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Descrizione fisica	1 online resource (XVII, 386 p. 206 illus., 9 illus. in color.)
Disciplina	629.4113
Soggetti	Aerospace engineering Astronautics Space sciences Mechanical engineering Aerospace Technology and Astronautics Space Sciences (including Extraterrestrial Physics, Space Exploration and Astronautics) Mechanical Engineering
Lingua di pubblicazione	Inglese
Formato	Materiale a stampa
Livello bibliografico	Monografia
Note generali	Bibliographic Level Mode of Issuance: Monograph
Nota di bibliografia	Includes bibliographical references and index.
Nota di contenuto	Fundamentals of Astrodynamics -- Keplerian Motion -- Orbital Maneuvers -- Techniques of Astrodynamics -- Non-Keplerian Motion -- Spacecraft Rendezvous -- Navigation and Mission Design Techniques and Tools -- Further Study.
Sommario/riassunto	This textbook covers fundamental and advanced topics in orbital mechanics and astrodynamics to expose the student to the basic dynamics of space flight. The engineers and graduate students who read this class-tested text will be able to apply their knowledge to mission design and navigation of space missions. Through highlighting basic, analytic and computer-based methods for designing interplanetary and orbital trajectories, this text provides excellent insight into astronomical techniques and tools. This book is ideal for graduate students in Astronautical or Aerospace Engineering and related fields of study, researchers in space industrial and governmental research and development facilities, as well as

researchers in astronautics. This book also:

- Illustrates all key concepts with examples
- Includes exercises for each chapter
- Explains concepts and engineering tools a student or experienced engineer can apply to mission design and navigation of space missions
- Covers fundamental principles to expose the student to the basic dynamics of space flight.
