

Scientific Program of the 6th International Conference on Semiconductor Photochemistry in Oldenburg

Monday, September 11th, 2017

- 12.30 **Welcome and Opening of SP 6**
- Session 1: Chair: J. Strunk (Rostock, Germany)**
- 12.50 PL 1 **Photocatalysis versus Photosynthesis - Design Criteria for Devices for Solar Energy Conversion and Photocatalysis**
Frank E. Osterloh, University of California, Davis, USA
- 13.40 O 1 A WO₃ – CuCrO₂ photoelectrochemical tandem cell for overall water splitting under simulated sunlight
Ana Korina Díaz-García, R. Gómez, University of Alicante, Spain
- 14.00 O 2 Electrospinning to prepare nanostructured photocatalysts and photoelectrodes
Marcus Einert, André Blösser, Roland Marschall, Justus-Liebig-University Giessen; Germany
- 14.20 O 3 PEC at the Terawatt Level: Are devices using noble metal catalysts scalable?
Bastian Mei, R. Brüninghoff, G. Mul, University of Twente, Netherlands, *A. Bodin, B. Sebok, T. Pedersen, B. Seger, P C.K. Vesborg, O. Hansen, I. Chorkendorff*, Technical University of Denmark, Denmark; *E. Kemppainen, J. Halme, P. Lund*, Aalto University, Finland
- 14.40 O 4 Promoters in Photocatalytic Water Splitting: Elucidating the Electronic and Catalytic Effects
K. Skadell, S. Beckert, E. Alfonso González, Roger Gläser, University of Leipzig, Germany
- 15.00 Coffee break
- Session 2: Chair: R. Gläser (Leipzig, Germany)**
- 15.30 O 5 Large Scale Photocatalytic Hydrogen Production
Michael Schwarze, M. Schröder, J. Borgmeyer, R. Schomäcker, Technical University Berlin, Germany
- 15.50 O 6 Coated Wireless Light Emitters for Efficient Up Scaling of Photocatalytic Processes
Bastien O. Burek^{1,2}, Detlef W. Bahnemann², Jonathan Z. Bloh¹, ¹ DECHEMA Research Institute, Frankfurt/M., Germany, ² Leibniz University Hannover, Germany
- 16.10 O 7 Recent developments in self-sterilizing semiconductor and metal uniform films on 2D/3D surfaces leading to quasi-instantaneous bacterial inactivation kinetics
John Kiwi, Cesar Pulgarin, Sami Rtimi, Ecole Polytechnique Fédérale de Lausanne, EPFL, Switzerland
- 16.30 KN 1 **Engineering of Photoreactors**
Dirk Ziegenbalg, Maximilian Sender, Benjamin Wriedt, Fabian Guba, Ümit Tastan, University Stuttgart, Germany
- 17.00 **Poster Speed Talks (5 min) Poster A 1-11,**
Chairs: B. Mei (Twente, Netherlands) and P. Robertson (Belfast, UK)
- 18.00 Poster Session A with Beer/Bratwurst (Sausage), (up to about 8 p.m.)

Tuesday, September 12th, 2017

Session 3: Chair: A. Emeline (St. Petersburg, Russia)

- 08.30 PL 2 **Photocatalysis on TiO₂: insights from first principles simulations**
Annabella Selloni, Sencer Selcuk, Xunhua Zhao, Princeton University, USA
- 09:20 O 8 Robust free standing flow-through TiO₂ nanotube membranes of pure anatase
Francesca Riboni, Seulgi So, Imgon Hwang, JeongEun Yoo, Patrik Schmuki, University Erlangen-Nuremberg, Germany
- 09:40 O 9 Enhanced Photoelectrochemical Efficiency of Self-Organized TiO₂ Nanotube Layers due to Secondary Materials
Hanna Sopha, Milos Krbal, Siowwoon Ng, Raul Zazpe, Jan Prikryl, Jan M. Macak, University of Padubice, Czech Republic
- 10.00 O 10 TiO₂ immobilization with poly(vinyl-alcohol)
Ottó Horváth, Péter Hegedűs, Erzsébet Szabó-Bárdos, University of Pannonia Veszprém, Hungary
- 10.20 Coffee break

Session 4: Chair: A. Selloni (Princeton, USA)

- 10.50 O 11 Development of complex oxide and composite for efficient photocatalytic water splitting
Ping Wang, Xianying Wang, University of Shanghai, P.R. China
- 11.10 O 12 Visible-light activity of g-C₃N₄/TiO₂ photocatalysts (An EPR study)
Dana Dvoranová, Zuzana Barbieriková, Milan Mazúr, Vlasta Brezová, University of Technology in Bratislava, Slovak Republic, Tatiana Giannakopoulou, Christos Trapalis, NCSR Demokritos, Attikis, Greece
- 11.30 O 13 p-type doping of copper-based complex oxide photoelectrodes
Freddy E. Oropeza, Emiel J. M. Hensen, Jan P. Hofmann, Eindhoven University of Technology, The Netherlands
- 11.50 O 14 Oxidation-stable plasmonic copper nanoparticles in photocatalytic TiO₂ aerogels
Jeremy J. Pietron, Paul A. DeSario, Joseph F. Parker, Olga Baturina, Debra R. Rolison, Todd H. Brintlinger, Rhonda M. Stroud, U.S. Naval Research Laboratory, USA
- 12.10 Lunch break + Poster A

Session 5: Chair: F. Osterloh (Davis, USA)

- 13.30 PL 3 **Molecular and Bioinspired Approaches to Solar Fuels**
Leif Hammarström, Uppsala University, Sweden
- 14.20 O 15 Deploying Photocatalytic Technology for the Conversion of Cellulose feedstocks to High Value Products; Hydrogen and Sugars
Nathan Skillen, Peter Robertson, Queens University Belfast, UK, Sanjay Nagarajan, Birmingham City University, UK, Aakash Welgamage Don, Linda Lawton, Robert Gordon University, UK, John Irvine, St Andrews University, UK
- 14.40 O 16 Size-dependent photocatalytic activity of supported vanadates probed by methanol oxidation
Bianca Kortewille, Jennifer Strunk, Leibniz Institute for Catalysis, Rostock, Germany, Niklas Cibura, Max-Planck-Institute for Chemical Energy Conversion, Muelheim, Germany, Israel E. Wachs, Lehigh University, USA
- 15.00 KN 2 **Ultrafast charge carrier dynamics in BiVO₄ and in WO₃/BiVO₄ coupled systems**
Ivan Grigioni, Maria Vittoria Dozzi, Elena Selli, Aurelio Oriana, Giulio Cerullo, University of Milano, Italy, Prashant V. Kamat, University of Notre Dame, USA
- 15.30 Coffee break

Session 6: Chair: J. Bloh (Frankfurt, Germany)

- 16.00 O 17 PureBau – Investigation and development of Photocatalytic Active Construction and Building Materials
Thomas Koch, Horst Purwin, KRONOS International Inc., Germany
- 16.20 O 18 Development of TiO₂ photocatalytical coatings and building materials
A.W. Morawski, M. Janus, A. Markowska-Szczupak, K. Bubacz, A.Wanag, P. Rokicka, E.Kusiak-Nejman, West Pomeranian University of Technology Szczecin, Poland

- 16.40 O 19 Site Resolved Optical Detection of Photocatalysis on Building Materials
Clemens Ehm, Dietmar Stephan, Technical University Berlin, Germany
- 17.00 **Poster Speed Talks (5 min) Poster B 1-10,**
Chairs: Y. Paz (Haifa, Israel) and J. Pietron (Washington, USA)
- 18.00 Poster Session B with Beer/pretzel (up to about 8.00 p.m.)

Wednesday, September 13th, 2017

Session 7: Chair: G. Mul (Twente, Netherlands)

- 08.30 PL 4 **Crystallization of hybrid halide perovskites**
Pablo Docampo, Newcastle University, UK
- 09:20 O 20 Tolerance factors for organic-inorganic perovskites: Applicability only for high temperature phases?
Markus Becker, Michael Wark, Thorsten Klüner, Carl von Ossietzky University Oldenburg, Germany
- 09:40 O 21 Organometal Halide Perovskite Photonic Crystals
Kun Chen, Stefan Schünemann, Harun Tüysüz, Max-Planck-Institut für Kohlenforschung, Muelheim, Germany
- 10.00 O 22 Self-powered solar hydrogen generation by tandem system of BiVO₄ photoanode and PbS quantum dot solar cell
Xintong Zhang, Yang Zhang, Shuaipu Zang, Meiyang Li, Yinglin Wang, Northeast Normal University, P.R. China
- 10.20 Coffee break

Session 8: Chair: D. Bahnemann (Hannover, Germany)

- 10.50 O 23 Complementing Intensity Modulated Photo Spectroscopy Applied on Organic Solar Cells with Fast Intensity Transient Measurements
Sebastian Feihl, Michael Multerer, Carl A. Schiller, ZAHNER-elektrik, Kronach, Germany, Nicola Gasparini, Gebhard Matt, Christoph Brabec, University Erlangen-Nuremberg, Germany, Thomas Kunz, ZAE Bayern, Erlangen, Germany
- 11.10 O 24 The Development of Photocatalytic Reactor Technology for Water Disinfection with a Consideration of Bacterial Factors in Promoting Pathogen Resistance
Caitlin Buck, Peter K. J. Robertson, Jeanette Robertson, Queen's University Belfast, UK
- 11.30 O 25 (Au@Ag)@Au double shell nanoparticles loaded on rutile TiO₂ nanorod for decomposition of pollutions under visible light
Teruhisa Ohno, Sunao Kamimura, Kyushu Institute of Technology, Japan
- 11.50 O 26 Visible-Light-Driven Water Oxidation at Polarized Liquid-Liquid Interfaces
Shokoufeh Rastgar, Gunther Wittstock, Carl von Ossietzky University Oldenburg, Germany
- 12.10 Lunch break + Poster B

Session 9: Chair: R. Marschall (Giessen, Germany)

- 13.10 PL 5 **Visible Light Photoredox Catalysis for Organic Synthesis**
Burkhard Koenig, University of Regensburg, Germany
- 14.00 O 27 Photocatalytic Dehydrogenation of 1,2,3,4-Tetrahydroquinoline to Quinoline by surface grafted TiO₂ under Visible Light Illumination
Narmina O. Balayeva, Ralf Dillert, Detlef W. Bahnemann, Leibniz University of Hannover, Germany, Nan Zheng, University of Arkansas, USA
- 14.20 KN 3 **Organic Polymer Nano-Dots for Light Driven Hydrogen Generation**
Haining Tian, Palas Baran Pati, Lei Wang, Uppsala University, Sweden
- 15.00 Social Program
- 19.00 Conference dinner (up to about 0.30 a.m.)

Thursday, September 14th, 2017

Session 10: Chair: J. Krysa (Prague, Czech Republic)

- 09.00 PL 6 **Principles, mechanism and applications of photodeposition of nanoparticles on semiconductor surfaces**
Guido Mul, University of Twente, The Netherlands
- 09:50 O 28 Cocatalysts in photo(electro)catalysis: size and electrolyte effects
Radim Beranek, Ulm University, Germany
- 10.10 O 29 Refined Model for the Optimal Metal Content in Semiconductor Photocatalysis
Jonathan Z. Bloh, DECHEMA Research Institute, Frankfurt/M., Germany
- 10.30 O 30 Effect of Metal Doping on Optical and Photochemical Behavior of Metal Oxide Photoactive Materials
Alexei V. Emeline, V.K. Ryabchuk, A.V. Rudakova, A.A. Murashkina, L.L. Shaitanov, K.V. Nikitin, D.W. Bahnemann, Saint-Petersburg State University, Russia
- 10.50 Coffee break

Session 11: Chair: R. Beranek (Ulm, Germany)

- 11.20 O 31 Recombination kinetics of the photogenerated charge carriers in different TiO₂ photocatalysts
Jenny Schneider, Ralf Dillert, Detlef Bahnemann, Leibniz University Hannover, Germany
- 11.40 O 32 Transient phenomena in photocatalysis, as studied by ultrafast FTIR measurements
Yaron Paz, Technion, Israel
- 12.00 O 33 Femtosecond Laser Control of Photoionization
Matthias Wollenhaupt, Dominik Pengel, Stefanie Kerbstadt, Daniela Johannmeyer, Lars Englert, Tim Bayer, Carl von Ossietzky University of Oldenburg, Germany
- 12.20 Lunch break

Session 12: Chair: T. Ohno (Fukuoka, Japan)

- 13.30 KN 4 **Doped hematite photoanodes for photoelectrochemical water splitting**
J. Krýsa, T. Kotrla, Š. Paušová, M. Zlámal, M. Neumann-Spallart, University of Chemistry and Technology Prague, Czech Republic
- 14.00 O 34 Adjusting the stoichiometry of electrodeposited ferrite films for enhanced photoelectrocatalytic oxygen formation
Dereje H. Taffa, Sven Warfsmann, Michael Wark, Carl von Ossietzky University Oldenburg, Germany
- 14.20 O 35 Engineered Hematite Nanorod Arrays for Highly Efficient and Stable Solar Water Splitting
Tae Hwa Jeon, Gun-hee Moon, Wonyong Choi, Pohang University of Science and Technology, Korea, Hyunwoong Park, Kyungpook National University, Korea
- 14.50 KN 5 **Assessment of Performance for gas/solid photocatalytic reactions of VOCs**
Claudio Minero, M. Minella, University of Torino, Italy
- 15.20 O 36 Strategies to improve the photocatalytic DeNO_x selectivity
Amer Hakki¹, Lu Yang^{1,2}, and Donald.E. Macphée²
¹ University of Aberdeen, UK, ² Wuhan University of Technology, P.R. China
- 15.40 Closing Remarks
- 16.00 End

Speed Poster Talks A

Monday, September 11th, 2017, 5.00 p.m. (and Poster Presentation A)

- A-01 Comparative study of thermally and chemically exfoliated g-C₃N₄ for NO_x removal
I. Papailias, T. Giannakopoulou, N. Todorova, A. Delkos, N. Ioannidis, C. Trapalis, NCSR Demokritos, Greece
- A-02 The Kinetic of Oxalic Acid Photoreforming and Hydrogen Evolution on TiO₂ Surfaces: Effect of Noble Metal Modification
Yamen AlSalka, Detlef W. Bahnemann, Leibniz University Hannover, Germany
- A-03 Heterogeneous photocatalytic degradation of different pesticides in agro-waste water at pilot plant scale under natural sunlight
J. Fenoll, I. Garrido, P. Flores, P. Hellín, N. Vela, S. Navarro, A. Kushniarou, G. Navarro, Murcia, Spain
- A-04 Photocatalytic Disinfection of *E.coli* using Second Generation Photocatalysts
A. Tomruk, N.C. Birben, M. Bekbolet, Bogazici University, Istanbul, Turkey
- A-05 Increasing the Selectivity of DeNO_x Photocatalysts and Suppressing the Evolution of Toxic By-Products
Julia Patzsch, Jonathan Z. Bloh, DECHEMA Research Institute, Frankfurt/M., Germany
- A-06 Temperature matters: How the calcination procedure influences the photoelectrochemical performance of ZnFe₂O₄
Kristin Kirchner, Phillip Timmer, Roland Marschall, Justus-Liebig-University Giessen; Germany
- A-07 Hydrophilicity variations in Ag/TiO₂, Mn/TiO₂, anatase and rutile nanopowders under UV-vis light
Tiina Rytönen, University of Eastern Finland, Finland, Mika Huuhtanen, Riitta L. Keiski, University of Oulu, Finland
- A-08 Photocatalytic water splitting on TiO₂-rutile (110): Investigating the mechanism by *first-principles* quantum dynamical simulations
Thorben Petersen, Jan Mitschker, Thorsten Klüner, Carl von Ossietzky University Oldenburg, Germany
- A-09 Time-resolved photoluminescence analysis of N,F-doped and noble metal nanoparticle-modified TiO₂ photocatalysts
Maria Vittoria Dozzi, Elena Selli, Alessia Candeo, Cosimo D'Andrea, Gianluca Valentini, University of Milano, Italy
- A-10 Influence of reactant concentration and light intensity on methane yields in continuous-flow photocatalytic CO₂ reduction
Martin Dilla, Simon Ristig, Robert Schlögl, Max Planck Institute for Chemical Energy Conversion, Muelheim, Germany, Jennifer Strunk, Leibniz Institute for Catalysis, Rostock, Germany
- A-11 Effect of Pt nanoparticles towards photocatalytic reduction of CO₂
Minoo Tasbihi, Julian Rieß, Reinhard Schomäcker, Technical University Berlin, Germany, Kamila Kočí, Miroslava Edelmánová, Technical University of Ostrava, Czech Republic

Speed Poster Talks B

Tuesday, September 12th, 2017, 5.00 p.m. (and Poster Presentation B)

- B-01 Effect Of Microporous Vanadosilicate AM-6 Thin Films As Photocatalysts For The Degradation Of Methylene Blue
D. Kuzuyaka^{1,2}, *S. Galioglu*¹, *İ. Altın*³, *M. Sökmen*^{4,5}, *B. Akata*¹,
¹Middle East Technical University, Ankara, Turkey, ²Kastamonu University, Turkey, ³Karadeniz Technical University, Trabzon, Turkey, ⁴King Saud University, Riyadh, Saudi Arabia, ⁵Konya Food and Agriculture University, Konya, Turkey
- B-02 Photocatalytic *in situ* Hydrogen Peroxide Production for Biocatalysis based on Peroxidases
Bastien O. Burek^{1,2}, *Detlef W. Bahnemann*², *Jonathan Z. Bloh*¹, ¹DECHEMA Research Institute, Frankfurt/M., Germany, ²Leibniz University Hannover, Germany
- B-03 Highly Efficient C-containing TiO₂ Layers for the Photocatalytic Degradation of Aqueous Solutions of Chlorinated Pollutants
Radek Zouzelka, *Monika Remzova*, *Libor Brabec*, *Jiri Rathousky*,
J. Heyrovsky Institute of Physical Chemistry, Prague, Czech Republic
- B-04 Comparison of the Photocatalytic Activity of Different Photocatalysts by Applying a "Black Body" Reactor
Lena Megatif, *Ralf Dillert*, *Detlef W. Bahnemann*, Leibniz University Hannover, Germany
- B-05 Reversible Surface Reconstruction of Copper Electrodes Spectroscopically Monitored under Conditions of Carbon Dioxide Reduction
Matthias M. Waegle, *Charuni Gunathunge*, *Xiang Li*, *Jingyi Li*, *Robert P. Hicks*, *Vincent Ovalle*, Boston College, USA
- B-06 Isolated photoanodes for Dyes-Sensitized Solar Cells (DSSCs) investigate with Scanning Electrochemical Microscopy (SECM)
Sabina Scarabino, *Gunther Wittstock*, Carl von Ossietzky University Oldenburg, Germany, *Raffael Ruess*, *Derck Schlettwein*, Justus-Liebig University Giessen, Germany, *Kazuteru Nonomura*, *Nikolaos Vlachopoulos*, *Anders Hagfeldt*, *Laboratory of Photomolecular Science, Institute of Chemical Science and Engineering, Ecole Polytechnique Fédérale de Lausanne, EPFL-FSB-ISIC-LSPM, CH-1015 Lausanne, Switzerland*
- B-07 Visible-light-driven TiO_{2-x}N_y photocatalyst via defect manipulation for efficient co-catalyst-free hydrogen evolution
Huijun Li, *Xianying Wang*, *Nanquan Ou*, *Ping Wang*, University of Shanghai for Science and Technology, P.R. China
- B-08 Outstanding visible photocatalytic activity of a new mixed Bismuth Titanate material
M.C. Hidalgo, *P. Zambrano*, *M.J. Sayagués*, *J.A. Navío*, CSIC-Universidad de Sevilla, Spain
- B-09 Synthesis and Characterization of Double Perovskites
M. Elizarov, *A. Murashkina*, *O. Lozhkina*, *A. Emeline*, Saint Petersburg State University, Russia

Poster presentation A

Monday, September 11th, 2017, 6.00 – 8.00 p.m.

- A-13 Photocatalytic Hydrogen Production in Solar Light by using Tin-Exchanged Materials
Morten Weiss, Roland Marschall, Justus-Liebig-University Giessen, Germany
- A-14 Synthesis and characterization of MgFe₂O₄ nanocrystals towards applications as photocatalyst in renewable fuel generation and green chemistry
André Blösser, Kristin Kirchberg, Roland Marschall, Justus-Liebig University Giessen, Germany
- A-15 Synthesis of Highly Active Neodymium-Doped SrTiO₃ as a Photocatalyst for Hydrogen Evolution from Water Splitting
S. Banakhajasteh, S. Beckert, R. Gläser, University Leipzig, Germany
- A-16 Making the most of glycerol; photocatalytic conversion to hydrogen and high value products
Nathan Skillen, Peter Robertson, Kathryn Ralphs, Haresh Maynar, David Craig, Sean O'Neil, Queens University Belfast, UK
- A-17 Heptazine-based 2D Carbon Nitrides for Photocatalytic Hydrogen Evolution
Julia Kröger^{1,2}, Hendrik Schlomberg^{1,2}, Vincent W. Lau¹, Bettina V. Lotsch^{1,2}, ¹Max-Planck Institute for Solid State Research, Stuttgart, Germany, ²University of Munich (LMU), Germany
- A-18 Photocatalytic hydrogen production in alkaline sulfide solution by application of ZnS/CdS photocatalysts
Ottó Horváth, Bence Solymosi, Lajos Fodor, University of Pannonia, Veszprém, Hungary
- A-19 Al doping effect on the morphological, structural and photocatalytic properties of TiO₂ thin layers
F. Bensouici¹, M. Bououdina², A. A. Dakhep², T. Souier³, R. Tala-Ighil¹, M. Toubane¹, S. Liu⁴, W. Cai⁴, ¹UMBB University, Boumerdes, Algeria, ²University of Bahrain, Kingdom of Bahrain, ³Sultan Qaboos University, Oman, ⁴Chinese Academy of Sciences, Hefei, P.R.China
- A-20 A comparative photoelectrochemical study of intrinsic and modified tungsten trioxide
Ana Korina Díaz-García, Roberto Gómez, University of Alicante, Spain
- A-21 Influence of UV-photoexcitation of TiO₂ (anatase) on superficial OH-groups: the FT-IR study
Ekaterina A. Toshcheva, Maria V. Maevskaya, Aida V. Rudakova, Kirill M. Bulanin, St. Petersburg State University, Russia
- A-22 Influence of Fluorine Doping on Photoactivity of TiO₂
K. V. Nikitin, D. A. Zharovov, L. L. Shaitanov, V. K. Ryabchuk, A. V. Emeline, Saint Petersburg State University, Russia
- A-23 Surface modification of TiO₂ for the improvement of yields in the photocatalytic CO₂ reduction
Nikolaos G. Moustakas, Tim Poppel, Jennifer Strunk, Leibniz Institute for Catalysis, Rostock, Germany, *Martin Dilla*, Max-Planck- Institute for Chemical Energy Conversion, Duisburg, Germany, *Polycarpos Falaras*, NCSR Demokritos, Athens, Greece
- A-24 How Ionic Liquids can influence phase formation and photocatalytic activity of TiO₂ multiphase nanoparticle heterojunctions
Pascal Voepel, Morten Weiss, Bernd M. Smarsly, Roland Marschall, Justus-Liebig-University Giessen, Germany
- A-25 Photocatalytic properties of layered TiO₂/CdS, TiO₂/ZnO, ZnO/TiO₂ heterostructures
M.V. Maevskaia, M.M. Sivokhina, A.V. Rudakova, A.V. Emeline, Saint-Petersburg State University, Russia
- A-26 Electrodeposition and Structure Evolution of FeOOH for an Fe-FeOOH based Battery
Christian Gutsche, Thorsten Plaggenborg, Jürgen Parisi, Martin Knipper, Carl von Ossietzky University Oldenburg, Germany

- A-27 Ferrite-based Photoelectrodes
Luis Granone, Ralf Dillert, Detlef W. Bahnemann, Leibniz University Hannover, Germany
- A-28 Concepts for creation of efficient up-conversion materials
D.A. Zharovov, A.V. Mayeuskii, A.V. Rudakova, A.V. Shurukhina, D.S. Barinov, A.V. Emeline, Saint-Petersburg State University, Russia
- A-29 Influence of Inorganic Ions on the Charge Carrier Dynamics and Photocatalytic NO Degradation of TiO₂
Fabian Sieland, Anh-Thu Duong, Jenny Schneider, Detlef W. Bahnemann, Leibniz University Hannover, Germany
- A-31 The Development of Photocatalytic Reactor Technology for the Removal of Organic Environmental Contaminants in Water
Jamie Kelly, Peter Robertson, Panagiotis Manesiotis, Nathan Skillen, Queen's University Belfast, UK
- A-32 Kinetics and reaction mechanism of the highly efficient and fast photocatalytic reduction of nitrobenzene in ethanol
Julia Patzsch, Aneta Pashkova, Benedict Berg, Jonathan Z. Bloh, DECHEMA Research Institute, Frankfurt/M., Germany
- A-33 Role of Doping of TiO₂ on Simultaneous Removal of *E.coli* and Humic Matter
M. Bekbolet, N.C. Birben, A. Tomruk, Bogazici University, Bebek, Istanbul, Turkey
- A-34 ZIF-8 supported Nanocomposites for Photocatalytic Degradation of Organic Pollutants
A.N. Ökte, D. Tuncel, Boğaziçi University, Turkey, D. Karamanis, E. Chalkia, University of Patras, Greece
- A-35 Photooxidation of six pesticides in water assisted by ZnO under solar irradiation
M. Calín, N. Vela, I. Garrido, J. Fenoll, G. Pérez-Lucas, S. Navarro, Murcia, Spain
- A-36 Mesoporous TiO₂ thin films with electrodeposited ZnO particles for photocatalytic CO₂ reduction
E. Gent, M. Wark, Carl von Ossietzky University Oldenburg, Germany
- A-37 Sol gel synthesis of bismuth titanates with varied calcination temperature for H₂ production
J.P. Hildebrand, M. Wark, Carl von Ossietzky University Oldenburg, Germany
- A-38 Investigation of the Photocatalytic Surface Plasmon Resonance (SPR) Effect of Au-TiO₂
J. Nie, J. Schneider, D. Bahnemann, Leibniz University Hannover, Germany
- A-39 Surface Plasmon-Assisted Glycerol Oxidation over Supported Au and Bimetallic AuCu Catalysts
Georgios Dodekatos, Stefan Schünemann, Harun Tüysüz, Max-Planck-Institut für Kohlenforschung, Mülheim an der Ruhr, Germany

Poster presentation B

Tuesday, September 12th, 2017, 6.00 – 8.00 p.m.

- B-12 Low inhomogeneous broadening of excitonic resonance in MAPbBr₃ single crystal
O. Lozhkina, Yu.V. Kapitonov, A. Murashkina, A. Emeline, Saint Petersburg State University, Russia
- B-13 Photocatalytic activity of TiO₂ modified by silicon phthalocyanine in dye-sensitized solar cells and degradation of methylene blue
Münevver Sökmen, King Saud University, Riyadh, Saudi Arabi and Food and Agriculture University Konya, Turkey, *İlknur Altın, Melek Koç Keşir, Zekeriya Bıyıklıoğlu*, Karadeniz Technical University, Trabzon, Turkey
- B-14 Ion-Exchanged Layered Dion-Jacobson Type Niobium Oxides for Photocatalytic Hydrogen Production
Natalia Kulischow, Calin Ladasiu, Roland Marschall, Justus-Liebig University, Giessen, Germany
- B-15 Wavelength Dependent Measurements to investigate the Visible-Light Activity of Zinc Ferrite
Arsoy Arimi, Lena Megatif, Luis Granone, Ralf Dillert, Detlef W. Bahnemann, Leibniz University Hannover, Germany
- B-16 Photocatalytic H₂ Generation at Plasmonic Au–TiO₂ and Au–TiO₂/Pt Aerogels: Effects of Nanoscale Interfacial Design
Jeremy J. Pietron, Paul A. DeSario, Adam Dunkelberger, Olga Baturina, Jeffrey C. Owrutsky, Debra R. Rolison, Todd H. Brintlinger, Rhonda M. Stroud, U.S. Naval Research Laboratory, USA
- B-17 Effect of doping with rare earth ions on ZrO₂ optical behavior
R.R. Khabibrakhmanov, A.V. Shurukhina, A.V. Rudakova, A.V. Emeline, Saint Petersburg State University, Russia
- B-18 Analysis of TPD spectra of CO₂ remaining on TiO₂ surface after photooxidation of CO in presence of oxygen
P.E. Lavrik, R.V. Mikhaylov, Saint-Petersburg State University, Russia
- B-19 Combination of methods to enhance the efficiency of heterogeneous photocatalysis
Orsolya Fónagy, Ottó Horváth, Erzsébet Szabó-Bárdos, University of Pannonia, Veszprém, Hungary
- B-20 New 3D flexible metal-organic framework MIL-53(La): Synthesis. Characterization. Computer simulation
A.V. Maysuski, A.V. Rudakova, K. Nikitin, A.V. Petrov, A.V. Emeline, Saint-Petersburg State University, Russia
- B-21 Characterization of Photocatalytic Concrete Stones Using EDX/SEM
Horst Purwin, Thomas Koch, Kronos International Inc., Germany
- B-23 The structure and energetics of ozone complexes with surface titanium atoms of nanocrystalline TiO₂ from experimental IR and theoretical ab Initio data
M.N. Sboev, R. Kevorkyants, Yu.V. Chizhov, K.M. Bulanin, St. Petersburg State University, Russia
- B-24 Optical Properties of Bulk and Surface Models of Spinel-type Ferrites – A Theoretical Approach
Katharina C. L. Bauerfeind, Anna C. Ulpe, Thomas Bredow, University of Bonn, Germany
- B-25 Adsorption and dissociation of water on tungsten trioxide (001) from first principles
Thomas Teusch, Thorsten Klüner, Carl von Ossietzky Universität Oldenburg, Germany
- B-26 Photocatalytic decomposition of azo dyes by ZnO-Basolite nanocomposites
D. Tunçel, A.N. Ökte, Boğaziçi University, Istanbul, Turkey, *D. Karamanis, E. Chalkia*, University of Patras, Greece

- B-27 Characterization of Organic Matrix Released by Photocatalytic Inactivation of *E.coli*
N.C. Birben, A. Tomruk, M. Bekbolet, Bogazici University, Bebek, Istanbul Turkey
- B-28 Verifying Methylene Blue as a Model Pollutant for Photocatalytic Activity Test
Dariusz Mitoraj, Radim Beranek, Ulm University, Germany, Umaporn Lamdab, Natia Wetchakun, Chiang Mai University, Thailand
- B-29 Unconventionally Prepared TiO₂/g-C₃N₄ Photocatalysts for Photocatalytic Decomposition of Nitrous Oxide
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