

Contents

vii	<i>Authors</i>
ix	<i>Conference Committee</i>
xi	<i>Introduction</i>

SESSION 1 3D SHAPE MEASUREMENT

10373 02	Usefulness of orthogonal basis sets for predicting optical performance of wavefronts with mid-spatial frequency error (Invited Paper) [10373-1]
10373 04	Fusion of light-field and photogrammetric surface form data [10373-4]
10373 05	Expansion of measurement area of three-dimensional deformation measurement speckle interferometry with same sensitivities in three directions under consideration of measurement sensitivity [10373-5]
10373 06	Form and position measurement of sheet metal parts by boundary outlines extracting strategy [10373-6]

SESSION 2 POLARIZATION MEASUREMENT AND TECHNIQUES

10373 07	Application of polarization in high speed, high contrast inspection [10373-7]
10373 09	Measurement of polarization state of light using in-plane spin splitting [10373-9]
10373 0A	The photonic spin Hall effect sensor [10373-10]

SESSION 3 FINE SCALE FEATURE METROLOGY

10373 0B	Vibration-immune compact optical metrology to enable production-line quantification of fine scale features [10373-11]
10373 0C	Experimental investigation of natural convection in a rectangular cavity with two protruded half cylinders using a Mach-Zehnder interferometer [10373-13]
10373 0D	Authentication Sensing System Using Resonance Evaluation Spectroscopy (ASSURES) [10373-14]
10373 0E	Optical mapping of surface roughness by implementation of a spatial light modulator [10373-15]

- 10373 OG **Dimensional metrology of micro structure based on modulation depth in scanning broadband light interferometry [10373-38]**

SESSION 4 OPTICAL TESTING

- 10373 OH **Phase measuring deflectometry for determining 5 DOF misalignment of segmented mirrors [10373-16]**
- 10373 OI **Deflectometry for measuring mount-induced mirror surface deformations [10373-17]**
- 10373 OJ **General testing method for refractive surfaces based on reverse Hartmann test [10373-18]**
- 10373 OK **Geometrical error calibration in reflective surface testing based on reverse Hartmann test [10373-20]**
- 10373 OL **Study of annular sub-aperture stitching interferometry for aspheric surfaces [10373-21]**

SESSION 5 SPECTROSCOPIC TECHNIQUES AND METROLOGY

- 10373 OM **Development of an oxygen saturation measuring system by using near-infrared spectroscopy [10373-22]**
- 10373 ON **Metrology of semiconductor structures using novel Fabry Perot fringe stretching system [10373-23]**
- 10373 OO **Rapid, automated, quality control of diffraction grating efficiency [10373-24]**
- 10373 OP **Spatially and temporally resolved diagnostics of dense sprays using gated, femtosecond, digital holography [10373-25]**

SESSION 6 FRINGE PROJECTION AND STRUCTURED LIGHT

- 10373 OQ **Multimodal and synthetic aperture approach to full-field 3D shape and displacement measurements (Invited Paper) [10373-39]**
- 10373 OR **Focusing schlieren systems using digitally projected grids [10373-26]**
- 10373 OS **Application of instrument transfer function to a fringe projection system for measuring rough surfaces [10373-27]**
- 10373 OT **A three-dimensional scanning apparatus based on structured illumination method and its application in dental scanning [10373-28]**
- 10373 OU **A calibration method immune to the projector errors in fringe projection profilometry [10373-29]**

POSTER SESSION

- 10373 0V **Collimator focus check with interferometer [10373-30]**
- 10373 0W **Characterizing the surface fluctuation of an epitaxial wafer by using a Shack-Hartmann wave-front sensor [10373-31]**
- 10373 0Z **Advanced polarization sensitive analysis in optical coherence tomography [10373-34]**
- 10373 10 **Optical stabilization for time transfer infrastructure [10373-35]**
- 10373 12 **Robust phase unwrapping algorithm for 3D profile measurement applications [10373-37]**
- 10373 13 **Measurement of vibration using phase only correlation technique [10373-40]**