Record Nr. UNINA9910299467703321 Autore Gross Dietmar Titolo Engineering Mechanics 3: Dynamics // by Dietmar Gross, Werner Hauger, Jörg Schröder, Wolfgang A. Wall, Sanjay Govindjee Pubbl/distr/stampa Berlin, Heidelberg: .: Springer Berlin Heidelberg: .: Imprint: Springer. , 2014 **ISBN** 3-642-53712-X Edizione [2nd ed. 2014.] Descrizione fisica 1 online resource (IX, 365 p. 190 illus.) Collana Springer textbook Disciplina 620.1 Soggetti Mechanics Mechanics, Applied Mechanical engineering Theoretical and Applied Mechanics Solid Mechanics Mechanical Engineering Lingua di pubblicazione Inglese **Formato** Materiale a stampa Livello bibliografico Monografia Note generali Includes index. Nota di contenuto Motion of a Point Mass -- Dynamics of Systems of Point Masses --Dynamics of Rigid Bodies -- Principles of Mechanics -- Vibrations --Non-Inertial Reference Frames -- Numerical Simulation. Sommario/riassunto Dynamics is the third volume of a three-volume textbook on Engineering Mechanics. It was written with the intention of presenting to engineering students the basic concepts and principles of mechanics in as simple a form as the subject allows. A second objective of this book is to guide the students in their efforts to solve problems in mechanics in a systematic manner. The simple approach to the theory of mechanics allows for the different educational backgrounds of the students. Another aim of this book is to provide engineering students as well as practising engineers with a basis to help them bridge the gaps between undergraduate studies, advanced courses on mechanics and practical engineering problems. The book contains numerous examples and their solutions. Emphasis is placed upon student participation in solving the problems. The contents of the book

correspond to the topics normally covered in courses on basic

engineering mechanics at universities and colleges. Volume 1 deals with Statics; Volume 2 contains Mechanics of Materials.