

Room 9

Session 3-9-1: GS10 Precision positioning I

GS10-03 Compensation of Axis-coupled Inertial Forced Vibrations using Machine Tool Feed Drives
Kaan Bahtiyar, Eiji Shamoto and Burak Sencer

GS10-04 Iteratively Evaluation-feedback Learning Control Mechanism for Grouped Systems with Similar System Parameters
Zhiying He, Hongji Pu and Fangyan Zheng

GS10-05 Study on Positioning Accuracy of Si Chips in Noncontact Holding by Non-contact Chuck Utilizing Ultrasonic Squeeze Effect
Seiji Sato, M. Miyatake, H. Kikuchi and H. Hishinuma

GS10-06 A New Absolute Capacitive Angular Displacement Sensor with Single-track Structure based Time-grating
Xingchen Fan, W. Dan, X. Hu, Z. Yu and H. Pu

GS10-07 Control Design for a Precision Positioning Stage Employing Real-Time AI Model Estimation
Fu-Cheng Wang, C. Wen, M. Chang, Y. Chang and P. Chung

Session 3-9-2: GS10 Precision positioning II

GS10-08 Investigation of distance measurement reproducibility for a long-range nanopositioning machine combined with a laser focus sensor
Davi Anders Brasil, S. Hesse, M. Katzschmann, L. Herzog, T. Fröhlich and T. Kissinger

GS10-09 Floating support properties of fine feed table for non-contact support with squeezed-air effect
Yuma Tamaru, Tomohiro Ushijima and Hiroki Shimizu

GS10-10 Evaluating Scale Pitch Deviation with Differential Angle Sensors Utilizing Optical Lever and Laser-Autocollimation Methods
Jiucheng Wu, L. Quan, Y. Shimizu, R. Sato, H. Matsukuma and W. Gao

GS10-11 Reduction of crosstalk errors in a two-axis grating interferometer with an Improved Z-Range
Yifan Hong, Ryo Sato, Hiraku Matsukuma and Wei Gao

GS10-12 Implementation of the Torque Limit Skip for Thermal Error Measurement on Precision Machine Tools
Petr Kaftan, F. Porquez, J. Mayr, K. Wegener and M. Bambach

Session 3-9-3: OS07 Micro/Nano machining and figurings I

OS07-01 Thermal effect on the mechanical properties of monocrystalline silicon under nanoindentation: a molecular dynamics analysis
Yifan Li, Liangchi Zhang

OS07-02 Deformation and cracking mechanisms of single crystal indium phosphide induced by nanoscratch
Xuliang Li, Mingyuan Lu and Han Huang

OS07-09 One-step dry etching of engraved silica nanocones with plasma-induced film-dewetted masks
Jin Hu and Shaolin Xu

OS07-03 Elliptical vibration ruling of pixelated blazed gratings for the fabrication of anti-counterfeiting structural colors
Mengying Luan, J. Yu, P. Feng, F. Feng and J. Wang

OS07-08 Laser-assisted fabrication of micro-structured surface with hierarchical roughness on single-crystal silicon
Changlin Liu, Wai Sze Yip and Suet To

Session 3-9-4: OS07/OS22 Micro/Nano machining and figurings II MEMS/NEMS

OS07-11 Comparative Study about Various Ultraprecision Machine Tools in Mid-Spatial-Frequency Waviness Generation on Optical surface
Yan Wei, M. Takeda, T. Hosobata, Y. Yamagata and S. Morita

OS22-02 Free standing diamond nanostructures formed by sacrificial layer etching for nanoelectromechanical actuators
Taro Ikeda and Yoshiaki Kanamori

OS22-04 Design of a device for surface profile measurement integrating 3x3 displacement sensors
Kotaro Nakahara, T. Noda, N. Shirozu, Y. Tamaru and H. Shimizu

OS09-27 Study of GaN anodization characterization for electrochemical mechanical polishing
Xu Yang, L. Zhu, X. Yang, K. Yamamura and Z. Jiang

OS05-31 Force servo assisted single point diamond cutting mechanism and technology for hard and brittle surface substrates
Hui Li, Zhongwei Li, Kaiyang Xia and Yuanliu Chen