

Room 2

Session 3-2-1: OS01

Digital design and manufacturing systems I

OS23-11 Application of Design of Experiments for high-accuracy plastic micro needle arrays manufacturing, Alireza Mollaei Ardestani, M. Babenko, M. Calaon, J. H. Hattel, M. Kulahci, B. Whiteside, G. Tosello

OS01-04 Eccentric machining of a crankshaft using feature-based simultaneous four-axis machining using STEP-NC
Shunta Onodera, Fumiki Tanaka and Masahiko Onosato

OS01-06 A study on easy to build friction models for feed axis simulation of machine tools
Evaluation score of paper
Taro Ogiso and Shunsuke Aoki

OS01-11 Improvement of press formability of UD semi-preg CFRTP using polygon development based on 3D-CAD data
Hidetake Tanaka, Atsushi Yabe, Koudai Ueda and Tatsuki Ikari

OS01-08 A Study on Suppression of Variation in Tool Center Points for Ball-End Milling of Free-Form Surfaces
Eisuke Sogabe and Keiichi Nakamoto

Session 3-2-2: OS01

Digital design and manufacturing systems II

OS01-09 An optimization model for cutting tool allocation in flexible manufacturing systems considering remaining usable times and machine load balance
Taketo Fujii and Haruhiko Suwa

OS01-10 A Study on Computer Aided Process Planning to Realize Parts Machining on a Sliding Headstock Lathe
Taichi Takanami, Shuichi Watabe, Naoki Akiyama, Kazuhiko Sannomiya, Takaichi Nakaya and Keiichi Nakamoto

OS01-07 A study on Computer Aided Process Planning to allocate the operation sequence by referring to workpiece material
Ryo Hamanaka, Eisuke Sogabe and Keiichi Nakamoto

OS01-12 Measurement and Compensation of workpiece setup error in NC machining using a 3D scanner
Daisuke Narita, Hayato Yoshioka and Zongwei Ren

Session 3-2-3: GS02/GS08

Design

Atomic and close-to-atomic scale manufacturing

GS02-04 Investigation of Geometric Accuracy Characteristics of an Ultra-Precision Fine-Pitch Gear Measuring Machine
Zhaoyao Shi, Kui Liao, Huixu Song, Zhongpu Wen and Bo Yu

GS02-05 Enhancing Thin-Film Pressure Sensor Performance for Measuring Human Eyelid Pressure Using High-Precision Microarray Structures
Teng-Jung Kao, Yu-Zhen Mao, Wen-Kai Li and Chun-Wei Liu

GS08-01 Fabrication of atomic-scale structures on gallium arsenide by tip induced local oxidation and post etching
Yangyang Li, Jinyan Tang, Mao Peng and Yuan-Liu Chen

GS08-02 In-process monitoring of current for quality control in scanning probe oxidation lithography of atomic-scale structures
Mao Peng, Jinyan Tang, Yangyang Li and Yuan-Liu Chen

GS02-02 Research on high-sensitivity force measuring guide apparatus for joule balance
Peng Wu, Pengyue Zhao and Jianwei Wu

Session 3-2-4: GS14

Cyber-physical and digital twin production systems

GS14-01 Suggestion and Investigation of Interlock System for Human Error using Modular Robot
Kaoru Mitsuhashi

GS14-03 Digital Twin-Driven Work Handling
Charles Walker, Abhilash Puthanveetil Madathil and Xichun Luo

GS14-02 Enhancing Nanostructure Image Generation Through Physical Rendering
Wei-Cheng Jiang and Chao-Ching Ho