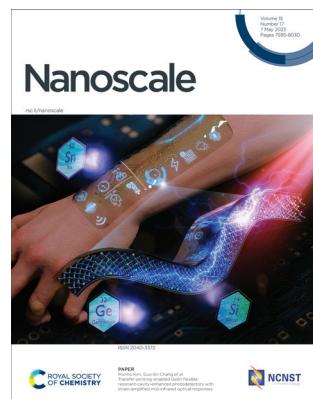


IN THIS ISSUE

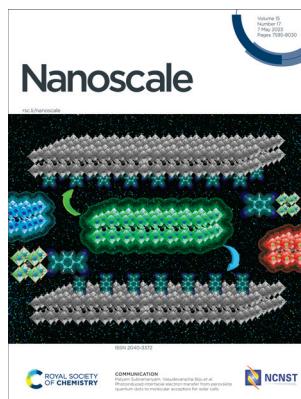
ISSN 2040-3372 CODEN NANOHL 15(17) 7595–8030 (2023)



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See Munho Kim,
Guo-En Chang *et al.*,
pp. 7745–7754.

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Inside cover

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pp. 7695–7702.

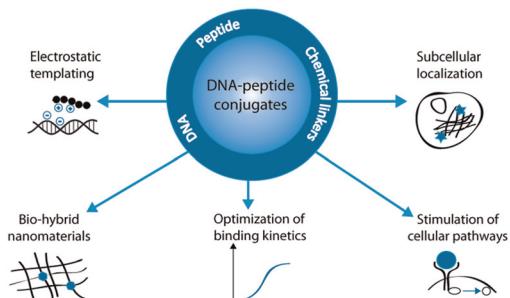
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REVIEWS

7608

Integration of functional peptides into nucleic acid-based nanostructures

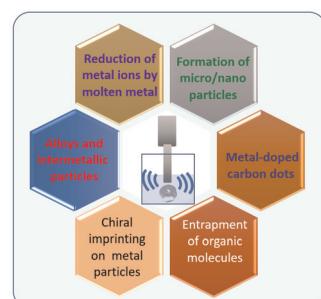
Jessica S. Freitag, Christin Möser, Robel Belay,
Basma Altattan, Nico Grasse, Bhanu Kiran Pothineni,
Jörg Schnauß and David M. Smith*



7625

Sonochemistry of molten metals

Vijay Bhooshan Kumar, Aharon Gedanken and
Ze'ev Porat*



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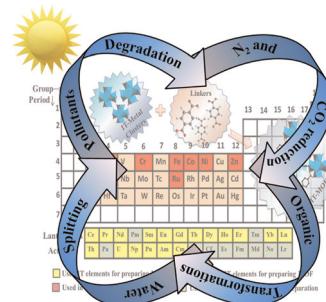


REVIEWS

7640

Inner transition metal-modulated metal organic frameworks (IT-MOFs) and their derived nanomaterials: a strategic approach towards stupendous photocatalysis

Jayashree Panda, Suraj Prakash Tripathy, Srabani Dash, Asheli Ray, Pragyadeepi Behera, Satyabrata Subudhi and Kulamani Parida*

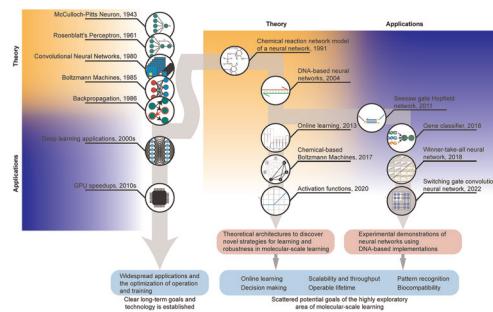


MINIREVIEW

7676

A survey on molecular-scale learning systems with relevance to DNA computing

Rajiv Teja Nagipogu,* Daniel Fu* and John H. Reif

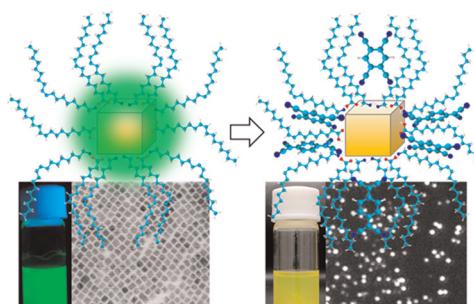


COMMUNICATIONS

7695

Photoinduced interfacial electron transfer from perovskite quantum dots to molecular acceptors for solar cells

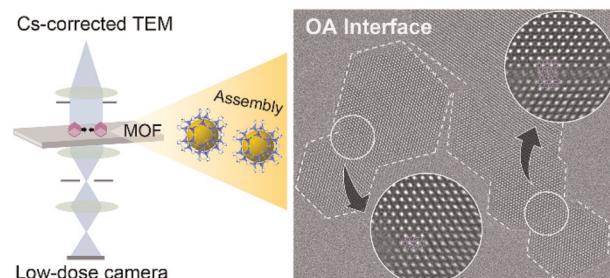
Bhagyashree Mahesha Sachith, Zhijing Zhang, Palyam Subramanyam,* Challapalli Subrahmanyam, Akihiro Furube, Naoto Tamai, Takuya Okamoto, Hiroaki Misawa and Vasudevanpillai Biju*



7703

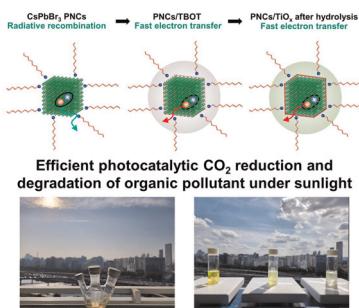
Oriented attachment interfaces of zeolitic imidazolate framework nanocrystals

Xiaocang Han, Rui Su, Wenqian Chen, Qi Han, Yuan Tian, Jiahui Han, Xiaodong Wang, Shuangxi Song, Kolan Madhav Reddy, Hexiang Deng, Pan Liu* and Mingwei Chen*



COMMUNICATIONS

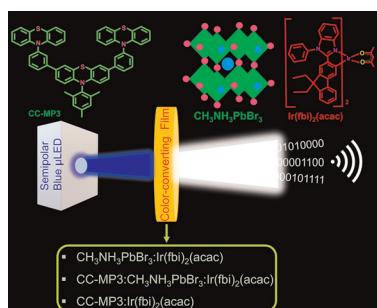
7710



Investigating the interfacial properties of halide perovskite/TiO_x heterostructures for versatile photocatalytic reactions under sunlight

Tae Hyung Kim, Inho Park, Kyeong Ho Lee, Jin-Han Sim, Min-Ho Park, Tae-Hee Han, Ungyu Paik, Jaeyoung Jang,* Ho Bum Park* and Young-Hoon Kim*

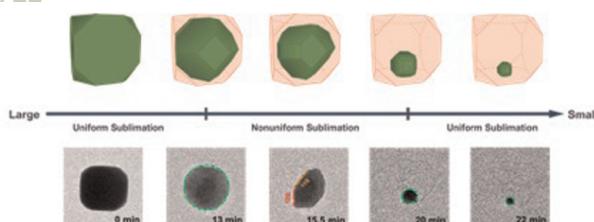
7715



High bandwidth semipolar (20–21) micro-LED-based white light-emitting diodes utilizing perovskite quantum dots and organic emitters in color-conversion layers for visible light communication and solid-state lighting applications

Annada Sankar Sadhu, Yi-Hua Pai, Li-Yin Chen,* Chung-An Hsieh, Hao-Wu Lin and Hao-Chung Kuo*

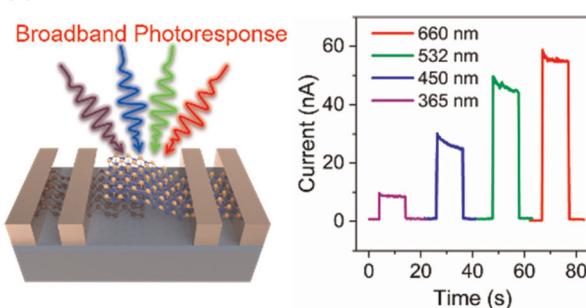
7722



Probing the sublimation kinetics of Ag, Ag@TiO₂, and Ag@C nanoparticles

Hao-Chin Huang, Kai-Yuan Hsiao, Yu-Han Tseng, Yan-De Chen and Ming-Yen Lu*

7730



A two-dimensional Te/ReS₂ van der Waals heterostructure photodetector with high photoresponsivity and fast photoresponse

Yafei Yan, Minxin Li, Kai Xia, Kemeng Yang, Dun Wu, Liang Li, Guangtao Fei* and Wei Gan*

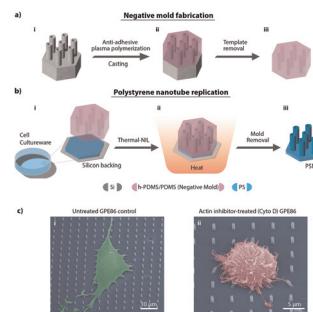


COMMUNICATIONS

7737

The influence of dysfunctional actin on polystyrene-nanotube-mediated mRNA nanoinjection into mammalian cells

Hao Zhe Yoh, Yaping Chen,* Ali-Reza Shokouhi, Helmut Thissen, Nicolas H. Voelcker* and Roey Elnathan*

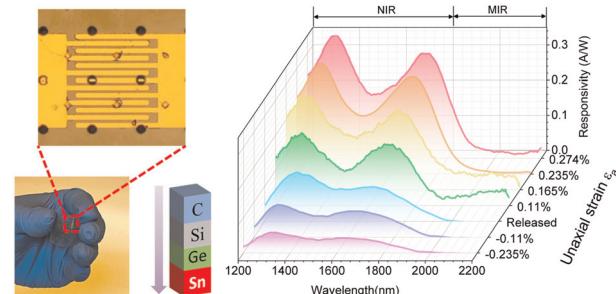


PAPERS

7745

Transfer-printing-enabled GeSn flexible resonant-cavity-enhanced photodetectors with strain-amplified mid-infrared optical responses

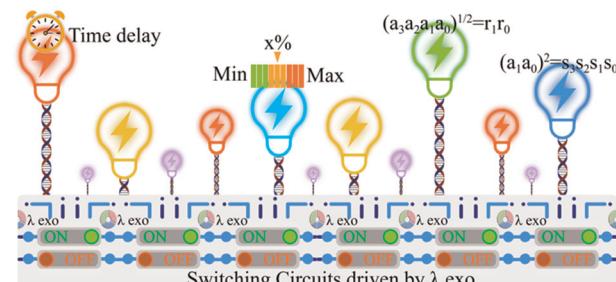
Yeh-Chen Tai, Shu An, Po-Rei Huang, Yue-Tong Jheng, Kuo-Chih Lee, Hung-Hsiang Cheng, Munho Kim* and Guo-En Chang*



7755

Construction of DNA-based molecular circuits using normally open and normally closed switches driven by lambda exonuclease

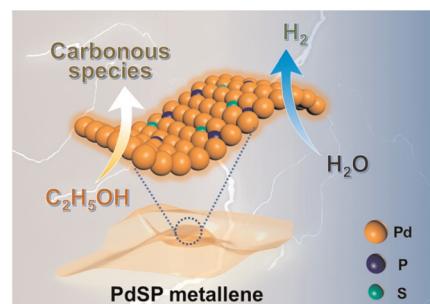
Xin Liu, Xun Zhang, Yao Yao, Peijun Shi, Chenyi Zeng and Qiang Zhang*



7765

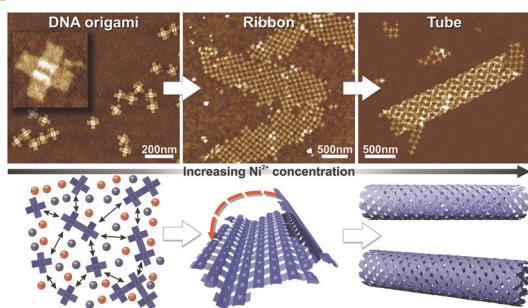
Sulfur and phosphorus co-doping optimized electronic structure and modulated intermediate affinity on PdSP metallene for ethanol-assisted energy-saving H₂ production

Hongjing Wang, Yanan Guo, Qiqi Mao, Hongjie Yu, Kai Deng, Ziqiang Wang, Xiaonian Li, You Xu* and Liang Wang*



PAPERS

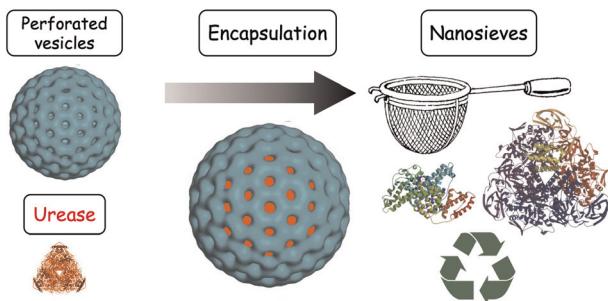
7772



Creation of ordered 3D tubes out of DNA origami lattices

Johannes M. Parikka, Heini Järvinen, Karolina Sokołowska, Visa Ruokolainen, Nemanja Markešević, Ashwin K. Natarajan, Maija Vihinen-Ranta, Anton Kuzyk, Kosti Tapiö* and J. Jussi Toppari*

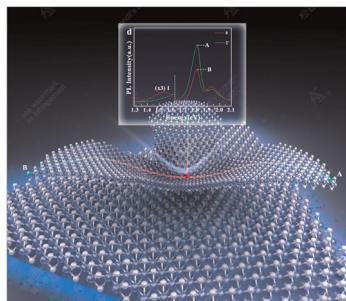
7781



Fluorinated dendritic amphiphiles, their stomatosome aggregates and application in enzyme encapsulation

Tiffany Guitton-Spassky, Florian Junge, Abhishek Kumar Singh, Boris Schade, Katharina Achazi, Marta Maglione, Stephan Sigrist, Rashmi Rashmi and Rainer Haag*

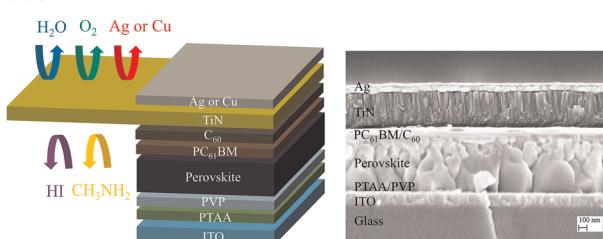
7792



A natural indirect-to-direct band gap transition in artificially fabricated MoS₂ and MoSe₂ flowers

Jun Zhou, Juan Cui, Shuo Du, Zihan Zhao, Jianfeng Guo, Songyang Li, Weifeng Zhang, Nan Liu, Xiaotian Li, Qinghu Bai, Yang Guo, Shuo Mi, Zihai Cheng, Lin He, J. C. Nie, Yu Yang* and Ruifen Dou*

7803



High-performance p-i-n perovskite photodetectors and image sensors with long-term operational stability enabled by a corrosion-resistant titanium nitride back electrode

Tian Sun, Tong Chen, Jiahao Chen, Qiang Lou, Zihao Liang, Guijun Li,* Xiaoyun Lin, Guoshen Yang and Hang Zhou*

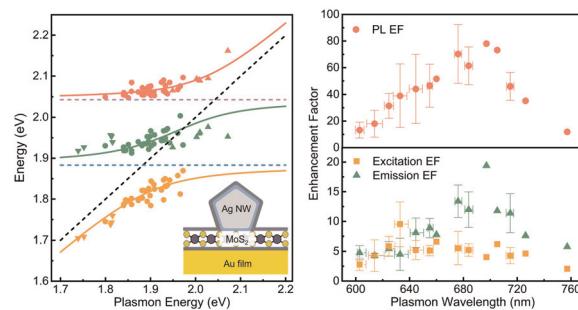


PAPERS

7812

Excitation and emission distinguished photoluminescence enhancement in a plasmon–exciton intermediate coupling system

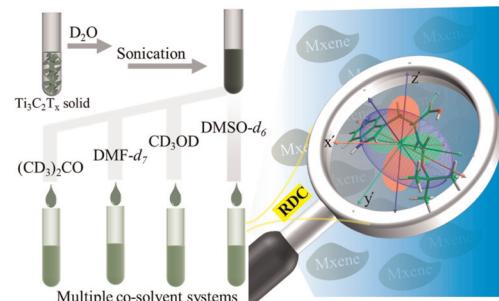
Wenjun Zhang, Long Gao, Xiaohong Yan, Hongxing Xu* and Hong Wei*



7820

Weakly aligned $\text{Ti}_3\text{C}_2\text{T}_x$ MXene liquid crystals: measuring residual dipolar coupling in multiple co-solvent systems

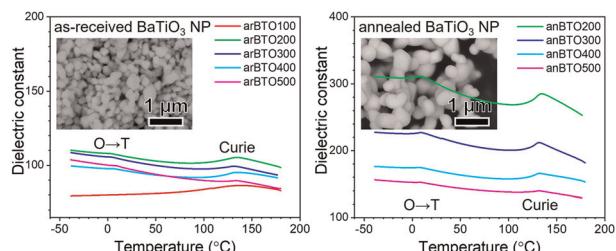
You Zhao, Huan Qin, Yan-Ling Yang, Jia-Qian Li, Si-Yong Qin,* Ai-Qing Zhang* and Xinxian Lei*



7829

Investigation into the crystal structure–dielectric property correlation in barium titanate nanocrystals of different sizes

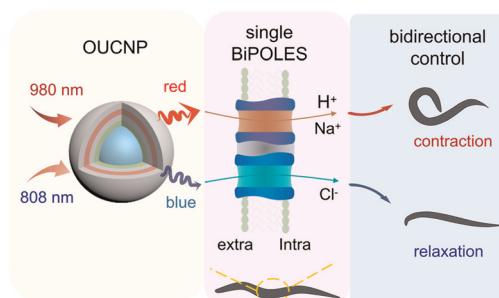
Qiong Li, Tianxiong Ju, Ruipeng Li, Shuang Wang, Yongfang Yang, Hatsuo Ishida, Yeu-Wei Harn, Jihua Chen, Benjamin Hirt, Alp Sehirlioglu, Zhiqun Lin* and Lei Zhu*



7845

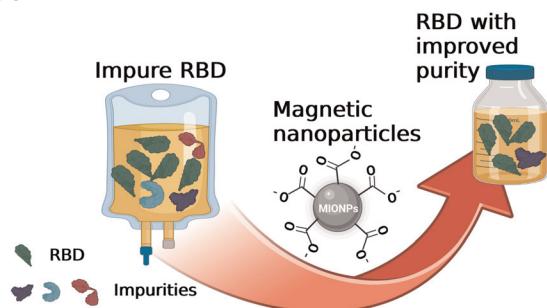
Bidirectional near-infrared regulation of motor behavior using orthogonal emissive upconversion nanoparticles

Jingxuan Guo, Lili Chen, Feihong Xiong, Yongning Zhang, Ruipeng Wang, Xuefei Zhang, Quan Wen, Shangbang Gao* and Yan Zhang*



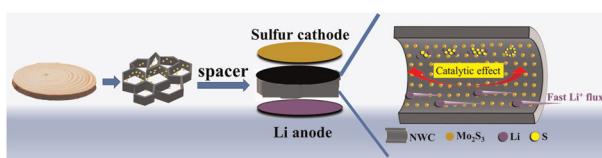
PAPERS

7854


Efficient capture of recombinant SARS-CoV-2 receptor-binding domain (RBD) with citrate-coated magnetic iron oxide nanoparticles

D. A. González-Martínez,* G. González Ruíz,* C. Escalante-Bermúdez, J. A. García Artalejo, T. Gómez Peña, J. A. Gómez, E. González-Martínez, Y. Cazañas Quintana, T. Fundora Barrios, T. Hernández, R. C. Varela Pérez, D. Díaz Goire, D. Castro López, I. Ruiz Ramírez, C. R. Díaz-Águila and J. M. Moran-Mirabal

7870


Defect-rich Mo_2S_3 loaded wood-derived carbon acts as a spacer in lithium–sulfur batteries: forming a polysulfide capture net and promoting fast lithium flux

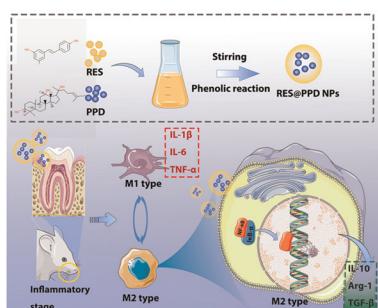
Xin Huang, Wanli Sha, Songchun He, Lijie Zhao, Shaobin Li, Chunmei Lv, Chunhua Lou, Xintong Xu, Jianxin Wang* and Hong Pan*

7877


Nano shield: a new tetrahedral framework nucleic acids-based solution to radiation-induced mucositis

Geru Zhang, Liwei Huang, Maogeng Feng, Tianxu Zhang, Yang Gao, Yangxue Yao, Songhang Li, Xiaobing Li* and Yunfeng Lin*

7894


Facile engineering of resveratrol nanoparticles loaded with 20(S)-protopanaxadiol for the treatment of periodontitis by regulating the macrophage phenotype

Huimin Huangfu, Shulin Du, Hao Zhang, Hanchi Wang, Yi Zhang, Zhen Yang, Xinwei Zhang, Sicong Ren, Siyu Chen, Cuizhu Wang,* Yidi Zhang* and Yanmin Zhou*

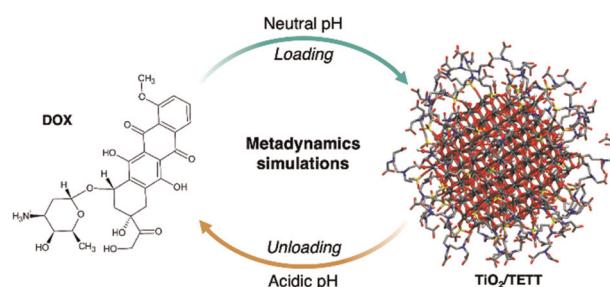


PAPERS

7909

Metadynamics simulations for the investigation of drug loading on functionalized inorganic nanoparticles

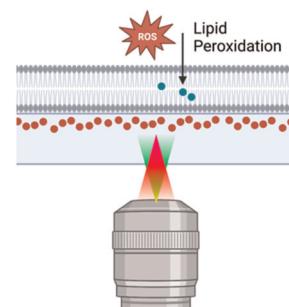
Stefano Motta, Paulo Siani, Edoardo Donadoni, Giulia Frigerio, Laura Bonati and Cristiana Di Valentin*



7920

Lipid peroxidation in diamond supported bilayers

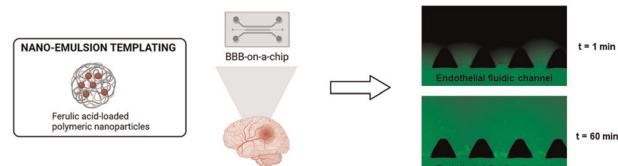
A. R. Ortiz Moreno, R. Li, K. Wu and R. Schirhagl*



7929

Ferulic acid-loaded polymeric nanoparticles prepared from nano-emulsion templates facilitate internalisation across the blood–brain barrier in model membranes

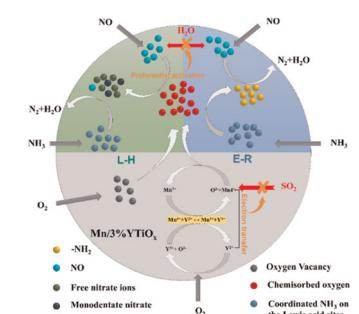
Luna Garcia, Sujey Palma-Florez, Victor Espinosa, Fatemeh Soleimani Rokni, Anna Lagunas, Mònica Mir, María José García-Celma, Josep Samitier, Carlos Rodríguez-Abreu* and Santiago Grijalvo*



7945

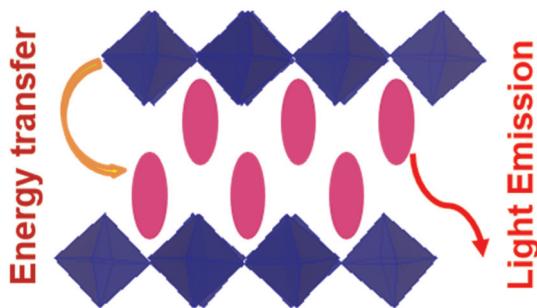
Engineering 3D structure Mn/YTiO_x nanotube catalyst with an efficient H₂O and SO₂ tolerance for low-temperature selective catalytic reduction of NO with NH₃

Rongji Cui, Xiaosheng Huang, Guodong Zhang and Zhicheng Tang*



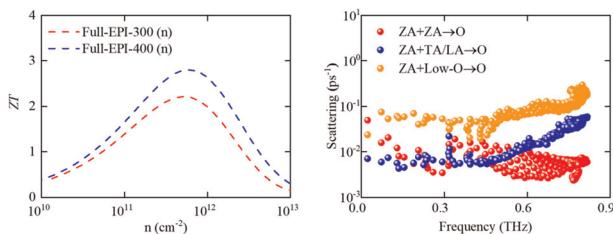
PAPERS

7962


Energy level alignments between organic and inorganic layers in 2D layered perovskites: conjugation vs. substituent

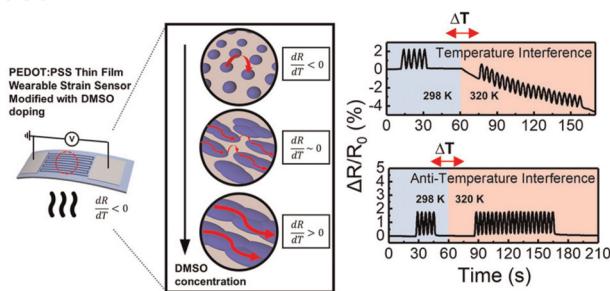
Eti Mahal, Shyama Charan Mandal, Diptendu Roy and Biswarup Pathak*

7971


Excellent thermoelectric properties of the Ti_2S_3 monolayer for medium-temperature applications

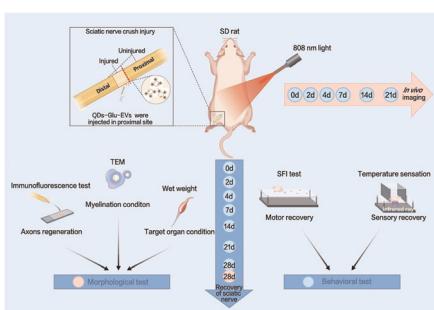
Lang Zhou, Qi Wang, Mei Xu, Chengwei Hu, Xue Deng, Yumin Li, Bing Lv* and Wenzhong Wang*

7980


Charge transport transition of PEDOT:PSS thin films for temperature-insensitive wearable strain sensors

Young Kyun Choi, Tae Hyuk Kim, Jeong Han Song, Byung Ku Jung, Woosik Kim, Jung Ho Bae, Hyung Jin Choi, Jeonghun Kwak,* Jae Won Shim* and Soong Ju Oh*

7991


Spatio-temporally deciphering peripheral nerve regeneration *in vivo* after extracellular vesicle therapy under NIR-II fluorescence imaging

Yueming Wang, Huaixuan Sheng, Meng Cong, Wenjin Wang, Qianru He, Huizhu Li, Shunyao Li, Jian Zhang, Yuzhou Chen, Shuaicheng Guo, Lu Fang, Stefano Pluchino, Ewelina Biskup, Mikhail Artemyev, Fuchun Chen, Yunxia Li, Jun Chen,* Sijia Feng* and Yan Wo*

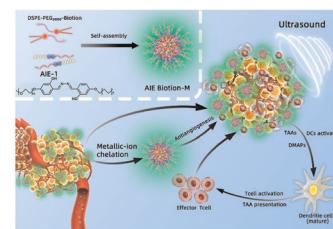


PAPERS

8006

Tumor-targeted AIE polymeric micelles mediated immunogenic sonodynamic therapy inhibits cancer growth and metastasis

Kai Deng,* Yifeng Yu, Yong Zhao, Jiami Li, Kunheng Li, Hongyang Zhao, Meng Wu* and Shiwen Huang*



Schematic illustration of AIE/Biotin-M mediated sonodynamic therapy and metal ions chelation for inhibiting breast cancer growth and metastasis.

8019

Orientation order of a nonpolar molecular fluid compressed into a nanosmall space

Dan Wang, Milena Lippmann, Johannes Gäding, Anita Ehnes, Dmitri Novikov, Robert Meißner and Oliver H. Seeck

