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IN THIS ISSUE

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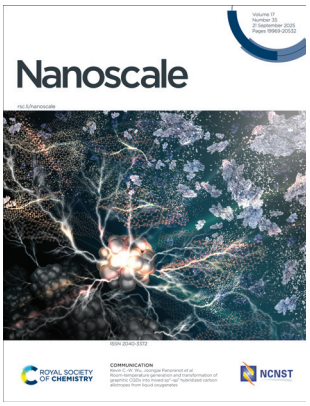

Cover
See Kevin C.-W. Wu, Joongjai Panpranot *et al.*, pp. 20057–20073.

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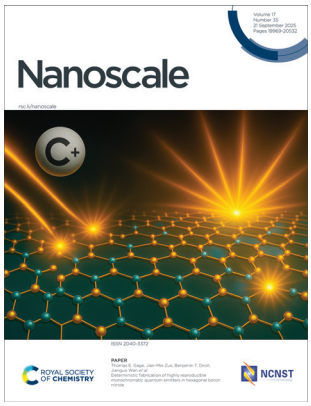

Inside cover
See Thomas E. Gage, Jian-Min Zuo, Benjamin T. Diroll, Jianguo Wen *et al.*, pp. 20081–20088.

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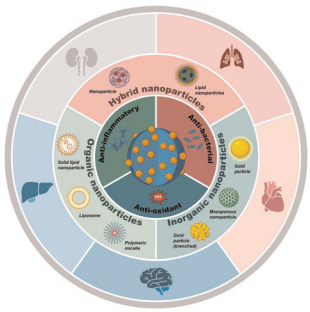
EDITORIAL

REVIEWS



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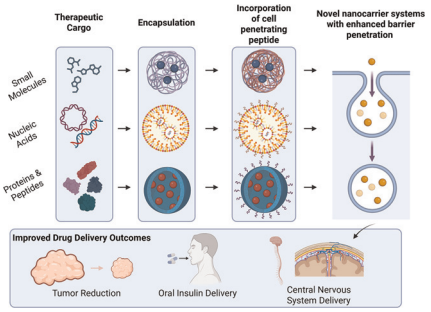
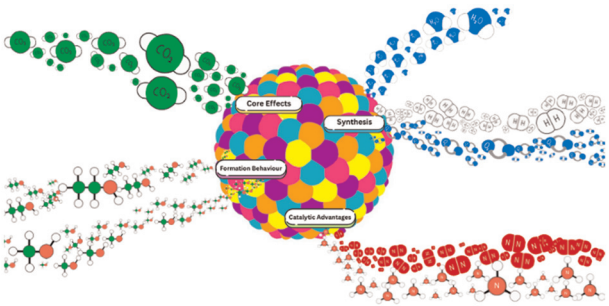
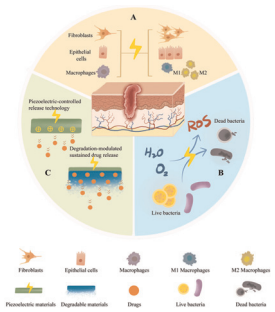
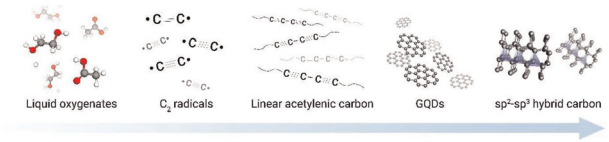




MINIREVIEW



COMMUNICATIONS



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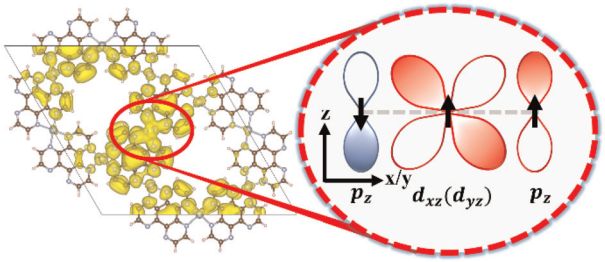
20074

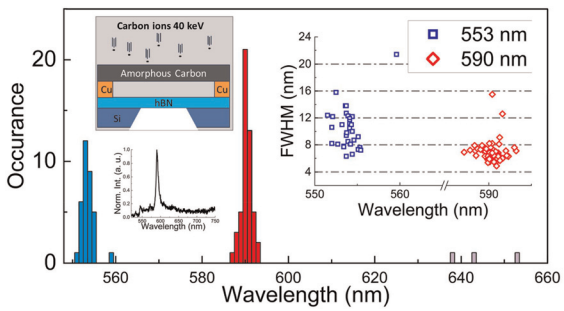


Variable π–d orbital hybridization in 2D transition metal–organic frameworks

Chengkun Lyu, Yuantao Chen, Muqing Hua, Songyu Mo, Yifan Gao, Xiaobo Wang, Li Huang* and Nian Lin*

PAPERS

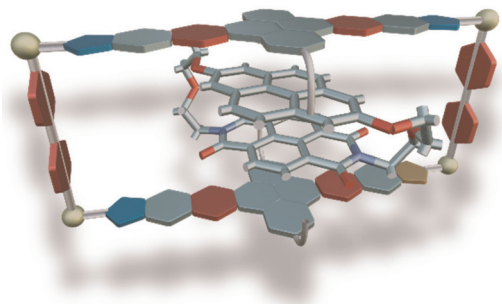
20081



Deterministic fabrication of highly reproducible monochromatic quantum emitters in hexagonal boron nitride

Muchuan Hua, Wei-Ying Chen, Hanyu Hou, Venkata Surya Chaitanya Kolluru, Maria K. Y. Chan, Haihua Liu, Thomas E. Gage,* Jian-Min Zuo,* Benjamin T. Diroll* and Jianguo Wen*

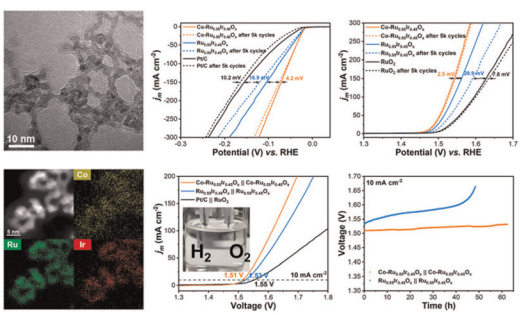
20089



A metallosupramolecular-based ring-in-ring complex showing reversible host–guest dynamics and switchable electrochemical properties

Joel Martínez-Visiedo, Susana Ibáñez,* Louise N. Dawe and Eduardo Peris*

20096



Co-doped RuIr nanoparticles for enhanced activity and stability in alkaline overall water splitting

Zhuofan Gan, Jingwen Cao, Zhixu Chen, Peixi Qiu, Jiangyun Bai, Chengyong Shu* and Wei Tang*

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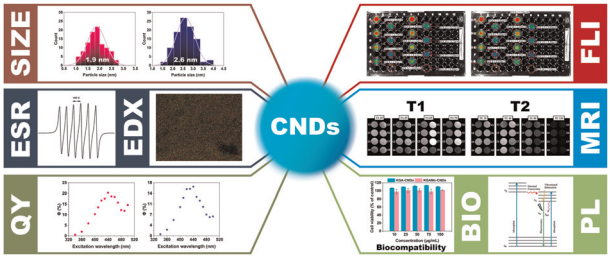

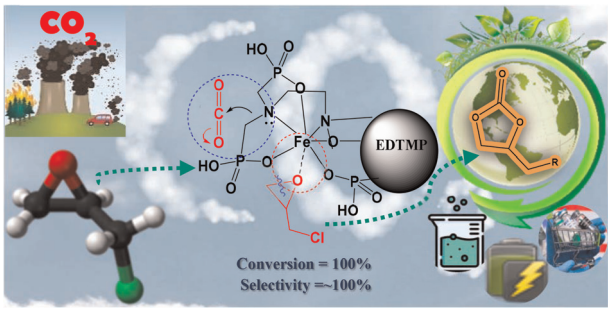

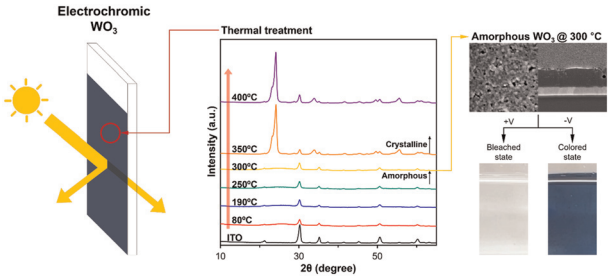

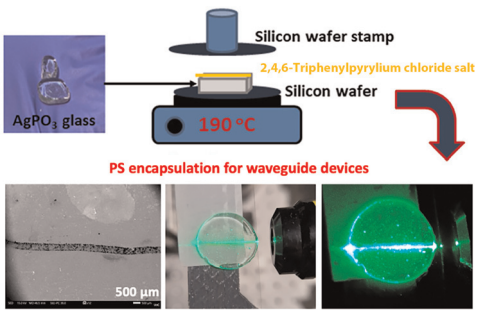

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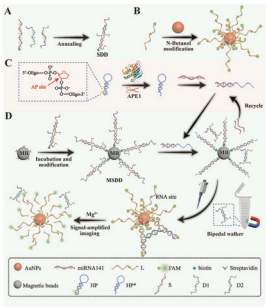
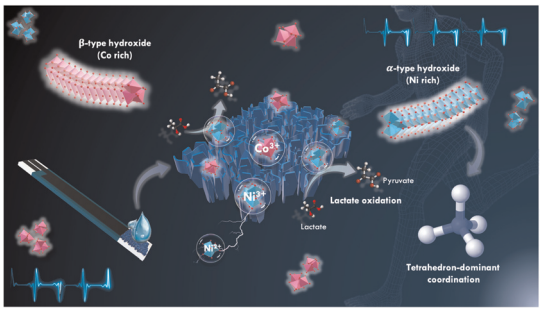
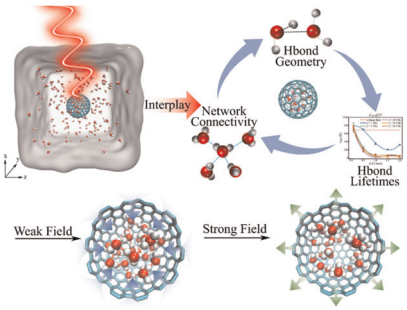
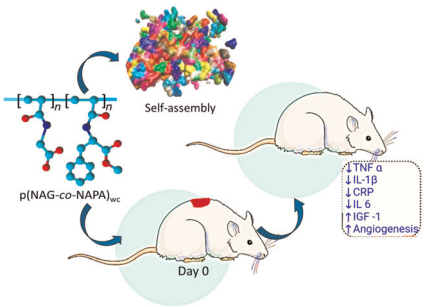


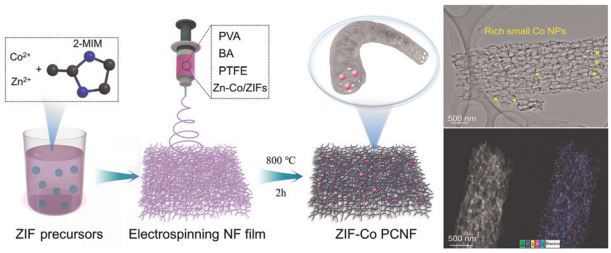






PAPERS

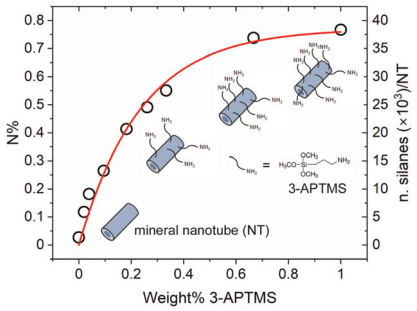
20251



Constructing macroporous nanofibers with enriched Co–N–C sites *via* a cascade chamber confinement strategy for an efficient oxygen reduction reaction

Yuanyuan Zhang,* Haotian Guo, Zihao Li, Wei Jiang, Xiaojun Wang, Yan Xu, Xinzhong Wang and Jianhua Yan*

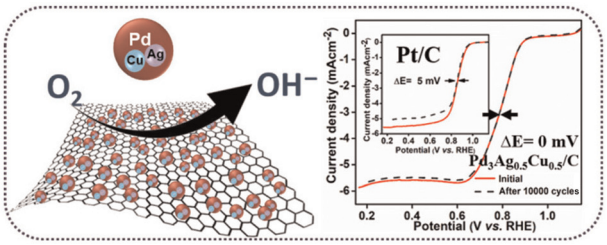
20259



Tunable functional coverage of biocompatible magnesium silicate nanotubes by microwave-assisted silanization

Valeria Secchi, Daniela D'Alessio, Andrea Erroi, Silvia Mostoni, Giancarlo Capitani, Alberto Calloni, Gianlorenzo Bussetti, Massimiliano D'Arienzo, Roberto Lorenzi, Keren Keinan-Adamsky, Shai Rahimipour, Angelo Monguzzi and Marcello Campione*

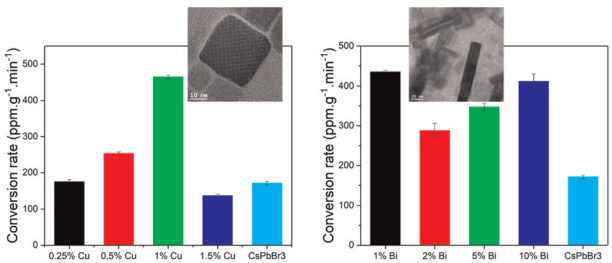
20269



Interface-driven Pd–Ag–Cu/C nanocomposites with increased oxygen reduction reaction kinetics

Rashmi Chetry, Shaheen Parveez Bhuyan, Rupjyoti Dutta, Sanjana Das, Manash R. Das, Priyanka Dutta, Nand Kishor Gour, Ramesh Ch. Deka and Pankaj Bharali*

20280



Impact of Bi^{3+} and Cu^{2+} doping on the optical and electronic properties of $CsPbBr_3$ for photocatalytic toluene oxidation

Marija Knezevic, Thi-Hieu Hoang, Vien Duong Quach, Alba Garzón Manjón, David Llorens Rauret, Marie Erard, Audrey Gayral, Mireille Benoit, David Berardan, Jordi Arbiol, Christophe Colbeau-Justin and Mohamed Nawfal Ghazzal*

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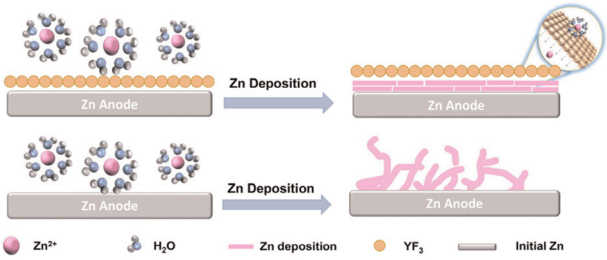

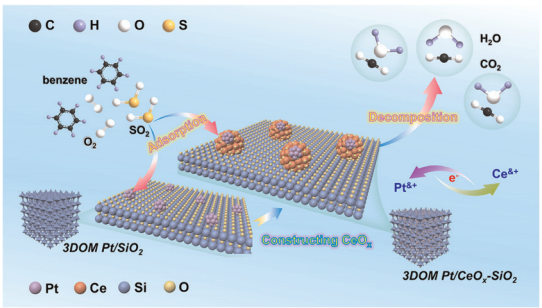

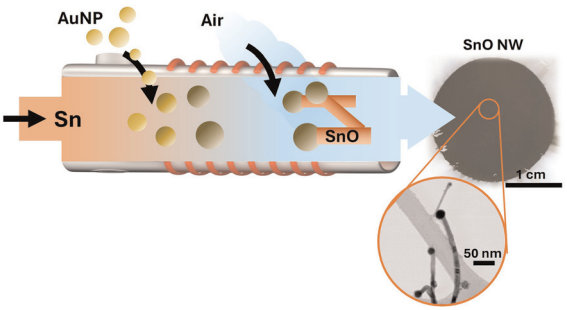

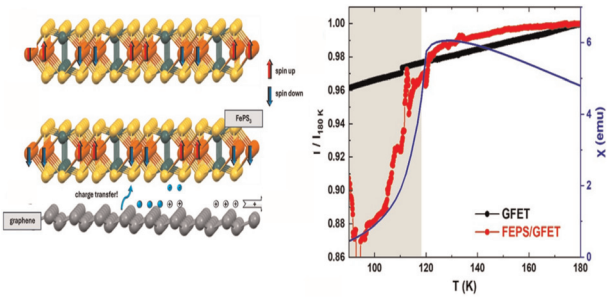

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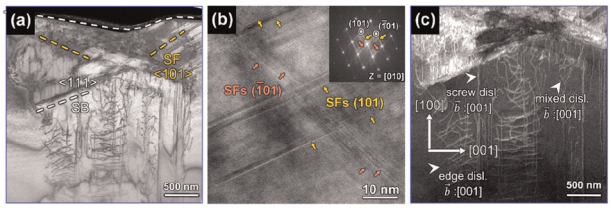
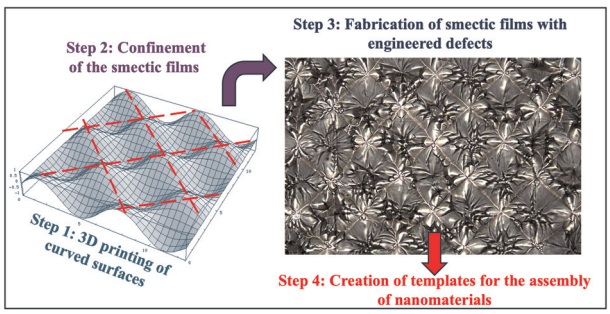
20338



Dislocation-enabled plasticity in rutile TiO_{2-x} at room temperature

Bo Yang,* Nicholas Richter, Huan Li, Zhongxia Shang, Zihao He, Hongyi Dou, Jianan Shen, R. Edwin García, Noam Bernstein, C. Stephen Hellberg, Haiyan Wang and Xinghang Zhang*

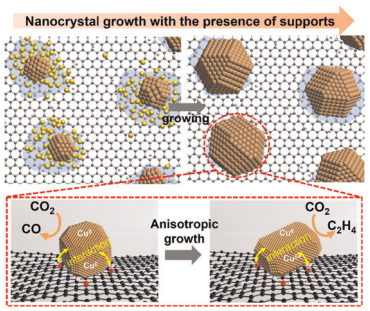
20351



Templated self-assembly of gold nanoparticles in smectic liquid crystals confined at 3D printed curved surfaces

Mackenzie O'Keefe, Jane Bernadette Denise M. Garcia, Abeco J. Rwakabuba, Timothy M. Otchy, Daniel A. Beller* and Mohamed Amine Gharbi*

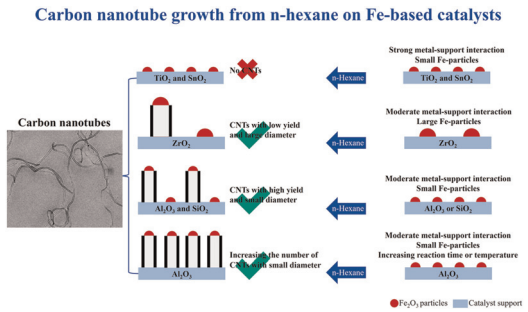
20365



Atomic-scale investigation of the role of supports in nanocrystal growth

Xiao Han, Xiaolin Tai, Xun Hong, Jingxiang Low, Yongfei Ji* and Yue Lin*

20375



Insights into the reaction process and mechanism of CNT growth from *n*-hexane on Fe-based catalysts

Changchang Tian, Dongzhe Cui, Xu Hou,* Xinyao Sun, Ao Dong, Jing Huang,* Li Yin and Enxian Yuan*

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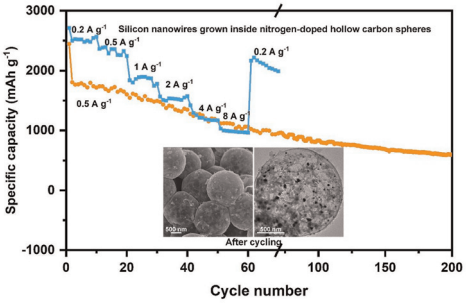

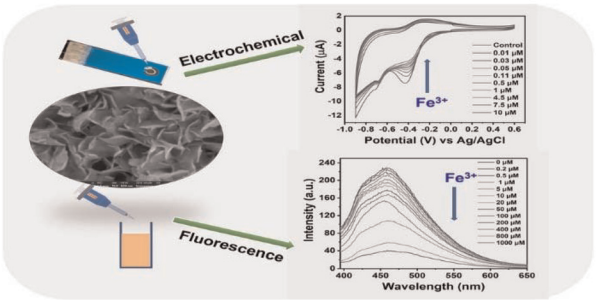

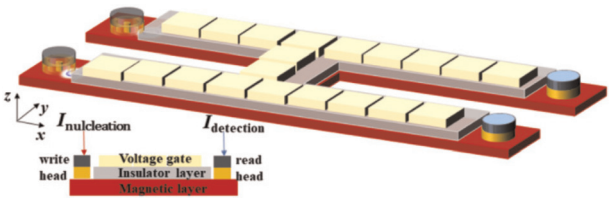

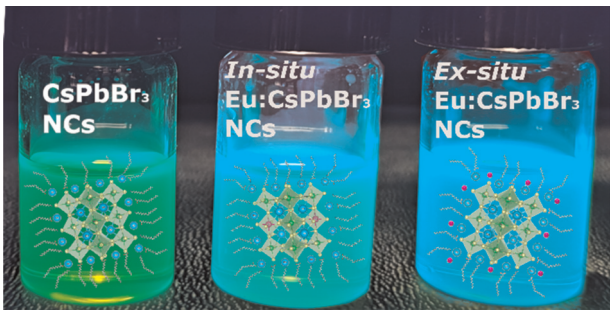

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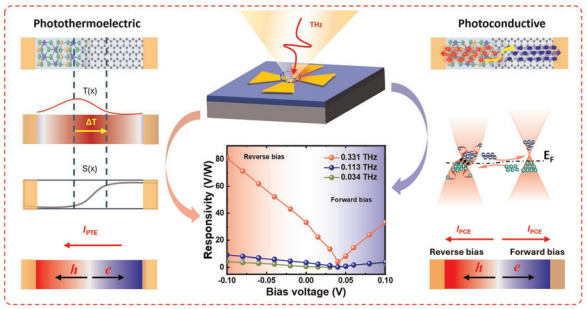
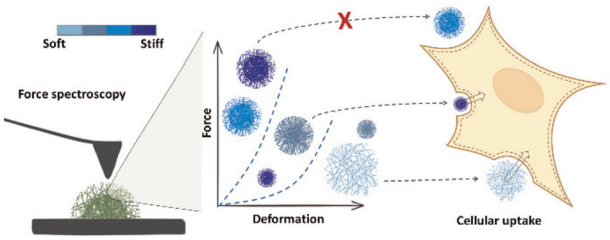
20435



High-sensitivity broadband terahertz detection enabled by synergistic effects in an antenna-integrated $TaCo_2Te_2$/graphene heterostructure

Donghai Zhang, Changlong Liu,* Sheng Ni, Changyi Pan, Weiwei Tang, Lin Wang, Kin Seng Chiang* and Xiaoshuang Chen*

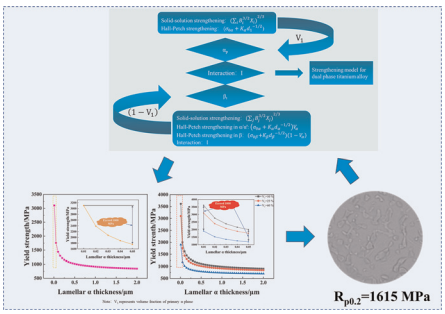
20445



Size and softness synergy in cellular microgel uptake: a force spectroscopy study

Andrey Babenyshev, Victoria K. Switacz, Marc Spehr and Walter Richtering*

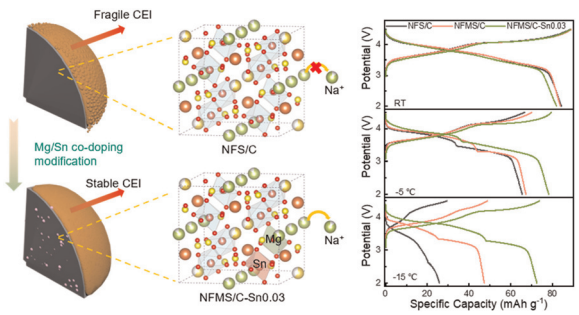
20455



The key approach to fabricate ultra-high strength dual-phase titanium alloys and its practice

Ruyi Ji, Leying Chen, Run Li, Haicheng Zhang, Liwei Cheng, Hengjun Luo* and Jian Mao*

20465



A novel spherical Mg/Sn co-doped alluaudite-type $Na_{2+2x}Fe_{2-x}(SO_4)_3$ cathode material for durable low-temperature sodium-ion batteries

Weiyi Li, Min Zhang, Shen Cai, Yan Xin and Huajun Tian*

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