

1. Record Nr.	UNINA9910760288703321
Autore	Aiello Maria Antonietta
Titolo	Proceedings of Italian Concrete Conference 2022 [[electronic resource] /] / edited by Maria Antonietta Aiello, Antonio Bilotta
Pubbl/distr/stampa	Cham : , : Springer Nature Switzerland : , : Imprint : Springer, , 2024
ISBN	3-031-43102-2
Edizione	[1st ed. 2024.]
Descrizione fisica	1 online resource (730 pages)
Collana	Lecture Notes in Civil Engineering, , 2366-2565 ; ; 435
Altri autori (Persone)	BilottaAntonio
Disciplina	691.3
Soggetti	Concrete Building materials Buildings - Design and construction Structural Materials Building Construction and Design
Lingua di pubblicazione	Inglese
Formato	Materiale a stampa
Livello bibliografico	Monografia
Nota di contenuto	Structural performances of recycled aggregates concrete foundation plinths -- Experimental and Analytical Study of a Welded Steel Wire Mesh for Anti-Falling Debris Protection System -- Carbon-doped eco-earth concretes for sustainable monitoring of structures -- A preliminary study on the use of Recycled Asphalt Pavement (RAP) in mortars -- Seismic fragility curves: a comparison among nonlinear static and dynamic analysis procedures -- Recycled Aggregates and Circular Economy: the case of centrifuged reinforced concrete poles for electric power lines -- Advances on the use of geopolymers recycled aggregate concrete in construction -- Bond behavior of geopolymer concrete with CFRP and GFRP bars -- Ultra High-Performance Fibre-Reinforced Cementitious Composites as the link between structural durability and sustainability: the experience of the H2020 project ReSHEALience -- A new concept of Additive Manufacturing for the regeneration of existing tunnels -- Influence of infill-to-frame connection on the seismic response of RC frames -- Green geopolymer mortars for masonry buildings: effect of additives on their workability and mechanical properties/Sviluppo di malte geopolimeriche "green" per muratura: studio dell'effetto degli additivi sulla lavorabilità e sulle

proprietà meccaniche -- FRCC composites for the structural upgrading of Reinforced Concrete shallow beams -- Indirect Identification of the Bond-Slip Model at SRP-Concrete Interface -- Limits of current design approaches in the analysis of wind turbine foundations -- Use of plastic waste for the development of green lightweight structural concrete -- Comparison of different approaches to derive global safety factors for non-linear analyses of slender RC members -- North-West Ring Road of Merano - 2nd Lot: Cut&Cover Tunnel -- Analysis of failure mechanisms of Gerber half-joint specimens through digital image correlation -- Quality control of prestressed concrete girder decks in existing bridges: From diagnostics to numerical analysis -- Recent developments of an optimisation procedure for seismic retrofit of RC frames -- Degradation and rehabilitation of Gerber saddles of concrete bridges -- Experimental tests on post-tensioned PC girders with grouting defects under different prestressing levels: preliminary results -- Dapped-end beams: experimental tests and capacity models in the literature.

---

### Sommario/riassunto

This book gathers the best peer-reviewed papers presented at the Italian Concrete Conference, held in Naples, Italy, on October 12-15, 2022. The conference topics encompass the aspects of design, execution, rehabilitation, and control of concrete structures, with particular reference to theory and modeling, applications and realizations, materials and investigations, technology, and construction techniques. The contributions amply demonstrate that today's structural concrete applications concern not only new constructions, but more and more rehabilitation, conservation, strengthening, and seismic upgrading of existing premises, and that requirements cover new aspects within the frame of sustainability, including environmental friendliness, durability, adaptability, and reuse of works and/or materials. As such, the book represents an invaluable, up-to-the-minute tool, providing an essential overview of structural concrete, as well as all new materials with cementitious matrices.

---