

Nanoscale Horizons

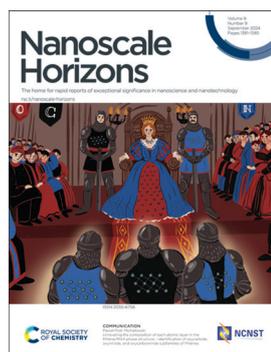
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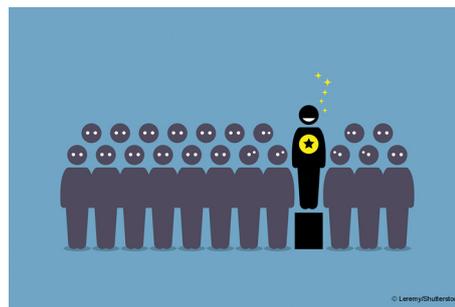
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See Artem V. Bondarenko, Adekunle O. Adeyeye, Gleb N. Kakazei *et al.*, pp. 1498-1505. Image reproduced by permission of Artem V. Bondarenko and Gleb N. Kakazei from *Nanoscale Horiz.*, 2024, 9, 1498.

EDITORIAL

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Outstanding Reviewers for *Nanoscale Horizons* in 2023

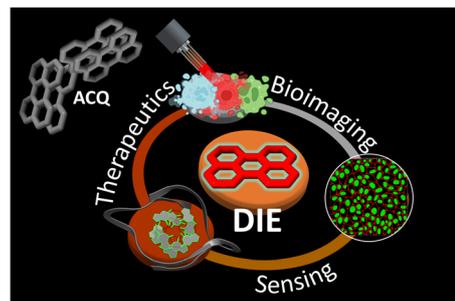


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Advancements in molecular disassembly of optical probes: a paradigm shift in sensing, bioimaging, and therapeutics

Karolina Saczuk, Marta Dudek, Katarzyna Matczyszyn and Marco Deiana*



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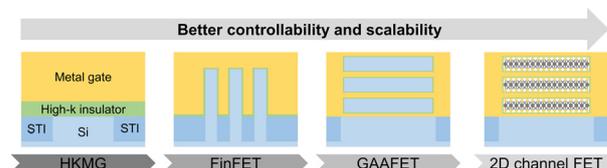
Fundamental questions
Elemental answers

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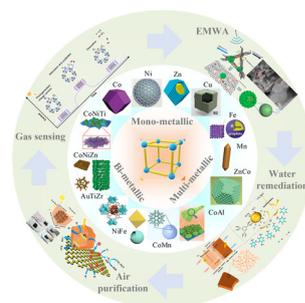
Byeongchan Kim, Seojoo Lee and Jin-Hong Park*



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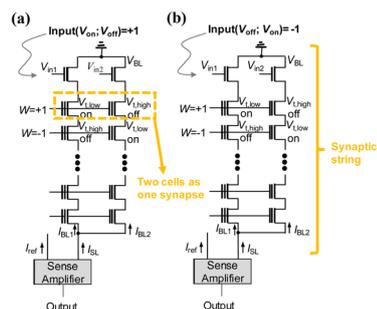
Wei Wang, Bergoi Ibarlucea, Chuanhui Huang, Renhao Dong, Muhannad Al Aiti,* Shirong Huang* and Gianarelio Cuniberti*



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Sung-Tae Lee* and Jong-Ho Lee*

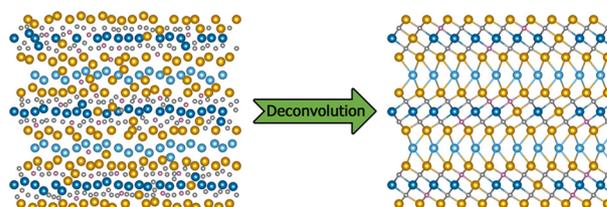


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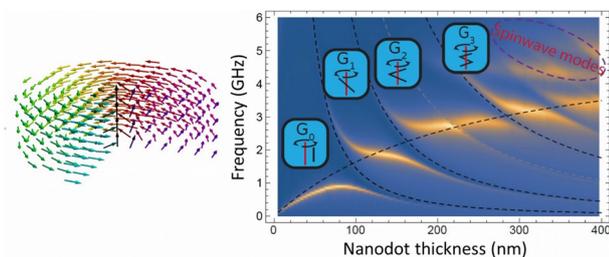
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Unraveling the composition of each atomic layer in the MXene/MAX phase structure – identification of oxycarbide, oxynitride, and oxycarbonitride subfamilies of MXenes

Paweł Piotr Michałowski



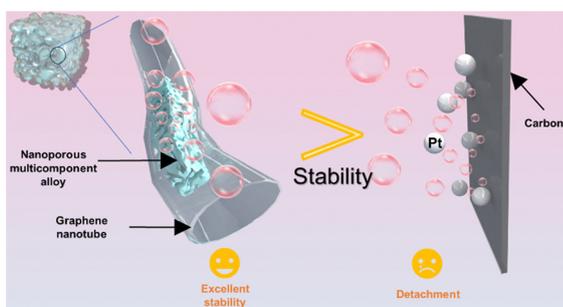
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Dominant higher-order vortex gyromodes in circular magnetic nanodots

Artem V. Bondarenko,* Sergey A. Bunyaev, Amit K. Shukla, Arlete Apolinario, Navab Singh, David Navas, Konstantin Y. Guslienko, Adekunle O. Adeyeye* and Gleb N. Kakazei*

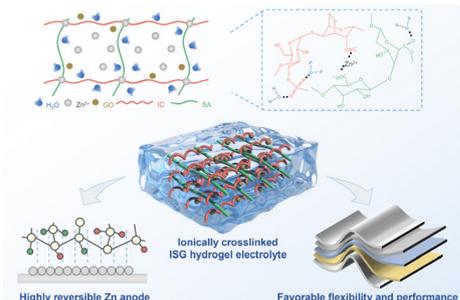
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Bubbling resilient 3D free-standing nanoporous graphene with an encapsulated multicomponent nano-alloy for enhanced electrocatalysis

Linshan Zhu, Qingqing Li, Yixuan Hu, Xin Wu, Kolan Madhav Reddy,* Kaikai Li,* Guoqiang Xie, Xingjun Liu and Hua-Jun Qiu*

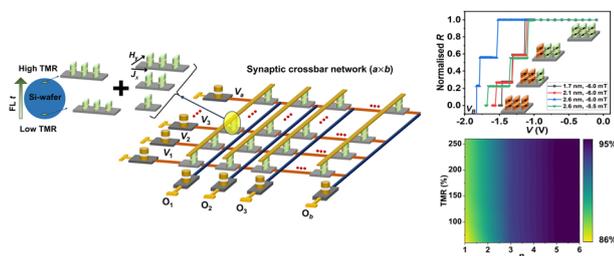
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An ionically cross-linked composite hydrogel electrolyte based on natural biomacromolecules for sustainable zinc-ion batteries

Haoyang Ge, Liping Qin,* Bingyao Zhang, Long Jiang, Yan Tang, Bingan Lu, Siyu Tian* and Jiang Zhou*

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Bimodal alteration of cognitive accuracy for spintronic artificial neural networks

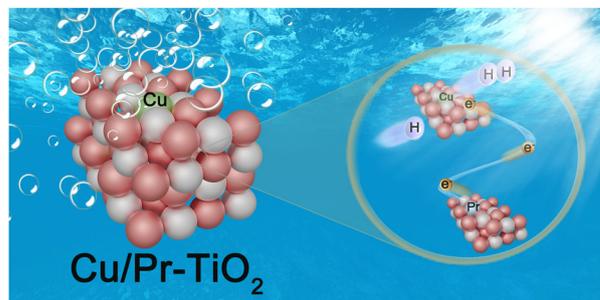
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Insight into mechanism for remarkable photocatalytic hydrogen evolution of Cu/Pr dual atom co-modified TiO₂

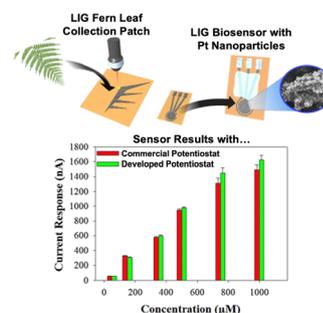
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Biomimetic laser-induced graphene fern leaf and enzymatic biosensor for pesticide spray collection and monitoring

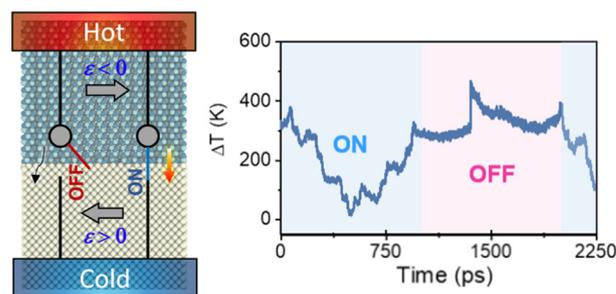
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Mechanical regulation to interfacial thermal transport in GaN/diamond heterostructures for thermal switch

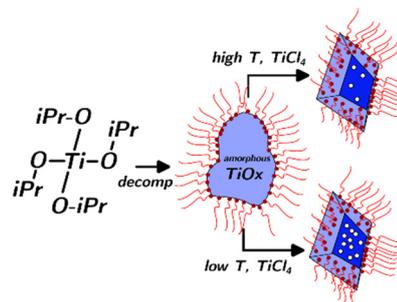
Xiaotong Yu, Yifan Li, Renjie He, Yanwei Wen, Rong Chen, Baoxing Xu* and Yuan Gao*



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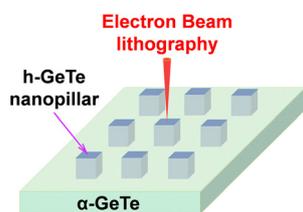
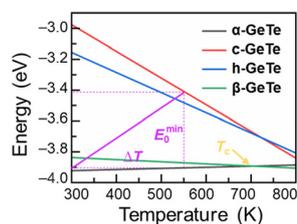
Colloidal TiO₂ nanocrystals with engineered defectivity and optical properties

Julia J. Chang, Bin Yuan, Sandro Mignuzzi, Riccardo Sapienza, Francesco Mezzadri and Ludovico Cademartiri*



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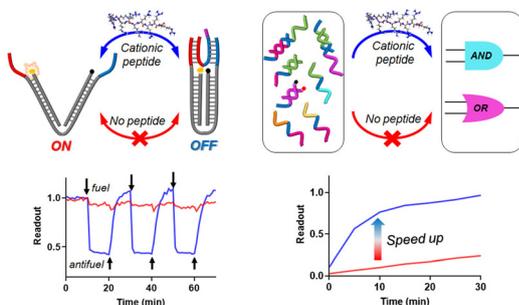
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Electron beam lithography of GeTe through polymorphic phase transformation

Hu Zhang, Meng Li, Shao-Bo Mi,* Shao-Dong Cheng, Lu Lu and Zhi-Gang Chen*

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Enhancing DNA-based nanodevices activation through cationic peptide acceleration of strand displacement

Xianxue Zhang, Ruikai Du, Shichao Xu, Xinyue Wang and Zhen-Gang Wang*

CORRECTION

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Correction: Supramolecular nanocapsules as two-fold stabilizers of outer-cavity sub-nanometric Ru NPs and inner-cavity ultra-small Ru clusters

Ernest Ubasart, Irene Mustieles Marin, Juan Manuel Asensio, Gabriel Mencia, Ángela M. López-Vinasco, Cristina García-Simón, Iker del Rosal, Romuald Poteau,* Bruno Chaudret* and Xavi Ribas*

