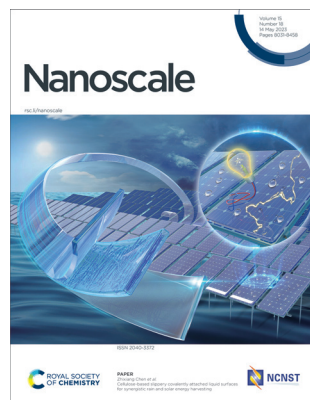


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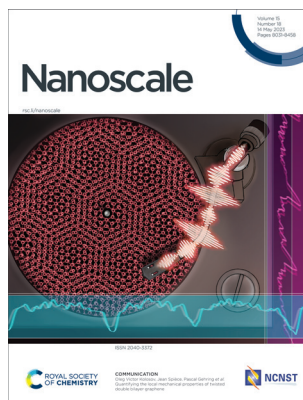
ISSN 2040-3372 CODEN NANOHL 15(18) 8031–8458 (2023)



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See Zhixiang Chen *et al.*, pp. 8158–8168.

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See Oleg Victor Kolosov, Jean Spèce, Pascal Gehring *et al.*, pp. 8134–8140.

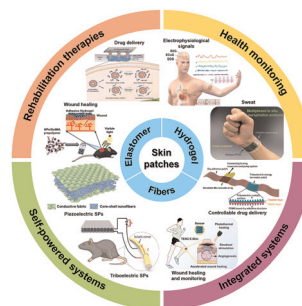
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### Evolution of nanostructured skin patches towards multifunctional wearable platforms for biomedical applications

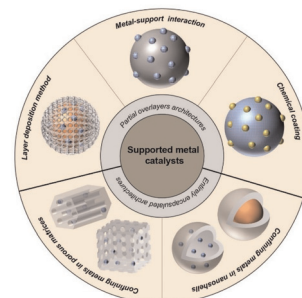
Daniel Rybak, Yu-Chia Su, Yang Li, Bin Ding,\* Xiaoshuang Lv, Zhaoling Li, Yi-Cheun Yeh, Pawel Nakielski, Chiara Rinoldi, Filippo Pierini\* and Jagan Mohan Dodda\*



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### Review on supported metal catalysts with partial/porous overlayers for stabilization

Kun Lu, Xiao Kong, Junmeng Cai, Shirui Yu and Xingguang Zhang\*



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## A review on accelerated development of skin-like MXene electrodes: from experimental to machine learning

Romy Garg, Nikhil Ram Patra, Soumyajit Samal, Shubham Babbar and Kaushik Parida\*

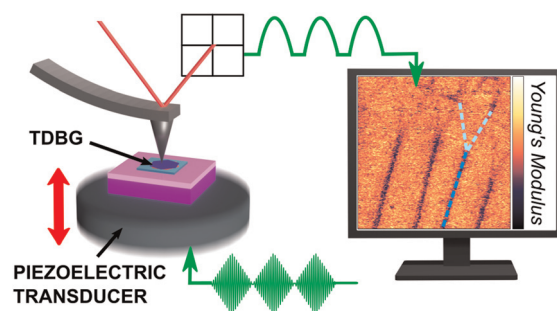


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## Quantifying the local mechanical properties of twisted double bilayer graphene

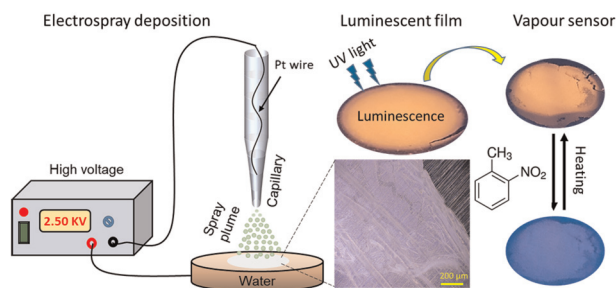
Alessandra Canetta, Sergio Gonzalez-Munoz, Viet-Hung Nguyen, Khushboo Agarwal, Pauline de Crombrugge de Picquendaele, Yuanzhuo Hong, Sambit Mohapatra, Kenji Watanabe, Takashi Taniguchi, Bernard Nysten, Benoit Hackens, Rebeca Ribeiro-Palau, Jean-Christophe Charlier, Oleg Victor Kolosov,\* Jean Spiecke\* and Pascal Gehring\*



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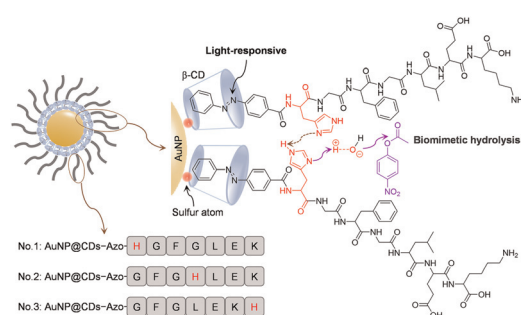
Arijit Jana, B. K. Spoorthi, Akhil S. Nair, Ankit Nagar, Biswarup Pathak,\* Tomas Base\* and Thalappil Pradeep\*



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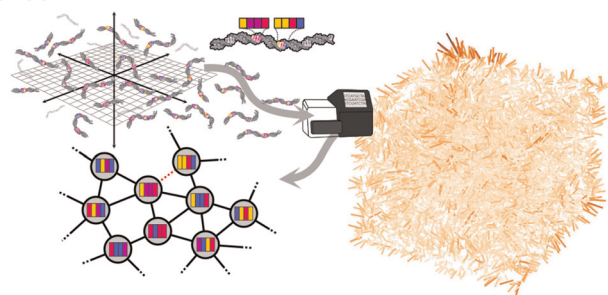
## Tuning the enzyme-like activity of peptide-nanoparticle conjugates with amino acid sequences

Xiaojin Zhang, Yichuan Wang, Yu Dai\* and Fan Xia\*



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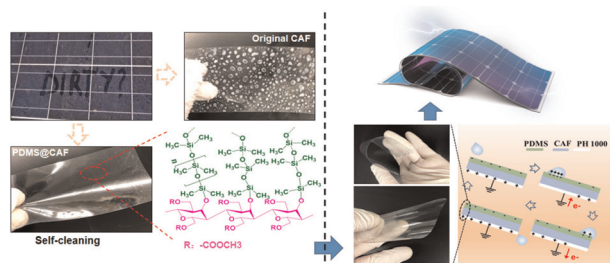


### Image recovery from unknown network mechanisms for DNA sequencing-based microscopy

David Fernandez Bonet and Ian T. Hoffecker\*

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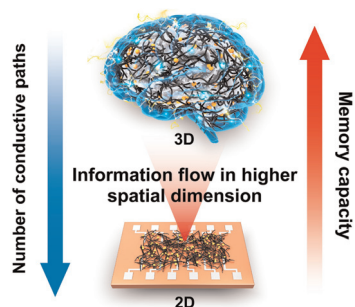
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### Cellulose-based slippery covalently attached liquid surfaces for synergistic rain and solar energy harvesting

Zhixiang Chen,\* Yi Lu, Rogerio Manica, Jianting Lu, Di Shi, Jingqiao Li and Qingxia Liu

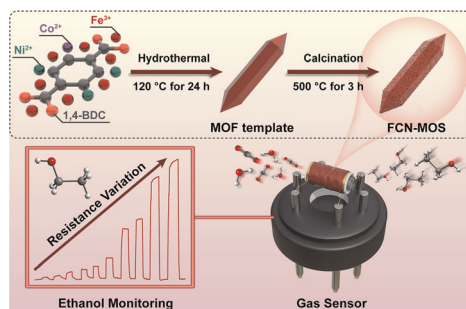
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Saman Azhari,\* Deep Banerjee, Takumi Kotooka, Yuki Usami and Hirofumi Tanaka\*

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Xin-Yu Huang, Ya-Ru Kang, Shu Yan, Ahmed Elmarakbi, Yong-Qing Fu\* and Wan-Feng Xie\*

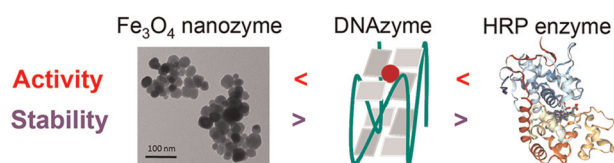


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### Comparison of the peroxidase activities of iron oxide nanozyme with DNAzyme and horseradish peroxidase

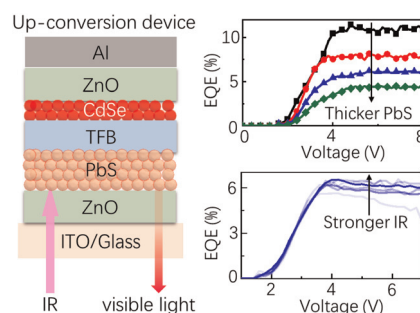
Chang Lu, Mohamad Zandieh, Jinkai Zheng\* and Juewen Liu\*



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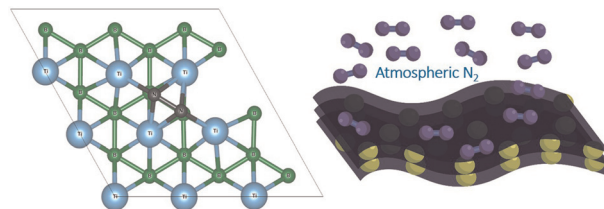
Qiulei Xu, Xinxin Yang, Jiao Jiao Liu, Fei Li, Ruiguang Chang, Lei Wang, A Qiang Wang,\* Zhenghui Wu,\* Huaibin Shen and Zuliang Du



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### Nitrogen adsorption *via* charge transfer on vacancies created during surfactant assisted exfoliation of TiB<sub>2</sub>

Anshul Rasyotra, Anupma Thakur, Raviraj Mandalia, Raghavan Ranganathan and Kabeer Jasuja\*

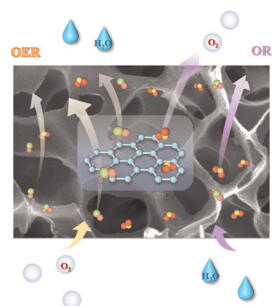


Defects present in TiB<sub>2</sub> nanosheets chemisorb N<sub>2</sub> under ambient conditions

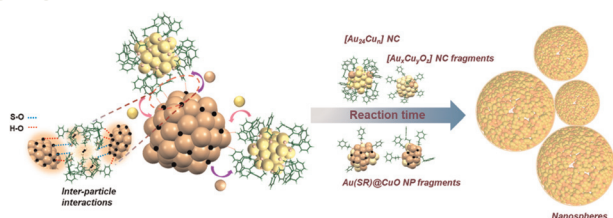
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### Boosting oxygen evolution electrocatalysis *via* CeO<sub>2</sub> engineering on Fe<sub>2</sub>N nanoparticles for rechargeable Zn–air batteries

Minghui Wang, Jianwei Ren,\* Hui Wang, Xuyun Wang and Rongfang Wang\*



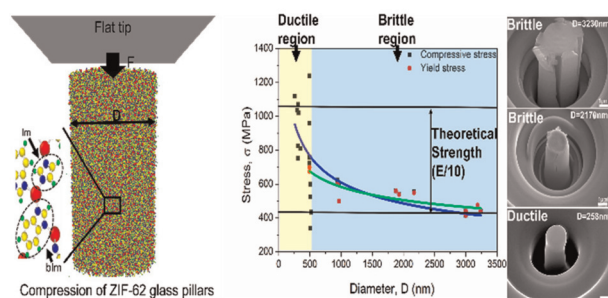
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Jayoti Roy, Biswajit Mondal, Gaurav Vishwakarma, Nonappa, Nishanthi Vasanthi Sridharan, Pattabiraman Krishnamurthi and Thalappil Pradeep\*

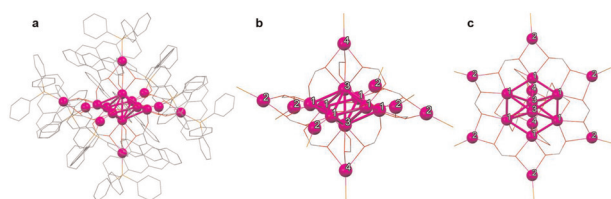
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### Brittle-to-ductile transition and theoretical strength in a metal–organic framework glass

Shaohua Yan, Thomas D. Bennett, Weipeng Feng, Zhongyin Zhu, Dingcheng Yang, Zheng Zhong\* and Qing H. Qin\*

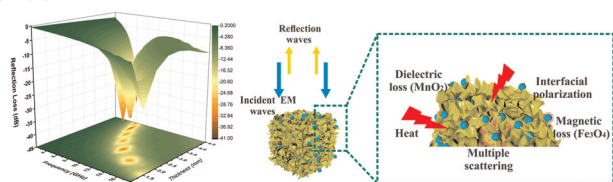
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### Monocarboxylate-protected two-electron superatomic silver nanoclusters with high photothermal conversion performance

Hao-Hai Wang, Jianyu Wei, Fahime Bigdeli, Farzaneh Rouhani, Hai-Feng Su, Ling-Xiao Wang, Samia Kahlal, Jean-François Halet, Jean-Yves Saillard,\* Ali Morsali\* and Kuan-Guan Liu\*

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### Enhanced electromagnetic wave absorption of $\text{Fe}_3\text{O}_4@\text{MnO}_2@\text{Ni-Co/C}$ composites derived from Prussian blue analogues

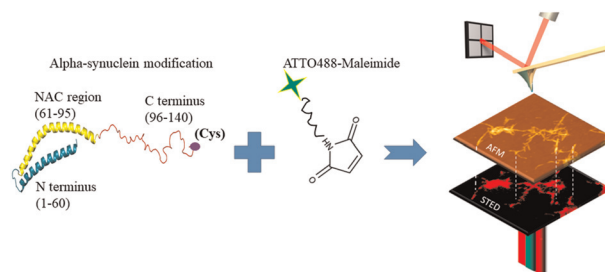
Huanhuan Wang, Qi Qu, Jiangshan Gao\* and Yan He\*



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## Fluorescence labeling methods influence the aggregation process of $\alpha$ -syn *in vitro* differently

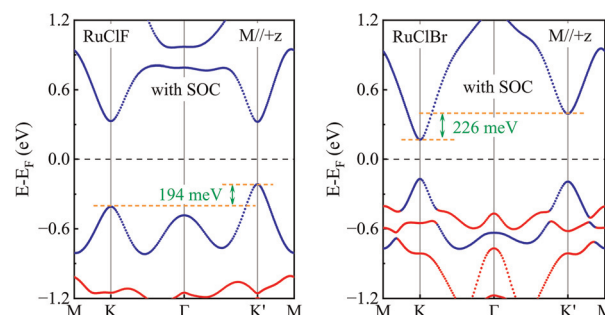
S. Jadavi, S. Dante, L. Civiero, M. Sandre, L. Bubacco, L. Tosatto, P. Bianchini, C. Canale\* and A. Diaspro



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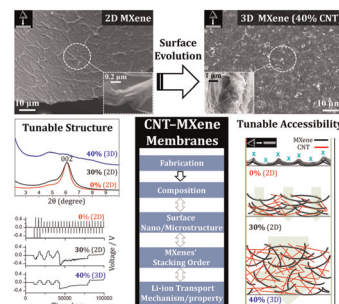
Yubiao Ma, Yanzhao Wu, Junwei Tong, Li Deng, Xiang Yin, Lianqun Zhou, Xiaoli Han, Fubo Tian and Xianmin Zhang\*



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## CNT–MXene ultralight membranes: fabrication, surface nano/microstructure, 2D–3D stacking architecture, ion-transport mechanism, and potential application as interlayers for Li–O<sub>2</sub> batteries

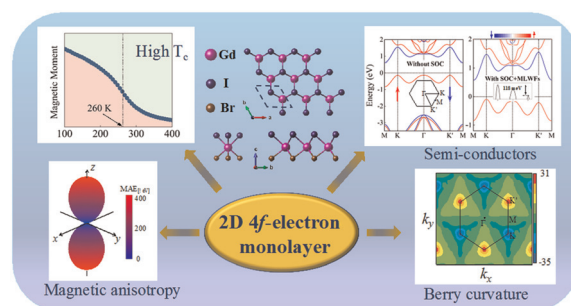
Mehdi Estili,\* Shoichi Matsuda,\* Lulu Jia, Nobuyuki Sakai, Renzhi Ma, Tohru S. Suzuki and Kohei Uosaki



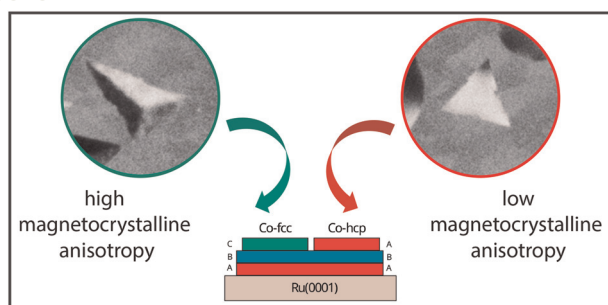
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## Two-dimensional ferromagnetic semiconductors of rare-earth Janus 2H-GdIBr monolayers with large valley polarization

Cunquan Li and Yukai An\*



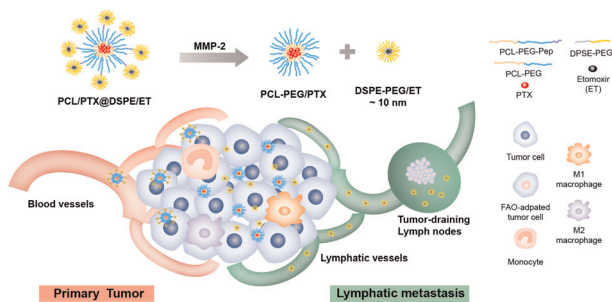
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### Stacking influence on the in-plane magnetic anisotropy in a 2D magnetic system

Sandra Ruiz-Gómez, Lucas Pérez, Arantazu Mascaraque, Benito Santos, Farid El Gabaly, Andreas K. Schmid and Juan de la Figuera\*

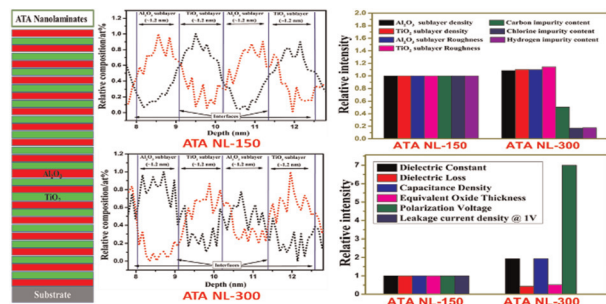
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### A core-satellite micellar system against primary tumors and their lymphatic metastasis through modulation of fatty acid metabolism blockade and tumor-associated macrophages

Xuan He, Tao Deng, Jiabin Li, Rong Guo, Yashi Wang, Ting Li, Shuya Zang, Jiabin Li, Ling Zhang, Man Li\* and Qin He\*

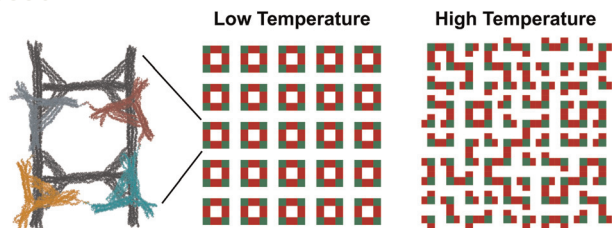
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### Process temperature-dependent interface quality and Maxwell–Wagner interfacial polarization in atomic layer deposited $\text{Al}_2\text{O}_3/\text{TiO}_2$ nanolaminates for energy storage applications

Partha Sarathi Padhi,\* R. S. Ajimsha, S. K. Rai, U. K. Goutam, Aniruddha Bose, Sushmita Bhartiya and Pankaj Misra\*

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### Thermally reversible pattern formation in arrays of molecular rotors

Marcello DeLuca, Wolfgang G. Pfeifer, Benjamin Randoing, Chao-Min Huang, Michael G. Poirier, Carlos E. Castro and Gaurav Arya\*

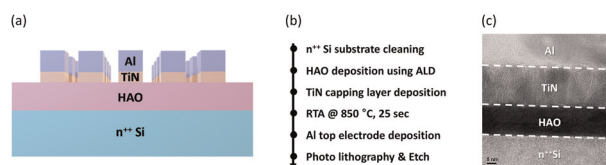




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### Ferroelectric synaptic devices based on CMOS-compatible HfAlO<sub>x</sub> for neuromorphic and reservoir computing applications

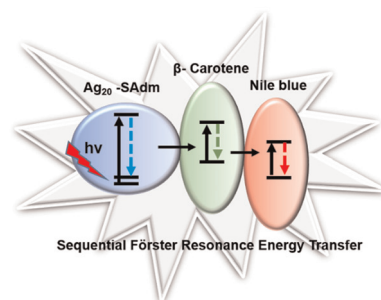
Dahye Kim, Jihyung Kim, Seokyeon Yun, Jungwoo Lee, Euncho Seo and Sungjun Kim\*



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### Luminescent [CO<sub>2</sub>@Ag<sub>20</sub>(SAdm)<sub>10</sub>(CF<sub>3</sub>COO)<sub>10</sub>(DMA)<sub>2</sub>] nanocluster: synthetic strategy and its implication towards white light emission

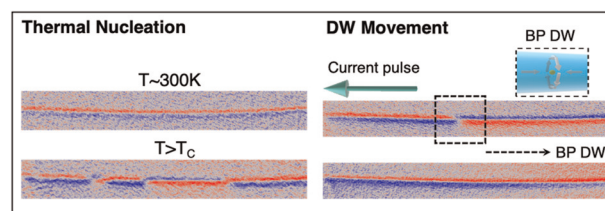
Sourav Biswas, Anish Kumar Das, Avirup Sardar, Surya Sekhar Manna, Pradip Kumar Mondal, Maurizio Polentarutti, Biswarup Pathak and Sukhendu Mandal\*



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### Domain wall propagation and pinning induced by current pulses in cylindrical modulated nanowires

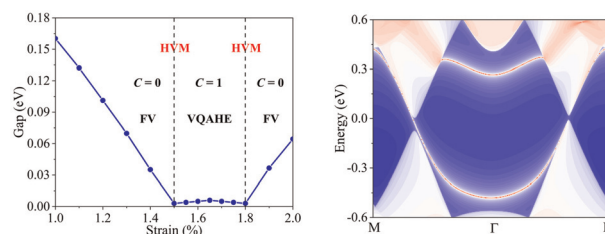
C. Bran,\* J. A. Fernandez-Roldan, J. A. Moreno, A. Fraile Rodríguez, R. P. del Real, A. Asenjo, E. Saugar, J. Marqués-Marchán, H. Mohammed, M. Foerster, L. Aballe, J. Kosel, M. Vazquez and O. Chubykalo-Fesenko



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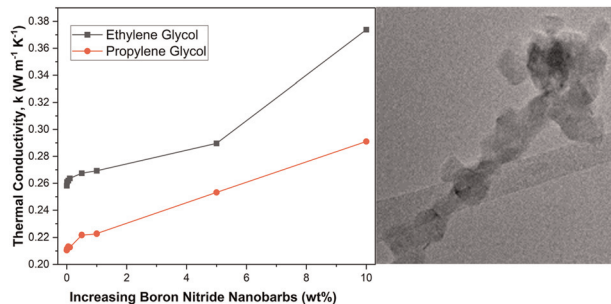
### Spontaneous valley polarization and valley-nonequilibrium quantum anomalous Hall effect in Janus monolayer ScBrI

Kang Jia, Xiao-Jing Dong, Sheng-Shi Li, Wei-Xiao Ji and Chang-Wen Zhang\*



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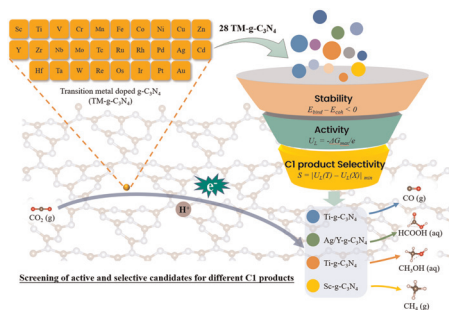
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### Thermal conductivity of ethylene glycol and propylene glycol nanofluids with boron nitride nano-barbs

Adesewa O. Maselugbo, Bolaji L. Sadiku and Jeffrey R. Alston\*

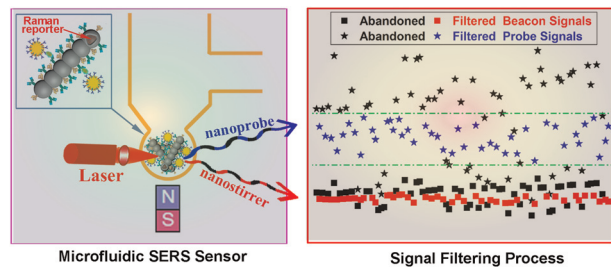
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### Computational screening of effective g-C<sub>3</sub>N<sub>4</sub> based single atom electrocatalysts for the selective conversion of CO<sub>2</sub>

Huiwen Zhu, Shuai Liu, Jiahui Yu, Quhan Chen, Xinyi Mao and Tao Wu\*

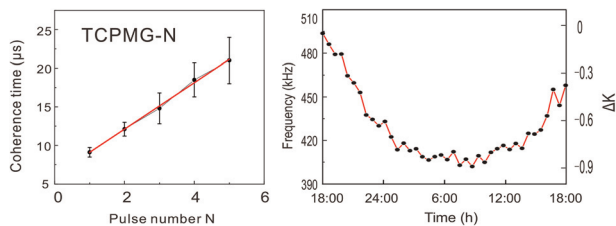
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### Design of Raman reporter-embedded magnetic/plasmonic hybrid nanostirrers for reliable microfluidic SERS biosensors

Bingfang Zou, Shiyun Lou, Jie Duan, Shaomin Zhou\* and Yongqiang Wang\*

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### High-sensitivity silicon carbide divacancy-based temperature sensing

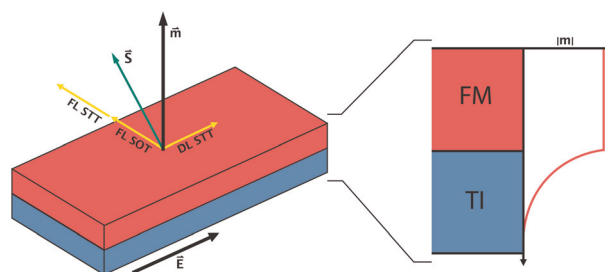
Qin-Yue Luo, Shuang Zhao, Qi-Cheng Hu, Wei-Ke Quan, Zi-Qi Zhu, Jia-Jun Li and Jun-Feng Wang\*



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## Spin transfer torques due to the bulk states of topological insulators

James H. Cullen,\* Rhonald Burgos Atencia and Dimitrie Culcer



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## Large tunneling magnetoresistance in spin-filtering 1T-MnSe<sub>2</sub>/h-BN van der Waals magnetic tunnel junction

Zhao Chen, Xiaofeng Liu, Xingxing Li, Pengfei Gao, ZhongJun Li, Weiduo Zhu, Haidi Wang\* and Xiangyang Li\*

