



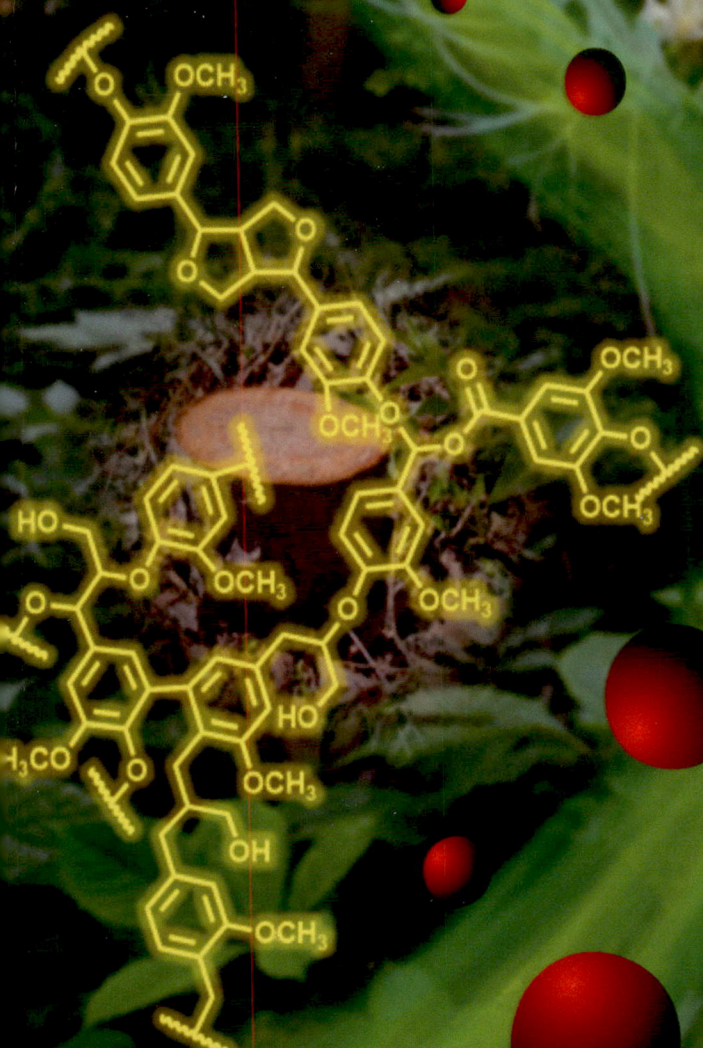
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# Frontiers of Chemical Science and Engineering

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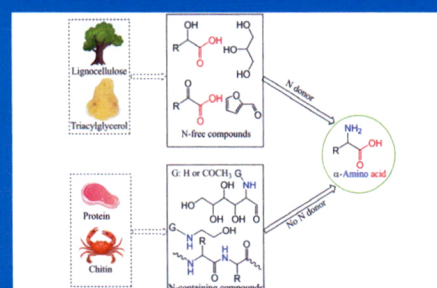
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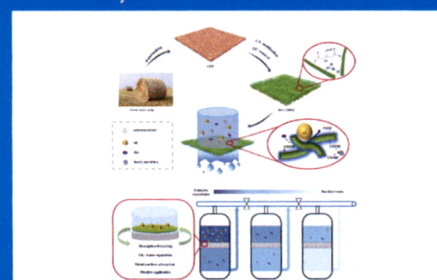
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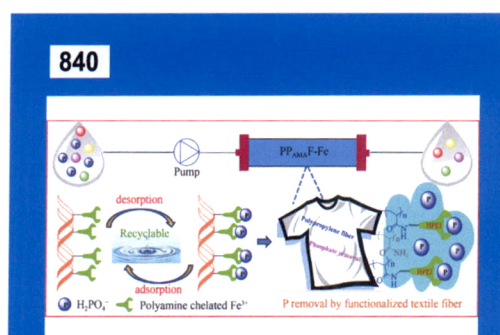


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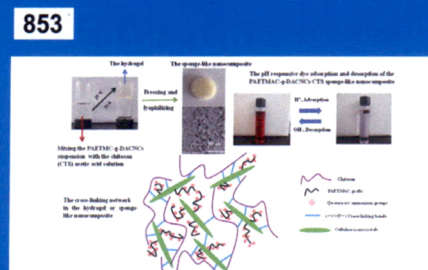
**840** Fabrication of recyclable Fe<sup>3+</sup> chelated aminated polypropylene fiber for efficient clean-up of phosphate wastewater

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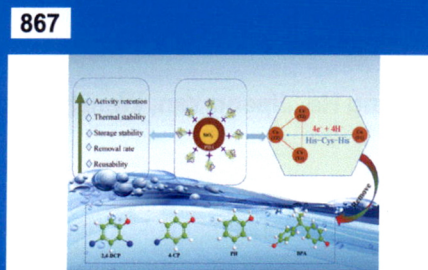
**853** Dialdehyde cellulose nanocrystal cross-linked chitosan foam with high adsorption capacity for removal of acid red 134

**Xiuzhi Tian, Rui Yang, Chuanyin Xiong, Haibo Deng, Yonghao Ni, Xue Jiang**



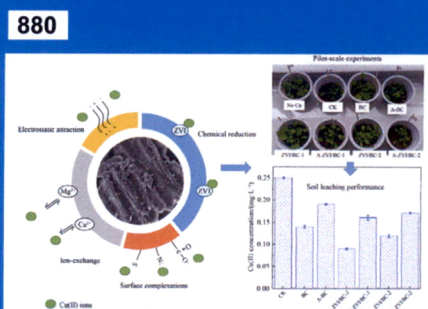
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**Wei Zhang, Runtang Liu, Xu Yang, Binbin Nian, Yi Hu**



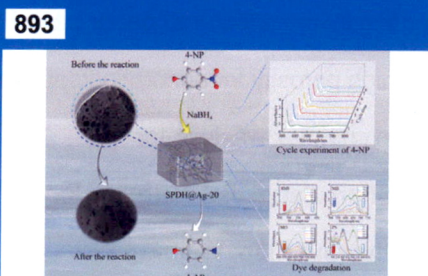
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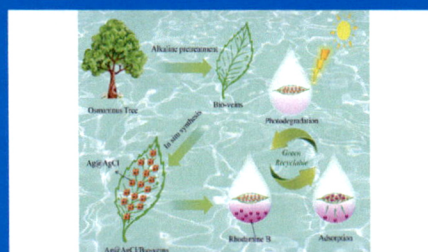
**893** Nanosilver anchored alginate/poly(acrylic acid/acrylamide) double-network hydrogel composites for efficient catalytic degradation of organic dyes

**Fan Zhang, Ce Gao, Shang-Ru Zhai, Qing-Da An**



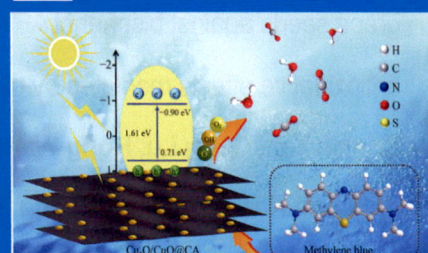
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**918** Cuprous oxide/copper oxide interpenetrated into ordered mesoporous cellulose-based carbon aerogels for efficient photocatalytic degradation of methylene blue

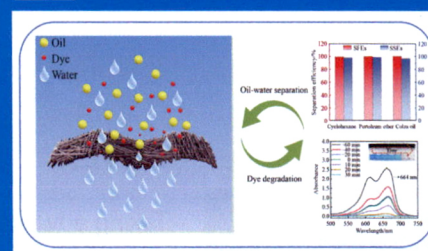
**918**



**Rui Cui, Dongnv Jin, Gaojie Jiao, Zhendong Liu, Jiliang Ma, Runcang Sun**

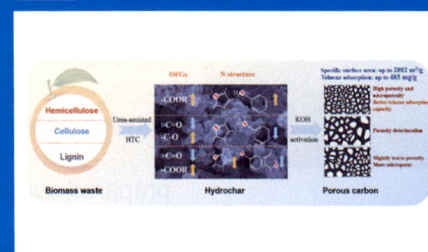
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**Guodong Tian, Chao Duan, Bingxu Zhou, Chaochao Tian, Qiang Wang, Jiachuan Chen**

**930**



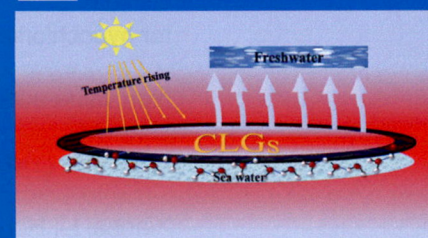
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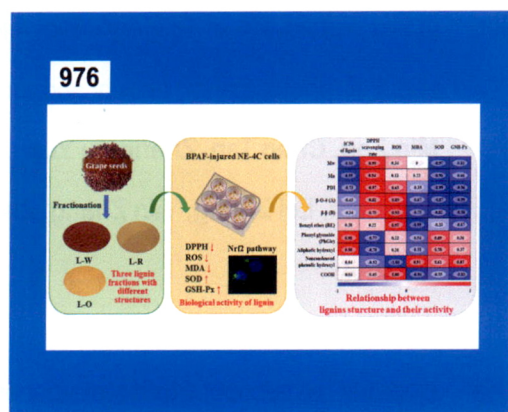
**954** Investigation of the roles of lignin in biomass-based hydrogel for efficient desalination  
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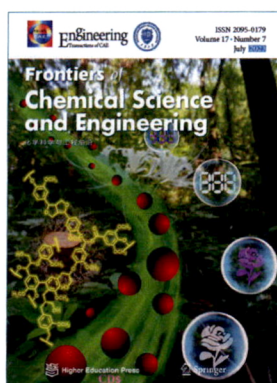
966 Lignin-derived dual-function red light carbon dots for hypochlorite detection and anti-counterfeiting

**Yixuan Chang, Fanwei Kong, Zihao Zhu,  
Ziai Wang, Chunxia Chen, Xiaobai Li,  
Hongwei Ma**



976 Protective effects of lignin fractions obtained from grape seeds against bisphenol AF neurotoxicity via antioxidative effects mediated by the Nrf2 pathway

**Bowen Yan, Geng Lu, Rong Wang,  
Shixiong Kang, Caoxing Huang, Hao Wu,  
Qiang Yong**



## COVER

Taking advantage of the large  $sp^2$  hybrid domain of lignin, new lignin-derived carbon dots (SPN-CDs) with red fluorescence were successfully synthesized. It has desirable anti-interference properties of short-wave background and exhibit superior luminescence stability. A portable, low-cost and sensitive fluorescence sensing paper with a dual color/fluorescence response to hypochlorite was prepared using SPN-CDs. Furthermore, a novel type of visible-light and fluorescence dual-channel information encryption platform was constructed. In this work, we successfully synthesized dual-function lignin red light carbon dots for hypochlorite detection and anti-counterfeiting, opening up a new avenue for high value-added applications of environmentally friendly lignin-based fluorescent materials. (Yixuan Chang, Fanwei Kong, Zihao Zhu, Ziai Wang, Chunxia Chen, Xiaobai Li, Hongwei Ma, pp. 966–975)

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