

Publications 2011

(alphabetically ordered by first author)

1. AMBROŽIČ, Gabriela, ŠKAPIN, Srečo D., ŽIGON, Majda, CRNJAK OREL, Zorica. Poly(zinc dimethacrylate) as a precursor in the low-temperature formation of ZnO nanoparticles. *J. Colloid Interface Sci.*, 2011, 360, 370-376. [COBISS.SI-ID [4665882](#)]
2. AMBROŽIČ, Gabriela, ŠKAPIN, Srečo D., ŽIGON, Majda, CRNJAK OREL, Zorica. The formation of zinc oxide nanoparticles from zinc acetylacetone hydrate interbutanol : a comparative mechanistic study with isomeric C4 alcohols as the media. *Mater. Res. Bull.*, 2011, 46, 2497-2501. [COBISS.SI-ID [4765210](#)]
3. ANŽLOVAR, Alojz, CRNJAK OREL, Zorica, ŽIGON, Majda. Sub micrometer and nano ZnO as filler in PMMA materials = Submikrometerski in nano ZnO kot polnilo v PMMA-materialih. *Mater. Tehnol.*, 2011, 45, 269-274. [COBISS.SI-ID [860842](#)]
4. ANŽLOVAR, Alojz, KOGEJ, Ksenija, CRNJAK OREL, Zorica, ŽIGON, Majda. Polyol mediated nano size zinc oxide and nanocomposites with poly(methyl methacrylate). *Express Polym. Lett.*, 2011, 5, 604-619. [COBISS.SI-ID [35003909](#)]
5. BALEVIČIUS, Vytautas, GDANIEC, Zofia, KLIMAVICIUS, Vytautas, MASALKA, Arunas, PLAVEC, Janez. NMR monitoring of nonequilibrium aggregation in ionic solutions. *Chem. Phys. Lett.*, 2011, 503, 235-238. [COBISS.SI-ID [4601370](#)]
6. BILIŠKOV, Nikola, KOJIĆ-PRODIĆ, Biserka, MALI, Gregor, MOLČANOV, Krešimir, STARE, Jernej. A partial proton transfer in hydrogen bond O-H ... O in crystals of anhydrous potassium and rubidium complex chloranilates. *J. Phys. Chem., A Mol. spectosc. kinet. environ. gen. theory*, 2011, 115, 3154-3166. [COBISS.SI-ID [4646938](#)]
7. BILJAN, Ivana, ILC, Gregor, GIACHIN, Gabriele, RASPADORI, Andrea, ZHUKOV, Igor, PLAVEC, Janez, LEGNAME, Giuseppe. Toward the molecular basis of inherited prion diseases: NMR structure of the human prion protein with V210I mutation. *J. Mol. Biol.*, 2011, 412, 660-673. [COBISS.SI-ID [4776474](#)]
8. BRULC, Blaž, ŽAGAR, Ema, GADZINOWSKI, Mariusz, SLOMKOWSKI, Stanislaw, ŽIGON, Majda. Homo and block copolymers of poly([beta] -benzyl-L-aspartate)s and poly([gamma] -benzyl-L-glutamate)s of different architectures. *Macromol. Chem. Phys.*, 2011, 212, 550-562. [COBISS.SI-ID [4589594](#)]

9. CINČIĆ, Dominik, JURIBAŠIĆ, Marina, BABIĆ, Darko, MOLČANOV, Krešimir, ŠKET, Primož, PLAVEC, Janez, ĆURIĆ, Manda. New insight into solid-state molecular dynamics: mechanochemical synthesis of azobenzene/triphenylphosphine palladacycles. *Chem. Commun. (Lond.)*, 1996, 2011, 47, 11543-11545. [COBISS.SI-ID [4800794](#)]
10. GAZIVODA, Tatjana, PETROVIĆ, Martina, KRIŠTAFOR, Svjetlana, MAKUC, Damjan, PLAVEC, Janez, ROSS, Tobias L., AMETAMEY, Simon M., RAIĆ-MALIĆ, Silvana. Methoxymethyl (MOM) group nitrogen protection of pyrimidines bearing C-6 acyclic side-chains. *Molecules (Basel)*, 2011, 16, 5113-5129. [COBISS.SI-ID [4698906](#)]
11. HASA, Dritan, VOINOVICH, Dario, PERISSUTTI, Beatrice, BONIFACIO, Alois, GRASSI, Mario, FRANCESCHINIS, Erica, DALL'ACQUA, Stefano, SPEH, Manuela, PLAVEC, Janez, INVERNIZZI, Sergio. Multidisciplinary approach on characterizing a mechanochemically activated composite of vincristine and crospovidone. *J. Pharm. Sci.*, 2011, 100, 915-932. [COBISS.SI-ID [4601114](#)]
12. ISKRA, Jernej. Antimalarial peroxides: from artemisinin to synthetic peroxides. *J. Malar. Res.*, 2011, 1, 1-40. [COBISS.SI-ID [25368615](#)]
13. JAREMKO, Łukasz, JAREMKO, Mariusz, ELFAKI, Imadeldin, MUELLER, Jonathan W., EJCHART, Andrzej, BAYER, Peter, ZHUKOV, Igor. Structure and dynamics of the first archaeal parvulin reveal a new functionally important loop in parvulin-type prolyl isomerases. *J. Biol. Chem.*, 2011, 286, 6554-6565. [COBISS.SI-ID [4607002](#)]
14. KRIŠTAFOR, Svjetlana, MEŠČIĆ, Andrijana, CETINA, Mario, KORUNDA, Silvija, MAKUC, Damjan, PLAVEC, Janez, RAIĆ-MALIĆ, Silvana. Synthesis, structural and conformational studies of Z- and E-isomers of fluorinated C-6 isobutetyl N-methyl thymine derivatives. *J. Fluorine Chem.*, 2011, 132, 573-578. [COBISS.SI-ID [4761626](#)]
15. MAKUC, Damjan, HISCOCK, Jennifer R., LIGHT, Mark E., GALE, Philip A., PLAVEC, Janez. NMR studies of anion-induced conformational changes in diindolylureas and diindolylthioureas. *Beilstein journal of organic chemistry*, 2011, 7, 1205-1214. [COBISS.SI-ID [4765978](#)]
16. MALI, Gregor, SIRISOPANAPORN, Chutchamon, MASQUELIER, Christian, HANŽEL, Darko, DOMINKO, Robert. Li₂FeSiO₄ polymorphs probed by ⁶Li MAS NMR and ⁵⁷Fe Mössbauer spectroscopy. *Chem. Mater.*, 2011, 23, 2735-2744. [COBISS.SI-ID [4676890](#)].

17. MALI, Gregor, SIRISOPANAPORN, Chutchamon, MASQUELIER, Christian, HANŽEL, Darko, DOMINKO, Robert. Li₂FeSiO₄ polymorphs probed by ⁶Li MAS NMR and ⁵⁷Fe Mössbauer spectroscopy. *Chem. Mater.*, 2011, 23, 2735-2744. [COBISS.SI-ID [4676890](#)]
18. MAV GOLEŽ, Ida, PAHOVNIK, David, BLÁHA, Michal, ŽIGON, Majda, VOHLÍDAL, Jiří. Copolymers of 2-methoxyaniline with 2- and 3-aminobenzenesulfonic and 2- and 3-aminobenzoic acids: Relationships between the polymerization conditions, structure, spectroscopic characteristics and conductivity. *Synth. Met.*, 2011, 161, 1845-1855. [COBISS.SI-ID [4764954](#)]
19. MAVROMOUSTAKOS, Thomas, DURDAGI, Serdar, KOUKOULITSA, Catherine, SIMČIČ, Mihael, PAPADOPoulos, Manthos G., HODOŠČEK, Milan, GOLIČ GRDADOLNIK, Simona. Strategies in the rational drug design. *Curr. Med. Chem.*, 2011, 18, 2517-2530. [COBISS.SI-ID [4671770](#)]
20. NEOPHYTOU, N., LEONIS, G., STAVRINOUDAKIS, N., SIMČIČ, Mihael, GOLIČ GRDADOLNIK, Simona, PAPAVASSILOPOULOU, E., MICHAS, G., MOUTEVELIS MINAKAKIS, Panayiota, PAPADOPoulos, Manthos G., ZING, M., MAVROMOUSTAKOS, Thomas. Docking and molecular dynamics calculations of pyrrolidinone analog MMK16 bound to COX and LOX enzymes. *Molecular Informatics*, 2011, 30, 473-486. [COBISS.SI-ID [4654106](#)]
21. NOWAKOWSKI, Michał, JAREMKO, Łukasz, JAREMKO, Mariusz, ZHUKOV, Igor, BELCZYK, Agnieszka, BIERZYŃSKI, Andrzej, EJCHART, Andrzej. Solution NMR structure and dynamics of human apo-S100A1 protein. *J Struct Biol*, 2011, 174, 391-399. [COBISS.SI-ID [4641050](#)]
22. NTOUNTANIOTIS, Dimitrios, MALI, Gregor, GOLIČ GRDADOLNIK, Simona, HALABALAKI, Maria, SKALTSONIS, Alexios-Leandros, POTAMITIS, Konstantinos, SIAPI, Eleni, CHATZIGEORGIOUG, Petros, RAPPOLT, Michael, MAVROMOUSTAKOS, Thomas. Thermal, dynamic and structural properties of drug AT1 antagonist olmesartan in lipid bilayers. *Biochim. biophys. acta, Biomembr.*, 2011, 1808, 2995-3006. [COBISS.SI-ID [4754202](#)]
23. NTOUNTANIOTIS, Dimitrios, MALI, Gregor, GOLIČ GRDADOLNIK, Simona, HALABALAKI, Maria, SKALTSONIS, Alexios-Leandros, POTAMITIS, Konstantinos, SIAPI, Eleni, CHATZIGEORGIOUG, Petros, RAPPOLT, Michael, MAVROMOUSTAKOS, Thomas. Thermal, dynamic and structural properties of drug AT1 antagonist olmesartan in lipid bilayers. *Biochim. Biophys. Acta, Biomembr.*, 2011, 1808, 2995-3006. [COBISS.SI-ID [4754202](#)]

24. PAHOVNIK, David, REVEN, Sebastjan, GRDADOLNIK, Jože, BORŠTNAR, Rok, MAVRI, Janez, ŽAGAR, Ema. Determination of the interaction between glimepiride and hyperbranched polymers in solid dispersions. *J. Pharm. Sci.*, 2011, 100, 4700-4709. [COBISS.SI-ID 4713498]
25. POLITI, Aggeliki, LEONIS, Georgios, TZOUPIS, Haralambos, NTOUNTANIOTIS, Dimitros, PAPADOPOULOS, Manthos G., GOLIČ GRDADOLNIK, Simona, MAVROMOUSTAKOS, Thomas. Conformational properties and energetic analysis of Aliskiren in solution and receptor site. *Molecular Informatics*, 2011, 30, 973-985. [COBISS.SI-ID 4870938]
26. POTAMITIS, Konstantinos, MATSOUKAS, M.-T., TSELIOS, Theodore V., MAVROMOUSTAKOS, Thomas, GOLIČ GRDADOLNIK, Simona. Conformational analysis of the MBP83-99 (Phe91) and MBP83-99 (Tyr91) peptide analogues and study of their interactions with the HLA-DR2 and human TCR receptors by using molecular dynamics. *J. Comput.-aided Mol. Des.*, 2011, 25, 837-853. [COBISS.SI-ID 4772122]
27. POYRAZ, M., BANTI, C. N., KOURKOUMELIS, N., DOKOROU, V., MANOS, M. J., SIMČIČ, Mihael, GOLIČ GRDADOLNIK, Simona, MAVROMOUSTAKOS, Thomas, GIANNOLIS, A. D., VERGINADIS, I. I., CHARALABOPOULOS, K., HADJIKAKOU, S. K. Synthesis, structural characterization and biological studies of novel mixed ligand Ag(I) complexes with triphenylphosphine and aspirin or salicylic acid. *Inorg. Chim. Acta.*, 2011, 375, 114-121. [COBISS.SI-ID 4672026]
28. RANGUS, Mojca, MAZAJ, Matjaž, ARČON, Iztok, MALI, Gregor, KAUČIČ, Venčeslav. Spectroscopic investigation of Ti-modified aluminum-free zeolite-beta crystallization. *Chem. Mater.*, 2011, 23, 1337-1346. [COBISS.SI-ID 1795579]
29. ŠALA, Martin, MAKUC, Damjan, KOLAR, Jana, PLAVEC, Janez, PIHLAR, Boris. Potentiometric and ³¹P NMR spectroscopic studies on inositol phosphates and their interaction with iron(III) ions. *Carbohydr. Res.*, 2011, 346, 488-494. [COBISS.SI-ID 34723589]
30. SELIGER, Janez, PLAVEC, Janez, ŠKET, Primož, ŽAGAR, Veselko, BLINC, Robert. (¹⁷O) NQR and (¹³C) NMR study of hydrogen-bonded organic ferroelectric croconic acid. *Phys. Status Solidi, b Basic Res.*, 2011, 248, 2091-2096. [COBISS.SI-ID 24706599]
31. SIRISOPANAPORN, Chutchamon, DOMINKO, Robert, MASQUELIER, Christian, ARMSTRONG, A. Robert, MALI, Gregor, BRUCE, Peter G. Polymorphism in Li₂(Fe,Mn)SiO₄: a combined diffraction and NMR study. *J. Mater. Chem.*, 2011, 21, 17823-17831. [COBISS.SI-ID 4822810].

32. SIRISOPANAPORN, Chutchamon, DOMINKO, Robert, MASQUELIER, Christian, ARMSTRONG, A. Robert, MALI, Gregor, BRUCE, Peter G. Polymorphism in Li₂(Fe,Mn)SiO₄: a combined diffraction and NMR study. *J. Mater. Chem.*, 2011, 21, 17823-17831. [COBISS.SI-ID [4822810](#)]
33. SOSIČ, Izidor, BARRETEAU, Hélène, SIMČIČ, Mihael, ŠINK, Roman, CESAR, Jožko, ZEGA, Anamarija, GOLIČ GRDADOLNIK, Simona, CONTRERAS MARTEL, Carlos, DESSEN, Andréa, AMOROSO, Ana, JORIS, Bernard, BLANOT, Didier, GOBEC, Stanislav. Second-generation sulfonamide inhibitors of d-glutamic acid-adding enzyme: activity optimisation with conformationally rigid analogues of d-glutamic acid. *Eur. J. Med. Chem.*, 2011, 46, 2880-2894. [COBISS.SI-ID [3001457](#)]
34. STAVBER, Stojan. Recent advances in the application of Selectfluor^[sup](TM)F-TEDA-BF₄ as a versatile mediator or catalyst in organic synthesis. *Molecules (Basel)*, 2011, 16, 6432-6464. [COBISS.SI-ID [24931879](#)]
35. STEPHAN, Michel, MODEC, Barbara, MOHAR, Barbara. Asymmetric synthesis of SMS-Phos series' precursor and a naphthalene analogue. *Tetrahedron Lett.*, 2011, 52, 1086-1089. [COBISS.SI-ID [4599834](#)]
36. STEPHAN, Michel, ŠTERK, Damjan, ZUPANČIČ, Borut, MOHAR, Barbara. Profiling the tuneable R-SMS-Phos structure in the rhodium(I)-catalyzed hydrogenation of olefins : the last stand?. *Organic and Biomolecular Chemistry.*, 2011, 9, 5266-5271. [COBISS.SI-ID [4698650](#)]
37. STEPHAN, Michel, ZUPANČIČ, Borut, MOHAR, Barbara. Synthesis of bulky 1,2-dialkoxy- and 1,2,3-trialkoxy-arenes. *Tetrahedron.*, 2011, 67, 6308-6315. [COBISS.SI-ID [4724250](#)]
38. TERPINC, Petra, POLAK, Tomaž, ŠEGATIN, Nataša, HANZLOWSKY, Andrej, POKLAR ULRIH, Nataša, ABRAMOVIC, Helena. Antioxidant properties of 4-vinyl derivatives of hydroxycinnamic acids. *Food Chem.*, 2011, 128, 62-69. [COBISS.SI-ID [3884664](#)]
39. TOMAŠIĆ, Tihomir, KOVAČ, Andreja, SIMČIČ, Mihael, BLANOT, Didier, GOLIČ GRDADOLNIK, Simona, GOBEC, Stanislav, KIKELJ, Danijel, PETERLIN-MAŠIČ, Lucija. Novel 2-thioxothiazolidin-4-one inhibitors of bacterial MurD ligase targeting d-Glu- and diphosphate-binding site. *Eur. J. Med. Chem.*, 2011, 46, 3964-3975. [COBISS.SI-ID [3030897](#)]
40. UKMAR, Tina, GODEC, Aljaž, PLANINŠEK, Odon, KAUČIČ, Venčeslav, MALI, Gregor, GABERŠČEK, Miran. The phase (trans)formation and physical state of a model

drug in mesoscopic confinement. *PCCP. Phys. Chem. Chem. Phys.*, 2011, 13, 16046-16054. [COBISS.SI-ID [4727322](#)]

41. UKMAR, Tina, KAUČIČ, Venčeslav, MALI, Gregor. Solid-state NMR spectroscopy and first-principles calculations: a powerful combination of tools for the investigation of polymorphism of indomethacin. *Acta Chim. Slov.*, 2011, 3, 425-433. [COBISS.SI-ID [4767770](#)]
42. VUKOMANOVIĆ, Marija, ŠKAPIN, Srečo D., POLJANŠEK, Ida, ŽAGAR, Ema, KRALJ, Bogdan, IGNJATOVIĆ, Nenad, USKOKOVIĆ, Dragan. Poly(D, L-lactide-co-glycolide)/hydroxyapatite core-shell nanosphere. Pt. 2, Simultaneous release of a drug and a prodrug (clindamycin and clindamycin phosphate). *Colloids Surf., B Biointerfaces.*, 2011, 82, 414-421,. [COBISS.SI-ID [4520218](#)]
43. ZAVASNIK, Jaka, PODBEVŠEK, Peter, PLAVEC, Janez. Observation of water molecules within the bimolecular d(G3CT4G3C)2 G-quadruplex. *Biochemistry (Easton).*, 2011, 50, 4155-4161. [COBISS.SI-ID [4651802](#)]
44. ZAVRŠNIK, Davorka, MURATOVIĆ, Samija, MAKUC, Damjan, PLAVEC, Janez, CETINA, Mario, NAGL, Ante, DE CLERCQ, Erik, BALZARINI, Jan, MINTAS, Mladen. Benzylidene-bis-(4-hydroxycoumarin) and benzopyrano-coumarin derivatives : synthesis, ¹H/¹³C-NMR conformational and X-ray crystal structure studies and in vitro antiviral activity evaluations. *Molecules (Basel)*, 2011, 16, 6023-6040. [COBISS.SI-ID [4725530](#)]