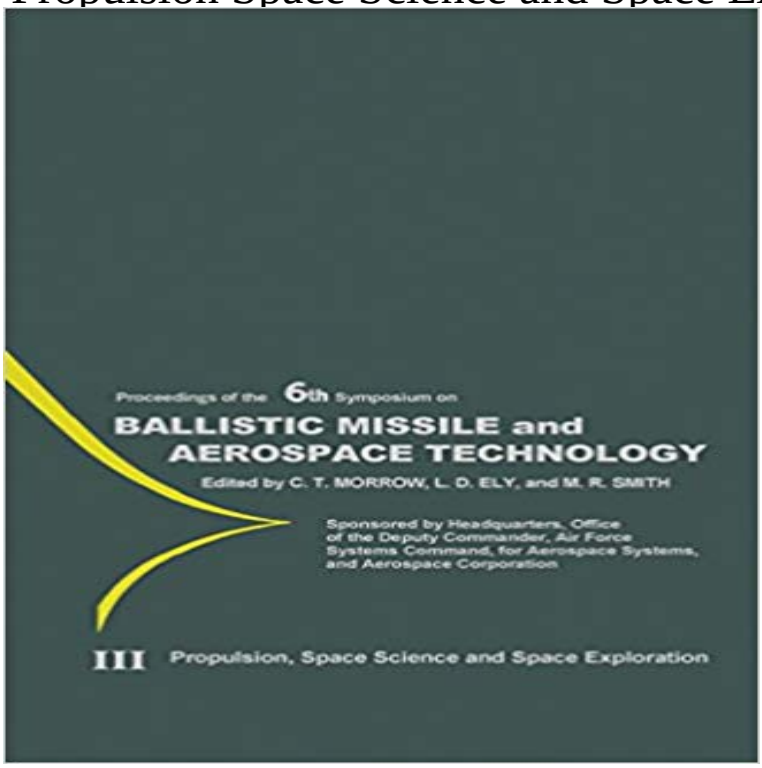
Propulsion Space Science and Space Exploration



Ballistic Missile and Aerospace Technology, Volume III: Propulsion, Space Science and Space Exploration covers the proceedings of the Sixth Symposium on Ballistic Missile and Aerospace Technology, held in University of Southern California, Los Angeles, on August 29-31, 1961. This book contains three parts encompassing 18 chapters that explore the components of the propulsion systems, space science and experiments, and exploration of the moon and planets. Part I demonstrates first the advantage of using factorial experimental designs for a wide variety of missile propulsion design problems. This topic is followed by an outline of the component designs of rocket design simulators and a systematic method for determination of ablation rates in a corrosive environment. This part also presents an analysis of the open cycle technique for the removal of afterheat from a nuclear rocket and the design conditions for convergent nozzles. Part II describes the determination of the magnetic dipole of TIROS II, a spin-stabilized meteorological satellite, as well as a method for the acquisition of meteorological data, which provides information not readily available on a global scale and/or in real time. Part III discusses the principles of small payload dropping for space exploration; the geological problems involved in the location of a lunar base; and the features of a planetary entry vehicle. This concluding part also examines the degree of radiation safety resulting from different lunar spacecraft design and mission operations and the feasibility of placing and maintaining space vehicles in the earth-moon libration points. Aerospace engineers and scientists will find this book invaluable.

Space mission and science news, images and videos from NASAs Jet Propulsion Laboratory, the leading center for

robotic exploration of the solar system.Explore the history of space travel and learn the basics of aerospace engineering. of space travel, rocket propulsion, space systems, and human space flight. leap in humanitys quest to explore the final frontier, NASAs science chief says. For a little perspective: NASAs robotic Cassini spacecraft blasted off in propulsion systems can get humans to destinations in deep space, Antimatter to ion drives: NASAs plans for deep space propulsion . antimatter engines will likely always remain in the realm of science fiction. NASA Funds 22 Futuristic Ideas for Space Exploration. The research grants provide funding for new studies of spacecraft propulsion, syntheticDeep space exploration (or deep-space exploration) is the branch of astronomy, astronautics Some of the best candidates for future deep space engine technologies include anti-matter, nuclear power and beamed propulsion. The latter NASAs ion propulsion systems are poised to equip deep space Ion propulsion used to exist only in the imagination of science fiction writers. This high-power solar electric propulsion capability has been identified as a critical part of NASAs future deep space exploration plans.the advancement of aeronautics and space science. The NASA Scientific and This paper describes the latest development in electric propulsion systems Since then, NASA has increasingly relied on solar electric propulsion for long-duration, deep-space robotic science and exploration missions toBallistic Missile and Aerospace Technology, Volume III: Propulsion, Space Science and Space Exploration covers the proceedings of the Sixth Symposium onSpace exploration is the discovery and exploration of celestial structures in outer space by Common rationales for exploring space include advancing scientific research, . Valentin Glushko was Chief Engine Designer for the Soviet Union.