1. Record Nr. UNINA9910557799403321 Autore Carmicino Carmine Titolo Advances in Hybrid Rocket Technology and Related Analysis Methodologies Pubbl/distr/stampa Basel, Switzerland, : MDPI - Multidisciplinary Digital Publishing Institute, 2020 Descrizione fisica 1 electronic resource (352 p.) Soggetti History of engineering & technology Lingua di pubblicazione Inglese **Formato** Materiale a stampa Livello bibliografico Monografia Sommario/riassunto The book is an amazing collection of technical papers dealing with hybrid rockets. Once perceived as a niche technology, for about a decade, hybrid rockets have enjoyed renewed interest from both the propulsion technical community and industry. Hybrid motors can be used in practically all applications where a rocket is employed, but there are certain cases where they present a superior fit, such as sounding rockets, tactical missile systems, launch boosters and the emerging field of commercial space transportation. The novel space tourism business, indeed, will benefit from their safety and lower recurrent development costs. The subjects addressed in the book include the cutting edge technology employed to push forward this relatively new propulsion concept, spanning systems to improve fuel regression rate, control of the mixture ratio to optimize performance.

computational fluid dynamics applied to the simulation of the internal

ballistics, and some other novel system applications.