1. Record Nr. UNINA9911007187703321 Autore Jayakumar V Titolo International Conference on Advancements in Materials, Manufacturing and Automation Pubbl/distr/stampa Zurich: ,: Trans Tech Publications, Limited, , 2024 ©2024 **ISBN** 9783035725285 3035725284 Edizione [1st ed.] Descrizione fisica 1 online resource (269 pages) Altri autori (Persone) DavimJ. Paulo DhinakaranV Soggetti Mechanical engineering Materials science Lingua di pubblicazione Inglese **Formato** Materiale a stampa Livello bibliografico Monografia Nota di contenuto Intro -- International Conference on Advancements in Materials, Manufacturing & Dreface -- Table of Contents --Chapter 1: Polymers and Composites -- Experimental Study on Mechanical, Chemical and Acoustical Properties of Waste Tea Leaf Fiber Reinforced Epoxy Composites -- Study of Stir Casting and Microstructure of Al-B4C MMCs -- Investigation on Environmentally Polluted Water Hyacinth with Banana Fibre Reinforced Composite

Chapter 1: Polymers and Composites -- Experimental Study on Mechanical, Chemical and Acoustical Properties of Waste Tea Leaf Fiber Reinforced Epoxy Composites -- Study of Stir Casting and Microstructure of Al-B4C MMCs -- Investigation on Environmentally Polluted Water Hyacinth with Banana Fibre Reinforced Composite Absorption Properties -- Optimization Techniques in Compression Moulding: A Comprehensive Review -- Micromechanical Analysis of GFRP Composite with Micro-Level Defects -- Chapter 2: Tribology and Emerging Materials -- Synthesis of Calcium Fluoride from Discarded Egg Shell - A Potential Solid Lubricant -- Tribological Properties of Additively Manufactured Al-Si Alloys and Steels -- Synthesis of Titanium Dioxide (TiO2) Nanoparticles by Sol-Gel Method and its Characterization -- Chapter 3: Additive Manufacturing -- Study on Recyclebot with 3D Printing Wastes for Circular Economy -- Design and Optimization of 4D Printed Carbon Fiber Reinforced Poly Lactic Acid Parts Using Fused Deposition Modeling for Shape Memory Applications: A Taguchi Approach -- Influence of Printing Parameters on Mechanical

Behavior of 3D-Printed PLA Using Taguchi Based ANFIS Technique -- Chapter 4: Structural Metals Machining -- Research and Development Status of Laser Cladding on Stainless Steel Alloys: A Review -- Multiple Response Optimization of Dissimilar Friction Stir Welding on 6061-T6 Aluminum Alloy and AZ31B Magnesium Alloy -- Investigation on Influence of Die Electric Medium in Electrical Discharge Machining of Monel 400 Alloy -- Experimental Analysis of Cryogenic-Treated Single Tubular Electrodes in Micro-EDM Using CRITIC-MOORA Based Integrated Approach.

Multi-Objective Parametric Optimization of Micro-Electro Discharge Machining of Hastelloy C276 Super Alloy Using Response Surface Methodology and Particle Swarm Optimization -- Chapter 5: Mechanical Engineering -- Design and Development of a Portable Resistance Spot Welding Machine for Small-Scale Industries -- Review on Performance and Emissions Characteristics of Compression Ignition Engine Fueling Non-Edible Vegetable Oil -- An Analytical Study of the Impact of an Inclined Magnetic Field on Couette Flow with Jeffrey Fluid under Local Thermal Non-Equilibrium (LTNE) and Viscous Dissipation -- Strategies on the Optimization of Thermoelectric Systems for Heat Transfer Applications: State of the Art Review -- A Survey of Drones in Agriculture Sector -- Multi-Objective Optimization of a Three Degree-of-Freedom Translational Parallel Kinematic Machine with Coplanar Rails -- Keyword Index -- Author Index.

Sommario/riassunto

Selected peer-reviewed extended articles based on abstracts presented at the 1st International Conference on Advancements in Materials, Manufacturing and Automation (AMMA-2023) Aggregated Book.