

Materials Advances

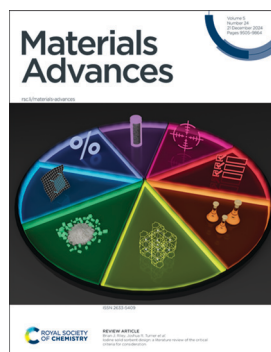
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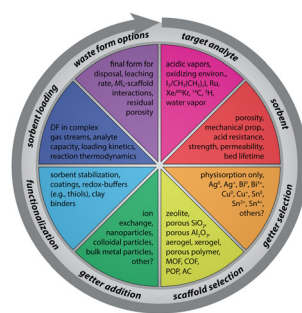
See Brian J. Riley,
Joshua R. Turner *et al.*,
pp. 9515–9547.
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REVIEWS

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Iodine solid sorbent design: a literature review of the critical criteria for consideration

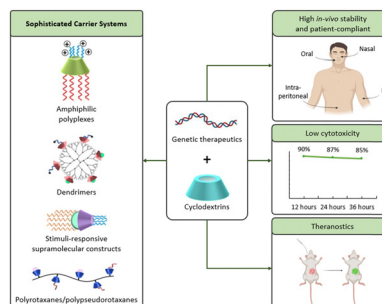
Brian J. Riley,* Joshua R. Turner,* Joanna McFarlane,
Saehwa Chong, Krista Carlson and Josef Matyáš



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Active transfection of genetic materials using cyclodextrin-anchored nanovectors

Amey Revdekar, Bhagyashree V. Salvi and
Pravin Shende*



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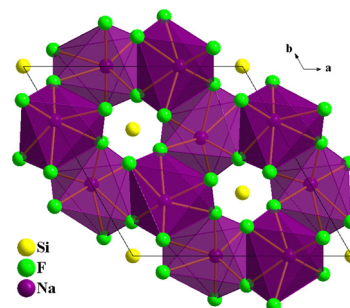
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COMMUNICATION

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A deep-ultraviolet nonlinear-optical material with a wide bandgap and large static dielectric polarizability coefficient: $\text{Na}_6\text{Si}_3\text{F}_{18}$

Changcheng Tang,* Xingxing Jiang, Xiuyu Wu, Yuechen Gong, Chao Yang, Ruixin Guo, Panpan Wang, Yongming Huang, Dakun Zhou, Huaiming Chen and Zheshuai Lin

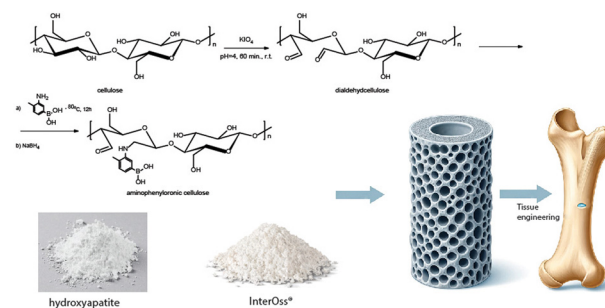


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Integrating hydroxyapatite and bovine bone mineral into cellulose–collagen matrices for enhanced osteogenesis

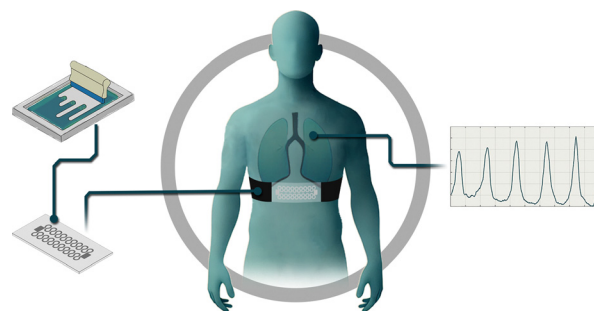
Tudor Pinteala, Paul-Dan Sirbu, Narcis Anghel,* Irina Rosca, Geanina Voicu, Manuela Calin and Iuliana Spiridon



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Screen-printed wearable sensors for continuous respiratory rate monitoring: fabrication, clinical evaluation, and point-of-care potential

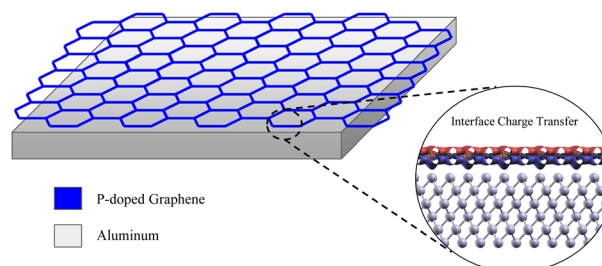
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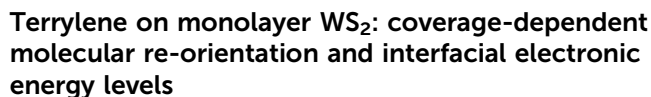


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Reinforcement of aluminum metal matrix composites through graphene and graphene-like monolayers: a first-principles study

Ellie Zhang* and Xuan Luo

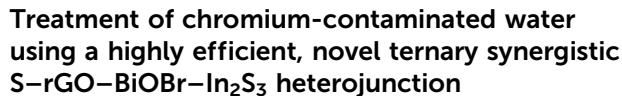




Qiang Wang, Sifan You, Björn Kobin, Patrick Amsalem,
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Stefan Hecht, Lifeng Chi and Norbert Koch*

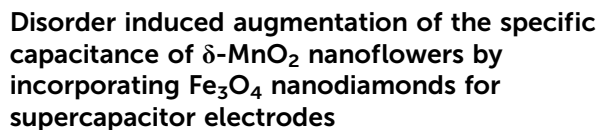
Enhancing lithium-ion conductivity: impact of hausmannite nanofiller on PVDF–HFP/PEG blend nanocomposite polymer electrolytes

Khizar Hayat Khan, Aneesa Zafar, Haroon Rashid,
Iftikhar Ahmad, Gul Shahzada Khan and Hazrat Hussain*



Satyanjib Sahoo, Naresh Kumar Sahoo,*
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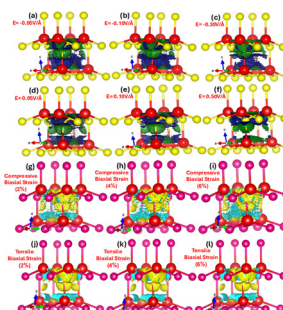


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Electric field and strain mediated zinc blende ZnSe: exploring its potential as a controlled stimulus responsive optical and optoelectronic material

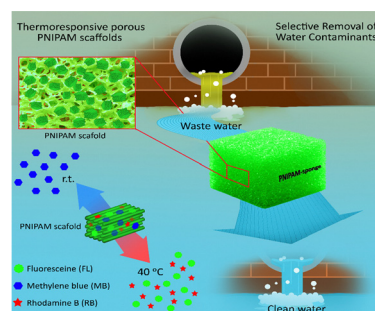
Fakhar E. Alam, Basharat Ali and Suneela Arif*



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Thermoresponsive scaffolds fabricated using covalent organic frameworks for the selective removal of water contaminants

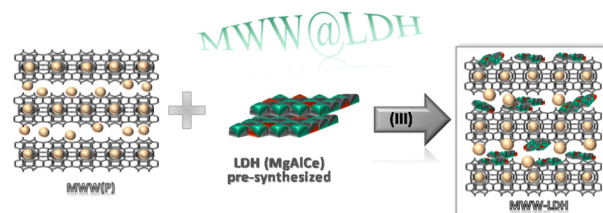
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Design and characterization of multi-component lamellar materials based on MWW-type zeolitic layers and metal oxide sub-domains

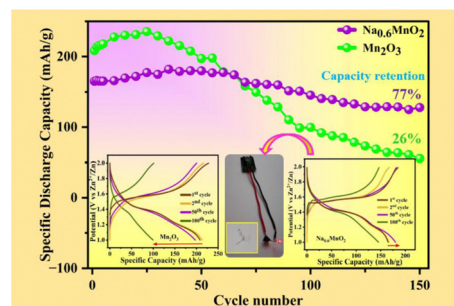
Cristina Esteban, Alexandra Velty* and Urbano Díaz*



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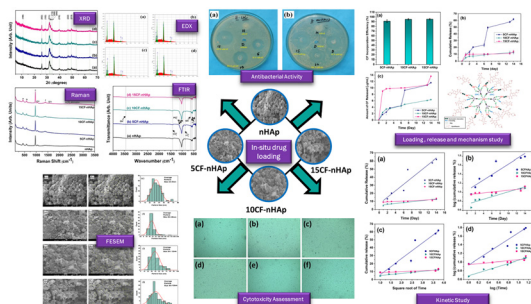
Enhancing the cycling performance of manganese oxides through pre-sodiation for aqueous Zn-ion batteries

Anjeline Williams and Prasanth Kumar Nayak*



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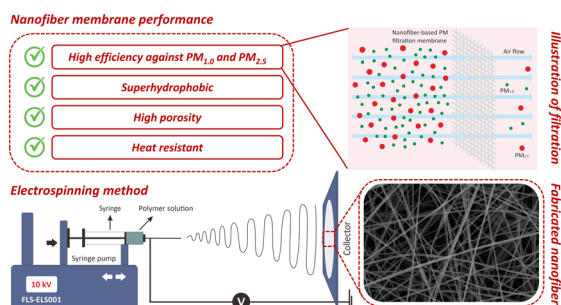
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Poultry waste derived *in situ* drug loaded nano-hydroxyapatite bio-ceramic material for osteomyelitis treatment: *in vitro* drug release and biocompatibility studies

Mashrafi Bin Mobarak, Fariha Chowdhury, Md. Najem Uddin, Md. Sahadat Hossain, Umme Sarmeen Akhtar, Nazmul Islam Tanvir, Md Aftab Ali Shaikh* and Samina Ahmed*

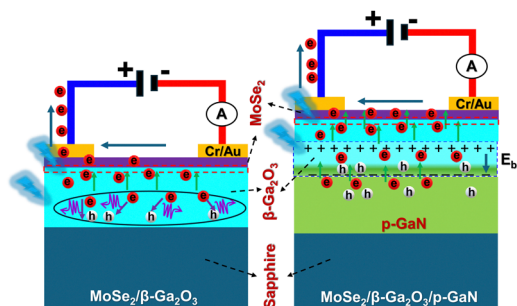
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A superhydrophobic and heat-resistant PAN/PSU/PTFE composite nanofiber membrane for high-efficiency PM_{1.0} and PM_{2.5} filtration

Rizky Aflaha, Chlara Naren Maharani, Linda Ardita Putri, Yulian Dwi Prabowo, Iman Rahman, Tarmizi Taher, Aditya Rianjanu, Roto Roto, Hutomo Suryo Wasisto and Kuwat Triyana*

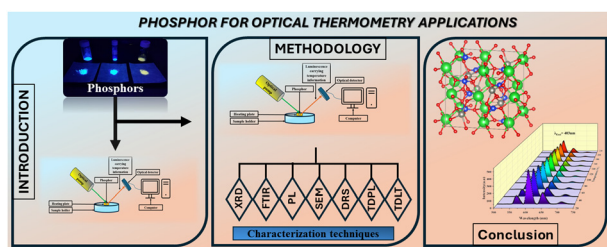
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Unveiling the synergic potential of dual junction MoSe₂/n-Ga₂O₃/p-GaN heterojunctions for ultra-broadband photodetection

Vishnu Aggarwal, Manish Kumar, Rahul Kumar, Sudhanshu Gautam, Aditya Yadav, Shikha Shrivastava, Anjana Dogra, Govind Gupta, Sumeet Walia and Sunil Singh Kushvaha*

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Structural, thermal, and optical spectroscopic studies of Sm³⁺-doped Ba₂ZnSi₂O₇ phosphors for optical thermometry applications

Tejas, A. Princy, S. Masilla Moses Kennedy, Vikash Mishra, M. I. Sayyed, Taha A. Hanafy and Sudha D. Kamath*

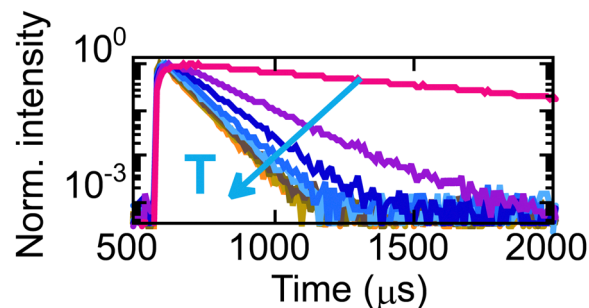


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Promising single crystal host for bulk scintillators: luminescence and energy migration in (Gd,Y)AlO₃

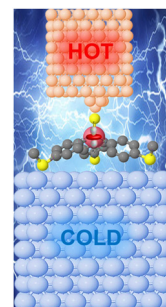
Monika Kotyková,* Romana Kučerková, Alena Beitlerová, Vladimír Babin, Vítězslav Jarý, Jan Touš, Jan Polák, Karel Blažek and Martin Nikl



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Thermoelectric signature of d-orbitals in tripod-based molecular junctions

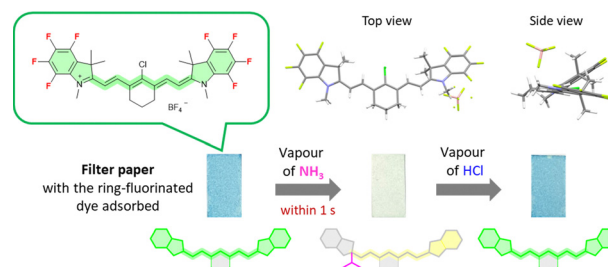
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A ring-fluorinated heptamethine cyanine dye: synthesis, photophysical properties, and vapochromic properties in response to ammonia

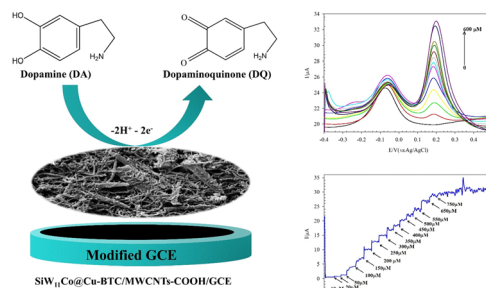
Shouhei Ajioka, Yuto Hagiyama, Yuki Uehashi, Tomohiro Agou, Yasuhiro Kubota, Toshiyasu Inuzuka and Kazumasa Funabiki*



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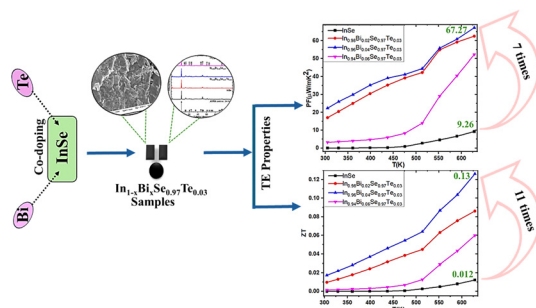
A novel synthesis of inorganic–organic nanohybrid based on SiW₁₁Co@Cu–BTC/MWCNTs–COOH for electrocatalytic oxidation of dopamine

Zahra Sadeghi and Somayeh Dianat*



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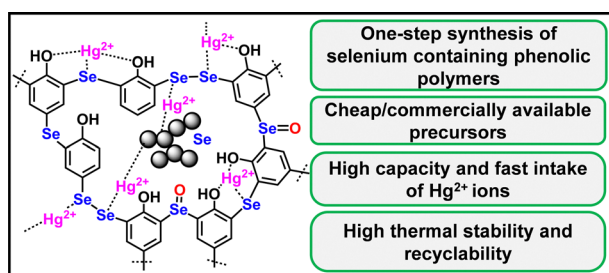
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Bismuth and tellurium co-doping: a route to improve thermoelectric efficiency in InSe polycrystals

Manasa R. Shankar, A. N. Prabhu* and Tulika Srivastava

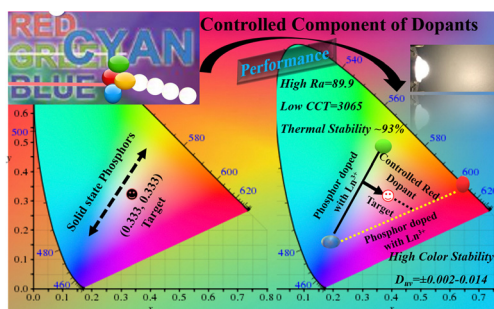
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Arylselanyl motifs in hierarchically structured mesoporous phenolic polymers: efficient adsorption sites for Hg²⁺ ions

Vishnu Selladurai and Selvakumar Karuthapandi*

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White light emission and superior color stability in a single-component host with exceptional eminent color rendering and theoretical calculations on D_{uv} for color quality

Wasim Ullah Khan, Waheed Ullah Khan, Haris Zaman, Ayaz Mahsud, Dilfaraz Khan,* Salim Ullah Khan, Shuakat Khan and Yueli Zhang*

CORRECTION

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Correction: A perspective on contact-electro-catalysis based on frontier molecular orbitals

Ziming Wang, Xuanli Dong, Fu-Jie Lv and Wei Tang*

