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Autore	Sîrbu Nicuor Alin
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Nota di contenuto	Intro -- Materials Science and Welding Technologies -- Preface -- Table of Contents -- Chapter 1: Functional and Special Materials -- Transport Properties Study of ZnSb Compound Using BoltzTrap First-Principles -- Strong Acousto-Plasmonic Coupling in Film-Coupled Nanoparticles Mediated by Surface Acoustic Waves -- Theoretical Investigation of Optoelectronics Properties of Titanium Dichalcogenides Materials TiX ₂ (X=S, Se, Te) Using Quantum Espresso -- Chapter 2: Welding Technologies and Properties of Welded Connections -- Determination of Mechanical Properties for Laser Welded Turbine Rotor Assemblies for Automotive Turbocharger Applications -- Experiments on Gas-Metal-Arc Welding (MAG) with Combined Spin-Arc and Weaving Facilities, for Interdisciplinary Applications -- Development of a Gas-Metal-Arc Welding Technology with Combined Spin-Arc and Weaving Facilities for Ship Building -- Ultrasonic Welding Behaviour of Composites Achieved by Additive Manufacture -- Capacitor Energy Storage Welding of Ni ₆₃ Cr ₁₂ Fe ₄ Si ₈ B ₁₃ Amorphous Ribbons -- Investigation of Hardfacing on Ultra-High Strength Steel Base Material -- The Behaviour of Hybrid Aluminium-Steel Resistance Spot Welded Joints in Case of Dynamic Loading -- Effect of TIG-Welding on the Structure and Mechanical Properties of Low-Cost Titanium Alloy Ti-2.8Al-5.1Mo-4.9Fe Welded Joints -- Some Contributions to the Optimization of MIG Spot Welding of Aluminum Alloys -- Research on

the Reconditioning of Injection Moulds by LASER Welding -- Welding Joint Made of Two Different Austenitic Materials -- Application of Static Magnetic Field to Modify Heat and Mass Transfer during Welding of Shipbuilding Steel -- High Cycle Fatigue Testing of Lap Shear RSW Joints from Martensitic MS1400 Steel Sheets -- Development and Improvement of Numerical Models of Welded Joints with Multiple Defects.

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