

# Table of Contents

## Preface, Sponsors and Committee

## Chapter 1: Abrasive Jet Machining

<b>Optimization of Hybrid Laser-Waterjet Micromachining of Silicon</b> V. Tangwarodomnukun and J. Wang	3
<b>A Visualization Study of the Radial-Mode Abrasive Waterjet Turning Process for Alumina Ceramics</b> M.A. Ali, J.M. Fan, H.T. Zhu and J. Wang	9
<b>An Experimental Research on Abrasive Water Jet Polishing of the Hard Brittle Ceramics</b> Z. Lv, C.Z. Huang, J. Wang, H.T. Zhu, P. Yao and Z.W. Liu	15
<b>Study on the Effect of Standoff Distance on Processing Performance of Alumina Ceramics in Two Modes of Abrasive Waterjet Turning Patterns</b> D. Liu, C.Z. Huang, J. Wang, H.T. Zhu, P. Yao and Z.W. Liu	21
<b>An Experimental Study on Radial-Mode Abrasive Waterjet Turning of Alumina Ceramics</b> Z.B. Yue, C.Z. Huang, H.T. Zhu, J. Wang, P. Yao and Z.W. Liu	27
<b>Kerf Profile Characteristics in Abrasive Air Jet Micromachining</b> J.M. Fan and J. Wang	33
<b>A Study on Erosion Performance of Monocrystalline Silicon in Ultrasonic Vibration-Assisted Abrasive Water Jet Machining</b> Z.W. Zhang, H.T. Zhu, C.Z. Huang, J. Wang, P. Yao and Z.W. Liu	39
<b>Impact Erosion of Quartz Crystals by Micro-Particles in Abrasive Waterjet Micro-Machining</b> H. Qi, J.M. Fan and J. Wang	46

## Chapter 2: Abrasive Machining

<b>Optimization Design for Gun-Receiver Materials Belt Grinding Based on Orthogonal Experimental Method and Grey Relational Analysis</b> Y.H. Chen, Y. Huang and Y. Huang	55
<b>Research on Cutter-Contact Point Data Calculation of Robotic Abrasive Belt Polishing for Gun-Receiver Surface</b> Y. Huang, Y. Huang and R.K. Cheng	61
<b>Research on the Technology of Nc Abrasive Belt Grinding for the Leading and Trailing Edges of Aero-Engine Blades</b> Z.Y. Liu, Y. Huang, H.P. Wei and C. Sun	67
<b>Feasibility Study on Grinding of Titanium Alloys with Electroplated CBN Wheels</b> Z.D. Shi and H. Attia	73
<b>Research of Micro-Abrasive Suspension Jet Erosion Morphology and Material Removal Mechanism</b> Z. Luo, C.Y. Wang and R.J. Wang	79
<b>Machining Characteristics of Multilayered Thin Film Solar Panels in Diamond Wire Sawing and Grinding</b> H. Huang, A.S. He, C.W. Kang, Y.X. Zhang, F.J. Chen, H. Huang, S.H. Yin, X.P. Xu and Y.H. He	85
<b>Influence of a Grinding Atmosphere in the Combination Grinding of Steel and WC with a Diamond Wheel</b> S. Ninomiya, M. Iwai and K. Suzuki	90
<b>Experimental Investigation of Material Removal Mechanism in Grinding of Alumina by Single Grain Scratch Test</b> T. Tawakoli, H. Kitzig and R.D. Lohner	96
<b>Compensation and Experiment Research of Machining Error for Optical Aspheric Precision Grinding</b> X.L. Ke, Y.B. Guo and C.J. Wang	103

<b>Dynamics Modeling of Cavitation Bubble in the Grinding Area of Power Ultrasonic Honing</b> X.J. Zhu, C. Guo, J.Q. Wang and G.D. Liu	108
<b>Experimental Studies on Forces and Specific Energy in High Speed Grinding of Titanium Alloy Ti6Al4V</b> H.Y. Li, L. Tian, Y.C. Fu and G.Q. Liu	112
<b>Study on the Effect of Coarse Grinding Area Slope Angle on Surface Quality in Point Grinding</b> Y.D. Gong, G.Q. Yin, C. Wang, X.L. Wen and J. Cheng	118
<b>Grinding Force Model for Low-Speed Grinding Based on Impact Principle</b> M.H. Liu, X.M. Zhang and S.C. Xiu	123
<b>Ultraprecision Lapping for the Zirconia Ceramic Plane</b> H.B. Ji, Y. Peng, F.F. Zhou, W.G. Guo, B.H. Lv and P. Zhao	129
<b>Experimental Study on the Ultra-Precision Polishing for the Quartz Substrates</b> L. Sun, W.G. Guo, J.L. Yuan, Q.F. Deng, M. Feng and W.H. Zhou	135
<b>High-Accuracy Calibration of the Wheel Spindle Tilt Angle for Grinding Hydrostatic Seal Rings Used in Reactor Coolant Pumps</b> G. Feng, F.W. Huo, Z.J. Jin, R.K. Kang and D.M. Guo	140

## Chapter 3: Advanced Cutting Technology

<b>Experimental Study on the Thread Turning Performance of Two TiAlN Coated Thread Inserts with Different Features</b> K. Li, P.N. Li and M. Chen	149
<b>Experimental Investigation on Drilling Force and Hole Quality when Drilling of T800S/250F CFRP Laminate</b> Q.L. An, J. Xu, X.J. Cai and M. Chen	155
<b>FEM Analyzing Effect of Tool Body Materials on Security Reliability for Face-Milling Cutter</b> L.N. Liu, Z.Y. Shi and Z.Q. Liu	161
<b>Effects of Cutting Conditions on the Machinability of Stainless Steel Formed by Laser Cladding</b> B. Wang, Z.Q. Liu, L.C. Su and L.Q. Zhang	166
<b>Microstructure and Mechanical Properties of <math>\text{Al}_2\text{O}_3\text{-TaC}_w</math> Ceramic Cutting Tool Materials</b> G.L. Zhao, C.Z. Huang, H.L. Liu, B. Zou, H.T. Zhu and J. Wang	172
<b>An Indicative End-Milling Condition Decision Support System Using Data-Mining for Difficult-to-Cut Materials Based on Comparison with Irregular Pitch and Lead End-Mill and General Purpose End-Mill</b> H. Kodama, T. Hirogaki, E. Aoyama and K. Ogawa	177
<b>Cutting Edge Preparation of PCBN Inserts</b> B. Denkena, J. Köhler and C.E.H. Ventura	183
<b>Comparison of Material Removal Characteristics in Single and Multiple Cutting Edge Scratches</b> X. Chen and T.T. Öpöz	189
<b>Effect of Fiber Directions on the Surface Quality of Milling C/SiC Composites</b> Y.J. Bao, M.Z. Bi, H. Gao and B. Cao	196
<b>Numerical Investigation on Effect of Rounded Cutting Edge Radius in Milling of Ultra-High-Strength Steel 30Cr3SiNiMoVA</b> C.Y. Wang, J.J. Tian, Q.L. An and M. Chen	202
<b>Experimental Investigation on the Cutting Mechanism of Oxygen Free Copper in Cutting Speeds Ranging from 1 m/s to 210 m/s</b> J. Shinozuka	208
<b>Experimental Study on Fractal Laws of Cutting Force for Machining Irregular Surface of Granite</b> J.S. Zhang, Z.M. Zhang, M.W. Ding, H.C. Wang and Z. Wang	214

## Chapter 4: Brittle Material Machining

<b>Experimental Investigations of Grinding Forces in Elliptical Ultrasonic Assisted Grinding (EUAG) of Monocrystal Sapphire</b>	223
Z.Q. Liang, T.F. Zhou, X.B. Wang, Y.B. Wu and W.X. Zhao	
<b>Study on Numerical Simulation and Experimental of Cutting Force in Turning Machinable Glasses Ceramics</b>	229
L.J. Ma, X.J. Zhang and Y.D. Gong	
<b>Grinding Force and Surface Roughness in Ultrasonic Assisted Grinding of SiC Ceramics with Diamond Grinding Wheel</b>	234
L.F. Liu, F.H. Zhang, C.H. Li, J. Chen and M.H. Liu	
<b>Development of High-Efficiency and Crack-Free Grinding Process for Chamfering of LCD Glass Edge</b>	240
Y.B. Tian and H. Xu	
<b>Predicted Model of Cutting Force for Single Diamond Fast Milling Hard-Brittle Materials</b>	246
S.S. Hu, C.G. Chen, Y.N. Hu and D.R. Zheng	
<b>Study on Thermal Influence of Grinding Process on LiTaO<sub>3</sub></b>	252
W. Hang, L.B. Zhou, J. Shimizu and J.L. Yuan	

## Chapter 5: CMP and Silicon Wafer Processing

<b>Study on Chemical Mechanical Polishing Parameters of 6H-SiC Crystal Substrate Based on Diamond Abrasive</b>	261
J.X. Su, Z.Q. Zhang, J.G. Yao, L.J. Ma and Q.G. Feng	
<b>Optimization of Process Parameters Based on Multi-Process and Multi-Evaluation Index for Function Ceramics in CMP</b>	266
Z.H. Hu, J. Peng and M.K. Gao	
<b>Investigation of Surface Roughness for Grinding Silicon Wafer of the Micro Pellet Diamond Tool</b>	273
S.Y. Luo and T.H. Yu	
<b>Investigation of Dressing Characteristics of Single Crystal Diamond in CMP</b>	279
W.K. Chen, M.Y. Tsai and Y.L. Pai	
<b>Study of Cluster Magnetorheological-Chemical Mechanical Polishing Technology for the Atomic Scale Ultra-Smooth Surface Planarization of SiC</b>	284
J.T. Zhu, J.B. Lu, J.S. Pan, Q.S. Yan and X.P. Xu	

## Chapter 6: Coolants and Cooling

<b>Development of an Innovative Water Machining System Employing the Electric Rust Preventive Method - Precise Evaluation of Purity of the Refined Water with a Laser Turbidity Meter</b>	293
N. Nishikawa, T. Sawa, Y. Hagiwara, N. Yoshihara, H. Okawai, T. Iyama, M. Mizuno and S. Tsukamoto	
<b>A Model of the Fluid Convective Cooling in Grinding Process</b>	299
L. Zhang and M.N. Morgan	

## Chapter 7: Design, Fabrication and Analysis of Devices for the Applications of Abrasive Technologies

<b>Development of Non-Destructive Inspection System for Grinding Burn - An Application of the Grinding Burn Detecting Technique to Evaluate Residual Stress</b>	307
R. Ito, T. Azuma, T. Kasuga, S. Soma, S. Murakami and T. Kuriyagawa	

## Chapter 8: EDM, Ultrasonic Machining, and Laser Machining

<b>Research on the Ultrasonic Assisted WEDM of Ti-6Al-4V</b>	315
G.C. Han, S.L. Soo, D.K. Aspinwall and D. Bhaduri	
<b>Study on Ultrasonic Generator for Ultrasonically Assisted Machining</b>	320
Y.S. Xu, P. Zou, X.L. Yang and Y. He	

<b>Surface Textures Fabrication on Zirconia Ceramics by 3D Ultrasonic Vibration Assisted Slant Feed Grinding</b>	326
S.L. Xu, C. Nishikawa, K. Shimada, M. Mizutani and T. Kuriyagawa	
<b>Effect of Ultrasonic Vibration Parameters on Machining Performance Based on Tool-Workpiece Contact Ratio</b>	326
D. Lu, Q. Wang, Y.B. Wu and H.A. Huang	
<b>Surface Quality of Textured Surface on Cylindrical Inner Surface Using Whirling Electrical Discharge Texturing</b>	332
V. Lertphokanont, T. Sato, M. Ota, K. Yamaguchi and K. Egashira	
<b>Fundamental Machining Characteristics of Ultrasonic Assisted Turning of Titanium Alloy Ti-6Al-4V</b>	338
Y.B. Wu, J.T. Niu, M. Fujimoto and M. Nomura	
<b>Effectiveness of Ultrasonic Vibration on Press Forming</b>	344
Y. Ashida and H. Aoyama	
<b>A Study on Ultrasonic Assisted Grinding of Nickel-Based Superalloys</b>	350
W.Q. Song, Y.B. Wu, J.G. Cao and J.T. Niu	
<b>Effect of Ultrasonic EDM on Machinability of Coarse PCD</b>	356
M. Iwai, S. Ninomiya, Z.R. Zhou and K. Suzuki	
<b>Micro-Grooving of Glass Using Small-Diameter Diamond Grindstone with Ultrasonic Vibration</b>	362
S. Koshimizu and S. Aoki	
<b>A Study on Grinding Tungsten Carbide with Ultrasonic Assisted</b>	368
P.L. Tso and C.C. Tseng	

## Chapter 9: Finishing, Lapping and Polishing

<b>Research on Ultra Precision Mirror Machining Technology for Aluminum Alloy Mobile Phone Shell</b>	385
J.L. Guan, X.H. Zhang, X.Q. Ma, Z.W. Wang and L.L. Zhu	
<b>Research on Process Parameters Influencing on Cutting Force in Abrasive Flow Machining (AFM)</b>	390
K.H. Zhang, J.F. Ding and Y.C. Xu	
<b>Effects of Magnetic Fluid on Machining Characteristics in Magnetic Field Assisted Polishing Process</b>	396
S.H. Yin, Z.Q. Xu, H.J. Duan and F.J. Chen	
<b>Effects of Permanent Magnet Excitation on Material Removal Rate in Area Taking Magnetorheological Finishing</b>	401
S.H. Yin, Y.Q. Wang, G.J. Deng, H. Luo, F.J. Chen and Z.C. Lu	
<b>Research on Grain Impacting Load in Abrasive Flow Machining</b>	405
J.F. Ding, K.H. Zhang and Y.C. Xu	
<b>Study of Process Characteristics of Abrasive Flow Machining (AFM) for Ti-6Al-4V and Validation with Process Model</b>	411
T. Sato, S. Wan and Y.J. Ang	
<b>Study on the Characteristics of New Abrasive Medium for Abrasive Flow Machining</b>	417
H. Gao, Y.Z. Fu, J.H. Zhu, M.Y. Wu and Y.W. Sun	
<b>Experimental Study on Micro-Deliquescence Ultra-Precision Polishing with Fine Water Mist for KDP Crystal</b>	423
X. Wang, H. Gao, D.M. Guo, Y.C. Chen and C.P. Song	
<b>Research on Distribution of Magnetic Particles Based on Magnetic Field Control Grinding Wheel</b>	428
S.H. Yin, S. Gong, F.J. Chen and M. Wang	
<b>Experimental Research on Rolling Bearing Raceway Finishing</b>	432
P.Q. Ge and J.L. Zhang	
<b>A Study on the Analysis of Influential Factors for 300mm Wafer Final Polishing</b>	438
W.K. Choi, E.S. Lee, H.J. Choi and N.K. Kim	
<b>Study on Dual-Plane Ball Polishing Method for Finishing Ceramics Ball</b>	444
K.P. Feng, Z.Z. Zhou, B.H. Lv and J.L. Yuan	

<b>Polishing Characteristics of a Low Frequency Vibration Assisted Polishing Method</b>	450
W.M. Lin, S.K. Chee, H. Suzuki and T. Higuchi	
<b>Polishing Technology and Phenomena of the Inner/Outer Surfaces of Small Cup-Type Nickel Tube-Study of Ultraviolet-Ray Aided Machining</b>	455
T. Tanaka	
<b>Friction Force Analysis on Diaomond Lapping of Sapphire Wafers</b>	461
C.C.A. Chen, C.H. Tseng and W.K. Tu	
<b>Study on Impinging Stream Flow Channel in Abrasive Flow Polishing Complex Cavity of Precision Mold</b>	469
D.F. Zhou and D.Y. Liu	
<b>Proposal of Finishing Method of MLA Mold Applied Sphere Indentation</b>	475
Y. Kobayashi, R. Ishida and H. Sakamoto	

## Chapter 10: Glass Molding and Related Topics

<b>Experiment on Glass Microgroove Molding by Using Polycrystalline Nickel Phosphorus Mold</b>	483
T.F. Zhou, Z.Q. Liang, X.B. Wang and T. Kuriyagawa	

## Chapter 11: Grinding Wheel and Abrasive Grain Technologies

<b>Experimental Study on a New Combination Processing Technology of Polycrystalline Diamond</b>	491
Z.M. Cui, Y.G. Han, J.P. Kong and Q.Q. Chen	
<b>CVD Micron Diamond Powders</b>	495
T. Zhang, F.H. Sun, B. Shen and Z.M. Zhang	
<b>Study on Radial Deformation of CBN Grinding Wheel Considering Centrifugal Force and Grinding Heat</b>	500
X.Z. Wang, W.S. Wang, T.B. Yu, N. Yuan and X. Sun	
<b>Progress of Researches on the Surface Topography Detection Techniques for Grinding Wheel</b>	505
W. Liu, Z.H. Deng, L.L. Wan, Q.P. Wu and H. Tang	
<b>Creep Feed Grinding of Ni-Based Superalloy with Micro-Crystalline Ceramic Alumina Wheels</b>	511
Z.C. Zhao, J.H. Xu, Y.C. Fu and Z.W. Zhang	
<b>Grinding Characteristics of Porous Composite-Bonded CBN Wheels</b>	516
Z.Z. Chen, J.H. Xu, W.F. Ding and C.Y. Ma	
<b>Effect of Contact Stiffness of Grinding Wheel on Ground Surface Roughness and Residual Stock Removal of Workpiece</b>	522
T. Yamada, H.S. Lee and K. Miura	
<b>Analysis on Wear of Self-Sharpening Fine Super-Hard Abrasive Tool</b>	528
Z.Z. Zhou, K.P. Feng, B.H. Lv, H.W. Fan and J.L. Yuan	
<b>Heat Pipe Grinding Wheel in Grinding Titanium Alloy Ti-6Al-4V</b>	534
Q.S. He, Y.C. Fu, J.J. Chen and W. Zhang	

## Chapter 12: In-Process Measurement and Monitoring, Metrology

<b>Development of CMM Auxiliary Equipment for Tiny Hole Measuring</b>	543
F. Chen, Z.G. Bing, S.H. Li, L. Cheng, Z.Q. Zhang, J. Chen and Y. Yang	
<b>A Thin Silicon Wafer Thickness Measurement System by Optical Reflectmetry Scheme Using Fourier Transform Near-Infrared Spectrometer</b>	549
T. Onuki, R. Ono, A. Suzuki, H. Ojima, J. Shimizu and L.B. Zhou	
<b>Review on Multi-Point Method for Roundness Error Separation</b>	555
F.F. Zhou, H.Z. Lu, J.L. Yuan and F. Li	
<b>Development of a Measuring Equipment for Silicon Wafer Warp</b>	561
H.J. Liu, R.K. Kang, S. Gao, P. Zhou, Y. Tong and D.M. Guo	

## **Chapter 13: Machine Tools and Systems, Tooling Processing**

<b>Research on Iso-Scallop Method for NC Grinding of the Special Rotating Workpiece</b>	569
L.J. Li, W. Sun, T. Zhang, H.J. Dong and W.T. Bai	
<b>Mathematical Modeling and Parametric Design of Taper End Mills</b>	574
L.L. He, X.B. Wang, Z.B. Liu, M. Chen and Z.W. Xu	
<b>Adaptability Comprehensive Evaluation of Auto Assembly Machine Product Platform for Small Shaft and Sleeve Subassemblies</b>	579
Z.F. Deng, Z.Q. Zhang, R.D. Li and H.H. Xu	
<b>Development of Electronic Impact Hammer and its Application to Face Milling Cutter Modal Analysis</b>	585
L.N. Liu, Y.G. Zhang, Z.Y. Shi and Z.Q. Liu	
<b>Research on Hole-Making Tools for CFRP</b>	592
H.Z. Zhang, Y.Y. Wei, Y.C. Yuan and H.Y. Jiang	
<b>Experimental Investigation on Grinding Performance of Microcrystalline Alumina Abrasive Grinding Wheel for Superalloys</b>	597
Z.G. Dong, X.W. Zhao, X.L. Zhu, R.K. Kang and B.J. Hao	
<b>Study on the Restraint Method of Thermal Deformation in the Machine Tools</b>	603
K. Umezu, K. Ohashi and S. Tsukamoto	
<b>Grinding System Reducing the Influence of Thermal Deformation of Workpiece in Cylindrical Grinding</b>	609
T. Onishi, M. Sakakura, N. Sato, T. Kodani, K. Ohashi and S. Tsukamoto	

## **Chapter 14: Micro/Nano-Machining**

<b>Experiment Research on Grinding Temperature of Micro-Grinding H62</b>	615
Y.D. Gong, X.L. Wen, G.Q. Yin, C. Wang, J. Cheng and B.P. Li	
<b>Finite Element Simulation of Minimum Uncut Chip Thickness in Micro Mill-Grinding Ti6Al4V Based on Single-Edge Single-Grit Model</b>	622
Y.D. Gong, C. Wang, G.Q. Yin, H. Xu and X.L. Wen	
<b>The Dynamic Analysis of Micro-Scale Edge in the Process of Micromilling</b>	628
Y.D. Gong, J.F. Zhang, J. Cheng, X.L. Wen, C. Wang and G.Q. Yin	
<b>Fabrication of Surface Microtexture by Vibration Assisted Cutting</b>	638
J. Shimizu, T. Yamamoto, L.B. Zhou, H. Ojima, T. Onuki and S.I. Nagaoka	
<b>Bending of Drill and Radial Forces in Micro Drilling</b>	642
O. Horiuchi, M. Masuda and T. Shibata	
<b>An Approach to Improve Machined Surface Finish in Micro Milling</b>	649
Y.S. Liao and C.L. Huang	

## **Chapter 15: Surface Integrity and Materials Characterization**

<b>Experimental Research on Surface Residual Stress of Quenched GCr15 Steel in Ultrasonic Aided Turning</b>	657
F. Jiao, X. Liu, C.Y. Zhao and X. Zhang	
<b>Effect of Low-Frequency Pulsed Magnetic Treatment on Micro-Hardness of High Speed Steel</b>	663
L.P. Ma, Z.Q. Liang, X.B. Wang, W.X. Zhao, T.F. Zhou and H.M. Yao	
<b>Indentation Crack Initiation and Ductile to Brittle Transition Behavior of Fused Silica</b>	667
P. Yao, W. Wang, C.Z. Huang, J. Wang, H.T. Zhu and T. Kuriyagawa	
<b>Research on Subsurface Damage Layer Detection during Substrate Processing</b>	673
H. Zhou, X.M. Xu, X. Gao and H. Feng	
<b>Surface Integrity - an Inherent Load Sensor</b>	679
B. Denkena, J. Köhler, B. Breidenstein and T. Mörke	
<b>Surface Layer Damage of Silicon Wafers Sliced by Wire Saw Process</b>	685
R.K. Kang, Y.F. Zeng, S. Gao, Z.G. Dong and D.M. Guo	

<b>Study on the Subsurface Damages of Glass Fiber Reinforced Composites</b>	691
F.J. Ma, X.L. Zhu, R.K. Kang, Z.G. Dong and S.Q. Zou	
<b>A Modified Surface on Titanium Alloy by Micro-Blasting Process</b>	696
Y. Lin, C.F. Huang, H.C. Cheng and Y.K. Shen	
<b>Crack Filling of Cover Glasses by Sol-Gel Coatings</b>	700
K.J. Ma, H.H. Chien, S.W. Huang, S.C. Chen and C.L. Chao	
<b>A Study of Mechanical Properties and Material Removal of Polycrystalline Tungsten via Nanoindentation and Nanoscratch</b>	706
C.W. Kang and H. Huang	

## Chapter 16: Tribology in Manufacturing

<b>Friction Evolution in Running-In of Sliding Wear of Cast Iron Processed in Gleeble</b>	713
Q. Zhang, Z.Y. Jiang, D.B. Wei, G.L. Xie and J.T. Han	
<b>Frictional and Wear Behavior of Micro-Crystalline and Nano-Crystalline Diamond Films</b>	719
X.C. Wang, S.L. Chen, B. Shen and F.H. Sun	
<b>Dry Sliding Wear of As-Cast and Thermomechanically Processed Low Chromium White Cast Iron</b>	725
X.J. Gao, Q. Zhang, D.B. Wei, S.H. Jiao and Z.Y. Jiang	

## Chapter 17: Truing, Dressing and ELID

<b>Study of Grinding Force for Internal Cylinder of Ultrasonic ELID Composite Grinding</b>	733
B. Zhao, Y.M. Li and P.Y. Bian	
<b>Research on ELID Grinding Performance of GCr15 Steel</b>	740
J.L. Guan, X.Q. Ma, X.H. Zhang, L.L. Zhu and Z.W. Wang	
<b>Experimental Study on Dry Electrical Contact Discharge (ECD) Dressing Parameters of Coarse Diamond Grinding Wheel</b>	746
Y.J. Lu, J. Xie, K.K. Wu, J. Cheng and L.Z. Cheng	
<b>Visualization of 3D Topography of Grinding Wheel Surface Dressed by Rotary Diamond Dresser</b>	751
A. Kubo, M.A.K. Chowdhury, S. Noda, J. Tamaki and A.M.M. Sharif Ullah	