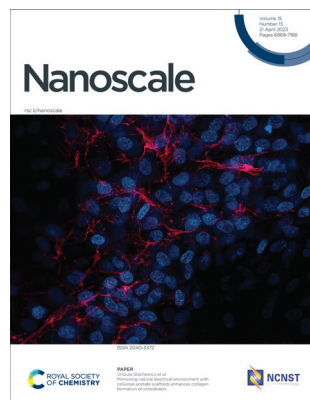


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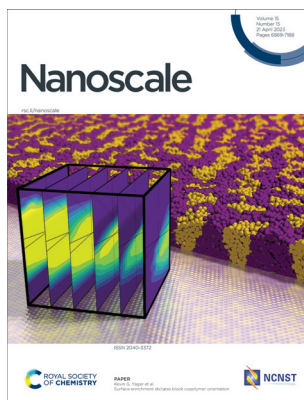
ISSN 2040-3372 CODEN NANOHL 15(15) 6869–7188 (2023)



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See Urszula Stachewicz *et al.*, pp. 6890–6900.

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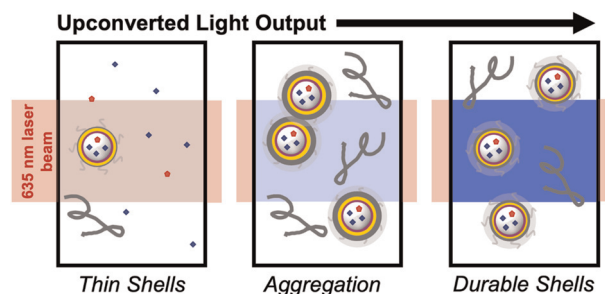
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### Controlling the durability and optical properties of triplet–triplet annihilation upconversion nanocapsules

Tracy H. Schloemer, Samuel N. Sanders, Pournima Narayanan, Qi Zhou, Manchen Hu and Daniel N. Congreve\*

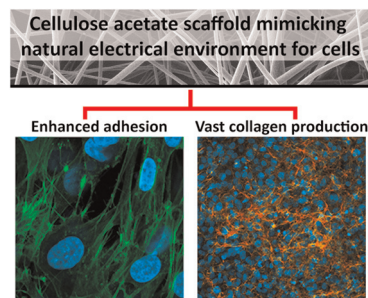


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### Mimicking natural electrical environment with cellulose acetate scaffolds enhances collagen formation of osteoblasts

Piotr K. Szewczyk, Krzysztof Berniak, Joanna Knapczyk-Korczak, Joanna E. Karbowiczek, Mateusz M. Marzec, Andrzej Bernasik and Urszula Stachewicz\*



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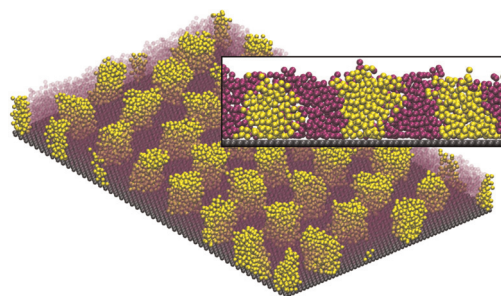


## PAPERS

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# Surface enrichment dictates block copolymer orientation

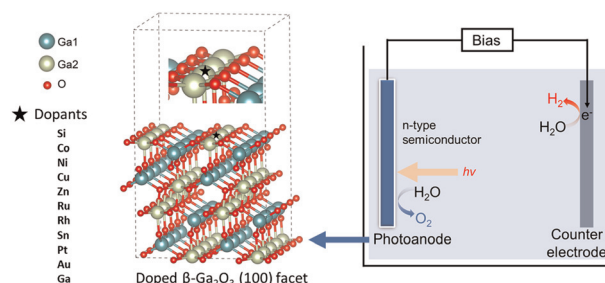
Suwon Bae, Marcus M. Noack and Kevin G. Yager\*



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# Theoretical screening of single atom doping on $\beta$ -Ga<sub>2</sub>O<sub>3</sub> (100) for photoelectrochemical water splitting with high activity and low limiting potential

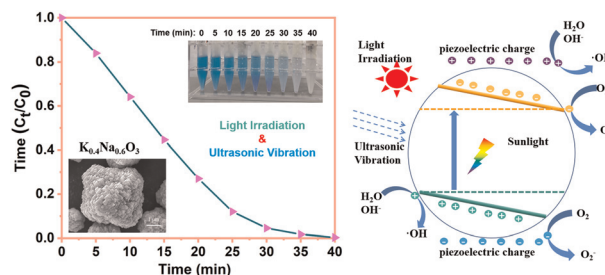
Sijia Fu, David Lewis, Philip van Eyk, Petar Atanackovic and Yan Jiao\*



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# Piezoelectrically enhanced photocatalysis of K<sub>x</sub>Na<sub>1-x</sub>NbO<sub>3</sub> (KNN) microstructures for efficient water purification

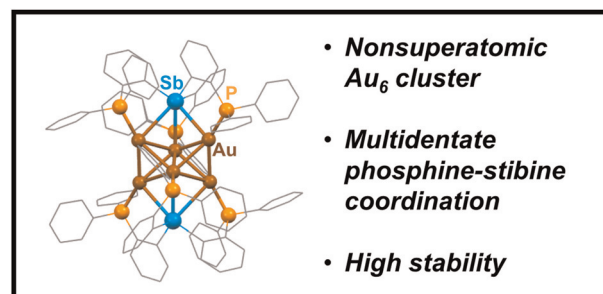
Runjiang Guo, Mengqian Liu, Yurui Xing, Tanglong Bai, Chenglong Zhao, Haolin Huang and Hongti Zhang\*



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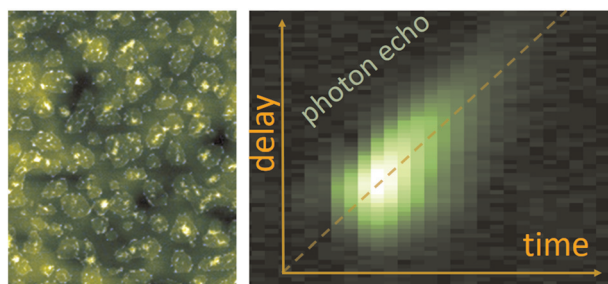
# A first glance into mixed phosphine–stibine moieties as protecting ligands for gold clusters

Kundan K. Singh, Ayan Bhattacharyya, Shana Havenridge, Mohamed Ghabin, Hagan Ausmann, Maxime A. Siegler, Christine M. Aikens\* and Anindita Das\*



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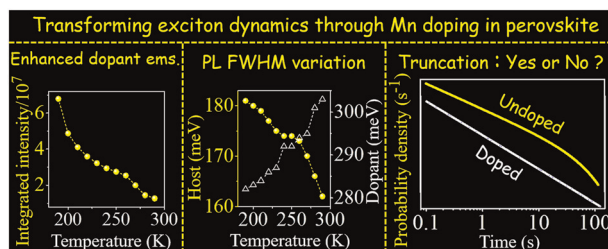
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### Coherent imaging and dynamics of excitons in MoSe<sub>2</sub> monolayers epitaxially grown on hexagonal boron nitride

Karolina Ewa Potczyńska\*, Simon Le Denmat, Takashi Taniguchi, Kenji Watanabe, Marek Potemski, Piotr Kossacki, Wojciech Pacuski and Jacek Kasprzak\*

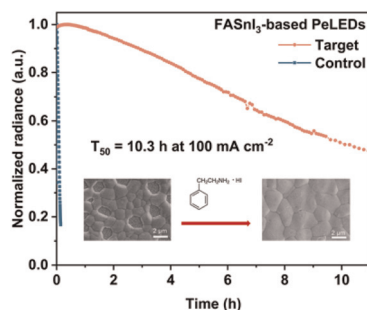
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### Transforming exciton dynamics in perovskite nanocrystal through Mn doping

Soumen Mukherjee, Swarnali Ghosh, Dibyendu Biswas, Mainak Ghosal, Kheyali De and Prasun K. Mandal\*

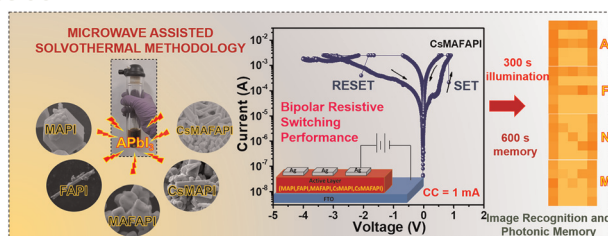
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### Stabilizing FASnI<sub>3</sub>-based perovskite light-emitting diodes with crystallization control

Guoling Zhang, Shiyu Xing, Xuhui Cao, Baodan Zhao\* and Dawei Di\*

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### Revealing the effect of substitutional cation doping in the A-site of nanoscale APbI<sub>3</sub> perovskite layers for enhanced retention and endurance in optoelectronic resistive switching for non-volatile bipolar memory devices

Twinkle George and Arumugam Vadivel Murugan\*



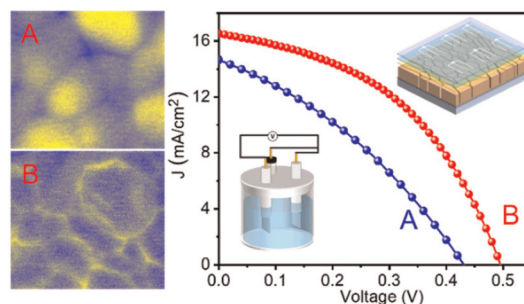


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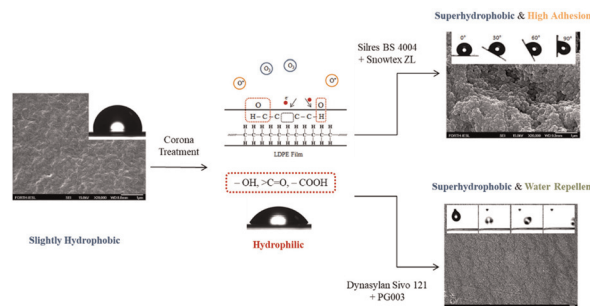
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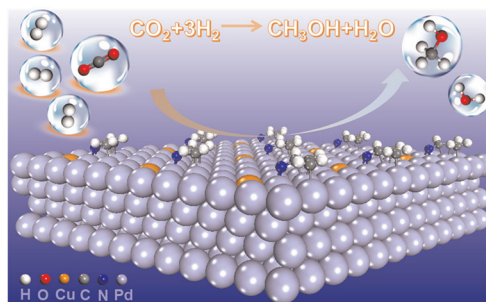
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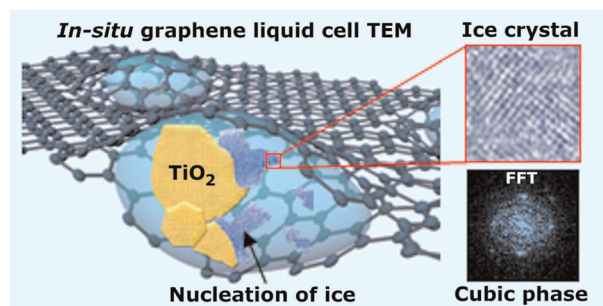
Sanmei Wang, Qi Li, Yue Xin, Sunpei Hu, Xiaoxi Guo, Yong Zhang, Ling Zhang, Bingang Chen\*, Wenhua Zhang\* and Liangbing Wang\*



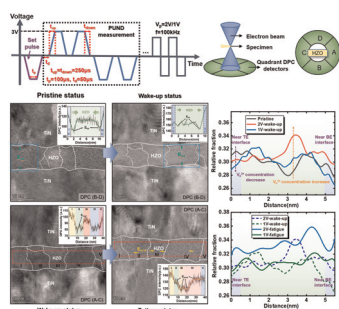
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**Real-time TEM observations of ice formation in graphene liquid cell**

Abhijit H. Phakatkar, Constantine M. Megaridis, Tolou Shokuhfar\* and Reza Shahbazian-Yassar\*



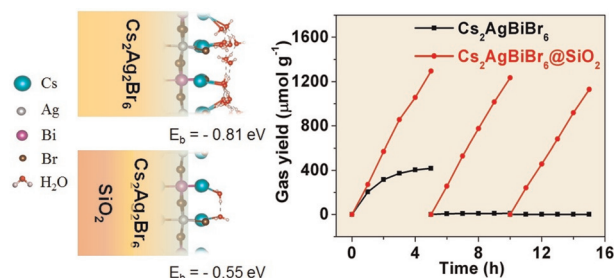
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### First direct observation of the built-in electric field and oxygen vacancy migration in ferroelectric $\text{Hf}_{0.5}\text{Zr}_{0.5}\text{O}_2$ film during electrical cycling

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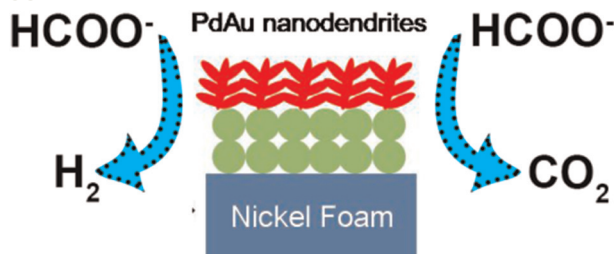
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### *In situ* growth of lead-free halide perovskites into $\text{SiO}_2$ sub-microcapsules toward water-stable photocatalytic $\text{CO}_2$ reduction

Jie Liu, Zihou Wu, Feng Zhang,\* Mengzhen Zhao, Chao Li, Jie Li,\* Bo Wen and Feijiu Wang\*

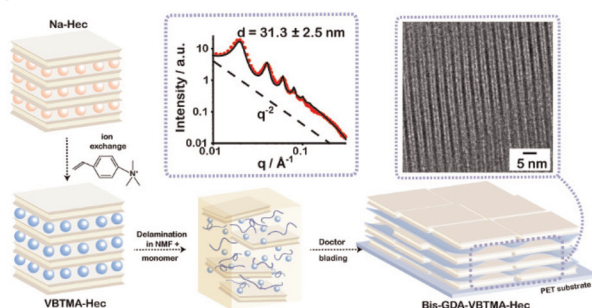
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Bowei Pan, Shuang Shan, Junpeng Wang, Quan Tang, Longfei Guo, Tao Jin, Qiao Wang, Zhen Li, Muhammad Usman and Fuyi Chen\*

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### Fabrication of Bragg stack films of clay nanosheets and polycations *via* co-polymerization of intercalated monomers and functional interlayer cations

Dominik Schuchardt, Sabine Rosenfeldt, Hussein Kalo and Josef Breu\*

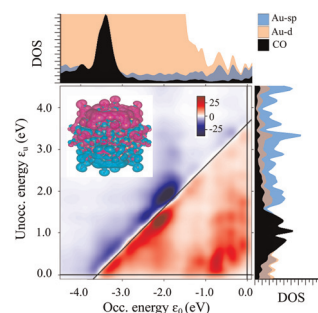


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# A comprehensive investigation of the plasmonic-photocatalytic properties of gold nanoparticles for CO<sub>2</sub> conversion to chemicals

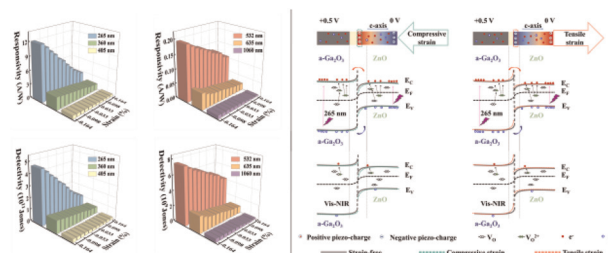
Maryam Soleimani and Mahdi Pourfath\*



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# Piezo-phototronic effect regulated broadband photoresponse of a-Ga<sub>2</sub>O<sub>3</sub>/ZnO heterojunction

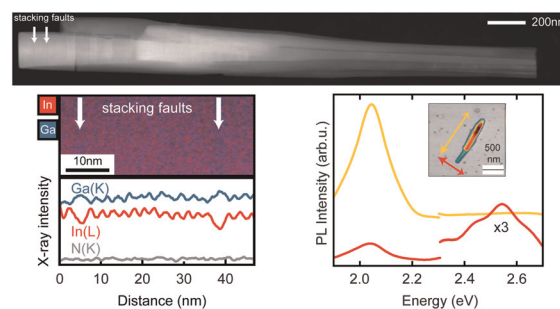
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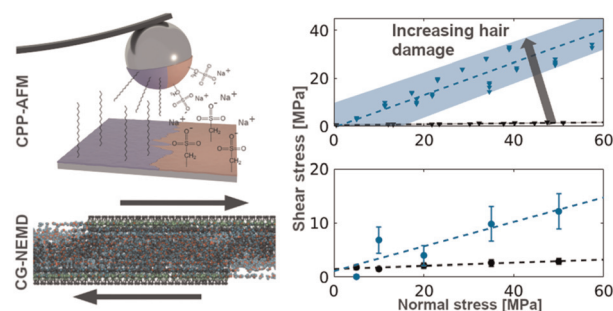
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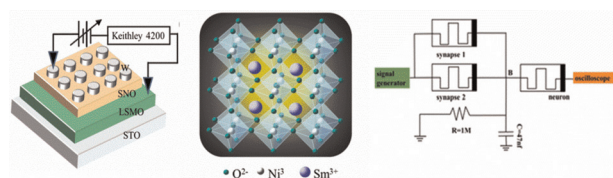
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Erik Weiland\*, James P. Ewen\*, Yuri Roiter, Peter H. Koenig, Steven H. Page, Francisco Rodriguez-Ropero, Stefano Angioletti-Uberti and Daniele Dini



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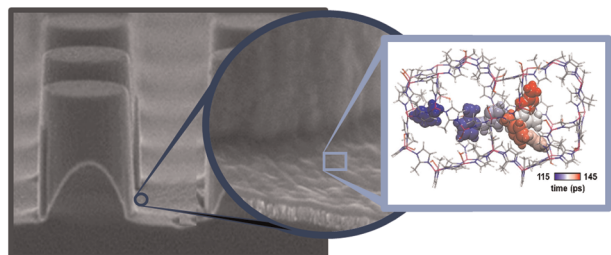
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Lei Li, Dongqing Yu, Yiheng Wei, Yong Sun, Jianhui Zhao, Zhenyu Zhou, Jie Yang, Zichang Zhang and Xiaobing Yan\*

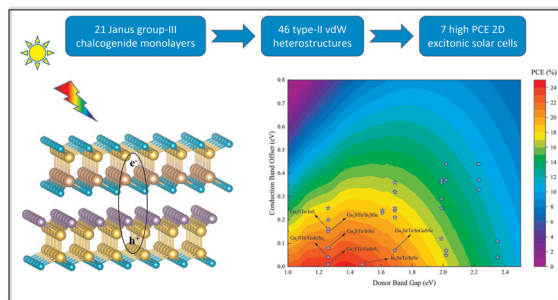
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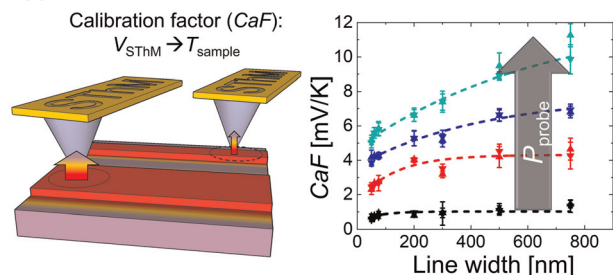
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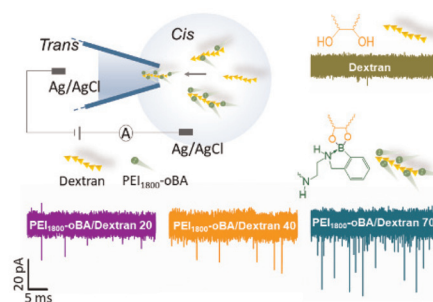


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# Phenylboronic acid-modified polyethyleneimine assisted neutral polysaccharide detection and weight-resolution analysis with a nanopipette

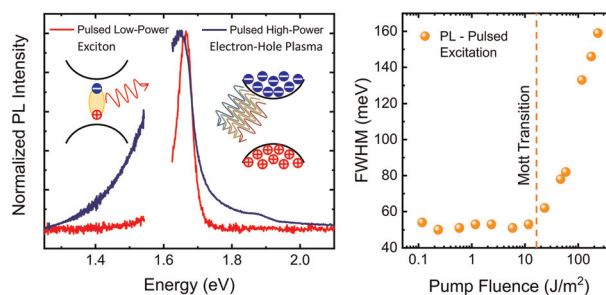
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# Ultrafast hot electron–hole plasma photoluminescence in two-dimensional semiconductors

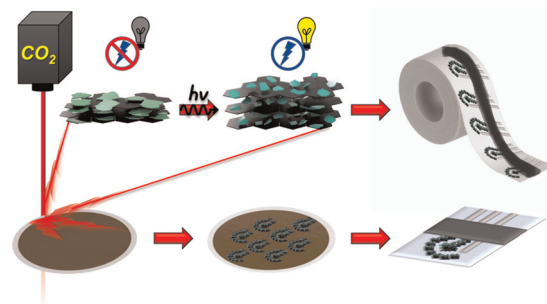
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Manav Bhati, Sergei A. Ivanov, Thomas P. Senftle, Sergei Tretiak\* and Dibyajyoti Ghosh\*

