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Soggetti	Aerospace engineering Astronautics Geographic information systems Computer simulation Electrical engineering Aerospace Technology and Astronautics Geographical Information Systems/Cartography Simulation and Modeling Electrical Engineering
Lingua di pubblicazione	Inglese
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Note generali	Description based upon print version of record.
Nota di bibliografia	Includes bibliographical references at the end of each chapters.
Nota di contenuto	Introduction -- Principle of INS/CNS/GNSS Navigation System -- Filters in Navigation System -- Error Modeling, Calibration and Compensation of Inertial Measurement Unit (IMU) -- Star Map Processing Algorithm of Star Sensor and Autonomous Celestial Navigation -- INS/GNSS Integrated Navigation Method -- INS/CNS INTEGRATED NAVIGATION METHOD -- INS/CNS/GNSS Integrated Navigation Method -- Study for Real-time Ability of INS/CNS/GNSS Integrated Navigation Method -- Semi-physical Simulation Technology of INS/CNS/GNSS Integrated Navigation -- Prospect of INS/CNS/GNSS Integrated navigation

technology.

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Sommario/riassunto

This book not only introduces the principles of INS, CNS and GNSS, the related filters and semi-physical simulation, but also systematically discusses the key technologies needed for integrated navigations of INS/GNSS, INS/CNS, and INS/CNS/GNSS, respectively. INS/CNS/GNSS integrated navigation technology has established itself as an effective tool for precise positioning navigation, which can make full use of the complementary characteristics of different navigation sub-systems and greatly improve the accuracy and reliability of the integrated navigation system. The book offers a valuable reference guide for graduate students, engineers and researchers in the fields of navigation and its control. Dr. Wei Quan, Dr. Jianli Li, Dr. Xiaolin Gong and Dr. Jiancheng Fang are all researchers at the Beijing University of Aeronautics and Astronautics.

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