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See Ha M. Nguyen *et al.*, pp. 9364–9374.
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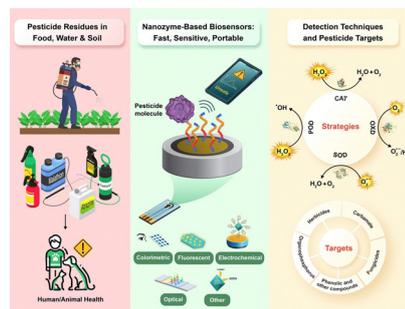
See Ravi Kumar Pujala *et al.*, pp. 9391–9406.
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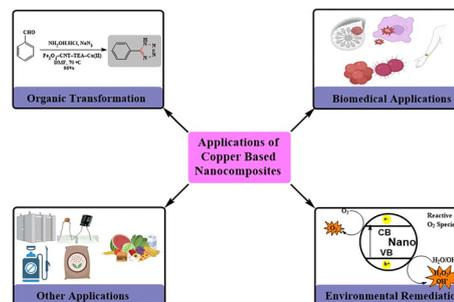
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Khushboo Aggarwal, Anamika Brahma, Nisha, Yashaswi Sharma, Priyanshu Rajput, Bhoomi Sachdeva, Aarushi Singh,* Ramesh Chandra* and Snigdha Singh*



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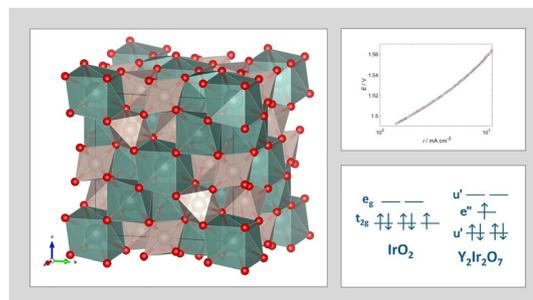
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REVIEWS

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A review of rare earth ruthenate pyrochlores as OER electrocatalysts in acidic media

Megan Heath,* Svein Sunde and Frode Seland

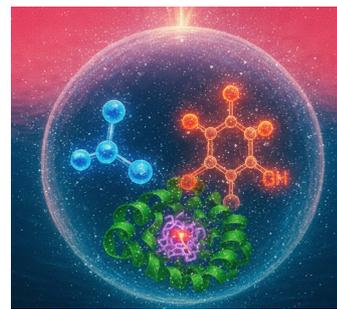


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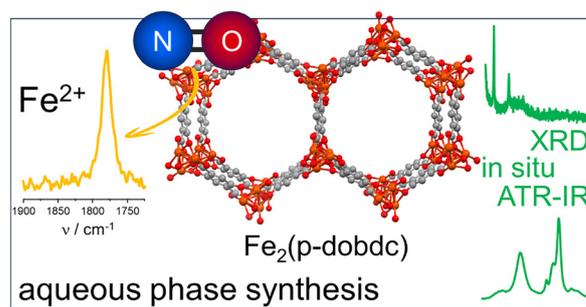
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Rapid, facile synthesis of Fe^{2+} -MOFs in water at ambient conditions

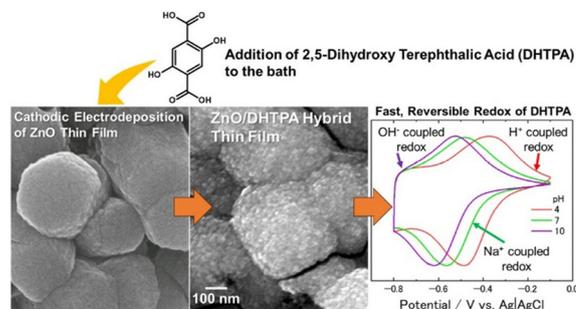
Iliia Kochetygov* and Davide Ferri*



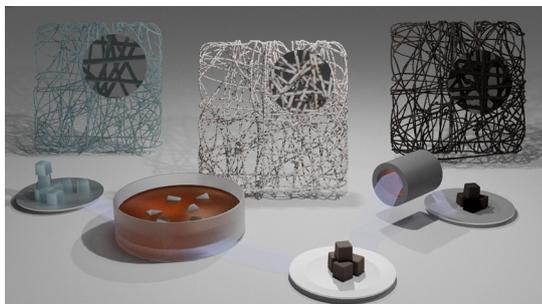
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Satoshi Chubachi, Lauren Aheran, Yuya Harada, Tensho Nakamura, David Punihaole and Tsukasa Yoshida*



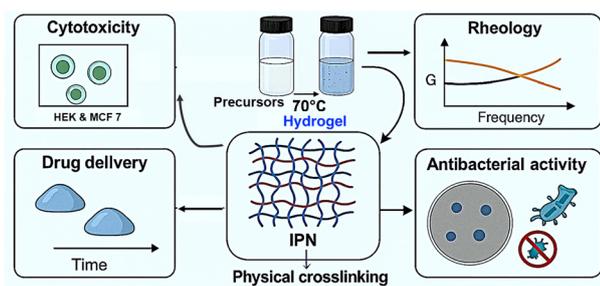
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Multifunctional flexible carbon aerogels based on sustainable bacterial cellulose

Seeni Meera Kamal Mohamed,* Benjamin Ignatzi, Rebekka Probst, Beruktayet Fekadu, Max Zinke, Lennart Barth, Marina Schwan, Marion Bartsch and Barbara Milow

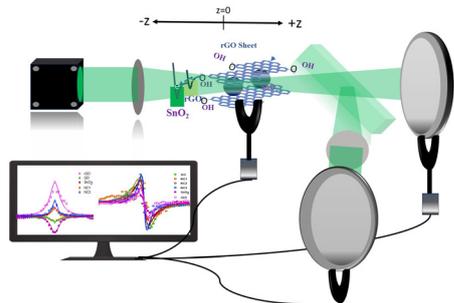
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Physically crosslinked poly(methacrylic acid-co-acrylamide)/gelatin-chitosan (poly-MAGC) interpenetrating polymer network hydrogels for drug delivery and antibacterial activity

Anilkumar Yamala, Rathangpani Pandit, Ravi Kumar Kanaparthi, Prasanna Katti, Sivakumar Vallabhapurapu* and Ravi Kumar Pujala*

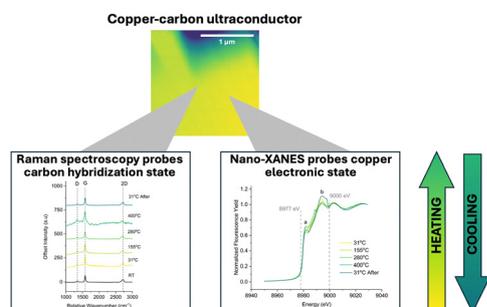
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Tuning the nonlinear optical properties of SnO₂-rGO nanocomposites: exploration using conventional Z-scan and thermal lensing models

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Investigating the mechanism of copper-carbon interactions in ultraconductor materials *via in situ* thermal X-ray and Raman spectroscopy

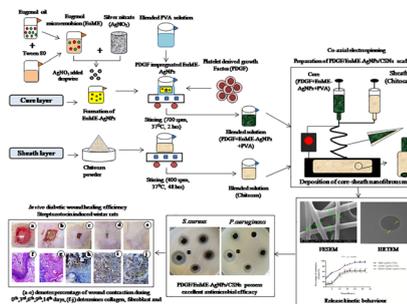
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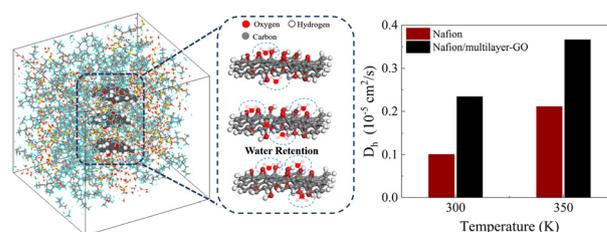
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Enhanced hydronium ion diffusion in proton exchange membranes reinforced with multilayer graphene oxide: new insights into water retention and ion mobility using molecular dynamics simulation

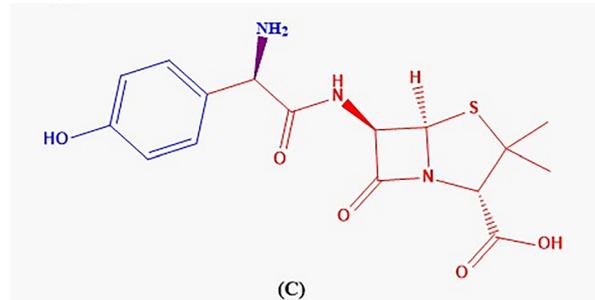
Sachin Kumar Varshney and Poornesh Kumar Koorata*



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Amoxicillin antibiotic with potential anticancer and antidiabetic activity: acetaldehyde–amoxicillin Schiff base and its vanadyl complex with DFT and docking investigation

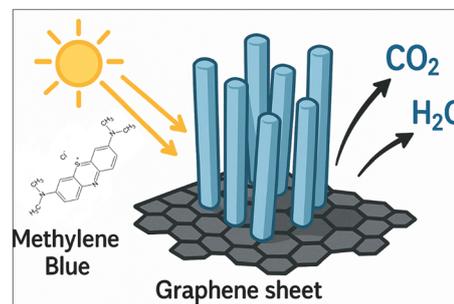
Hadeel M. Banbela, Reema H. Aldahiri, Amrajaa S. Abubakr, Magda F. Mohamed and Safaa S. Hassan*



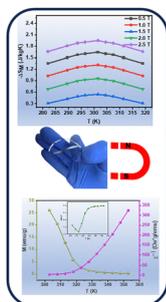
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Laura Khamkhash, Alima Bazanova, Kuralay Rustembekkyzy, Bachir Yaou Balarabe and Timur Sh. Atabaev*



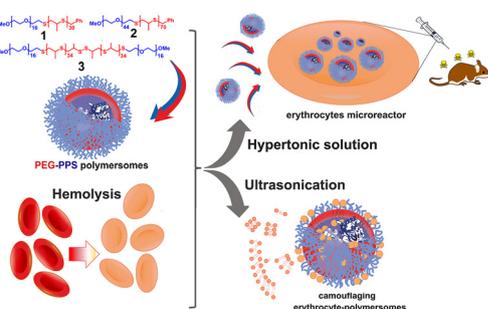
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Anjana Vinod, D. Arvindha Babu, Manivel Raja Muthuvel, S. Srinath and W. Madhuri*

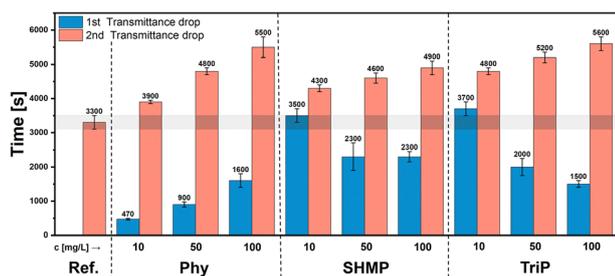
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Enzyme-containing double layer polymersomes coated by erythrocytes as a biomimetic nanoscavengers for *in vivo* protection from toxicants

Tatiana Pashirova,* Dmitry Tatarinov, Zukhra Shaihutdinova, Albina Malanyeva, Olga Vasileva, Alexey Rogov, Vladimir Evtjugin, Andrey Nemtarev, Aida Gabdoulkhakova, Eric Chabrière, Pauline Jacquet, David Daudé and Patrick Masson*

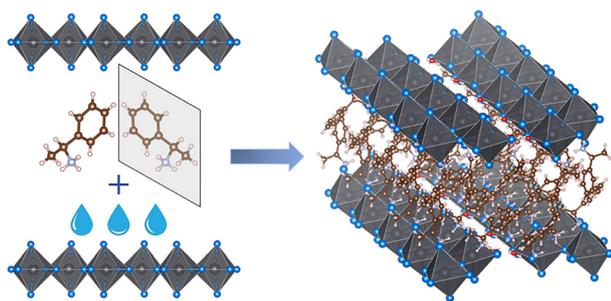
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Yannick H. Emminger, Annika Bastian, Luca Ladner, Tobias Steiner and Cristina Ruiz-Agudo*

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Chirality-driven dimensionality and broadband emission in lead bromide perovskites

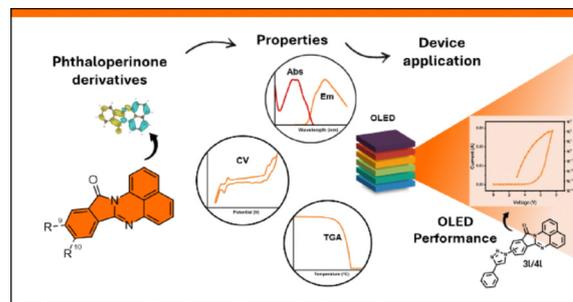
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A thorough and comprehensive study of novel phthaloperinone derivatives: from synthesis and property evaluation to applications in light-emitting diodes

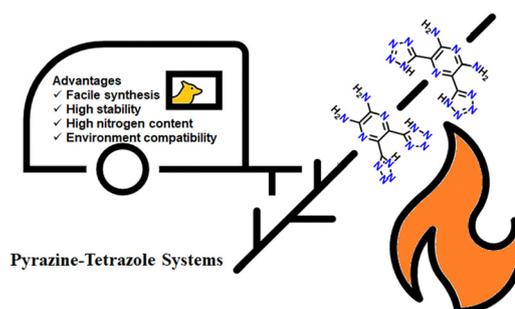
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Design and synthesis of thermally robust pyrazine–tetrazole hybrids as high-nitrogen energetic materials

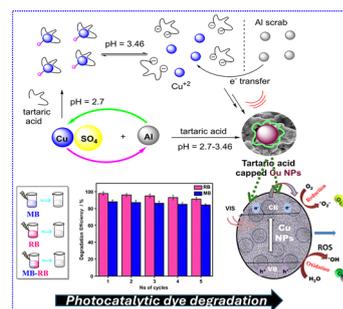
Jatinder Singh, Richard J. Staples and Jean'ne M. Shreeve*



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Redox-driven synthesis of stable copper nanoparticles *via* metal displacement and their application in organic dye degradation

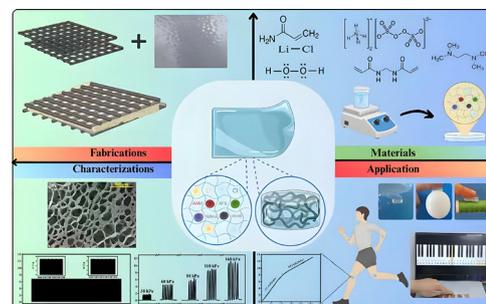
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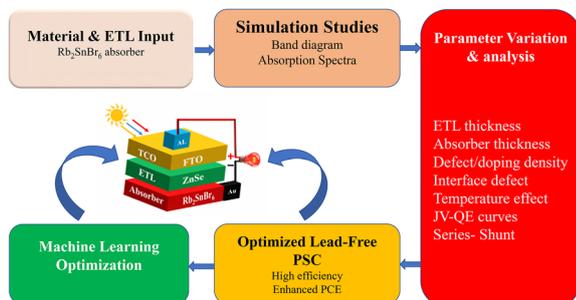
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Flexible fabric-integrated PAAm–LiCl hydrogel pressure sensor for wearable and soft robotics applications

Liza Liza, Md Homaune Kabir, Mohashin Kabir, Md Nuramurtada Rafi, Xu Ruidong, Md Ashikur Rahman, Tarikul Islam* and Tian Mingwei*



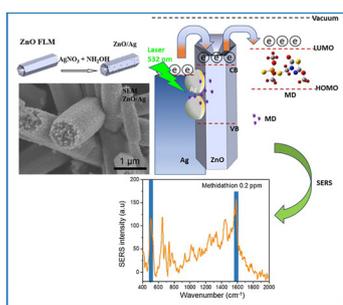
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Simulation and machine learning driven optimization of Rb_2SnBr_6 -based lead-free perovskite solar cells using diverse ETLs for enhanced photovoltaic performance

Md. Selim Reza, Avijit Ghosh,* Asadul Islam Shimul, Saeed Hasan Nabil, Manjuara Akter, Aijaz Rasool Chaudhry, Dipongkar Ray Sobuj, Yedluri Anil Kumar, Shaikat Biswas, Khorshed Alam and Maida Maqsood

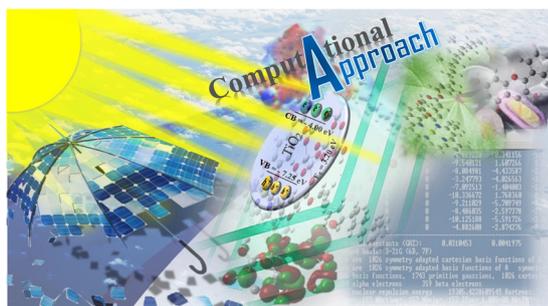
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Fabrication and the highly sensitive SERS performance of Ag-decorated ZnO flower-like microrods for methidathion detection

Nguyen Duc Dien, Thi Thu Ha Pham,* Xuan Hoa Vu, Ngo Thi Lan, Tran Thu Trang, Pham Thi Nga, Pham The Chinh, Truong Xuan Vuong, Thi Thu Thuy Nguyen, Cao Thanh Hai, Tran Thi Kim Chi, Tran Thi Huong Giang, Pham Thanh Binh, Nguyen Trong Nghia and Nguyen Duc Toan

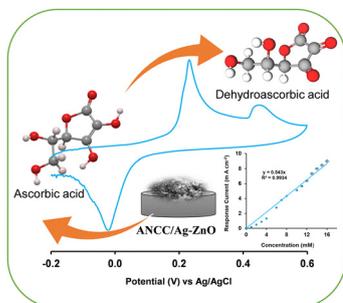
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Optimizing DSSC dyes: investigating synergistic interactions of chlorophyll *b* and anthocyanin with TiO_2 through TD-DFT methodology

Muneer Hussain,* Tahmineh Jalali,* Leila Maftoon-Azad and Shahriar Osfouri

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The efficiency of an aminated nanocrystalline cellulose stabilized binary Ag–ZnO nanocomposite as an electrode platform for electrochemical sensing of ascorbic acid

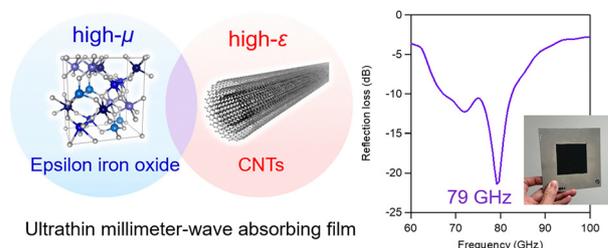
Md. Mahabur Rahman, Md. Sohel Rana, Hideto Minami, Md. Mahbubor Rahman, Md. Abdur Rahman, Md. Ashrafal Alam and Hasan Ahmad*



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Ultrathin millimeter-wave-absorbing film for automotive radars based on an epsilon iron oxide/carbon nanotube composite material

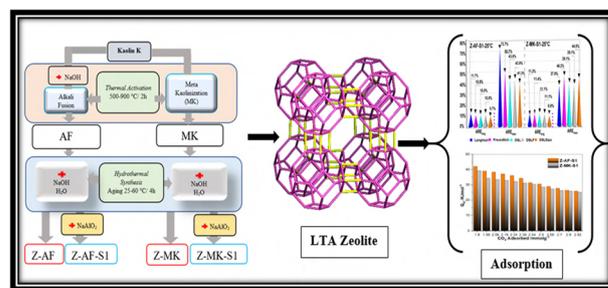
Asuka Namai,* Marie Yoshikiyo, Jessica MacDougall, Takashi Ono, Takahiro Asai, Masayuki Hara, Momoe Kanai, Takayuki Yoshida, Yasuto Miyamoto, Kenji Sakane, Shinji Kurahashi, Toshifumi Nishio and Shin-ichi Ohkoshi*



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Cameroonian natural clay derived Linde type LTA zeolite: demystifying and understanding the impact of the synthesis process on adsorption efficiency

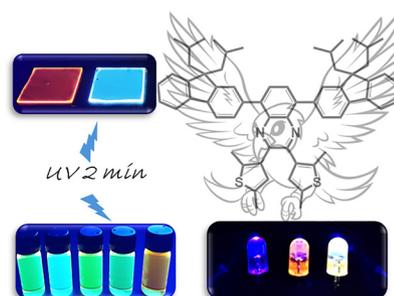
Cyrille Ghislain Fotsop, Alexandra Lieb and Franziska Scheffler*



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Controlling emissive behaviour through molecular design: 2,3-bis(2,5-dimethylthiophen-3-yl)quinoxalines with variable fluorene substitution

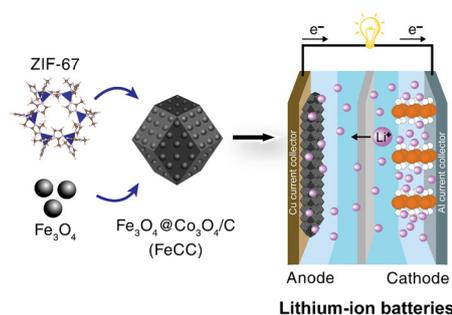
Liudmila Loghina,* Jiri Jancalek, Jakub Houdek, Zuzana Zmrhalova, Roman Jambor and Miroslav Vlcek



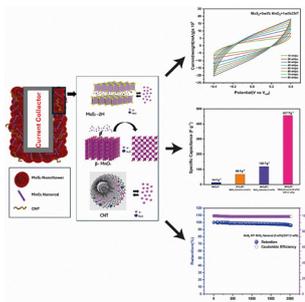
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Optimization of the carbonization temperature and composition of FeCC composites for enhanced lithium-ion battery anode performance

Do Thao Anh, Nguyen Bao Tran, Quang Ngoc Tran, Hanh Kieu Thi Ta, Bach Thang Phan, Tuan Loi Nguyen and Nhu Hoa Thi Tran*



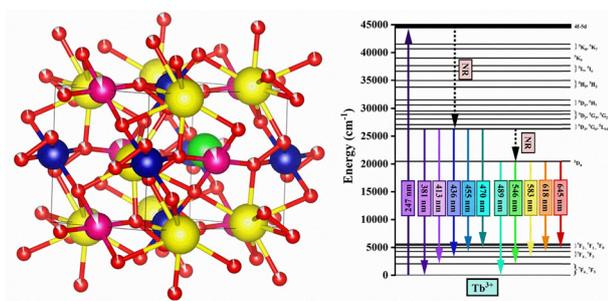
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Hierarchical integration of a MoS₂ nanoflower/MnO₂ nanorod/CNT ternary composite electrode for high capacitance and long-term cycling stability

Md. Arif Hossain Chowdhury Anik, T. M. A. Iqbal Bin Belal, Md Shafayatul Islam, Koushik Roy Chowdhury, Mrinmoy Brahma, Shad Inquiad Mim, Aninda Nafis Ahmed* and Ahmed Sharif*

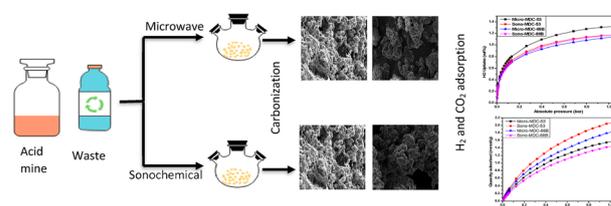
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Synthesis of iron-based metal–organic frameworks and carbon derivatives *via* unconventional synthetic methods and waste precursors with potential for gas storage

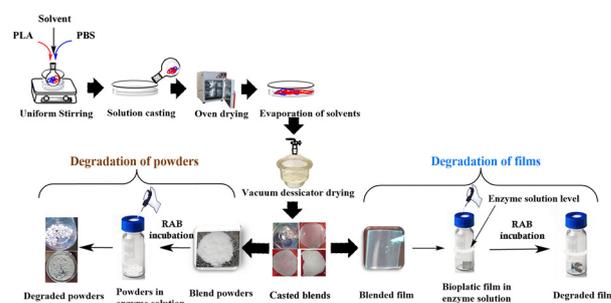
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Test-tube model for rapid and accelerated biodegradation of poly(lactic acid)/poly(butylene succinate) blended bioplastic obtained from solution casting

Shreetam Parida, Nivethitha Ashok and Rajendra Kurapati*



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A conductive poly(*m*-aminophenol) interface for α -lipoic acid detection in NELL-1 membranous nephropathy

Kanwal Bashir, Adnan Mujahid and Adeel Afzal*

