

RSC

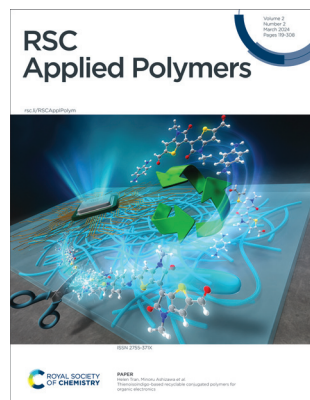
Applied Polymers

rsc.li/rscapplpolym

The Royal Society of Chemistry is the world's leading chemistry community. Through our high impact journals and publications we connect the world with the chemical sciences and invest the profits back into the chemistry community.

IN THIS ISSUE

eISSN 2755-371X CODEN RAPSBD 2(2) 119–308 (2024)



Cover
See Helen Tran,
Minoru Ashizawa *et al.*,
pp. 163–171.

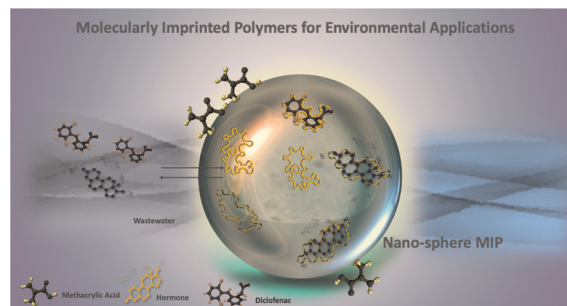
Image reproduced
by permission of
Minoru Ashizawa from
RSC Appl. Polym.,
2024, **2**, 163.

REVIEW

127

Application of molecularly imprinted polymers (MIPs) as environmental separation tools

Despina A. Gkika, Athanasia K. Tolkou,
Dimitra A. Lambropoulou, Dimitrios N. Bikiaris,
Petros Kokkinos, Ioannis K. Kalavrouziotis and
George Z. Kyzas*



COMMUNICATIONS

149

An algae-derived partially renewable epoxy resin formulation for glass fibre-reinforced sustainable polymer composites

Dimitrios Apostolidis, William E. Dyer,
Clemens A. Dransfeld and Baris Kumru*



RSC Applied Interfaces

GOLD
OPEN
ACCESS

Interfacial and surface research
with an applied focus

Interdisciplinary and open access

rsc.li/RSCApplInter

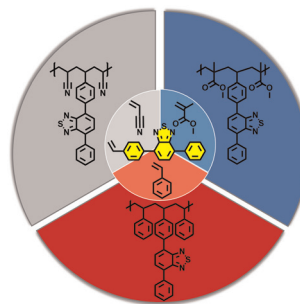
Fundamental questions
Elemental answers

COMMUNICATIONS

155

Comonomer effects in vinyl based photocatalytic polymers

Thomas Kuckhoff, Julian Heuer, Rong Li, Kai A. I. Zhang, Katharina Landfester* and Calum T. J. Ferguson*

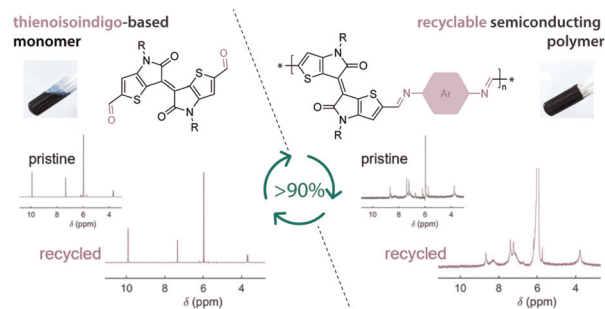


PAPERS

163

Thienoisindigo-based recyclable conjugated polymers for organic electronics

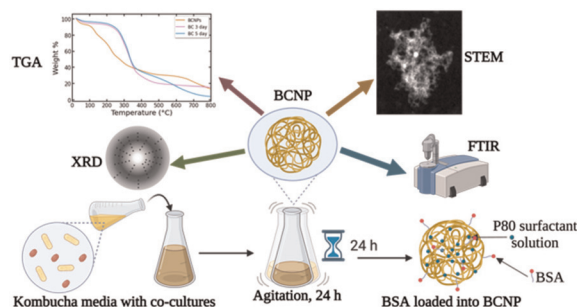
Naoya Nozaki, Azalea Uva, Hidetoshi Matsumoto, Helen Tran* and Minoru Ashizawa*



172

Bacterial cellulose nanoparticles as a sustainable drug delivery platform for protein-based therapeutics

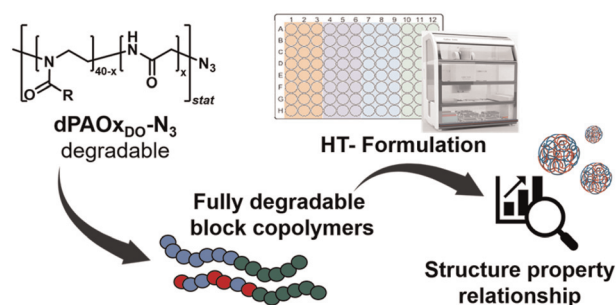
Gabrielle N. Balistreri, Ian R. Campbell, Xinqi Li, Julia Amorim, Shuai Zhang, Elizabeth Nance and Eleftheria Roumeli*



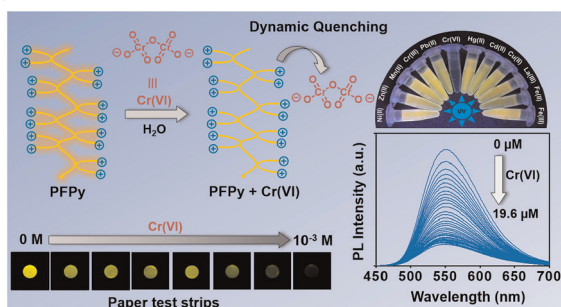
184

How introduction of hydrolyzable moieties in POx influences particle formation – a library approach based on block copolymers comprising polyesters

Natalie E. Göppert, Antje Vollrath, Leanne M. Stafast, Steffi Stumpf, Bianca Schulze, Stephanie Hoepfner, Christine Weber and Ulrich S. Schubert*



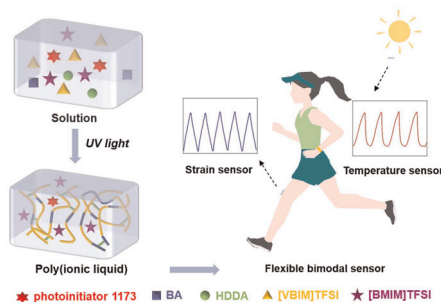
196



Dynamic quenching mechanism based optical detection of carcinogenic Cr(VI) in water and on economical paper test strips via a conjugated polymer

Arvin Sain Tanwar, Moirangthem Anita Chanu, Retwik Parui, Debika Barman, Yeon-Ho Im* and Parameswar Krishnan Iyer*

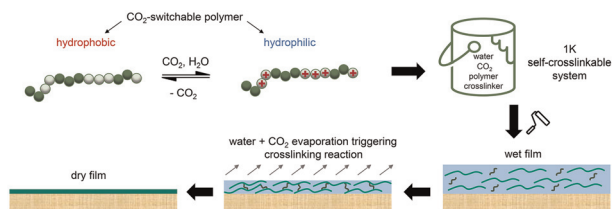
205



Facile fabrication of a stretchable, stable, and self-adhesive poly(ionic liquid) as a flexible sensor

Jingxian Sun, Shilu Zhou, Zhe Zhao, Fengfeng Zhang, Zhongcheng Guo, Shimin Liu and Yan Lu*

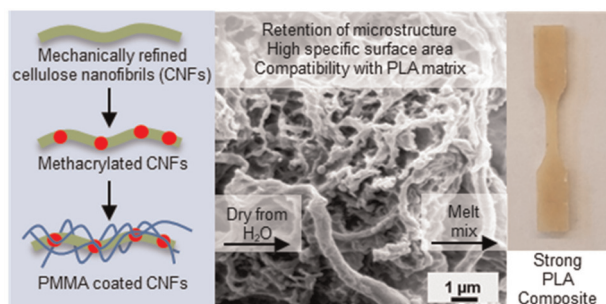
214



Crosslinking CO₂-switchable polymers for paints and coatings applications

Raz Abbasi, Army Mitchell, Philip G. Jessop* and Michael F. Cunningham*

224



Strengthening polylactic acid (PLA) composites with poly(methyl methacrylate)-functionalized cellulose nanofibrils created through grafting-through emulsion polymerization

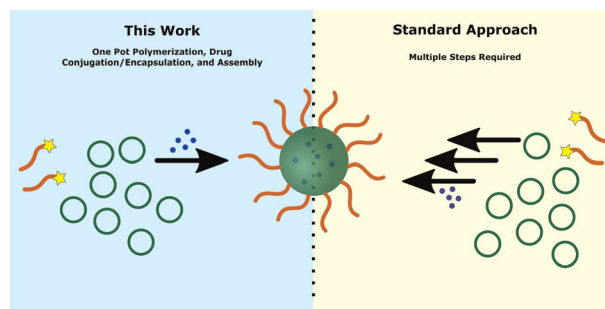
Hathaithep Senkum, Peter V. Kelly, Ahmad A. L. Ahmad, Siamak Shams Es-haghi and William M. Gramlich*



238

Drug catalyzed polymerization yields one pot nanomedicines

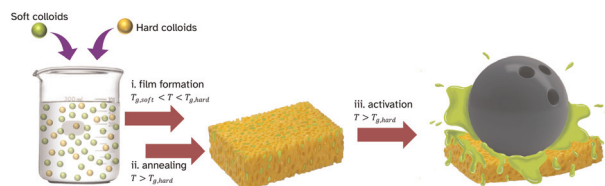
Paul Joshua Hurst, Kyle J. Gassaway, Mohammed Faris Abouchaleh, Nehal S. Idris, Chelsea R. Jones, Chris A. Dickson, James S. Nowick and Joseph P. Patterson*



248

A mesh reinforced pressure-sensitive adhesive for a linerless label design

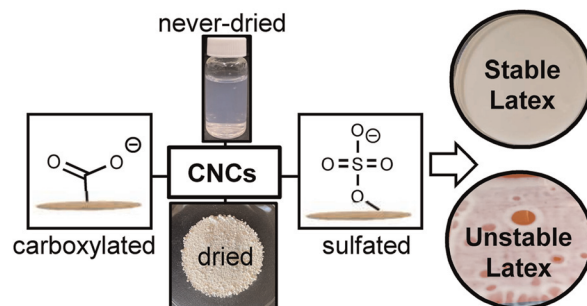
Emily M. Brogden, Paul F. Wilson, Steven Hindmarsh, Ian Hands-Portman, Andrew Unsworth, Evelina Liarou and Stefan A. F. Bon*



262

Influence of cellulose nanocrystal surface chemistry and dispersion quality on latex nanocomposite stability, film formation and adhesive properties

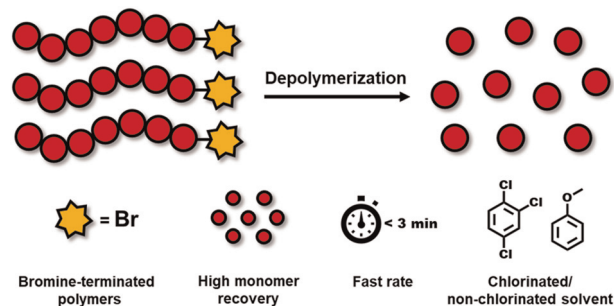
Julia M. Antoniw, Vida A. Gabriel, Michael V. Kiriakou, Marc A. Dubé, Michael F. Cunningham and Emily D. Cranston*



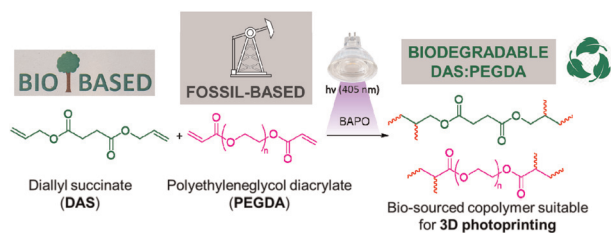
275

Chemical recycling of bromine-terminated polymers synthesized by ATRP

Stella Afroditi Mountaki, Richard Whitfield, Kostas Parkatzidis, Maria-Nefeli Antonopoulou, Nghia P. Truong and Athina Anastasaki*



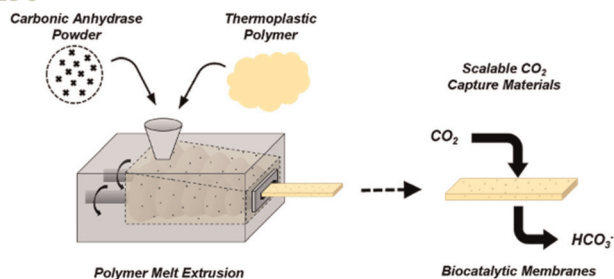
284



Synthesis of bio-sourced liquid resins and their photopolymerization with poly(ethylene glycol) diacrylate in the roadmap to more sustainable digital light processing technologies

Ludmila Hodášová, Isaac Isarn, Fernando Bravo,*
Carlos Alemán, Núria Borràs, Gemma Fargas and
Elaine Armelin*

296



Melt stability of carbonic anhydrase in polyethylene oxide for extrusion of protein–polymer composite materials

Samuel S. Hays and Jonathan K. Pokorski*

