

# Materials Advances

An open access journal publishing across the breadth of materials science

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See Huancai Lin, Liping Wu et al., pp. 4110–4118.  
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### Inside cover

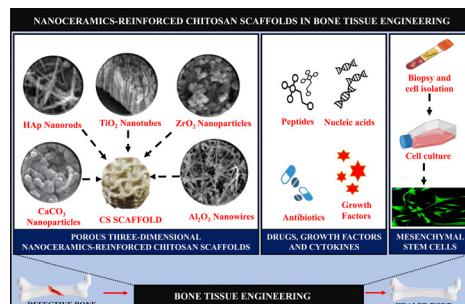
See Chitra Gurnani et al., pp. 4119–4128.  
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### Nanoceramics-reinforced chitosan scaffolds in bone tissue engineering

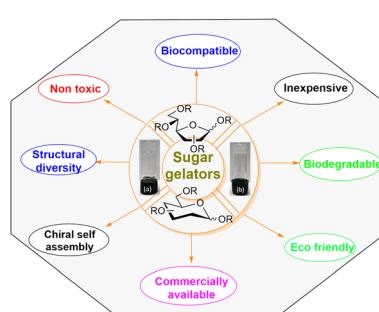
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Rajdeep Tyagi, Kavita Singh, Nitin Srivastava\* and Ram Sagar\*



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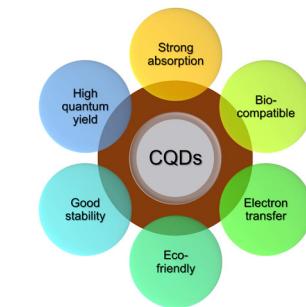


## REVIEWS

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**A review on plant derived carbon quantum dots for bio-imaging**

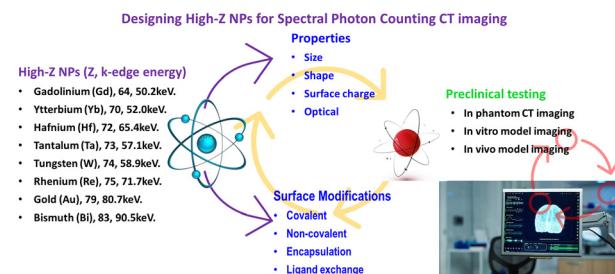
Ashok Kumar S., Dheeraj Kumar M., Mowsam Saikia, Renuga Devi N. and Subramania A.\*



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**High atomic number nanoparticles to enhance spectral CT imaging aspects**

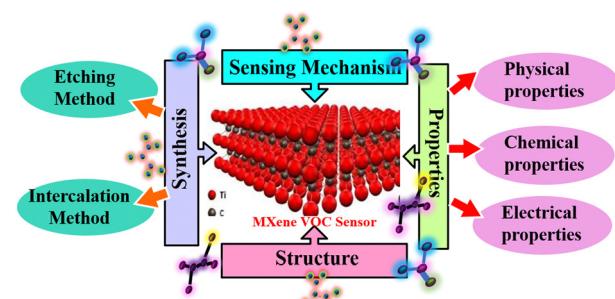
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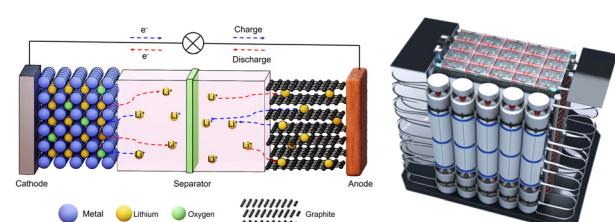
Monu Gupta, Arpit Verma, Priyanka Chaudhary and B. C. Yadav\*



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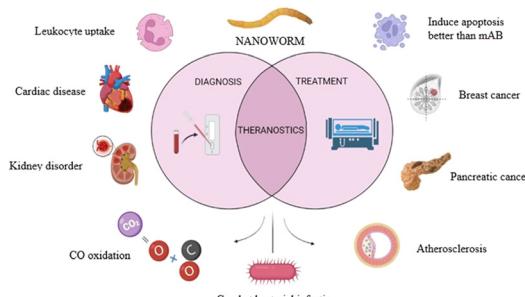
**Research progress in liquid cooling technologies to enhance the thermal management of LIBs**

Rui Zhou, Yumei Chen, Jiawen Zhang and Pan Guo\*



## REVIEWS

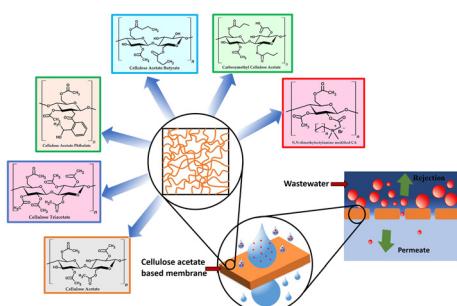
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Kadambari Borse and Pravin Shende\*

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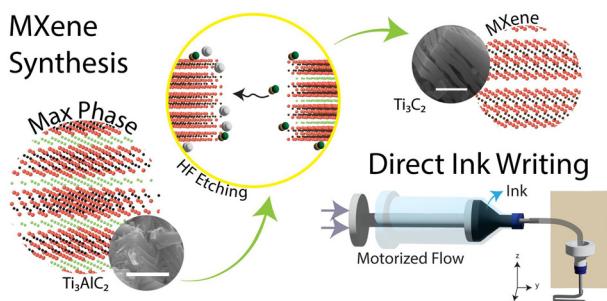


## Cellulose acetate-based membrane for wastewater treatment—A state-of-the-art review

Md. Didarul Islam, Foyez Jalal Uddin, Taslim Ur Rashid\* and Mohammad Shahruzzaman\*

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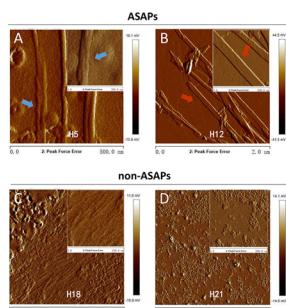


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Dongru Chen, Tingyu Wang, Yiyi Huang, Yucong Chen, Huancui Lin\* and Liping Wu\*

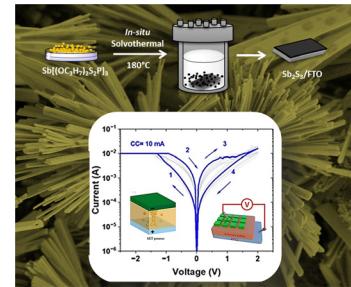


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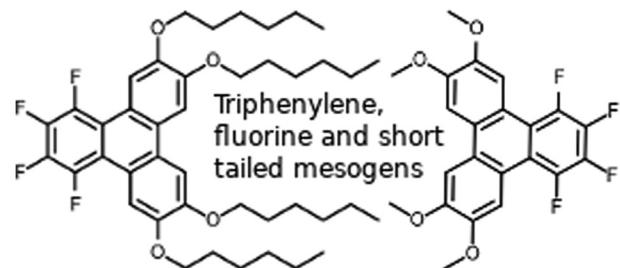
Sayali Shrishail Harke, Tongjun Zhang, Ruomeng Huang and Chitra Gurnani\*



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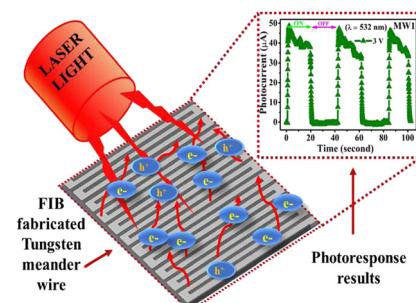
Parikshit Guragain,\* Mitchell Powers, John Portman, Brett Ellman and Robert J. Twieg



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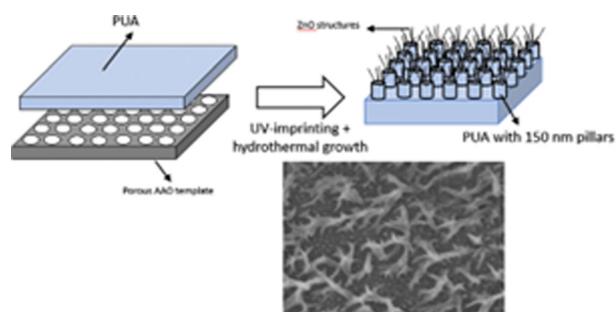
Abhishek Kumar, Alka Sharma, Animesh Pandey, M. P. Saravanan and Sudhir Husale\*



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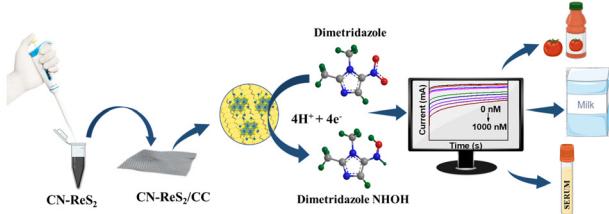
**Antibacterial surface based on hierarchical polyurethane acrylate/zinc oxide structures**

Sruthi Venugopal Oopath, Akesh Babu Kakarla, Ing Kong, Thanh Tien Nguyen, Vi Khanh Truong\* and Avinash Baji\*



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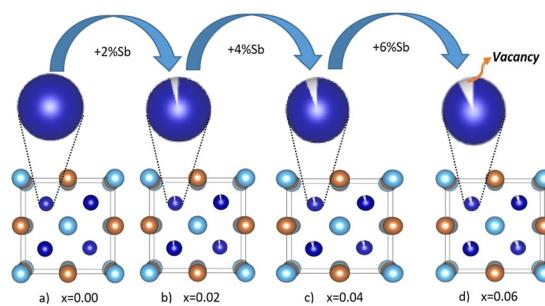
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M. Mufeeda, Pushpalatha V. Vaishag, Menon Ankitha and P. Abdul Rasheed\*

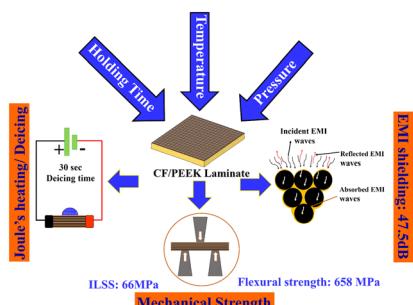
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S. Mahakal, Diptasikha Das, Pintu Singha, Aritra Banerjee, S. C. Das, Santanu K. Maiti, S. Assa Aravindh and K. Malik\*

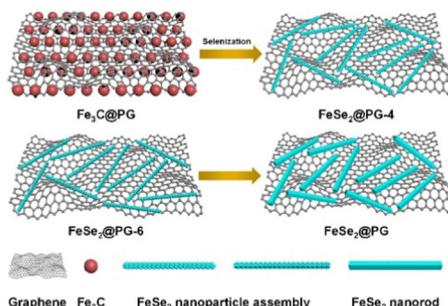
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Rishi Raj, Sampath Parasuram, S. Kumar and Suryasarathi Bose\*

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**Confined oriented growth of FeSe<sub>2</sub> on a porous graphene film as a binder-free anode for high-rate lithium-ion batteries**

Xiaoting Zhang, Jiaxiu Diao, Jinghao Qiao, Yuhui Wen, Hongkun Zhang\* and Rui Wang\*

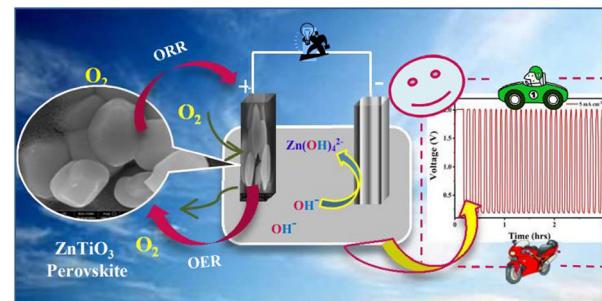


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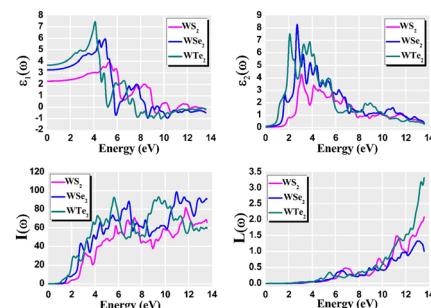
Upasana Bhardwaj, Aditi Sharma and H. S. Kushwaha\*



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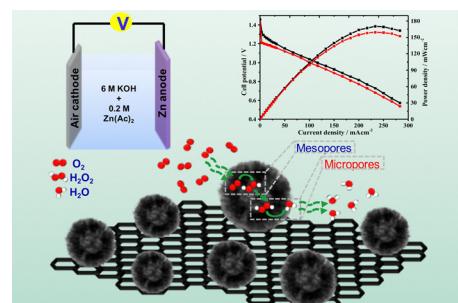
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## Dendritic hollow nitrogen-doped carbon nanospheres for oxygen reduction at primary zinc–air batteries

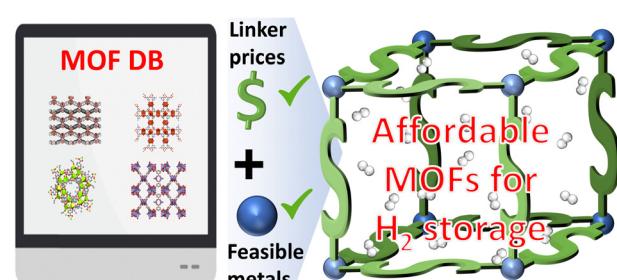
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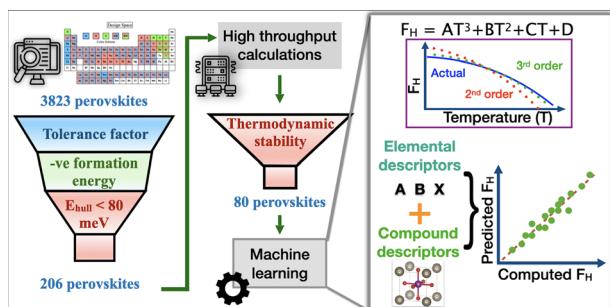
## A database to select affordable MOFs for volumetric hydrogen cryoabsorption considering the cost of their linkers

Jose A. Villajos,\* Martin Bienert, Nikita Gugin, Franziska Emmerling and Michael Maiwald



## PAPERS

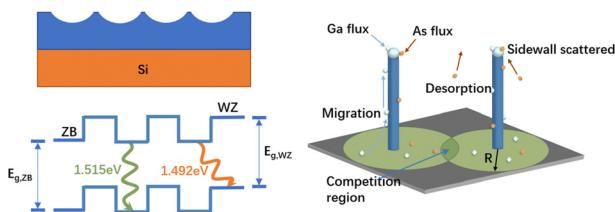
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Krishnaraj Kundavu, Suman Mondal and Amrita Bhattacharya\*

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Shan Wang, Haolin Li, Jilong Tang, Yubin Kang, Xiaohua Wang,\* Rui Chen\* and Zhipeng Wei\*

