

1. Record Nr.	UNINA9910459998803321
Titolo	High performance concrete : innovation & utilization : selected, peer reviewed papers from the 10th International Symposium on High Performance Concrete-- Innovation & Utilization (HPC 2014), September 16-18, Beijing, China // edited by Gai-Fei Peng [and 3 others]
Pubbl/distr/stampa	Pfaffikon, Switzerland : , : Trans Tech Publications Ltd., , [2015] ©2015
ISBN	3-03826-660-4
Descrizione fisica	1 online resource (625 p.)
Collana	Key engineering materials ; ; volumes 629-630
Disciplina	620.136
Soggetti	High strength concrete 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 and indexes.
Nota di contenuto	High Performance Concrete - Innovation & Utilization; Preface, Symposium Organizations and Sponsors; Table of Contents; Chapter 1: High-Performance and Ultra-High Performance Concrete; Autogenous Shrinkage of HPC and Ways to Mitigate it; Material and Structural Properties for Creating High Performance Concrete Structures; Research and Application of Multi-Properties Concrete; Hodder Avenue Underpass: An Innovative Bridge Solution with Ultra-High Performance Fibre-Reinforced Concrete; Insulating and Strength Properties of an Aerogel-Incorporated Mortar Based an UHPC Formulations Evolution from High Strength Concrete to High Performance Concrete Low Cost Ultra-High Performance Fiber Reinforced Concrete (UHPFRC) with Flash Metakaolin; Cable-Stayed Footbridge with UHPC Segmental Deck; Relationship between Fiber Orientation and Flexural Strength in Ultra-High-Performance Fiber-Reinforced Concrete Panels; Study on the Mechanical Properties of High Performance Hybrid Fiber Reinforced Cementitious Composite (HFRCC) under Impact Loading; Reinforcement to Induce Ductile Behavior in an Ultra High Performance Fiber Reinforced Concrete Beam Effect of Nano-Silica Particles on the Fresh Properties of

UHPC Mechanical Properties and Durability of Ultra-High Performance Concrete Incorporating Coarse Aggregate; Experimental Study of Strengthening and Toughening for Recycled Steel Fiber Reinforced Ultra-High Performance Concrete; Mechanical Properties of Reactive Power Concrete and Ultra-High Strength Concrete with Coarse Aggregate; Chapter 2: Concrete Durability and Mechanical Properties; Application of Micro-Structure Testing in the Analysis of the Cause of Concrete Cracks; Influence of Reinforcement Placement on the Creep of Concrete

The Protection of Reinforcing Steel in Concrete by Migrating Corrosion Inhibitor Evaluation of Shrinkage Resulted Cracking of High Strength Calcium Sulfoaluminate Cement Concrete with Impact of Internal Curing; Experimental Research on High-Strength Super Sulphate Cement Paste Mixed with Superfine Mineral Admixtures; The Effect of Modified Hydrotalcites on Mechanical Properties and Chloride Penetration Resistance in Cement Mortar; Transport of Water and Chloride Ion in Cement Composites Modified with Graphene Nanoplatelet

Corrosion Behavior of Steel Reinforcement in Simulated Concrete Pore Solutions with Various pH and Chloride Contents Influence of Recycled Aggregate Defects on the Durability of Recycled Aggregate Concrete; Effect of Loading on Permeability of Recycled Aggregate Concrete; Experimental Research on the Durability of Inorganic Binder Stabilized Material with Soda Residue; Sorptivity as a Measure of Salt Frost Scaling Resistance of Air-Entrained Concrete; Internal Curing in High Performance Concrete: Effect of Lightweight Aggregate on Shrinkage and Salt Frost Durability
Experiment Study on the Effect of GGBFS on Frost Resistance of Concrete

Sommario/riassunto

Collection of selected, peer reviewed papers from the 10 th International Symposium on High Performance Concrete - Innovation & Utilization (HPC 2014), September 16-18, 2014, Beijing, China. The 87 papers are grouped as follows: Chapter 1: High-Performance and Ultra-High Performance Concrete, Chapter 2: Concrete Durability and Mechanical Properties, Chapter 3: Fire Resistance, Chapter 4: Concrete Sustainability, Recycling and Utilization, Chapter 5: Mix Proportion Design and Hydration, Chapter 6: Self-Compacting Concrete, Chapter 7: Special Raw Materials, Concrete Composites and Additives, Cha
