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Titolo	Experiment-Based Structural Mechanics / / by Kyung-Jae Shin, Swoo-Heon Lee
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ISBN	981-15-8311-0
Edizione	[1st ed. 2021.]
Descrizione fisica	1 online resource (XXV, 143 p. 235 illus., 111 illus. in color.)
Disciplina	624.171
Soggetti	Buildings - Design and construction Building materials Building construction Light construction Steel construction Lightweight construction Building Construction and Design Building Materials Solid Construction Light-weight Construction, Steel and Timber Construction
Lingua di pubblicazione	Inglese
Formato	Materiale a stampa
Livello bibliografico	Monografia
Nota di contenuto	Strength of Flexural Member Made of Paper -- Strength of Compressive Member Made of Paper -- Bending, Compression, Tensile Test of a Spaghetti Noodle -- Centroid of Section -- Test and Design of Tension Member -- Stress Concentration Test -- Flexural Strength Test of Beam -- Bending Test and Design of Flexural Member -- Deflection Test of Beam -- Lateral Buckling Test of Beam -- Shear Center Test (Focused on Channel Section) -- Principle of Reinforced Concrete Beam.
Sommario/riassunto	This textbook demonstrates theoretical principles and actual cases of structural mechanics. This book explains basic definitions of beam, frame, and truss which are widely used in the field of structure mechanics and also shows important engineering tests such as moment distribution, characteristics of member section, analysis of a truss, analysis of a statically indeterminate structure, and principle of bending

resistance of concrete section. These contents can help many students to figure out the resistance principle of a structure through simple model tests, dynamics, reinforced concrete structure, steel frame structure and understand how dynamic computational equation is mathematically used in structure mechanics.