

## GS12 Dimensional metrology

**GS12-01** Design and Realization of Three-line Step Height and Surface Roughness Certified Reference Materials

Sunghoon Eom and Jonghan Jin

**GS12-02** R-test for identifying a kinematic model of articulated arm coordinate measuring machines

Tomoaki Kashiwa and Soichi Ibaraki

Hiroshima University

**GS12-03** Simulation Study on the Measurement of Fuel Rod Oxide Layer Thickness by Eddy Current

Ji Li, Zhiyong Deng, Sanjie Gao and Bin xu

Nuclear Power Institute of China

**GS12-04** High-accuracy measurement of wheel tread geometric parameters based on laser displacement sensors

Qixin He, Hao Yuan, Jing Yang, Fajia Zheng and Qibo

**GS12-05** A point-by-point probing method for roundness metrology of small cylinders with the coordinate measuring machine

Jiali Zhao, Zihan Wang, Yan Zhao and Qiaolin Li

Lanzhou University of Technology

**GS12-06** Influence of relative intensity in metal-polymer assembly evaluation by X-ray computed tomography

Daniel Gallardo, Lucía Díaz, José A. Albajez and José A. Yagüe-Fabra

University of Zaragoza

**GS12-07** Theoretical modeling of fluorescent confocal detection for surface position determination in dimensional measurement

Motoya Yoshikawa, Shuzo Masui, Shotaro Kadoya, Masaki Michihata and Satoru Takahashi

The University of Tokyo

**GS12-08** Optimization of multiple-orientation dimensional measurement on X-ray CT

Osamu Sato, Mari Watanabe, Kazuya Matsuzaki, Mariko Kajima, Souichi Telada, Tsukasa Watanabe, Youichi Bitou and Toshiyuki Takatsuji

National Institute of Advanced Industrial Science and Technology

**GS12-09** A High-precision Displacement Measurement Method based on Ultrasonic Travelling Waves in Crystals

Mingshu Wu, Bai Ji, Guancoing Tao, Yuge Zhang and

**GS12-10** Optical calibration system for resin gauges used in X-ray CT

M. Watanabe, K. Matsuzaki, O. Sato, M. Kajima and T. Watanabe

National Institute of Advanced Industrial Science and Technology

**GS12-11** Improving the accuracy of workpiece pose estimation of robotic bin picking from stationary and mobile depth cameras

Pung Kyu Lee, Seongin No and Huitaek Yun

Korea Advanced Institute of Science and Technology

**GS12-12** Experimental characterization of contact stiffness using an on-machine measurement device

Kaho Hirano, Atsushi Matsubara and Kotaro Mori

Kawasaki Heavy Industries, Ltd.

**GS12-13** Aggregation-value-based active sampling method for multi-sensor freeform surfaces measurement and reconstruction

Gengxiang Chen, Yingguang Li, Charyar Mehdi-Souzani and Xu Liu

Université Paris-Saclay USPN

**GS12-14** Integrated metrology in manufacturing: connecting digital twins and applications in metal forming

Enrico Savio