

1. Record Nr.	UNINA9910300271903321
Titolo	Metal Allergy : From Dermatitis to Implant and Device Failure // edited by Jennifer K Chen, Jacob P. Thyssen
Pubbl/distr/stampa	Cham : , : Springer International Publishing : , : Imprint : Springer, , 2018
ISBN	3-319-58503-7
Edizione	[1st ed. 2018.]
Descrizione fisica	1 online resource (xvii, 578 pages) : illustrations
Disciplina	616.51
Soggetti	Dermatology Allergy Occupational medicine Orthopedics Cardiac surgery Allergology Occupational Medicine/Industrial Medicine Cardiac Surgery
Lingua di pubblicazione	Inglese
Formato	Materiale a stampa
Livello bibliografico	Monografia
Nota di contenuto	Preface -- I Metal: Overview -- 1 Use of metals in our society -- 2 Methods to detect metal composition: XRF, SEM, ICP-MS -- 3 Metal corrosion -- 4 EN1811 -- 5 EN ISO 17075 -- 6 Regulation of metal exposure to prevent allergy -- II Metals, skin and the immune system -- 7 Deposition of metals on the skin and spot tests -- 8 Penetration of metals through the skin barrier -- 9 Innate immune system response: Toll-like receptors -- 10 Acquired immunity: T cell response -- 11 Tolerance development -- 12 Metal patch testing.-13 Lymphocyte proliferation assays -- III Allergens -- 14 Aluminum -- 15 Beryllium -- 16 Chromium -- 17 Cobalt -- 18 Copper -- 19 Gold -- 20 Nickel -- 21 Palladium -- 22 Titanium -- 23 Other metals: iron, platinum, tin, zinc -- IV Common Sources of Metal Exposure -- 24 Metals in every day devices -- 25 Metals in tools and the workplace -- 26 Metals in cosmetics -- 27 Metals in coins -- 28 Metals in the diet -- V Hypersensitivity to Metallic Implants -- 29 Orthopedic Metal Implants

-- 30 Cardiovascular Metal Implants -- 31 Dental Metal Implants -- 32 Other Metal Implants: Gynecological, Neurovascular -- 33 Diagnostic work-up of patients with metal implant failure -- VI Metal Allergy in Select Patient Populations -- 34 Metal allergy in children -- 35 Metal allergy in atopic dermatitis -- 36 Metal allergy in Asia -- VII Uncommon Manifestations of Metal Allergy -- 37 Metal allergy in asthma -- 38 Metal allergy in palmoplantar pustulosis -- 39 Metal allergy in endometriosis -- 40 Systemic Nickel Allergy Syndrome -- Future research areas -- Subject Index. .

Sommario/riassunto

This volume has been compiled in response to the ongoing revolution in our understanding of metal contact allergy, and the ensuing challenge this has created for clinicians and others to synthesize large amounts of sometimes contradictory data. It opens by providing a comprehensive overview of the use and regulation of metals in our society, metal properties, and available testing methodologies. Common and uncommon metal allergens and sources of exposure are then reviewed in depth, and detailed sections are devoted to hypersensitivity to metal implants (which may be associated with device failure and/or dermatitis), metal allergy in select patient populations, and less frequently encountered manifestations of metal allergy. The prevalence of metal allergy in the general population is high: up to 17% of people are allergic to nickel, and 1–3% to cobalt and chromium. Environmental sources of metal exposure include jewelry, clothing, electronic devices, coins, leather, diet, and occupational exposure. As metals are ubiquitous, this book will be an indispensable reference text for a wide range of clinicians and investigators, meeting the needs of all who are interested in metal allergy and its diagnosis and management. .
