

Nanoscale Horizons

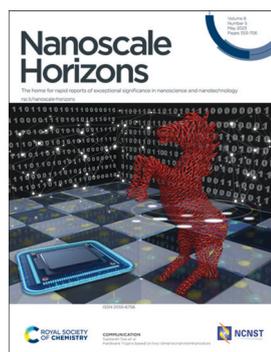
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Nanoscale Horizons 2022 Outstanding Paper Award

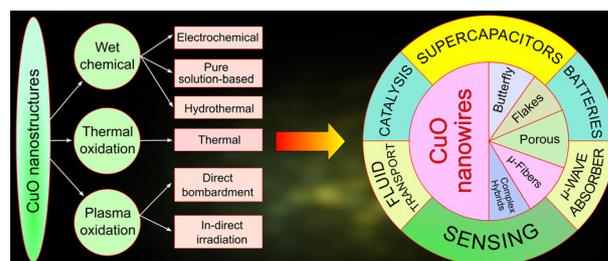


REVIEW

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Recent innovations in the technology and applications of low-dimensional CuO nanostructures for sensing, energy and catalysis

Oleg Baranov,* Kateryna Bazaka, Thierry Belmonte, Claudia Riccardi, H. Eduardo Roman, Mandhakini Mohandas, Shuyan Xu, Uroš Cvelbar and Igor Levchenko*



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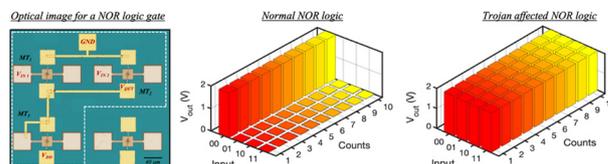
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Hardware Trojans based on two-dimensional memtransistors

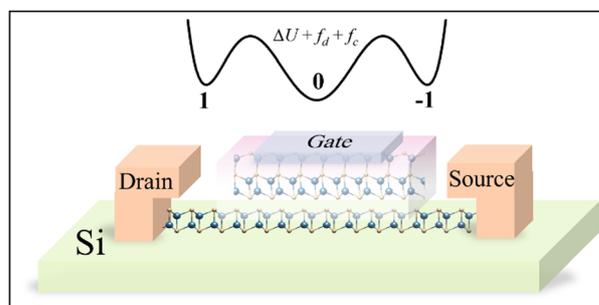
Akshay Wali, Harikrishnan Ravichandran and Saptarshi Das*



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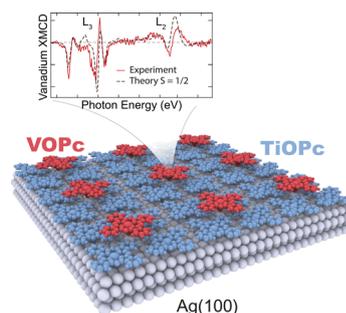
Changming Ke, Yihao Hu and Shi Liu*



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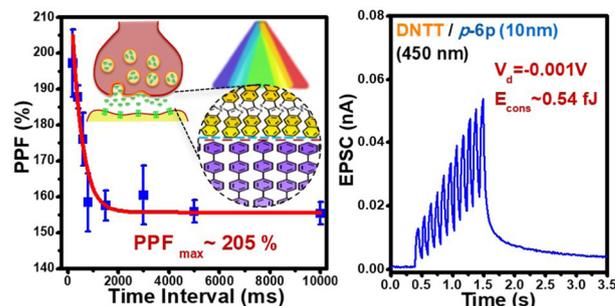
Kyungju Noh, Luciano Colazzo,* Corina Urdaniz, Jaehyun Lee, Denis Krylov, Parul Devi, Andrin Doll, Andreas J. Heinrich, Christoph Wolf,* Fabio Donati* and Yujeong Bae*



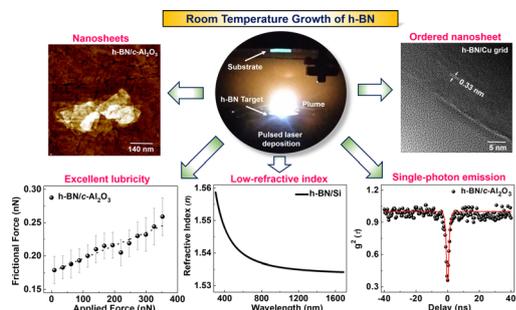
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Molecular template growth of organic heterojunctions to tailor visual neuroplasticity for high performance phototransistors with ultralow energy consumption

Ender Ercan,* Chih-Chien Hung, Guan-Syuan Li, Yun-Fang Yang, Yan-Cheng Lin and Wen-Chang Chen*



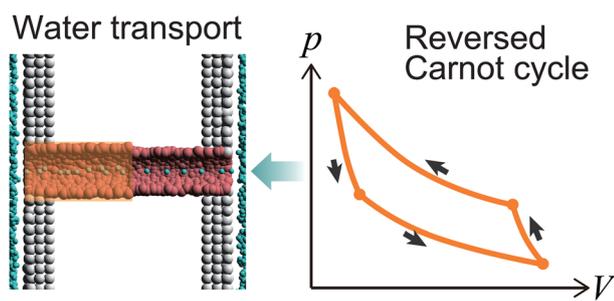
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Unravelling the room temperature growth of two-dimensional h-BN nanosheets for multifunctional applications

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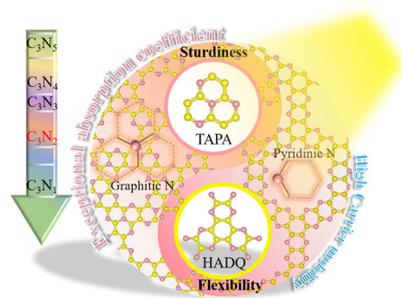
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Wetting hysteresis induces effective unidirectional water transport through a fluctuating nanochannel

Noriyoshi Arai,* Eiji Yamamoto, Takahiro Koishi, Yoshinori Hirano, Kenji Yasuoka and Toshikazu Ebisuzaki

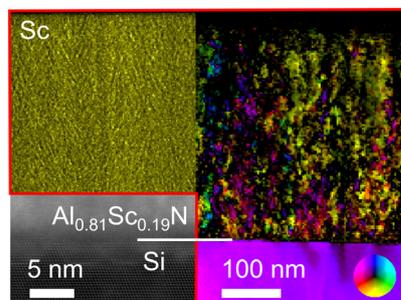
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C₃N₂: the missing part of highly stable porous graphitic carbon nitride semiconductors

Xinyong Cai, Jiao Chen, Hongyan Wang,* Yuxiang Ni, Yuanzheng Chen* and R. Bruce King*

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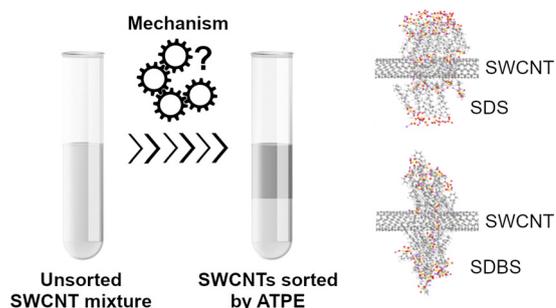
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Pranjala Tiwari,* Błażej Podleśny, Maciej Krzywiecki, Karolina Z. Milowska and Dawid Janas*



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Transition metal single atom-optimized g-C₃N₄ for the highly selective electrocatalytic synthesis of H₂O₂ under neutral electrolytes

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