

ANALYTICAL INSTRUMENT MAKING FOR BIOTECHNOLOGIES

CONTENTS

MASS SPECTROMETRY

Method ECD / ETD fragmentation of the phosphopeptides in modern tandem mass spectrometry <i>I. A. Krasnov, M. A. Gavrik, E. P. Podolskaya, N. V. Krasnov</i>	5
Analysis of cyanotoxines using an LTQ ORBITRAP (Thermo Finnigan): the optimization of mass-spectrometry method <i>E. N. Chernova, Ya. V. Russkikh, E. P. Podolskaya, Z. A. Zhakovskaya, V. S. Tsarev, G. I. Kukhareva</i>	20
Application of chromato-mass-spectrometer of high resolution LTQ ORBITRAP for determination of perfluorinated acids in natural water with the traditional solid-phase and metall-affine sorbents: method development and optimization <i>E. N. Chernova, O. A. Keltsieva, V. D. Gladilovich, Ya. V. Russkikh, N. G. Sukhodolov, A. A. Selutin, V. A. Nikiforov, Z. A. Zhakovskaya, E. P. Podolskaya</i>	30
Identification of cyanide adduct with human serum albumin using mass-spectrometry <i>Ya. A. Dubrovskiy, E. A. Murashko, M. Yu. Kombarova, E. P. Podolskaya, V. N. Babakov, N. V. Krasnov, A. S. Radilov</i>	38
The development of HPLC-ESI-MS(+) method for ursodeoxycholic acid analysis <i>I. A. Krasnov, D. E. Bobkov, M. Zaitseva, S. S. Prisyach, N. V. Krasnov</i>	44
Ion's separation in the static fields: quadrupole electric and homogeneous magnetic <i>Yu. K. Golikov, N. K. Krasnova, V. I. Nikolaev, K. V. Solovyev</i>	52
Planar electrostatic ion Z^2 traps <i>V. A. Elokhin, Yu. K. Golikov, K. V. Solovyev</i>	61
New dynamic mass spectrometer with electric impulse <i>N. K. Krasnova, Yu. K. Golikov, V. A. Elokhin, V. I. Nikolaev</i>	68

CHROMATOGRAPHY, PCR, DNA ANALYSIS

Immobilized metal ion affinity chromatography (IMAC). Principle and applications <i>O. A. Keltsieva, V. D. Gladilovich, E. P. Podolskaya</i>	74
New materials received by the Langmuir—Blodgett method and their application in nanotechnology and instrument (Part 1. Hybrid materials) <i>N. G. Sukhodolov, N. S. Ivanov, E. P. Podolskaya</i>	86
Study of the specific properties of multimolecular regular sorbent Fe(III) <i>V. D. Gladilovich, E. V. Shreyner, Ya. A. Dubrovsky, P. D. Kolonitsky, K. A. Krasnov, E. V. Babina, E. A. Murashko, V. N. Babakov, O. A. Keltsieva, I. A. Krasnov, M. C. Anurov, Ya. V. Russkih, E. N. Chernova, Z. A. Zhakovskaya, N. G. Sukhodolov, A. A. Selyutin, M. L. Alexandrova, E. P. Podolskaya</i>	106
Synthesis and characterization of nanoregular sorbents based on zirconium oxide <i>A. A. Selyutin, P. D. Kolonitskiy, N. G. Sukhodolov, E. V. Shreyner, N. V. Krasnov, E. P. Podolskaya</i>	115

CONTENTS

Study of electrokinetic properties of regular multimolecular sorbent based on trivalent metals stearates

N. G. Sukhodolov, V. D. Gladilovich, P. D. Kolonitskiy, E. V. Shreyner, A. I. Yanklovich, A. A. Selyutin, N. V. Krasnov, E. P. Podolskaya

123

Application of high-resolution melting analysis and maldi minisequencing for polymorphism genotyping of human paraoxonase-1 gene

I. D. Kurdyukov, E. A. Murashko, Ya. A. Dubrovsky, V. N. Babakov, A. S. Radilov

130

MISCELLANEOUS

Test of strain gages based on SmS semiconductor thin films

N. N. Stepanov, V. V. Kaminsky, A. A. Molodykh

136