

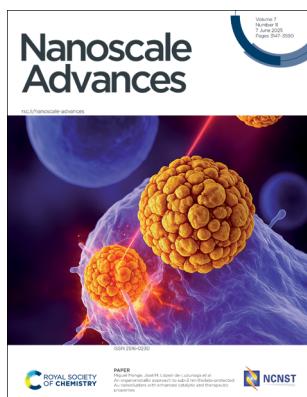
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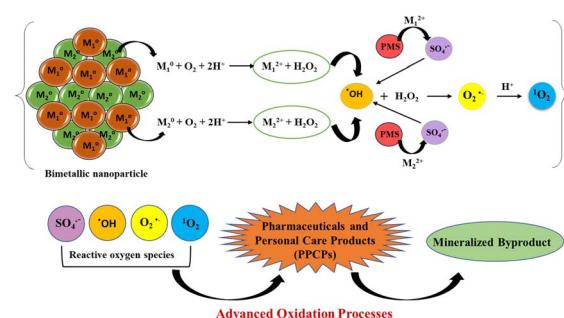
See Miguel Monge, José M. López-de-Luzuriaga et al., pp. 3228–3235. Image reproduced by permission of Miguel Monge from *Nanoscale Adv.*, 2025, 7, 3228.

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Bimetallic nanoparticles as pioneering eco-friendly catalysts for remediation of pharmaceuticals and personal care products (PPCPs)

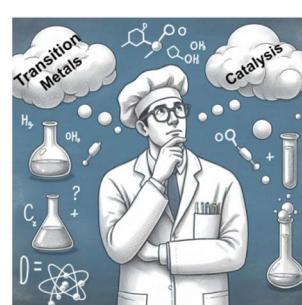
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Irfan Ahmad, Munthar Kedhim, Yashwantsinh Jadeja, Gargi Sangwan, Kavitha V., Aditya Kashyap, Shirin Shomurotova, Mosstafa Kazemi*, and Ramin Javahershenas*



Advantages of Transition Metals

- Electron Configuration
- Coordination Chemistry
- Surface Properties
- Thermal Stability
- Variable Oxidation States
- High Catalytic Activity



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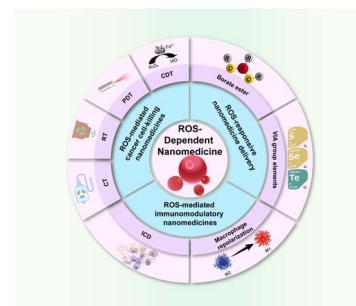
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REVIEWS

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Reactive oxygen species-dependent nanomedicine therapeutic modalities for gastric cancer

Zhiyan Li, Yanjun Lu, Lulu Wang, Liuyi Shi and Tao Wang*

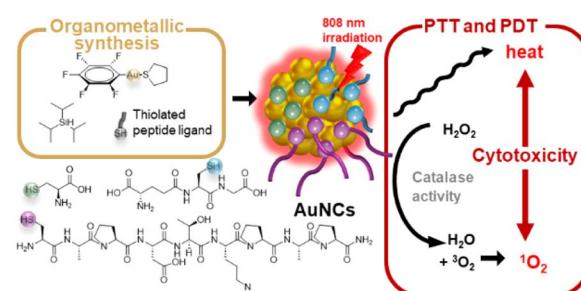


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An organometallic approach to sub-2 nm thiolate-protected Au nanoclusters with enhanced catalytic and therapeutic properties

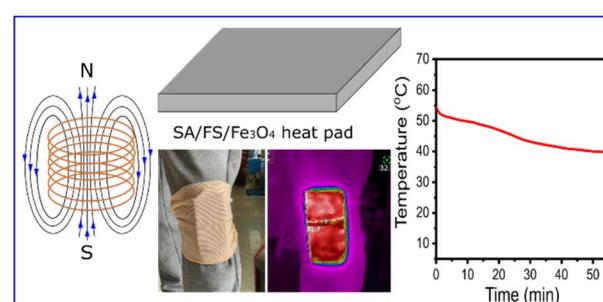
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Stearic acid/fumed silica/Fe₃O₄ composite phase change materials with low thermal conductivities and magnetically accelerated heating performance for wearable thermotherapy

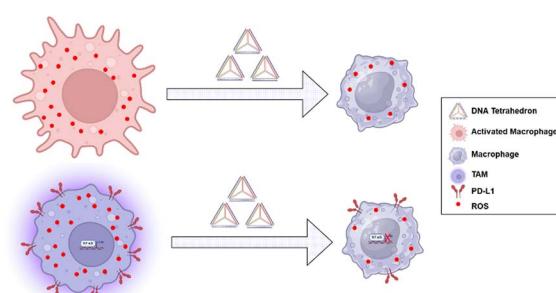
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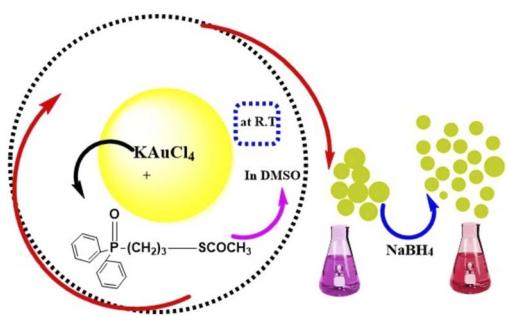
Designer DNA nanocages modulate anti-oxidative and anti-inflammatory responses in tumor associated macrophages

Payal Vaswani and Dhiraj Bhatia*



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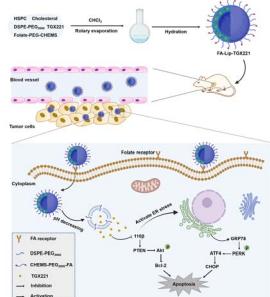
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Gold nanoparticles functionalized by phosphine oxide derivatives: characterization and influence of ligand structure on their stability

Wanisa Abdussalam-Mohammed,* Mashaal M. Alshaikh, Pawan Shah and Ajaya Bhattacharai*

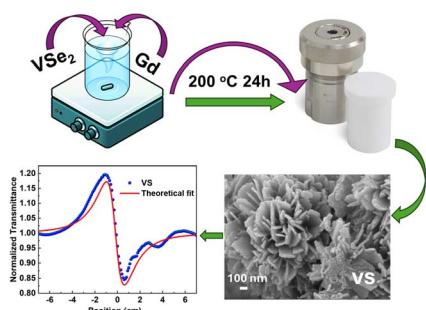
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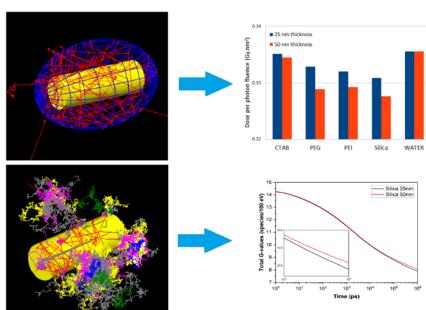
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Optical nonlinearity of Gd-doped VSe_2 nanoflowers for photonic device applications

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Taheri A.* Khandaker M. U.* Rabus H., Moradi F. and Bradley D. A.

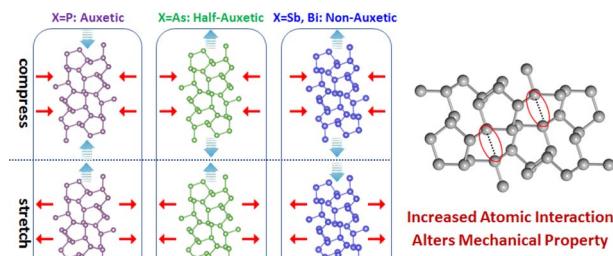


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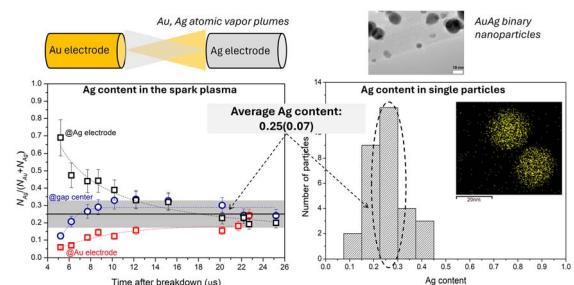
Hong Zheng,* Zhenhan Zhao, Jiasheng Chen, Hanwen Qin, Jun Li and Xiang Zhao*



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Gold–silver alloy nanoparticle formation via spark ablation: the dynamics of material mixing

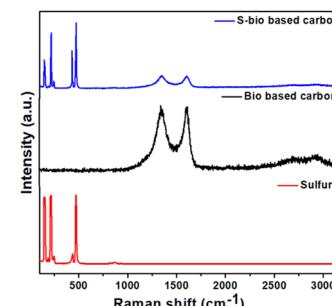
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A renewable carbon material derived from native European deciduous trees serves as a sustainable electroactive substance for multifunctional energy storage systems

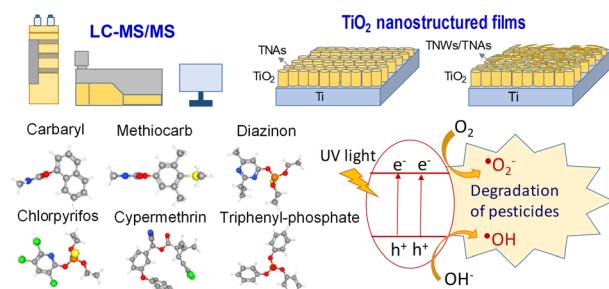
Surjit Sahoo,* Thiba Nagaraja, Monika Michalska and Suprem R. Das*



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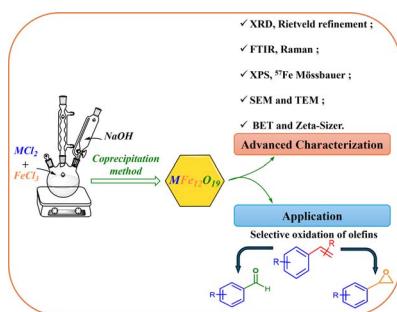
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Phuoc Huu Le, Thao Phuong Huynh, Teng-Ping Chu, Loc Tan Nguy, Ngo Ngoc Uyen and Tho Chau Minh Vinh Do*



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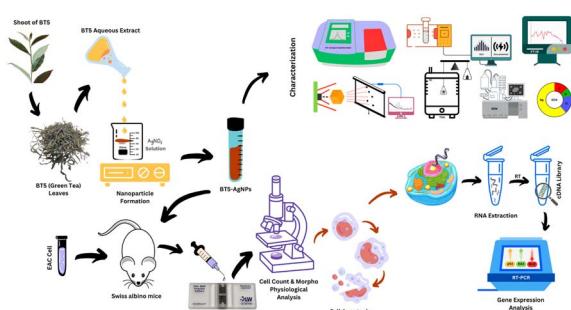
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Magnetically recoverable MFe₁₂O₁₉ nanoparticles as efficient and environmentally benign catalysts for gram-scale selective oxidation of olefins

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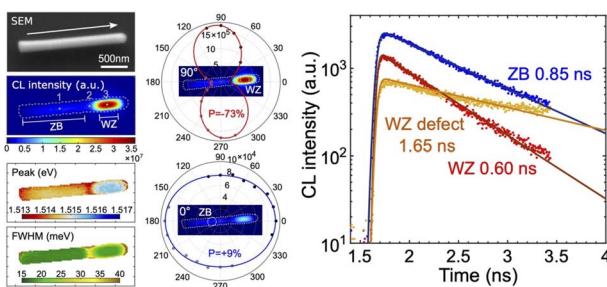
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Green synthesis of silver nanoparticles using the BT5 tea cultivar of Bangladesh: unveiling molecular mechanisms of anti-cancer activity in mice model

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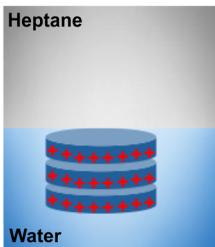


Undoped and doped wurtzite GaAs probed by polarization- and time-resolved cathodoluminescence

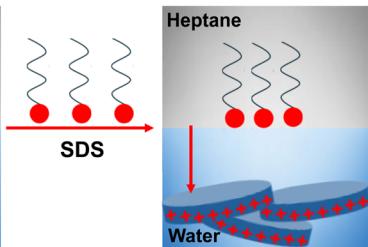
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Laponite free interface



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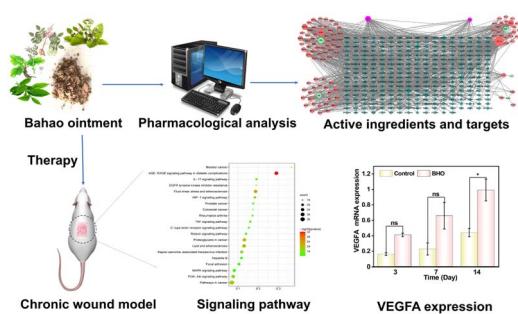


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Molecular insight of nanosized Ba-Hao herbal ointment in accelerating chronic wound healing

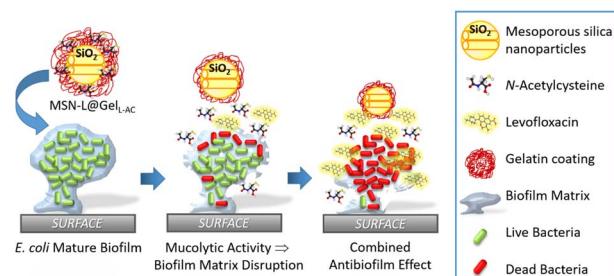
Han-Ying Qian, Lu Chen, Xiao-Man Zhang, Le Qiu, Fei Wang, Ting Feng, Jie Shan,* Xun Yuan* and Xu-Lin Chen*



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Mucolytic and antibiotic combination therapy using silica-based nanocarriers to eradicate *Escherichia coli* biofilms

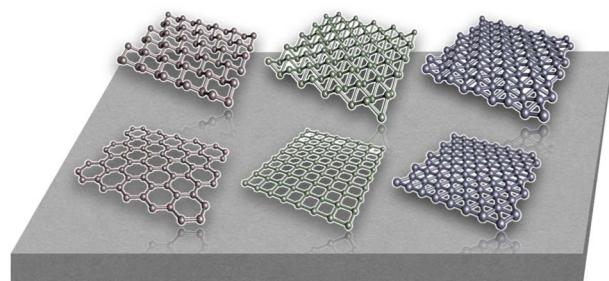
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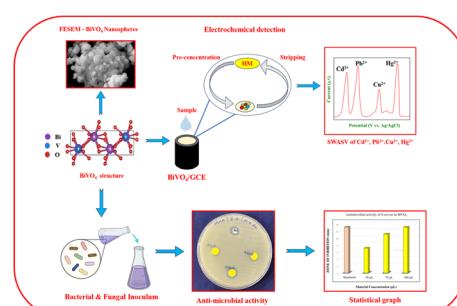
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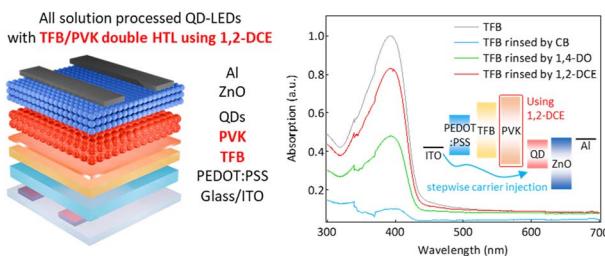
Simultaneous electrochemical detection of heavy metal ions using a sol–gel synthesized BiVO_4 nanosphere modified electrode and its antimicrobial activity

Keerthana Madhivanan, Raji Atchudan, Sandeep Arya and Ashok K. Sundramoorthy*



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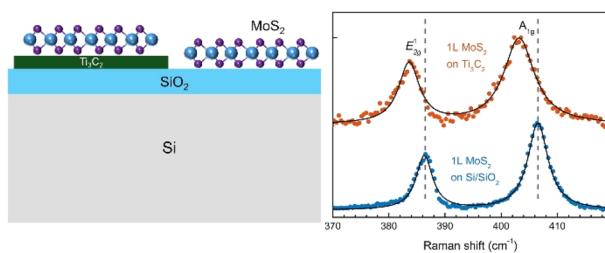
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Improved performance of all-solution-processed quantum dot light-emitting diodes with TFB/PVK double-hole transport layers using 1,2-dichloroethane

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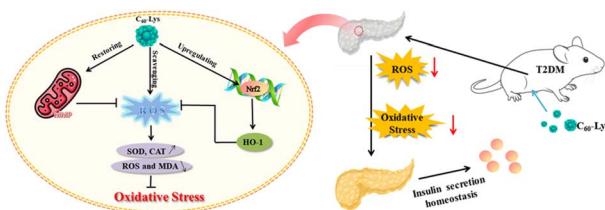
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Raman spectroscopy of 2D MoS₂ on Ti₃C₂ MXene: the substrate effect

Ethan Pollack, Qiaohui Zhou, Elham Loni, Kenneth Agbakansi, Ahmad Majed, Fei Wang, Ali Soleymani, Melena Busse, Michael Naguib and Xin Lu*

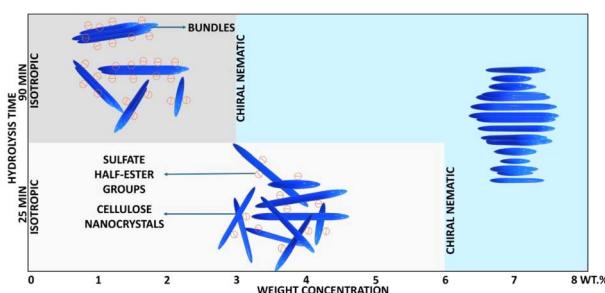
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A novel fullerene-lysine derivative with noticeable ROS scavenging capabilities for improving type 2 diabetes mellitus

Jiaqi Weng, Wei Guo, Jie Liu, Kollie Larwubah, Jianjun Guo, Yanrong Jia* and Meilan Yu*

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Tuning the phase separation of cellulose nanocrystals with hydrolysis times: influence of effective dimensions

Shiying Hong, Ashley Bean, Yuan Fang, Nathalie Lavoie* and Lucian Lucia*

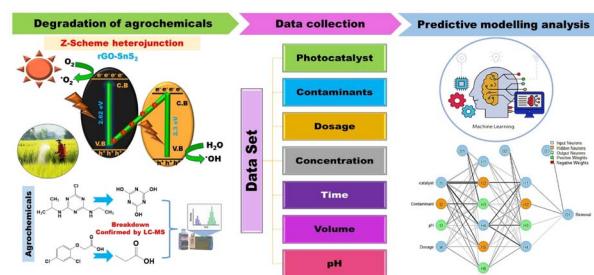


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Designing a Z-scheme rGO–SnS₂ synergistic photocatalyst for photocatalytic mineralization of atrazine and 2,4-dichlorophenoxyacetic acid and applying machine learning for predictive modelling of photocatalytic performance

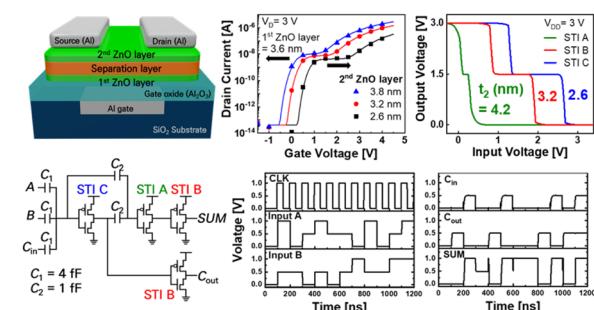
Jinal Patel, Megha Parmar, Syed Shahabuddin,* Inderjeet Tyagi, Suhas and Rama Gaur*



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An area and power efficient ternary serial adder using phase composite ZnO stack channel FETs

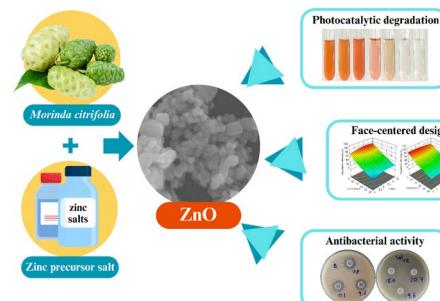
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Antibacterial and photocatalytic activities of fruit-extract-mediated synthesized ZnO nanoparticles

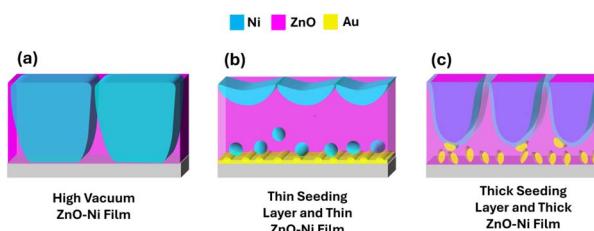
Ngoan Thi Thao Nguyen, Anh Nguyen Quynh Phan, Thuan Van Tran* and Thuy Thi Thanh Nguyen*



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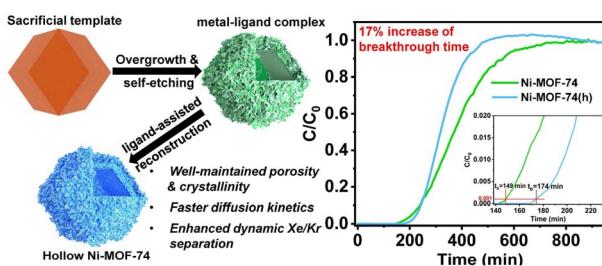
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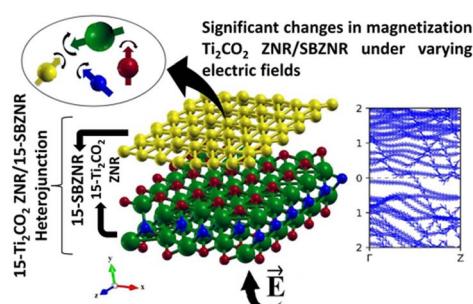
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A facile two-step synthesis of hollow MOF-74 for enhanced dynamic Xe/Kr separation

Chunhui Wu,* Xiaoling Wu, He Zhou, Youshi Zeng, Xinxin Chu,* Wei Liu and Tao Li*

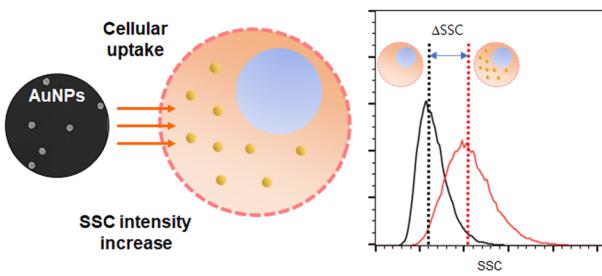
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The electronic properties of functionalized MXene M₂XT₂ (M = Ti, Zr, Sc; X = C; T = O, F) nanoribbon/striped borophene nanoribbon heterojunctions

Mahdi Shirazinia and Edris Faizabadi*

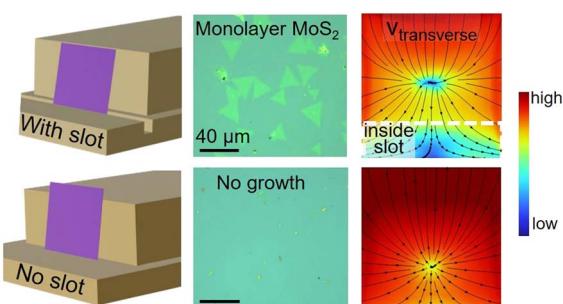
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Quantification of cellular uptake of gold nanoparticles via scattering intensity changes in flow cytometry

Hye Ji Shin, Minjeong Kwak, Ik Hwan Kwon, Sook Heun Kim and Ji Youn Lee*

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Critical role of precursor flux in modulating nucleation density in 2D material synthesis revealed by a digital twin

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Metasurface-enabled small-satellite polarisation imaging

Sarah E. Dean,* Josephine Munro, Neuton Li,
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