

Polymer Chemistry

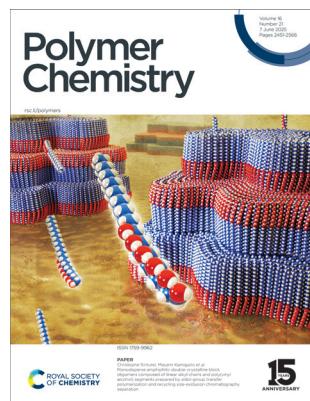
The home for the most innovative and exciting polymer chemistry, with an emphasis on polymer synthesis and applications thereof

rsc.li/polymers

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

ISSN 1759-9962 CODEN PCOHC2 16(21) 2451-2566 (2025)



Cover

See Christophe Sinturel, Masami Kamigaito *et al.*, pp. 2471–2479.

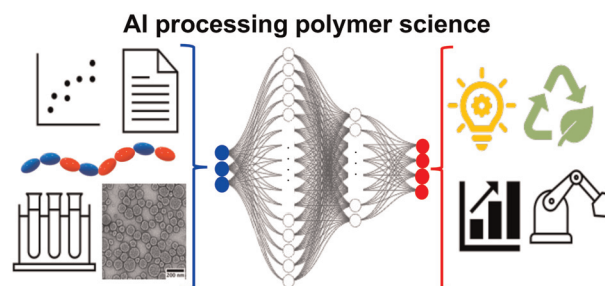
Image reproduced by permission of Masami Kamigaito from *Polym. Chem.*, 2025, **16**, 2471. Credit: Artwork by Masaya Matsukawa.

REVIEW

2457

Basic concepts and tools of artificial intelligence in polymer science

Khalid Ferji

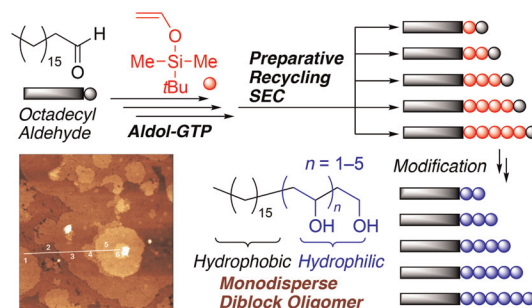


PAPERS

2471

Monodisperse amphiphilic double-crystalline block oligomers composed of linear alkyl chains and poly(vinyl alcohol) segments prepared by aldol-group transfer polymerization and recycling size-exclusion chromatography separation

Toa Nakane, Hironobu Watanabe, Mineto Uchiyama, Fabrice Muller, Nathalie Mathieu, Christophe Sinturel* and Masami Kamigaito*



RSC Applied Interfaces

GOLD
OPEN
ACCESS

**Interfacial and surface research
with an applied focus**

Interdisciplinary and open access

rsc.li/RSCApplInter

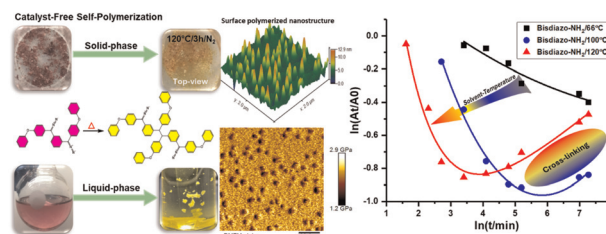
**Fundamental questions
Elemental answers**

PAPERS

2480

Polymerization behaviour of biscarbenes derived by thermolysis of bisdiazo compounds

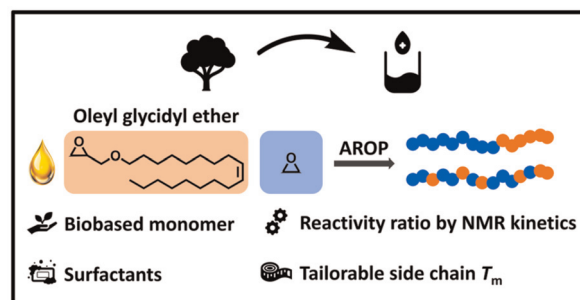
Xiaosong Liu, Mark G. Moloney* and Koji Okuda



2494

Biobased oleyl glycidyl ether: copolymerization with ethylene oxide, postmodification, thermal properties, and micellization behavior

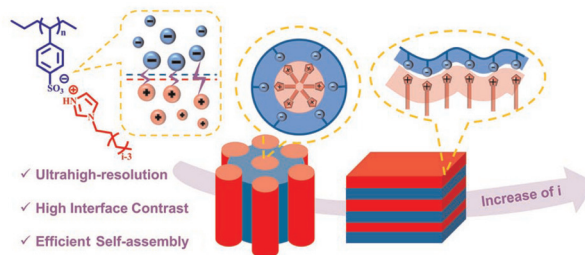
Gregor M. Linden, Sandra Schüttner, Nora Fribiczer, Sebastian Seiffert and Holger Frey*



2506

Ultrahigh-resolution, high interface contrast ionic homopolymers induced by acid–base mixed electrostatic interactions and nanopattern evolution

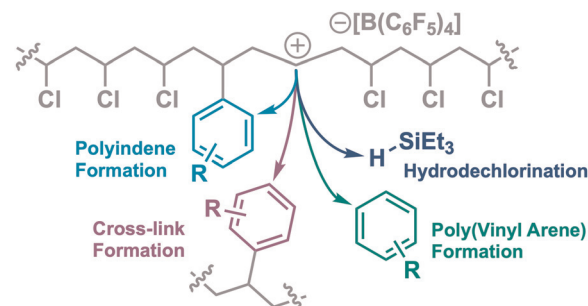
Sen Weng, Zhen Lu, Jingyu Cai, Longqiang Xiao, Kairui Wang, Rui Zhao, Xin Fu and Linxi Hou*



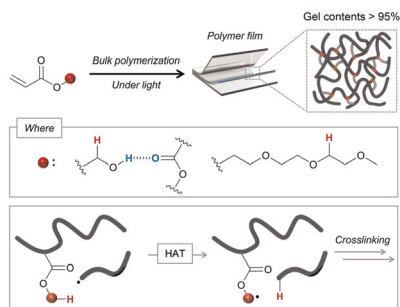
2514

Understanding the competition between hydrodechlorination and Friedel–Crafts alkylation in PVC dechlorination with silylium ions

Nicholas J. Roubineau, Eunice C. Castro, Kaustubh Rane, Zachary A. Wood, Angelyn N. Nguyen, Nancy G. Bush, Ayon Das, Shaama Mallikarjun Sharada* and Megan E. Fieser*



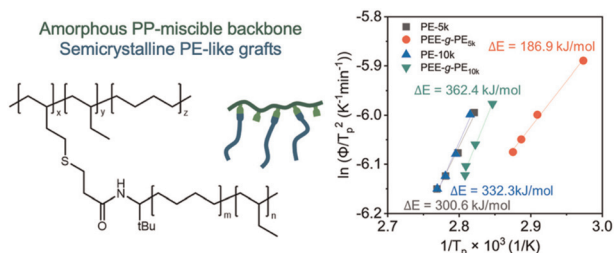
2521



Crosslinking of polymers from monofunctional acrylates via C–H bond activation

Junkyu Kim, Seokju Lee, Youngjoo Park, Woojin Jeon and Min Sang Kwon*

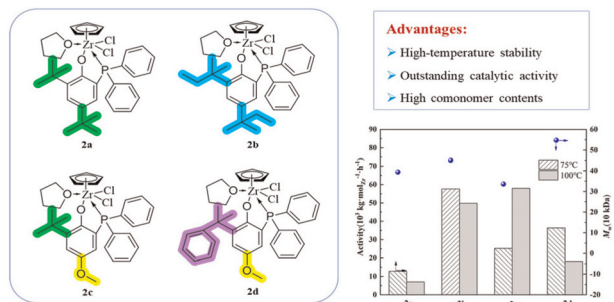
2530



Synthesis of butadiene-derived polyolefin graft copolymers and their crystallization behaviors

Jin Qian and Zhe Qiang*

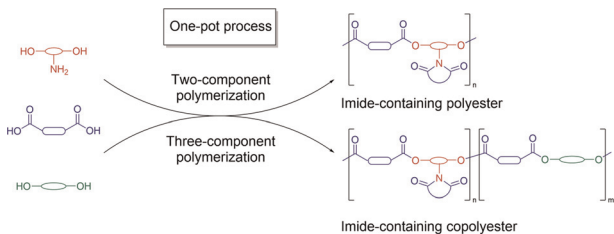
2543



Synthesis, characterization and efficient catalytic ethylene polymerization reactions of phenylphosphine half-metallocene zirconium complexes

Di Wu, Xiaohui Mao, Biao Li, Xianghan Zhang, Zihao Jiang, Li Pan* and Yuesheng Li*

2552



Sustainable one-pot synthesis of imide-containing polyesters with programmable structures and tunable performance

Tianhua Ren,* Feng Yu, Jialong Li, Jinlin Li and Kechun Zhang*

