Record Nr. UNINA9910554827803321 Computer modeling in the aerospace industry / / edited by Iftikhar B. **Titolo** Abbasov Pubbl/distr/stampa Hoboken, NJ:,: Wiley Beverly, MA:,: Scrivener Publishing,, 2020 **ISBN** 1-119-68230-4 1-119-68226-6 1-119-68136-7 Descrizione fisica 1 online resource (283 pages) Disciplina 629.10113 Soggetti Aerospace engineering - Computer simulation Airplanes - Design and construction - Data processing Inglese Lingua di pubblicazione **Formato** Materiale a stampa Livello bibliografico Monografia Sommario/riassunto "This book is devoted to unique developments in the field of computer modeling in aerospace engineering. The book describes the original conceptual models of amphibious aircraft, ground-effect vehicles, hydrofoil vessels, and others, from theory to the full implementation in industrial applications. The developed models are presented with the design of passenger compartments and are actually ready for implementation in the aircraft industry. The originality of the concepts are based on biological prototypes, which are ergonomic, multifunctional and aesthetically pleasing. The aerodynamic layout of prospective convertible land and ship-based aircrafts of vertical and short takeoff-landing is presented, as well as the development of the original model of the unmanned aerial vehicle, or drone. The results of full-scale experiments are presented, including the technology of modeling aerospace simulators based on the virtual reality environment with technical vision devices. Whether for the practicing engineer in the

field, the engineering student, or the scientist interested in new

aerospace developments, this volume is a must-have"--