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Titolo	Cadmium toxicity : new aspects in human disease, rice contamination, and cytotoxicity // Seiichiro Himeno, Keiko Aoshima, editors
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ISBN	981-13-3630-X
Descrizione fisica	1 online resource (VIII, 190 p. 68 illus., 51 illus. in color.)
Collana	Current Topics in Environmental Health and Preventive Medicine, , 2364-8333
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Soggetti	Cadmium - Toxicology
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Livello bibliografico	Monografia
Nota di contenuto	Overview. Overview of historical and current problems of cadmium pollution in Japan -- Health effects of cadmium in human populations and its relation to cadmium exposure levels. History and present status of Itai-Itai disease -- Pathophysiology of renal and bone lesions in Itai-itai disease -- A long-term follow-up study of the residents exposed to cadmium in Kakehashi River basin -- Effects of cadmium exposure on life prognosis -- Evaluation of cadmium exposure and health effects among rice farmers in Akita prefecture -- Cadmium intake from foods among general population in Japan and Asia -- Rice contamination by cadmium and its remediation. Regulation of cadmium contents in rice -- Molecular mechanism of cadmium accumulation in rice -- Mitigation technologies of cadmium and arsenic in rice -- Development of low-cadmium-accumulating rice -- New aspects in the mechanisms of cadmium toxicity. Novel mechanisms of cadmium-induced cell death -- Cadmium transport and toxicity in the kidney -- Disturbance in phosphorus metabolism by cadmium exposure.
Sommario/riassunto	This volume focuses on cadmium (Cd) exposure, its effects on human health, the mechanism of Cd accumulation and the development of mitigation technologies. Further, it discusses clinical, epidemiological, agricultural, toxicological, and biochemical aspects of Cd pollution and presents recent biochemical studies on molecular mechanisms of Cd cytotoxicity and cellular transport as well as the mechanism of Cd-

induced disturbances in phosphorus (P) metabolism. It also provides insights into the pathophysiology of itai-itai disease, a serious condition caused by Cd pollution. Cadmium -New Aspects in Human Disease, Rice Contamination, and Cytotoxicity- is a valuable resource for scientists involved in heavy metal toxicology, botanical sciences, and regulatory sciences. Addressing the features of Cd pollution in the past and in the present, as well as future perspectives, this is a must-have book for students, researchers and practitioners interested in global and local metal pollution.
