

1. Record Nr.	UNINA9910825857203321
Titolo	The silicon cycle : human perturbations and impacts on aquatic systems // edited by Venugopalan Ittekkot ... [et al.]
Pubbl/distr/stampa	Washington, DC, : Island Press, c2006
ISBN	1-59726-782-1 1-4356-2869-1
Edizione	[1st ed.]
Descrizione fisica	1 online resource (297 p.)
Collana	Scope series ; ; 66
Altri autori (Persone)	IttekkotV <1945-> (Venugopalan)
Disciplina	577/.14
Soggetti	Silicon cycle (Biogeochemistry) Aquatic ecology
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	""Title Page""; ""Copyright Page""; ""Table of Contents""; ""List of Figures and Tables""; ""Preface""; ""Acknowledgments""; ""Ch. 1: Introduction""; ""Ch. 2: Silicate Weathering in South Asian Tropical River Basins""; ""Ch. 3: Silicon in the Terrestrial Biogeosphere""; ""Ch. 4: Factors Controlling Dissolved Silica in Tropical Rivers""; ""Ch. 5: Dissolved Silica Dynamics in Boreal and Arctic Rivers: Vegetation Control over Temperature?""; ""Ch. 6: Dissolved Silica in the Changjiang (Yangtze River) and Adjacent Coastal Waters of the East China Sea""; ""Ch. 7: Atmospheric Transport of Silicon"" ""Ch. 8: Estuarine Silicon Dynamics""""Ch. 9: Physiological Ecology of Diatoms Along the River - Sea Continuum""; ""Ch. 10: Modeling Silicon Transfer Processes in River Catchments""; ""Ch. 11: Role of Diatoms in Silicon Cycling and Coastal Marine Food Webs""; ""Ch. 12: Responses of Coastal Ecosystems to Anthropogenic Perturbations of Silicon Cycling""; ""Ch. 13: Silicon Isotope-Based Reconstructions of the Silicon Cycle""; ""Ch. 14: Long-Term Oceanic Silicon Cycle and the Role of Opal Sediment""; ""Ch. 15: The Perturbed Silicon Cycle""; ""Contributors""; ""SCOPE Series List""; ""Index""
Sommario/riassunto	The Silicon Cycle is the first book in more than 20 years to present a comprehensive overview of the silicon cycle and issues associated with it. The book summarizes the major outcomes of the project Land-

Ocean Interactions: Silica Cycle, initiated by the Scientific Community on Problems of the Environment (SCOPE) of the International Council of Scientific Unions (ICSU). It tracks the pathway of silicon from land to sea and discusses its biotic and abiotic modifications in transit as well as its cycling in the coastal seas. Natural geological processes in combination with atmospheric and hydrological processes are discussed, as well as human perturbations of the natural controls of the silicon cycle.

---