Nanoscale Advances

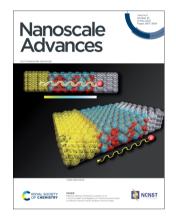
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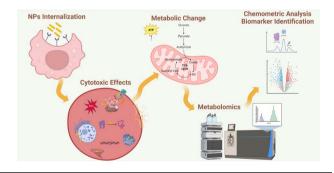
See Mohammad Awashra and Piotr Młynarz, pp. 2674–2723. Image reproduced by permission of Mohammad Awashra, using the building blocks of Dr. Joseph Manion with permission, from *Nanoscale Adv.*, 2023, **5**, 2674. The authors thank Prof. Sami Franssila for his advice and funding.

REVIEWS

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The toxicity of nanoparticles and their interaction with cells: an *in vitro* metabolomic perspective

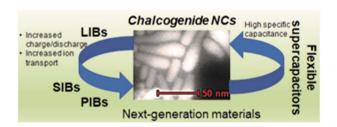
Mohammad Awashra* and Piotr Młynarz



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Transition metal chalcogenides for next-generation energy storage

Soubantika Palchoudhury,* Karthik Ramasamy, Jinchen Han, Peng Chen and Arunava Gupta*



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Microfluidic static droplet generated quantum dot arrays as color conversion layers for full-color micro-LED displays

Licai Zhu, Jin Tao,^{*} Panyuan Li, Wenchao Sun, Jiwei Li, KaiLi Fan, Jinguang Lv, Yuxin Qin, Kaifeng Zheng, Baixuan Zhao, Yingze Zhao, Yupeng Chen, Yingwen Tang, Weibiao Wang and Jingqiu Liang^{*}

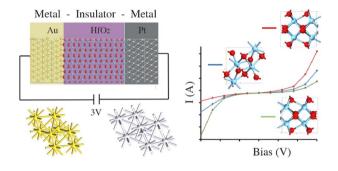
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PAPERS

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First-principles investigation of interface phenomena in hafnium-based metal–insulator–metal diodes

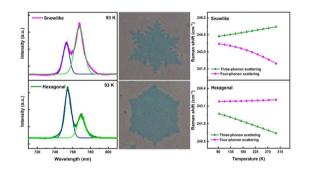
Eleonora Pavoni, Elaheh Mohebbi, Pierluigi Stipa, Luca Pierantoni, Davide Mencarelli, Mircea Dragoman, Martino Aldrigo* and Emiliano Laudadio*



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Morphological dependent exciton dynamics and thermal transport in MoSe₂ films

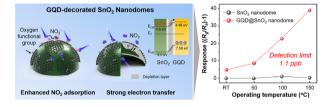
Jay Deep Gupta, Priyanka Jangra, Bishnu Pada Majee and Ashish Kumar Mishra*



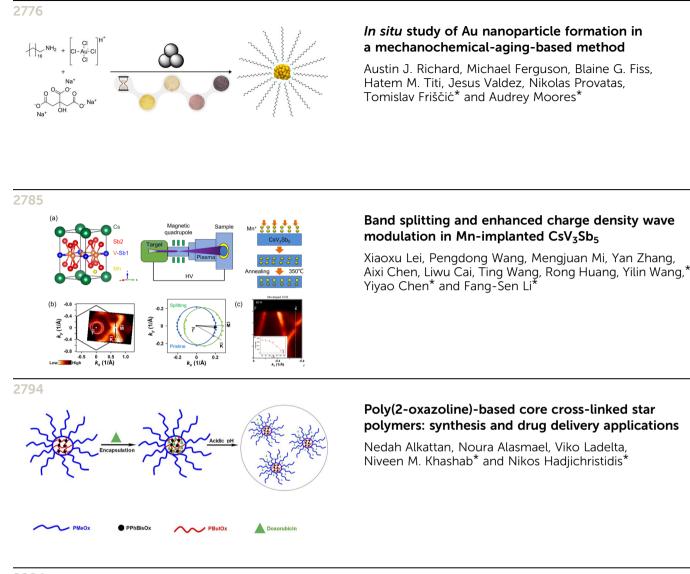
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Role of graphene quantum dots with discrete band gaps on SnO₂ nanodomes for NO₂ gas sensors with an ultralow detection limit

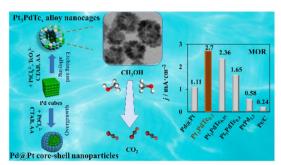
Jinho Lee, Minsu Park, Young Geun Song, Donghwi Cho, Kwangjae Lee, Young-Seok Shim* and Seokwoo Jeon*



PAPERS



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Te-induced fabrication of Pt₃PdTe_{0.2} alloy nanocages by the self-diffusion of Pd atoms with unique MOR electrocatalytic performance

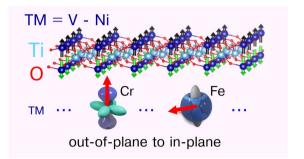
Yuhe Shi, Ling Zhang,* Huiwen Zhou, Ruanshan Liu, Shichen Nie, Guojie Ye, Fengxia Wu, Wenxin Niu,* Jing Long Han* and Ai Jie Wang

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Magnetic order and magnetic anisotropy in twodimensional ilmenenes

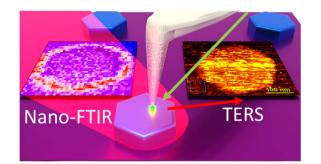
R. H. Aguilera-del-Toro, M. Arruabarrena, A. Leonardo and A. Ayuela*



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Local phonon imaging of AlN nanostructures with nanoscale spatial resolution

Ilya Milekhin,^{*} Kirill Anikin, Nina N. Kurus, Vladimir G. Mansurov, Timur V. Malin, Konstantin S. Zhuravlev, Alexander G. Milekhin, Alexander V. Latyshev and Dietrich R. T. Zahn



CORRECTION

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Correction: A hierarchical integrated 3D carbon electrode derived from gingko leaves *via* hydrothermal carbonization of H₃PO₄ for high-performance supercapacitors

Han Liu, Fuming Zhang, Xinyu Lin, Jinggao Wu and Jing Huang*