COMPOSITE STRUCTURES - MODELLING, TESTING AND MANUFACTURING

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TOPICS

- Composite materials and components, lightweight structures
- Design and manufacturing of lightweight hybrid structures
- Numerical and experimental analysis
- Methods for testing of composite materials
- Computational methods and simulation techniques
- Engineering methods of design, calculations, and simulations
- Simulations of material and structural behavior using classical and novel approaches
- Rheology of composite materials and structures
- Homogenization methods in composite mechanics
- Optimization problems and sensitivity analysis
- Fatigue strength and fracture mechanics
- Composite from renewable materials and recycling of composite structures
- Composites and hybrid structures in mobile applications
- Composite materials and lightweight structures with high thermal resistance
- Processing and technology of composite materials and lightweight structures
- Use of composite materials for engineering constructions and their reinforcement
- Non-destructive investigation methods for composite materials and structures
- Functional and special composite materials (e.g. smart materials).