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ANHANG

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DIE FRAUNHOFER-GESELLSCHAFT

MITGLIEDSCHAFTEN

FRAUNHOFER-VERBUND LIGHT & SURFACES

NAMEN, DATEN UND EREIGNISSE

RÜCKBLICK

AUSBLICK

AUSGEWÄHLTE FÖRDERPROJEKTE

KONTAKT

IMPRESSUM



DIE FRAUNHOFER-GESELLSCHAFT THE FRAUNHOFER-GESELLSCHAFT

Die Fraunhofer-Gesellschaft ist die führende Organisation für angewandte Forschung in Europa. Unter ihrem Dach arbeiten 72 Institute und Forschungseinrichtungen an Standorten in ganz Deutschland. Mehr als 25 000 Mitarbeiterinnen und Mitarbeiter erzielen das jährliche Forschungsvolumen von 2,3 Milliarden Euro. Davon fallen knapp 2 Milliarden Euro auf den Leistungsbereich Vertragsforschung. Rund 70 Prozent dieses Leistungsbereichs erwirtschaftet die Fraunhofer-Gesellschaft mit Aufträgen aus der Industrie und mit öffentlich finanzierten Forschungsprojekten. Internationale Kooperationen mit exzellenten Forschungspartnern und innovativen Unternehmen weltweit sorgen für einen direkten Zugang zu den wichtigsten gegenwärtigen und zukünftigen Wissenschafts- und Wirtschaftsräumen.

Unsere Vertragspartner und Auftraggeber sind:

- Industrieunternehmen
- Dienstleistungsunternehmen
- Öffentliche Hand

Die wichtigsten Kennzahlen auf einen Blick

- 72 Institute und Forschungseinrichtungen
- Rund 25 000 Mitarbeiterinnen und Mitarbeiter
- 2,3 Milliarden Euro Forschungsvolumen jährlich
- Über 70 Prozent werden mit Aufträgen aus der Industrie und mit öffentlich finanzierten Forschungsprojekten erwirtschaftet
- Internationale Zusammenarbeit durch weltweite Niederlassungen

www.fraunhofer.de

The Fraunhofer-Gesellschaft is the leading organization for applied research in Europe. Its research activities are conducted by 72 institutes and research units at locations throughout Germany. The Fraunhofer-Gesellschaft employs a staff of more than 25,000, who work with an annual research budget totaling 2.3 billion euros. Of this sum, almost 2 billion euros is generated through contract research. Around 70 percent of the Fraunhofer-Gesellschaft's contract research revenue is derived from contracts with industry and from publicly financed research projects. International collaborations with excellent research partners and innovative companies around the world ensure direct access to regions of the greatest importance to present and future scientific progress and economic development.

Customers and contractual partners are:

- Industry
- Service sector
- Public administration

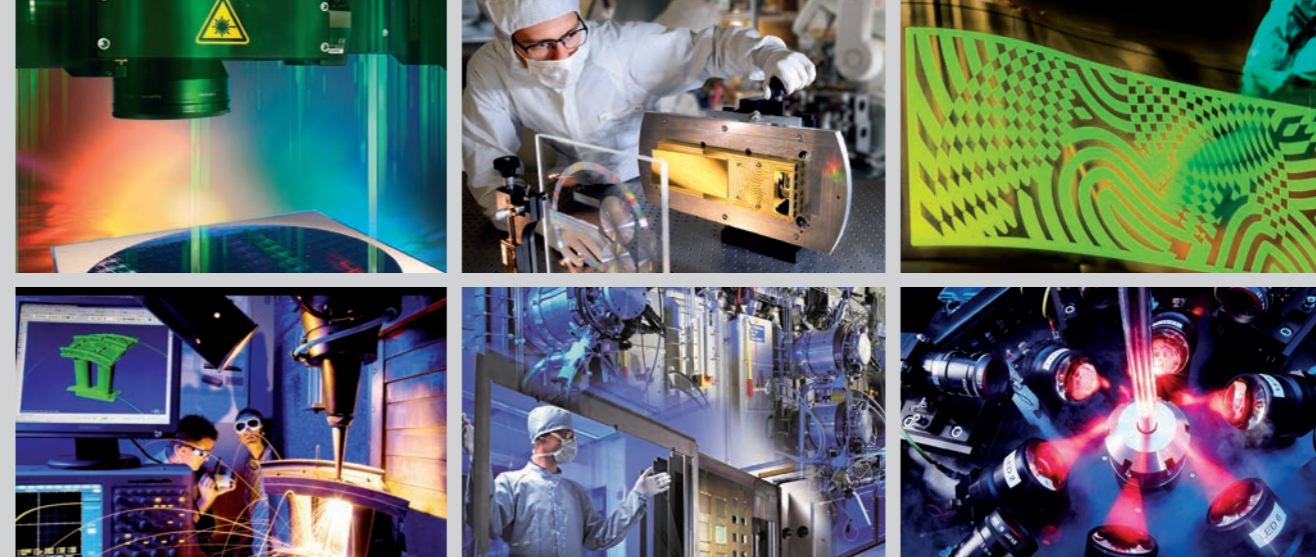
Key figures at a glance

- 72 institutes and research units
- 25,000 staff
- 2.3 billion euros annual research budget totaling
- More than 70 percent of the Fraunhofer-Gesellschaft's contract research revenue is derived from contracts with industry and from publicly financed research projects
- International cooperation through affiliated research centers and worldwide representative offices

www.fraunhofer.de

MITGLIEDSCHAFTEN MEMBERSHIPS

- 3D-Netzwerk (Initiative der Wirtschaftsförderung Solingen GmbH & Co. KG)
- AMA Fachverband für Sensorik e. V.
- AK Glasig-kristalline Multifunktionswerkstoffe
- Bundesverband mittelständische Wirtschaft (BVMW)
- Deutsche Glastechnische Gesellschaft
- Dresden-concept e. V.
- Energy Saxony e. V.
- Europäische Forschungsgesellschaft Dünne Schichten e. V. (EFDS)
- European Association for the Promotion of UV and EB curing
- Fachverband für Mikrotechnik
- Forum MedTech Pharma e. V.
- Forschungsallianz Kulturerbe
- Fraunhofer-Allianz Batterien
- Fraunhofer-Allianz Reinigungstechnik
- Fraunhofer-Verbund Light & Surfaces
- Informationsdienst Wissenschaft
- International Council for Coatings on Glass ICCG e. V.
- International Electrotechnical Commission IEC, TC 110 Electronic display devices, WG 12 Eyewear display
- International Irradiation Association
- Kompetenznetz Industrielle Plasma-Oberflächentechnik INPLAS e. V.
- Netzwerk »Dresden - Stadt der Wissenschaft«
- Organic Electronics Saxony e. V. (OES)
- Photonics 21
- Plasma Germany
- Silicon Saxony e. V.
- Verband der Elektrotechnik - Bezirksverein Dresden e. V. (VDE)
- Verband deutscher Maschinen- und Anlagenbau e. V. (VDMA)
- Verband Deutsches Reisemanagement e. V. (VDR)
- Verbundinitiative Maschinenbau Sachsen



FRAUNHOFER VERBUND LIGHT & SURFACES

FRAUNHOFER GROUP FOR LIGHT & SURFACES

Competence by Networking

Six Fraunhofer institutes cooperate in the Fraunhofer Group Light & Surfaces. Co-ordinated competences allow quick and flexible alignment of research work in the field of optics, laser and thin film technology as well as material on the requirements of different fields of application. Coordinated activities are carried out to answer actual and future challenges, especially in the fields of energy, environment, production, information and security.

Core Competences of the Group

- Surface and coating functionalization
- Laser-based manufacturing processes
- Laser development and nonlinear optics
- Materials in optics and photonics
- Microassembly and system integration
- Micro and nano technology
- Carbon technology
- Measurement methods and characterization
- Ultra precision engineering
- Material technology
- Plasma and electron beam sources

Business Areas

- Ablation and cutting
- Imaging and illumination
- Additive manufacturing
- Light sources and laser systems
- Lithography
- Material testing and analytics
- Medical engineering and biophotonics
- Micro systems and sensors
- Optical systems and instrumentation
- Tooling and mold making

Fraunhofer Institute for Organic Electronics, Electron Beam and Plasma Technology FEP

The Fraunhofer FEP works on innovative solutions in the fields of vacuum coating, surface treatment as well as organic semiconductors. The core competences electron beam technology, sputtering, plasma-activated deposition and high-rate PECVD as well as technologies for organic electronics and IC/system design provide a basis for these activities. Fraunhofer FEP continuously enhances them and makes them available to a wide range of industries: mechanical engineering, transport, biomedical engineering, architecture and preservation, packaging, environment and energy, optics, sensor technology and electronics as well as agriculture.

www.fep.fraunhofer.de

Fraunhofer Institute for Laser Technology ILT

With more than 400 employees the Fraunhofer ILT develops innovative laser beam sources, laser technologies, and laser systems for its partners from the industry. Our technology areas cover the following topics: laser and optics, medical technology and biophotonics, laser measurement technology and laser material processing. This includes laser cutting, caving, drilling, welding and soldering as well as surface treatment, micro processing and additive manufacturing. Furthermore, the Fraunhofer ILT is engaged in laser plant technology, process control, modeling as well as in the entire system technology.

www.ilt.fraunhofer.de

Fraunhofer Institute for Applied Optics and Precision Engineering IOF

The Fraunhofer IOF develops innovative optical systems to control light from the generation to the application. Our service range covers the entire photonic process chain from optomechanical and opto-electrical system design to the manufacturing of customized solutions and prototypes. The institute works in the five business fields of Optical Components and Systems, Precision Engineering Components and Systems, Functional Surfaces and Layers, Photonic Sensors and Measuring Systems and Laser Technology.

www.iof.fraunhofer.de

Fraunhofer Institute for Physical Measurement Techniques IPM

The Fraunhofer IPM develops tailor-made measuring techniques, systems and materials for industry. In this way we enable our customers to minimize their use of energy and resources while at the same time maximizing quality and reliability. Fraunhofer IPM makes processes more ecological and at the same time more economical. Many years of experience with optical technologies and functional materials form the basis for high-tech solutions in the fields of production control, materials characterization and testing, object and shape detection, gas and process technology as well as functional materials and systems.

www.ipm.fraunhofer.de

Fraunhofer Institute for Surface Engineering and Thin Films IST

As an innovative R&D partner the Fraunhofer IST offers complete solutions in surface engineering which are developed in cooperation with customers from industry and research. The IST's »product« is the surface, optimized by modification, patterning, and/or coating for applications in the business units mechanical engineering, tools and automotive technology, aerospace, energy and electronics, optics, and also life science and ecology. The extensive experience of the Fraunhofer IST with thin film deposition and film applications is complemented by excellent capabilities in surface analysis and in simulating vacuum-based processes.

www.ist.fraunhofer.de

Fraunhofer Institute for Material and Beam Technology IWS

The Fraunhofer IWS is known for its innovations in the business units joining and cutting as well as in the surface and coating technology. Across all business units our interdisciplinary topics include energy storage systems, energy efficiency, additive manufacturing, lightweight construction and big data. Our special feature is the expertise of our scientists in combining the profound know-how in materials engineering with the extensive experience in developing system technologies. Every year, numerous solutions with regard to laser material processing and coating technology have been developed and have found their way into industrial applications.

www.iws.fraunhofer.de

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NAMEN, DATEN UND EREIGNISSE

NAMES, DATES AND EVENTS

PATENTE

PATENTS

F54817 / DE 10 2014 202 945 B4

Verfahren zum Herstellen eines organischen Bauelementes und organisches elektronisches Bauelement
M. Stanel, S. Mogck

F51293 / EP 2 564 383 B1

Pixel circuit for an active matrix OLED display
T. Presberger, D. Kreye

F52278 / TW 1569245 B1

Bidirectional display and control thereof
R. Herold, B. Richter, U. Vogel

FEP 275 EP / EP 2 526 217 B1

Method for vacuum-coating a substrate with transparent, conductive metal alloy oxide and a transparent, conductive layer made of a metal alloy oxide
M. Fahland, A. Schönberger, W. Schönberger, S. Straach, N. Schiller

FEP 308 / EP 2 820 165 B1

Method for depositing a LiPON coating on a substrate
S. Günther, H. Morgner, S. Straach, B. Meyer, M. Fahland

F50364 / DE 10 2009 057 212 B4

Unterdrückung partieller Kurzschlussursachen bei elektrischen Bauelementen auf Basis organischer Materialien
M. Eritt, J. Amelung, C. May

F49432 / EP 2 316 143 B1

OLED and method for producing an OLED
J. Amelung

FEP 264 / US 9,640,369 B2

Coaxial Hollow Cathode Plasma Assisted Directed Vapor Deposition and Related Method Thereof
N. Haydn, G. Wadley, G. Mattausch, H. Morgner, F.-H. Rögner

DISSERTATIONEN

DISSERTATIONS

B. Graffel

Untersuchungen zum Einsatz des Elektronenstrahls bei der Herstellung passivierter Solarzellen-Rückseitenkontakte
Technische Universität Dresden

M. Jahnel

Organische Photosensoren mit spektraler Anpassung
Technische Universität Dresden

FEP 316 / EP 2 768 012 B1

Method of detaching a disc-shaped single crystal from a base body using an electron beam
D. Temmler, K. Bedrich, S. Saager

FEP 308 / JP 6147280 B2

Method for depositing a LiPON coating on a substrate
S. Günther, H. Morgner, S. Straach, B. Meyer, M. Fahland

F48317 / EP 2 065 698 B1

Chip for analysing a medium with integrated organic light emitter and process of manufacturing such a chip
K. Leo, U. Vogel

FEP 324 / UA 114690 C

Apparatus for impinging bulk material with accelerated electrons
A. Weidauer, G. Mattausch, F.-H. Rögner, J. Kubusch

FEP 342 / US 9,771,650 B2

Method for Modifying a TCO Coating
V. Fischer, B. Graffel, F. Winckler, B. Meyer, M. Fahland, S. Günther

FEP 357 / DE 10 2016 121 982 B3

Verfahren zum Aufbereiten eines Transplantates
C. Wetzels, J. Schönfelder, S. Walker, J. Kubusch

F52352 / CN 103636024 B

Electroluminescent Light Emission Device Comprising an Optical Lattice Structure and Method for Manufacturing Same
R. Pfeifer, K. Fehse, U. Vogel, K. Leo

FEP 345 / DE 10 2016 101 856 B4

Verfahren zum Abscheiden einer CdTe-Schicht auf einem Substrat
H. Morgner, C. Metzner, D. Hirsch, O. Zywitzki, L. Decker, T. Werner, B. Siepchen, B. Späth, K. Velappan, C. Kraft, C. Drost

S. Mühl

An investigation of slot-die coated layers in evaporated small molecule organic light-emitting diodes targeting large area and flexible applications
Technische Universität Dresden

PREISE

AWARDS



Deutsch-Französischer Wirtschaftspreis
Dezember 2017

Erfolgreiche Zusammenarbeit des Fraunhofer FEP mit MICROOLED als Industriepartner

German-French Business Award
December 2017

Successful collaboration of Fraunhofer FEP with MICROOLED as industry partner



„Innovator des Jahres“ DESIGN&ELEKTRONIK
November 2017

Auszeichnungen in den Bereichen „Optoelektronik“ und als Teil des „besten Forschungskonsortiums“ zusammen mit den Partnern des vom BMBF geförderten Projektes „KONFEKT“

„Innovator of the Year“ DESIGN&ELEKTRONIK
November 2017

Awards in the areas „Optoelectronics“ and as part of the „Best Research Consortium“ together with the partner of the BMBF funded project „KONFEKT“



RadTech RTE Advanced Development Award
Dezember 2017

Javier Portillo Casado
Low Energy Electron Beam Irradiation of Liquids for Medical Applications

RadTech RTE Advanced Development Award
December 2017

Javier Portillo Casado
Low Energy Electron Beam Irradiation of Liquids for Medical Applications



Fraunhofer-Medaille
Oktober 2017

Prof. Dr. Volker Kirchhoff
Ehrung mit der Fraunhofer-Medaille anlässlich der erfolgreichen Integration des ehemaligen Fraunhofer COMEDD in das Fraunhofer FEP

Fraunhofer Medal
October 2017

Prof. Dr. Volker Kirchhoff
Honored with the Fraunhofer Medal with regard to the successful integration of the former Fraunhofer COMEDD into Fraunhofer FEP

VERÖFFENTLICHUNGEN

PUBLICATIONS

A detailed list of all publications from Fraunhofer FEP in the year 2017 can be found at:

<http://publica.fraunhofer.de/institute/FEPI/2017>

X. Fan, K. Sokorai, A. Weidauer, G. Gotzmann, F.-H. Rögner, E. Koch
Comparison of gamma & electron beam irradiation in reducing populations of *E. coli* artificially inoculated on mung bean, clover and fenugreek seeds and affecting germination and growth of seeds
Radiation Physics and Chemistry, Vol. 130, 2017, p. 306 - 315

O. Zywitzki, T. Modes, S. Barth, H. Bartzsch, P. Frach
Effect of scandium content on structure and piezoelectric properties of AlScN films deposited by reactive pulse magnetron sputtering
Surface and Coating Technology, Vol. 309, 2017, p. 417 - 422

G. Gotzmann, J. Beckmann, B. Scholz, U. Herrmann, J. Neunzehn
Electron-beam modification of DLC coatings for biomedical applications
Surface and Coating Technology, Vol. 311, 2017, p. 248 - 256

W. Wisniewski, S. Saager, A. Böbenroth, C. Rüssel
Experimental Evidence Concerning the Significant Information Depth of Electron Backscatter Diffraction (EBSD)
Ultramicroscopy, Vol. 173, 2017, p. 1 - 9

C. Hengst, S. B. Menzel, G.K. Rane, V. Smirnov, K. Wilken, B. Leszczynska, D. Fischer, N. Prager
Mechanical properties of ZTO, ITO, and a-Si: H multilayer films for flexible thin film solar cells
Materials, Vol. 10, Issue 3, 2017, Article 245, p. 1 - 11

J. Fahlteich, C. Steiner, N. Schiller, O. Miesbauer, K. Noller, K.-J. Deichmann, M. Mirza, S. Amberg-Schwab
Roll-to-Roll Thin Film Coating on Fluoropolymer Webs - Status, Challenges and Applications
Surface and Coating Technology, Vol. 314, 2017, p. 160 - 168

M. Top, S. Schönfeld, J. Fahlteich, S. Bunk, T. Kühnel, S. Straach, J. De Hosson
Hollow-cathode activated PECVD for the high-rate deposition of permeation barrier films
Surface and Coating Technology, Vol. 314, 2017, p. 155 - 159

B. Scheffel, O. Zywitzki, C. Metzner
Plasma-assisted reactive high-rate vapor deposition of yttria-stabilized zirconia using electron beam evaporation and spotless vacuum arc
Surface and Coating Technology, Vol. 316, 2017, p. 155 - 161

J. Fichtner, S. Günther, B. Butschkau
Investigation of electron beam curable varnishes as smoothing layers
European Coatings Journal, Vol. 5, 2017, p. 38 - 41

T. Preussner, M. Junghähnel, U. Hartung, T. Kopte, J. Fahlteich
Preparation of a Gradient SiO₂ Antireflective Coating by a Co-Sputtering Method Using a Dual Rotatable Magnetron System
Proceedings of 59th Annual SVC - Society of Vacuum Coaters - Technical Conference, Indianapolis, USA, 09. - 13. Mai 2016, ©2017, p. 469 - 474

J. Fahlteich, C. Steiner, N. Schiller, O. Miesbauer, K. Noller, K.-J. Deichmann, M. Mirza, S. Amberg-Schwab
Roll-to-Roll Thin Film Coating on Fluoropolymer Webs - Status, Challenges and Applications
Proceedings of 59th Annual SVC - Society of Vacuum Coaters - Technical Conference, Indianapolis, USA, 09. - 13. Mai 2016, ©2017, p. 416 - 428

A. Jiménez-Solano, M. Anaya, M. E. Calvo, M. Alcon-Camas, C. Alcañiz, E. Guillén, N. Martínez, M. Gallas, T. Preussner, R. Escobar-Galindo, H. Miguez
Aperiodic Metal-Dielectric Multilayers as Highly Efficient Sunlight Reflectors
Advanced Optical Materials, Vol. 5, Issue 9, 2017, Article 1600833

P. Frach, D. Glöß, T. Goschurny, A. Drescher, U. Hartung, H. Bartzsch, A. Heisig, H. Grune, L. Leischnig, S. Leischnig, C. Bundesmann
Large area precision coatings by pulse magnetron sputtering
Proceedings of SPIE Conference Advanced Optics for Defense Applications, Anaheim, USA, 09. - 13. April 2017, Vol. 10181, p. 101810K-1 - 101810K-7

P. Frach, S. Barth, H. Bartzsch, D. Glöß
Energy harvesting based on piezoelectric AlN and AlScN thin films deposited by high rate sputtering
Proceedings of SPIE Conference Advanced Optics for Defense Applications, Anaheim, USA, 09. - 13. April 2017, Vol. 10194, p. 10194Z-1 - 10194Z-10

F. Patrovsky, V. Fiehler, S. Derenko, S. Barth, H. Bartzsch, K. Ortstein, P. Frach, L. M. Eng
Anodization of sputtered substoichiometric aluminum oxide thin-films for improved nanorod array fabrication
Materials Research Express, Vol. 4, 2017, p. 055010

E. Bodenstern, S. Saager, M. Metzner, M. Hoffmann, O. Hild, C. Metzner, U. Vogel
Direct Electron Beam Micropatterning and Thermal Annealing of Organic Light Emitting Devices
Proceedings of SID Symposium Digest of Technical Papers, Vol. 48, Issue 1, 2017, p. 1932 - 1935

U. Vogel, B. Beyer, M. Schober, P. Wartenberg, S. Brenner, G. Bunk, S. Ulbricht, P. König, B. Richter
Ultra-low Power OLED Microdisplay for Extended Battery Life in NTE Displays
Proceedings of SID Symposium Digest of Technical Papers, Vol. 48, Issue 1, 2017, p. 1125 - 1128

S. Winkler, M. Dietze, J. Edelmann
E-beam sterilization of microstructures in titanium surfaces for medical implants
Proceedings of 17th International Conference & Exhibition of the European Society for Precision Engineering and Nanotechnology, EUSPEN 2017, Hannover, Germany, 29. Mai - 02. Juni 2017, p. 481 - 482

G. Obenaus
Kreatives Wärmepumpen - Konzept heizt und kühlt gleichzeitig
Die Kälte + Klimatechnik, Ausgabe 06/2017, Seite 42 - 45

R. Barré, R. Bartmann, S. Jurk, M. Kuhlmeier, B. Duckstein, A. Seeboth, D. Löttsch, C. Rabe, P. Frach, H. Bartzsch, M. Gittner, S. Bruns, G. Schottner, J. Fischer
Time-sequential working wavelength-selective filter for flat autostereoscopic displays
Applied Sciences Vol. 7, Nr. 2, 2017, Art. 194, 20 S.

M. Piwko, T. Kuntze, S. Winkler, S. Straach, P. Härtel, H. Althues, S. Kaskel
Hierarchical columnar silicon anode structures for high energy density lithium sulfur batteries
Journal of Power Sources, Vol. 351, 2017, S. 183 - 191

C. May
Next steps in OLED Lighting
OPE Journal, Vol. 19, 2017, p. 14

U. Vogel, B. Richter, P. Wartenberg, P. König, O. Hild, K. Fehse, M. Schober, E. Bodenstern, B. Beyer
OLED microdisplays in near-to-eye applications: challenges and solutions
Proceedings SPIE, SPIE Digital Optical Technologies, Vol. 10335, 2017, p. 1033503-1 - 1033503-12

V. Krishnakumar, B. Späth, C. Drost, C. Kraft, B. Siepchen, A. Delahoy, X. Tan, K. Chin, S. Peng, D. Hirsch, O. Zywitzki, T. Modes, H. Morgner
Close spaced sublimation deposition of CdTe layers with process gas oxygen for thin film solar cells
Thin Solid Films, Vol. 633, 2017, p. 112 - 117

M. H. Jakob, S. Gutsch, C. Chatelle, A. Krishnaraja, J. Fahlteich, W. Weber, M. Zacharias
Flexible thin film pH sensor based on low-temperature atomic layer deposition
Physica Status Solidi - Rapid Research Letters, Vol. 11, Issue 7, 2017, Article 1700123

M. Chiari, A. Chimielewski, F.-H. Rögner
Accelerators and Industry
Applications of Particle Accelerators in Europe, EUCARD, APAE-Broschüre, p. 42 - 69

M. Top, J. Fahlteich, J. De Hosson
Influence of the applied power on the barrier performance of silicon-containing plasma polymer coatings using a hollow-cathode activated PECVD process
Plasma Processes and Polymers, Vol.14, Issue 9, 2017, p. 1700016, 1 - 8

M. Junghähnel, J. Fahlteich
Thin - Film Deposition on Flexible Glass by Plasma Processes
S. M. Garner, Flexible Glass, ISBN: 978-1-118-94636-7, Kapitel 5, S. 129 - 179

F.-H. Rögner
Die Trocknung - Kostentreiber und Stiefkind der Reinigung?
WOMAG, Vol. 10, 2017 p. 30 - 31

M. Junghähnel, J. Westphalen
Processing on Flexible Glass - Challenges and Opportunities
SVC Bulletin, Winter 2017, p. 31 - 39

F. Fietzke, O. Zywitzki
Structure and Properties of Magnetron-sputtered Manganese Ferrite Films
Thin Solid Films, Vol. 644, 2017, p. 138 - 145

G. Gotzmann
Long-term stable surface modification of DLC coatings
Current Directions in Biomedical Engineering, Volume 3, Nr. 2, 2017, Pages 351 - 354

J. Fahlteich, M. Fahland, P. Kudlacek, W. Manders, M. Junghähnel, S. Mogck, C. Keibler
Roll-to-Roll Processing of Functional Substrates for Flexible Electronics
Proceedings of IDW 2017, Sendai, Japan, 04. - 08. Dezember 2017, p. 1531 - 1534

A. Delan, R. Ngoumeni, K. Vondkar, D. Glöß, G. Gerlach
Eigenschaften von Samariumsulfidschichten für Sensoranwendungen
Onlineproceedings of 13. Dresdner Sensor Symposium, Dresden, Germany, 04. - 06. Dezember 2017, page 243 - 247
www.ama-science.org/proceedings/details/2755

M. Hoffmann
Conductor structures for biodegradable electronics
Coating International, Band 50, Ausgabe 11, 2017 p. 20

RÜCKBLICK HIGHLIGHTS

SID-ME Chapter Spring Meeting 2017

13.03.–14.03.2017, Dresden



This year's SID Mid-Europe (SID-ME) Spring Meeting with focus on „Wearables and Projection Displays“ was organized by Fraunhofer FEP, Dresden, Germany.

The announced talks and presentations of 20 internationally renowned speakers, thereof 3 keynote speakers from Microsoft Corp., Technical University of Dresden and University of Cambridge as well as 5 invited speakers were attracting more than 100 participants from 18 countries worldwide. Additionally to this, more than 10 poster contributions attracted the interest of many participants. The successful first conference day with many interesting talks ended with a reception and evening event at Dresden city centre. Both days were accompanied by poster sessions with 13 poster contributions as well as an industrial exhibiton with 6 booths and many possibilities for networking and interesting conversations.

Many thanks to our sponsors and all participants and contributions!

VISION | FLEXIBLE GLASS

04.04.–05.04.2017, Dresden



VISION | FLEXIBLE GLASS is an international technology and networking event that focuses on research and development for ultra-thin flexible glass in both sheet-to-sheet and roll-to-roll processes at Fraunhofer FEP.

Fraunhofer FEP began its activities in the field of flexible glass in 2013, and has since then increasingly established important collaborations with the world leading manufacturers for flexible glass.

Together with VON ARDENNE GmbH, we presented the world's first roll-to-roll coater for ultra-thin glass – the FOSA LabX 330, which was installed in October 2016 at Fraunhofer FEP in Dresden.

With more than 130 participants, VISION | FLEXIBLE GLASS was a huge success. We would like to especially thank the sponsors VON ARDENNE GmbH and SCHOTT AG.

pro flex 2017

27.11.–28.11.2017, Dresden



The scope of the workshop pro flex 2017 was to bring together equipment suppliers, film manufacturers, users of roll-to-roll equipment, converters, end-users of flexible materials as well as R&D institutions.

The talks covered nearly every aspect of roll-to-roll technology and highlighted very interesting and even visionary applications of flexible materials: architecture and OLED lighting. The talks were complemented by many possibilities for discussions as well as a lab tour on the second day.

The workshop pro flex has first been successfully held in 2004 and took place in Dresden, Germany, for the fifth time and with more than 100 participants from 15 countries (Europe, Asia, and America).

“Pro flex 2017 conference was one of the best I have attended with a broad mix of interesting papers. Dr. Nicolas Schiller and his team at Fraunhofer FEP are to be congratulated on putting together an excellent program that was well received by the 100-plus participants.”

Dr. Charles A. Bishop in Converting Quarterly 2018, Q1

AUSBLICK OUTLOOK

Preliminary list of participations 2018

Thementage Grenz- und Oberflächentechnik
13.03.–15.03.2018, Zeulenroda, Germany

LOPEC
14.03.–15.03.2018, Munich, Germany

light+building
18.03.–21.03.2018, Frankfurt/Main, Germany

XPOMET® Convention
21.03.–23.03.2018, Leipzig, Germany

Wearable Europe
11.04.–12.04.2018, Berlin, Germany

Medtec
17.04.–19.04.2018, Stuttgart, Germany

SVC TechCon
05.05.–10.05.2018, Orlando, USA

SID Display Week
20.05.–24.05.2018, Los Angeles, USA

ICCG 12
11.06.–15.06.2018, Würzburg, Germany

AWE Europe
18.10.–19.10.2018, Munich, Germany

... and many more can be found at:

www.fep.fraunhofer.de/events



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AUSGEWÄHLTE FÖRDERPROJEKTE


SELECTION OF FUNDED PROJECTS


Eine detaillierte Auflistung laufender und abgeschlossener Förderprojekte, an denen das Fraunhofer FEP beteiligt ist, finden Sie auf unserer Webseite unter:


www.fep.fraunhofer.de/projekte

 **ARIES**
 Accelerator Research and Innovation for European Science and Society
 Funded by the European Commission in the Horizon 2020 Programme for Research and Innovation
 Förderkennzeichen: 730871

 **LOMID**
 Large cost-effective OLED microdisplays and their applications
 Funded by the European Commission in the Horizon 2020 Programme for Research and Innovation
 Förderkennzeichen: 644101


 **PI-SCALE**
 Shaping the future in OLED lighting
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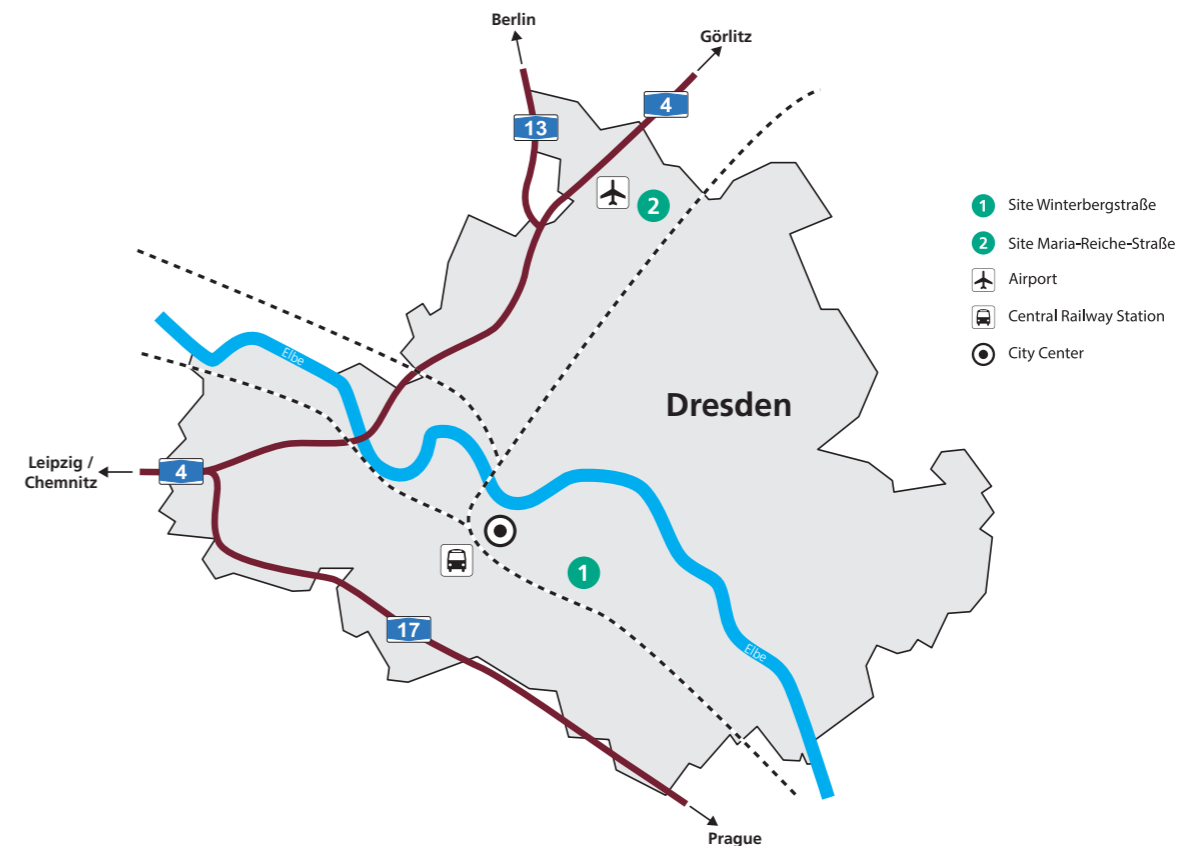
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