

Content

Dallaeva D., Tomanek P., Korostylev E. and Bílalov B.	SCANNING ELECTRON MICROSCOPY OF THE THIN LAYERS OF SILICON CARBIDEALUMINUM NITRIDE SOLID SOLUTION FORMATTED BY SUBLIMATION EPITAXY	5
Doleček R., Kopecký V., Psota P. and Lédl V.	DIGITAL HOLOGRAPHIC SETUP FOR MEASUREMENT OF ASYMMETRIC TEMPERATURE FIELD AND TOMOGRAPHIC RECONSTRUCTION	9
Fibrich M., Rus B. and Kramer D.	HOLLOW-DUCT RADIATION DELIVERY SYSTEM INVESTIGATION	13
Gronle M., Lyda W. and Osten W.	CONCEPTS FOR AN ACTIVE INSPECTION OF THREE-DIMENSIONAL OBJECTS USING A MULTI-SENSOR MEASUREMENT SYSTEM	17
Hošek J. and Studenovský K.	REDUCING THE EDGE CHIPPING FOR CAPILLARY END FACE GRINDING AND POLISHING	24
Inneman A., Pina L., Hudec R., Černá D., Maršíková V. and Melich Z.	HISTORY OF DEVELOPMENT OF X-RAY OPTICS IN CZECH REPUBLIC	28
Jašíková D., Pavlík D., Kotek M. and Kopecký V.	MEASUREMENT OF FLUID MOTION AND TEMPERATURE CHANGES IN THE REAL MODEL OF THE HEAT EXCHANGER USING PLIF	34
King Ch. W. and Simpson P.	NOVEL STITCHING INTERFEROMETRY FOR THE MEASUREMENT OF LARGE FLATS	41
Klejš M., Němec M., Kubát J. and Polák J.	PREPARATION, PROPERTIES AND APPLICATION OF SAPPHIRE SINGLE-CRYSTAL FIBERS GROWN BY THE EFG METHOD	48
Kmetík V., Námcová S., Jiran L., Stranakova E. and Inneman A.	DEVELOPMENT OF LARGE APERTURE ELEMENTS FOR ACTIVE AND ADAPTIVE OPTICS	53
Kočárková H.	LIGHTING MOLDED OPTICS: DESIGN AND MANUFACTURING	57
Kramer D., Novák J. and Rus B.	DESIGN OF HYBRID COMPRESSOR FOR A 10PW LASER	66
Kruchenko A.V., Nováková K. and Mokřý P.	OPTIMIZATION OF ELECTRODE GEOMETRY AND PIEZOELECTRIC LAYER THICKNESS OF A DEFORMABLE MIRROR	69
Kunc Š. and Šulc M.	HIGH FREQUENCY MODULATION METHOD FOR MEASURING OF BIREFRINGENCE	74
Květoň M., Havránek A., Škereň M. and Fiala P.	REAL-TIME MEASUREMENTS OF DIFFRACTION GRATING GROWTH IN PHOTOPOLYMER RECORDING MATERIALS	77
Lazar J., Holá M., Hrabina J., Buchta Z. and Číp O.	PRECISION DISPLACEMENT INTERFEROMETRY WITH STABILIZATION OF WAVELENGTH ON AIR	81
Melich R., Psota P., Lédl V. and Václavík J.	IRREGULAR SURFACES - MEASUREMENTS AND ZEMAX SIMULATIONS	86
Mikš A., Novák J. and Novák P.	TECHNIQUE FOR SURFACE SHAPE RECONSTRUCTION USING DEFLECTOMETRIC PRINCIPLE	89
Mrňa L., Šarbort M., Řeřucha Š. and Jedlička P.	ADAPTIVE OPTICS FOR CONTROL OF THE LASER WELDING PROCESS	93
Dupický P., Jareš D., Václavík J. and Vápenka D.	PHOTONOMETERS FOR COATING AND SPUTTERING MACHINES	99

Pintr P.	RELATIONSHIP BETWEEN LUMINOSITY, IRRADIANCE AND TEMPERATURE OF STAR ON THE ORBITAL PARAMETERS OF EXOPLANETS	103
Procháska F., Polák J., Tomka D. and Šubert E.	USING FEM TECHNOLOGY FOR OPTICAL SURFACES POLISHING	107
Psota P., Kopecký V., Lédl V. and Doleček R.	DIGITAL HOLOGRAPHIC METHOD FOR PIEZOELECTRIC TRANSFORMERS VIBRATION ANALYSIS	112
Shirazi M.R. and Biglary M.	MULTIPLE WAVELENGTH GENERATION USING A COMPACTED HYBRID RAMAN / BI-EDF AMPLIFIER	118
Steiger L. and Šulc M.	MULTIPLE MIRROR POSITION MONITORING SYSTEM FOR PARTICLE DETECTOR RICH-1	121
Škereň M., Svoboda J., Květoň M. and Fiala P.	FABRICATION OF DIFFRACTIVE ELEMENTS USING MATRIX LASER LITHOGRAPHY	124
Škereň M., Svoboda J., Květon M., Fiala P., Hopp J. and Possolt M.	DIFFRACTIVE ELEMENTS FOR CORRECTION OF CHROMATIC ABERRATIONS OF ILLUMINATION SYSTEMS	129
Šmíd R., Čížek M. and Číp O.	EVALUATION OF LENGTH OF THE FABRY-PEROT CAVITY WITH ULTRA-LOW EXPANSION SPACER WITH OPTICAL FREQUENCY COMB	132
Tománek P., Škarvada P., Grmela L. and Dallaeva D.	OPTOELECTRONIC DIAGNOSTICS OF DEFECTS IN SOLAR CELL STRUCTURES	137
Tomáščík J. and Čtvrtilík R.	NANOSCRATCH TEST – A TOOL FOR EVALUATION OF COHESIVE AND ADHESIVE PROPERTIES OF THIN FILMS AND COATINGS	141
Václavík J. and Vápenka D.	GALLIUM PHOSPHIDE AS A MATERIAL FOR VISIBLE AND INFRARED OPTICS	145
Vápenka D. and Václavík J.	DESIGN AND FABRICATION OF ANTI-REFLECTION COATING ON GALLIUM PHOSPHIDE SUBSTRATE FOR VISIBLE AND INFRARED APPLICATION	149
Vojtšek P. and Richter I.	SURFACE STATES IN PHOTONIC CRYSTALS	151