

1. Record Nr.	UNINA9910877126303321
Autore	Tewari Ashish
Titolo	Foundations of space dynamics // Ashish Tewari
Pubbl/distr/stampa	Hoboken, N.J., : Wiley, 2021 Hoboken, New Jersey : , : Wiley, , 2021
ISBN	1-119-45532-4 1-119-45533-2 1-119-45530-8
Edizione	[First edition.]
Descrizione fisica	1 online resource (371 pages)
Collana	Aerospace series / editors Peter Belobaba, Jonathan Cooper and Allan Seabridge
Classificazione	538 629.4/11
Disciplina	629.4/11
Soggetti	Aerospace engineering Astrodynamics Orbital mechanics
Lingua di pubblicazione	Non definito
Formato	Materiale a stampa
Livello bibliografico	Monografia
Note generali	Includes bibliographical references and index
Nota di bibliografia	Includes bibliographical references and index.
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Sommario/riassunto

"Space dynamics is one of the most important topics in aerospace engineering. It governs the satellites launched into an Earth orbit as well as lunar and interplanetary space exploration missions. The successful launching and operation of all spacecraft requires a good knowledge of space dynamics. Space dynamics can be divided into two broad categories: (i) orbital mechanics, and (ii) attitude dynamics. Orbital mechanics is a study of the translational motion of a spacecraft under the gravitational influence of either one or several large bodies. Attitude dynamics is the study of rotational motion of a rigid spacecraft about its own centre of mass, and includes both kinematical and kinetic description in terms of Euler angles, quaternion, or Rodrigues/modified Rodrigues parameters, and the angular velocity components."--

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