

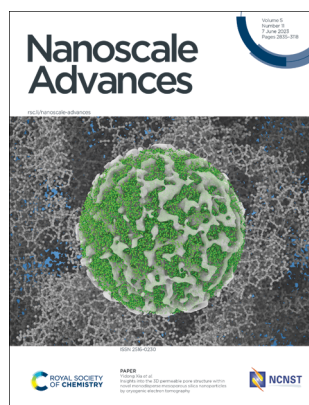
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IN THIS ISSUE

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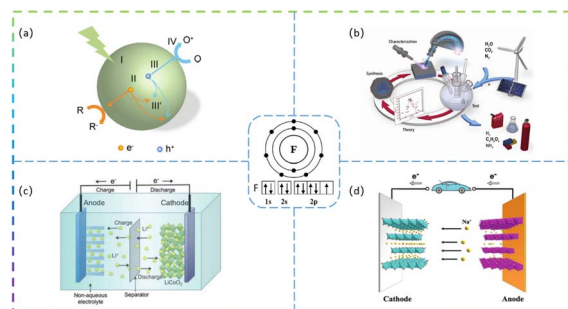
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REVIEW

2846

Synthesis of F-doped materials and applications in catalysis and rechargeable batteries

Jiale Huo, Yaofang Zhang,* Weimin Kang, Yan Shen,
Xiang Li, Zirui Yan, Yingwen Pan and Wei Sun

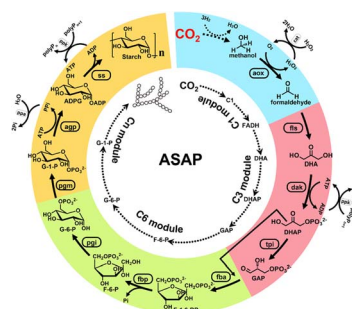


MINIREVIEW

2865

The potential of converting carbon dioxide to food compounds via asymmetric catalysis

Rui Gao, Xinxin Xu,* Zhimeng Wu, Liguang Xu, Hua Kuang
and Chuanlai Xu



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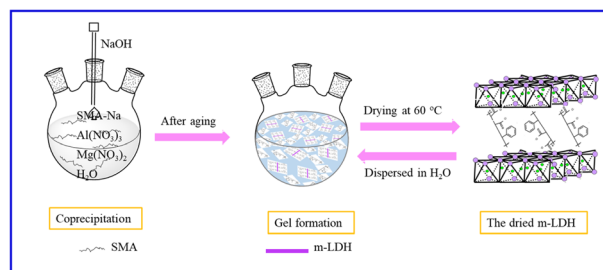


COMMUNICATION

2873

Preparation of water-dispersed monolayer LDH nanosheets by SMA intercalation to hinder the restacking upon redispersion in water

Qingqing Qin, Yingmo Hu,* Junya Wang, Yuanyuan Yang, Ting Lei, Zhenyu Cui, Sufang Guo and Shuhao Qin*

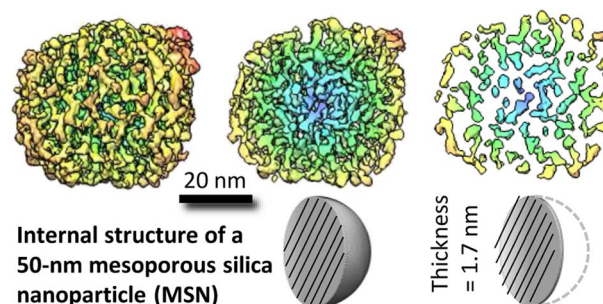


PAPERS

2879

Insights into the 3D permeable pore structure within novel monodisperse mesoporous silica nanoparticles by cryogenic electron tomography

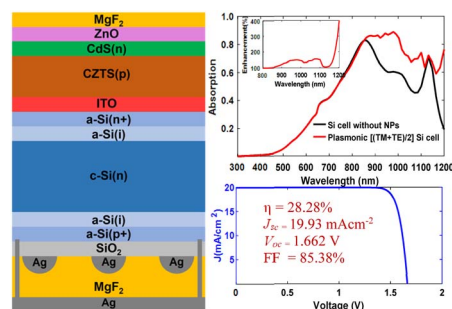
Yidong Xia,* Jianfang Liu, Rahul Kancharla, Jiaoyan Li, Seyed M. Hataamlee, Gang Ren, Viktoriya Semeykina, Ahmed Hamed and Joshua J. Kane



2887

Surface plasmon enhanced ultrathin $\text{Cu}_2\text{ZnSnS}_4$ /crystalline-Si tandem solar cells

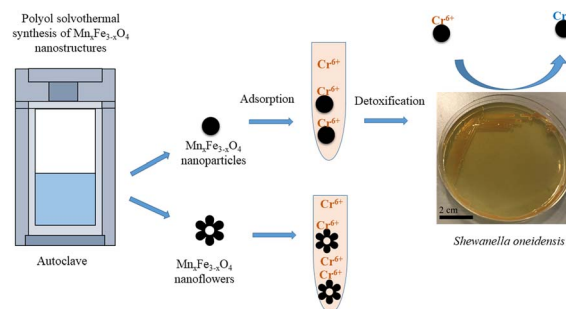
Shafayeth Jamil, Uday Saha and Md. Kawsar Alam*



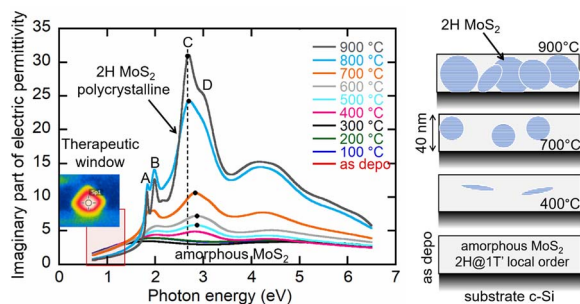
2897

Enhanced detoxification of Cr^{6+} by *Shewanella oneidensis* via adsorption on spherical and flower-like manganese ferrite nanostructures

Diana S. Raie, Ioannis Tsonas, Melisa Canales, Stefanos Mourdikoudis, Konstantinos Simeonidis, Antonis Makridis, Dimitrios Karfaridis, Shanom Ali, Georgios Vourlias, Peter Wilson, Laurent Bozec, Lena Ciric and Nguyen Thi Kim Thanh*



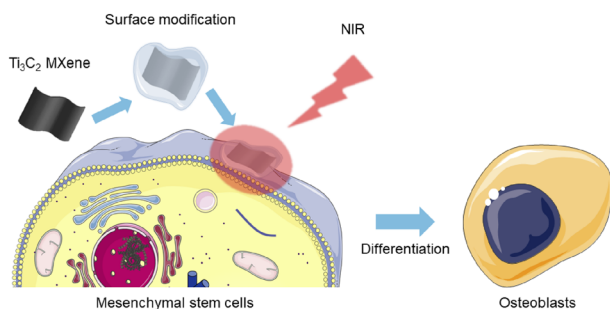
2911



Giant change of MoS₂ optical properties along amorphous–crystalline transition: broadband spectroscopic study including the NIR therapeutic window

Jan Mistrik,^{*} Milos Krbal, Vit Prokop and Jan Prikryl

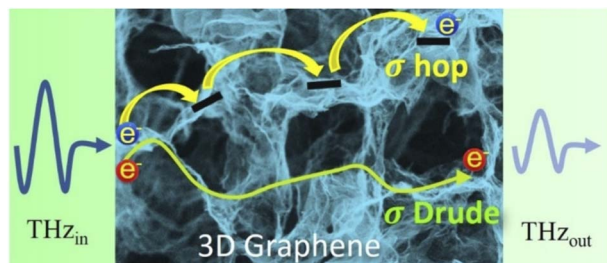
2921



Surface-modified Ti₃C₂ MXene nanosheets for mesenchymal stem cell osteogenic differentiation via photothermal conversion

Jiebing Zhang, Shuang Tang, Ning Ding, Ping Ma and Zutai Zhang^{*}

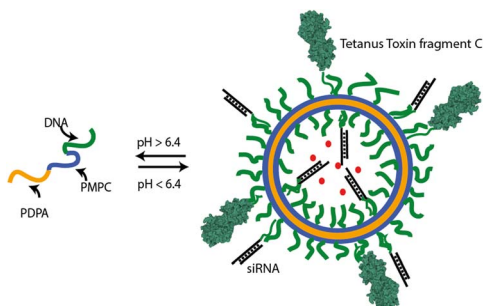
2933



Terahertz charge transport dynamics in 3D graphene networks with localization and band regimes

Prabhat Kumar, Martin Šilhavík, Manas R. Parida, Hynek Němec, Jiří Červenka and Petr Kužel^{*}

2941



A modular RNA delivery system comprising spherical nucleic acids built on endosome-escaping polymeric nanoparticles

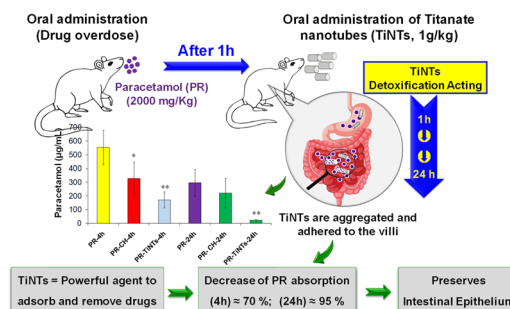
Antonio Garcia-Guerra,^{*} Ruth Ellerington, Jens Gaitzsch, Jonathan Bath, Mahnseok Kye, Miguel A. Varela, Giuseppe Battaglia, Matthew J. A. Wood, Raquel Manzano, Carlo Rinaldi and Andrew J. Turberfield^{*}



2950

Titanate nanotubes as an efficient oral detoxifying agent against drug overdose: application in rat acetaminophen poisoning

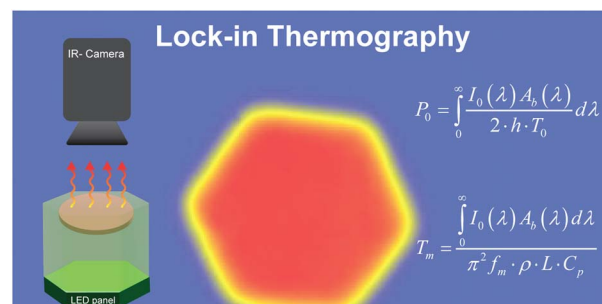
Abir Salek, Mouna Selmi, Leila Njim, Polona Umek, Philippe Mejanelle, Fathi Moussa, Wahiba Douki, Karim Hosni and Tarek Baati*



2963

Quantification of nanoparticles' concentration inside polymer films using lock-in thermography

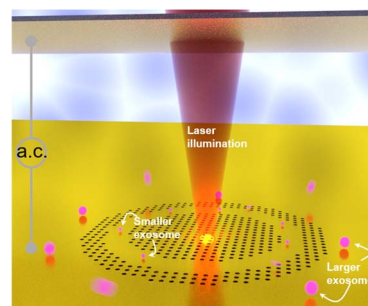
Giulia Mirabello, Lukas Steinmetz, Christoph Geers, Barbara Rothen-Ruthishauser, Mathias Bonmarin, Alke Petri-Fink and Marco Lattuada*



2973

Exosomes trapping, manipulation and size-based separation using opto-thermo-electrohydrodynamic tweezers

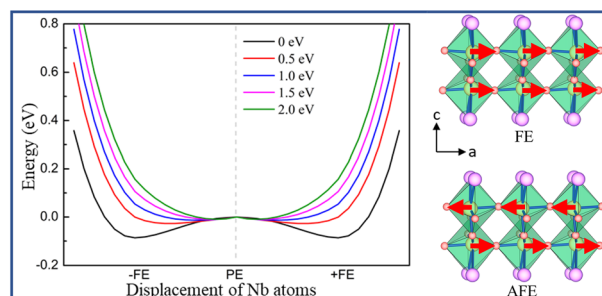
Chuchuan Hong, Sen Yang and Justus C. Ndukaife*



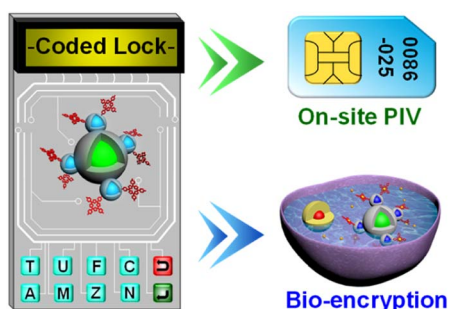
2979

Second-order Jahn–Teller effect induced high-temperature ferroelectricity in two-dimensional NbO₂X (X = I, Br)

Huasheng Sun, Kaiming Deng, Erjun Kan* and Yongping Du*



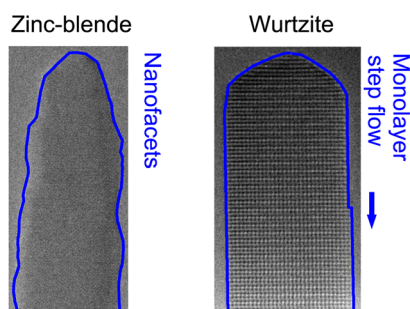
2986



An optical keypad lock with high resettability based on a quantum dot–porphyrin FRET nanodevice

Peng Shen, Yuqian Liu, Xiaojun Qu, Mingsong Zhu, Ting Huang and Qingjiang Sun*

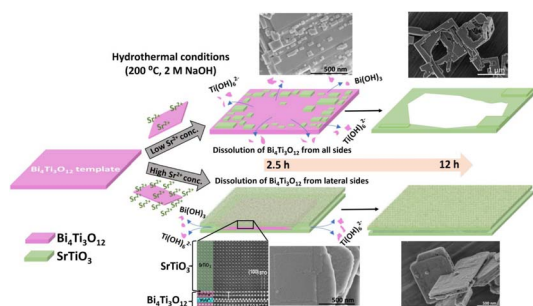
2994



Real-time thermal decomposition kinetics of GaAs nanowires and their crystal polytypes on the atomic scale

Paul Schmiedeke, Federico Panciera, Jean-Christophe Harmand, Laurent Travers and Gregor Koblmüller*

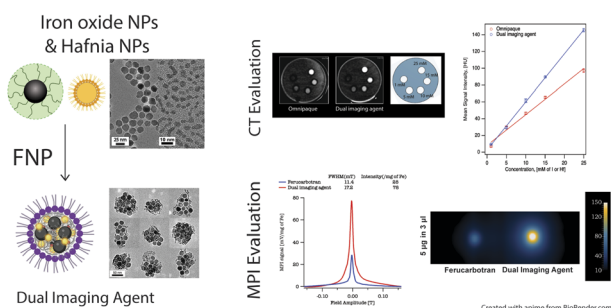
3005



Hydrothermal topotactic epitaxy of SrTiO₃ on Bi₄Ti₃O₁₂ nanoplatelets: understanding the interplay of lattice mismatch and supersaturation

Alja Čontala, Nina Daneu, Suraj Gupta, Matjaž Spreitzer, Anton Meden and Marjeta Maček Kržmanc*

3018



Dual imaging agent for magnetic particle imaging and computed tomography

Sitong Liu, Anahita Heshmat, Jennifer Andrew, Izabella Barreto and Carlos M. Rinaldi-Ramos*

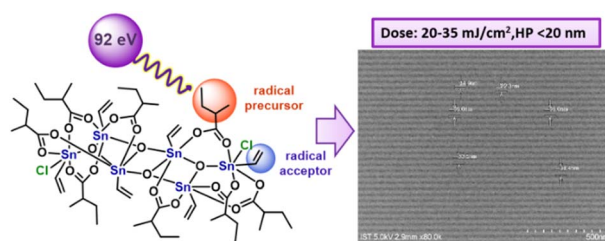


PAPERS

3033

Novel hexameric tin carboxylate clusters as efficient negative-tone EUV photoresists: high resolution with well-defined patterns under low energy doses

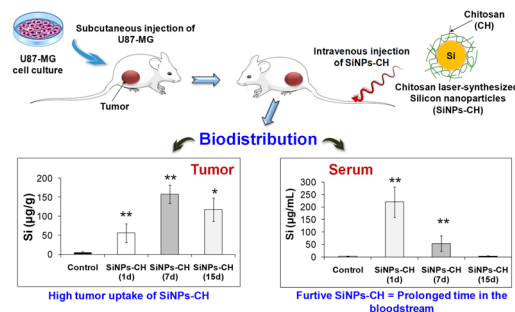
Jia-Rong Wu, Ting-An Lin, Yan-Ru Wu, Po-Hsiung Chen, Tsi-Sheng Gau, Burn-Jeng Lin, Po-Wen Chiu and Rai-Shung Liu*



3044

Chitosan-coated ultrapure silicon nanoparticles produced by laser ablation: biomedical potential in nano-oncology as a tumor-targeting nanosystem

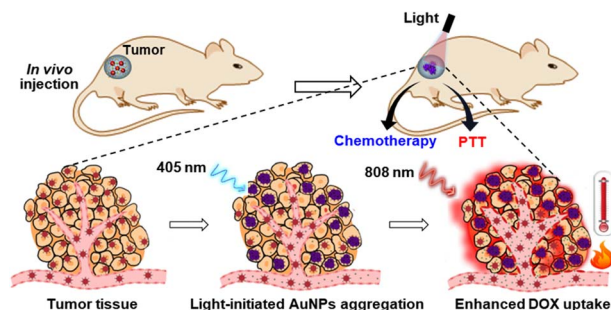
Tarek Baati,* Imen Chaabani, Abir Salek, Leila Njim, Mouna Selmi, Ahmed Al-Kattan and Karim Hosni



3053

Light-initiated aggregation of gold nanoparticles for synergistic chemo-photothermal tumor therapy

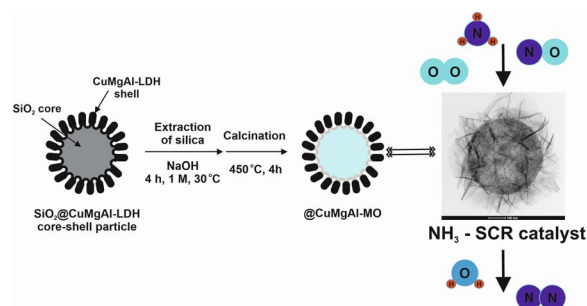
Huawei Xia, Jinfeng Zhu, Changhe Men, Anna Wang, Qiulian Mao, Yali Feng, Jiachen Li, Jingwei Xu, Xiaju Cheng* and Haibin Shi*



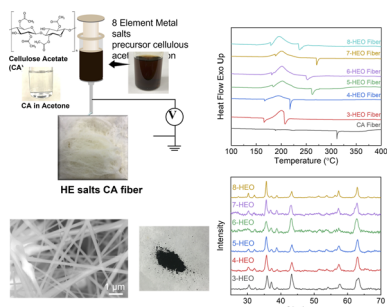
3063

Hollow @CuMgAl double layered hydrotalcites and mixed oxides with tunable textural and structural properties, and thus enhanced NH₃-NO_x-SCR activity

Tomasz Kondratowicz,* Ondřej Horký, Stanislav Slang, Lada Dubnová, Marta Gajewska, Lucjan Chmielarz and Libor Čapek*



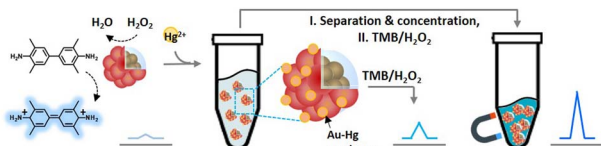
3075



Electrospun single-phase spinel magnetic high entropy oxide nanoparticles *via* low-temperature ambient annealing

Xiao Han, Dian Li, Jingyi Zhou, Yufeng Zheng, Lingyan Kong, Lin Li and Feng Yan*

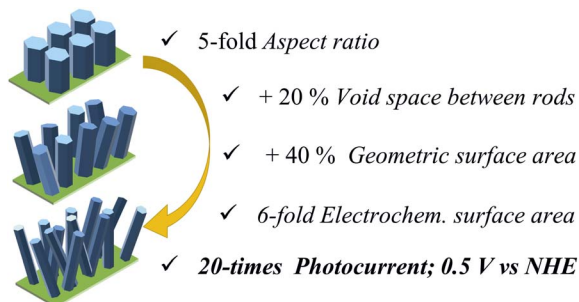
3084



Colorimetric mercury detection with enhanced sensitivity using magnetic-Au hybrid nanoparticles

Miseon Jeong, Dahyun Bae and Jin-sil Choi*

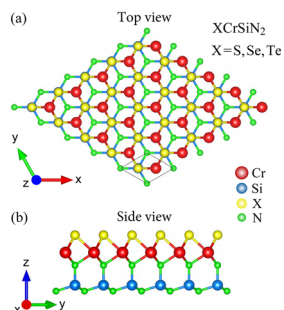
3091



Comprehensive evaluation of photoelectrochemical performance dependence on geometric features of ZnO nanorod electrodes

Ali Can Guler, Jan Antos, Milan Masar, Michal Urbanek, Michal Machovsky and Ivo Kuritka*

3104



First-principles examination of two-dimensional Janus quintuple-layer atomic structures XCrSiN₂ (X = S, Se, and Te)

P. T. Linh Tran, Nguyen V. Hieu, Hoi Bui D., Q. Nguyen Cuong and Nguyen N. Hieu*



CORRECTIONS

3114

Correction: Enhanced detoxification of Cr⁶⁺ by *Shewanella oneidensis* via adsorption on spherical and flower-like manganese ferrite nanostructures

Diana S. Raie, Ioannis Tsonas, Melisa Canales, Stefanos Mourdikoudis, Konstantinos Simeonidis, Antonios Makridis, Dimitrios Karfaridis, Shanom Ali, Georgios Vourlias, Peter Wilson, Laurent Bozec, Lena Ciric and Nguyen Thi Kim Thanh*

3115

Correction: SARS-CoV-2 suppression depending on the pH of graphene oxide nanosheets

Md. Saidul Islam, Masahiro Fukuda, Md. Jakir Hossain, Nurun Nahar Rabin, Ryuta Tagawa, Mami Nagashima, Kenji Sadamasu, Kazuhisa Yoshimura, Yoshihiro Sekine, Terumasa Ikeda* and Shinya Hayami*

