

## GS10 Precision positioning

**GS10-01** Trajectory positioning error compensation and verification for six-axis industrial robot

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**GS10-02** Micro/nano vibration suppression of a flexible macro-micro manipulator

Lingwei Meng, Yannan Mo, Zixuan Yu, Chen Wang and Yiling Yang

Ningbo University

**GS10-03** Compensation of Axis-coupled Inertial Forced Vibrations using Machine Tool Feed Drives

Kaan Bahtiyar, Eiji Shamoto and Burak Sencer

Oregon State University

**GS10-04** Iteratively Evaluation-feedback Learning Control Mechanism for Grouped Systems with Similar System Parameters

Zhiying He and Hongji Pu

Chongqing University of Technology

**GS10-05** Study on Positioning Accuracy of Si Chips in Noncontact Holding by Non-contact Chuck Utilizing Ultrasonic Squeeze Effect

Seiji Sato, Masaaki Miyatake, Hiroshi Kikuchi and Hayato Hishinuma

Tokyo University of Science

**GS10-06** A New Absolute Capacitive Angular Displacement Sensor with Single-track Structure based Time-grating

Xingchen Fan, Wenwen Dan, Xiaoyang Hu, Zhicheng Yu and Hongji Pu

**GS10-07** Control Design for a Precision Positioning Stage Employing Real-Time AI Model Estimation

Fu-Cheng Wang, Chi-Wei Wen, Min-Shang Chang, Yan-Teng Chang and Jia-Yushi Yen

National Taiwan University

**GS10-08** Investigation of distance measurement reproducibility for a long-range nanopositioning machine combined with a laser focus sensor

Davi Anders Brasil, Steffen Hesse, Michael

Katzschmann, Ludwig Herzog, Thomas Fröhlich and Thomas Kissinger

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

**GS10-10** Evaluating Scale Pitch Deviation with Differential Angle Sensors Utilizing Optical Lever and Laser-Autocollimation Methods  
Jiucheng Wu, Lue Quan, Yuki Shimizu, Ryo Sato, Hiraku Matsukuma and Wei Gao  
Tohoku University

**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  
Tohoku University

**GS10-12** Implementation of the Torque Limit Skip for Thermal Error Measurement on Precision Machine Tools  
Petr Kaftan, Florian Porquez, Josef Mayr, Konrad Wegener and Markus Bambach

**GS10-13** Enhancing Positioning Accuracy of a Parallel Kinematic Manipulator through Machine Learning-Embedded Self-Calibration Strategies  
Yu-Jen Chiu and Syamala Jaya Prakash Reddy  
Ming Chi University of Technology

**GS10-14** Kinematically Redundant (6+3)-DOF Hybrid Parallel Robots with Very Large Rotational Workspace  
Kefei Wen  
The University of British Columbia

**GS10-15** Latest Advancement on Human-Robot Collaboration in Manufacturing  
Lihui Wang  
KTH Royal Institute of Technology, Sweden