



processes



Special Issue Reprint

Innovations in Manufacturing Processes and Systems for Sustainable Practices

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This Reprint presents a selection of cutting-edge research originally published in the *Processes* Special Issue “Innovations in Manufacturing Processes and Systems for Sustainable Practices.” It brings together 22 high-quality articles that reflect the dynamic evolution of manufacturing toward sustainability, efficiency, and digital transformation. The contributions are divided into five major themes: Strategic Approaches to Sustainable Manufacturing and Digitalization; Additive Manufacturing and 3D Printing for Sustainability; Advanced Materials and Green Material Development; Process Innovation and Sustainable Machining; and Digital Tools, Simulation, and Production System Optimization. Together, these works demonstrate how emerging technologies such as digital twins, circular economy principles, and advanced materials are transforming industrial production. Through real-world case studies, decision-making frameworks, and technological breakthroughs, this Reprint highlights how manufacturing can be transformed to meet environmental, economic, and production goals. It offers valuable guidelines for researchers, engineers, and industrial managers working with and making decisions regarding innovation and sustainability in industrial systems.



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