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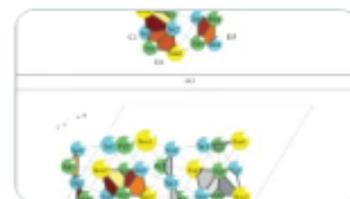


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**Cluster Self-Organization of Intermetallic Systems:  
Precursor Clusters K3, K4, K5, and K6 in the Self-Assembly  
of Crystalline Structures  $\text{Sm}_6\text{Pd}_{10}\text{Sn}_{11}-mS54$  and  
 $\text{Sm}_3\text{Pd}_5\text{Sn}_5-mS52$**

G. D. Ilyushin

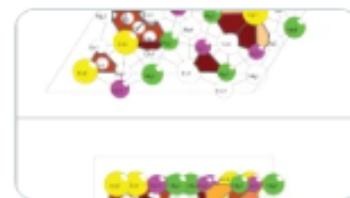
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**Cluster Self-Organization of Intermetallic Systems:  
Precursor Clusters K3, K4, K5, and K6 for the Self-Assembly  
of Crystal Structures  $(\text{Ce}_4\text{Mg}_7\text{Ge}_6)_2-mS34$ ,  $(\text{Eu}_4\text{Li}_7\text{Bi}_6)_2-mS34$ , and  
 $\text{Li}_{13}\text{Ba}_8\text{GaSb}_{12}-mS34$**

G. D. Ilyushin

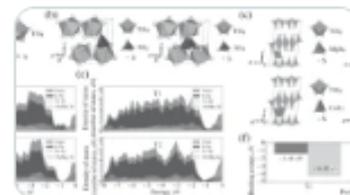
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**Ab Initio Study of  $\text{Mg}^{2+}$  and  $\text{Ca}^{2+}$  Intercalation in  $\text{TiS}_3$**

M. Yu. Arsent'ev, M. M. Sychev ... S. V. Balabanov

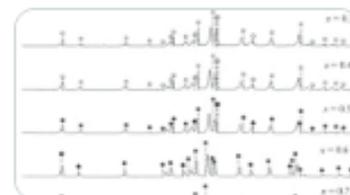
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**Vaporization and Thermodynamic Properties of the SrO–  
BaO– $\text{Al}_2\text{O}_3$ – $\text{SiO}_2$  System Based on High-Temperature Mass  
Spectrometry Data**

E. A. Balabanova, S. I. Lopatin ... Z. G. Tyurnina

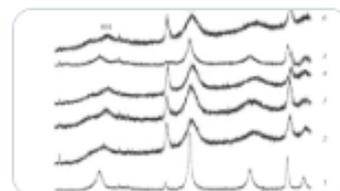
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## **Formation and Thermal Properties of Hydrosilicates with a Chrysotile Structure in the MgO–NiO–MeO–Me'O–SiO<sub>2</sub>–H<sub>2</sub>O (NaOH) System, Where Me and Me' Are Cu and/or Fe, Using Mixed Metal Hydroxides as Reagents**

E. N. Gatina, V. L. Ugolkov ... A. A. Osminina

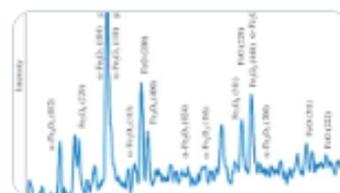
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## **Light-Absorbing Composites Based on an Epoxy Polymer and FeO**

S. K. Evstrop'ev, D. V. Bulyga ... G. S. Polishchuk

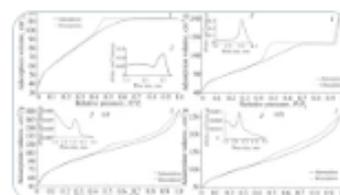
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## **Thermal Insulation Materials Based on ZrO<sub>2</sub>–Y<sub>2</sub>O<sub>3</sub>–Yb<sub>2</sub>O<sub>3</sub>**

N. Yu. Fedorenko, O. L. Belousova ... A. S. Dolgin

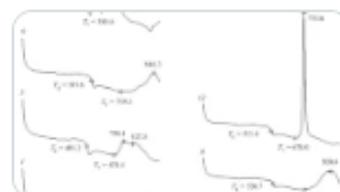
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## **Bioactivity of Low-Silica Glasses in the Na<sub>2</sub>O–CaO–ZnO–SiO<sub>2</sub>–P<sub>2</sub>O<sub>5</sub> System**

M. V. Dyadenko, I. A. Levitskii ... A. D. Podsoonnaya

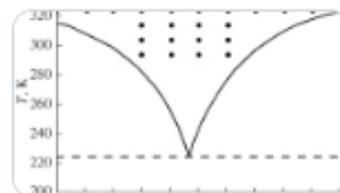
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## **On the Density and Intermolecular Interaction in the Eutectic System Thymol–L-Menthol**

G. Kh. Misikov, A. V. Petrov & A. M. Toikka

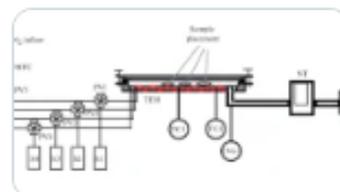
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## **Photocatalytic Properties of Quartz Glass with Titanium Oxide Coatings of Varying Thicknesses, Synthesized by Molecular Layer Deposition**

A. V. Moskalev, A. S. Saratovskij & A. A. Malygin

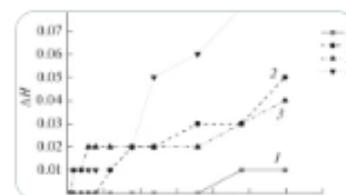
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## Influence of Synthesis Conditions on the Functional Composition of the Surface of Cesium-Containing Quartzoid Glasses

T. A. Tsyganova, Ya. P. Lushankin ... I. N. Anfimova

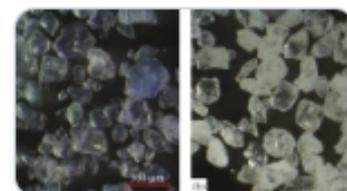
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## Structural Transformations of High-Purity Xerogel SiO<sub>2</sub> in the Temperature Range of 300–1200°C

A. S. Burdina, K. N. Generalova ... I. V. Ryapsov

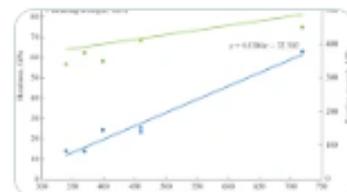
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## Dependence of the Elastic Modulus of a Diamond–Silicon Carbide Composite Material on Its Phase Composition

M. M. Sychev, A. S. Dolgin & S. P. Bogdanov

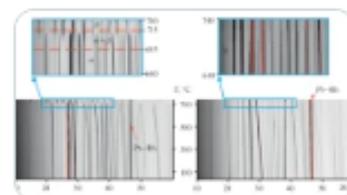
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## Thermal Structural Evolution and Optical Properties of Isosymmetric Nonlinear-Optical Borates α- and β-RbB<sub>3</sub>O<sub>5</sub>

G. S. Sizov, A. V. Povolotskiy ... S. K. Filatov

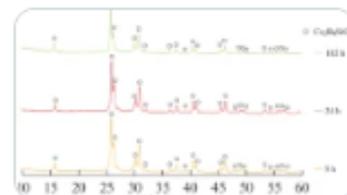
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## Thermal Behavior of Cs<sub>2</sub>B<sub>4</sub>SiO<sub>9</sub>

E. S. Derkacheva, V. L. Ugolkov ... K. M. Terent'eva

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## Impact of ZnO on Physical, Structural, and Optical Properties of Sodium Strontium Borate Glasses

Harjeet Kaur, Raghav Goyal ... Supreet Pal Singh

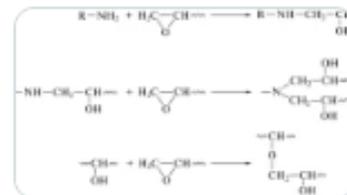
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## Development of Epoxy Modified SiO<sub>2</sub> Hydrophobic Coating with Enhanced Self-Cleaning Properties

Kong Que, Li Jiefang & Li Zhiguang

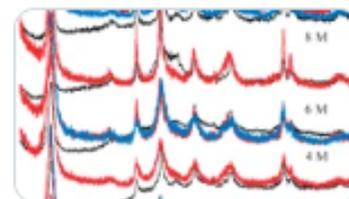
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## Hydrothermal Synthesis of Cobalt-Containing Potassium Titanate Nanoparticles

N. V. Besprozvannykh, O. G. Miroshnikova ... O. Yu. Sinel'shchikova

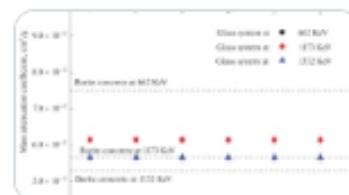
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## Investigation of the Effect of Manganese in Bismuth-Borate Glass System for Gamma-Ray Shielding: A Theoretical and Experimental Correlation

Mehul Nayyar, Nikhil Saroch ... Vikas Anand

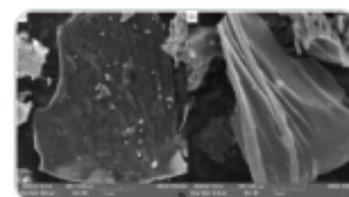
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## Influence of the Functional Composition of the Surface of Carbon Nanofillers on the Physical and Mechanical Properties of Thermoelastoplastic Elastomers Developed for 3D Printing

M. V. Timoshenko, S. V. Myakin ... M. M. Sychev

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## Aerodynamic Levitation Melt-Quenching Fabricated Tb<sup>3+</sup>-Doped La<sub>2</sub>O<sub>3</sub>-TiO<sub>2</sub>-Ga<sub>2</sub>O<sub>3</sub>-ZrO<sub>2</sub> Glass with a High Verdet Constant for Photonic Applications

Abdus Samad Shohan, Yu Chao ... Sijie Yang

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