

1. Record Nr.	UNINA9910144377503321
Titolo	Metal amide chemistry [[electronic resource] /] / Michael Lappert ... [et al.]
Pubbl/distr/stampa	Chichester, U.K., : Wiley, c2009
ISBN	1-282-68784-0 9786612687846 0-470-74038-8 0-470-74037-X
Descrizione fisica	1 online resource (371 p.)
Altri autori (Persone)	LappertM. F
Disciplina	547/.042
Soggetti	Amides Alkaline earth metals Organometallic compounds
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	Metal Amide Chemistry; Contents; Biographies; Preface; 1 Introduction; 1.1 Scope and Organisation of Subject Matter; 1.2 Developments and Perspectives; 2 Alkali Metal Amides; 2.1 Introduction; 2.2 Lithium Amides; 2.2.1 Introduction; 2.2.2 Monomeric Lithium Amides; 2.2.3 Dimeric Lithium Amides; 2.2.4 Trimeric Lithium Amides; 2.2.5 Tetrameric Lithium Amides; 2.2.6 Higher Aggregate Lithium Amides; 2.2.7 Laddering; 2.2.8 Heterometallic Derivatives; 2.3 Sodium Amides; 2.3.1 Introduction; 2.3.2 Monomeric and Dimeric Sodium Amides; 2.3.3 Higher Aggregate Sodium Amides 2.3.4 Heterometallic Sodium Amides2.4 Potassium Amides; 2.4.1 Introduction; 2.4.2 Potassium Parent Amides (NH ₂ as Ligand); 2.4.3 Potassium Primary and Secondary Amides; 2.4.4 Heterometallic Potassium Amides; 2.5 Rubidium Amides; 2.6 Caesium Amides; References; 3 Beryllium and the Alkaline Earth Metal Amides; 3.1 Introduction; 3.2 Beryllium Amides 403.3 Magnesium Amides; 3.3.1 Introduction; 3.3.2 Monomeric Magnesium Amides; 3.3.3 Dimeric Magnesium Amides; 3.3.4 Higher Aggregates and Related Magnesium Amides; 3.3.5 Heterometallic Magnesium Amides; 3.3.6 Magnesium

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3.3.7 Magnesium Imides 3.4 Calcium Amides; 3.4.1 Introduction; 3.4.2 Monomeric Calcium Amides; 3.4.3 Dimeric Calcium Amides and Higher Aggregates; 3.4.4 Heterometallic Calcium Amide Derivatives; 3.5 Strontium Amides; 3.5.1 Introduction; 3.5.2 Monomeric Strontium Amides; 3.5.3 Higher Aggregate Strontium Amides; 3.6 Barium Amides; 3.6.1 Introduction; 3.6.2 Monomeric Barium Amides; 3.6.3 Dimeric Barium Amides; 3.6.4 Heterometallic Barium Amides; References; 4 Amides of the Group 3 and Lanthanide Metals; 4.1 Introduction; 4.2 The Pre-1996 Literature: Anwender's Review; 4.2.1 Introduction 4.2.2 LnIII Complexes with N-Hydrocarbyl-Amido Ligands 4.2.3 LnIII Complexes having Silylamido Ligands; 4.2.4 Bis(Trimethylsilyl) Amido-LnII Complexes and a CeIV Analogue; 4.2.5 LnIII Complexes having Donor-Functionalised Amido Ligands; 4.2.6 Ln Amides as Precursors for Ln Coordination or Organometallic Compounds; 4.2.7 Applications as Materials or Catalysts; 4.3 The Recent (Post-1995) Literature; 4.3.1 Introduction; 4.3.2 LnIII Complexes with N-Hydrocarbyl Substituted Ligands; 4.3.3 LnIII Complexes having Silylamido Ligands; 4.3.4 LnII and CeIV Amides 4.3.5 Ln Complexes having Donor-Functionalised Amido Ligands 4.3.6 Ln Amides as Precursors for Ln Coordination or Organometallic Compounds; 4.3.7 Applications as Materials or Catalysts; 4.3.8 Ln Complexes having 1,4-Disubstituted-1,4-Diazabutadiene Ligands, R²-DAD; References; 5 Amides of the Actinide Metals; 5.1 Introduction; 5.2 Neutral Amidouranium(IV) and Thorium(IV) Complexes; 5.2.1 Introduction; 5.2.2 Hydrocarbylamido-AnIV Compounds Free of p-Centred Ligands; 5.2.3 Silylamido-AnIV Compounds Free of p-Centred Ligands; 5.2.4 AnIV Amides Containing p-Centred Co-ligands; 5.3 Neutral UIII Amides 5.4 Neutral Mixed Valence (UIII /UIV), UII ,U V and UVI Amides

Sommario/riassunto

Written by internationally recognised leaders in the field, Metal Amide Chemistry is the authoritative survey of this important class of compounds, the first since Lappert and Power's 1980 book "Metal and Metalloid Amides." An introduction to the topic is followed by in-depth discussions of the amide compounds of: alkali metals, alkaline earth metals, zinc, cadmium and mercury, the transition metals, group 3 and lanthanide metals, group 13 metals, silicon and the group 14 metals, group 15 metals, the actinide metals. Accompanied by a substantial bibliography.