

**PRESS RELEASE**

**July 24, 2017**

## The winner of “Top Papers Award” in 2017

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. This award can be granted to the same paper twice.

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

### Top Papers

The photoluminescence mechanism in carbon dots (graphene quantum dots, carbon nanodots, and polymer dots): Current state and future perspective. Zhu, Shoujun; Song, Yubin; Zhao, Xiaohuan; Shao, Jieren; Zhang, Junhu; Yang, Bai\*. [Nano Research, 2015, 8\(2\): 355–381.](#)

A mini review of NiFe-based materials as highly active oxygen evolution reaction electrocatalysts. Gong, Ming; Dai, Hongjie\*. [Nano Research, 2015, 8\(1\): 23–39.](#)

Recent advances in the development of organic photothermal nano-agents. Song, Xuejiao; Chen, Qian; Liu, Zhuang\*. [Nano Research, 2015, 8\(2\): 340–354.](#)

Transition-metal doped edge sites in vertically aligned MoS<sub>2</sub> catalysts for enhanced hydrogen evolution. Wang, Haotian; Tsai, Charlie; Kong, Desheng; Chan, Karen; Abild-Pedersen, Frank; Norskov, Jens K.\*; Cui, Yi\*. [Nano Research, 2015, 8\(2\): 566–575.](#)

Sodium iron hexacyanoferrate with high Na content as a Na-rich cathode material for Na-ion batteries. You, Ya; Yu, Xiqian; Yin, Yaxia; Nam, Kyung-Wan\*; Guo, Yu-Guo\*. [Nano Research, 2015, 8\(1\): 117–128.](#)

Solution processed MoS<sub>2</sub>-PVA composite for sub-bandgap mode-locking of a wideband tunable ultrafast Er: fiber laser. Zhang, Meng; Howe, Richard C. T.; Woodward, Robert I.; Kelleher, Edmund J. R.; Torrisi, Felice; Hu, Guohua; Popov, Sergei V.; Taylor, J. Roy; Hasan, Tawfique\*. [Nano Research, 2015, 8\(5\): 1522–1534.](#)

Chemically exfoliated metallic MoS<sub>2</sub> nanosheets: A promising supporting co-catalyst for enhancing the photocatalytic performance of TiO<sub>2</sub> nanocrystals. Bai, Song; Wang, Limin; Chen, Xiaoyi; Du, Junteng; Xiong, Yujie\*. [Nano Research, 2015, 8\(1\): 175–183.](#)

1.3  $\mu\text{m}$  emitting  $\text{SrF}_2:\text{Nd}^{3+}$  nanoparticles for high contrast *in vivo* imaging in the second biological window. Villa, Irene; Vedda, Anna; Cantarelli, Irene Xochilt; Pedroni, Marco; Piccinelli, Fabio; Bettinelli, Marco; Speghini, Adolfo; Quintanilla, Marta; Vetrone, Fiorenzo; Rocha, Ueslen; Jacinto, Carlos; Carrasco, Elisa; Sanz Rodriguez, Francisco; Juarranz, Angeles; del Rosal, Blanca; Ortgies, Dirk H.; Haro Gonzalez, Patricia; Garcia Sole, Jose; Jaque Garcia, Daniel\*. [Nano Research, 2015, 8\(2\): 649–665.](#)

Interlayer interactions in anisotropic atomically thin rhenium diselenide. Zhao, Huan; Wu, Jiangbin; Zhong, Hongxia; Guo, Qiushi; Wang, Xiaomu; Xia, Fengnian; Li, Yang; Tan, Pingheng\*; Wang, Han\*. [Nano Research, 2015, 8\(11\): 3651–3661.](#)

*In situ* synthesis of graphitic- $\text{C}_3\text{N}_4$  nanosheet hybridized N-doped  $\text{TiO}_2$  nanofibers for efficient photocatalytic  $\text{H}_2$  production and degradation. Han, Cheng; Wang, Yingde\*; Lei, Yongpeng\*; Wang, Bing; Wu, Nan; Shi, Qi; Li, Qiong. [Nano Research, 2015, 8\(4\): 1199–1209.](#)

Ultrastable single-atom gold catalysts with strong covalent metal-support interaction (CMSI). Qiao, Botao; Liang, Jin-Xia; Wang, Aiqin; Xu, Cong-Qiao; Li, Jun\*; Zhang, Tao\*; Liu, Jingyue (Jimmy)\*. [Nano Research, 2015, 8\(9\): 2913–2924.](#)

$\text{TiO}_2$  nanosheets with exposed {001} facets for photocatalytic applications. Sajan, Chimmikuttanda Ponnappa; Wageh, Swelm; Al-Ghamdi, Ahmed. A.; Yu, Jiaguo\*; Cao, Shaowen\*. [Nano Research, 2016, 9\(1\): 3–27.](#)

Organic-inorganic bismuth (III)-based material: A lead-free, air-stable and solution-processable light-absorber beyond organolead perovskites. Lyu, Miaoqiang; Yun, Jung-Ho; Cai, Molang; Jiao, Yalong; Bernhardt, Paul V.; Zhang, Meng; Wang, Qiong; Du, Aijun; Wang, Hongxia; Liu, Gang; Wang, Lianzhou\*. [Nano Research, 2016, 9\(3\): 692–702.](#)

A mini review on nickel-based electrocatalysts for alkaline hydrogen evolution reaction. Gong, Ming; Wang, Di-Yan; Chen, Chia-Chun\*; Hwang, Bing-Joe\*; Dai, Hongjie\*. [Nano Research, 2016, 9\(1\): 28–46.](#)

Optoelectronic devices based on two-dimensional transition metal dichalcogenides. Tian, He; Chin, Matthew L.; Najmaei, Sina; Guo, Qiushi; Xia, Fengnian; Wang, Han\*; Dubey, Madan\*. [Nano Research, 2016, 9\(6\): 1543–1560.](#)

A highly active oxygen evolution electrocatalyst: Ultrathin CoNi double hydroxide/CoO nanosheets synthesized via interface-directed assembly. Wu, Jun; Ren, Zhiyu\*; Du, Shichao; Kong, Lingjun; Liu, Bowen; Xi, Wang; Zhu, Jiaqing; Fu, Honggang\*. [Nano Research, 2016, 9\(3\): 713–725.](#)