1. Record Nr. UNINA9910483773403321 Titolo Innovative design, analysis and development practices in aerospace and automotive engineering: proceedings of I-DAD 2020 / / Nicolas Gascoin, E. Balasubramanian Gateway East, Singapore:,: Springer,, [2021] Pubbl/distr/stampa ©2021 **ISBN** 981-15-6619-4 Edizione [1st ed. 2021.] Descrizione fisica 1 online resource (XIII, 571 p. 371 illus., 292 illus. in color.) Collana Lecture Notes in Mechanical Engineering, , 2195-4356 Disciplina 620.0042 Soggetti Engineering design Industrial and Production Engineering Automobiles - Design and construction Motor vehicles - Design and construction Lingua di pubblicazione Inglese **Formato** Materiale a stampa Livello bibliografico Monografia Note generali Includes index. Nota di contenuto 3D Digitizing Practice-Advantage In Reverse Engineering With Accuracy boost -- Cell Arrangement Measurement - A Perfect Usage of Cell Fabricating Framework in an ndustry -- CFD Analysis on Extrusion of Slurry in Direct Ink Writing -- Numerical Investigation on Optimized Convergent Divergent Nozzle in 3S Separator Device -- Thermal Distribution on Gas Turbine Blade Using Thermal Paint -- Synthesis and Characterization of 17 Cr Ferritic ODS Steel Developed through Vacuum Hot Pressing -- Aerodynamic Analysis of Manta Ray inspired Micro Air Vehicle Wing Planforms -- Study of Gas Centered Coaxial Injector using Jet in a Cross-flow Mechanism -- A Contemporary Review on Knee Injuries and Protective Pads -- Development of Analytical Method for Mass Flow Measurement in a Porous Channel. This book gathers the best articles presented by researchers and Sommario/riassunto industrial experts at the International Conference on "Innovative Design, Analysis and Development Practices in Aerospace and Automotive Engineering (I-DAD 2020)". The papers discuss new design concepts, and analysis and manufacturing technologies, with a focus

on achieving improved performance by downsizing; improving the

strength-to-weight ratio, fuel efficiency and operational capability at room and elevated temperatures; reducing wear and tear; addressing NVH aspects, while balancing the challenges of Euro VI/Bharat Stage VI emission norms, greenhouse effects and recyclable materials. Presenting innovative methods, this book is a valuable reference resource for professionals at educational and research organizations, as well as in industry, encouraging them to pursue challenging projects of mutual interest.