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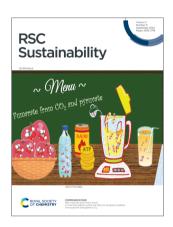
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See Hiroki Sakagami and Tetsuya Tsuda, pp. 2486-2490. Image reproduced by permission of Hiroki Sakagami and Tetsuya Tsuda from RSC. Sustainability., 2024, 2, 2486.



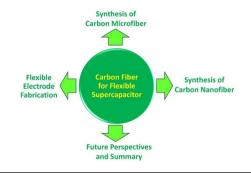
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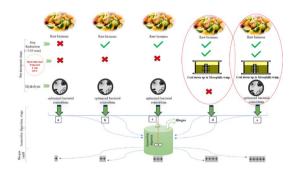
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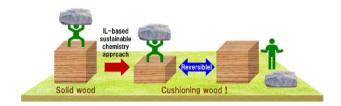


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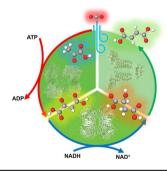
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A multi-biocatalytic system for effective fumarate synthesis from pyruvate and gaseous CO₂

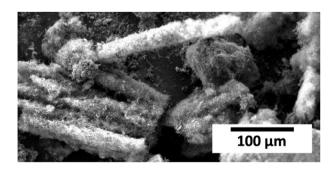
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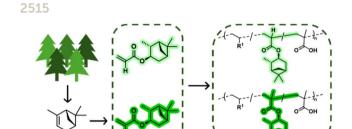


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Thermal approaches based on microwaves to recover lithium from spent lithium-ion batteries

A. Cornelio, A. Zanoletti, M. Scaglia, E. Galli, D. La Corte, G. Biava and E. Bontempi*



√ Emulsion copolymerisation

√ Tuneable T_g

√ Stain resistant films

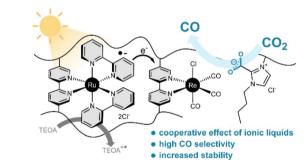
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✓ Cost efficient

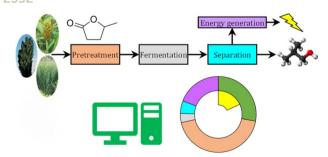
Scalable



Polymerized ionic liquid Co-catalysts driving photocatalytic CO₂ transformation

Lisa Eisele, Bletë Hulaj, Maximilian Podsednik, Francesco Laudani, Pablo Ayala, Alexey Cherevan, Annette Foelske, Andreas Limbeck, Dominik Eder* and Katharina Bica-Schröder*

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Synthesis of high molecular weight poly(ricinoleic acid) via direct solution polycondensation in hydrophobic ionic liquids

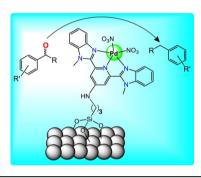
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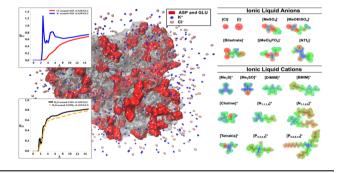
Selective hydrodeoxygenation of oxygenated aromatic molecules using a molecular palladium catalyst covalently bound to a solid SiO2 support

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lon-combination specific effects driving the enzymatic activity of halophilic alcohol dehydrogenase 2 from Haloferax volcanii in aqueous ionic liquid solvent mixtures

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Eco-friendly amidation of oxidized carbon black by dry ball milling

Aida Kiani, Marco Palumbo and Maria Rosaria Acocella*



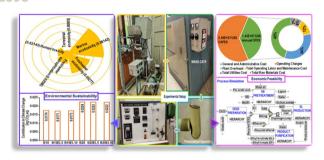
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Hydrothermal liquefaction of different waste biomass using green solvent 2methyltetrahydrofuran as extractant and co-solvent

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Continuous drop-in-biofuel production from pretreated sugarcane bagasse in a microwave-visible irradiated continuous stirred slurry reactor: reaction kinetics & techno-enviro-economic sustainability analyses

Sourav Barman and Rajat Chakraborty*

Nanoscale ZnO-NiO-Ni RH Nanoscale ZnO-NiO-Ni TBHP (1 eqv.), THF, 90 °C, 2h Addehydes Aliphatic Aromatic Heterocyclic Morpholine Thiomorpholine Piperazine Pyrrolidine Piperidine I High functional group tolerance I Cooperative catalysis Reusable catalyst

A cooperative nanoscale ZnO-NiO-Ni heterojunction for sustainable catalytic amidation of aldehydes with secondary amines

Amishwar Raysing Shelte, Rahul Daga Patil and Sanjay Pratihar*

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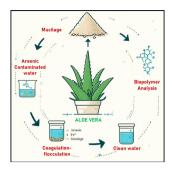
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Junduo Hu, Xiaofan Shi, Liliang Huang,* Rongkang Zhang and Huangdi Feng*

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Aloe vera mucilage as a sustainable biopolymer flocculant for efficient arsenate anion removal from

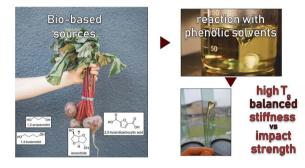
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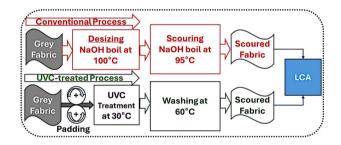
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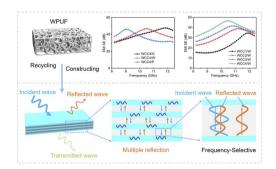
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Multilayered frequency-selective and highperformance electromagnetic interference shielding materials derived from waste polyurethane foam

Jian Zhang, Qunhao Wang, Zehang Zhou, Zengyan Sui, Chao Wang* and Canhui Lu*



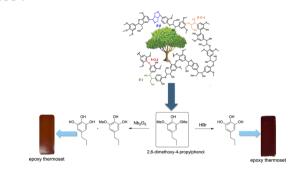
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Catalytic function of ionic liquids in polyethylene terephthalate glycolysis by molecular dynamics simulations

Mohamed Ahmed Nosir and Manuel Angel Ortuño*

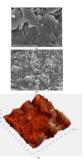
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Multi-functional syringol based epoxides and properties of their thermoset polymers

Melissa Sanchez, Peter C. Ford and Mahdi M. Abu-Omar*

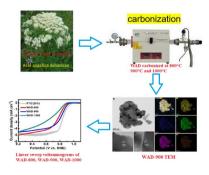
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Synthesis of hydrogels based on sterculia gum-co-poly(vinyl pyrrolidone)-co-poly(vinyl sulfonic acid) for wound dressing and drug-delivery applications

Ankita Kumari and Baljit Singh*

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Excellent phosphorus-doped porous carbon oxygen reduction reaction catalysts derived from natural wild *Angelica dahurica*

Wenhao Mo,* Xiaohua Tan and Lei Zhao