

Contents

Vol. 51, No. 8, Series A, 2009

A simultaneous English language translation of this journal is available from Pleiades Publishing, Ltd.
Distributed worldwide by Springer. *Polymer Science, Series A* ISSN 0965-545X.

Journal Jubilee

- Quantum Vibration Dynamics and Deformation of Skeleton of Polymer Molecules
V. I. Vettegren' and V. B. Kulik 849
-

Solutions

- Phase Diagrams and the Thermodynamic Flory–Huggins Interaction Parameter
of Deformed Solutions of Polymers
S. A. Vshivkov 858
-

Structure, Properties

- Complexation in the Polyacrylonitrile–Amide Solvent–PtCl₄ System
G. N. Bondarenko, M. N. Efimov, L. M. Zemtsov, and G. P. Karpacheva 864
- Microstructure of Polyisoprene Produced by Cationic Polymerization: NMR Spectroscopic Study
V. A. Rozentsvet, A. S. Khachaturov, and V. P. Ivanova 870
- Manifestation of the Monoclinic Phase in IR Spectra of Ultrahigh-Molecular-Weight Polyethylene
V. A. Aulov and I. O. Kuchkina 877
- Initial Stages of Growth of Poly(*p*-xylylene) Coatings: AFM Study
*D. R. Strel'tsov, E. I. Grigor'ev, P. V. Dmitryakov, N. A. Erina,
K. A. Mailyan, A. V. Pebalk, and S. N. Chvalun* 881
- Specific Features of the Melting of Poly(ethylene terephthalate) After
Its Thermal and Mechanical Treatment
V. M. Egorov, Yu. M. Boiko, and V. A. Marikhin 891
- Morphological, Thermal, and Conductivity Studies of Poly(methyl methacrylate)/Polyaniline
Dodecylbenzenesulfonate Blends
Abdul Shakoor, Tasneem Zahra Rizvi, and Hafeez Anwar 898
-

Blends

- Evolution of the Structure and Phase State in Nonequilibrium Heterogeneous Polymer Systems
N. V. Babkina, Yu. S. Lipatov[†], T. T. Alekseeva, and N. V. Yarovaya 904
-

Rheology

- Gel Formation of Solutions of Fibrillar Proteins During Flow in a Longitudinal Field
A. A. Kholmuminov, S. O. Eshbekova, and A. Ya. Malkin 912
- Solid-Phase Extrusion of Polyamide under Simple Shear
V. A. Beloshenko, A. V. Voznyak, and Yu. V. Voznyak 916
- Effect of Wall Slip on the Shear Flow of a Polymer
in a Channel with a Wavy Bottom
I. V. Kravchenko and S. A. Patlazhan 923

Theory, Modeling

The Theory of Viscoelastic Characteristics of a Highly Stretched Macromolecule
in Single Molecule AFM

D. A. Markelov, I. M. Neelov, A. I. Neelov, Yu. Ya. Gotlib, and A. A. Darinskii

940

Monte Carlo Simulation of a Polymer-Analogous Reaction in a Polymer Blend

A. V. Chertovich, D. V. Guseva, E. N. Govorun, Ya. V. Kudryavtsev, and A. D. Litmanovich

957
