1. Record Nr. UNINA9910437953003321

Titolo	Medical Geochemistry : Geological Materials and Health / / edited by Paolo Censi, Thomas Darrah, Yigal Erel
Pubbl/distr/stampa	Dordrecht : , : Springer Netherlands : , : Imprint : Springer, , 2013
ISBN	94-007-4372-6
Edizione	[1st ed. 2013.]
Descrizione fisica	1 online resource (199 p.)
Disciplina	616.98
Soggetti	Geochemistry Environmental health Medicinal chemistry Ecotoxicology Environmental Health Medicinal Chemistry
Lingua di pubblicazione	Inglese
Formato	Materiale a stampa
Livello bibliografico	Monografia
Note generali	Includes index.
Nota di contenuto	Preface -- How trace element contents in bronchoalveolar lavages can probe the human exposure to inhaled particulates -- Geochemistry and Biochemistry - insights into the fate and transport of Pt-based chemotherapy drugs -- Atmospheric Particulate Matter (PM) in the Middle East: Toxicity, trans-boundary transport and influence of synoptic conditions.- Reaction path modeling: theoretical aspects and applications -- An observation on the composition of urinary calculi: environment influence -- Magnetite minerals in the human brain: what' s their role? -- Chemometrics and Medical Geochemistry: A brief tutorial -- Dust, metals and metalloids in the environment: from air to hair -- Metal Geochemistry of a Brackish Lake: Étang Saumâtre, Haiti -- Trace Element Composition of Modern Human Bone.
Sommario/riassunto	This book includes a collection of chapters illustrating the application of geochemical methods to investigate the interactions between geological materials and fluids with humans. Examples include the incorporation and human health effects of inhaling lithogenic materials, the reactivity of biological fluids with geological materials, and the impact on nascent biomineral formation. Biomineralization

is investigated in terms of mineralogy, morphology, bone chemistry, and pathological significance with a focus on the health impacts of "foreign" geological/environmental trace element incorporation. One of the contribution is devoted to particulate matter, the presence of metals and metalloids in the environment, and the possibility of using human hair as a biomarker between environmental/geological exposure and human bioincorporation. Other chapters focus on the last advances on the analytical methods and instrumentational approaches to investigating the chemistry of biological fluids and tissues.