1. Record Nr. UNINA9910483531803321 Materials, design, and manufacturing for sustainable environment: **Titolo** select procededings of ICMDMSE 2020 / / Santhakumar Mohan, S. Shankar and G. Rajeshkumar (editors) Gateway East, Singapore:,: Springer,, [2021] Pubbl/distr/stampa ©2021 **ISBN** 981-15-9809-6 Edizione [1st ed. 2021.] Descrizione fisica 1 online resource (XVIII, 925 p. 585 illus., 508 illus. in color.) Collana Lecture Notes in Mechanical Engineering, , 2195-4356 Disciplina 929.374 Soggetti Engineering design - Environmental aspects Manufacturing processes - Environmental aspects Lingua di pubblicazione Inglese **Formato** Materiale a stampa Livello bibliografico Monografia Nota di contenuto Experimental Analysis of Tribological Behaviour of Jute Fiber Reinforced Nano-clay Filled Epoxy Composites -- A Robust Motion Control Scheme of an Underwater Robot with Tiltable Thrusters -- Characterization of Pneumatic Air Muscle (Pam) under Unloaded and Loaded Conditions --Experimental Studies on Bio Machining of Copper and its Behavioural Characteristics -- Experimental Investigation of Tensile Strength and Hardness in GMAW/GTAW Butt Welded Joints with Various Shielding Gas Compositions -- Double-loop Robust Motion Control of a Groundbased Vehicle-Manipulator System -- Trend Plot Analysis of Dry Sliding Wear in Al/SiC Co-Continuous Ceramic Composites -- Study on Fibre Behaviour for Chemical Treatment and Fabrication of ABS Based Fibre Composite -- A Study on Influence of Frictional Coefficient on Stresses in AISI-1045 Forging Using Deform-3D -- Influence of Phoenix sp. Fiber Content on the Viscoelastic Properties of Polymer Composites. . This book comprises the select proceedings of the International Sommario/riassunto Conference on Materials, Design and Manufacturing for Sustainable Environment (ICMDMSE 2020). The primary focus is on emerging materials and cutting-edge manufacturing technologies for sustainable environment. The book covers a wide range of topics such as advanced materials, vibration, tribology, finite element method (FEM), heat

transfer, fluid mechanics, energy engineering, additive manufacturing, robotics and automation, automobile engineering, industry 4.0, MEMS and nanotechnology, optimization techniques, condition monitoring, and new paradigms in technology management. Contents of this book will be useful to students, researchers, and practitioners alike.