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Descrizione fisica	1 online resource (XIV, 174 p. 121 illus.)
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Disciplina	629.453
Soggetti	Aerospace engineering Astronautics Space sciences Control engineering Robotics Mechatronics Aerospace Technology and Astronautics Space Sciences (including Extraterrestrial Physics, Space Exploration and Astronautics) Control, Robotics, Mechatronics
Lingua di pubblicazione	Inglese
Formato	Materiale a stampa
Livello bibliografico	Monografia
Nota di bibliografia	Includes bibliographical references at the end of each chapters.
Nota di contenuto	Introduction -- Modeling and Hardware Components of Control System of Orbital Transfer Vehicle -- Orbit Prediction Technology -- Inertial Navigation and Initial Alignment Technology.- INS/GNSS Integrated Navigation Technology -- INS/CNS Integrated Navigation Technology -- Redundant Fault Tolerance and Failure Reconfiguration Technology of Inertial Sensor -- Guidance and Midcourse Correction Technology -- Orbit Control Strategy.
Sommario/riassunto	This book uses the entire flying process, starting from ground launching of the orbital transfer vehicle (OTV) to injecting payload into earth synchronous orbit, as an example for real-world engineering practices. It discusses in detail the analysis design and integrated OTV navigation and guidance system technologies in combination with the engineering experiences of the authors in analysis, design and integrated OTV navigation and guidance system applications, and the

research on navigation and guidance theories. It focuses on establishing motion of air vehicle equations, control system hardware components, orbit prediction technology, inertial navigation and initial alignment technologies, INS/GNSS integrated navigation technologies, INS/CNS integrated navigation technologies, redundant fault tolerance and failure reconfiguration technology of inertial sensors, guidance and midcourse correction technologies and orbit control strategies. The book is a valuable reference book for the engineers, technicians and researchers who are engaged in analysis, design and integrated application of OTV navigation and guidance control systems. It can also be used as teaching material for postgraduates and senior undergraduates majoring in OTV navigation and guidance systems and other related subjects.
