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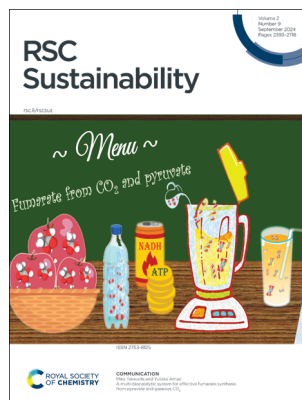
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IN THIS ISSUE

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Cover
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.



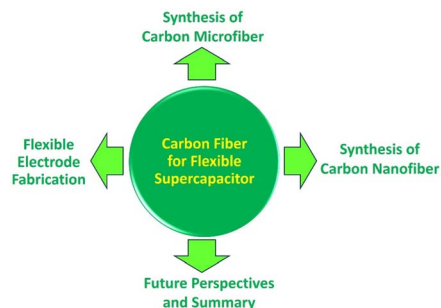
Inside cover
See Mika Takeuchi and Yutaka Amao, pp. 2491–2495. Image reproduced by permission of Yutaka Amao from *RSC Sustainability*, 2024, 2, 2491.

CRITICAL REVIEWS

2403

Recent advancements in carbon fiber-based sustainable electrodes for flexible and wearable supercapacitors

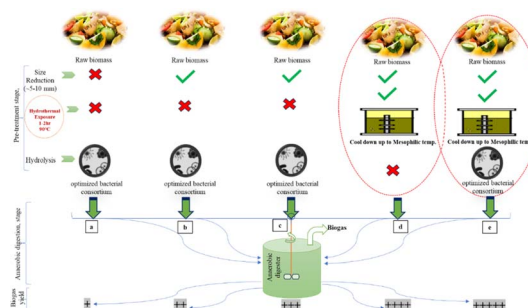
Susmi Anna Thomas, Jayesh Cherusseri* and Deepthi N. Rajendran*



2444

A comprehensive pre-treatment strategy evaluation of ligno-hemicellulosic biomass to enhance biogas potential in the anaerobic digestion process

Rajesh Kumar Prasad,* Anjali Sharma, Pranab Behari Mazumder and Anil Dhussa



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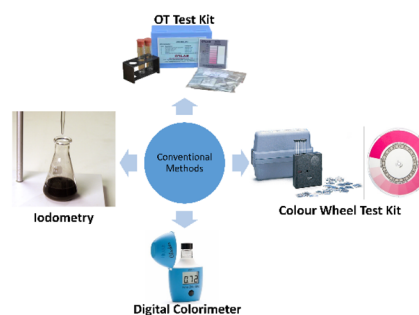
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TUTORIAL REVIEW

2468

Recent developments and sustainability in monitoring chlorine residuals for water quality control: a critical review

Yohanz Khor, A. R. Abdul Aziz and Su Sin Chong*

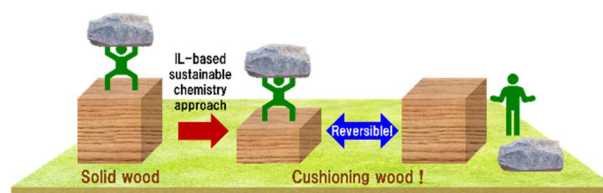


COMMUNICATIONS

2486

Fabrication of biological cushioning materials with natural wood structure by an ionic liquid-based sustainable chemistry approach

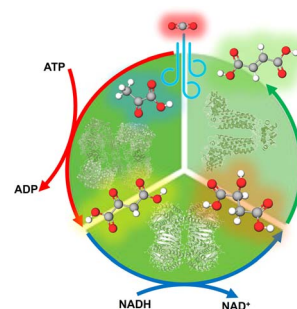
Hiroki Sakagami* and Tetsuya Tsuda*



2491

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

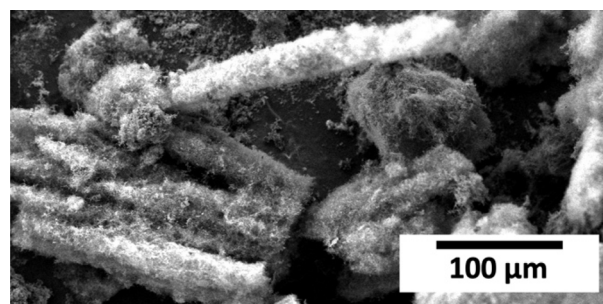
Mika Takeuchi and Yutaka Amao*



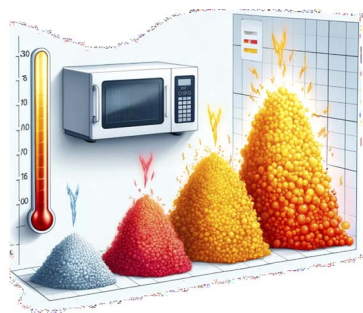
2496

Polymer composites with carbon nanotubes made from CO₂

Gad Licht, Kyle Hofstetter and Stuart Licht*



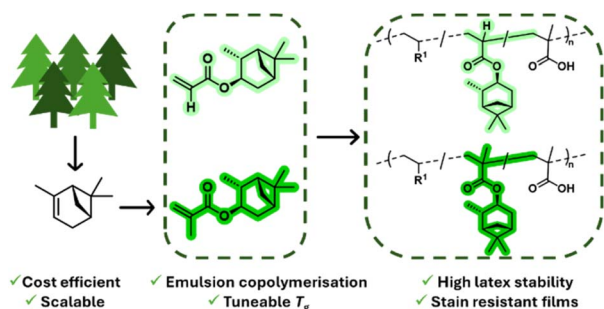
2505



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*

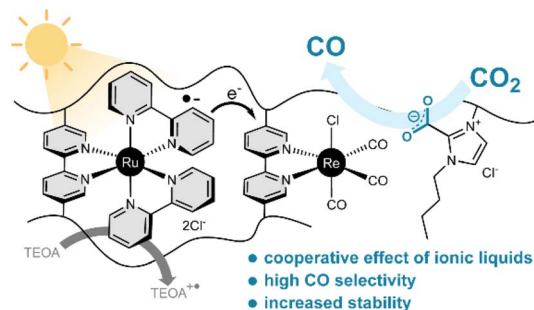
2515



Sustainable, upscaled synthesis of pinene-derived (meth)acrylates and their application as high T_g monomers in styrene/acrylic-based bioderived copolymer coatings

María Pin-Nó, Philippa L. Jacob, Vincenzo Taresco, Maud Kastelijn, Tijs Nabuurs, Chandres Surti, John Bilney, John Daly, Daniel J. Keddie, Steven M. Howdle* and Robert A. Stockman*

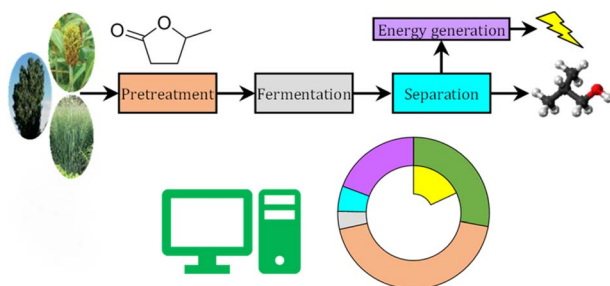
2524



Polymerized ionic liquid Co-catalysts driving photocatalytic CO_2 transformation

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

2532



On the synthesis of biorefineries for high-yield isobutanol production: from biomass-to-alcohol experiments to system level analysis

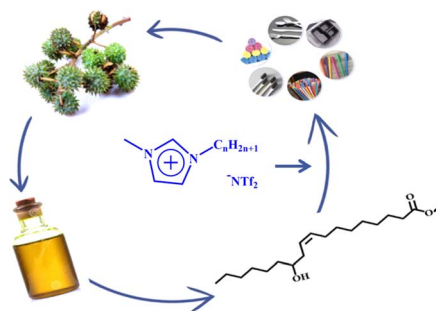
Arthur E. Pastore de Lima, Jason Coplien, Larry C. Anthony, Trey K. Sato, Yaoping Zhang, Steven D. Karlen, Chris Todd Hittinger and Christos T. Maravelias*



2541

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

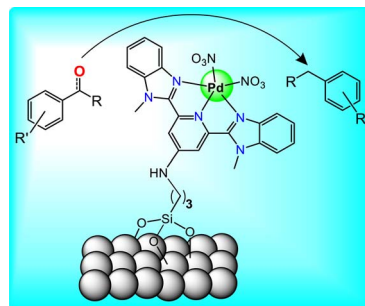
Lulu Wang, Hua Yuan, Xiaoli Ma, Zijin Li, Haowei Sun, Xiaoyan Zhang, Xiaoyu Huang, Qiaohong Peng* and Yejiang Tan*



2549

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

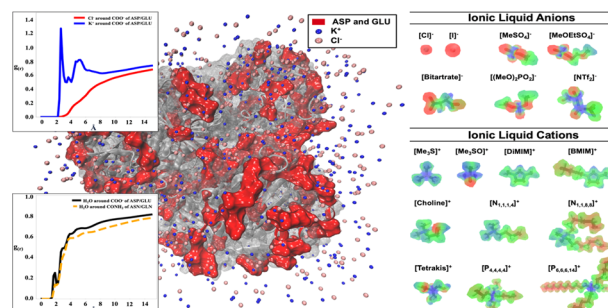
Jake G. Tillou, Joseph J. Kuchta, III, Nathan Thornburg, Santosh K. Balijepalli and Aaron K. Vannucci*



2559

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

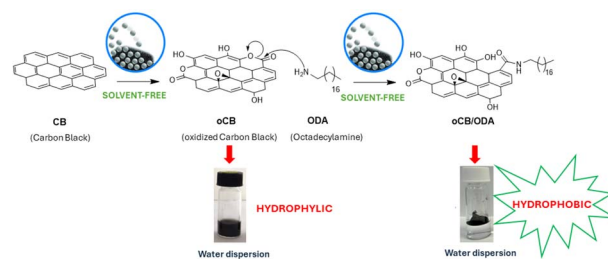
Alexandra Schindl,* M. Lawrence Hagen, Isabel Cooley, Christof M. Jäger, Andrew C. Warden, Mischa Zelzer, Thorsten Allers and Anna K. Croft*



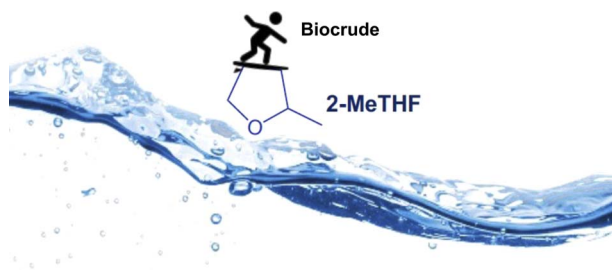
2581

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

Aida Kiani, Marco Palumbo and Maria Rosaria Acocella*



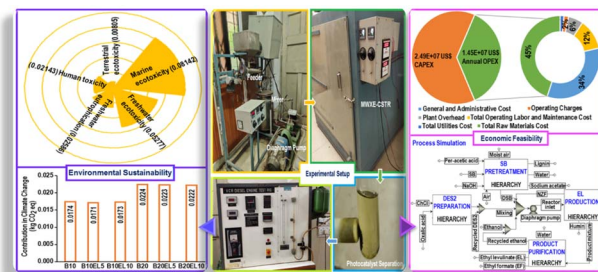
2589



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

Yuen Wai Lui, Sze Ha Tsang, Tsz Hin Chan, Ka Hei Chan, Yin Hei Lee, Hoi Fung Man and Matthew Y. Lui*

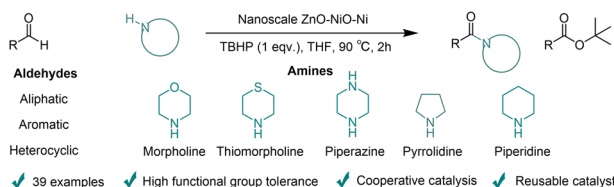
2598



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*

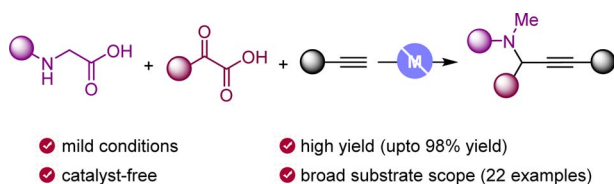
2615



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*

2626



Facile synthesis of propargylamines by metal-free doubly decarboxylative coupling

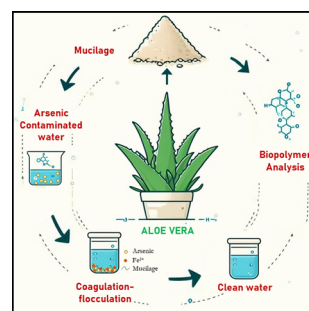
Junduo Hu, Xiaofan Shi, Liliang Huang,* Rongkang Zhang and Huangdi Feng*



2632

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

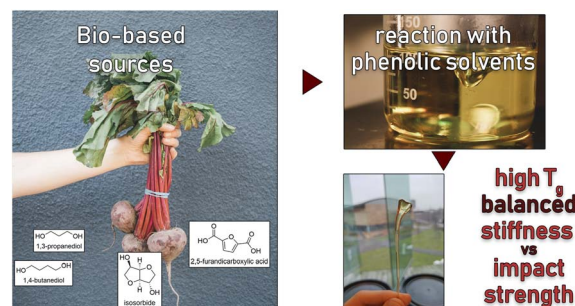
Deysi J. Venegas-García, Lee D. Wilson* and Mayela De la Cruz-Guzmán



2644

The search for rigid, tough polyesters with high T_g – renewable aromatic polyesters with high isosorbide content

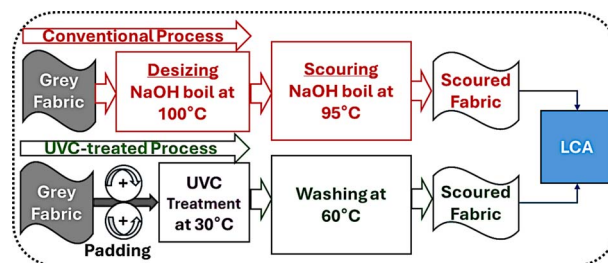
Bruno Bottega Pergher, Daniel H. Weinland, Robert-Jan van Putten and Gert-Jan M. Gruter*



2657

Coloration of ultraviolet-C-assisted combined desizing-scouring cotton fabric

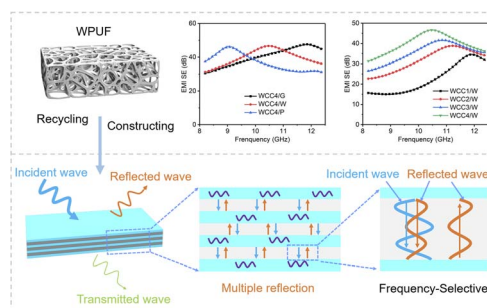
Sanjay Kumar Bhikari Charan Panda,* Samrat Mukhopadhyay and Kushal Sen



2669

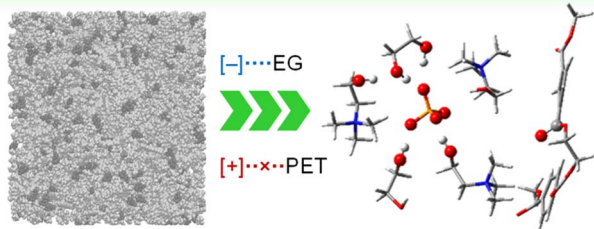
Multilayered frequency-selective and high-performance electromagnetic interference shielding materials derived from waste polyurethane foam

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



2677

PET glycolysis via ionic liquids... at atomic resolution



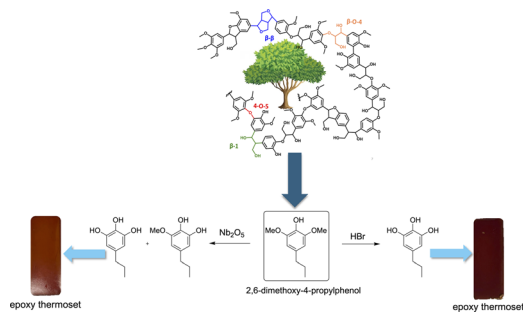
Catalytic function of ionic liquids in polyethylene terephthalate glycolysis by molecular dynamics simulations

Mohamed Ahmed Nosir and Manuel Angel Ortuño*

2684

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

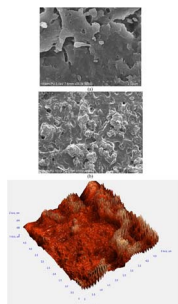
Melissa Sanchez, Peter C. Ford and Mahdi M. Abu-Omar*



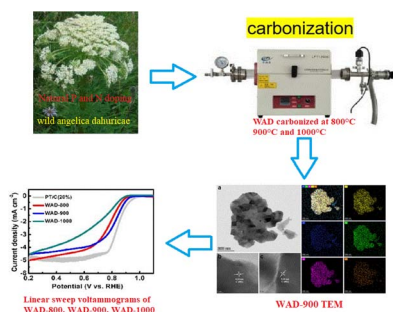
2693

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*



2709

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

Wenhao Mo,* Xiaohua Tan and Lei Zhao

