

1. Record Nr.	UNINA9910452822903321
Autore	Sakai K (Koji)
Titolo	The sustainable use of concrete / / Koji Sakai, Takafumi Noguchi
Pubbl/distr/stampa	Boca Raton, Fla. : , : CRC Press, , 2013
ISBN	0-429-21294-1 1-136-72731-0 0-203-81717-6
Descrizione fisica	1 online resource (185 p.)
Altri autori (Persone)	NoguchiTakafumi
Disciplina	624.1/834
Soggetti	Concrete Concrete construction Sustainable construction Concrete - Environmental aspects Electronic books.
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.
Nota di contenuto	Front Cover; Contents; Preface; Chapter 1 - Introduction; Chapter 2 - Sustainability; Chapter 3 - Sustainability in Concrete and Construction; Chapter 4 - Evaluation Systems of Sustainability; Chapter 5 - Technologies for Concrete Sustainability; Chapter 6 - Sustainable Concrete Technologies: Case Studies; Chapter 7 - Future Perspectives; Back Cover
Sommario/riassunto	Preface The construction industry is very conservative. This can be seen as deriving from the special nature of its work which is creating the social and economic infrastructures required by each particular age in a safe way. Architecture is to some extent ahead of its time in the design of buildings but also reflects the inclinations of clients. In other words, the basic activity of the construction industry has been to reliably translate social needs into material form. Naturally, with the growing sophistication of requirements, construction technology has developed and many breakthroughs have been achieved to make the impossible possible, but this process has also been marked by many failures. The construction industry can be said to have built its technology systems through a process of experience engineering. The construction industry

exhibits a high degree of locality. Structures have generally been built by local people using local materials. Globalization has promoted internationalization in the construction industry as elsewhere, but the basics of construction systems have remained unchanged. What makes this possible is the wide use of concrete as a construction material. Its primary component materials are aggregate, cement, and water, with aggregate constituting approximately 70% of the total volume. The Earth's crust is composed of rocks that are the raw materials for aggregate. Water, when seawater is included, is the most commonly available globally circulating substance on Earth. In the case of cement, the raw materials are limestone and clay, both of which are also available in abundance--
