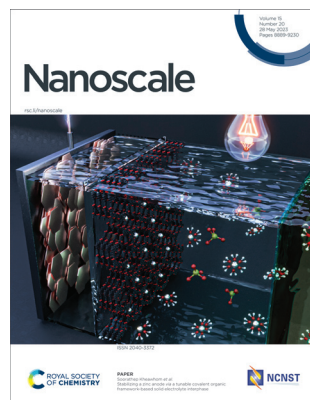


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### Cover

See Soorathep Kheawhom *et al.*, pp. 9003–9013.

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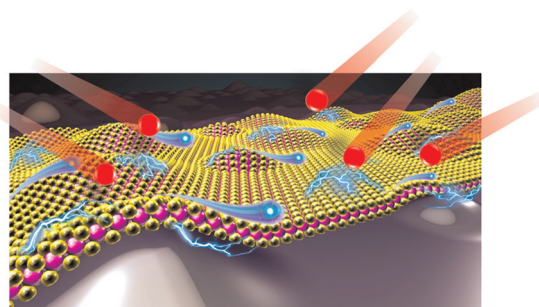
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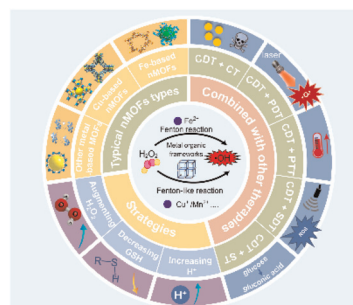


## MINIREVIEW

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**Recent advances in nanoscale metal–organic frameworks for cancer chemodynamic therapy**

Muse Ji, Hongbing Liu, Jingxin Gou, Tian Yin, Haibing He, Yu Zhang\* and Xing Tang

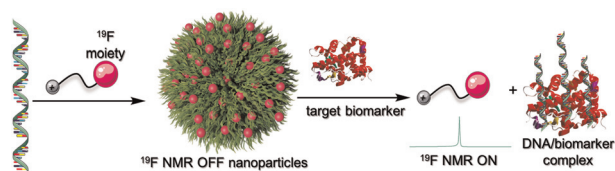


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**<sup>19</sup>F NMR ON/OFF nanoparticles: a universal approach for the specific detection of DNA-binding cancer biomarkers**

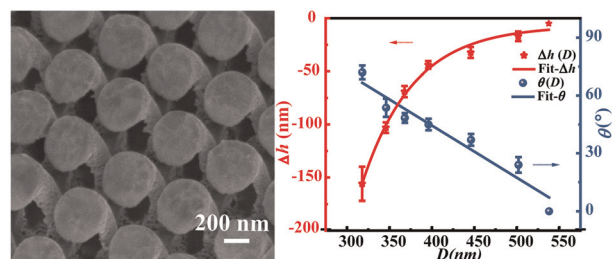
Devanathan Perumal, Jithu Krishna, Kaloor S. Harikrishnan, Gowtham Raj, Jemshiya Kalathil, Minu Saji, Kavyasree M. and Reji Varghese\*



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**Fabricating 3D freestanding metamaterials on elastic substrates via the shadow metal-sputtering and plastic deformation**

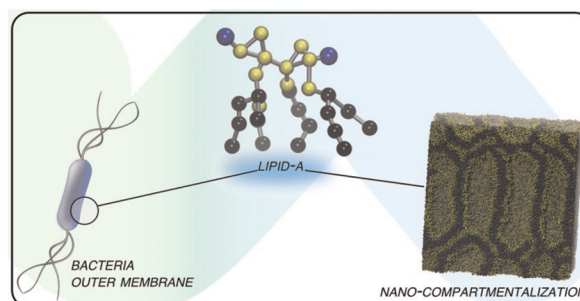
Qiushun Zou, Jian Ou-Yang, Xiaoyi She, Yang Shen and Chongjun Jin\*



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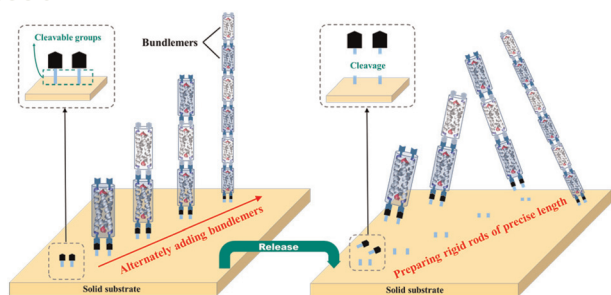
**Bacterial lipids drive compartmentalization on the nanoscale**

Antonio De Nicola, Costanza Montis,\* Greta Donati, Antonio Molinaro,\* Alba Silipo, Arianna Balestri, Debora Berti, Flaviana Di Lorenzo, You-Liang Zhu and Giuseppe Milano\*



## COMMUNICATIONS

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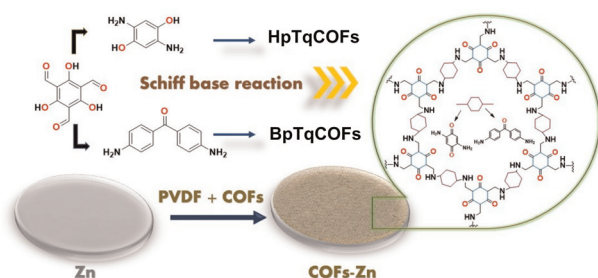


### Bottom-up on-surface synthesis based on click-functionalized peptide bundles

Yanmei He, Dongdong Wu\* and Xingdong Zhang

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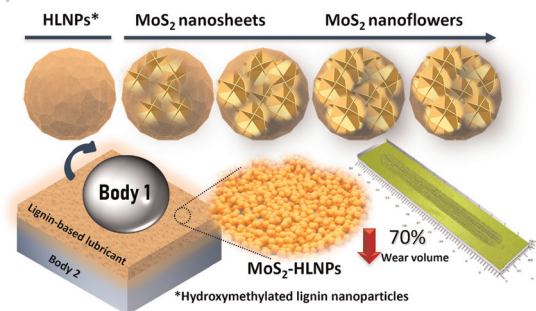
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### Stabilizing a zinc anode via a tunable covalent organic framework-based solid electrolyte interphase

Vipada Aupama, Wathanyu Kao-ian, Jinnawat Sangsawang, Gopalakrishnan Mohan, Suttipong Wannapaiboon, Ahmad Azmin Mohamad, Prasit Pattanauwat, Chakrit Sriprachuabwong, Wei-Ren Liu and Soorathep Kheawhom\*

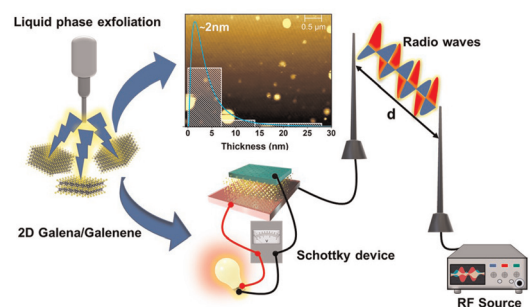
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### MoS<sub>2</sub> nanoflower-decorated lignin nanoparticles for superior lubricant properties

Lucie Lindenbeck, Björn B. Beele, Mohammad Morsali, Serhiy Budnyk, Marcella Frauscher, Jianhong Chen, Mika H. Sipponen, Adam Slabon and Bruno V. M. Rodrigues\*

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### Energy harvesting from radio waves using few-layer 2D galena (galenene)

Karthik R, Appu Kumar Singh, P R Sreeram,\* Preeti Lata Mahapatra, Douglas S. Galvao\* and Chandra Sekhar Tiwary\*

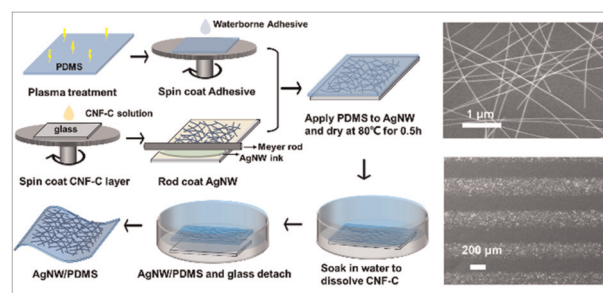


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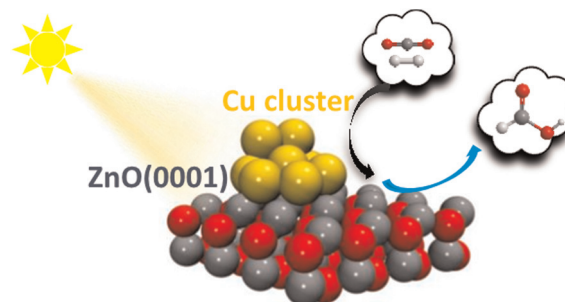
Jianzhong Wang, Kaiqing Wang and Fei Xiao\*



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### A combined theoretical and experimental investigation on the photocatalytic hydrogenation of CO<sub>2</sub> on Cu/ZnO polar surface

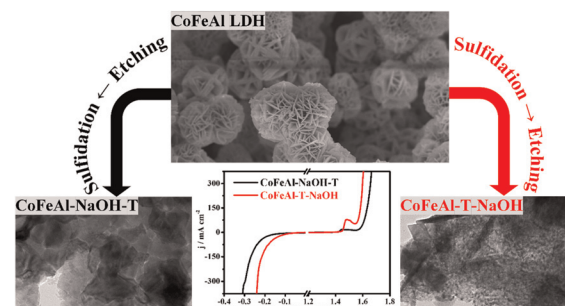
Han Xiao, Yihong Lian, Shiduo Zhang, Minyi Zhang,\* Jiye Zhang\* and Chunsen Li\*



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### Sulfidation and NaOH etching in CoFeAl LDH evolved catalysts for an efficient overall water splitting in an alkaline solution

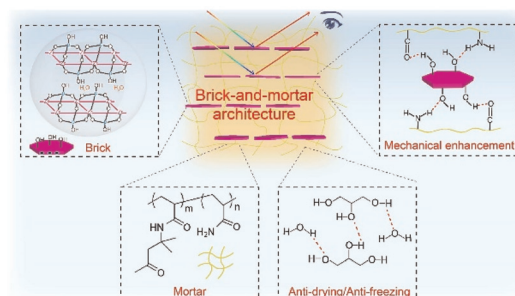
Xiaolong Deng,\* Shanshan Wang, Yi Liu, Jiafeng Cao,\* Jinzhao Huang\* and Xingwei Shi



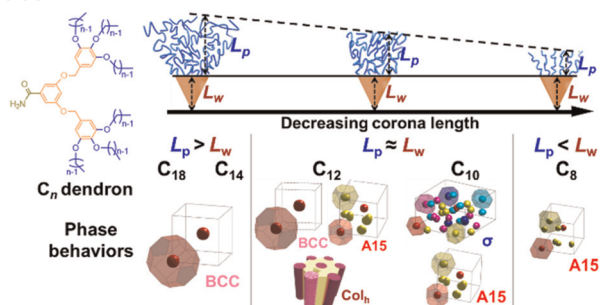
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### Nacre-inspired layered composite gels with broad tunable mechanical strength and structural color for stress visualization

Yunpeng Wang, Xinyu Kan, Yaru Liu, Jie Ju\* and Xi Yao\*



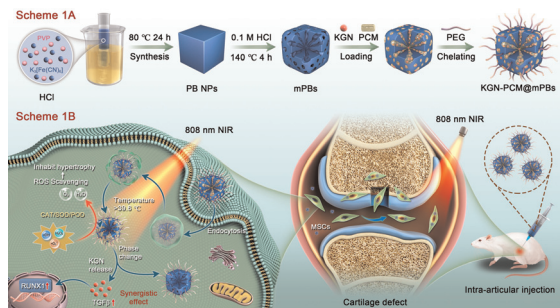
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### Impact of peripheral alkyl chain length on mesocrystal assemblies of G2 dendrons

Taesuk Jun, Hyunjun Park, Junsu Kim, Wooseop Lee, Hyungju Ahn, Woo-Dong Jang,\* Byeongdu Lee\* and Du Yeol Ryu\*

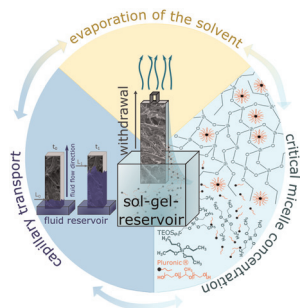
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Zunhan Liu, Zhenyu Luo, Haoda Yu, Enze Zhao, Junfeng Guo, Ping Mou, Anjing Chen, Jiali Chen, Zongke Zhou\* and Weinan Zeng\*

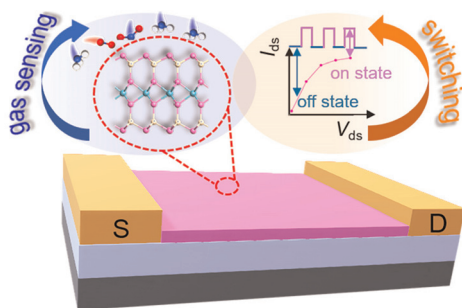
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J. J. Mikolei, D. Richter, R. Pardehkhorrani, C. Helbrecht, S. Schabel, T. Meckel, M. Biesalski, M. Ceolin and A. Andrieu-Brunsen\*

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Mi-Mi Dong, Hang He, Chuan-Kui Wang\* and Xiao-Xiao Fu\*

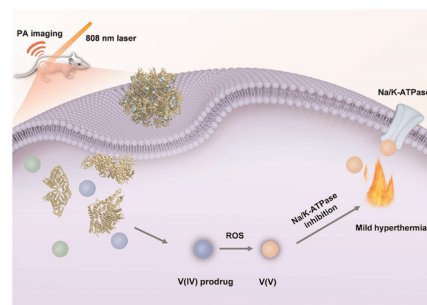


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### Stimuli-responsive ultra-small vanadate prodrug nanoparticles with NIR photothermal properties to precisely inhibit Na/K-ATPase for enhanced cancer therapy

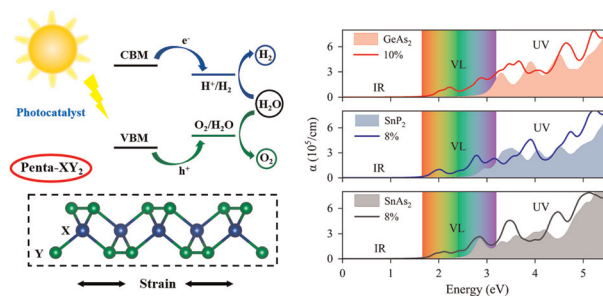
Yifan Li, Jian Wang, Yujing Tang, Sheng Lu, Yitong Lv, Wenzhe Li, Ming Zhang\* and Yingjie Yu\*



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### Prediction of 2D IV–V semiconductors: flexible monolayers with tunable band gaps and strong optical absorption as water-splitting photocatalysts

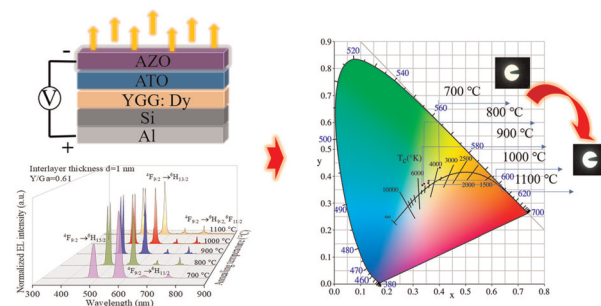
Luqi Liu, Xuxin Kang, Shan Gao and Xiangmei Duan\*



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### Bright white electroluminescence from polycrystalline dysprosium-doped yttrium gallium garnet nanofilms fabricated by atomic layer deposition on silicon

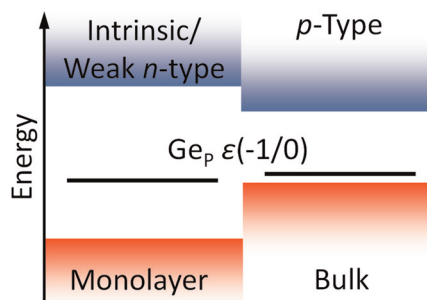
Zhimin Yu, Zejun Ye, Yang Yang\* and Jiaming Sun\*



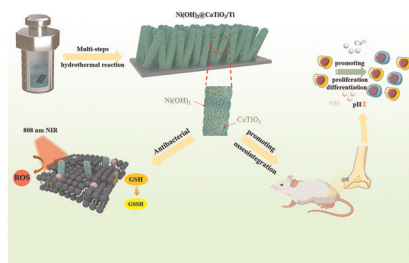
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### Strong interlayer coupling and unusual antisite defect-mediated p-type conductivity in $\text{GeP}_x$ ( $x = 1, 2$ )

Guoxujia Chen, Weiwei Meng,\* Xiaoxi Guan, Peili Zhao, Shuangfeng Jia, He Zheng, Dongshan Zhao\* and Jianbo Wang\*



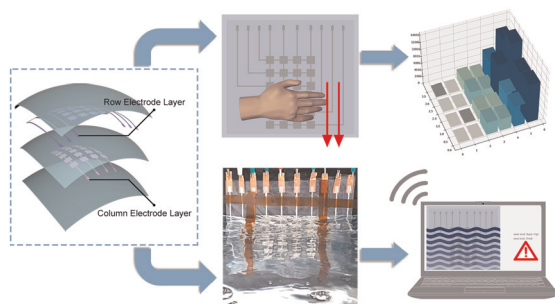
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### Construction of a $\text{Ni}(\text{OH})_2@ \text{CaTiO}_3$ heterostructure on a Ti implant for enhanced osseointegration through NIR photoactivated bacterial inactivation and microenvironment optimization

Zheng Liu, Hong Ding, Miaomiao He, Yulin Jiang, Lin Qi, Meixuan Du, Jing Wang, Yubao Li, Limin Liu, Ganjun Feng\* and Li Zhang\*

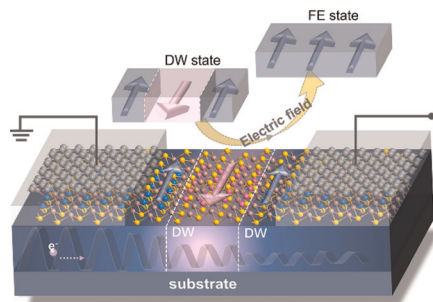
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### A highly adaptive real-time water wave sensing array for marine applications

Hanyun Liu, Yu Xiao, Yun Xu,\* Shaochun Zhang, Changming Qu and Yuanlong Zhang

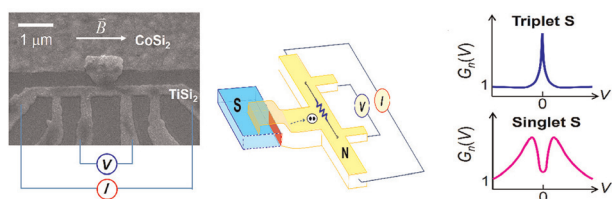
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### Realizing multiple non-volatile resistance states in a two-dimensional domain wall ferroelectric tunneling junction

Minzhi Dai, Zhiyuan Tang, Xin Luo\* and Yue Zheng\*

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Shao-Pin Chiu, Vivek Mishra, Yu Li, Fu-Chun Zhang, Stefan Kirchner\* and Juhn-Jong Lin\*



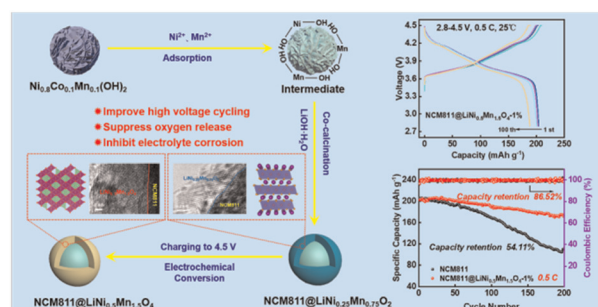


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### *In situ* epitaxial growth and electrochemical conversion of $\text{LiNi}_{0.5}\text{Mn}_{1.5}\text{O}_4$ thin layer on Ni-rich cathode materials for high voltage lithium-ion batteries

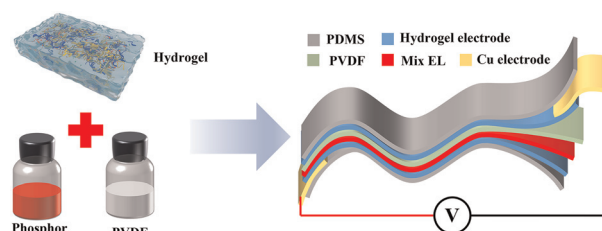
Cong Li, Chun Liu, Honglei Liu, Chengzhi Hu, Yong Wu, Afei Li, Zhangxian Chen, Zeheng Yang\* and Weixin Zhang\*



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### Flexible multi-color electroluminescent devices with a high transmission conducting hydrogel and an organic dielectric

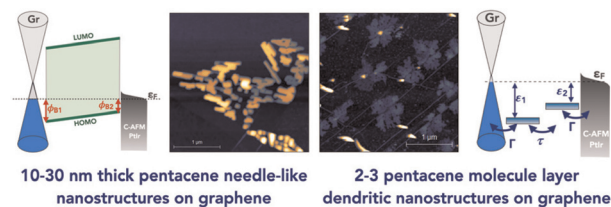
Yongjie Yu, Kun He, Haibo Xu, Zhen Xiao,\* Liang Chen, Shiqing Xu and Gongxun Bai\*



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### Nanoscale electronic transport at graphene/pentacene van der Waals interfaces

Michel Daher Mansour, Jacopo Oswald, Davide Beretta, Michael Stiefel, Roman Furrer, Michel Calame\* and Dominique Vuillaume\*



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### Dual-inhibition of lactate metabolism and Prussian blue-mediated radical generation for enhanced chemodynamic therapy and antimetastatic effect

Wenting Li, Shikai Liu, Yangyang Zhang, Jialing Zhou, Rumin Li, Shili Gai,\* Lei Zhong\* and Piaoping Yang\*

