

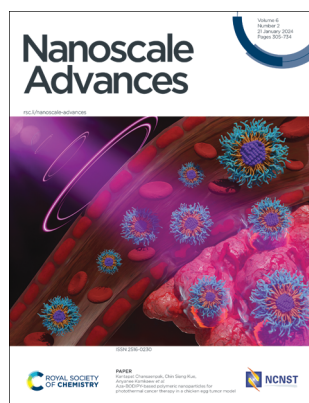
# Nanoscale Advances

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ISSN 2516-0230 CODEN NAADAI 6(2) 305–734 (2024)



**Cover**  
See Kantapat Chansaenpak, Chin Siang Kue, Anyanee Kamkaew *et al.*, pp. 406–417. Image reproduced by permission of Kantapat Chansaenpak from *Nanoscale Adv.*, 2024, 6, 406.



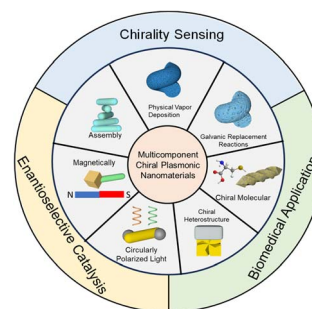
**Inside cover**  
See Xiaojuan Sun, Dabing Li *et al.*, pp. 418–427. Image reproduced by permission of Ke Jiang, Xiaojuan Sun, Dabing Li from *Nanoscale Adv.*, 2024, 6, 418.

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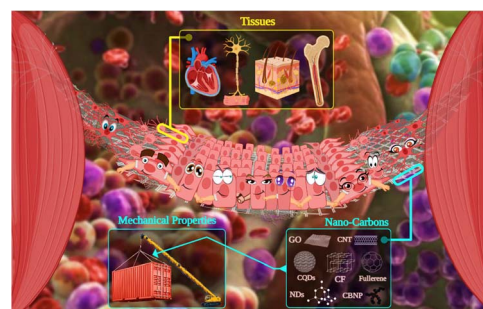
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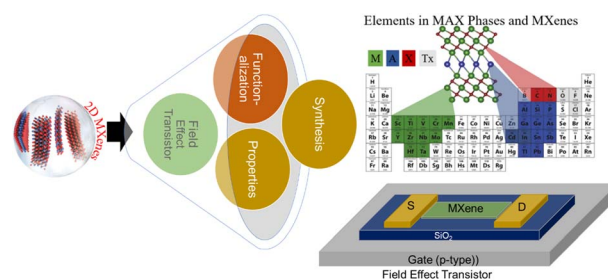
Fundamental questions  
Elemental answers

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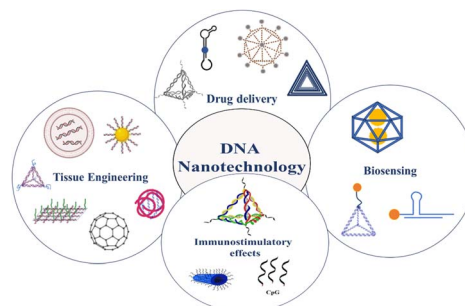
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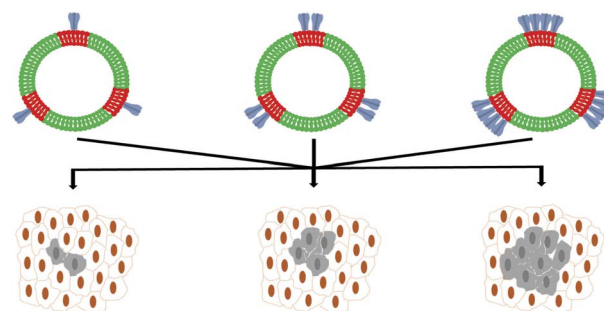


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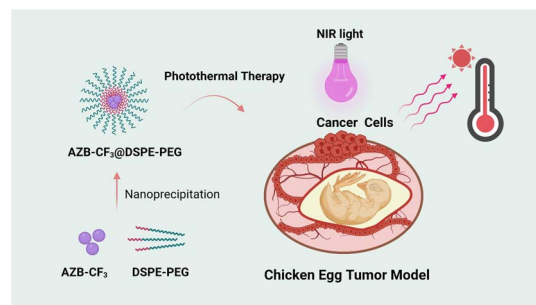


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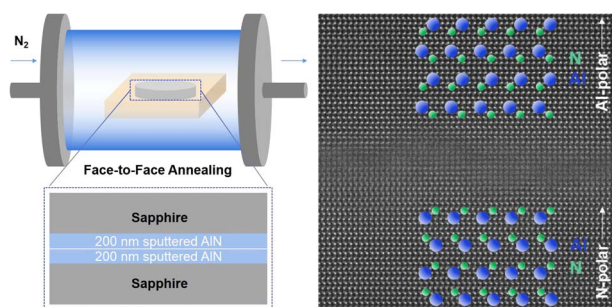
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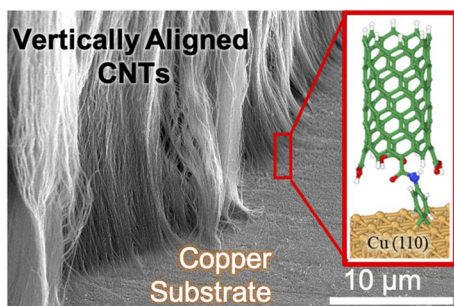
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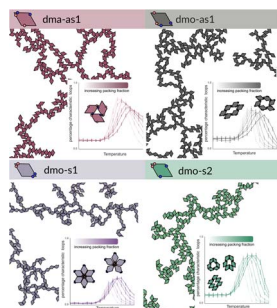
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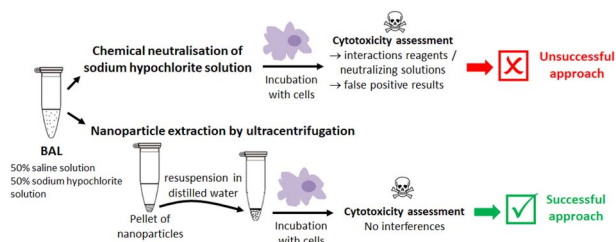
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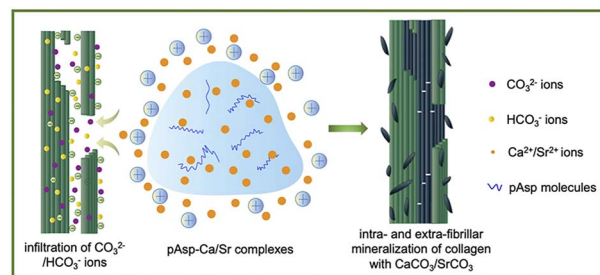
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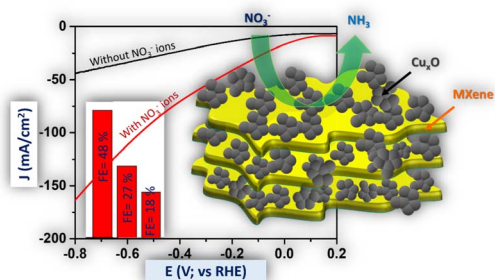
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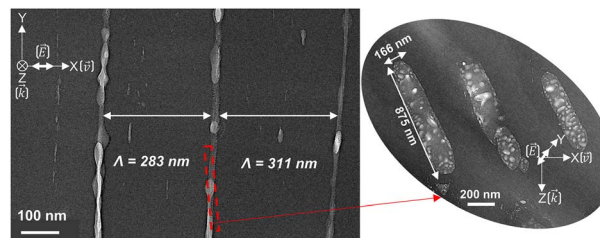
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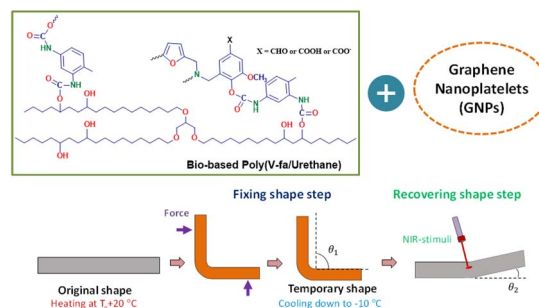
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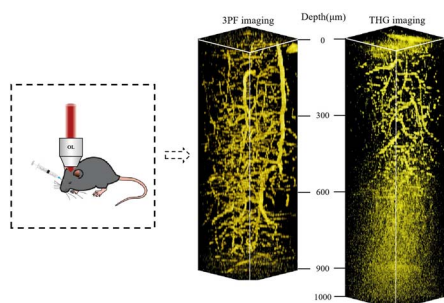
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Weerapong Jamnongpak, Sunan Tiptipakorn, Hariharan Arumugam, Krittapas Charoensuk, Panagiotis Karagiannidis and Sarawut Rimdusit\*



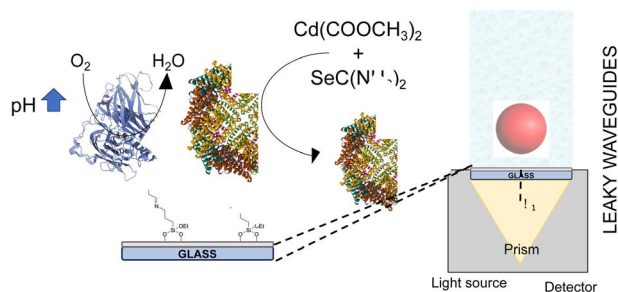
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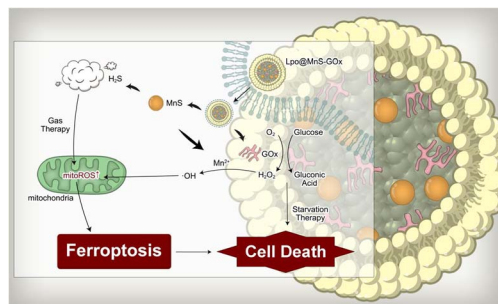
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Angelo Tricase, Bushra Alhenaki, Verdiana Marchianò, Luisa Torsi, Ruchi Gupta\* and Paolo Bollella\*

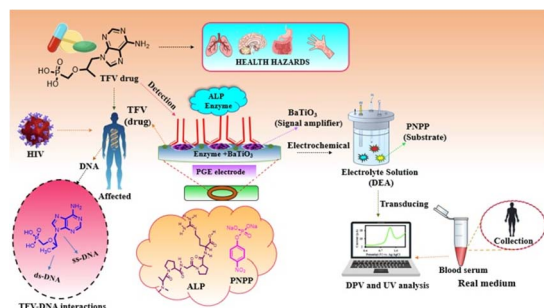
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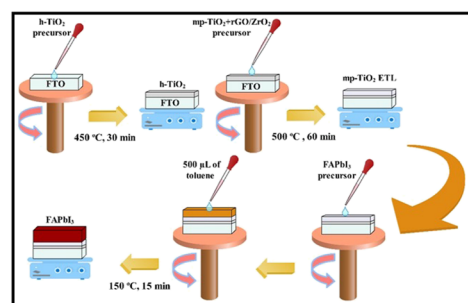
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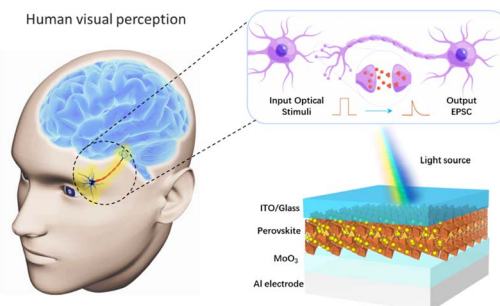
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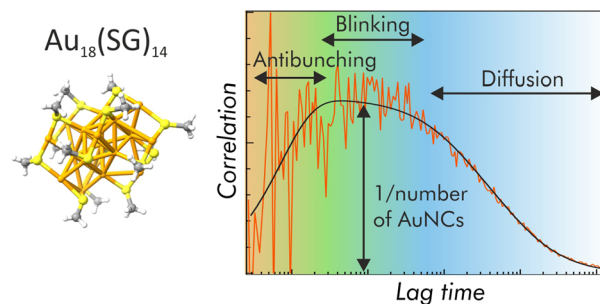
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Yi Li, Anran Yu,\* Hongyi Zhu\* and Yiqiang Zhan\*



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### Unveiling the photoluminescence dynamics of gold nanoclusters with fluorescence correlation spectroscopy

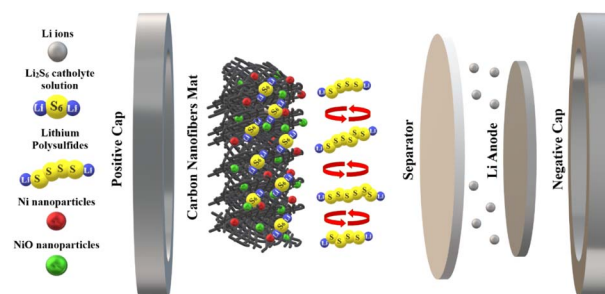
Malavika Kayyil Veedu, Julia Osmólska, Agata Hajda,  
Joanna Olesiak-Bańska and Jérôme Wenger\*



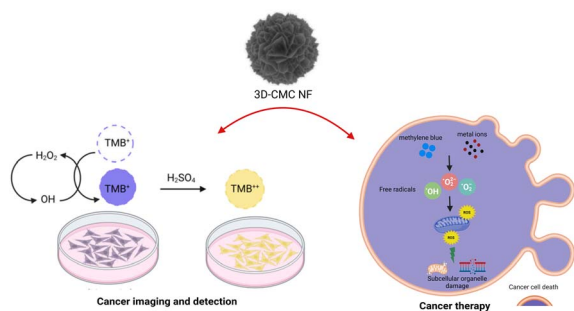
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### Nickel and nickel oxide nanoparticle-embedded functional carbon nanofibers for lithium sulfur batteries

Islam Rakhimbek, Nurzhan Baikalov, Aishuak Konarov,  
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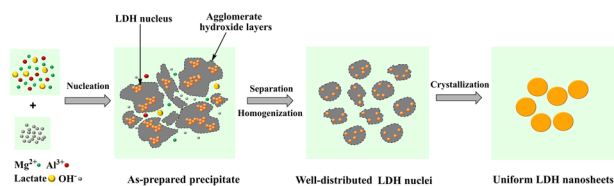
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### A self-assembled three-dimensional hierarchical nanoflower: an efficient enzyme-mimetic material for cancer cell detection that improves ROS generation for therapy

Chandran Murugan, Hyoryong Lee and Sukho Park\*

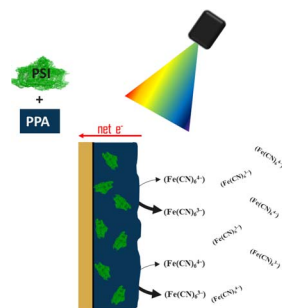
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### Controllable synthesis of layered double hydroxide nanosheets to build organic inhibitor-loaded nanocontainers for enhanced corrosion protection of carbon steel

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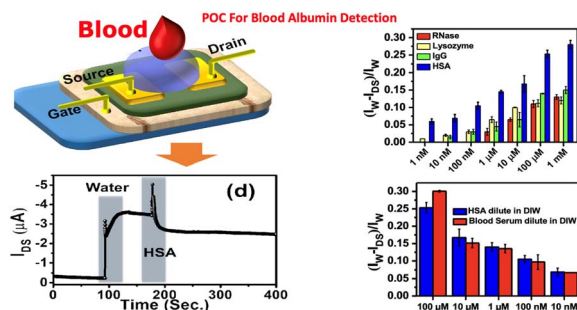
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Marc A. Nabhan, Allison V. Cordova-Huaman, David E. Cliffel and G. Kane Jennings\*

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Ajoy Mandal, Suman Mandal, Samik Mallik, Sovantal Mondal, Subhendu Sekhar Bag and Dipak K. Goswami\*

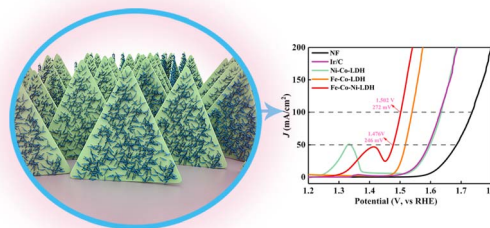




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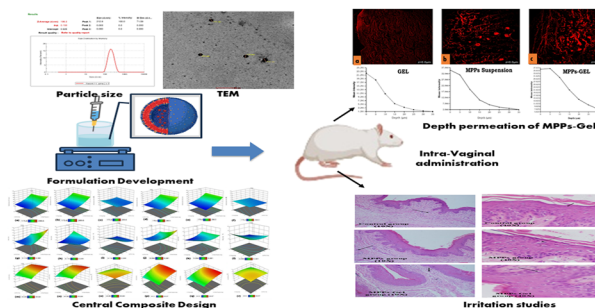
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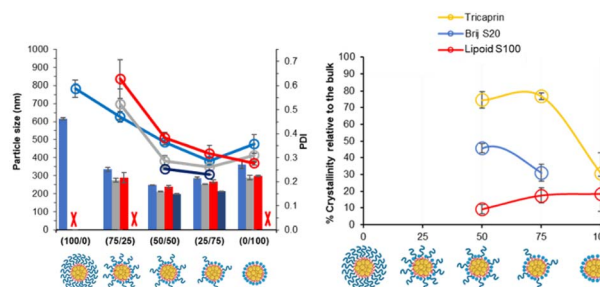
Uzma Farooq, Mohd Aamir Mirza, Abdullah Alshetali, Sradhanjali Mohapatra, Pooja Jain, Nazia Hassan, Zeenat Iqbal\* and Asgar Ali\*



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### Navigating the challenges of lipid nanoparticle formulation: the role of unpegylated lipid surfactants in enhancing drug loading and stability

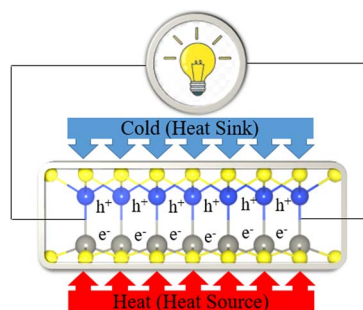
Cameron Hogarth, Keith Arnold, Steve Wright, Heba Elkateb, Steve Rannard and Tom O. McDonald\*



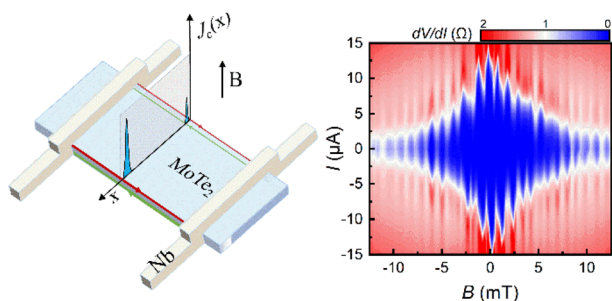
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### Optical and thermoelectric properties of new Janus ZnMN<sub>2</sub> (M = Ge, Sn, Si and N = S, Se, Te) monolayers: a first-principles study

Basit Ali, Muhammad Idrees, Tahani A. Alrebdi, Bin Amin and Qaisar Alam\*



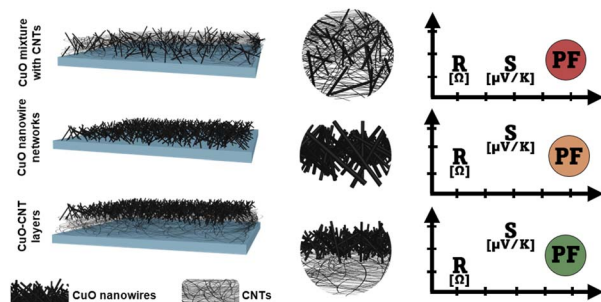
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### Asymmetric edge supercurrents in $\text{MoTe}_2$ Josephson junctions

Pingbo Chen, Jinhua Wang, Gongqi Wang, Bicong Ye, Liang Zhou, Le Wang, Jiannong Wang, Wenqing Zhang, Weiqiang Chen, Jiawei Mei and Hongtao He\*

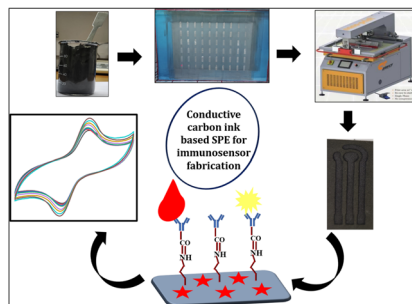
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Raitis Sondors, Davis Gavars, Elmars Spalva, Artis Kons, Rynno Lohmus, Margarita Volkova, Raimonds Meija and Jana Andzane\*

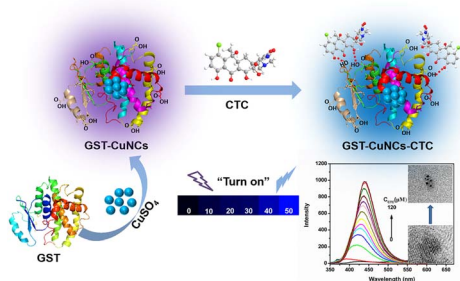
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Payal Gulati, Avinash Kumar Singh, Amit K. Yadav, Kiran Pasbola, Perna Pandey, Rinu Sharma, Alok Thakar and Pratima R. Solanki\*

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### Glutathione S-transferase templated copper nanoclusters as a fluorescent probe for turn-on sensing of chlorotetracycline

Jiayi Wang, Wenting Chen, Lei Cao, Mengyan Zhou, Yongkang Geng, Yifei Liu, Shushu Ding\* and Ding-Yi Fu\*



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**Correction: A novel study on the preferential attachment of chromophore and auxochrome groups in azo dye adsorption on different greenly synthesized magnetite nanoparticles: investigation of the influence of the mediating plant extract's acidity**

Kaouthar Ahmouda,\* Moussa Boudiaf and Boubaker Benhaoua

