Record Nr. UNINA9910877753703321 Autore Lehto Jukka Titolo Chemistry and analysis of radionuclides: laboratory techniques and methodology / / Jukka Lehto and Xiaolin Hou Weinheim,: Wiley-VCH, 2010 Pubbl/distr/stampa **ISBN** 1-283-14055-1 9786613140555 3-527-63302-2 3-527-63277-8 3-527-63278-6 Edizione [4th ed.] Descrizione fisica 1 online resource (428 p.) Altri autori (Persone) HouXiaolin Disciplina 539.77 Soggetti Radioisotopes - Analysis Radioactive substances - Analysis Lingua di pubblicazione Inglese **Formato** Materiale a stampa Livello bibliografico Monografia Description based upon print version of record. Note generali Nota di bibliografia Includes bibliographical references and index. Nota di contenuto Chemistry and Analysis of Radionuclides: Laboratory Techniques and Methodology; Contents; Preface; Acknowledgments; 1 Radionuclides and their Radiometric Measurement; 2 Special Features of the Chemistry of Radionuclides and their Separation; 3 Factors Affecting Chemical Forms of Radionuclides in Aqueous Solutions; 4 Separation Methods; 5 Yield Determinations and Counting Source Preparation; 6 Radiochemistry of the Alkali Metals; 7 Radiochemistry of the Alkaline Earth Metals; 8 Radiochemistry of the 3d-Transition Metals; 9 Radiochemistry of the 4d-Transition Metals 10 Radiochemistry of the Lanthanides11 Radiochemistry of the Halogens: 12 Radiochemistry of the Noble Gases: 13 Radiochemistry of Tritium and Radiocarbon; 14 Radiochemistry of Lead, Polonium, Tin, and Selenium; 15 Radiochemistry of the Actinides; 16 Speciation Analysis: 17 Measurement of Radionuclides by Mass Spectrometry: 18 Sampling and Sample Pretreatment for the Determination of

Radionuclides; 19 Chemical Changes Induced by Radioactive Decay;

Written by chemists for chemists, this is a comprehensive guide to the

Index

Sommario/riassunto

important radionuclides as well as techniques for their separation and analysis. It introduces readers to the important laboratory techniques and methodologies in the field, providing practical instructions on how to handle nuclear waste and radioactivity in the environment.