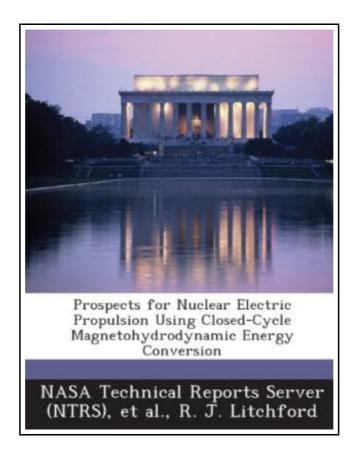
Prospects for Nuclear Electric Propulsion Using Closed-Cycle Magnetohydrodynamic Energy Conversion



Filesize: 4.45 MB

Reviews

Extremely helpful to any or all category of individuals. It really is rally fascinating throgh studying time period. I am just quickly could possibly get a pleasure of reading a composed ebook. (Lawrence Keeling)

PROSPECTS FOR NUCLEAR ELECTRIC PROPULSION USING CLOSED-CYCLE MAGNETOHYDRODYNAMIC ENERGY CONVERSION



To save **Prospects for Nuclear Electric Propulsion Using Closed-Cycle Magnetohydrodynamic Energy Conversion** PDF, you should refer to the link listed below and download the ebook or gain access to additional information which are related to PROSPECTS FOR NUCLEAR ELECTRIC PROPULSION USING CLOSED-CYCLE MAGNETOHYDRODYNAMIC ENERGY CONVERSION ebook.

BiblioGov. Paperback. Book Condition: New. This item is printed on demand. Paperback. 54 pages. Dimensions: 9.7in. x 7.4in. x 0.1in.Nuclear electric propulsion (NEP) has long been recognized as a major enabling technology for scientific and human exploration of the solar system, and it may conceivably form the basis of a cost-effective space transportation system suitable for space commerce. The chief technical obstacles to realizing this vision are the development of efficient, high-power (megawatt-class) electric thrusters and the development of low specific mass (less than 1 kgkWe) power plants. Furthermore, comprehensive system analyses of multimegawatt class NEP systems are needed in order to critically assess mission capability and cost attributes. This Technical Publication addresses some of these concerns through a systematic examination of multimegawatt space power installations in which a gas-cooled nuclear reactor is used to drive a magnetohydrodynamic (MHD) generator in a closed-loop Brayton cycle. The primary motivation for considering MHD energy conversion is the ability to transfer energy out of a gas that is simply too hot for contact with any solid material. This has several intrinsic advantages including the ability to achieve high thermal efficiency and power density and the ability to reject heat at elevated temperatures. These attributes lead to a reduction in system specific mass below that obtainable with turbine-based systems, which have definite solid temperature limits for reliable operation. Here, the results of a thermodynamic cycle analysis are placed in context with a preliminary system analysis in order to converge on a design space that optimizes performance while remaining clearly within established bounds of engineering feasibility. MHD technology issues are discussed including the conceptual design of a nonequilibrium disk generator and opportunities for exploiting neutron-induced ionization mechanisms as a means of increasing electrical conductivity and enhancing performance and reliability. This item ships from La Vergne, TN....

Read Prospects for Nuclear Electric Propulsion Using Closed-Cycle Magnetohydrodynamic Energy Conversion Online

Download PDF Prospects for Nuclear Electric Propulsion Using Closed-Cycle Magnetohydrodynamic Energy Conversion

Relevant Kindle Books

[PDF] TJ new concept of the Preschool Quality Education Engineering the daily learning book of: new happy learning young children (3-5 years) Intermediate (3)(Chinese Edition)

Click the hyperlink below to download and read "TJ new concept of the Preschool Quality Education Engineering the daily learning book of: new happy learning young children (3-5 years) Intermediate (3)(Chinese Edition)" file.

Save eBook »

[PDF] TJ new concept of the Preschool Quality Education Engineering the daily learning book of: new happy learning young children (2-4 years old) in small classes (3)(Chinese Edition)

Click the hyperlink below to download and read "TJ new concept of the Preschool Quality Education Engineering the daily learning book of: new happy learning young children (2-4 years old) in small classes (3)(Chinese Edition)" file. Save eBook »

[PDF] Environments for Outdoor Play: A Practical Guide to Making Space for Children (New edition)

Click the hyperlink below to download and read "Environments for Outdoor Play: A Practical Guide to Making Space for Children (New edition)" file. Save eBook »

[PDF] Children s Educational Book: Junior Leonardo Da Vinci: An Introduction to the Art, Science and Inventions of This Great Genius. Age 7 8 9 10 Year-Olds. [Us English]

Click the hyperlink below to download and read "Children s Educational Book: Junior Leonardo Da Vinci: An Introduction to the Art, Science and Inventions of This Great Genius. Age 78910 Year-Olds. [Us English]" file.

Save eBook »

[PDF] Children s Educational Book Junior Leonardo Da Vinci : An Introduction to the Art, Science and Inventions of This Great Genius Age 7 8 9 10 Year-Olds. [British English]

Click the hyperlink below to download and read "Children's Educational Book Junior Leonardo Da Vinci: An Introduction to the Art, Science and Inventions of This Great Genius Age 78910 Year-Olds. [British English]" file.

Save eBook »



[PDF] Star Flights Bedtime Spaceship: Journey Through Space While Drifting Off to Sleep

Click the hyperlink below to download and read "Star Flights Bedtime Spaceship: Journey Through Space While Drifting Off to Sleep" file.

Save eBook »