

Contents

Vol. 4, Nos. 9–10, 2009

A simultaneous English language translation of this journal is available from Pleiades Publishing, Ltd.
Distributed worldwide by Springer. *Nanotechnologies in Russia* ISSN 1995-0780.

Reviews

Fullerenes in the Drug Design <i>L. B. Piotrovskii</i>	541
Composition Materials Based on Elastomer and Polymer Matrices Filled with Nanodiamonds of Detonation Synthesis <i>V. Yu. Dolmatov</i>	556
Nanoparticles in Dendrimers: From Synthesis to Application <i>L. M. Bronstein and Z. B. Shifrina</i>	576

Articles

On the Photochemistry of Impurity Molecules in a Photonic Crystal <i>V. G. Plotnikov, V. A. Smirnov, and M. V. Alfimov</i>	609
The Formation of the Developed Nanorelief on Deposited Films <i>Yu. V. Martynenko and M. Yu. Nagel</i>	612
The Influence of Interparticle Potential Form on Structure Transformations in Metallic Clusters <i>D. K. Belashchenko, A. N. Sirenko, and D. L. Tytik</i>	618
The Field Emission Properties of Carbon Nanotubes and SiC Whiskers Synthesized over Ni Particles Deposited in Ion Tracks in SiO ₂ <i>A. V. Okotrub, A. G. Kurennya, A. V. Gusel'nikov, A. G. Kudashov, L. G. Bulusheva, A. S. Berdinskii, Yu. A. Ivanova, D. K. Ivanov, E. A. Strel'tsov, D. Fink, A. V. Petrov, and E. K. Belonogov</i>	627
The Formation and Properties of One-Dimensional FeHal ₂ (Hal = Cl, Br, I) Nanocrystals in Channels of Single-Walled Carbon Nanotubes <i>M. V. Kharlamova, M. M. Brzhezinskay, A. S. Vinogradov, I. P. Suzdalev, Yu. V. Maksimov, V. K. Imshennik, S. V. Novichikhin, A. V. Krestinin, L. V. Yashina, A. V. Lukashin, Yu. D. Tretyakov, and A. A. Eliseev</i>	634
Nanosized Catalysts in Fine Organic Synthesis as a Basis for Developing Innovative Technologies in the Pharmaceutical Industry <i>P. M. Valetsky, M. G. Sulman, L. M. Bronstein, E. M. Sulman, A. I. Sidorov, and V. G. Matveeva</i>	647
Hypercrosslinked Polystyrene: The First Nanoporous Polymeric Material <i>M. P. Tsyurupa, Z. K. Blinnikova, N. A. Proskurina, A. V. Pastukhov, L. A. Pavlova, and V. A. Davankov</i>	665
Molecular Dynamics Simulation of Thermo-Mechanical Properties of Montmorillonite Crystal <i>M. A. Mazo, L. I. Manevich, and N. K. Balabaev</i>	676
Formation of Silver Nanoparticles in PVP Matrix in Supercritical CO ₂ : Small-Angle X-ray Scattering and Modeling <i>E. V. Shtykova, K. A. Dembo, V. V. Volkov, E. E. Said-Galiev, A. I. Stakhanov, and A. R. Khokhlov</i>	700

Dynamic Monitoring and Optimization of Track Membrane Irradiation <i>A. A. Baldin and E. G. Baldina</i>	711
Kinetics of the Direct Energy Transfer of Optical Excitation in Crystalline Nanoparticles: Theory and Monte Carlo Computer Simulation <i>N. A. Glushkov, T. T. Basiev, and Yu. V. Orlovskii</i>	722
An Examination of the Ability of Titanium Dioxide Nanoparticles and Its Conjugates with Oligonucleotides to Penetrate into Eucariotis Cells <i>V. F. Zarytova, V. V. Zinov'ev, Z. R. Ismagilov, A. S. Levina, M. N. Repkova, N. V. Shikina, A. A. Evdokimov, E. F. Belanov, S. M. Balakhnin, O. A. Serova, S. I. Baiborodin, E. G. Malygin, and S. N. Zagrebel'nyi</i>	732

Brief Communications

Preparing Film Composites Based on Crazed Polymers and Silica Sol Nanoparticles <i>E. S. Trofimchuk, N. I. Nikonorova, E. A. Nesterova, A. M. Muzafarov, I. B. Meshkov, A. L. Volynskii, and N. F. Bakeev</i>	736
--	-----
