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Nota di contenuto	Intro -- 2022 International Conference on Machining, Materials and Mechanical Technologies -- Preface -- Table of Contents -- Chapter 1: Coatings and Surface Treatment -- Effect of Mechanically Created Pits Pattern for Direct Diamond Deposition on Stainless-Steel Surface -- Low Tool Wear Cutting Method Using H ₂ O Radical -- Electropolishing Research for Stainless Steel Surface Finishing under Vacuum Status -- Edge Treatment by Tip-Burnishing Process with an Active Rotary Tool -- Chapter 2: Emerging Metals Machining -- A Research on the Enhancing of the Formability of Stainless-Steel Sheet Sus304 by Multistage Single Point Incremental Sheet Forming (MSPIF) Technology -- A Study on a Novel Process Combines Cutting and Joining by an Automatic Lathe -- Chapter 3: Nanomaterials and Nanoprocessing -- Study of Foaming Morphology in Microcellular Injection Molded TPU/MWCNT Composites under Gas Counter Pressure -- Fabrication of Hybrid Micro/Nano Structures on Titanium by Vector Femtosecond Laser Beam -- Manufacturing Method and Characteristics of Nanocopper Fiber Yarn -- Chapter 4: Tools and Machines Design -- A Study on Prototype of End Mill for Ultra-High Pressure Coolant

Supplying from Flank Surface Side Using Fluid Simulation -- Fatigue Analysis of Monopile Foundation for Offshore Wind Turbine -- Mechanical Design Using Open-Source Software (Eigenvalue Analysis by Parametric Study) -- Relationship between Flow Field of Cutting Edge and Chip Dispersal during CFRP Drilling -- Chapter 5: Mechatronics -- Development of a Hydrostatic Bearing in High Vacuum Using an Ionic Liquid for a Semiconductor Fabrication Device -- Numerical Investigation of Bearing Characteristics of a Hydrostatic Thrust Bearing with a Flow-Control Restrictor Using a Bending Beam -- Breakage Detection Based on the Breakage Mechanism of Small-Diameter Drills. Measurement Path Calculation Method for High-Precision On-Machine Measurement -- Swing up Control of the Pendubot with Restricted Actuator Movement Angle Using Energy-Based Methods -- Swing up Control of the Pendubot with Elbow Joint Extended Using Energy-Based Methods -- Verification and Learning of Feature Automatic Recognition with Time Prediction for EDM and WEDM -- Keyword Index -- Author Index.

Sommario/riassunto

Selected peer-reviewed extended articles based on abstracts presented at the 4th International Conference on Machining, Materials and Mechanical Technologies (2022 IC3MT) Aggregated Book.
