

Contents

Vol. 49, No. 3, 2007

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

Crystal Structure of a Pu(VII) Potassium Salt, $K_3PuO_4(OH)_2 \cdot 2H_2O$ <i>I. A. Charushnikova, N. N. Krot, Z. A. Starikova, and I. N. Polyakova</i>	217
Synthesis and Study of New Complex Pu(V) and Np(V) Acetates <i>A. A. Bessonov, N. N. Krot, I. A. Charushnikova, and V. I. Makarenkov</i>	222
Synthesis and Characteristics of Double Np(VI) and Pu(VI) Phthalates of the Composition $M_2AnO_2(C_8H_4O_4)_2 \cdot nH_2O$ ($M = NH_4, K, \text{ and } Cs$) <i>N. N. Krot, I. A. Charushnikova, A. A. Bessonov, and M. S. Grigor'ev</i>	229
Formation–Decomposition Equilibrium of the $NpO_2^+ \cdot UO_2^{2+}$ Complex in Chloride Melts <i>Yu. A. Barbanel', R. B. Dushin, V. V. Kolin, V. P. Kotlin, L. G. Mashirov, and S. N. Nekhoroshkov</i>	237
Recovery of Actinides from Their Dioxides Using Organic Reagents Saturated with Nitric Acid <i>Yu. M. Kulyako, T. I. Trofimov, M. D. Samsonov, and B. F. Myasoedov</i>	241
Recovery of Actinides from Their Dioxides Using Supercritical CO_2 Containing the Adduct of Tributyl Phosphate with Nitric Acid <i>M. D. Samsonov, T. I. Trofimov, Yu. M. Kulyako, and B. F. Myasoedov</i>	246
Extraction of Alkaline-Earth Elements from Nitric Acid with a Solution of HDBP Zirconium Salt <i>O. V. Shmidt, B. Ya. Zilberman, Yu. S. Fedorov, O. N. Egorova, Yu. V. Palenik, and G. R. Choppin</i>	251
Extraction of U(VI), Th(IV), and Rare-Earth Elements from Nitric Acid Solutions with Phosphoryl- and Carbonyl-Containing Podands <i>A. N. Turanov, V. K. Karandashev, and V. E. Baulin</i>	256
Extraction of Rare-Earth Elements from Nitric Acid Solutions with Polyalkylphosphonitric Acid <i>A. N. Turanov, V. K. Karandashev, N. I. Rodygina, and A. M. Fedoseev</i>	264
Extraction of Uranyl, La(III), and Y(III) Nitrates with a Composite Solid Extractant Based on a Polymeric Support Impregnated with Trialkylmethylammonium Nitrate <i>A. K. Pyartman, V. A. Keskinov, V. V. Lishchuk, A. V. Konstantinova, and V. V. Belova</i>	268
Extraction of Uranyl, La(III), and Y(III) Nitrates with a Composite Solid Extractant Based on a Polymeric Support Impregnated with Trialkylamine <i>A. K. Pyartman, V. V. Lishchuk, and V. A. Keskinov</i>	273
Kinetics of REE Separation by Nonequilibrium Extraction at Oscillating Temperature <i>A. A. Kopyrin, A. A. Fomichev, and M. A. Afonin</i>	277
Extraction Methods in Development of Gd-Loaded Liquid Scintillators for Detection of Low-Energy Antineutrino: 1. Gadolinium Extraction with Carboxylic Acids <i>N. A. Danilov, A. Yu. Tsivadze, Yu. S. Krylov, G. V. Kostikova, I. R. Barabanov, L. B. Bezrukov, G. Ya. Novikova, E. A. Yanovich, N. P. Nesterova, C. Cattadori, and A. Di Vacri</i>	281
Transmutation of ^{99}Tc and Preparation of Artificial Stable Ruthenium: I. Transmutation of Metallic ^{99}Tc in a High-Flux SM Reactor <i>V. A. Tarasov, E. G. Romanov, Yu. G. Toporov, V. M. Radchenko, K. V. Rotmanov, L. S. Lebedeva, A. A. Kozar', and V. F. Peretrukhin</i>	289
Influence of Sn^{2+} Concentration on Complexation of ^{99m}Tc with Potassium Sodium Hydroxyethylidenediphosphonate <i>V. M. Petriev, V. G. Skvortsov, and T. P. Ryzhikova</i>	293

²⁵² Cf-Based Generator of Radioactive Xenon Isotopes <i>Yu. V. Dubasov, N. V. Skovorodkin, and E. I. Biryukov</i>	297
Use of 2-[¹⁸ F]Fluoroethyl Bromide in Synthesis of O-(2'-[¹⁸ F]Fluoroethyl)-L-tyrosine, a Radiotracer for PET Diagnostics of Brain Tumors <i>N. A. Gomzina, D. A. Vasil'ev, and R. N. Krasikova</i>	299
Sorption-Barrier Properties of Granitoids and Andesite-Basaltic Metavolcanites with Respect to Am(III) and Pu(IV): 1. Absorption of Am and Pu from Groundwater on Monolithic Samples of Granitoids and Andesite-Basaltic Metavolcanites <i>E. B. Anderson, Yu. M. Rogozin, E. A. Smirnova, R. V. Bryzgalova, N. R. Andreeva, S. I. Malimonova, S. I. Shabalev, Ai Fujiwara, and O. Tochiyama</i>	305
Sorption-Barrier Properties of Granitoids and Andesite-Basaltic Metavolcanites with Respect to Am(III) and Pu(IV): 2. Absorption of Am and Pu from Groundwater on Crushed Samples of Granitoids and Andesite-Basaltic Metavolcanites and Also on Their Rock-Forming Minerals <i>E. B. Anderson, Yu. M. Rogozin, E. A. Smirnova, R. V. Bryzgalova, N. R. Andreeva, S. I. Malimonova, S. I. Shabalev, Ai Fujiwara, and O. Tochiyama</i>	313
Inorganic Sorbents Based on Modified Microspheres for Treatment of Liquid Radioactive Waste <i>L. D. Danilin and V. S. Drozhzhin</i>	319
Viktor Ivanovich Spitsyn (1902–1988) (to 105th Anniversary of His Birth) <i>Yu. M. Kiselev</i>	323
<i>Nepovtorimye cherty talanta. Boris Vasil'evich Kurchatov: dokumenty, vospominaniya, izbrannye nauchnye trudy</i> (Unique Traits of Talent. Boris Vasil'evich Kurchatov: Documents, Memoirs, Selected Scientific Works), Kuznetsova, R.V., Executive Editor; Pchelin, V.A., Scientific Editor Moscow: IzdAT, 2005, 751 pp. <i>Yu. V. Sivintsev</i>	324
