

# Materials Advances

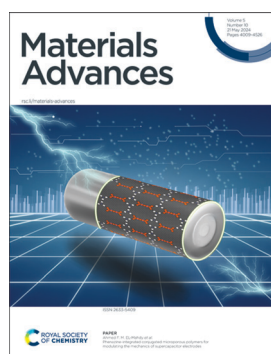
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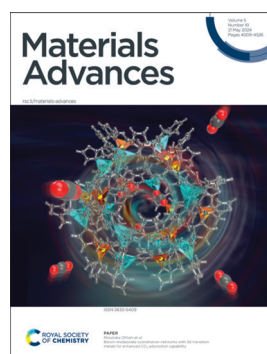
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See Ahmed F. M. EL-Mahdy *et al.*, pp. 4142–4150.  
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### Inside cover

See Masataka Ohtani *et al.*, pp. 4151–4158.  
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## EDITORIAL

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### Introduction to surface engineering of transition metal-based 2D layered materials for anti-corrosion and energy applications

Subrata Kundu

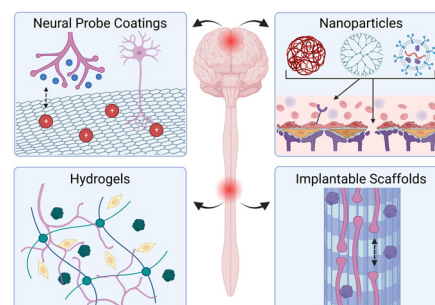


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### Biomaterial strategies for regulating the neuroinflammatory response

Alycia N. Galindo, David A. Frey Rubio and Marian H. Hettiaratchi\*



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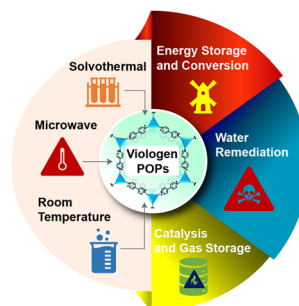
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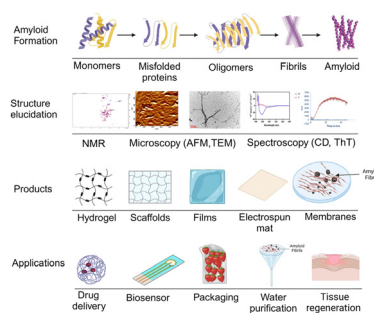
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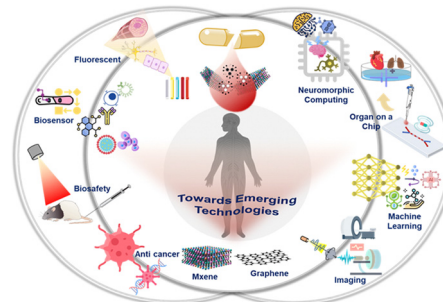
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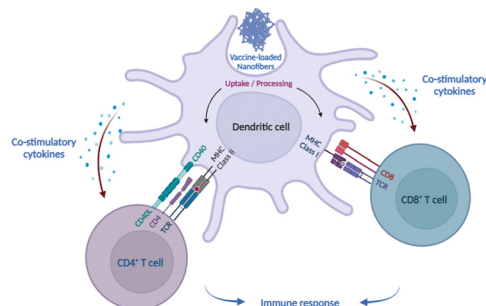
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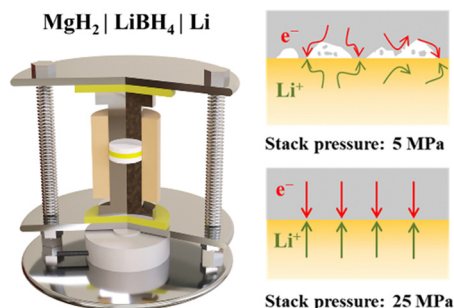
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Hatem A. F. M. Hassan,\* Mohamed Haider and Sherif Ashraf Fahmy



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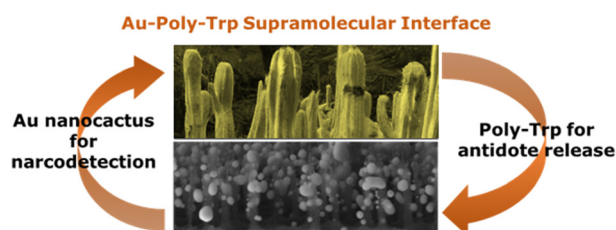
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### Enhancing the cycling performance of MgH<sub>2</sub>-LiBH<sub>4</sub> based solid-state batteries via stacking pressure tailoring

Xueye Zhuang, Haoliang Chen, Shiman He,\* Long Hu, Hui Wang\* and Renzong Hu\*

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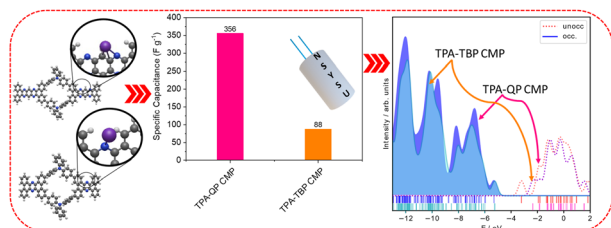


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Sarvesh Kumar Srivastava

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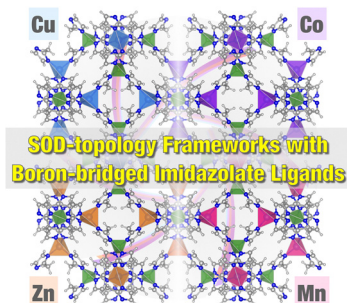
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Mohammed G. Kotp, Johann Lüder, Shiao-Wei Kuo and Ahmed F. M. EL-Mahdy\*

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Takeshi Kato, Ikuho Akiyama, Fumika Mori, Ayumu Shinohara, Yudai Ogura, Akitaka Ito and Masataka Ohtani\*

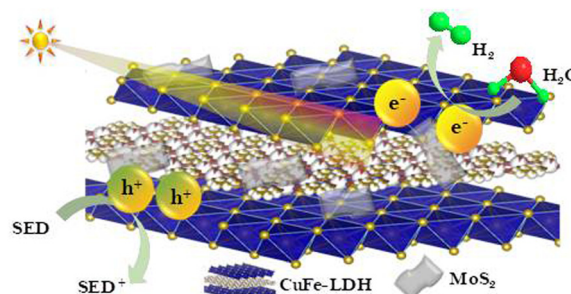




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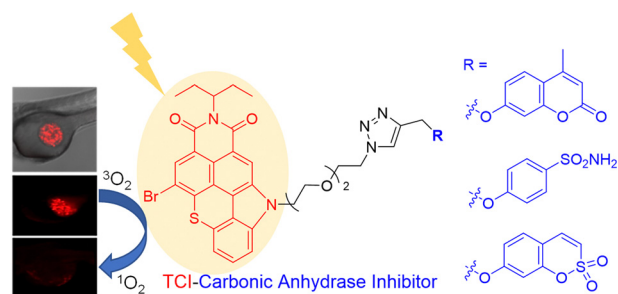
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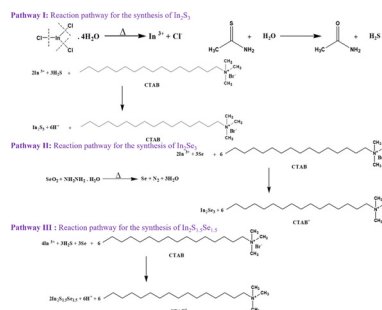
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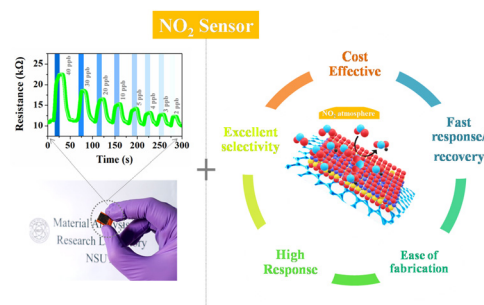
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Neeraj Dhariwal, Preeti Yadav, Amit Sanger, Sung Bum Kang, M. S. Goyat, Yogendra Kumar Mishra and Vinod Kumar\*



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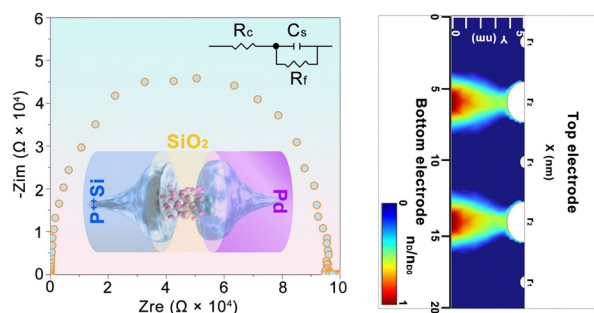
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### Phase transition of recombinant fusion protein assemblies in macromolecularly crowded conditions

Jooyong Shin, Yinhao Jia, Janani Sampath and Yeongseon Jang\*

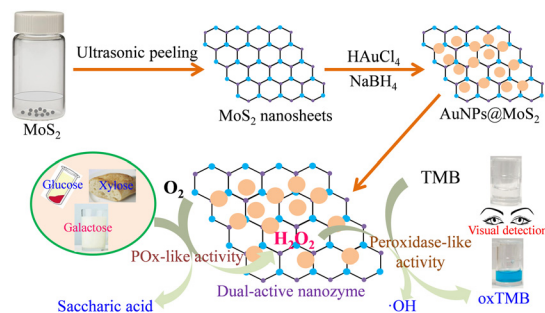
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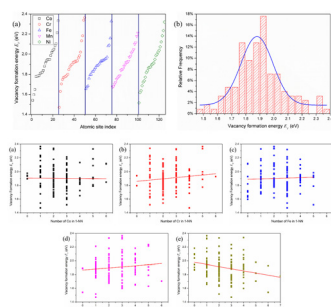
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Shilan Fu, Junfeng Liu, Siqi Wu, Lin Zhang, Xu Zhang\* and FengFu Fu\*

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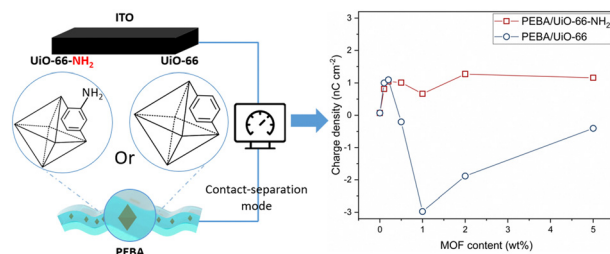
Chan Gao,\* Shuyu Wang, Xiao Liu and Chandra Veer Singh\*



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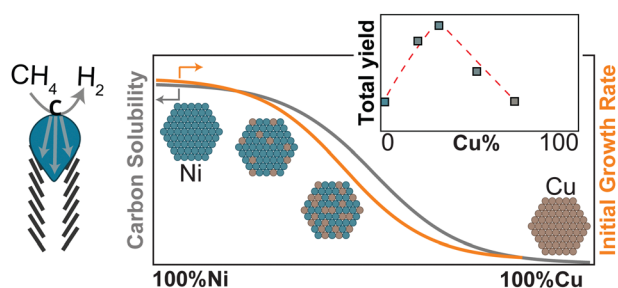
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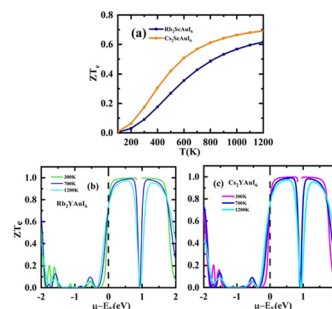
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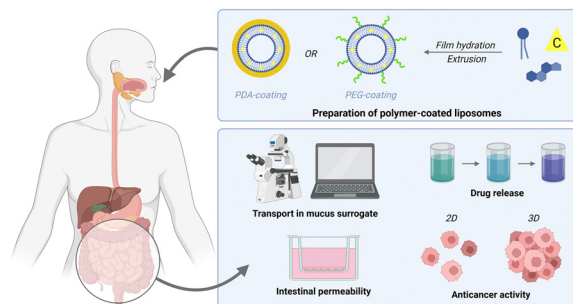
Abrar Nazir, Aparna Dixit, Ejaz Ahmad Khera,\* Mumtaz Manzoor, Ramesh Sharma and A. J. A. Moayad\*



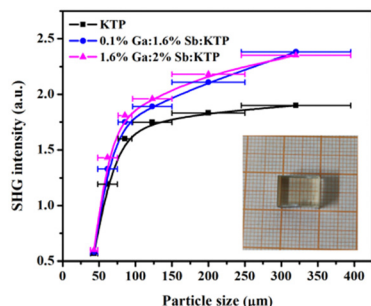
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Anna Maria Maurelli, Bárbara Ferreira, Sofia Dias, Helena Almeida, Vincenzo De Leo,\* Bruno Sarmiento, Lucia Catucci\* and José das Neves\*



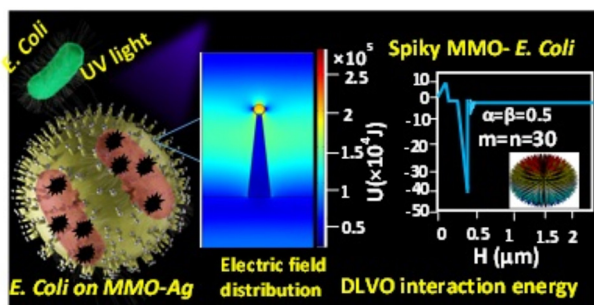
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Yutong Zhang, Biao Wang, Xinhui Jia, Xi Chong, Jing Li,\* Bingbing Zhang\* and Jiyang Wang

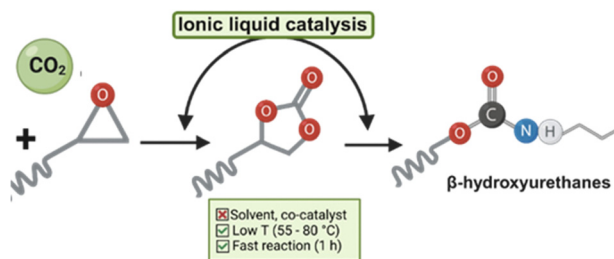
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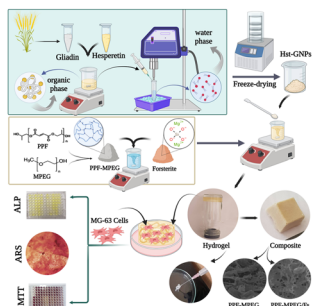
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Marwa Rebei, Ctirad Červinka, Andrii Mahun, Petra Ecorchard, Jan Honziček, Sébastien Livi, Ricardo K. Donato and Hynek Beneš\*

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Mahsa Zaghian, Jaleh Varshosaz,\* Mahboubeh Rostami and Mina Mirian

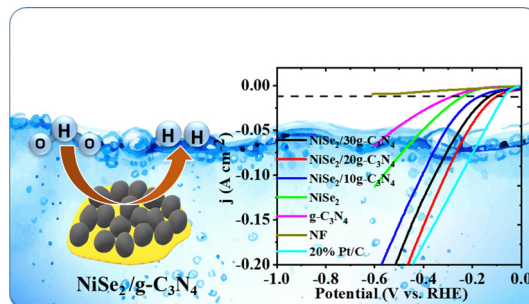




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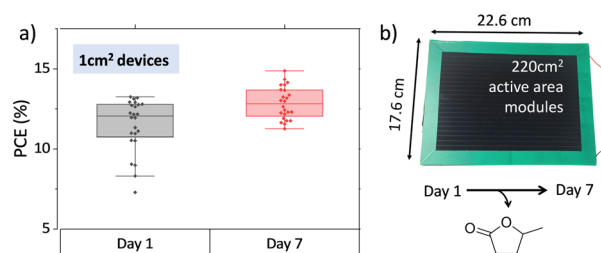
Somnath R. Khaladkar, Oshnik Maurya, Girish Gund, Bhavesh Sinha, Girish Kamble, Jin Hyeok Kim,\* R. R. Deshmukh\* and Archana Kalekar\*



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### Age-induced excellence with green solvents: the impact of residual solvent and post-treatments in screen-printed carbon perovskite solar cells and modules

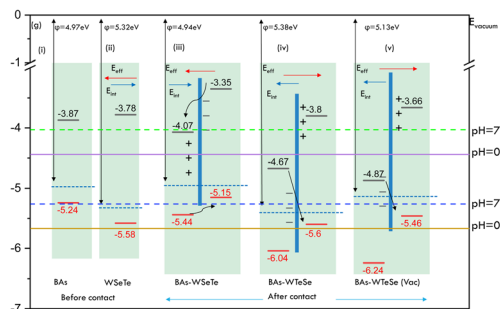
Carys Worsley,\* Sarah-Jane Potts, Declan Hughes, Wing Chung Tsoi and Trystan Watson\*



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### Enhanced photocatalytic water splitting with two-dimensional van der Waals heterostructures of BAs/WTeSe

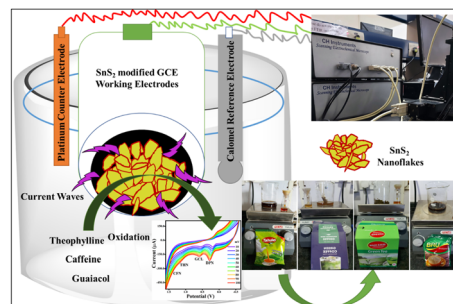
BiBi Hanifan, Abdul Jalil, Syed Zafar Ilyas, Azeem Ghulam Nabi\* and Devis Di Tommaso\*



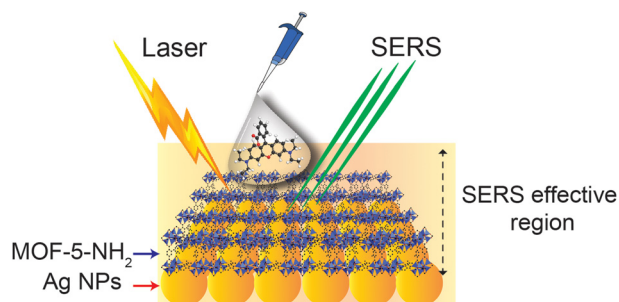
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Amisha Kushwaha, Gajendar Singh, Umesh Kumar Gaur and Manu Sharma\*



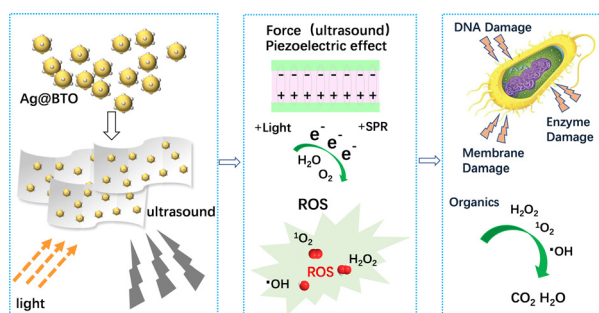
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Nguyen La Ngoc Tran, Le Hong Tho, Ngoc Quang Tran, Hanh Kieu Thi Ta, Bach Thang Phan, Nguyet N. T. Pham, Tan Le Hoang Doan\* and Nhu Hoa Thi Tran\*

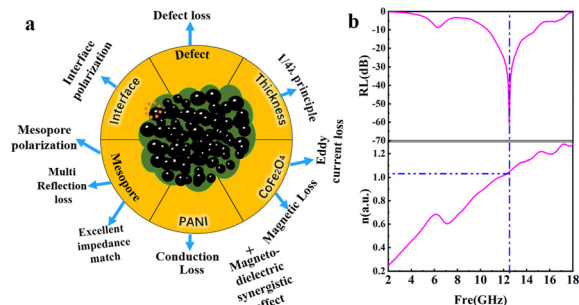
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### A heterostructure nanofiber film with an enhanced internal electrical field and surface plasmon resonance for efficient microbial removal

Wanting Li, Jing Yang, Xin Gao, Yiqian Fu, Huiyu He, Pu Wang, Yudong Hou, Mankang Zhu and Xiu-Hong Wang\*

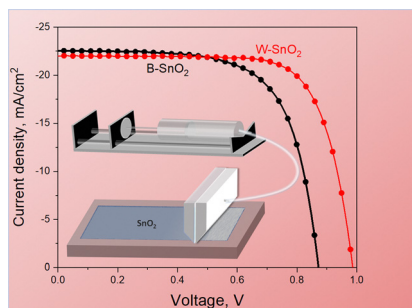
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Aiqiong Wang, Jianxiong Li and Xiaoming Zhao\*

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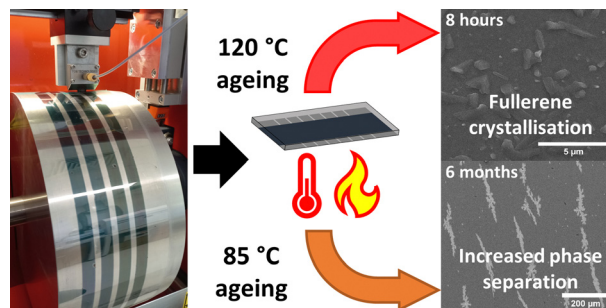
Anuja Vijayan, Vishnu Vijayakumar, Malin B. Johansson, Masoud Karimipour, Monica Lira-Cantu, Byeong Jo Kim and Gerrit Boschloo\*



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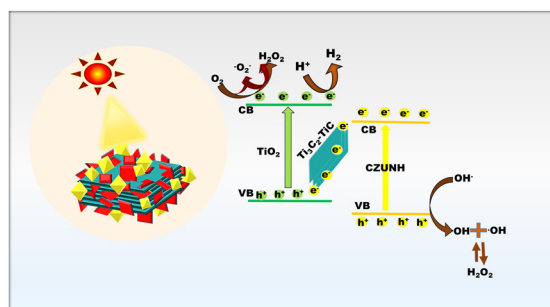
Bradley P. Kirk, Amira R. Alghamdi, Matthew J. Griffith, Xun Pan, Martyn Jevric, David A. Lewis, Gunther G. Andersson and Mats R. Andersson\*



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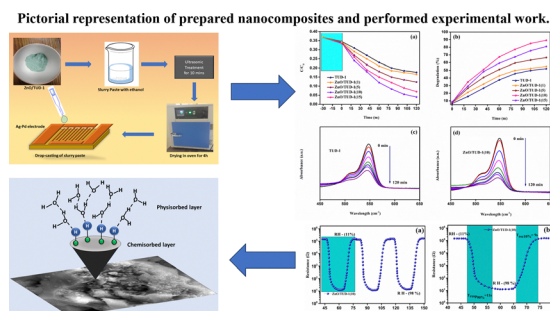
Lijarani Biswal, Suraj Prakash Tripathy, Srabani Dash, Sarmistha Das, Satyabrata Subudhi and Kulamani Parida\*



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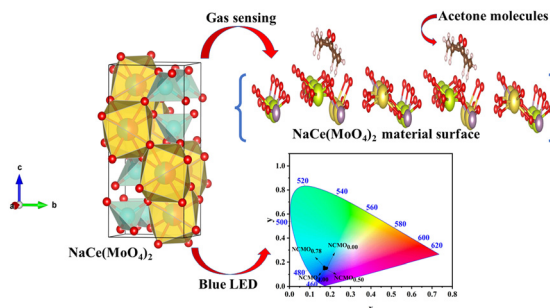
Aryan Boora, Surender Duhan,\* Bhavna Rohilla, Priya Malik, Supriya Sehrawat, M. S. Goyat, Yogendra Kumar Mishra and Vinod Kumar



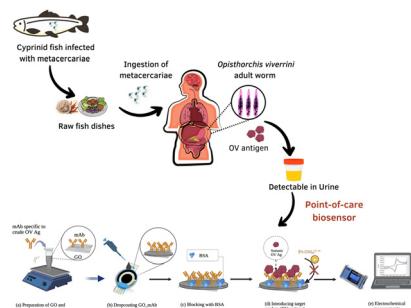
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### A truncated octahedron $\text{NaCe}(\text{MoO}_4)_2$ nanostructure: a potential material for blue emission and acetone sensing

Nibedita Haldar, Tanmoy Mondal, Tanushri Das, Debabrata Sarkar, Mrinal Pal, Asiful H. Seikh and Chandan Kumar Ghosh\*



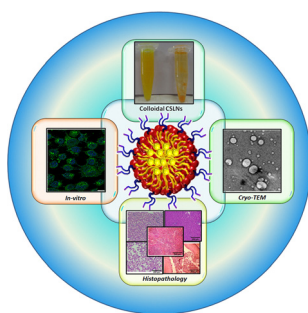
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### Functionalized graphene oxide–antibody conjugate-based electrochemical immunosensors to detect *Opisthorchis viverrini* antigen in urine

Nang Noon Shean Aye, Pornsuda Maraming, Patcharaporn Tippayawat, Sakda Daduang, Anchalee Techasen, Wassana Jammongkan, Paiboon Sithithaworn and Jureerut Daduang\*

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### Selective induction of apoptotic cell death in lung carcinoma cells by curcumin-loaded PEGylated lipid nanoparticles with minimal normal tissue toxicity: *in vitro* and *in vivo* toxicity evaluation by oral delivery

Bijaideep Dutta, Sourav Kumar Das, Mayur Temgire, Jayesh Bellare, K. C. Barick,\* Amit Kumar and P. A. Hassan\*

