1. Record Nr. UNISA996543349003316

Titolo	1616.1-2023 - IEEE Standard for Data Storage Systems for Automated Driving . Volume 1 / / IEEE
Pubbl/distr/stampa	New York, USA : , : IEEE, , 2023
ISBN	1-5044-9878-X
Descrizione fisica	1 online resource (43 pages)
Disciplina	004.6782
Soggetti	Cloud computing Buffer storage (Computer science) Decision making
Lingua di pubblicazione	Inglese
Formato	Materiale a stampa
Livello bibliografico	Monografia
Sommario/riassunto	The goals and metrics of a data storage system for automated driving (DSSAD) are defined in this standard. Functions and common technical requirements for data storage are identified. Data elements relevant to automated driving system (ADS) Level 3, Level 4 and Level 5 are defined. The usage of data among diverse end users is also defined. A compendium of data elements used in vehicles of categories M1 and N1 regarding their EDR and DSSAD for partial and fully automated vehicles is provided in this standard. An on-board diagnostic (OBD) port lockout/near field communication (NFC) protocol for protection against data manipulation via the vehicle diagnostic port is provided. This standard is made available without prejudice to national and regional laws related to data privacy, protection, and personal data processing. Users are responsible for compliance with all such laws and regulations. This standard may be frequently updated to include relevant data definitions and data elements toward the development of automated vehicles. The overall goal is to create a data collection standard for automated driving that includes functional requirements for automated vehicle gateways and security guidelines for cloud-based automotive data recorder requirements.

2. Record Nr. UNINA9910437809703321

Titolo	Cadmium : from toxicity to essentiality / / Astrid Sigel, Helmut Sigel, Roland K. O. Sigel, editors
Pubbl/distr/stampa	Dordrecht ; ; New York, : Springer, c2013
ISBN	1-299-40773-0 94-007-5179-6
Edizione	[1st ed. 2013.]
Descrizione fisica	1 online resource (587 p.)
Collana	Metal ions in life sciences ; ; vol. 11
Altri autori (Persone)	SigelAstrid SigelHelmut SigelRoland K. O
Disciplina	571.954662
Soggetti	Cadmium Cadmium - Metallurgy
Lingua di pubblicazione	Inglese
Formato	Materiale a stampa
Livello bibliografico	Monografia
Note generali	Description based upon print version of record.
Nota di bibliografia	Includes bibliographical references and index.
Nota di contenuto	Cadmium: From Toxicity to Essentiality; Historical Development and Perspectives of the Series: Metal Ions in Life Sciences*; Metal Ions in Life Sciences; Preface to Volume 11; Cadmium: From Toxicity to Essentiality; Contents; Contributors to Volume 11; Titles of Volumes 1-44 in the Metal Ions in Biological Systems Series; Contents of Volumes in the Metal Ions in Life Sciences Series; Chapter 1: The Bioinorganic Chemistry of Cadmium in the Context of Its Toxicity; 1 Introduction; 1 Introduction; 1 Introduction; 1 Introduction; 1 Introduction; 1 Introduction; 1 Introduction 1 Introduction: Importance of Cadmium Accumulation in Plants1 Introduction; 1 Introduction; 1 Introduction; 2 Cadmium Coordination Chemistry of Biological Relevance; 2.1 Cadmium Complexes, Stabilities, and Properties; 2 Geochemistry of Cadmium; 2.1 Chemical Properties; 2 Biomarkers of Exposure; 2.1 Overview; 2 Cadmium Toxicity in Cells; 3 Detection of Intracellular Cadmium; 2 General Considerations and Basic Principles; 3 113Cd NMR Chemical Shifts from 113Cd-Substituted Metalloproteins; 2.1 Adenine; 2.2 N-Substituted Purines with Non-coordinating Pendant Arms 2 Complexes of Amino Acids and Derivatives2.1 General Characteristics

of Cadmium(II) Complexes of Amino Acids; 1.1 Cadmium Accumulation in Indicator and Excluder Plants; 1.2 Active Cadmium Hyperaccumulation; 2 Sources and Exposures; 2.1 Occupational Sources and Exposures; 2 Epidemiology and Animal Carcinogenicity; 2.1 Carcinogenicity in Humans; 2 Cadmium Distribution in the Ocean; 2.1 Vertical Profiles; 2.2 Cadmium Protein Complexes; 2.2 Abundance in the Continental Crust; 2.2 Pre-analytic Phase; 3.1 Overview of Cadmium Detection
4 Specific Highlights of Studies on Alkaline Phosphatase, Calcium Binding Proteins, and Metallothioneins2.3 N-Substituted Purines with Potential Chelating Pendant Arms; 2.2 Complexes of Amino Acids with Non-coordinating Side Chains; 2 Ecological Role of Cadmium Hyperaccumulation; 2.2 Non-Occupational Sources and Exposures; 2.2 Carcinogenicity in Experimental Animals; 2.2 Isotope Composition; 2.3 Cadmium Interactions with Other Biomolecules; 3 Cadmium Biochemistry; 3 Mobilization of Cadmium; 3.1 Natural Sources; 2.3 Analytical Methods for the Determination of Cadmium
2.3.1 Inductively Coupled Plasma Mass Spectrometry3.2 Principles of the Development of Fluorescence Probes for Metal Ions; 3.3 Fluorescence Imaging of Cadmium with Calcium or Zinc Fluorescence Probes; 4.1 113Cd NMR and Alkaline Phosphatase; 4.2 113Cd NMR and Calcium Binding Proteins; 2.4 6-Mercaptopurine; 2.5 Oxopurines; 2.3 Complexes of Amino Acids with Coordinating Side Chains; 2.3.1 Complexes of Amino Acids with O-Donor Side Chains; 3 Mechanisms of Cadmium Hyperaccumulation; 3.1 Compartmentation of Cadmium in Tissues, Cells, and Organelles; 3 Entry Pathways, Transport, and Trafficking
3.1 Entry Pathways

Sommario/riassunto

Cadmium: From Toxicity to Essentiality, MILS-11 provides in an authoritative and timely manner in 16 stimulating chapters, written by 40 internationally recognized experts from 11 nations, and supported by more than 2600 references, 35 tables, and over 100 illustrations, many in color, a most up-to-date view on the role of cadmium for life, presently a vibrant research area. MILS-11 covers the bioinorganic chemistry of Cd(II), its biogeochemistry, anthropogenic release into the environment, and speciation in the atmosphere, waters, soils, and sediments. The analytical tools for Cd determination, its imaging in cells, and the use of 113Cd NMR to probe Zn(II) and Ca(II) proteins are summarized, as are Cd(II) interactions with nucleotides, nucleic acids, amino acids, and proteins including metallothioneins. The phytoremediation by Cd(II)-accumulating plants, etc., the toxicology of Cd(II), its damage to mammalian organs, and its role as a carcinogen for humans, are highlighted. The book terminates with a fascinating report on the use of Cd(II) in carbonic anhydrase of certain marine phytoplankton species. Astrid Sigel, Helmut Sigel, and Roland K. O. Sigel have long-standing interests in Biological Inorganic Chemistry. Their research focuses on metal ion interactions with nucleotides and nucleic acids and on related topics. They edited previously 44 volumes in the series Metal Ions in Biological Systems.