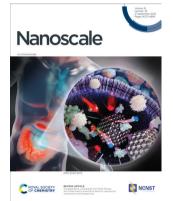
## Nanoscale

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#### IN THIS ISSUE

ISSN 2040-3372 CODEN NANOHL 15(35) 14271-14684 (2023)



#### Cover

See Giuseppe Bardi, Luca Boselli, Pier Paolo Pompa, pp. 14284-14300.

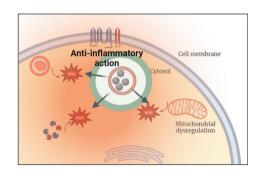
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#### **REVIEWS**

#### 14284

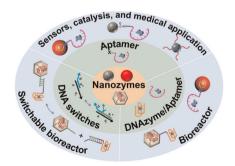
#### Anti-inflammatory potential of platinum nanozymes: mechanisms and perspectives

Giuseppe Bardi,\* Luca Boselli\* and Pier Paolo Pompa\*



#### Nucleic acid-functionalized nanozymes and their applications

Yunlong Qin, Yu Ouyang and Itamar Willner\*



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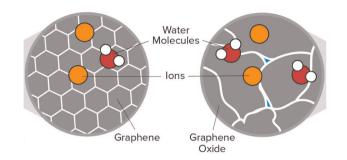


#### **MINIREVIEW**

#### 14319

Ion and water adsorption to graphene and graphene oxide surfaces

Amanda J. Carr,\* Seung Eun Lee and Ahmet Uysal

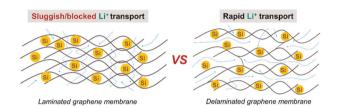


#### COMMUNICATION

#### 14338

Scalable engineering of hierarchical layered micro-sized silicon/graphene hybrids via direct foaming for lithium storage

Mathar Hamza, Siyuan Zhang, Wengiang Xu, Denghui Wang, Yingjie Ma\* and Xianglong Li\*

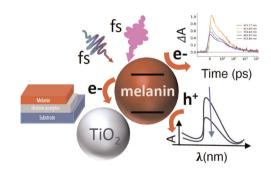


#### **PAPERS**

#### 14346

Enhanced photochemical activity and ultrafast photocarrier dynamics in sustainable synthetic melanin nanoparticle-based donor-acceptor inkjet-printed molecular junctions

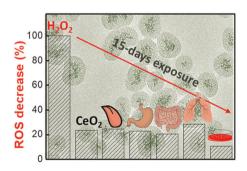
Max DeMarco, Matthew Ballard, Elinor Grage, Farnoush Nourigheimasi, Lillian Getter, Ashkan Shafiee and Elham Ghadiri\*



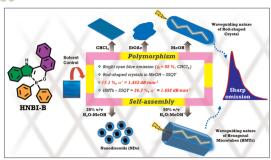
#### 14365

Conservation of the enzyme-like activity and biocompatibility of CeO<sub>2</sub> nanozymes in simulated body fluids

Muling Zeng, Xu Zhang, Jie Tang, Xingfei Liu, Yichao Lin, Dongdong Guo, Yuping Zhang, Shijie Ju, Guillermo Fernández-Varo, Ya-Chao Wang,\* Xiangyu Zhou,\* Gregori Casals\* and Eudald Casals\*



#### 14380



#### Luminescent hexagonal microtubes prepared through water-induced self-assembly of a polymorphic organoboron compound: formation mechanism and waveguide behaviour

Pradip A. Gaikwad, Prodipta Samadder, Shubham Som, Deepak Chopra,\* Prakash P. Neelakandan\* and Aasheesh Srivastava\*

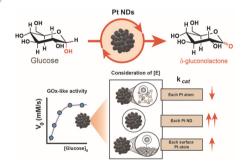
#### 14388



#### Self-assembly of cellulose nanocrystals confined to square capillaries

Amanda J. Ackroyd, Adam De Paolis, Yi-Tao Xu, Arash Momeni, Wadood Y. Hamad and Mark J. MacLachlan\*

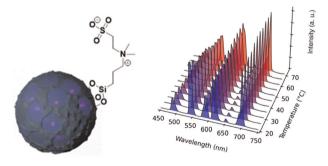
#### 14399



#### Platinum-based nanodendrites as glucose oxidasemimicking surrogates

Jose I. Garcia-Peiro, Javier Bonet-Aleta, Maria L. Tamayo-Fraile, Jose L. Hueso\* and Jesus Santamaria\*

#### 14409



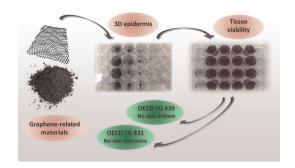
#### Hybrid multifunctionalized mesostructured stellate silica nanoparticles loaded with $\beta$ -diketonate Tb<sup>3+</sup>/ Eu3+ complexes as efficient ratiometric emissive thermometers working in water

Tristan Pelluau, Saad Sene, Lamiaa M. A. Ali, Gautier Félix, Faustine Manhes, Albano N. Carneiro Neto, Luis D. Carlos,\* Belén Albela, Laurent Bonneviot, Erwan Oliviero, Magali Gary-Bobo, Yannick Guari\* and Joulia Larionova\*

#### 14423

In vitro assessment of skin irritation and corrosion properties of graphene-related materials on a 3D epidermis

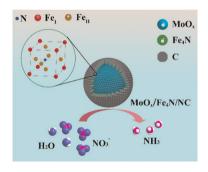
Michela Carlin, Marina Garrido, Silvio Sosa. Aurelia Tubaro, Maurizio Prato and Marco Pelin\*



#### 14439

Multi-layer core-shell metal oxide/nitride/carbon and its high-rate electroreduction of nitrate to ammonia

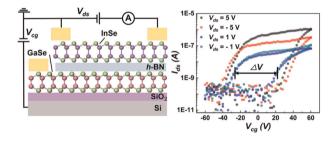
Xiaoyu Li, Ping Deng, Mengqiu Xu, Zhenbo Peng, Yuhu Zhou, Gan Jia, Wei Ye,\* Peng Gao\* and Wei Wang\*



#### 14448

Tunable non-volatile memories based on 2D InSe/ h-BN/GaSe heterostructures towards potential multifunctionality

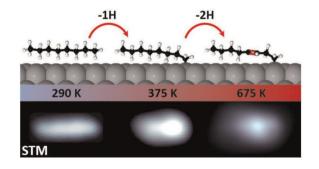
Xiang Gong, Yueying Zhou, Jiangnan Xia, Li Zhang, Lijie Zhang, Long-Jing Yin, Yuanyuan Hu,\* Zhihui Qin\* and Yuan Tian\*



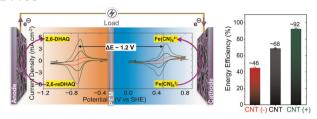
#### 14458

#### In situ observation of the on-surface thermal dehydrogenation of *n*-octane on Pt(111)

Daniel Arribas, Víctor Villalobos-Vilda, Ezequiel Tosi, Paolo Lacovig, Alessandro Baraldi, Luca Bignardi, Silvano Lizzit, José Ignacio Martínez, Pedro Luis de Andres, Alejandro Gutiérrez, José Ángel Martín-Gago and Pablo Merino\*

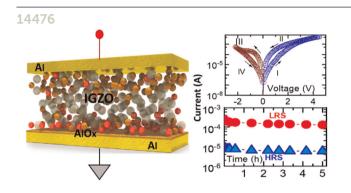


#### 14468



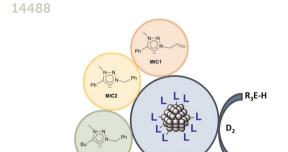
# Electrostatically driven unidirectional molecular flux for high performance alkaline flow batteries

Bhojkumar Nayak, Ritwik Mondal and Musthafa Ottakam Thotiyl\*



Interface roughness effects and relaxation dynamics of an amorphous semiconductor oxide-based analog resistance switching memory

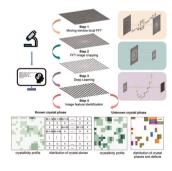
G. R. Haripriya, Hee Yeon Noh, Chan-Kang Lee, June-Seo Kim, Myoung-Jae Lee and Hyeon-Jun Lee\*



Ruthenium nanoparticles stabilized by 1,2,3-triazolylidene ligands in the hydrogen isotope exchange of E-H bonds (E=B, Si, Ge, Sn) using deuterium gas

Pablo Molinillo, Maxime Puyo, Florencia Vattier, Bertrand Lacroix, Nuria Rendón,\* Patricia Lara\* and Andrés Suárez\*

14496



R<sub>3</sub>E-D

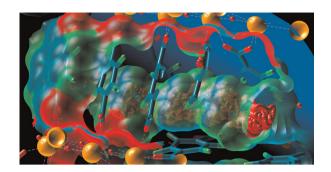
# Deep learning-assisted analysis of HRTEM images of crystalline nanoparticles

Xiaoyang Zhu, Yu Mao, Jizi Liu, Yi Chen, Chuan Chen, Yan Li, Xiao Huang\* and Ning Gu\*

#### 14505

Disclosing gate-opening/closing events inside a flexible metal-organic framework loaded with CO<sub>2</sub> by reactive and essential dynamics

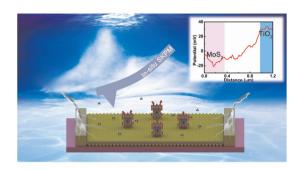
Susanna Monti.\* Cheherazade Trouki and Giovanni Barcaro



#### 14514

#### TiO<sub>2</sub>-modified MoS<sub>2</sub> monolayer films enable sensitive NH<sub>3</sub> sensing at room temperature

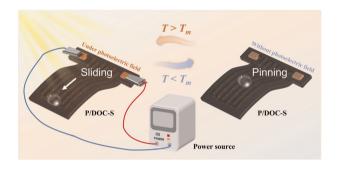
Lun Tan, Xianzhen Liu, Peng Wu, Liwei Cao, Wei Li, Ang Li,\* Zhao Wang\* and Haoshuang Gu\*



#### 14523

#### Photoelectric synergistic anisotropic slippery interface for directional droplets manipulation

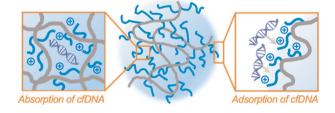
Xu Sun, Xuan Wang, Pu Guo, Lei Jiang and Liping Heng\*



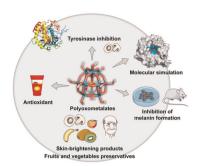
#### 14531

#### Nanogels designed for cell-free nucleic acid sequestration

Yuhang Huang, Shangyu Li, Logan W. C. Zettle, Yingshan Ma, Hani E. Naguib and Eugenia Kumacheva\*



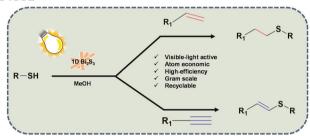
#### 14543



#### Mechanism of melanogenesis inhibition by **Keggin-type polyoxometalates**

Guoxiang Chi, Die Shuai, Jiaxin Li, Xiangsong Chen, Han Yang, Meijuan Zhao, Zedong Jiang, Li Wang\* and Bingnian Chen\*

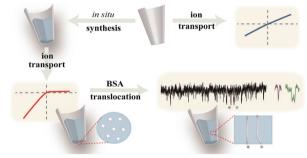
#### 14551



#### Visible light-driven photocatalytic thiol-ene/yne reactions using anisotropic 1D Bi<sub>2</sub>S<sub>3</sub> nanorods: a green synthetic approach

Haider Ali, Bhagirath Mahto, Ashok Barhoi and Sahid Hussain\*

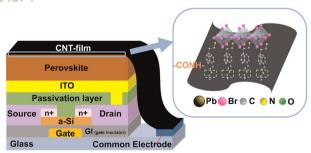
#### 14564



#### Ion transport based structural description for in situ synthesized SBA-15 nanochannels in a sub-micropipette

Rui Zhang, Qiang Zeng,\* Xuye Liu and Lishi Wang\*

#### 14574



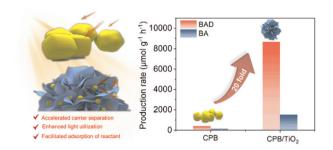
#### An interfacial toughening strategy for high stability 2D/3D perovskite X-ray detectors with a carbon nanotube thin film electrode

Liwen Qiu, Mingqiang Wang, Tian Sun, Qiang Lou, Tong Chen, Guoshen Yang, Wei Qian, Zixuan Zhang, Shihe Yang, Min Zhang, Yufeng Jin and Hang Zhou\*

#### 14584

High-efficiency visible-light-driven oxidation of primary C-H bonds in toluene over a CsPbBr<sub>3</sub> perovskite supported by hierarchical TiO<sub>2</sub> nanoflakes

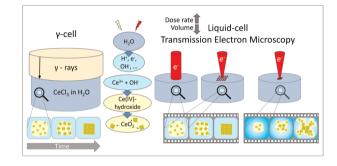
Jiayu Yi, Sunzai Ke, Suwei Lu, Bo Weng, Lijuan Shen, Xuhui Yang, Hun Xue, Min-Quan Yang\* and Qingrong Qian\*



#### 14595

#### Non-classical crystallization of CeO<sub>2</sub> by means of in situ electron microscopy

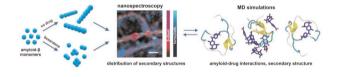
Hannes Zschiesche,\* Inna L. Soroka, Mats Jonsson and Nadezda V. Tarakina\*



#### 14606

#### Nanoscale insights into the local structural rearrangements of amyloid-β induced by bexarotene

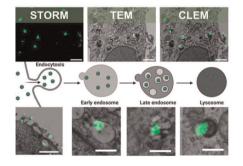
Kamila Sofińska, Piotr Batys, Adrian Cernescu, Dhiman Ghosh, Katarzyna Skirlińska-Nosek, Jakub Barbasz, Sara Seweryn, Natalia Wilkosz, Roland Riek, Marek Szymoński and Ewelina Lipiec\*



#### 14615

A super-resolution and transmission electron microscopy correlative approach to study intracellular trafficking of nanoparticles

Teodora Andrian, Yolanda Muela, Lidia Delgado, Lorenzo Albertazzi\* and Silvia Pujals\*



# Breakable Organosilica Nanocages (ssOSCs) Drug loading

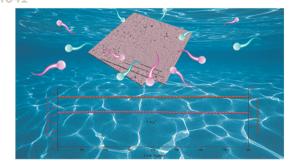
# Cargo-loaded lipid-shielded breakable organosilica nanocages for enhanced drug delivery

María Sancho-Albero, Giada Rosso, Luisa De Cola\* and Valentina Cauda\*

#### 14641

Coating with lipid mixture

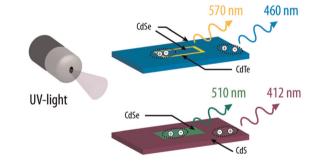
Cell Uptake



# *In situ* Cu doping of ultralarge CoSe nanosheets with accelerated electronic migration for superior sodium-ion storage

Jitao Geng, Huilong Dong, Jing Liu, Chengkui Lv, Huaixin Wei, Yafei Cheng,\* Jun Yang\* and Hongbo Geng\*

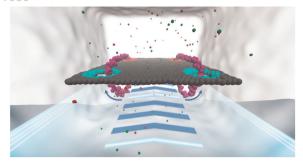
#### 14651



# Expanding the color palette of bicolor-emitting nanocrystals

Corentin Dabard, Hong Po, Ningyuan Fu, Lina Makke, Henri Lehouelleur, Leonardo Curti, Xiang Zhen Xu, Emmanuel Lhuillier, Benjamin T. Diroll and Sandrine Ithurria\*

#### 14659



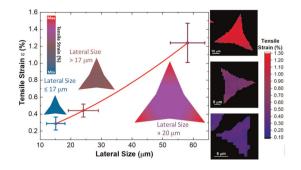
#### Nanopore actuation of a DNA-tracked nanovehicle

Wei Si,\* Xiaojing Lin, Liwei Wang, Gensheng Wu, Yin Zhang, Yunfei Chen and Jingjie Sha\*

#### 14669

Built-in tensile strain dependence on the lateral size of monolayer MoS<sub>2</sub> synthesized by liquid precursor chemical vapor deposition

L. Seravalli, F. Esposito, M. Bosi, L. Aversa, G. Trevisi, R. Verucchi, L. Lazzarini, F. Rossi and F. Fabbri\*



#### **CORRECTIONS**

#### 14679

Correction: Ion and water adsorption to graphene and graphene oxide surfaces

Amanda J. Carr,\* Seung Eun Lee and Ahmet Uysal

#### 14680

Correction: In situ observation of the on-surface thermal dehydrogenation of n-octane on Pt(111)

Daniel Arribas, Víctor Villalobos-Vilda, Ezequiel Tosi, Paolo Lacovig, Alessandro Baraldi, Luca Bignardi, Silvano Lizzit, José Ignacio Martínez, Pedro Luis de Andres, Alejandro Gutiérrez, José Ángel Martín-Gago and Pablo Merino\*

#### 14681

Correction: Probing antiferromagnetism in exfoliated Fe<sub>3</sub>GeTe<sub>2</sub> using magneto-transport measurements

Stasiu T. Chyczewski,\* Ji Shi, Hanwool Lee, Paolo F. Ferrari, Kai Xu, Arend M. van der Zande and Wenjuan Zhu\*