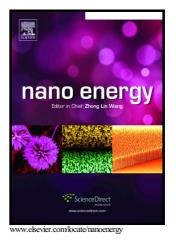
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Copper Nanodot-Embedded Graphene Urchins of Nearly Full-Spectrum Solar Absorption and Extraordinary Solar Desalination

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Copper Nanodot-Embedded Graphene Urchins of Nearly Full-Spectrum Solar Absorption and Extraordinary Solar Desalination

Jijian Xu^{a,b}, Feng Xu^b, Meng Qian^b, Li Zhi^b, Peng Sun^b, Zhanglian Hong^{a*}, Fuqiang Huang^{a,b*}

^aState Key Laboratory of Silicon Materials, School of Materials Science and

Engineering, Zhejiang University, Hangzhou 310027, P.R. China;

^bState Key Laboratory of High Performance Ceramics and Superfine Microstructure,

Shanghai Institute of Ceramics, Chinese Academy of Sciences, Shanghai 200050, P.R.

China;

hong_zhanglian@zju.edu.cn

huangfq@mail.sic.ac.cn

^{*}Corresponding authors.

Abstract:

Black materials are the key to convert solar light to thermal energy, but it is not easy to economically achieve full solar-spectrum light absorption and maximally harvest solar energy. Herein, we develop a "popcorn" approach based on a space-confined pyrolysis of copper carbodiimide to synthesis Cu nanodot-embedded N-doped graphene urchins. In situ formed Cu nanodots are rigidly fixed and spatially scaffolded in the graphene matrix, achieving nearly full-spectrum solar light Download English Version:

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