

**PRESS RELEASE**

July 12, 2019

## The winner of “Top Papers Award” in 2019

The annual Top Papers Award has been established since 2015 by the editorial board of *Nano Research* and the Tsinghua University Press (TUP). This award is open to any scientists worldwide who have published papers in *Nano Research* during the two preceding years. After the JCR is released in each year, the winner will be determined by the Award Committee (Editors-in-Chief, Associate Editors, representatives from TUP) according to the citation in the latest year and the contribution of the papers.

The awardees will receive a prize of RMB ¥10,000 and a certificate. The winner's name and work will be featured in *Nano Research* and other media.

We are pleased to announce that the fifth Top Papers Awards are presented to the following papers.

### Top Papers

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Confinedly implanted NiFe<sub>2</sub>O<sub>4</sub>-rGO: Cluster tailoring and highly tunable electromagnetic properties for selective-frequency microwave absorption. Zhang, Yanlan; Wang, Xixi; Cao, Maosheng\*. 2018(3):1426-1436. <https://rdcu.be/bIyAS>

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Facile synthesis of yolk-shell Ni@void@SnO<sub>2</sub>(Ni<sub>3</sub>Sn<sub>2</sub>) ternary composites via galvanic replacement/Kirkendall effect and their enhanced microwave absorption properties. Zhao, Biao\*; Guo, Xiaoqin; Zhao, Wanyu; Deng, Jiushuai; Fan, Bingbing; Shao, Gang; Bai, Zhongyi; Zhang, Rui. 2017(1):331-343. <https://rdcu.be/bIyAA>

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MoS<sub>2</sub> as a long-life host material for potassium ion intercalation. Ren, Xiaodi; Zhao, Qiang; McCulloch, William D.; Wu, Yiying\*. 2017(4):1313-1321. <https://rdcu.be/bIyBN>

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Self-supported CoMoS<sub>4</sub> nanosheet array as an efficient catalyst for hydrogen evolution reaction at neutral pH. Ren, Xiang; Wu, Dan; Ge, Ruixiang; Sun, Xu; Ma, Hongmin; Yan, Tao; Zhang, Yong; Du, Bin; Wei, Qin\*; Chen, Liang\*. 2018(4):2024-2033. <https://rdcu.be/bIyNB>

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Biotemplated synthesis of three-dimensional porous MnO/C-N nanocomposites from renewable rapeseed pollen: An anode material for lithium-ion batteries. Chen, Li-Feng; Ma, Sheng-Xiang; Lu, Shu; Feng, Yue; Zhang, Jia; Xin, Sen; Yu, Shu-Hong\*. 2017(1):1-11. <https://rdcu.be/bIyBg>

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Engineering carbon quantum dots for photomediated theranostics. Hassan, Mahbub; Gomes, Vincent G.\*; Dehghani, Alireza; Ardekani, Sara M. 2018(1):1-41. <https://rdcu.be/bIyVM>

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Hierarchical graphene foam-based phase change materials with enhanced thermal conductivity and shape stability for efficient solar-to-thermal energy conversion and storage. Qi, Guoqiang; Yang, Jie; Bao, Ruiying; Xia, Dongyun; Cao, Min; Yang, Wei\*; Yang, Mingbo; Wei, Dacheng\*. 2017(3):802-813. <https://rdcu.be/bIyEB>

Aqueous electrocatalytic N<sub>2</sub> reduction under ambient conditions. Cao, Na; Zheng, Gengfeng\*. 2018(6):2992-3008. <https://rdcu.be/bIyVr>

Embedding CoS<sub>2</sub> nanoparticles in N-doped carbon nanotube hollow frameworks for enhanced lithium storage properties. Zhang, Jintao; Yu, Le\*; Lou, Xiong Wen (David)\*. 2017(12):4298-4304. <https://rdcu.be/bIyCh>

Two-photon-excited near-infrared emissive carbon dots as multifunctional agents for fluorescence imaging and photothermal therapy. Lan, Minhuan; Zhao, Shaojing; Zhang, Zhenyu; Yan, Li; Guo, Liang; Niu, Guangle; Zhang, Jinfeng; Zhao, Junfang; Zhang, Hongyan; Wang, Pengfei\*; Zhu, Guangyu; Lee, Chun-Sing; Zhang, Wenjun\*. 2017(9):3113-3123. <https://rdcu.be/bIyPB>

Interface engineering of high efficiency perovskite solar cells based on ZnO nanorods using atomic layer deposition. Li, Shibin\*; Zhang, Peng; Wang, Yafei; Sarvari, Hojjatollah; Liu, Detao; Wu, Jiang; Yang, Yajie; Wang, Zhiming; Chen, Zhi David\*. 2017(3):1092-1103. <https://rdcu.be/bIyBq>

Transparent, stretchable, and rapid-response humidity sensor for body-attachable wearable electronics. Tran Quang Trung; Le Thai Duy; Ramasundaram, Subramanian; Lee, Nae-Eung\*. 2017(6):2021-2033. <https://rdcu.be/bIyRc>

Application of yolk-shell Fe<sub>3</sub>O<sub>4</sub>@N-doped carbon nanochains as highly effective microwave-absorption material. Qiao, Mingtao; Lei, Xingfeng; Ma, Yong; Tian, Lidong; He, Xiaowei; Su, Kehe; Zhang, Qiuyu\*. 2018(3):1500-1519. <https://rdcu.be/bIyFm>

Coordination-responsive drug release inside gold nanorod@metal-organic framework core-shell nanostructures for near-infrared-induced synergistic chemo-photothermal therapy. Li, Yantao; Jin, Jun; Wang, Dawei; Lv, Jiawei; Hou, Ke; Liu, Yaling\*; Chen, Chunying\*; Tang, Zhiyong\*. 2018(6):3294-3305. <https://rdcu.be/bIy11>

Cobalt phosphide nanoparticles embedded in nitrogen-doped carbon nanosheets: Promising anode material with high rate capability and long cycle life for sodium-ion batteries. Zhang, Kai; Park, Mihui; Zhang, Jing; Lee, Gi-Hyeok; Shin, Jeongyim; Kang, Yong-Mook\*. 2017(12):4337-4350. <https://rdcu.be/bIyXG>

Investigation on the broadband electromagnetic wave absorption properties and mechanism of Co<sub>3</sub>O<sub>4</sub>-nanosheets/reduced-graphene-oxide composite. Ding, Yi; Zhang, Zheng; Luo, Baohe; Liao, Qingliang\*; Liu, Shuo; Liu, Yichong; Zhang, Yue\*. 2017(3):980-990. <https://rdcu.be/bIyCP>