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| Autore                  | Cueto Elías   |
| Titolo                  | An Introduction to Structural Mechanics for Architects / / by Elías Cueto, David González   |
| Pubbl/distr/stampa      | Cham : , : Springer International Publishing : , : Imprint : Springer, , 2018   |
| ISBN                    | 3-319-72935-7   |
| Edizione                | [1st ed. 2018.]   |
| Descrizione fisica      | 1 online resource (XIII, 235 p. 225 illus., 130 illus. in color.)   |
| Collana                 | Structural Integrity, , 2522-560X ; ; 4   |
| Disciplina              | 624.171   |
| Soggetti                | Mechanics<br>Mechanics, Applied<br>Engineering design<br>Buildings—Design and construction<br>Building<br>Construction<br>Engineering, Architectural<br>Building materials<br>Solid Mechanics<br>Engineering Design<br>Building Construction and Design<br>Structural Materials   |
| Lingua di pubblicazione | Inglese   |
| Formato                 | Materiale a stampa  |
| Livello bibliografico   | Monografia  |
| Nota di bibliografia    | Includes bibliographical references and index.  |
| Nota di contenuto       | Preface -- 1 An Introduction to Continuum Mechanics -- 2 Cable Structures -- 3 Arches -- 4 Trusses -- 5 Beams (I) Geometric Description and Internal Forces -- 6 Beams (II) Normal Stresses -- 7 Beams (III) Shear Stresses -- 8 Beams (IV) Torsion -- 9 Statically Indeterminate Structures -- Appendix A: Indicial Notation -- Index.                         |
| Sommario/riassunto      | This textbook offers an introductory course to structural mechanics for architects, including problems and solutions. It follows a completely different approach to structural mechanics than the usual books for engineering schools, making it much more attractive for architecture students and practitioners. It also offers a different point of view for |

engineering students, as it provides them with a more intuitive understanding of structural mechanics and the models therein. Instead of studying the classical theory of linear elasticity and then particularizing it to simple structures, this book analyzes structures in a historic and also typological order. The book starts with cable structures and stone arches, followed by trusses and, finally, frame structures made of beams. For every typology, the latest, state-of-the-art theory in the field is introduced in a very didactic way.

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