Record Nr. UNINA9910876801303321 **Titolo** Silicon biochemistry Chichester [West Sussex];; New York,: Wiley, 1986 Pubbl/distr/stampa **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 574.19/214 Disciplina Soggetti Silicon - Physiological effect Organosilicon compounds Silicon in the body Lingua di pubblicazione Inglese **Formato** Materiale a stampa Livello bibliografico Monografia Editors: David Evered (organizer) and Maeve O'Connor. Note generali 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 collagenUrinary 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

Silicon is the second most abundant element in the Earth's crust, and is

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found in water, plants and organisms. The contributors decribe how silica gets into and out of organisms and discuss how essential or harmful silicon or silicon-based compounds are in higher animals.