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IN THIS ISSUE

ISSN 1359-7345 CODEN CHCOFS 62(13) 3927-4148 (2026)



Cover

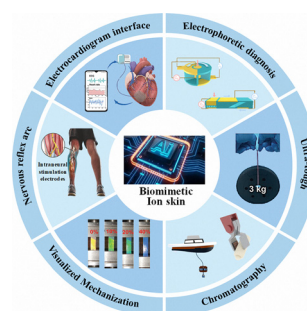
See Ian Colliard and Gauthier J.-P. Deblonde, pp. 4018–4022 and pp. 4023–4027. Image reproduced by permission of Eric B. Smith (LLNL), *Chem. Commun.*, 2026, 62, 4018.

HIGHLIGHT

3940

Bionic ion skin multimodal system for advanced epidermal electronics

Yanfang Meng, Boyu Liu and Lin Xu*

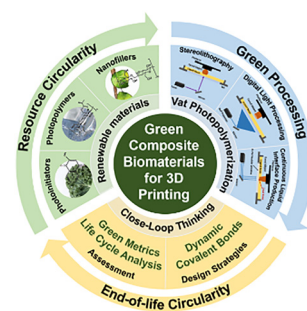


FEATURE ARTICLES

3956

Photopolymerizable green composite biomaterials for potential 3D printing applications

Jun Shen, Xiaotong Peng and Pu Xiao*



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Fundamental questions
Elemental answers

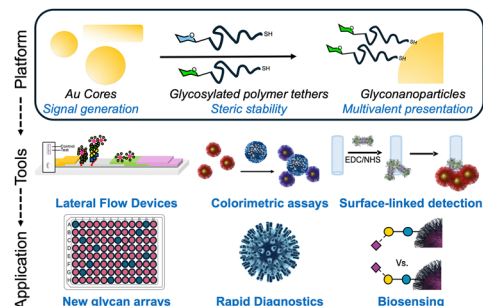


FEATURE ARTICLES

3970

Polymer-tethered glycosylated gold nanoparticles as versatile tools for bio-sensing

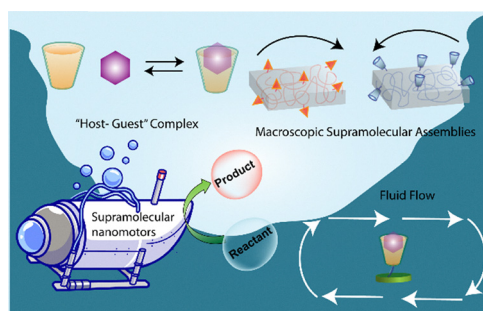
Sarah-Jane Richards* and Matthew I. Gibson*



3989

Programming self-powered motion via "host-guest" recognition

Reek Mahapatra, Anvi Sangwan, Devender Singh and Debabrata Patra*

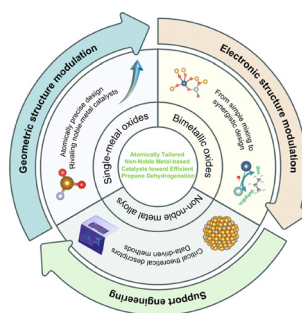


REVIEW

4004

Atomically tailored non-noble metal-based catalysts toward efficient propane dehydrogenation

Dali Chen, Yicong Chai,* Jian Lin* and Xiaodong Wang

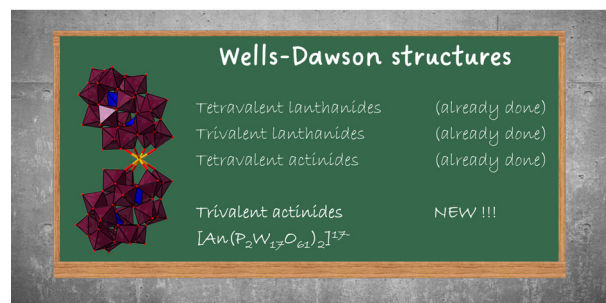


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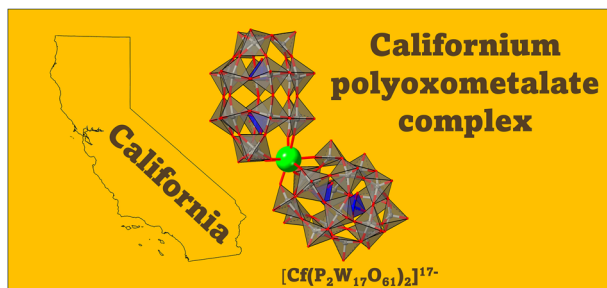
4018

Actinide complexes with Wells–Dawson polyoxometalates (part 1): americium and curium

Ian Colliard* and Gauthier J.-P. Deblonde*



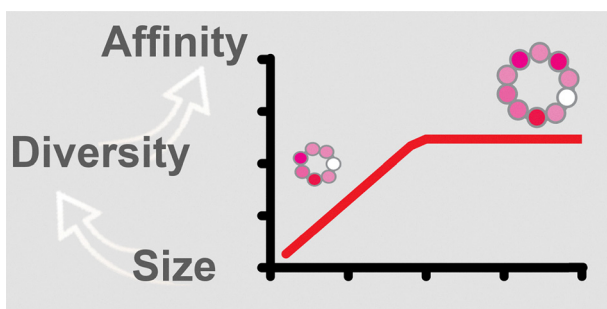
4023



Actinide complexes with Wells–Dawson polyoxometalates (part 2): californium

Ian Colliard* and Gauthier J.-P. Deblonde*

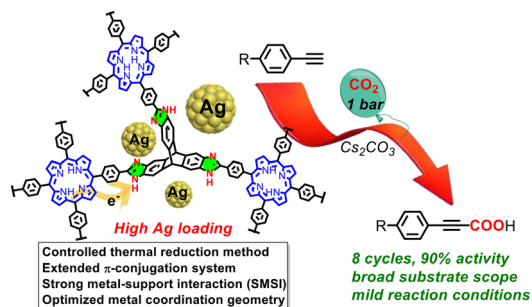
4028



The effect of peptide size on target affinity in mRNA display-derived macrocyclic peptides

Xuefei Jing, Jen Suh, Joshua Maxwell, Karishma Patel, Alexander Norman, Xavier J. Reid, Chandrika Deshpande, Jason K. K. Low, Richard J. Payne, Toby Passioura* and Joel P. Mackay*

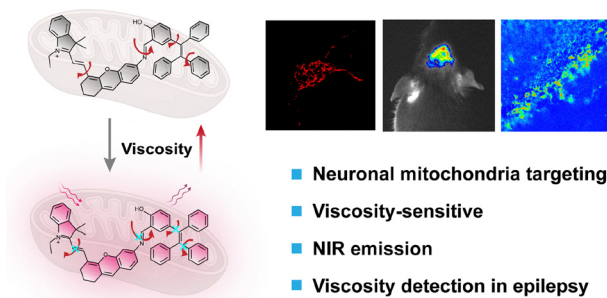
4032



Silver nanoparticle-immobilized benzimidazole-linked porphyrin polymers for efficient carboxylation of terminal alkynes with CO_2

Yinghua Lu, Xinrui Xia, Xu Wang, Jianhui Huang and Rongchang Luo*

4037



A multi-rotor near-infrared probe for high-sensitivity imaging of mitochondrial viscosity in epilepsy

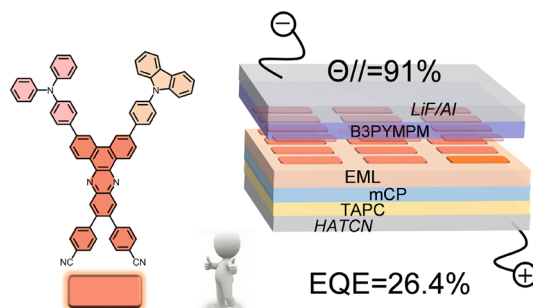
Pengpeng Lu, Yuening Wang, Yan Huang* and Limin Zhang*



4041

A high orientation asymmetric TADF molecule with a 91% horizontal dipole ratio for high-efficiency organic light-emitting diodes

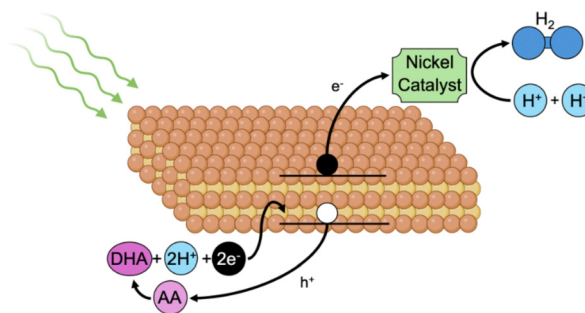
Yanyan Liu,* Xiaoyu Li, Jiayi Yang, Zixian Wang, Shi-Jian Su, Zhenguo Chi* and Hai-Tao Feng*



4045

Robust photocatalytic hydrogen generation from CdSe nanoplatelets

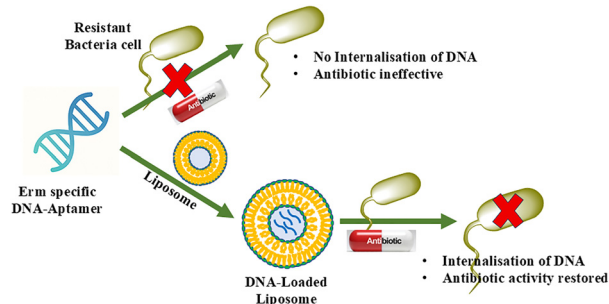
Elizabeth O. Phinney, Mahilet T. Meidenbauer and Todd D. Krauss*



4050

Liposome-based delivery of DNA aptamers to inhibit erythromycin methyltransferase-mediated antibiotic resistance

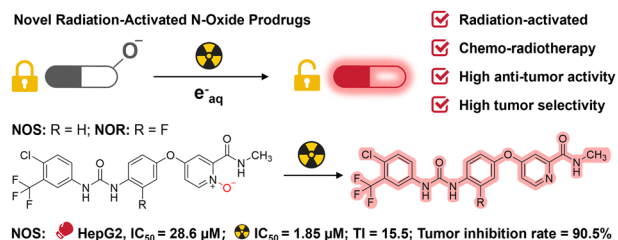
Swagata Patra,* Damini Sahu, Leena L. Badgujar, P. I. Pradeepkumar and Ruchi Anand*



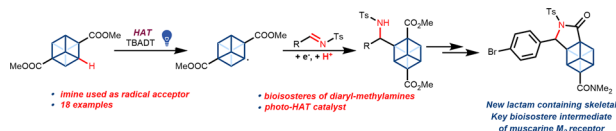
4054

Novel radiation-activated N-oxide prodrugs for highly selective and synergistic tumor therapy to promote DNA damage and the ATM/ATR pathway

Dongliang Ji, Jian Chen, Yifan Ma, Ningning Luo, Yangyang Jiang, Rong Cao, Dongwei Liu, Yunhao Zhang, Lei Wang,* Tao Yang* and Yong Ling*



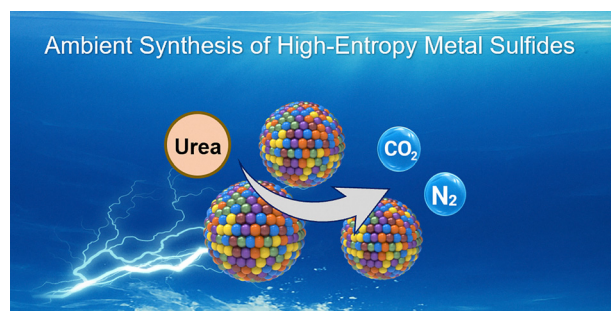
4059



Photochemical HAT-mediated site-selective C(sp³)-H aminoalkylation of cubanes catalyzed by TBADT

Zhicheng Tang, Mingyang Liu, Xiuran Yang, Zhuang Zhong, Sensheng Liu* and Haifeng Zhou*

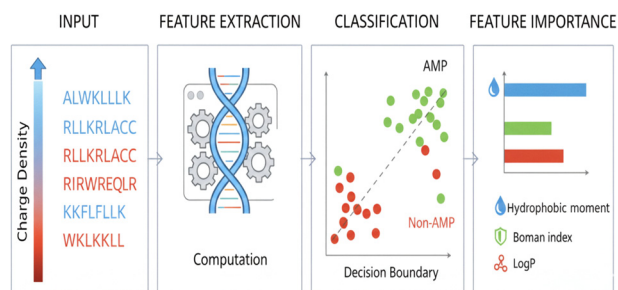
4063



Rapid synthesis of high-entropy metal sulfides under ambient conditions as efficient catalysts for the urea oxidation reaction

Linwei Jiang, Yee Xuan Seow, Hsien-Yi Hsu, Mark A. Buntine, Hongpeng Jia,* Zongyou Yin* and Guohua Jia*

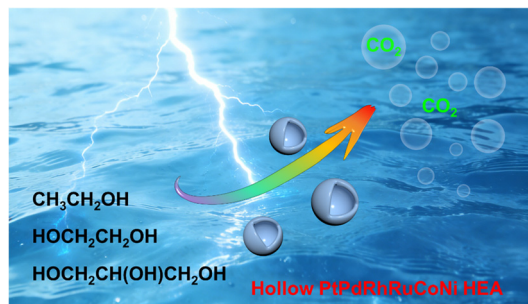
4067



Mechanistic principles of antimicrobial peptides uncovered by charge density-based machine learning

Hrushikesh Malshikare, U. Deva Priyakumar, Prathit Chatterjee* and Durba Sengupta*

4071



A hollow PtPdRhRuCoNi high-entropy alloy as an effective electrocatalyst for ethanol, ethylene glycol and glycerol oxidation

Hong Huang, Jia-Lin Li, Ai-Jun Wang, Hua-Jie Niu* and Jiu-Ju Feng*

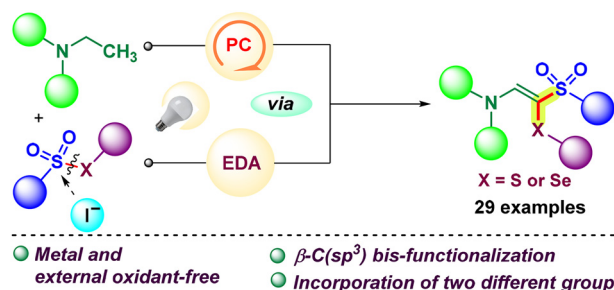


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4076

Visible-light-mediated β,β -thio- and selenosulfonylation of *N*-ethyl tertiary amines

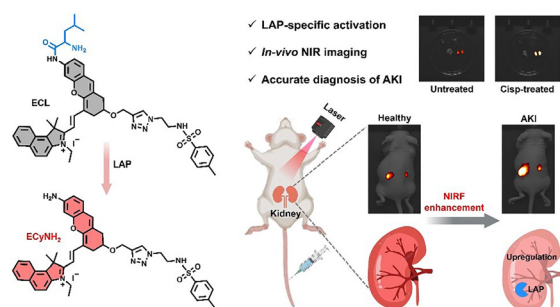
Pallaba Ganjan Dalai, Dinabandhu Barik, Supriya Manna, Allu Lokesh and Bhisma K. Patel*



4080

NIR fluorescent probe for accurate diagnosis of acute kidney injury by monitoring leucine aminopeptidase

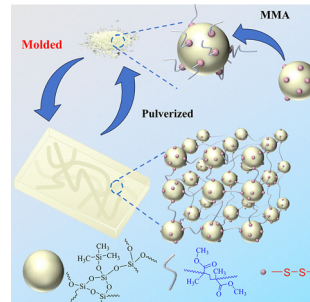
Xiaofeng Xia, Minrong Huang, Zhe Zhou, Yiyu Chen, Pei Peng, Erfei Wang,* Feiyi Wang* and Jun Ren*



4085

Upcycling thermosetting polysiloxanes into thermoplastics via UV-induced surface photopolymerization of acrylates

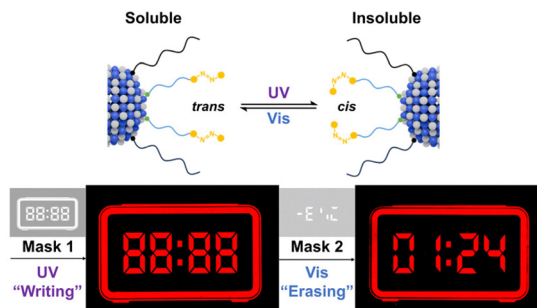
Qihan Zhang, Zhixin Xie, Yanjie Pang and Hongping Xiang*



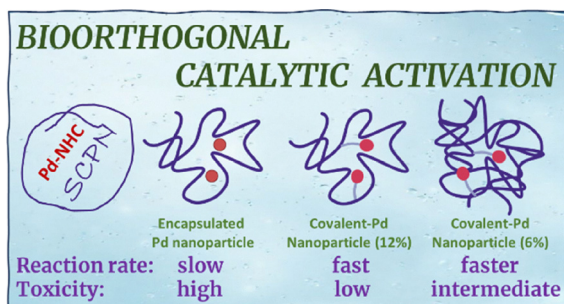
4089

Direct photopatterning and erasing of quantum dots via ligand photoisomerization

Zhong Fu, Zhi Zheng, Yu Xie, Hannikezi Abudukeremu, Likuan Zhou, Shuangan Zang, Kunfei Tian, Qiuyu Liu, Yuan Li and Hao Zhang*



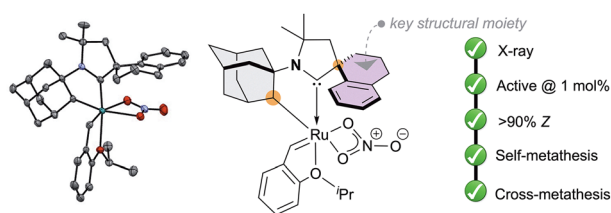
4094



Consequences of encapsulated vs. covalently attached Pd-NHC amphiphilic polymeric nanocatalysts in bioorthogonal catalysis

Lieke de Jonge, Ibai Hazenberg, Harshit Singh, Tessa Loman, A. P. Prakasham* and Anja R. A. Palmans*

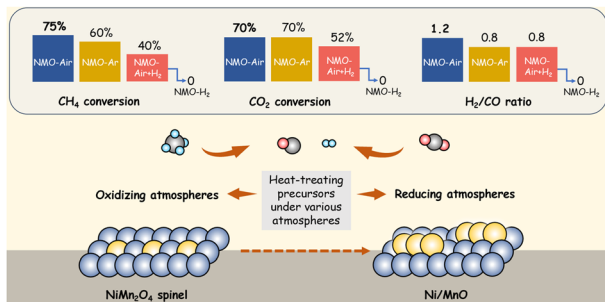
4099



Design, synthesis and reactivity of *N*-adamantyl cyclometalated cyclic(alkyl)(amino)carbene ruthenium complexes in *Z*-selective olefin metathesis

Clément Casalta, Fanny Morvan, Sophie Colombel-Rouen, Thierry Roisnel, Rodolphe Jazzar,* Angelino Doppiu* and Marc Mauduit*

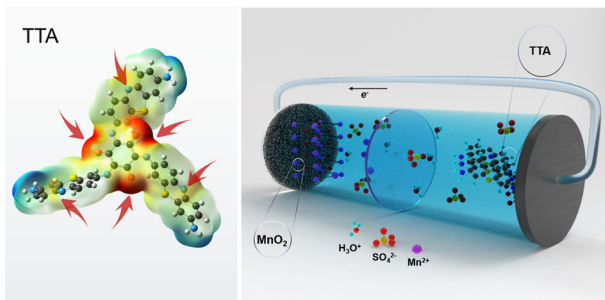
4103



Structure evolution of NiMn₂O₄-based materials induced by the atmosphere and its impact on dry reforming of methane activity

Jun Duan, Xueying Zheng, Shiyong Fan, Shaomin Liu and Xinyong Li*

4108



Phenothiazine-based anodes with π -conjugation extension and dynamic charge balance enabling ultra-stable hydronium-ion batteries

Yunpeng Zhou, Lintong Hu,* Yongzhihan He, Huilin Wei, Can Cui and Chao Yan*

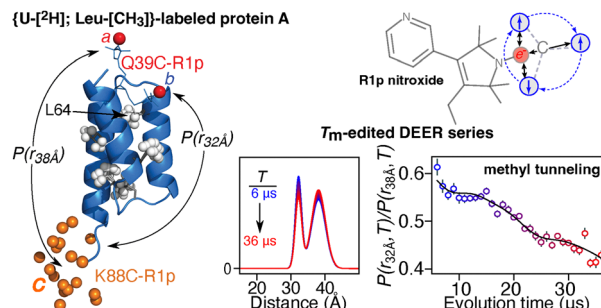


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4112

Direct observation and measurement of the average quantum methyl-tunneling frequency in a protein using T_m -edited double electron–electron resonance EPR spectroscopy

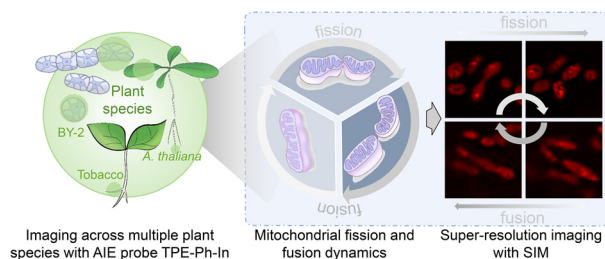
Thomas Schmidt,* Francesco Torricella and G. Marius Clore*



4117

A small-molecule AIE fluorescent probe targeting plant mitochondria and its application in super-resolution imaging

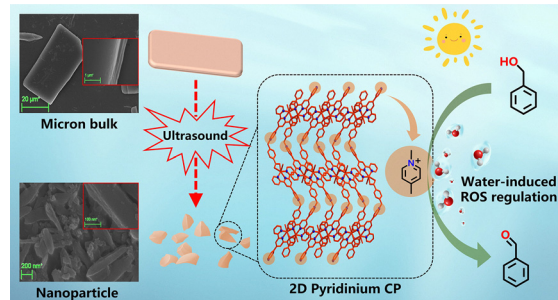
Yi Zhang, Xiangzhou Lao,* Ethan P. Y. Chung, Sijie Chen* and Liwen Jiang



4122

Controlled ROS generation in pyridinium-functionalized nanocatalysts for selective photooxidation

Jing-Wang Cui, Shuai Ma, Yun-Rui Chen, Jia-Qi Pan, Bin Tan and Jie Zhang*

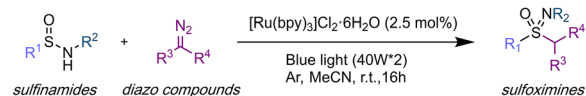


4127

Photocatalytic S-alkylation of sulfinamides: access to sulfoximines

Ivan Sliusarevskiy, Haripriyo Mondal and Rene M. Koenigs*

Photocatalytic S-alkylation reaction of sulfinamides

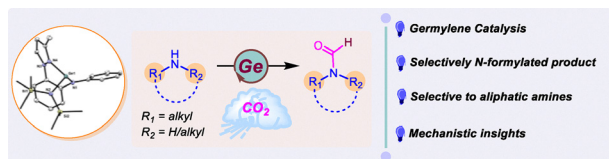


In the presence of a simple photocatalyst, diazo compounds undergo selective S-alkylation reactions with sulfinamides.



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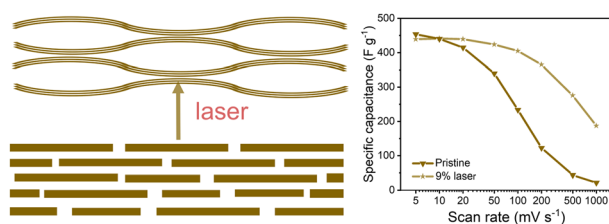
4131



Anilido-pyrazole ligand supported germylenes: synthesis, structure, and catalytic *N*-formylation of amines using CO₂

Jogendrananda Barik and Arnab Rit*

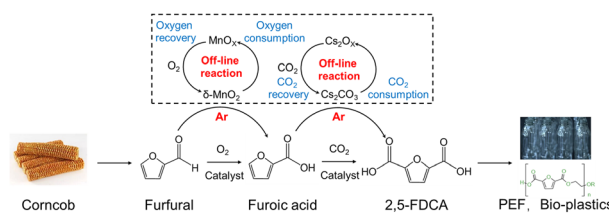
4135



Laser writing of a TiVC film for high rate supercapacitors with ultrahigh capacitance

Zhiwei Yang, Renzhong Hou, Weikai Lin, Shuhui Tan, Honghui Hu, Zijie Chen, Xiongfai Yang, Jiawei Zhang, Wei Chen,* Lei Zhang* and Jun Tang*

4139



Offline catalytic behavior in the preparation of FDCA from biomass and CO₂

Xu Wu, Heqin Guo,* Litao Jia and Debao Li*

CORRECTIONS

4143

Correction: The next Frontier of photodynamic therapy: nuclear-targeted small-molecule photosensitizers for precise tumor cell elimination

Yang Tian, Jianfen Wang, Fangjun Huo* and Caixia Yin*



CORRECTIONS

4145

Correction: Synthesis and characterization of the first neutral hexacoordinated silole complexes

Balázs Szathmári, Tamás Holczbauer, Bence Balterer, Attila Domján, Balázs Volk, Ilona Kovács* and Zsolt Kelemen*

