

Ambient-pressure Photoemission Kelvin Probe Systems

The Mystery of Black TiO₂: Insights from Combined Surface Science and In Situ Electrochemical Methods

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ACS Materials Au (2021) DOI: <https://doi.org/10.1021/acsmaterialsau.1c00020>

APS04; Impact factor: Unknown; Institute: University of Szeged, Hungary

Two-Step Chemical Vapor Deposition-Synthesized Lead-Free All-Inorganic Cs₃Sb₂Br₉ Perovskite Microplates for Optoelectronic Applications

Sujit Kumer Shil, Fei Wang, Kingsley O. Egbo, Zhengxun Lai, Ying Wang, Yunpeng Wang, Dongxu Zhao, Sai-Wing Tsang, Johnny C. Ho, and Kin Man Yu

ACS Applied Materials & Interfaces (2021) DOI: <https://doi.org/10.1021/acsmi.1c07839>

APS04; Impact factor: 8.758; Institute: City University of Hong Kong, China

Interface Defect Engineering of a Large-Scale CVD-Grown MoS₂ Monolayer via Residual Sodium at the SiO₂/Si Substrate

Sang Wook Han, Won Seok Yun, Whang Je Woo, Hyungjun Kim, Jusang Park, Young Hun Hwang, Tri Khoa Nguyen, Chinh Tam Le, Yong Soo Kim, Manil Kang, Chang Won Ahn, Soon Cheol Hong

Advanced Materials Interfaces (2021) 2100428

APS01; Impact factor: 5.70; Institute: University of Ulsan, Republic of Korea

Development of high-performance roll-to-roll-coated gas-diffusion-electrode-based fuel cells

Scott A. Mauger, Min Wang, Firat C. Cetinbas, Michael J. Dzara, Jaehyung Park, Deborah J. Myers, Rajesh K. Ahluwalia, Svitlana Pylypenko, Leiming Hu, Shawn Litster, K.C. Neyerlin, Michael Ulsh

Journal of Power Sources (2021) 506, 230039

APS02; Impact factor: 8.247; Institute: National Renewable Energy Laboratory, USA

Band alignment of wide bandgap NiO/MoO₃ and NiO/WO₃ p-n heterojunctions studied by high-resolution x-ray photoelectron spectroscopy

Kingsley O. Egbo, Sujit K. Shil Cheuk Gary Kwok, Ying Wang, Chao Ping Liu, Kin Man Yu

Journal of Alloys and Compounds (2021) DOI: <https://doi.org/10.1016/j.jallcom.2021.160136>

APS04; Impact factor: 4.65; Institute: City University of Hong Kong, China

Function and Electronic Structure of the SnO₂ Buffer Layer between the α -Fe₂O₃ Water Oxidation Photoelectrode and the Transparent Conducting Oxide Current Collector

Yelin Hu, Florent Boudoire, Matthew T. Mayer, Songhak Yoon, Michael Graetzel, and Artur Braun

Journal of Physical Chemistry C (2021), DOI: <https://doi.org/10.1021/acs.jpcc.1c01809>

APS01; Impact factor: 4.189; Institute: Empa - Swiss Federal Laboratories for Materials Science and Technology, Switzerland

Solid-State Ionic Liquid: Key to Efficient Detection and Discrimination in Organic Semiconductor Gas Sensors

Saurav Limbu, Katherine Stewart, James Nightingale, Hao Yan, Chandran Balamurugan, Soonil Hong, Jehan Kim, Kwanghee Lee, Sooncheol Kwon, and Ji-Seon Kim

ACS Applied Electronic Materials (2021) DOI: <https://doi.org/10.1021/acsaelm.1c00157>

APS04; Impact factor: Unknown; Institute: Imperial College London, United Kingdom

Structural Features Dictate the Photoelectrochemical Activities of Two-Dimensional MoSe₂ and WSe₂ Nanostructures

Péter S. Tóth, Gábor Szabó, and Csaba Janáky

The Journal of Physical Chemistry C (2021) DOI: <https://doi.org/10.1021/acs.jpcc.1c01265>

APS04; Impact factor: 4.189; Institute: University of Szeged, Hungary

Selenium-Substituted Non-Fullerene Acceptors: A Route to Superior Operational Stability for Organic Bulk Heterojunction Solar Cells

Chiara Labanti, Min Jae Sung, Joel Luke, Sooncheol Kwon, Rhea Kumar, Jisu Hong, Jehan Kim, Artem A. Bakulin, Soon-Ki Kwon, Yun-Hi Kim and Ji-Seon Kim

ACS Nano (2021) DOI: <https://doi.org/10.1021/acsnano.1c01345>

APS04; Impact factor: 14.588; Institute: Imperial College London, United Kingdom

Crystalline all-inorganic lead-free Cs₃Sb₂I₉ perovskite microplates with ultra-fast photoconductive response and robust thermal stability

Sujit Kumer Shil, Fei Wang, Zhengxun Lai, You Meng, Yunpeng Wang, Dongxu Zhao, Mohammad Kamal Hossain, Kingsley O. Egbo, Ying Wang, Kin Man Yu, and Johnny C. Ho
 Nano Research (2021) DOI: <https://doi.org/10.1007/s12274-021-3351-x>
APS04; Impact factor: 8.183; Institute: City University of Hong Kong, China

A Commercial Benchmark: Light-Soaking Free, Fully Scalable, Large-Area Organic Solar Cells for Low-Light Applications

Joel Luke, Luiza Corrêa, Jair Rodrigues, Juliana Martins, Matyas Daboczi, Diego Bagnis and Ji-Seon Kim
 Adv. Energy Mater. (2021), 11, 9, 2003405
APS04; Impact factor: 25.245; Institute: Imperial College London, United Kingdom

Novel scalable aerosol-assisted CVD route for perovskite solar cells

S. R. Ratnasingham, L. Mohan, M. Daboczi, T. Degousée, R. Binions. Fenwick, J.-S. Kim, M. A. McLachlan and J. Briscoe
 Material Advances (2021) 2, 1606-1612
APS04; Impact factor: 27.398; Institute: Imperial College London, United Kingdom

Formamide iodide: A new cation additive for inhibiting δ -phase formation of formamidinium lead iodide perovskite

Itaru Raifuku, Yu-Hsien Chiang, Cheng-Hung Hou, Ming-Hsien Li, Chen-Fu Lin, Pei-Ying Lin, Jing-Jong Shyue and Peter Chen
 Materials Advances (2021) DOI: 10.1039/D0MA00945H
APS04; Impact factor: 27.398; Institute: National Cheng Kung University, Taiwan

Mg_xZn_{1-x}O contact to CuGa₃Se₅ absorber for photovoltaic and photoelectrochemical devices

Imran S Khan, Christopher P Muzzillo, Craig L Perkins, Andrew G Norman, James L Young, Nicolas Gaillard and Andriy Zakutayev
 Journal of Physics: Energy (2021) 3, 024001
APS02; Impact factor: Unknown; Institute: National Renewable Energy Laboratory, USA

Electronic Structure of the CdS/Cu(In,Ga)Se₂ Interface of KF- and RbF-Treated Samples by Kelvin Probe and Photoelectron Yield Spectroscopy

Marin Rusu, Tim Kodalle, Leo Choubrac, Nicolas Barreau, Christian A. Kaufmann, Rutger Schlatmann, and Thomas Unold
 Applied Materials and Interfaces (2021) 13, 6, 7745-7755
APS02; Impact factor: 8.758; Institute: Helmholtz-Zentrum Berlin für Materialien und Energie, Germany

Solar Photoelectroreduction of Nitrate Ions on PbI₂/CuI Nanocomposite Electrodes

Egon Kecsenovity Saji Thomas Kochuveedu Jyh-Pin Chou Diána Lukács Ádám Gali Csaba Janáky
 Solar RRL (2021) 5, 2, 2000418
APS04; Impact factor: 7.527; Institute: University of Szeged, Hungary

Surface-modified ultra-thin indium zinc oxide films with tunable work function for efficient hole transport in flexible indoor organic photovoltaics

Jae WanPark, Ashkan Vakilipour, Takaloo, Sang Hyeon Kim, Kyung Rock Son, Dae Yun Kang, Song Kyu Kang, Cheong Beom Lee, Hyosung Choi, Jae Won Shim, Tae Geun Kim
 Journal of Power Sources (2021) 489. 229507
APS01; Impact factor: 8.247; Institute: Korea University, Republic of Korea

Demonstration of Energy-Resolved γ -Ray Detection at Room Temperature by the CsPbCl₃ Perovskite Semiconductor

Yihui He, Constantinos C. Stoumpos, Ido Hadar, Zhongzhen Luo, Kyle M. McCall, Zhifu Liu, Duck Young Chung, Bruce W. Wessels and Mercouri G. Kanatzidis
 J. Am. Chem. Soc. (2021) 143, 4, 2068-2077
APS04; Impact factor: 14.612; Institute: Northwestern University, USA

Effect of microstructural defects on passive layer properties of interstitial free (IF) ferritic steels in alkaline environment

A.Yilmaz, K.Traka, S.Pletincx, T.Hauffman, J.SietsmaaY.Gonzalez-Garcia
 Corrosion Science (2021), 182, 109271
APSN2RH; Impact factor: 6.479; Institute: Max-Planck-Institut für Eisenforschung GmbH, Germany

Scanning Kelvin Probe Systems**Interfacial charge transport of Ag²⁺-decorated CuI thin film for solar cell application**

K. Prakash, S. Prabakaran, S. Harish & M. Navaneethan

Journal of Materials Science: Materials in Electronics (2021), DOI: <https://doi.org/10.1007/s10854-021-06578-y>

SKP5050; Impact factor: 2.478; Institute: SRM Institute of Science and Technology, India

ZnO nanoparticles modified with biomaterial GHK-Cu as electron transport layer to fabricate highly efficient inverted polymer solar cells

Jinzheng Huang, Huangzhong Yu, Xiaoming Zhou

Chemical Engineering Journal (2021) 428, 131366

SKP5050; Impact factor: 10.652; South China University of Technology, China

Novel p–n heterojunctions incorporating NiS_{1.03}@C with nitrogen doped TiO₂ for enhancing visible-light photocatalytic performance towards cyclohexane oxidation

Dandan Peng, Ying Zhang, Guang Xu, Ye Tian, Di Ma, Yao Zhang

Applied Surface Science (2021) 566, 150676

SKP5050; Impact factor: 6.182; China University of Petroleum, China

Cathode made by silver-precursor ink for all-solution processed quantum dots light-emitting diodes

Binbin Zhang, Jiali Li, Chaohuang Mai, Miaozi Li, Haihua Li, Wei Xu, Jian Wang

Organic Electronics (2021) DOI: <https://doi.org/10.1016/j.orgel.2021.106281>

SKP5050; Impact factor: 3.31; Institute: South China University of Technology, China

High-performance self-powered photodetectors achieved through the pyro-phototronic effect in Si/SnO_x/ZnO heterojunctions

José P. B. Silva, Eliana M. F. Vieira, Katarzyna Gwozdz, Adrian Kaim, Luís M. Goncalves, Judith L. MacManus-Driscoll, Robert L. Z. Hoye, Mario Pereira

Nano Energy (2021) 89, A, 106347

SKP5050; Impact factor: 16.602; Institute: Wroclaw University of Science and Technology, Poland

Enhanced-Performance Self-Powered Solar-Blind UV-C Photodetector Based on n-ZnO Quantum Dots Functionalized by p-CuO Micro-pyramids

Norah Alwadai, Somak Mitra, Mohamed Nejjib Hedhili, Hadeel Alamoudi, Bin Xin, Naresh Alaal, and Iman S. Roqan

ACS Applied Materials & Interfaces (2021) DOI: <https://doi.org/10.1021/acsami.1c03424>

SKP5050; Impact factor: 8.758; Institute: King Abdullah University of Science and Technology, Saudi Arabia

NO₂ sensor based on Al modified ZnO nanowires

Niranjan S. Ramgir, C.P. Goyal, Deepak Goyal, S.J. Patil, H. Ikeda, S. Ponnusamy, K.P. Muthe, A.K. Debnath

Materials Science in Semiconductor Processing (2021) 134, 106027

SKP5050; Impact factor: 2.82; Institute: Bhabha Atomic Research Center, India

Engineering surface oxygen vacancy of mesoporous CeO₂ nanosheets assembled microspheres for boosting solar-driven photocatalytic performance

Decai Yang, Yachao Xu, Kai Pan, Chuanxin Yu, Jiaying Wu, Mingxia Li, Fan Yang, Yang Qu, Wei Zhou

Chinese Chemical Letters (2021) DOI: <https://doi.org/10.1016/j.ccl.2021.06.035>

SKP5050; Impact factor: 1.587; Institute: Heilongjiang University, China

Effects of UV Irradiation and Storage on the Performance of Inverted Red Quantum-Dot Light-Emitting Diodes

Yu Luo, Junjie Wang, Pu Wang, Chaohuang Mai, Jian Wang, Boon Kar Ya and Junbiao Peng

Nanomaterials (2021) 11, 6, 1606

SKP5050; Impact factor: 4.034; Institute: South China University of Technology, China

Synergistic Molecular Engineering of Hole-Injecting Conducting Polymers Overcomes Luminescence Quenching in Perovskite Light-Emitting Diodes

Soyeong Ahn, Young-Hoon Kim, Sungjin Kim, Jinwoo Park, Nannan Li, Jung-Min Heo, Joo Sung Kim, Dong Jin Kim, Byung Hee Hong, Jin Yong Lee, Tae-Woo Lee

Advanced Optical Materials (2021) 2100646

SKP5050; Impact factor: 8.286; Institute: Seoul National University, Republic of Korea

Synergistic Interfacial and Doping Engineering of Heterostructured NiCo(OH)_x-Co₂W as an Efficient Alkaline Hydrogen Evolution Electrocatalyst

Ruopeng Li, Hao Xu, Peixia Yang, Dan Wang, Yun Li and Lihui Xiao

Nano-Micro Letters (2021) 13, 1, 120

SKP5050; Impact factor: 12.264; Institute: Harbin Institute of Technology, China

Effect of Cu₂O Substrate on Photoinduced Hydrophilicity of TiO₂ and ZnO Nanocoatings

Maria V. Maevskaya, Aida V. Rudakova, Alexei V. Emeline and Detlef W. Bahnemann

Nanomaterials (2021) 11, 6, 1526

SKP5050; Impact factor: 4.034; Institute: Saint-Petersburg State University, Russia

Phosphorus-doping CdS@NiFe layered double hydroxide as Z-Scheme heterojunction for enhanced photocatalytic and photofenton degradation performance

Bin Fang, Zipeng Xing, Meijun Guo, Yalu Qiu, Yongqian Cui, Zhenzi Li, Yu Wang, Peng Chen, Wei Zhou

Separation and Purification Technology (2021) 274, 119066

SKP5050; Impact factor: 5.774; Institute: Jilin University, China

Polymer-based Cu/Ag composite as seed layer on insulating substrate for copper addition of multi-dimensional conductive patterns

Jiujuan Li, Yan Hong, Guoyun Zhou, Huaiwu Zhang, Wei He, Shouxu Wang, Yuanming Chen, Chong Wang, Xinhong Su, Yukai Sun, Martin Andersson

Journal of the Taiwan Institute of Chemical Engineers (2021) DOI: <https://doi.org/10.1016/j.jtice.2021.05.033>

SKP5050; Impact factor: 5.76; Institute: University of Electronic Science and Technology of China, China

Multidimensional Ti₃C₂T_x MXene Architectures via Interfacial Electrochemical Self-Assembly

Taeyeong Yun, Gang San Lee, Jungwoo Choi, Hyerim Kim, Geon Gug Yang, Ho Jin Lee, Jin Goo Kim, Hyuck Mo Lee, Chong Min Koo, Joonwon Lim and Sang Ouk Kim

ACS Nano (2021) DOI: <https://doi.org/10.1021/acsnano.1c01727>

SKP5050; Impact factor: 14.588; Institute: Kyung Hee University, Republic of Korea

Electron work function: an indicative parameter towards a novel material design methodology

Yuzhuo Luo, Yunqing Tang, Tsai-Fu Chung, Cheng-Ling Tai, Chih-Yuan Chen, Jer-Ren Yang & D. Y. Li

Scientific Reports (2021) 11, 11565

SKP5050; Impact factor: 3.998; Institute: University of Alberta, Canada

Solution processable transition metal oxide ultra-thin films as alternative electron transport and hole blocking layers in dye sensitized solar cells

Om Prakash, Vibha Saxena, R.K. Bedi, A.K. Debnath, Aman Mahajan

Journal of Photochemistry and Photobiology A: Chemistry (2021) 113385

SKP5050; Impact factor: 3.261; Institute: Bhabha Atomic Research Centre, India

Improved photocatalytic activities of recyclable porous Fe₂O₃ nanotubes by modifying with nano-sized SiO₂ and g-C₃N₄ for degrading 2-chlorophenol

E.Wenyu, Tianwei Dou, Yangyang Zhu, Jingqiang Liu, Liqiang Jing

Materials Research Bulletin (2021) 111416

SKP5050; Impact factor: 4.019; Institute: Heilongjiang University, China

Tuning the Conductivity and Electron Work Function of a Spin-Coated PEDOT:PSS/PEO Nanofilm for Enhanced Interfacial Adhesion

Raymond Christopher Setiawan and D. Y. Li
 Langmuir (2021) DOI: <https://doi.org/10.1021/acs.langmuir.1c00147>
 SKP5050; Impact factor: 3.557; Institute: University of Alberta, Canada

Phosphorylation of NiAl-layered double hydroxide nanosheets as a novel cocatalyst for photocatalytic hydrogen evolution

Jiang-Yan He, Dou Zhang, Xiao-Jing Wang, Jun Zhao, Yu-Pei Li, Ying Liu, Fa-Tang Li
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 SKP5050; Impact factor: 4.939; Institute: Jilin University, China

Direct Z-scheme Fe₂(MoO₄)₃/MoO₃ heterojunction: Photo-Fenton reaction and mechanism comprehension

Yufeng Zhu, Shouchun Ma, Yang Yang, Jiaqi Li, Yuqing Mei, Li Liu, Tongjie Yao, Jie Wu
 Journal of Alloys and Compounds (2021) 159830
 SKP5050; Impact factor: 4.65; Institute: Heilongjiang University, China

A direct Z-scheme α-Fe₂O₃/LaTiO₂N visible-light photocatalyst for enhanced CO₂ reduction activity

Jia Song, Ying Lu, Yuan Lin, Qianwen Liu, Xuxu Wang, Wenyue Su
 Applied Catalysis B: Environmental (2021) 159746
 SKP5050; Impact factor: 16.683; Institute: Fuzhou University, China

Photoinduced hydrophilic behavior of TiO₂ thin film on Si substrate

Aida V. Rudakova, Alexei V. Emeline, Andrey I. Romanychev, Detlef W. Bahnemann
 Journal of Alloys and Compounds (2021) 159746
 SKP5050; Impact factor: 4.65; Institute: Saint-Petersburg State University, Russia

An effective CdS/Ti-Fe₂O₃ heterojunction photoanode: Analyzing Z-scheme charge-transfer mechanism for enhanced photoelectrochemical water-oxidation activity

Yinyin Li, Qiannan Wu, Qijing Bu, Kai Zhang, Yanhong Lin, Dejun Wang, Xiaoxin Zou, Tengfeng Xie
 Chinese Journal of Catalysis (2021) 42, 5, 762-771
 SKP5050; Impact factor: 1.964; Institute: Jilin University, China

Triboelectrification of nanocomposites using identical polymer matrixes with different concentrations of nanoparticle fillers

Linars Lapčinskis, Artis Linarts, Kaspars Mālnieks, Hyunseung Kim, Kristaps Rubenis, Kaspars Pudzs, Krisjanis Smits, Andrejs Kovaļovs, Kaspars Kalniņš, Aile Tamm, Chang Kyu Jeong and Andris Šutka
 Journal of Materials Chemistry A (2021) DOI: <https://doi.org/10.1039/D0TA12441A>
 SKP5050; Impact factor: 11.301; Institute: Riga Technical University, Latvia

Silver nanowire/PEDOT:PSS hybrid electrode for flexible organic light-emitting diodes

Hyun Gi Kim, Mansu Kim, Sung Soo Kim, Sang Hyun Paek, Young Chul Kim
 Journal of Science: Advanced Materials and Devices (2021) DOI: <https://doi.org/10.1016/j.jsamd.2021.03.004>
 SKP5050; Impact factor: 3.783; Institute: Kyung Hee University, Republic of Korea

Boron-doped nitrogen-deficient carbon nitride-based Z-scheme heterostructures for photocatalytic overall water splitting

Yinyin Li, Qiannan Wu, Yifan Chen, Rui Zhang, Cuiyan Li, Kai Zhang, Mingjie Li, Yanhong Lin, Dejun Wang, Xiaoxin Zou, Tengfeng Xie, Daming Zhao, Yiqing Wang, Chung-Li Dong, Yu-Cheng Huang, Jie Chen, Fei Xue, Shaohua Shen & Liejin Guo
 Nature Energy (2021) DOI: <https://doi.org/10.1038/s41560-021-00795-9>
 SKP5050; Impact factor: 46.495; Institute: Jilin University, China

Growth of ZnO Nanorods on ITO Film for Piezoelectric Nanogenerators

Hyun Gi Kim, Eun Hye Kim and Sung Soo Kim
 Materials (2021), 290, 14, 1461
 SKP5050; Impact factor: 3.057; Institute: Kyung Hee University, Republic of Korea

Interface engineering Z-scheme Ti-Fe₂O₃/In₂O₃ photoanode for highly efficient photoelectrochemical water splitting

Yinyin Li, Qiannan Wu, Yifan Chen, Rui Zhang, Cuiyan Li, Kai Zhang, Mingjie Li, Yanhong Lin, Dejun Wang, Xiaoxin Zou, Tengfeng Xie

Applied Catalysis B: Environmental (2021), 290, 120058

SKP5050; Impact factor: 16.683; Institute: Jilin University, China

Contribution of cold-work to the wear resistance of materials and its limitation – A study combining molecular dynamics modeling and experimental investigation

Yunqing Tang, Hongbo Pan and D.Y.Li

Wear (2021), 203642

SKP5050; Impact factor: 2.531; Institute: University of Alberta, Canada

Microstructure – electron work function relationship: A crucial step towards “electronic metallurgy”

Yuzhuo Luo, Yunqing Tang, Liqiu Guo and D.Y. Li

Materials Today Communications (2021), 26, 101977

SKP5050; Impact factor: 2.678; Institute: University of Alberta, Canada

Mechanism of analog bipolar resistive switching and work function in Au/Na_{0.5}Bi_{0.5}TiO₃/Pt heterostructure thin films

G. Jagadish Kumara, M.Sarathbavan, Yuvaraj Sivalingam, M.Navaneethan K. Kamala Bharathi

Materials Chemistry and Physics (2021), 257, 123765

SKP5050; Impact factor: 3.408; Institute: SRM Institute of Science and Technology, India

Tuning the work function of nickel oxide using triethoxysilane functionalized monolayers

Gang Chen, Xinquan Wang, Yuting Shi, Jonathan S. Tinkham, Thomas M. Brenner, Dana C. Olson, Alan Sellinger and Thomas E. Furtak

Physical Chemistry Chemical Physics (2021), 23, 2449-2457

SKP5050; Impact factor: 3.43; National Renewable Energy Laboratory, USA

ZnO/Ti₃C₂T_x monolayer electron transport layers with enhanced conductivity for highly efficient inverted polymer solar cells

Chunli Hou, Huangzhong Yu

Chemical Engineering Journal (2021), 407, 127192

SKP5050; Impact factor: 10.652; South China University of Technology, China

Aldol Condensation-Polymerized n-Doped Conjugated Polyelectrolytes for High-Performance Nonfullerene Polymer Solar Cells

Li Tian, Jianhua Jing, Haoran Tang, Yuanying Liang, Zhicheng Hu, Muhammad Rafiq, Fei Huang, Yong Cao

Solar RRL (2021), 407, 127192

SKP5050; Impact factor: 7.527; South China University of Technology, China

Understand the large difference in properties among coiled tubing steels having similar microstructures via electron work function analysis

LiuYang, Jiaqi Li, Deguo Wang, Yanbao Guo, Qingyang Li, Wei Li, Renbo Xu, D. L. Chen, D. Y. Li

Wear (2021), 26, 101977

SKP5050; Impact factor: 2.531; Institute: University of Alberta, Canada

Monolayer Bi₂W_{1-x}MoxO₆ Solid Solutions for Structural Polarity to Boost Photocatalytic Reduction of Nitrobenzene under Visible Light

Yanyu Xie, Dan Liu, Bing Wang, Dongmiao Li, Ziyuan Yan, Yanmei Chen, Jinni Shen, Zizhong Zhang and Xuxu Wang

ACS Sustainable Chem. Eng. (2021) 9, 6, 2465-2474

SKP5050; Impact factor: 7.632; Institute: Fuzhou University, China

Natural silk-composite enabled versatile robust triboelectric nanogenerators for smart applications

Bhaskar Dudem, Sontyana Adonijah Graham, R.D. Ishara G.Dharmasena, S. Ravi P.Silva and Jae Su Yu

Nano Energy (2021), 105819

SKP5050; Impact factor: 16.602; Kyung Hee University, Republic of Korea

Observation of dopant-dependent efficiency in chemically doped graphene/silicon solar cells and prospects for MoOx to overcome the stability and efficiency limits

S. Chandramohan, Santhosh Durairaj, Tae Hoon Seo, Beo Deul Ryu and Chang-Hee Hong

Journal of Applied Physics (2021), 129:1

SKP5050; Impact factor: 2.286; Institute: SRM Institute of Science and Technology, India

Highly sensitive NO₂ sensor based on ZnO nanostructured thin film prepared by SILAR technique

S. Chandramohan, Santhosh Kailasa Ganapathi S., Manmeet Kaur, Shaheera M., Ankita Pathak, S. C. Gadkari, A. K. Debnath

Sensors and Actuators B: Chemical (2021) 335, 129678

SKP5050; Impact factor: 7.1; Institute: Bhabha Atomic Research Centre, India

Surface potential, fermi level and band gap energy of copper doped magnesium nickel ferrite nanoparticles

Gideon Osamong, Paul Kuria Kamweru, Joel Mwangi Gichumbi, Francis Gichuki Ndiritu

Asian Journal of Nanosciences and Materials (2021) DOI: 10.26655/AJNANOMAT.2021.1.1

SKP5050; Impact factor: Unknown; Institute: Chuka University, Kenya

Development and chemical properties of retinal prostheses using photoelectric dyes coupled to polyethylene films with various anions to achieve high durability

Koichiro Yamashita, Tenu Tanaka, Toshihiko Matsuo & Tetsuya Uchida

Polymer Journal (2021) DOI: <https://doi.org/10.1038/s41428-021-00468-0>

SKP5050; Impact factor: 2.826; Institute: Okayama University, Japan

Single Point Kelvin Probe Systems

Insights on hexagonal TbMnO₃ for optoelectronic applications: From powders to thin films

T.Fix, G.Schmerber, J.-L.Rehspringer, M.V.Rastei, S.Roques, J.Bartringer, A.Slaoui

Journal of Alloys and Compounds (2021), 883, 160922

KP020; Impact factor: 4.65; Institute: CNRS and Université de Strasbourg, France

Molecular Doping of 2D Indium Selenide for Ultrahigh Performance and Low-Power Consumption Broadband Photodetectors

Nicholas Turetta Francesco Sedona Andrea Liscio Mauro Sambi Paolo Samori

Advanced Functional Materials (2021), 2103353

KP020; Impact factor: 16.836; Institute: Université de Strasbourg, France

Au(111) Surface Contamination in Ambient Conditions: Unravelling the Dynamics of the Work Function in Air

Nicholas Turetta, Francesco Sedona, Andrea Liscio, Mauro Sambi and Paolo Samori

Advanced Material Interfaces (2021), 2100068

KP020; Impact factor: 4.948; Institute: Université de Strasbourg, France

Chemical etching fabrication of uniform mesoporous Bi@Bi₂O₃ nanospheres with enhanced visible light-induced photocatalytic oxidation performance for NO_x

Peng Zhang, Yu Huang, Yongfang Rao, Meijuan Chen, Xinwei Li, Wingkei Ho, Shuncheng Lee and Junji Cao

Chemical Engineering Journal (2021), 406, 126910

KP020; Impact factor: 10.652; Institute: Chinese Academy of Sciences, China

Construction of β-Bi₂O₃/Bi₂O₂CO₃ heterojunction photocatalyst for deep understanding the importance of separation efficiency and valence band position

Jie-haoLi, Jie Ren, Ying-juan Hao, Er-peng Zhou, Yue Wang, Xiao-jing Wang, Ran Su, Ying Liu, Xue-han Qi and Fa-tangLi

Journal of Hazardous Materials (2021), 401, 123262

KP020; Impact factor: 9.038; Institute: Hebei University of Science and Technology, China

Air-Processed Infrared-Annealed Printed Methylammonium-Free Perovskite Solar Cells and Modules Incorporating Potassium-Doped Graphene Oxide as an Interlayer

Luigi Angelo Castriotta, Fabio Matteocci, Luigi Vesce, Lucio Cinà, Antonio Agresti, Sara Pescetelli, Alessandro Ronconi, Markus Löffler, Minas M. Stylianakis, Francesco Di Giacomo, Paolo Mariani, Maurizio Stefanelli, Emily Mae Speller, Antonio Alfano, Barbara Paci, Amanda Generosi, Fabio Di Fonzo, Annamaria Petrozza, Bernd Rellinghaus, Emmanuel Kymakis, and Aldo Di Carlo
Applied Materials and Interfaces (2021) 13, 10, 11741-11754

KPO20; Impact factor: 8.758; Institute: Istituto Italiano di Tecnologia, Italy

Moisture resistance in perovskite solar cells attributed to a water-splitting layer

Min Kim, Antonio Alfano, Giovanni Perotto, Michele Serri, Nicola Dengo, Alessandro Mezzetti, Silvia Gross, Mirko Prato, Marco Salerno, Antonio Rizzo, Roberto Sorrentino, Enrico Cescon, Gaudenzio Meneghesso, Fabio Di Fonzo, Annamaria Petrozza, Teresa Gatti & Francesco Lamberti

Communications Materials (2021), 2: 6 DOI: <https://doi.org/10.1038/s43246-020-00104-z>

KPO20; Impact factor: Unknown; Institute: Istituto Italiano di Tecnologia, Italy

Work Function of TiO₂ (Anatase, Rutile, and Brookite) Single Crystals: Effects of the Environment

Vera Mansfeldova, Magda Zlamalova, Hana Tarabkova, Pavel Janda, Mykhailo Vorokhta, Lesia Piliai, and Ladislav Kavan
J. Phys. Chem. C (2021) 125, 3, 1902-1912

KPO20; Impact factor: 4.189; Institute: Czech Academy of Sciences, Czech Republic

A metal chelation strategy suppressing chemical reduction between PEDOT and polyethylenimine for a printable low-work function electrode in organic solar cells

Mengyuan Yang, Fei Qin, Wen Wang, Tiefeng Liu, Lulu Sun, Cong Xie, Xinyun Dong, Xin Lu and Yinhua Zhou
Journal of Materials Chemistry A (2021) 9, 3918-3924

KPO20; Impact factor: 11.301; Institute: Huazhong University of Science and Technology, China

Ultra-high vacuum Kelvin Probe Systems

Examination of Spontaneous Orientation Polarization in Wet-Processed Tris(8-hydroxyquinolinato)aluminum Film Measured by Rotary Kelvin Probe Method

Masahiro Ohara, Tatsuya Watanabe, Yuya Tanaka, Hisao Ishii

Physica status solidi (a) (2021) 2000790

UHVKPO20; Impact factor: 2.291; Institute: Chiba University, Japan

Surface photovoltage response of zinc oxide microrods on prismatic planes: effect of UV, temperature and oxygen ambience

Kusuma M. B. Urs and Vinayak Kamble

Journal of Materials Science: Materials in Electronics (2021)

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Molecular n-Doping of Large- and Small-Diameter Carbon Nanotube Field-Effect Transistors with Tetrakis(tetramethylguanidino)benzene

Jan M. Gotthardt, Severin Schneider, Maximilian Brohmann, Simone Leingang, Eric Sauter, Michael Zharnikov, Hans-Jörg Himmel and Jana Zaumseil

ACS Appl. Electron. Mater. (2021) 3, 2, 804-812

UHVKPO20; Impact factor: Unknown; Institute: Czech Academy of Sciences, Czech Republic

Surface photovoltage Spectroscopy Kelvin Probe Systems

Modelling the visual response to an OUREP retinal prosthesis with photoelectric dye coupled to polyethylene film

Koichiro Yamashita, Prathima Sundaram, Tetsuya Uchida, Toshihiko Matsuo and Willy Wong

Journal of Neural Engineering (2021) DOI: <https://doi.org/10.1088/1741-2552/abf892>

SKP5050 + SPS040; Impact factor: 4.81; Institute: Okayama University, Japan

Fabrication of highly conducting ZnO/Ag/ZnO and AZO/Ag/AZO transparent conducting oxide layers using RF magnetron sputtering at room temperature

Bidyut Barman, Sanjay Kumar Swami, Viresh Dutta

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Development of highly durable retinal prosthesis using photoelectric dyes coupled to polyethylene film and quantitative in vitro evaluation of its durability

Koichiro Yamashita, Tenu Tanaka, Toshihiko Matsuo and Tetsuya Uchida

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Functional ZnO/TiO₂ Bilayer as Electron Transport Material for Solution-Processed Sb₂S₃ Solar Cells

Dr. Agustin Baron Jaimes, Dr. Oscar Andrés Jaramillo-Quintero, Ramses Alejandro Miranda Gamboa, Dr. Ariosto Medina-Flores and Dr. Marina Elizabeth Rincon

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Relative Humidity Chamber Kelvin Probe Systems

Correction to Optical and Electronic Properties of Colloidal CdSe Quantum Rings

James Xiao, Yun Liu, Violette Steinmetz, Mustafa Caglar, Jeffrey Mc Hugh, Tomi Baikie, Nicolas Gauriot, Malgorzata Nguyen, Edoardo Ruggeri, Zahra Andaji-Garmaroudi, Samuel D. Stranks, Laurent Legrand, Thierry Barisien, Richard H. Friend, Neil C.

Greenham, Akshay Rao, and Raj Pandya

ACS Nano (2021) 15, 2, 3540

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