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| Descrizione fisica | 1 online resource (xxi, 442 pages) : illustrations (some color) |
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| Soggetti | Space trajectories |
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| Formato | Materiale a stampa |
| Livello bibliografico | Monografia |
| Nota di bibliografia | Includes bibliographical references and index. |
| Nota di contenuto | part I. Free orbital motion. Two-body problem ; Perturbed motion ; Three-body problem ; Orbit determination ; Collision risks -- part II. Controlled orbital motion. Impulsive transfer ; Orbital rendezvous ; Optimal thrust level ; Low-thrust transfer -- Space debris cleaning -- part III. Launch and reentry. Launch into orbit ; Launcher staging ; Flat earth solutions ; Interplanetary trajectory ; Atmospheric reentry. |
| Sommario/riassunto | "Space trajectories are paths that spacecraft follow to reach their destinations. They're calculated using physics and celestial mechanics, considering factors like gravity, speed, and direction. These trajectories are crucial in aerospace engineering applications for efficient fuel usage, avoiding collisions with celestial bodies, or tracking satellites or space debris. Precise trajectory planning is vital for mission success, cost-effectiveness, and safety in space exploration."-- |