

Polymer Chemistry

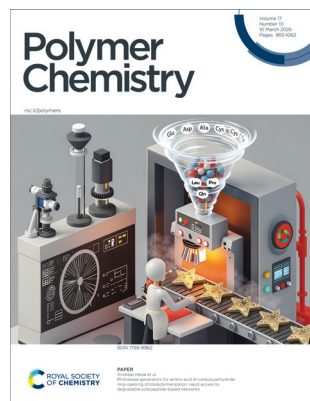
The home for the most innovative and exciting polymer chemistry, with an emphasis on polymer synthesis and applications thereof

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 17(10) 965-1062 (2026)



Cover
See Andreas Heise *et al.*,
pp. 989–994.

Image reproduced
by permission of
Andreas Heise
from *Polym. Chem.*,
2026, **17**, 989.

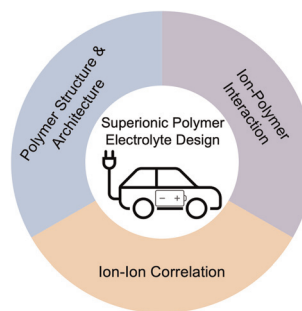
The authors acknowledge
Miriam Frances from
accelopment AG and the use
of Freepik in creating the
artwork.

PERSPECTIVE

971

Superionic conduction in solid polymer electrolytes – decoupling ion transport from segmental relaxation

Mengying Yang and Thomas H. Epps, III*

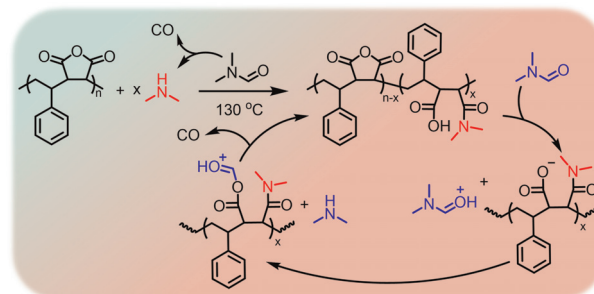


COMMUNICATION

984

The amidation of poly(styrene-*alt*-maleic anhydride) via *N,N*-dimethylformamide decomposition

Michael-Phillip Smith, Lauren E. Ball, Ilanie Wessels and Bert Klumperman*



RSC Applied Interfaces

GOLD
OPEN
ACCESS

Interfacial and surface research
with an applied focus

Interdisciplinary and open access

rsc.li/RSCApplInter

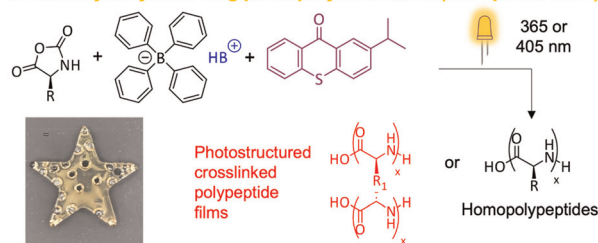
Fundamental questions
Elemental answers

989

Photobase generators for amino acid *N*-carboxyanhydride ring-opening photopolymerization: rapid access to degradable polypeptide-based networks

Robert D. Murphy, Thiago Ouriques Machado, Carlo Gonzato, Fernando Vidal, Ander Leiza, Oihane Varela, Haritz Sardon, Olivier Soppera and Andreas Heise*

N-carboxyanhydride ring photopolymerization (NCA photo-ROP)

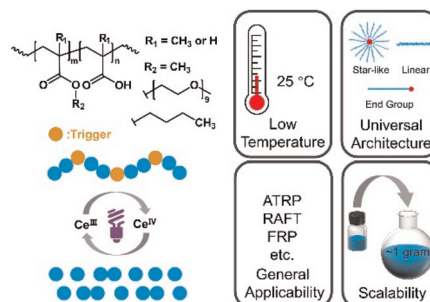


✓Rapid NCA ROP kinetics ✓Symmetrical low D (<1.5) ✓Amenable to visible light

995

Visible light-induced degradation of acrylate/methacrylate copolymers with comonomer triggers

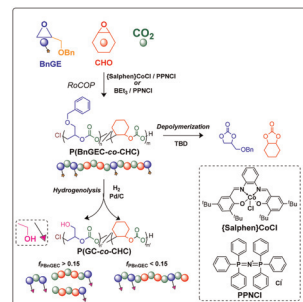
Xuzheng Guo, Wenhua Peng, Wenjie Zhang, Chengli Wang, Xiaomeng Zhang, Zhe Cui, Peng Fu, Mingyong Liu, Ge Shi, Shuang Liang, Yanjie He* and Xinchang Pang*



1005

CO₂/epoxides ring-opening copolymerization towards hydroxy-functionalized polycarbonates

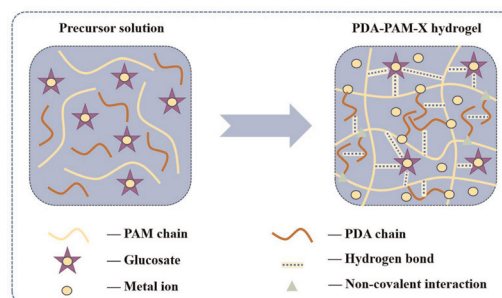
Nishant Chaudhary, A. Stephen K. Hashmi, Jean-François Carpentier* and Sophie M. Guillaume*



1019

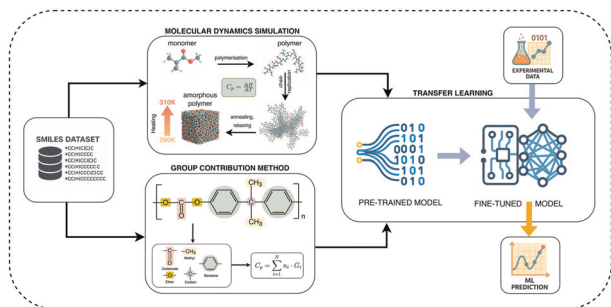
Mechanically robust gluconate-regulated polydopamine–polyacrylamide hydrogels with exceptional adhesion

Zhongyang Wang, Chengcheng Yin, Qiaoyu Ma, Songfang Zhao, Guangbin Duan,* Degang Zhao and Shuhua Yang*



PAPERS

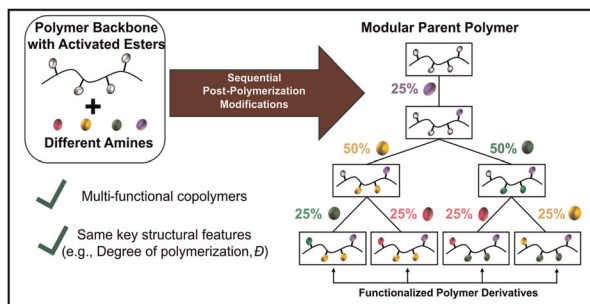
1028



A transfer learning framework integrating molecular dynamics and group contribution methods for predicting polymer specific heat capacity

Sobin Alosious, Jiaxin Xu, Meng Jiang and Tengfei Luo*

1052



A divergent synthetic route to functional copolymer libraries *via* modular polymers

Rachel H. Bianculli, Connor M. B. Gallagher, Zhen Shi, Rhone B. Jenkins, Timothy D. Ermolaev and Michael D. Schulz*

CORRECTION

1059

Correction: Simple amination of polystyrene *via* radical sp^3 C–H imination

Mengnan Hu, Lizhe He and Robert J. Comito*

