

Room 8

Session 3-8-1: OS09 Non-traditional machining and additive manufacturing II

OS09-01 Influence of Dielectric Oil Cooling-Effect on Wire EDM Characteristics
Shixian Liu, Ren Sakata, Akira Okada and Tomohiko Kitamura

OS09-02 Non-Circular Section Machining of Glass with Lathe-Type Electrochemical Discharge Machine
Katsushi Furutani and Toshiki Irie

OS09-07 Development of A Novel Near-Dry Mist-Electrical Discharge Machining - An Environment-Friendly Precise Process
Albert Wen-Jeng Hsue and Tsung-Rei Lin

OS09-28 Modeling of parallel discharge mechanisms in multi-wire EDM
Junming Guan, Yijin Zhong and Yonghua Zhao

OS09-19 In-process X-ray observation of electrical discharge machining revealing electrode behavior inside metal workpiece, Hiroto Motoyama, S. Egawa, G. Yamaguchi, J. Guo, H. Yumoto, T. Koyama, H. Takano, Y. Hayashi, H. Ohashi, M. Yabashi and H. Mimura

Session 3-8-2: OS09 Non-traditional machining and additive manufacturing III

OS09-05 Effect of Amplitude on Ultrasonic Vibration Assisted EDM of SKD 61 S steel: Theoretical Analysis and CFD Study
Chenxue Wang, Tomohiro Sasaki and Atsutoshi Hirao

OS09-06 Melt Pool Observation in Ultrasonic Vibration-Assisted Directed Energy Deposition
Yuya Hagihara, Y. Miyata, T. Mori, I. Yamaji, W. Cong and D. Kono

OS09-03 Enhancing Formability of SiCp/Al Composites through Ultrasonic Compression Molding
Zhen Li, Zhengji Yang and Liangchi Zhang

OS09-12 An experimental investigation on magnetic field assisted ultra-precision diamond machining of microgrooves on titanium alloy surfaces
Linhe Sun, Suet To and Wai Sze Yip

OS09-11 Research on the material removal behavior of SiC f /SiC composites during ultrasonic assisted scratching
Yichuan Ran, G. Yuan, Y. Bao, X. Zhu, S. Gao and R. Kang

Session 3-8-3: OS09 Non-traditional machining and additive manufacturing IV

OS09-08 Machine learning application in Laser forming - Predicting scanning paths with CNN and structured patterns -
Ping-Hsien Chou, T. Miyake, K. Yamada, Y. Hwang, E. Sentoku, R. Tanaka and K. Sekiya

OS09-14 Numerical Analysis of Atmospheric Pressure Inductively Coupled Argon Plasma
Xinyang Wei, I. Noto, R. Sun, Y. Ohkubo and K. Yamamura

OS09-09 Study on Surface Smoothing of Metal Lattice Structures by Large area Electron Beam Irradiation Method
Seiya Miura, T. Shinonaga, A. Yamaguchi and A. Okada

OS09-17 Joining of Additive Manufactured Metals via Friction Welding Technology
Fatma Nur Depboylu and Andrei-Alexandru Popa

OS09-10 Selective Laser Melting of AlCoCrMoNbNi Refractory High-Entropy Alloy with Titanium and Carbon Nanoparticle Additions: Exploring the Microstructure and Crack Propagation Mechanisms, Meng-Hsiu Tsai, Yu-Chieh Chuang

Session 3-8-4: OS09 Non-traditional machining and additive manufacturing V

OS09-20 In-situ characterization of molten pool evolution via high-speed imaging of laser powder bed fusion
Yoshiki Sakai, H. Suzuki, L. Chen, Y. Ito and K. Nagato

OS09-21 A new characteristic method for Directed Energy Deposition (DED) additive manufacturing based on point cloud analysis
Hao Xue, L. Ye, Y. Wang, F. Xu, C. Liu, S. Tammam-Williams and N. Yu

OS09-26 Development of deposition height control system for GTAW-based additive manufacturing
Masahiro Kawabata, T. Sasaki, K. Wada, S. Kanemaru, Y. Nomura and H. Sasahara

OS09-13 Investigation of the influence of base metal size on residual stress and deformation in directed energy deposition
Kaito Sekiguchi, Y. Miyata, S. Sugimoto, T. Abe and J. Kaneko

OS09-23 Investigation of the effect of gravity on melt pool formation in powder bed fusion using simulation
Yoshitomo Ichise and Ryo Koike