The 17th International Symposium on Advances in Abrasive Technology (ISAAT2014)

Poster Presentations

Time: 13:20-15:00, 24 (Wed.) September, 2014
Place: Pre-Function Room

P01 Research on Material Removal Mechanism of Single Grit Cutting based on FEM Simulation
L. Yan, F. Jiang, C. Fang

P02 A Preliminary Study of Surface Integrity and Wheel Wear in the Grinding of Multilayered Thin Film Structures
C. Kang, B. Hao, H. Huang

P03 Experiment Research on ZrO_2 Engineering Ceramics with Abrasive Belt Grinding
D. Zhang, Y. Huang, X. Yin, L. Zhou, Y. Yang, L. Yong

P04 Research on Grinding of Silicon Particles Reinforced Aluminum Matrix Composites with High Volume Fraction
F. Zhang, K. Wang, P. Fu, M. Wu

P05 Investigation of Grinding Characteristics of Cemented Carbides YL10.2 and YF06
T. Xu, J. Yu, Z. Zhang, J. Tu, X. Liu, Y. Wu, L. He

P06 Optimization of Grinding Conditions in Non-axisymmetric Aspherical Grinding
N. Yoshihara, T. Nakagawa, N. Nishikawa, M. Mizuno

P07 Investigation Performance of AlCrN_based Coated Broaching Tool in Broaching of Gas Turbine Material X12CrMoWVNbN1011
Z. Liu, M. Chen, C. Wang, Q. An, C. Ge, G. Guo

P08 Study on Force Characteristics of Ultrasonic Vibration-assisted Sawing Ceramics with Diamond Blade
X. Xiang, J. Shen, Z. Hu, X. Xu

P09 A Study on Erosion of Alumina wafer in Abrasive Water Jet Machining
Y. Wang, H. Zhu, C. Huang, J. Wang, P. Yao, Z. Zhang

P10 An innovative cooling method for grinding process based on heat pipe technology
J. Chen, Y. Fu, Q. He, W. Zhang, Y. Zhu

P11 Simulations of milling process of Inconel 718 alloy based on three dimensional finite element models
L. He, H. Su, J. Xu, J. Fu

P12 Wear characteristics of binder-less nano-polycrystalline diamond and cubic boron nitride
H. Sumiya, K. Harano

P13 Development of PCD milling tool for carbon-fiber-reinforced plastics
T. Kitajima, J. Kusuyama, A. Yui, K. Fujii, Y. Ito

P14 Study on the Model of Surface Crack Depth in Ceramics Grinding
J. Kwang Su, B. Lin, L. Wang

P15 Radial Directional Vibration-assisted Ductile-mode Grinding of Engineering Ceramic
K. Imai

P16 Blind Hole Machining of Quartz Fiber Reinforced Ceramic Matrix Composites by Helical Milling with Electroplated Diamond Tool
H. Gao, T. Zhao, Y. J. Bao, C. Sun, S. X. Lu

P17 Effectiveness Evaluation of Novel Pad Dressing Method by Flexible Fiber Dresser –Tool Life Evaluation of Flexible Fiber Dresser–
M. Uneda, N. Takahashi, Y. Arai, T. Fujita

P18 Development of Rotary Work Table with Constant-flow Hydrostatic Water Bearing for Large Scale Silicon-wafer Grinding Machine
G. Okahata, A. Yui, T. Kitajima, S. Okuyama, H. Saito, A. H. Slocum

P19 Development of a Fine Grating on ZnS for a Wideband Spectral Disperser in Characterizing Exoplanets using Space-borne Telescopes
K. Enya, T. Sukegawa, S. Sugiyama, F. Iijima, N. Fujishiro, Y. Ikeda, T. Yoshikawa, M. Takami

P20 Ultrasonic Vibration Assisted Grinding of Sintered Dental Zirconia Ceramics: An Experimental Study on Surface Roughness
S. Dong, K. Zheng, X. Xiao

P21 External Magnetic Field Control during EDM of a Permanent Magnet
H. Takezawa, N. Yokote, N. Mohri

P22 Development of ultrasonic lapping equipment for small holes finishing
J. Liang, R. Kang, F. Ma, J. Liu, Y. Yu

P23 Experimental Investgation of Copper-tungsten Electrode Wear in EDM
J. Yu, L. He, X. Sheng, W. Duan, S. Yin, Z. Shang

P24 Proposal of micro removal process with pulsed laser irradiation based on form generation theorem
H. Sakamoto, K. Morioka

P25 Study on the Flow Pressure of Mass in Centrifugal Disc Finishing
Y. Matsumoto, T. Yamaguchi, K. Kitajima, A. Yamamoto, S. Takahashi

P26 Research on Performance of Fixed Abrasive Tools of Polishing 6H-SiC Wafers
J. Lu, G.Q. Hu, G.Q. Huang, C.F. Fang, X.P. Xu

P27 Evaluation of Grinding Performance By Mechanical Properties of Super Abrasive Wheel –Relationship Between Modulus of Rupture and Critical Grain Holding Power (2nd report)–
T. Sawa, N. Nishikawa, Y. Ikuse

P28 Investigation on properties of magnesia grinding wheels used in silicon wafer grinding
B. Hao, Z. Dong, S. Gao, R. Kang, D. Guo

P29 Influence of Tool Shape and Coating Type on Machined Surface Quality in Face Milling of CFRP
T. Furuki, T. Hirogaki, E. Aoyama, H. Kodama, K. Ogawa

P30 Estimation of Machining Error in Ball-End Milling of Hemispherical Surface based on Measured Cutting Force
K. Shimana, E. Kondo, S. Yamashita, Y. Kawano, N. Kawagoishi

P31 Monitoring of Wear Land Width of Diamond Tool Cutting Edge with Large Nose Radius in Ultra-precision Cutting using Static Cutting Forces
E. Kondo, R. Iwamoto, Y. Kobaru

P32 Study on a Novel Brazing Diamond Wire with CuSnTi Brazing Filler
X. Zhu, H. Huang, H. Guo, Y. Yu, X. Xu

P33 A 5-axis coordinated CNC grinding method for the flank of a non-coaxial helical micro-drill with the cylinder grinding wheel
Z. Liang, H. Jian, X. Wang, W. Zhao, S. Zhang, Y. Otani, S. Xue

P34 Influence of Processing Parameters on Surface Roughness in Micro Mill-Grinding Aluminium Alloy 6061
Y. Gong, C. Wang, J. Cheng, X. Wen, G. Yin

P35 Experiment Research on Surface Roughness in Micro-grinding Metal Material
Y. Gong, X. Wen, Z. Zhu, J. Cheng, G. Yin, C. Wang

P36 Investigation of Grinding Fluid Supply Parameters on Workpiece Surface Integrity
X. Shichao, Z. Xiuming, J. Ang, S. Xiaoliang, L. Shujun, L. Xiaopeng

P37 Study on the Tribological Property of Bionic Lead Rail using ABAQUS
L. Ma, L. Gu, Y. Luo, F. Wang, X. Chen

P38 A Wear Simulation of the Fixed Soft Abrasive Film based on Discrete Element Method
Z. Zhou, K. Feng, J. Yuan