Record Nr. UNINA9910813104503321 Handbook on the toxicology of metals / / Gunnar F. Nordberg, Bruce A. **Titolo** Fowler, Monica Nordberg, editors Pubbl/distr/stampa London, England:,: Academic Press,, 2015 ©2015 **ISBN** 0-12-397339-2 Edizione [Fourth edition.] 1 online resource (1544 p.) Descrizione fisica 615.9/253 Disciplina Soggetti Metals - Toxicology Lingua di pubblicazione Inglese **Formato** Materiale a stampa Livello bibliografico Monografia Note generali Includes index. Nota di contenuto e9780444594532v1; Front Cover; Handbook on the Toxicology of Metals; Copyright; Preface; Short Contents; Full Contents; List of Contributors: List of Reviewers: Volume I -General Considerations: Chapter 1 -Toxicology of Metals: Overview, Definitions, Concepts, and Trends; 1 METAL EXPOSURES AND GLOBAL BURDEN OF DISEASE; 2 INTERNATIONAL HISTORICAL PERSPECTIVES ON RISKS OF HEALTH EFFECTS OF METALS: 3 METAL POISONING AND OTHER HUMAN HEALTH EFFECTS; 4 HUMAN EXPOSURES TO METALLIC COMPOUNDS, RISK ASSESSMENT, AND PREVENTION: References Chapter 2 - General Chemistry, Sampling, Analytical Methods, and Speciation*1 DEFINITION OF METALS; 2 THE PERIODIC TABLE; 3 COMPOUNDS OF METALLIC ELEMENTS: 4 SOLUBILITY: 5 PROPERTIES OF METAL IONS; 6 OTHER ASPECTS OF METAL CHEMISTRY OF BIOLOGICAL AND TOXICOLOGICAL INTEREST; 7 METALLOMICS, TOTAL ELEMENT ANALYSIS, AND ELEMENTAL SPECIATION; 8 SAMPLING AND SAMPLE PREPARATION; 9 SEPARATION TECHNIQUES; 10 DETECTION METHODS; 11 CALIBRATION; 12 REFERENCE MATERIALS; 13 QUALITY ASSURANCE; 14 CONCLUSIONS; References; Chapter 3 - Routes of Exposure, Dose,

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Handbook on the Toxicology of Metals, Fourth Edition bridges the gap between established knowledgebase and new advances in metal toxicology to provide one essential reference for all those involved in the field. This book provides comprehensive coverage of basic toxicological data, emphasizing toxic effects primarily in humans, but also those of animals and biological systems in vitro. The fourth edition also contains several new chapters on important topics such as nanotoxicology, metals in prosthetics and dental implants, geneenvironment interaction, neurotoxicology, metals in food, renal,