

EDITORIAL

Nenad Trinajstić

Croat. Chem. Acta 78 (2005) LV19th Dubrovnik International Course & Conference
MATH / CHEM / COMP 2004
Dubrovnik
June 21–26, 2004

ORIGINAL SCIENTIFIC PAPERS

CCA-3038

The McClelland Number of Conjugated Hydrocarbons

Ivan Gutman, Lemi Türker, Boris Furtula, and Veselin Vučković

$$2^{-(1/2)^k} \sqrt{2nm} \leq E < 2^{-(1/2)^{k+1}} \sqrt{2nm}$$

Croat. Chem. Acta 78 (2005) 485–488

CCA-3039

On Reducing Correlations between
Topological IndicesBoris Hollas, Ivan Gutman,
and Nenad TrinajstićCorrelation between topological
indices before transformation

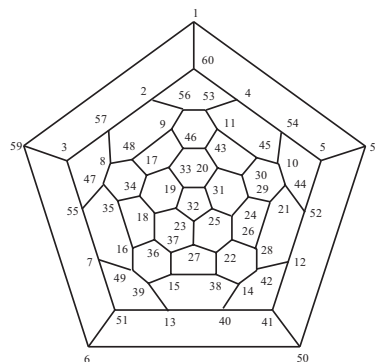
	m	χ	M_2
m	1.0000	0.9939	0.9545
χ		1.0000	0.9214
M_2			1.0000

Correlation between topological
indices after transformation

	m	$\tilde{\chi}$	\tilde{M}_2
m	1.0000	0.0000	0.0000
$\tilde{\chi}$		1.0000	-0.8256
\tilde{M}_2			1.0000

Croat. Chem. Acta 78 (2005) 489–492

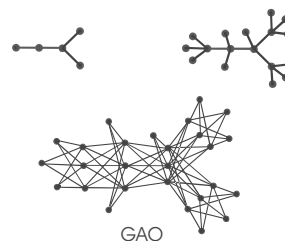
CCA-3040

On Canonical Numbering of Carbon Atoms
in Fullerenes: C₆₀ BuckminsterfullereneDejan Plavšić, Damir Vukičević,
and Milan Randić*Croat. Chem. Acta* 78 (2005) 493–502

CCA-3041

Comparison of QSPR Models Based on Hydrogen-Filled
Graphs and on Graphs of Atomic Orbitals

Andrey A. Toropov, Alla P. Toropova, and Ivan Gutman

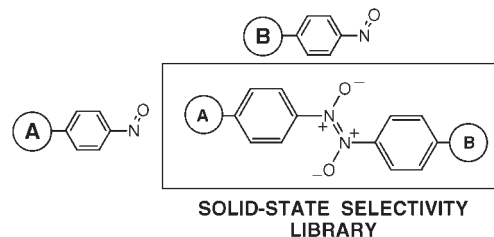
Croat. Chem. Acta 78 (2005) 503–509

CCA-3042

Nitrosobenzene Library: A Model for Studying Selectivity in the Solid State Nitroso-Azodioxide Dimerization

Vesna Šimunić-Mežnarić, Ernest Meštrović,
Vladislav Tomišić, Marijana Žgela, Dražen Vikić-Topić,
Helena Čičak, Predrag Novak, and Hrvoj Vančik

Croat. Chem. Acta **78** (2005) 511–518



CCA-3043

Non-linear optimization of parameters in Michaelis-Menten kinetics

Željko Jeričević and Željko Kušter

Croat. Chem. Acta **78** (2005) 519–523

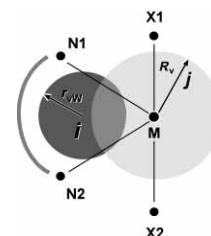
$$\sum_{i=1}^N \delta_i^2 = \sum_{i=1}^N \left(v_i - \frac{V_{\max} S_i}{K_M + S_i} \right)^2$$

CCA-3044

Estimation of Stability Constants of Copper(II) and Nickel(II) Chelates with 1,2-Diaminoethanes by the Overlapping Spheres Method

Ante Miličević and Nenad Raos

Croat. Chem. Acta **78** (2005) 525–534

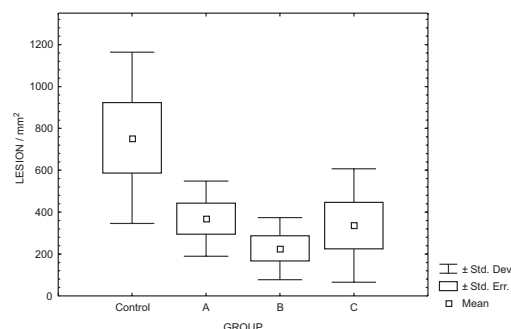


CCA-3045

Alpha-Melanocyte Stimulating Hormone Reduces Colonic Damage in Rat Model of Inflammatory Bowel Disease

Duška Tješić-Drinković, Dorian Tješić-Drinković,
Nikola Štambuk, Paško Konjevoda, Ana Votava-Raić,
Marijana Vinković, and Dražen Vikić-Topić

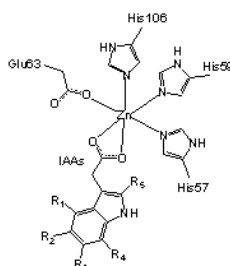
Croat. Chem. Acta **78** (2005) 535–539



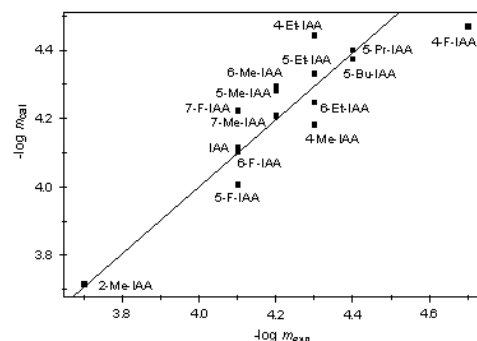
CCA-3046

Chemometric and Molecular Modeling Study of 1H-Indole-3-acetic Acid Derivatives with Auxin Activity

Rudolf Kiralj and
Márcia M. C. Ferreira



Croat. Chem. Acta **78** (2005) 541–549

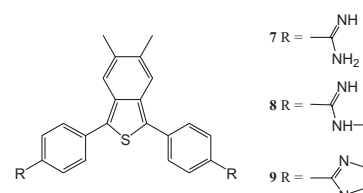


CCA-3047

Synthesis of Bisbenzamidine Derivatives in Benzo[c]thiophene Series

Mirjana Kožul, Ivana Stolić, Biserka Žinić, and Miroslav Bajić

Croat. Chem. Acta **78** (2005) 551–555

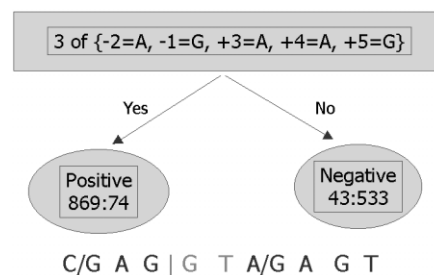


CONFERENCE PAPER

CCA-3048

Extraction of Comprehensible Logical Rules from Neural Networks. Application of TREPAN in Bio and Chemoinformatics

 Brian D. Hudson, David C. Whitley, Antony Browne,
and Martyn G. Ford

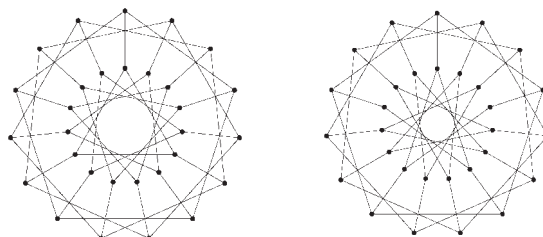
Croat. Chem. Acta **78** (2005) 557–561


NOTE

CCA-3049

Counting Disconnected Structures: Chemical Trees, Fullerenes, *I*-graphs, and others

Marko Petkovšek and Tomaž Pisanski

Croat. Chem. Acta **78** (2005) 563–567


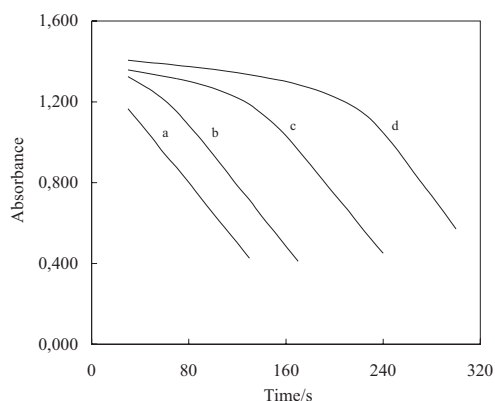
ORDINARY CCA PAPERS

ORIGINAL SCIENTIFIC PAPERS

CCA-3050

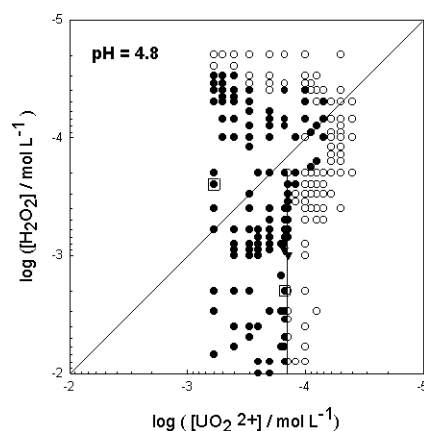
Sensitive Kinetic-Spectrophotometric Determination of Sb^{III} Based on Its Inhibitory Effect on the Decolorization Reaction of Methyl Orange

 Abbas Afkhami, Tayyebah Madrakian,
and Azizeh Abdolmaleki

Croat. Chem. Acta **78** (2005) 569–574


CCA-3051

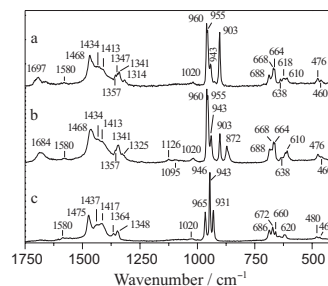
Precipitation of Uranium(VI) Peroxide (UO₄) in Sodium Perchlorate Solution

 Renata Djogić, Vlado Cuculić and Marko Branica
Croat. Chem. Acta **78** (2005) 575–580


CCA-3052

Vibrational Behavior of Calcium Hydrogen Triacetate Monohydrate, $\text{CaH}(\text{CH}_3\text{COO})_3 \cdot \text{H}_2\text{O}$

Violeta Koleva

Croat. Chem. Acta **78** (2005) 581–591

CCA-3053

Nitrogen – 15 signals of anthropogenic nutrient loading in *Anemonia sulcata* as a possible indicator of human sewage impacts on marine coastal ecosystems: a case study of Pirovac Bay and the Murter Sea (Central Adriatic)

Tadej Dolenc, Barbara Vokal, and Matej Dolenc

Croat. Chem. Acta **78** (2005) 593–600

CCA-3054

Approximate solution of dense linear systems

Željko Jeričević

Croat. Chem. Acta **78** (2005) 601–615

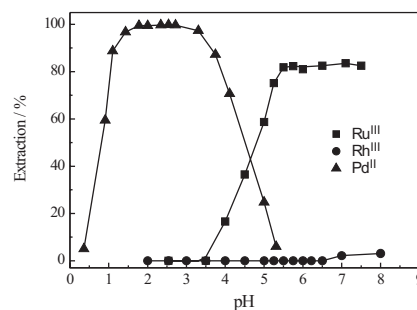
$$Fy = FAF^{-1}Fx$$

$$FBF^{-1}Fq_i = \lambda_i Fq_i$$

CCA-3055

Extraction of Ruthenium and Its Separation from Rhodium and Palladium with 4-Pyridone Derivatives

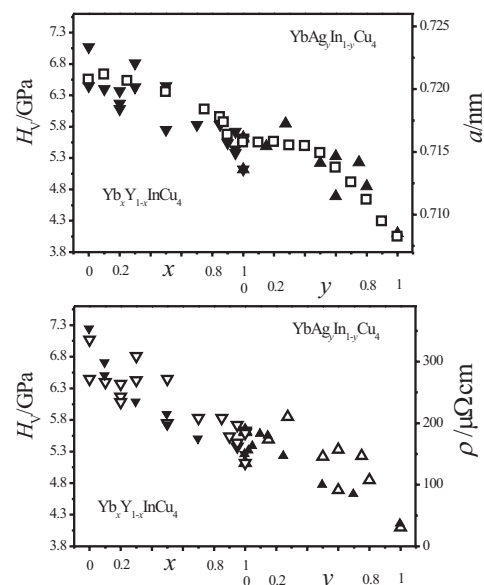
Vinka Drušković, Vlasta Vojković, and Tatjana Antonić

Croat. Chem. Acta **78** (2005) 617–626

CCA-3056

Influence of the electronic structure on the plastic properties of the single crystal $\text{Yb}_x\text{Y}_{1-x}\text{InCu}_4$ and $\text{YbAg}_y\text{In}_{1-y}\text{Cu}_4$ systems

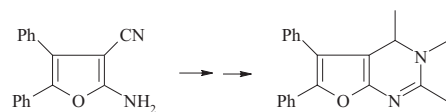
Mirko Stubičar, Miroslav Očko, John-Louis Sarrao, Nada Stubičar, and Željko Šimek

Croat. Chem. Acta **78** (2005) 627–632*Croat. Chem. Acta* **78** (4) XLIX–LIII (2005)

CCA-3057

Fused Pyrimidines. Part II: Synthesis and Antimicrobial activity of Some Furo[3,2-*e*]imidazo[1,2-*c*]pyrimidines and Furo[2,3-*d*]pyrimidines

M. M. H. Bhuiyan, Khandker M. M. Rahman,
M. K. Hossain, M. A. Rahim, and M. I. Hossain



Croat. Chem. Acta **78** (2005) 633–636

APPENDIX

LETTER TO THE EDITOR

Smiljko Ašperger

A23–A26

OBITUARIES

Boris Matković (1927–2005)

A27–A28

Dragutin Fleš (1921–2005)

A29–A30

Zdravko Ježić (1931–2005)

A31–A32

ERRATUM

A33

MINUTES OF THE ANNUAL ASSEMBLY OF THE CROATIAN CHEMICAL SOCIETY (in Croatian)

A35–A45

ACKNOWLEDGEMENT TO REVIEWERS

A47–A48

CONTENTS AND INDEX OF *CROATICA CHEMICA ACTA* VOL. **78**

A51–A60