

EDITORIAL

T. Hrenar and N. Kallay

Croat. Chem. Acta **84** (2011) CCXI.

ORIGINAL SCIENTIFIC ARTICLES

CCA-3459

Changes in Erythrocyte Transmethylation Ability are Predictive Factors for Tumor Prognosis in Prostate Cancer

Anna Blázovics, Péter Nyirády, Gabriella Bekő, Edit Székely, Ágnes Szilvás, Eszter Kovács-Nagy, András Horváth, Miklós Szűcs, Imre Romics, and Éva Sárdi

Parameters	Patient groups		
	healthy controls (N=26)	early stage (N=28)	metastatic (N=18)
IL-1 alpha / pg ml ⁻¹	0.64 ± 0.50	0.10 ± 0.30	0.54 ± 0.42
IL-1 beta / pg ml ⁻¹	1.57 ± 1.3	0.80 ± 2.20	1.18 ± 1.60
IL-2 / pg ml ⁻¹	4.18 ± 2.80	4.70 ± 5.60	7.80 ± 4.4
IL-4 / pg ml ⁻¹	4.56 ± 1.84	2.30 ± 5.40	4.70 ± 2.05
IL-6 / pg ml ⁻¹	1.51 ± 1.34	1.20 ± 2.30	14.2 ± 24.20
IL-8 / pg ml ⁻¹	25.21 ± 16.16	9.10 ± 16.30	31.20 ± 87.00
IL-10 / pg ml ⁻¹	1.08 ± 0.69	0.20 ± 0.50	1.54 ± 1.91
TNF-alpha/pg ml ⁻¹	7.45 ± 4.23	3.00 ± 3.60	3.41 ± 1.65
VEGF / pg ml ⁻¹	190 ± 150	183 ± 94	272 ± 116
IFNG / pg ml ⁻¹	1.78 ± 1.41	0.8 ± 1.50	4.28 ± 4.21
MCP1 / pg ml ⁻¹	346 ± 158	306 ± 93	347 ± 171
EGF* / pg ml ⁻¹	212 ± 81	66.8 ± 58.3	59.3 ± 40.4
CRP / pg ml ⁻¹	<5	5.6 ± 12.8	14.4 ± 24.9
PSA / pg ml ⁻¹	<2	10.66 ± 7.79*	93 ± 120**

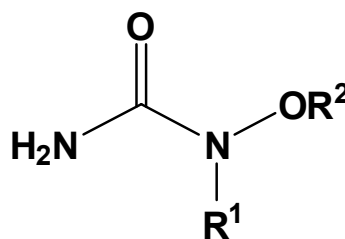
Croat. Chem. Acta **84** (2011) 127–131.

Significance ($p < 0.05$): control vs *; * vs **.

CCA-3460

Kinetics and Mechanism of Oxidation of Hydroxyurea Derivatives with Hexacyanoferrate(III) in Aqueous Solution

Ana Budimir, Tin Weitner, Ivan Kos, Davor Šakić, Mario Gabričević, Erim Bešić, and Mladen Biruš



Hydroxyurea (HU) : $R^1 = R^2 = H$

N-methylhydroxyurea (NMHU):
 $R^1 = CH_3, R^2 = H$

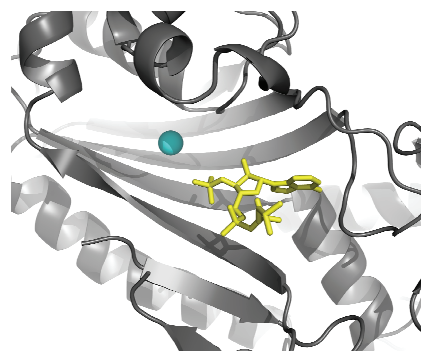
N-methoxyurea (MetU):
 $R^1 = H, R^2 = CH_3$

Croat. Chem. Acta **84** (2011) 133–147.

CCA-3461

Substrate Recognition by Novel Family of Amino Acid:[Carrier Protein] Ligases

Marko Močibob, Nives Ivić, Deni Šubašić, Marija Luić, and Ivana Weygand-Đurašević

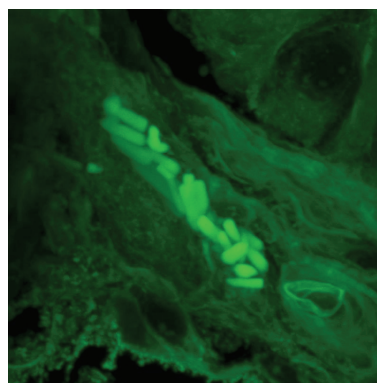


Croat. Chem. Acta **84** (2011) 149–157.

CCA-3462

Reinke's Crystals in Perivascular and Peritubular Leydig Cells

Viviana Kozina, Ljerka Banek, Nikola Knežević, David Geist, Lucie Kubinová, Marin Kosović, Christian Rentenberger, Andreja Vukasović, and Davor Ježek

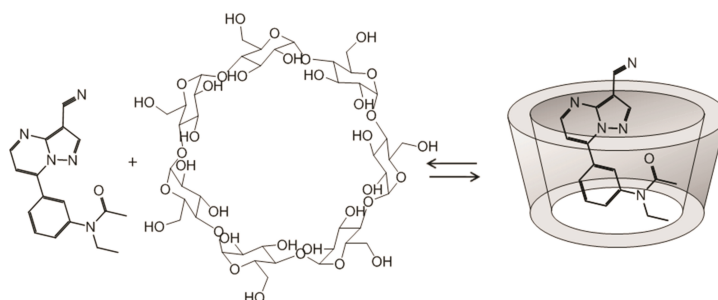


Croat. Chem. Acta **84** (2011) 159–167.

CCA-3463

Stability and Structure of Inclusion Complexes of Zaleplon with Natural and Modified Cyclodextrins

Jasna Jablan, Tin Weitner, Mario Gabričević, and Mario Jug

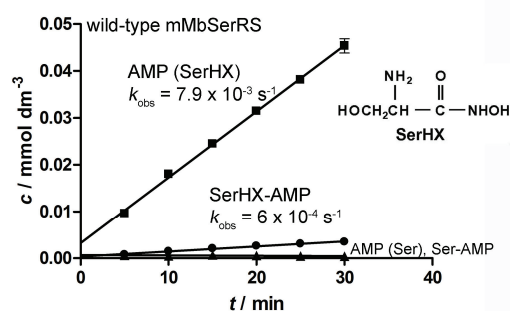


Croat. Chem. Acta **84** (2011) 169–178.

CCA-3464

Pre-transfer Editing of Serine Hydroxamate within the Active Site of Methanogenic-type Seryl-tRNA Synthetase

Ita Gručić-Sovulj, Morana Dulić, and Ivana Weygand-Đurašević

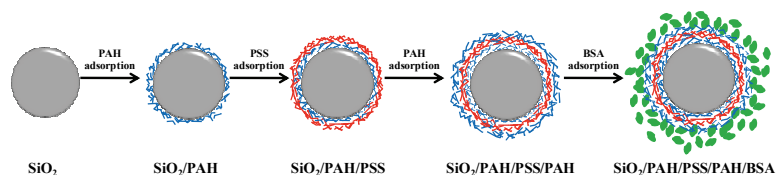


Croat. Chem. Acta **84** (2011) 179–184.

CCA-3465

Electrokinetic Study of Bovine Serum Albumin Adsorption on Previously Formed PAH/PSS Multilayer

Irena Đapić and Davor Kovačević

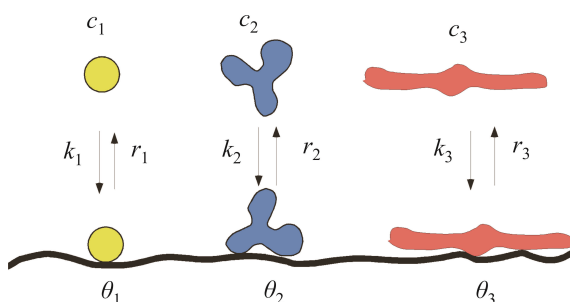


Croat. Chem. Acta **84** (2011) 185–191.

CCA-3466

Competitive Adsorption of Three Human Plasma Proteins onto Sulfhydryl-to-sulfonate Gradient Surfaces

Yong-Xue Ding and Vladimir Hlady



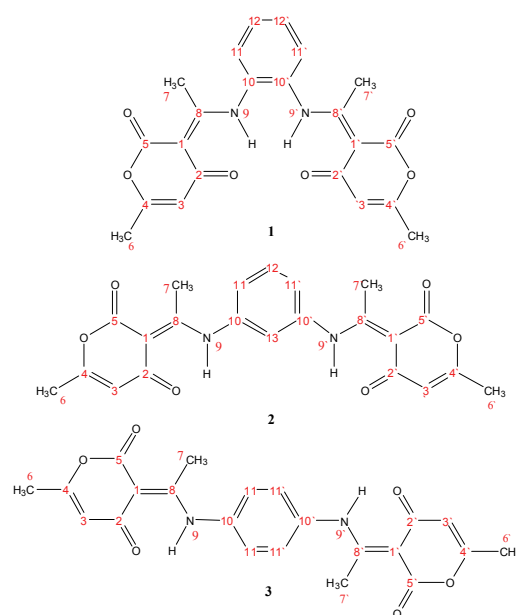
Croat. Chem. Acta **84** (2011) 193–202.

Croat. Chem. Acta **84** (2011) CCIII.

CCA-3467

Bioactive Phenylenediamine Derivatives of Dehydroacetic Acid: Synthesis, Structural Characterization and Deuterium Isotope Effects

Tomislav Jednačak, Predrag Novak, Krunoslav Užarević, Igor Bratoš, Jelena Marković, and Marina Cindrić

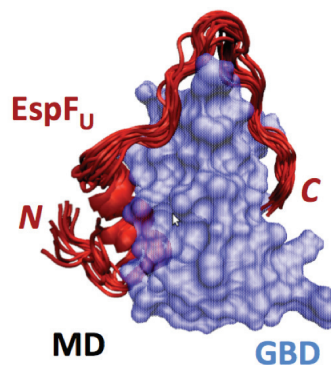


Croat. Chem. Acta **84** (2011) 203–209.

CCA-3468

Computational Analysis of Binding of the GBD Domain of WASP to Different Binding Partners

Maria K. Janowska, Ruben Zubac, and Bojan Zagrovic

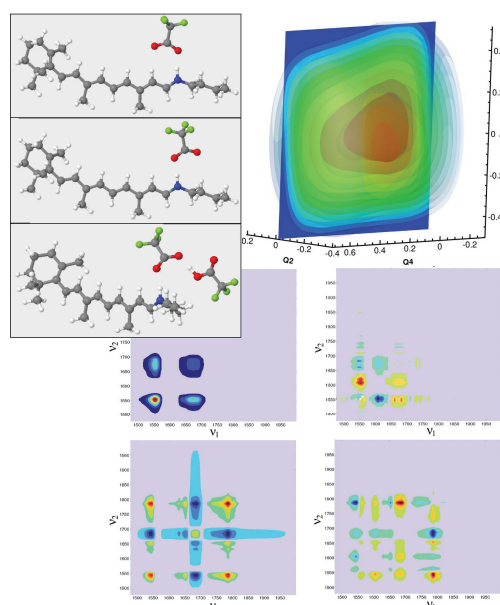


Croat. Chem. Acta **84** (2011) 211–220.

CCA-3469

Localization of the Counterion of the Protonated Schiff Base of *n*-butylretinal in Solution

Nikola Biliškov, Jurica Novak, Milena Petković, Goran Zgrablić, Goran Baranović, and Nađa Došlić

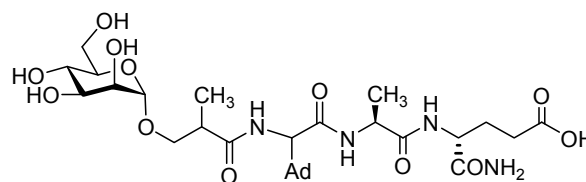


Croat. Chem. Acta **84** (2011) 221–231.

CCA-3470

Synthesis and Biological Evaluation of New Mannose Derived Immunomodulating Adamantyltripeptides

Rosana Ribić, Lidija Habjanec, Branka Vranešić, Ruža Frkanec, and Srđanka Tomić

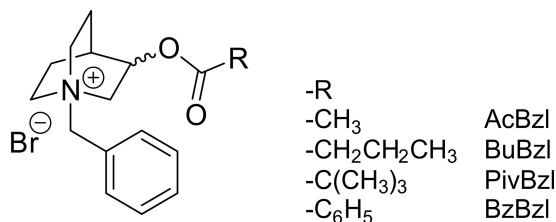


Croat. Chem. Acta **84** (2011) 233–244.

CCA-3471

Influence of the Acyl Moiety on the Hydrolysis of Quinuclidinium Esters Catalyzed by Butyrylcholinesterase

Ines Primožič and Srđanka Tomić



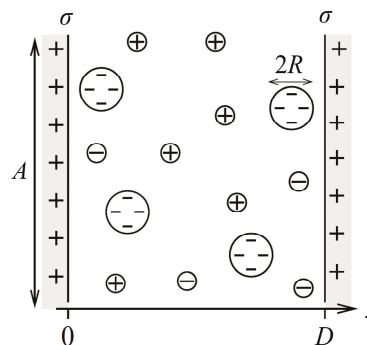
Croat. Chem. Acta **84** (2011) 245–249.

CCA-3472

Attraction between Like Charged Surfaces Mediated by Uniformly Charged Spherical Colloids in a Salt Solution

Sylvio May and Klemen Bohinc

Croat. Chem. Acta **84** (2011) 251–257.



CCA-3473

Human Dipeptidyl Peptidase III: the Role of Asn406 in Ligand Binding and Hydrolysis

Jasminka Špoljarić, Antonija Tomić, Bojana Vukelić, Branka Salopek-Sondi, Dejan Agić, Sanja Tomić, and Marija Abramić

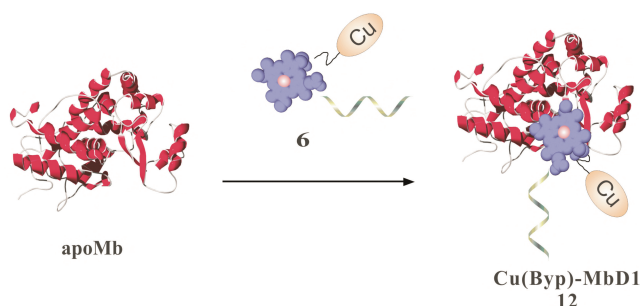
Enzyme form	Arg-Arg-2NA hydrolysis		Tyr-Phe-NHOH
	$K_m / \mu\text{mol dm}^{-3}$	$k_{\text{cat}} / \text{s}^{-1}$	$K_i / \mu\text{mol dm}^{-3}$
Wild-type	3.37 ± 1.10	14.13 ± 1.67	0.23 ± 0.03
N406S	3.99 ± 0.99	10.70 ± 0.92	0.28 ± 0.02
N406Q	5.03 ± 1.23	0.21 ± 0.02	35.89 ± 5.86

Croat. Chem. Acta **84** (2011) 259–268.

CCA-3474

Bimetallic Copper-Heme-Protein-DNA Hybrid Catalyst for Diels Alder Reaction

Chi-Hsien Kuo, Christof M. Niemeyer, and Ljiljana Fruk



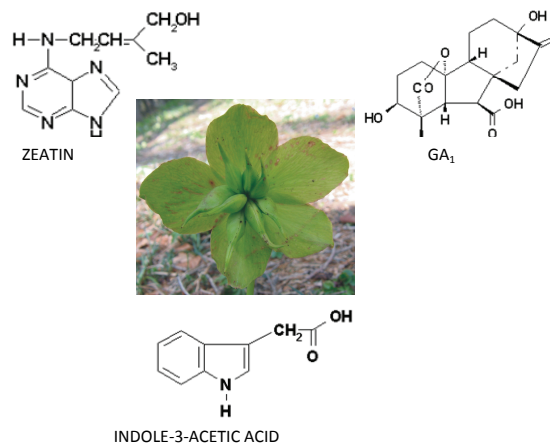
Croat. Chem. Acta **84** (2011) 269–275.

REVIEWS

CCA-3475

**Reproductive Development of the Christmas Rose (*Helleborus niger* L.):
The Role of Plant Hormones**

Branka Salopek-Sondi

*Croat. Chem. Acta* **84** (2011) 277–285.

CCA-3476

**Neurochemical and Behavioural Changes in Rat
Models of Depression**

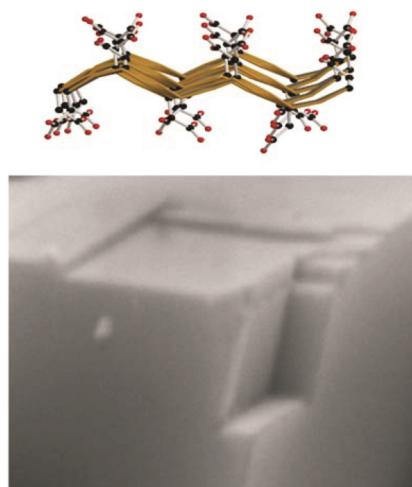
Ivan Skelin, Tomislav Kovačević, and Mirko Diksic

Croat. Chem. Acta **84** (2011) 287–299.

CCA-3477

Kinetic Approach to Biomineralization: Interactions of Synthetic Polypeptides with Calcium Carbonate Polymorphs

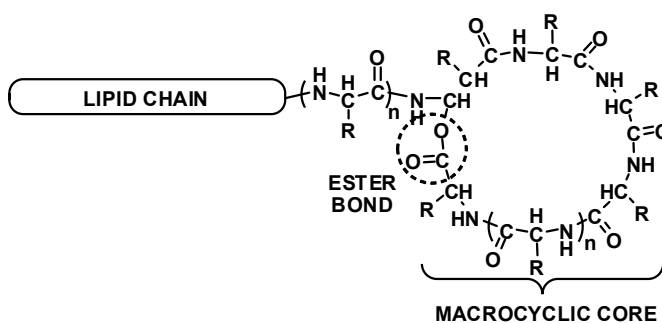
Branka Njegić-Džakula, Ljerka Brečević, Giuseppe Falini, and Damir Kralj

*Croat. Chem. Acta* **84** (2011) 301–314.

CCA-3478

**Cyclic Lipodepsipeptides in Novel Antimicrobial
Drug Discovery**

Nina Bionda and Predrag Cudic

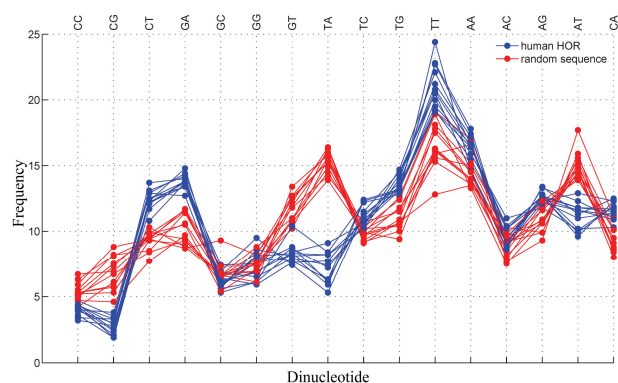
*Croat. Chem. Acta* **84** (2011) 315–329.

PRELIMINARY COMMUNICATION

CCA-3479

Start/stop Codon-like Trinucleotides (CLTs) and Extended Clusters as New Language of DNA

Marija Rosandić, Matko Glunčić, and Vladimir Paar

Croat. Chem. Acta **84** (2011) 331–341.

APPENDICES

Book review

VITOMIR ŠUNJIĆ, MICHAEL J. PARNHAM

**Signposts to Chiral Drugs
Organic Synthesis in Action**

Nenad Trinajstić

CCXIII–CCXIV

Advertisement

Shimadzu Top class

CCXV

Acknowledgment

CCXVII

ConclusionCCXIX
