

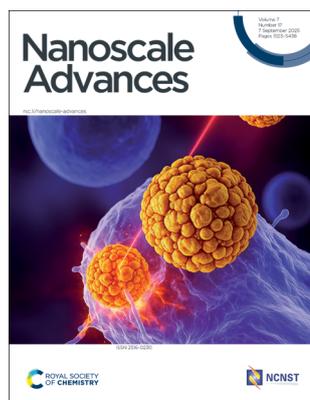
# Nanoscale Advances

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ISSN 2516-0230 CODEN NAADAI 7(17) 5123–5438 (2025)



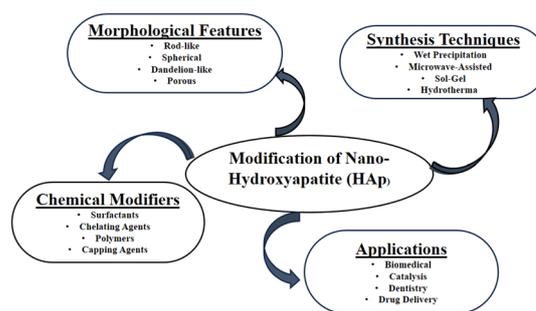
**Cover**  
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## REVIEW

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### Effects of different types of modifiers on structural variation of nano-hydroxyapatite for efficient application

Nahida Sultana Bristy, Md. Kawsar\* and Md. Sahadat Hossain\*

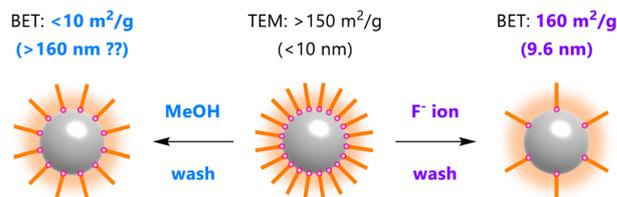


## COMMUNICATION

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### A more accurate estimation of the specific surface area of TiO<sub>2</sub> nanoparticles capped with organic ligands

Masahiko Sagawa, Shohei Yamashita and Yohei Okada\*



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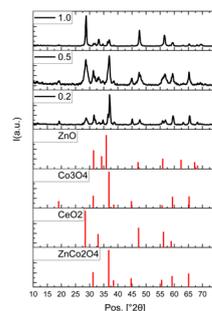
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## ZnCo<sub>(2-x)</sub>Ce<sub>x</sub>O<sub>4</sub> (x=0–1.0 wt%): optimized structural, morphological, dielectric, and magnetic properties for humidity sensing applications

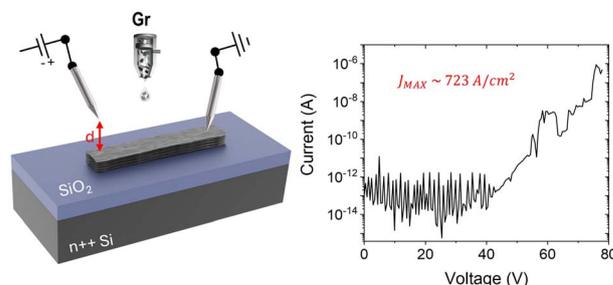
Abdelfattah Darwish, Mohamed I. Farouk, Mohamed Morsy and Amir Elzawy\*



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## Electron field emission of water-based inkjet printed graphene films

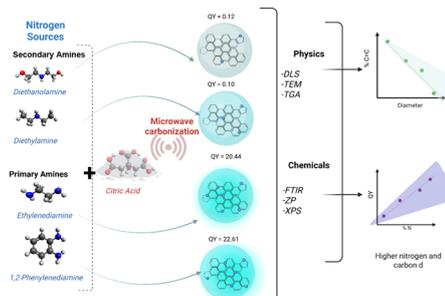
Alessandro Grillo,\* Towseef I. Ahmad, Jingjing Wang, Aniello Pelella, Enver Faella, Daniele Capista, Maurizio Passacantando, Antonio Di Bartolomeo and Cinzia Casiraghi\*



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## Effect of the chemical nature of the nitrogen source on the physicochemical and optoelectronic properties of carbon quantum dots (CQDs)

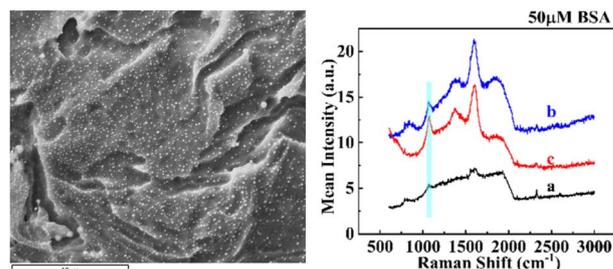
Stephania Rosales,\* Karol Zapata, Oscar E. Medina, Benjamin A. Rojano, Esteban A. Taborda, Farid B. Cortés, Agustín F. Pérez-Cadenas, E. Bailón-García, Francisco Carrasco-Marín and Camilo A. Franco\*



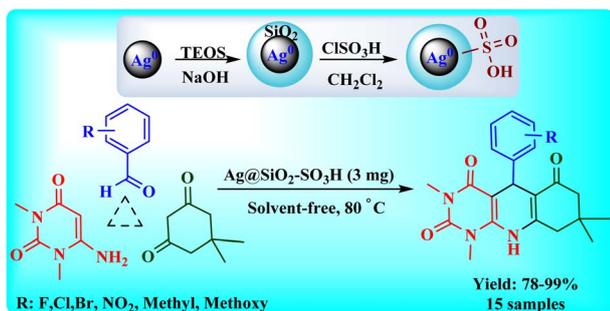
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## UV-SERS monitoring of plasmonic photodegradation of biomolecules on aluminum platforms decorated with rhodium nanoparticles

Yanqiu Zou, Luca Mattarozzi, Huaizhou Jin, Qifei Ma, Sandro Cattarin, Shukun Weng, Ali Douaki, German Lanzavecchia, Karol Kořataj, Nicco Corduri, Ben Johns, Nicolò Maccaferri, Guillermo Acuna, Zhenrong Zheng,\* Shangzhong Jin\* and Denis Garoli\*



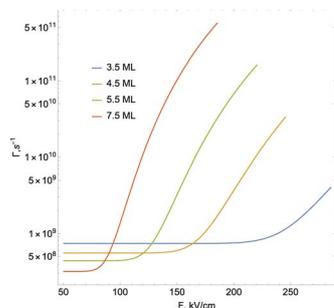
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### Sulfonic acid grafted on silica-shell silver nanoparticles as a novel catalyst for the preparation of pyrimido[4,5-*b*]quinolines

Seyede Elaheh Ghafouri, Hamid Goudarziafshar\* and Ahmad Reza Moosavi-Zare\*

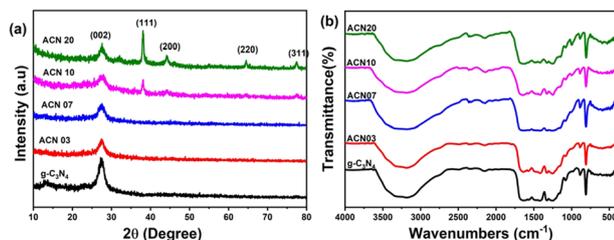
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### Influence of an in-plane uniform electric field on 2D exciton states in CdSe nanoplatelets

Davit A. Baghdasaryan, Volodya A. Harutyunyan, Hayk A. Sarkisyan,\* Lyudvig S. Petrosyan and Tigran V. Shahbazyan

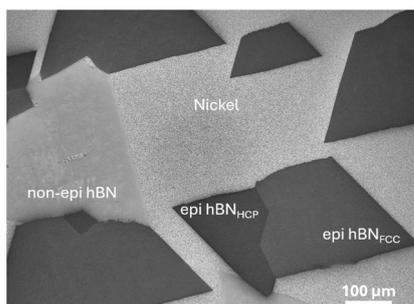
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### Environmentally friendly fabrication of Ag nanoparticles decorated on g-C<sub>3</sub>N<sub>4</sub> for enhancing the photodegradation of RhB

Lan Anh Luu Thi, Quoc Tung Trieu, Thi Hue Trinh, Tuyet Mai Nguyen Thi, Cong Tu Nguyen, Tran Thanh Tung and Nguyen Xuan Sang\*

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### Fast crystallographic texture mapping of atomically thin hBN films on Ni(111) using secondary electron contrast

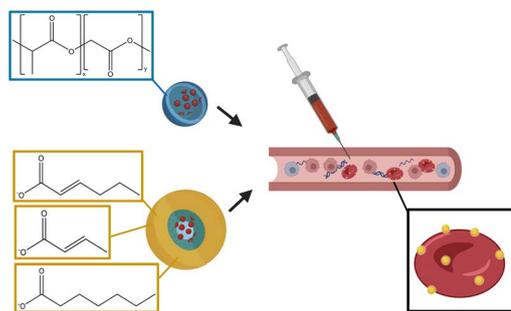
Vitaliy Babenko, Se Hun Joo, Anastasia P. Krief, Evan Tillotson, Sarah J. Haigh, Chris J. Pickard and Stephan Hofmann\*



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### Insights into the physicochemical interactions of ionic liquid-coated polymeric nanoparticles with red blood cells

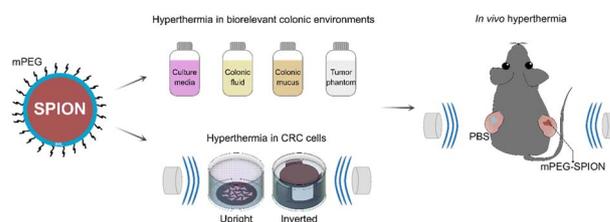
Christine M. Hamadani, George R. Taylor, Amber Cecil, Claylee M. Chism, Emilia Huff, Gaya Dasanayake, Jaylon Everett, Amandeep Kaur, George W. Monroe, Mira Patel, Elisa Pierpaoli and Eden E. L. Tanner\*



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### Flame-made nanoparticles for magnetic hyperthermia and MRI in colorectal cancer theranostics

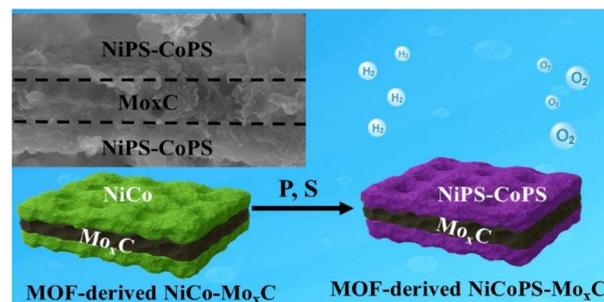
Yuming Zhang, Christina Paraskeva, Qianying Chen, Anano Maisuradze, Shaquib Rahman Ansari, Tapati Sarkar, Vasiliki Koliarakis and Alexandra Teleki\*



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### Molybdenum carbide supported metal-organic framework-derived Ni, Co phosphosulphide heterostructures as efficient OER and HER catalysts

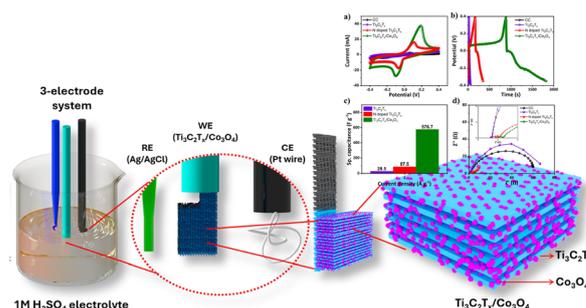
Muhammad Ahsan Naseeb, Maida Murtaza, Komal Farooq, Waqas Ali Shah\* and Amir Waseem\*



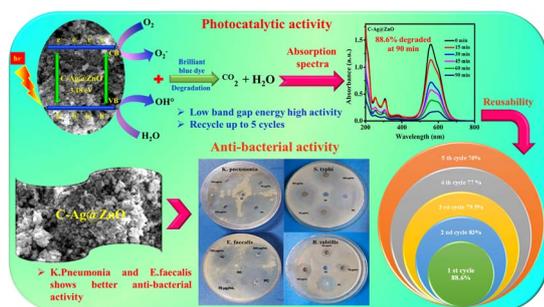
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### Electrochemical investigation of $Ti_3C_2T_x$ (MXene), $N-Ti_3C_2T_x$ , and the $Ti_3C_2T_x/Co_3O_4$ hybrid composite deposited on carbon cloth for use as anode materials in flexible supercapacitors

Lan Nguyen, Adnan Ali,\* Brahim Aissa, Sosiawati Teke, Roshan Mangal Bhattarai, Avik Denra, Oai Quoc Vu and Young Sun Mok\*



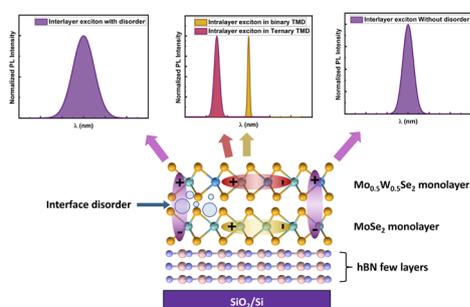
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## Novel self-assembled valine-derived carbon-supported Ag@ZnO optical materials for enhanced photodegradation and anti-bacterial activity

P. R. Nithiasri, J. Aarthi and B. Karthikeyan\*

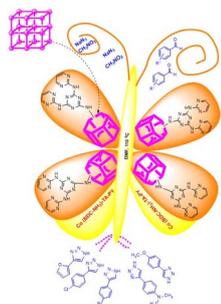
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## Influence of interface dielectric disorder on interlayer excitons in mixed binary/ternary TMD heterostructures

Mohammed Adel Aly, Emmanuel Oghenevo Enakerakpor, Hilary Masenda and Martin Koch\*

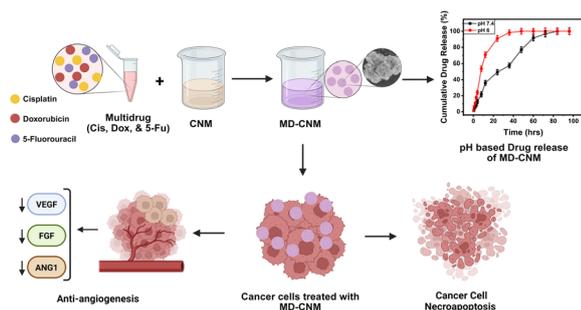
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## Triazoles synthesis using nanocatalyst triazine-pyrimidine-modified cobalt-based metal-organic frameworks

Mahtab Amirian, Ramin Ghorbani-Vaghei\* and Sedigheh Alavinia

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## Cobalt-nickel metal-organic frameworks (CNMs) as drug delivery agents for triple-negative breast cancer

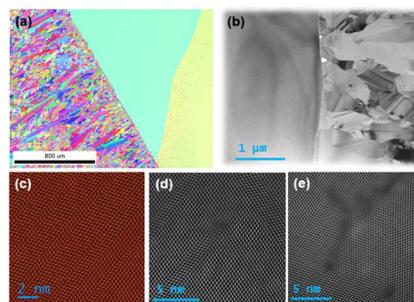
Shaik Sameer Basha, Abhishek Sasmal, Subastri Ariraman, Mukilarasi B, Thilak Raj, Vimalraj Selvaraj, A. Arockiarajan and Swathi Sudhakar\*



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### Atomic-level characterization of crystal defects in a polycrystalline silicon-diamond structure

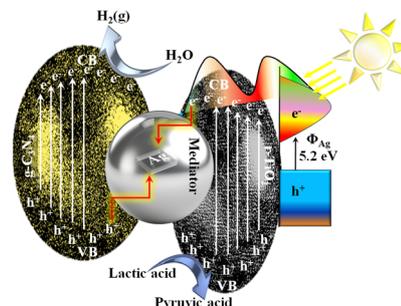
Yuxuan Yang, Kaige Chen, Xinlu Xue, Tong Song, Zhihao Zhao, Xianghong Zhou, Yang Zhang,\* Rong Qin,\* Fei Li, Xiangdong Ding, Jun Sun and Haijun Wu\*



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### Coupling plasmonic and electron-mediated effects in $\text{Ag}_x\text{@r-TiO}_2/\text{g-C}_3\text{N}_4$ heterostructures for enhanced catalytic hydrogen generation

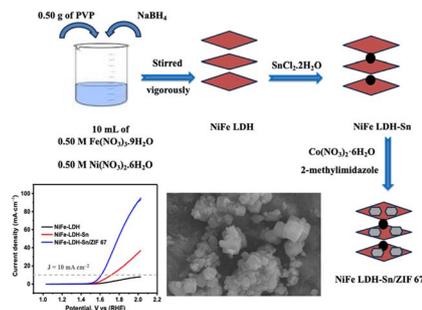
Kashaf Ul Sahar, Khezina Rafiq,\* Muhammad Zeeshan Abid, Ubaid Ur Rehman, Talib K. Ibrahim, Abdul Rauf and Ejaz Hussain\*



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### Synergistic design of ZIF-67/Sn-doped NiFe-LDH for enhanced oxygen evolution reaction

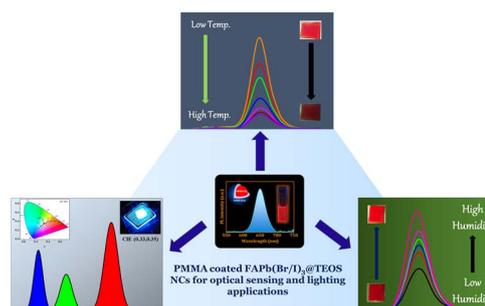
Rana Ahmed, Abeer Enaiet Allah, Ahmed A. Farghali, Waleed M. A. El Rouby and Abdalla Abdelwahab\*



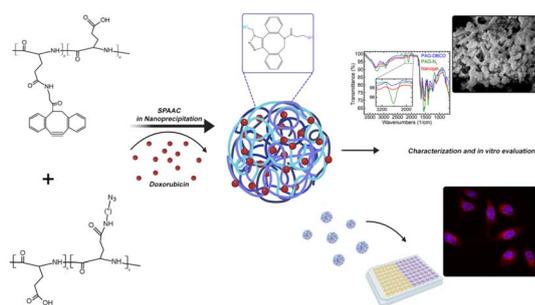
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### Double-encapsulated red-emitting formamidinium lead halide perovskite nanocrystals for fluorescence sensing and lighting applications

Kajol Sahoo, Latika Juneja, Ramakanta Naik and Saikat Bhaumik\*



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### Fast assembly of 'clickable nanogels' for drug delivery

Pasquale Mastella,\* Aldo Moscardini, Andrea Guerrini and Stefano Luin

## EXPRESSION OF CONCERN

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### Expression of concern: Flavin-adenine-dinucleotide gold complex nanoparticles: chemical modeling design, physico-chemical assessment and perspectives in nanomedicine

Celia Arib, Nadia Bouchemal, Maria Barile, Didier Paleni, Nadia Djaker, Nathalie Dupont and Jolanda Spadavecchia\*

