

Contents

Vol. 49, No. 2, 2007

Simultaneous English language translation of the journal is available from Pleiades Publishing, Inc.
Distributed worldwide by Springer. *Radiochemistry* ISSN 1066-3622

Synthesis and Study of Np(V) Sesquioxalates <i>N. N. Krot, A. A. Bessonov, I. A. Charushnikova, and V. I. Makarenkov</i>	107
Crystal Structure of a Np(V) Sesquioxalate, $\text{Na}_4(\text{NpO}_2)_2(\text{C}_2\text{O}_4)_3 \cdot 2\text{H}_2\text{O}$ <i>I. A. Charushnikova, N. N. Krot, and I. N. Polyakova</i>	112
Synthesis and Crystal Structure of New Np(VI) and Pu(VI) Phthalates, $\text{Na}_4\{\text{AnO}_2[(\text{OOC})_2\text{C}_6\text{H}_4]_3\} \cdot n\text{H}_2\text{O}$ <i>I. A. Charushnikova, N. N. Krot, I. N. Polyakova, and Z. A. Starikova</i>	117
Synthesis of Pu(V) Sulfates <i>N. N. Krot, A. A. Bessonov, M. S. Grigor'ev, and V. I. Makarenkov</i>	123
Synthesis and Study of Compounds $\text{A}_2^{\text{I}}(\text{UO}_2)_2\text{Si}_5\text{O}_{13} \cdot 3\text{H}_2\text{O}$ ($\text{A}^{\text{I}} = \text{Na}, \text{K}$) <i>N. G. Chernorukov, A. V. Knyazev, and A. A. Sazonov</i>	127
Mechanism and Kinetics of Thermal Decomposition of Uranyl Nitrate Hexahydrate under the Nonisothermal Conditions <i>R. D. Kozlova, V. A. Matyukha, and N. V. Dedov</i>	130
Stability of Actinide(III, IV) and Lanthanide(III, IV) Complexes with $\text{P}_2\text{W}_{17}\text{O}_{61}^{10-}$ Heteropolyanions <i>A. B. Yusov, V. P. Shilov, and A. M. Fedoseev</i>	135
Interaction of U(VI), Np(VI), and Pu(VI) Ions with Unsaturated Heteropolytungstates of the 17th and 11th Series in Aqueous Solutions <i>A. B. Yusov and V. P. Shilov</i>	144
Formal Oxidation Potentials of Actinide Couples in $\text{K}_{10}\text{P}_2\text{W}_{17}\text{O}_{61}$ Solutions <i>A. B. Yusov, V. P. Shilov, and A. M. Fedoseev</i>	152
Prospects for Development of a Process for Recovering Technetium from Spent Fuel of Nuclear Power Plants <i>B. Ya. Zilberman, Yu. A. Pokhitonov, M. Yu. Kirshin, M. Ozawa, and A. A. Blokhin</i>	156
Separation of U, Pu, and Am Recovered from Mixed Oxide (MOX) Fuel by Countercurrent Chromatography <i>M. N. Litvina, D. A. Malikov, T. A. Maryutina, Yu. M. Kulyako, and B. F. Myasoedov</i>	162
Effect of Fe(III) on the Extraction of U(VI), Th(IV), and REE(III) from HCl Solutions with Diphenyl(dibutylcarbamoylmethyl)phosphine Oxide <i>A. N. Turanov, V. K. Karandashev, A. N. Yarkevich, and Z. V. Safronova</i>	166
Extraction of U(VI) with Antipyrine in the Presence of Aminone Pyrazolone Dye <i>G. E. Shestakova, A. E. Lesnov, and N. V. Bryzgalova</i>	171
Sorption of $^{131}\text{I}_2$ and $\text{CH}_3^{131}\text{I}$ from Gas–Water Vapor Medium with Porous Inorganic Sorbents Containing <i>d</i> Elements <i>S. A. Kulyukhin, L. V. Mizina, N. V. Tanashchuk, I. A. Rumer, N. A. Konovalova, and V. V. Sergeev</i>	174
Determination of Radiochemical and Radionuclide Purity of a ^{131}I Preparation <i>I. V. Tselishchev, Yu. P. Savochkin, M. I. Mel'nik, and T. F. Trepalina</i>	178
Nonequilibrium Processes in Reactions of Hot Tritium Atoms with Cooled Solid Targets. Attenuation of the Flow of Tritium Atoms in Adsorption Layers of Alkyltrimethylammonium Bromides <i>Z. A. Tyasto, E. V. Mikhulina, M. G. Chernysheva, and G. A. Badun</i>	182

Nonequilibrium Processes in Reactions of Hot Tritium Atoms with Cooled Solid Targets. Influence of the Atomizer Temperature on Formation of Labeled Substances <i>M. G. Chernysheva, G. A. Badun, Z. A. Tyasto, V. Yu. Pozdnyakova, V. M. Fedoseev, and A. L. Ksenofontov</i>	186
Global ^{137}Cs as a Sediment Marker in Deep Lakes <i>N. A. Bakunov and D. Yu. Bol'shiyanov</i>	190
Dynamics of Gleyzation-Mediated Leaching of Radiostrontium from Soils <i>E. K. Legin, Yu. I. Trifonov, M. L. Khokhlov, D. N. Suglovov, and E. E. Legina</i>	194
Semipermeable Dynamic Membranes for Ultrafiltration Treatment of Ground Waters to Remove Radionuclides <i>L. I. Rudenko, O. V. Dzhuzha, and V. E. Khan</i>	201
Simulation of the Distribution of Radionuclides in the Reservoir Bed for Deep-Well Injection Disposal of Acid Liquid Radioactive Waste <i>M. D. Noskov, A. D. Istomin, A. G. Kesler, A. A. Zubkov, E. V. Zakharova, and G. F. Egorov[†]</i>	204
Further Development of Express Chromatographic Radiochemical Analysis as Applied to Process and Radioecological Monitoring in Nuclear Power Engineering <i>V. N. Epimakhov and L. N. Moskvina</i>	210
Grigorii Nikolaevich Yakovlev (December 29, 1914–November 26, 2006)	215
