

Významné publikace v r. 2008

Článek v odborném periodiku s IF v databázi WoS

- Ansari, MA., Štěpánek, F. The effect of granule microstructure on dissolution rate. *Powder Technology*. 2008, roč. 181, č. 2, s. 104-114.
- Ansari, MA., Štěpánek, F. The evolution of microstructure in three-component granulation and its effect on dissolution. *Particulate Science and Technology*. 2008, roč. 26, č. 1, s. 55-66.
- Antol, I., Eckert-Maksic, M., Ončák, M., Slavíček, P., Lischka, H. PHOTODISSOCIATION PATHWAYS OF ACETONE UPON EXCITATION INTO THE 3s RYDBERG STATE: ADIABATIC VERSUS DIABATIC MECHANISM. *Collection of Czechoslovak Chemical Communications*. 2008, roč. 73, č. 11, s. 1475-1494.
- Bakeš, D., Schreiberová, L., Schreiber, I., Hauser, M.J.B.. Mixed-mode oscillations in a homogeneous pH-oscillatory chemical reaction system. *CHAOS*. 2008, roč. 8, č. 1, s. 015102-015102.
- Bernauer, M., Dohnal, V. Temperature Dependence of Air-Water Partitioning of N-Methylated (C1 and C2) Fatty Acid Amides. *Journal of Chemical Engineering Data*. 2008, roč. 53, č. 11, s. 2622-2631.
- Bobák, M., Gregor, T., Bachman, B., Kosek, J. Estimation of morphology characteristics of porous polypropylene particles from degassing measurements. *Macromolecular Reaction Engineering*. 2008, roč. 2, č. 2, s. 176-189.
- Böhme, A., Paschke, A., Vrbka, P., Dohnal, V., Schüürmann, G. Determination of Temperature-Dependent Henry's Law Constant of Four Oxygenated Solutes in Water Using Headspace Solid-Phase Microextraction Technique. *Journal of Chemical Engineering Data*. 2008, roč. 53, č. 12, s. 2873-2877.
- Botek, M. Cope with stress in managerial life. *Contemporary Economics*. 2008, roč. 2, č. 3, s. 1-4.
- Broncová, G., Shishkanova, T., Krondák, M., Wolf, R.Král, V., Optimalization of poly(neutral red) coated-wire electrode for determination of citrate in soft drinks. *Sensors*. 2008, roč. 8, č. 2, s. 594-606.
- Bříza, T., Kaplánek, R., Havlík, M., Dolenský, B., Kejík, Z., Martásek, P., Král, V. Synthesis of Highly Functionalized Fluorinated Porphyrins. *Supramolecular Chemistry*. 2008, roč. 20, č. 3, s. 237-242.
- Bříza, T., Kejík, Z., Císařová, I., Králová, J., Martásek, P., Král, V. Optical sensing of sulfate by polymethinium salt receptors: colorimetric sensor for heparin. *Chemical Communications*. 2008, č. 16, s. 1901-1903.
- Bříza, T., Král, V., Martásek, P., Kaplánek, R. Electrophilic polyfluoroalkylating agents based on sulfonate esters. *Journal of Fluorine Chemistry*. 2008, roč. 129, č. 4, s. 235-247.
- Bureš, M. Thermochemical properties of polychlorinated biphenylenes. *Journal of Chemical Engineering Data*. 2008, roč. 53, č. 1, s. 48-52.
- Bureš, M., Pekárek, V., Ocelka, T. Thermochemical properties and relative stability of polychlorinated biphenyls. *Environmental Toxicology and Pharmacology*. 2008, roč. 25, č. 2, s. 148-155.
- Buřič, L., Janovský, V. On pattern formation in a class of traffic models. *Physica D*. 2008, č. 237, s. 28-49.
- Cígler, P., Král, V., Kožíšek, M., Konvalinka, J., Mirsky, V. Anomalous adsorptive properties of HIV protease: Indication of two-dimensional crystallization?. *Colloids and Surfaces B: Biointerfaces*. 2008, roč. 64, č. 1, s. 145-149.

- Cvačka, J., Kofroňová, E., Vašíčková, S., Stránský, K., Jiroš, P., Hovorka, O., Kindl, J., Valterová, I. Unusual fatty acids in the fat body of the early nesting bumblebee, *Bombus pratorum*. *Lipids*. 2008, roč. 43, č. 5, s. 441-450.
- Člupek, M., Prokopec, V., Matějka, P., Volka, K. Raman spectral detection and assessment of thin organic layers on metal substrates: systematic approach from substrate preparation to map evaluation. *Journal of Raman Spectroscopy*. 2008, roč. 39, č. 4, s. 515-524.
- Dingemans, M., Dewulf, J., Braeckman, L., Van Langenhove, H., Friess, K., Hynek, V., Šípek, M. Mass transfer characteristic of VOC permeation through flat sheet porous and composite membranes: The impact of the different membrane layers on the overall membrane resistance. *Journal of Membrane Science*. 2008, roč. 322, č. 1, s. 234-242.
- Dybal, J., Makrlík, E., Budka, J., Vaňura, P. DFT-calculated structure of protonated tetraphenyl p-tert-butylcalix[4]arene tetraketone. *Monatshefte für Chemie*. 2008, roč. 139, č. 11, s. 1353-1355.
- Dybal, J., Makrlík, E., Vaňura, P., Budka, J., Protonation of 25,27-bis(1-octyloxy)calix[4]arene-crown-6 in the 1,3-alternate conformation. *Monatshefte für Chemie*. 2008, roč. 139, č. 10, s. 1175-1178.
- Eckert, E., Vaněk, T. Mathematical modelling of selected characterisation procedures for oil fractions. *Chemical Papers*. 2008, roč. 62, č. 1, s. 26-33.
- Fořt, I., Hasal, P., Paglanti, A., Magelli, F. Axial force at the vessel bottom induced by axial impellers. *Acta Polytechnica, Journal of Advanced Engineering*. 2008, roč. 48, č. 4, s. 45-50.
- Francová, M., Kolafa, J., Morávek, P., Labík, S., Malijevský, A. Fluids of hard nonspherical molecules. I. Higher virial coefficients. *Collection of Czechoslovak Chemical Communications*. 2008, roč. 73, č. 4, s. 413-423.
- Fulem, M., Becerra, M., Hasan, A., Zhao, B., Shaw, JM. Phase behaviour of Maya crude oil based on calorimetry and rheometry. *Fluid Phase Equilibria*. 2008, roč. 272, č. 1-2, s. 32-41.
- Fulem, M., Laštovka, V., Straka, M., Růžička, K., Shaw, JM., Heat Capacities of Tetracene and Pentacene. *Journal of Chemical Engineering Data*. 2008, roč. 53, č. 9, s. 2175-2181.
- Furuta, H., Nanami, H., Morimoto, T., Ogawa, T., Král, V., Sessler, J., Lynch, V. Halide anion mediated dimerization of a meso-unsubstituted N-confused porphyrin. *Chemistry - An Asian Journal*. 2008, roč. 3, č. 3, s. 592-599.
- Goncharova, I., Urbanová, M. Stereoselective bile pigment binding to polypeptides. *Analytical and Bioanalytical Chemistry*. 2008, roč. 392, č. 7-8, s. 1355-1365.
- Gróf, M., Gatial, A., Milata, V., Prónayová, N., Kožíšek, J., Breza, M., Matějka, P. Conformational and isomerizational studies of 3-N,N-dimethylhydrazino-2-methylsulfonyl propenenitrile using NMR and vibrational spectra, X-ray analysis and ab initio calculations. *Journal of Molecular Structure*. 2008, roč. 891, č. 1-3, s. 192-204.
- Grof, Z., Frenkel, G., Blumenfeld, R., King, P.R.. Structural characterization and statistical properties of two-dimensional granular systems. *Physical Review E*. 2008, roč. 77, č. 4, s. 041304-041304.
- Grof, Z., Štěpánek, F., Lawrence, C. The strength of liquid bridges in random granular materials. *Journal of Colloid and Interface Science*. 2008, roč. 319, č. 1, s. 182-192.
- Grof, Z., Štěpánek, F., Lawrence, CJ. Computer simulation of Capillary Bridges in Particulate Materials. *Granular Matter*. 2008, roč. 10, č. 2, s. 93-103.
- Gros, I., Dytar, J. Planning system for distribution system management. *Logistic News*. 2008, roč. 5, č. 6, s. 1-3.
- Gros, I., Vágner, M. System Approach and Supply Chain Management. *Logistic News*. 2008, roč. 5, č. 9, s. 2-5.
- Hanta, V., Poživil, J. Modelling of a Simple Baggage Handling Process as a Conveyor System. *Transport & Logistics*. 2008, roč. 8, č. 14, s. 5-13.

- Hasal, P., Jahoda, M., Fořt, I. Macro-instability: a chaotic flow component in stirred tanks. *Philosophical Transactions of Royal Society A*. 2008, roč. 366, č. 1864, s. 409-418.
- Havlík, M., Král, V., Kaplánek, R., Dolenský, B. One-pot reaction as an efficient method for rigid molecular tweezers. *Organic Letters*. 2008, roč. 10, č. 21, s. 4767-4769.
- Hilgardt, C., Čejková, J., Hauser, MJB. Ševčíková, H., Streamless aggregation of Dictyostelium in the presence of isopropylidenadenosin. *Biophys.Chem.*. 2008, roč. 132, č. 1, s. 9-17.
- Chadt, J., Sýkora, D., Nilsson, R., Vodička, P. Monitoring of dimethyl sulphate-induced N3-methyladenine, N7-methylguanine and O6-methylguanine DNA adducts using reversed-phase high performance liquid chromatography and mass spectrometry. *Journal of Chromatography B*. 2008, roč. 867, č. 1, s. 43-48.
- Jagoda-Cwiklik, B., Slavíček, P., Cwiklik, L., Nolting, D., Winter, B., Jungwirth, P. Ionization of Imidazole in the Gas Phase, Microhydrated Environments, and in Aqueous Solution. *Journal of Physical Chemistry A*. 2008, roč. 112, č. 16, s. 3499-3505.
- Jagoda-Cwiklik, B., Slavíček, P., Nolting, D., Winter, B., Jungwirth, P. Ionization of Aqueous Cations: Photoelectron Spectroscopy and ab Initio Calculations of Protonated Imidazole. *JOURNAL OF PHYSICAL CHEMISTRY B*. 2008, roč. 112, č. 25, s. 7355-7358.
- Janovská, D., Janovský, V., Tanabe, K. A note on computation of pseudospectra. *Electronic Transactions on Numerical Analysis (ETNA)*. 2008, č. 29, s. 294-297.
- Janovská, D., Opfer, G. Linear Quaternionic Systems,. *Mitt. Math. Ges. Hamburg*. 2008, roč. XXVII, č. 1, s. 223-234.
- Julínek, O., Goncharova, I., Urbanová, M. Chiral memory and self-replication study of porphyrin and bilirubin aggregates formed on polypeptide matrices. *Supramolecular Chemistry*. 2008, roč. 20, č. 7, s. 643-650.
- Kania, P., Stříteská, L., Šimečková, M., Musil, P., Kolesniková, L., Koubek, J., Urban, Š. Rotational spectrum of ¹³C chloromethanes. *Journal of Molecular Spectroscopy*. 2008, roč. 252, č. 1, s. 90-92.
- Klenko, Y., Scholtz, V. Influence of a Point-to-Plane DC Negative Corona Discharge on Gel Surfaces. *Acta Polytechnica, Journal of Advanced Engineering*. 2008, roč. 48, č. 4, s. 27-29.
- Kočí, P., Plát, F., Štěpánek, J., Kubíček, M., Marek, M. Dynamics and selectivity of NO_x reduction in NO_x storage catalytic monolith. *Catalysis Today*. 2008, roč. 137, č. 2, s. 253-260.
- Kolafa, J. A polarizable three-site water model with intramolecular polarizability. *Collection of Czechoslovak Chemical Communications*. 2008, roč. 73, č. 4, s. 507-517.
- Kolafa, J., Moučka, F., Nezbeda, I. Handling electrostatic interactions in molecular simulations: A systematic study. *Collection of Czechoslovak Chemical Communications*. 2008, roč. 73, č. 4, s. 481-506.
- Kolesniková, L., Varga, J., Beckers, H., Šimečková, M., Zelinger, Z., Stříteská, L., Kania, P., Willner, H., Urban, Š. Detailed study of fine and hyperfine structures in rotational spectra of the free fluoroformyloxy radical FCO₂??. *Journal of Chemical Physics*. 2008, roč. 128, č. 22, s. 224302-224309.
- Kolská, Z., Kukal, J., Zábranský, M., Růžička, V. Estimation of the Heat Capacity of Organic Liquids as a Function of Temperature by a Three-Level Group Contribution Method. *Ind.Eng.Chem., Res.*. 2008, roč. 47, č. 6, s. 2075-2085.
- Kordač, M., Linek, V. Dynamic Measurement of Carbon Dioxide Volumetric Mass Transfer Coefficient. *Ind.Eng.Chem., Res.*. 2008, roč. 47, č. 1, s. 1310-1317.
- Koukol, O., Beňová, B., Vosmanská, M., Frantík, T., Vosátka, M., Kovářová, M. Decomposition of spruce litter needles of different duality by Setulipes androsaceus and Thysanophora penicillloides. *Plant and Soil*. 2008, roč. 311, č. 1-2, s. 151-159.

- Kožíšek, M., Cíglér, P., Lepšík, M., Fanfrlík, J., Řezáčová, P., Brynda, J., Pokorná, J., Plešek, J., Grüner, B., Grantz Šašková, K., Václavíková, J., Král, V., Konvalinka, R. Inorganic Polyhedral Metallacarborane Inhibitors of HIV Protease: A New Approach to Overcoming Antiviral Resistance. *Journal of Medicinal Chemistry*. 2008, roč. 51, č. 15, s. 4839-4843.
- Králová, J., Bříza, T., Moserová, I., Dolenský, B., Vašek, P., Poučková, P., Kejík, Z., Kaplánek, R., Martásek, P., Dvořák, M., Král, V. Glycol Porphyrin Derivatives as Potent Photodynamic Inducers of Apoptosis in Tumor Cells. *Journal of Medicinal Chemistry*. 2008, roč. 51, č. 19, s. 5964-5973.
- Králová, J., Dvořák, M., Koc, M., Král, V. p38 MAPK plays an essential role in apoptosis induced by photoactivation of a novel ethylene glycol porphyrin derivative. *Oncogene*. 2008, roč. 27, č. 20, s. 3010-3020.
- Králová, J., Koivukorpi, J., Kejík, Z., Poučková, P., Sievänen, E., Kolehmainen, E., Král, V. Porphyrin-bile acid conjugates: from saccharide recognition in the solution to the selective cancer cell fluorescence detection. *Organic and Biomolecular Chemistry*. 2008, roč. 6, č. 9, s. 1548-1552.
- Kříž, J., Dybal, J., Makrlík, E., Budka, J., Vaňura, P. Protonation of tetrapropoxy-4-tert-butylcalix[4]arene: NMR study of interaction and probable structures of the product. *Supramolecular Chemistry*. 2008, roč. 20, č. 5, s. 487-494.
- Kříž, J., Dybal, J., Makrlík, E., Vaňura, P. Experimental evidence for unusual protonation of tetraethyl p-tert-butylcalix[4]arene tetraacetate and the most probable structure of the resulting complex. *Supramolecular Chemistry*. 2008, roč. 20, č. 4, s. 387-395.
- Kumar, R., Panoskalsis, N., Štěpánek, F., Mantalaris, A. Coupled oxygen-carbon dioxide transport model for the human bone marrow. *Food and Bioproducts Processing*. 2008, roč. 86, č. C3, s. 211-219.
- Kurbanov, S. Limit theorems for non-critical branching processes with continuous state space.. *Serdica*. 2008, č. 2, s. 483-488.
- Labík, S., Smith, WR. New approximate analytical formula for the solute-solvent contact distribution function in an infinitely dilute binary hard-sphere mixture. *Collection of Czechoslovak Chemical Communications*. 2008, roč. 73, č. 3, s. 314-321.
- Laštovka, V., Fulem, M., Becerra, M., Shaw, JM. A similarity variable for estimating the heat capacity of solid organic compounds - Part II. Application: Heat capacity calculation for ill-defined organic solids. *Fluid Phase Equilibria*. 2008, roč. 268, č. 1-2, s. 134-141.
- Ledvinková roz.Horáčková, B., Keller, F., Kosek, J., Nieken, U. Mathematical modeling of the generation of the secondary porous structure in a monolithic adsorbent. *Chemical Engineering Journal*. 2008, roč. 140, č. 1-3, s. 578-585.
- Leitner, J., Hampl, M., Růžička, K., Straka, M., Sedmidubský, D., Svoboda, P. Heat capacity, enthalpy and entropy of strontium niobate Sr₂Nb₂O₇ and calcium niobate Ca₂Nb₂O₇. *Thermochimica Acta*. 2008, roč. 475, č. 1, s. 33-38.
- Leitner, J., Hampl, M., Růžička, K., Straka, M., Sedmidubský, D., Svoboda, P. Thermodynamic properties of strontium metaniobate SrNb₂O₆. *Journal Therm.Anal.Cal.*. 2008, roč. 91, č. 3, s. 985-990.
- Linek, V., Kordač, M. Mechanism of gas absorption enhancement in presence of fine solid particles in. *Chemical Engineering Science*. 2008, roč. 63, č. 1, s. 5120-5128.
- Makrlík, E., Budka, J., Vaňura, P. Extraction of H⁺, NH₄⁺, Ag⁺ and Tl⁺ into nitrobenzene by using sodium dicarbollylcobaltate in the presence of tetramethyl p-tert-butylcalix[4]arene tetraketone. *Journal of Radioanalytical and Nuclear Chemistry*. 2008, roč. 275, č. 2, s. 459-461.

- Makrlík, E., Budka, J., Vaňura, P., Dybal, J. Solvent extraction of univalent cations into nitrobenzene using sodium dicarbollylcobaltate and tetraphenyl p-tert-butylcalix[4]arene tetraketone. Monatshefte für Chemie. 2008, roč. 139, č. 11, s. 1349-1351.
- Makrlík, E., Budka, J., Vaňura, P., Selucký, P. Extraction of Ba²⁺, Pb²⁺ and Cd²⁺ into nitrobenzene by using strontium dicarbollylcobaltate in the presence of tetramethyl p-tert-butylcalix[4]arene tetraketone. Journal of Radioanalytical and Nuclear Chemistry. 2008, roč. 277, č. 2, s. 487-490.
- Makrlík, E., Budka, J., Vaňura, P., Selucký, P. Solvent extraction of Ca²⁺, Ba²⁺, Cu²⁺, Zn²⁺, Cd²⁺, Pb²⁺, UO₂²⁺, Mn²⁺, Co²⁺ and Ni²⁺ into nitrobenzene using strontium dicarbollylcobaltate and tetra-tert-butyl p-tert-butylcalix[4]arene tetraacetate. Journal of the Serbian Chemical Society. 2008, roč. 73, č. 12, s. 1181-1186.
- Makrlík, E., Dybal, J., Budka, J., Vaňura, P. Experimental evidence, stability and proposed structure of protonated tetramethyl p-tert-butylcalix[4]arene tetraketone. Polish Journal of Chemistry. 2008, roč. 82, č. 7, s. 1441-1447.
- Makrlík, E., Vaňura, P. Mathematical modeling of separation of microamounts of strontium from yttrium in the two-phase water-nitrobenzene extraction system. Journal of Radioanalytical and Nuclear Chemistry. 2008, roč. 275, č. 3, s. 673-675.
- Makrlík, E., Vaňura, P. Solvent extraction of magnesium, zinc and manganese into nitrobenzene by using strontium dicarbollylcobaltate in the presence of valinomycin. Journal of Radioanalytical and Nuclear Chemistry. 2008, roč. 275, č. 2, s. 453-455.
- Makrlík, E., Vaňura, P. Stability constants of complexes of Li⁺, H₃O⁺, NH₄⁺ and Ag⁺ with hexaethyl calix[6]arene hexaacetate in nitrobenzene saturated with water. Journal of Radioanalytical and Nuclear Chemistry. 2008, roč. 277, č. 2, s. 495-497.
- Makrlík, E., Vaňura, P. Stability of complexes of alkali metal cations with p-tert-butylcalix[4]arene-tetrakis (N, N-dimethylthioacetamide) in nitrobenzene saturated with water. Journal of Radioanalytical and Nuclear Chemistry. 2008, roč. 275, č. 1, s. 217-220.
- Makrlík, E., Vaňura, P., Budka, J. Contribution to the thermodynamics of complexes of alkali metal cations with hexaethyl p-tert-butylcalix[6]arene hexaacetate in the water-nitrobenzene extraction system. Journal of Radioanalytical and Nuclear Chemistry. 2008, roč. 275, č. 2, s. 463-466.
- Makrlík, E., Vaňura, P., Budka, J. Solvent extraction of potassium by nitrobenzene solution of sodium dicarbollylcobaltate in the presence of p-tert-butylcalix[4]arene-tetrakis(N,N-diethylacetamide). Polish Journal of Chemistry. 2008, roč. 82, č. 7, s. 1485-1488.
- Makrlík, E., Vaňura, P., Selucký, P. Experimental evidences for some unusual divalent cation complexes of valinomycin. Monatshefte für Chemie. 2008, roč. 139, č. 6, s. 597-600.
- Makrlík, E., Vaňura, P., Selucký, P. Extraction distributions of microamounts of strontium and barium in the two-phase water-HCl-nitrobenzene-dibenzo-21-crown-7-hydrogen dicarbollylcobaltate system. Journal of Radioanalytical and Nuclear Chemistry. 2008, roč. 275, č. 1, s. 3-7.
- Makrlík, E., Vaňura, P., Selucký, P. Extraction of microamounts of calcium into nitrobenzene using hydrogen dicarbollylcobaltate in the presence of dibenzo-21-crown-7 and dibenzo 24 crown-8. Journal of Radioanalytical and Nuclear Chemistry. 2008, roč. 275, č. 2, s. 285-289.
- Makrlík, E., Vaňura, P., Selucký, P. Extraction of microamounts of calcium, strontium and barium into nitrobenzene by using hydrogen dicarbollylcobaltate in the presence of dibenzo-18-crown-6. Journal of Radioanalytical and Nuclear Chemistry. 2008, roč. 277, č. 3, s. 549-554.
- Makrlík, E., Vaňura, P., Selucký, P. Extraction of microamounts of cesium into nitrobenzene by using sodium, ammonium and thallium dicarbollylcobaltates in the presence of benzo-15-crown-5. Journal of Radioanalytical and Nuclear Chemistry. 2008, roč. 278, č. 1, s. 131-135.
- Makrlík, E., Vaňura, P., Selucký, P. Extraction of microamounts of europium and americium by using hydrogen dicarbollylcobaltate in the presence of dibutyl diethylcarbamoylmethylene phosphonate. Journal of Radioanalytical and Nuclear Chemistry. 2008, roč. 275, č. 2, s. 309-312.

- Makrlík, E., Vaňura, P., Selucký, P. Solvent extraction of Ba²⁺, Pb²⁺ and Cd²⁺ into nitrobenzene by using strontium dicarbollylcobaltate in the presence of tetraethyl p-tert-butylcalix[4]arene tetraacetate. *Acta Chimica Slovenica*. 2008, roč. 55, č. 2, s. 430-433.
- Makrlík, E., Vaňura, P., Selucký, P. Solvent extraction of microamounts of cesium into nitrobenzene by using potassium and rubidium dicarbollylcobaltates in the presence of benzo 15 crown-5. *Journal of Radioanalytical and Nuclear Chemistry*. 2008, roč. 275, č. 1, s. 229-232.
- Makrlík, E., Vaňura, P., Selucký, P. Solvent extraction of microamounts of europium and americium into nitrobenzene by using hydrogen dicarbollylcobaltate in the presence of "classical" CMPO. *Acta Chimica Slovenica*. 2008, roč. 55, č. 1, s. 223-227.
- Mestek, O., Mališová, K., Koplík, R., Polák, J., Suchánek, M. Uncertainty of the concentration of a copper calibration solution. *Accreditation and Quality Assurance*. 2008, roč. 13, č. 6, s. 305-310.
- Mestek, O., Polák, J., Koplík, R., Šantrůček, J., Kodíček, M. Isolation of ligands of trace metals by immobilized metal affinity chromatography. *Anal.Lett.* 2008, roč. 41, č. 8, s. 1459-1467.
- Monte, MJS., Santos, LMNBF., Sousa, CAD., Fulem, M. Vapor pressures of solid and liquid xanthene and phenoxathiin from effusion and static studies. *Journal of Chemical Engineering Data*. 2008, roč. 53, č. 8, s. 1922-1926.
- Morávek, P., Kolafa, J., Francová, M. Fluids of hard nonspherical molecules. II. Monte Carlo data and equation of state. *Collection of Czechoslovak Chemical Communications*. 2008, roč. 73, č. 4, s. 459-480.
- Nový, J., Böhm, S., Králová, J., Král, V., Urbanová, M. Formation and temperature stability of G-quadruplex structures studied by electronic and vibrational circular dichroism spectroscopy combined with ab initio calculations. *Biopolymers*. 2008, roč. 89, č. 2, s. 144-152.
- Ončák, M., Slavíček, P., Poterya, V., Fárník, M., Buck, U. Emergence of Charge-Transfer-to-Solvent Band in the Absorption Spectra of Hydrogen Halides on Ice Nanoparticles: Spectroscopic Evidence for Acidic Dissociation. *Journal of Physical Chemistry A*. 2008, roč. 112, č. 24, s. 5344-5353.
- Pangrác, J., Fulem, M., Hulicius, E., Melichar, K., Šimeček, T., Růžička, K., Morávek, P., Růžička, V., Rushworth, SA. Vapor pressure of germanium precursors. *Journal Cryst.Growth*. 2008, roč. 310, č. 23, s. 4720-4723.
- Pešek, O., Kofránková, V., Schreiberová, L., Schreiber, I. Response dynamics to pulsed perturbations of the hydrogen peroxide-thiosulfate-Cu²⁺ reaction. *Journal of Physical Chemistry A*. 2008, roč. 112, č. 5, s. 826-832.
- Picálek, J., Minofar, B., Kolafa, J., Jungwirth, P. Aqueous solutions of ionic liquids: study of the solution/vapor interface using molecular dynamics simulations. *Physical Chemistry Chemical Physics*. 2008, roč. 10, č. 37, s. 5765-5775.
- Pokorný, P. Stability Condition for Vertical Oscillation of 3-dim Heavy Spring Elastic Pendulum.. Regular and Chaotic Dynamics. 2008, roč. 13, č. 3, s. 155-165.
- Pokorný, P., Klíč, A. Dynamical systems generated by two alternating vector fields. *Eur. Phys. J. Special Topics*. 2008, č. 165, s. 61-71.
- Postler, T., Slouka, Z., Svoboda, M., Přibyl, M., Šnita, D. Parametrical studies of electroosmotic transport characteristics in submicrometer channels. *Journal of Colloid and Interface Science*. 2008, roč. 320, č. 1, s. 321-332.
- Poterya, V., Fárník, M., Ončák, M., Slavíček, P. Water photodissociation in free ice nanoparticles at 243 nm and 193 nm. *Physical Chemistry Chemical Physics*. 2008, roč. 10, č. 32, s. 4835-4842.
- Poterya, V., Votava, O., Fárník, M., Ončák, M., Slavíček, P. Generation and orientation of organoxenon molecule H-Xe-CCH in the gas phase. *Journal of Chemical Physics*. 2008, roč. 128, č. 1, s. 104313-104323.

- Prokopec, V., Čejková, J., Matějka, P., Hasal, P. Preparation of SERS-active substrates with large surface area for Raman spectral mapping and testing of their surface nanostructure. *Surface Interface Anal.*. 2008, roč. 40, č. 3-4, s. 601-607.
- Ramachandran, R., Poor, JMH., Sanders, CFW., Glaser, T., Immanuel, CD., Doyle, FJ., Litster, JD., Štěpánek, F., Wang, F., Cameron, IT. Experimental studies on distributions of granule size, binder content and porosity in batch drum granulation: Inferences on process modelling requirements and process sensitivities. *Powder Technology*. 2008, roč. 188, č. 2, s. 89-101.
- Randová, A. Hovorka, Š., Izák, P., Bartovská, L., Swelling of Nafion in methanol-water-inorganic salt ternary mixtures. *Journal of Electroanalytical Chemistry*. 2008, roč. 616, č. 1, s. 117-121.
- Řezanka, P., Záruba, K., Král, V. A change in nucleotide selectivity pattern of porphyrin derivatives after immobilization on gold nanoparticles. *Tetrahedron Letters*. 2008, roč. 49, č. 45, s. 6448-6453.
- Sedláková, Z., Sauton, H., Hynek, V., Malíjevská, I. Solid-Liquid Equilibrium in the Systems with an Ionic Liquid. *Collection of Czechoslovak Chemical Communications*. 2008, roč. 73, č. 5, s. 657-664.
- Setnička, V., Hlaváček, J., Urbanová, M. Oligopeptide-porphyrin interactions studied by circular dichroism spectroscopy: the effect of metalloporphyrin axial ligands on peptide matrix conformation. *Journal of Porphyrins and Phthalocyanines*. 2008, roč. 12, č. 12, s. 1270-1278.
- Setnička, V., Nový, J., Böhm, S., Sreenivasachary, N., Urbanová, M., Volka, K. Molecular Structure of Guanine-Quartet Supramolecular Assemblies in a Gel-State Based on a DFT Calculation of Infrared and Vibrational Circular Dichroism Spectra. *Langmuir*. 2008, roč. 24, č. 14, s. 7520-7527.
- Shishkanova, T., Matějka, P., Král, V., Šeděnková, I., Trchová, M., Stejskal, J. Optimization of the thickness of a conducting polymer, polyaniline, deposited on the surface of poly(vinyl chloride) membranes: A new way to improve their potentiometric response. *Anal.Chim.Acta*. 2008, roč. 624, č. 2, s. 238-246.
- Schrott, W., Přibyl, M., Štěpánek, J., Šnita, D. Electroosmotic characteristics of polystyrene microchips - experiments and modeling. *Microelectronic Engineering*. 2008, roč. 85, č. 5-6, s. 1100-1103.
- Sievänen, E., Noponen, V., Král, V., Bříza, T., Kolehmainen, E. ¹H,¹³C, ¹⁹F NMR, and ESI mass spectral characterization of two geminal difluorosteroids. *Magnetic Resonance in Chemistry*. 2008, roč. 46, č. 4, s. 392-397.
- Stephens, PJ., Pan, J-J., Devlin, FJ., Urbanová, M., Julínek, O., Hájíček, J. Determination of the Absolute Configurations of Natural Products via Density Functional Theory Calculations of Vibrational Circular Dichroism, Electronic Circular Dichroism, and Optical Rotation: The Iso-Schizozygane Alkaloids Isoschizogaline. *Chirality*. 2008, roč. 20, č. 3-4, s. 454-470.
- Svoboda, M., Slouka, Z., Lindner, J., Šnita, D. Direct evidence of concentration and potential profiles in the electrolyte diode. *Chemical Engineering Journal*. 2008, roč. 135, č. S1, s. 203-209.
- Synytsya, A., Blafková, P., Synytsya, A., Čopíková, J., Spěváček, J., Uher, M. Conjugation of kojic acid with chitosan. *Carbohydrate Polymers*. 2008, roč. 72, č. 1, s. 21-31.
- Šeda, L., Kosek, J. Predictive modeling of ionic permselectivity of porous media. *COMPUTERS & CHEMICAL ENGINEERING*. 2008, roč. 32, č. 1-2, s. 125-134.
- Šeda, L., Zubov, A., Bobák, M., Kosek, J., Kantzas, A. Transport and reaction characteristics of reconstructed polyolefin particles. *Macromolecular Reaction Engineering*. 2008, roč. 2, č. 6, s. 495-512.
- Šmejkal, K., Chudík, S., klouček, R., Cvačka, J., Urbanová, M., Julínek, O., Kokoška, L., Šlapetová, T., Holubová, P., Zima, A., Dvorská, M. Antibacterial C-Geranylflavonoids from Paulownia tomentosa Fruits. *Journal of Natural Products*. 2008, roč. 71, č. 4, s. 706-709.

- Štěpánek, F. Effect of microstructure and pure component properties on the dissolution rate of a binary composite material. Computational Materials Science. 2008, roč. 44, č. 1, s. 145-151.
- Thielmann, F., Naderi, M., Ansari, MA., Štěpánek, F. The effect of primary particle surface energy on agglomeration rate in fluidised bed wet granulation. Powder Technology. 2008, roč. 181, č. 2, s. 160-168.
- Tkadlecová, M., Foltýnová, J., Valík, M., Král, V. Spectroscopic binding studies of novel fluorescent distamycin derivatives. Tetrahedron Letters. 2008, roč. 49, č. 2, s. 323-326.
- Turzík, D., Dubcová, M. Stability of Steady State and Traveling Waves Solutions in Coupled Map Lattices. International Journal of Bifurcation and Chaos. 2008, roč. Vol. 18, č. No.1, s. 219-225.
- Vinšová, H., Křížová, V., Kolaříková, I., Adamcová, J., Přikryl, R., Zeman, J. The influence of temperature and hydration on the sorption properties of bentonite. Journal of Environmental Radioactivity. 2008, roč. 99, č. 2, s. 415-425.
- Voňka, P., Leitner, J., Sedmidubský, D. Topology of Potential Phase Diagrams of Partially Open Condensed System. Collection of Czechoslovak Chemical Communications. 2008, roč. 73, č. 3, s. 372-387.
- Vrbka, P., Dohnal, V. Limiting activity coefficients in binary mixtures of 1-alkanols and ethylbenzene. Fluid Phase Equilibria. 2008, roč. 263, č. 1, s. 64-70.
- Vrňata, M., Kopecký, D., Vysloužil, F., Myslik, V., Fitl, P., Ekrt, O., Hofmann, J. Impedance properties of polypyrrolic sensors prepared by MAPLE technology. Sensors and Actuators B. 2008, roč. 137, č. 1, s. 88-93.
- Warren, P., Štěpánek, F. Wall shear rate distribution for flow in random sphere packings. Physical Review Letters. 2008, roč. 100, č. 8, s. 084501-084501.

Kniha-celek

- Botek, M. Manažerský bedekr. Brno : Tribun, 2008. 121 s. ISBN: 978-80-7399-542-3.
- Gros, I. Matematické modely pro manažerské rozhodování. Praha : VŠCHT Praha, 2008. 265 s. ISBN: 978-80-7080-709-5.

Kniha-kapitola

Botek, M. Efficiency evaluation of Department of Human Resources. In New Trends&Challenges in Management. Warsaw : University of Finance and Management in Warsaw, 2008, s. 177-183.

Malijevský, A., Kolafa, J. Introduction to the Thermodynamics of Hard Spheres and Related Systems. In Theory and simulation of hard-sphere fluids and related systems (Angel Mulero, ed.). Berlin, Heidelberg : Springer-Verlag, 2008, s. 27-36.

Malijevský, A., Kolafa, J. Structure of Hard Spheres and Related Systems. In Theory and simulation of hard-sphere fluids and related systems (Angel Mulero, ed.). Berlin, Heidelberg : Springer-Verlag, 2008, s. 1-26.

Přibyl, M., Šnita, D., Marek, M. Multiphysical modeling of DC and AC electroosmosis. In Recent advantages in modelling and simulation. Vídeň : I-Tech Education and Publishing, 2008, s. 501-522.

Vegnerová, P., Dyntar, J. Případové studie - Matematické modely pro manažerské rozhodování. In Matematické modely pro manažerské rozhodování. Praha : VŠCHT Praha, 2008, s. 1-20.

Patent

Král, V., Bříza, T., Kejík, Z., Králová, J. Poučková, P., Kombinovaný přístup k léčbě nádorových onemocnění. VŠCHT Praha. 2008.

Řezanka, P., Záruba, K.Král, V., Modifikované nanočástice a jejich terapeutické, diagnostické a analytické použití. VŠCHT Praha. 2008.

Řezanka, P., Záruba, K., Král, V. Modifikované nanočástice a jejich terapeutické, diagnostické a analytické použití. VŠCHT Praha. 2008.