Record Nr. UNINA9910462368703321 Progress in abrasive and grinding technology [[electronic resource]]: **Titolo** special topic volume with invited papers only / / edited by Xipeng Xu Pubbl/distr/stampa Stafa-Zurich, Switzerland;; Enfield, N.H.,: Trans Tech Publications, c2009 **ISBN** 3-03813-271-3 Descrizione fisica 1 online resource (194 p.) Key engineering materials, , 1013-9826 ; ; v. 404 Collana Altri autori (Persone) XuXipeng Disciplina 621.92 Soggetti Abrasives Grinding and polishing Electronic books. Lingua di pubblicazione Inglese **Formato** Materiale a stampa Livello bibliografico Monografia Note generali Description based upon print version of record. Nota di bibliografia Includes bibliographical references and indexes. Nota di contenuto Progress in Abrasive and Grinding Technology; Preface; Table of Contents; Development in the Dressing of Super Abrasive Grinding Wheels; High Speed Grinding of Advanced Ceramics: A Review; Experimental Investigations on Material Removal Rate and Surface Roughness in Lapping of Substrate Wafers: A Literature Review; A Focused Review on Enhancing the Abrasive Waterjet Cutting Performance by Using Controlled Nozzle Oscillation; A Review of Electrolytic In-Process Dressing (ELID) Grinding; On the Coherent Length of Fluid Nozzles in Grinding Surface Characteristics of Efficient-Ground Alumina and Zirconia Ceramics for Dental ApplicationsOptimization of Cutting-Edge Truncation in Ductile-Mode Grinding of Optical Glass; On the Polishing Techniques of Diamond and Diamond Composites; Super Polishing Behaviour Investigation of Stainless Steel Optical Lens Moulding Inserts; Corrective Abrasive Polishing Processes for Freeform Surface; Applications of Contact Length Models in Grinding Processes; Polishing Performance of Electro-Rheological Fluid of Polymerized Liquid Crystal Contained Abrasive Grit Study on Tribo-Fabrication in Polishing by Nano Diamond ColloidEfficient Super-Smooth Finishing Characteristics of SiC Materials

through the Use of Fine-Grinding; Polishing of Ultra Smooth Surface

with Nanoparticle Colloid Jet; An Experimental Study on High Speed Grinding of Granite with a Segmented Diamond Wheel; Thinning Silicon Wafer with Polycrystalline Diamond Tools; Mechanisms of Al/SiC Composite Machining with Diamond Whiskers; Effect of Slurry and Nozzle on Hole Machining of Glass by Micro Abrasive Suspension Jets Experimental Investigation of Temperatures in Diamond Wire Sawing GraniteKeywords Index; Authors Index

Sommario/riassunto

The grinding and abrasive processing of materials are machining techniques which use bonded or loose abrasives to remove material from workpieces. Due to the well-known advantages of grinding and abrasive processes, advances in abrasive and grinding technology are always of great import in enhancing both productivity and component quality. In order to highlight the recent progress made in this field, the editor invited 21 world-wide contributions with the aim of gathering together all of the achievements of leading researchers into a single publication. The authors of the 21 invited papers, of