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ISSN 2633-5409 CODEN MAADC9 4(15) 3075-3370 (2023)



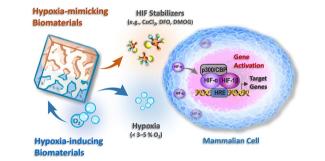
**Cover** See Sidi A. Bencherif *et al.*, pp. 3084–3090. Image reproduced by permission of Sidi A. Bencherif from *Mater. Adv.*, 2023, **4**, 3084.

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#### 3084

### HIF-stabilizing biomaterials: from hypoxia-mimicking to hypoxia-inducing

Thibault Colombani, Khushbu Bhatt, Boris Epel, Mrignayani Kotecha and Sidi A. Bencherif\*

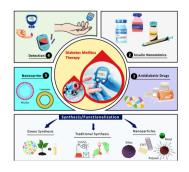


#### REVIEWS

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# Emerging trends in nano-based antidiabetic therapeutics: a path to effective diabetes management

Ritika Sharma, Shikha Jyoti Borah, Bhawna, Sanjeev Kumar, Akanksha Gupta, Vandana Kumari, Ravinder Kumar,\* Kashyap Kumar Dubey and Vinod Kumar\*



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Materials Advances (electronic: ISSN 2633-5409) is published 24 times a year by the Royal Society of Chemistry, Thomas Graham House, Science Park, Milton Road, Cambridge, UK CB4 0WF.

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#### REVIEWS

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### Advances in electrospun chitosan nanofiber biomaterials for biomedical applications

Ganesan Padmini Tamilarasi, Govindaraj Sabarees, Krishnan Manikandan,\* Siddan Gouthaman, Veerachamy Alagarsamy\* and Viswas Raja Solomon\*

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Recent progress in B<sub>4</sub>C–SiC composite ceramics: processing, microstructure, and mechanical properties

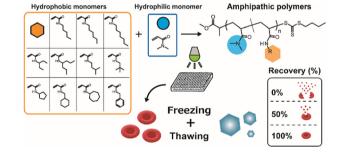
Wei Zhang

#### COMMUNICATION

#### 3192

Preparation of an amphipathic polymer library in a mixture of water/ethanol by photoinduced polymerization and evaluation of the cryoprotective activity

Masanori Nagao,\* Shuya Tanaka and Yoshiko Miura\*



Application

B₄C-Si

composite

ceramic

Microstructure

Performance Hardness

Bending strength

Preparation

Hot-press sintering

Spark plasma sintering

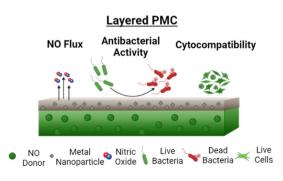
led sintering

#### PAPERS

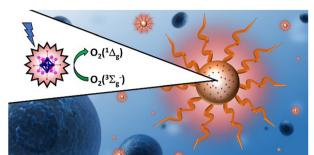
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Catalytic effect of transition metal-doped medical grade polymer on S-nitrosothiol decomposition and its biological response

Arnab Mondal, Patrick Maffe, Sarah N. Wilson, Sama Ghalei, Ricky Palacio, Hitesh Handa and Elizabeth J. Brisbois\*

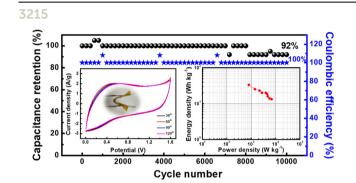


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PEGylated poly(lactic-co-glycolic acid) nanoparticles doped with molybdenum-iodide nanoclusters as a promising photodynamic therapy agent against ovarian cancer

Alexis Verger,\* Gilles Dollo, Nolwenn Brandhonneur, Sophie Martinais, Stéphane Cordier, Kamil Lang, Maria Amela-Cortes and Kaplan Kirakci\*



M = Cu Fe Zr

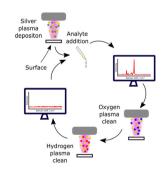
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Da-Young Kim, Sivaprakasam Radhakrishnan, Seungmin Yu and Byoung-Suhk Kim\*

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Matthew Teusner,\* Jitendra Mata, Bernt Johannessen, Glen Stewart, Seán Cadogan and Neeraj Sharma

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Water-based electrode Improved nano and microstructure 870 mAhg<sup>-1</sup>vs Li

### Rapid single step atmospheric pressure plasma jet deposition of a SERS active surface

Oliver S. J. Hagger, M. Emre Sener, Imran Khan, Francis Lockwood Estrin, Stefanos Agrotis, Albertus D. Handoko, Ivan P. Parkin and Daren J. Caruana\*

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Ranjan Kr. Giri,\* Sunil H. Chaki,\* Mehul S. Dave, Shivani R. Bharucha, Ankurkumar J. Khimani, Rohitkumar M. Kannaujiya, Milind P. Deshpande and Mitesh B. Solanki



Investigation of the reliability of nano-nickel/ niobium oxide-based multilayer thin films deposited on polymer substrates for flexible electronic applications

Rahul Sahay,\* Yen-Cheng Tu, Izzat Aziz, Arief S. Budiman,\* Cher Ming Tan, Pooi See Lee, Olivier Thomas and Nagarajan Raghavan\*

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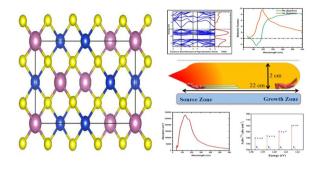
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Indrajeet S. Nawghare, Ambarish Kumar Singh, Ashakiran Maibam, Shivdeep Suresh Deshmukh, Sailaja Krishnamurty,\* Kothandam Krishnamoorthy\* and Jayaraj Nithyanandhan\*

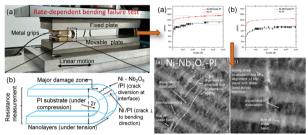
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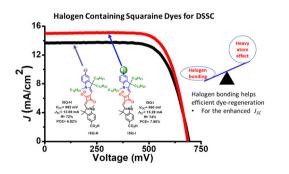
## Graphene-sandwiched nitrogen-enriched $\pi$ -conjugated molecules as redox-active cathodes for Li-ion batteries

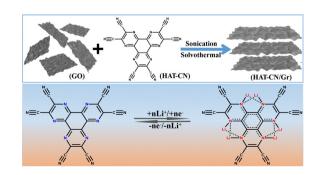
Kai Chen, Xiaolan Ma, Xiaoyan Han\* and Yingkui Yang\*

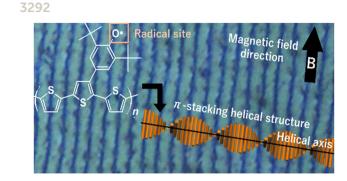


Reliability of multilayer Ni/Niobium oxide on Polymer substrate





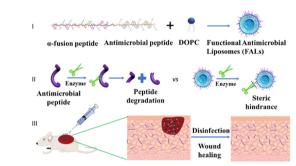




Oriented quasi-domain structure of helical spin polymers prepared by electrochemical polymerization in a cholesteric liquid crystal under a magnetic field, showing a helical stripe magnetic domain

Masashi Otaki, Shigeki Nimori and Hiromasa Goto\*

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#### Nanoliposomes protecting antimicrobial peptides via membrane-fused incorporation to fight wound infection

Hao Xue, Jiaying Li, Liwei Zhang, Xiaolu Song,\* Hui Shi, Yonghai Feng, Shuai Hou, Zengkai Wang, Taofeng Zhu\* and Lei Liu\*

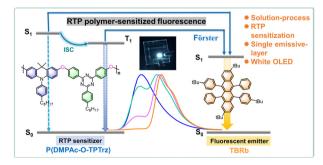
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Gaurav Tatrari, Chetna Tewari, Mayank Pathak, Diksha Bhatt, Manisha Solanki, Faiz Ullah Shah and Nanda Gopal Sahoo\*

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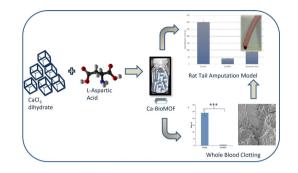
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Yiting Tian, Renze He, Guoyun Meng,\* Shumeng Wang,\* Lei Zhao and Junqiao Ding\*

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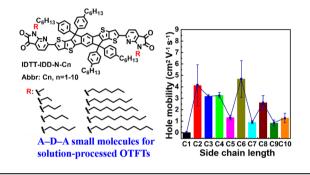
Chandan Bhogendra Jha, Chitrangda Singh, Raunak Varshney, Sweta Singh, Kuntal Manna\* and Rashi Mathur\*



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Optimized charge transport in *N*-substituted isatin-based acceptor-donor-acceptor small molecules by regulating the side chain length for solution-processable organic thin-film transistors

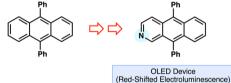
Wenyu Cai, Jiyun Lee, Yao Zhao, Boseok Kang\* and Guobing Zhang\*



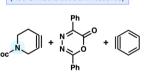
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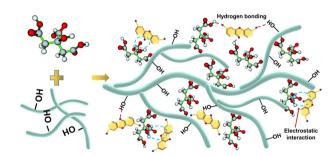
#### Facile synthesis of 2-aza-9,10-diphenylanthracene and the effect of precise nitrogen atom incorporation on OLED emitters performance

Evan R. Darzi, Dane A. Stanfield, Luca McDermott, Andrew V. Kelleghan, Benjamin J. Schwartz\* and Neil K. Garg\*









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### Preparation of citric acid/porous starch composite adsorbents and their adsorption studies

Yangyang Zheng, Ye He, Chang Liu, Leqian Song and Huacheng Zhang\*