

GS11 Optical metrology

GS11-02 High precision and sensitivity anti-interference 3D coherent ranging based on dual reversely chirped self-mixing lasers

Chenxiao Lin and Yidong Tan

Tsinghua University

GS11-03 Second harmonic confocal probe with a mode-locked femtosecond laser

Ryo Sato, Hiraku Matsukuma and Wei Gao

Tohoku University

GS11-04 Research on TSV depth measurement technique using interferometric spectroscopy

Zizheng Wang, Zhaoran Liu, Chengpei Bai, Chengyuan Yao, Xinlei Sun and Chunguang Hu

Tianjin university

GS11-05 Error analysis for near optical coaxial phase measuring deflectometry with refraction error model

Yanling Li, Feng Gao, Yongjia Xu, Zonghua Zhang and Xiangqian Jiang

University of Huddersfield

GS11-06 State of the art and novel approaches in angle metrology at the Physikalisch-Technische Bundesanstalt

Ralf D. Geckeler, Matthias Schumann, Andreas Just and Michael Krause

GS11-07 Laser-based method for simultaneously measuring length and straightness based on a single quadrant detector

Ying Zhang, Fajia Zheng, Jing Yang, Fei Long, Bin Zhang and Qibo Feng

Beijing Jiaotong University

GS11-10 Precise Angular Alignment of Birefringent Axes for Polarization Maintaining Fiber Based Electro-optic Sensing Probe

Seung Kwan Kim and Sun Do Lim

Korea Research Institute of Standards and Science

GS11-11 An optical sensor for three-axis angle measurement employing imaging sensors

Misaki Hosoya, Ryo Sato, Jiucheng Wu, Hiraku Matsukuma and Wei Gao

Tohoku University

GS11-12 The centroid based automatic segmentation and weighted localization algorithm for the center of the focused laser spot
Huixu Song and Qingwei Li
Beijing University of Technology (BJUT)

GS11-14 Six Degree-of-freedom Pose Metrology Based on Dual-comb Ranging
Ruilin Jiang, Jinming Li, Lijiang Zeng and Guanhao Wu
Tsinghua University

GS11-15 Straightness measurement with laser beam and deep learning
Ukyo Takata, Satoru Takano, Yohei Yamada, Toshinori Yasuhara, Kohsei Terao and Masato Aketagawa
Nagaoka university of technology

GS11-16 Structured illumination white-light scanning interferometry microscope
Min Seo Cho and Ki-Nam Joo
Chosun university

GS11-17 Second Harmonic Generation (SHG) Angle Sensor based on a Collimated Femto-second Laser Beam
Jiahui Lin, Zhiyang Zhang, Ryo Sato, Hiraku Matsukuma and Wei Gao

GS11-18 Investigation on Performance of Fabry-Pérot Angle Sensor using Mode-locked Femtosecond Laser
Dong Wook Shin, Ryo Sato, Hiraku Matsukuma and Wei Gao
Tohoku University

GS11-19 A real time and accurate vibration measurement method based on an event camera
Xing Qu, Chunyang Ma and Shuming Yang
Xi'an Jiaotong University

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Elie Magnon, Yasuhiro Mazutani, Tsutomu Uenohara and Yasuhiro Takaya

GS11-21 Measurement system and experiment of structural deformation with six degrees of freedom in a thermal vacuum environment
Fajia Zheng, Qibo Feng, Bin Zhang, Jing Yang, Fei Long and Ying Zhang
Beijing Jiaotong University

GS11-22 Applying Deep Learning to Far-field Intensity Distribution for Extreme Ultraviolet Mask Defect Inspection Based on Scatterometry
I-Chih Huang, Jia-Han Li, Chao-Te Lee and Wen-Hao Chao

GS11-23 Enhanced 3D Surface Profilometry of Chromatic Confocal Microscopy with Spatially Varying Richardson-Lucy Deconvolution
Han-Ju Tsai, Wei-Chi Hung, Ching-Chia Yen and Liang-Chia Chen
National Taiwan University

GS11-24 Spectroscopic measurement with machine learning for optical sensors employing an ultrashort pulse laser
Yusuke Kobayashi, Dong Wook Shin, Ryo Sato, Hiraku Matsukuma and Wei Gao
Tohoku university

GS11-25 Design of a Small-Angle Laser Scanning and Ranging System with Stationary-Reference
Qingzhao Yang, Liheng Shi, Lijiang Zeng and Guanhao Wu

GS11-26 2D displacement measurement with sinusoidal phase modulation interferometry
Itsuki Nagaoka, Taku Sato, Masato Higuchi and Masato Aketagawa
Nagaoka University of Technology

GS11-27 Enhancing in-process monitoring of additive manufacturing through virtual fringe-projection simulations
Tibebe Yalew, Xiangjun Kong, Qingkang Bao, Gerardo Adesso and Samanta Piano

GS11-28 Quantum enhanced metrology for 3D manufacturing
Jernej Frank, Tommaso Tufarelli, Samanta Piano, Alexander Lvovsky and Gerardo Adesso
University of Nottingham

GS11-29 An enhanced data-processing algorithm for spectrally-resolved interferometry using a femtosecond laser
Tao Liu, Amane Suzuki, Ryo Sato, Hiraku Matsukuma and Wei Gao