

Publications:

1. N.V. Avramenko, A.L. Mirakyan, M.V. Korobov, E.B. Stukalin, Thermochemistry of solvated crystals of C_{60} and C_{70} with o-xylene. *J. Therm. Anal.*, **52**, 831-836, (1998).
2. M.V. Korobov, V.M. Senyavin, E.B. Stukalin, O.P. Pronina, N.V. Avramenko, V.A. Davydov, L.S. Kashevarova, A.V. Rakhmanina, V. Agafonov, A. Szwarc, DSC and IR study of phase transformations of pressure-polymerized C_{60} , in «Fullerenes for the New Millenium», P.V. Kamat, D.M. Guldi, K.M. Kadish., editors, ECS, Vol. 11, PV 2001-11, 416-425, (2001).
3. E.B. Stukalin, M.V. Korobov, N.V. Avramenko, and R. Ruoff, Ternary System of C_{60} and C_{70} with 1,2-Dimethylbenzene, *Fullerene Science and Technology*, **9**, 113-130, (2001).
4. N.V. Avramenko, E.B. Stukalin, M.V. Korobov, I.S. Neretin, Yu.L. Slovokhotov. Binary systems of C_{60} with positional isomers 1,2- and 1,3- $C_6H_4Br_2$. *Thermochimica Acta*, **370**, 21-28, (2001).
5. Y. Marcus, A.L. Smith, M.V. Korobov, A.L. Mirakyan, N.V. Avramenko, E.B. Stukalin, Solubility of a C_{60} Fullerene. *J. Phys. Chem. B*, **105**, 2499-2506, (2001).
6. M.V. Korobov, V.M. Senyavin, E.B. Stukalin, A.G. Bogachev, N.V. Avramenko, V.A. Davydov, L.S. Kashevarova, A.V. Rakhmanina, A.V. Dzyabchenko, V. Agafonov, A. Szwarc, Phase transformations in pressure polymerized C_{60} : enthalpies and kinetic parameters, in «The exciting world of Nanocages and Nanotubes», P. Kamat, D. Guldi, K. Kadish, editors, Fullerenes V.12, ECS, PV 2002-12, 776-787, (2002).
7. M.V. Korobov, E.B. Stukalin, N.I. Ivanova, N.V. Avramenko, G.V. Andrievsky, DSC study of C_{60} – water system: unexpected peaks, in «The exciting world of Nanocages and Nanotubes», P. Kamat, D. Guldi, K. Kadish, editors, Fullerenes V.12, ECS, PV 2002-12, 799-814, (2002).
8. M.V. Korobov, V.M. Senyavin, A.G. Bogachev, E.B. Stukalin, V.A. Davydov, L.S. Kashevarova, A.V. Rakhmanina, V. Agafonov, A. Szwarc. Phase transformations in pressure polymerized C_{60} , *Chem. Phys. Lett.*, **381**, 410-415, (2003).
9. M.V. Korobov, E.B. Stukalin, A.L. Mirakyan, I.S. Neretin, Yu.L. Slovokhotov, A.V. Dzyabchenko, A.I. Ancharov, B.P. Tolochko. New solid solvates of C_{60} and C_{70} fullerenes: The relationship between structures and lattice energies. *Carbon*, **41**, 2743-2755, (2003).
10. E.B. Stukalin, M.V. Korobov, N.V. Avramenko. Solvation free energies of the fullerenes C_{60} and C_{70} in the framework of polarizable continuum model. *J. Phys. Chem. B*, **107**, 9692-9700, (2003).
11. E.B. Stukalin, A.B. Kolomeisky. Simple growth models of rigid multifilament biopolymers. *J. Chem. Phys.*, **121**, 1097-1104 (2004).
12. M.V. Korobov, A.G. Bogachev, A.A. Popov, V.M. Senyavin, E.B. Stukalin, A.V. Dzyabchenko, V.A. Davydov, L.S. Kashevarova, A.V. Rakhmanina, V. Agafonov. Relative stability of polymerized phases of C_{60} : Depolymerization of tetragonal phase, *Carbon*, **43**, 954-961, (2005).

13. A.B. Kolomeisky, E.B. Stukalin, A.A. Popov. Understanding mechanochemical coupling in kinesins using first-passage-time processes. *Phys. Rev. E*, **71**, 031902 (2005).
14. E.B. Stukalin, H. Phillips III, A.B. Kolomeisky. Coupling of two motor proteins: a new motor can move faster, *Phys. Rev. Lett.*, **94**, 238101 (2005).
15. E.B. Stukalin, A.B. Kolomeisky. Polymerization dynamics of double-stranded biopolymers: chemical kinetic approach. *J. Chem. Phys.*, **122**, 104903 (2005).
16. E.B. Stukalin, A.B. Kolomeisky. ATP hydrolysis stimulates large length fluctuations in single actin filaments, submitted to *Biophys. J.* (2005). <http://arxiv.org>

Contributed presentations:

1. Fullerene solvation free energy modeling. XIV Conference on Chemical Thermodynamics, July 1-5, 2002, St. Petersburg, Russia.
2. Understanding mechanochemical coupling in kinesins using first-passage times. Proteomics: Sequence, Structure Function. Workshop IV: Molecular Machines, IPAM, University of California, Los Angeles, May 24-28, 2004.
3. Dynamic properties of single actin filaments. 49-th Annual Biophysical Society Meeting, Long Beach, California, February 12-16, 2005.