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2.12 Central Nervous System (CNS) Depressants: Promazines, Hydantoins and Barbiturates; 2.13 Hydantoins and Barbiturates; 2.14 Oligonucleotide Antisense Agents; 2.15 Hormones; 2.16 Liposomes; 2.17 Conclusions; Acknowledgements; References; 3 (12)Mg The Role of Magnesium as a Metallotherapeutic Drug; 3.1 Introduction; 3.2 Magnesium as a Drug; 3.2.1 Gestational hypertension, preeclampsia and eclampsia; 3.2.2 Asthma; 3.2.3 Stroke; 3.2.4 Acute myocardial infarction; 3.2.5 Arrhythmias; 3.2.6 Miscellaneous; References; 4 (13)Al Aluminum Metallotherapeutics; 4.1 Introduction; 4.2 Adjuvants; 4.2.1 Alum
4.2.2 Al(OH)₃; 4.2.3 Aluminum phosphate; 4.3 Antacids; 4.3.1 Aluminum hydroxide; 4.3.2 Aluminum glycinate; 4.3.3 Peptic ulcer disease; 4.3.4 Bismuth aluminum carbonate; 4.3.5 Bismuth-magnesium-sodium aluminosilicate; 4.4 Phosphate Binders; 4.4.1 Basic aluminum carbonate; 4.4.2 Aluminosilicates; 4.5 Alginate Raft Formulations; 4.6 Blistering Diseases in the Elderly; 4.7 Metabolic Diseases and Aluminum; 4.8 Anti-malarial Substances; 4.9 Potential Aluminum Toxicity; 4.10 Conclusions; References; 5 (14)Si Biological Activity of Organosilicon Compounds; 5.1 Introduction
5.2 Organosilicon Modification; 5.2.1 O-, S- and N-Silylation; 5.2.2 C-Silylation; 5.3 Sila Analogues; 5.4 Specific Organosilicon Compounds; References; 6 (20)Ca The Role of Calcium as a Metallotherapeutic Drug; 6.1 Introduction; 6.2 Calcium Homeostasis; 6.3 Hormonal Regulation of Calcium Metabolism; 6.4 Optimal Amount of Dietary Calcium Intake and Benefits of Calcium Supplementation; 6.5 Osteoporosis; 6.6 Hypertension; 6.7 Hypertension in Pregnancy and Preeclampsia; 6.8 Colon Cancer; 6.9 Weight Control and Regulation of Body Fat; 6.10 Periodontal Disease; 6.11 Kidney Stones
6.12 Calcium Supplements: Side Effects

Sommario/riassunto

There are an astonishing number and variety of roles that metals play in contemporary medicine. This book contains information on the medicinal uses of inorganics, that is, of elements such as boron, lithium, selenium, to name a few, as well as metal-containing species. In keeping with the notion that healthy mammals rely on (bio-essential) metals for the normal functioning of approximately a third of their proteins and enzymes, a large number of drugs are metal-based and considerable effort is being devoted to developing both second- and third-generation drugs as well as generating novel me
