 **Poster session Thursday 7th November**

|  |  |  |
| --- | --- | --- |
| AbstractNumber | Tittle | Authors |
| 97 | Driving Chemical Reactions with a Metal/perovskite Nanocrystal Energy Transfer Photosystem | Saris, Seryio (P) (C) ; Loiudice, Anna; Buonsanti, Raffaella |
| 190 | Direct Patterning of Nanocrystals by E-beam Lithography | Dieleman, Christian (P) (C) ;Ding, Weiyi; Patra, Biplap; Agrawal, Harshal; Garnett, Erik; Castellanos, Sonia; Ehrler, Bruno |
| 241 | Ni-Ti Porous Electrodes for Electrochemical Applications | Guenani, Nihal (P); Guerrero, Antonio; Barawi, Mariam; Villar-Garcia, Ignacio J.; de la Peña O'Shea, Victor A. |
| 249 | Novel S-rich PbS QDs as a Promising Material for P-type Layer in PbS QD Solar Cells | Bederak, Dima (P) (C); Sukharevksa, Nataliia; Dirin, Dmitry N.; Kovalenko, Maksym V.; Loi, Maria A. |
| 307 | Syngas Production by Electrocatalytic Reduction of CO2 by Using Ag-decorated TiO2 Nanotubes | Hernandez, Simelys (P) (C); Farkhondehfal, M.Amin; Rattalino, Matteo; Makkee, Michiel; Lamberti, Andrea; Chiodoni, Angelica; Bejtka, Katarzyna; Sacco, Adriano; Pirri, Fabrizio; Russo, Nunzio |
| 327 | Understanding Double Peak Emission in Lead Halide Perovskites | Schötz, Konstantin (P); Askar, Abdelrahman; Peng, Wei; Seeberger, Dominik; Guijar, Tanaji P.; Thelakkat, Mukundan; Köhler, Anna; Hüttner, Sven; Bakr, Osman M.; hankar, Karthik: Panzer, Fabian |
| 330 | Polymeric Triphenylamine Derivatives for Perovskite Solar Cells | Matsui, Taisuke; Petrikyte, Ieva; Malinauskas, Tadas; Domanski, Konrad; Daskeviciene, Maryte; Steponaitis, Matas; Gratia, Paul; Tress, Wolfgang; Correa-Baena, Juan-Pablo; Abate, Antonio; Hagfeldt, Anders; Graetzel, Michael; Nazeeruddin, Mohammad Khaja; Getautis, Vytautas; Saliba, Michael |
| 336 | Electrocatalytic Reactions on Pd Atomic Ensembles | Jordao Pereira, Ines (P) (C); Degn Jensen, Kim; Escudero Escribano, Maria |
| AbstractNumber | Tittle | Authors |
| 338 | Effect of Interfacial Oxygen Stoichiometry on Performance of Perovoskite Solar Cells | Sultan, Muhammad (P) (C); Haider, Irfan; Fakhruddin, Azhar; Schmidt-Mende, Lukas |
| 341 | Blue Light Emitting Defective Nanocrystals Composed of Earth-Abundant Elements | Hansen, Eric (P); Liu, Yun; Utzat, Hendrik; Bertram, Sophie; Grossman, Jeffrey; Bawendi, Moungi |
| 342 | 2D Hybrid Organic-Inorganic Metal Halide Perovskite Nanowires | Pradhan, Bapi (P) (C) |
| 343 | Copper-Doped Colloidal Quantum Wells: Synthesis, Solar Light Harvesting, Lasing, and Mutual Energy Transfer | Sharma, Manoj (P) (C); Sharma, Ashma; Gungor, Kivanc; Yu, Junhong; Li, Mingjie; Sum, Tze-Chien; Dang, Cuong; Demir, Hilmi Volkan |
| 350 | Noble Metal Supported on Metal Organic Frameworks derived Co@N-doped Carbon Polyhedra as Advanced Bifunctional Electrocatalysts | Sarkar, Bidushi (P) (C); Das, Debanjan; Nanda, Karuna Kar |
| 352 | Formation of Carbon Nitride Films Using Electrophoretic Deposition of Supramolecular Assemblies for Enhanced Photoelectrochemical Cell Performance | Abisdris, Liel (P); Volokh, Michael; Shalom, Menny |
| 358 | Towards 2D Layered Hybrid Perovskites With Enhanced Functionality. | Lutsen, Laurence (P) (C); Vanderzande, Dirk; Van Gompel, Wouter; Herckens, Roald; Denis, Paul-Henri; Mertens, Martijn; Aernouts, Tom; D'Haen, Jan; Ruttens, Bart; Van Hecke, Kristof |
| 359 | Development of Novel Imaging Techniques for Quality Control in Organic Solar Cell Manufacturing Using Artificially Introduced Defects. | Karl, Andre(P) (C); Osvet, Andres; Li, Ning; Brabec, Christoph J. |
| 361 | Copper-Based Electrodes for Electrochemical CO2 Conversion | Zeng, Juqin (P) (C); Bejtka, Katarzyna; Sacco, Adriano; Castellino, Micaela; Pirri, Candido Fabrizio; Chiodoni, Angelica |

|  |  |  |
| --- | --- | --- |
| AbstractNumber | Tittle | Authors |
| 365 | MoTe2/Pentacene Type II Heterostructure for Efficient Charge Population and Extraction | Jang, Yu Jin (P); Park, Jin Cheol; Tran, Minh Dao; Kim, Meeree; Kim, Joonsoo; Yun, Seok Joon; Lee, Hyoyoung; Kim, Ji-Hee; Lee, Young Hee |
| 369 | New Aspects of Operando Raman Spectroscopy Applied to Electrochemical CO2 Reduction on Cu Foams | Jiang, Shan (P); Klingan, Katharina; Pasquini, Chiara; D´Amario, Luca; Dau, Holger |
| 372 | Hot Carrier Recombination in Lead Halide Perovskite Nanocrystals | Papagiorgis, Paris (P) (C); Manoli, Andreas; Bernasconi, Caterina; I. Bodnarchuk, Maryna; V.; Kovalenko, Maksym; Othonos, Andreas; Itskos, Grigorios |
| 374 | Study of Copper-Derived Catalysts for Electrochemical Reduction of CO2 | Fernández-Climent, Roser (P) (C); García-Tecedor, Miguel; Gimenez, Sixto |
| 375 | Amplified Spontaneous Emission in Formamidinium Lead Iodide Perovskite Nanocrystals | Andreas, Manoli (P) (C); Papagiorgis, Paris; Bodnarchuk, Maryna; V.Kovalenko, Maksym; Itskos, Grigorios |
| 377 | Stability of Oxidized Spiro-MeOTAD Under Influence of Perovskite and its Components | Kasparavicius, Ernestas (P) (C); Malinauskas, Tadas; Getautis, Vytautas |
| 378 | Energy Harvesting for Indoor IoT Applications with Organic Photovoltaics | Mueller, David (P) (C); Wuerfel, Uli |
| 380 | Colloidal Multimetallic Nanoparticles to Advance Electrochemical CO2 Conversion Studies | Castilla-Amorós, Laia (P); Huang, Jianfeng; Buonsanti, Raffaella |
| 381 | Characterization of Nitrogen Implanted TiO2 Photocatalysts by Soft X-ray Spectroscopy | Yoshida, Tomoko (P) (C); Yamamoto, Muneaki; Ozawa, Akiyo; Tanabe, Tetsuo |
| 383 | Investigating Synergetic Effects in Cu-Sn Mixed Metal Oxide CO2 Reduction Electrocatalysts by Hard and Soft X-ray Spectroscopy | Pardo-Pérez, Laura; Stojkovikj, Sasho; Arndt, Alexander; Xi, Lifei; Mayer, Matthew T. |

|  |  |  |
| --- | --- | --- |
| AbstractNumber | Tittle | Authors |
| 384 | Metal Halide Perovskite Nanocrystals as Additive to Enhance Thermoelectric Performance | Calcabrini, Mariano (P) (C); Liu, Yu; Genc, Aziz; Arbiol, Jordi; Kovalenko, Maksym; Ibañez, Maria |
| 385 | Organic Interlayers as Hybrid Interface Modifiers for c-Si Solar Cells with Tetracene as Singlet Fission Sensitizer | Niederhausen, Jens (P) (C); Gersmann, Clemens; MacQueen, Rowan W.; Liebhaber, Martin; Futscher, Moritz H.; Daiber, Benjamin; Ehrler, Bruno; Lips, Klaus |
| 387 | Combustion Synthesized NiCo2O4 Hole Transport Layer for Inverted Perovskite Solar Cells | Papadas, Ioannis (P) (C); Ioakeimidis, Apostolos; Armatas, Gerasimos; Choulis, Stelios |
| 390 | CsPbX3 in Silica Monolith via a Novel Sol-gel Route Starting from Cs4PbX6 Nanocrystals | Park, Sungwook (P); An, Mai Ngoc; De Trizio, Luca; Almeida, Guilherme; Palazon, Francisco; Spirito, Davide; Krahne, Roman; Manna, Liberato |
| 391 | Copper Nanoparticles for Electroreduction of CO2 to Sustainable Fuels | Oates, Rose (P) (C); Tong, Capucine; Said, Said A; Mezzavilla, Stefano; Williams, Charlotte; Kucernak, Anthony R; Shaffer, Milo; Stephens, Ifan E L |
| 392 | Compound Attachment Tool: Automating the Construction of Chemical Compounds | van Beek, Bas (P); Zapata, Felipe; Visscher, Lucas; Infante, Ivan |
| 393 | Developing Lattice Matched ZnMgSe Shells on InZnP Quantum Dot Phosphors | Mulder, Jence (P); Kirkwood, Nicholas; De Trizio, Luca; Manna, Liberato; Houtepen, Arjan |
| 394 | Role of Surface Reduction in the Formation of Traps in n-Doped II-VI Semiconductor Nanocrystals: How to Charge without Reducing the Surface | du Fossé, Indy (P); ten Brinck, Stephanie; Infante, Ivan; Houtepen, Arjan J. |
| 400 | Towards Luminescent Water-Dispersible CdSe@CdS Nanorods with High pH-Stability | Liu, Bei (P); Micheel, Mathias; Wächtler, Maria |

|  |  |  |
| --- | --- | --- |
| AbstractNumber | Tittle | Authors |
| 402 | Facile synthesis of CdSe/CdSeTe Nanoplatelets/TiO2 for efficient Photocatalytic NOx oxidation and storage under UV-Vis irradiation | Ebrahimi, Elnaz (P) (C); Irfan, Muhammad; Kocak, Yusuf; Shabani, Farzan; Demir, Hilmi Volkan; Ozensoy, Emrah |
| 404 | Surface Engineering from Anionic Ligand-Rich to Cationic Ligand-Rich Surfaces of CsPbX3 Perovskite Nanocrystals: Understanding the Role of Additional Metal Halides | Woo, Ju Young (P); Kim, Youngsik; Yoo, Dongsuk; Lim, Sung Nam; Song, Shin Ae; Kim, Kiyoung; Kim, Yong-Hyun; Jeong, Sohee |
| 405 | Long Time In-situ Raman Observation of the Cu Cathode Surface without Pretreatment during CO2 Electrochemical Reduction | Fujii, Katsushi (P) (C); Koike, Kayo; Morishita, Kei; Torikai, Eri; Matsumoto, Jun; Takeda, Dai; Nakamura, Ryuhei; Wada, Satoshi |
| 408 | Surface Study of InP Nanocrystals Synthesized Using Aminophosphine | Kim, Youngsik (P); Choi, Mahnmin; Woo, Ju Young; Choi, Hyekyoung; Jeong, Sohee |
| 409 | Effect of Hole Transport Layer and Back Electrode on Thermal Stability of Organic Photovoltaic Modules | Kim, Sung Hyun (P) (C); Son, Hyung Jin |
| 410 | First-principles Study on Fundamental Optoelectronic Properties and Surface Characteristics of I-V-VI2 Ternary Compounds | Lee, Yeunhee (P); Yoo, Dongsuk; Kim, Yong-Hyun |
| 412 | First Principle Studies of the Control of Metal Phthalocyanine Orientation on ITO | Situmorang, Andres Bethavan (P); Lee, Yeunhee; Kim, Jeong Won; Kim, Yong Hyun |
| 413 | Antimony doped Tin Oxide/Polyethylenimine Electron Selective Contact for reliable and light soaking-free high Performance Inverted Organic Solar Cells | Georgiou, Efthymios (P); T. Papadas, Ioannis; Antoniou, Ioanna; F. Oszajca, Marek; Hartmeier, Benjamin; Rossier, Michael; A. Luechinger, Norman; A. Choulis, Stelios |
| 414 | Interplay of Fluorescence Quantum Yield and Photovoltaic Parameters of Perovskite Solar Cells | Kramarenko, Mariia (P) (C); G. Ferreira, Catarina; Martínez-Denegri, Guillermo; Sansierra, Constanza; Toudert, Johann; Martorell, Jordi |
| 417 | Manganese-doped Lead Halide White Phosphors with High Efficiency and Ultra High Color Rendering | Yuan, Hailong (P); Massuyeau, Florian; Gautier, Romain; Paris, Michael |

|  |  |  |
| --- | --- | --- |
| AbstractNumber | Tittle | logo nanoGeAuthors |
| 420 | Atomic Atom Distribution of Ruthenium Dispersed on a 2D Covalent Organic Framework for Electrocatalytic Hydrogen Evolution Reaction | Liang, Zhifu (P) (C); Wang, Xiang; Yang, Dawei; Cabot, Andreu; Arbiol, Jordi |
| 421 | Magneto-photoluminescence and Optically Detected Magnetic Resonance Studies of Magnetically Doped Colloidal Core/shell Nanocrystals | Barak, Yahel (P) (C); Dehnel, Joanna; Strassberg, Rotem; Delikanli, Savas |
| 422 | Combined High Catalytic Activity and Efficient Polar Tubular Nanostructure in Urchin-Like Metallic NiCo2Se4 for High-Performance Lithiumâ€“Sulfur Batteries | Zhang, Ting (P); Zhang, Chaoqi; Biendicho, Jordi Jacas; Du, Ruifeng; Li, Junshan; Yang, Xuhui; Zhou, Yingtang; Morante, Joan Ramon; Cabot, Andreu; Arbiol, Jordi |
| 426 | InP/ZnSe QDs Synthesis Mechanism: Metal Halides as Alternative Metal Source for the Shell Growth | Mingabudinova, Leila (P) (C); Schiettecatte, Pieter; Dupon, Dorian; Tessier, Mickaël; Hens, Zeger |
| 428 | Spin Properties in Mn2+ doped CdSe/CdS Core-Shell Seeded Nanorods | Dehnel, Joanna (P) (C); Barak, Yahel; Lifshitz, Efrat |
| 430 | Hybrid Sb2Se3/Molecular Catalyst Photocathodes for Carbon Dioxide Reduction | Garcia-Osorio, D. Alicia (P) (C); Neri, Gaia; Hutter, Oliver; Potter, Richard J.; Major, Jon; Cowan, Alex |
| 434 | Expanding the functionality of thiophenes in the quest for halide perovskite stabilization | Primera Darwich, Barbara; Cho, Han-Hee; Guijarro, Nestor; Yao, Liang; Sivula, Kevin; Yum, Jun-Ho |
| 436 | Theoretical Study on the Shape and the Electronic Structure of InP QDs | Dümbgen, Kim (P) (C); Infante, Ivan; Hens, Zeger |
| 440 | Density Functional Theory Investigation of Structural, Electronic, and Optical Properties of CsPb(I1-xBrx )3 Perovskite | Ghaithan, Hamid (P) (C); Alahmed, Zeyad; Qaid, Saif; Hezam, Mahmoud; Aldwayyan, Abdullah |
| 444 | All inorganic Tin Germanium Perovskite Nanocubes: Towards Highly Efficient Lead free Perovskite Nanocrystals based Solar Cells | Vivo, Paola (P) (C); Liu, Maning; Pasanen, Hannu; Ali-Löytty, Harri; Lahtonen, Kimmo; Qudsia, Syeda; Smått, Jan-Henrik; Valden, Mika; Tkachenko, Nikolai V.  |

|  |  |  |
| --- | --- | --- |
| 447 | Control over InP Nanocrystal Size Using Aminophosphine Derivatives with Tunable Reactivity: Continuous Nucleation and Size Dependent Growth Kinetics | McMurtry, Brandon M. (P) (C); Qian, Kevin;Teglasi, Joseph K.; Swarnakar, Anindya K.; De Roo, Jonathan; Owen, Jonathan S. |