Record Nr. UNINA9910640392103321 Autore Wu Gang Titolo Novel Precast Concrete Structure Systems / / by Gang Wu, De-Cheng Feng, Chun-Lin Wang Singapore:,: Springer Nature Singapore:,: Imprint: Springer,, 2023 Pubbl/distr/stampa 981-19-6821-7 **ISBN** Edizione [1st ed. 2023.] Descrizione fisica 1 online resource (336 pages) Collana Springer Tracts in Civil Engineering, , 2366-2603 Disciplina 624.183414 Soggetti Buildings - Design and construction **Building construction** Mechanics, Applied Solids **Building Construction and Design** Solid Construction Solid Mechanics Inglese Lingua di pubblicazione **Formato** Materiale a stampa Livello bibliografico Monografia Nota di contenuto Introduction -- Precast concrete frame system with ductile connector -- Prestressed precast concrete frame system with external energy dissipation -- Precast concrete frame system with friction energy dissipation -- Cast-in-situ frame with precast sub-frame structure system -- Precast rocking wall structure system -- Precast concrete cassette structures for highrise buildings -- Precast modularized suspended structure system. This book systematically presents these findings for the first time, Sommario/riassunto focusing on the composition, force mode, structural characteristics, performance advantages, and calculation methods for each new structural system, and comparing each one with traditional structural systems. In view of the persistent problems in the current equivalent

cast in situ precast concrete structural systems and the development of

non-equivalent cast in situ precast concrete structure systems, Southeast University and Harbin Institute of Technology have conducted extensive research and proposed several new types of precast concrete structural systems. Their findings in this regard can promote the development of basic theories and technologies for building industrialization, accelerate the advancement of China's building industrialization, promote the application of precast building technology, and realize the concept of green building.