

Photonics for Solar Energy Systems

Monday - Wednesday 23 - 25 April 2018

Conference Sessions At A Glance

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Hot Topics I

1: Nanophotonics for Photovoltaics

2: Nanophotonics for Solar Modules

3: Nanostructured Antireflection Coatings and Energy Saving in Buildings

Posters-Monday

4: Thin-film and Tandem Solar Cells

5: Spectral Conversion and Light Trapping

6: Nanowire Solar Cells and Disordered Photonic Nanostructures I

Hot Topics II

7: Disordered Photonic Nanostructures II

8: Disordered Photonic Nanostructures III

Important Dates

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Abstract Due:
25 October 2017

Author Notification:
26 January 2018

Manuscript Due Date:
26 March 2018

Conference Committee

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Conference Chair

[Raif B. Wehrspohn](#), Fraunhofer-Institut für Werkstoffmechanik (Germany)

Conference Co-Chair

Alexander N. Sprafke, Martin-Luther Univ. Halle-Wittenberg (Germany)

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MONDAY 23 APRIL

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Hot Topics I

Monday 23 April 2018
9:00 AM - 11:00 AM
Location: Schweitzer Auditorium

Photonics Europe 2018: Hot Topics Session I

From Einstein doubts to quantum bits: a second quantum revolution

Alain Aspect, Lab. Charles Fabry, Institut d'Optique, France

Pico-Photonics: watching and sensing single molecules by confining light to the atom scale

Jeremy J. Baumberg, NanoPhotonics Ctr., Univ. of Cambridge, United Kingdom

For additional details please visit <http://spie.org/x12297.xml>.

Coffee Break 11:00 AM - 11:25 AM

Opening Remarks

Monday 23 April 2018
11:25 AM - 11:30 AM
Location: Salon 10

Session 1: Nanophotonics for Photovoltaics

Monday 23 April 2018
11:30 AM - 12:50 PM
Location: Salon 10

Session Chair: [Ralf B. Wehrspohn](#), Fraunhofer-Institut für Mikrostruktur von Werkstoffen und Systemen (Germany)

Light management and the dream of photovoltaic energy for 0.01 euro/kWh *(Invited Paper)*

Paper 10688-1

Time: 11:30 AM - 12:00 PM

Author(s): Albert Polman, FOM Institute AMOLF (Netherlands)

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Photonic structures for III-V/Si multi-junction solar cells with efficiency >33% *(Invited Paper)*

Paper 10688-2

Time: 12:00 PM - 12:30 PM

Author(s): Benedikt Bläsi, Oliver Höhn, Hubert Hauser, Fraunhofer-Institut für Solare Energiesysteme (Germany); Nico Tucher, Fraunhofer-Institut für Solare Energiesysteme (Germany), Univ. of Freiburg (Germany); Romain Cariou, Jan Benick, Frank Feldmann, Paul Beutel, David Lackner, Gerald Siefer, Fraunhofer-Institut für Solare Energiesysteme (Germany); Stefan W. Glunz, Fraunhofer-Institut für Solare Energiesysteme (Germany), Univ. of Freiburg (Germany); Andreas W. Bett, Frank Dimroth, Martin Hermle, Fraunhofer-Institut für Solare Energiesysteme (Germany)


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Photon recycling in solar cells under nonideal conditions

Paper 10688-3

Time: 12:30 PM - 12:50 PM

Author(s): Muluneh G. Abebe, Guillaume Gomard, Karlsruher Institut für Technologie (Germany); Lin Zschiedrich, JCMwave GmbH (Germany), Konrad-Zuse-Zentrum für Informationstechnik Berlin (Germany); Carsten Rockstuhl, Ulrich Paetzold, Aimi Abass, Karlsruher Institut für Technologie (Germany)

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Lunch Break 12:50 PM - 2:10 PM

Session 2: Nanophotonics for Solar Modules

Monday 23 April 2018
2:10 PM - 3:30 PM
Location: Salon 10

Session Chair: Alexander N. Sprafke, Martin-Luther-Univ. Halle-Wittenberg (Germany)

Advanced module optics of textured perovskite silicon tandem solar cells

Paper 10688-4

Time: 2:10 PM - 2:30 PM

Author(s): Nico Tucher, Fraunhofer-Institut für Solare Energiesysteme (Germany), Univ. of Freiburg (Germany); Oliver Höhn, Benedikt Bläsi, Jan Christoph Goldschmidt, Fraunhofer-Institut für Solare Energiesysteme (Germany)


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Optimization of encapsulated invisibility cloaks for solar modules

Paper 10688-5

Time: 2:30 PM - 2:50 PM

Author(s): Malte Langenhorst, Martin F. Schumann, Raphael Schmager, Jonathan Lehr, Uli Lemmer, Karlsruher Institut für Technologie (Germany); Bryce S. Richards, Karlsruhe Institute of Technology (Germany); Martin Wegener, Karlsruher Institut für Technologie (Germany)


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Microcone structured encapsulations for light trapping in photovoltaics

Paper 10688-6

Time: 2:50 PM - 3:10 PM

Author(s): Stephan Dottermusch, Raphael Schmager, Efthymios Klampafitis, Bryce S. Richards, Ulrich Paetzold, Karlsruher Institut für Technologie (Germany)


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Viola flower for improved light harvesting in photovoltaics

Paper 10688-7

Time: 3:10 PM - 3:30 PM

Author(s): Raphael Schmager, Benjamin Fritz, Karlsruher Institut für Technologie (Germany); Kaining Ding, Forschungszentrum Jülich GmbH (Germany); Ulrich Lemmer, Bryce S. Richards, Guillaume Gomard, Ulrich W. Paetzold, Karlsruher Institut für Technologie (Germany)

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Coffee Break 3:30 PM - 4:00 PM

Session 3: Nanostructured Antireflection Coatings and Energy Saving in Buildings

Monday 23 April 2018

4:00 PM - 5:50 PM


Location: Salon 10

Session Chair: [Benedikt Bläsi](#), Fraunhofer-Institut für Solare Energiesysteme (Germany)**Broadband and omnidirectional antireflection coatings for III-V concentrating multijunction solar cells** (*Invited Paper*)

Paper 10688-8

Time: 4:00 PM - 4:30 PM


Author(s): Lucio C. Andreani, Marco Liscidini, Marco Passoni, Maddalena Patrini, Univ. degli Studi di Pavia (Italy); Gianluca Timò, Franco Trespidi, RSE SpA (Italy)

[Add To My Schedule](#) **Antireflective nanotextures for monolithic perovskite-silicon tandem solar cells**

Paper 10688-9

Time: 4:30 PM - 4:50 PM


Author(s): Klaus Jäger, Helmholtz-Zentrum Berlin für Materialien und Energie GmbH (Germany); Phillip Manley, Duote Chen, Helmholtz-Zentrum Berlin für Materialien und Energie GmbH (Germany), Zuse Institute Berlin (Germany); Philipp Tockhorn, David Eisenhauer, Grit Köppel, Helmholtz-Zentrum Berlin für Materialien und Energie GmbH (Germany); Martin Hammerschmidt, Sven Burger, Zuse Institute Berlin (Germany), JCMwave GmbH (Germany); Steve Albrecht, Christiane Becker, Helmholtz-Zentrum Berlin für Materialien und Energie GmbH (Germany)

[Add To My Schedule](#) **Nanoimprinted sol-gel materials for antireflective structures on silicon solar cells**

Paper 10688-10

Time: 4:50 PM - 5:10 PM


Author(s): Laura Stevens, Hubert Hauser, Oliver Höhn, Fraunhofer-Institut für Solare Energiesysteme (Germany); Nico Tucher, Fraunhofer-Institut für Solare Energiesysteme (Germany), Univ. of Freiburg (Germany); Christine Wellens, Fraunhofer-Institut für Solare Energiesysteme (Germany); Rainer Jahn, Walther Glaubitt, Fraunhofer-Institut für Silicatforschung ISC (Germany); Claas Müller, Univ. of Freiburg (Germany); Benedikt Bläsi, Fraunhofer-Institut für Solare Energiesysteme (Germany)

[Add To My Schedule](#) **Optical optimization of a wideband antireflection coating using porous MgF₂ for ultrathin CIGS solar cells**

Paper 10688-11

Time: 5:10 PM - 5:30 PM


Author(s): Nasim Rezaei, Olindo Isabella, Delft University of Technology (Netherlands); Zeger Vroon, TNO-Brightlands Materials Center (Netherlands); Miro Zeman, Delft University of Technology (Netherlands)

[Add To My Schedule](#) **A combined experimental and theoretical study into the performance of multilayer vanadium dioxide nanocomposites for energy saving applications**

Paper 10688-12

Time: 5:30 PM - 5:50 PM

Author(s): Christian Sol, Johannes Schläfer, Tao Li, Univ. College London (United Kingdom); Stefan Guldin, University College London (United Kingdom); Ivan P. Parkin, Ioannis Papakonstantinou, Univ. College London (United Kingdom)

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Session PSMon: Posters-Monday

Monday 23 April 2018

5:30 PM - 7:00 PM

Location: Hall Rhin


Conference attendees are invited to attend the Photonics Europe poster session on Monday 17.30 to 19.00. Posters will be on display after 10.00 Monday morning in the Hall Rhin. Come view the posters, enjoy light refreshments, ask questions, and network with colleagues in your field. Authors of poster papers will be present to answer questions concerning their papers. Attendees are required to wear their conference registration badges to the poster sessions. Poster authors, view poster presentation guidelines and set-up instructions at <http://spie.org/x34963.xml>.

Algorithm for precise positioning of the sun position in solar energy system using the GPS/GLONASS system

Paper 10688-34

Time: 5:30 PM - 7:00 PM


Author(s): Kamil Plachta, Wroclaw Univ. of Science and Technology (Poland)

[Add To My Schedule](#) **Analysis of mirrors geometry of V-trough solar concentrator in photovoltaic system**

Paper 10688-36

Time: 5:30 PM - 7:00 PM


Author(s): Kamil Plachta, Wroclaw Univ. of Science and Technology (Poland)

[Add To My Schedule](#) **Electronics and photonics towards plasmonics and new solar energy devices**

Paper 10688-37

Time: 5:30 PM - 7:00 PM


Author(s): Mihaela Girtan, Univ. d'Angers (France)

[Add To My Schedule](#) **Improvement and regeneration of perovskite solar cells via methylamine gas post-treatment (Canceled)**


Paper 10688-38
 Time: 5:30 PM - 7:00 PM
 Author(s):

Solvent engineering enhances pore filling in fully printable mesoscopic perovskite solar cell


Paper 10688-39
 Time: 5:30 PM - 7:00 PM
 Author(s): Yue Ming, Huazhong Univ. of Science and Technology (China)

[Add To My Schedule](#) **Excitation-intensity dependent charge carrier dynamics in methylammonium lead tri-iodide perovskite semiconductors**


Paper 10688-40
 Time: 5:30 PM - 7:00 PM
 Author(s): In-Sik Kim, Cheol Jo, Gwangju Institute of Science and Technology (Korea, Republic of); Rira Kang, Korea Atomic Energy Research Institute (Korea, Republic of); Dong-Yu Kim, Do-Kyeong Ko, Gwangju Institute of Science and Technology (Korea, Republic of)

[Add To My Schedule](#) **Stochastic modelling of hopping charge carrier transport mechanism in organic photovoltaic structures**


Paper 10688-41
 Time: 5:30 PM - 7:00 PM
 Author(s): Ana Bărar, Octavian Dănilă, Doina Mănăilă-Maximean, Marian Vladescu, Paul Șchiopu, Univ. Politehnica of Bucharest (Romania)

[Add To My Schedule](#) **Conversion characteristics of silicon photovoltaic cells for optical beaming**


Paper 10688-42
 Time: 5:30 PM - 7:00 PM
 Author(s): Arkadiy Blank, S.P. Korolev Rocket and Space Corp. Energia (Russian Federation); Alla Chebotareva, Tatiana Kost, Gennady Untila, Natalia Suhareva, M.V. Lomonosov Moscow State Univ. (Russian Federation); Vjatcheslav Tugaenko, S.P. Korolev Rocket and Space Corp. Energia (Russian Federation)

[Add To My Schedule](#) **Formation of nanostructures on the surface of CIGS films by picosecond laser with different beam patterns**


Paper 10688-43
 Time: 5:30 PM - 7:00 PM
 Author(s): Huizhu Yang, Gedong Jiang, Wenjun Wang, Xuesong Mei, Xi'an Jiaotong Univ. (China); Ming Li, Xi'an Institute of Optics and Precision Mechanics, CAS (China)

[Add To My Schedule](#) **Plasmonic nanoscale antireflective coating for efficient CZTS solar cells**


Paper 10688-44
 Time: 5:30 PM - 7:00 PM
 Author(s): Omar A. M. Abdelraouf, The American Univ. in Cairo (Egypt), Ain Shams Univ. (Egypt); Ahmed Shaker, Ain Shams Univ. (Egypt); Nageh K. Allam, The American Univ. in Cairo (Egypt)

[Add To My Schedule](#) **Design methodology for selecting optimum plasmonic scattering nanostructures inside CZTS solar cells**


Paper 10688-45
 Time: 5:30 PM - 7:00 PM
 Author(s): Omar A. M. Abdelraouf, The American Univ. in Cairo (Egypt), Ain Shams Univ. (Egypt); Ahmed Shaker, Ain Shams Univ. (Egypt); Nageh K. Allam, The American Univ. in Cairo (Egypt)

[Add To My Schedule](#) **Design of optimum back contact plasmonic nanostructures for enhancing light coupling in CZTS solar cells**


Paper 10688-46
 Time: 5:30 PM - 7:00 PM
 Author(s): Omar A. M. Abdelraouf, The American Univ. in Cairo (Egypt), Ain Shams Univ. (Egypt); Ahmed Shaker, Ain Shams Univ. (Egypt); Nageh K. Allam, The American Univ. in Cairo (Egypt)

[Add To My Schedule](#) **Angle-selective reflection surface for energy efficiency**

Paper 10688-47
 Time: 5:30 PM - 7:00 PM
 Author(s): Kazutaka Isoda, Koki Nagata, Mizue Ebisawa, Tokyo Metropolitan Industrial Technology Research Institute (Japan); Yukitoshi Otani, Utsunomiya Univ. (Japan)

[Add To My Schedule](#) **Linear and nonlinear light sensors in SCC based maximum power point search algorithms**

Paper 10688-48
 Time: 5:30 PM - 7:00 PM
 Author(s): Mariusz Ostrowski, Wroclaw Univ. of Science and Technology (Poland)


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The multi-input photovoltaic maximum power point tracker with integrated linear light sensor

Paper 10688-49

Time: 5:30 PM - 7:00 PM

Author(s): Mariusz Ostrowski, Wroclaw Univ. of Science and Technology (Poland)

[Add To My Schedule](#) **Petrovskite solar cells: from materials to devices****(Canceled)**

Paper 10688-50

Time: 5:30 PM - 7:00 PM


Author(s):

Potassium-alumina-boron glass doped with copper ions for solar cell down-convertors

Paper 10688-51

Time: 5:30 PM - 7:00 PM


Author(s): Pavel Shirshnev, Alexey Romanov, Vladislav Bougrov, Elena Shirshneva-Vaschenko, Zheneveva Snezhnaia, ITMO Univ. (Russian Federation)

[Add To My Schedule](#) **Wafer scale FeCl₃ intercalated graphene electrodes for photovoltaic applications**

Paper 10688-52

Time: 5:30 PM - 7:00 PM

Author(s): Kieran Walsh, Conor Murphy, Gareth Jones, Matthew Barnes, Adolfo De Sanctis, Saverio Russo, Monica Craciun, Univ. of Exeter (United Kingdom)

[Add To My Schedule](#) **Cost-effective solutions for dye sensitized solar cells****(Canceled)**

Paper 10688-53

Time: 5:30 PM - 7:00 PM


Author(s):

Phase-separated scattering nanostructures for light trapping back reflectors in thin film solar cells

Paper 10688-54

Time: 5:30 PM - 7:00 PM

Author(s): Yidenekachew J. Donie, Karlsruher Institut für Technologie (Germany); Michael Smeets, Forschungszentrum Jülich GmbH (Germany); Amos Egel, Karlsruher Institut für Technologie (Germany); Florian Lentz, Forschungszentrum Jülich GmbH (Germany); Jan B. Preinfalk, Adrian Mertens, Uli Lemmer, Karlsruher Institut für Technologie (Germany); Karsten Bittkau, Forschungszentrum Jülich GmbH (Germany); Guillaume Gomard, Karlsruher Institut für Technologie (Germany)

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TUESDAY 24 APRIL[Show All Abstracts](#)

**Session 4:
Thin-film and Tandem Solar Cells**

Tuesday 24 April 2018

8:50 AM - 10:30 AM


Location: Salon 10

Session Chair: [Lucio C. Andreani](#), Univ. degli Studi di Pavia (Italy)**Optical confinement in thin CIGS solar cells (Invited Paper)**

Paper 10688-13

Time: 8:50 AM - 9:20 AM


Author(s): Marko Topic, Janez Krc, Univ of Ljubljani (Slovenia)

[Add To My Schedule](#) **Perovskite-silicon tandem solar cells: progress and challenges (Conference Presentation) (Invited Paper)**

Paper 10688-14

Time: 9:20 AM - 9:50 AM


Author(s): Thomas White, The Duong, Jun Peng, Yiliang Wu, Heping Shen, Klaus J. Weber, Kylie R. Catchpole, The Australian National Univ. (Australia)

[Add To My Schedule](#) **Nanophotonic perovskites for enhanced absorption in solar cells**

Paper 10688-15

Time: 9:50 AM - 10:10 AM


Author(s): Raphael Schmager, Philipp Brenner, Karlsruher Institut für Technologie (Germany); Dong Jae Lee, KAIST (Korea, Republic of); Tobias Abzieher, Somayeh Moghadamzadeh, Ihteaz Muhameen Hossain, Ulrich Lemmer, Bryce Sydney Richards, Ulrich Wilhelm Paetzold, Karlsruher Institut für Technologie (Germany)

[Add To My Schedule](#) **Waveguide-based spectrum-splitting concept for parallel-stacked tandem solar cells (Conference Presentation)**

Paper 10688-16

Time: 10:10 AM - 10:30 AM

Author(s): Tom P.N. Veeken, AMOLF (Netherlands); Jorik van de Groep, Stanford Univ. (United States); Mark W. Knight, A. Polman, AMOLF (Netherlands)

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Coffee Break 10:30 AM - 11:00 AM

Session 5: Spectral Conversion and Light Trapping

Tuesday 24 April 2018

11:00 AM - 12:30 PM

Location: Salon 10


Session Chair: Thomas White, The Australian National Univ. (Australia)

Multi-resonant light trapping in ultra-thin solar cells (Conference Presentation) *(Invited Paper)*

Paper 10688-18

Time: 11:00 AM - 11:30 AM

Author(s): Andrea Cattoni, C2N-CNRS, Université Paris-Sud, Université Paris-Saclay (France)


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Lambertian scattering metasurfaces for photovoltaics (Conference Presentation)

Paper 10688-19

Time: 11:30 AM - 11:50 AM

Author(s): Verena Neder, AMOLF (Netherlands); Younes Ra'di, Andrea Alù, The Univ. of Texas at Austin (United States); Albert Polman, AMOLF (Netherlands)


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Modified PV structures with a nanostructured top electrode

Paper 10688-20

Time: 11:50 AM - 12:10 PM

Author(s): Rafal Pietruszka, Bartłomiej Witkowski, The Institute of Physics (Poland); Monika Ozga, Centrum Badań i Rozwoju Technologii dla Przemysłu S.A. - CBRT (Poland); Malgorzata Lukasiewicz, Marek Godlewski, The Institute of Physics (Poland)


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Mie resonators as rearside structures for light trapping in solar cells

Paper 10688-21

Time: 12:10 PM - 12:30 PM

Author(s): Alexander N. Sprafke, Martin-Luther-Univ. Halle-Wittenberg (Germany); Peter Michael Piechulla, Martin-Luther Univ. Halle-Wittenberg (Germany); Michael E. Pollard, The Univ. of New South Wales (Australia); Ralf B. Wehrspohn, Fraunhofer-Institut für Mikrostruktur von Werkstoffen und Systemen (Germany)

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Lunch/Exhibition Break 12:30 PM - 2:30 PM

Session 6: Nanowire Solar Cells and Disordered Photonic Nanostructures I

Tuesday 24 April 2018

2:30 PM - 4:00 PM

Location: Salon 10


Session Chair: [Marko Topic](#), Univ. of Ljubljana (Slovenia)

Nanophotonics in III-V nanowire arrays toward tandem solar cells *(Invited Paper)*

Paper 10688-22

Time: 2:30 PM - 3:00 PM

Author(s): Nicklas Anttu, Sol Voltaics AB (Sweden), Aalto Univ. (Finland), Lund Univ. (Sweden); Lars Samuelson, Lund Univ. (Sweden)


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Controlling the optical energy density in real nanostructures *(Invited Paper)*

Paper 10688-23

Time: 3:00 PM - 3:30 PM

Author(s): Willem L. Vos, Univ. Twente (Netherlands)


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Light's topology at the nanoscale: faithfulness, tragedy and usefulness *(Invited Paper)*

Paper 10688-24

Time: 3:30 PM - 4:00 PM

Author(s): Laurens Kobus Kuipers, Kavli Institute of Nanoscience Delft (Netherlands)

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Coffee Break 4:00 PM - 4:30 PM

Hot Topics II

Tuesday 24 April 2018

4:30 PM - 6:05 PM

Location: Schweitzer Auditorium

Photonics Europe 2018: Hot Topics Session II

Coherent combination of fiber amplified ultrafast laser pulses

Jens Limpert, Institute of Applied Physics, Friedrich Schiller Univ. Jena, Germany

2D materials and their heterostructures: fundamentals, applications and prototypes

Frank Koppens, ICFO-The Institute of Photonic Sciences, Spain

For additional details, please visit <http://spie.org/x12297.xml>

WEDNESDAY 25 APRIL

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Session 7: Disordered Photonic Nanostructures II

Wednesday 25 April 2018

8:50 AM - 10:30 AM

Location: Salon 10


Session Chair: [Aimi Abass](#), Karlsruher Institut für Technologie (Germany)

Hyperuniform solar light absorbers (*Invited Paper*)

Paper 10688-25

Time: 8:50 AM - 9:20 AM

Author(s): Marian Florescu, George Gkantzounis, Richard Spalding, Univ. of Surrey (United Kingdom)


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Self-assembly of nanoparticles into nearly hyperuniform 2D structures

Paper 10688-26

Time: 9:20 AM - 9:40 AM

Author(s): Peter Michael Piechulla, Martin-Luther Univ. Halle-Wittenberg (Germany); Stefan Nanz, Karlsruher Institut für Technologie (Germany); Alexander Sprafke, Martin-Luther-Univ. Halle-Wittenberg (Germany); Aimi Abass, Carsten Rockstuhl, Karlsruher Institut für Technologie (Germany); Ralf B. Wehrspohn, Martin-Luther Univ. Halle-Wittenberg (Germany), Fraunhofer-Institut für Mikrostruktur von Werkstoffen und Systemen (Germany)


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Strategy for tailoring nanospheres for rough interfaces in solar cells (Conference Presentation)

Paper 10688-27

Time: 9:40 AM - 10:00 AM

Author(s): Stefan Nanz, Aimi Abass, Karlsruher Institut für Technologie (Germany); Peter M. Piechulla, Martin-Luther Univ. Halle-Wittenberg (Germany); Alexander Sprafke, Martin-Luther-Univ. Halle-Wittenberg (Germany); Ralf B. Wehrspohn, Martin-Luther Univ. Halle-Wittenberg (Germany), Fraunhofer-Institut für Mikrostruktur von Werkstoffen und Systemen (Germany); Carsten Rockstuhl, Karlsruher Institut für Technologie (Germany)


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Localization and correlations of light in disordered photonic systems for photovoltaic applications (*Invited Paper*)

Paper 10688-28

Time: 10:00 AM - 10:30 AM

Author(s): Francesco Riboli, LENS - Lab. Europeo di Spettroscopia Non-Lineari (Italy)

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Coffee Break 10:30 AM - 11:00 AM

Session 8: Disordered Photonic Nanostructures III

Wednesday 25 April 2018

11:00 AM - 12:30 PM

Location: Salon 10


Session Chair: [Klaus Jäger](#), Helmholtz-Zentrum Berlin für Materialien und Energie GmbH (Germany)

Photonic network random lasers (*Invited Paper*)

Paper 10688-29

Time: 11:00 AM - 11:30 AM

Author(s): Dhruv Saxena, Michele Gaio, Imperial College London (United Kingdom); Jacopo Bertolotti, Univ. of Exeter (United Kingdom); Dario Pisignano, Univ. del Salento (Italy); Andrea Camposeo, Istituto Nanoscienze (Italy); Riccardo Sapienza, Imperial College London (United Kingdom)


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Polymer blend lithography: a versatile approach for the fabrication of disordered light harvesting nanostructures (Conference Presentation)

Paper 10688-30

Time: 11:30 AM - 11:50 AM

Author(s): Yidenekachew J. Donie, Anna Osypka, Karlsruher Institut für Technologie (Germany); Radwanul H. Siddique, California Institute of Technology (United States); Tsvetelina Merdzhanova, Forschungszentrum Jülich GmbH (Germany); Vikas R. Voggu, Brian A. Korgel, The Univ. of Texas at Austin (United States); Jan B. Preinfalk, Amos Egel, Hendrik Hölscher, Uli Lemmer, Guillaume Gomard, Karlsruher Institut für Technologie (Germany)

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A slab waveguide source for discontinuous Galerkin time-domain methods

Paper 10688-31

Time: 11:50 AM - 12:10 PM

Author(s): Dan-Nha Huynh, Humboldt-Univ. zu Berlin (Germany); Paris Varytis, Kurt Busch, Max-Born-Institut für Nichtlineare Optik Kurzzeitspektroskopie (Germany)

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Waveguide-integrated single photon spectrometer based on tailored disorder (Conference Presentation)

Paper 10688-32

Time: 12:10 PM - 12:30 PM

Author(s): Wladick Hartmann, Westfälische Wilhelms-Univ. Münster (Germany); Paris Varytis, Kurt Busch, Humboldt-Univ. zu Berlin (Germany); Wolfram Pernice, Westfälische Wilhelms-Univ. Münster (Germany)

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