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See Young Hoon Roh *et al.*, pp. 469–477.
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See Samanth Kokkiligadda, Soong Ho Um *et al.*, pp. 451–468.
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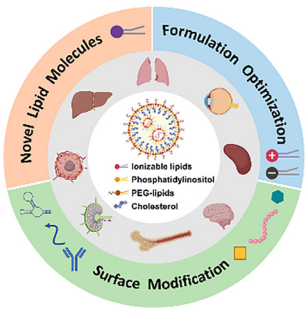
Optimizing the targeting of lipid nanoparticles for gene therapy

Lei Yue, Xiulei Gao, Wei Qi, Lvhong Zhang and Yuefei Wang*



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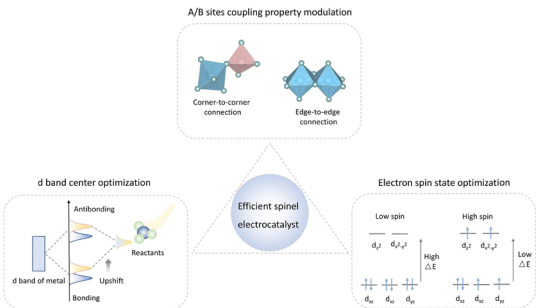
Electronic engineering of spinels for advanced electrocatalysis

Jingwei Li, Yihang Yu, San Ping Jiang and Zhao-Qing Liu*



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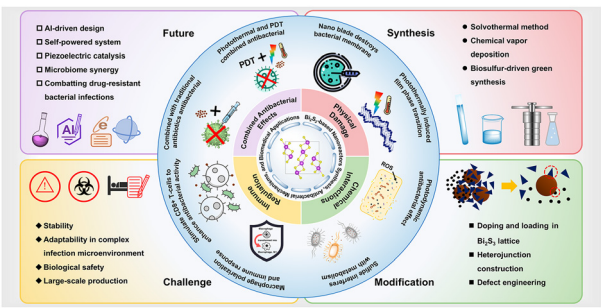
Engineering Bi_2S_3-based nanoreactors for antimicrobial applications: synthetic strategies, mechanistic insights, and practical implementations

Rongrong Gu, Huiling Chen, Yongxin Wang, Wenchang Tao, Hualong Li,* Hongjie Zhang* and Sheng Ye*



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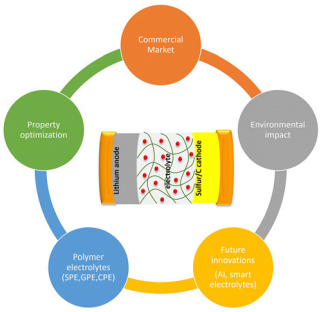

Powering the future: advances, challenges, and sustainability of polymer electrolytes in lithium–sulfur batteries

Dipsikha Ganguly, Rayavarapu Prasada Rao and Seeram Ramakrishna*

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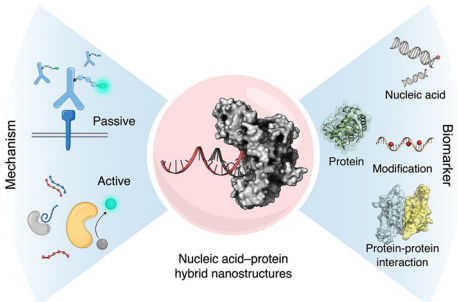

Passive and active biosensing with nucleic acid–protein hybrid nanostructures

Zhonglang Yu, Yuan Chen, Hong Min Tan and Huilin Shao*

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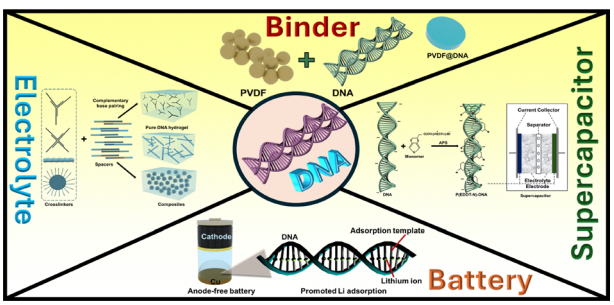

DNA-based hydrogels: a promising material for future energy storage applications

Samanth Kokkiligadda,* Surya Kiran Ampasala and Soong Ho Um*

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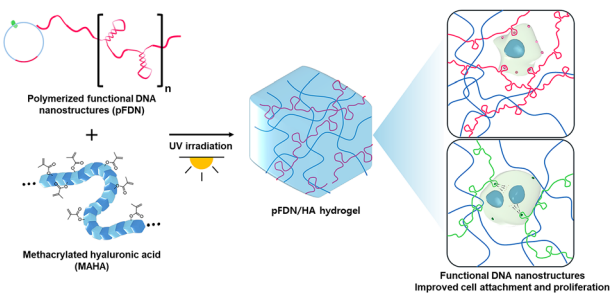

Cell instructive hydrogels functionalized with polymerized DNA nanostructures

Hee Yeon Kim, Young Min Kim, Keonwook Nam, Kyungjik Yang, Joohyun Oh, Su-Min Han and Young Hoon Roh*

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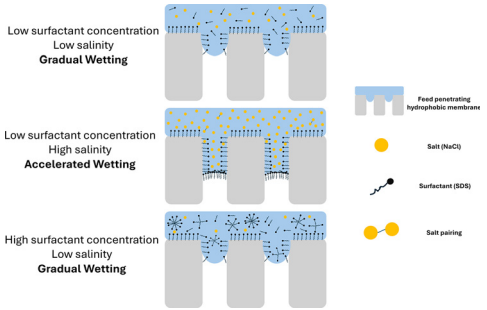
Surfactant-induced wetting dynamics in the context of hypersaline desalination for membrane distillation

Joel Parayil Jacob and Raju Kumar Gupta*



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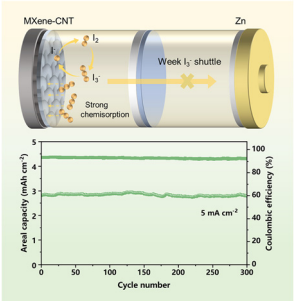
Complementary chemical adsorption of iodine species on MXene/carboxylated CNTs for high loading zinc–iodine batteries

Aidi Fu, Guohao Li, Yingxinjie Wang, Jie Wang, Jiale Fan, Jiamin Liu, Nan Zhang and Xiuqiang Xie*



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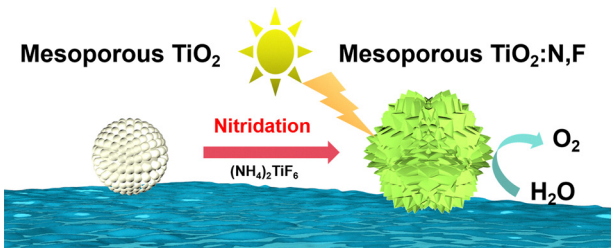
Topochemical synthesis of mesoporous TiO_2 co-doped with nitrogen and fluorine for improved photocatalytic O_2 evolution under visible light

Shuwei Liu, Ryosuke Nishikubo, Fumitaka Ishiwari, Xian Zhang, Megumi Okazaki, Shunsuke Nozawa, Akinori Saeki and Kazuhiko Maeda*



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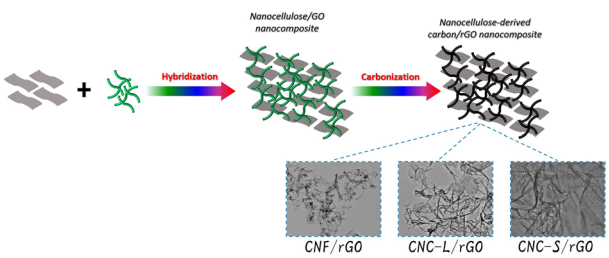
Synthesis of carbon nanocomposites consisting of nanocellulose-derived carbon and reduced graphene oxide for high-performance captive deionization

Azhar Alowasheeir, Md. Ikram Ul Hoque, Xingtao Xu, Scott W. Donne, Yoshio Bando, Saad M. Alshehri, Tansir Ahamad, Md Shahriar A. Hossain, Yusuke Yamauchi, Nasim Amiralian,* Dong Jiang* and Yusuke Asakura*



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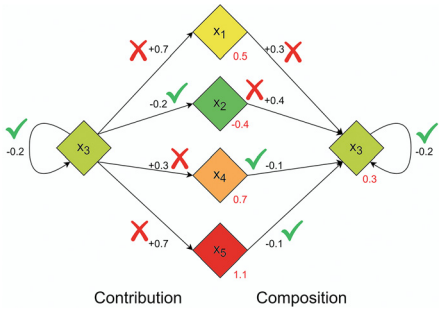

Impact of nanoparticle morphologies on property prediction using explainable AI

Tommy Liu and Amanda S. Barnard*

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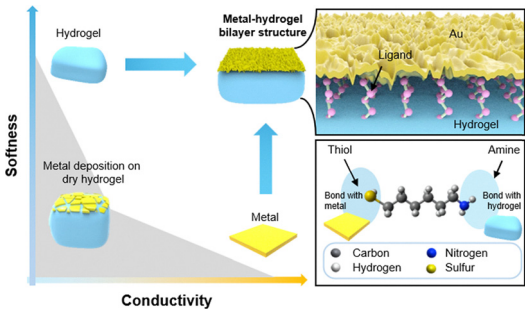

Chemically anchored metal–hydrogel bilayers for ultrasoft and metallic biointerfaces

Yoon A Lee, Jun Yong Lee, Jeeyoung Kim, Hyunjin Lee, Seonghae Park, Sung-Hyuk Sunwoo,* Gi Doo Cha* and Dae-Hyeong Kim*

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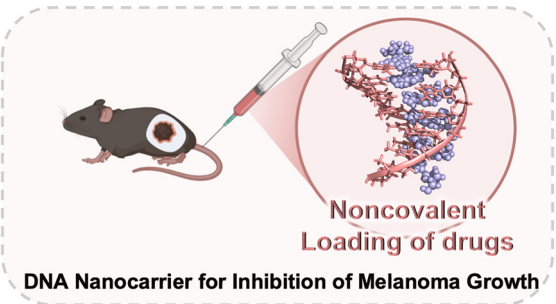

Noncovalent and precise loading of small molecule drugs on DNA nanocarriers

Xinyu Feng, Mingtao Zhao, Huichao Chen, Rui She, Yangying Wang, Leyi Jia, Wenting Li, Mengmeng Li, Shuheng Wei, Yunxiao Ma, Wuyi Sun,* Xiao Cui,* Song Wang* and Jiemin Zhao*

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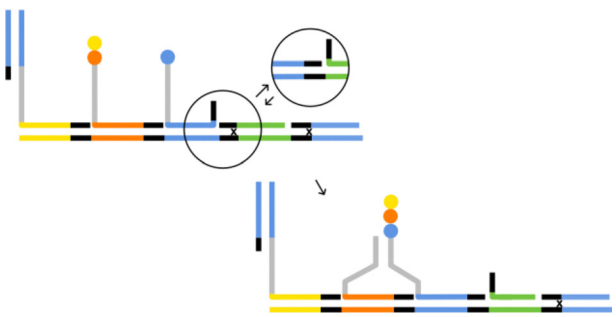

Mechanism for a molecular assembler of sequence-controlled polymers using parallel DNA and a DNA polymerase

Jonathan Bath* and Andrew J. Turberfield

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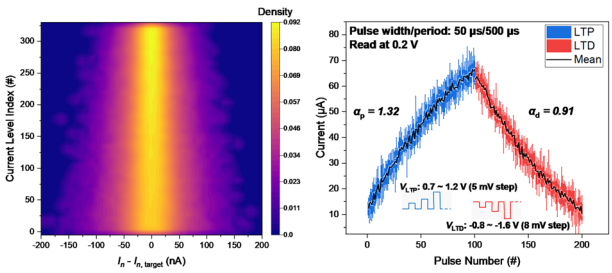
High-density conductance states and synaptic plasticity in SnP_2S_6 memristors for neuromorphic computing

Thaw Tint Te Tun, Jiali Huo and Kah-Wee Ang*



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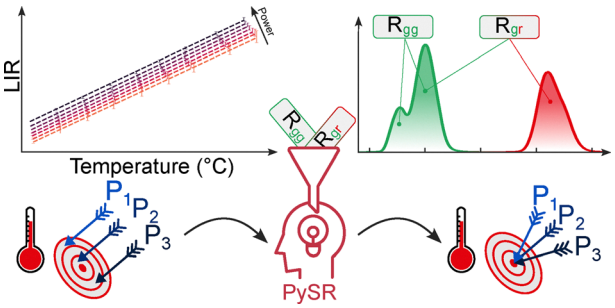
Unambiguous calibration of power dependence in ratiometric luminescent nanothermometry through multiple intensity ratios and symbolic regression

Simon Spelthann,* Lea Koetters, Rajesh Komban, Christoph Gimmler and Michael Steinke



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Composition-modulated anti-ambipolar behavior enabled by two-dimensional GeS_xSe_{1-x}/SnS_2 van der Waals heterostructures for high-performance logic inverters

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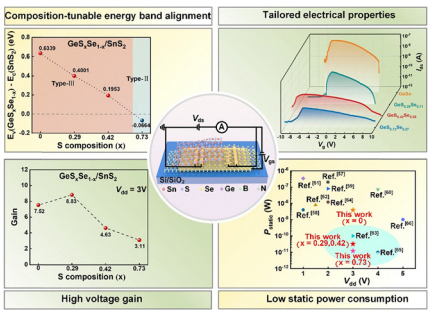

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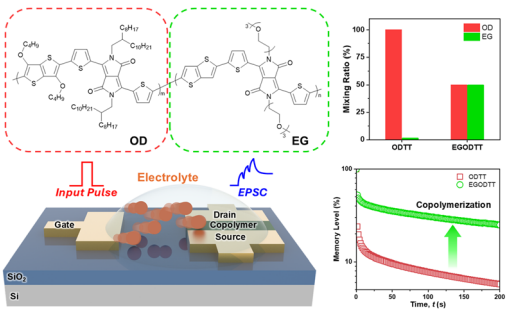
Harnessing glycol–alkyl copolymerization to realize nonvolatile and biologically relevant synaptic behaviors

Yoohyeon Jang, Junho Sung, Suhui Sim, Sein Chung, Young Un Jeon, Myeongjin An, Minju Kim, Sung Yun Son, Jaewon Lee* and Eunho Lee*