

Wissenschaftliche Publikationen |  
Scientific Publications

Zeitschriften | Journals

Albero, J.; Bargiel, S.; Passilly, N.; Dannberg, P.; Stumpf, M.; Zeitner, U. D.; Rousselot, C.; Gastinger, K.; Gorecki, C.

**Micromachined array-type Mirau interferometer for parallel inspection of MEMS**  
Journal of Micromechanics and Microengineering 21 (2011) 6 065005, ISSN 0960-1317

Barr, B. W.; Edgar, M. P.; Nelson, J.; Plissi, M. V.; Huttner, S. H.; Sorazu, B.; Strain, K. A.; Burmeister, O.; Britzger, M.; Friedrich, D.; Schnabel, R.; Danzmann, K.; Hallam, J.; Freise, A.; Clausnitzer, T.; Brückner, F.; Kley, E.-B.; Tünnermann, A.

**Translational, rotational, and vibrational coupling into phase in diffractively coupled optical cavities**  
Optics Letters 36 (2011) 14 p. 2746–2748, ISSN 0146-9592

Baumgartl, M.; Jansen, F.; Stutzki, F.; Jauregui, C.; Ortaç, B.; Limpert, J.; Tünnermann, A.

**High average and peak power femto-second large-pitch photonic-crystal-fiber laser**  
Optics Letters 36 (2011) 2 p. 244–246, ISSN 0146-9592

Baumgartl, M.; Ortaç, B.; Schreiber, T.; Limpert, J.; Tünnermann, A.

**Ultrashort pulse formation and evolution in mode-locked fiber lasers**  
Applied Physics B: Lasers and Optics 104 (2011) 3 p. 523–536, ISSN 0946-2171

Bischoff, M.; Stenzel, O.; Friedrich, K.; Wilbrandt, S.; Gäbler, D.; Mewes, S.; Kaiser, N.  
**Plasma-assisted deposition of metal fluoride coatings and modeling the extinction coefficient of as-deposited single layers**  
Applied Optics 50 (2011) 9 p. C232–C238, ISSN 0003-6935

Blázquez-Sánchez, D.; Weichelt, B.; Austerschulte, A.; Voss, A.; Graf, T.; Killi, A.; Eckstein, H.-C.; Stumpf, M.; Matthes, A. L.; Zeitner, U. D.

**Improving the brightness of a multi-kilowatt single thin-disk laser by an aspherical phase front correction**  
Optics Letters 36 (2011) 6 p. 799–801, ISSN 0146-9592

Brahm, A.; Wichmann, F.; Gerth, C.; Tymoshchuk, M.; Riehemann, S.; Notni, G.; Tünnermann, A.

**Terahertz Computed Tomography Helps ID Chemical Substances**  
PHOTONICS Spectra 12/ 2011, 40–43 (2011)

Braig, C.; Käsebier, T.; Kley, E.-B.; Tünnermann, A.

**Stand-alone diamond binary phase transmission gratings for the EUV band**  
Optics Express 19 (2011) 15 p. 14008–14017, ISSN 1094-4087

Brand, U.; Beckert, E.; Beutler, A.; Dai, G.; Stelzer, C.; Hertwig, A.; Klapetek, P.; Koglin, J.; Thelen, R.; Tutsch, R.

**Comparison of optical and tactile layer thickness measurements of polymers and metals on silicon or SiO<sub>2</sub>**  
Measurement Science and Technology 22 (2011) 9 094021, ISSN 0957-0233

Britzger, M.; Friedrich, D.; Kroker, S.; Brückner, F.; Burmeister, O.; Kley, E.-B.; Tünnermann, A.; Danzmann, K.; Schnabel, R.

**Diffractively coupled Fabry-Perot resonator with power-recycling**  
Optics Express 19 (2011) 16 p. 14964–14975, ISSN 1094-4087

Britzger, M.; Friedrich, D.; Kroker, S.; Brückner, F.; Burmeister, O.; Kley, E.-B.; Tünnermann, A.; Danzmann, K.; Schnabel, R.

**Pound-Drever-Hall error signals for the length control of three-port grating coupled cavities**  
Applied Optics 50 (2011) 22 p. 4340–4346, ISSN 0003-6935

Bromage, J.; Rothhardt, J.; Hädrich, S.; Dorrer, C.; Jocher, C.; Demmler, S.; Limpert, J.; Tünnermann, A.; Zuegel, J.D.

**Analysis and suppression of parasitic processes in noncollinear optical parametric amplifiers**  
Optics Express 19 (2011) 18 p. 16797–16808, ISSN 1094-4087

Brückner, F.; Kroker, S.; Friedrich, D.; Kley, E.-B.; Tünnermann, A.

**Widely tunable monolithic narrowband grating filter for near-infrared radiation**  
Optics Letters 36 (2011) 4 p. 436–438, ISSN 0146-9592

Brückner, A.; Leitel, R.; Oberdörster, A.; Dannberg, P.; Wippermann, F.; Bräuer, A.  
**Multi-aperture optics for wafer-level cameras**  
Journal of Micro/Nanolithography, MEMS, and MOEMS 10 (2011) 4 043010, ISSN 1932-5150

Chipouline, A.; Petschulat, J.; Tünnermann, A.; Pertsch, T.; Menzel, C.; Rockstuhl, C.; Lederer, F.

**Multipole approach in electrostatics of metamaterials**  
Applied Physics A: Materials Science & Processing 103 (2011) 3 p. 899–904, ISSN 0947-8396

Coriand, L.; Mitterhuber, M.; Duparré, A.; Tünnermann, A.

**Definition of roughness structures for superhydrophobic and hydrophilic optical coatings on glass**  
Applied Optics 50 (2011) 9 p. 257–263, ISSN 0003-6935

Danz, N.; Kick, A.; Sonntag, F.; Schmieder, S.; Höfer, B.; Klotzbach, U.; Mertig, B. C.  
**Surface plasmon resonance platform technology for multi-parameter analyses on polymer chips**  
Engineering in Life Sciences 11 (2011) 6 p. 566–572, ISSN 1618-2863

Demmler, S.; Rothhardt, J.; Heidt, A.M.; Hartung, A.; Rohwer, E.G.; Bartelt, H.; Limpert, J.; Tünnermann, A.

**Generation of high quality, 1.3 cycle pulses by active phase control of an octave spanning supercontinuum**

Optics Express 19 (2011) 21 p. 20151–20158, ISSN 1094-4087

Döring, S.; Richter, S.; Tünnermann, A.; Nolte, S.

**Evolution of hole depth and shape in ultrashort pulse deep drilling in silicon**

Applied Physics A: Materials Science & Processing 105 (2011) 1 p. 69–74, ISSN 0947-8396

Dreisow, F.; Wang, G.; Heinrich, M.; Keil, R.; Tünnermann, A.; Nolte, S.; Szameit, A.

**Observation of anharmonic Bloch oscillations**

Optics Letters 36 (2011) 20 p. 3963–3965, ISSN 0146-9592

Duparré, A.; Ristau, D.

**Optical Interference Coatings 2010 Measurement Problem**

Applied Optics 50 (2011) 9 p. C172–C177, ISSN 0003-6935

Eidam, T.; Hädrich, S.; Jansen, F.; Stutzki, F.; Rothhardt, J.; Carstens, H.; Jauregui, C.; Limpert, J.; Tünnermann, A.

**Preferential gain photonic-crystal fiber for mode stabilization at high average powers**

Optics Express 19 (2011) 9 p. 8656–8661, ISSN 1094-4087

Eidam, T.; Rothhardt, J.; Stutzki, F.; Jansen, F.; Hädrich, S.; Carstens, H.; Jauregui, C.; Limpert, J.; Tünnermann, A.

**Fiber chirped-pulse amplification system emitting 3.8 GW peak power**

Optics Express 19 (2011) 1 p. 255–260, ISSN 1094-4087

Eidam, T.; Wirth, C.; Jauregui, C.; Stutzki, F.; Jansen, F.; Otto, H.-J.; Schmidt, O.; Schreiber, T.; Limpert, J.; Tünnermann, A.

**Experimental observations of the threshold-like onset of mode instabilities in high power fiber amplifiers**

Optics Express 19 (2011) 14 p. 13218–13224, ISSN 1094-4087

Eilenberger, F.; Minardi, S.; Szameit, A.; Röpke, U.; Kobelke, J.; Schuster, K.; Bartelt, H.; Nolte, S.; Torner, L.; Lederer, F.; Tünnermann, A.; Pertsch, T.

**Evolution dynamics of discrete-continuous light bullets**

Physical Review A 84 (2011) 1 013836, ISSN 1094-1622

Faradzhev, N. S.; Yakshinskiy, B. V.; Starodub, E.; Madey, T. E.; Hill, S.B.; Grantham, S.; Lucatorto, T. B.; Yulin, S.; Vescovo, E.; Keister, J. W.

**Resonance effects in photoemission from TiO<sub>2</sub>-capped Mo/Si multilayer mirrors for extreme ultraviolet applications**

Journal of Applied Physics 109 (2011) 8 083112, ISSN 0021-8979

Finck, A. v.; Hauptvogel, M.; Duparré, A.

**Instrument for close-to-process light scatter measurements of thin film coatings and substrates**

Applied Optics 50 (2011) 9 C321-C328, ISSN 0003-6935

Flämmich, M.; Danz, N.; Michaelis, D.

**Accessing OLED emitter properties by radiation pattern analyses**

Optics Express 12 (2011) 1 p. 83–91, ISSN 1094-4087

Flämmich, M.; Frischeisen, J.; Setz, D. S.; Michaelis, D.; Krummacher, B.C.; Schmidt, T. D.; Brütting, W.; Danz, N.

**Oriented phosphorescent emitters boost OLED efficiency**

Organic Electronics 12 (2011) 10 p. 1663–1668, ISSN 1566-1199

Freese, W.; Kämpfe, T.; Rockstroh, W.; Kley, E.-B.; Tünnermann, A.

**Optimized electron beam writing strategy for fabricating computer-generated holograms based on an effective medium approach**

Optics Express 19 (2011) 9 p. 8684–8692, ISSN 1094-4087

Friedrich, D.; Barr, B.W.; Brückner, F.; Hild, S.; Nelson, J.; Macarthur, J.; Plissi, M.V.; Edgar, M. P.; Huttner, S.H.; Sorazu, B.; Kroker, S.; Britzger, M.; Kley, E.-B.; Danzmann, K.; Tünnermann, A.; Strain, K.A.; Schnabel, R.

**Waveguide grating mirror in a fully suspended 10 meter Fabry-Perot cavity**

Optics Express 19 (2011) 16 p. 14955–14963, ISSN 1094-4087

Gödeker, C.

**AR coating for sapphire has high scratch resistance**

Applied Optics 50 (2011) 9 C255, ISSN 0003-6935

Gödeker, C.; Schulz, U.; Kaiser, N.

**Improved scratch resistance for antireflective coatings on sapphire**

Applied Optics 50 (2011) 9 p. 253–256, ISSN 0003-6935

Hädrich, S.; Carstens, H.; Rothhardt, J.; Limpert, J.; Tünnermann, A.

**Multi-gigawatt ultrashort pulses at high repetition rate and average power from two-stage nonlinear compression**

Optics Express 19 (2011) 8 p. 7546–7552, ISSN 1094-4087

Hädrich, S.; Demmler, S.; Rothhardt, J.; Jocher, C.; Limpert, J.; Tünnermann, A.

**High-repetition-rate sub-5-fs pulses with 12 GW peak power from fiber-amplifier-pumped optical parametric chirped-pulse amplification**

Optics Letters 36 (2011) 3 p. 313–315, ISSN 0146-9592

Hädlich, S.; Krebs, M.; Rothhardt, J.; Carstens, H.; Demmler, S.; Limpert, J.; Tünnermann, A.

**Generation of  $\mu\text{W}$  level plateau harmonics at high repetition rate**

Optics Express 19 (2011) 20 p. 19374–19383, ISSN 1094-4087

Heidler, N.; Schenk, C.; Harnisch, G.; Risse, S.; Schubert, G.; Eberhardt, R.; Tünnermann, A.

**Contact-free exhaust system for vacuum compatible gas bearing guides**

Precision Engineering 36 (2012) 1 p. 37–43, ISSN 0141-6359

Heidt, A. M.; Rothhardt, J.; Hartung, A.; Bartelt, H.; Rohwer, E.G.; Limpert, J.; Tünnermann, A.

**High quality sub-two cycle pulses from compression of supercontinuum generated in all-normal dispersion photonic crystal fiber**

Optics Express 19 (2011) 15 p. 13873–13879, ISSN 1094-4087

Heinrich, M.; Keil, R.; Dreisow, F.; Tünnermann, A.; Szameit, A.; Nolte, S.

**Nonlinear discrete optics in femtosecond laser-written photonic lattices**

Applied Physics B: Lasers and Optics 104 (2011) 3 p. 469–480, ISSN 0946-2171

Heinrich, M.; Szameit, A.; Dreisow, F.; Keil, R.; Minardi, S.; Pertsch, T.; Nolte, S.; Tünnermann, A.; Lederer, F.

**Observation of three-dimensional discrete-continuous X waves in photonic lattices**

Physical Review Letters 106 (2011) 2 029901, ISSN 0031-9007

Helgert, C.; Pshenay-Severin, E.; Falkner, M.; Menzel, C.; Rockstuhl, C.; Kley, E.-B.; Tünnermann, A.; Lederer, F.; Pertsch, T.

**Chiral metamaterial composed of three-dimensional plasmonic nanostructures**

Nano Letters 11 (2011) 10 4400-4, ISSN 1530-6984

Helgert, C.; Rockstuhl, C.; Etrich, C.; Kley, E.-B.; Tünnermann, A.; Lederer, F.; Pertsch, T.

**Effects of anisotropic disorder in an optical metamaterial**

Applied Physics A: Materials Science & Processing 103 (2011) 3 p. 591–595, ISSN 0947-8396

Helm, R.; Mauroner, O.

**Soft starters, research boutiques and product-oriented firms: different business models for spin-off companies**

International Journal of Entrepreneurship and Small Business 12 (2011) 4 p. 479–498, ISSN 1476-1297

Henseleit, A.; Schmieder, S.; Bley, T.; Sonntag, F.; Schilling, N.; Quenzel, P.; Danz, N.; Klotzbach, U.; Boschke, E.

**A compact and rapid aptasensor platform based on surface plasmon resonance**

Engineering in Life Sciences 11 (2011) 6 p. 573–579, ISSN 1618-2863

Jansen, F.; Stutzki, F.; Jauregui, C.; Limpert, J.; Tünnermann, A.

**Avoided crossings in photonic crystal fibers**

Optics Express 19 (2011) 14 p. 13578–13589, ISSN 1094-4087

Jauregui, C.; Eidam, T.; Limpert, J.; Tünnermann, A.

**Impact of modal interference on the beam quality of high-power fiber amplifiers**

Optics Express 19 (2011) 4 p. 3258–3271, ISSN 1094-4087

Jocher, C.; Jauregui, C.; Voigtländer, C.; Stutzki, F.; Nolte, S.; Limpert, J.; Tünnermann, A.

**Fiber based polarization filter for radially and azimuthally polarized light**

Optics Express 19 (2011) 20 p. 19582–19590, ISSN 1094-4087

Kaiser, N.

**Optische Schichten als Innovationstreiber. Neue optische Schichtsysteme bieten das Potential, Licht auch in extremen Zeit-, Intensitäts- und Wellenlängenbereichen zu kontrollieren**

mo – Magazin für Oberflächentechnik 65 (2011) 1–2 S. 15–17, ISSN 0026-0797

Kalkowski, G.; Zeuske, J. R.; Risse, S.; Müller, S.; Peschel, T.; Rohde, M.

**Electrostatic clamping with an EUVL mask chuck: Particle issues**

Microelectronic Engineering 88 (2011) 8 p. 1986–1991, ISSN 0167-9317

Keil, R.; Dreisow, F.; Heinrich, M.; Tünnermann, A.; Nolte, S.; Szameit, A.

**Classical characterization of biphoton correlation in waveguide lattices**

Physical Review A 83 (2011) 1 013808, ISSN 1094-1622

Keil, R.; Heinrich, M.; Dreisow, F.; Pertsch, T.; Tünnermann, A.; Nolte, S.; Christodoulides, D.N.; Szameit, A.

**All-optical routing and switching for three-dimensional photonic circuitry**

Scientific Reports 1 (2011) 94, ISSN 2045-2322

Klenke, A.; Seise, E.; Demmler, S.; Rothhardt, J.; Breitkopf, S.; Limpert, J.; Tünnermann, A.

**Coherently-combined two channel femtosecond fiber CPA system producing 3 mJ pulse energy**

Optics Express 19 (2011) 24 p. 24280–24285, ISSN 1094-4087

Kroker, S.; Brückner, F.; Kley, E.-B.; Tünnermann, A.

**Enhanced angular tolerance of resonant waveguide grating reflectors**

Optics Letters 36 (2011) 4 p. 537–539, ISSN 0146-9592

Kroker, S.; Käsebier, T.; Brückner, F.; Fuchs, F.; Kley, E.-B.; Tünnermann, A.

**Reflective cavity couplers based on resonant waveguide gratings**

Optics Express 19 (2011) 17 p. 16466–16479, ISSN 1094-4087

Lederer, F.; Nolte, S.; Tünnermann, A.

**Selected papers in nonlinear dynamics in dissipative and discrete optical systems**

Applied Physics B: Lasers and Optics 104 (2011) 3 p. 451–452, ISSN 0946-2171

Leibinger, P.; Tünnermann, A.

**Agenda Photonik 2020 – Unsere Branche im Aufbruch**

Optik & Photonik 6 (2011) 1 S. 25–27, ISSN 1863-1460

Limpert, J.; Hädrich, S.; Rothhardt, J.; Krebs, M.; Eidam, T.; Schreiber, T.; Tünnermann, A.

**Ultrafast fiber lasers for strong-field physics experiments**

Laser & Photonics Reviews 5 (2011) 5 p. 634–646, ISSN 1863-8880

Lutzke, P.; Kühmstedt, P.; Notni, G.

**Measuring error compensation on three-dimensional scans of translucent objects**

Optical Engineering 50 (2011) 6 063601, ISSN 0091-3286

Mauroner, O.

**Social Media im Wissenschaftsmarketing**

Wissenschaftsmanagement – Zeitschrift für Innovation, Jg. 17, Nr. 5, S. 30–34

Meyer, J.; Brückner, A.; Leitel, R.; Dannberg, P.; Bräuer, A.; Tünnermann, A.

**Optical cluster eye fabricated on wafer-level**

Optics Express 19 (2011) 18 p. 17506–17519, ISSN 1094-4087

Michaelis, D.; Schreiber, P.; Bräuer, A.

**Cartesian oval representation of freeform optics in illumination systems**

Optics Letters 36 (2011) 6 p. 918–920, ISSN 0146-9592

Munzert, P.; Schulz, U.; Kaiser, N.; Schönberger W.; Fahland, M.

**Thin film growth on nanostructured polymer webs for anti-reflection purposes**

Surface & Coatings Technology 205 (2011) Supplement 2 S498–S501, ISSN 0257-8972

Nodop, D.; Schimpf, D.; Limpert, J.; Tünnermann, A.

**Highly dynamic and versatile pulsed fiber amplifier seeded by a superluminescence diode**

Applied Physics B: Lasers and Optics 102 (2011) 4 p. 737-741, ISSN 0946-2171

Oliva, M.; Harzendorf, T.; Michaelis, D.; Zeitner, U. D.; Tünnermann, A.

**Multilevel blazed gratings in resonance domain: an alternative to the classical fabrication approach**

Optics Express 19 (2011) 15 p. 14735–14745, ISSN 1094-4087

Paetzold, U.W.; Moulin, E.; Michaelis, D.; Böttler, W.; Wächter, C.; Hagemann, V.; Meier, M.; Carius, R.; Rau, U.

**Plasmonic reflection grating back contacts for microcrystalline silicon solar cells**

Applied Physics Letters 99 (2011) 18 181105, ISSN 0003-6951

Präfke, C.; Schulz, U.; Kaiser, N.

**Preparation and characterization of organic layers for UV protection of polycarbonate**

Thin Solid Films (2011) doi:10.1016/j.tsf.2011.06.065

Pshenay-Severin, E.; Chipouline, A.; Petschulat, J.; Hübner, U.; Tünnermann, A.; Pertsch, T.

**Optical properties of metamaterials based on asymmetric double-wire structures**

Optics Express 19 (2011) 7 p. 6277–6291, ISSN 1094-4087

Richter, S.; Döring, S.; Tünnermann, A.; Nolte, S.

**Bonding of glass with femtosecond laser pulses at high repetition rates**

Applied Physics A: Materials Science & Processing 103 (2011) 2 p. 257–261, ISSN 0340-3793

Richter, S.; Heinrich, M.; Döring, S.; Tünnermann, A.; Nolte, S.

**Formation of femtosecond laser-induced nanogratings at high repetition rates**

Applied Physics A: Materials Science & Processing 104 (2011) 2 p. 503–507, ISSN 0947-8396

Riehemann, S.; Palme, M.; Kühmstedt, P.; Grossmann, C.; Notni, G.; Hintersehr, J.

**Microdisplay-Based Intraoral 3D Scanner for Dentistry**

IEEE Journal of Display Technology 7 (2011) 3 p. 151–155, ISSN 1551-319X

Riehemann, S.; Palme, M.; Peschel, T.; Kunert, K.; Notni, G.; Blum, M.

**An accommodating opto-mechanical model of the aging human eye**

Journal of Modern Optics 58 (2011) 19–20 p. 1788-1803, ISSN 1362-3044

Ringleb, S.; Rademaker, K.; Nolte, S.; Tünnermann, A.

**Monolithically integrated optical frequency converter and amplitude modulator in LiNbO<sub>3</sub> fabricated by femtosecond laser pulses**

Applied Physics B: Lasers and Optics 102 (2011) 1 p. 59–63, ISSN 0340-3793

Rothhardt, J.; Eidam, T.; Hädrich, S.; Jansen, F.; Stutzki, F.; Gottschall, T.; Andersen, T. V.; Limpert, J.; Tünnermann, A.

**135 W average-power femtosecond pulses at 520 nm from a frequency-doubled fiber laser system**

Optics Letters 36 (2011) 3 p. 316–318, ISSN 0146-9592

Scheiding, S.; Yi, A. Y.; Gebhardt, A.; Li, L.; Risse, S.; Eberhardt, R.; Tünnermann, A.

**Freeform manufacturing of a microoptical lens array on a steep curved substrate by use of a voice coil fast tool servo**

Optics Express 19 (2011) 24 p. 23938–23951, ISSN 1094-4087

Schmidt, C.; Chipouline, A.; Käsebier, T.; Kley, E.-B.; Tünnermann, A.; Pertsch, T.

**Temperature induced nonlinearity in coupled microresonators**

Applied Physics B: Lasers and Optics 104 (2011) 3 p. 503–511, ISSN 0946-2171

Schmidt, O.; Rekas, M.; Wirth, C.; Rothhardt, J.; Rhein, S.; Kliner, A.; Strecker, M.; Schreiber, T.; Limpert, J.; Eberhardt, R.; Tünnermann, A.

**High power narrow-band fiber-based ASE source**

Optics Express 19 (2011) 5 p.4421–4427, ISSN 1094-4087

Schönberger, W.; Gerlach, G.; Fahland, M.; Munzert, P.; Schulz, U.; Thielsch, R.; Kleinhempel, R.

**Large-area fabrication of stochastic nanostructures on polymer webs by ion- and plasma treatment**

Surface & Coatings Technology 205 (2011) Supplement 2 S495–S497, ISSN 0257-8972

Schröder, S.; Duparré, A.; Coriand, L.; Tünnermann, A.; Penalvar, D. H.; Harvey, J. E.

**Modeling of light scattering in different regimes of surface roughness**

Optics Express 19 (2011) 10 p. 9820–9835, ISSN 1094-4087

Schröder, S.; Herfurth, T.; Blaschke, H.; Duparré, A.

**Angle-resolved scattering: An effective method for characterizing thin film coatings**

Applied Optics 50 (2011) 9 p. 164–171, ISSN 0003-6935

Schulz, M.; Riedel, R.; Willner, A.; Mans, T.; Schnitzler, C.; Russbueldt, P.; Dolkemeyer, J.; Seise, E.; Gottschall, T.; Hädrich, S.; Duesterer, S.; Schlarb, H.; Feldhaus, J.; Limpert, J.; Faatz, B.; Tünnermann, A.; Rossbach, J.; Drescher, M.; Tavella, F

**Yb:YAG Innoslab amplifier: efficient high repetition rate subpicosecond pumping system for optical parametric chirped pulse amplification**

Optics Letters 36 (2011) 13 p. 2456–2458, ISSN 0146-9592

Schulz, U.; Präfke, C.; Gödeker, C.; Kaiser, N.; Tünnermann, A.

**Plasma-etched organic layers for antireflection purposes**

Applied Optics 50 (2011) 9 p. C31–C35, ISSN 0003-6935

Schulz, U.; Präfke, C.; Munzert, P.; Gödeker, C.; Kaiser, N.

**Formation of antireflective nanostructures on melamine and N,N'-di (1-naphthyl)-N,N'-diphenyl benzidine (NPB)**

Optical Materials Express 1 (2011) 1 p. 101–107, ISSN 2159-3930

Schulze, M.; Lehr, D.; Helgert, M.; Kley, E.-B.; Tünnermann, A.

**Transmission enhanced optical lenses with self-organized antireflective subwavelength structures for the UV range**

Optics Letters 36 (2011) 19 p. 3924–3926, ISSN 0146-9592

Schürmann, M.; Jobst, P.-J.; Müller, T.; Scheler, M.; Kaiser, N.

**Beschichtung großer Substrate für die Präzisionsoptik**

Photonik (2011) 1 S. 18, ISSN 1432–9778

Seise, E.; Klenke, A.; Breitkopf, S.; Limpert, J.; Tünnermann, A.

**88 W 0.5 mJ femtosecond laser pulses from two coherently combined fiber amplifiers**

Optics Letters 36 (2011) 19 p. 3858–3860, ISSN 0146-9592

Seise, E.; Klenke, A.; Breitkopf, S.; Plötner, M.; Limpert, J.; Tünnermann, A.

**Coherently combined fiber laser system delivering 120 μJ femtosecond pulses**

Optics Letters 36 (2011) 4 p. 439-441, ISSN 0146-9592

Setz, D.S.; Schmidt, T.D.; Flämmich, M.; Nowy, S.; Frischeisen, J.; Krummacker, B. C.; Dobbertin, T.; Heuser, K.; Michaelis, D.; Danz, N.; Brütting, W.; Winnacker, A.

**Comprehensive efficiency analysis of organic light emitting devices**

Journal of Photonics for Energy 1 (2011) 1 011006, ISSN 1947-7988

Setzpfandt, F.; Neshev, D.N.; Sukhorukov, A.A.; Schiek, R.; Ricken, R.; Min, Y.; Kivshar, Y.S.; Sohler, W.; Lederer, F.; Tünnermann, A.; Pertsch, T.

**Nonlinear dynamics with higher-order modes in lithium niobate waveguide arrays**

Applied Physics B: Lasers and Optics 104 (2011) 3 p. 487–493, ISSN 0946-2171

Sieler, M.; Schreiber, P.; Dannberg, P.; Bräuer, A.; Tünnermann, A.

**Ultraslim fixed pattern projectors with inherent homogenization of illumination**

Applied Optics, 51 (2012)1, p.64–74, ISSN 1559–128X

Steinmetz, A.; Eidam, T.; Nodop, D.; Limpert, J.; Tünnermann, A.

**Nonlinear compression of Q-Switched laser pulses to the realm of ultrashort durations**

Optics Express 19 (2011) 4 p. 3758-3764, ISSN 1094-4087

Stenzel, O.; Gäbler, D.; Wilbrandt, S.; Kaiser, N.; Steffen, H.; Ohl, A.

**Plasma ion assisted deposition of aluminium oxide and aluminium oxifluoride layers for applications in the ultraviolet spectral range**

Optical Materials 33 (2011) 11 p. 1681–1687, ISSN 0925-3467

Stenzel, O.; Wilbrandt, S.; Schürmann, M.; Kaiser, N.; Tünnermann, A. et al.

**Mixed Oxide Coatings for Optics**

Applied Optics 50 (2011) 9 p. C69–C74, ISSN 0003-6935

Stenzel, O.; Wilbrandt, S.; Yulin, S.; Kaiser, N.; Held, M.; Tünnermann, A.; Biskupek, J.; Kaiser, U.

**Plasma ion assisted deposition of hafnium dioxide using argon and xenon as process gases**

Optical Materials Express 1 (2011) 2 p. 278–292, ISSN 2159-3930

Stutzki, F.; Jansen, F.; Eidam, T.; Steinmetz, A.; Jauregui, C.; Limpert, J.; Tünnermann, A.

**High average power large-pitch fiber amplifier with robust single-mode operation**

Optics Letters 36 (2011) 5 p. 689–691, ISSN 0146-9592

Stutzki, F.; Jansen, F.; Jauregui, C.; Limpert, J.; Tünnermann, A.

**Non-hexagonal Large-Pitch Fibers for enhanced mode discrimination**

Optics Express 19 (2011) 13 p. 12081–12086, ISSN 1094-4087

Stutzki, F.; Jauregui, C.; Limpert, J.; Tünnermann, A.

**Real-time characterisation of modal content in monolithic few-mode fibre lasers**

Electronics Letters 47 (2011) 4 p. 274–275, ISSN 0013-5194

Thomas, J.; Heinrich, M.; Zeil, P.; Hilbert, V.; Rademaker, K.; Riedel, R.; Ringleb, S.; Dubs, C.; Ruske, J.-P.; Nolte, S.; Tünnermann, A.

**Laser direct writing: Enabling monolithic and hybrid integrated solutions on the lithium niobate platform**

Physica status solidi. A 208 (2011) 2 p. 276–283, ISSN 0031-8965

Thomas, J.; Jovanovic, N.; Becker, R. G.; Marshall, G. D.; Withford, M. J.; Tünnermann, A.; Nolte, S.; Steel, M. J.

**Cladding mode coupling in highly localized fiber Bragg gratings: modal properties and transmission spectra**

Optics Express 19 (2011) 1 p. 325–341, ISSN 1094-4087

Trost, M.; Schröder, S.; Feigl, T.; Duparré, A.; Tünnermann, A.

**Influence of the Substrate Finish and Thin Film Roughness on the Optical Performance of Mo/Si Multilayers**

Applied Optics 50 (2011) 9 p. 148–153, ISSN 0003-6935

Voigtländer, C.; Becker, R. G.; Thomas, J.; Richter, D.; Singh, A.; Tünnermann, A.; Nolte, S.

**Ultrashort pulse inscription of tailored fiber Bragg gratings with a phase mask and a deformed wavefront**

Optical Materials Express 1 (2011) 4 p. 633–642, ISSN 2159-3930

Voigtlander, C.; Richter, D.; Thomas, J.; Tünnermann, A.; Nolte, S.

**Inscription of high contrast volume Bragg gratings in fused silica with femtosecond laser pulses**

Applied Physics A: Materials Science & Processing 102 (2011) 1 p. 35–38, ISSN 0947-8396

Weber, T.; Käsebier, T.; Kley, E.-B.; Tünnermann, A.

**Broadband iridium wire grid polarizer for UV applications**

Optics Letters 36 (2011) 4 p. 445–447, ISSN 0146-9592

Wilbrandt, S.; Stenzel, O.; Bischoff, M.; Kaiser, N.

**Combined in situ and ex situ optical data analysis of magnesium fluoride coatings deposited by plasma ion assisted deposition**

Applied Optics 50 (2011) 9 p. C5–C10, ISSN 0003-6935

Williams, R. J.; Voigtländer, C.; Marshall, G. D.; Tünnermann, A.; Nolte, S.; Steel, M. J.; Withford, M. J.

**Point-by-point inscription of apodized fiber Bragg gratings**

Optics Letters 36 (2011) 15 p. 2988–90, ISSN 0146-9592

Wirth, C.; Schmidt, O.; Kliner, A.; Schreiber, T.; Eberhardt, R.; Tünnermann, A.

**High-power tandem pumped fiber amplifier with an output power of 2.9 kW**

Optics Letters 36 (2011) 16 p. 3061–3063, ISSN 0146-9592

Wirth, C.; Schmidt, O.; Tsybin, I.; Schreiber, T.; Eberhardt, R.; Limpert, J.; Tünnermann, A.; Ludewigt, K.; Gowin, M.; Have, E.t.; Jung, M.

**High average power spectral beam combining of four fiber amplifiers to 8.2 kW**

Optics Letters 36 (2011) 16 p. 3118–3120, ISSN 0146-9592

Yoo, G.; Radtke, D.; Baek, G.; Zeitner, U. D.; Kanicki, J.

**Electrical Instability of a-Si:H TFTs Fabricated by Maskless Laser-Write Lithography on a Spherical Surface**

IEEE Transactions on Electron Devices 58 (2011) 1 p. 160–164, ISSN 0018-9383

[Eingeladene Vorträge | Invited Lectures](#)

Bräuer, A.; Brückner, A.; Wippermann, F.; Dannberg, P.; Leitel, R.

**Bio-inspired multichannel imaging**

8<sup>th</sup> International Symposium on Modern Optics and Its Applications (ISMOA), 4.–7.7.2011, Bandung, Indonesia

Duparré, A.

**PSD als Auswertewerkzeug in der Oberflächenmesstechnik**

Optikseminar der Hochschule für Angewandte Wissenschaften – HAW Deggendorf, 7.6.2011, Teisnach, Deutschland



Eberhardt, R.; Beckert, E.;  
Böhme, S.; Tünnermann, A.

**Laser based joining technologies for optical systems**

JENOPTIK Laser GmbH – Customer  
Day „20 years Jenoptik“,  
1.7.2011, Jena, Germany

Eberhardt, R.; Beckert, E.; Gebhardt, A.;  
Mohaupt, M.; Burkhardt, T.; Tünnermann, A.

**Adjustment turning of inorganic-metallic mounted optical components**

World of Photonics 2011, EOSMOC  
2011 – 2<sup>nd</sup> EOS Conference on  
Manufacturing of Optical Components,  
22.–26.5.2011, Munich, Germany

Kaiser, N.

**Beschichtung großer Präzisionsflächen**

Otti Seminar Schichten auf Glas – Schichtherstellung, Funktionalisierung, Optimierung,  
11.–12.5.2011, Regensburg, Deutschland

Kaiser, N.

**Design optischer Schichtsysteme**

Otti Seminar Schichten auf Glas – Schichtherstellung, Funktionalisierung, Optimierung,  
11.–12.5.2011, Regensburg, Deutschland

Kaiser, N.

**Der hauchdünne Vorsprung: Optiken für die EUV-Lithographie**

Technologiezentrum Chemnitz,  
Erstes Industriegespräch Chemnitz/Jena,  
24.5.2011, Chemnitz, Deutschland

Kaiser, N.

**Die Bedeutung dünner Schichten für die Optischen Technologien**

Otti Seminar Optische Technologien – vom Design zum Produkt, 2.–3.3.2011,  
Regensburg, Deutschland

Kaiser, N.

**Nanotechnologie**

SBO-Tag Salzmannschule Schnepfenthal,  
8.3.2011, Waltershausen, Deutschland

Kaiser, N.

**Plasma und Optische Technologien (PluTO)**

DPG Jahrestagung, FV Plasmaphysik und Kurzzeitphysik, Symposium Plasma und optische Technologien (SYPT),  
29.3.2011, Kiel, Deutschland

Kaiser, N.

**Was ist Präzisionsoptik?**

Otti Seminar Schichtherstellungstechniken für die Präzisionsoptik, 9.–10.11.2011,  
Regensburg, Deutschland

Munzert, P.; Präfke, C.; Schulz, U.; Kaiser, N.

**Vacuum Deposition of Optical Coatings on PMMA and Polycarbonate**

8th International Symposium on Polymer Surface Modification, 20.–22.6.11, Danbury, USA

Nolte, S.; Döring, S.; Ancona, A.;

Limpert, J.; Tünnermann, A.

**High Repetition Rate Ultrashort Pulse**

**Micromachining with Fiber Lasers**

Advanced Solid-State Photonics (ASSP),  
13.–16.2.2011, Istanbul, Turkey  
Proceedings Advanced Solid-State Photonics (ASSP), OSA Technical Digest (Optical Society of America 2011) FThC1

Notni, G.

**Some challenges in shape measurements of optical freeform surfaces**

SPIE Optical Metrology/Optical Measurement Systems for Industrial Inspection,  
23.–26.5.2011, Munich, Germany

Notni, G.

**Vermessung präzisionsbearbeiteter Oberflächen – Von der Makrogeometrie bis zur Oberflächenrauheit**

Hannoversches Optisches Kolloquium,  
30.3.2011, Hannover, Deutschland

Schreiber, P.

**Concepts for LED-Illumination systems and prototyping**

Smart Lighting Conference 2011,  
2.–3.3.2011, Düsseldorf, Germany

Schulz, U.

**Beschichtung von Kunststoffen für optische Anwendungen**

SKZ-Seminar Optische Kunststoff-Formteile in Design und Technik,  
30.6.2011, Würzburg, Deutschland

Schulz, U.; Munzert, P.; Präfke, C.; Kaiser, N.

**Coatings on transparent plastics for automotive applications**

Proceedings SPE Eurotec 2011,  
14.–15.11.2011, Barcelona, Spain

Schulz, U.; Präfke, C.; Munzert, P.; Kaiser, N.

**Organic small molecule-based optical coatings**

SPIE Optical System Design 2011,  
Advances in Optical Thin Films IV,  
5.–8.9.2011, Marseille, France  
SPE Proceedings Vol. 8168 (2011)  
81680Q, ISBN 9780819487940

Sieler, M.; Schreiber, P.;

Dannberg, P.; Bräuer, A.

**Design and Realization of an Ultra-Slim Array Projector**

17<sup>th</sup> Microoptics Conference (MOC '11),  
30.10.–2.11.2011, Sendai, Japan  
Proceedings 17<sup>th</sup> Microoptics Conference (MOC '11) F-5, ISBN 978-4-86348-182-4

Stenzel, O.; Schulz, U.; Kaiser, N.

**Nanostructure effects and the performance of optical interference coatings**

SPIE Optics + Photonics 2011, Nanostructured Thin Films IV, 21.–25.8.2011,  
San Diego, California, USA  
SPE Proceedings Vol. 8104 (2011)  
810409, ISBN 9780819487148

Zimer, H.; Kozak, M.; Liem, A.; Flohrer, F.; Doerfel, F.; Riedel, P.; Linke, S.; Horley, R.; Ghiringhelli, F.; Demoullins, S.; Zervas, M.; Kirchhof, J.; Unger, S.; Jetschke, S.; Peschel, T.; Schreiber, T.

**Fibers and fiber-optic components for high power fiber lasers**

SPIE Photonics West, 22.–26.1.2011,  
San Francisco, California, USA  
SPE Proceedings Vol. 7914 (2011)  
791414, ISBN 9780819484512

Baumgartl, M.; Jansen, F.; Stutzki, F.;  
Jauregui, C.; Limpert, J.; Tünnermann, A.

**22 Watt Average Power Multi-MW fiber oscillator**

Advanced Solid-State Photonics (ASSP),  
13.–16.2.2011, Istanbul, Turkey  
OSA Technical Digest (Optical Society of  
America 2011) (2011) ATuC4

Baumgartl, M.; Jansen, F.; Stutzki, F.; Jauregui,  
C.; Limpert, J.; Tünnermann, A.

**High Power 100fs Fiber Oscillator**

Proceedings CLEO/Europe – EQEC 2011, OSA  
Technical Digest (Optical Society of America  
2011) (2011) CJ5\_1

Beckert, E.; Wippermann, F.; Walther, S.;  
Burkhardt, T.; Messerschmidt, B.; Bartnitzek, T.;  
Vahrenkamp, T.; Eberhardt, R.; Gäbler, D.;  
Tünnermann, A.

**Autoclaveable miniaturized video endoscopes with simplified flip-chip assembly**

SPIE Photonics West, BIOS Conference,  
22.–26.1.2011, San Francisco, CA, USA  
SPIE Proceedings Vol. 7893 (2011) 78930B,  
ISBN 9780819484307

Benkenstein, T.; Flämmich, M.; Harzendorf, T.;  
Käsebier, T.; Michaelis, D.; Oliva, M.; Wächter,  
C.; Zeitner, U.D.

**Effects of metallic nanoparticle arrays in Si solar cell structures**

SPIE Optics + Photonics 2011, Thin Film Solar  
Technology III, 21.–25.8.2011, San Diego, CA,  
USA  
SPIE Proceedings Vol. 8110 (2011) 81100D,  
ISBN 9780819487209

Bingel, A.; Füchsel, K.; Kaiser, N.; Tünnermann, A.

**Tailored TCOs**

SPIE Optical Systems Design 2011, Advances  
in Optical Thin Films IV, 5.–8.9.2011, Marseille,  
France  
SPIE Proceedings Vol. 8168 (2011) 81680R,  
ISBN 9780819487940

Brahm, A.; Bauer, M.; Hoyer, T.; Quast, H.; Löffler,  
T.; Riehemann, S.; Notni, G.; Tünnermann, A.

**All-electronic 3D computed THz tomography**

36<sup>th</sup> International Conference on Infrared,  
Millimeter, and Terahertz Waves (IRMMW-THz  
2011), 2.–7.10.2011, Houston, Texas, USA

Brahm, A.; Weigel, A.; Riehemann, S.;  
Notni, G.; Tünnermann, A.

**Highly precise parameter extraction of thin multi-layers in THz transmission and reflection geometry**

36<sup>th</sup> International Conference on Infrared,  
Millimeter, and Terahertz Waves (IRMMW-THz  
2011), 2.–7.10.2011, Houston, Texas, USA

Brahm, A.; Weigel, A.; Riehemann, S.;  
Notni, G.; Tünnermann, A.

**Interferometrie mit ultrakurzen Terahertz-Pulsen**

112. Tagung der DGaO, 14.–18.6.2011,  
Ilmenau, Deutschland  
DGaO-Proceedings 2011 (2011) B34, ISSN  
1614-8436

Bräuer, A.; Brückner, A.; Wippermann, F.;  
Dannberg, P.; Leitel, R.

**High Resolution Multichannel Imaging Systems**

17<sup>th</sup> Microoptics Conference (MOC '11),  
30.10.–2.11.2011, Sendai, Japan  
Proceedings 17<sup>th</sup> Microoptics Conference  
(MOC '11) F-2, ISBN 978-4-86348-182-4

Bräuer, A.; Sieler, M.; Schreiber, P.; Dannberg,  
P.; Höfer, B.

**Novel LED-based slim microoptical array projector for luminaires and display applications**

4<sup>th</sup> EOS Topical Meeting on Optical Microsystems (OμS'11), 26.–28.9.2011, Capri, Italy

Bräuer-Burchardt, C.; Breitbarth, A.; Kühmstedt,  
P.; Schmidt, I.; Heinze, M.; Notni, G.

**Fringe Projection Based High Speed 3D Sensor for Real-Time Measurements**

SPIE Optical Metrology/Optical Measurement  
Systems for Industrial Inspection,  
23.–26.5.2011, Munich, Germany  
SPIE Proceedings Vol. 8082 (2011) 808212,  
ISBN 9780819486783

Bräuer-Burchardt, C.; Breitbarth, A.; Munkelt,  
C.; Heinze, M.; Kühmstedt, P.; Notni, G.

**Calibration evaluation and calibration stability monitoring of fringe projection based 3D scanners**

PIA 11, Photogrammetric Image Analysis,  
5.–7.10.2011, Munich, Germany

Bräuer-Burchardt, C.; Kühmstedt, P.; Notni, G.

**Error compensation by sensor re-calibration in fringe projection based optical 3D stereo scanners**

16<sup>th</sup> International Conference on Image Analysis  
and Processing (ICIAP), 14.–16.9.2011,  
Ravenna, Italy

Bräuer-Burchardt, C.; Munkelt, C.; Heinze, M.;  
Kühmstedt, P.; Notni, G.

**Using geometric constraints to solve the point correspondence problem in fringe projection based 3D measuring systems**

16<sup>th</sup> International Conference on Image Analysis  
and Processing (ICIAP), 14.–16.9.2011,  
Ravenna, Italy

Breitbarth, A.; Kühmstedt, P.; Heinze, M.;  
Schmidt, I.; Notni, G.

**Ultra-mobile 3D-Messtechnik – Handgeführter 3D-Scanner „kolibri CORDLESS“**

11<sup>th</sup> International Police Workshop on  
Photogrammetry, Laser Scanning and  
Terrestrial Technologies, 27.–29.7.2011, Neuss,  
Deutschland



Breitbarth, A.; Kühmstedt, P.; Schmidt, I.;  
Bräuer-Burchardt, C.; Notni, G.

**Streifenlichtbasierter 3D-Hochgeschwindigkeitsensor unter Nutzung der Epipolargeometrie**

10. Oldenburger 3D-Tage, 2.–3.2.2011,  
Oldenburg, Deutschland  
Photogrammetrie, Laserscanning, optische  
3D-Messtechnik: Beiträge der Oldenburger  
3D-Tage 2011 S. 248–257,  
ISBN 978-3-87907-506-5

Breitbarth, A.; Schmidt, I.; Kühmstedt, P.;  
Notni, G.

**3-D-Messung mit extrem kurzer Zykluszeit in Fertigungsprozessen**

Proceedings Fraunhofer Vision-Technologietag  
2011: Innovative Technologien für die industrielle  
Qualitätssicherung mit Bildverarbeitung,  
29.–30.6.2011, Kaiserslautern, Deutschland  
23.–24.11.2011, Magdeburg, Deutschland

Breitbarth, A.; Schmidt, I.; Kühmstedt, P.;  
Notni, G.

**Geschwindigkeitsoptimierung eines hochauflösenden, maschinenintegrierbaren 3D-Sensors auf Basis Streifenprojektion**

112. Tagung der DGaO, 14.–18.6.2011,  
Ilmenau, Deutschland  
DGaO-Proceedings 2011 (2011) A35,  
ISSN 1614-8436

Bruchmann, C.; Appelfelder, M.; Türke, S.;  
Beckert, E.; Eberhardt, R.; Tünnermann, A.

**Optical characterization of a screen printed actuator deformable mirror**

Proceedings 8<sup>th</sup> International Workshop on  
Adaptive Optics for Industry and Medicine  
(AOIM), 5.–9.6.2011, Murcia, Spain  
p. 74–75

Brückner, A.; Leitel, R.; Dannberg, P.; Wippermann, F.; Bräuer, A.

**A multi-aperture approach to wafer-level camera lenses**

SPIE Photonics West, 22.–26.1.2011, San  
Francisco, CA, USA  
SPIE Proceedings Vol. 7930 (2011) 79300B,  
ISBN 9780819484673

Brückner, A.; Wippermann, F.; Leitel, R.;  
Dannberg, P.; Buß, W.; Höfer, B.; Bräuer, A.;  
Duparré, J.

**Flachbauendes Mikroskop: Ein mikrooptisches Abbildungssystem für digitale Nahaufnahmen**

Proceedings 4. VDE/VDI Mikrosystemtechnik-  
Kongress 2011, 10.–12.10.2011, Darmstadt,  
Deutschland, S. 134–137,  
ISBN 978-3-8007-3367-5

Burkhardt, T.; Bruchmann, C.; Kamm, A.; Hornaff, M.; Beckert, E.; Gebhardt, S.; Müller, J.; Hoffmann, M.; Eberhardt, R.; Tünnermann, A.

**Smarte adaptive-optische Mikrosysteme – Aufbautechnologie und thermomechanische Charakterisierung**

Proceedings 4. VDE/VDI Mikrosystemtechnik-  
Kongress 2011, 10.–12.10.2011, Darmstadt,  
Deutschland, S. 587–590,  
ISBN 978-3-8007-3367-5

Burkhardt, T.; Hornaff, M.; Kamm, A.;  
Rütz, M.; Possner, T.; Beckert, E.; Eberhardt, R.;  
Tünnermann, A.

**Assembly of a photonic wavelength-division multiplexing device using laser-based soldering**

SPIE Proceedings Vol. 8069 (2011) 80690V,  
ISBN 9780819486585

Burkhardt, T.; Mohaupt, M.; Hornaff, M.;  
Zaage, B.; Beckert, E.; Döring, H.-J.; Slodowski, M.; Reimer, K.; Witt, M.; Eberhardt, R.;  
Tünnermann, A.

**Packaging technology of multi deflection arrays for multi-shaped beam lithography**

Proceedings IMAPS 2011, 44<sup>th</sup> International  
Symposium on Microelectronics,  
9.–13.10.2011, Long Beach, CA, USA,  
p. 600–607, ISBN 0-930815-94-7

Buß, W.; Richter, H.; Bartnitzek, T.; Brode, W.;  
Heymel, A.; Walther, T.

**Embossed Ceramic Reflectors with Nano Dispersive Coatings for Compact Optoelectronic Systems**

Proceedings 18<sup>th</sup> European Microelectronics  
and Packaging Conference (EMPC) 2011,  
12.–15.9.2011, Brighton, England,  
ISBN 978-0956808608

Chipouline, A.; Petschulat, J.; Tünnermann, A.; Pertsch, T.; Menzel, C.;  
Rockstuhl, C.; Lederer, F.; Fedotov, V.A.

**Multipole model for metamaterials with gain: from nano-laser to quantum metamaterials**

SPIE Proceedings Vol. 8070 (2011)  
80700O, ISBN 9780819486608

Coriand, L.; Duparré, A.; Tünnermann, A.

**Advanced PSD-analysis of optical surfaces by mid- and high-spatial frequency metrology**

SPIE Optical Systems Design 2011, Optical  
Fabrication, Testing, and Metrology IV,  
5.–8.9.2011, Marseille, France

Danz, N.; Kick, A.; Sonntag, F.; Schmieder, S.;  
Mertig, M.; Klotzbach, U.

**SPR Technologie zur Multi-Parameter-Analyse auf polymeren Chips**

Proceedings 4. VDE/VDI Mikrosystemtechnik-  
Kongress 2011, 10.–12.10.2011, Darmstadt,  
Deutschland, S. 741–744,  
ISBN 978-3-8007-3367-5

Döring, S.; Richter, S.; Nolte, S.;  
Tünnermann, A.

**In-situ observation of the hole formation during deep drilling with ultrashort laser pulses**

SPIE Proceedings Vol. 7925 (2011) 792517,  
ISBN 9780819484628

Döring, S.; Richter, S.; Tünnermann, A.; Nolte, S.

**In-situ observation of ultrashort pulse deep drilling in silicon at 1030 nm and 515 nm**

Proceedings CLEO/Europe – EQEC 2011, OSA  
Technical Digest (Optical Society of America  
2011) (2011) CM\_P17

Dreisow, F.; Heinrich, M.; Keil, R.; Tünnermann, A.; Nolte, S.; Longhi, S.; Szameit, A.

**Photonic Zitterbewegung: Relativistic physics in waveguide arrays**

Proceedings CLEO 2011 – Laser Applications  
to Photonic Applications, OSA Technical Digest  
(Optical Society of America 2011) (2011)  
QWF4

Dreisow, F.; Heinrich, M.; Keil, R.; Tünnermann, A.; Nolte, S.; Longhi, S.; Szameit, A.

**Relativistic physics in waveguide arrays: The Zitterbewegung**

Proceedings CLEO/Europe – EQEC 2011, OSA Technical Digest (Optical Society of America 2011) (2011) EH2\_1

Dreisow, F.; Wang, G.; Heinrich, M.; Keil, R.; Nolte, S.; Tünnermann, A.; Szameit, A.

**Bloch oscillations in zigzag waveguide arrays**

Proceedings CLEO/Europe – EQEC 2011, OSA Technical Digest (Optical Society of America 2011) (2011) EH\_P14

Duparré, A.

**Laser based light scattering techniques for efficient optical quality control**

3rd OASIS/13<sup>th</sup> Meeting on Optical Engineering and Science in Israel, 9.–10.3.2011, Tel-Aviv, Israel

Duparré, A.; Trost, M.

**Rauheitsbewertung auf fertigungsrelevanten Oberflächen mittels Streulichtverfahren**

Proceedings Fraunhofer Vision-Tag 2011: Innovative Technologien für die industrielle Qualitätssicherung mit Bildverarbeitung, 29.–30.6.2011, Kaiserslautern, Deutschland  
23.–24.11.2011, Magdeburg, Deutschland

Eberhardt, R.; Gebhardt, A.

**Technologien für die Instrumentierung in der Astronomie – neue Entwicklungen**

Max-Planck-Institut für Sonnenforschung, 24.2.2011, Katlenburg-Lindau, Deutschland

Eckstein, H.-C.; Zeitner, U.D.; Ahmed, K.; Schmid, W.; Strauss, U.

**Control of slow axis mode behavior with waveguide phase structures in semiconductor broad-area lasers**

SPIE Proceedings Vol. 7953 (2011) 79531J, ISBN 9780819484901

Eidam, T.; Hädrich, S.; Rothhardt, J.; Stutzki, F.; Jansen, F.; Gottschall, T.; Andersen, T.V.; Limpert, J.; Tünnermann, A.

**High average power femtosecond pulses at 520 nm via second harmonic generation of a fiber chirped pulse amplification system**

Advanced Solid-State Photonics (ASSP), 13.–16.2.2011, Istanbul, Turkey, OSA Technical Digest (Optical Society of America 2011) (2011) FThB2

Eidam, T.; Rothhardt, J.; Stutzki, F.; Jansen, F.; Hädrich, S.; Carstens, H.; Limpert, J.; Tünnermann, A.

**Fiber CPA System delivering 2.2 mJ, sub 500 fs pulses with 3.8 GW Peak Power**

Advanced Solid-State Photonics (ASSP), 13.–16.2.2011, Istanbul, Turkey

Eilenberger, F.; Minardi, S.; Pshenay-Severin, E.; Kartashov, Y.; Szameit, A.; Roepke, U.; Kobelke, J.; Schuster, K.; Torner, L.; Nolte, S.; Lederer, F.; Tünnermann, A.; Pertsch, T.

**Observation of nonlinear Light Bullets in waveguide arrays**

Proceedings CLEO 2011: QELS – Spatiotemporal Dynamics and Discrete Systems, OSA Technical Digest (Optical Society of America 2011) (2011) QMD5

Enghardt, W.; Bussmann, M.; Cowan, T.; Fiedler, F.; Kaluza, M.; Pawelke, J.; Schramm, U.; Sauerbrey, R.; Tünnermann, A.; Baumann, M.

**A technology platform for translational research on laser driven particle accelerators for radiotherapy**

SPIE Proceedings Vol. 8079 (2011) 80791F, ISBN 9780819486691

Feigl, T.; Pauer, H.; Perske, M.; Yulin, S.; Trost, M.; Schröder, S.; Duparré, A.; Kaiser, N.; Tünnermann, A.

**Optical performance of 5.5 sr LPP multilayer collectors**

2011 International Symposium on Extreme Ultraviolet Lithography, 17.–19.10.2011, Miami, Florida, USA

Fiedler, T.; Schulz, U.; Kaiser, N.

**Herstellung und Eigenschaften von Melamin-Nanostrukturen**

V2011, Industrieausstellung & Workshop-Woche, 19. NDVak, Beschichtung, Modifizierung und Charakterisierung von Polymeroberflächen, 17.–20.10.2011, Dresden, Deutschland

Finck, A.v.; Hauptvogel, M.; Duparré, A.

**Table-Top Streulichtmesssystem ALBATROSS-TT**

112. Tagung der DGaO, 14.–18.6.2011, Ilmenau, Deutschland

Finck, A.v.; Herffurth, T.; Hauptvogel, M.; Duparré, A.

**Symmetry and anisotropy ARS analysis of optical components**

SPIE Optical Systems Design 2011, Optical Fabrication, Testing, and Metrology IV, 5.–8.9.2011, Marseille, France

Flämmich, M.; Michaelis, D.; Danz, N.

**In situ measurement of spectrum, emission zone, and dipole emitter orientation in OLEDs**

SPIE Proceedings Vol. 7954 (2011) 795410, ISBN 9780819484918

Flämmich, M.; Michaelis, D.; Wächter, C.; Danz, N.

**Precise determination of OLED emitter properties**

SPIE Optics + Photonics 2011, Organic Light Emitting Materials and Devices XV, 21.–25.8.2011, San Diego, CA, USA

Franke, C.; Schürmann, M.; Wilbrandt, S.; Jobst, P. J.; Kaiser, N.

**Deposition of dielectric coatings on large optical components by reactive magnetron sputtering**

10<sup>th</sup> International Conference on Reactive Sputter Deposition, 8.–9.12.2011, Linköping, Schweden

Freese, W.; Kämpfe, T.; Kley, E.-B.;  
Tünnermann, A.

**Design and fabrication of a highly off-axis binary multi-phase-level computer-generated hologram based on an effective medium approach**

SPIE Proceedings Vol. 7927 (2011) 792710,  
ISBN 9780819484642

Frey, K.; Palme, M.; Peschel, T.; Riehemann, S.;  
Notni, G.

**An opto-mechanical model and stray light investigation of laser treated human eye**

SPIE Optical Systems Design 2011, Optical  
Design and Engineering IV, 5.–8.9.2011,  
Marseille, France  
SPIE Proceedings Vol. 8167 (2011) 816705,  
ISBN 9780819487933

Frey, K.; Palme, M.; Riehemann, S.; Notni, G.

**Optische Äquivalent-Modelle für das menschliche Auge hinsichtlich Laserbehandlungen**

112. Tagung der DGaO, 14.–18.6.2011,  
Ilmenau, Deutschland  
DGaO-Proceedings 2011 (2011) B16,  
ISSN 1614-8436

Füchsel, K.; Bingel, A.; Kaiser, N.;  
Tünnermann, A.

**Transparent conductive oxides for Nano-SIS solar cells**

SPIE Eco Photonics 2011, 28.–30.3.2011,  
Strasbourg, France  
SPIE Proceedings Vol. 8065 (2011) 80650B,  
ISBN 9780819486516

Gather, M.C.; Danz, N.; Meerholz, K.;  
Leosson, K.

**Optical Amplification of Propagating Surface Plasmon Polaritons**

Proceedings CLEO 2011: QELS – Fundamental  
Science, OSA Technical Digest (Optical Society  
of America 2011) (2011) QFES

Gebhardt, A.; Scheiding, S.; Kinast, J.;  
Risse, S.; Trost, M.; Duparré, A.; Rohloff, R.-R.;  
Schönherr, V.

**Nickel Plated Metal Mirrors for Advanced Applications**

26. Annual Meeting of the American  
Society for Precision Engineering (ASPE),  
13.–18.11.2011, Denver, Co, USA

Großmann, C.; Perske, F.; Riehemann, S.;  
Herold, R.; Richter, B.; Vogel, U.; Notni, G.;  
Tünnermann, A.

**Bidirectional OLED microdisplay utilized as inverse confocal sensor**

SID-ME Chapter Spring Meeting 2011,  
10.–11.3.2011, Seeheim-Jugenheim, Germany

Großmann, C.; Perske, F.; Riehemann, S.;  
Herold, R.; Richter, B.; Vogel, U.; Notni, G.;  
Tünnermann, A.

**Inverse confocal sensor based on bidirectional OLED display**

SID 2011, Display Week, 49<sup>th</sup> International  
Symposium, Seminar, and Exhibition,  
15.–20.5.2011, Los Angeles, CA, USA  
Digest of Technical Papers from the SID  
International Symposium 2011 p. 66–69,  
ISSN 0097-966X

Großmann, C.; Perske, F.; Zwick, S.; Baum-  
garten, J.; Richter, B.; Riehemann, S.; Vogel, U.;  
Notni, G.; Tünnermann, A.

**Surface metrology system based on bidirectional microdisplays**

SPIE Optical Systems Design 2011,  
5.–8.9.2011, Marseille, France  
SPIE Proceedings Vol. 8167 (2011) 81670Q,  
ISBN 9780819487933

Großmann, C.; Perske, F.; Zwick, S.;  
Riehemann, S.; Notni, G.; Tünnermann, A.

**Einsatz von bidirektionalen Mikrodisplays in der Messtechnik**

112. Tagung der DGaO, 14.–18.6.2011,  
Ilmenau, Deutschland  
DGaO-Proceedings 2011 (2011) A15,  
ISSN 1614-8436

Großmann, C.; Zwick, S.; Perske, F.;  
Baumgarten, J.; Richter, B.; Wartenberg,  
P.; Herold, R.; Brenner, S.; Vogel, U.; Riehe-  
mann, S.; Notni, G.; Tünnermann, A.

**Einsatz von Bidirektionalen Mikrodisplays in der Messtechnik als invers-konfokaler Sensor**

Proceedings, S. 425–428,  
ISBN 978-3-8007-3367-5

Hädrich, S.; Carstens, H.; Rothhardt, J.;  
Limpert, J.; Tünnermann, A.

**High Peak and Average Power Ultrashort Pulses from Double Stage Nonlinear Compression of a Fiber Chirped Pulse Amplification System**

Advanced Solid-State Photonics (ASSP),  
13.–16.2.2011, Istanbul, Turkey, OSA Technical  
Digest (Optical Society of America 2011)  
(2011) AMD5

Hädrich, S.; Carstens, H.; Rothhardt, J.;  
Limpert, J.; Tünnermann, A.

**High Average Power Ultrashort Pulses with 5 GW Peak Power**

Proceedings CLEO/Europe – EQEC 2011, OSA  
Technical Digest (Optical Society of America  
2011) (2011) CF8\_2

Hädrich, S.; Rothhardt, J.; Eidam, T.; Gottschall,  
T.; Limpert, J.; Tünnermann, A.

**High-average power second harmonic generation of femtosecond fiber lasers**

SPIE Proceedings Vol. 7914 (2011) 79140S,  
ISBN 9780819484512

Harvey, J.E.; Schröder, S.; Choi, N.; Duparré, A.

**Determining parametric TIS behavior from optical fabrication metrology data**

SPIE Optics + Photonics 2011, Optical Manu-  
facturing and Testing IX, 21.–25.8.2011, San  
Diego, CA, USA  
SPIE Proceedings Vol. 8126 (2011) 81260X,  
ISBN 9780819487360

Heidler, N.; Mohaupt, M.; Risse, S.; Döring, H.-J.  
**Investigations on clearance seal units for moving elements in an ultra-high vacuum region**

Proceedings IWK 2011, 56<sup>th</sup> International Scientific Colloquium, 12.–16.9.2011, Ilmenau, Germany, urn:nbn:de:gbv:ilm1-2011iwk-074:4

Heidler, N.; Holub, T.; Risse, S.; Eberhardt, R.; Tünnermann, A.

**Load bearing capacity and stiffness of porous journal gas bearing elements in a vacuum environment**

26<sup>th</sup> Annual Meeting of the American Society for Precision Engineering (ASPE), 13.–18.11.2011, Denver, Co, USA

Heinrich, M.; Keil, R.; Dreisow, F.; Tünnermann, A.; Nolte, S.; Szameit, A.

**Discrete Solitons in Photonic Lattices with Topological Defects**

Proceedings CLEO/Europe – EQEC 2011, OSA Technical Digest (Optical Society of America 2011) (2011) CD5\_4

Herffurth, T.; Hauptvogel, M.; Duparré, A.; Tünnermann, A.

**Kompakter streulichtbasierter Rauheitssensor**

112. Tagung der DGaO, 14.–18.6.2011, Ilmenau, Deutschland

Herffurth, T.; Hauptvogel, M.; Schröder, S.; Duparré, A.; Tünnermann, A.

**Light scattering based roughness sensor**

SPIE Optical Systems Design 2011, Optical Fabrication, Testing, and Metrology IV, 5.–8.9.2011, Marseille, France

Hideur, A.; Lecaplain, C.; Ortaç, B.; Machinet, G.; Bouillet, J.; Cormier, E.; Baumgartl, M.; Schreiber, T.

**Femtosecond Microjoule-Class Ytterbium Fiber Lasers**

Advanced Solid-State Photonics (ASSP), 13.–16.2.2011, Istanbul, Turkey

Hill, S.B.; Faradzhev, N.S.; Richter, L.J.;

Grantham, S.; Tarrío, C.; Lucatorto, T.B.; Yulin, S.; Schürmann, M.; Nesterenko, V.; Feigl, T.

**Optics contamination studies in support of high-throughput EUV lithography tools**

SPIE Proceedings Vol. 7969 (2011) 79690M, ISBN 9780819485281

Jansen, F.; Stutzki, F.; Eidam, T.; Rothhardt, J.; Hädrich, S.; Carstens, H.; Jauregui, C.; Limpert, J.; Tünnermann, A.

**Yb-doped Large Pitch Fiber with 105  $\mu\text{m}$  Mode Field Diameter**

Proceedings Optical Fiber Communication Conference (OFC), OSA Technical Digest (Optical Society of America 2011) (2011) OTuC5

Jansen, F.; Stutzki, F.; Eidam, T.; Steinmetz, A.; Jauregui, C.; Limpert, J.; Tünnermann, A.

**Robust single-mode ytterbium-doped large pitch fiber emitting 294 W**

SPIE Proceedings Vol. 7914 (2011) 791417, ISBN 9780819484512

Jansen, F.; Stutzki, F.; Jauregui, C.; Limpert, J.; Tünnermann, A.

**Anticrossings induced by index depressions and their impact on mode area scaling of active large pitch fibers**

Proceedings CLEO/Europe – EQEC 2011, OSA Technical Digest (Optical Society of America 2011) (2011) CJ\_P19

Janunts, N.; Steinert, M.; Kley, E.-B.; Tünnermann, A.; Pertsch, T.; Nerkararyan, K.

**Optical transmissivity of single metallic V-grooves**

Proceedings CLEO/Europe – EQEC 2011, OSA Technical Digest (Optical Society of America 2011) (2011) EJ1\_5

Jauregui, C.; Eidam, T.; Limpert, J.; Tünnermann, A.

**Inversion Grating Assisted Beam Quality Degradation in High Power Fiber Laser Systems**

Advanced Solid-State Photonics (ASSP), 13.–16.2.2011, Istanbul, Turkey, OSA Technical Digest (Optical Society of America 2011) (2011) ATuD1

Jauregui, C.; Limpert, J.; Tünnermann, A.

**On the Raman threshold of passive large mode area fibers**

SPIE Proceedings Vol. 7914 (2011) 791408, ISBN 9780819484512

Jauregui, C.; Nodop, D.; Limpert, J.; Tünnermann, A.

**Improved parametric generation of light in optical fibers**

Proceedings CLEO/Europe – EQEC 2011, OSA Technical Digest (Optical Society of America 2011) (2011) CD\_P13

Jauregui, C.; Eidam, T.; Limpert, J.; Tünnermann, A.

**Impact of modal interference on high-power fiber laser systems**

SPIE Proceedings Vol. 7914 (2011) 79142I, ISBN 9780819484512

Jobst, P. J.; Schürmann, M.; Kaiser, N.; Beier, B.; Luck, F. U.; Thaut, M.

**Beschichtungstechnologie und Anwendungen von strukturierbaren breitbandig reflektionsgemindertem Chrom**

V2011, Industrieausstellung & Workshop-Woche, Vakuumbeschichtung und Plasmaoberflächentechnik, 17.–20.10.2011, Dresden, Deutschland

Jobst, P. J.; Schürmann, M.; Kaiser, N.; Luck, F. U.; Beier, B.; Thaut, M.

**Reflexionsgeminderte Chromschichten für Anwendungen in der Mikrooptik**

V2011, Industrieausstellung & Workshop-Woche, Vakuumbeschichtung und Plasmaoberflächentechnik, 17.–20.10.2011, Dresden, Deutschland

Jobst, P. J.; Schürmann, M.; Kaiser, N.; Beier, B.; Luck, F. U.; Thaut, M.

**Coating technology for the deposition of structurable chromium films with reduced reflection**

SPIE Optical Systems Design 2011, Advances in Optical Thin Films IV, 5.–8.9.2011, Marseille, France

Jourlin, Y.; Veillas, C.; Tonchev, S.; Sauvage-Vincent, J.; Zeitner, U.D.; Parriaux, O.

**Grating phase-mask lithography for subwavelength radial polarizer fabrication**

World of Photonics 2011, EOSMOC 2011 – 2<sup>nd</sup> EOS Conference on Manufacturing of Optical Components, 22.–26.5.2011, Munich, Germany

Kalkowski, G.; Risse, S.; Rothhardt, C.; Rohde, M.; Eberhardt, R.

**Optical contacting of low-expansion materials**

SPIE Optics + Photonics 2011, Optical Manufacturing and Testing IX, 21.–25.8.2011, San Diego, CA, USA

SPIE Proceedings Vol. 8126 (2011) 81261F, ISBN 9780819487360

Kaster, J.; Pupeza, I.; Eidam, T.; Jocher, C.; Fill, E.; Limpert, J.; Holzwarth, R.; Bernhardt, B.; Udem, T.; Hänsch, T.W.; Tünnermann, A.; Krausz, F.

**High power enhancement cavities for generation of XUV and X-Ray radiation of high brilliance**

Proceedings CLEO/Europe – EQEC 2011, OSA Technical Digest (Optical Society of America 2011) (2011) CG\_P8

Kaster, J. M.; Pupeza, I.; Eidam, T.; Jocher, C.; Fill, E.; Limpert, J.; Holzwarth, R.; Bernhardt, B.; Udem, T.; Hänsch, T. W.; Tünnermann, A.; Krausz, F.

**Towards MW average powers in ultrafast high-repetition-rate enhancement cavities**

Advanced Solid-State Photonics (ASSP), 13.–16.2.2011, Istanbul, Turkey, OSA Technical Digest (Optical Society of America 2011) (2011) HFB4

Keil, R.; Dreisow, F.; Heinrich, M.; Tünnermann, A.; Nolte, S.; Szameit, A.

**Classical characterization of correlated biphotons in waveguide lattices**

Proceedings CLEO/Europe – EQEC 2011, OSA Technical Digest (Optical Society of America 2011) (2011) EA8\_5

Klenke, A.; Seise, E.; Bretkopf, S.; Tünnermann, A.; Limpert, J.

**Fiber laser CPA system delivering 120 µj femtosecond pulses using coherent combining**

Proceedings CLEO 2011 – Laser Applications to Photonic Applications, OSA Technical Digest (Optical Society of America 2011) (2011) CFE4

Klenke, A.; Seise, E.; Limpert, J.; Tünnermann, A.

**Basic considerations on coherent combining of ultrafast CPA amplifiers**

Proceedings CLEO/Europe – EQEC 2011, OSA Technical Digest (Optical Society of America 2011) (2011) CJ\_P18

Koller, D.; Walchshäusl, L.; Eggers, G.; Neudel, F.; Kursawe, U.; Kühmstedt, P.; Heinze, M.; Ramm, R.; Bräuer-Burchardt, C.; Notni, G.; Kafka, R.; Neubert, R.; Seibert, H.; Castro-Neves, M.; Nouak, A.

**3D capturing of fingerprints – On the way to a contact less certified sensor**

Proceedings BIOSIG 2011, Biometrics and Security, 8.–9.9.2011, Darmstadt, Germany, p. 33-44, ISBN 978-3-88579-285-7

Krebs, M.; Hädrich, S.; Limpert, J.; Tünnermann, A.

**Fiber laser based high harmonic generation at high repetition rate and average power**

Advanced Solid-State Photonics (ASSP), 13.–16.2.2011, Istanbul, Turkey, OSA Technical Digest (Optical Society of America 2011) (2011) HWA2

Kühmstedt, P.; Bräuer-Burchardt, C.; Möller, F.; Otto, E.; Schmidt, I.; Notni, G.

**Hand-held 3D sensor for documentation of fossil and archaeological excavations**

SPIE Optical Metrology/Optical Measurement Systems for Industrial Inspection, 23.–26.5.2011, Munich, Germany  
SPIE Proceedings, Vol. 8084 (2011) 80840U, ISBN 9780819486806

Kühmstedt, P.; Heinze, M.; Schmidt, I.; Bräuer-Burchardt, C.; Breitbarth, A.; Notni, G.

**Entwicklung eines handgeführten 3D-Farbscanners**

10. Oldenburger 3D-Tage, 2.–3.2.2011, Oldenburg, Deutschland  
Photogrammetrie, Laserscanning, optische 3D-Messtechnik: Beiträge der Oldenburger 3D-Tage 2011 S. 199-204, ISBN 978-3-87907-506-5

Lange, N.; Wippermann, F.; Beckert, E.; Eberhardt, R.; Tünnermann, A.

**Nutzung UV aushärtender Polymere zum Aufbau elektrostatischer Aktuatorik**

Proceedings 4. VDE/VDI Mikrosystemtechnik-Kongress 2011, 10.–12.10.2011, Darmstadt, Deutschland, S. 689-692, ISBN 978-3-8007-3367-5

Lange, N.; Wippermann, F.; Leitel, R.; Bruchmann, C.; Beckert, E.; Eberhardt, R.; Tünnermann, A.

**Erste Ergebnisse elektrostatischer Aktuatorik auf Basis UV-aushärtender Polymere**

Proceedings 3. GMM Workshop Mikro-Nano-Integration, 3.–4.3.2011, Stuttgart, Deutschland, 453334007, ISBN 978-3-8007-3334-7

Lange, N.; Wippermann, F.; Leitel, R.; Bruchmann, C.; Beckert, E.; Eberhardt, R.; Tünnermann, A.

**First results on electrostatic polymer actuators based on UV-replication**

SPIE Photonics West, 22.–26.1.2011, San Francisco, CA, USA  
SPIE Proceedings Vol. 7926 (2011) 792609, ISBN 9780819484635

Lecaplain, C.; Ortaç, B.; Machinet, G.; Bouillet, J.; Baumgartl, M.; Schreiber, T.; Cormier, E.; Hideur, A.

**Properties of a microjoule-class fiber oscillator mode-locked with a SESAM**

World of Photonics 2011, The European Conference on Lasers and Electro-Optics – European Quantum Electronics Conference (CLEO/Europe – EQEC), 22.–26.5.2011, Munich, Germany

Leitel, R.; Dannberg, P.; Brückner, A.; Bräuer, A.

**Recent developments in wafer-level fabrication of micro-optical multi-aperture imaging systems**

SPIE Optical Systems Design 2011, Optical Design and Engineering IV, 5.–8.9.2011, Marseille, France

SPIE Proceedings Vol. 8167 (2011) 81670P, ISBN 9780819487933

Li, C.; Schreiber, P.; Walkling, A.; Schierz, C.; Schwede, M.; Gühne, V.

**Freeform reflector design for LED street lighting**

SPIE Optics + Photonics 2011, 11<sup>th</sup> International Conference on Solid State Lighting, 21.–25.8.2011, San Diego, CA, USA

SPIE Proceedings Vol. 8123 (2011) 81230O, ISBN 9780819487339

Ludewigt, K.; Gowin, M.; Ten Have, E.; Jung, M.; Wirth, C.; Schmidt, O.; Tsybin, I.; Schreiber, T.; Eberhardt, R.; Limpert, J.; Tünnermann, A.

**High brightness spectral beam combining to 8.2 kW**

SPIE Proceedings Vol. 7914 (2011) 791401, ISBN 9780819484512

Maenz, S.; Irmeler, I.; Ramm, R.; Kamradt, T.; Kühmstedt, P.; Jandt, K.D.; Bossert, J.

**Quantification of bone parameters in experimental murine arthritis by micro-computed tomography – a preliminary study**

3D Microstructure Meeting, 2.–4.11.2011, Saarbrücken, Germany

Mauroner, O.; Helm, R.

**Keep close ties or cut the painter? The role of cooperation strategies between spin-offs and their parents**

9<sup>th</sup> Interdisciplinary European Conference on Entrepreneurship Research (IECER), 16.–18.2.2011, Munich, Germany

Mauroner, O.; Helm, R.

**Personality structure of information multipliers in online and offline contexts: increase due to online communication?**

Scientific Workshop on E-Commerce in China, Chinesisch-Deutsches Hochschulkolleg, 13.–15.3.2011, Shanghai, China

Mauroner, O.; Helm, R.; Dowling, M.

**Entrepreneurial spin-offs from R&D institutes – Empirical study on success factors**

First Conference on Entrepreneurship and new venture creation, International Consortium for Entrepreneurship Research (ICER), 8.–10.12.2011, Bangalore, India

Meyer, J.; Brückner, A.; Leitel, R.; Dannberg, P.; Bräuer, A.; Tünnermann, A.

**Ultra-compact imaging system based on multi-aperture architecture**

SPIE Proceedings Vol. 7930 (2011) 79300C, ISBN 9780819484673

Michaelis, D.; Oliva, M.; Benkenstein, T.; Harzendorf, T.; Matthes, A.; Zeitner, U.

**Nano-optical gratings for integrated laser interferometer arrays**

Proceedings CLEO/Europe – EQEC 2011, OSA Technical Digest (Optical Society of America 2011) (2011) CK5\_3

Michaelis, D.; Schreiber, P.; Li, C.; Bräuer, A.

**Construction of freeforms in illumination systems via generalized Cartesian oval representation**

SPIE Optics + Photonics 2011, Nonimaging Optics: Efficient Design for Illumination and Solar Concentration VIII, 21.–25.8.2011, San Diego, CA, USA

SPIE Proceedings Vol. 8124 (2011) 812403, ISBN 9780819487346

Minardi, S.; Eilenberger, F.; Kartashov, Y.; Szameit, A.; Röpke, U.; Kobelke, J.; Schuster, K.; Bartelt, H.; Torner, L.; Nolte, S.; Tünnermann, A.; Lederer, F.; Pertsch, T.

**Dynamics of light bullets in two-dimensional arrays of waveguides**

Proceedings CLEO/Europe – EQEC 2011, OSA Technical Digest (Optical Society of America 2011) (2011) CD5\_5

Munkelt, C.; Kühmstedt, P.; Denzler, J.; Notni, G.

**Ansichtenplanung zur 3-D Rekonstruktion unter Berücksichtigung von Vollständigkeit und Messunsicherheit**

112. Tagung der DGaO, 14.–18.6.2011, Ilmenau, Deutschland

Nesterenko, V.; Yulin, S.; Feigl, T.; Kaiser, N.

**Interface-engineered multilayer mirrors with enhanced reflectivity**

SPIE Optical Systems Design 2011, Advances in Optical Thin Films IV, 5.–8.9.2011, Marseille, France

Nodop, D.; Jauregui, C.; Jansen, F.; Limpert, J.; Tünnermann, A.

**Inhibition of stimulated Raman scattering using long period gratings in double clad fiber amplifiers**

Advanced Solid-State Photonics (ASSP), 13.–16.2.2011, Istanbul, Turkey, OSA Technical Digest (Optical Society of America 2011) (2011) AMB8

Nodop, D.; Schimpf, D.; Limpert, J.; Tünnermann, A.

**SBS suppression in high power fiber pulse amplifiers employing a superluminescence diode as seed source**

Proceedings CLEO/Europe – EQEC 2011, OSA Technical Digest (Optical Society of America 2011) (2011) CJ7\_6

Nolte, S.; Thomas, J.; Voigtländer, C.; Becker, R.G.; Richter, D.; Tünnermann, A.

**Femtosecond laser induced fiber Bragg gratings in active and multi mode fibers**

Proceedings CLEO/Europe – EQEC 2011, OSA Technical Digest (Optical Society of America 2011) (2011) CJ10\_1

Notni, G.

**3D-measurement within short cycle time**

10. SpectroNet Collaboration Forum, 20.4.2011, Jena, Germany



Oberdörster, A.; Brückner, A.; Wippermann, F.; Bräuer, A.

**Correcting distortion and braiding of micro-images from multi-aperture imaging systems**

SPIE Proceedings Vol. 7875 (2011) 78750B, ISBN 9780819484123

Oberdörster, A.; Brückner, A.; Wippermann, F.; Bräuer, A.

**Image Fusion for Multi-Aperture Cameras**

ICCP 2011, 8.–10.4.2011, Pittsburgh, USA

Pabst, O.; Perelaer, J.; Beckert, E.; Schubert, U.S.; Eberhardt, R.; Tünnermann, A.

**All Inkjet-Printed Electroactive Polymer Actuators for Active Microoptical and Polytronical Systems**

Proceedings Large-area Organic and Printed Electronics Convention (LOPE-C) 2011, 28.–30.6.2011, Frankfurt a.M., Germany, S. 139–142, ISBN 978-3-00-034957-7

Pabst, O.; Perelaer, J.; Beckert, E.; Schubert, U.S.; Eberhardt, R.; Tünnermann, A.

**Erzeugung von elektroaktiven Polymeraktoren mittels Inkjet Drop-on-Demand zur Anwendung in mikrofluidischen Systemen**

Proceedings 4. VDE/VDI Mikrosystemtechnik-Kongress 2011, 10.–12.10.2011, Darmstadt, Deutschland, S. 281–284, ISBN 978-3-8007-3367-5

Pabst, O.; Perelaer, J.; Beckert, E.; Schubert, U.S.; Eberhardt, R.; Tünnermann, A.

**Inkjet Printing of Electroactive Polymer Actuators on Polymer Substrates**

SPIE Smart Structures/NDE, 6.–10.3.2011, San Diego, CA, USA  
SPE Proceedings Vol. 7976 (2011) 79762H, ISBN 9780819485380

Pabst, O.; Perelaer, J.; Hornaff, M.; Beckert, E.; Becker, H.; Schubert, U.S.; Eberhardt, R.; Tünnermann, A.

**Inkjet-Druck und Niedertemperatur-Sintern von Ag-Nanopartikelintinten auf Polymersubstraten**

Proceedings 3. GMM Workshop Mikro-Nano-Integration, 3.–4.3.2011, Stuttgart, Deutschland, 453334016, ISBN 978-3-8007-3334-7

Pabst, O.; Schiffer, M.; Obermeier, E.; Tekin, T.; Lang, K.D.; Ngo, H.-D.

**Measurement of Young's modulus and residual stress of thin SiC layers for MEMS high temperature applications**

SPIE Proceedings Vol. 8066 (2011) 806608, ISBN 9780819486554

Pauer, H.; Perske, M.; Yulin, S.; Trost, M.; Duparré, A.; Feigl, T.; Kaiser, N.

**EUV-Kollektorspiegel für Hochleistungs-laserplasmaquellen**

V2011, Industrieausstellung & Workshop-Woche, Vakuumbeschichtung und Plasmaoberflächentechnik, 17.–20.10.2011, Dresden, Deutschland

Perske, M.; Pauer, H.; Yulin, S.; Trost, M.; Schröder, S.; Duparré, A.; Feigl, T.; Kaiser, N.; Tünnermann, A.

**Multilayer coating for EUV collector mirrors**

2011 International Workshop on EUV and Soft X-Ray Sources, 7.–9.11.2011, Dublin, Ireland

Peschel, T.

**Finite-Element-Untersuchungen zur Modellierung von Tastschnittmessungen**

263. PTB-Seminar, Fertigungsmittel für Mikrosysteme-Ermittlung von Materialeinflüssen auf die Messunsicherheit in der optischen und taktilen dimensionellen Messtechnik, Workshop Normprojekt DIN 32567, 17.11.2011, Braunschweig, Deutschland

Präfke, C.; Schulz, U.; Kaiser, N.; Tünnermann, A.

**Vacuum-deposited UV-protective coatings for bisphenol-A-polycarbonate**

5<sup>th</sup> European Weathering Symposium (EWS), 21.–23.9.2011, Lisbon, Portugal  
Proceeding 5<sup>th</sup> EWS – Natural and Artificial Aging of Polymers, CEEES Publication No. 15, 2011, S. 471–479, ISBN 978-3-9813136-2-8

Pshenay-Severin, E.; Chipouline, A.; Petschulat, J.; Hübner, U.; Eilenberger, F.; Setzpfandt, F.; Pertsch, T.; Tünnermann, A.

**Magnetic properties of asymmetric double-wire structures**

Proceedings CLEO 2011 – Laser Applications to Photonic Applications, OSA Technical Digest (Optical Society of America 2011) (2011) QTuD7

Pupeza, I.; Eidam, T.; Kaster, J.; Bernhardt, B.; Rauschenberger, J.; Ozawa, A.; Fill, E. F.; Udem, T.; Kling, M.F.; Limpert, J.; Alahmed, Z.A.; Azzeer, A.M.; Tünnermann, A.; Hänsch, T.W.; Krausz, F.

**Power scaling of femtosecond enhancement cavities and high-power applications**

SPIE Proceedings Vol. 7914 (2011) 791411, ISBN 9780819484512

Pupeza, I.; Kaster, J.; Eidam, T.; Bernhardt, B.; Weitenberg, J.; Holzwarth, R.; Hänsch, T.W.; Udem, T.; Limpert, J.; Tünnermann, A.; Fill, E.; Krausz, F.

**Progress in Enhancement Cavities for XUV Generation**

Proceedings CLEO 2011: QELS – Fundamental Science, OSA Technical Digest (Optical Society of America 2011) (2011) QMJ6

Pupeza, I.; Weitenberg, J.; Russbuedt, P.; Eidam, T.; Limpert, J.; Fill, E.; Udem, T.; Hoffmann, H.-D.; Poprawe, R.; Tünnermann, A.; Krausz, F.

**Tailored Transverse Modes in High-Finesse Femtosecond Enhancement Cavities**

Proceedings CLEO 2011: QELS – Fundamental Science, OSA Technical Digest (Optical Society of America 2011) (2011) QMJ7

Rhein, S.; Schmidt, O.; Zimer, H.; Schreiber, T.; Eberhardt, R.; Tünnermann, A.

**High-average power optical demodulation of a fiber amplified phase modulated single-frequency signal**

SPIE Proceedings Vol. 7914 (2011) 791430, ISBN 9780819484512

Richter, D.; Voigtländer, C.; Becker, R.G.; Thomas, J.; Tünnermann, A.; Nolte, S.

**Efficient volume Bragg gratings in various transparent materials induced by femtosecond laser pulses**

Proceedings CLEO/Europe – EQEC 2011, OSA Technical Digest (Optical Society of America 2011) (2011) CM3\_4

Richter, S.; Döring, S.; Peschel, T.; Eberhardt, R.; Nolte, S.; Tünnermann, A.

**Breaking stress of glass welded with femtosecond laser pulses at high repetition rates**

SPIE Proceedings Vol. 7925 (2011) 79250P, ISBN 9780819484628

Richter, S.; Heinrich, M.; Döring, S.; Tünnermann, A.; Nolte, S.

**Formation process of Femtosecond Laser-induced Nanogratings at High Repetition Rates**

Proceedings CLEO/Europe – EQEC 2011, OSA Technical Digest (Optical Society of America 2011) (2011) CM1\_5

Riehemann, S.; Palme, M.; Steinkopf, R.; Munzert, P.; Notni, G.; Krieg, J.

**Monolithic optical freeform element for an IR line camera**

SPIE Optical Systems Design 2011, Optical Design and Engineering IV, 5.–8.9.2011, Marseille, France,

SPIE Proceedings Vol. 8167 (2011) 81670H, ISBN 9780819487933

Riehemann, S.; Palme, M.; Steinkopf, R.; Munzert, P.; Notni, G.; Krieg, J.; Sassenberg, V.

**Monolithisches optisches Freiformelement für eine IR-Detektorzeile**

112. Tagung der DGaO, 14.–18.6.2011, Ilmenau, Deutschland  
DGaO-Proceedings 2011 (2011) P39, ISSN 1614-8436

Risse, S.; Damm, C.; Hornaff, M.; Kamm, A.; Schmidt, I.; Mohaupt, M.; Eberhardt, R.; Döring, H.-J.; Elster, T.; Kirschstein, U.C.

**Precision assembly of a miniaturized wire deflector for electron-beam lithography**

37<sup>th</sup> International Conference on Micro and Nano Engineering (MNE), 19.–23.9.2011, Berlin, Germany

Risse, S.; Gebhardt, A.; Kolbmüller, A.; Steinkopf, R.; Schürmann, M.; Jobst, J.; Kaiser, N.; Eberhardt, R.

**Ultra-precise optical mirrors with thick amorphous silicon layer**

Proceedings 11<sup>th</sup> International Conference of the European Society for Precision Engineering & Nanotechnology (EUSPEN), 23.–27.5.2011, Lake Como, Italy, p. 337–340, ISBN 978-0-9553082-9-1

Risse, S.; Scheiding, S.; Gebhardt, A.; Damm, C.; Holota, W.; Eberhardt, R.; Tünnermann, A.

**Development and fabrication of a hyper-spectral, mirror based IR-telescope with ultra-precise manufacturing and mounting techniques for a snap-together system assembly**

SPIE Remote Sensing 2011, 19.–22.9.2011, Prague, Czech Republic  
SPIE Proceedings Vol. 8176 (2011) 81761N, ISBN 9780819488039

Rothhardt, J.; Hädrich, S.; Demmler, S.; Jocher, C.; Limpert, J.; Tünnermann, A.

**Sub-5 fs pulses with 12 GW peak power from high repetition rate OPCPA**

Advanced Solid-State Photonics (ASSP), 13.–16.2.2011, Istanbul, Turkey, OSA Technical Digest (Optical Society of America 2011) (2011) JWA3

Rothhardt, J.; Heidt, A.; Hartung, A.; Bartelt, H.; Rohwer, E.; Limpert, J.; Tünnermann, A.

**Sub-two cycle pulse generation with all normal dispersion photonic crystal fiber and linear chirp compensation**

Proceedings CLEO/Europe – EQEC 2011, OSA Technical Digest (Optical Society of America 2011) (2011) CF3\_5

Scheiding, S.

**Snap-In fabrication of a hyper-spectral, all metal mirror based IR-Telescope**

Abbe School of Photonics – Seminar Summer Term, 10.6.2011, Jena, Germany

Scheiding, S.; Risse, S.; Gebhardt, A.; Damm, C.; Eberhardt, R.; Tünnermann, A.

**Freeform mirror fabrication by means of fast tool servo diamond turning**

26<sup>th</sup> Annual Meeting of the American Society for Precision Engineering (ASPE), 13.–18.11.2011, Denver, Co, USA

Scheiding, S.; Yi, A.Y.; Gebhardt, A.; Li, L.; Risse, S.; Eberhardt, R.; Tünnermann, A.

**Free-form manufacturing of a microoptical lens array on a curved substrate**

Proceedings ASPE 2011 Spring Topical Meeting, 6.–8.3.2011, Charlotte, North Carolina, USA, p. 19–23, ISBN 978-1-887706-57-5

Scheiding, S.; Yi, A.Y.; Gebhardt, A.; Loose, R.; Li, L.; Risse, S.; Eberhardt, R.; Tünnermann, A.

**Diamond milling or turning for the fabrication of micro lens arrays: comparing different diamond machining technologies**

SPIE Advanced Fabrication Technologies for Micro/Nano Optics and Photonics IV, 22.–27.1.2011, San Francisco, CA, USA  
SPIE Proceedings Vol. 7927 (2011) 79270N, ISBN 9780819484642

Schmidt, C.; Chipouline, A.; Kley, E.-B.; Tünnermann, A.; Pertsch, T.

**Thermal nonlinearity in coupled disk microresonators**

Proceedings CLEO/Europe – EQEC 2011, OSA Technical Digest (Optical Society of America 2011) (2011) CK9\_1

Schmidt, C.; Liebsch, M.; Chipouline, A.; Janunts, N.; Kley, E.-B.; Tünnermann, A.; Pertsch, T.

**Mapping of Whispering-Gallery-Modes in coupled disk microresonators**

Proceedings CLEO/Europe – EQEC 2011, OSA Technical Digest (Optical Society of America 2011) (2011) CK8\_2

Schmidt, O.; Wirth, C.; Rhein, S.; Rekas, M.; Klíner, A.; Schreiber, T.; Eberhardt, R.; Tünnermann, A.

**697 W 12 pm linewidth of fiber generated and amplified spontaneous emission (ASE) at 1 μm**

Proceedings CLEO/Europe – EQEC 2011, OSA Technical Digest (Optical Society of America 2011) (2011) CJ7\_1

Schmidt, O.; Wirth, C.; Rhein, S.; Rekas, M.; Klíner, A.; Schreiber, T.; Eberhardt, R.; Tünnermann, A.

**High power narrow-band ASE as source for beam combining applications**

Proceedings Advanced Solid-State Photonics (ASSP), OSA Technical Digest (Optical Society of America 2011) (2011) AMF3

Schreiber, P.

**Micro-optics for slim LED light sources**

World of Photonics 2011, Application Panels – Laser and Photonics in Actual Practice, 22.–26.5.2011, Munich, Germany

Schröder, S.; Herffurth, T.; Duparré, A.

**Impact of surface roughness on scatter losses and the scattering distribution of surfaces and thin film coatings**

SPIE Optical Systems Design 2011, Optical Fabrication, Testing, and Metrology IV, 5.–8.9.2011, Marseille, France  
SPIE Proceedings Vol. 8169 (2011) 81690R, ISBN 9780819487957

Schröder, S.; Herffurth, T.; Duparré, A.; Notni, G.

**Mobile compact optical roughness sensor**

Joint International IMEKO TC1+TC7+TC13 Symposium 2011, 31.8.–2.9.2011, Jena, Germany

Schröder, S.; Trost, M.; Feigl, T.; Duparré, A.; Harvey, J.E.

**Efficient specification and characterization of surface roughness for extreme ultra-violet optics**

SPIE Advanced Lithography 2011, 27.2.–4.3.2011, San Jose, CA, USA; SPIE Proceedings Vol. 7969 (2011) 79692C, ISBN 9780819485281

Schulz, U.

**Entspiegelung transparenter Kunststoffe für optische Anwendungen**

VDI Wissensforum Kunststoffe in Optischen Systemen, 8.–9.11.2011, Baden-Baden, Deutschland

Schulz, U.

**Technologien für die Entspiegelung von Kunststoffoptiken**

OTTI Fachforum, 9.–10.11.2011, Regensburg, Deutschland

Schulz, U.; Mändl, H.; Nottebohm, R.; Gödeker, C.; Kaiser, N.

**Antireflective coatings for optical lenses based on plasma-etched melamine**

Society of Vacuum Coaters (SVC) 2011, 16.–21.4.2011, Chicago, USA  
Technical Conference Proceedings 1991-2011 O-4, ISSN 0737-5921

Schulz, U.; Präfke, C.; Kaiser, N.

**Aufgedampfte organische Schichten für optische Anwendungen**

V2011, Industrieausstellung & Workshop-Woche, Vakuumbeschichtung und Plasmaoberflächentechnik, 17.–20.10.2011, Dresden, Deutschland

Schürmann, M.; Jobst, P. J.; Kaiser, N.; Müller, S.; Kolbmüller, A.; Gebhardt, A.; Risse, S.; Eberhardt, R.

**Bearbeitbare Siliziumschichten zur Herstellung ultra-präziser optischer Komponenten**

V2011, Industrieausstellung & Workshop-Woche, Vakuumbeschichtung und Plasmaoberflächentechnik, 17.–20.10.2011, Dresden, Deutschland

Schürmann, M.; Jobst, P.J.; Kaiser, N.; Müller, S.; Kolbmüller, A.; Gebhardt, A.; Risse, S.; Eberhardt, R.

**Machinable thick silicon coatings for the manufacture of ultra-precise optical components**

SPIE Optical Systems Design 2011, Advances in Optical Thin Films IV, 5.–8.9.2011, Marseille, France

Schürmann, M.; Yulin, S.; Nesterenko, V.; Feigl, T.; Kaiser, N.; Tkachenko, B.; Schürmann, M.C.

**Study on the lifetime of Mo/Si multilayer optics with pulsed EUV-source at the ETS**

SPIE Optics + Optoelectronics 2011, 18.–21.4.2011, Prague, Czech Republic  
SPIE Proceedings Vol. 8077 (2011) 80770X, ISBN 9780819486677

Seise, E.; Klenke, A.; Breitkopf, S.; Plötner, M.; Limpert, J.; Tünnermann, A.

**120 μJ Pulses from Coherently Coupled Femtosecond Fiber Laser Systems**

Advanced Solid-State Photonics (ASSP), 13.–16.2.2011, Istanbul, Turkey, OSA Technical Digest (Optical Society of America 2011) (2011) AMC1

Seise, E.; Klenke, A.; Breitkopf, S.; Plötner, M.; Limpert, J.; Tünnermann, A.

**Coherent combining of ultrashort fiber-amplified laser pulses**

SPIE Proceedings Vol. 7914 (2011) 79141D, ISBN 9780819484512

Seise, E.; Klenke, A.; Breitkopf, S.; Plötner, M.; Limpert, J.; Tünnermann, A.

**High Energy Coherently Combined Femtosecond Fiber CPA System**

Proceedings CLEO/Europe – EQEC 2011, OSA Technical Digest (Optical Society of America 2011) (2011) CJ9\_3

Sieler, M.; Schreiber, P.; Dannberg, P.; Höfer, B.; Bräuer, A.

**1300 lumen LED-based super-slim multi-aperture projection display with switchable static image content**

SID-ME Chapter Spring Meeting 2011, 10.–11.3.2011, Seeheim-Jugenheim, Germany

Sieler, M.; Schreiber, P.; Dannberg, P.; Bräuer, A.  
**Ultra-kompakter digitaler Array-Projektor**  
Proceedings 4. VDE/VDI Mikrosystemtechnik-Kongress 2011, 10.–12.10.2011, Darmstadt, Deutschland, S. 126–129, ISBN 978-3-8007-3367-5

Steinkopf, R.; Dick, L.; Kopf, T.; Gebhardt, A.; Risse, S.; Eberhardt, R.

**Data handling and representation of freeform surfaces**

SPIE Optical Systems Design 2011, Optical Fabrication, Testing, and Metrology IV, 5.–8.9.2011, Marseille, France; SPIE Proceedings Vol. 8169 (2011) 81690X, ISBN 9780819487957

Steinmetz, A.; Nodop, D.; Eidam, T.; Limpert, J.; Tünnermann, A.

**High Pulse Energy Sub-10 ps Pulses from Compressed Passively Q-Switched Laser**

Advanced Solid-State Photonics (ASSP), 13.–16.2.2011, Istanbul, Turkey, OSA Technical Digest (Optical Society of America 2011) (2011) ATuD5

Steinmetz, A.; Nodop, D.; Martin, A.; Limpert, J.; Tünnermann, A.

**Sub-10 picosecond pulses from a fiber-amplified and optically compressed passively Q-switched microchip laser**

SPIE Proceedings Vol. 7914 (2011) 791412, ISBN 9780819484512

Stenzel, O.

**Struktur-Eigenschaftsbeziehungen bei PIAD-Schichten**

DPG 2011, 26.–29.3.2011, Regensburg, Deutschland

Stenzel, O.

**Struktur-Eigenschaftsbeziehungen hochwertiger Oxidschichten**

OTTI Fachforum, 9.–10.11.2011, Regensburg, Deutschland

Stenzel, O.; Schürmann, M.; Wilbrandt, S.; Kaiser, N.; Tünnermann, A.; Mende, M.; Ehlers, H.; Ristau, D.; Bruns, S.; Vergöhl, M.; Riggers, W.; Bischoff, M.; Held, M.

**Optical and mechanical properties of oxide UV coatings, prepared by PVD techniques**

SPIE Optical Systems Design 2011, Advances in Optical Thin Films IV, 5.–8.9.2011, Marseille, France; SPIE Proceedings Vol. 8168 (2011) 81681W, ISBN 9780819487940

Stenzel, O.; Wilbrandt, S.; Kaiser, N.

**Absolutmessungen von gerichteter Transmission und Reflexion an Festkörperproben in der GPOB unter Nutzung von VN-Einsätzen und Anwendung auf die optische Charakterisierung dünner Festkörperschichten**

Proceedings COSP 2011 Colloquium Optische Spektrometrie, 21.–22.3.2011, Berlin, Deutschland

Stenzel, O.; Wilbrandt, S.; Kaiser, N.

**Optische Charakterisierung dünner Festkörperschichten auf der Basis von Transmissions- und Reflexionsspektren**

COSP 2011 Colloquium Optische Spektrometrie, 21.–22.3.2011, Berlin, Deutschland

Stenzel, O.; Wilbrandt, S.; Kaiser, N.; Schmitz, C.; Turowski, M.; Ristau, D.; Awakowicz, P.; Brinkmann, R.P.; Musch, T.; Rolfes, I.; Steffen, H.; Foest, R.; Ohl, A.; Köhler, T.; Dolgonos, G.; Frauenheim, T.

**Plasma and optical thin film technologies**

SPIE Optical Systems Design 2011, Advances in Optical Thin Films IV, 5.–8.9.2011, Marseille, France; SPIE Proceedings Vol. 8168 (2011) 81680L, ISBN 9780819487940

Stutzki, F.; Jansen, F.; Eidam, T.; Jauregui, C.; Limpert, J.; Tünnermann, A.

**Robust single-mode high average power very large mode area fiber amplifiers**

Advanced Solid-State Photonics (ASSP), 13.–16.2.2011, Istanbul, Turkey, OSA Technical Digest (Optical Society of America 2011) (2011) AMB11

Stutzki, F.; Jansen, F.; Jauregui, C.; Limpert, J.; Tünnermann, A.

**Dynamic waveguide properties of active fibers under high power operation**

Proceedings CLEO/Europe – EQEC 2011, OSA Technical Digest (Optical Society of America 2011) (2011) CJ3\_4

Szeghalmi, A.; Arnold, M.; Berger, A.; Schammelt, N.; Fücksel, K.; Knez, M.; Kley, E.-B.; Zahn, D.R.T.; Tünnermann, A.

**Atomic Layer Deposition of Iridium Thin Films and their Application in Gold Electrodeposition**

SPIE Proceedings Vol. 8168 (2011) 81680K, ISBN 9780819487940

Thomas, J.; Hilbert, V.; Geiss, R.; Tünnermann, A.; Nolte, S.

**Femtosecond pulse written quasi phase matching element in x-cut lithium niobate**

Proceedings CLEO/Europe – EQEC 2011, OSA Technical Digest (Optical Society of America 2011) (2011) CD3\_2

Trost, M.; Schröder, S.; Duparré, A.; Tünnermann, A.

**Light scattering from surfaces and multilayers: Measurement and modeling using vector perturbation theories**

29<sup>th</sup> PIERS 2011 (Progress In Electromagnetic Research Symposium), 20.–23.3.2011, Marrakesh, Morocco

Trost, M.; Schröder, S.; Feigl, T.; Duparré, A.; Tünnermann, A.

**Roughness characterization of large EUV mirror optics by laser light scattering**

SPIE Optical Systems Design 2011, Optical Fabrication, Testing, and Metrology IV, 5.–8.9.2011, Marseille, France; SPIE Proceedings Vol. 8169 (2011) 81690P, ISBN 9780819487957

Tünnermann, A.

**Energy efficient solid state laser concepts**

World of Photonics 2011, EOSMOC 2011 – 2<sup>nd</sup> EOS Conference on Manufacturing of Optical Components, 22.–26.5.2011, Munich, Germany

- Tünnermann, A.  
**Green Photonics – Optiklösungen aus Thüringen**  
 LASER World of Photonics 2011, Eröffnung Innovationscluster “Green Photonics”, 22.–26.5.2011, München, Deutschland
- Tünnermann, A.  
**Green Photonics: Optische Lösungen für Energieeffizienz und Ressourcenschonung in Produktion, Beleuchtungs- und Solartechnik**  
 Fachseminar Highlights in der Optik und Photonik, 15.3.2011, Zürich, Schweiz
- Tünnermann, A.  
**Green Photonics: sustainable solutions for the future**  
 Symposium “Optical Valley”, 9.11.2011, Seoul, Korea
- Tünnermann, A.  
**Green Photonics: the bright future of lighting**  
 Zukunftskonferenz Green Photonics & CoOP-TICS Jahrestagung 2011, 18.–19.10.2011, Jena, Germany
- Tünnermann, A.  
**High power fiber lasers: status and prospects**  
 Jenoptik Customer Day, 1.7.2011, Jena, Germany
- Tünnermann, A.  
**High Power solid state lasers: status and prospects**  
 LASER World of Photonics 2011, Application Panel “Solid state lighting”, 22.–26.5.2011, Munich, Germany
- Tünnermann, A.  
**High power solid state lasers: status and prospects**  
 European Automotive Laser Applications 2011, 9.2.2011, Bad Nauheim, Germany
- Tünnermann, A.  
**Neue optische Materialeigenschaften auf Basis von Mikro- und Nanostrukturen**  
 Thüringer Werkstofftag, 30.3.2011, Jena, Deutschland
- Tünnermann, A.  
**Optics and MedTech cluster Jena: sustainable solutions for the future**  
 7<sup>th</sup> Japanese-German Industry Forum 2011, 15.11.2011, Tokio, Japan
- Tünnermann, A.  
**Prospects and challenges in high power fiber laser technology**  
 OSA Advanced Photonics Congress, 13.–14.6.2011, Toronto, Canada
- Tünnermann, A.  
**Prospects and challenges in high power fiber lasers**  
 1<sup>st</sup> International conference in frontiers of laser processing ICFL, 13.7.2011, Changchun, China
- Tünnermann, A.  
**Prospects and challenges in high power fiber lasers**  
 International Workshop on Fiber Lasers, Sensors and Materials, 27.–29.7.2011, Reichenschwand, Germany
- Tünnermann, A.  
**Small lenses go big – trends in mobile imaging**  
 LASER World of Photonics 2011, Analystenkonferenz Spectaris, 22.–26.5.2011, Munich, Germany
- Tünnermann, A.  
**Solutions with light – made in Thuringia**  
 SPIE Photonics West, Thuringia’s reception, 22.–26.1.2011, San Francisco, CA, USA
- Tünnermann, A.  
**Status und Perspektiven in Laserentwicklung und Applikation**  
 Physikalisches Kolloquium IPMS, 11.1.2011, Dresden, Deutschland
- Tünnermann, A.  
**Trends in mobile imaging – small lenses go big**  
 1<sup>st</sup> EOS Topical Meeting on Micro- and Nano-Optoelectronic Systems, 7.–9.12.2011, Bremen, Germany
- Tünnermann, A.  
**Trends in mobile imaging – small lenses go big**  
 37<sup>th</sup> International Conference on Micro and Nano Engineering (MNE), 19.–23.9.2011, Berlin, Germany
- Tünnermann, A.; Limpert, J.  
**Prospects and challenges in high power fiber laser technology**  
 Proceedings Specialty Optical Fibers (SOF), OSA Technical Digest (Optical Society of America 2011) (2011) SOMA1
- Vogler, U.; Bich, A.; Voelkel, R.; Stürzebecher, L.; Zeitner, U.D.; Hornung, M.  
**Mask aligner process enhancement by spatial filtering**  
 SPIE Optical Systems Design 2011, Illumination Optics II, 5.–8.9.2011, Marseille, France; SPIE Proceedings Vol. 8170 (2011) 81700E, ISBN 9780819487964
- Voigtländer, C.; Zeil, P.; Thomas, J.; Ams, M.; Williams, R.J.; Withford, M.J.; Tünnermann, A.; Nolte, S.  
**Fs laser induced apodised Bragg waveguides in fused silica**  
 SPIE Proceedings Vol. 7925 (2011) 79250Y, ISBN 9780819484628
- Wächter, C.; Michaelis, D.; Flämmich, M.; Danz, N.; Dannberg, P.; Bräuer, A.  
**Micro-optical beam-shaping concept for tailored light-emission patterns from OLEDs**  
 SPIE Optics + Photonics 2011, Organic Light Emitting Materials and Devices XV, 21.–25.8.2011, San Diego, CA, USA

Walter, I.; Zeh, T.; Helbert, J.; Hiesinger, H.; Gebhardt, A.; Hirsch, H.; Knollenberg, J.; Kessler, E.; Rataj, M.; Habermeier, J.; Peter, G.  
**Deep space instrument design for thermal infrared imaging with MERTIS**  
SPIE Optics + Photonics 2011, Infrared Remote Sensing and Instrumentation XIX, 21.–25.8.2011, San Diego, CA, USA  
SPIE Proceedings Vol. 8154 (2011) 81540Y, ISBN 9780819487643

Weber, T.; Käsebier, T.; Szeghalmi, A.; Knez, M.; Kley, E.-B.; Tünnermann, A.  
**High aspect ratio iridium wire grid polarizer for UV applications**  
World of Photonics 2011, EOSMOC 2011 – 2<sup>nd</sup> EOS Conference on Manufacturing of Optical Components, 22.–26.5.2011, Munich, Germany

Wilke, M.; Wippermann, F.; Zoschke, K.; Toepper, M.; Ehrmann, O.; Reichl, H.; Lang, K.-D.  
**Prospects and limits in wafer-level-packaging of image sensors**  
Proceedings 61<sup>st</sup> Electronic Components and Technology Conference (ECTC) (2011) p. 1901–1907, ISBN 978-1-61284-497-8

Williams, R.J.; Voigtländer, C.; Steel, M.J.; Marshall, G.D.; Tünnermann, A.; Nolte, S.; Withford, M.J.  
**Apodized point-by-point fiber Bragg gratings**  
Proceedings CLEO/Europe – EQEC 2011, OSA Technical Digest (Optical Society of America 2011) (2011) CM4\_1

Willis, C.; Bradford, J.D.; Sims, R.A.; Shah, L.; Richardson, M.; Thomas, J.; Becker, R.G.; Voigtländer, C.; Tünnermann, A.; Nolte, S.  
**All-fiber single-mode PM thulium fiber lasers using femtosecond laser written fiber Bragg gratings**  
SPIE Proceedings Vol. 7914 (2011) 79140I, ISBN 9780819484512

Willis, C.C.; Bradford, J.; Sims, R.; Shah, L.; Richardson, M.; Thomas, J.; Becker, R.; Voigtländer, C.; Tünnermann, A.; Nolte, S.  
**Monolithic polarization maintaining thulium fiber laser using high and low reflectivity FBGs**  
Advanced Solid-State Photonics (ASSP), 13.–16.2.2011, Istanbul, Turkey, OSA Technical Digest (Optical Society of America 2011) (2011) AMB10

Willis, C.C.; Bradford, J.D.; Sims, R.A.; Shah, L.; Richardson, M.; Thomas, J.; Becker, R.G.; Voigtländer, C.; Tünnermann, A.; Nolte, S.  
**Monolithic narrow linewidth polarization-maintaining thulium fiber laser using femtosecond laser written fiber Bragg gratings**  
SPIE Proceedings Vol. 8039 (2011) 80390H, ISBN 9780819486134

Wippermann, F.C.; Reimann, A.; Leibel, G.  
**Endurance analysis of optical master stamps for UV-replication**  
SPIE Proceedings Vol. 7926 (2011) 792603, ISBN 9780819484635

Wirth, C.; Schmidt, O.; Schreiber, T.; Eberhardt, R.; Tünnermann, A.  
**High power tandem pumped photonic crystal fiber amplifier**  
Proceedings CLEO 2011 – Laser Applications to Photonic Applications, OSA Technical Digest (Optical Society of America 2011) (2011) CThU7

Yulin, S.; Nesterenko, V.; Feigl, T.; Kaiser, N.  
**Development of EUV/X-Ray multilayer optics in IOF**  
262. PTB-Seminar on EUV Metrology, 27.–28.10.2011, Berlin, Germany

Yulin, S.; Nesterenko, V.; Feigl, T.; Kaiser, N.  
**Reflective mirrors for next generation lithography**  
2011 International Symposium on Extreme Ultraviolet Lithography, 17.–19.10.2011, Miami, Florida, USA

Yulin, S.; Schürmann, M.; Nesterenko, V.; Feigl, T.; Kaiser, N.; Schürmann, M.C.; Tkachenko, B.; Hill, S.B.; Faradzhev, N.S.; Richter, L.J.; Lucatorto, T.B.  
**Lifetime of EUV optics under pulsed source**  
SPIE Advanced Lithography 2011, 27.2.–4.3.2011, San Jose, CA, USA

Zwick, S.; Kühmstedt, P.; Notni, G.  
**Phase-shifting fringe projection system using freeform optics**  
SPIE Optical Systems Design 2011, Optical Design and Engineering IV, 5.–8.9.2011, Marseille, France  
SPIE Proceedings Vol. 8169 (2011) 81690W, ISBN 9780819487957