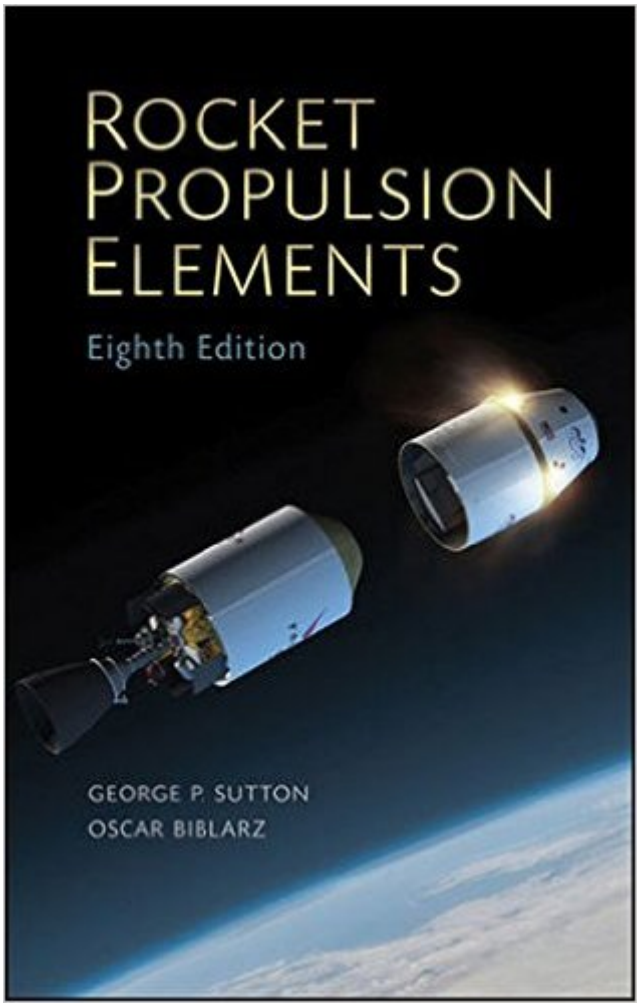
Rocket Propulsion Elements



Synopsis

The definitive text on rocket propulsionâ ”now revised to reflect advancements in the field For sixty years, Sutton’s Rocket Propulsion Elements has been regarded as the single most authoritative sourcebook on rocket propulsion technology. As with the previous edition, coauthored with Oscar Biblarz, the Eighth Edition of Rocket Propulsion Elements offers a thorough introduction to basic principles of rocket propulsion for guided missiles, space flight, or satellite flight. It describes the physical mechanisms and designs for various types of rockets’ and provides an understanding of how rocket propulsion is applied to flying vehicles. Updated and strengthened throughout, the Eighth Edition explores: The fundamentals of rocket propulsion, its essential technologies, and its key design rationale The various types of rocket propulsion systems, physical phenomena, and essential relationships The latest advances in the field such as changes in materials, systems design, propellants, applications, and manufacturing technologies, with a separate new chapter devoted to turbopumps Liquid propellant rocket engines and solid propellant rocket motors, the two most prevalent of the rocket propulsion systems, with in-depth consideration of advances in hybrid rockets and electrical space propulsion Comprehensive and coherently organized, this seminal text guides readers evenhandedly through the complex factors that shape rocket propulsion, with both theory and practical design considerations. Professional engineers in the aerospace and defense industries as well as students in mechanical and aerospace engineering will find this updated classic indispensable for its scope of coverage and utility.

Book Information

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Customer Reviews

Well, I am not going to say almost the same many people said in previous reviews, because most of them are correct. Essencially, and commonly accepted, this is a very good book in the topic.Besides the previous, I spent nearly 3 months to read the whole book in my partially "in itinere" spare time. From that reading, I came to some approaches that I enlight few lines now:a) This book covers almost all involved technology when designing a rocket propulsion system. Nevertheless, there are few things that are not as clear as it should be for novices in such a topic, especially basis on rockets paths, or another way to say, basis on why motors are designed as they are. It has nosense to tell deeply how a rocket engine is working if you dont know what duty has this propulsion system to accomplish. In this great book, many design parameters are involved as input data to design a rocket system, but little or no information about such needs is available. For example, rocket's path to orbit, and chosen orbit's type. This path defines rocket's setup. For a clear and comprehensive approach to this topic, and in order to understand the parameters involved, I highly recommend another more theorical book, which explains in a marvellous way this: Introduction to Rocket Science and Engineering. The selected book is not as hard engineered book as the one I am reviewing now, but it explains in a very easy way what a rocket system must do, and why.b) After reading the whole book, there are some missed systems (and important ones) that are not fully covered.

Strings: Viola (Essential Elements for Strings) Essential Elements Christmas Favorites - Flute: Solos and Band Arrangements Correlated with Essential Elements Band Method Essential Elements Broadway Favorites: Flute (Essential Elements Band Method) Adobe Photoshop Elements 3.0 and Premiere Elements Classroom in a Book Collection Structural Elements for Architects and Builders: Design of Columns, Beams, and Tension Elements in Wood, Steel, and Reinforced Concrete, 2nd Edition Emery's Elements of Medical Genetics: With STUDENT CONSULT Online Access, 14e (Turnpenny, Emery's Elements of Medical Genetics)