

# Materials Advances

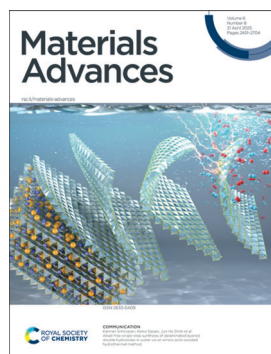
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### Cover

See Kannan Srinivasan, Keiko Sasaki, Jun Ho Shim *et al.*, pp. 2503–2506. Image reproduced by permission of Jun Ho Shim from *Mater. Adv.*, 2025, 6, 2503.



### Inside cover

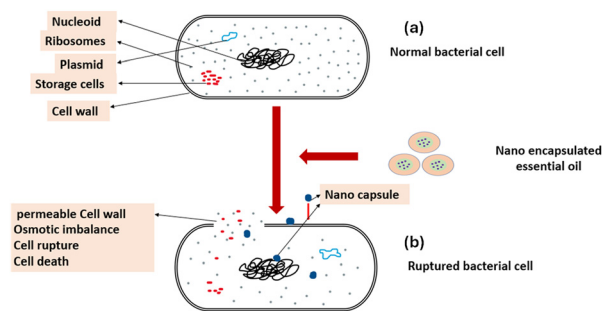
See Chia-Ching Wu *et al.*, pp. 2507–2520. Image reproduced by permission of Chia-Ching Wu from *Mater. Adv.*, 2025, 6, 2507.

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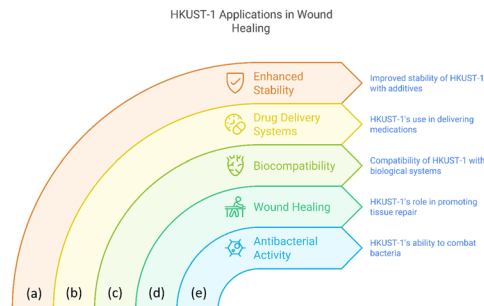
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Dorsa Davoodian, Shirin Khaleghnia Rashkhar and Ali Es-haghi\*



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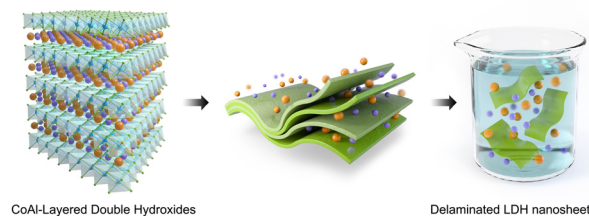


## COMMUNICATION

2503

Alkali-free single-step synthesis of delaminated layered double hydroxides in water *via* an amino acid-assisted hydrothermal method

Paulmanickam Koilraj, Rajathsing Kalusulingam, Kannan Srinivasan,\* Keiko Sasaki\* and Jun Ho Shim\*

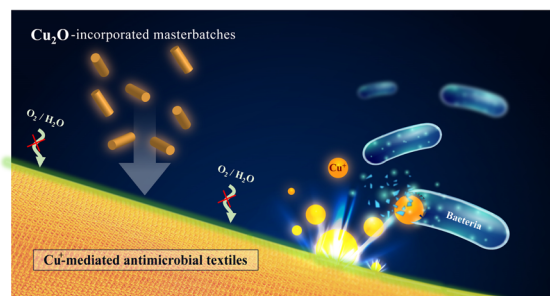


## PAPERS

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## Industrially compatible manufacturing process of wash-durable antimicrobial textiles using cuprous oxide–polymer composites

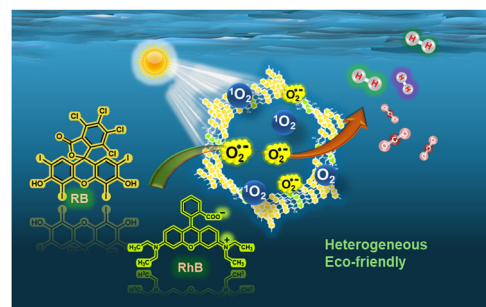
Hung-Tung Chen, Ming-Cai Huang, Yi-Ying Chiang, Yong Chang and Chia-Ching Wu\*



2521

A carbazole-based fully conjugated sp<sup>2</sup>c D–A covalent organic polymer for visible light mediated photocatalytic degradation of rhodamine B and Rose Bengal

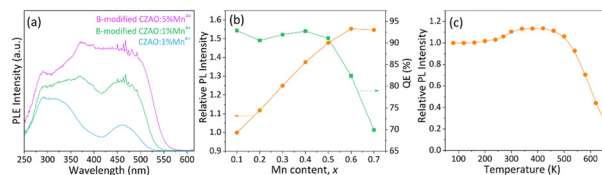
Kamal Verma and K. R. Justin Thomas\*



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High-concentration Mn<sup>4+</sup> doping in boron-modified Ca<sub>14</sub>Zn<sub>6</sub>Al<sub>10</sub>O<sub>35</sub> – based phosphors: decoding superior luminescence performances

Jiquan Huang,\* Ting Lv, Yuqing Lin, Zhonghua Deng, Zhuguang Liu and Wang Guo\*

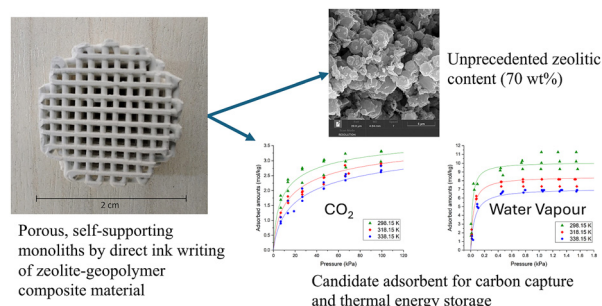




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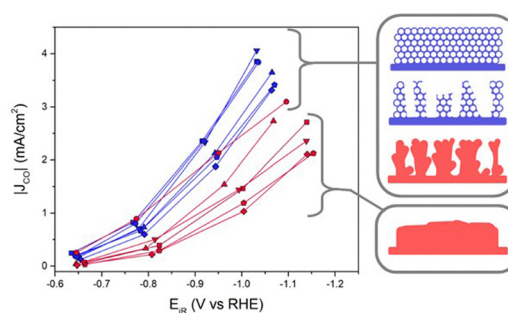
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## Decoupling multiscale morphological effects in templated porous Ag electrodes for electrochemical CO<sub>2</sub> reduction

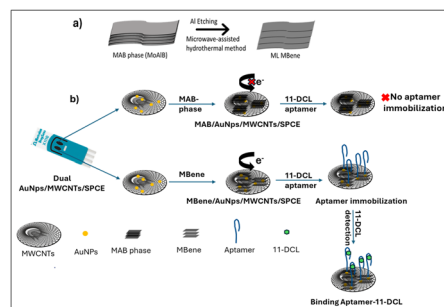
Maaik E. T. Vink-van Ittersum, Karen van den Akker, Peter Ngene and Petra E. de Jongh\*



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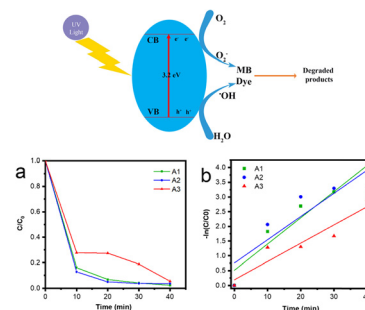
Amina Rhouati, Rawan Ramadan Mohamed, Madhurya Chandel, Karamullah Eisawi, Michael Naguib, Agnieszka Jastrzębska and Mohammed Zourob\*



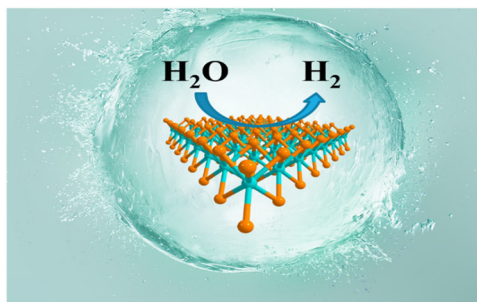
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## Enhanced photocatalytic efficiency of eco-friendly synthesized ZnO for rapid full degradation of methylene blue dye

Mohammad Tashakkori Masuleh, Masood Hasheminasari and Rouholah Ashiri\*



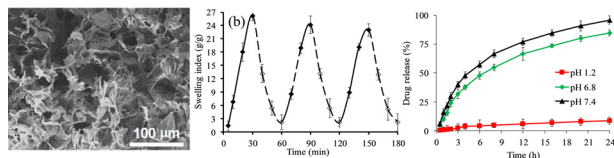
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## 2D monolayer molybdenum(IV) telluride TMD: an efficient electrocatalyst for the hydrogen evolution reaction

Vikash Kumar and Srimanta Pakhira\*

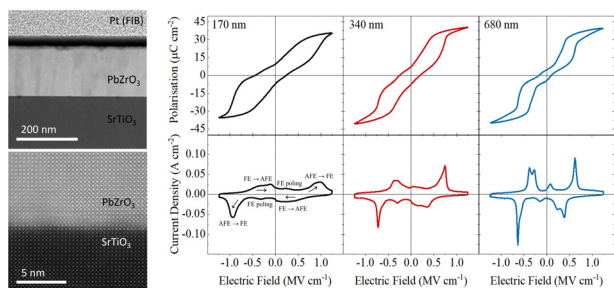
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## A chia (*Salvia hispanica* L.) seed mucilage-based glucoxytan-grafted-acrylic acid hydrogel: a smart material for pH-responsive drug delivery systems

Maria Khatoon, Arshad Ali, Muhammad Ajaz Hussain,\*  
 Muhammad Tahir Haseeb, Gulzar Muhammad,  
 Muhammad Sher, Syed Zajif Hussain, Irshad Hussain and  
 Munawar Iqbal

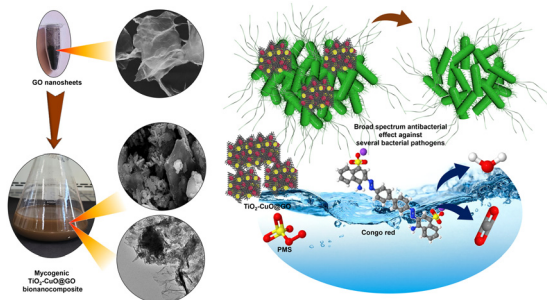
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 Maja Koblar, Andreja Benčan, Torsten Granzow,  
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 Mael Guennou and Sebastjan Glinšek\*

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Basma A. Omran,\* M. O. Abdel-Salam,  
 Hebatullah H. Farghal, Mayyada M. H. El-Sayed\* and  
 Kwang-Hyun Baek\*

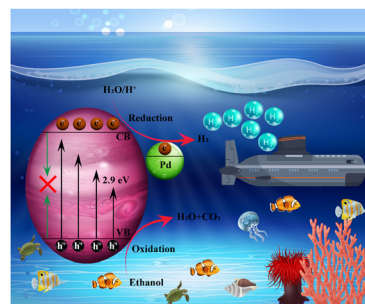


## PAPERS

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### Rectification of charges on *r*-TiO<sub>2</sub> via Pd-cocatalysts and Schottky junctions to produce H<sub>2</sub> for green energy systems

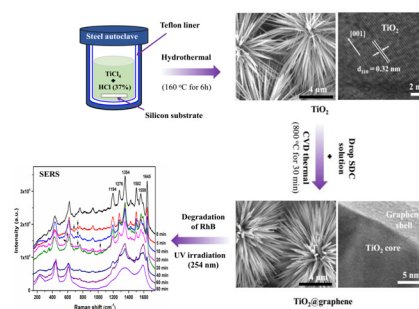
Ejaz Hussain,\* Muhammad Jalil, Mehreen Qurban, Muhammad Zeeshan Abid, Muhammad Asif Khan, Minhas Nazir and Khezina Rafiq\*



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### A new and facile preparation of 3D urchin-like TiO<sub>2</sub>@graphene core@shell SERS substrates for photocatalytic degradation of RhB

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## CORRECTION

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Fan Feng, Dariusz Mitoraj, Ruihao Gong, Dandan Gao, Mohamed M. Elnagar, Rongji Liu, Radim Beranek\* and Carsten Streb\*

