

1. Record Nr.	UNINA9910146099903321
Titolo	Silicon biochemistry [[electronic resource]]
Pubbl/distr/stampa	Chichester [West Sussex] ; ; New York, : Wiley, 1986
ISBN	1-282-34584-2 9786612345845 0-470-51332-2 0-470-51333-0
Descrizione fisica	1 online resource (274 p.)
Collana	Ciba Foundation symposium ; ; 121
Altri autori (Persone)	EveredDavid O'ConnorMaeve
Disciplina	574.19 574.19214
Soggetti	Silicon - Physiological effect Organosilicon compounds Silicon in the body Electronic books.
Lingua di pubblicazione	Inglese
Formato	Materiale a stampa
Livello bibliografico	Monografia
Note generali	Editors: David Evered (organizer) and Maeve O'Connor. Based on the Symposium on Silicon Biochemistry, held at the Ciba Foundation, London, 17-19 September 1985. "A Wiley-Interscience publication."
Nota di bibliografia	Includes bibliographical references and indexes.
Nota di contenuto	Silicon biochemistry; Contents; Participants; General introduction; Sources and speciation of aluminium and silicon in natural waters; Introduction to silicon chemistry and biochemistry; Structural aspects of biogenic silica; Silicification by diatoms; Silica in higher plants; General discussion; A primer on organosilicon chemistry; Silicon as an essential trace element in animal nutrition; Biological implications of the interaction (via silanol groups) of silicon with metal ions; Aluminosilicates and the ageing brain: implications for the pathogenesis of Alzheimer's disease Effects of silica on lung collagen Urinary and serum silicon in normal and uraemic individuals; Silica and oesophageal cancer; Biocompatibility of silicates for medical use; Final general discussion;

Index of contributors; Subject index

Sommario/riassunto

Silicon is the second most abundant element in the Earth's crust, and is found in water, plants and organisms. The contributors describe how silica gets into and out of organisms and discuss how essential or harmful silicon or silicon-based compounds are in higher animals.