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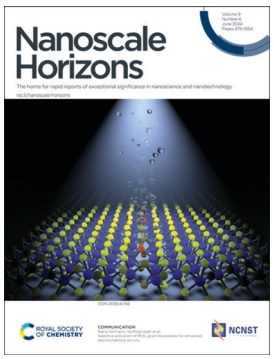

Cover
See Mario Hofmann, Ya-Ping Hsieh *et al.*, pp. 946–955.
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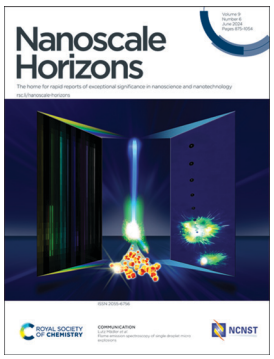

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See Lutz Mädler *et al.*, pp. 956–967.
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EDITORIAL

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FOCUS

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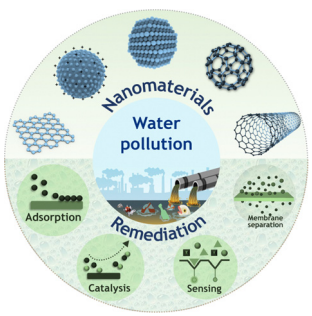
Nanoscience and nanotechnology for water remediation: an earnest hope toward sustainability

Subhajit Dutta,* Anna Sinelshchikova, Jacopo Andreo and Stefan Wuttke*



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REVIEWS

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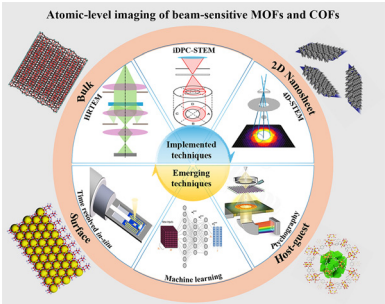
Atomic-level imaging of beam-sensitive COFs and MOFs by low-dose electron microscopy

Zhen Zhan, Yuxin Liu, Weizhen Wang, Guangyu Du, Songhua Cai* and Peng Wang*



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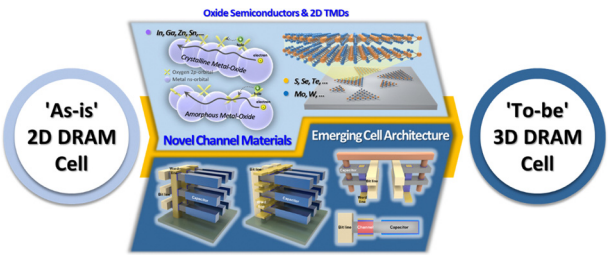
Oxide and 2D TMD semiconductors for 3D DRAM cell transistors

Jae Seok Hur, Sungsoo Lee, Jiwon Moon, Hang-Gyo Jung, Jongwook Jeon, Seong Hun Yoon, Jin-Hong Park* and Jae Kyeong Jeong*



COMMUNICATIONS

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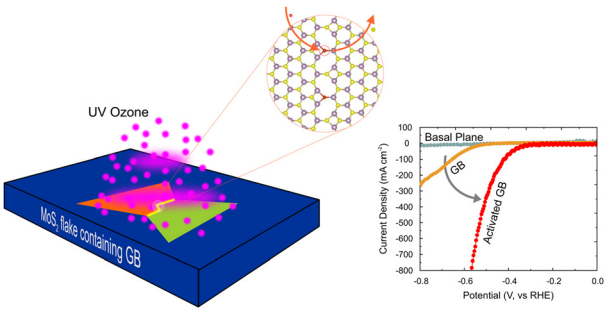
Selective activation of MoS_2 grain boundaries for enhanced electrochemical activity

Radha Raman, Jeyavelan Muthu, Zhi-Long Yen, Mohammad Qorbani, Yu-Xiang Chen, Ding-Rui Chen, Mario Hofmann* and Ya-Ping Hsieh*



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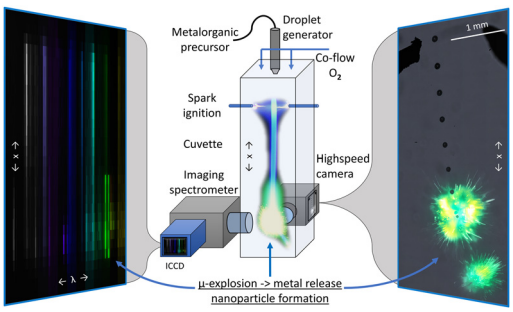
Flame emission spectroscopy of single droplet micro explosions

Jan Derk Groeneveld, Suman Pokhrel and Lutz Mädler*



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COMMUNICATIONS

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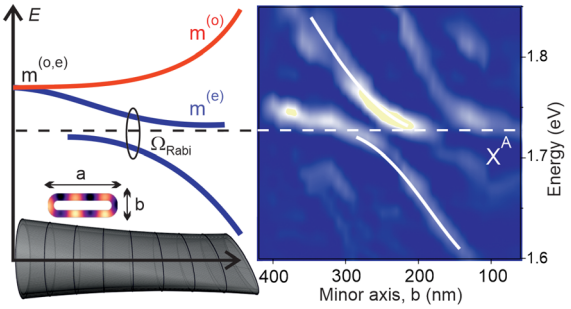

Direct observation of split-mode exciton-polaritons in a single MoS_2 nanotube

A. I. Galimov, D. R. Kazanov, A. V. Poshakinskiy, M. V. Rakhlin, I. A. Eliseyev, A. A. Toropov, M. Remškar and T. V. Shubina*

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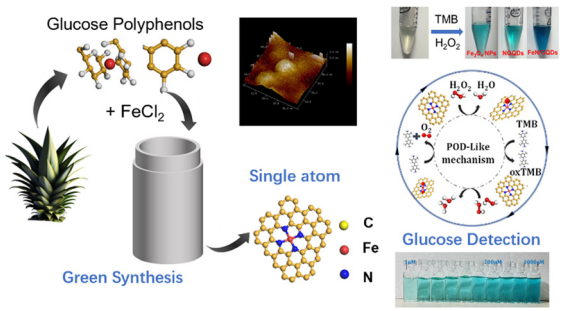

Green synthesis of iron-doped graphene quantum dots: an efficient nanozyme for glucose sensing

Xinqi Li, Guanyou Lin, Lijun Zhou, Octavia Prosser, Mohammad H. Malakooti* and Miqin Zhang*

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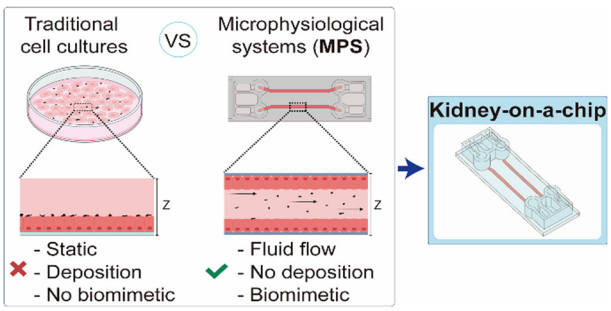

A microphysiological system for handling graphene related materials under flow conditions

Alodia Lacueva-Aparicio, Viviana Jehová González, Ana Rosa Remacha, Daniel Woods, Eduardo Prado, Ignacio Ochoa, Sara Oliván* and Ester Vázquez*

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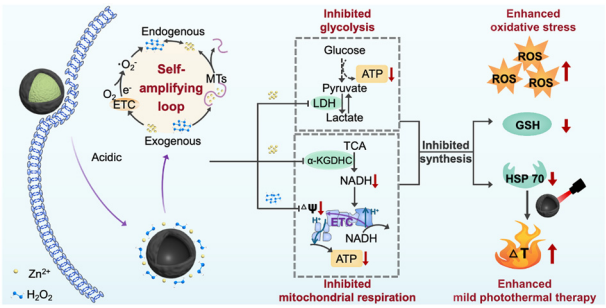

Polydopamine-encapsulated zinc peroxide nanoparticles to target the metabolism-redox circuit against tumor adaptability for mild photothermal therapy

Yue Qiao, Xiaodan Jia, Yue Wang, Lin Liu,* Mengchao Zhang* and Xiue Jiang*

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COMMUNICATIONS

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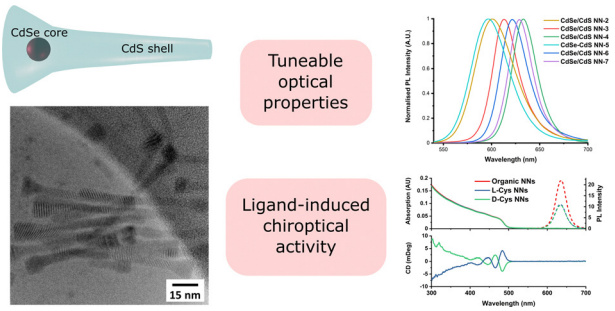
Chiroptically active quantum nanonails

Finn Purcell-Milton,* Vera A. Kuznetsova,* Xue Bai, Áine Coogan, Marina Martínez-Carmona, Jorge A. Garcia, A. Louise Bradley and Yurii K. Gun'ko*



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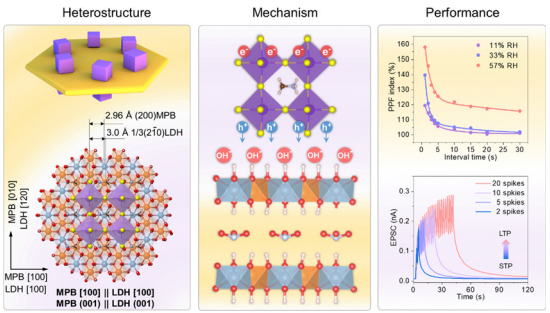
Heterointerface engineering of layered double hydroxide/$MAPbBr_3$ heterostructures enabling tunable synapse behaviors in a two-terminal optoelectronic device

Qian Chen, Jiacheng Cao, Zhiwei Yang, Zeyi Wang, Jian Wang, Shilong Yu, Chenjie Hao, Nana Wang, Hai Li and Xiao Huang*



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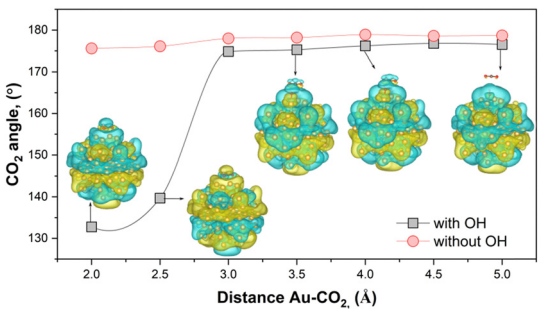
***Ab initio* investigation of hot electron transfer in CO_2 plasmonic photocatalysis in the presence of hydroxyl adsorbate**

Zelio Fusco,* Dirk Koenig, Sean C. Smith and Fiona Jean Beck



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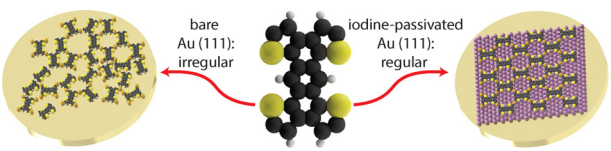
Iodine passivation facilitates on-surface synthesis of robust regular conjugated two-dimensional organogold networks on Au(111)

Arash Badami-Behjat, Gianluca Galeotti, Rico Gutzler, Dominik L. Pastoetter, Wolfgang M. Heckl, Xinliang Feng and Markus Lackinger*



CORRECTION

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Correction: Pickering emulsion templated proteinaceous microparticles as glutathione-responsive carriers for endocytosis in tumor cells

Weijie Jiang, Xin Guan, Wei Liu, Yunxing Li, Hang Jiang* and To Ngai*

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