Универзитет у Крагујевцу
ПРИРОДНО-МАТЕМАТИЧКИ ФАКУЛТЕТ
Радоја Домановића 12, 34000 Крагујевац, Србија

University of Kragujevac
FACULTY OF SCIENCE
Radoja Domanovića 12, 34000 Kragujevac, Serbia

Број: 8/962
30. 11. 2018. године
К р а г у ј е в а ц

УНИВЕРЗИТЕТ У КРАГУЈЕВЦУ
Број I 01-11401/4
Датум 30 НОВ 2018
КРАГУЈЕВАЦ

УНИВЕРЗИТЕТ У КРАГУЈЕВЦУ
Већу за природно-математичке науке
Комисији за претходна питања

К Р А Г У Ј Е В А Ц

Поштовани,

У прилогу дописа достављамо Вам одлуку Наставно-научног већа Природно-математичког факултета у Крагујевцу којом Природно-математички факултет у Крагујевцу предлаже кандидата за Светосавску награду Универзитета **за животно дело**.

С поштовањем,

Д Е К А Н

Проф. др Срећко Трифуновић

Централа: 034 336223 Деканат: 034 335039 • Секретар: 034 300245 • Студентска служба: 034 300260 • Факс: 034 335040
Phone: +381 34 336 223 • Dean's office +381 34 335 039 • Secretary Office +381 34 300 245
Administrative student office +381 34 300 260 • Fax +381 34 335 040
www.pmf.kg.ac.rs • e-mail: pmfkrag@kg.ac.rs

Универзитет у Крагујевцу
ПРИРОДНО-МАТЕМАТИЧКИ ФАКУЛТЕТ
Број: 840/ XVII-1.
28. 11. 2018. године
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УНИВЕРЗИТЕТ У КРАГУЈЕВЦУ
Број I-01-1140
Датум 30 НОВ 2018
КРАГУЈЕВАЦ

На основу члана 176 Статута Факултета, Наставно-научно веће Факултета на седници одржаној 28. 11. 2018. године донело је следећу

О Д Л У К У

Предлаже се **проф. др Иван Гутман**, професор Емеритус Природно-математичког факултета Универзитета у Крагујевцу, за кандидата за Светосавску награду Универзитета за животно дело.

ДЕКАН
Проф. др Срећко Трифуновић

Д-но:
- Универзитету,
- именованом,
- продекану за наставу,
- продекану за науку,
- архиви.

УНИВЕРЗИТЕТ У КРАГУЈЕВЦУ
Број I-01-1140/2
Датум 30 НОВ 2018
КРАГУЈЕВАЦ

Природно-математички факултет у Крагујевцу предлаже

професора емеритуса др Ивана Гутмана, редовног члана САНУ,

за доделу Светосавске награде за животно дело

1. Биографски подаци

Професор др Иван Гутман рођен је 2. септембра 1947. године у Сомбору од оца др Мирка и мајке Катарине. Основну школу и гимназију похађао је у Сомбору. На хемијску групу Природно-математичког факултета у Београду уписао се 1966. године. Дипломирао је 1970. године са средњом оценом 10,0. После тога је краће време радио као хонорарни асистент на Природно-математичком факултету у Београду.

Од 1971. до 1977. године био је члан Групе за теоријску хемију Института „Руђер Бошковић“ у Загребу, где је био асистент-приправник, асистент и виши асистент. Године 1973. магистрирао је на Универзитету у Загребу из области теоријске органске хемије. Исте године стекао је докторат хемијских наука, одбранивши на Природословно-математичком факултету у Загребу дисертацију под насловом „*Истраживања тополошких својстава конјугираних угљиководика*“. Израдом доктората руководио је професор Ненад Тринајстић.

Од 1977. до 2012. године радио је на Природно-математичком факултету Универзитета у Крагујевцу, где је био запослен као наставник за предмет Физичка хемија. Био је доцент и ванредни професор, а за редовног професора изабран је 1984. године. Након пензионисања, октобра 2012. године, постаје емеритус професор на истом факултету.

Године 1990. изабран је за редовног професора Физичко-хемијског факултета Универзитета у Београду, али службу није прихватио. Године 1995. хабилитирао је на Универзитету Јожеф Атила у Сегедину. Идуће, 1996. године, изабран је за редовног професора у Институту за физичку хемију истог Универзитета, али службу није прихватио.

Од 1975. године је члан Математичког института САНУ у Београду. Године 1981. стекао је и докторат математичких наука, одбранивши на Електротехничком

факултету у Београду дисертацију под насловом „*Прилог спектралној теорији стабала*“. Израдом доктората руководио је професор Драгош Цветковић.

Од 1988. члан је Српске академије наука и уметности (редовни члан од 1997).

Од 2005. члан је Међународне академије математичке хемије.

Од 2006. члан је Академије нелинеарних наука (Москва).

Од 2012. члан је Европске академије (Лондон).

Од 1972. ожењен је Магдом (1948). Имају кћерку Барбару (1974), а имали су сина Матију (1976-1999).

2. Допринос угледу Универзитета

Професор Гутман даје велики допринос угледу Универзитета у Крагујевцу кроз свој обиман и разноврсан научни рад, учешћем у редакцијама научних часописа, учешћем на домаћим и међународним научним скуповима. Професор Гутман је главни уредник часописа *MATCH Communications in Mathematical and in Computer Chemistry* i *Kragujevac Journal of Science*. Часопис *MATCH Communications in Mathematical and in Computer Chemistry,* који објављује Природно-математички факултет Универзитета у Крагујевцу, представља најпрестижнији међународни научни часопис који се издаје у Србији и региону. Професор Гутман је уредник је серије књига „*Mathematical Chemistry Monographs*“ које издаје Природно-математички факултет Универзитета у Крагујевцу.

Професор др Гутман је члан редакција великог броја домаћих и међународних часописа, што представља значајан допринос препознавању научног значаја Универзитета у Крагујевцу. Члан је (+) или је био члан (x) редакције или савета часописа *Advances in Systems Science and Applications* (+), *Applicable Analysis and Discrete Mathematics* (+), *Applied and Computational Mathematics* (+), *Bulletin of Society of Mathematicians Banja Luka* (x), *Communication in Combinatorics and Optimization* (+), *Dijalektika* (x), *Flogiston* (x), *Gazi Universitesi Journal of Science* (x), *Glasnik hemičara i tehnologa Bosne i Hercegovine* (+), *Global Journal of Mathematics and Mathematical Science* (x), *Graph Theory Notes* (New York) (x), *Hemijski pregled* (+), *Indian Journal of*

Chemistry A (x), *International Journal of Applied Graph Theory* (+), *International Journal of Chemical Modelling* (+), *International Journal of Pure and Applied Mathematical Sciences* (x), *Iranian Journal of Mathematical Chemistry* (+), *Iranian Journal of Mathematical Sciences and Informatics* (+), *Journal of Mathematical Chemistry* (x), *Journal of Mathematical Nanoscience* (+), *Journal of the Argentine Chemical Society* (+), *Journal of the Serbian Chemical Society* (+), *Kragujevac Journal of Mathematics* (+), *Kragujevac Journal of Science* (+), *MATCH Communications in Mathematical and in Computer Chemistry* (+), *Mathematics Interdisciplinary Research* (+), *Polycyclic Aromatic Compounds* (+), *Transactions on Combinatorics* (+), *Zbornik radova Prirodno-matematičkog fakulteta Kragujevac* (x).

Професор Гутман је држао предавања у следећим земљама: Аустрија, Белгија, Босна и Херцеговина, Бразил, Бугарска, Црна Гора, Чешка, Чиле, Данска, Египат, Финска, Француска, Холандија, Хонг Конг, Хрватска, Италија, Иран, Израел, Јапан, Јужна Африка, Јужна Кореја, Канада, Кина, Колумбија, Куба, Мађарска, Македонија, Малта, Мексико, Немачка (ДР), Немачка (СР), Норвешка, Португалија, Румунија, Русија, Сједињене Америчке Државе, Словачка, Словенија, Швајцарска, Шведска, Тајван, Турска, Велика Британија, Венецуела.

Сарађивао је и има објављене радове са колегама из следећих земаља: Алжир, Аргентина, Аустралија, Аустрија, Белгија, Босна и Херцеговина, Бразил, Бугарска, Чешка, Чиле, Црна Гора, Египат, Финска, Француска, Грчка, Грузија, Холандија, Хонг Конг, Хрватска, Индија, Ирак, Иран, Италија, Израел, Јапан, Јужна Африка, Јужна Кореја, Канада, Кина, Колумбија, Куба, Литванија, Мађарска, Македонија, Малезија Малта, Мароко, Мексико, Молдавија, Монголија, Немачка, Норвешка, Нови Зеланд, Пакистан, Палестина, Пољска, Португалија, Реунион, Румунија, Русија, Сингапур, Сједињене Америчке Државе, Словачка, Словенија, Србија, Спанија, Шри Ланка, Шведска, Швајцарска, Тајван, Тринидад, Турска, Узбекистан, Велика Британија, Венецуела.

Има објављене радове на следећим језицима: африканс, босански, бугарски, енглески, фински, холандски, хрватски, кинески, мађарски, македонски, немачки, персијски, португалски, руски, словеначки, српски, шпански.

Професор Гутман је добитник бројних награда и признања које доприносе промоцији Универзитета у Крагујевцу. Професор др Иван Гутман Добио је награду Културно просветне заједнице Крагујевца за научно остварење из области теоријске хемије (1980), медаљу Српског хемијског друштва за прегалаштво и успех у науци (1987), награду „Војислав К. Стојановић“ Удружења универзитетских професора и научника Србије за резултате постигнуте у научно-истраживачком раду (1993), златну медаљу и повељу Српског хемијског друштва поводом његове стогодишњице (1997), медаљу Српског хемијског друштва за трајан и изванредан допринос науци (2001). Почасни је члан Српског хемијског друштва од 2015. године. Заједно са Борисом Фуртулом добио је плакету Министарства науке Србије за најбољу монографију у области природно-математичких наука у 2010. години. Проглашен је заслужним грађанином Крагујевца (2006) и добио Ђурђевданску награду града Крагујевца (за науку) за 2007. годину. Проглашен је истакнутим пријатељем гимназије „Вељко Петровић“ у Сомбору (2015). Почасни је доктор (*Doctor Honoris Causa*) Универзитета Обуда у Будимпешти (2017).

3. Остварени научни резултати

Професор Гутман је учествовао на бројним научним скуповима у земљи и иностранству, више пута као позвани предавач. Од 1971. године до данас објавио је преко 1400 научних радова, од тога око 270 радова самостално, а остале у сарадњи с великим бројем (преко 780) колега из земље и иностранства. Поред десетак чланака монографског и ревијског карактера написао је и шест књига објављених у иностранству (издавачи: Springer, Берлин 1977, 1986, 1988 и 1989, Nord Holand, Амстердам 1988, Nova, Хантингтон, Њујорк, 2001, 2002, Springer, Њујорк, 2012).

Радови су му цитирани преко 30000 пута у научним радовима других аутора, и преко 5100 пута у више од 460 књига и уџбеника.

Списак свих објављених научних радова и књига се налази у приложеном фајлу.

4. Резултати наставног рада и ангажовања у развоју наставе и научног подмлатка

Професор Гутман је изводио наставу из више предмета из области физичке, компјутерске и теоријске хемије. Поред Физичке хемије коју је предавао непрекидно од 1977. до 2012. године, држао је курсеве из предмета Хемијска термодинамика, Квантна хемија и молекулске структуре, Квантна хемија (за последипломце), Теоријска органска хемија (за последипломце), Обрада резултата у хемији, Рачунари у хемији, Програмирање у хемији, Рачунарска хемија, Информатика за хемичаре, Историја хемије и Историја и филозофија хемије. На Природно-математичком факултету у Крагујевцу организовао је стални семинар Математичке методе у хемији који је активно и без прекида радио од пролећа 1981. до пролећа 2006. године и на коме је одржано преко 1000 предавања.

Руководио је израдом већег броја дипломских, 7 специјалистичких и 10 магистарских радова, као и 10 доктората. Значајне резултате остварио је и на увођењу младих (првенствено студената, али и средњошколаца) у научни рад. Занима се и за наставу и историју природних наука и математике, и из ових области је објавио двадесетак радова.

5. Стручно-професионални допринос и допринос широј академској заједници

Професор Гутман је у више наврата боравио је на стручним усавршавањима у иностранству. Пет пута је био стипендиста Хумболтове фондације, и радио је у Институту за квантну хемију Слободног Универзитета у Западном Берлину (1977), у Макс-Планковом Институту за радијациону хемију у Милхајму, СР Немачка (1980 и 1985), у Институту за органску хемију и биохемију Универзитета у Фрајбургу, Немачка (2000), у Математичком Институту Универзитета у Бајројту, Немачка (2000) и у Центру за компјутерску хемију Универзитета у Елрангену (2003). Године 1988. боравио је на Универзитету у Трондхајму, Норвешка, као стипендиста Норвешког фонда за научна истраживања. Године 1989. и 1990. боравио је (у два наврата) на Универзитету Вандербилт, у Нешвилу, САД, као стипендиста Фулбрајтове фондације. Године 1989. био је и стипендиста Јапанског друштва за унапређење науке. Године 1995. је као стипендиста фондација Леди Дејвис био гостујући професор на Хебрејском Универзитету у Јерусалиму, Израел. Године 1996. боравио је у Институту за врхунске студије Хебрејског Универзитета у Јерусалиму. Године 1997. боравио је на Универзитету у Санта Клари, Куба, као стипендиста Академије наука трећег света. Године 1996. и 2001. као стипендиста фондације DAAD боравио је на Техничком Универзитету у Илменау, Немачка. Био је гостујући професор и на Техничкој високој школи у Илменау, ДР Немачка (1982), Универзитету Јужне Каролине у Колумбији, САД (1983), Кинеској Академији наука у Тајпеју, Тајван (1992/93), Универзитету Јожеф Атила у Сегедину, Мађарска (1994-96), Монтреалском Универзитету, Канада (1998), Универзитету Јоханес Кеплер у Линцу, Аустрија (1999), Андском Универзитету у Мериди, Венецуела (2000), Универзитету у Билефелду, Немачка (2001 и 2002), Универзитету Малте у Мсиди (2004), Универзитету Нанкаи у Тианџину, Кина (2005 и 2007), Националном Аутономном Универзитету Мексика у Мексико Ситију (2006), Северном Католичком Универзитету у Антофагасти, Чиле (2009), Државном Универзитету у Новом Пазару (2014-2016). Године 2012/13. био је хонорарни професор на Универзитету Краља Абдулазиза, у Џеди, Саудијска Арабија. Посетио је и велики

број других универзитета и научних институција и на многима од њих држао предавања.

Професор Гутман се доста ангажовао и на популаризацији хемије и математике, објављујући научно-популарне радове (око 300) и држећи предавања по основним и средњим школама. Циљ оваквог ангажовања Проф. др Гутмана је увек био да охрабри талентовану децу да крену путем истраживања и бављења науком.

6. Образложење

Професор Гутман редовни је члан Српске академије наука и уметности, најзначајније научно-културне институције наше земље. Члан је и других признатих домаћих и међународних научних организација. Добитник је бројних награда и признања, како у нашој земљи, тако и у иностранству. Опус научног рада професора Гутмана је изванредан: објавио је преко 1400 научних радова, десетак чланака монографског и ревијског карактера, написао је шест књига објављених у иностранству, и већи број књига и уџбеника штампаних у Србији. Радови су му цитирани преко 30000 пута у научним радовима и преко 5100 пута у више од 460 књига и уџбеника. Руководио је израдом већег броја дипломских, специјалистичких, магистарских радова и доктората. Активно учествује у промовисању и популаризацији науке држећи предавања по основним и средњим школама и објављујући стручне чланке, којих има око 300. Већ годинама је главни уредник часописа *MATCH Communications in Mathematical and in Computer Chemistry,* који објављује Природно-математички факултет Универзитета у Крагујевцу и који представља најпрестижнији међународни научни часопис који се издаје у Србији и региону. Гостовао је и одржао бројна предавања на универзитетима на свим континетима, чиме је директно промовисао наш Универзитет.

Професор Гутман ради на Универзитету у Крагујевцу пуних 40 година. Овај временски период је веома близак дужини постојања Универзитета у Крагујевцу и Природно-математичког факултета. На тај начин, дело и рад професора Гутмана чине битан део темеља и развоја нашег Универзитета. Универзитет у Крагујевцу се 2017. године први пут појавио на престижној Шангајској листи за област математика. Значајан допринос овом великом успеху дали су и веома цитирани научни радови професора Ивана Гутмана објављени у математичким часописима.

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Списак научних радова професора Ивана Гутмана

1404. S. Akbari, A. H. Ghodrati, I. Gutman, M. A. Hosseinzadeh, E. V. Konstantinova (4 VI 2018)
On path energy of graphs
MATCH Communications in Mathematical and in Computer Chemistry, in press.

1403. K. C. Das, I. Gutman (28 V 2018)
Comparing Laplacian energy and Kirchhoff index
MATCH Communications in Mathematical and in Computer Chemistry, in press.

1402. I. Gutman, M. Ascioglu, I. N. Cangul (23 IV 2018)
Multiplicative geometric–arithmetic index
International Journal of Applied Graph Theory, in press.

1401. A. Ali, L. Zhong, I. Gutman (14 IV 2018)
Harmonic index and its generalizations: Extremal results and bounds
MATCH Communications in Mathematical and in Computer Chemistry, in press.

1400. A. Ghalavand, A. Ashrafi, I. Gutman (6 III 2018)
New upper and lower bounds for some degree–based graph invariants
Kragujevac Journal of Mathematics, in press.

1399. I. Gutman, T. Réti (23 II 2018)
Note on irregular graphs
Bulletin de l'Académie Serbe des Sciences et des Arts (Classe des Sciences Mathématiques et Naturelles), in press.

1398. V. Mathad, S. I. Khalaf, S. S. Mahde, I. Gutman (13 II 2018)
Average degree-eccentricity energy of graphs
Mathematics Interdisciplinary Research **3** (2018) 45–54.

1397. Y. Ma, S. Cao, Y. Shi, I. Gutman, M. Dehmer, B. Furtula (11 II 2018)
From the connectivity index to various Randić–type descriptors
MATCH Communications in Mathematical and in Computer Chemistry **80** (2018) 85–106.

1386. K. Xu, X. Gu, I. Gutman (10 II 2018)
Relations between total irregularity and non-self-centrality of graphs
Applied Mathematics and Computation, in press.

1395. B. Furtula, K. C. Das, I. Gutman (3 II 2018)
Comparative analysis of symmetric division deg index as potentially useful molecular descriptor
International Journal of Quantum Chemistry, in press.

1394. A. Ghalavand, A. R. Ashrafi, I. Gutman (5 I 2018)
Extremal graphs for the second multiplicative Zagreb index
Bulletin of International Mathematical Virtual Institute **8** (2018) 369–383.

1393. K. C. Das, I. Gutman, I. Milovanović, E. Milovanović, B. Furtula (21 XII 2017)
Degree–based energies of graphs
Linear Algebra and Its Applications **554** (2018) 185–204.

1392. H. Abdo, D. Dimitrov, I. Gutman (30 XI 2017)
Graphs with maximal σ irregularity
Discrete Applied Mathematics, in press.

1391. K. C. Das, I. Gutman (28 XI 2017)
On Laplacian energy, Laplacian–energy–like invariant and Kirchhoff index of graphs
Linear Algebra and Its Applications **554** (2018) 170–184.

1390. B. Sharada, M. I. Sowaity, I. Gutman (19 XI 2017)
Laplacian sum-eccentricity energy of a graph
Mathematics Interdisciplinary Research **2** (2017) 209–219.

1389. A. Ali, I. Gutman, E. Milovanović, I. Milovanović (18 XI 2017)
Sum of powers of the degrees of graphs: Extremal results and bounds
MATCH Communications in Mathematical and in Computer Chemistry **80** (2018) 5–84.

1388. X. Li, W. So, I. Gutman (1 XI 2017)
Constructions of graphs and trees with partially prescribed spectrum
MATCH Communications in Mathematical and in Computer Chemistry **80** (2018) 415–421.

1387. H. S. Ramane, I. Gutman, J. B. Patil, R. B. Jummannaver (20 X 2017)
Seidel signless Laplacian energy of graphs
Mathematics Interdisciplinary Research **2** (2017) 181–192.

1386. I. Gutman, E. Milovanović, I. Milovanović (18 IX 2017)
Beyond the Zagreb indices
AKCE International Journal of Graphs and Combinatorics, in press.

1385. M. Arockiaraj, S. R. J. Kavitha, K. Balasubramanian, I. Gutman (13 IX 2017)
Hyper–Wiener and Wiener polarity indices of silicate and oxide frameworks
Journal of Mathematical Chemistry **56** (2018) 1493–1510.

1384. I. Gutman (27 VIII 2017)
Stepwise irregular graphs
Applied Mathematics and Computation **325** (2018) 234–238.

1383. H. S. Ramane, R. B. Jummannaver, I. Gutman (11 VIII 2017)
Seidel Laplacian energy of graphs
International Journal of Applied Graph Theory **1**(2) (2017) 74–82.

1382. I. Gutman, M. Togan, A. Yurttas, A. S. Cevik, I. N. Cangul (1 VIII 2017)
Inverse problem for sigma index
MATCH Communications in Mathematical and in Computer Chemistry **79** (2018) 491–508.

1381. I. Gutman, I. Milovanović, E. Milovanović (20 VII 2017)
Relations between ordinary and multiplicative degree–based topological indices
Filomat, in press.

1380. C. Xu, L. Ge, Y. Zhang, M. Dehmer, I. Gutman (14 VII 2017)
Computational prediction of therapeutic peptides based on graph index
Journal of Biomedical Informatics **75** (2017) 63–69.

1379. N. Jafari Rad, A. Jahanbani, I. Gutman (10 VII 2017)
Zagreb energy and Zagreb Estrada index of graphs
MATCH Communications in Mathematical and in Computer Chemistry **79** (2018) 371–386.

1378. I. Gutman, B. Furtula (15 VI 2017)
The total π-electron energy saga
Croatica Chemica Acta **90** (2017) 359–368.

1377. A. M. Naji, N. D. Soner, I. Gutman (30 V 2017)
On leap Zagreb indices of graphs
Communications in Combinatorics and Optimization **2** (2017) 99–117.

1376. I. Gutman, B. Furtula, V. Katanić (24 V 2017)
Randić index and information
AKCE International Journal of Graphs and Combinatorics, in press.

1375. B. Furtula, I. Gutman (23 V 2017)
Borderenergetic graphs of order 12
Iranian Journal of Mathematical Chemistry **8** (2017) 339–343.

1374. I. Gutman (26 IV 2017)
General theory of cycle–dependence of total π-electron energy
Iranian Journal of Mathematical Chemistry **9** (2018) 9–16.

1373. M. M. Shikare, P. P. Malavadkar, S. C. Patekar, I. Gutman (12 IV 2017)
On path eigenvalues and path energy of graphs
MATCH Communications in Mathematical and in Computer Chemistry **79** (2018) 387–398.

1372. I. Gutman (31 III 2017)
On borderenergetic graphs
Bulletin de l'Académie Serbe des Sciences et des Arts (Classe des Sciences Mathématiques et Naturelles) **150** (2017) 9–18.

1371. Y. Gao, E. Zhu, Z. Shao, I. Gutman, A. Klobučar (8 III 2017)
Total domination and open packing in some chemical graphs
Journal of Mathematical Chemistry **56** (2018) 1481–1492.

1370. I. Gutman, V. R. Kulli, B. Chaluvaraju, H. S. Boregowda (1 II 2017)
On Banhatti and Zagreb indices
Bulletin of International Mathematical Virtual Institute **7** (2017) 53–67.

1369. I. Gutman (11 I 2017)
On two Laplacian–spectrum–based graph invariants and their relation. A review
Applied and Computational Mathematics **16** (2017) 3–11.

1368. Z. Shao, P. Wu, Y. Gao, I. Gutman, X. Zhang (4 I 2017)
On the maximum *ABC* index of graphs without pendent vertices
Applied Mathematics and Computation **315** (2017) 298–312.

1367. B. Borovićanin, K. C. Das, B. Furtula, I. Gutman (3 I 2017)
Bounds for Zagreb indices
MATCH Communications in Mathematical and in Computer Chemistry **78** (2017) 17–100.

1366. I. Gutman, Z. You, M. Huang (30 XII 2016)
Inequalities between Kirchhoff index and Laplacian–energy–like invariant
in the book: I. Gutman, B. Furtula, K. C. Das, E. Milovanović, I. Milovanović (Eds.), *Bounds in Chemical Graph Theory - Mainstreams*, Univ. Kragujevac, Kragujevac, 2017, pp. 83–92.

1365. I. Gutman (29 XII 2016)
Relation between energy and extended energy of a graph
International Journal of Applied Graph Theory **1**(1) (2017) 42–48.

1364. I. Ž. Milovanović, E. I. Milovanović, I. Gutman, B. Furtula (26 XII 2016)
Some inequalities for the forgotten topological index
International Journal of Applied Graph Theory **1**(1) (2017) 1–15.

1363. K. C. Das, S. Balachandran, I. Gutman (8 XII 2016)
Inverse degree, Randić index and harmonic index of graphs
Applicable Analysis and Discrete Mathematics **11** (2017) 304–313.

1362. I. Gutman, B. Furtula, K. C. Das (5 XII 2016)
Extended energy and its dependence on molecular structure
Canadian Journal of Chemistry **95** (2017) 526–529.

1361. S. Radenković, I. Gutman, S. Zdravković, M. Antić (28 XI 2016)
Strain in strain–free benzenoid hydrocarbons: The case of fibonacenes
Chemical Papers **71** (2017) 1491–1495.

1360. I. Gutman (27 XI 2016)
On coindices of graphs and their complements
Applied Mathematics and Computation **305** (2017) 161–165.

1359. I. Gutman (25 XI 2016)
On hyper–Zagreb index and coindex
Bulletin de l'Académie Serbe des Sciences et des Arts (Classe des Sciences Mathématiques et Naturelles) **150** (2017) 1–8.

1358. L. Yu, Y. Zhang, I. Gutman, Y. Shi, M. Dehmer (21 XI 2016)
Protein sequence comparison based on physicochemical properties and the position–feature energy matrix
Nature - Scientific Reports **7** (2017) #46237 (8 pp).

1357. B. Borovićanin, K. C. Das, B. Furtula, I. Gutman (12 XI 2016)
Zagreb indices: Bounds and extremal graphs
in the book: I. Gutman, B. Furtula, K. C. Das, E. Milovanović, I. Milovanović (Eds.), *Bounds in Chemical Graph Theory - Basics*, Univ. Kragujevac, Kragujevac, 2017, pp. 67–153.

1356. I. Gutman, B. Furtula, A. Farrugia, I. Sciriha (22 IX 2016)
Constructing NSSD molecular graphs
Croatica Chemica Acta **89** (2016) 449–454.

1355. I. Gutman, S. Li, W. Wei (10 IX 2016)
Cacti with n-vertices and t cycles having extremal Wiener index
Discrete Applied Mathematics **232** (2017) 189–200.

1354. M. Zhang, S. Li, I. Gutman (9 IX 2016)
Connectivity, diameter, independence number and the distance spectral radius of graphs
Linear Algebra and Its Applications **529** (2017) 30–50.

1353. I. Gutman (VIII 2016)
Selected Theorems in Chemical Graph Theory
Faculty of Science & University, Kragujevac, 2017, pp. VII+168.

1352. I. Gutman, N. Dehgardi, H. Aram (18 VIII 2016)
On general first Zagreb index of graphs with fixed maximum degree
Bulletin of International Mathematical Virtual Institute **6** (2016) 251–258.

1351. I. Gutman, K. C. Das, B. Furtula, E. Milovanović, I. Milovanović (10 VIII 2016)
Generalizations of Szőkefalvi Nagy and Chebyshev inequalities with applications in spectral graph theory
Applied Mathematics and Computation **313** (2017) 235–244.

1350. K. C. Das, I. Gutman, B. Furtula (25 VI 2016)
On spectral radius and energy of extended adjacency matrix of graphs
Applied Mathematics and Computation **296** (2017) 116–123.

1349. K. C. Das, S. A. Mojallal, I. Gutman (12 VI 2016)
Relations between degrees, conjugate degrees and graph energies
Linear Algebra and Its Applications **515** (2017) 24–37.

1348. A. Cafure, D. A. Jaume, L. N. Grippo, A. Pastine, M. D. Safe, V. Trevisan, I. Gutman (10 VI 2016)
Some results for the (signless) Laplacian resolvent
MATCH Communications in Mathematical and in Computer Chemistry **77** (2017) 105–114.

1347. Y. Mao, Z. Wang, I. Gutman, A. Klobučar (7 VI 2016)
Steiner degree distance
MATCH Communications in Mathematical and in Computer Chemistry **78** (2017) 221–230.

1346. K. C. Das, S. Elumalai, I. Gutman (27 V 2016)
On *ABC* index of graphs
MATCH Communications in Mathematical and in Computer Chemistry **78** (2017) 459–468.

1345. K. C. Das, S. Sun, I. Gutman (23 V 2016)
Normalized Laplacian eigenvalues and Randić energy of graphs
MATCH Communications in Mathematical and in Computer Chemistry **77** (2017) 45–59.

1344. M. A. Boutiche, H. Belbachir, I. Gutman (12 V 2016)
Merrifield–Simmons and Hosoya index of thorn–regular graphs
Scientific Publications of the State University of Novi Pazar. Series A: Applied Mathematics, Informatics & Mechanics **8** (2016) 113–129.

1343. H. S. Ramane, V. V. Manjalapur, I. Gutman (10 V 2016)
General sum-connectivity index, general product-connectivity index, general Zagreb index and coindices of line graph of subdivision graphs
AKCE International Journal of Graphs and Combinatorics **14** (2017) 92–100.

1342. Y. Mao, Z. Wang, I. Gutman, H. Li (7 V 2016)
Nordhaus–Gaddum–type results for the Steiner Wiener index of graphs
Discrete Applied Mathematics **219** (2017) 167–175.

1341. A. Hamzeh, A. Iranmanesh, S. Hossein–Zadeh, M. A. Hosseinzadeh, I. Gutman (3 V 2016)
On common neighborhood graphs II
Iranian Journal of Mathematical Chemistry **9** (2018) 37–46.

1340. I. Gutman, A. Ghalavand, T. Dehghan–Zadeh, A. R. Ashrafi (22 IV 2016)
Graphs with smallest forgotten index
Iranian Journal of Mathematical Chemistry **8** (2017) 259–273.

1339. I. Gutman, S. Radenković, S. Đorđević, I. Ž. Milovanović, E. I. Milovanović (5 IV 2016)
Extending the McClelland formula for total π-electron energy
Journal of Mathematical Chemistry **55** (2017) 1934–1940.

1338. R. Rasi, S. M. Sheikholeslami, I. Gutman (15 III 2016)
On harmonic index of trees
MATCH Communications in Mathematical and in Computer Chemistry **78** (2017) 405–416.

1337. I. Gutman, B. Furtula (14 III 2016)
Survey of graph energies
Mathematics Interdisciplinary Research **2** (2017) 85–129.

1336. I. Ž. Milovanović, E. I. Milovanović, I. Gutman (6 III 2016)
Upper bounds for some graph energies
Applied Mathematics and Computation **289** (2016) 435–443.

1335. I. Gutman, B. Furtula, K. C. Das (28 II 2016)
On some degree–and–distance–based graph invariants of trees
Applied Mathematics and Computation **289** (2016) 1–6.

1334. I. Gutman (26 II 2016)
On two degree-and-distance-based graph invariants
Bulletin de l'Académie Serbe des Sciences et des Arts (Classe des Sciences Mathématiques et Naturelles) **149** (2016) 21–31.

1333. I. Gutman, I. Gültekin, B. Şahin (15 II 2016)
On Merrifield–Simmons index of molecular graphs
Kragujevac Journal of Science **38** (2016) 83–95.

1332. I. Gutman (10 II 2016)
Irregularity of molecular graphs
Kragujevac Journal of Science **38** (2016) 71–81.

1331. B. Horoldagva, L. Buyantogtokh, S. Dorjsembe, I. Gutman (8 II 2016)
Maximum size of maximally irregular graphs
MATCH Communications in Mathematical and in Computer Chemistry **76** (2016) 81–98.

1330. I. Gutman, S. Radenkovic, S. Đorđević, I. Ž. Milovanović, E. I. Milovanović (3 II 2016)
Total π-electron and HOMO energy
Chemical Physics Letters **649** (2016) 148–150.

1329. S. Radenković, I. Gutman, S. Ružić, S. Zdravković (2 II 2016)
Strain in strain–free benzenoid hydrocarbons: The case of chrysene and triphenylene
Revue Roumaine de Chimie **61** (2016) 261–267.

1328. W. Liu, Q. Guo, Y. Zhang, L. Feng, I. Gutman (29 I 2016)
Further results on the largest matching root of unicyclic graphs
Discrete Applied Mathematics **221** (2017) 82–88.

1327. I. Gutman (11 I 2016)
On Steiner degree distance of trees
Applied Mathematics and Computation **283** (2016) 163–167.

1326. B. Deng, X. Li, I. Gutman (3 I 2016)
More on borderenergetic graphs
Linear Algebra and Its Applications **497** (2016) 199–208.

1325. L. Yu, Y. Zhang, G. Jian, I. Gutman (3 I 2016)
Classification for microarray data based on K-means clustering combined with modified single-to-noise-ratio based on graph energy
Journal of Computational and Theoretical Nanoscience **14** (2017) 598–606.

1324. Y. Mao, Z. Wang, I. Gutman (31 XII 2015)
Steiner Wiener index of graph products
Transactions on Combinatorics **5**(3) (2016) 39–50.

1323. L. E. Allem, J. Capaverde, V. Trevisan, I. Gutman, E. Zogić, E. Glogić (26 XII 2015)
Resolvent energy of unicyclic, bicyclic and tricyclic graphs
MATCH Communications in Mathematical and in Computer Chemistry **77** (2017) 95–104.

1322. K. C. Das, S. A. Mojallal, I. Gutman (22 XII 2015)
On energy of line graphs
Linear Algebra and Its Applications **499** (2016) 79–89.

1321. H. H. Li, Q. Q. Wu, I. Gutman (15 XII 2015)
On ordering of complements of graphs with respect to matching numbers
Applied Mathematics and Computation **282** (2016) 167–174.

1320. S. Gong, X. Li, I. Gutman, Z. Qin, K. Yang (20 XI 2015)
On the maximal energy of integral weighted trees with fixed total weight sum
MATCH Communications in Mathematical and in Computer Chemistry **76** (2016) 615–633.

1319. B. Furtula, I. Gutman, V. Katanić (18 XI 2015)
Three–center Harary index and its applications
Iranian Journal of Mathematical Chemistry **7** (2016) 61–68.

1318. J. Đurđević Nikolić, I. Gutman (10 XI 2015)
A comparative study of isomers of bicalicene
Polycyclic Aromatic Compounds bf 38 (2018) 25–31.

1317. I. Gutman (25 X 2015)
Total π-electron energy of conjugated molecules with non-bonding molecular orbitals
Zeitschrift für Naturforschung **71a** (2016) 161–164.

1316. B. Deng, S. Wang, I. Gutman (21 X 2015)
Resolvent Estrada index of cycles and paths
Scientific Publications of the State University of Novi Pazar. Series A: Applied Mathematics, Informatics & Mechanics **8** (2016) 1-10.

1315. I. Gutman, I. Triantafillou (27 IX 2015)
Dependence of graph energy on nullity. A case study
MATCH Communications in Mathematical and in Computer Chemistry **76** (2016) 761–769.

1314. H. Abdo, D. Dimitrov, I. Gutman (23 IX 2015)
On extremal trees with respect to the F-index
Kuwait Journal of Science **44**(3) (2017) 1–8.

1313. H. S. Ramane, G. A. Gudodagi, I. Gutman (22 IX 2015)
Laplacian energy of union and Cartesian product and Laplacian equienergetic graphs
Kragujevac Journal of Mathematics **39** (2015) 193–205.

1312. K. C. Das, S. A. Mojallal, I. Gutman (18 IX 2015)
On energy and Laplacian energy of bipartite graphs
Applied Mathematics and Computation **273** (2016) 759–766.

1311. X. Li, Y. Mao, I. Gutman (16 IX 2015)
Inverse problem on the Steiner Wiener index
Discussiones Mathematicae Graph Theory 38 (2018) 83–95.

1310. M. A. A. de Freitas, I. Gutman, M. Robbiano (5 IX 2015)
Graphs with maximum Laplacian–energy–like invariant and incidence energy
MATCH Communications in Mathematical and in Computer Chemistry **75** (2016) 331–342.

1309. B. Furtula, I. Gutman, K. C. Das (1 IX 2015)
On atom–bond connectivity molecular structure descriptors
Journal of the Serbian Chemical Society **81** (2016) 271–276.

1308. I. Gutman (20 VIII 2015)
Stability of bicalicene isomers – a topological study
Journal of the Serbian Chemical Society **81** (2016) 81–89.

1307. K. C. Das, M. A. Mohammed, I. Gutman, K. A. Atan (17 VIII 2015)
Comparison between atom–bond connectivity indices of graphs
MATCH Communications in Mathematical and in Computer Chemistry **76** (2016) 159–170.

1306. K. C. Das, I. Gutman (13 VIII 2015)
On Wiener and multiplicative Wiener indices of graphs
Discrete Applied Mathematics **206** (2016) 9–14.

1305. H. Chen, Y. Zhang, I. Gutman (9 VIII 2015)
A kernel–based clustering method for gene selection with gene expression data
Journal of Biomedical Informatics **62** (2016) 12–20.

1304. I. Gutman (VII 2015)
Matching energy
in the book: I. Gutman, X. Li (Eds.), *Graph Energies – Theory and Applications*, Univ. Kragujevac, Kragujevac, 2016, pp. 167–190.

1303. I. Gutman, B. Furtula, E. Zogić, E. Glogić (VII 2015)
Resolvent energy
in the book: I. Gutman, X. Li (Eds.), *Graph Energies – Theory and Applications*, Univ. Kragujevac, Kragujevac, 2016, pp. 277–290.

1302. I. Gutman (20 VII 2015)
A survey on the matching polynomial
in the book: Y. Shi, M. Dehmer, X. Li, I. Gutman (Eds.), *Graph Polynomials*, CRC Press, Boca Raton, 2016, pp. 77–99.

1301. K. C. Das, I. Gutman, M. J. Nadjafi–Arani (14 VII 2015)
Relations between distance–based and degree–based topological indices
Applied Mathematics and Computation **270** (2015) 142–147.

1300. M. Goubko, C. Magnant, P. Salehi Nowbandegani, I. Gutman (29 VI 2015)
ABC index of trees with fixed number of leaves
MATCH Communications in Mathematical and in Computer Chemistry **74** (2015) 697–701.

1299. I. Gutman, B. Furtula, E. Zogić, E. Glogić (8 VI 2015)
Resolvent energy of graphs
MATCH Communications in Mathematical and in Computer Chemistry **75** (2016) 279–290.

1298. I. Gutman (31 V 2015)
Open problems for equienergetic graphs
Iranian Journal of Mathematical Chemistry **6** (2015) 185–187.

1297. I. Gutman (27 V 2015)
Edge–decomposition of topological indices
Iranian Journal of Mathematical Chemistry **6** (2015) 103–108.

1296. S. Gong, X. Li, I. Gutman, G. Xu, Y. Tang, Z. Qin, K. Yang (12 V 2015)
On maximal energy of trees with fixed weight sequence
MATCH Communications in Mathematical and in Computer Chemistry **75** (2016) 267–278.

1295. B. Furtula, I. Gutman, Ž. Kovijanić Vukićević, G. Lekishvili, G. Popivoda (24 IV 2015)
On an old/new degree–based topological index
Bulletin de l'Académie Serbe des Sciences et des Arts (Classe des Sciences Mathématiques et Naturelles) **148** (2015) 19–31.

1294. S. Pirzada, H. A. Ganie, I. Gutman (31 III 2015)
Comparison between Laplacian–energy–like invariant and Kirchhoff index
Electronic Journal of Linear Algebra **31** (2016) 27–41.

1293. B. Basavanagoud, I. Gutman, C. S. Gali (30 III 2015)
On second Zagreb index and coindex of some derived graphs
Kragujevac Journal of Science **37** (2015) 113–121.

1292. K. C. Das, S. A. Mojallal, I. Gutman (26 III 2015)
On Laplacian energy in terms of graph invariants
Applied Mathematics and Computation **268** (2015) 83–92.

1291. B. Basavanagoud, I. Gutman, V. R. Desai (13 III 2015)
Zagreb indices of generalized transformation graphs and their complements
Kragujevac Journal of Science **37** (2015) 99–112.

1290. I. Gutman, B. Furtula, X. Chen, J. Qian (2 III 2015)
Resolvent Estrada index – computational and mathematical studies
MATCH Communications in Mathematical and in Computer Chemistry **74** (2015) 431–440.

1289. I. Gutman, M. Robbiano, B. San Martín (28 II 2015)
Upper bound on Randić energy of some graphs
Linear Algebra and Its Applications **478** (2015) 241–255.

1288. H. S. Ramane, I. Gutman, M. M. Gundloor (15 II 2015)
Seidel energy of iterated line graphs of regular graphs
Kragujevac Journal of Mathematics **39** (2015) 7–12.

1287. I. Gutman, B. Furtula, X. Li (26 I 2015)
Multicenter Wiener indices and their applications
Journal of the Serbian Chemical Society **80** (2015) 1009–1017.

1286. S. Radenković, I. Gutman, S. Đorđević (22 I 2015)
Strain in strain–free benzenoid hydrocarbons: The case of phenanthrene
Chemical Physics Letters **625** (2015) 69–72.

1285. I. Gutman, J. Lu, M. A. Boutiche (14 I 2015)
On distance in complements of graphs
Scientific Publications of the State University of Novi Pazar. Series A: Applied Mathematics, Informatics & Mechanics **8** (2016) 35–42.

1284. I. Gutman, S. Radenković (12 I 2015)
Paradise lost – π-Electron conjugation in homologs and derivatives of perylene
in the book: R. Chauvin, C. Lepetit, B. Silvi, E. Alikhani (Eds.), *Applications of Topological Methods in Molecular Chemistry*, Springer, Cham, 2016, pp. 297–320.

1283. I. Gutman, B. Furtula, Ž. Kovijanić Vukićević, G. Popivoda (11 I 2015)
On Zagreb indices and coindices
MATCH Communications in Mathematical and in Computer Chemistry **74** (2015) 5–16.

1282. C. Magnant, P. Salehi Nowbandegani, I. Gutman (8 I 2015)
Which tree has the smallest ABC index among trees with k leaves?
Discrete Applied Mathematics **194** (2015) 143–146.

1281. X. Li, Y. Mao, I. Gutman (27 XII 2014)
The Steiner Wiener index of a graph
Discussiones Mathematicae Graph Theory **36** (2016) 455–465.

1280. H. S. Ramane, K. C. Nandeesh, I. Gutman, X. Li (19 XII 2014)
Skew equienergetic digraphs
Transactions on Combinatorics **5**(1) (2016) 15–23.

1279. S. Gong, X. Li, G. Xu, I. Gutman, B. Furtula (16 XII 2014)
Borderenergetic graphs
MATCH Communications in Mathematical and in Computer Chemistry **74** (2015) 321–332.

1278. X. Li, Z. Qin, M. Wei, I. Gutman, M. Dehmer (14 XII 2014)
Novel inequalities for generalized graph entropies – Graph energies and topological indices
Applied Mathematics and Computation **259** (2015) 470–479.

1277. I. Gutman, B. Furtula, X. Chen, J. Qian (2 XII 2014)
Graphs with smallest resolvent Estrada indices
MATCH Communications in Mathematical and in Computer Chemistry **73** (2015) 267–270.

1276. B. Furtula, I. Gutman (6 XI 2014)
A forgotten topological index
Journal of Mathematical Chemistry **53** (2015) 1184–1190.

1275. J. Du, G. Su, J. Tu, I. Gutman (6 XI 2014)
The degree resistance distance of cacti
Discrete Applied Mathematics **188** (2015) 16–24.

1274. S. Pirzada, H. A. Ganie, I. Gutman (13 X 2014)
On Laplacian–energy–like invariant and Kirchhoff index
MATCH Communications in Mathematical and in Computer Chemistry **73** (2015) 41–60.

1273. I. Gutman, L. C. Medina, P. Pizarro, M. Robbiano (9 IX 2014)
Graphs with maximum Laplacian and signless Laplacian Estrada index
Discrete Mathematics **339** (2016) 2664–2671.

1272. S. M. Hosamani, I. Gutman (3 IX 2014)
Zagreb indices of transformation graphs and total transformation graphs
Applied Mathematics and Computation **247** (2014) 1156–1160.

1271. I. Gutman (24 VIII 2014)
Altan derivatives of graphs
Iranian Journal of Mathematical Chemistry **5**(2) (2014) 85–90.

1270. I. Gutman (16 VIII 2014)
An exceptional property of the first Zagreb index
MATCH Communications in Mathematical and in Computer Chemistry **72** (2014) 733–740.

1269. S. Radenković, I. Gutman, M. Antić (31 VII 2014)
A case of breakdown of the Pauling bond order concept
Chemical Physics Letters **614** (2014) 104–109.

1268. I. Gutman. M. K. Jamil, N. Akhter (30 VII 2014)
Graphs with fixed number of pendent vertices and minimal first Zagreb index
Transactions on Combinatorics **4**(1) (2015) 43–48.

1267. H. Fatoorehchi, I. Gutman, H. Abolghasemi (19 VII 2014)
A combined technique for computation of energy–effect of cycles in conjugated molecules
Journal of Mathematical Chemistry **53** (2015) 1113–1125.

1266. I. Gutman (19 VI 2014)
Topological properties of altan–benzenoid hydrocarbons
Journal of the Serbian Chemical Society **79** (2014) 1515–1521.

1265. I. Gutman, E. A. Martins, M. Robbiano, B. San Martín (3 VI 2014)
Ky Fan theorem applied to Randić energy
Linear Algebra and Its Applications **459** (2014) 23–42.

1264. R. Cruz, I. Gutman, J. Rada (V 2014)
Topological indices of Kragujevac trees
Proyecciones Journal of Mathematics **33** (2014) 471–482.

1263. M. B. Ahmadi, D. Dimitrov, I. Gutman, S. A. Hosseini (26 V 2014)
Disproving a conjecture on trees with minimal atom–bond connectivity index
MATCH Communications in Mathematical and in Computer Chemistry **72** (2014) 685–698.

1262. G. Su, L. Xiong, I. Gutman, L. Xu (26 V 2014)
Reciprocal product–degree distance of graphs
Filomat **30** (2016) 2217–2231.

1261. Y. Su, Y. Zhang, W. Chen, I. Gutman (19 V 2014)
Nucleosome positioning based on information content
MATCH Communications in Mathematical and in Computer Chemistry **72** (2014) 551–562.

1260. I. Gutman (27 IV 2014)
Frank model with limited resources
Journal of Mathematical Chemistry **52** (2014) 2330–2333.

1259. I. Gutman (25 IV 2014)
On the origin of two degree–based topological indices
Bulletin de l'Académie Serbe des Sciences et des Arts (Classe des Sciences Mathématiques et Naturelles) **146** (2014) 39–52.

1258. I. Gutman (23 IV 2014)
Kragujevac trees and their energy
Scientific Publications of the State University of Novi Pazar. Series A: Applied Mathematics, Informatics & Mechanics **6** (2014) 71–79.

1257. G. Britto Antony Xavier, E. Suresh, I. Gutman (21 IV 2014)
Counting relations for general Zagreb indices
Kragujevac Journal of Mathematics **38** (2014) 95–103.

1256. A. Hamzeh, A. Iranmanesh, T. Réti, I. Gutman (3 IV 2014)
Chemical graphs constructed of composite graphs and their q-Wiener index
MATCH Communications in Mathematical and in Computer Chemistry **72** (2014) 807–823.

1255. I. Gutman, T. Réti (2 III 2014)
Zagreb group indices and beyond
International Journal of Chemical Modeling **6** (2014) 191–200.

1254. I. Gutman, E. Milovanović, I. Milovanović (24 II 2014)
Bounds for Laplacian–type graph energies
Miskolc Mathematical Notes **16** (2015) 195–203.

1253. K. C. Das, S. Sorgun, I. Gutman (17 II 2014)
On Randić energy
MATCH Communications in Mathematical and in Computer Chemistry **73** (2015) 81–92.

1252. I. Gutman (14 II 2014)
Topological resonance energy 40 years later
International Journal of Chemical Modeling **6** (2014) 177–189.

1251. M. Goubko, I. Gutman (11 II 2014)
Degree–based topological indices: Optimal trees with given number of pendents
Applied Mathematics and Computation **240** (2014) 387–398.

1250. J. Senbagamalar, J. Baskar Babujee, I. Gutman (8 II 2014)
On Wiener index of graph complements
Transactions on Combinatorics **3**(2) (2014) 11–15.

1249. I. Gutman, B. Furtula, V. Katanić (3 II 2014)
New bounds and approximations for total π-electron energy – a critical test
Kragujevac Journal of Science **36** (2014) 79–86.

1248. K. C. Das, I. Gutman (27 I 2014)
Bounds for energy of graphs
Hacettepe Journal of Mathematics and Statistics **45** (2016) 695–703.

1247. I. Gutman, B. Furtula, C. Elphick (25 I 2014)
Three new/old vertex–degree–based topological indices
MATCH Communications in Mathematical and in Computer Chemistry **72** (2014) 617–632.

1246. B. Furtula, G. Lekishvili, I. Gutman (20 I 2014)
A graph theoretical approach to cis/trans isomerism
Journal of the Serbian Chemical Society **79** (2014) 805–813.

1245. H. Fatoorehchi, I. Gutman, H. Abolghasemi (11 I 2014)
Computing graph energy: An alternative approach
Kragujevac Journal of Science **36** (2014) 69–78.

1244. I. Gutman, J. Đurđević, S. Gojak–Salimović (6 XII 2013)
Testing the Clar theory: Cyclic conjugation in some benzo– and naphthaleno–annelated ovalenes
Kragujevac Journal of Science **36** (2014) 87–93.

1243. B. Furtula, I. Gutman, S. Ediz (3 XII 2013)
On difference of Zagreb indices
Discrete Applied Mathematics **178** (2014) 83–88.

1242. I. Gutman, M. Goubko (22 XI 2013)
Trees with fixed number of pendent vertices with minimal first Zagreb index
Bulletin of International Mathematical Virtual Institute **3** (2013) 161–164.

1241. K. C. Das, I. Gutman (16 XI 2013)
On incidence energy of graphs
Linear Algebra and Its Applications **446** (2014) 329–344.

1240. H. Gomes, I. Gutman, E. Andrade Martins, M. Robbiano, B. San Martín (10 XI 2013)
On Randić spread
MATCH Communications in Mathematical and in Computer Chemistry **72** (2014) 249–266.

1239. I. Gutman, K. Xu, M. Liu (7 XI 2013)
A congruence relation for Wiener and Szeged indices
Filomat **29** (2015) 1081–1083.

1238. I. Milovanović, I. Gutman, E. Milovanović (6 XI 2013)
On Kirchhoff and degree Kirchhoff indices
Filomat **29** (2015) 1869–1877.

1237. I. Gutman, B. Furtula (X 2013)
Metric–extremal graphs
in the book: M. Dehmer, F. Emmert–Streib (Eds.), *Quantitative Graph Theory – Mathematical Foundations and Applications*, CRC Press, Boca Raton, 2015, pp. 111–139.

1236. J. Carmona, I. Gutman, N. Jaque Tamblay, M. Robbiano (25 X 2013)
A decreasing sequence of upper bounds for the Laplacian energy of a tree
Linear Algebra and Its Applications **446** (2014) 304–313.

1235. I. Gutman, L. Zhong, K. Xu (30 IX 2013)
Relating the *ABC* and harmonic indices
Journal of the Serbian Chemical Society **79** (2014) 557–563.

1234. S. Marković, I. Gutman, N. Simić (23 IX 2013)
Local aromaticity in benzo– and benzocyclobutadieno–annelated perylenes
Journal of the Serbian Society for Computational Mechanics **7** (2013) 71–81.

1233. J. Rada, R. Cruz, I. Gutman (18 IX 2013)
Benzenoid systems with extremal vertex–degree–based topological indices
MATCH Communications in Mathematical and in Computer Chemistry **72** (2014) 125–136.

1232. I. Gutman, K. C. Das (5 IX 2013)
Estimating the total π-electron energy
Journal of the Serbian Chemical Society **78** (2013) 1925–1933.

1231. S. P. Hande, S. R. Jog, H. S. Ramane, P. R. Hampiholi, I. Gutman, B. S. Durgi (2 IX 2013)
Derived graphs of subdivision graphs
Kragujevac Journal of Mathematics **37** (2013) 319–323.

1230. O. Ori, M. V. Putz, I. Gutman, P. Schwerdtfeger (VIII 2013)
Generalized Stone–Wales transformations for fullerene graphs derived from Berge's switching theorem
in the book: I. Gutman, B. Pokrić, D. Vukičević, (Eds.), *Ante Graovac – Life and Works*, Univ. Kragujevac, Kragujevac, 2014, pp. 259–272.

1229. J. Yang, L. You, I. Gutman (16 VII 2013)
Bounds on the distance Laplacian energy of graphs
Kragujevac Journal of Mathematics **37** (2013) 245–255.

1228. M. Knor, B. Lužar, R. Škrekovski, I. Gutman (15 VII 2013)
On Wiener index of common neighborhood graphs
MATCH Communications in Mathematical and in Computer Chemistry **72** (2014) 321–332.

1227. M. Hakimi–Nezhaad, A. R. Ashrafi, I. Gutman (12 VII 2013)
Note on degree Kirchhoff index of graphs
Transactions on Combinatorics **2**(3) (2013) 43–52.

1226. M. P. Stanić, I. Gutman (1 VII 2013)
Towards a definition of almost–equienergetic graphs
Journal of Mathematical Chemistry **52** (2014) 213–221.

1225. D. Stevanović, I. Gutman, M. U. Rehman (18 VI 2013)
On spectral radius and energy of complete multipartite graphs
Ars Mathematica Contemporanea **9** (2015) 109–113.

1224. R. Škrekovski, I. Gutman (17 VI 2013)
Vertex version of the Wiener theorem
MATCH Communications in Mathematical and in Computer Chemistry **72** (2014) 295–300.

1223. K. C. Das, S. A. Mojallal, I. Gutman (2 VI 2013)
Improving McClelland's lower bound for energy
MATCH Communications in Mathematical and in Computer Chemistry **70** (2013) 663–668.

1222. I. Gutman (30 V 2013)
Degree–based topological indices
Croatica Chemica Acta **86** (2013) 351–361.

1221. I. Gutman, S. Radenković, M. Antić, J. Đurđević (20 V 2013)
A test of Clar aromatic sextet theory
Journal of the Serbian Chemical Society **78** (2013) 1539–1546.

1220. K. C. Das, I. Gutman, A. S. Çevik, B. Zhou (6 V 2013)
On Laplacian energy
MATCH Communications in Mathematical and in Computer Chemistry **70** (2013) 689–696.

1219. H. Y. Wang, J. Qin, I. Gutman (7 IV 2013)
Wiener numbers of random pentagonal chains
Iranian Journal of Mathematical Chemistry **4**(1) (2013) 59–76.

1218. I. Gutman, R. Cruz, J. Rada (5 IV 2013)
Wiener index of Eulerian graphs
Discrete Applied Mathematics **162** (2014) 247–250.

1217. J. Rada, I. Gutman, R. Cruz (4 IV 2013)
The energy of directed hexagonal systems
Linear Algebra and Its Applications **439** (2013) 1825–1833.

1216. I. Gutman, B. Furtula, J. Tošović, M. Essalih, M. El Marraki (3 IV 2013)
On terminal Wiener indices of kenograms and plerograms
Iranian Journal of Mathematical Chemistry **4**(1) (2013) 77–89.

1215. R. Sharafdini, I. Gutman (19 III 2013)
Splice graphs and their topological indices
Kragujevac Journal of Science **35** (2013) 89–98.

1214. M. P. Stanić, I. Gutman (17 III 2013)
On almost–equienergetic graphs
MATCH Communications in Mathematical and in Computer Chemistry **70** (2013) 681–688.

1213. S. Gojak–Salimović, I. Gutman, J. Đurđević, M. Janošević (28 II 2013)
Cyclic conjugation in benzo–annelated ovalenes
Bulletin of the Chemists and Technologists of Bosnia and Herzegovina **40** (2013) 17–20.

1212. R. Cruz, I. Gutman, J. Rada (18 II 2013)
On benzenoid systems with minimal number of inlets
Journal of the Serbian Chemical Society **78** (2013) 1351–1357.

1211. I. Gutman, M. Essalih, M. El Marraki, B. Furtula (15 II 2013)
Why plerograms are not used in chemical graph theory? The case of terminal–Wiener index
Chemical Physics Letters **568-569** (2013) 195–197.

1210. S. Pirzada, M. A. Bhat, I. Gutman, J. Rada (6 II 2013)
On the energy of digraphs
Bulletin of International Mathematical Virtual Institute **3** (2013) 69–76.

1209. J. Rada, R. Cruz, I. Gutman (25 I 2013)
Vertex–degree–based topological indices of catacondensed hexagonal systems
Chemical Physics Letters **572** (2013) 154–157.

1208. L. Chen, X. Li, M. Liu, I. Gutman (11 I 2013)
On a relation between Szeged and Wiener indices of bipartite graphs
Transactions on Combinatorics **1**(4) (2012) 43–49.

1207. S. A. Hosseini, M. B. Ahmadi, I. Gutman (8 I 2013)
Kragujevac trees with minimal atom–bond connectivity index
MATCH Communications in Mathematical and in Computer Chemistry **71** (2014) 5–20.

1206. M. Tavakoli, F. Rahbarnia, M. Mirzavaziri, A. R. Ashrafi, I. Gutman (30 XII 2012)
Extremely irregular graphs
Kragujevac Journal of Mathematics **37** (2013) 135–139.

1205. B. Furtula, I. Gutman, H. Lin (23 XII 2012)
More trees with all degrees odd having extremal Wiener index
MATCH Communications in Mathematical and in Computer Chemistry **70** (2013) 293–296.

1204. M. Azari, A. Iranmanesh, I. Gutman (13 XII 2012)
Zagreb indices of bridge and chain graphs
MATCH Communications in Mathematical and in Computer Chemistry **70** (2013) 921–938.

1203. X. Li, Y. Li, Y. Shi, I. Gutman (11 XII 2012)
Note on the HOMO–LUMO index of graphs
MATCH Communications in Mathematical and in Computer Chemistry **70** (2013) 85–96.

1202. K. Xu, M. Liu, K. C. Das, I. Gutman, B. Furtula (5 XII 2012)
A survey on graphs extremal with respect to distance–based topological indices
MATCH Communications in Mathematical and in Computer Chemistry **71** (2014) 461–508.

1201. K. C. Das, I. Gutman, A. S. Çevik (3 XII 2012)
On the Laplacian–energy–like invariant
Linear Algebra and Its Applications **442** (2014) 58–68.

1200. G. H. Fath–Tabar, I. Gutman, R. Nasiri (30 XI 2012)
Extremely irregular trees
Bulletin de l'Académie Serbe des Sciences et des Arts (Classe des Sciences Mathématiques et Naturelles) **145** (2013) 1–8.

1199. I. Gutman, B. Furtula, Ş. B. Bozkurt (9 XI 2012)
On Randić energy
Linear Algebra and Its Applications **442** (2014) 50–57.

1198. B. Furtula, I. Gutman (7 XI 2012)
Comparing energy and Randić energy
Macedonian Journal of Chemistry and Chemical Engineering **32** (2013) 117–123.

1197. H. S. Ramane, I. Gutman, A. B. Ganagi (30 X 2012)
On diameter of line graphs
Iranian Journal of Mathematical Sciences and Informatics **8** (2013) 105–109.

1196. B. Furtula, I. Gutman, M. Dehmer (24 X 2012)
On structure–sensitivity of degree–based topological indices
Applied Mathematics and Computation **219** (2013) 8973–8978.

1195. K. C. Das, K. Xu, I. Gutman (20 X 2012)
On Zagreb and Harary indices
MATCH Communications in Mathematical and in Computer Chemistry **70** (2013) 301–314.

1194. K. C. Das, I. Gutman (20 X 2012)
Bound for vertex PI Index in terms of simple graph parameters
Filomat **27** (2013) 1583–1587.

1193. Ş. B. Bozkurt, I. Gutman (6 X 2012)
Estimating the incidence energy
MATCH Communications in Mathematical and in Computer Chemistry **70** (2013) 143–156.

1192. I. Gutman, J. Tošović (2 X 2012)
Testing the quality of molecular structure descriptors. Vertex–degree–based topological indices
Journal of the Serbian Chemical Society **78** (2013) 805–810.

1191. S. Sedghi, N. Shobe, M. A. Salahshour, I. Gutman (17 IX 2012)
Relations between the polynomials of a graph and Wiener index
Kragujevac Journal of Science **35** (2013) 77–88.

1190. S. R. Jog, S. P. Hande, I. Gutman, Ş. B. Bozkurt (27 VIII 2012)
Derived graphs of some graphs
Kragujevac Journal of Mathematics bf 36 (2012) 309–314.

1189. S. Radenković, P. Bultinck, I. Gutman, J. Đurđević (24 VIII 2012)
On induced current density in the perylene/bisanthrene homologous series
Chemical Physics Letters **552** (2012) 151–155.

1188. A. Iranmanesh, M. A. Hosseinzadeh, I. Gutman (1 VIII 2012)
On multiplicative Zagreb indices of graphs
Iranian Journal of Mathematical Chemistry **3**(2) (2012) 145–154.

1187. I. Gutman, J. Đurđević, S. Radenković, Z. Matović (25 VII 2012)
Anomalous cyclic conjugation in the perylene/bisanthrene homologous series
Monatshefte für Chemie **143** (2012) 1649–1653.

1186. S. Radenković, I. Gutman, P. Bultinck (23 VII 2012)
A comparative study of aromaticity in tetraoxa[8]circulenes
Journal of Physical Chemistry **A116** (2012) 9421–9430.

1185. I. Gutman, B. Furtula, M. B. Ahmadi, S. A. Hosseini, P. Salehi Nowbandegani, M. Zarrinderakht (10 VII 2012)
The *ABC* index conundrum
Filomat **27** (2013) 1075–1083.

1184. S. Zhang, Y. Zhang, I. Gutman (5 VII 2012)
Analysis of DNA sequences based on the fuzzy integral
MATCH Communications in Mathematical and in Computer Chemistry **70** (2013) 417–430.

1183. I. Gutman (9 VI 2012)
On discriminativity of vertex–degree–based indices
Iranian Journal of Mathematical Chemistry **3** (2012) 95–101.

1182. T. Réti, I. Gutman (5 VI 2012)
Relations between ordinary and multiplicative Zagreb indices
Bulletin of International Mathematical Virtual Institute **2** (2012) 133–140.

1181. H. S. Ramane, A. B. Ganagi, I. Gutman (4 VI 2012)
On a conjecture on the diameter of line graphs of graphs of diameter two
Kragujevac Journal of Mathematics **36** (2012) 59–62.

1180. I. Gutman, L. Feng, G. Yu (31 V 2011)
On the degree resistance distance of unicyclic graphs
Transactions on Combinatorics **1**(2) (2012) 27–40.

1179. I. Gutman, J. Đurđević, Z. Matović, M. Marković (19 V 2012)
Verifying the modes of cyclic conjugation in tetrabenzo[*bc, ef, op, rs*]circumanthracene
Journal of the Serbian Chemical Society **77** (2012) 1401–1408.

1178. A. S. Bonifácio, R. R. Rosa, I. Gutman, N. M. M. de Abreu (14 V 2012)
Complete common neighborhood graphs
Proceedings of Congreso Latino–Iberoamericano de Investigación Operativa & Simpósio Brasileiro de Pesquisa Operacional (2012) 4026–4032.

1177. G. Su, L. Xiong, I. Gutman (2 V 2012)
Harary index of the k-th power of a graph
Applicable Analysis and Discrete Mathematics **7** (2013) 94–105.

1176. L. Feng, I. Gutman, G. Yu (23 IV 2012)
Degree Kirchhoff index of unicyclic graphs
MATCH Communications in Mathematical and in Computer Chemistry **69** (2013) 629–648.

1175. B. Furtula, I. Gutman, M. Ivanović, D. Vukičević (19 IV 2012)
Computer search for trees with minimal *ABC* index
Applied Mathematics and Computation **219** (2012) 767–772.

1174. B. Arsić, I. Gutman, K. C. Das, K. Xu (30 III 2012)
Relations between Kirchhoff index and Laplacian–energy–like invariant
Bulletin de l'Académie Serbe des Sciences et des Arts (Classe des Sciences Mathématiques et Naturelles) **144** (2012) 61–72.

1173. A. Alwardi, B. Arsić, I. Gutman, N. D. Soner (19 III 2012)
The common neighborhood graph and its energy
Iranian Journal of Mathematical Sciences and Informatics **7**(2) (2012) 1–8.

1172. R. Cruz, I. Gutman, J. Rada (5 III 2012)
Convex hexagonal systems and their topological indices
MATCH Communications in Mathematical and in Computer Chemistry **68** (2012) 97–108.

1171. J. Đurđević, I. Gutman (27 II 2012)
Phenyl-cyclopentadienyl rule
Macedonian Journal of Chemistry and Chemical Engineering **31** (2012) 1–15.

1170. I. Gutman, S. Wagner (13 II 2012)
The matching energy of a graph
Discrete Applied Mathematics **160** (2012) 2177–2187.

1169. I. Gutman, B. Furtula (7 II 2012)
Trees with smallest atom–bond connectivity index
MATCH Communications in Mathematical and in Computer Chemistry **68** (2012) 131–136.

1168. M. Marković, J. Đurđević, I. Gutman (31 I 2012)
Cyclic conjugation in benzo– and benzocyclobutadieno–annelated terrylenes and higher rylenes
Journal of the Serbian Chemical Society **77** (2012) 751–759.

1167. Y. Zhang, Z. Zhang, W. Chen, I. Gutman, Y. Li (29 I 2012)
Predicting nucleosome positions using the dinucleotide absolute frequency of DNA fragment
MATCH Communications in Mathematical and in Computer Chemistry **68** (2012) 639–650.

1166. I. Gutman (20 I 2012)
Estimating the Laplacian–energy–like molecular structure descriptor
Zeitschrift für Naturforschung **67a** (2012) 403–406.

1165. K. P. Narayankar, S. B. Lokesh, V. Mathad, I. Gutman (8 I 2012)
Hosoya polynomial of Hanoi graphs
Kragujevac Journal of Mathematics **36** (2012) 51–57.

1164. M. Ghorbani, M. Songhori, I. Gutman (5 I 2012)
Modified Narumi–Katayama index
Kragujevac Journal of Science **34** (2012) 57–64.

1163. M. Mogharrab, I. Gutman (26 XII 2011)
Bridge graphs and their topological indices
MATCH Communications in Mathematical and in Computer Chemistry **69** (2013) 579–587.

1162. I. Gutman (23 XII 2011)
Comparative studies of graph energies
Bulletin de l'Académie Serbe des Sciences et des Arts (Classe des Sciences Mathématiques et Naturelles) **144** (2012) 1–17.

1161. I. Gutman (19 XII 2011)
Bounds for all graph energies
Chemical Physics Letters **528** (2012) 72–74.

1160. I. Gutman, B. Furtula, E. O. D. Andriantiana, M. Cvetić (19 XII 2011)
More trees with large energy and small size
MATCH Communications in Mathematical and in Computer Chemistry **68** (2012) 697–702.

1159. I. Gutman, B. Furtula (12 XII 2011)
Vertex–degree–based molecular structure descriptors of benzenoid systems and phenylenes
Journal of the Serbian Chemical Society **77** (2012) 1031–1036.

1158. I. Gutman, J. Tošović, S. Radenković, S. Marković (1 XII 2011)
On atom–bond connectivity index and its chemical applicability
Indian Journal of Chemistry **51A** (2012) 690–694.

1157. H. Shabani, A. R. Ashrafi, I. Gutman, B. Furtula (22 XI 2011)
On extensions of Wiener index
MATCH Communications in Mathematical and in Computer Chemistry **69** (2013) 589–596.

1156. T. Tamizh Chelvam, S. Raja, I. Gutman (20 XI 2011)
Strongly regular integral circulant graphs and their energies
Bulletin of International Mathematical Virtual Institute **2** (2012) 9–16.

1155. C. Adiga, A. Bayad, I. Gutman, S. A. Srinivas (14 X 2011)
The minimum covering energy of a graph
Kragujevac Journal of Science **34** (2012) 39–56.

1154. K. C. Das, K. Xu, I. Gutman (26 IX 2011)
Comparison between Kirchhoff index and the Laplacian–energy–like invariant
Linear Algebra and Its Applications **436** (2012) 3661–3671.

1153. T. Réti, I. Gutman, D. Vukičević (24 IX 2011)
On Zagreb indices of pseudo–regular graphs
Journal of Mathematical Nanoscience **1** (2011) 1–12.

1152. D. Vukičević, J. Đurđević, I. Gutman (15 IX 2011)
Limitations of Pauling bond order concept
Polycyclic Aromatic Compounds **32** (2012) 36–47.

1151. I. Gutman (31 VIII 2011)
Generalizing the McClelland and Koolen–Moulton inequalities for total π-electron energy
International Journal of Chemical Modeling **4** (2012) 135–141.

1150. J. Liu, I. Gutman, Z. Mu, Y. Zhang (30 VIII 2011)
q-Wiener index of some compound trees
Applied Mathematics and Computation **218** (2012) 9528–9535.

1149. M. Eliasi, A. Iranmanesh, I. Gutman (27 VIII 2011)
Multiplicative versions of first Zagreb index
MATCH Communications in Mathematical and in Computer Chemistry **67** (2012) 217–230.

1148. L. Ren, Y. Zhang, I. Gutman (1 VIII 2011)
Predicting the classification of transcription factors by incorporating their binding site properties into a novel mode of Chou's pseudo amino acid composition
Protein and Peptide Letters **19** (2012) 1170–1176.

1147. K. C. Das, I. Gutman, B. Furtula (22 VII 2011)
On atom–bond connectivity index
Filomat **26** (2012) 733–738.

1146. K. C. Das I. Gutman, B. Horoldagva (21 VII 2011)
Comparing Zagreb indices and coindices of trees
MATCH Communications in Mathematical and in Computer Chemistry **68** (2012) 189–198.

1145. I. Gutman, Y. Zhang, M. Dehmer, A. Ilić (18 VII 2011)
Altenburg, Wiener, and Hosoya polynomials
in the book: I. Gutman, B. Furtula (Eds.), *Distance in Molecular Graphs – Theory*, Univ. Kragujevac, Kragujevac, 2012, pp. 49–70.

1144. Z. Zhang, Y. Zhang, I. Gutman (8 VII 2011)
Predicting nucleosome position in yeast: Using the absolute frequency
Journal of Biomolecular Structure and Dynamics **29** (2012) 1081–1088.

1143. I. Gutman, B. Furtula, M. Ivanović (3 VII 2011)
Notes on trees with minimal atom–bond connectivity index
MATCH Communications in Mathematical and in Computer Chemistry **67** (2012) 467–482.

1142. Y. Zhang, I. Gutman, J. Liu, Z. Mu (16 VI 2011)
q-Analog of Wiener index
MATCH Communications in Mathematical and in Computer Chemistry **67** (2012) 347–356.

1141. H. Abdo, D. Dimitrov, I. Gutman (9 VI 2011)
On the Zagreb indices equality
Discrete Applied Mathematics **160** (2012) 1–8.

1140. H. Shabani, A. R. Ashrafi, I. Gutman (4 VI 2011)
On revised Szeged index of graphs
Utilitas Mathematica **95** (2014) 281–288.

1139. X. Li, Y. Shi I. Gutman (V 2011)
Graph Energy
Springer, New York, 2012, pp. XI+266.

1138. K. C. Das, I. Gutman, B. Furtula (9 V 2011)
On atom–bond connectivity index
Chemical Physics Letters **511** (2011) 452–454.

1137. A. T. Balaban, I. Gutman, S. Marković, D. Simijonović, J. Đurđević (1 V 2011)
Local aromaticity in benzo– and benzocyclobutadiento–annelated phenanthrenes
Polycyclic Aromatic Compounds **31** (2011) 339–349.

1136. A. Alwardi, N. D. Soner, I. Gutman (29 IV 2011)
On the common–neighborhood energy of a graph
Bulletin de l'Académie Serbe des Sciences et des Arts (Classe des Sciences Mathématiques et Naturelles) **143** (2011) 49–59.

1135. I. Gutman, M. Janošević, S. Radenković (14 IV 2011)
Effect of benzocyclobutadieno–annelation on cyclic conjugation in coronene
Kragujevac Journal of Science **33** (2011) 45–53.

1134. X. Xu, F. Wei, I. Gutman (14 III 2011)
Comparing the energy of two unicyclic molecular graphs
Kragujevac Journal of Science **33** (2011) 39–44.

1133. I. Gutman, B. Stojanovska (4 III 2011)
Effect of benzocyclobutadieno–annelation on cyclic conjugation in perylene
Macedonian Journal of Chemistry and Chemical Engineering **30** (2011) 235–240.

1132. I. Gutman, A. T. Balaban (28 II 2011)
Simple mathematical model for the effect of benzo-annelation on cyclic conjugation
Journal of the Serbian Chemical Society **76** (2011) 1505–1511.

1131. I. Gutman (16 II 2011)
Multiplicative Zagreb indices of trees
Bulletin of Society of Mathematicians Banja Luka **18** (2011) 17–23.
also published in:
Bulletin of International Mathematical Virtual Institute **1** (2011) 13–19.

1130. I. Gutman, M. Ghorbani (14 II 2011)
Some properties of the Narumi–Katayama index
Applied Mathematics Letters **25** (2012) 1435–1438.

1129. I. Gutman (24 I 2011)
Effect of benzocyclobutadieno–annelation on cyclic conjugation
Indian Journal of Chemistry **50A** (2011) 670–673.

1128. A. D. Güngör Maden, I. Gutman, A. S. Çevik (4 I 2011)
Bounds for resistance–distance spectral radius
Hacettepe Journal of Mathematics and Statistics **42** (2013) 43–50.

1127. A. T. Balaban, I. Gutman, S. Marković, D. Simijonović (14 I 2011)
Local aromaticity in benzo– and benzocyclobutadieno–annelated anthracenes
Monatshefte für Chemie **142** (2011) 797–800.

1126. D. Vukičević, I. Gutman, B. Furtula, V. Andova, D. Dimitrov (11 I 2011)
Some observations on comparing Zagreb indices
MATCH Communications in Mathematical and in Computer Chemistry **66** (2011) 627–645.

1125. H. Khodashenas, M. J. Nadjafi–Arani, A. R. Ashrafi, I. Gutman (14 XII 2010)
A new proof of the Szeged–Wiener theorem and a new characterization of block graphs
Kragujevac Journal of Mathematics **35** (2011) 165–172.

1124. K. C. Das, I. Gutman, B. Furtula (9 XII 2010)
On the first geometric–arithmetic index of graphs
Discrete Applied Mathematics **159** (2011) 2030–2037.

1123. F. M. Brückler, T. Došlić, A. Graovac, I. Gutman (3 XII 2010)
On a class of distance–based molecular structure descriptors
Chemical Physics Letters **503** (2011) 336–338.

1122. I. Gutman, B. Furtula, A. T. Balaban (1 XII 2010)
Effect of benzocyclobutadieno–annelation on cyclic conjugation in fluoranthene congeners
Journal of the Serbian Chemical Society **76** (2011) 733–741.

1121. J. Y. Shao, F. Gong, I. Gutman (29 XI 2010)
New approaches for the real and complex integral formulas of the energy of a polynomial
MATCH Communications in Mathematical and in Computer Chemistry **66** (2011) 849–861.

1120. K. C. Das, I. Gutman, D. Vukičević (26 XI 2010)
One–two descriptor of graphs
Bulletin de l'Académie Serbe des Sciences et des Arts (Classe des Sciences Mathématiques et Naturelles) **143** (2011) 37–47.

1119. S. Marković, S. Radenković, Z. Marković, I. Gutman (26 XI 2010)
DFT study on singlet diradical character of zethrenes
Russian Journal of Physical Chemistry A **85** (2011) 2368–2372.

1118. S. K. Ayyaswamy, S. Balachandran, Y. B. Venkatakrishnan, I. Gutman (14 XI 2010)
Signless Laplacian Estrada index
MATCH Communications in Mathematical and in Computer Chemistry **66** (2011) 785–794.

1117. Z. Yarahmadi, A. R. Ashrafi, I. Gutman (17 X 2010)
First and second extremal bipartite graphs with respect to PI index
Mathematical and Computer Modelling **54** (2011) 2460–2463.

1116. A. T. Balaban, I. Gutman, S. Jeremić, J. Đurđević (30 IX 2010)
Effect of benzo–annelation on cyclic conjugation
Monatshefte für Chemie **142** (2011) 53–57.

1115. H. Shabani, A. R. Ashrafi, I. Gutman (27 IX 2010)
Geometric–arithmetic index: An algebraic approach
Studia Universitatis Babeş–Bolyai – Chemia **55** (2010) 107–112.

1114. I. Gutman, J. Y. Shao (16 IX 2010)
The energy change of weighted graphs
Linear Algebra and Its Applications **435** (2011) 2425–2431.

1113. H. S. Ramane, I. Gutman (13 IX 2010)
Counterexamples for properties of line graphs of graphs of diameter two
Kragujevac Journal of Mathematics **34** (2010) 147–150.

1112. I. Gutman, H. Deng, S. Radenković (VIII 2010)
The Estrada index: An updated survey
in the book: D. Cvetković, I. Gutman (Eds.), *Selected Topics on Applications of Graph Spectra*, Math. Inst., Belgrade, 2011, pp. 155–174.

1111. I. Gutman, B. Borovićanin (VIII 2010)
Nullity of graphs: An updated survey
in the book: D. Cvetković, I. Gutman (Eds.), *Selected Topics on Applications of Graph Spectra*, Math. Inst., Belgrade, 2011, pp. 137–154.

1110. I. Gutman (VIII 2010)
Hyperenergetic and hypoenergetic graphs
in the book: D. Cvetković, I. Gutman (Eds.), *Selected Topics on Applications of Graph Spectra*, Math. Inst., Belgrade, 2011, pp. 113–135.

1109. S. K. Ayyaswamy, S. Balachandran, I. Gutman (28 VII 2010)
Upper bound for the energy of strongly connected digraphs
Applicable Analysis and Discrete Mathematics **5** (2011) 37–45.

1108. S. K. Ayyaswamy, S. Balachandran, I. Gutman (21 VI 2010)
On second–stage spectrum and energy of a graph
Kragujevac Journal of Mathematics **34** (2010) 139–146.

1107. K. C. Das, I. Gutman, B. Furtula (13 VI 2010)
On third geometric–arithmetic index of graphs
Iranian Journal of Mathematical Chemistry **1**(2) (2010) 29–36.

1106. I. Gutman, B. Furtula (31 V 2010)
Estimating the second and third geometric–arithmetic indices
Hacettepe Journal of Mathematics and Statistics **40** (2011) 69–76.

1105. I. Gutman, J. Đurđević (26 V 2010)
Cycles in dicyclopenta–derivatives of benzenoid hydrocarbons
MATCH Communications in Mathematical and in Computer Chemistry **65** (2011) 785–798.

1104. I. Gutman, J. Đurđević, D. Bašić, D. Rašović (19 V 2010)
On π-electron configuration of cyclopenta–derivatives of benzenoid hydrocarbons
Indian Journal of Chemistry **49A** (2010) 853–860.

1103. B. Furtula, I. Gutman (19 V 2010)
Relation between second and third geometric–arithmetic indices of trees
Journal of Chemometrics **25** (2011) 87–91.

1102. I. Gutman, S. Marković, S. Jeremić (15 V 2010)
A case of breakdown of the Kekulé–structure model
Polycyclic Aromatic Compounds **30** (2010) 240–246.

1101. N. Abreu, D. M. Cardoso, I. Gutman, E. Andrade Martins, M. Robbiano (11 V 2010)
Bounds for the signless Laplacian energy
Linear Algebra and Its Applications **435** (2011) 2365–2374.

1100. K. C. Das, I. Gutman, B. Furtula (8 V 2010)
Survey on geometric–arithmetic indices of graphs
MATCH Communications in Mathematical and in Computer Chemistry **65** (2011) 595–644.

1099. K. C. Das, I. Gutman, B. Furtula (7 V 2010)
On second geometric–arithmetic index of graphs
Iranian Journal of Mathematical Chemistry **1**(2) (2010) 1(2) 17–28.

1098. K. Xu, I. Gutman (21 IV 2010)
The greatest Hosoya index of bicyclic graphs with given maximum degree
MATCH Communications in Mathematical and in Computer Chemistry **66** (2011) 795–824.

1097. S. Marković, J. Đurđević, S. Jeremić, I. Gutman (19 IV 2010)
Diradical character of some fluoranthenes
Journal of the Serbian Chemical Society **75** (2010) 1241–1249.

1096. T. Došlić, B. Furtula, A. Graovac, I. Gutman, S. Moradi, Z. Yarahmadi (29 III 2010)
On vertex–degree–based molecular structure descriptors
MATCH Communications in Mathematical and in Computer Chemistry **66** (2011) 613–626.

1095. B. Horoldagva, I. Gutman (16 III 2010)
On some vertex–degree–based graph invariants
MATCH Communications in Mathematical and in Computer Chemistry **65** (2011) 723–730.

1094. S. Marković, J. Đurđević, S. Jeremić, I. Gutman (9 III 2010)
Triplet fluoranthenes: Aromaticity versus unpaired electrons
Journal of Molecular Modeling **17** (2011) 805–810.

1093. Ş. B. Bozkurt, A. D. Güngör, I. Gutman (27 II 2010)
Randić spectral radius and Randić energy
MATCH Communications in Mathematical and in Computer Chemistry **64** (2010) 321–334.

1092. W. Li, X. Li, I. Gutman (5 II 2010)
Volkmann trees and their molecular structure descriptors
in the book: I. Gutman, B. Furtula (Eds.), *Novel Molecular Structure Descriptors – Theory and Applications II*, Univ. Kragujevac, Kragujevac, 2010, pp. 231–246.

1091. M. Ghorbani, M. A. Hosseinzadeh, I. Gutman (30 I 2010)
The truncated Randić–type indices
Kragujevac Journal of Science **32** (2010) 45–56.

1090. I. G. Yero, J. A. Rodríguez–Velázquez, I. Gutman (28 I 2010)
Estimating the higher–order Randić index
Chemical Physics Letters **489** (2010) 118–120.

1089. I. Gutman (21 I 2010)
Edge versions of topological indices
in the book: I. Gutman, B. Furtula (Eds.), *Novel Molecular Structure Descriptors – Theory and Applications II*, Univ. Kragujevac, Kragujevac, 2010, pp. 3–20.

1088. S. Jeremić, S. Radenković, I. Gutman (18 I 2010)
Cyclic conjugation in benzo-annelated coronenes
Macedonian Journal of Chemistry and Chemical Engineering **29** (2010) 63–69.

1087. A. T. Balaban, J. Đurđević, I. Gutman, S. Jeremić, S. Radenković (9 I 2010)
Correlations between local aromaticity indices of bipartite conjugated hydrocarbons
Journal of Physical Chemistry **A 114** (2010) 5870–5877.

1086. A. Heydari, I. Gutman (29 XII 2009)
On the terminal Wiener index of thorn graphs
Kragujevac Journal of Science **32** (2010) 57–64.

1085. I. Gutman, B. Furtula (28 XII 2009)
A survey on terminal Wiener index
in the book: I. Gutman, B. Furtula (Eds.), *Novel Molecular Structure Descriptors – Theory and Applications I*, Univ. Kragujevac, Kragujevac, 2010, pp. 173–190.

1084. B. Furtula, I. Gutman (24 XII 2009)
Geometric–arithmetic indices
in the book: I. Gutman, B. Furtula (Eds.), *Novel Molecular Structure Descriptors – Theory and Applications I*, Univ. Kragujevac, Kragujevac, 2010, pp. 137–172.

1083. X. Shen, Y. Hou, I. Gutman, X. Hui (18 XII 2009)
Hyperenergetic graphs and cyclomatic number
Bulletin de l'Académie Serbe des Sciences et des Arts (Classe des Sciences Mathématiques et Naturelles) **141** (2010) 1–8.

1082. D. Vukičević, J. Đurđević, I. Gutman (7 XII 2009)
On the number of Kekulé structures of fluoranthene congeners
Journal of the Serbian Chemical Society **75** (2010) 1093–1098.

1081. D. M. Cardoso, I. Gutman, E. Andrade Martins, M. Robbiano (1 XII 2009)
A generalization of Fiedler's lemma and some applications
Linear and Multilinear Algebra **59** (2011) 929–942.

1080. S. Jeremić, S. Radenković, I. Gutman (1 XII 2009)
Cyclic conjugation in benzo-annelated triphenylenes
Journal of the Serbian Chemical Society **75** (2010) 943–950.

1079. I. Gutman, S. Radenković, W. Linert (25 XI 2009)
Pairwise energy effect of cyclic conjugation in benzo–annelated perylenes
Monatshefte für Chemie **141** (2010) 401–407.

1078. Ş. B. Bozkurt, A. D. Güngör, I. Gutman, A. S. Çevik (9 XI 2009)
Randić matrix and Randić energy
MATCH Communications in Mathematical and in Computer Chemistry **64** (2010) 239–250.

1077. I. Gutman (7 XI 2009)
Theory of the PCP effect and related phenomena
Journal of Mathematical Chemistry **47** (2010) 1309–1312.

1076. S. Stanković, S. Marković, I. Gutman, S. Sretenović (4 XI 2009)
Hydrogen–mediated Stone–Wales isomerization of dicyclopenta[*de,mn*]anthracene
Journal of Molecular Modeling **16** (2010) 1519–1527.

1075. M. Mateljević, V. Božin, I. Gutman (3 XI 2009)
Energy of a polynomial and the Coulson integral formula
Journal of Mathematical Chemistry **48** (2010) 1062–1068.

1074. I. Gutman, G. V. Milovanović (30 X 2009)
Calculating a class of integrals encountered in theoretical chemistry
Bulletin de l'Académie Serbe des Sciences et des Arts (Classe des Sciences Mathématiques et Naturelles) **143** (2011) 1–19.

1073. S. Li, X. Li, H. Ma, I. Gutman (15 X 2009)
On triregular graphs whose energy exceeds the number of vertices
MATCH Communications in Mathematical and in Computer Chemistry **64** (2010) 201–216.

1072. A. Ilić, M. Bašić, I. Gutman (9 X 2009)
Triply equienergetic graphs
MATCH Communications in Mathematical and in Computer Chemistry **64** (2010) 189–200.

1071. I. Gutman, M. Robbiano, E. Andrade Martins, D. M. Cardoso, L. Medina, O. Rojo (6 X 2009)
Energy of line graphs
Linear Algebra and Its Applications **433** (2010) 1312–1323.

1070. A. T. Balaban, T. K. Dickens, I. Gutman, R. B. Mallion (29 IX 2009)
Ring currents and the PCP rule
Croatica Chemica Acta **83** (2010) 209–215.

1069. B. Zhou, I. Gutman, B. Furtula, Z. Du (16 IX 2009)
On two types of geometric–arithmetic index
Chemical Physics Letters **482** (2009) 153–155.

1068. H. Bamdad, F. Ashraf, I. Gutman (15 IX 2009)
Lower bounds for Estrada index and Laplacian Estrada index
Applied Mathematics Letters **23** (2010) 739–742.

1067. K. C. Das, F. M. Bhatti, S. G. Lee, I. Gutman (12 IX 2009)
Spectral properties of the He matrix of hexagonal systems
MATCH Communications in Mathematical and in Computer Chemistry **65** (2011) 753–774.

1066. S. Wagner, I. Gutman (18 VIII 2009)
Maxima and minima of the Hosoya index and the Merrifield–Simmons index: A survey of results and techniques
Acta Applicandae Mathematicae **112** (2010) 323–346.

1065. S. Radenković, W. Linert, I. Gutman, S. Jeremić (17 VIII 2009)
Pairwise energy effects of rings in benzo-annelated perylenes
Indian Journal of Chemistry **48A** (2009) 1657–1661.

1064. O. Khormali, A. Iranmanesh, I. Gutman, A. Ahmadi (14 VIII 2009)
Generalized Schultz index and its edge versions
MATCH Communications in Mathematical and in Computer Chemistry **64** (2010) 783–798.

1063. M. Robbiano, E. Andrade Martins, I. Gutman (10 VIII 2009)
Extending a theorem by Fiedler and applications to graph energy
MATCH Communications in Mathematical and in Computer Chemistry **64** (2010) 145–156.

1062. J. Đurđević, S. Radenković, I. Gutman, S. Marković (19 VI 2009)
Testing the PCP–rule
Monatshefte für Chemie **140** (2009) 1305–1309.

1061. B. Furtula, I. Gutman, S. Jeremić, S. Radenković (2 VI 2009)
Effect of a ring on cyclic conjugation in another ring: Applications to acenaphthylene–type polycyclic conjugated molecules
Journal of the Serbian Chemical Society **75** (2010) 83–90.

1060. A. Ilić, I. Gutman (25 V 2009)
Eccentric connectivity index of chemical trees
MATCH Communications in Mathematical and in Computer Chemistry **65** (2011) 731–744.

1059. I. Gutman (6 V 2009)
Kekulé structures in fluoranthenes
Zeitschrift für Naturforschung **65a** (2010) 473–476.

1058. G. H. Fath–Tabar, B. Furtula, I. Gutman (28 IV 2009)
A new geometric–arithmetic index
Journal of Mathematical Chemistry **47** (2010) 477–486.

1057. I. Gutman, K. Salem (14 IV 2009)
A fully benzenoid system has a unique maximum cardinality resonant set
Acta Applicandae Mathematicae **112** (2010) 15–19.

1056. S. Radenković, J. Đurđević, I. Gutman (7 IV 2009)
Quantitative study of the PCP effect
Chemical Physics Letters **475** (2009) 289–292.

1055. A. T. Balaban, J. Đurđević, I. Gutman (6 IV 2009)
Comments on π-electron conjugation in the five-membered ring of benzo-derivatives of corannulene
Polycyclic Aromatic Compounds **29** (2009) 185–205.

1054. I. Gutman, D. Kiani, M. Mirzakhah, B. Zhou (26 III 2009)
On incidence energy of a graph
Linear Algebra and Its Applications **431** (2009) 1223–1233.

1053. I. Gutman, B. Zhou, B. Furtula (18 III 2009)
The Laplacian–energy like invariant is an energy like invariant
MATCH Communications in Mathematical and in Computer Chemistry **64** (2010) 85–96.

1052. Z. You, B. Liu, I. Gutman (8 III 2009)
Note on hypoenergetic graphs
MATCH Communications in Mathematical and in Computer Chemistry **62** (2009) 491–498.

1051. K. C. Das, I. Gutman (7 III 2009)
Estimating the vertex PI index
Zeitschrift für Naturforschung **65a** (2010) 240–244.

1050. K. C. Das, I. Gutman (3 III 2009)
Estimating the Szeged index
Applied Mathematics Letters **16** (2009) 1680–1684.

1049. I. Gutman, S. Jeremić, V. Petrović (26 II 2009)
Extending the PCP rule
Indian Journal of Chemistry **48A** (2009) 658–662.

1048. I. Gutman, J. Đurđević (17 II 2009)
On π-electron conjugation in the five-membered ring of fluoranthene-type benzenoid hydrocarbons
Journal of the Serbian Chemical Society **74** (2009) 765–771.

1047. J. Đurđević, I. Gutman, J. Terzić, A. T. Balaban (7 II 2009)
Cyclic conjugation in fluoranthene and its benzo–derivatives. Part 1. Catacondensed systems
Polycyclic Aromatic Compounds **29** (2009) 90–102.

1046. S. Majstorović, I. Gutman, A. Klobučar (29 I 2009)
Tricyclic biregular graphs whose energy exceeds the number of vertices
Mathematical Communications **15** (2010) 213–222.

1045. P. Dankelmann, I. Gutman, S. Mukwembi, H. C. Swart (19 I 2009)
On the degree distance of a graph
Discrete Applied Mathematics **157** (2009) 2773–2777.

1044. I. Gutman, D. Kiani, M. Mirzakhah (14 I 2009)
On incidence energy of graphs
MATCH Communications in Mathematical and in Computer Chemistry **62** (2009) 573–580.

1043. I. Gutman (6 I 2009)
On a class of integrals encountered in theoretical chemistry
International Journal of Chemical Modeling **2** (2010) 335–341.
also published in:
M. V. Putz (Ed.), *Advances in Chemical Modeling*, Vol. 2, Nova, New York, 2011, pp. 419–425.

1042. I. Gutman, W. Xiao (6 I 2009)
Distance in trees and Laplacian matrix
International Journal of Chemical Modeling **2** (2010) 327–333.
also published in:
M. V. Putz (Ed.), *Advances in Chemical Modeling*, Vol. 2, Nova, New York, 2011, pp. 411–417.

1041. R. R. del Vecchio, I. Gutman, V. Trevisan, C. T. M. Vinagre (2 I 2009)
On the spectra and energies of double–broom–like trees
Kragujevac Journal of Science **31** (2009) 45–58.

1040. G. Indulal, I. Gutman (29 XII 2008)
D-Equienergetic self-complementary graphs
Kragujevac Journal of Mathematics **32** (2009) 123–131.

1039. B. Borovićanin, I. Gutman (23 XII 2008)
Nullity of graphs
in the book: D. Cvetković, I. Gutman (Eds.), *Applications of Graph Spectra*, Math. Inst., Belgrade, 2009, pp. 107–122.

1038. I. Gutman, E. Gudiño, D. Quiroz (16 XII 2008)
Upper bound for the energy of graphs with fixed second and fourth spectral moments
Kragujevac Journal of Mathematics **32** (2009) 27–35.

1037. B. Zhou, I. Gutman (15 XII 2008)
More on the Laplacian Estrada index
Applicable Analysis and Discrete Mathematics **3** (2009) 371–378.

1036. K. C. Das, I. Gutman (7 XII 2008)
Estimating the Wiener index by means of number of vertices, number of edges, and diameter
MATCH Communications in Mathematical and in Computer Chemistry **64** (2010) 647–660.

1035. J. Đurđević, I. Gutman, R. Ponec (21 XI 2008)
Verifying the PCP-rule by five-center bond indices
Journal of the Serbian Chemical Society **74** (2009) 549–554.

1034. H. Deng, S. Radenković, I. Gutman (20 XI 2008)
The Estrada index
in the book: D. Cvetković, I. Gutman (Eds.), *Applications of Graph Spectra*, Math. Inst., Belgrade, 2009, pp. 123–140.

1033. S. Majstorović, A. Klobučar, I. Gutman (20 XI 2008)
Selected topics from the theory of graph energy: hypoenergetic graphs
in the book: D. Cvetković, I. Gutman (Eds.), *Applications of Graph Spectra*, Math. Inst., Belgrade, 2009, pp. 65–105.

1032. S. Stanković, S. Marković, S. Radenković, I. Gutman (28 X 2008)
Formation and isomerization of dicyclopenta[*de,mn*]anthracene. Electronic structure study
Journal of Molecular Modeling **15** (2009) 953–958.

1031. I. Gutman, J. Đurđević, S. Radenković, A. Burmudžija (3 X 2008)
Energetic properties of fluoranthenes
Indian Journal of Chemistry **48A** (2009) 194–197.

1030. W. So, M. Robbiano, N. M. M. de Abreu, I. Gutman (30 IX 2008)
Applications of a theorem by Ky Fan in the theory of graph energy
Linear Algebra and Its Applications **432** (2010) 2163–2169.

1029. K. C. Das, I. Gutman, B. Zhou (29 IX 2008)
New upper bounds on Zagreb indices
Journal of Mathematical Chemistry **46** (2009) 514–521.

1028. G. H. Fath–Tabar, A. R. Ashrafi, I. Gutman (26 IX 2008)
Note on Estrada and *L*-Estrada indices of graphs
Bulletin de l'Académie Serbe des Sciences et des Arts (Classe des Sciences Mathématiques et Naturelles) **139** (2009) 1–16.

1027. I. Gutman, B. Furtula, M. Petrović (23 IX 2008)
Terminal Wiener index
Journal of Mathematical Chemistry **46** (2009) 522–531.

1026. S. Radenković, I. Gutman (10 IX 2008)
Stability order of isomeric benzenoid hydrocarbons and Kekulé structure count
Journal of the Serbian Chemical Society **74** (2009) 155–158.

1025. A. S. Bonifácio, N. M. M. de Abreu, C. T. M. Vinagre, I. Gutman (8 IX 2008)
Grafos hiperenergéticos a não hiperenergéticos [Hyperenergetic and non-hyperenergetic graphs]
Proceedings of XXXI Congresso Nacional de Matemática Applicada e Computacional (CNMAC 2008), Belem (Brazil), pp. 1–6.

1024. S. Marković, S. Stanković, S. Radenković, I. Gutman (7 VIII 2008)
Thermal isomerization in cyclopenta[*fg*]aceanthrylene
Monatshefte für Chemie **140** (2009) 153–156.

1023. I. Gutman, J. Đurđević, A. T. Balaban (25 VII 2008)
A regularity for cyclic conjugation in acenaphthylene, fluoranthene and their congeners
Polycyclic Aromatic Compounds **29** (2009) 3–11.

1022. S. Majstorović, A. Klobučar, I. Gutman (23 VII 2008)
Triregular graphs whose energy exceeds the number of vertices
MATCH Communications in Mathematical and in Computer Chemistry **62** (2009) 509–524.

1021. I. Gutman, A. Klobučar, S. Majstorović, C. Adiga (19 VII 2008)
Biregular graphs whose energy exceeds the number of vertices
MATCH Communications in Mathematical and in Computer Chemistry **62** (2009) 499–508.

1020. S. Marković, S. Stanković, S. Radenković, I. Gutman (15 VII 2008)
Electronic structure study of thermal interconversions of some dicyclopenta–fused polycyclic aromatic compounds
Journal of Chemical Information and Modeling **48** (2008) 1984–1989.

1019. P. Dankelmann, I. Gutman, S. Mukwembi, H. C. Swart (18 VI 2008)
The edge–Wiener index of a graph
Discrete Mathematics **309** (2009) 3452–3457.

1018. I. Gutman, X. Li, J. Zhang (V 2008)
Graph energy
in the book: M. Dehmer, F. Emmert–Streib (Eds.), *Analysis of Complex Networks. From Biology to Linguistics*, Wiley–VCH, Weinheim, 2009, pp. 145–174.

1017. J. Đurđević, S. Radenković, I. Gutman (20 V 2008)
Hall rule in fluoranthene–type benzenoid hydrocarbons
Journal of the Serbian Chemical Society **73** (2008) 989–995.

1016. O. Miljković, B. Furtula, S. Radenković, I. Gutman (15 V 2008)
Equienergetic and almost–equienergetic trees
MATCH Communications in Mathematical and in Computer Chemistry **61** (2009) 451–461.

1015. I. Gutman, J. Đurđević (18 IV 2008)
Fluoranthene and its congeners – A graph theoretical study
MATCH Communications in Mathematical and in Computer Chemistry **60** (2008) 659–670.

1014. R. Ponec, S. Fias, S. Van Damme, P. Bultinck, I. Gutman, S. Stanković (14 IV 2008)
The close relation between cyclic delocalization, energy effects of cycles and aromaticity
Collection of Czechoslovak Chemical Communications **74** (2009) 147–166.

1013. R. Ponec, S. Fias, P. Bultinck, I. Gutman, S. Stanković (9 IV 2008)
Benzoid szénhidrogének aromás és lokális aromás tulajdonságairól [On aromatic and local aromatic properties of benzenoid hydrocarbons]
Magyar Kémiai Folyóirat **114** (2008) 177–182.

1012. I. Gutman, J. Đurđević, B. Furtula, B. Milivojević (24 III 2008)
Cyclic conjugation in mono– and dicyclopenta–derivatives of anthracene and phenanthrene
Indian Journal of Chemistry **47A** (2008) 803–807.

1011. A. Iranmanesh, I. Gutman, O. Khormali, A. Mahmiani (24 III 2008)
The edge versions of the Wiener index
MATCH Communications in Mathematical and in Computer Chemistry **61** (2009) 663–672.

1010. C. Adiga, Z. Khoshbakht, I. Gutman (10 III 2008)
More graphs whose energy exceeds the number of vertices
Iranian Journal of Mathematical Sciences and Informatics **2**(2) (2007) 57–62.

1009. M. Robbiano, I. Gutman, R. Jiménez, B. San Martín (29 II 2008)
Spectra of copies of Bethe trees attached to path and applications
Bulletin de l'Académie Serbe des Sciences et des Arts (Classe des Sciences Mathématiques et Naturelles) **137** (2008) 59–81.

1008. A. P. Toropova, A. A. Toropov, I. Gutman (11 II 2008)
QSPR modeling of water solubility of minerals by optimal descriptors calculated with SMILES
Kragujevac Journal of Science **30** (2008) 65–72.

1007. J. Đurđević, B. Furtula, I. Gutman, S. Radenković, S. Stanković (8 II 2008)
Comparative study of cyclic conjugation in tribenzoperylene isomers
in the book: A. Graovac, I. Gutman, D. Vukičević (Eds.), *Mathematical Methods and Modelling for Students of Chemistry and Biology*, Hum, Zagreb, 2009, pp. 29–39.

1006. B. Zhou, I. Gutman, T. Aleksić (7 II 2008)
A note on Laplacian energy of graphs
MATCH Communications in Mathematical and in Computer Chemistry **60** (2008) 441–446.

1005. I. Gutman, S. Stanković (6 II 2008)
Comparing the stability of tribenzo[*b,n,pqr*]perylene and tribenzo[*b,k,pqr*]perylene
Monatshefte für Chemie **139** (2008) 1179–1184.

1004. I. Gutman, B. Furtula (23 I 2008)
Cyclic conjugation in pyracylene
Polycyclic Aromatic Compounds **28** (2008) 136–142.

1003. Y. Ginosar, I. Gutman, T. Mansour, M. Schork (8 I 2008)
Estrada index and Chebyshev polynomials
Chemical Physics Letters **454** (2008) 145–147.

1002. I. Gutman, A. R. Ashrafi, G. H. Fath–Tabar (2007)
Graphhay ham energy [Equienergetic graphs]
Farhang va Andishe-e-Riazi [*Culture and Thinking of Mathematics*] **15** (1389) 41–50. [in Persian, 1389 ~ 2011]

1001. H. S. Ramane, D. S. Revankar, I. Gutman, H. B. Walikar (20 XII 2007)
Distance spectra and distance energies of iterated line graphs of regular graphs
Publications de l'Institut Mathématique (Beograd) **85** (2009) 39–46.

1000. X. Li, X. Yao, J. Zhang, I. Gutman (17 XII 2007)
Maximum energy trees with two maximum degree vertices
Journal of Mathematical Chemistry **45** (2009) 962–973.

999. S. Stanković, J. Đurđević, I. Gutman, R. Milentijević (17 XII 2007)
Partitioning of π-electrons in rings of diaza-derivatives of acenes
Journal of the Serbian Chemical Society **73** (2008) 547–554.

998. B. Furtula, S. Radenković, I. Gutman (5 XII 2007)
Bicyclic molecular graphs with greatest energy
Journal of the Serbian Chemical Society **73** (2008) 431–433.

997. H. S. Ramane, I. Gutman, D. S. Revankar (2 XII 2007)
Distance equienergetic graphs
MATCH Communications in Mathematical and in Computer Chemistry **60** (2008) 473–484.

996. G. Indulal, I. Gutman (26 XI 2007)
On the distance spectra of some graphs
Mathematical Communications (Osijek) **13** (2008) 123–131.

995. J. Liu, B. Liu, S. Radenković, I. Gutman (30 X 2007)
Minimal LEL-equienergetic graphs
MATCH Communications in Mathematical and in Computer Chemistry **61** (2009) 471–478.

994. I. Gutman (30 X 2007)
Linearly annelated coronenes with greatest Kekulé structure count
Kragujevac Journal of Science **30** (2008) 51–56.

993. I. Gutman, G. Indulal, R. Todeschini (29 X 2007)
Generalizing the McClelland bounds for total π-electron energy
Zeitschrift für Naturforschung **63a** (2008) 280–282.

992. G. H. Fath–Tabar, A. R. Ashrafi, I. Gutman (26 X 2007)
Note on Laplacian energy of graphs
Bulletin de l'Académie Serbe des Sciences et des Arts (Classe des Sciences Mathématiques et Naturelles) **137** (2008) 1–10.

991. I. Gutman, X. Li, Y. Shi, J. Zhang (23 X 2007)
Hypoenergetic trees
MATCH Communications in Mathematical and in Computer Chemistry **60** (2008) 415–426.

990. H. S. Ramane, D. S. Revankar, I. Gutman, S. B. Rao, B. D. Acharya, H. B. Walikar (20 X 2007)
Estimating the distance energy of graphs
Graph Theory Notes of New York **55** (2008) 27–32.

989. I. Gutman, S. Stanković (10 X 2007)
Why is phenanthrene more stable than anthracene?
Macedonian Journal of Chemistry and Chemical Engineering **26** (2007) 111–114.

988. S. Pirzada, I. Gutman (6 X 2007)
Energy of a graph is never the square root of an odd integer
Applicable Analysis and Discrete Mathematics **2** (2008) 118–121.

987. B. Furtula, I. Gutman (4 X 2007)
Energy and Estrada index of phenylenes
Indian Journal of Chemistry **47A** (2008) 220–224.

986. S. Radenković, I. Gutman (30 IX 2007)
Relation between Wiener index and spectral radius
Kragujevac Journal of Science **30** (2008) 57–64.

985. H. S. Ramane, D. S. Revankar, I. Gutman, S. B. Rao, B. D. Acharya, H. B. Walikar (17 IX 2007)
Bounds for the distance energy of a graph
Kragujevac Journal of Mathematics **31** (2008) 59–68.

984. I. Gutman, S. Radenković (30 VIII 2007)
Hypoenergetic molecular graphs
Indian Journal of Chemistry **46A** (2007) 1733–1736.

983. G. Indulal, I. Gutman, A. Vijayakumar (25 VIII 2007)
On distance energy of graphs
MATCH Communications in Mathematical and in Computer Chemistry **60** (2008) 461–472.

982. N. M. M. de Abreu, C. T. M. Vinagre, A. S. Bonifácio, I. Gutman (10 VIII 2007)
The Laplacian energy of some Laplacian integral graphs
MATCH Communications in Mathematical and in Computer Chemistry **60** (2008) 447–460.

981. H. Hosoya, I. Gutman (2 VIII 2007)
Kekulé structures of hexagonal chains – some unusual connections
Journal of Mathematical Chemistry **44** (2008) 559–568.

980. A. T. Balaban, I. Gutman, S. Stanković (24 VII 2007)
Effect of heteroatoms on partitioning of π-electrons in rings of catafusenes
Polycyclic Aromatic Compounds **28** (2008) 85–97.

979. S. Radenković, I. Gutman (23 VII 2007)
Total π-electron energy and Laplacian energy: How far the analogy goes?
Journal of the Serbian Chemical Society **72** (2007) 1343–1350.

978. I. Gutman, S. Stanković (12 VII 2007)
Testing the Y-rule in Clar theory
Polycyclic Aromatic Compounds **27** (2007) 425–436.

977. I. Gutman, S. Radenković, N. Li, S. Li (11 VII 2007)
Extremal energy trees
MATCH Communications in Mathematical and in Computer Chemistry **59** (2008) 315–320.

976. I. Gutman (11 VII 2007)
On graphs whose energy exceeds the number of vertices
Linear Algebra and Its Applications **429** (2008) 2670–2677.

975. M. H. Khalifeh, H. Yousefi–Azari, A. R. Ashrafi, I. Gutman (10 VII 2007)
The edge Szeged index of product graphs
Croatica Chemica Acta **81** (2008) 277–281.

974. I. Gutman, S. Radenković, A. Graovac, D. Plavšić (6 VII 2007)
Monte Carlo approach to Estrada index
Chemical Physics Letters **446** (2007) 233–236.

973. I. Gutman, S. Radenković, B. Furtula, T. Mansour, M. Schork (3 VII 2007)
Relating Estrada index with spectral radius
Journal of the Serbian Chemical Society **72** (2007) 1321–1327.

972. H. S. Ramane, H. B. Walikar, I. Gutman (VI 2007)
Equienergetic graphs
Journal of Combinatorial Mathematics and Combinatorial Computing **69** (2009) 165–173.

971. I. Gutman, N. M. M. de Abreu, C. T. M. Vinagre, A. S. Bonifácio, S. Radenković (18 VI 2007)
Relation between energy and Laplacian energy
MATCH Communications in Mathematical and in Computer Chemistry **59** (2008) 343–354.

970. I. Gutman, A. R. Ashrafi (30 V 2007)
The edge version of the Szeged index
Croatica Chemica Acta **81** (2008) 263–266.

969. M. Mateljević, I. Gutman (18 V 2007)
Note on the Coulson and Coulson–Jacobs integral formulas
MATCH Communications in Mathematical and in Computer Chemistry **59** (2008) 257–268.

968. I. Gutman, A. R. Ashrafi (16 V 2007)
On the PI index of phenylenes and their hexagonal squeezes
MATCH Communications in Mathematical and in Computer Chemistry **60** (2008) 135–142.

967. I. Gutman, B. Furtula, V. Marković, B. Glišić (10 IV 2007)
Alkanes with greatest Estrada index
Zeitschrift für Naturforschung **62a** (2007) 495–498.

966. I. Gutman, S. Stanković (30 III 2007)
Complete analysis of cyclic conjugation energy effects: Comparison of benzo[*a*]pyrene and benzo[*b*]pyrene
Bulletin de l'Académie Serbe des Sciences et des Arts (Classe des Sciences Mathématiques et Naturelles) **135** (2008) 29–36.

965. I. Gutman (29 III 2007)
The McClelland approximation and the distribution of π-electron molecular orbital energy levels
Journal of the Serbian Chemical Society **72** (2007) 967–973.

964. T. Aleksić, I. Gutman, M. Petrović (23 III 2007)
Estrada index of iterated line graphs
Bulletin de l'Académie Serbe des Sciences et des Arts (Classe des Sciences Mathématiques et Naturelles) **134** (2007) 33–41.

963. H. B. Walikar, H. S. Ramane, I. Gutman, S. B. Halkarni (4 III 2007)
On equienergetic graphs and molecular graphs
Kragujevac Journal of Science **29** (2007) 73–84.

962. I. Gutman (1 III 2007)
An extremal problem in the theory of hexagonal systems
Graph Theory Notes of New York **59** (2007) 26–29.

961. I. Gutman, B. Furtula, H. Hua (21 II 2007)
Bipartite unicyclic graphs with maximal, second–maximal, and third–maximal energy
MATCH Communications in Mathematical and in Computer Chemistry **58** (2007) 75–82.

960. I. Gutman (12 I 2007)
Partitioning of π-electrons in rings of aza–derivatives of triphenylene
Macedonian Journal of Chemistry and Chemical Engineering **26** (2007) 25–29.

959. I. Gutman (11 I 2007)
Lower bounds for Estrada index
Publications de l'Institut Mathématique (Beograd) **83** (2008) 1–7.

958. B. Liu, I. Gutman (10 I 2007)
On a conjecture on Randić indices
MATCH Communications in Mathematical and in Computer Chemistry **62** (2009) 143–154.

957. I. Gutman, B. Furtula, B. Glišić, V. Marković, A. Vesel (31 XII 2006)
Estrada index of acyclic molecules
Indian Journal of Chemistry **46A** (2007) 723–728.

956. I. Gutman, A. Graovac (26 XII 2006)
Estrada index of cycles and paths
Chemical Physics Letters **436** (2007) 294–296.

955. I. Gutman, S. Radenković (19 XII 2006)
A lower bound for the Estrada index of bipartite molecular graphs
Kragujevac Journal of Science **29** (2007) 67–72.

954. J. A. de la Peña, I. Gutman, J. Rada (14 XII 2006)
Retarded regular graphs are regular or semiregular
Linear and Multilinear Algebra **56** (2008) 507–509.

953. I. Gutman, S. Radenković (11 XII 2006)
Estrada index of benzenoid hydrocarbons
Zeitschrift für Naturforschung **62a** (2007) 254–258.

952. I. Gutman, S. Stanković, J. Đurđević, B. Furtula (5 XII 2006)
On the cycle–dependence of topological resonance energy
Journal of Chemical Information and Modeling **47** (2007) 776–781.

951. A. T. Balaban, B. Furtula, I. Gutman, R. Kovačević (27 XI 2006)
Partitioning of π-electrons in rings of aza-derivatives of polycyclic benzenoid hydrocarbons
Polycyclic Aromatic Compounds **27** (2007) 51–63.

950. B. Zhou, I. Gutman (24 XI 2006)
Nordhaus–Gaddum–type relations for the energy and Laplacian energy of graphs
Bulletin de l'Académie Serbe des Sciences et des Arts (Classe des Sciences Mathématiques et Naturelles) **134** (2007) 1–11.

949. I. Gutman, Y. Ruiz–Morales (24 X 2006)
Note on the Y-rule in Clar theory
Polycyclic Aromatic Compounds **27** (2007) 41–49.

948. S. Gojak, I. Gutman, S. Radenković, A. Vodopivec (23 X 2006)
Relating resonance energy with Zhang–Zhang polynomial
Journal of the Serbian Chemical Society **72** (2007) 673–679.

947. J. A. de la Peña, I. Gutman, J. Rada (9 X 2006)
Estimating the Estrada index
Linear Algebra and Its Applications **427** (2007) 70–76.

946. I. Gutman, S. Zare Firoozabadi, J. A. de la Peña, J. Rada (7 X 2006)
On the energy of regular graphs
MATCH Communications in Mathematical and in Computer Chemistry **57** (2007) 435–442.

945. B. Liu, I. Gutman (26 VIII 2006)
On general Randić indices
MATCH Communications in Mathematical and in Computer Chemistry **58** (2007) 157–176.

944. I. Gutman, B. Furtula, R. Kovačević (23 VIII 2006)
Partitioning of π-electrons in rings of aza–derivatives of naphthalene
Journal of the Serbian Chemical Society **72** (2007) 663–671.

943. I. Gutman, E. Estrada, J. A. Rodríguez–Velázquez (4 VIII 2006)
On a graph–spectrum–based structure descriptor
Croatica Chemica Acta **80** (2007) 151–154.

942. B. Liu, I. Gutman (28 VII 2006)
Estimating the Zagreb and the general Randić indices
MATCH Communications in Mathematical and in Computer Chemistry **57** (2007) 617–632.

941. B. Furtula, I. Gutman (13 VII 2006)
Assessing the distribution of π-electrons into rings of phenylenes
Indian Journal of Chemistry **45A** (2006) 1977–1980.

940. L. Clark, I. Gutman (16 VI 2006)
The exponent in the general Randić index
Journal of Mathematical Chemistry **43** (2008) 32–44.

939. I. Gutman (8 VI 2006)
Partitioning of π-electrons in rings of polycyclic conjugated molecules containing heteroatoms
MATCH Communications in Mathematical and in Computer Chemistry **56** (2006) 345–356.

938. I. Gutman, S. Radenković, N. Trinajstić, A. Vodopivec (8 V 2006)
On the relationship between π-electron energy and topological resonance energy
Zeitschrift für Naturforschung **61a** (2006) 345–348.

937. I. Gutman, B. Furtula (3 V 2006)
A Kekulé structure basis for phenylenes
Journal of Molecular Structure (Theochem) **770** (2006) 67–71.

936. J. Sedlar, I. Anđelić, I. Gutman, D. Vukičević, A. Graovac (26 IV 2006)
Vindicating the Pauling–bond–order concept
Chemical Physics Letters **427** (2006) 418–420.

935. G. Brinkmann, C. Grothaus, I. Gutman (24 IV 2006)
Fusenes and benzenoids with perfect matchings
Journal of Mathematical Chemistry **42** (2007) 909–924.

934. I. Gutman, N. Turković, B. Furtula (20 IV 2006)
On distribution of π-electrons in rhombus–shaped benzenoid hydrocarbons
Indian Journal of Chemistry **45A** (2006) 1601–1604.

933. J. Đurđević, B. Furtula, I. Gutman, S. Radenković (15 IV 2006)
Dependence of Hess–Schaad resonance energy on Kekulé structures
Kragujevac Journal of Science **28** (2006) 57–64.

932. I. Gutman, O. Miljković, B. Zhou, M. Petrović (24 III 2006)
Inequalities between distance–based graph polynomials
Bulletin de l'Académie Serbe des Sciences et des Arts (Classe des Sciences Mathématiques et Naturelles) **133** (2006) 57–68.

931. B. Zhou, I. Gutman (21 III 2006)
On Laplacian energy of graphs
MATCH Communications in Mathematical and in Computer Chemistry **57** (2007) 211–220.

930. S. Zhou, H. Zhang, I. Gutman (14 III 2006)
Relations between Clar structures, Clar covers, and the sextet–rotation tree of a hexagonal system
Discrete Applied Mathematics **156** (2008) 1809–1821.

929. S. Gojak, S. Radenković, R. Kovačević, S. Stanković, J. Đurđević, I. Gutman (8 III 2006)
A difference between the π-electron properties of catafusenes and perifusenes
Polycyclic Aromatic Compounds **26** (2006) 197–206.

928. I. Gutman (5 III 2006)
Mathematical modeling of chemical phenomena
in the book: K. R. Stevanović Hedrih (Ed.), *Advances in Nonlinear Sciences. Vol. 2. Sciences and Applications*, Academy of Nonlinear Sciences, Belgrade, 2008, pp. 110–136 (even pages).
Serbian language version:
Matematičko modeliranje hemijskih fenomena
in the book: K. R. Stevanović Hedrih (Ed.), *Advances in Nonlinear Sciences. Vol. 2. Sciences and Applications*, Academy of Nonlinear Sciences, Belgrade, 2008, pp. 111–137 (odd pages)
also published as:
I. Gutman (8 II 2008)
Mathematical modeling of chemical phenomena
in the book: A. Graovac, I. Gutman, D. Vukičević (Eds.), *Mathematical Methods and Modelling for Students of Chemistry and Biology*, Hum, Zagreb, 2009, pp. 13–27.

927. I. Gutman, S. Radenković (1 III 2006)
Extending and modifying the Hall rule
Chemical Physics Letters **423** (2006) 382–385.

926. I. Gutman, S. Radenković (21 II 2006)
A simple formula for calculating resonance energy of benzenoid hydrocarbons
Bulletin of the Chemists and Technologists of Macedonia **25** (2006) 17–21.

925. I. Gutman, B. Furtula (13 II 2006)
Equivalence of two models for partitioning of π-electrons in rings of benzenoid hydrocarbons
Zeitschrift für Naturforschung **61a** (2006) 281–285.

924. I. Gutman, S. Radenković (1 II 2006)
Dependence of Dewar resonance energy of benzenoid molecules on Kekulé structure count
Journal of the Serbian Chemical Society **71** (2006) 1039–1047.

923. I. Raška, A. Toropov, I. Gutman, D. Završnik, S. Špirtović (I 2006)
QSPR modeling of octanol/water partition coefficient of vitamins
in the book: I. Gutman (Ed.), *Mathematical Methods in Chemistry*, Prijepolje Museum, Prijepolje, 2006, pp. 197–208.

922. I. Gutman, S. Radenković (I 2006)
Investigation of Hosoya bond order
in the book: I. Gutman (Ed.), *Mathematical Methods in Chemistry*, Prijepolje Museum, Prijepolje, 2006, pp. 169–181.

921. S. Gojak, S. Stanković, I. Gutman, B. Furtula (I 2006)
Zhang–Zhang polynomial and some of its applications
in the book: I. Gutman (Ed.), *Mathematical Methods in Chemistry*, Prijepolje Museum, Prijepolje, 2006, pp. 141–158.

920. I. Gutman, L. Türker, V. Vučković (I 2006)
McClelland number of conjugated compounds
in the book: I. Gutman (Ed.), *Mathematical Methods in Chemistry*, Prijepolje Museum, Prijepolje, 2006, pp. 131–140.

919. J. Đurđević, B. Furtula, I. Gutman, R. Kovačević, S. Stanković, N. Turković (I 2006)
Cyclic conjugation in annelated perylenes
in the book: I. Gutman (Ed.), *Mathematical Methods in Chemistry*, Prijepolje Museum, Prijepolje, 2006, pp. 101–117.

918. B. Furtula, I. Gutman (I 2006)
Partitioning of π-electrons in the rings of benzenoid hydrocarbons using Fries structural formulas
in the book: I. Gutman (Ed.), *Mathematical Methods in Chemistry*, Prijepolje Museum, Prijepolje, 2006, pp. 89–100.

917. N. Turković, B. Furtula, I. Gutman (I 2006)
Electron and energy content of hexagons in benzenoid hydrocarbons
in the book: I. Gutman (Ed.), *Mathematical Methods in Chemistry*, Prijepolje Museum, Prijepolje, 2006, pp. 73–87.

916. S. Gojak, I. Gutman, B. Furtula (I 2006)
On distribution of π-electrons in double linear hexagonal chains
in the book: I. Gutman (Ed.), *Mathematical Methods in Chemistry*, Prijepolje Museum, Prijepolje, 2006, pp. 63–72.

915. D. Vukičević, I. Gutman, M. Randić (16 I 2006)
On instability of fullerene C_{72}
Croatica Chemica Acta **79** (2006) 429–436.

914. X. Li, I. Gutman (XII 2005)
Mathematical Aspects of Randić–Type Molecular Structure Descriptors
University of Kragujevac & Faculty of Science Kragujevac, Kragujevac, 2006, pp. VI+330.

913. I. Gutman, S. Gojak, B. Furtula, S. Radenković, A. Vodopivec (22 XII 2005)
Relating total π-electron energy and resonance energy of benzenoid molecules with Kekulé– and Clar–structure–based parameters
Monatshefte für Chemie **137** (2006) 1127–1138.

912. B. Zhou, I. Gutman (19 XII 2005)
A connection between ordinary and Laplacian spectra of bipartite graphs
Linear and Multilinear Algebra **56** (2008) 305–310.

911. B. Zhou, I. Gutman, J. A. de la Peña, J. Rada, L. Mendoza (17 XII 2005)
On spectral moments and energy of graphs
MATCH Communications in Mathematical and in Computer Chemistry **57** (2007) 183–191.

910. I. Gutman, S. Zhang (25 XI 2005)
Graph connectivity and Wiener index
Bulletin de l'Académie Serbe des Sciences et des Arts (Classe des Sciences Mathématiques et Naturelles) **133** (2006) 1–5.

909. S. Radenković, I. Gutman (24 XI 2005)
On Hosoya bond order of alternant nonbenzenoid molecules
Kragujevac Journal of Science **28** (2006) 39–46.

908. H. B. Walikar, H. S. Ramane, L. Sindagi, S. S. Shirakol, I. Gutman (20 XI 2005)
Hosoya polynomial of thorn trees, rods, rings, and stars
Kragujevac Journal of Science **28** (2006) 47–56.

907. I. Gutman, A. Vodopivec, S. Radenković, B. Furtula (15 XI 2005)
On π-electron excess of rings of benzenoid molecules
Indian Journal of Chemistry **45A** (2006) 347–351.

906. M. Perić, I. Gutman, J. Radić–Perić (14 XI 2005)
The Hückel total π-electron energy puzzle
Journal of the Serbian Chemical Society **71** (2006) 771–783.

905. I. Gutman (5 XI 2005)
Uniqueness of the matching polynomial
MATCH Communications in Mathematical and in Computer Chemistry **55** (2006) 351–358.

904. I. Gutman, B. Furtula, A. T. Balaban (27 X 2005)
Algorithm for simultaneous calculation of Kekulé and Clar structure counts, and Clar number of benzenoid molecules
Polycyclic Aromatic Compounds **26** (2006) 17–35.

903. I. Gutman, B. Arsić, M. Denić, I. Stojanović (3 X 2005)
Benzenoid isomers with greatest and smallest Kekulé structure counts
Journal of the Serbian Chemical Society **71** (2006) 785–791.

902. I. Gutman, S. Gojak, S. Stanković, B. Furtula (6 IX 2005)
A concealed difference between the structure–dependence of Dewar and topological resonance energy
Journal of Molecular Structure (Theochem) **757** (2005) 119–123.

901. K. Salem, M. Zheng, I. Gutman (31 VIII 2005)
Pair-wise resonance in catacondensed hexagonal systems
Chemical Physics Letters **416** (2005) 38–41.

900. I. Gutman, B. Borovićanin (25 VII 2005)
Zhang–Zhang polynomial of multiple linear hexagonal chains
Zeitschrift für Naturforschung **61a** (2006) 73–77.

899. I. Gutman, S. Gojak, N. Radulović, B. Furtula (19 VII 2005)
Benzenoid molecules with uniform distribution of π-electrons within rings
Monatshefte für Chemie **137** (2006) 277–284.

898. I. Gutman, B. Zhou (12 VII 2005)
Laplacian energy of a graph
Linear Algebra and Its Applications **414** (2006) 29–37.

897. I. Gutman, S. Gojak, B. Furtula (11 VII 2005)
Clar theory and resonance energy
Chemical Physics Letters **413** (2005) 396–399.

896. I. Gutman, W. Yan, Y. N. Yeh, B. Y. Yang (9 VII 2005)
Generalized Wiener indices of zigzagging pentachains
Journal of Mathematical Chemistry **42** (2007) 103–117.

895. I. Gutman, S. Klavžar (8 VII 2005)
Chemical graph theory of fibonacenes
MATCH Communications in Mathematical and in Computer Chemistry **55** (2006) 39–54.

894. I. Gutman, M. Mateljević (13 VI 2005)
Note on the Coulson integral formula
Journal of Mathematical Chemistry **39** (2006) 259–266.

893. S. Klavžar, I. Gutman (1 VI 2005)
A theorem on Wiener–type invariants for isometric subgraphs of hypercubes
Applied Mathematics Letters **19** (2006) 1129–1133.

892. I. Gutman, S. Stanković, R. Kovačević, J. Đurđević, B. Furtula (16 V 2005)
Anomalous cyclic conjugation in benzenoid molecules with a small number of Kekulé structures
Indian Journal of Chemistry **44A** (2005) 1751–1755.

891. B. Liu, I. Gutman (2 V 2005)
Upper bounds for Zagreb indices of connected graphs
MATCH Communications in Mathematical and in Computer Chemistry **55** (2006) 439–446.

890. M. Petrović, I. Gutman, S. Guo (22 IV 2005)
On the spectral radius of bicyclic graphs
Bulletin de l'Académie Serbe des Sciences et des Arts (Classe des Sciences Mathématiques et Naturelles) **131** (2005) 93–99.

889. B. Hollas, I. Gutman, N. Trinajstić (11 IV 2005)
On reducing correlations between topological indices
Croatica Chemica Acta **78** (2005) 489–492.

888. Y. Hu, X. Li, Y. Shi, T. Xu, I. Gutman (8 IV 2005)
On molecular graphs with smallest and greatest zeroth-order general Randić index
MATCH Communications in Mathematical and in Computer Chemistry **54** (2005) 425–434.

887. A. A. Toropov, A. P. Toropova, D. V. Mukhamedzhanova, I. Gutman (7 IV 2005)
Simplified molecular input line entry system (SMILES) as an alternative for constructing quantitative structure–property relationships (QSPR)
Indian Journal of Chemistry **44A** (2005) 1545–1552.

886. I. Gutman, B. Furtula, S. Jeremić, N. Turković (1 III 2005)
Electron content of rings of fully benzenoid hydrocarbons
Journal of the Serbian Chemical Society **70** (2005) 1199–1204.

885. I. Gutman, M. Randić, A. T. Balaban, B. Furtula, V. Vučković (16 II 2005)
π-Electron contents of rings in the double–hexagonal–chain homologous series (pyrene, anthanthrene, ...)
Polycyclic Aromatic Compounds **25** (2005) 215–226.

884. I. Gutman, L. Türker, B. Furtula, V. Vučković (9 II 2005)
The McClelland number of conjugated hydrocarbons
Croatica Chemica Acta **78** (2005) 485–488.

883. I. Gutman, S. Radenković, B. Furtula, H. Hosoya (4 II 2005)
Some properties of the topological bond order
Chemical Physics Letters **407** (2005) 73–77.

882. A. A. Toropov, A. P. Toropova, I. Gutman (18 I 2005)
Comparison of QSPR models based on hydrogen–filled graphs and on graphs of atomic orbitals
Croatica Chemica Acta **78** (2005) 503–509.

881. I. Gutman, B. Furtula, J. Đurđević, R. Kovačević, S. Stanković (12 I 2005)
Annelated perylenes: Benzenoid molecules violating the Kekulé–structure–based cyclic conjugation models
Journal of the Serbian Chemical Society **70** (2005) 1023–1031.

880. I. Gutman, B. Furtula, V. Vučković, B. Arsić, M. Ranđelović (24 XII 2004)
Partition of π-electrons in rings of double linear hexagonal chains
Bulletin de l'Académie Serbe des Sciences et des Arts (Classe des Sciences Mathématiques et Naturelles) **130** (2005) 97–105.

879. L. Türker, I. Gutman (8 XII 2004)
Iterative estimation of total π-electron energy
Journal of the Serbian Chemical Society **70** (2005) 1193–1197.

878. I. Gutman, G. Stojanović, Ž. Bošković, N. Radulović, P. Rašić (12 XI 2004)
Comparing the Randić–Balaban and the Clar models for partitioning of π-electrons in rings of benzenoid hydrocarbons. The case of phenes and starphenes
Polycyclic Aromatic Compounds **25** (2005) 345–355.

877. I. Gutman (4 XI 2004)
Topology and stability of conjugated hydrocarbons. The dependence of total π-electron energy on molecular topology
Journal of the Serbian Chemical Society **70** (2005) 441–456.

876. I. Gutman, A. T. Balaban, M. Randić, C. Kiss–Tóth (2 XI 2004)
Partitioning of π-electrons in rings of fibonacenes
Zeitschrift für Naturforschung **60a** (2005) 171–176.

875. B. Zhou, I. Gutman (1 XI 2004)
Further properties of Zagreb indices
MATCH Communications in Mathematical and in Computer Chemistry **54** (2005) 233–239.

874. K. Salem, I. Gutman (X 2004)
The unfixed subgraph of a catacondensed hexagonal system obtained by fixing an alternating set
Journal of Mathematical Chemistry **38** (2005) 503–510.

873. P. Hansen, H. Mélot, I. Gutman (4 X 2004)
Variable neighborhood search for extremal graphs 12. A note on the variance of bounded degrees in graphs
MATCH Communications in Mathematical and in Computer Chemistry **54** (2005) 221–232.
also published in:
Les Cahiers du GERAD **G-2004-74** (2004) 1–12.

872. I. Gutman (24 IX 2004)
Some relations between distance–based polynomials of trees
Bulletin de l'Académie Serbe des Sciences et des Arts (Classe des Sciences Mathématiques et Naturelles) **131** (2005) 1–7.

871. I. Gutman, N. Turković (7 IX 2004)
On the distribution of π-electrons into rings of conjugated hydrocarbons containing a linear polyacene fragment
Monatshefte für Chemie **136** (2005) 713–717.

870. I. Gutman, Ž. Tomović, K. Müllen, J. P. Rabe (19 VIII 2004)
On the distribution of π-electrons in large polycyclic aromatic hydrocarbons
Chemical Physics Letters **397** (2004) 412–416.

869. H. S. Ramane, I. Gutman, H. B. Walikar, S. B. Halkarni (3 VIII 2004)
Equienergetic complement graphs
Kragujevac Journal of Science **27** (2005) 67–74.

868. I. Gutman (3 VIII 2004)
Cyclic conjugation energy effects in polycyclic π-electron systems
Monatshefte für Chemie **136** (2005) 1055–1069.

867. I. Gutman, S. Milosavljević, B. Furtula, N. Cmiljanović (2 VIII 2004)
Relation between electron and energy contents of hexagons in pericondensed benzenoid hydrocarbons
Indian Journal of Chemistry **44A** (2005) 13–17.

866. I. Gutman (VII 2004)
Chemical graph theory – The mathematical connection
in the book: J. R. Sabin, E. J. Brändas (Eds.), *Advances in Quantum Chemistry 51*, Elsevier, Amsterdam, 2006, pp. 125–138.

865. B. Furtula, I. Gutman, N. Turković (30 VII 2004)
Relation between electron and energy contents of hexagons in catacondensed benzenoid hydrocarbons
Indian Journal of Chemistry **44A** (2005) 9–12.

864. I. Gutman, S. Gojak, N. Turković, B. Furtula (16 VII 2004)
Polansky's benzenoid character and the electron content of rings of benzenoid hydrocarbons
MATCH Communications in Mathematical and in Computer Chemistry **53** (2005) 139–145.

863. I. Gutman, B. Furtula, S. Radenković (14 VII 2004)
Relation between Pauling and Coulson bond orders in benzenoid hydrocarbons
Zeitschrift für Naturforschung **59a** (2004) 699–704.

862. H. S. Ramane, I. Gutman, H. B. Walikar, S. B. Halkarni (11 VII 2004)
Another class of equienergetic graphs
Kragujevac Journal of Mathematics **26** (2004) 15–18.

861. K. Salem, I. Gutman (25 VI 2004)
Clar number of hexagonal chains
Chemical Physics Letters **394** (2004) 283–286.

860. A. A. Toropov, I. Gutman, B. Furtula (24 VI 2004)
Graph of atomic orbitals and molecular structure–descriptors based on it
Journal of the Serbian Chemical Society **70** (2005) 669–674.

859. I. Gutman, B. Furtula, A. A. Toropov, A. P. Toropova (20 VI 2004)
The graph of atomic orbitals and its basic properties. 2. Zagreb indices
MATCH Communications in Mathematical and in Computer Chemistry **53** (2005) 225–230.

858. B. Zhou, I. Gutman (16 VI 2004)
Relations between Wiener, hyper–Wiener and Zagreb indices
Chemical Physics Letters **394** (2004) 93–95.

857. I. Gutman, A. A. Toropov, A. P. Toropova (5 VI 2004)
The graph of atomic orbitals and its basic properties. 1. Wiener index
MATCH Communications in Mathematical and in Computer Chemistry **53** (2005) 215–224.

856. I. Gutman, B. Furtula, B. Arsić (8 VI 2004)
On structure descriptors related with intramolecular energy of alkanes
Zeitschrift für Naturforschung **59a** (2004) 694–698.

855. S. Fiorini, I. Gutman, I. Sciriha (2 VI 2004)
Trees with maximum nullity
Linear Algebra and Its Applications **397** (2005) 245–251.

854. I. Sciriha, I. Gutman (21 V 2004)
Minimal configuration trees
Linear and Multilinear Algebra **54** (2006) 141–145.

853. I. Gutman, N. Turković, J. Jovičić (12 V 2004)
Cyclic conjugation in benzo-annelated perylenes: How empty is the "empty" ring ?
Monatshefte für Chemie **135** (2004) 1389–1394.

852. I. Gutman (10 V 2004)
Electron content and electron excess of rings of benzenoid hydrocarbons
Indian Journal of Chemistry **43A** (2004) 1615–1618.

851. T. Morikawa, S. Narita, I. Gutman (20 IV 2004)
Balancing the Pauling bond orders in Kekuléan benzenoid hydrocarbons
Journal of Molecular Structure (Theochem) **686** (2004) 181–183.

850. H. S. Ramane, H. B. Walikar, S. B. Rao, B. D. Acharya, P. R. Hampiholi, S. R. Jog, I. Gutman (7 IV 2004)
Spectra and energies of iterated line graphs of regular graphs
Applied Mathematics Letters **18** (2005) 679–682.

849. Z. Marković, D. Badjuk, I. Gutman (6 IV 2004)
Geometry and conformations of benzenecarboxylic acids
Journal of the Serbian Chemical Society **69** (2004) 877–882.

848. D. Vukičević, I. Gutman (1 IV 2004)
Laplacian matrix and distance in trees
Kragujevac Journal of Mathematics **26** (2004) 19–24.

847. I. Gutman, B. Furtula, N. Turković (III 2004)
Electron and energy contents of hexagons in benzenoid hydrocarbons
Polycyclic Aromatic Compounds **25** (2005) 87–94.

846. I. Gutman (III 2004)
A spectral property of regular and semiregular graphs
Bulletin of Society of Mathematicians Banja Luka **11** (2004) 1–4.

845. I. Sciriha, I. Gutman (16 III 2004)
Minimal configurations and interlacing
Graph Theory Notes of New York **49** (2005) 38–40.

844. D. Vukičević, I. Gutman (15 III 2004)
Almost all trees and chemical trees have equiseparable mates
Journal of Computer Chemistry Japan **3** (2004) 109–112.

843. B. Zhou, I. Gutman (12 III 2004)
Estimating the modified Hosoya index
MATCH Communications in Mathematical and in Computer Chemistry **52** (2004) 183–192.

842. I. Gutman (8 III 2004)
What chemists could not see without mathematics – Dependence of total π-electron energy on molecular structure
Kragujevac Journal of Science **27** (2005) 57–66.
also published in:
Xjenza (Malta) **10** (2005) 3–7.

841. I. Gutman, D. Stevanović, S. Radenković, S. Milosavljević, N. Cmiljanović (8 III 2004)
Dependence of total π-electron energy on large number of non-bonding molecular orbitals
Journal of the Serbian Chemical Society **69** (2004) 777–782.

840. I. Gutman, B. Furtula (6 II 2004)
Effect of ethyl groups on the relation between Zenkevich and Wiener indices
Kragujevac Journal of Science **26** (2004) 31-42.

839. I. Gutman, B. Furtula, O. Miljković, M. Rakić (27 I 2004)
Families of equiseparable trees and chemical trees
Kragujevac Journal of Science **26** (2004) 19–30.

838. V. Brankov, D. Stevanović, I. Gutman (26 I 2004)
Equienergetic chemical trees
Journal of the Serbian Chemical Society **69** (2004) 549–553.

837. I. Gutman, N. Cmiljanović, S. Milosavljević, S. Radenković (8 I 2004)
Dependence of total π-electron energy on the number of non-bonding molecular orbitals
Monatshefte für Chemie **135** (2004) 765–772.

836. I. Gutman, T. Morikawa, S. Narita (8 I 2004)
On π-electron content of bonds and rings in benzenoid hydrocarbons
Zeitschrift für Naturforschung **59a** (2004) 295–298.

835. K. C. Das, I. Gutman (5 I 2004)
Some properties of the second Zagreb index
MATCH Communications in Mathematical and in Computer Chemistry **52** (2004) 103–112.

834. I. Gutman, W. Xiao (26 XII 2003)
Generalized inverse of the Laplacian matrix and some applications
Bulletin de l'Académie Serbe des Sciences et des Arts (Classe des Sciences Mathématiques et Naturelles) **129** (2004) 15–23.

833. O. Miljković, B. Furtula, I. Gutman (5 XII 2003)
Statistics of equiseparable trees and chemical trees
MATCH Communications in Mathematical and in Computer Chemistry **51** (2004) 179–184.

832. I. Gutman, P. Hansen, H. Mélot (28 XI 2003)
Variable neighborhood search for extremal graphs 10. Comparison of irregularity indices for chemical trees
Journal of Chemical Information and Modeling **45** (2005) 222–230.
also published in:
Les Cahiers du GERAD **G-2003-78** (2003) 1–22.

831. H. S. Ramane, H. B. Walikar, S. B. Rao, B. D. Acharya, P. R. Hampiholi, S. R. Jog, I. Gutman (25 XI 2003)
Equienergetic graphs
Kragujevac Journal of Mathematics **26** (2004) 5–13.

830. I. Gutman (19 XI 2003)
On the distribution of π-electrons in benzenoid hydrocarbons
Bulletin of the Chemists and Technologists of Macedonia **22** (2003) 105–110.

829. I. Gutman, B. Furtula, D. Vukičević, B. Arsić (17 XI 2003)
Equiseparable molecules and molecular graphs
Indian Journal of Chemistry **43A** (2004) 7–10.

828. Đ. Baralić, I. Gutman, B. Popović (15 XI 2003)
Solution of the Türker inequality
Kragujevac Journal of Science **26** (2004) 13-18.

827. G. G. Cash, I. Gutman (10 XI 2003)
The Laplacian permanental polynomial: Formulas and algorithms
MATCH Communications in Mathematical and in Computer Chemistry **51** (2004) 129–136.

826. I. Gutman, B. Furtula, B. Arsić, Ž. Bošković (4 XI 2003)
On the relation between Zenkevich and Wiener indices of alkanes
Journal of the Serbian Chemical Society **69** (2004) 265–271.

825. W. Xiao, I. Gutman (3 XI 2003)
Relations between resistance and Laplacian matrices and their applications
MATCH Communications in Mathematical and in Computer Chemistry **51** (2004) 119–127.

824. I. Gutman, D. Vukičević, A. Graovac, M. Randić (28 X 2003)
Algebraic Kekulé structures of benzenoid hydrocarbons
Journal of Chemical Information and Computer Sciences **44** (2004) 296–299.

823. J. Aires-de-Sousa, J. Gasteiger, I. Gutman, D. Vidović (10 X 2003)
Chirality codes and molecular structure
Journal of Chemical Information and Computer Sciences **44** (2004) 831–836.

822. I. Gutman (IX 2003)
Uvod u hemijsku teoriju grafova [Introduction to Chemical Graph Theory]
Faculty of Science Kragujevac, Kragujevac, 2003, pp. IV+201.

821. I. Gutman, N. Cmiljanović, S. Milosavljević, S. Radenković (22 IX 2003)
Effect of non-bonding molecular orbitals on total π-electron energy
Chemical Physics Letters **383** (2004) 171–175.

820. I. Gutman (2 IX 2003)
Graphs with smallest sum of squares of vertex degrees
Kragujevac Journal of Mathematics **25** (2003) 51–54.

819. I. Gutman, K. C. Das (26 VIII 2003)
The first Zagreb index 30 years after
MATCH Communications in Mathematical and in Computer Chemistry **50** (2004) 83–92.

818. K. Salem, S. Klavžar, I. Gutman (13 VIII 2003)
On the role of hypercubes in the resonance graphs of benzenoid graphs
Discrete Mathematics **306** (2006) 699–704.

817. R. B. Bapat, I. Gutman, W. Xiao (2 VIII 2003)
A simple method for computing resistance distance
Zeitschrift für Naturforschung **58a** (2003) 494–498.

816. T. Morikawa, S. Narita, I. Gutman (1 VIII 2003)
Hexagonoidal partitioning and quasi–single bonds in benzenoid hydrocarbons
Polycyclic Aromatic Compounds **25** (2004) 75–82.

815. I. Gutman, L. Türker (24 VII 2003)
Angle of graph energy – A spectral measure of resemblance of isomeric molecules
Indian Journal of Chemistry **42A** (2003) 2698–2701.

814. I. Gutman, B. Furtula, D. Vidović, H. Hosoya (22 VII 2003)
A concealed property of the topological index Z
Bulletin of the Chemical Society of Japan **77** (2004) 491–496.

813. I. Gutman, L. Türker (21 VII 2003)
Estimating the angle of total π-electron energy
Journal of Molecular Structure (Theochem) **668** (2004) 119–121.

812. I. Gutman (7 VII 2003)
Hyper–Wiener index and Laplacian spectrum
Journal of the Serbian Chemical Society **68** (2003) 949–952.

811. I. Gutman, B. Furtula, J. Belić (7 VII 2003)
Note on the hyper–Wiener index
Journal of the Serbian Chemical Society **68** (2003) 943–948.

810. I. Gutman, L. Türker (10 VI 2003)
Correcting the azimuthal angle concept: nonexistence of an upper bound
Chemical Physics Letters **378** (2003) 425–427.

809. X. Li, H. Zhao, I. Gutman (23 V 2003)
On the Merrifield–Simmons index of trees
MATCH Communications in Mathematical and in Computer Chemistry **54** (2005) 389–402.

808. W. Xiao, I. Gutman (16 III 2003)
Resistance distance and Laplacian spectrum
Theoretical Chemistry Accounts **110** (2003) 284–289.

807. K. Salem, I. Gutman (10 III 2003)
On sextet and cell polynomials of catacondensed benzenoid hydrocarbons
Kragujevac Journal of Science **25** (2003) 93–106.

806. I. Gutman, L. Pavlović (28 II 2003)
On the coefficients of the Laplacian characteristic polynomial of trees
Bulletin de l'Académie Serbe des Sciences et des Arts (Classe des Sciences Mathématiques et Naturelles) **127** (2003) 31–40.

805. W. Xiao, I. Gutman (26 II 2003)
On resistance matrices
MATCH Communications in Mathematical and in Computer Chemistry **49** (2003) 67–81.

804. I. Gutman, B. Arsić, B. Furtula (21 II 2003)
Equiseparable chemical trees
Journal of the Serbian Chemical Society **68** (2003) 549–555.

803. S. Klavžar, I. Gutman (18 II 2003)
Relation between Wiener–type topological indices of benzenoid molecules
Chemical Physics Letters **373** (2003) 328–332.

802. D. Todorović, I. Gutman, M. Radulović (4 II 2003)
A stochastic chiral amplification model
Chemical Physics Letters **372** (2003) 464–468.

801. I. Gutman, D. Vidović, N. Cmiljanović, S. Milosavljević, S. Radenković (27 I 2003)
Graph energy – A useful molecular structure–descriptor
Indian Journal of Chemistry **42A** (2003) 1309–1311.

800. Z. Marković, V. Ivanov–Petrović, I. Gutman (21 I 2003)
Extremely branched alkanes
Journal of Molecular Structure (Theochem) **629** (2003) 303–306.

799. P. V. Khadikar, I. Lukovits, V. K. Agrawal, S. Shrivastava, M. Jaiswal, I. Gutman, S. Karmarkar, A. Shrivastava (6 I 2003)
Equlizied electronegativity and topological indices: Application for modeling toxicity of nitrobenzene derivatives
Indian Journal of Chemistry **42A** (2003) 1436–1441.

798. I. Gutman, D. Vukičević, J. Žerovnik (20 XII 2002)
A class of modified Wiener indices
Croatica Chemica Acta **77** (2004) 103–109.

797. I. Gutman (19 XII 2002)
A new hyper–Wiener index
Croatica Chemica Acta **77** (2004) 61–64.

796. I. Gutman (16 XII 2002)
Relation between the Laplacian and the ordinary characteristic polynomial
MATCH Communications in Mathematical and in Computer Chemistry **47** (2003) 133–140.

795. I. Gutman, B. Furtula (10 XII 2002)
Hyper–Wiener index vs. Wiener index. Two highly correlated structure–descriptors
Monatshefte für Chemie **134** (2003) 975–981.

794. I. Gutman, D. Vidović, B. Furtula, A. Vesel (16 X 2002)
Relations between topological indices of large chemical trees
Indian Journal of Chemistry **42A** (2003) 1241–1245.

793. D. Vukičević, I. Gutman (10 X 2002)
Note on a class of modified Wiener indices
MATCH Communications in Mathematical and in Computer Chemistry **47** (2003) 107–117.

792. I. Gutman, D. Vidović, B. Furtula, I. G. Zenkevich (7 X 2002)
Wiener–type indices and internal molecular energy
Journal of the Serbian Chemical Society **68** (2003) 401–408.

791. I. Gutman (27 IX 2002)
Some properties of Laplacian eigenvectors
Bulletin de l'Académie Serbe des Sciences at des Arts (Classe des Sciences Mathématiques et Naturelles) **127** (2003) 1–6.

790. I. Gutman, D. Vidović, B. Furtula (10 IX 2002)
Chemical applications of the Laplacian spectrum. VII. Studies of the Wiener and Kirchhoff indices
Indian Journal of Chemistry **42A** (2003) 1272–1278.

789. I. Gutman (27 VIII 2002)
Algebraic structure count of linear phenylenes and their congeners
Journal of the Serbian Chemical Society **68** (2003) 391–399.

788. M. Petrović, I. Gutman (23 VIII 2002)
The path is the tree with smallest greatest Laplacian eigenvalue
Kragujevac Journal of Mathematics **24** (2002) 67–70.

787. I. Gutman (23 VIII 2002)
The star is the tree with greatest greatest Laplacian eigenvalue
Kragujevac Journal of Mathematics **24** (2002) 61–65.

786. A. Dress, S. Grünewald, I. Gutman, M. Lepović, D. Vidović (VII 2002)
On the number of walks in trees
MATCH Communications in Mathematical and in Computer Chemistry **48** (2003) 63–85.

785. I. Gutman (23 VII 2002)
Relation between hyper–Wiener and Wiener index
Chemical Physics Letters **364** (2002) 352–356.

784. I. Gutman, A. A. Dobrynin, S. Klavžar, L. Pavlović (15 VII 2002)
Wiener–type invariants of trees and their relation
Bulletin of the Institute of Combinatorics and Applications **40** (2004) 23–30.

783. E. A. Castro, I. Gutman, D. Marino, P. Peruzzo (18 VI 2002)
Upgrading the Wiener index
Journal of the Serbian Chemical Society **67** (2002) 647–651.

782. I. Gutman, I. G. Zenkevich (4 VI 2002)
Wiener index and vibrational energy
Zeitschrift für Naturforschung **57a** (2002) 824–828.

781. B. Furtula, I. Gutman, Ž. Tomović, A. Vesel, I. Pesek (3 VI 2002)
Wiener–type topological indices of phenylenes
Indian Journal of Chemistry **41A** (2002) 1767–1772.

780. I. Gutman (18 III 2002)
How many benzenoid hydrocarbons?
Bulletin of the Chemists and Technologists of Macedonia **21** (2002) 53–56.

779. I. Gutman (3 III 2002)
On an upper bound for Laplacian eigenvalues
Graph Theory Notes of New York **44** (2003) 41–43.

778. I. Gutman, D. Vidović, D. Stevanović (28 II 2002)
Chemical applications of the Laplacian spectrum. VI. On the largest Laplacian eigenvalue of alkanes
Journal of the Serbian Chemical Society **67** (2002) 407–413.

777. B. Borovićanin, I. Gutman, M. Petrović (22 II 2002)
Tetracyclic harmonic graphs
Bulletin de l'Académie Serbe des Sciences at des Arts (Classe des Sciences Mathématiques et Naturelles) **123** (2002) 19–31.

776. I. Gutman, J. Žerovnik (20 II 2002)
Corroborating a modification of the Wiener index
Croatica Chemica Acta **75** (2002) 603–612.

775. I. Gutman, B. Furtula, D. Vidović (16 II 2002)
Coulson function and total π-electron energy
Kragujevac Journal of Science **24** (2002) 71–82.

774. I. Gutman (12 II 2002)
The Coulson function
Kragujevac Journal of Science **24** (2002) 65–70.

773. I. Gutman, D. Vidović (11 II 2002)
The largest eigenvalues of adjacency and Laplacian matrices, and ionization potentials of alkanes
Indian Journal of Chemistry **41A** (2002) 893–896.

772. I. Gutman, D. Vidović, B. Furtula (24 I 2002)
Coulson function and Hosoya index
Chemical Physics Letters **355** (2002) 378–382.

771. G. Rücker, C. Rücker, I. Gutman (22 I 2002)
On kites, comets, and stars. Sums of eigenvector coefficients in (molecular) graphs
Zeitschrift für Naturforschung **57a** (2002) 143–153.

770. M. Fischermann, I. Gutman, A. Hoffmann, D. Rautenbach, D. Vidović, L. Volkmann (14 I 2002)
Extremal chemical trees
Zeitschrift für Naturforschung **57a** (2002) 49–52.

769. I. Gutman (XII 2001)
Impact of the Sachs theorem on theoretical chemistry: A participant's testimony
MATCH Communications in Mathematical and in Computer Chemistry **48** (2003) 17–34.

768. I. Gutman, D. Vidović, H. Hosoya (26 XII 2001)
The relation between the eigenvalue sum and the topological index Z revisited
Bulletin of the Chemical Society of Japan **75** (2002) 1723–1727.

767. G. Caporossi, I. Gutman, P. Hansen, L. Pavlović (18 XII 2001)
Graphs with maximum connectivity index
Computational Biology and Chemistry **27** (2003) 85–90.

766. S. Klavžar, P. Žigert, I. Gutman (10 XII 2001)
Clar number of catacondensed benzenoid hydrocarbons
Journal of Molecular Structure (Theochem) **586** (2002) 235–240.

765. A. A. Dobrynin, I. Gutman, S. Klavžar, P. Žigert (5 XII 2001)
Wiener index of hexagonal systems
Acta Applicandae Mathematicae **72** (2002) 247–294.

764. I. Gutman, D. Vidović (2 XII 2001)
Two early branching indices and the relation between them
Theoretical Chemistry Accounts **108** (2002) 98–102.

763. I. Gutman, M. Lepović, D. Vidović, L. H. Clark (20 XI 2001)
Exponent–dependent properties of the connectivity index
Indian Journal of Chemistry **41A** (2002) 457–461.

762. A. Dress, I. Gutman (X 2001)
Asymptotic results regarding the number of walks in a graph
Applied Mathematics Letters **16** (2003) 389–393.

761. A. Dress, I. Gutman (X 2001)
The number of walks in a graph
Applied Mathematics Letters **16** (2003) 797–801.

760. I. Gutman (3 IX 2001)
Two theorems on connectivity indices
Journal of the Serbian Chemical Society **67** (2002) 99–102.

759. I. Gutman, D. Vidović, A. Nedić (3 IX 2001)
Ordering of alkane isomers by means of connectivity indices
Journal of the Serbian Chemical Society **67** (2002) 87–97.

758. I. Gutman, G. G. Cash (VIII 2001)
Relations between the permanental and characteristic polynomials of fullerenes and benzenoid hydrocarbons
MATCH Communications in Mathematical and in Computer Chemistry **45** (2002) 55–70.

757. I. Gutman (28 VIII 2001)
A spectral property of graphs
Graph Theory Notes of New York **44** (2003) 10–13.

756. B. Borovićanin, S. Grünewald, I. Gutman, M. Petrović (27 VII 2001)
Harmonic graphs with small number of cycles
Discrete Mathematics **265** (2003) 31–44.

755. I. Gutman (VI 2001)
Chemistry and algebra
Bulletin de l'Académie Serbe des Sciences at des Arts (Classe des Sciences Mathématiques et Naturelles) **124** (2003) 11–24.

754. I. Lukovits, I. Gutman (4 VI 2001)
On Morgan–trees
Croatica Chemica Acta **75** (2002) 563–576.

753. A. V. Teodorović, M. D. Joksović, I. Gutman, Ž. Tomović (31 V 2001)
Amino acid mediated borane reduction of ketones II
Monatshefte für Chemie **133** (2002) 23–29.

752. I. Gutman, D. Vidović (25 V 2001)
Conjugated molecules with maximal total π-electron energy
Bulletin de l'Académie Serbe des Sciences at des Arts (Classe des Sciences Mathématiques et Naturelles) **124** (2003) 1–7.

751. I. Gutman, M. Lepović (4 V 2001)
Choosing the exponent in the definition of the connectivity index
Journal of the Serbian Chemical Society **66** (2001) 605–611.

750. I. Gutman (19 IV 2001)
On the Klemm model for bistability of mixtures of interacting enantiomers
Journal of the Serbian Chemical Society **66** (2001) 517–521.

749. H. Fripertinger, I. Gutman, A. Kerber, A. Kohnert, D. Vidović (2 IV 2001)
The energy of a graph and its size dependence. An improved Monte Carlo approach
Zeitschrift für Naturforschung **56a** (2001) 342–346.

748. M. Lepović, I. Gutman (30 III 2001)
Some spectral properties of starlike trees
Bulletin de l'Académie Serbe des Sciences at des Arts (Classe des Sciences Mathématiques et Naturelles) **122** (2001) 107–113.

747. I. Gutman, T. Soldatović, M. Petković (28 III 2001)
A new upper bound and approximation for total π-electron energy
Kragujevac Journal of Science **23** (2001) 89–98.

746. I. Gutman, A. Kaplarević, A. Nikolić (26 III 2001)
An auxiliary function in the theory of total π-electron energy
Kragujevac Journal of Science **23** (2001) 75–88.

745. I. Gutman (20 III 2001)
A simple (n, m)-type estimate of the total π-electron energy
Indian Journal of Chemistry **40A** (2001) 929–932.

744. I. Gutman, A. Nikolić, Ž. Tomović (16 III 2001)
A concealed property of total π-electron energy
Chemical Physics Letters **349** (2001) 95–98.

743. I. Gutman, Ž. Tomović (12 III 2001)
Total π-electron energy of phenylenes: bounds and approximate expressions
Monatshefte für Chemie **132** (2001) 1023–1029.

742. I. Gutman, Ž. Tomović (12 III 2001)
On cyclic conjugation of the members of the pyrene/peropyrene series and their formally π-localized derivatives
Bulletin of the Chemists and Technologists of Macedonia **20** (2001) 33–37.

741. I. Gutman, Ž. Tomović (28 II 2001)
Cyclic conjugation in terminally bent and branched phenylenes
Indian Journal of Chemistry **40A** (2001) 678–681.

740. H. B. Walikar, I. Gutman, P. R. Hampiholi, H. S. Ramane (14 II 2001)
Non–hyperenergetic graphs
Graph Theory Notes of New York **41** (2001) 14–16.

739. A. Graovac, I. Gutman, P. E. John, D. Vidović, I. Vlah (26 I 2001)
On statistics of graph energy
Zeitschrift für Naturforschung **56a** (2001) 307–311.

738. Ž. Tomović, I. Gutman (22 I 2001)
Modeling boiling points of cycloalkanes by means of iterated line graph sequences
Journal of Chemical Information and Computer Sciences **41** (2001) 1041–1045.

737. I. Gutman, P. J. Plath (25 XII 2000)
On molecular graphs and digraphs of annulenes and their spectra
Journal of the Serbian Chemical Society **66** (2001) 237–241.

736. Ž. Tomović, I. Gutman (22 XII 2000)
Narumi–Katayama index of phenylenes
Journal of the Serbian Chemical Society **66** (2001) 243–247.

735. I. Gutman, D. Vidović (18 XII 2000)
Quest for molecular graphs with maximal energy: A computer experiment
Journal of Chemical Information and Computer Sciences **41** (2001) 1002–1005.

734. I. Gutman (27 XI 2000)
Molecular graphs with minimal and maximal Randić indices
Croatica Chemica Acta **75** (2002) 357–369.

733. I. Gutman, C. Rücker, G. Rücker (31 X 2000)
On walks in molecular graphs
Journal of Chemical Information and Computer Sciences **41** (2001) 739–745.

732. I. Gutman, T. Soldatović (IX 2000)
(n, m)-Type approximations for total π-electron energy of benzenoid hydrocarbons
MATCH Communications in Mathematical and in Computer Chemistry **44** (2001) 169–182.

731. I. Gutman, S. Klavžar, M. Petkovšek, P. Žigert (IX 2000)
On Hosoya polynomials of benzenoid graphs
MATCH Communications in Mathematical and in Computer Chemistry **43** (2001) 49–66.

730. I. Gutman, T. Soldatović, A. Graovac, S. Vuković (21 IX 2000)
Approximating the total π-electron energy by means of spectral moments
Chemical Physics Letters **334** (2001) 168–172.

729. R. Merris, I. Gutman (9 IX 2000)
The number of high–energy bands in the photoelectron spectrum of alkanes
Zeitschrift für Naturforschung **55a** (2000) 973–977.

728. I. Gutman, Y. Hou (VII 2000)
Bipartite unicyclic graphs with greatest energy
MATCH Communications in Mathematical and in Computer Chemistry **43** (2001) 17–28.

727. Y. Hou, I. Gutman (VII 2000)
Hyperenergetic line graphs
MATCH Communications in Mathematical and in Computer Chemistry **43** (2001) 29–39.

726. I. Gutman (19 VII 2000)
On permutations in bipartite graphs
Kragujevac Journal of Mathematics **22** (2000) 57–66.

725. I. Gutman, T. Soldatović (19 VII 2000)
On a class of approximate formulas for total π-electron energy of benzenoid hydrocarbons
Journal of the Serbian Chemical Society **66** (2001) 101–106.

724. Y. Hou, I. Gutman, C. W. Woo (13 VII 2000)
Unicyclic graphs with maximal energy
Linear Algebra and Its Applications **356** (2002) 27–36.

723. S. Klavžar, A. Vesel, P. Žigert, I. Gutman (11 VII 2000)
Binary coding of Kekulé structures of catacondensed benzenoid hydrocarbons
Computers & Chemistry **25** (2001) 569–575.

722. I. Gutman, Y. Hou, H. B. Walikar, H. S. Ramane, P. R. Hampiholi (10 VII 2000)
No Hückel graph is hyperenergetic
Journal of the Serbian Chemical Society **65** (2000) 799–801.

721. I. Gutman, O. Araujo, J. Rada (28 VI 2000)
An identity for Randić's connectivity index and its applications
Acta Chimica Hungarica - Models in Chemistry **137** (2000) 653–658.

720. M. Lepović, I. Gutman (27 VI 2000)
No starlike trees are cospectral
Discrete Mathematics **242** (2002) 291–295.

719. I. Gutman, O. Araujo, J. Rada (V 2000)
Matchings in starlike trees
Applied Mathematics Letters **14** (2001) 843–848.

718. J. Rada, O. Araujo, I. Gutman (22 V 2000)
Randić index of benzenoid systems and phenylenes
Croatica Chemica Acta **74** (2001) 225–235.

717. I. Gutman, Ž. Tomović, B. K. Mishra, M. Kuanar (22 V 2000)
On the use of iterated line graphs in quantitative structure–property studies
Indian Journal of Chemistry **40A** (2001) 4–11.

716. I. Gutman, J. Rada, O. Araujo (IV 2000)
The Wiener index of starlike trees and a related partial order
MATCH Communications in Mathematical and in Computer Chemistry **42** (2000) 145–154.

715. I. Gutman, P. Paule (1 III 2000)
The variance of the vertex degrees of randomly generated graphs
Publikacije Elektrotehničkog Fakulteta (Beograd) *Serija Matematika* **13** (2002) 30–35.

714. I. Gutman, Z. Marković, J. P. Engelbrecht (2 II 2000)
On the relative stability of tetraoxo–bisanthrenes related to the radical anions of hypericin
South African Journal of Chemistry **53** (2000) 169–178.

713. I. Gutman, Ž. Tomović (30 I 2000)
Relation between distance–based topological indices
Journal of Chemical Information and Computer Sciences **40** (2000) 1333–1336.

712. I. Gutman, J. H. Koolen, V. Moulton, M. Parac, T. Soldatović, D. Vidović (27 I 2000)
Estimating and approximating the total π-electron energy of benzenoid hydrocarbons
Zeitschrift für Naturforschung **55a** (2000) 507–512.

711. I. Gutman, Ž. Tomović (12 I 2000)
More on the line graph model for predicting physico–chemical properties of alkanes
Acta Chimica Hungarica - Models in Chemistry **137** (2000) 439–445.

710. X. Li, I. Gutman (3 I 2000)
Elementary proof of the reality of the zeros of β-polynomials of complete graphs
Kragujevac Journal of Mathematics **22** (2000) 49–56.

709. A. A. Dobrynin, R. Entringer, I. Gutman (3 I 2000)
Wiener index of trees: theory and applications
Acta Applicandae Mathematicae **66** (2001) 211–249.

708. M. V. Diudea, I. Gutman, L. Jäntschi (1999)
Molecular Topology
Nova, Huntington, 2001, pp. IX+332.

second edition:
Nova, New York, 2002, pp. IX+329.

707. I. Gutman, Ž. Tomović (10 XII 1999)
On the application of line graphs in quantitative structure–property studies
Journal of the Serbian Chemical Society **65** (2000) 577–580.

706. Y. Wang, X. Li, I. Gutman (8 XII 1999)
More examples and counterexamples for a conjecture of Merrifield and Simmons
Publications de l'Institut Mathématique (Beograd) **69** (2001) 41–50.

705. I. Gutman, T. Soldatović (3 XII 1999)
Novel approximate formulas for the total π-electron energy of benzenoid hydrocarbons
Bulletin of the Chemists and Technologists of Macedonia **19** (2000) 17–20.

704. J. H. Koolen, V. Moulton, I. Gutman (30 XI 1999)
Improving the McClelland inequality for total π-electron energy
Chemical Physics Letters **320** (2000) 213–216.

703. I. Gutman, W. Linert, I. Lukovits, Ž. Tomović (24 XI 1999)
On the multiplicative Wiener index and its possible chemical applications
Monatshefte für Chemie **131** (2000) 421–427.

702. P. Žigert, S. Klavžar, I. Gutman (22 XI 1999)
Calculating the hyper–Wiener index of benzenoid hydrocarbons
Acta Chimica Hungarica - Models in Chemistry **137** (2000) 83–94.

701. J. H. Koolen, V. Moulton, I. Gutman, D. Vidović (4 XI 1999)
More hyperenergetic molecular graphs
Journal of the Serbian Chemical Society **65** (2000) 571–575.

700. I. Gutman, O. Araujo, D. A. Morales (11 X 1999)
Estimating the connectivity index of a saturated hydrocarbon
Indian Journal of Chemistry **39A** (2000) 381–385.

699. I. Gutman, L. Pavlović, O. Miljković (24 IX 1999)
On graphs with extremal connectivity indices
Bulletin de l'Académie Serbe des Sciences at des Arts (Classe des Sciences Mathématiques et Naturelles) **121** (2000) 1–14.

698. I. Gutman (13 IX 1999)
The energy of a graph: Old and new results
in the book: A. Betten, A. Kohnert, R. Laue, A. Wassermann (Eds.),
Algebraic Combinatorics and Applications, Springer, Berlin, 2001, pp. 196–211.

697. I. Gutman, E. C. Kirby (4 IX 1999)
Benzenoids with branching graphs that are trees
Croatica Chemica Acta **73** (2000) 943–955.

696. I. Gutman (VIII 1999)
A stochastic approach to the Türker angles
MATCH Communications in Mathematical and in Computer Chemistry **41** (2000) 71–78.

695. T. Morikawa, I. Gutman (21 VIII 1999)
Determination of unconjugated sites in benzenoid derivatives
Polycyclic Aromatic Compounds **18** (2001) 265–271.

694. I. Gutman, O. Araujo, D. A. Morales (15 VIII 1999)
Bounds for the Randić connectivity index
Journal of Chemical Information and Computer Sciences **40** (2000) 593–598.

693. I. Gutman, O. Miljković (VII 1999)
Molecules with smallest connectivity indices
MATCH Communications in Mathematical and in Computer Chemistry **41** (2000) 57–70.

692. S. Klavžar, P. Žigert, I. Gutman (20 VII 1999)
An algorithm for the calculation of the hyper–Wiener index of benzenoid hydrocarbons
Computers & Chemistry **24** (2000) 229–233.

691. I. Gutman, I. Sciriha (3 VII 1999)
Spectral properties of windmills
Graph Theory Notes of New York **38** (2000) 20–24.

690. F. Chyzak, I. Gutman, P. Paule (VI 1999)
Predicting the number of hexagonal systems with 24 and 25 hexagons
MATCH Communications in Mathematical and in Computer Chemistry **40** (1999) 139–151.

689. I. Gutman, W. Linert, I. Lukovits, Ž. Tomović (22 VI 1999)
The multiplicative version of the Wiener index
Journal of Chemical Information and Computer Sciences **40** (2000) 113–116.

688. I. Gutman (18 VI 1999)
A note on the Noyori model for chiral amplification in the aminoalcohol–catalyzed reaction of aldehydes with dialkylzinc
Journal of the Serbian Chemical Society **64** (1999) 681–684.

687. I. Gutman, I. Sciriha (18 VI 1999)
On the nullity of line graphs of trees
Discrete Mathematics **232** (2001) 35–45.

686. I. Gutman, V. Ivanov–Petrović, J. R. Dias (9 VI 1999)
Cyclic conjugation in total resonant sextet benzenoid hydrocarbons
Polycyclic Aromatic Compounds **18** (2000) 221–229.

685. I. Gutman (4 VI 1999)
Topological studies of dioxo derivatives of benzenoid hydrocarbons: Number of Kekulé structures of dioxo derivatives of prolate rectangles and a connection to hypericin
Monatshefte für Chemie **131** (2000) 47–54.

684. I. Gutman, V. Gineityte, M. Lepović, M. Petrović (20 V 1999)
The high–energy band in the photoelectron spectrum of alkanes and its dependence on molecular structure
Journal of the Serbian Chemical Society **64** (1999) 673–680.

683. I. Gutman, D. Vidović, T. Soldatović (28 IV 1999)
Modeling the dependence of the π-electron energy on the size of conjugated molecules. A Monte Carlo approach
Acta Chimica Hungarica – Models in Chemistry **136** (1999) 599–608.

682. M. Petrović, I. Gutman, M. Lepović, B. Milekić (16 IV 1999)
On bipartite graphs with small number of Laplacian eigenvalues greater than two and three
Linear and Multilinear Algebra **47** (2000) 205–215.

681. I. Gutman (6 IV 1999)
On the oxidation of dibenzo[*fg,ij*]pentaphene and dinaphtho[2,1,8,7–*defg*:2',1',8',7'-*ijkl*]pentaphene dianions
Journal of the Serbian Chemical Society **64** (1999) 563–570.

680. I. Gutman, Z. Marković (30 III 1999)
Dioxo derivatives of benzenoid hydrocarbons: Part IV – Dioxo–bisanthrenes
Indian Journal of Chemistry **38A** (1999) 407–410.

679. L. Pavlović, I. Gutman (22 III 1999)
Graphs with extremal connectivity index
Novi Sad Journal of Mathematics **31** (2001) 53–58.

678. C. Etzlstorfer, I. Gutman, H. Falk (15 III 1999)
Concerning the deprotonation of the photooxidized 3-hypericinate ion
Monatshefte für Chemie **130** (1999) 1333–1339.

677. I. Gutman, E. V. Konstantinova, V. A. Skorobogatov (12 III 1999)
Molecular hypergraphs and Clar structural formulas of benzenoid hydrocarbons
Acta Chimica Hungarica – Models in Chemistry **136** (1999) 539–548.

676. D. Stevanović, I. Gutman (7 III 1999)
Hosoya polynomials of trees with up to 10 vertices
Collection of Scientific Papers of the Faculty of Science Kragujevac **21** (1999) 111–119.

675. I. Gutman (2 III 1999)
A simple model for chiral amplification in the aminoalcohol–catalyzed reaction of aldehydes with dialkylzinc
Journal of the Serbian Chemical Society **64** (1999) 447–452.

674. I. Gutman, O. Miljković, G. Caporossi, P. Hansen (19 II 1999)
Alkanes with small and large Randić connectivity index
Chemical Physics Letters **306** (1999) 366–372.

673. A. A. Dobrynin, I. Gutman (19 II 1999)
The average Wiener index of hexagonal chains
Computers & Chemistry **23** (1999) 571–576.

672. C. D. Godsil, I. Gutman (1 II 1999)
Wiener index, graph spectrum, line graph
Acta Chimica Hungarica – Models in Chemistry **136** (1999) 503–510.

671. G. Caporossi, A. A. Dobrynin, I. Gutman, P. Hansen (25 I 1999)
Trees with palindromic Hosoya polynomials
Graph Theory Notes of New York **37** (1999) 10–16.
also published in:
Les Cahiers du GERAD **G-99-10** (1999) 1–9.

670. I. Gutman (28 XII 1998)
Bounds for the Randić connectivity index of alkanes
Bulletin of the Chemists and Technologists of Macedonia **18** (1999) 1–5.

669. I. Gutman (21 XII 1998)
Hyperenergetic molecular graphs
Journal of the Serbian Chemical Society **64** (1999) 199–205.

668. G. Caporossi, I. Gutman, P. Hansen (8 XII 1998)
Variable neighborhood search for extremal graphs IV: Chemical trees with extremal connectivity index
Computers & Chemistry **23** (1999) 469–477.

667. I. Gutman, S. Klavžar, A. Rajapakse (10 XI 1998)
Average distances in square–cell configurations
International Journal of Quantum Chemistry **76** (2000) 611–617.

666. A. A. Dobrynin, I. Gutman (25 X 1998)
The average Wiener index of trees and chemical trees
Journal of Chemical Information and Computer Sciences **39** (1999) 679–683.

665. P. U. Biedermann, J. R. Cheeseman, M. J. Frisch, V. Schurig, I. Gutman, I. Agranat (23 X 1998)
Conformational spaces and absolute configurations of chiral fluorinated inhalation anaesthetics. A theoretical study
Journal of Organic Chemistry **64** (1999) 3878–3884.

664. M. Kuanar, S. K. Kuanar, B. K. Mishra, I. Gutman (21 X 1998)
Correlation of line graph parameters with physicochemical properties of octane isomers
Indian Journal of Chemistry **38A** (1999) 525–528.

663. I. Gutman, L. Pavlović (25 IX 1998)
The energy of some graphs with large number of edges
Bulletin de l'Académie Serbe des Sciences at des Arts (Classe des Sciences Mathématiques et Naturelles) **118** (1999) 35–50.

662. I. Gutman (24 VIII 1998)
Topologically activated sites in benzenoid hydrocarbons. Polyacenes and benzo–annelated polyacenes
Journal of the Serbian Chemical Society **63** (1998) 987–993.

661. I. Gutman (13 VIII 1998)
On the Hall rule in the theory of benzenoid hydrocarbons
International Journal of Quantum Chemistry **74** (1999) 627–632.

660. G. Caporossi, D. Cvetković, I. Gutman, P. Hansen (12 VIII 1998)
Variable neighborhood search for extremal graphs. 2. Finding graphs with extremal energy
Journal of Chemical Information and Computer Sciences **39** (1999) 984–996.
also published in:
Les Cahiers du GERAD **G-98-44** (1998) 1–34.

659. I. Gutman, T. Soldatović, D. Vidović (10 VIII 1998)
The energy of a graph and its size dependence. A Monte Carlo approach
Chemical Physics Letters **297** (1998) 428–432.

658. A. A. Dobrynin, I. Gutman (29 VII 1998)
Indeks Vinera dlya derev'ev i grafov geksagonal'nyh sistem [Wiener index for trees and graphs of hexagonal systems]
Diskretnyi Analiz i Issledovanie Operacii (Novosibirsk) *Seriya 2* **5**(2) (1998) 34–60.

657. I. Gutman, Z. Marković, L. Marjanović (27 VII 1998)
On factors influencing the geometry of hypericin and its tautomers
Indian Journal of Chemistry **37A** (1998) 856–864.

656. D. J. Klein, I. Gutman (24 VII 1998)
Wiener–number–related sequences
Journal of Chemical Information and Computer Sciences **39** (1999) 534–536.

655. M. Lepović, I. Gutman, M. Petrović (30 VI 1998)
On canonical graphs and the Laplacian characteristic polynomial
Publikacije Elektrotehničkog Fakulteta (Beograd) *Serija Matematika* **11** (2000) 93–99.

654. I. Gutman, Z. Marković (29 V 1998)
Tautomerism in hypericin
Bulletin de l'Académie Serbe des Sciences at des Arts (Classe des Sciences Mathématiques et Naturelles) **117** (1999) 47–61.

653. I. Gutman (26 V 1998)
On dioxo derivatives of benzenoid hydrocarbons
Journal of Molecular Structure (Theochem) **460** (1999) 47–51.

652. I. Gutman, D. Vidović (25 V 1998)
Relations between Wiener–type topological indices of plerograms and kenograms
Journal of the Serbian Chemical Society **63** (1998) 695–702.

651. I. Gutman, Z. Marković (4 V 1998)
On the relative stability of dioxo derivatives of phenanthro[1,10,9,8–*opqra*]perylene related to the tautomers of hypericin
Monatshefte für Chemie **129** (1998) 1019–1024.

650. I. Gutman, S. J. Cyvin, V. Ivanov–Petrović (4 IV 1998)
Topological properties of circumcoronenes
Zeitschrift für Naturforschung **53a** (1998) 699–703.

649. S. Marković, I. Gutman (25 III 1998)
Spectral moments of the edge adjacency matrix in molecular graphs. Benzenoid hydrocarbons
Journal of Chemical Information and Computer Sciences **39** (1999) 289–293.

648. I. Gutman, S. Marković, A. Vesović, E. Estrada (23 III 1998)
Approximating total π-electron energy in terms of spectral moments. A quantitative approach
Journal of the Serbian Chemical Society **63** (1998) 639–646.

647. I. Gutman, S. J. Cyvin, V. Ivanov–Petrović (21 III 1998)
A survey of topological properties of circumcoronenes
Collection of Scientific Papers of the Faculty of Science Kragujevac **20** (1998) 155–166.

646. I. Gutman, L. Türker, V. Jovašević (27 II 1998)
Angles of total π-electron energy of benzenoid hydrocarbons
Bulletin de l'Académie Serbe des Sciences at des Arts (Classe des Sciences Mathématiques et Naturelles) **117** (1999) 13–27.

645. O. M. Minailiuc, G. Katona, M. V. Diudea, M. Strunje, A. Graovac, I. Gutman (23 II 1998)
Szeged fragmental indices
Croatica Chemica Acta **71** (1998) 473–488.

644. M. Kunz, Z. Rádl, I. Gutman (20 II 1998)
An experiment in chemical informatics. II. Furier analysis of a personal bibliography
Collection of Scientific Papers of the Faculty of Science Kragujevac **20** (1998) 147–154.

643. M. Kunz, I. Gutman (20 II 1998)
An experiment in chemical informatics. I. Statistical analysis of a personal bibliography
Collection of Scientific Papers of the Faculty of Science Kragujevac **20** (1998) 135–146.

642. X. Li, I. Gutman, G. V. Milovanović (20 II 1998)
The β-polynomials of complete graphs are real
Publications de l'Institut Mathématique (Beograd) **67** (2000) 1–6.

641. I. Gutman (19 II 1998)
Hosoya polynomial and the distance of the total graph of a tree
Publikacije Elektrotehničkog Fakulteta (Beograd) *Serija Matematika* **10** (1999) 53–58.

640. I. Gutman, M. V. Diudea (11 II 1998)
Defining Cluj matrices and Cluj matrix invariants
Journal of the Serbian Chemical Society **63** (1998) 497–504.

639. I. Gutman (9 II 1998)
Buckley–type relations for Wiener–type structure–descriptors
Journal of the Serbian Chemical Society **63** (1998) 491–496.

638. E. Estrada, N. Guevara, I. Gutman, L. Rodriguez (22 I 1998)
Molecular connectivity indices of iterated line graphs. A new source of descriptors for QSPR and QSAR studies
SAR and QSAR in Environmental Research **9** (1998) 229–240.

637. M. Lepović, I. Gutman (16 I 1998)
A collective property of trees and chemical trees
Journal of Chemical Information and Computer Sciences **38** (1998) 823–826.

636. I. Gutman, D. Babić, V. Gineityte (14 I 1998)
Degeneracy in the equivalent bond orbital model for high–energy band in the photoelectron spectra of saturated hydrocarbons
Acta Chimica Hungarica - Models in Chemistry **135** (1998) 901–909.

635. I. Gutman, E. Estrada, O. Ivanciuc (5 I 1998)
Some properties of the Wiener polynomial of trees
Graph Theory Notes of New York **36** (1999) 7–13.

634. I. Gutman, E. Estrada (XII 1997)
Acerca del uso de diferentes representaciones moleculares para la predicción de propiedades físico–químicas de compuestos orgánicos. Índice de Wiener de alcanos [On the use of different molecular representations for the prediction of physico–chemical properties of organic compounds. Wiener index of alkanes]
Afinidad **56** (1999) 253–256.

633. E. Estrada, L. Torres, L. Rodríguez, I. Gutman (15 XII 1997)
An atom–bond connectivity index: Modelling the enthalpy of formation of alkanes
Indian Journal of Chemistry **37A** (1998) 849–855.

632. E. Estrada, O. Ivanciuc, I. Gutman, A. Gutierrez, L. Rodríguez (15 XII 1997)
Extended Wiener indices. A new set of descriptors for quantitative structure–property studies
New Journal of Chemistry **22** (1998) 819–822.

631. I. Gutman, A. A. Dobrynin (18 XI 1997)
The Szeged index – a success story
Graph Theory Notes of New York **34** (1998) 37–44.

630. S. J. Cyvin, B. N. Cyvin, J. Brunvoll, I. Gutman, R. Chen, S. El–Basil, F. Zhang (15 XI 1997)
Polygonal systems including the corannulene and coronene homologs: Novel applications of Pólya's theorem
Zeitschrift für Naturforschung **52a** (1997) 867–873.

629. A. A. Dobrynin, I. Gutman, V. Jovashevich (11 XI 1997)
Biciklicheskie grafy i ih rebernye grafy s sovpadayushchim indeksom Vinera [Bicyclic graphs and their line graphs with coinciding Wiener index]
Diskretnyi Analiz i Issledovanie Operacii (Novosibirsk) *Seriya 2* **4** (2) (1997) 3–9.

628. I. Gutman, D. Vidović, L. Popović (10 XI 1997)
On graph representation of organic molecules – Cayley's plerograms vs. his kenograms
Journal of the Chemical Society Faraday Transactions **94** (1998) 857–860.

627. I. Gutman, V. Ivanov–Petrović (29 X 1997)
Unusual modes of cyclic conjugation in phenylenes
Bulletin of the Chemists and Technologists of Macedonia **16** (1997) 91–96.

626. I. Gutman (27 X 1997)
On the Türker angles in the theory of total π-electron energy
Turkish Journal of Chemistry **22** (1998) 399–402.

625. E. Estrada, N. Guevara, I. Gutman (16 X 1997)
Extension of edge connectivity index. Relationships to line graph indices and QSPR applications
Journal of Chemical Information and Computer Sciences **38** (1998) 428–431.

624. A. A. Dobrynin, I. Gutman, V. N. Piottukh–Peleckii (13 X 1997)
Giperindeks Vinera dlya aciklicheskih struktur [Hyper–Wiener index for acyclic structures]
Zhurnal Strukturnoi Khimii **40** (1999) 351–357.
translation into English:
A. A. Dobrynin, I. Gutman, V. N. Piottukh–Peletskii
Hyper–Wiener index for acyclic structures
Journal of Structural Chemistry **40** (1999) 293–298.

623. I. Gutman, L. Popović, E. Estrada, S. H. Bertz (29 IX 1997)
The line graph model. Predicting physico–chemical properties of alkanes
Acta Chimica Hungarica - Models in Chemistry **135** (1998) 147–155.

622. I. Gutman, V. Jovašević (4 IX 1997)
Wiener indices of benzenoid hydrocarbons containing two linear polyacene fragments
Journal of the Serbian Chemical Society **63** (1998) 31–40.

621. I. Sciriha, I. Gutman (VIII 1997)
Nut graphs – properties and construction
Utilitas Mathematica **54** (1998) 257–272.

620. I. Gutman (19 VIII 1997)
Distance in thorny graph
Publications de l'Institut Mathématique (Beograd) **63** (1998) 31–36.

619. I. Gutman, Z. Marković, I. Juranić (9 VIII 1997)
A Clar–type regularity for dianions of benzenoid hydrocarbons
Polycyclic Aromatic Compounds **13** (1999) 33–40.

618. I. Gutman, M. Medeleanu (8 VIII 1997)
On the structure–dependence of the largest eigenvalue of the distance matrix of an alkane
Indian Journal of Chemistry **37A** (1998) 569–573.

617. O. Chan, I. Gutman, T. K. Lam, R. Merris (4 VIII 1997)
Algebraic connections between topological indices
Journal of Chemical Information and Computer Sciences **38** (1998) 62–65.

616. I. Gutman, Z. Marković, S. Solujć, S. Sukdolak (28 VII 1997)
On the tautomers of hypericin
Monatshefte für Chemie **129** (1998) 481–486.

615. I. Gutman, S. M. Patra, R. K. Mishra (11 VII 1997)
On the pairing of molecular orbital energy levels of heteroconjugated molecules
Journal of the Serbian Chemical Society **63** (1998) 25–30.

614. A. A. Kiss, I. E. Kacso, O. M. Minailiuc, M. V. Diudea, S. Nikolic, I. Gutman (VI 1997)
Szeged indices: Vertex and fragmental descriptors
Studia Universitatis Babeş–Bolyai – Chemia **42** (1997) 183–191.
also published as:
A. A. Kiss, I. E. Kacso, O. M. Minailiuc, M. V. Diudea, S. Nikolić, I. Gutman (15 XII 1999)
Szeged indices: Vertex and fragmental descriptors
Kragujevac Journal of Science **22** (2000) 49–58.

613. A. A. Dobrynin, I. Gutman (26 VI 1997)
Congruence relations for the Szeged index of hexagonal chains
Publikacije Elektrotehničkog Fakulteta (Beograd) *Serija Matematika* **8** (1997) 106–113.

612. S. Klavžar, I. Gutman, A. Rajapakse (17 VI 1997)
Wiener numbers of pericondensed benzenoid hydrocarbons
Croatica Chemica Acta **70** (1997) 979–999.

611. M. V. Diudea, B. Parv, I. Gutman (9 VI 1997)
Detour–Cluj matrix and derived invariants
Journal of Chemical Information and Computer Sciences **37** (1997) 1101–1108.

610. I. Gutman, L. Popović, L. Pavlović (V 1997)
Elementary edge–cuts in the theory of benzenoid hydrocarbons – an application
MATCH Communications in Mathematical and in Computer Chemistry **36** (1997) 217–229.

609. I. Gutman, S. J. Cyvin (V 1997)
Elementary edge–cuts in the theory of benzenoid hydrocarbons
MATCH Communications in Mathematical and in Computer Chemistry **36** (1997) 177–184.

608. P. E. John, R. B. Mallion, I. Gutman (12 V 1997)
An algorithm for counting spanning trees in labeled molecular graphs homeomorphic to cata-condensed systems
Journal of Chemical Information and Computer Sciences **38** (1998) 108–112.

607. M. V. Diudea, I. Gutman (8 V 1997)
Wiener–type topological indices
Croatica Chemica Acta **71** (1998) 21–51.

606. I. Gutman, M. V. Diudea (IV 1997)
Correcting the definition of Cluj matrices
MATCH Communications in Mathematical and in Computer Chemistry **37** (1998) 195–201.

605. I. Gutman (30 IV 1997)
Permanents of adjacency matrices and their dependence on molecular structure
Polycyclic Aromatic Compounds **12** (1998) 281–287.

604. I. Gutman, S. Klavžar (30 IV 1997)
Relations between Wiener numbers of benzenoid hydrocarbons and phenylenes
Acta Chimica Hungarica – Models in Chemistry **135** (1998) 45–55.

603. I. Nagypál, I. Gutman, E. Hoffmann, I. Fishtik (17 IV 1997)
Response reactions: Interpretation and geometric representation
Journal of the Serbian Chemical Society **62** (1997) 801–815.

602. I. Gutman (13 IV 1997)
A theorem on graphs with maximum singularity
Collection of Scientific Papers of the Faculty of Science Kragujevac **19** (1997) 17–20.

601. I. Gutman, L. Popović, B. K. Mishra, M. Kuanar, E. Estrada, N. Guevara (9 IV 1997)
Application of line graphs in physical chemistry. Predicting the surface tensions of alkanes
Journal of the Serbian Chemical Society **62** (1997) 1025–1029.

600. M. Marjanović, I. Gutman (28 III 1997)
A distance–based graph invariant related to the Wiener and Szeged numbers
Bulletin de l'Académie Serbe des Sciences at des Arts (Classe des Sciences Mathématiques et Naturelles) **114** (1997) 99–108.

599. I. Gutman (3 III 1997)
Cyclic conjugation in dianions: effect of cycles on the thermodynamic stability of polycyclic conjugated dianions
Journal of Molecular Structure (Theochem) **428** (1998) 241–246.

598. I. Gutman (25 II 1997)
Wiener numbers of benzenoid isomers containing a linear polyacene fragment
Indian Journal of Chemistry **36A** (1997) 644–648.

597. I. Gutman (17 II 1997)
Comparing Wiener numbers of isomeric benzenoid hydrocarbons
Acta Chimica Hungarica - Models in Chemistry **134** (1997) 477–486.

596. I. Fishtik, I. Gutman, I. Nagypál, D. Geană (13 II 1997)
First derivatives in the thermodynamics of multiple equilibrium systems in terms of response reactions
Zeitschrift für Physikalische Chemie **204** (1998) 213–234.

595. I. Gutman, D. Plavšić, M. Šoškić, I. Landeka, A. Graovac (11 II 1997)
On the calculation of the path numbers ${}^1Z$, ${}^2Z$ and the Hosoya Z index
Croatica Chemica Acta **70** (1997) 941–954.

594. I. Nagypál, E. Hoffmann, I. Gutman, I. Fishtik (I 1997)
Response reactions: An interpretive concept in chemical thermodynamics
Pure & Applied Chemistry **70** (1998) 583–590.
translation into Hungarian:
Válaszreakciók: a kémiai termodinamika alapvető egyenleteinek és jelenségeinek új értelmezése (28 II 1997)
Magyar Kémiai Folyóirat **104** (1998) 395–401.

593. I. Gutman, V. Jovašević, A. A. Dobrynin (25 I 1997)
Smallest graphs for which the distance of the graph is equal to the distance of its line graph
Graph Theory Notes of New York **33** (1997) 19–19.

592. I. Gutman, S. Klavžar (24 I 1997)
Bounds for the Schultz molecular topological index of benzenoid systems in terms of the Wiener index
Journal of Chemical Information and Computer Sciences **37** (1997) 741–744.

591. T. Morikawa, I. Gutman, R. S. Chen, S. J. Cyvin (13 I 1997)
Determination of essentially disconnected sites in the boundary of coronoid subgraphs
Polycyclic Aromatic Compounds **12** (1998) 269–279.

590. I. Gutman, L. Pavlović (11 XII 1996)
More on distance of line graphs
Graph Theory Notes of New York **33** (1997) 14–18.

589. S. Simić, I. Gutman, V. Baltić (11 XII 1996)
Some graphs with extremal Szeged index
Mathematica Slovaca **50** (2000) 1–15.

588. D. Plavšić, M. Šoškić, Z. Đaković, I. Gutman, A. Graovac (14 XI 1996)
Extension of the Z matrix to cycle–containing and edge–weighted molecular graphs
Journal of Chemical Information and Computer Sciences **37** (1997) 529–534.

587. P. E. John, I. Gutman (11 XI 1996)
On the calculation of the algebraic structure count of polycyclic conjugated hydrocarbons by means of cell polynomial
Journal of the Serbian Chemical Society **62** (1997) 319–325.

586. L. Pavlović, I. Gutman (7 XI 1996)
Wiener numbers of phenylenes: An exact result
Journal of Chemical Information and Computer Sciences **37** (1997) 355–358.

585. T. Morikawa, I. Gutman (30 X 1996)
Determination of essential single bonds in benzenoid hydrocarbons
Polycyclic Aromatic Compounds **12** (1998) 261–267.

584. I. Gutman, I. Nagypál, I. Fishtik (10 X 1996)
Reaction extents in systems with multiple chemical equilibria
Journal of the Serbian Chemical Society **62** (1997) 327–333.

583. W. C. Shiu, P. C. B. Lam, I. Gutman (27 IX 1996)
Wiener number of hexagonal bitrapeziums and trapeziums
Bulletin de l'Académie Serbe des Sciences at des Arts (Classe des Sciences Mathématiques et Naturelles) **114** (1997) 9–25.

582. I. Gutman, W. Linert, I. Lukovits, A. A. Dobrynin (27 IX 1996)
Trees with extremal hyper–Wiener index: Mathematical basis and chemical applications
Journal of Chemical Information and Computer Sciences **37** (1997) 349–354.

581. I. Gutman, S. Marković, L. Popović, Z. Spalević, L. Pavlović (31 VIII 1996)
The relation between the Wiener indices of phenylenes and their hexagonal squeezes
Journal of the Serbian Chemical Society **62** (1997) 207–210.

580. Z. Slanina, M. C. Chao, S. L. Lee, I. Gutman (16 VIII 1996)
On applicability of the Wiener index to estimate relative stabilities of the higher–fullerene IPR isomers
Journal of the Serbian Chemical Society **62** (1997) 211–217.

579. I. Gutman (6 VIII 1996)
A property of the Wiener number and its modifications
Indian Journal of Chemistry **36A** (1997) 128–132.

578. I. Gutman (16 VII 1996)
On local aromaticity in phenylenes
Indian Journal of Chemistry **35A** (1996) 909–914.

577. I. Gutman, J. H. Potgieter (13 VII 1996)
Wiener index and intermolecular forces
Journal of the Serbian Chemical Society **62** (1997) 185–192.

576. I. Fishtik, I. Nagypál, I. Gutman (9 VII 1996)
Novel formulation of the Gibbs–energy change in terms of stoichiometrically unique response reactions
Zeitschrift für Naturforschung **51a** (1996) 1079–1083.

575. A. A. Dobrynin, I. Gutman (VI 1996)
Szeged index of some polycyclic bipartite graphs with circuits of different size
MATCH Communications in Mathematical and in Computer Chemistry **35** (1997) 117–128.

574. A. Das, G. Dömötör, I. Gutman, S. Joshi, S. Karmarkar, D. Khaddar, T. Khaddar, P. V. Khadikar, L. Popović, N. S. Sapre, N. Sapre, A. Shirhatti (22 VI 1996)
A comparative study of the Wiener, Schultz and Szeged indices of cycloalkanes
Journal of the Serbian Chemical Society **62** (1997) 235–239.

573. I. Gutman, A. Pyka (20 VI 1996)
New topological indices for distinguishing between enantiomers and stereoisomers: A mathematical analysis
Journal of the Serbian Chemical Society **62** (1997) 261–265.

572. I. Fishtik, I. Gutman, I. Nagypál (29 V 1996)
Response reactions in chemical thermodynamics
Journal of the Chemical Society Faraday Transactions **92** (1996) 3525–3532.
translation into Hungarian:
Válaszreakciók a kémiai termodinamikában (21 VIII 1996)
Magyar Kémiai Folyóirat **103** (1997) 89–100.

571. I. Gutman (14 V 1996)
Note on Türker's approximate formula for total π-electron energy of benzenoid hydrocarbons
Acta Chimica Hungarica - Models in Chemistry **133** (1996) 415–420.

570. M. V. Diudea, O. M. Minailiuc, G. Katona, I. Gutman (IV 1996)
Szeged matrices and related numbers
MATCH Communications in Mathematical and in Computer Chemistry **35** (1997) 129–143.

569. Z. Marković, S. Konstantinović, I. Gutman (27 IV 1996)
The dependence of vicinal proton–proton coupling constans of norbornenes on molecular structure
Zeitschrift für Naturforschung **51a** (1996) 1042–1044.

568. I. Gutman (24 IV 1996)
Distance of line graphs
Graph Theory Notes of New York **31** (1996) 49–52.

567. I. Gutman, S. Marković, A. Stajković, S. Kamidžorac (20 IV 1996)
Correlations between π-electron properties of phenylenes and their hexagonal squeezes
Journal of the Serbian Chemical Society **61** (1996) 873–879.

566. I. Gutman, T. P. Radhakrishnan (8 IV 1996)
On the origin of high Hückel molecular orbital degeneracy
Journal of the Serbian Chemical Society **61** (1996) 881–886.

565. S. Klavžar, I. Gutman (2 IV 1996)
A comparison of the Schultz molecular topological index with the Wiener index
Journal of Chemical Information and Computer Sciences **36** (1996) 1001–1003.

564. I. Gutman (26 III 1996)
Hückel molecular orbital energies and bond orders of cyclacenes
Polycyclic Aromatic Compounds **8** (1996) 251–257.

563. I. Gutman, V. Ivanov–Petrović (11 III 1996)
Clar theory and phenylenes
Journal of Molecular Structure (Theochem) **389** (1997) 227–232.

562. I. Gutman, T. Morikawa, S. J. Cyvin (26 II 1996)
Benzenoid isomers with extremal Kekulé structure counts: symmetric di–fibonaceno–annelated derivatives
Chemical Physics Letters **258** (1996) 13–17.

561. D. Plavšić, M. Šoškić, I. Landeka, I. Gutman, A. Graovac (22 II 1996)
On the relation between the path numbers ${}^1Z$, ${}^2Z$ and the Hosoya Z index
Journal of Chemical Information and Computer Sciences **36** (1996) 1118–1122.

560. S. Klavžar, I. Gutman (15 II 1996)
Wiener number of vertex–weighted graphs and a chemical application
Discrete Applied Mathematics **80** (1997) 73–81.

559. I. Gutman, P. V. Khadikar, T. Khaddar (I 1996)
Wiener and Szeged indices of benzenoid hydrocarbons containing a linear polyacene fragment
MATCH Communications in Mathematical and in Computer Chemistry **35** (1997) 105–116.

558. I. Gutman, L. Popović, P. V. Khadikar, S. Karmarkar, S. Joshi, M. Mandloi (I 1996)
Relations between Wiener and Szeged indices of monocyclic molecules
MATCH Communications in Mathematical and in Computer Chemistry **35** (1997) 91–103.

557. S. Klavžar, A. Rajapakse, I. Gutman (I 1996)
The Szeged and the Wiener index of graphs
Applied Mathematics Letters **9** (5) (1996) 45–49.

556. E. Estrada, I. Gutman (24 I 1996)
A topological index based on distances of edges of molecular graphs
Journal of Chemical Information and Computer Sciences **36** (1996) 850–853.

555. I. Gutman, S. Klavžar (22 I 1996)
A method for calculating Wiener numbers of benzenoid hydrocarbons
Acta Chimica Hungarica - Models in Chemistry **133** (1996) 389–399.

554. I. Fishtik, D. Geană, I. Gutman, I. Nagypál (19 I 1996)
Joule–Thomson coefficient in systems with multiple chemical equilibria
Journal of Mathematical Chemistry **20** (1996) 365–384.

553. I. Gutman, B. Mohar (11 I 1996)
The quasi–Wiener and the Kirchhoff indices coincide
Journal of Chemical Information and Computer Sciences **36** (1996) 982–985.

552. J. Aihara, D. Babić, I. Gutman (XII 1995)
Matching spectra of fullerenes
MATCH Communications in Mathematical and in Computer Chemistry **33** (1996) 7–16.

551. I. Gutman, T. Morikawa, S. J. Cyvin (13 XII 1995)
Benzenoid isomers with extremal values of the Kekulé structure count
Indian Journal of Chemistry **35A** (1996) 454–457.

550. S. Marković, I. Gutman, J. Šuković (11 XII 1995)
The dependence of the total π-electron energy of isomeric unbranched catacondensed benzenoid hydrocarbons with a fixed number of bay regions on the number of Kekulé structures
Journal of the Serbian Chemical Society **61** (1996) 539–543.

549. I. Gutman, M. V. Kaulgud, V. H. Chitgopkar (27 XI 1995)
Wiener numbers of non-periodic polymers
Collection of Scientific Papers of the Faculty of Science Kragujevac **18** (1996) 105–113.

548. I. Gutman (27 XI 1995)
On the energy of quadrangle–free graphs
Collection of Scientific Papers of the Faculty of Science Kragujevac **18** (1996) 75–82.

547. I. Gutman, G. Dömötör, P. C. B. Lam, W. C. Shiu, L. Popović (15 XI 1995)
Szeged indices of benzenoid hydrocarbons
Polycyclic Aromatic Compounds **8** (1996) 259–270.

546. W. C. Shiu, P. C. B. Lam, I. Gutman (30 X 1995)
Wiener number of hexagonal parallelograms
Graph Theory Notes of New York **30** (1996) 21–25.

545. I. Fishtik, I. Nagypál, I. Gutman (27 X 1995)
Effect of dilution on the speciation in multiple equilibrium systems in solutions
Acta Chimica Hungarica - Models in Chemistry **133** (1996) 231–242.

544. I. Gutman, I. Nagypál (20 X 1995)
Mathematical foundation of the Hessian response equilibrium concept
Journal of Mathematical Chemistry **19** (1996) 193–203.

543. I. Nagypál, I. Fishtik, I. Gutman (11 X 1995)
A válaszegyensúlyok elmélete [Theory of response equilibria]
Magyar Kémiai Folyóirat **102** (1996) 381–390.

542. I. Gutman, E. Estrada (30 IX 1995)
Topological indices based on the line graph of the molecular graph
Journal of Chemical Information and Computer Sciences **36** (1996) 541–543.

541. I. Gutman (29 IX 1995)
Two distance–based graph invariants and their relation in the case of unicyclic graphs
Bulletin de l'Académie Serbe des Sciences at des Arts (Classe des Sciences Mathématiques et Naturelles) **111** (1996) 19–29.

540. P. V. Khadikar, S. Karmarkar, S. Joshi, I. Gutman (29 IX 1995)
Estimation of the protonation constants of salicylhydroxamic acids by means of the Wiener topological index
Journal of the Serbian Chemical Society **61** (1996) 89–95.

539. I. Gutman, I. Sciriha (20 IX 1995)
Graphs with maximum singularity
Graph Theory Notes of New York **30** (1996) 17–20.

538. I. Gutman, H. Hosoya, D. Babić (18 IX 1995)
Topological indices and graph polynomials of some macrocyclic belt–shaped molecules
Journal of the Chemical Society Faraday Transactions **92** (1996) 625–628.

537. V. R. Rosenfeld, I. Gutman (8 IX 1995)
A new recursion relation for the characteristic polynomial of a molecular graph
Journal of Chemical Information and Computer Sciences **36** (1996) 527–530.

536. O. Bodroža–Pantić, I. Gutman, S. J. Cyvin (VIII 1995)
Fibonacci numbers and algebraic structure count of some non-benzenoid conjugated polymers
Fibonacci Quarterly **35** (1997) 75–83.

535. I. Gutman, V. Ivanov–Petrović, S. Pogodin (2 VIII 1995)
Unusual conjugation pattern in a class of benzenoid hydrocarbons
Indian Journal of Chemistry **35A** (1996) 87–92.

534. R. Chen, S. J. Cyvin, I. Gutman (6 VII 1995)
Recognition of fully-arenoid hydrocarbons
Journal of the Serbian Chemical Society **60** (1995) 1083–1093.

533. I. Gutman, P. U. Biedermann, V. Ivanov–Petrović, I. Agranat (26 VI 1995)
Cyclic conjugation effects in cyclacenes
Polycyclic Aromatic Compounds **8** (1996) 189–202.

532. I. Gutman, V. R. Rosenfeld (19 VI 1995)
Spectral moments of polymer graphs
Theoretica Chimica Acta **93** (1996) 191–197.

531. I. Gutman (29 V 1995)
On independent vertices and edges of belt graphs
Publications de l'Institut Mathématique (Beograd) **59** (1996) 11–17.

530. A. A. Dobrynin, I. Gutman (15 V 1996)
On the Szeged index of unbranched catacondensed benzenoid molecules
Croatica Chemica Acta **69** (1996) 845–856.

529. I. Gutman, D. Bonchev, W. A. Seitz, E. Gordeeva (11 V 1995)
Complementing the proof of the limit of relative atomic moments
Journal of Chemical Information and Computer Sciences **35** (1995) 894–895.

528. I. Gutman, S. Klavžar (24 IV 1995)
An algorithm for the calculation of the Szeged index of benzenoid hydrocarbons
Journal of Chemical Information and Computer Sciences **35** (1995) 1011–1014.

527. O. Bodroža–Pantić, I. Gutman, S. J. Cyvin (11 IV 1995)
Algebraic structure count of some non-benzenoid conjugated polymers
Acta Chimica Hungarica – Models in Chemistry **133** (1996) 27–41.

526. I. Gutman, P. V. Khadikar, P. V. Rajput, S. Karmarkar (7 IV 1995)
The Szeged index of polyacenes
Journal of the Serbian Chemical Society **60** (1995) 759–764.

525. I. Gutman (3 IV 1995)
Coloring of the vertices of a graph using two colors
Graph Theory Notes of New York **29** (1995) 14–17.

524. A. A. Dobrynin, I. Gutman, G. Dömötör (III 1995)
A Wiener–type graph invariant for some bipartite graphs
Applied Mathematics Letters **8** (5) (1995) 57–62.

523. I. Fishtik, I. Nagypál, I. Gutman (6 III 1995)
Sensitivity analysis of multiple chemical equilibria: Sensitivity coefficients and response equilibria
Journal of Chemical Physics **103** (1995) 7545–7555.

522. I. Gutman, T. Körtvélyesi (20 II 1995)
Wiener indices and molecular surfaces
Zeitschrift für Naturforschung **50a** (1995) 669–671.

521. S. Marković, I. Gutman, Ž. Bančević (10 II 1995)
Correlation between Wiener and quasi-Wiener indices in benzenoid hydrocarbons
Journal of the Serbian Chemical Society **60** (1995) 633–636.

520. X. Li, B. Zhao, I. Gutman (2 II 1995)
More examples for supporting the validity of a conjecture on β-polynomial
Journal of the Serbian Chemical Society **60** (1995) 1095–1101.

519. S. Klavžar, I. Gutman, B. Mohar (1 II 1995)
Labeling of benzenoid systems which reflects the vertex–distance relations
Journal of Chemical Information and Computer Sciences **35** (1995) 590–593.

518. I. Gutman (30 I 1995)
Some properties of Calvin's model of spontaneous chiral amplification
Indian Journal of Chemistry **34A** (1995) 688–691.

517. I. Gutman, I. Nagypál, I. Fishtik (30 I 1995)
General thermodynamic identities for sensitivity coefficients
Journal of Mathematical Chemistry **18** (1995) 73–82.

516. I. Gutman (16 I 1995)
Studies on the kinetics of spontaneous chiral amplification. The Calvin model
Bulletin of the Chemists and Technologists of Macedonia **14** (1995) 69–72.

515. I. Gutman, S. L. Lee, J. H. Sheu, C. Li (6 I 1995)
Predicting the nodal properties of molecular orbitals by means of signed graphs
Bulletin of the Institute of Chemistry of the Academia Sinica **42** (1995) 25–32.

514. P. V. Khadikar, N. V. Deshpande, P. P. Kale, A. Dobrynin, I. Gutman, G. Dömötör (23 XII 1994)
The Szeged index and an analogy with the Wiener index
Journal of Chemical Information and Computer Sciences **35** (1995) 547–550.

513. O. Bodroža–Pantić, S. J. Cyvin, I. Gutman (XI 1994)
A formula for the algebraic structure count of multiple phenylenes
MATCH Communications in Mathematical and in Computer Chemistry **32** (1995) 47–58.

512. D. Babić, I. Gutman (XI 1994)
More lower bounds for the total π-electron energy of alternant hydrocarbons
MATCH Communications in Mathematical and in Computer Chemistry **32** (1995) 7–17.

511. I. Fishtik, I. Nagypál, I. Gutman (23 XI 1994)
Unnoticed identities in chemical thermodynamics
Journal of the Chemical Society Faraday Transactions **91** (1995) 1325–1331.

510. I. Gutman, V. Petrović (16 XI 1994)
Theoretical study of cyclic conjugation in phenes: Some hitherto unnoticed features
Monatshefte für Chemie **126** (1995) 1179–1185.

509. I. Gutman, S. Marković, G. G. Hall (15 XI 1994)
Revisiting a simple regularity for benzenoid hydrocarbons: Total π-electron energy versus the number of Kekulé structures
Chemical Physics Letters **234** (1995) 21–24.

508. A. Dobrynin, I. Gutman (25 X 1994)
Solving a problem connected with distances in graphs
Graph Theory Notes of New York **28** (1995) 21–23.

507. J. Brunvoll, B. N. Cyvin, S. J. Cyvin, E. C. Kirby, I. Gutman (4 X 1994)
Fully-naphthalenoid hydrocarbons: Enumeration and classification
Polycyclic Aromatic Compounds **4** (1995) 219–229.

506. I. Gutman (30 IX 1994)
On the distance of some compound graphs
Publikacije Elektrotehničkog Fakulteta (Beograd) *Serija Matematika* **5** (1994) 29–34.

505. I. Gutman (30 IX 1994)
Contributions to the sensitivity analysis of multiple chemical equilibria: the Hessian determinant of ideal systems
Bulletin de l'Académie Serbe des Sciences at des Arts (Classe des Sciences Mathématiques et Naturelles) **112** (1996) 11–21.

504. I. Gutman, G. Dömötör (26 IX 1994)
Wiener number of polyphenyls and phenylenes
Zeitschrift für Naturforschung **49a** (1994) 1040–1044.

503. I. Fishtik, I. Nagypál, I. Gutman (9 IX 1994)
Response reactions: A way to explain the unusual behaviour of multiple equilibrium systems
Journal of the Chemical Society Faraday Transactions **91** (1995) 259–267.

502. I. Gutman (16 VIII 1994)
A class of lower bounds for total π-electron energy of alternant conjugated hydrocarbons
Croatica Chemica Acta **68** (1995) 187–192.

501. I. Gutman (29 VII 1994)
The topological indices of linear phenylenes
Journal of the Serbian Chemical Society **60** (1995) 99–104.

500. I. Gutman, S. Marković, D. Vukićević, A. Stajković (29 VII 1994)
The dependence of total π-electron energy of large benzenoid hydrocarbons on the number of Kekulé structures is non-linear
Journal of the Serbian Chemical Society **60** (1995) 93–98.

499. S. J. Cyvin, P. E. John, I. Gutman, J. Brunvoll, B. N. Cyvin (22 VII 1994)
Contributions to the theory of benzenoid isomers. Part 2: Building-up principles
Journal of Molecular Structure (Theochem) **334** (1995) 243–247.

498. I. Gutman, L. Türker, I. Bálint (22 VII 1994)
Measuring the similarity of spectra of molecular graphs
Indian Journal of Chemistry **34A** (1995) 1–4.

497. A. Dobrynin, I. Gutman (1 VII 1994)
On a graph invariant related to the sum of all distances in a graph
Publications de l'Institut Mathématique (Beograd) **56** (1994) 18–22.

496. I. Gutman, I. Lukovits (VI 1994)
A gráfelmélet kémiai alkalmazásairól [On the chemical applications of graph theory]
Magyar Kémikusok Lapja **50** (1995) 513–518.

495. I. Gutman (23 VI 1994)
An approximate Hückel total π-electron energy formula for benzenoid aromatics: Some amendments
Polycyclic Aromatic Compounds **4** (1995) 271–274.

494. D. Babić, A. Graovac, I. Gutman (23 VI 1994)
Algebraic structure count of cyclobutadienyl bridged polyacenes
Polycyclic Aromatic Compounds **4** (1995) 199–207.

493. I. Gutman, I. Fishtik, I. Nagypál (21 VI 1994)
An identity in chemical thermodynamics
Journal of Mathematical Chemistry **16** (1994) 229–244.

492. S. J. Cyvin, I. Gutman, O. Bodroža–Pantić, J. Brunvoll (31 V 1994)
Kekulé structure count and algebraic structure count of multiple phenylenes
Acta Chimica Hungarica - Models in Chemistry **131** (1994) 777–790.

491. D. J. Klein, I. Lukovits, I. Gutman (18 V 1994)
On the definition of the hyper–Wiener index for cycle–containing structures
Journal of Chemical Information and Computer Sciences **35** (1995) 50–52.

490. I. Gutman, J. W. Kennedy, B. Servatius (18 V 1994)
Tree singularity and a chemical background to singular graphs
Graph Theory Notes of New York **27** (1994) 33–41.

489. I. Gutman (IV 1994)
The Frank kinetic model for spontaneous chiral symmetry breaking with variable concentration of the achiral substrate
Journal of Science Islamic Republic of Iran **6** (1995) 231–234.

488. P. V. Khadikar, N. V. Deshpande, P. P. Kale, I. Gutman (26 IV 1994)
Spectral moments of polyacenes
Journal of Chemical Information and Computer Sciences **34** (1994) 1181–1183.

487. I. Fishtik, I. Nagypál, I. Gutman (12 IV 1994)
New approach to sensitivity analysis of multiple equilibria in solutions
Journal of the Chemical Society Faraday Transactions **90** (1994) 3245–3252.

486. I. Gutman, Y. N. Yeh, S. L. Lee, H. Hosoya, S. J. Cyvin (12 IV 1994)
Calculating the determinant of the adjacency matrix and counting Kekulé structures in circulenes
Zeitschrift für Naturforschung **49a** (1994) 1053–1058.

485. I. Gutman, G. Peintler, I. Nagypál (8 IV 1994)
Some properties of a Frank–type chiral amplification model
Reaction Kinetics and Catalysis Letters **53** (1994) 353–361.

484. I. Lukovits, I. Gutman (III 1994)
Edge–decomposition of the Wiener number
MATCH Communications in Mathematical Chemistry **31** (1994) 133–144.

483. I. Gutman, P. Petković, P. V. Khadikar (28 III 1994)
Bounds for the total π-electron energy of phenylenes
Revue Roumaine de Chimie **41** (1996) 637–643.

482. I. Gutman, N. Gavrilović, D. Banković, P. V. Khadikar, N. V. Deshpande, P. P. Kale (21 III 1994)
Dependence of spectral moments of benzenoid hydrocarbons on molecular structure: The case of linear polyacenes
Journal of the Serbian Chemical Society **59** (1994) 519–524.

481. I. Gutman (21 III 1994)
A formula for the Wiener number of trees and its extension to graphs containing cycles
Graph Theory Notes of New York **27** (1994) 9–15.

480. I. Gutman (28 II 1994)
Selected properties of the Schultz molecular topological index
Journal of Chemical Information and Computer Sciences **34** (1994) 1087–1089.

479. I. Gutman, S. J. Cyvin, V. Petrović, A. Teodorović (7 II 1994)
Fully-naphthalenoid hydrocarbons and their conjugation modes
Polycyclic Aromatic Compounds **4** (1994) 183–189.

478. X. Li, I. Gutman (25 I 1994)
A unified approach to the first derivatives of graph polynomials
Discrete Applied Mathematics **58** (1995) 293–297.

477. I. Gutman, S. L. Lee, C. H. Chu, Y. L. Luo (17 I 1994)
Chemical applications of the Laplacian spectrum of molecular graphs: Studies of the Wiener number
Indian Journal of Chemistry **33A** (1994) 603–608.

476. I. Gutman, J. Brunvoll, B. N. Cyvin, E. Brensdahl, S. J. Cyvin (5 I 1994)
Essentially disconnected fully-acenoids, and fully-arenoid hydrocarbons
Chemical Physics Letters **219** (1994) 355–359.

475. I. Gutman, S. J. Cyvin (XII 1993)
Fully-arenoid hydrocarbons
MATCH Communications in Mathematical Chemistry **30** (1994) 93–102.

474. I. Gutman (27 XII 1993)
Frequency of even and odd numbers in distance matrices of bipartite graphs
Journal of Chemical Information and Computer Sciences **34** (1994) 912–914.

473. I. Gutman, A. Stajković, S. Marković, P. Petković (21 XII 1993)
Dependence of total π-electron energy of phenylenes on Kekulé structure count
Journal of the Serbian Chemical Society **59** (1994) 367–373.

472. I. Gutman, M. Stanković (8 XII 1993)
Cyclic conjugation in non-Kekulean benzenoid molecules
Collection of Scientific Papers of the Faculty of Science Kragujevac **15** (1994) 97–104.

471. L. Türker, I. Gutman (XI 1993)
Isomerization of alternant hydrocarbons
MATCH Communications in Mathematical Chemistry **30** (1994) 269–274.

470. I. Gutman, M. Stanković (5 XI 1993)
On the Hückel $(4m + 2)$ rule in polycyclic alternant hydrocarbons
Journal of Molecular Structure (Theochem) **309** (1994) 301–304.

469. I. Gutman (5 X 1993)
A note on the Frank model for chiral stereoselection
Univerzitetska Misao – Prirodne Nauke (Priština) **1** (1994) 47–51.

468. I. Gutman (VIII 1993)
A regularity for the total π-electron energy of phenylenes
MATCH Communications in Mathematical Chemistry **31** (1994) 99–110.

467. I. Gutman, M. Čukanović, L. Popović (24 VIII 1993)
Coding chemical structure by means of Matula numbers. Some computational aspects
Collection of Scientific Papers of the Faculty of Science Kragujevac **14** (1993) 63–66.

466. I. Gutman, D. Todorović, M. Vučković (9 VIII 1993)
A variant of the Frank chiral amplification model
Chemical Physics Letters **216** (1993) 447–452.

465. I. Gutman (5 VIII 1993)
Algebraic structure count of poly-peri-biphenylene
Journal of the Serbian Chemical Society **58** (1993) 1039–1044.

464. I. Gutman, J. H. Potgieter (VII 1993)
Die Wiener indeks en intermolekulêre kragte [The Wiener index and intermolecular forces]
South African Journal of Science **92** (1996) 47–48.

463. I. Gutman, D. Todorović, M. Vučković (16 VII 1993)
The limited Frank's chiral amplification model
Indian Journal of Chemistry **33A** (1994) 93–96.

462. I. Gutman, E. C. Kirby (12 VII 1993)
Algebraic structure count of cyclobutadieno–annelated unbranched phenylenes
Monatshefte für Chemie **125** (1994) 539–547.

461. I. Gutman, D. Todorović (26 VI 1993)
A kinetic model for the origin of chirality of biomolecules
Journal of the Serbian Chemical Society **59** (1994) 449–456.

460. I. Gutman, S. J. Cyvin, J. Brunvoll (23 VI 1993)
Enumeration of the isomers of phenylenes
Monatshefte für Chemie **125** (1994) 887–894.

459. I. Gutman, W. M. Fong, S. L. Lee (17 VI 1993)
Weina zhishu (Wiener index) – Guji fenzi xingzhi yu fenzi jian zuoyongli de yi zhong you yong de gongju [The Wiener index – A useful tool for estimating molecular properties and intermolecular forces]
Huaxue [Chemistry (Taiwan)] **52** (1994) 139–146.

458. Z. Marković, S. Konstantinović, I. Gutman (3 VI 1993)
The dependence of vicinal proton–proton coupling constants on molecular structure
Zeitschrift für Naturforschung **49a** (1994) 815–818.

457. I. Gutman, X. Li, H. Zhang (27 V 1993)
On a formula involving the first derivative of the characteristic polynomial of a graph
Publikacije Elektrotehničkog Fakulteta (Beograd) *Serija Matematika* **4** (1993) 97–102.

456. I. Gutman, M. Stanković (26 V 1993)
Violation of the Hückel rule in alternant nonbenzenoid hydrocarbons
Journal of the Serbian Chemical Society **58** (1993) 897–903.

455. S. B. Elk, I. Gutman (18 V 1993)
Further properties derivable from the Matula numbers of an alkane
Journal of Chemical Information and Computer Sciences **34** (1994) 331–334.

454. I. Gutman, Y. N. Yeh, S. L. Lee, J. C. Chen (III 1993)
Wiener numbers of dendrimers
MATCH Communications in Mathematical Chemistry **30** (1994) 103–115.

453. Y. N. Yeh, I. Gutman, C. M. Fu (28 III 1993)
Graph transformations which preserve the multiplicity of an eigenvalue
Discrete Applied Mathematics **67** (1996) 221–228.

452. I. Gutman (27 III 1993)
Some properties of the Wiener polynomial
Graph Theory Notes of New York **25** (1993) 13–17.

451. I. Gutman, Y. N. Yeh, S. L. Lee, Y. L. Luo (24 III 1993)
Some recent results in the theory of the Wiener number
Indian Journal of Chemistry **32A** (1993) 651–661.

450. I. Gutman, S. L. Lee, Y. L. Luo, Y. N. Yeh (24 III 1993)
Net signs of molecular graphs: Dependence on molecular structure
International Journal of Quantum Chemistry **49** (1994) 87–95.

449. I. Gutman (22 III 1993)
Calculating the Wiener number: The Doyle–Graver method
Journal of the Serbian Chemical Society **58** (1993) 745–750.

448. I. Gutman, Y. N. Yeh (16 III 1993)
The sum of all distances in bipartite graphs
Mathematica Slovaca **45** (1995) 327–334.

447. I. Gutman, Y. N. Yeh, J. C. Chen (18 II 1993)
On the sum of all distances in graphs
Tamkang Journal of Mathematics **25** (1994) 83–86.

446. I. Gutman (18 II 1993)
Easy method for the calculation of the algebraic structure count of phenylenes
Journal of the Chemical Society Faraday Transactions **89** (1993) 2413–2416.

445. I. Gutman, L. Türker (15 II 1993)
Approximating the total π-electron energy of benzenoid hydrocarbons: Some new estimates of (n, m)-type
Indian Journal of Chemistry **32A** (1993) 833–836.

444. I. Gutman, S. J. Cyvin (11 II 1993)
Number of Kekulé structures in antikekulene and its homologs
Journal of Molecular Structure (Theochem) **288** (1993) 85–91.

443. I. Gutman, A. Ivić (10 II 1993)
On Matula numbers
Discrete Mathematics **150** (1996) 131–142.

442. I. Gutman, R. B. Mallion (3 II 1993)
On spanning trees in catacondensed molecules
Zeitschrift für Naturforschung **48a** (1993) 1026–1030.

441. I. Gutman (1 II 1993)
Cyclic conjugation in phenylenes
South African Journal of Chemistry **47** (1994) 53–55.

440. I. Gutman, S. L. Lee (30 I 1993)
Cyclic conjugation in circulenes
Bulletin of the Institute of Chemistry of the Academia Sinica **40** (1993) 47–54.

439. Y. N. Yeh, I. Gutman (13 I 1993)
On the sum of all distances in composite graphs
Discrete Mathematics **135** (1994) 359–365.

438. I. Gutman (12 I 1993)
Cyclic conjugation in antikekulene and its homologues
Revue Roumaine de Chimie **39** (1994) 943–947.

437. I. Gutman (6 I 1993)
A contribution to the study of palindromic graphs
Graph Theory Notes of New York **24** (1993) 51–56.

436. I. Gutman, Y. N. Yeh (24 XII 1992)
Deducing properties of trees from their Matula numbers
Publications de l'Institut Mathématique (Beograd) **53** (1993) 17–22.

435. D. Babić, A. Graovac, I. Gutman (4 XII 1992)
Comment on "Characteristic polynomials of fullerene cages"
Chemical Physics Letters **206** (1993) 584–585.

434. I. Gutman, Y. L. Luo, S. L. Lee (30 XI 1992)
The mean isomer degeneracy of the Wiener index
Journal of the Chinese Chemical Society **40** (1993) 195–198.

433. I. Gutman (27 XI 1992)
A new method for the calculation of the Wiener number of acyclic molecules
Journal of Molecular Structure (Theochem) **285** (1993) 137–142.

432. I. Gutman (18 XI 1992)
Rectifying a misbelief: Frank Harary's role in the discovery of the coefficient–theorem in chemical graph theory
Journal of Mathematical Chemistry **16** (1994) 73–78.

431. I. Gutman (X 1992)
Approximating the total π-electron energy of benzenoid hydrocarbons: On an overlooked formula of Cioslowski
MATCH Communications in Mathematical Chemistry **29** (1993) 71–79.

430. I. Gutman (12 X 1992)
Violations of the Hückel $(4n + 2)$ rule
Journal of the Chinese Chemical Society **40** (1993) 7–10.

429. I. Gutman (5 X 1992)
Algebraic structure count of linear phenylenes
Indian Journal of Chemistry **32A** (1993) 281–284.

428. I. Gutman (IX 1992)
Approximating the total π-electron energy of benzenoid hydrocarbons: A record accurate formula of (n, m)-type
MATCH Communications in Mathematical Chemistry **29** (1993) 61–69.

427. I. Gutman, A. Ivić (25 IX 1992)
Graphs with maximal and minimal Matula numbers
Bulletin de l'Académie Serbe des Sciences et des Arts (Classe des Sciences Mathématiques et Naturelles) **107** (1994) 65–74.

426. I. Gutman, V. Petrović, B. Mohar (12 VIII 1992)
Cyclic conjugation effects: individual, collective and overall
Chemical Physics Letters **203** (1993) 378–382.

425. I. Gutman (VII 1992)
Hückel rule in catacondensed benzenoid hydrocarbons
MATCH Communications in Mathematical Chemistry **29** (1993) 51–60.

424. I. Gutman, A. Ivić, S. B. Elk (23 VII 1992)
Matula numbers for coding chemical structure and some of their properties
Journal of the Serbian Chemical Society **58** (1993) 193–201.

423. S. J. Cyvin, B. N. Cyvin, J. Brunvoll, I. Gutman, P. E. John (13 VII 1992)
Towards a theoretical basis of the constant–isomer series of benzenoid hydrocarbons
Journal of the Serbian Chemical Society **58** (1993) 1–11.

422. I. Gutman (2 VI 1992)
Independent vertex palindromic graphs
Graph Theory Notes of New York **23** (1992) 21–24.

421. I. Gutman (14 V 1992)
Contribution to Despić's method for the study of complex chemical reactions. A general algorithm for the generation of reaction mechanism models
Journal of the Serbian Chemical Society **57** (1992) 973–979.

420. I. Gutman, V. Petrović (12 V 1992)
Cyclic conjugation in zig-zag fibonacenes
Revue Roumaine de Chimie **38** (1993) 439–445.

419. I. Gutman, S. Marković (4 V 1992)
Benzenoid graphs with equal maximum eigenvalues
Journal of Mathematical Chemistry **13** (1993) 213–215.

418. E. C. Kirby, I. Gutman (30 IV 1992)
The branching graphs of polyhexes: some elementary theorems, conjectures and open questions
Journal of Mathematical Chemistry **13** (1993) 359–374.

417. I. Gutman, V. Petrović (2 IV 1992)
Cyclic conjugation in benzo–annelated polyacenes
Indian Journal of Chemistry **31A** (1992) 647–650.

416. I. Gutman, L. Anđelković (1 IV 1992)
Note on the structure–dependency of the largest graph eigenvalue of catacondensed benzenoid hydrocarbons
Collection of Scientific Papers of the Faculty of Science Kragujevac **13** (1992) 31–34.

415. D. Babić, I. Gutman, S. Marković, M. Stanković (III 1992)
On the almost–isospectrality concept for benzenoid systems
MATCH Communications in Mathematical Chemistry **28** (1992) 3–12.

414. I. Gutman, D. Todorović (30 III 1992)
The critical time in Frank's chiral amplification model
Chemical Physics Letters **195** (1992) 62–66.

413. I. Gutman (28 II 1992)
Cyclic conjugation in benzenoid hydrocarbons
Bulletin de l'Académie Serbe des Sciences et des Arts (Classe des Sciences Mathématiques et Naturelles) **106** (1993) 37–50.

412. I. Gutman, V. Petrović (13 II 1992)
Cyclic conjugation in linear polyacenes
Journal of the Serbian Chemical Society **57** (1992) 495–501.

411. H. Hosoya, I. Gutman, J. Nikolić (10 II 1992)
Topological indices of unbranched catacondensed benzenoid hydrocarbons
Bulletin of the Chemical Society of Japan **65** (1992) 2011–2015.

410. I. Gutman (15 I 1992)
A real graph polynomial?
Graph Theory Notes of New York **22** (1992) 33–37.

409. I. Gutman (13 I 1992)
A contribution to the study of real graph polynomials
Publikacije Elektrotehničkog Fakulteta (Beograd) *Serija Matematika* **3** (1992) 35–40.

408. I. Gutman, J. C. Wu, S. L. Lee (10 I 1992)
Jing–fuhao fa yu Hückel $(4n+2)$ faze [Net sign approach to the Hückel $(4n+2)$-rule]
Huaxue [Chemistry (Taiwan)] **50** (1992) 147–152.

407. M. Lepović, I. Gutman, M. Petrović (XII 1991)
A conjecture in the theory of cyclic conjugation and an example supporting its validity
MATCH Communications in Mathematical Chemistry **28** (1992) 219–234.

406. I. Gutman, S. J. Cyvin, R. S. Chen, K. R. Lin (17 XII 1991)
Number of Kekulé structures in multiple zigzag chain aromatics
Monatshefte für Chemie **124** (1993) 117–125.

405. I. Gutman (20 XI 1991)
Independent vertex sets in some compound graphs
Publications de l'Institut Mathématique (Beograd) **52** (1992) 5–9.

404. I. Gutman, S. L. Lee, Y. N. Yeh (14 XI 1991)
Net signs and eigenvalues of molecular graphs: some analogies
Chemical Physics Letters **191** (1992) 87–91.

403. I. Gutman (30 X 1991)
Estimation of the total π-electron energy of a conjugated molecule
Journal of the Chinese Chemical Society **39** (1992) 1–5.

402. I. Gutman, L. Xu (25 IX 1991)
Some properties of the a_N-index of saturated hydrocarbons
Journal of the Serbian Chemical Society **57** (1992) 11–18.

401. I. Gutman (15 IX 1991)
Numbers of independent vertex and edge sets of a graph: some analogies
Graph Theory Notes of New York **22** (1992) 18–22.

400. D. Babić, I. Gutman (11 IX 1991)
On isospectral benzenoid graphs
Journal of Mathematical Chemistry **9** (1992) 261–278.

399. I. Gutman, H. Hosoya, G. Uraković, L. Ristić (28 VIII 1991)
Two variants of the topological index and the relations between them
Bulletin of the Chemical Society of Japan **65** (1992) 14–18.

398. I. Gutman (25 VIII 1991)
Remark on the moment expansion of total π-electron energy
Theoretica Chimica Acta **83** (1992) 313–318.

397. I. Gutman, D. Todorović, M. Vučković, P. Jungwirth (19 VIII 1991)
Modelling spontaneous chiral stereoselection: The Frank mechanism with racemization
Journal of the Chemical Society Faraday Transactions **88** (1992) 1123–1127.

396. I. Gutman (15 VIII 1991)
Extremal hexagonal chains
Journal of Mathematical Chemistry **12** (1993) 197–210.

395. I. Gutman, S. Marković (12 VII 1991)
Almost–isospectral benzenoid systems
Chemical Physics Letters **185** (1991) 473–477.

394. I. Gutman (VI 1991)
McClelland–type approximations for total π-electron energy of benzenoid hydrocarbons
MATCH Communications in Mathematical Chemistry **26** (1991) 123–135.

393. I. Gutman, S. Marković, V. Grbović (24 VI 1991)
The smallest pair of isospectral benzenoid systems
Journal of the Serbian Chemical Society **56** (1991) 553–554.

392. I. Gutman, D. Babić (15 V 1991)
Characterization of all-benzenoid hydrocarbons
Journal of Molecular Structure (Theochem) **251** (1991) 367–373.

391. I. Gutman (29 III 1991)
Some relations for the independence and matching polynomials and their chemical applications
Bulletin de l'Académie Serbe des Sciences et des Arts (Classe des Sciences Mathématiques et Naturelles) **105** (1992) 39–49.

390. M. M. Petrović, I. Gutman, M. Lepović (21 III 1991)
Graphs with three independent edges
Collection of Scientific Papers of the Faculty of Science Kragujevac **12** (1991) 25–38.

389. I. Gutman, L. Šoltés (19 II 1991)
The range of the Wiener index and its mean isomer degeneracy
Zeitschrift für Naturforschung **46a** (1991) 865–868.

388. I. Gutman, R. B. Mallion, D. H. Rouvray (8 II 1991)
Extension of the pairing theorem to Möbius non-alternant hydrocarbons
Journal of Mathematical Chemistry **8** (1991) 355–366.

387. I. Gutman, G. G. Hall, S. Marković, Z. Stanković, V. Radivojević (4 II 1991)
Effect of bay regions on the total π-electron energy of benzenoid hydrocarbons
Polycyclic Aromatic Compounds **2** (1991) 275–282.

386. P. Jungwirth, I. Gutman (29 I 1991)
Origin of biomolecular chirality. The Frank model with racemization
Journal of the Serbian Chemical Society **56** (1991) 253–258.

385. J. Pospichal, V. Kvasnička, I. Gutman (15 I 1991)
Chemical distance for molecules whose classical structural formula is not unique
Collection of Scientific Papers of the Faculty of Science Kragujevac **12** (1991) 109–125.

384. I. Gutman, G. G. Hall (11 I 1991)
Linear dependence of total π-electron energy of benzenoid hydrocarbons on Kekulé structure count
International Journal of Quantum Chemistry **41** (1992) 667–672.

383. V. R. Rosenfeld, I. Gutman (9 I 1991)
On the graph polynomials of a weighted graph
Collection of Scientific Papers of the Faculty of Science Kragujevac **12** (1991) 49–57.

382. I. Gutman (XII 1990)
Total π-electron energy of benzenoid hydrocarbons
Topics in Current Chemistry **162** (1992) 29–63.

381. I. Gutman (XII 1990)
Topological properties of benzenoid systems
Topics in Current Chemistry **162** (1992) 1–28.

380. I. Gutman (8 XII 1990)
Topological properties of benzenoid systems. Merrifield–Simmons indices and independence polynomials of unbranched catafusenes
Revue Roumaine de Chimie **36** (1991) 379–388.

379. S. Marković, I. Gutman (8 XI 1990)
Dependence of spectral moments of benzenoid hydrocarbons on molecular structure
Journal of Molecular Structure (Theochem) **235** (1991) 81–87.

378. S. J. Cyvin, B. N. Cyvin, J. Brunvoll, I. Gutman (5 XI 1990)
Kekulé structure counts for some classes of all-benzenoid and all-coronoid hydrocarbons
Monatshefte für Chemie **122** (1991) 771–787.

377. L. J. Schaad, I. Gutman, B. A. Hess, J. Hu (11 X 1990)
Ab initio calculation of secondary deuterium isotope ratios in the formation of diketene
Journal of the American Chemical Society **113** (1991) 5200–5203.

376. I. Gutman, D. Utvić, A. K. Mukherjee (10 X 1990)
A class of topological formulas for total π-electron energy
Journal of the Serbian Chemical Society **56** (1991) 59–63.

375. I. Gutman, J. W. Kennedy, L. V. Quintas (25 IX 1990)
Perfect matchings in random hexagonal chain graphs
Journal of Mathematical Chemistry **6** (1991) 377–383.

374. I. Gutman, H. Narumi (7 VIII 1990)
An inequality for the simple topological index
Collection of Scientific Papers of the Faculty of Science Kragujevac **11** (1990) 19–22.

373. I. Gutman (6 VIII 1990)
Fragmentation formulas for the number of Kekulé structures, Hosoya and Merrifield–Simmons indices and related graph invariants
Collection of Scientific Papers of the Faculty of Science Kragujevac **11** (1990) 11–18.

372. D. Babić, A. Graovac, I. Gutman (25 V 1990)
On a resonance energy model based on expansion in terms of acyclic moments: Exact results
Theoretica Chimica Acta **79** (1991) 403–411.

371. I. Gutman, S. J. Cyvin (14 V 1990)
Counting Kekulé structures in some conjugated systems with repeating units
Journal of the Serbian Chemical Society **55** (1990) 555–561.

370. I. Gutman, J. W. Kennedy, L. V. Quintas (27 IV 1990)
Wiener numbers of random benzenoid chains
Chemical Physics Letters **173** (1990) 403–408.

369. I. Gutman (III 1990)
Some analytical properties of the independence and matching polynomials
MATCH Communications in Mathematical Chemistry **28** (1992) 139–150.

368. I. Gutman, J. R. Dias (III 1990)
The excised internal structure of hexagonal systems
in the book: R. Bodendiek (Ed.), *Contemporary Methods in Graph Theory*, BI–Wissenschaftsverlag, Mannheim, 1990, pp. 249–259.

367. I. Gutman (28 III 1990)
A property of the number of perfect matchings of a graph
Publications de l'Institut Mathématique (Beograd) **49** (1991) 17–20.

366. I. Gutman (26 III 1990)
McClelland–type lower bound for total π-electron energy
Journal of the Chemical Society Faraday Transactions **86** (1990) 3373–3375.

365. M. M. Petrović, I. Gutman, M. Lepović (20 III 1990)
Graphs with small numbers of independent edges
Discrete Mathematics **126** (1994) 239–244.

364. I. Gutman (17 III 1990)
Topological studies on heteroconjugated molecules. VI. Alternant systems with two heteroatoms
Zeitschrift für Naturforschung **45a** (1990) 1085–1089.

363. I. Gutman (5 III 1990)
Graph propagators
Graph Theory Notes of New York **19** (1990) 26–30.

362. I. Gutman (27 II 1990)
An identity for the independence polynomials of trees
Publications de l'Institut Mathématique (Beograd) **50** (1991) 19–23.

361. I. Gutman, A. V. Teodorović, N. Kolaković (22 II 1990)
An application of corals
Journal of the Serbian Chemical Society **55** (1990) 363–368.

360. I. Gutman, I. Agranat (16 II 1990)
Cyclic conjugation in peropyrenes
Polycyclic Aromatic Compounds **2** (1991) 63–73.

359. D. K. Das, A. K. Mukherjee, I. Gutman (10 II 1990)
Study of trends in charge–transfer absorption maxima of some π-type molecular complexes using graph–theoretical techniques
Proceeding of the Indian Academy of Sciences (Chemical Sciences) **102** (1990) 759–767.

358. I. Gutman, D. J. Klein (1 II 1990)
Generalization of Cyvin's formula
Journal of Mathematical Chemistry **6** (1991) 41–50.

357. F. Zhang, R. Chen, X. Guo, I. Gutman (I 1990)
Benzenoid systems whose (x, y, z)-invariants have $x = 1$ and $x = 2$
MATCH Communications in Mathematical Chemistry **26** (1991) 229–241.

356. I. Gutman, E. C. Kirby (XII 1989)
Three theorems on branching graphs
MATCH Communications in Mathematical Chemistry **26** (1991) 111–122.

355. I. Gutman, N. Kolaković (22 XII 1989)
Hosoya index of the second kind of molecules containing a polyacene fragment
Bulletin de l'Académie Serbe des Sciences et des Arts (Classe des Sciences Mathématiques et Naturelles) **102** (1990) 39–46.

354. I. Gutman (18 XII 1989)
Characteristic and matching polynomials of some bipartite graphs
Publikacije Elektrotehničkog Fakulteta (Beograd) *Serija Matematika* **1** (1990) 25–30.

353. M. Lepović, I. Gutman, M. Petrović, N. Mizoguchi (7 XII 1989)
Some contributions to the theory of cyclic conjugation
Journal of the Serbian Chemical Society **55** (1990) 193–198.

352. I. Gutman, H. Hosoya (6 XI 1989)
Molecular graphs with equal Z-counting and independence polynomials
Zeitschrift für Naturforschung **45a** (1990) 645–648.

351. R. Q. Sheng, S. J. Cyvin, I. Gutman (X 1989)
"Essentially disconnected benzenoids" are essentially disconnected
MATCH Communications in Mathematical Chemistry **26** (1991) 191–203.

350. I. Gutman (X 1989)
On independent vertices and edges of a graph
in the book: R. Bodendiek, R. Henn (Eds.), *Topics in Combinatorics and Graph Theory*, Physica–Verlag, Heidelberg, 1990, pp. 291–296.

349. I. Gutman (IX 1989)
A property of the simple topological index
MATCH Communications in Mathematical Chemistry **25** (1990) 131–140.

348. I. Gutman, N. Mizoguchi (26 IX 1989)
A property of the circuit characteristic polynomial
Journal of Mathematical Chemistry **5** (1990) 81–82.

347. I. Gutman, N. Mizoguchi (20 IX 1989)
Conjugated systems with identical circuit resonance energies
Bulletin of the Chemical Society of Japan **63** (1990) 1083–1086.

346. S. Marković, I. Gutman, S. Živković, M. Stanković (19 IX 1989)
Topological properties of benzenoid systems. XLVIIIb. A further study of Hall's and Cioslowski's formulae
Collection of Scientific Papers of the Faculty of Science Kragujevac **10** (1989) 61–70.

345. I. Gutman (16 VIII 1989)
Nonaromatic benzenoid hydrocarbons
Pure & Applied Chemistry **62** (1990) 429–434.

344. I. Gutman (VII 1989)
Cyclic conjugation in fully benzenoid hydrocarbons
Reports in Molecular Theory **1** (1990) 115–119.

343. I. Gutman (5 IV 1989)
Origin of biomolecular chirality. The reversible Frank model
Journal of the Serbian Chemical Society **54** (1989) 573–578.

342. I. Gutman, N. Kolaković, A. Graovac, D. Babić (III 1989)
A method for calculation of the Hosoya index of polymers
in the book: A. Graovac (Ed.), *MATH/CHEM/COMP 1988*, Elsevier, Amsterdam, 1989, pp. 141–154.

341. I. Gutman (II 1989)
The number of perfect matchings in a random hexagonal chain
Graph Theory Notes of New York **16** (1988) 26–28.

340. I. Gutman (24 II 1989)
Zavisnost fizičko–hemijskih osobina supstanci od molekulske strukture: Primer ukupne π-elektronske energije [Dependence of physico–chemical properties of substances on molecular structure: The example of total π-electron energy]
Glas de l'Académie Serbe des Sciences et des Arts (Classe des Sciences Mathématiques et Naturelles) **362** (1990) 83–91.

339. I. Gutman (22 II 1989)
Factors determining the direction of the stereoselection process in the generalized Frank model
Journal of Mathematical Chemistry **3** (1989) 343–355.

338. I. Gutman (7 II 1989)
A relation for the number of carbon atoms and carbon–carbon bonds of a benzenoid hydrocarbon
Journal of the Serbian Chemical Society **54** (1989) 197–198.

337. I. Gutman, A. Graovac, S. Vuković, S. Marković (7 II 1989)
Some more isomer–undistinguishing approximate formulas for the total π-electron energy of benzenoid hydrocarbons
Journal of the Serbian Chemical Society **54** (1989) 189–196.

336. I. Gutman, S. Marković (I 1989)
Topological properties of benzenoid systems. XLVIIIa. An empirical study of two contradictory formulas for total π-electron energy
MATCH Communications in Mathematical Chemistry **25** (1990) 141–149.

335. D. Aboav, I. Gutman (30 I 1989)
Estimation of the number of unbranched catacondensed benzenoid hydrocarbons
Journal of the Serbian Chemical Society **54** (1989) 249–251.

334. S. L. Lee, I. Gutman (24 I 1989)
Topological analysis of the eigenvectors of the adjacency matrices in graph theory: degenerate case
Chemical Physics Letters **157** (1989) 229–232.

333. I. Gutman, S. J. Cyvin (XII 1988)
Introduction to the Theory of Benzenoid Hydrocarbons
Springer, Berlin, 1989, pp. IX+152.

332. Y. Jiang, H. Zhu, H. Zhang, I. Gutman (27 XII 1988)
Moment expansion of Hückel molecular energies
Chemical Physics Letters **159** (1989) 159–164.

331. I. Gutman (18 XI 1988)
Vertex degree sequences of graphs with small number of circuits
Publications de l'Institut Mathématique (Beograd) **46** (1989) 7–12.

330. J. Brunvoll, R. Tošić, M. Kovačević, A. T. Balaban, I. Gutman, S. J. Cyvin (14 XI 1988)
Enumeration of catacondensed benzenoid hydrocarbons and their numbers of Kekulé structures
Revue Roumaine de Chimie **35** (1990) 85–96.

329. I. Gutman, A. V. Teodorović, N. Kolaković (11 XI 1988)
Algebraic studies of Kekulé structures. A semilattice based on the sextet rotation concept
Zeitschrift für Naturforschung **44a** (1989) 1097–1101.

328. I. Gutman (3 XI 1988)
On the dependence of the total π-electron energy of a benzenoid hydrocarbon on the number of Kekulé structures
Chemical Physics Letters **156** (1989) 119–121.

327. S. J. Cyvin, J. Brunvoll, I. Gutman (12 IX 1988)
Annulenes and primitive coronoids: some topological properties and enumerations
Revue Roumaine de Chimie **35** (1990) 985–996.

326. I. Gutman, D. H. Rouvray (4 IX 1988)
A new theorem for the Wiener molecular branching index of trees with perfect matchings
Computers & Chemistry **14** (1990) 29–32.

325. V. R. Rosenfeld, I. Gutman (VIII 1988)
A novel approach to graph polynomials
MATCH Communications in Mathematical Chemistry **24** (1989) 191–199.

324. J. Brunvoll, S. J. Cyvin, B. N. Cyvin, I. Gutman (VIII 1988)
Essentially disconnected benzenoids: Distribution of K, the number of Kekulé structures, in benzenoid hydrocarbons – VIII
MATCH Communications in Mathematical Chemistry **24** (1989) 51–57.

323. I. Gutman (30 VIII 1988)
A class of benzenoid systems with large number of Kekulé structures
Journal of the Serbian Chemical Society **53** (1988) 607–612.

322. I. Gutman, Y. S. Jiang, H. X. Zhang (25 VIII 1988)
Two topological approaches to resonance energy and the relation between them
Acta Chimica Sinica **4** (1989) 324–332.

321. I. Gutman (24 VIII 1988)
Conjugated circuits in benzenoid hydrocarbons: general solution of Randić's equations
Collection of Scientific Papers of the Faculty of Science Kragujevac **9** (1988) 77–84.

320. I. Gutman (15 VIII 1988)
Counting independent conjugated circuits in benzenoid hydrocarbons
Zeitschrift für Physikalische Chemie (Leipzig) **271** (1990) 793–798.

319. I. Gutman (26 VII 1988)
On the counting of conjugated circuits in benzenoid hydrocarbons
Indian Journal of Chemistry **27A** (1988) 1084–1086.

318. R. Q. Sheng, S. J. Cyvin, I. Gutman (13 VII 1988)
Remarks on Kekulean and non-Kekulean benzenoid hydrocarbons
Journal of Molecular Structure (Theochem) **187** (1989) 285–289.

317. I. Gutman (1 VII 1988)
Examination of the statistical method in the conjugated circuit theory
Monatshefte für Chemie **120** (1989) 1043–1047.

316. I. Gutman, S. J. Cyvin (28 V 1988)
A new method for the calculation of the sextet polynomial of unbranched catacondensed benzenoid hydrocarbons
Bulletin of the Chemical Society of Japan **62** (1989) 1250–1252.

315. I. Gutman, A. K. Mukherjee (19 V 1988)
Hückel rule in annulenes with one heteroatom
Indian Journal of Chemistry **27A** (1988) 847–850.

314. Y. Zhang, F. Zhang, I. Gutman (5 V 1988)
On the ordering of bipartite graphs with respect to their characteristic polynomials
Collection of Scientific Papers of the Faculty of Science Kragujevac **9** (1988) 9–20.

313. J. Brunvoll, B. N. Cyvin, S. J. Cyvin, I. Gutman, R. Tošić, M. Kovačević (4 V 1988)
Enumeration and classification of coronoid hydrocarbons. Part V. Primitive coronoids
Journal of Molecular Structure (Theochem) **184** (1989) 165–177.

312. I. Gutman, S. J. Cyvin (4 V 1988)
Conjugated circuits in benzenoid hydrocarbons
Journal of Molecular Structure (Theochem) **184** (1989) 159–163.

311. I. Gutman, S. J. Cyvin (29 IV 1988)
Kekuléan and non-Kekuléan benzenoid hydrocarbons
Journal of the Serbian Chemical Society **53** (1988) 391–409.

310. I. Gutman, S. J. Cyvin (III 1988)
A result on 1-factors related to Fibonacci numbers
Fibonacci Quarterly **28** (1990) 81–84.

309. D. Aboav, I. Gutman (22 III 1988)
Estimation of the number of benzenoid hydrocarbons
Chemical Physics Letters **148** (1988) 90–92.

308. I. Gutman (4 III 1988)
Topological analysis of eigenvalues of the adjacency matrices in graph theory: a difficulty with the concept of internal connectivity
Chemical Physics Letters **148** (1988) 93–94.

307. J. Brunvoll, B. N. Cyvin, S. J. Cyvin, I. Gutman (II 1988)
Essentially disconnected benzenoids: enumeration and classification of benzenoid hydrocarbons – IX
MATCH Communications in Mathematical Chemistry **23** (1988) 209–227.

306. I. Gutman, S. J. Cyvin (II 1988)
All-benzenoid systems: topological properties of benzenoid systems. LVII
MATCH Communications in Mathematical Chemistry **23** (1988) 175–178.

305. B. N. Cyvin, J. Brunvoll, S. J. Cyvin, I. Gutman (II 1988)
All-benzenoid systems: enumeration and classification of benzenoid hydrocarbons. VI
MATCH Communications in Mathematical Chemistry **23** (1988) 163–173.

304. I. Gutman (26 II 1988)
Perfect matchings in a class of bipartite graphs
Publications de l'Institut Mathématique (Beograd) **45** (1989) 11–15.

303. J. Brunvoll, I. Gutman, S. J. Cyvin (18 II 1988)
Benzenoid chains with maximum number of Kekulé structures
Zeitschrift für Physikalische Chemie (Leipzig) **270** (1989) 982–988.

302. I. Gutman, S. J. Cyvin (5 II 1988)
The number of Kekulé structures in long benzenoid chains
Chemical Physics Letters **147** (1988) 121–125.

301. I. Gutman (I 1988)
On the Hosoya index of very large molecules
MATCH Communications in Mathematical Chemistry **23** (1988) 95–103.

300. I. Gutman, S. J. Cyvin (I 1988)
Hosoya index of fused molecules
MATCH Communications in Mathematical Chemistry **23** (1988) 89–94.

299. I. Gutman (21 I 1988)
Hosoya index of a class of benzenoid hydrocarbons
Journal of the Serbian Chemical Society **53** (1988) 129–132.

298. I. Gutman, V. Babović, S. Jokić (31 XII 1987)
A simple model for spontaneous non-autocatalytic asymmetric synthesis
Journal of the Serbian Chemical Society **53** (1988) 79–84.

297. I. Gutman, N. Kolaković, S. J. Cyvin (XI 1987)
Hosoya index of some polymers
MATCH Communications in Mathematical Chemistry **24** (1989) 105–117.

296. O. Bodroža, I. Gutman, S. J. Cyvin, R. Tošić (23 XI 1987)
Number of Kekulé structures of hexagon–shaped benzenoids
Journal of Mathematical Chemistry **2** (1988) 287–298.

295. J. Brunvoll, B. N. Cyvin, S. J. Cyvin, I. Gutman (19 XI 1987)
Some benzenoid hydrocarbons with extremal properties
Zeitschrift für Naturforschung **43a** (1988) 889–894.

294. S. J. Cyvin, I. Gutman (X 1987)
Kekulé Structures in Benzenoid Hydrocarbons
Springer, Berlin, 1988, pp. XV+348.

293. I. Gutman (29 IX 1987)
Topological properties of benzenoid systems. LI. Hosoya index of molecules containing a polyacene fragment
Zeitschrift für Naturforschung **43a** (1988) 939–942.

292. I. Gutman, V. Babović, S. Jokić (22 IX 1987)
The origin of biomolecular chirality: the generalized Frank model with arbitrary initial conditions
Chemical Physics Letters **144** (1988) 187–190.

291. I. Gutman (2 VIII 1987)
The number of unbranched catacondensed benzenoid hydrocarbons
Journal of the Serbian Chemical Society **52** (1987) 611–613.

290. I. Gutman, S. Marković, M. Marinković (VI 1987)
Investigation of the Cioslowski formula
MATCH Communications in Mathematical Chemistry **22** (1987) 277–284.

289. I. Gutman (VI 1987)
The generalized Cioslowski formula
MATCH Communications in Mathematical Chemistry **22** (1987) 269–275.

288. S. J. Cyvin, I. Gutman (29 VI 1987)
On recognizing Kekuléan benzenoid molecules
Journal of Molecular Structure (Theochem) **164** (1988) 183–188.

287. I. Gutman, A. Klemm (11 V 1987)
Simplest kinetic models for bistability of antipodal mixtures
Zeitschrift für Naturforschung **42a** (1987) 899–900.

286. I. Gutman, L. X. Su, S. J. Cyvin (5 V 1987)
Identity for the number of Kekulé structures of benzenoid hydrocarbons
Journal of the Serbian Chemical Society **52** (1987) 263–270.

285. V. Babović, I. Gutman, S. Jokić (30 IV 1987)
Origin of biomolecular chirality. Frank's model with initial production of life
Collection of Scientific Papers of the Faculty of Science Kragujevac **8** (1987) 51–60.

284. A. T. Balaban, J. Brunvoll, J. Cioslowski, B. N. Cyvin, S. J. Cyvin, I. Gutman, W. C. He, W. J. He, J. V. Knop, M. Kovačević, W. R. Müller, K. Szymanski, R. Tošić, N. Trinajstić (7 IV 1987)
Enumeration of benzenoid and coronoid hydrocarbons
Zeitschrift für Naturforschung **42a** (1987) 863–870.

283. J. Brunvoll, S. J. Cyvin, B. N. Cyvin, I. Gutman, W. J. He, W. C. He (III 1987)
There are exactly eight concealed non-Kekuléan benzenoids with eleven hexagons
MATCH Communications in Mathematical Chemistry **22** (1987) 105–109.

282. S. J. Cyvin, B. N. Cyvin, J. Brunvoll, I. Gutman (24 III 1987)
Enumeration of Kekulé structures for multiple zigzag chains and related benzenoid hydrocarbons
Zeitschrift für Naturforschung **42a** (1987) 722–730.

281. I. Gutman, S. Marković, D. Luković, V. Radivojević, S. Rančić (23 III 1987)
On Wiener numbers of benzenoid hydrocarbons
Collection of Scientific Papers of the Faculty of Science Kragujevac **8** (1987) 15–34.

280. D. Bonchev, I. Gutman, O. E. Polansky (II 1987)
Parity of the distance numbers and Wiener numbers of bipartite graphs
MATCH Communications in Mathematical Chemistry **22** (1987) 209–214.

279. I. Gutman, V. R. Rosenfeld, Z. Marković (11 II 1987)
Approximate formula for Hosoya's topological index
Journal of the Serbian Chemical Society **52** (1987) 139–144.

278. I. Gutman, J. Cioslowski (20 I 1987)
Bounds for the Hosoya index
Zeitschrift für Naturforschung **42a** (1987) 438–440.

277. I. Gutman (16 I 1987)
On distances in some bipartite graphs
Publications de l'Institut Mathématique (Beograd) **43** (1988) 3–8.

276. I. Gutman, S. J. Cyvin (10 I 1987)
A new method for the enumeration of Kekulé structures
Chemical Physics Letters **136** (1987) 137–140.

275. I. Gutman (XII 1986)
Comment on the paper: Cycle decomposition of linear benzene chains
MATCH Communications in Mathematical Chemistry **22** (1987) 317–318.

274. I. Gutman, J. Cioslowski (19 XII 1986)
Bounds for the number of perfect matchings in hexagonal systems
Publications de l'Institut Mathématique (Beograd) **42** (1987) 21–27.

273. I. Gutman (17 XII 1986)
Wiener numbers of benzenoid hydrocarbons: two theorems
Chemical Physics Letters **136** (1987) 134–136.

272. I. Gutman (XI 1986)
Topological properties of benzenoid systems. XLVIII. Two contradictory formulas for total π-electron energy and their reconciliation
MATCH Communications in Mathematical Chemistry **21** (1986) 317–324.

271. S. J. Cyvin, B. N. Cyvin, I. Gutman (10 XI 1986)
Number of Kekulé structures of systems with repeated units
Zeitschrift für Naturforschung **42a** (1987) 181–186.

270. V. Babović, I. Gutman, S. Jokić (4 XI 1986)
Origin of biomolecular chirality. Analysis of Frank's model
Zeitschrift für Naturforschung **42a** (1987) 1024–1026.

269. I. Gutman, Z. Marković, S. Marković (30 X 1986)
A simple method for the approximate calculation of Hosoya's index
Chemical Physics Letters **134** (1987) 139–142.

268. B. N. Cyvin, J. Brunvoll, S. J. Cyvin, I. Gutman (IX 1986)
Distribution of K, the number of Kekulé structures in benzenoid hydrocarbons. Part III: Kekulé structure statistics
MATCH Communications in Mathematical Chemistry **21** (1986) 301–315.

267. F. Zhang, R. Chen, X. Guo, I. Gutman (26 IX 1986)
An invariant of the Kekulé structures of benzenoid hydrocarbons
Journal of the Serbian Chemical Society **51** (1986) 537–543.

266. S. J. Cyvin, I. Gutman (24 VII 1986)
Topological properties of benzenoid hydrocarbons. Part XLIV. Obvious and concealed non-Kekuléan benzenoids
Journal of Molecular Structure (Theochem) **150** (1987) 157–169.

265. I. Gutman, Z. Marković (10 VII 1986)
Truncated Hosoya index
Journal of the Serbian Chemical Society **51** (1986) 455–458.

264. I. Gutman (5 VII 1986)
Number of benzenoid hydrocarbons
Zeitschrift für Naturforschung **41a** (1986) 1089–1090.

263. I. Gutman, Z. Marković (30 VI 1986)
Approximate formulas for Hosoya's topological index
Bulletin of the Chemical Society of Japan **60** (1987) 2611–2614.

262. I. Gutman (18 VI 1986)
Acyclic conjugated molecules, trees and their energies
Journal of Mathematical Chemistry **1** (1987) 123–143.

261. I. Gutman (17 VI 1986)
Graphs and graph polynomials of interest in chemistry
in the book: G. Tinhofer, G. Schmidt (Eds.), *Graph–Theoretic Concepts in Computer Science*, Springer, Berlin, 1987, pp. 177–187.

260. I. Gutman, O. E. Polansky (V 1986)
Wiener numbers of polyacenes and related benzenoid molecules
MATCH Communications in Mathematical Chemistry **20** (1986) 115–123.

259. S. J. Cyvin, I. Gutman (27 V 1986)
Number of Kekulé structures as a function of the number of hexagons in benzenoid hydrocarbons
Zeitschrift für Naturforschung **41a** (1986) 1079–1086.

258. I. Gutman, S. El–Basil (IV 1986)
Fibonacci graphs
MATCH Communications in Mathematical Chemistry **20** (1986) 81–94.

257. I. Gutman, O. E. Polansky (28 IV 1986)
Eigenvalue distribution of topomers
Chemical Physics Letters **127** (1986) 521–524.

256. J. Cioslowski, I. Gutman (25 III 1986)
Upper bounds for the total π-electron energy of benzenoid hydrocarbons and their relations
Zeitschrift für Naturforschung **41a** (1986) 861–865.

255. I. Gutman, S. J. Cyvin (12 III 1986)
Topological properties of benzenoid systems. XXXV. Number of Kekulé structures of multiple–chain aromatics
Monatshefte für Chemie **118** (1987) 541–552.

254. S. J. Cyvin, B. N. Cyvin, I. Gutman (12 II 1986)
Topological properties of benzenoid systems. XLII. Number of Kekulé structures of more peri-condensed molecules
Collection of Scientific Papers of the Faculty of Science Kragujevac **7** (1986) 5–20.

253. I. Gutman, Z. Marković (12 II 1986)
Topological properties of benzenoid systems. XLIa. Carbon–carbon bond types and total π-electron energy of benzenoid hydrocarbons
Collection of Scientific Papers of the Faculty of Science Kragujevac **7** (1986) 21–26.

252. I. Gutman, S. Marković, A. V. Teodorović, Ž. Bugarčić (15 I 1986)
Isomer–undistinguishing approximate formulas for the total π-electron energy of benzenoid hydrocarbons
Journal of the Serbian Chemical Society **51** (1986) 145–149.

251. D. M. Cvetković, M. Doob, I. Gutman, A. Torgašev (1985)
Recent Results in the Theory of Graph Spectra
North–Holland, Amsterdam, 1988, pp. XII+306.

250. I. Gutman, S. J. Cyvin (25 XI 1985)
Recognizing Kekuléan benzenoid molecules
Journal of Molecular Structure (Theochem) **138** (1986) 325–331.

249. I. Gutman, H. Sachs (25 XI 1985)
New approach to the Pauling bond order concept
Zeitschrift für Physikalische Chemie (Leipzig) **268** (1987) 257–266.

248. I. Gutman, O. E. Polansky (X 1985)
Mathematical Concepts in Organic Chemistry
Springer, Berlin, 1986, pp. X+212.

247. I. Gutman, O. E. Polansky (X 1985)
μ-Polynomial of a graph with an articulation point
MATCH Communications in Mathematical Chemistry **19** (1986) 139–145.

246. I. Gutman (X 1985)
Some relations for the μ-polynomial
MATCH Communications in Mathematical Chemistry **19** (1986) 127–137.

245. I. Gutman (21 X 1985)
Some relations for graphic polynomials
Publications de l'Institut Mathématique (Beograd) **39** (1986) 55–62.

244. D. Cvetković, I. Gutman (10 X 1985)
The computer system GRAPH: A useful tool in chemical graph theory
Journal of Computational Chemistry **7** (1986) 640–644.

243. I. Gutman, A. Graovac, O. E. Polansky (3 X 1985)
Spectral properties of some structurally related graphs
Discrete Applied Mathematics **19** (1988) 195–203.
also published in:
J. W. Kennedy, L. V. Quintas (Eds.), *Applications of Graphs in Chemistry and Physics*, North–Holland, Amsterdam, 1988, pp. 195–203.

242. I. Gutman (IX 1985)
Polynomials in graph theory
in the book: D. Bonchev, D. H. Rouvray (Eds.), *Chemical Graph Theory: Introduction and Fundamentals*, Gordon & Breach, New York, 1991, pp. 133–176.

241. S. J. Cyvin, B. N. Cyvin, I. Gutman (12 IX 1985)
Number of Kekulé structures of five–tier strips
Zeitschrift für Naturforschung **40a** (1985) 1253–1261.

240. I. Gutman (29 VII 1985)
Topological properties of benzenoid systems. XLI. Carbon–carbon bond types and connectivity indices of benzenoid hydrocarbons
Journal of the Serbian Chemical Society **50** (1985) 451–455.

239. S. J. Cyvin, I. Gutman (19 VII 1985)
Topological properties of benzenoid systems. XXXIX. The number of Kekulé structures of benzenoid hydrocarbons containing a chain of hexagons
Journal of the Serbian Chemical Society **50** (1985) 443–450.

238. I. Gutman, F. Zhang (8 VII 1985)
On the ordering of graphs with respect to their matching numbers
Discrete Applied Mathematics **15** (1986) 25–33.

237. I. Gutman, M. Rašković (3 VII 1985)
Monte Carlo approach to total π-electron energy of conjugated hydrocarbons
Zeitschrift für Naturforschung **40a** (1985) 1059–1061.

236. S. J. Cyvin, I. Gutman (V 1985)
Topological properties of benzenoid systems. Part XXXVI. Algorithm for the number of Kekulé structures in some peri-condensed benzenoids
MATCH Communications in Mathematical Chemistry **19** (1986) 229–242.

235. R. Tošić, R. Doroslovački, I. Gutman (V 1985)
Topological properties of benzenoid systems. XXXVIII. The boundary code
MATCH Communications in Mathematical Chemistry **19** (1986) 219–228.

234. I. Gutman, S. El–Basil (7 V 1985)
Topological properties of benzenoid systems. XXXVII. Characterization of certain chemical graphs
Zeitschrift für Naturforschung **40a** (1985) 923–926.

233. I. Gutman (6 V 1985)
A regularity for the boiling points of alkanes and its mathematical modeling
Zeitschrift für Physikalische Chemie (Leipzig) **267** (1986) 1152–1158.

232. I. Gutman, L. Türker, J. R. Dias (25 IV 1985)
Another upper bound for total π-electron energy of alternant hydrocarbons
MATCH Communications in Mathematical Chemistry **19** (1986) 147–161.

231. I. Gutman, J. Kruszewski (27 III 1985)
On the occurrence of eigenvalue one in the graph spectrum of benzenoid systems
Nouveau Journal de Chimie **9** (1985) 669–670.

230. I. Gutman (12 III 1985)
Overlooked relations in the theory of cyclic conjugation
Chemical Physics Letters **117** (1985) 614–616.

229. I. Gutman (22 II 1985)
Cyclic conjugation in porphin
Croatica Chemica Acta **58** (1985) 359–369.

228. F. Zhang, Z. Chen, I. Gutman (I 1985)
Some topological properties of generalized S,T-isomers
MATCH Communications in Mathematical Chemistry **18** (1985) 101–109.

227. I. Gutman, F. Zhang (28 I 1985)
On a quasiordering of bipartite graphs
Publications de l'Institut Mathématique (Beograd) **40** (1986) 11–15.

226. I. Gutman (14 I 1985)
Topological properties of benzenoid systems. XXXIV. Number of Kekulé structures of some peri-condensed molecules
Collection of Scientific Papers of the Faculty of Science Kragujevac **6** (1985) 35–42.

225. I. Gutman, A. Graovac, O. E. Polansky (3 I 1985)
On the theory of S– and T-isomers
Chemical Physics Letters **116** (1985) 206–209.

224. A. Graovac, I. Gutman, O. E. Polansky (31 XII 1984)
An interlacing theorem in simple molecular–orbital theory
Journal of the Chemical Society Faraday Transactions II **81** (1985) 1543–1553.

223. S. J. Cyvin, I. Gutman (XI 1984) Kekulé structures and their symmetry properties *Computers & Mathematics with Applications* **12B** (1986) 859–876.
also published in:
I. Hargittai (Ed.), *Symmetry – Unifying Human Understanding*, Pergamon Press, New York, 1986, pp. 859–876.

222. I. Gutman, S. El–Basil (12 XI 1984)
A regularity in Herndon's resonance energy method
Chemical Physics Letters **115** (1985) 416–418.

221. I. Gutman, S. Obenland, W. Schmidt (X 1984)
Clar formulas and Kekulé structures
MATCH Communications in Mathematical Chemistry **17** (1985) 75–90.

220. I. Gutman, A. Shalabi (X 1984)
Edge erasure technique for computing the characteristic polynomials of molecular graphs
MATCH Communications in Mathematical Chemistry **18** (1985) 3–15.

219. C. D. Godsil, I. Gutman (29 VIII 1984)
Note on bond orders
Zeitschrift für Naturforschung **39a** (1984) 1184–1186.

218. I. Gutman, S. El–Basil (9 VII 1984)
Topological properties of benzenoid systems. XXXII. Aihara resonance energies of non-branched cata-condensed benzenoid hydrocarbons
Journal of the Serbian Chemical Society **50** (1985) 25–29.

217. I. Gutman, A. V. Teodorović, Ž. Bugarčić (2 VII 1984)
On some topological formulas for total π-electron energy of benzenoid molecules
Bulletin de la Société Chimique Beograd **49** (1984) 521–525.

216. I. Gutman (VI 1984)
Topological properties of benzenoid systems. XXVIII. Number of Kekulé structures of some benzenoid hydrocarbons
MATCH Communications in Mathematical Chemistry **17** (1985) 3–10.

215. E. J. Farrell, I. Gutman (IV 1984)
A note on the circuit polynomial and its relation to the μ-polynomial
MATCH Communications in Mathematical Chemistry **18** (1985) 55–61.

214. I. Gutman (21 IV 1984)
Topological properties of benzenoid systems. XXX. An identity for the number of Kekulé structures
Collection of Scientific Papers of the Faculty of Science Kragujevac **5** (1984) 59–63.

213. I. Gutman, A. Shalabi (19 IV 1984)
Topological properties of benzenoid systems. XXIX. On Hosoya's topological index
Zeitschrift für Naturforschung **39a** (1984) 797–799.

212. I. Gutman (III 1984)
Mathematical investigations in organic chemistry – success and failure
Vestnik Slovenskega Kemijskega Društva (Ljubljana) **31** (Suppl.) (1984) 23–52.

211. I. Gutman (21 III 1984)
Note on algebraic structure count
Zeitschrift für Naturforschung **39a** (1984) 794–796.

210. I. Gutman (6 II 1984)
On some graphic polynomials whose zeros are real
Publications de l'Institut Mathématique (Beograd) **37** (1985) 29–32.

209. I. Gutman, W. C. Herndon (12 XII 1983)
Note on the contribution of a ring to the stability of conjugated molecules
Chemical Physics Letters **105** (1984) 281–284.

208. I. Gutman (6 XII 1983)
Topological studies on heteroconjugated molecules. A new pairing theorem
Zeitschrift für Naturforschung **39a** (1984) 152–154.

207. I. Gutman (15 XI 1983)
Topological studies on heteroconjugated molecules. IV. Effect of a heteroatom on molecular orbital energies
Bulletin de la Société Chimique Beograd **49** (1984) 157–163.

206. I. Gutman (14 XI 1983)
Bounds for total π-electron energy of conjugated hydrocarbons
Zeitschrift für Physikalische Chemie (Leipzig) **266** (1985) 59–64.

205. I. Gutman, O. E. Polansky, M. Zander (28 X 1983)
Some topological properties of isomeric benzenoid hydrocarbons
MATCH Communications in Mathematical Chemistry **15** (1984) 145–158.

204. M. Karaman, I. Gutman, V. Šorić, P. Đurđević (21 X 1983)
Određivanje tempa rasta riba pomoću programirajućih džepnih računara [Determination of fish growth tempo by programmable handheld calculators]
Ichthyologia (Beograd) **16** (1984) 49–55.

203. I. Gutman (19 X 1983)
On cyclic conjugation
Theoretica Chimica Acta **66** (1984) 43–49.

202. I. Gutman (3 X 1983)
General formulation of the first–order perturbation graph theory
Chemical Physics Letters **103** (1984) 475–478.

201. I. Gutman, A. V. Teodorović, L. Nedeljković (20 IX 1983)
Topological properties of benzenoid systems. Bounds and approximate formulae for total π-electron energy
Theoretica Chimica Acta **65** (1984) 23–31.

200. I. Gutman (VI 1983)
Polinomi v teoriyata na grafite [Polynomials in graph theory]
in the book: N. Tyutyulkov, D. Bonchev (Eds.), *Teoriya na grafite i prilozhenieto i v khimiyata [Graph Theory and Its Applications in Chemistry]*, Nauka i Izkustvo, Sofia, 1987, pp. 53–85.

199. A. Graovac, I. Gutman, O. E. Polansky (22 VI 1983)
Topological effect on MO energies, IV. The total π-electron energy of S– and T-isomers
Monatshefte für Chemie **115** (1984) 1–13.

198. V. Batagelj, D. Cvetković, I. Gutman (V 1983)
A formula involving the number of 1–factors in a graph
in the book: D. Cvetković, I. Gutman, T. Pisanski, R. Tošić (Eds.), *Graph Theory, Proceedings of the Fourth Yugoslav Seminar on Graph Theory*, University of Novi Sad, Novi Sad, 1984, pp. 39–42.

197. I. Gutman, L. Nedeljković, A. V. Teodorović (31 V 1983)
Topological formulas for total π-electron energy of benzenoid hydrocarbons – a comparative study
Bulletin de la Société Chimique Beograd **48** (1983) 495–500.

196. I. Gutman, D. Cvetković (23 V 1983)
Finding tricyclic graphs with a maximal number of matchings – another example of computer aided research in graph theory
Publications de l'Institut Mathématique (Beograd) **35** (1984) 33–40.

195. I. Gutman (27 IV 1983)
On the inverse problem of chemical kinetics
MATCH Communications in Mathematical Chemistry **15** (1984) 263–271.

194. I. Gutman (22 IV 1983)
Covering hexagonal systems with hexagons
in the book: D. Cvetković, I. Gutman, T. Pisanski, R. Tošić (Eds.), *Graph Theory, Proceedings of the Fourth Yugoslav Seminar on Graph Theory*, University of Novi Sad, Novi Sad, 1984, pp. 151–160.

193. I. Gutman, S. El–Basil (1 III 1983)
Topological properties of benzenoid systems. XXIV. Computing the sextet polynomial
Zeitschrift für Naturforschung **39a** (1984) 276–281.

192. I. Gutman (II 1983)
New approach to the McClelland approximation
MATCH Communications in Mathematical Chemistry **14** (1983) 71–81.

191. I. Gutman (II 1983)
On the definition of parity of Kekulé structures of benzenoid hydrocarbons
MATCH Communications in Mathematical Chemistry **14** (1983) 139–153.

190. I. Gutman, S. Petrović (20 I 1983)
On total π-electron energy of benzenoid hydrocarbons
Chemical Physics Letters **97** (1983) 292–294.

189. I. Gutman, H. Hartmann (27 XII 1982)
Hückel molecular orbitals of heteroanalogous polyvinylidenes
Bulletin de la Société Chimique Beograd **48** (1983) 127–133.

188. I. Gutman, R. B. Mallion, J. W. Essam (8 XII 1982)
Counting the spanning trees of a labelled molecular–graph
Molecular Physics **50** (1983) 859–877.

187. I. Gutman (23 XI 1982)
Topological properties of benzenoid systems. XIX. Contributions to the aromatic sextet theory
Wissenschafliche Zeitschrift der Technischen Hochschule Ilmenau **29** (3) (1983) 57–65.

186. I. Gutman (12 XI 1982)
Graphs with maximum and minimum independence numbers
Publications de l'Institut Mathématique (Beograd) **34** (1983) 73–79.

185. I. Gutman, I. Juranić (11 X 1982)
Violation of Kruszewski's rule
Zeitschrift für Naturforschung **38a** (1983) 383–384.

184. I. Gutman, A. V. Teodorović (13 IX 1982)
Correlation between topological resonance energy and some quantitative physico–chemical properties of benzenoid hydrocarbons
Bulletin de la Société Chimique Beograd **47** (1982) 579–582.

183. S. El–Basil, I. Gutman (6 IX 1982)
Combinatorial analysis of Kekulé structures of non-branched cata-condensed benzenoid hydrocarbons. Proof of some identities for the sextet polynomial
Chemical Physics Letters **94** (1983) 188–192.

182. I. Gutman (30 VIII 1982)
Topological properties of benzenoid systems. XXI. Theorems, conjectures, unsolved problems
Croatica Chemica Acta **56** (1983) 365–374.

181. I. Gutman, F. Harary (29 VII 1982)
Generalizations of the matching polynomial
Utilitas Mathematica **24** (1983) 97–106.

180. I. Gutman (22 VII 1982)
Topological properties of benzenoid molecules
Bulletin de la Société Chimique Beograd **47** (1982) 453–471.

179. H. Hartmann, I. Gutman (15 VII 1982)
Über Gesetzmässigkeiten in der π-Elektronenstruktur von heteroanalogen Polyvinylidenverbindungen [On regularities in the π-electron structure of heteroanalogs of polyvinylidene compounds]
Journal für Praktische Chemie **325** (1983) 534–544.

178. D. Cvetković, M. Doob, I. Gutman (VI 1982)
On graphs whose spectral radius does not exceed $(2 + \sqrt{5})^{1/2}$
Ars Combinatoria **14** (1982) 225–239.

177. I. Gutman, A. Graovac, B. Mohar (5 V 1982)
On the existence of a Hermitian matrix whose characteristic polynomial is the matching polynomial of a molecular graph
MATCH Communications in Mathematical Chemistry **13** (1982) 129–150.

176. I. Gutman (5 V 1982)
On Kekulé structure count of cata-condensed benzenoid hydrocarbons
MATCH Communications in Mathematical Chemistry **13** (1982) 173–181.

175. I. Gutman (1 IV 1982)
Correction of the paper "Graphs with greatest number of matchings"
Publications de l'Institut Mathématique (Beograd) **32** (1982) 61–63.

174. I. Gutman, E. J. Farrell, S. A. Wahid (III 1982)
On the matching polynomials of graphs containing benzenoid chains
Journal of Combinatorics, Information & System Sciences **8** (1983) 159–168.

173. I. Gutman, B. Mohar (1 III 1982)
Some observations on the topological resonance energy of benzenoid hydrocarbons
Croatica Chemica Acta **55** (1982) 375–382.

172. I. Gutman (17 II 1982)
Characteristic and matching polynomials of benzenoid hydrocarbons
Journal of the Chemical Society Faraday Transactions II **79** (1983) 337–345.

171. I. Gutman, S. Petrović, B. Mohar (8 II 1982)
Topological properties of benzenoid systems. XXa. Matching polynomials and topological resonance energies of peri-condensed benzenoid hydrocarbons
Collection of Scientific Papers of the Faculty of Science Kragujevac **4** (1983) 189–225.

170. I. Gutman, S. Petrović, B. Mohar (8 II 1982)
Topological properties of benzenoid systems. XX. Matching polynomials and topological resonance energies of cata-condensed benzenoid hydrocarbons
Collection of Scientific Papers of the Faculty of Science Kragujevac **3** (1982) 43–90.

169. I. Gutman (8 II 1982)
The number of Kekulé structures in conjugated systems containing a linear polyacene fragment
Croatica Chemica Acta **55** (1982) 371–374.

168. I. Gutman (28 I 1982)
Topological resonance energy of linear polyacenes
Zeitschrift für Naturforschung **37a** (1982) 248–250.

167. I. Gutman, I. Juranić (22 I 1982)
On the dependence of π-electron charge distribution on molecular topology. II
Bulletin de la Société Chimique Beograd **47** (1982) 183–188.

166. H. Hartmann, I. Gutman (6 XI 1981)
Zu einigen Gesetzmässigkeiten in der π-Elektronenstruktur von Heteroradialenen [On some regularities in the π-electron structure of heteroradialenes]
Zeitschrift für Physikalische Chemie (Leipzig) **264** (1983) 33–42.

165. I. Gutman (26 IX 1981)
Topological properties of benzenoid systems. IX. On the sextet polynomial
Zeitschrift für Naturforschung **37a** (1982) 69–73.

164. I. Gutman (21 VIII 1981)
A note on analogies between the characteristic and the matching polynomial of a graph
Publications de l'Institut Mathématique (Beograd) **31** (1982) 27–31.

163. I. Gutman (19 VI 1981)
Topological properties of benzenoid systems. X. Note on a graph–theoretical polynomial of Knop and Trinajstić
Croatica Chemica Acta **55** (1982) 309–313.

162. I. Gutman, S. Petrović (13 V 1981)
Topological properties of benzenoid systems. VII. Approximate formulas for resonance energy
Bulletin de la Société Chimique Beograd **46** (1981) 459–464.

161. C. D. Godsil, I. Gutman (13 V 1981)
Contributions to the theory of topological resonance energy
Acta Chimica Academiae Scientiarum Hungaricae **110** (1982) 415–424.

160. I. Gutman (28 IV 1981)
Topological properties of benzenoid systems. VI. On Kekulé structure count
Bulletin de la Société Chimique Beograd **46** (1981) 411–415.

159. D. Kasum, N. Trinajstić, I. Gutman (20 IV 1981)
Chemical graph theory. III. On the permanental polynomial
Croatica Chemica Acta **54** (1981) 321–328.

158. D. M. Cvetković, I. Gutman (II 1981)
A new spectral method for determining the number of spanning trees
Publications de l'Institut Mathématique (Beograd) **29** (1981) 49–52.

157. I. Gutman (II 1981)
Izračunavanje uticaja prstena na π-elektronski naboj u konjugovanim ugljovodonicima [Calculation of the effect of a ring on the π-electron charge in conjugated hydrocarbons]
Collection of Scientific Papers of the Faculty of Science Kragujevac **2** (1981) 157–164.

156. I. Gutman (12 II 1981)
Topological studies on heteroconjugated molecules. III. On the law of alternating polarity
Zeitschrift für Naturforschung **36a** (1981) 1112–1114.

155. I. Gutman (30 I 1981)
On perturbation graph theory
Chemical Physics Letters **81** (1981) 303–305.

154. I. Gutman (XII 1980)
Some combinatorial consequences of Clar's resonant sextet theory
MATCH Communications in Mathematical Chemistry **11** (1981) 127–143.

153. I. Gutman, O. E. Polansky (18 XII 1980)
Cyclic conjugation and the Hückel molecular orbital model
Theoretica Chimica Acta **60** (1981) 203–226.

152. I. Gutman (6 XI 1980)
The R-polynomial. A new combinatorial technique in resonance theory
Bulletin de la Société Chimique Beograd **46** (1981) 17–22.

151. I. Gutman (X 1980)
Bounds for the smallest positive eigenvalue of a bipartite molecular graph
MATCH Communications in Mathematical Chemistry **11** (1981) 75–86.

150. I. Gutman, B. Mohar (13 X 1980)
More difficulties with topological resonance energy
Chemical Physics Letters **77** (1981) 567–570.

149. I. Gutman (22 IX 1980)
Topological resonance energy of very large benzenoid hydrocarbons
Zeitschrift für Naturforschung **36a** (1981) 128–131.

148. I. Gutman (26 VI 1980)
Proof of Kruszewski's rule
Zeitschrift für Naturforschung **35a** (1980) 820–822.

147. I. Gutman (4 VI 1980)
On the topological resonance energy of heteroconjugated molecules
Croatica Chemica Acta **54** (1981) 75–80.

146. N. Ohkami, A. Motoyama, T. Yamaguchi, H. Hosoya, I. Gutman (24 V 1980)
Graph–theoretical analysis of the Clar's aromatic sextet. Mathematical properties of the set of the Kekulé patterns and the sextet polynomial for polycyclic aromatic hydrocarbons
Tetrahedron **37** (1981) 1113–1122.

145. I. Gutman (15 V 1980)
On the characterization of monocyclic structures. Hosoya's index
Croatica Chemica Acta **54** (1981) 81–83.

144. O. E. Polansky, I. Gutman (III 1980)
Graph–theoretical treatment of aromatic hydrocarbons. V: The number of Kekulé structures in an all-benzenoid aromatic hydrocarbon
MATCH Communications in Mathematical Chemistry **8** (1980) 269–290.

143. I. Gutman, O. E. Polansky (III 1980)
On the matching polynomial of the graph $G\{R_1, R_2, \ldots, R_n\}$
MATCH Communications in Mathematical Chemistry **8** (1980) 315–322.

142. C. D. Godsil, I. Gutman (4 III 1980)
Some remarks on the matching polynomial and its zeros
Croatica Chemica Acta **54** (1981) 53–59.

141. I. Gutman (II 1980)
Spectral properties of some graphs derived from bipartite graphs
MATCH Communications in Mathematical Chemistry **8** (1980) 291–314.

140. I. Gutman (1979)
Matrice i grafovi u hemiji [Matrices and graphs in chemistry]
in the book: D. Cvetković, *Kombinatorna teorija matrica [Combinatorial Matrix Theory]*, Naučna knjiga, Beograd, 1980, pp. 272–301; 2nd ed.: 1987.

139. I. Gutman (28 XII 1979)
Total π-electron energy of a class of conjugated polymers
Bulletin de la Société Chimique Beograd **45** (1980) 67–68.

138. I. Gutman (3 XII 1979)
Failures of the topological resonance energy method
Theoretica Chimica Acta **56** (1980) 89–92.

137. C. D. Godsil, I. Gutman (XI 1979)
On the theory of the matching polynomial
Journal of Graph Theory **5** (1981) 137–144.

136. I. Gutman (X 1979)
Prilog kvantnoj teoriji alternantnih molekula [Contribution to the quantum theory of alternant molecules]
Collection of Scientific Papers of the Faculty of Science Kragujevac **2** (1981) 23–32.

135. I. Gutman, D. M. Cvetković (X 1979)
Relations between graphs and special functions
Collection of Scientific Papers of the Faculty of Science Kragujevac **1** (1980) 101–119.

134. E. Ruch, I. Gutman (IX 1979)
The branching extent of graphs
Journal of Combinatorics, Information & System Sciences **4** (1979) 285–295.

133. I. Gutman, B. Mohar (28 IX 1979)
Artifact in the topological resonance energy method
Chemical Physics Letters **69** (1980) 375–377.

132. I. Gutman (15 IX 1979)
Polynomial matrix method for the estimation of π-electron energies of some linear conjugated molecules
Journal of the Chemical Society Faraday Transactions II **76** (1980) 1161–1169.

131. I. Gutman (13 IX 1979)
Note on a topological property of the HOMO–LUMO separation
Zeitschrift für Naturforschung **35a** (1980) 458–460.

130. I. Gutman (13 IX 1979)
On graph theoretical polynomials of annulenes and radialenes
Zeitschrift für Naturforschung **35a** (1980) 453–457.

129. I. Gutman (3 IX 1979)
Effect of cycles on topological resonance energy
Croatica Chemica Acta **53** (1980) 581–586.

128. I. Gutman (3 IX 1979)
On the dependence of π-electron charge distribution on molecular topology
Bulletin de la Société Chimique Beograd **44** (1979) 627–630.

127. I. Gutman (4 VII 1979)
Difficulties with topological resonance energy
Chemical Physics Letters **66** (1979) 595–597.

126. A. Graovac, I. Gutman (25 VI 1979)
Estimation of the HOMO–LUMO separation
Croatica Chemica Acta **53** (1980) 45–50.

125. O. E. Polansky, I. Gutman (23 V 1979)
Graph–theoretical treatment of aromatic hydrocarbons. IV: Identifizierung zusammenhängender schlichter Graphen als Polyhexes [Identification of connected simple graphs as polyhexes]
MATCH Communications in Mathematical Chemistry **5** (1979) 227–238.

124. O. E. Polansky, I. Gutman (23 V 1979)
Zur Wegematrix schlichter Graphen [On the path matrix of simple graphs]
MATCH Communications in Mathematical Chemistry **5** (1979) 219–225.

123. I. Gutman (6 IV 1979)
Graphs with greatest number of matchings
Publications de l'Institut Mathématique (Beograd) **27** (1980) 67–76.

122. I. Gutman (III 1979)
On polymethine graphs
MATCH Communications in Mathematical Chemistry **5** (1979) 161–176.

121. I. Gutman (9 III 1979)
Characteristic and matching polynomials of some compound graphs
Publications de l'Institut Mathématique (Beograd) **27** (1980) 61–66.

120. O. E. Polansky, I. Gutman (XII 1978)
On the calculation of the largest eigenvalue of molecular graph
MATCH Communications in Mathematical Chemistry **5** (1979) 149–159.

119. I. Gutman, M. Randić (4 XII 1978)
A correlation between Kekulé valence structures and conjugated circuits
Chemical Physics **41** (1979) 265–270.

118. C. D. Godsil, I. Gutman (X 1978)
On the matching polynomial of a graph
in the book: L. Lovász, V. T. Sós (Eds.), *Algebraic Methods in Graph Theory*, North–Holland, Amsterdam, 1981, pp. 241–249.
also published in:
Mathematics Research Report University of Melbourne **35** (1978) 1–10.

117. I. Gutman (24 X 1978)
Effect of cycles on total π-electron energy of alternant conjugated hydrocarbons
Journal of the Chemical Society Faraday Transactions II **75** (1979) 799–805.

116. I. Gutman (19 X 1978)
Two theorems on topological resonance energy
Bulletin de la Société Chimique Beograd **44** (1979) 173–178.

115. I. Gutman (6 X 1978)
Contribution to the problem of the spectra of compound graphs
Publications de l'Institut Mathématique (Beograd) **24** (1978) 53–60.

114. I. Gutman, D. H. Rouvray (27 IX 1978)
An approximate topological formula for the HOMO–LUMO separation in alternant hydrocarbons
Chemical Physics Letters **62** (1979) 384–388.

113. I. Gutman (25 IX 1978)
The energy of a graph
Berichte der Mathematisch–Statistischen Sektion im Forschungszentrum Graz **103** (1978) 1–22.

112. I. Gutman (25 IX 1978)
Topologija i stabilnost konjugovanih ugljovodonika. Zavisnost ukupne π-elektronske energije od molekulske topologije [Topology and stability of conjugated hydrocarbons. The dependence of total π-electron energy on molecular topology]
Bulletin de la Société Chimique Beograd **43** (1978) 761–774.

111. C. D. Godsil, I. Gutman (14 IX 1978)
Topological resonance energy is real
Zeitschrift für Naturforschung **34a** (1979) 776–777.

110. I. Gutman (17 VIII 1978)
Bounds for Hückel total π-electron energy
Croatica Chemica Acta **51** (1978) 299–306.

109. L. J. Schaad, B. A. Hess, J. B. Nation, N. Trinajstić, I. Gutman (17 VII 1978)
On the reference structure for the resonance energy of aromatic hydrocarbons
Croatica Chemica Acta **52** (1979) 233–248.

108. A. Graovac, I. Gutman (VI 1978)
The determinant of the adjacency matrix of a molecular graph
MATCH Communications in Mathematical Chemistry **6** (1979) 49–73.

107. I. Gutman (VI 1978)
The matching polynomial
MATCH Communications in Mathematical Chemistry **6** (1979) 75–91.

106. D. M. Cvetković, I. Gutman, S. K. Simić (IV 1978)
On self pseudo-inverse graphs
Publikacije Elektrotehničkog Fakulteta (Beograd) *Serija Matematika Fizika* **616** (1978) 111–117.

105. I. Gutman (20 III 1978)
Relations between bond orders
Bulletin de la Société Chimique Beograd **43** (1978) 379–384.

104. I. Gutman (6 III 1978)
A rule for charge distribution in non-alternant hydrocarbons
Chemical Physics Letters **58** (1978) 137–139.

103. I. Gutman (4 III 1978)
A method for calculation of resonance energy of benzenoid hydrocarbons
Zeitschrift für Naturforschung **33a** (1978) 840–841.

102. I. Gutman (8 II 1978)
A graph theoretical study on linear polyenes and their derivatives
Acta Chimica Academiae Scientiarum Hungaricae **99** (1979) 145–153.

101. I. Gutman, S. Bosanac, N. Trinajstić (1 II 1978)
Graph theory and molecular orbitals. XX. Local and long range contributions to bond order
Croatica Chemica Acta **51** (1978) 293–298.

100. I. Gutman (27 I 1978)
Topological studies on heteroconjugated molecules. Alternant systems with one heteroatom
Theoretica Chimica Acta **50** (1979) 287–297.

99. I. Gutman (22 XII 1977)
Topological properties of benzenoid systems. IV. On Aihara's resonance energy
Bulletin of the Chemical Society of Japan **51** (1978) 2729–2731.

98. I. Gutman, H. Hosoya (16 XII 1977)
On the calculation of the acyclic polynomial
Theoretica Chimica Acta **48** (1978) 279–286.

97. I. Gutman (18 XI 1977)
Some properties of the topological resonance energy
Bulletin de la Société Chimique Beograd **43** (1978) 191–197.

96. I. Gutman (24 X 1977)
Electronic properties of Möbius systems
Zeitschrift für Naturforschung **33a** (1978) 214–216.

95. I. Gutman (19 IX 1977)
Topological formulas for free–valency index
Croatica Chemica Acta **51** (1978) 29–33.

94. A. Graovac, I. Gutman, N. Trinajstić (5 IX 1977)
Graph–theoretical study of conjugated hydrocarbons: total pi-electron energies and their differences
International Journal of Quantum Chemistry **12** (Suppl. 1) (1977) 153–155.

93. D. Jeremić, I. Gutman, R. Petrović, S. Milosavljević (2 IX 1977)
^1H NMR spectra of cis– and trans-5-hydroxy-2-ethyl-1,3-dioxanes
Bulletin de la Société Chimique Beograd **43** (1978) 1–8.

92. I. Gutman (VIII 1977)
A comparative study of bond orders
MATCH Communications in Mathematical Chemistry **3** (1977) 121–132.

91. I. Gutman (30 VII 1977)
A topological formula for total π-electron energy
Zeitschrift für Naturforschung **32a** (1977) 1072–1073.

90. I. Gutman (21 VII 1977)
Bounds for reactivity indices
Theoretica Chimica Acta **47** (1978) 217–222.

89. A. Graovac, I. Gutman, M. Randić, N. Trinajstić (15 VII 1977)
Kekulé index for valence bond structures of conjugated systems containing cyclobutadiene
Collection of Czechoslovak Chemical Communications **43** (1978) 1375–1392.

88. A. Graovac, I. Gutman, N. Trinajstić (VI 1977)
Topological Approach to the Chemistry of Conjugated Molecules
Springer, Berlin, 1977, pp. X+123.

87. I. Gutman (16 VI 1977)
Bounds for total π-electron energy of polymethines
Chemical Physics Letters **50** (1977) 488–490.

86. I. Gutman (14 VI 1977)
The acyclic polynomial of a graph
Publications de l'Institut Mathématique (Beograd) **22** (1977) 63–69.

85. I. Gutman (7 VI 1977)
Graph–theoretical formulation of Forsman's equation
Journal of Chemical Physics **68** (1978) 2523–2524.

84. I. Gutman (12 V 1977)
Topological properties of bond order
Zeitschrift für Naturforschung **32a** (1977) 765–767.

83. I. Gutman (10 V 1977)
Relation between the Coulson and Pauling bond orders
Journal of Chemical Physics **68** (1978) 1321–1322.

82. A. Graovac, I. Gutman (28 IV 1977)
The determinant of the adjacency matrix of the graph of a conjugated molecule
Croatica Chemica Acta **51** (1978) 133–140.

81. I. Gutman (1 III 1977)
Topological properties of benzenoid systems. An identity for the sextet polynomial
Theoretica Chimica Acta **45** (1977) 309–315.

80. I. Gutman, H. Hosoya, T. Yamaguchi, A. Motoyama, N. Kuboi (31 I 1977)
Topological properties of benzenoid systems. III. Recursion relation for the sextet polynomial
Bulletin de la Société Chimique Beograd **42** (1977) 503–510.

79. I. Gutman, S. Bosanac (19 I 1977)
Quantitative approach to Hückel rule. The relations between the cycles of a molecular graph and the thermodynamic stability of a conjugated molecule
Tetrahedron **33** (1977) 1809–1812.

78. I. Gutman, S. Bosanac (31 XII 1976)
Quantitative testing of the perimeter rule
Bulletin de la Société Chimique Beograd **42** (1977) 499–502.

77. I. Gutman, M. Randić (22 XII 1976)
Algebraic characterization of skeletal branching
Chemical Physics Letters **47** (1977) 15–19.

76. I. Gutman, N. Trinajstić (6 XII 1976)
Factors contributing to the stability of conjugated heterocycles containing a single heteroatom
Chemical Physics Letters **46** (1977) 591–593.

75. I. Gutman (22 XI 1976)
Proof of the Hückel rule
Chemical Physics Letters **46** (1977) 169–171.

74. S. Bosanac, I. Gutman (20 XI 1976)
Effect of a ring on the stability of polycyclic conjugated molecules
Zeitschrift für Naturforschung **32a** (1977) 10–12.

73. I. Gutman (1 XI 1976)
Generalizations of a recurrence relation for the characteristic polynomials of trees
Publications de l'Institut Mathématique (Beograd) **21** (1977) 75–80.

72. I. Gutman, A. Graovac (18 X 1976)
On structural factors causing stability differences between conjugated isomers
Croatica Chemica Acta **49** (1977) 453–459.

71. I. Gutman (4 X 1976)
New applications of the Dewar index
Croatica Chemica Acta **49** (1977) 635–641.

70. D. M. Cvetković, I. Gutman (22 IX 1976)
Note on branching
Croatica Chemica Acta **49** (1977) 115–121.

69. I. Gutman, M. Milun, N. Trinajstić (20 IX 1976)
Topological resonance energy of annulenes
Croatica Chemica Acta **49** (1977) 441–452.

68. I. Gutman (2 IX 1976)
Acyclic systems with extremal Hückel π-electron energy
Theoretica Chimica Acta **45** (1977) 79–87.

67. I. Gutman (VI 1976)
Partial ordering of forests according to their characteristic polynomials
in the book: A. Hajnal, V. T. Sós (Eds.), *Combinatorics*, North–Holland, Amsterdam, 1978, pp. 429–436.

66. I. Gutman, S. Bosanac (7 VI 1976)
Topological studies on heteroconjugated molecules. The stability of alternant systems with one heteroatom
Chemical Physics Letters **43** (1976) 371–373.

65. I. Gutman (31 V 1976)
The relation between resonance energy and molecular structure
Acta Chimica Academiae Scientiarum Hungaricae **92** (1977) 65–72.

64. I. Gutman, N. Trinajstić (28 IV 1976)
Simple topological formula for Dewar resonance energies of benzenoid molecules
Croatica Chemica Acta **48** (1976) 297–299.

63. I. Gutman, N. Trinajstić (29 III 1976)
Applications of the Cauchy inequalities in simple molecular orbital theory
Journal of the Chemical Society Faraday Transactions II **73** (1977) 435–437.

62. I. Gutman, T. Yamaguchi, H. Hosoya (25 II 1976)
Topological index as applied to π-electronic systems. IV. On the topological factors causing non-uniform π-electron charge distribution in non-alternant hydrocarbons
Bulletin of the Chemical Society of Japan **49** (1976) 1811–1816.

61. I. Gutman (2 II 1976)
A method for enumeration of the algebraic structure count of non-branched cata-condensed molecules
Croatica Chemica Acta **48** (1976) 289–296.

60. I. Gutman (15 I 1976)
Jedna približna topološka formula za ukupnu π-elektronsku energiju [An approximate topological formula for total π-electron energy]
Bulletin de la Société Chimique Beograd **41** (1976) 159–164.

59. I. Gutman, N. Trinajstić (8 I 1976)
Graph theory and molecular orbitals, XIV. On topological definition of resonance energy
Acta Chimica Academiae Scientiarum Hungaricae **91** (1976) 203–209.

58. I. Gutman (6 I 1976)
A class of approximate topological formulas for total π-electron energy
Journal of Chemical Physics **66** (1977) 1652–1655.

57. I. Gutman (13 XI 1975)
An algorithm for the enumeration of bonding and antibonding MO's in conjugated hydrocarbons
Chemical Physics Letters **37** (1976) 475–477.

56. I. Gutman, M. Milun, N. Trinajstić (7 XI 1975)
Graph theory and molecular orbitals. 19. Nonparametric resonance energies of arbitrary conjugated systems
Journal of the American Chemical Society **99** (1977) 1692–1704.

55. I. Gutman (3 XI 1975)
Hückel molecular orbital energies for [0]paracyclophanes – a test for the validity of the perimeter rule
Bulletin de la Société Chimique Beograd **41** (1976) 69–74.

54. I. Gutman, M. Milun, N. Trinajstić (2 XI 1975)
Graph theory and molecular orbitals. XVIII. On topological resonance energy
Croatica Chemica Acta **48** (1976) 87–95.

53. I. Gutman (20 X 1975)
A graph–theoretical study of conjugated systems containing a linear polyene fragment
Croatica Chemica Acta **48** (1976) 97–108.

52. I. Gutman, M. Randić, N. Trinajstić (11 X 1975)
Kekulé structures and topology. III. On inseparability of Kekulé structures
Revue Roumaine de Chimie **23** (1978) 383–395.

51. A. Graovac, I. Gutman, N. Trinajstić (26 IX 1975)
A linear relationship between the total π-electron energy and the characteristic polynomial
Chemical Physics Letters **37** (1976) 471–474.

50. I. Gutman, N. Trinajstić (16 IX 1975)
On the extension of the Hückel rule to polycyclic non-alternant conjugated hydrocarbons
Canadian Journal of Chemistry **54** (1976) 1789–1794.

49. A. Graovac, I. Gutman, M. Randić, N. Trinajstić (17 VII 1975)
On structural features characterizing conductivity in polymeric conjugated hydrocarbons
Colloid & Polymer Science **255** (1977) 480–487.

48. I. Gutman, N. Trinajstić (7 VII 1975)
Graph theory and molecular orbitals. XVII. On the self–polarizability of the atom
Journal of Chemical Physics **65** (1976) 3796–3797.

47. A. Graovac, I. Gutman, N. Trinajstić (16 VI 1975)
On the Coulson integral formula for total π-electron energy
Chemical Physics Letters **35** (1975) 555–557.

46. I. Gutman, M. Milun, N. Trinajstić (V 1975)
Topological definition of delocalisation energy
MATCH Communications in Mathematical Chemistry **1** (1975) 171–175.

45. N. Trinajstić, I. Gutman (V 1975)
Some aspects of graph spectral theory of conjugated molecules
MATCH Communications in Mathematical Chemistry **1** (1975) 71–82.

44. I. Gutman, N. Trinajstić (16 V 1975)
Graph theory and molecular orbitals. XVI. On π-electron charge distribution
Croatica Chemica Acta **48** (1976) 19–24.

43. I. Gutman, N. Trinajstić (1 IV 1975)
Graph theory and molecular orbitals. XV. The Hückel rule
Journal of Chemical Physics **64** (1976) 4921–4925.

42. I. Gutman, N. Trinajstić (17 III 1975)
Graph spectral theory of conjugated molecules
Croatica Chemica Acta **47** (1975) 507–533.

41. I. Gutman, W. C. Herndon (4 III 1975)
On resonance theory
Chemical Physics Letters **34** (1975) 387–391.

40. D. Cvetković, I. Gutman, N. Trinajstić (9 XII 1974)
Graphical studies on the relations between the structure and reactivity of conjugated systems: The role of non-bonding molecular orbitals
Journal of Molecular Structure **28** (1975) 289–303.

39. R. Swinborne–Sheldrake, W. C. Herndon, I. Gutman (27 XI 1974)
Kekulé structures and resonance energies of benzenoid hydrocarbons
Tetrahedron Letters **16** (1975) 755–758.

38. I. Gutman, N. Trinajstić (11 XI 1974)
On the parity of Kekulé structures
Croatica Chemica Acta **47** (1975) 35–39.

37. D. M. Cvetković, I. Gutman (26 VIII 1974)
On spectral structure of graphs having the maximal eigenvalue not greater than two
Publications de l'Institut Mathématique (Beograd) **18** (1975) 39–45.

36. H. Hosoya, K. Hosoi, I. Gutman (6 VIII 1974)
A topological index for the total π-electron energy. Proof of a generalised Hückel rule for an arbitrary network
Theoretica Chimica Acta **38** (1975) 37–47.

35. I. Gutman, D. M. Cvetković (22 VII 1974)
The reconstruction problem for characteristic polynomials of graphs
Publikacije Elektrotehničkog Fakulteta (Beograd) *Serija Matematika Fizika* **505** (1975) 45–48.

34. D. Cvetković, I. Gutman, N. Trinajstić (1 VII 1974)
Conjugated molecules having integral graph spectra
Chemical Physics Letters **29** (1974) 65–68.

33. I. Gutman, B. Ruščić, N. Trinajstić, C. F. Wilcox (21 VI 1974)
Graph theory and molecular orbitals. XII. Acyclic polyenes
Journal of Chemical Physics **62** (1975) 3399–3405.

32. C. F. Wilcox, I. Gutman, N. Trinajstić (17 VI 1974)
Graph theory and molecular orbitals – XI. Aromatic substitution
Tetrahedron **31** (1975) 147–152.

31. I. Gutman, N. Trinajstić, C. F. Wilcox (17 VI 1974)
Graph theory and molecular orbitals – X. The number of Kekulé structures and the thermodynamic stability of conjugated systems
Tetrahedron **31** (1975) 143–146.

30. I. Gutman, N. Trinajstić (27 V 1974)
Graph theory and molecular orbitals. XIII. On the stability of annelated tropylium cations
Croatica Chemica Acta **46** (1974) 243–248.

29. I. Gutman (27 V 1974)
Some topological properties of benzenoid systems
Croatica Chemica Acta **46** (1974) 209–215.

28. I. Gutman, N. Trinajstić (17 V 1974)
Violation of the Dewar–Longuet–Higgins conjecture
Zeitschrift für Naturforschung **29a** (1974) 1238–1238.

27. I. Gutman (8 IV 1974)
The nonexistence of topological formula for total π-electron energy
Theoretica Chimica Acta **35** (1974) 355–359.

26. I. Gutman (21 II 1974)
On the number of antibonding MO's in conjugated hydrocarbons
Chemical Physics Letters **26** (1974) 85–88.

25. D. Cvetković, I. Gutman (4 II 1974)
Kekulé structures and topology. II. Cata-condensed systems
Croatica Chemica Acta **46** (1974) 15–23.

24. I. Gutman (10 I 1974)
Estimating the π-electron energy of very large conjugated systems
Die Naturwissenschaften **61** (1974) 216–217.

23. D. Cvetković, I. Gutman, N. Trinajstić (4 I 1974)
Graph theory and molecular orbitals. IX. On the stability of cata-condensed hydrocarbons
Theoretica Chimica Acta **34** (1974) 129–136.

22. D. Cvetković, I. Gutman, N. Trinajstić (24 X 1973)
Graph theory and molecular orbitals. VII. The role of resonance structures
Journal of Chemical Physics **61** (1974) 2700–2706.

21. I. Gutman (15 X 1973)
Bounds for total π-electron energy
Chemical Physics Letters **24** (1974) 283–285.

20. I. Gutman, N. Trinajstić (10 IX 1973)
Graph theory and molecular orbitals. VIII. Kekulé structures and permutations
Croatica Chemica Acta **45** (1973) 539–545.

19. I. Gutman, M. Milun, N. Trinajstić (24 VIII 1973)
On the Dewar definition of resonance energy
Chemical Physics Letters **23** (1973) 284–286.

18. I. Gutman, J. V. Knop, N. Trinajstić (13 VII 1973)
A graph–theoretical analysis of the HOMO–LUMO separation in conjugated hydrocarbons
Zeitschrift für Naturforschung **29b** (1974) 80–82.

17. J. V. Knop, N. Trinajstić, I. Gutman, L. Klasinc (19 VI 1973)
A graph–theoretical study of positional isomers
Die Naturwissenschaften **60** (1973) 475–476.

16. I. Gutman (8 V 1973)
Određivanje koeficijenata u hemijskim jednačinama. Egzistencija rešenja [Determination of the coefficients in chemical equations. The existence of the solution]
Bulletin de la Société Chimique Beograd **40** (1975) 195–200.

15. I. Gutman, N. Trinajstić (27 IV 1973)
A graph–theoretical classification of conjugated hydrocarbons
Die Naturwissenschaften **60** (1973) 475–475.

14. I. Gutman, N. Trinajstić (2 IV 1973)
Graph theory and molecular orbitals. The loop rule
Chemical Physics Letters **20** (1973) 257–260.

13. I. Gutman, N. Trinajstić, T. Živković (2 III 1973)
Graph theory and molecular orbitals – VI. A discussion of non-alternant hydrocarbons
Tetrahedron **29** (1973) 3449–3454.

12. I. Gutman, N. Trinajstić (12 I 1973)
Graph theory and molecular orbitals. IV. Further application of Sachs formula
Croatica Chemica Acta **45** (1973) 423–429.

11. I. Gutman, N. Trinajstić (5 I 1973)
Graph theory and molecular orbitals
Topics in Current Chemistry **42** (1973) 49–93.

10. A. Graovac, I. Gutman, M. Randić, N. Trinajstić (13 X 1972)
Kekulé index for valence bond structures of conjugated polycyclic systems
Journal of the American Chemical Society **95** (1973) 6267–6273.

9. I. Gutman, N. Trinajstić (3 X 1972)
Graph theory and molecular orbitals. Total π-electron energy of alternant hydrocarbons
Chemical Physics Letters **17** (1972) 535–538.

8. D. Cvetković, I. Gutman, N. Trinajstić (28 VII 1972)
Kekulé structures and topology
Chemical Physics Letters **16** (1972) 614–616.

7. I. Gutman, N. Trinajstić, T. Živković (10 VII 1972)
Theoretical studies on radialenes and related molecules
Croatica Chemica Acta **44** (1972) 501–505.

6. D. Cvetković, I. Gutman, N. Trinajstić (9 VI 1972)
Graph theory and molecular orbitals. II
Croatica Chemica Acta **44** (1972) 365–374.

5. I. Gutman, N. Trinajstić, T. Živković (8 III 1972)
Comments on the PMO method
Chemical Physics Letters **14** (1972) 342–345.

4. I. Gutman, M. Milun, N. Trinajstić (3 III 1972)
Comment on the paper: "Properties of the latent roots of a matrix. Estimation of π-electron energies" by B. J. McClelland
Journal of Chemical Physics **59** (1973) 2772–2774.

3. A. Graovac, I. Gutman, N. Trinajstić, T. Živković (1 III 1972)
Graph theory and molecular orbitals. Application of Sachs theorem
Theoretica Chimica Acta **26** (1972) 67–78.

2. D. M. Cvetković, I. Gutman (10 XII 1971)
The algebraic multiplicity of the number zero in the spectrum of a bipartite graph
Matematički Vesnik (Beograd) **9** (1972) 141–150.

1. I. Gutman, M. Milun, N. Trinajstić (20 IX 1971)
Hückel molecular orbital calculations of aromatic stabilization of annulenes
Croatica Chemica Acta **44** (1972) 207–213.

Књиге професора Ивана Гутмана

1. A. Graovac, I. Gutman, N. Trinajstić
   TOPOLOGICAL APPROACH TO THE CHEMISTRY OF CONJUGATED MOLECULES
   Springer, Berlin, 1977, pp. X+123.

2. I. Gutman, O. E. Polansky
   MATHEMATICAL CONCEPTS IN ORGANIC CHEMISTRY
   Springer, Berlin, 1986, pp. X+212.

3. D. M. Cvetković, M. Doob, I. Gutman, A. Torgašev
   RECENT RESULTS IN THE THEORY OF GRAPH SPECTRA
   North–Holland, Amsterdam, 1988, pp. XII+306.

4. S. J. Cyvin, I. Gutman
   KEKULÉ STRUCTURES IN BENZENOID HYDROCARBONS
   Springer, Berlin, 1988, pp. XV+348.

5. I. Gutman, S. J. Cyvin
   INTRODUCTION TO THE THEORY OF BENZENOID HYDROCARBONS
   Springer, Berlin, 1989, pp. IX+152.

6. I. Gutman
   OBRADA REZULTATA MERENJA U HEMIJI (Elaboration of the Results of Measurements in Chemistry)
   Faculty of Science, Kragujevac, 1990, pp. III+56.

7. S. Jokić, I. Gutman
   HEMIJSKI ELEMENTI – POREKLO, TRANSMUTACIJE, RASPAD
   (Chemical Elements – Origin, Transmutations, Decay)
   Faculty of Science & University, Kragujevac & Dečje Novine, Gornji Milanovac, 1992, pp. III+123.

8. I. Gutman
   OBRADA REZULTATA MERENJA (Elaboration of the Results of Measurements)
   Faculty of Science, Kragujevac, 1997, pp. VI+69.

9. I. Gutman
   OBRADA REZULTATA HEMIJSKIH MERENJA (Elaboration of the Results of Chemical Measurements)
   Faculty of Science, Kragujevac, 2000, pp. VI+114.

10. I. Gutman
    DVADESET GODINA SEMINARA MATEMATIČKE METODE U HEMIJI (Twenty Years of the Seminar Mathematical Methods in Chemistry)
    Faculty of Science, Kragujevac, 2001, pp. VI+84.

11. M. V. Diudea, I. Gutman, L. Jäntschi
    MOLECULAR TOPOLOGY
    Nova, Huntington, 2001, pp. IX+332.

11a. M. V. Diudea, I. Gutman, L. Jäntschi
MOLECULAR TOPOLOGY
Nova, New York, 2002, pp. IX+329.

12. I. Gutman
UVOD U HEMIJSKU TEORIJU GRAFOVA (Introduction to Chemical Graph Theory)
Faculty of Science, Kragujevac, 2003, pp. IV+201.

13. I. Gutman
IZABRANA POGLAVLJA IZ ISTORIJE HEMIJE (Selected Chapters from the History of Chemistry)
Faculty of Science, Kragujevac, 2005, pp. IV+90.

14. X. Li, I. Gutman
MATHEMATICAL ASPECTS OF RANDIĆ–TYPE MOLECULAR STRUCTURE DESCRIPTORS
Faculty of Science & University, Kragujevac, 2006, pp. VI+330.

15. I. Gutman
DVADESET PET GODINA SEMINARA MATEMATIČKE METODE U HEMIJI (Twenty Five Years of the Seminar Mathematical Methods in Chemistry)
Faculty of Science, Kragujevac, 2006, pp. V+157.

16. I. Gutman, S. Radenković
ZBIRKA ZADATAKA IZ FIZIČKE HEMIJE 1 (Collection of Problems from Physical Chemistry 1)
Faculty of Science, Kragujevac, 2008, pp. VI+66.

17. I. Gutman, M. Zejnilagić–Hajrić, I. Nuić
IZABRANA POGLAVLJA IZ ISTORIJE HEMIJE. Drugo, prerađeno i dopunjeno izdanje (Selected Chapters from the History of Chemistry. Second, revised and extended edition)
Faculty of Science, Kragujevac, 2010, pp. V+113.

18. I. Gutman, J. Đurđević, S. Stojanović, A. V. Teodorović
NASTAVA HEMIJE KROZ DRUŽENJE, IGRANJE I MAŠTANJE (Teaching of Chemistry by Friendship, Playing and Imagination)
Faculty of Science & Center for Freedom Activities, Kragujevac, 2011, pp. 96.

19. X. Li, Y. Shi, I. Gutman
GRAPH ENERGY
Springer, New York, 2012, pp. XI+266.

20. I. Gutman, M. Zejnilagić–Hajrić, I. Nuić
HISTORIJSKI RAZVOJ HEMIJE (Historical Development of Chemistry)
Faculty of Science Sarajevo, Sarajevo, 2012, pp. VI+156.

21. I. Gutman
SELECTED THEOREMS IN CHEMICAL GRAPH THEORY
Faculty of Science & University, Kragujevac, 2017, pp. VII+168.

уредник

1. D. Cvetković, I. Gutman, T. Pisanski, R. Tošić
   GRAPH THEORY. PROCEEDINGS OF THE FOURTH YUGOSLAV SEMINAR ON GRAPH THEORY
   University of Novi Sad, Novi Sad, 1984, pp. IV+319.

2. I. Gutman, S. J. Cyvin
   ADVANCES IN THE THEORY OF BENZENOID HYDROCARBONS
   (Topics in Current Chemistry 153)
   Springer, Berlin, 1990, pp. VIII+292.

3. I. Gutman
   ADVANCES IN THE THEORY OF BENZENOID HYDROCARBONS II
   (Topics in Current Chemistry 162)
   Springer, Berlin, 1992, pp. VIII+226.

4. I. Gutman
   MATHEMATICAL METHODS IN CHEMISTRY
   Prijepolje Museum, Prijepolje, 2006, pp. X+208.

5. D. Cvetković, I. Gutman, V. Kovačević–Vujčić
   GRAFOVI, OPTIMIZACIJA, HEMIJA – ZAPISI O RADU JEDNOG NAUČNOG PROJEKTA (Graphs, optimization, chemistry – Notes on the work of a scientific project)
   Akademska misao, Beograd, 2007, pp. VIII+188.

6. I. Gutman, B. Furtula
   RECENT RESULTS IN THE THEORY OF RANDIĆ INDEX
   Faculty of Science & University, Kragujevac, 2008, pp. III+282.

7. D. Cvetković, I. Gutman
   APPLICATIONS OF GRAPH SPECTRA
   Matemaički Institut SANU, Beograd, 2009, pp. 140.

8. A. Graovac, I. Gutman, D. Vukičević
   MATHEMATICAL METHODS AND MODELLING FOR STUDENTS OF CHEMISTRY AND BIOLOGY
   Hum, Zagreb, 2009, pp. IX+271.

9. I. Gutman, B. Furtula
   NOVEL MOLECULAR STRUCTURE DESCRIPTORS – THEORY AND APPLICATIONS I
   Faculty of Science & University, Kragujevac, 2010, pp. III+239.

10. I. Gutman, B. Furtula
    NOVEL MOLECULAR STRUCTURE DESCRIPTORS – THEORY AND APPLICATIONS II
    Faculty of Science & University, Kragujevac, 2010, pp. III+302.

11. D. Cvetković, I. Gutman
SELECTED TOPICS ON APPLICATIONS OF GRAPH SPECTRA
Matemaički Institut SANU, Beograd, 2011, pp. 174.

12. I. Gutman, B. Furtula
DISTANCE IN MOLECULAR GRAPHS – THEORY
Faculty of Science & University, Kragujevac, 2012, pp. III+348.

13. I. Gutman, B. Furtula
DISTANCE IN MOLECULAR GRAPHS – APPLICATIONS
Faculty of Science & University, Kragujevac, 2012, pp. III+252.

14. D. Cvetković, T. Davidović, I. Gutman, V. Kovačević–Vujčić
GRAFOVI OPTIMIZACIJA HEMIJA RAČUNARSTVO – ZAPISI O RADU JEDNOG NAUČNOG PROJEKTA (Graphs, optimization, chemistry, computer science – Notes on the work of a scientific project)
Akademska misao, Beograd, 2012, pp. VIII+144.

15. I. Gutman, B. Pokrić, D. Vukičević
ANTE GRAOVAC – LIFE AND WORKS
Faculty of Science & University, Kragujevac, 2014, pp. IV+306.

16. I. Gutman
TOPICS IN CHEMICAL GRAPH THEORY
Faculty of Science & University, Kragujevac, 2014, pp. IV+262.

17. I. Gutman, X. Li
GRAPH ENERGIES – THEORY AND APPLICATIONS
Faculty of Science & University, Kragujevac, 2016, pp. III+290.

18. Y. Shi, M. Dehmer, X. Li, I. Gutman
GRAPH POLYNOMIALS
CRC Press, Boca Raton, 2016, pp. XII+249.

19. I. Gutman, B. Furtula, K. C. Das, E. Milovanović, I. Milovanović
BOUNDS IN CHEMICAL GRAPH THEORY – BASICS
Faculty of Science & University, Kragujevac, 2017, pp. IV+302.

20. I. Gutman, B. Furtula, K. C. Das, E. Milovanović, I. Milovanović
BOUNDS IN CHEMICAL GRAPH THEORY – MAINSTREAMS
Faculty of Science & University, Kragujevac, 2017, pp. IV+299.

21. I. Gutman, B. Furtula, K. C. Das, E. Milovanović, I. Milovanović
BOUNDS IN CHEMICAL GRAPH THEORY – ADVANCES
Faculty of Science & University, Kragujevac, 2017, pp. IV+254.

гостујући уредник

- I. Gutman, S. Klavžar, B. Mohar
DISCRETE APPLIED MATHEMATICS (50th Anniversary of the Wiener Index) Vol. **80**, Number 1, 1997, pp. 1–113.

- I. Gutman, S. Klavžar, B. Mohar
  MATCH COMMUNICATIONS IN MATHEMATICAL AND IN COMPUTER CHEMISTRY (Fifty Years of the Wiener Index) Vol. **35**, 1997, pp. 1–259.

- I. Gutman
  JOURNAL OF THE SERBIAN CHEMICAL SOCIETY (Fifty Years of the Wiener Index) Vol. **62**, Number 3, 1997, pp. 185–294.

- I. Gutman
  INDIAN JOURNAL OF CHEMISTRY, Section A (Graph-Based Molecular Structure-Descriptors – Theory and Applications) Vol. **42**, Number 6, 2003, pp. 1193–1446.

- N. Abreu, D. Cvetković, I. Gutman, V. Nikiforov
  LINEAR ALGEBRA AND ITS APPLICATIONS (Special Issue Devoted to Selected Papers Presented at the Workshop on Spectral Graph Theory with Applications on Computer Science, Combinatorial Optimization and Chemistry, Rio de Janeiro, 2008) Vol. **432**, Number 9, 2010, pp. 2161–2456.

- I. Gutman, P. Rowlinson, S. K. Simić, D. Stevanović, E. R. van Dam
  LINEAR ALGEBRA AND ITS APPLICATIONS (Special Issue in Honor of Dragoš Cvetković) Vol. **435**, Number 10, 2011, pp. 2321–2638.