

1. Record Nr.	UNINA9910986129203321
Autore	Yang Wenke
Titolo	The Issues and Discussion of Modern Concrete Science [[electronic resource] /] / by Wenke Yang
Pubbl/distr/stampa	Berlin, Heidelberg : , : Springer Berlin Heidelberg : , : Imprint : Springer, , 2015
ISBN	3-662-44567-0
Edizione	[1st ed. 2015.]
Descrizione fisica	1 online resource (285 p.)
Disciplina	620 620.1 620.14 691
Soggetti	Building materials Ceramics Glass Composite materials Mechanics Mechanics, Applied Building Materials Ceramics, Glass, Composites, Natural Materials Solid Mechanics
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 at the end of each chapters.
Nota di contenuto	Sole of Concrete - Mix Proportion -- Important Raw Material -Coarse Aggregate -- Core Raw Material - Cement -- Alkali aggregate reaction, where are you?- Is Air-entraining agent a panacea for solving frost resistance problem?- Breeding and False Setting, Which Is Better?- Fiber, When Is Useful?- Cancer of Modern Concrete - Cracks -- Fly Ash, Really Only Advantages?- Admixtures - All medicines have their own side-effects -- Fatal Factor for Durability - Drying Shrinkage -- Doctor of Concrete - self-healing -- High Performance Concrete, Really High Performance?- Where Is the Correct Idea for Durability Research?- Scientific Foundation of Modern Concrete -- Summary report of

Experimental study on dehydration crack appearing in the construction of Turpan civil airport cement concrete pavement.

Sommario/riassunto

This book is devoted to two primary objectives. The first is to present the errors, inadaptability, and mistakes arising when the current theory on concrete is applied to explaining practical construction of concrete; the second is to put forward viewpoints in modern concrete science. Taking a number of engineering cases as examples, we experimentally studied and theoretically analyzed the errors, inadaptability, and mistakes when the current theory on concrete is applied to explaining practical construction of concrete. Moreover, we investigated the use of mixing ratios, aggregates, cement, high-performance concrete and fibers, as well as the frost resistance, cracking behavior, durability, dry shrinkage and autogenous healing to address and remedy the shortcomings in today's concrete science, put forward new proposals, and make a number of innovative achievements in the field, particularly in modern theory on concrete science. The results and topics which will be of particular interest to engineers and researchers include: corrections to several one-sided, even mistaken views on concrete construction in the field and a new theory that can be adopted to improve the durability of concrete projects, to control and improve the implementation quality of concrete projects, and to guide teaching in universities. Wenke Yang is a distinguished senior engineer at China Airport Construction Group Corporation, General Administration of Civil Aviation of China (CAAC).

2. Record Nr.	UNINA9910367569203321
Autore	Antunes Carlos Henggeler
Titolo	Optimisation Models and Methods in Energy Systems / Carlos Henggeler Antunes
Pubbl/distr/stampa	MDPI - Multidisciplinary Digital Publishing Institute, 2019 Basel, Switzerland : , : MDPI, , 2019
ISBN	9783039211197 3039211196
Descrizione fisica	1 electronic resource (192 p.)
Soggetti	History of engineering and technology
Lingua di pubblicazione	Inglese
Formato	Materiale a stampa
Livello bibliografico	Monografia
Sommario/riassunto	Challenging problems arise in all segments of energy industries-generation, transmission, distribution and consumption. Optimization models and methods play a key role in offering decision/policy makers better information to assist them in making sounder decisions at different levels, ranging from operational to strategic planning. This book comprises nine papers addressing problems such as the selection of offshore wind farm locations, a model for the analysis of regional energy system management and emission reduction potential, the management of building microgrid networks in islanded mode considering adjustable power and component outages, the portfolio optimization of power generation assets, a graph theoretic approach to optimal firefighting in oil terminals, a university building test case for occupancy-based building automation, the prospects of a meshed electrical distribution system featuring large-scale variable renewable power, a generation expansion planning model for an integrated energy system considering feasible operation region and the generation efficiency of combined heat and power, and the consideration of wind power generation in Brazil's long-term energy planning model.