

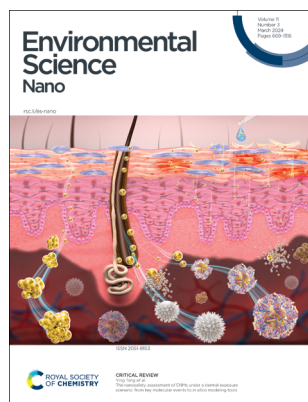
# Environmental Science Nano

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## IN THIS ISSUE

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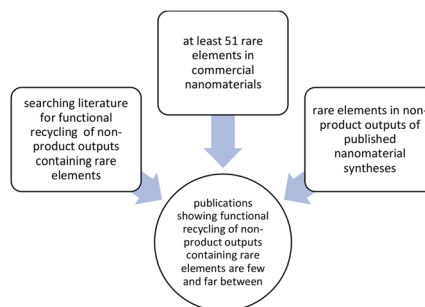
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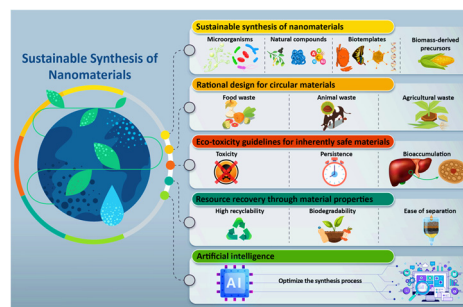
Lucas Reijnders\*



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Arezoo Khosravi, Atefeh Zarepour, Siavash Iravani,\*  
Rajender S. Varma\* and Ali Zarrabi\*



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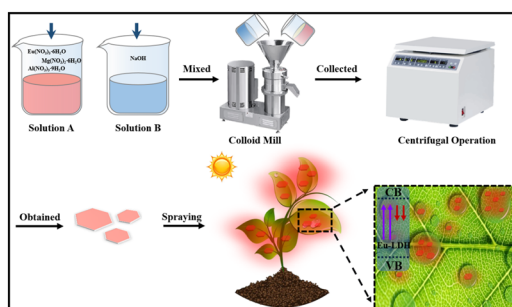
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Fundamental questions  
Elemental answers





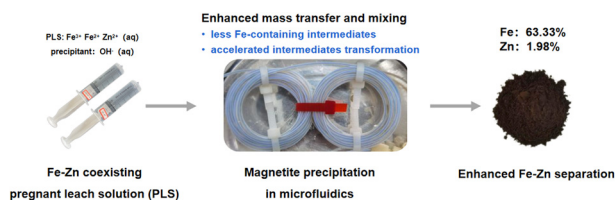
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### Europium-doped layered double hydroxide with spectral conversion property for enhanced photosynthesis

Chong Wang, Zixian Li, Yufei Zhao, Changjiao Sun, Yue Shen, Shenshan Zhan, Xingye Li, Qi Liu, Weichang Gao, Tao Li and Yan Wang\*

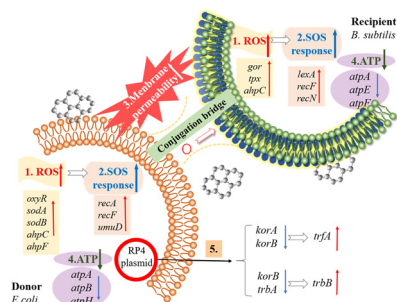
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Jiawei Li, Zhihui Yang, Wenchao Zhang, Deyi Zhu, Jiahui Wu, Xiaoyun Liu, Qingwei Wang, Meiqing Shi,\* Xu Yan\* and Zhang Lin

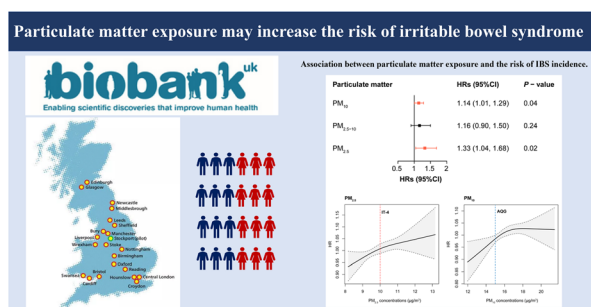
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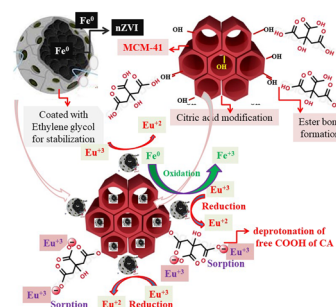
Yan Ran, Jian Lei, Laifu Li, Lianli Wang, Yating Sun, Lin Mei, Fangchen Ye and Fei Dai\*



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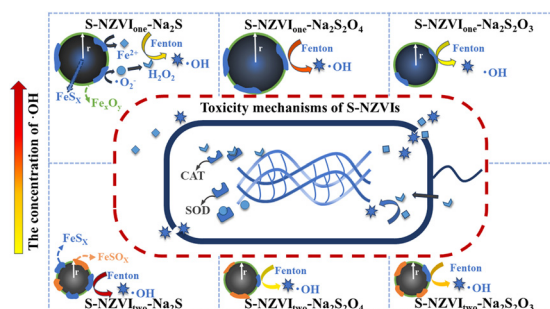
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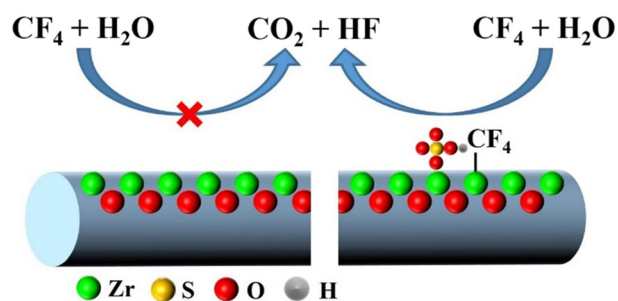
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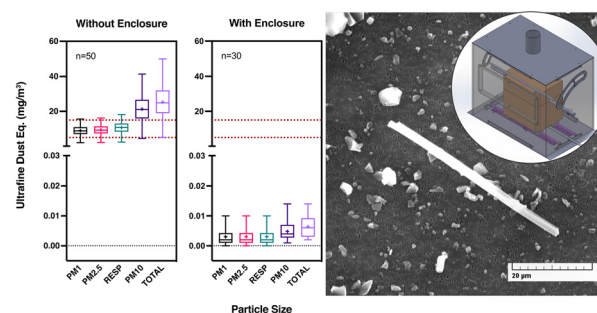
Yingkang Chen, Cheng-Wei Kao, Tao Luo, Hang Zhang, Yan Long, Junwei Fu, Zhang Lin, Liyuan Chai, Ting-Shan Chan\* and Min Liu\*



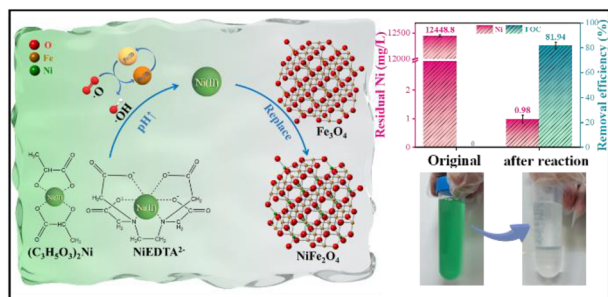
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Nina Z. Janković, Wei Lee Leong, Andrew I. Ryan, Omar N. Tantawi, Brian S. Smith and Desiree L. Plata\*



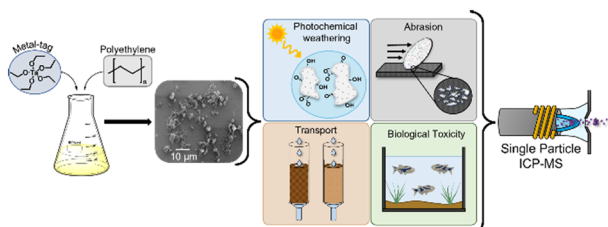
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Kaibin Lu, Jiemin Qin, Meihua Hu, Limeng Hu, Minlin Mao,\* Xiaoqin Li, Zhang Lin and Weizhen Liu\*

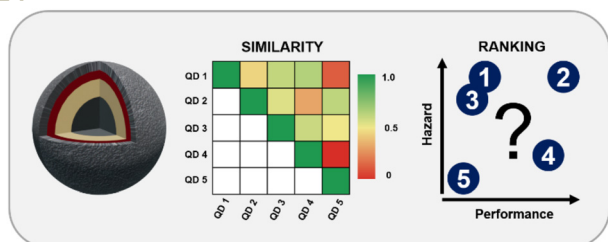
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Casey Smith, Stephanie Brown, Nathan Malone, Shaun Bevers, James Ranville and D. Howard Fairbrother\*

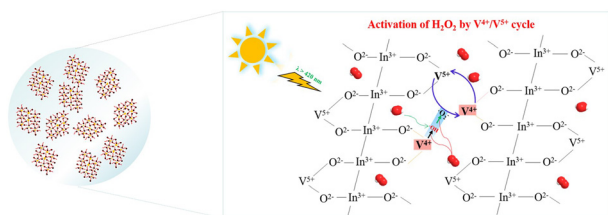
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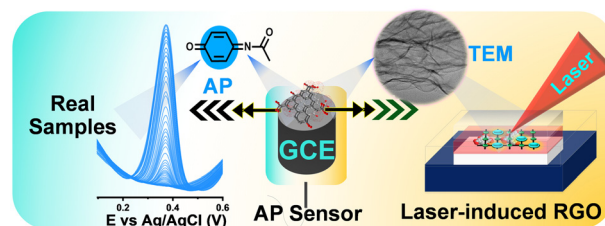
Lei Jin, Honglin Liu, Liqun Ye, Yingping Huang, Xiang Liu\* and Di Huang\*



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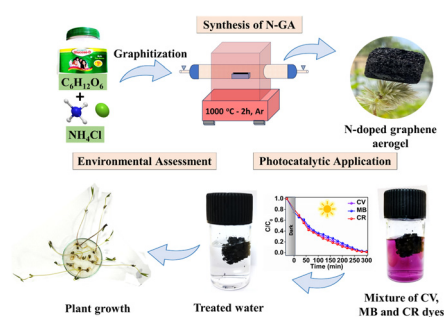
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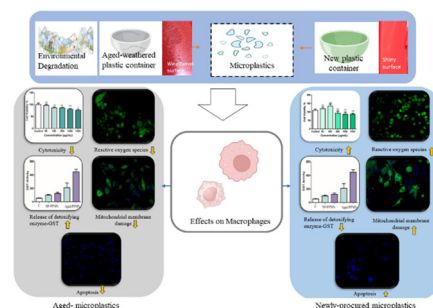
Himanshu Asati, Raka Mondal and Kumud Malika Tripathi\*



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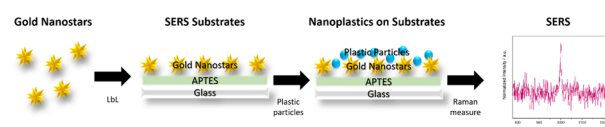
Shramana Koner, Amitava Mukherjee and Natarajan Chandrasekaran\*



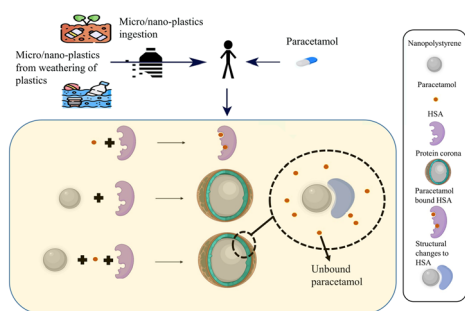
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Jessica Caldwell, Patricia Taladriz-Blanco,\* Laura Rodriguez-Lorenzo, Barbara Rothen-Rutishauser and Alke Petri-Fink\*



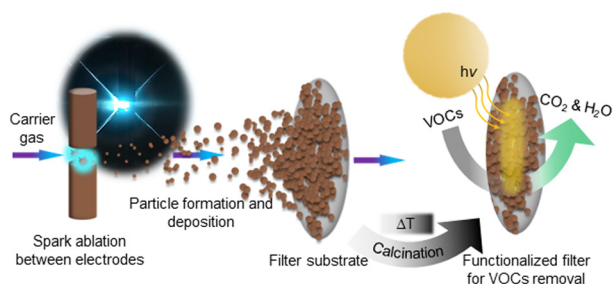
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Zachariah Sunil, John Thomas, Muruges Shivashankar and Natarajan Chandrasekaran\*

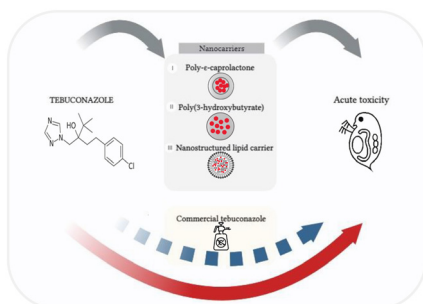
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## Precursor- and waste-free synthesis of spark-ablated nanoparticles with enhanced photocatalytic activity and stability towards airborne organic pollutant degradation

Sarka Drdova, Min Gao, Olga Sambalova, Robin Pauer, Zhouping Zhou, Sofia Dimitriadou, Andreas Schmidt-Ott and Jing Wang\*

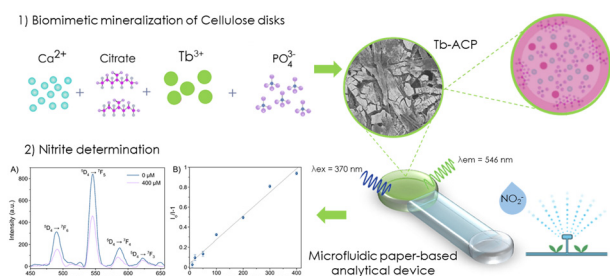
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Mahleh Eghbalinejad, Rocío López-Cabeza, Jan Kotouček, Renato Grillo, Marek Koutný, Zuzana Bilková and Jakub Hofman\*

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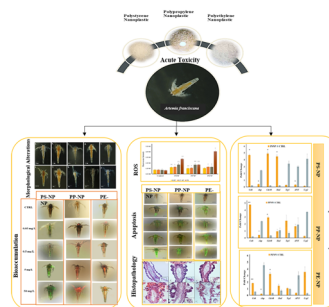




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### Comparative toxicity of polystyrene, polypropylene, and polyethylene nanoplastics on *Artemia franciscana* nauplii: a multidimensional assessment

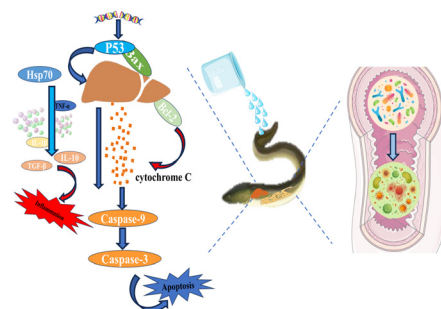
Marriya Sultan, Xing-Yi Wei, Jin-Jing Duan, Bao-Fu Zhang, Ming-Fei Wu, Zi-Xin Cai and De-Sheng Pei\*



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### Effects of polystyrene nanoplastics on apoptosis, digestive enzymes, and intestinal histological structure and flora of swamp eel (*Monopterus albus*)

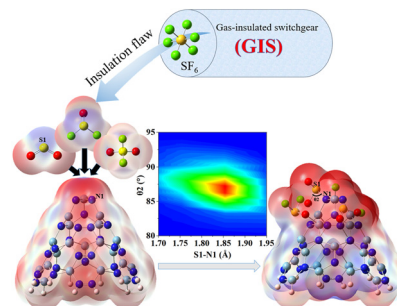
Zihan Zhou, Wenzong Zhou, Guoxing Liu, Chenxi Zhu, Mingming Han, Tian Zhu, Qichen Jiang\* and Weiwei Lv\*



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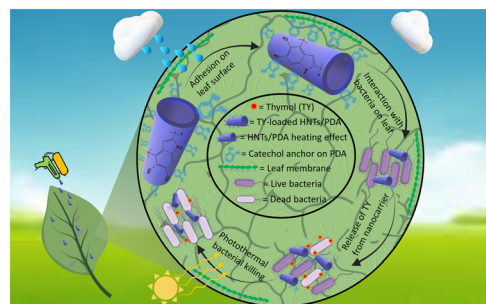
Mohammad Hassan Hadizadeh, Yongxia Hu, Fei Xu\* and Wenxing Wang



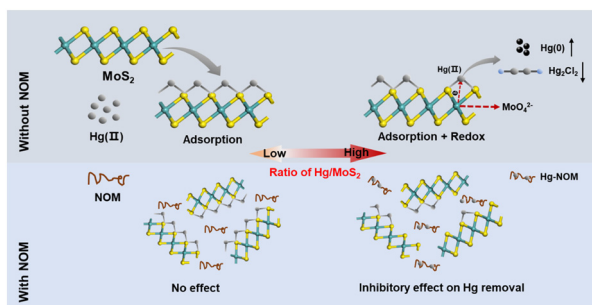
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### Multifunctional halloysite nanotube–polydopamine agro-carriers for controlling bacterial soft rot disease

Sandeep Sharma, Ofer Prinz Setter, Hanan Abu Hamad and Ester Segal\*



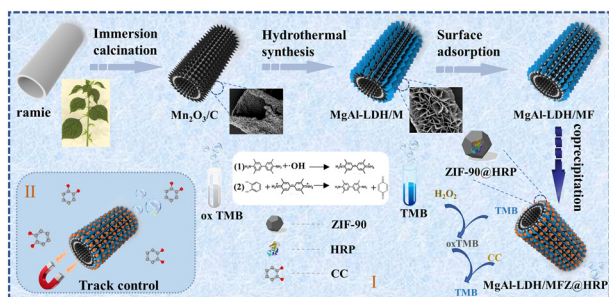
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Mengxia Wang, Meng Zhang, Qi Han, Yufei Shu, Xun Liu, Beizhao Chen, Yuchao Chen, Bei Liu\* and Zhongying Wang\*

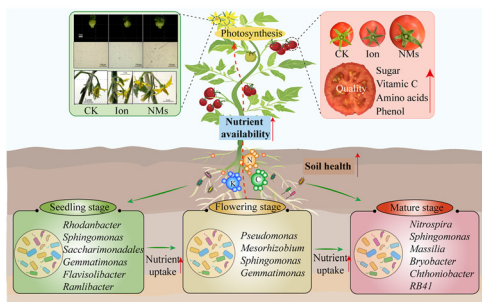
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### A novel bio-template route to synthesize enzyme-immobilized MOF/LDH tubular magnetic micromotors and their application in water treatment

Xiaohan Yang, Chenzhang Liu, Shuo Gao, Xiaolei Zhang, Ziwei Lan, Min Zuo and Jia Li\*

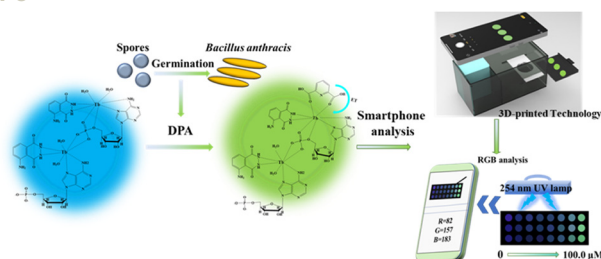
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### Dynamic microbial regulation of triiron tetrairon phosphate nanomaterials in the tomato rhizosphere

Liya Jiao, Le Yue, Xiehui Le, Xuesong Cao, Feiran Chen, Chuanxi Wang, Xiaoli Zhang, Hua Zou\* and Zhenyu Wang

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### Portable visual assay for anthrax biomarker based on lanthanide coordination polymer nanoparticles and smartphone-integrated mini-device

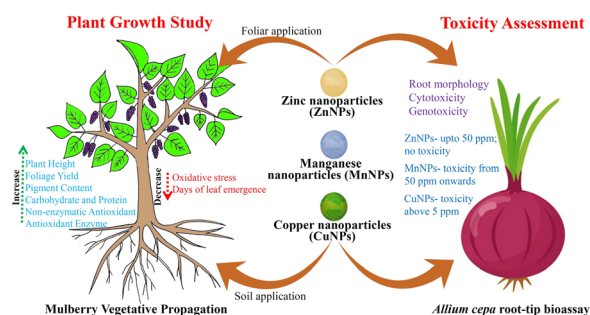
Shengnan Yin\* and Tianlun Xu



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## Evaluating the impact of phytosynthesized micronutrient nanoparticles on the growth and propagation of mulberry cuttings: dose determination and toxicity concerns

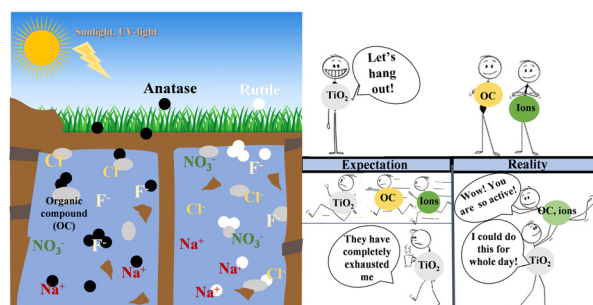
Md Salman Haydar, Puja Saha, Palash Mandal and Swarnendu Roy\*



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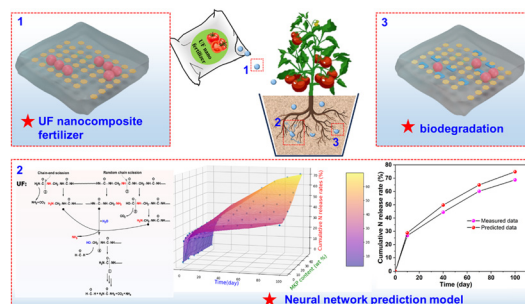
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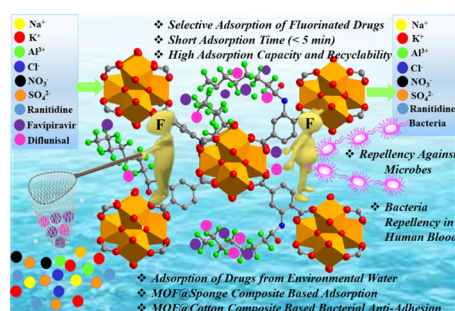
Yang Xiang, Xudong Ru, Yaqing Liu,\* Rui Miao, Yingfang Tong, Mingshan Gong, Yuhan Liu and Guizhe Zhao\*



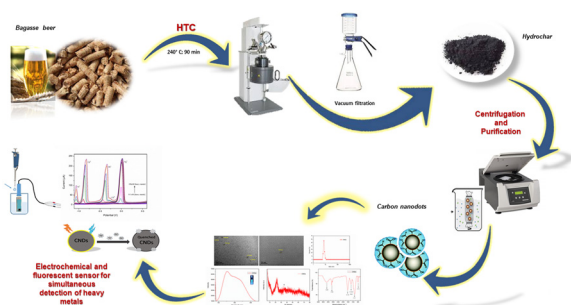
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## Superhydrophobic nanosized metal-organic framework composites for the targeted removal of hydrophobic pharmaceuticals with outstanding bacterial anti-adhesion properties

Subhrajyoti Ghosh, Abhijeet Rana, Anjali Patel, Debasis Manna and Shyam Biswas\*



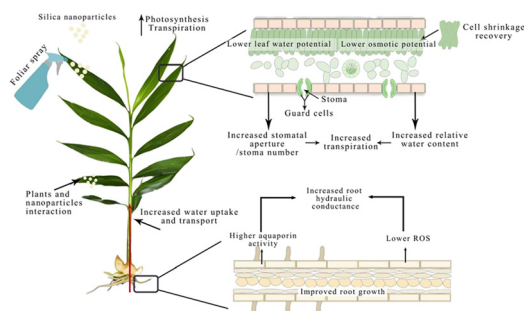
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### Waste-derived carbon nanodots for fluorimetric and simultaneous electrochemical detection of heavy metals in water

Viviana Bressi, Consuelo Celesti, Angelo Ferlazzo, Thomas Len, Kaveh Moulaei, Giovanni Neri, Rafael Luque\* and Claudia Espro\*

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Yongxing Zhu, Keyong Xi, Huihui Ma, Peihua Yang, Yanhong Wang, Huiling Li, Junliang Yin, Manli Qin\* and Yiqing Liu\*

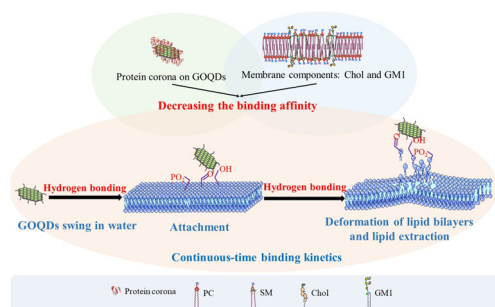
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### Super stable evaporators based on upcycled self-healing adsorbents for wastewater regeneration

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### Continuous-time binding kinetics of graphene oxide quantum dots and lipid bilayers dominated by hydrogen bonding: effect of nanoparticles' protein corona and membrane components

Chaoxiu Ren, Kaili Wang, Xinran Ge, Tao Wu\* and Qixing Zhou\*



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## Gold and titania nanoparticles accumulated in the body induce late toxic effects and alterations in transcriptional and miRNA landscape

Andrea Soltysova, Nicole Ludwig, Caroline Diener, Monika Sramkova, Katarina Kozics, Kristina Jakic, Lucia Balintova, Neus Gomez Bastus, Oscar Hernando Moriones, Aurelia Liskova, Zora Krivosikova, Eva Rollerova, Alena Manova, Tibor Dubaj, Victor Punteș, Peter Simon, Ladislava Wsolova, Jana Tulinska, Bozena Smolkova, Eckart Meese and Alena Gabelova\*

