Materials Advances

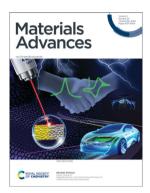
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IN THIS ISSUE

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Cover

See Guang Yang et al., pp. 9138-9159. Image reproduced by permission of Guang Yang from Mater. Adv., 2024, 5, 9138.



Inside cover

See G. N. Manjunatha Reddy et al., pp. 9210-9219. Image reproduced by permission of G. N. Manjunatha Reddy from Mater. Adv., 2024, 5, 9210.

REVIEWS

9138

Integrated electro- and chemical characterization of sulfide-based solid-state electrolytes

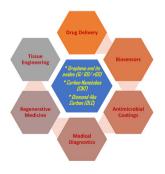
Yuanshun Li, Michelle Lehmann, Lei Cheng, Thomas A Zawodzinski, Jagjit Nanda and Guang Yang*



9160

Multifunctional carbon-based nanostructures (CBNs) for advanced biomedical applications - a perspective and review

Naveen Narasimhachar Joshi, Jagdish Narayan and Roger Narayan*





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REVIEWS

9175

Cyanuric chloride as a linker towards the synthesis of covalent triazine polymers: a review

Silpa Elizabeth Peter, Paul Thomas, P. Vairavel and N. V. Anil Kumar*

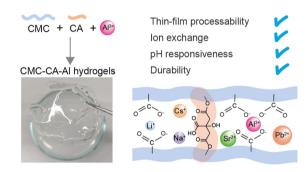


COMMUNICATION

9210

Dual cross-linked cellulose based hydrogel films

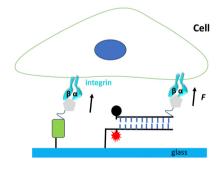
Neethu Thomas, Saphia Moussaoui, Braulio Reves-Suárez, Olivier Lafon and G. N. Manjunatha Reddy*



PAPERS

A multiplexed tension sensor reveals the distinct levels of integrin-mediated forces in adherent cells

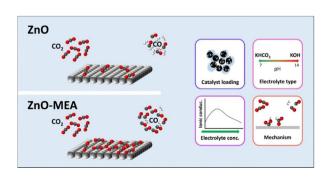
Xiaojun Liu, Jiangtao Li, Xiaoyun Wang, Feng Shao, Xingyou Hu, Juan Li, Lei Yu, Jicheng Zang,* Guixue Wang* and Yongliang Wang*



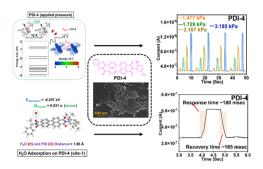
9231

Modification of ZnO gas-diffusion-electrodes for enhanced electrochemical CO₂ reduction: optimization of operational conditions and mechanism investigation

Gonçalves J. Marrenjo, Gelson T. S. T. da Silva, Rodrigo A. A. Muñoz, Lucia H. Mascaro and Osmando F. Lopes*

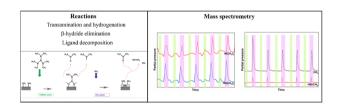


9243



Perylene diimide architecture-based electromechanical sensors: a systematic experimental and theoretical framework for the comparative analysis and study of the transduction mechanism

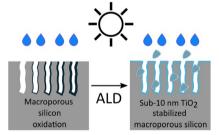
Aditya Tiwari, Vivek Adepu, Rikitha S. Fernandes, Nilanjan Dey,* Parikshit Sahatiya* and Sayan Kanungo*



A mass spectrometrical surface chemistry study of aluminum nitride ALD from tris-dimethylamido aluminum and ammonia

Pamburavi Mpofu, Houvem Hafdi, Jonas Lauridsen, Oscar Alm, Tommy Larsson and Henrik Pedersen*

9270



TiO2 ultrathin coating

- Photo-oxidation prevention
- Improved photocatalytic activity - Successful conformal

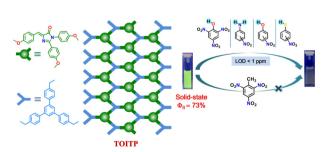
pore-filling

Water and sunlight exposure for 29 days

A road for macroporous silicon stabilization by ultrathin ALD TiO₂ coating

Bachar Al Chimali, Irene Carrasco, Thomas Defforge, Romain Dailleau, Lisa Monnier, Kaushik Baishya, Jan M. Macak, Gael Gautier and Brice Le Borgne*

9279



Green fluorescent protein chromophore-based covalent organic polymers (GFPC-COPs): sensing of nitroaromatic organic pollutants and explosives

Gulshan Anjum, Ashish Kumar, Gurunath Ramanathan* and Jarugu Narasimha Moorthy*

Unveiling the synergistic effect of an nZVI-SiO₂-TiO₂ nanocomposite for the remediation of dye contaminated wastewater

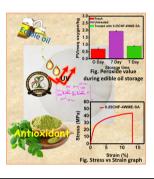
Murtala Namakka,* Md Rezaur Rahman,* Khairul Anwar Mohamad Bin Said, King Kuok Kuok, Fahmi Asyadi Md Yusof, Muneera S. M. Al-Saleem, Jehan Y. Al-Humaidi and Mohammed M. Rahman



9314

Sodium alginate-nanocellulose-based active composite film for edible oils packaging applications

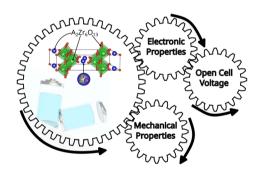
Sazzadur Rahman, Chandramani Batsh, Shalini Gurumayam, Jagat Chandra Borah and Devasish Chowdhury*



9330

Theoretical predictions of alkali hexazirconate $(A_2Zr_6O_{13}, A = Li, Na, And K)$ as candidates for alkali ion batteries

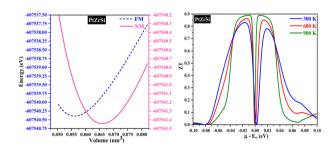
José. R. Fernández-Gamboa,* Frederik Tielens and Yohandys A. Zulueta



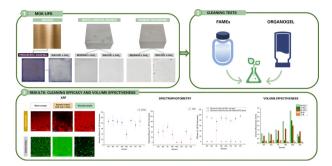
9340

Probing the thermoelectric and optical performance of half-Heusler PtZrX (X = Si, Ge) semiconductors: a first principles investigation

Bharti Gurunani and Dinesh C. Gupta*



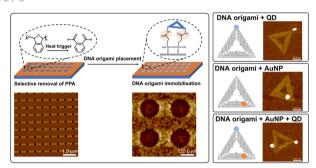
9359



Characterization and assessment of cleaning systems based on fatty acid methyl esters (FAMEs) for the removal of wax-based coatings from cultural heritage objects

Chiara Biribicchi,* Michael Doutre and Gabriele Favero

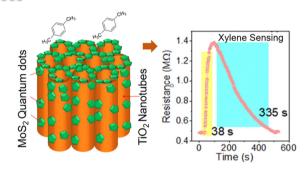
9376



Selective placement of functionalised DNA origami via thermal scanning probe lithography patterning

Tingting Zheng, Caoimhe O'Neill, John F. Marshall, Thomas Iskratsch* and Matteo Palma*

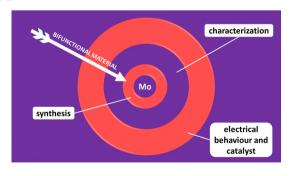
9383



A MoS₂ quantum dot functionalized TiO₂ nanotube array for selective detection of xylene at low temperature

Radha Bhardwaj and Arnab Hazra*

9391



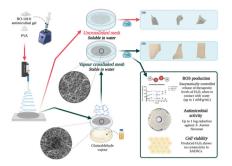
Bifunctional molybdenum and vanadium materials: semiconductor properties for advanced electronics and catalytic efficiency in linalool oxidation

Josipa Sarjanović, Mateja Cader, Edi Topić, Marta Razum, Dominique Agustin, Mirta Rubčić, Luka Pavić* and Jana Pisk*

9403

ROS-releasing PVA sub-micron antimicrobial dressing with enhanced aqueous stability and mechanical properties

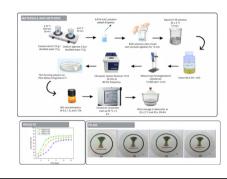
Joel Yupanqui Mieles,* Cian Vyas,* Gavin Humphreys, Carl Diver and Paulo Bartolo*



9417

Development and characterisation of starch/ alginate active films incorporated with lemongrass essential oil (Cymbopogon citratus)

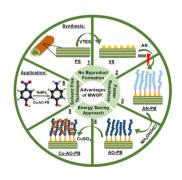
Olga Lucía Torres Vargas,* Yessica Viviana Galeano Loaiza and Iván Andrés Rodríguez Agredo



9428

Microwave-assisted synthesis of copper-loaded polyamidoxime brushes as an efficient catalytic system for nitroarene reduction

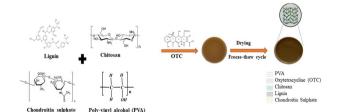
Shaista Taimur,* Shajia Rehman, Mujtaba Ellahi, Syed Rizwan, Humaira Razzaq and Tariq Yasin

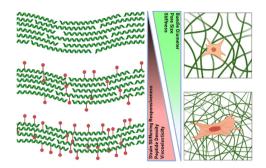


9445

A lignin-based biocomposite hydrogel for antimicrobial and wound healing applications

Jaskiran Preet, Khushboo Pathania, Jasdeep Kaur, Rachna Singh, Deepak B. Salunke and Sandip V. Pawar*

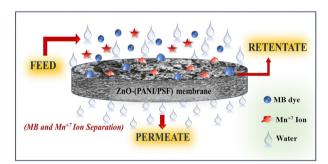




Controlling ligand density and viscoelasticity in synthetic biomimetic polyisocyanide hydrogels for studying cell behaviours: the key to truly biomimetic hydrogels

Nicholas J. Westra van Holthe,* Zhao Wang, Jan Lauko, Elliot P. Gilbert, Vishaak Gangasandra and Alan E. Rowan*

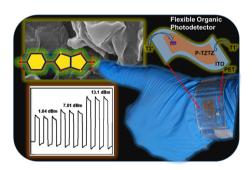
9471



Enabling improved PSF nanocomposite membrane for wastewater treatment with selective nanotubular morphology of PANI/ZnO

Agsa Zahid, Hafiza Hifza Nawaz, Amna Siddigue, Basheer Ahmed, Shumaila Razzague, Xuqing Liu, Humaira Razzaq* and Muhammad Umar*

9488



A high-performance broadband organic flexible photodetector from a narrow-bandgap thiazolo[5,4-d]thiazole containing conjugated polymer

Sanjana Mathew, Sayan Halder, Keerthi C. J., Saurjyesh Hota, Maitreyi Suntha, Chanchal Chakraborty* and Subhradeep Pal*

CORRECTIONS

Effect of build orientation and heat treatment on the microstructure, mechanical and corrosion performance of super duplex stainless steels fabricated via laser powder bed fusion

Karl Peter Davidson,* Ruiliang Liu, Chenyang Zhu, Mehmet Cagirici, Li Ping Tan, Alpravinosh Alagesan and Sarat Singamneni

CORRECTIONS

9501

Correction: Cu(ı) diimine complexes as immobilised antibacterial photosensitisers operating in water under visible light

Martin V. Appleby, Peter G. Walker, Dylan Pritchard, Sandra van Meurs, Carly M. Booth, Craig Robertson, Michael D. Ward, David J. Kelly* and Julia A. Weinstein*