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Collana	Solid state phenomena, , 1012-0394 ; ; volume 175
Altri autori (Persone)	XuXipeng
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Nota di bibliografia	Includes bibliographical references and index.
Nota di contenuto	Application of Diamond and Related Materials; Preface, Conference Organizers; Table of Contents; Microstructure and Properties of the Sintered Diamond Reinforced by Diamond-MWCNTs Composite Fibers; Influence of Zinc Particles on Oxidation Resistance of Diamond/Borosilicate Glass Composites; A Method to Investigate Stability of Silicon Coating on Diamond Substrate by First Principle Calculation; Coating SiC Whiskers with Protective Si Films for Al Matrix Composite; Thermal Damage of Diamond Grits during the Brazing Process with Ni-Cr Alloy; CFRP Drilling with Brazed Diamond Core Drill Fracture Morphology of Composite CBN Wheel Segments Based on Graphite Self-Lubricating Effects Measurement of Forces in Shearing Brazed Diamonds; A Comparative Study: Tool Life and Wear of Thin-Walled Monolayer Brazed Diamond Core Drill Fabricated with Ni-Cr and Ag-Cu-Ti Alloy; Effect of Arraying Patterns of Diamond Grits on the Wear of the Mono-Layer Brazed Diamond Tool; Slot Grinding of Advanced Ceramics with Brazed Diamond Cut-Off Wheels; Energy and

Material Removal Mechanisms for the Grinding of Cemented Carbide with Brazed Diamond Wheels
Analysis of Energy Consumption Efficiency in Diamond Circular Sawing
Analysis of Grit Cut Depth in Fixed-Abrasive Diamond Wire Saw Slicing
Single Crystal Silicon; Research on the Mechanical Properties of CaF₂ Crystal for Ultra-Precision Machining; Raman Analysis of the Silicon Wafer Scratched by Single Point Diamond; Material Removal Distribution of Chemical Mechanical Polishing by the Bionic Polishing Pad with Phyllotactic Pattern; The Effects of the Geometric Parameters of Segmented Sawblades on the Fluctuated Temperatures in Sawing
The Study of Vibration Effects on Precision Grinding Surface Quality
Analysis of Effecting Factors on Surface Finish of Fused Silica Glass Grinding with Inclined Ball-Headed Diamond Wheel; Experimental Study on Damage Mechanism of Nano-Ceramic Surface/Subsurface under Ultrasonic Vibration Aided Grinding; Study on Subsurface Damage after Fixed-Abrasive Lapping with Different Particle Size; A Research on the SiCp Reinforcing Cu-Base Composite Material's Cutting Performance; An Adaptive Tool Path Generation for Large Scale Wedge/Aspheric Lens Element Grinding Based on Isophote Interpolation
Research on CBN Grinding Wheel Dressing with Ultrasonic Vibration Assistance and its Grinding Performance Experiment Study on ELID Grinding of TN85 Cermets; Study on Friction and Wear Properties of Self-Lubricating Impregnated Diamond Bit Cutters; A Polishing Method of Single-Incentive Ultrasonic Elliptical Vibration for Tungsten Carbide Mould; Inclined Axis Ultra-Precision Grinding for Spherical Surface; A Comparative Study on Ultrasonic Machining of Red Granite; Productivity of EDM Process Assisted by Ultrasonic Waves
Sawing Characteristics of a Diamond Circular Blade with Grits in Ordered Distribution

Sommario/riassunto

This volume presents 70 papers selected from over 100 papers submitted by university and industrial researchers. All of the papers were peer-reviewed by carefully chosen experts. This volume provides readers with a broad overview of recent advances in the field of the application of diamond and related materials, as well as brazing super-abrasives. Review from Book News Inc.: Of the more than 100 papers submitted to the joint gathering, 70 were selected for the proceedings. They discuss such topics as energy and material removal mechanisms for grinding cemented carbide with brazed diamond wheel
