Advances and Trends in Engineering Materials and their Applications

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Advances and trends in engineering materials
Nano- and microtechnology
Nano materials and systems
Applications of micro and nano-engineering
Nanomaterials and nanostructures
Interfaces and nanomaterials
Advanced composite materials and structures
Hybrid materials and systems
Piezo-ceramics
Polymers and thin films
Films for Architecture
Solid oxide fuel cells
Intelligent materials and structures and their applications
Smart micro- and nanoelectronic devices and systems
Films and membranes
Biomedical materials and their applications
Biomedical systems and devices
Static, quasi-static and dynamic behavior
Structural Mechanics

Inhomogeneous and discrete systems
Composites and adaptive material systems
Micro-, meso- and macro-mechanics
Materials under severe loading conditions
Mechanical and physical characterization
Mass diffusion and phase transition
Viscous damping and contemporary architecture
Materials and engineering design
Tomography
Performance stability
Advances in fracture and damage mechanics
Numerical methods, including modeling, optimization, simulation, etc.
Experimental testing methods for the determination of the mechanical and physical characteristics
Maintainability and health monitoring
Reliability and security of structures through the application of advanced industrial materials
Interdisciplinary topics related to advanced industrial materials and their applications

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