

ISAAT2017 Program

3 December (Sunday), 2017

15:00	Registration Rizzan Sea-Park Hotel, Tancha-Bay
17:00	Welcome reception Rizzan Sea-Park Hotel, Tancha-Bay
19:00	Welcome reception Rizzan Sea-Park Hotel, Tancha-Bay

4 December (Monday), 2017

8:40	Conference Center Auditorium				
	Opening Ceremony (Chairperson: Prof. L. Zhou)				
	Opening addresses	<i>Prof. Hirofumi Suzuki</i> <i>Prof. Hideki Aoyama</i> <i>Prof. Tsunemoto Kuriyagawa</i>	<i>ISAAT2017 Symposium chairman</i> <i>ICAT Chairman</i> <i>JSAT President</i>		
9:00	Keynote speech 1	Novel Nano- and Microfabrications for Microfluidics and Biosensing Applications <i>Prof. Amy Shen, Okinawa Institute of Science and Technology Graduate University, Japan</i>			
9:40	Keynote speech 2	Machining of Composites for High Surface Integrity: Mechanics and Process Design <i>Prof. Liangchi Zhang, Univiersty of New South Wales, Australia</i>			
10:20	Coffee Break				
10:40	General Session (Chairperson: Prof. H. Suzuki)				
11:00	General presentation 1	G01	Design of Dimpled Engineering Surfaces for Improving Lubrication Performance in Rolling-Sliding Contacts <i>F. Hashimoto, R. S. Zhou, Advanced Finishing Technology Ltd., USA</i>		
11:20	General presentation 2	G02	Surface Integrity and Process Simulation in Abrasive Flow Machining <i>E. Uhlmann, S. Roskamp, Institute for Machine Tools and Factory Management, Technische Universität Berlin, Germany</i>		
11:40	General presentation 3	G03	Precision Cutting and Polishing of Thin Metal Substrates with Electroless Nickel Plating for Bent Neutron-Focusing Optics <i>T. Hosobata, Y. Yamagata, M. Yamada, E. Rantsiou, U. Filges, RIKEN Center for Advanced Photonics, Japan</i>		
12:00	General presentation 4	G04	An Experimental Study of Swarf in the Sawing of Granite with Diamond Wire <i>H. Huang, H. Guo, R. Zhao, Institute of Manufacturing Engineering, Huaqiao University, China</i>		
12:00	Lunch				
	(Room 1) Conference Center Auditorium	(Room 2) Conference Center Meeting Room #1	(Room 3) Main Campus Seminar Room B250	(Room 4) Main Campus Seminar Room C209	(Room 5) Main Campus Seminar Room C210
13:00	Abrasive Machining (1) Chairperson: K. Ohashi	Cutting Technology (1) Chairperson: J. Shinozuka	Non-conventional Machining (1) Chairperson: W. Natsu	High-efficiency Machining (1) Chairperson: H. Sasahara	Micro/nano Machining (1) Chairperson: S. Matsui
13:20	R101 Study on UV-assisted Grinding of SiC <i>M. Mekata, T. Kotsuji, M. Ota, K. Egashira, K. Yamaguchi, M. Yamada, M. Itoi</i>	R201 Fundamental Cutting Properties in End-milling of TiAl Alloy <i>M. Takegami, K. Okuda, H. Kodama, S. Sato</i>	R301 Evaluation of correlation between baseplate temperature and deposition properties in directed energy deposition <i>H. Negishi, R. Koike, Y. Kakinuma, Y. Oda, M. Fujishima, T. Aoyama</i>	R401 Study on the Diamond-Coated Wire Sawing Process of Silicon with Minimum Quantity Lubrication <i>C. Chung, M. Q. Li, C. Kuo</i>	R501 Investigation on Glass Stress Relaxation during Precision Glass Molding for Microlens Array <i>J. Xie, T. Zhou, X. Liu, B. Ruan, Z. Liang, X. Wang</i>
13:40	R102 Methodology for in-situ visual detection and compensation of profile grinding error <i>L. M. Xu, Z. H. Jiang, Y. X. Hu, F. Fan, D. J. Hu</i>	R202 Development of Localized Compressive Hydrostatic Pressure-assisted Cutting Method <i>J. Shimizu, T. Yamamoto, H. Ojima, T. Onuki, L. Zhou, H. Ashino</i>	R302 Study on ultrasonic vibration assisted drilling of SUS316 <i>K. Taguchi, N. Yoshihara, K. Hara, M. Mizuno</i>	R402 Ultraprecision machining of ceramic mold by micro milling tool of nano-polycrystalline diamond <i>H. Suzuki, W. Asai, M. Okada, Y. Masuda, H. Sumiya, K. Harano, K. Miura</i>	R502 Manufacturing of microstructures with preventing frost accretion effect <i>S. Hasegawa, K. Shimada, M. Mizutani, T. Kuriyagawa</i>
14:00	R103 A novel open numerical control system for complex profile grinding <i>Y. Hu, L. Xu, Y. Chen, Z. Zhang, F. Fan, L. Shi</i>	R203 Study on the Interface Temperature During Drilling of Carbon Fiber Reinforced Plastic/Titanium Alloy Stacks <i>B. Wang, B. Yang, M. Wang, Z. Ma, Y. Zheng</i>	R303 The Study on Mechanism of Readiat Ultrasonic Vibration Sawing Optical Glass <i>W. Song, J. Shen, J. Chen, X. Xu</i>	R403 Precision grinding of PCD tool for scribing <i>Y. Akiyama, H. Suzuki, M. Okada, Y. Masuda, T. Fukunishi, Y. Ogasawara, K. Iizawa</i>	R503 Modeling of the micro-grinding process considering the grinding tool topography <i>M. Kadivar, A. Zahedi, B. Azarhoushang, P. Krajnik</i>
14:20	R104 Development of Precision Centerless Grinding Machine with Nano-Size Controllability <i>M. Takahashi, K. Ohba, M. Takahashi</i>	R204 Study on Machinability of Difficult-to-cut Materials with Precision Cutting <i>Y. Zou, Y. Maeda, K. Kato, H. Tanaka, T. Yazawa, T. Otsubo</i>	R304 Study on formation mechanism of pores inside built structure by metal-based additive manufacturing <i>K. Egashira, T. Furumoto, K. Hishida, Y. Hashimoto, T. Koyano, N. Yoshida, A. Nakamura, A. Hosokawa</i>	R404 Sensitivity Analysis for Effects of Material Constitutive and Fracture Parameters on Serrated Chip Formation in High Speed Machining of Inconel 718 <i>B. Wang, Z. Liu</i>	R504 Experimental Verification of Micro End-milling Condition Decision Methodology Using Data-Mining System <i>H. Kodama, K. Okuda, K. Tanaka</i>
14:40	R105 Deformation of Nanotwinned Structure in a Nickel Alloy under Nanoindentation <i>Z. Zhang, S. Huang, Z. Zhu, L. Chen, X. Guo</i>	R205 Application of Wheel Scribing/Breaking Technique to Brittle Materials for High Efficient Cutting <i>N. Tomei, K. Murakami, T. Hashimoto, M. Kitaichi, T. Fukunishi</i>	R305 An experimental study for fabricating microelectrodes using the LS-WEDT method <i>Y. Gong, Y. Sun, M. Cai, X. Ma, Y. Ma</i>	R405 Study on the simulation of external electrostatic field during grinding on LT via COMSOL <i>S. Huang, W. Hang, B. H. Lyu, Q. Deng, J. Yuan, P. Zhao</i>	R505 Understanding the burr formation in nano-milling with molecular dynamics simulations <i>D. Cui, L. Zhang, W. Liu</i>
14:40	Coffee Break				

15:00	Abrasive Machining (2) Chairperson: M. Iwai	Cutting Technology (2) Chairperson: K. Hara	Non-conventional Machining (2) Chairperson: H. Isobe	High-efficiency Machining (2) Chairperson: A. Yui	Micro/nano Machining (2) Chairperson: T. Zhou
	R106 Experimental study on residual magnetism after grinding of Fe-Cr-Co permanent magnet alloy <i>J. Ai, F. Jiang, L. Yan, H. Guo</i>	R206 Influence of Surface Roughness on Tool Run-out with Endmilling <i>S. Nakai, Y. Maeda, K. Kato, H. Tanaka, T. Yazawa, T. Otsubo</i>	R306 Radial Directional Vibration-assisted Grinding of Ti-6Al-4V alloy <i>K. Imai</i>	R406 Study on High Efficiency of Impeller Machining with Taper Ball End Mill <i>T. Kimura, K. Matsubara, Z. Oda, H. Sasahara</i>	R506 Structural anisotropic effect on the nanocutting of 6H-Silicon Carbide <i>Z. Wu, W. Liu, L. Zhang</i>
15:20	R107 Fabrication of holes in reaction bonded silicon carbide by electrical discharge diamond grinding <i>X. Rao, F. Zhang, X. Wang, H. Zhao</i>	R207 Influence of reduction surface defects by a triple-facet tool in ultra-precision cutting of Al-Mg alloys <i>K. Amaki, Y. Maeda, K. Kato, H. Tanaka, T. Yazawa, T. Otsubo</i>	R307 A kerf Simulation of Laser Cutting Single-layer CFRP as Scanning Parallel to Fiber Orientation <i>D. Yu, X. Wang</i>	R407 An Experimental Study on High Speed Grinding of Hardened Steel with Vitrified CBN Wheels <i>Z. Shi, J. S. Agapiou, H. Attia</i>	R507 Study on Nanoscratching of C-plane Sapphire Wafer <i>W. Lin, J. Shimizu, L. Zhou, T. Onuki, H. Ojima, T. Yamamoto</i>
15:40	R108 Stochastic modelling of 3D surface topography for coated abrasive discs <i>A. P. S. Arunachalam, I. Sridhar, T. Sato</i>	R208 Wear Mechanisms and Performance of Different Coated Tools in High-speed Machining of TC4 under Dry and MQL Conditions <i>J. Chen, M. Chen, Q. An, W. Ming, J. Xu</i>	R308 Research on machining characteristics of micro hole drilling with mist nozzle in EDM process <i>W. Natsu, R. Nakamura, H. Maeda</i>	R408 A Novel Tool Vector Control Method of The Hybrid Additive and Subtractive Manufacturing Process in 5-axis Configuration <i>Q. Tang, S. Yin, Y. Zhang, L. Song, J. Liu</i>	R508 The Effect of Crystal Structure on Fabrication of Fine Periodic Surface Structures with Short Pulsed Laser <i>S. Kodama, S. Suzuki, A. Shibata, K. Shimada, M Mizutani, T. Kuriyagawa</i>
16:00	R109 Evaluation of workpiece surface integrity following creep feed grinding of single-crystal nickel based alloy DD6 <i>W. Ding, Q. Miao, J. Xu, Y. Fu, H. Su</i>	R209 An Ultra-precision Cutting of Carbon Steel by Diamond Tool in CO2 Atmosphere <i>S. Miyamoto, K. Okuda, H. Kodama, M. Nunobiki</i>	R309 Ultrasonic vibration-assisted polishing of polycrystalline diamond <i>W. Xu, L. Zhang</i>	R409 Performance for high-speed precision machining of W-Ni-Fe alloy using superhard cutting tools <i>Y. Zhang, Z. H. Xia, D. Xu</i>	R509 Drilling Microholes in Ceramic Materials Using Ultrasmall-Diameter Diamond Grinding Tools Fabricated by EDM <i>K. Egashira, A. Hayashi, M. Takeuchi, K. Yamaguchi, M. Ota</i>
16:20	Coffee Break				
16:40	Abrasive Machining (3) Chairperson: T. Yamada	Cutting Technology (3) Chairperson: J. Shimizu	Abrasive Jet Machining Chairperson: Y. Kameyama	Monitoring/Metrology Chairperson: T. Onishi	Tribology in Machining Chairperson: M. Mizutani
	R110 Recovery of Grindactivity by Dry Ice Blasting on Micro-Grit Diamond wheel in dry Grinding of Carbon <i>Y. Katayama, Y. Ohta, H. Kodama, K. Ohashi</i>	R210 Development of cBN electroplated end-mill combined cutting and grinding for precision machining of CFRP <i>T. Furuki, Y. Kabaya, T. Hirogaki, E. Aoyama, K. Inaba, K. Fujiwara</i>	R310 An experimental study of the particle velocities in abrasive waterjets <i>K. Thongkaew, J. Wang</i>	R410 Grinding Feed Control Based on Workpiece Deflection and On-machine Measurement of Workpiece Stiffness <i>M. Yoritune, M. Tano</i>	R510 Wear Behavior of Grain Cutting Edges and Grinding Force Distributions in Creep Feed Grinding <i>M. Fujimoto, S. Ohishi, R. Hinaga, Y. Kubo</i>
17:00	R111 Comparative study of wear performance of brazed boron-doped diamond grits and conventional diamond grits <i>Y. Chen, Y. Fu, D. Ding</i>	R211 Study on Mirror-like Cutting of Soft Metal Using Diamond Tool <i>M. Endo, K. Furumizu, W. Lin</i>	R311 Development of cutting method of carbon fiber reinforced plastics using blasting <i>H. Fukagawa, S. Saito, D. Ichikawa</i>	R411 Study on complete spherical surface unfolding methods for optical inspection with Adams <i>J. Qian, H. Lu, J. Yuan</i>	R511 Analysis of Friction and Wear Properties between Cutting Tool Coatings and AISI 4140 Steel <i>G. Li, S. Zhang, J. F. Li, W. H. Shi</i>
17:20	R112 Research on extending electrolyte life using diatomite in electrochemical abrasive machining <i>G. Jiang, Z. Jin, K. Li, X. Zhu</i>	R212 A Study on the Effects of Cutting-sequence Strategies in Drilling CFRP/Ti <i>J. Xu, Q. An, W. Ming, M. Chen</i>	R312 Fabrication of micro-hole array on brittle materials by abrasive jet machining <i>C. L. Chao, W. H. Wang, T. M. Chao, W. C. Chou, W. H. Fan</i>	R412 Monitoring of Rotational Vibration in Tap and Endmill Processes with a Wireless Multifunctional Tool Holder System <i>R. Matsuda, M. Shindou, T. Hirogaki, E. Aoyama</i>	R512 Tribological behaviour of water-based nanolubricant containing TiO2 nanoparticles on ferritic stainless steel <i>H. Wu, J. Zhao, X. Cheng, W. Xia, A. He, J. H. Yun, L. Wang, H. Huang, S. Jiao, Z. Jiang</i>
17:40	R113 Experimental Study on Grindability of Hss with Hybrid Abrasive Wheel <i>M. G. Mathen, S. Gowri, A. X. Kennedy</i>	R213 Cutting Performance of PCD Tool Composed of Boron Doped Diamond Particles on Ti Alloy <i>M. Iwai, S. Ninomiya, F. Koga, P. Chen, B. Lin, K. Suzuki</i>	R313 Micro Abrasive Jet Patterning of Sloped Micro Herringbone Grooves for Journal Bearings <i>S. Nakamae, M. Harada, H. Kodama, K. Ohashi</i>	R413 Development of wireless dynamometer for rotary infeed surface grinding <i>Y. Tsukii, L. Zhou, H. Ojima, J. Shimizu, T. Onuki, T. Tajima</i>	R513 Numerical modelling of micro deep drawing with aluminium-copper composite considering surface roughness <i>F. Jia, J. Zhao, L. Luo, H. Xie, Z. Jiang</i>
18:00					

5 December (Tuesday), 2017

	(Room 1) Conference Center Auditorium	(Room 2) Conference Center Meeting Room #1	(Room 3) Main Campus Seminar Room B250	(Room 4) Main Campus Seminar Room C209	(Room 5) Main Campus Seminar Room C210
8:40	Abrasive Machining (4) Chairperson: K. Yamaguchi	Cutting Technology (4) Chairperson: H. Kodama	Lapping/Polishing (1) Chairperson: Y. Wu	Grinding Wheel (1) Chairperson: M. Fujimoto	Surface Integrity (1) Chairperson: S. Morita
9:00	R114 Application of Abrasive Flow Machining in Removing Surface Defects in Metal Parts of 3D Printing <i>H. Wang, H. Wei, C. Peng, X. Wang, H. Gao</i>	R214 Study on Spin Turning Method Using a Cylindrical Tungsten Carbide Tool Reground on the Multi-tasking Lathe <i>F. Koga, S. Nagakura, S. Ninomiya, M. Iwai, K. Suzuki</i>	R314 Fundamental research on aspheric surface polishing using doughnut-shaped MCF polishing tool <i>M. Feng, Y. Wu, S. Xu, T. Bitou, M. Nomura, T. Fujii</i>	R414 Superabrasive Applications in Grinding of Crankshafts: a Review <i>N. Macerol, L. Franca, W. Leahy, P. Krajnik</i>	R514 Raman analysis of machining qualities on ground surfaces of sapphire wafers <i>T. Onuki, K. Wu, N. Sugano, H. Ojima, J. Shimizu, L. Zhou</i>
9:20	R115 Preparation and advanced properties of high-purity SiC magnetic abrasives for magnetic induction-wire sawing process <i>W. Zhang, C. Yao, Z. Yan, K. Li, K. Liu</i>	R215 Cutting performances of multi-layer composite diamond coated milling tools in machining zirconia ceramic <i>C. Wang, X. Wang, F. Sun</i>	R315 Dynamic contact analysis of abrasive filaments with a discrete system <i>E. Uhlmann, C. Sommerfeld</i>	R415 Investigation on the ultra-precision grinding performance of optical glass lens BK7 with rubber-bonded wheels <i>Y. Kawana, T. Suetomi, Y. Mizumoto, Y. Kakinuma, M. Fukuta, K. Tanaka</i>	R515 Temperature Characteristics and Their Effects on Austenitization in Grinding Hardening <i>Y. Deng, S. Xiu</i>
9:40	R116 Magnetic field-assisted finishing of a mold insert for injection molding of microfluidic chips <i>J. Guo, K. Liu, Z. Wang</i>	R216 Study on Cutting Force and Tool Wear while Milling Ni3Al-Based Superalloy <i>L. Xianpeng, Z. Zhengcai, F. Yucan, S. Honghus, L. Gaoqun</i>	R316 Investigation on Deterministic Polishing of Electro-less Plated NiP Surface Based on Preston Equation <i>H. Wang, F. Ji, W. Lin</i>	R416 Measuring of Grinding Wheel Surface Shape by Means of Laser Probe Method <i>G. Uchida, T. Yamada, K. Miura, H. Lee</i>	R516 Ellipsometry using the spin Hall effect of light for surface roughness detection <i>H. Fujita, Y. Mizutani, Y. Takaya</i>
10:00	R117 Magnetorheological Finishing (MRF) Using Spiral Tool Path with Equal Step Length <i>Y. Zhang, L. P. Wang, X. K. Li</i>	R217 High Speed Surface Texturing Process by Ultrasonic Turning for Improve Tribological Properties <i>K. Hara, H. Isobe</i>	R317 Study on surface mechanical properties and ultra precision lapping/polishing technology of YAG laser crystal <i>R. Xie, X. Chen, S. Zhao, D. Liao, J. Wang, Q. Xu, H. Zhao</i>	R417 Study on the Mechanical Property and Microstructure of the Vitrified Bond Ti-coated CBN Composites <i>X. Sun, T. Yu, M. Xu, Z. Wang, Z. Ma</i>	R517 The effect of material transfer induced by fine particle peening on the interfacial adhesion between electrodeposited coatings and aluminum substrate <i>Y. Kameyama, H. Yamamoto, S. Amano, K. Shirakashi, H. Sato, R. Shimpo</i>
10:20	R118 Dynamic Deformation Behavior of Ti-6Al-4V Alloy over a Wide Range of Strain Rate and Temperature <i>X. Hou, Z. Liu, B. Wang</i>	R218 Development of a cutting tool possessing multiple micro cutting edges on its face for the improvement of the machinability of elastomers <i>J. Shinozuka, Y. Meguro, S. Maeda</i>	R318 Processing technology of magnetorheological finishing for large-aperture optical components <i>J. Hou, H. X. Wang, X. H. Chen, B. Zhong, W. H. Deng, J. Wang, Q. Xu</i>	R418 Fabrication of TiN coated diamond abrasives for diamond tools <i>O. Kirino, Y. Kawahata, Y. Zhang, Y. Tani</i>	R518 Investigation of residual stresses in machined surface layer for turning Inconel 718 superalloy coupling finite element and analytical models <i>X. P. Ren, Z. Q. Liu</i>
	Coffee Break				

	Brittle Material Machining Chairperson: M. Nomura	System/Tooling Chairperson: T. Sawa	Lapping/Polishing (2) Chairperson: J. Murata	Grinding Wheel (2) Chairperson: S. Ninomiya	Surface Integrity (2) Chairperson: T. Onuki
10:40	R119 Study on the mechanical properties on different orientation for LiTaO3 <i>T. Zhang, W. Hang, B. Lyu, Q. Deng, X. Zeng, J. Yuan</i>	R219 Study on wheel cover safety for grinding machines <i>T. Fukui, A. Yui, T. Kitajima</i>	R319 UV-Assisted Finishing of CVD Diamond Using Fixed Abrasive Polishing <i>R. Kitamura, K. Endo, M. Ota, K. Egashira, K. Yamaguchi, H. Miwa, Y. Onchi, K. Tanada</i>	R419 Methods of analysis for a deeper understanding of the grinding process <i>B. Denkena, T. Grove, T. Götsching, P. Dzierzawa, F. L. Kempf</i>	R519 Scratch-induced Crack Propagation on C-Plane Sapphire <i>N. Wang, F. Jiang, Z. Hu, Y. S. Liao</i>
11:00	R120 An analytical force and surface roughness model for cylindrical grinding of brittle materials <i>A. Zahedi, B. Azarhoushang</i>	R220 Development of the Measurement-Grinding Integrated Machine Tool <i>M. Yang, X. Zhu, R. Kang, Z. Jiao, D. Guo, Z. Dong</i>	R320 Effect of process parameters on surface roughness of optical glass in fluid jet polishing process <i>K. G. Anbarasu, L. Vijayaraghavan, N. Arunachalam</i>	R420 Observation and Evaluation of surfaces of grinding wheels by means of a high speed camera <i>K. Kobayashi, G. Uchida, H. S. Lee, T. Yamada, K. Miura</i>	R520 Machining of an aluminium matrix composite with SiC particles:a finite element analysis <i>Q. Wu, W. Xu, L. Zhang</i>
11:20	R121 Study on the Polishing of Sapphire Using Fixed Abrasive with Free Abrasive <i>J. Chen, J. Wang, Y. Zhu</i>	R221 The Effect of New Cooling Method for Wheel Spindle Stock of Cylindrical Grinding Machine and the Characteristics of Relative Thermal Displacement between the Wheel spindle and Workpiece <i>H. Takahashi, R. Mukai, A. Makiuchi, Y. Kondo, Y. Sato, S. Shimizu</i>	R321 Abnormality diagnosis based on processing reaction force in deburring by rotary brush <i>T. Hatano, M. Nunobiki, K. Okuda, H. Kodama</i>	R421 Improvement of shape accuracy in internal grinding with slender grinding wheel <i>T. Onishi, K. Nishi, M. Sakakura, K. Ohashi</i>	R521 Improvement in Fatigue Life of Ti-6Al-4V Alloy by Microshot Peening and Ultrasonic Shot Peening <i>Y. Harada, M. Nakahira, Y. Saeki, K. Hattori</i>
11:40	R122 Evaluation of CVD-SiC grinding properties using indentation experiment <i>F. Ji, H. Wang, W. Lin</i>	R222 Development of Super Processing Center <i>D. Yoshii, T. Nakano, Y. Tsukuda, M. Ota, K. Egashira, K. Yamaguchi</i>	R322 An Improved Approach for the Lapping of Sapphire <i>Y. S. Liao, S. L. Chang</i>	R422 The Effects of Temperature Curves on the Diamond/Ni-Cr Interfacial Properties in High-frequency Induction Brazing <i>G. Huang, M. Zhang, H. Guo, X. Xu</i>	R522 Effects of cutting speed on surface integrity during finish turning pure iron material under MQL <i>J. Kong, B. Liu</i>
12:00	R123 Study on Electrolyte Selection and Electrochemical Grinding Process of Hardly Machined Material <i>K. Fan, Z. Jin, Z. Wang, X. Zhu</i>	R223 Identification of Cutting Tool for Avoiding Collision in Turning-Milling Machine <i>A. P. Rifai, H. Aoyama</i>	R323 Effects of shear thickening polishing parameters on the curved surface roughness of 20CrNi2Mo workpiece <i>Q. Shao, B. Lv, Q. Deng, W. Hang, J. Yuan</i>	R423 Study on the residual stress on grinding of titanium alloy with coolant supplied from inner side of grinding wheel <i>S. Toyokawa, N. Nakatsuka, A. Kusakabe, H. Sasahara</i>	R523 The effects of surface roughness and fatigue behavior during different machining methods <i>D. Du, J. Kong</i>
12:20	Lunch				
13:20	Poster Session (P001~P062) Conference Center Lobby Area & Meeting Room #2-4				
15:00					
15:20	Move to Banquet				
18:00	Banquet Bankoku Shinryokan Resort MICE Facility				
20:00					

6 December (Wednesday), 2017

9:00	Technical Tour OIST Labo Tour
13:00	

Poster session

P001

Fundamental Performance of Ultrasonic Assisted Plasma Oxidation Grinding Technique in Drilling of Ti-6Al-4V

Sisi Li, Yongbo Wu, Shaolin Xu, Teruo Bitou, Mitsuyoshi Nomura, Tatsuya Fujii

P002

Effect of Pre-stress on Surface Micro-topography in Pre-stressed Dry Grinding Process

Shichao Xiu, Yansheng Deng, Xiaoliang Shi, Minghe Liu

P003

Improvement of Removal Amount Estimation Method in Multistage Superfinishing of Sapphire

Shintaro Sakaguchi, Naomichi Furushiro, Tomomi Yamaguchi, Daisuke Hirooka, Noboru Matsumori, Kenichi Tanada

P004

Study on the trajectory of single-grit on the surface processing of ceramic tiles

Xiaolin He, Chengyong Wang, Wu Wen

P005

Experimental Study on Grinding Surface Quality of Nickel-based Single Crystal Superalloy

Ming Cai, Yadong Gong, Qiang Li, Yao Sun, Yin Liu

P006

Study on interaction functions of diamond grains in silicon carbide ceramics grinding process with double-grains grinding wheel

Honghua Su, Jianbo Dai, Tengfei Yu, Wenbo Zhou

P007

Surface topology reconstruction and distribution of undeformed chip thickness for textured monolayer brazed CBN wheels

Jiuhua Xu, Chenwei Dai, Wenfeng Ding, Chen Ding

P008

Experimental study on heat transport of a rotating heat pipe abrasive-milling tool in dry abrasive-milling

Yucan Fu, Junjie Gao, Jijia Chen, Zhibin Gu

P009

Experimental Investigation on Scratch Mechanism of Gear Grinding with Microcrystalline Ceramic Abrasive on Carburizing Hardened 20CrMnTi

Changsheng Wang, Peng Yao, Chuanzhen Huang, Hanlian Liu, Hongtao Zhu, Bin Zou, Zhihong Yang, Yue Liu

P010

Development of a novel bench-drill type grinding tool for welding electrode and experimental research on its grinding performance

Feng Jiao, Yuan Liu

P011

Texture Feature of Machined Surface of K9 Glass in Ultrasound-Assisted Grinding

Jianhui Zhu, Chen Jiang

P012

Theoretical analysis of roughness of high-speed reciprocation ground surface

Nobuhito Yoshihara, Kazuki Ono, Naohiro Nishikawa, Masahiro Mizuno

P013

The Grinding Force Prediction of CFRP Drilling with Brazed Diamond Core Drill

Juan Mu, Yan Chen

P014

An improved solution of Energy Partition in Grinding

Lei Zhang

P015

Ultrasonic assisted scratching on ceramic glass with a single diamond grain

Jiatong Zhang, Renke Kang, Feifei Zheng, Zhigang Dong, Dongming Guo

P016

Fundamental Investigation on the tilt helical milling of carbon fiber reinforced plastics (CFRP)

Qiang Wang, Yongbo Wu, Shaolin Xu, Teruo Bitou

P017

Determining Stable Machining Conditions through Inverse Analysis of Machined Surface Characteristics following Chatter Vibration in End-milling

Kaito Aotani, Toshiki Hirogaki, Eiichi Aayama

P018

Investigation on cutting effect of cylindrical turning Fe-based memory alloy with liquid nitrogen as coolant

Xin Wei, Jie Sun, Kai Guo, Ge Song, Weidong Li

P019

Research of Milling Performance about a Novel Tool for Amputating Clamping Supports by Experiments

Yiran Zhang, Kai Guo, Jie Sun, Weidong Li, Chao Sun

P020

Development of Self-lubricating Ceramic Cutting Tool Material with the Addition of Metal Coated Solid Lubricant Powders

Guangyong Wu, Chonghai Xu, Guangchun Xiao, Mingdong Yi, Zhaoqiang Chen

P021

A Feasibility Study of a Chemical Slicing Method for Semiconductor Wafers Using Photoelectrochemical Etching with an Optical-Fiber-Electrode Array Sheet

Junji Murata, Kousuke Funada

P022

Application of EC-PCD Composed of Boron Doped Diamond Particles to a Tool for Machining Resin Materials

Manabu Iwai, Fumihiko Uchiyama, Shinichi Ninomiya, Fumio Koga, Kiyoshi Suzuki

P023

Pulsed Laser Milling Integrated Die/Mold Machining

Analysis of Heat-affected Zone Obtained by Laser-milling Process for Hardened Die Steel

Keiji OGAWA, Heisaburo Nakagawa, Takumi Imada, Hirotaka Tanabe, Taichirou Ukawa

P024

The Investigation of the Morphology and Failure Types of Pre-placed CBN on Cu-Ni-Sn-Ti Bonded to Steel by Laser Process

Xufeng Zhao, Tianbiao Yu, Yu Zhao, Xue Sun, ZheLun Ma, Ming Li, Tianqi Zhang

P025

Experimental Study on Ultrasonic Elliptical Vibration Cutting of AISI 4340 Steel by using diamond Tool

Haidong Zhao, Ping Zou, Quan Wen, Jun Cheng, Wei Wang

P026

Research on Drilling Experiments of Inconel 718 superalloy with Ultrasonic Vibration

Yingjian Tian, Ping Zou, Shuo Chen, Di Kang, Xulei Yang

P027

Study on the drilling quality in ultrasonic vibration assisted drilling of CFRP /Al alloy Stacks

Wenrui Ma, Kan Zheng, Song Dong

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