1. Record Nr. UNINA9910523759303321

Autore	Bolvashenkov Igor
Titolo	Vehicle Electrification : On Water, in Air and Space / / by Igor Bolvashenkov, Jörg Kammermann, Alexander Rubinraut, Hans-Georg Herzog, Ilia Frenkel
Pubbl/distr/stampa	Cham : , : Springer International Publishing : , : Imprint : Springer, , 2022
ISBN	3-030-81740-7
Edizione	[1st ed. 2022.]
Descrizione fisica	1 online resource (107 pages)
Collana	SpringerBriefs in Applied Sciences and Technology, , 2191-5318
Disciplina	623.873
Soggetti	Vehicles Electric machinery Electric power production Vehicle Engineering Electrical Machines Mechanical Power Engineering
Lingua di pubblicazione	Inglese
Formato	Materiale a stampa
Livello bibliografico	Monografia
Nota di contenuto	From the failure rate of components to the cost-effectiveness of an Arctic gas carrier with an electric propulsion system -- Technological feasibility of a full-electric aircraft considering weight, volume, and reliability restrictions -- Electrical version design of search-and-rescue helicopter based on Eurocopter -- Electric propulsion systems of interorbital rockets for the flights towards planets of the solar system.
Sommario/riassunto	This book provides a comprehensive assessment and presentation of various feasible application of electric propulsion system, considering their weight, volume, reliability, and fault tolerance. The results of feasibility analysis can be used today or in the near future for development of electric propulsion system for the ships, planes, helicopters, and spacecrafts. To solve the above task, new theoretical approaches are applied, including combined random process methods, the Lz-transform technique for multistate systems, and statistical data processing.