

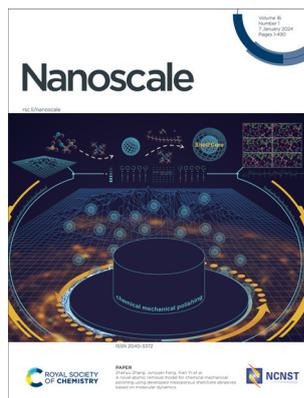
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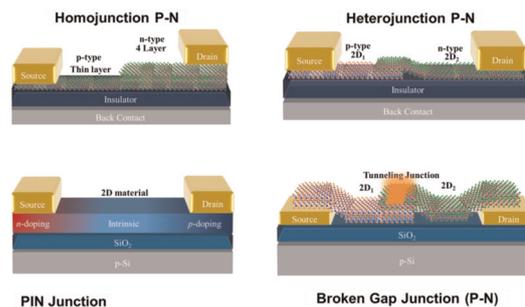
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Fundamental questions
Elemental answers

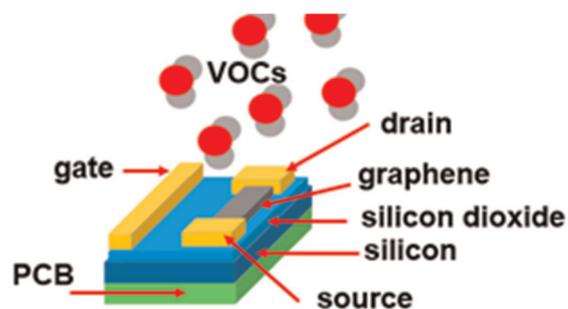


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Detection of medically relevant volatile organic compounds with graphene field-effect transistors and separated by low-frequency spectral and time signatures

Bruno Gil,* Dominic Wales, Haijie Tan and Eric Yeatman

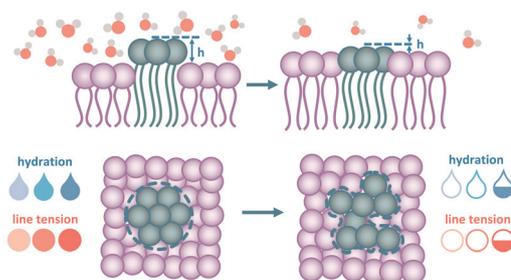


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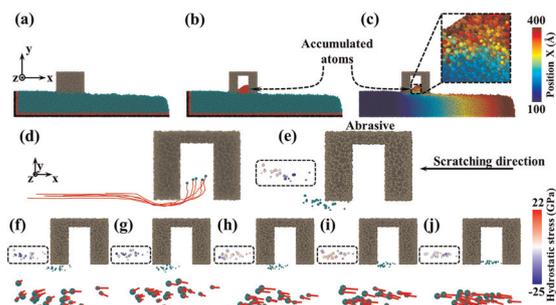
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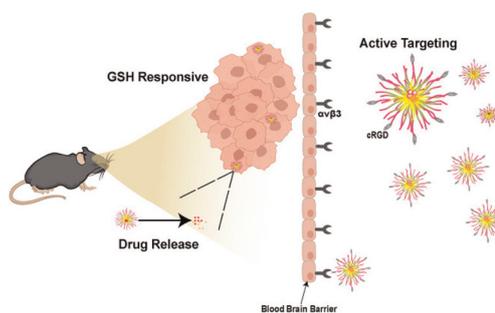
Zhensong Liu, Zhenyu Zhang,* Junyuan Feng,* Xian Yi,* Chunjing Shi, Yang Gu, Feng Zhao, Shihao Liu and Jingru Li



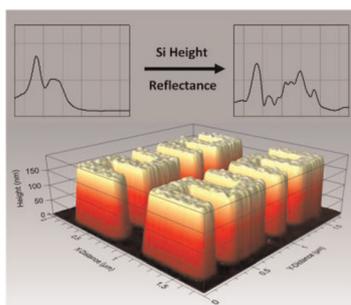
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Wanyu Wang, Yuanyuan Zhang, Yue Jian, Shi He, Jiagang Liu, Yongzhong Cheng, Songping Zheng, Zhiyong Qian, Xiang Gao and Xiang Wang*



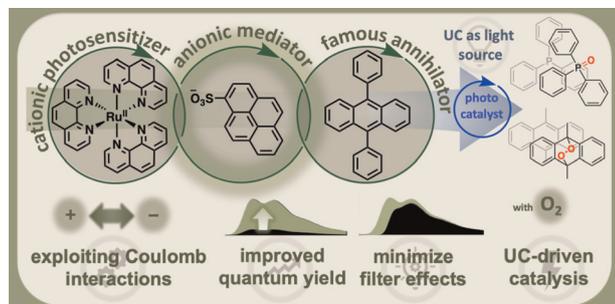
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Dominic J. P. Koyroytsaltis-McQuire,* Rahul Kumar, Tamas Javorfi, Giuliano Siligardi, Nikolaj Gadegaard and Malcolm Kadodwala*

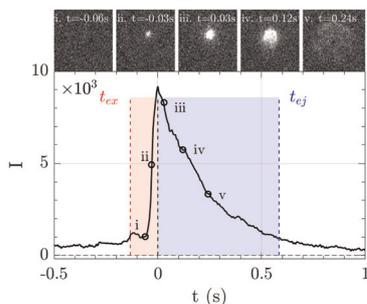
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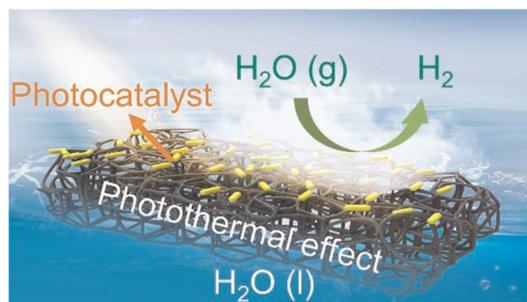
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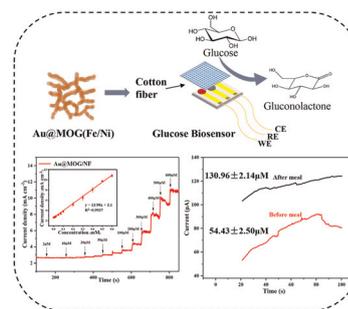
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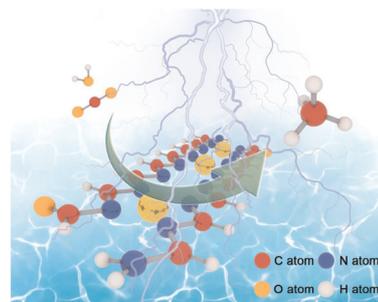
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Electron-beam writing of a relaxor ferroelectric polymer for multiplexing information storage and encryption

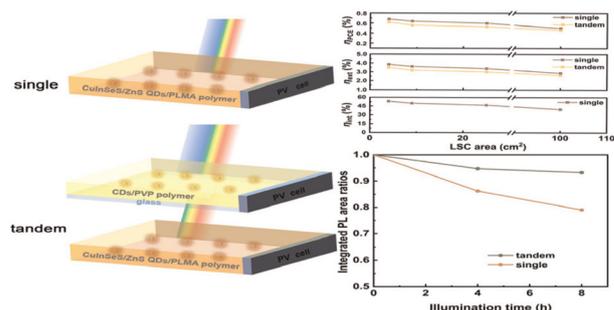
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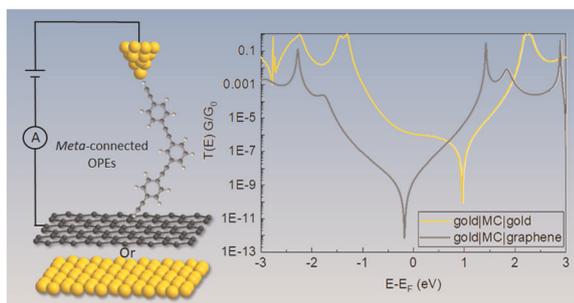
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Lianju Wang, Yiqing Chen, Yueling Lai, Xianglong Zhao, Kanghui Zheng, Ruilin Wang and Yufeng Zhou*



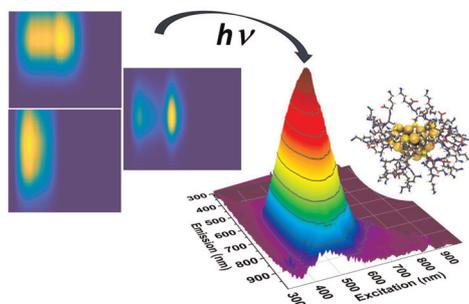
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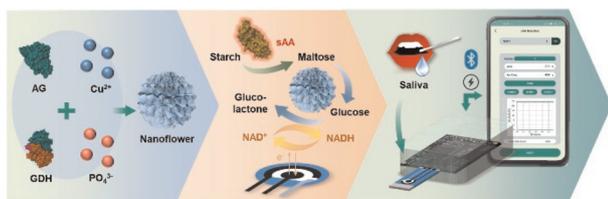
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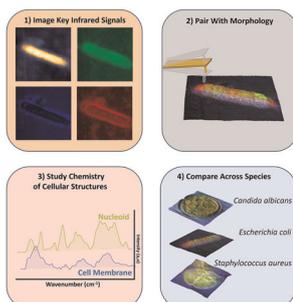
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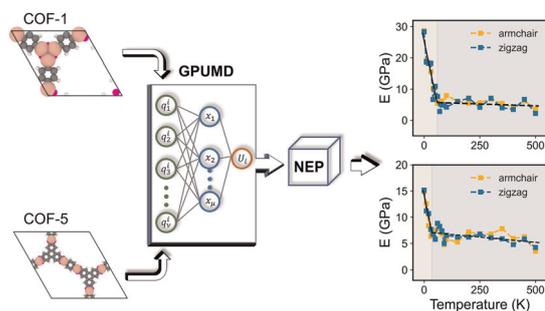
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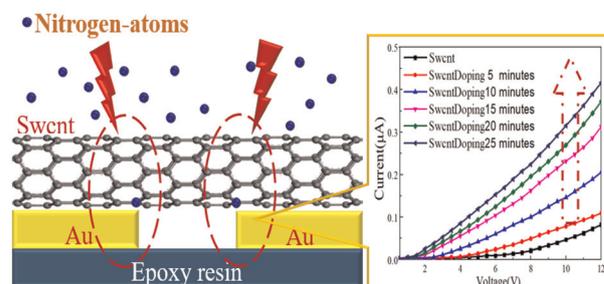
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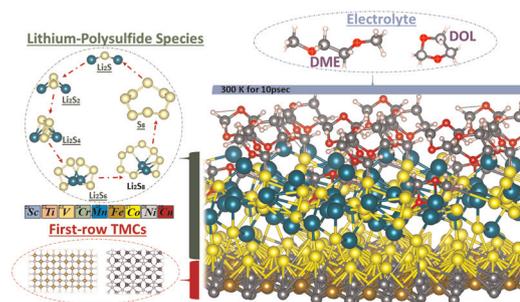
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First-row transition metal carbide nanosheets as high-performance cathode materials for lithium-sulfur batteries

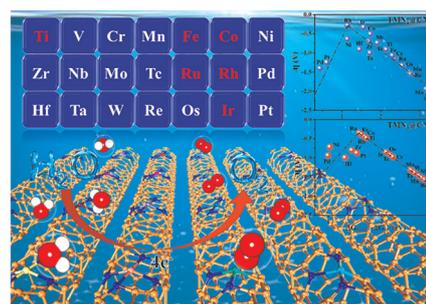
Imran Muhammad, Shehzad Ahmed, Zhen Yao, Danish Khan, Tanveer Hussain and Yang-Gang Wang*



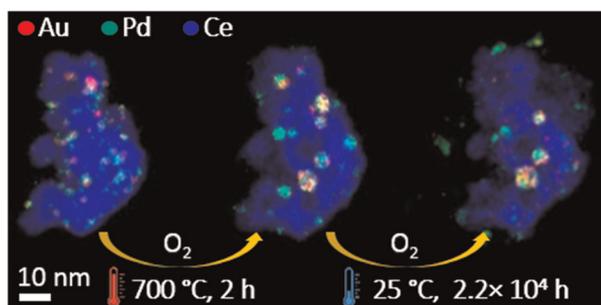
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Realizing a high OER activity in new single-atom catalysts formed by introducing TMN_x (x = 3 and 4) units into carbon nanotubes using high-throughput calculations

Xia Yang, Guangtao Yu* and Wei Chen*



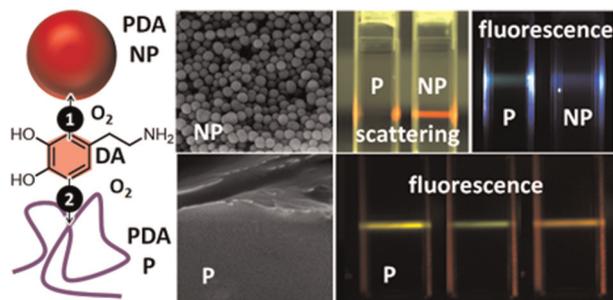
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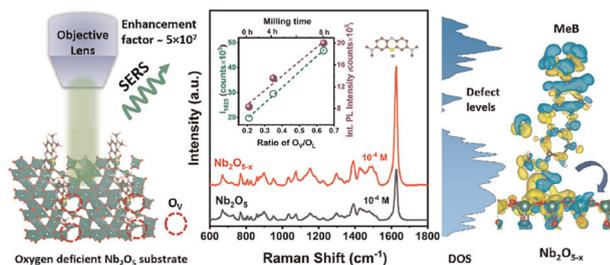
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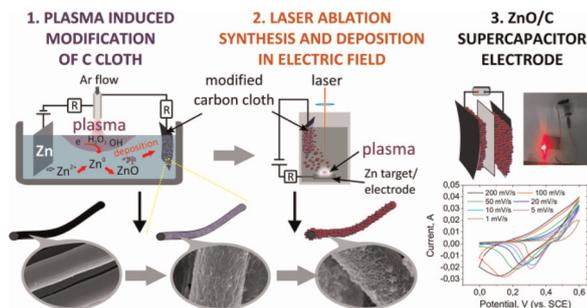
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Evidence of oxygen vacancy-mediated ultrahigh SERS sensitivity of Niobium pentoxide nanoparticles through defect engineering: Theoretical and experimental studies

Sirsendu Ghosal, Abhilasha Bora and P. K. Giri*

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Electric field-assisted laser ablation fabrication and assembly of zinc oxide/carbon nanocomposites into hierarchical structures for supercapacitor electrodes

Natalie N. Tarasenko,* Vladislav G. Kornev, Mikhail I. Nedelko, Hanna M. Maltanova, Sergey K. Poznyak and Nikolai V. Tarasenko

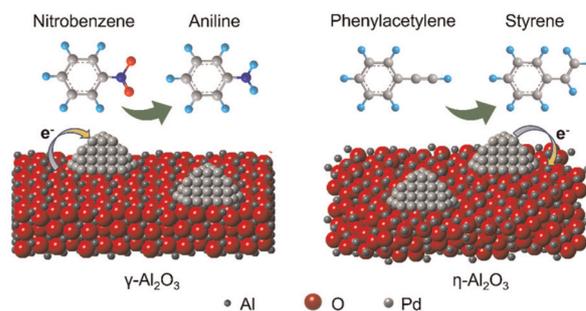


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Tuning the electronic structure of Pd by the surface configuration of Al_2O_3 for hydrogenation reactions

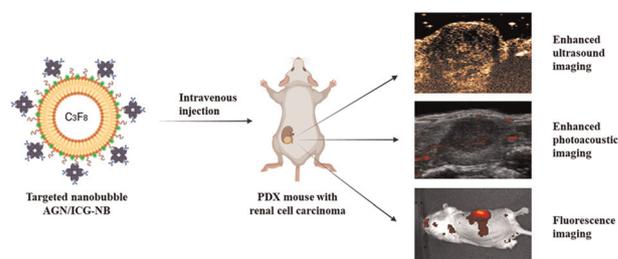
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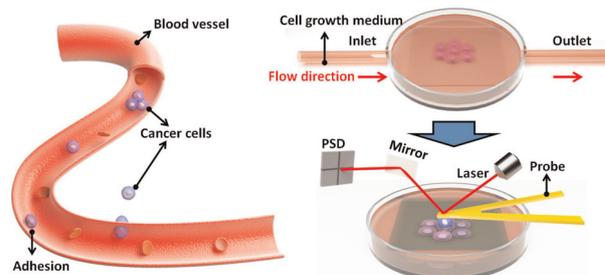
Jiajiu Chen, Jingyi Li, Chengjie Zhong, Yi Ling, Deng Liu, Xin Li, Jing Xu, Qiuli Liu, Yanli Guo* and Luofu Wang*



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Single-cell force spectroscopy of fluid flow-tuned cell adhesion for dissecting hemodynamics in tumor metastasis

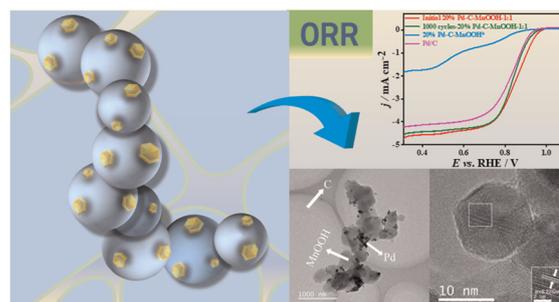
Jiajia Wei, Yanqi Yang and Mi Li*



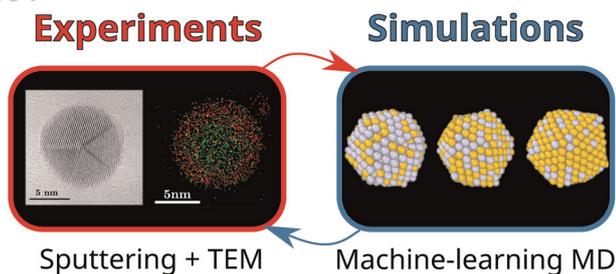
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Zheng Cheng, Wei Cheng, Xin-Ning Lin, Rong-Hua Zhang,* Luo-Yi Yan, Gui-Xian Tian, Xiao-Yu Shen and Xin-Wen Zhou*



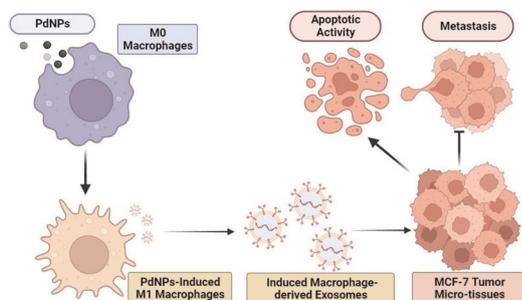
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Quentin Gromoff, Patrizio Benzo, Wissam A. Saidi, Christopher M. Andolina, Marie-José Casanove, Teresa Hungria, Sophie Barre, Magali Benoit and Julien Lam*

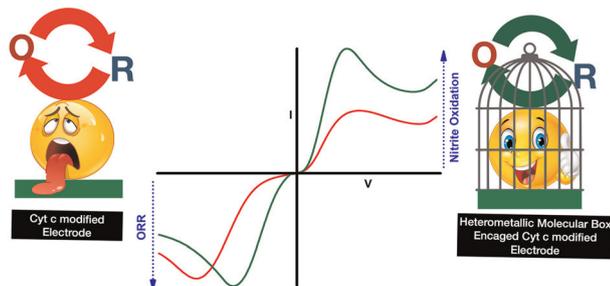
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Manipulating macrophage polarization with nanoparticles to control metastatic behavior in heterotypic breast cancer micro-tissues via exosome signaling

Mustafa Sungu, Melis Isik, Ülkü Güler, Cemil Can Eylem, Hakan Eskizengin, Emirhan Nemutlu, Bekir Salih and Burak Derkus*

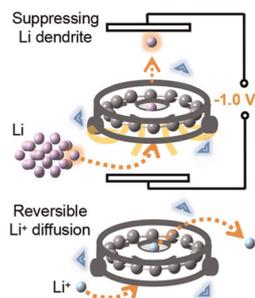
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The enhanced electrocatalytic performance of nanoscopic $\text{Cu}_6\text{Pd}_{12}\text{Fe}_{12}$ heterometallic molecular box encaged cytochrome c

Shazia Nabi, Feroz Ahmad Sofi, Qoonsar Jan, Aamir Y. Bhat, Pravin P. Ingole, Maryam Bayati and Mohsin Ahmad Bhat*

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Using a cyclocarbon additive as a cyclone separator to achieve fast lithiation and delithiation without dendrite growth in lithium-ion batteries

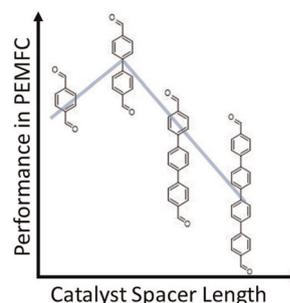
Jiacheng Gong, Jiabao Zhu, Xiao He* and Jinrong Yang*



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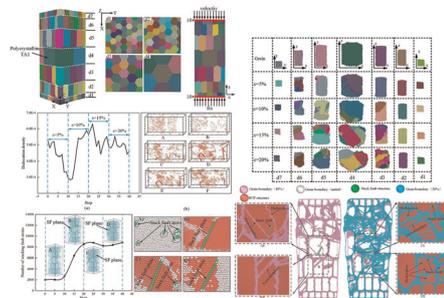
Yeela Persky, Yan Yurko, Rifael Z. Snitkoff-Sol, Noam Zion and Lior Elbaz*



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Deformation mechanisms based on the multiscale molecular dynamics of a gradient TA1 titanium alloy

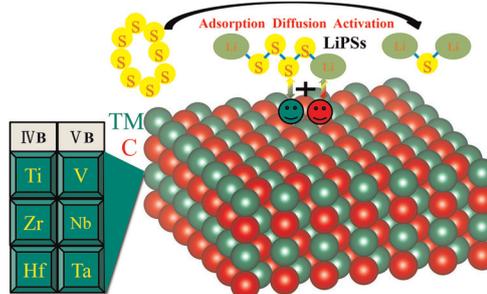
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Mingyang Wang, Jianjun Mao, Yudong Pang, Xilin Zhang, Zongxian Yang,* Zhansheng Lu* and Shuting Yang*



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Three-dimensional biotemplate-loaded nickel sulfide vacancies engineered to promote the absorption of electromagnetic waves

Wenrui Zhu, Dashuang Wang, Zhilan Du, Yan Liao, Kai Zhang, Shuai Xie, Wenxin Dong, Jinsong Rao, Yuxin Zhang* and Xiaoyin Liu*

