

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(9) 1013-1112 (2025)



Cover

See Bert Klumperman et al., pp. 1019–1023.

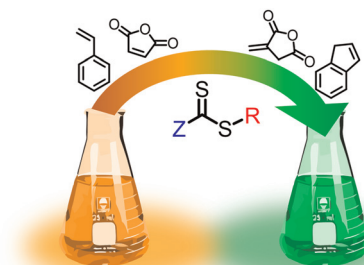
Image reproduced by permission of Michael-Phillip Smith from *Polym. Chem.*, 2025, **16**, 1019. Acknowledgment: Artwork by Michael-Phillip Smith and Nikki Smith.

COMMUNICATIONS

1019

Bioderived copolymer alternatives to poly(styrene-co-maleic anhydride) via RAFT-mediated copolymerization

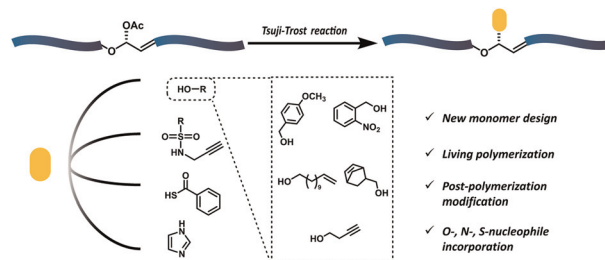
Lauren Elaine Ball, Michael-Phillip Smith and Bert Klumperman*



1024

Living cascade enyne metathesis polymerization of an allylic acetate monomer and post-polymerization modification via a Tsuji–Trost reaction

Zhixiong Luo, Yuhuai Tian, Bixia Xie and Liangbing Fu*



Environmental Science: Atmospheres

GOLD
OPEN
ACCESS

Connecting communities
and inspiring new ideas

rsc.li/submittoEA

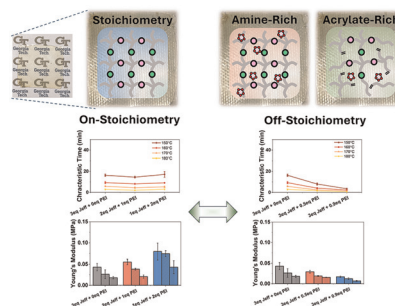
Fundamental questions
Elemental answers



1031

Stoichiometric effects on bulk stress relaxation to enhance reprocessability in covalent adaptable networks

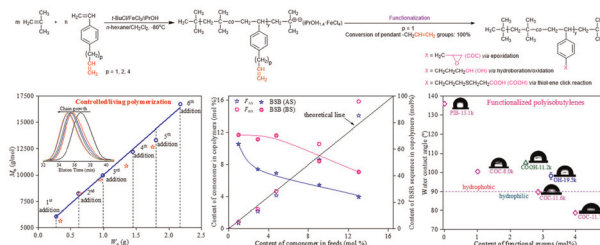
Jaehyun Cho, Santanu Ghosh, Mridula Nandi, Heejoon Jeon, Liang Yue, H. Jerry Qi, M. G. Finn and Blair Brettmann*



1044

Highly efficient synthesis of random isobutylene/alkenyl styrene copolymers with pendant vinyl groups via cationic polymerization for versatile functionalization

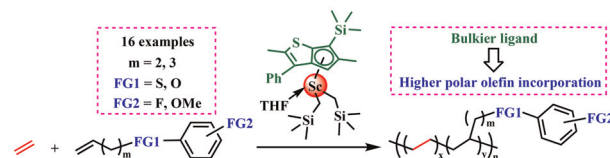
He-Ying Wang, Feng-Yu Zhang, Si-Hao Li, Zi-Yang Song, Yang Wang and Yi-Xian Wu*



1057

Direct synthesis of polyethylene containing two kinds of heteroatoms by scandium complexes

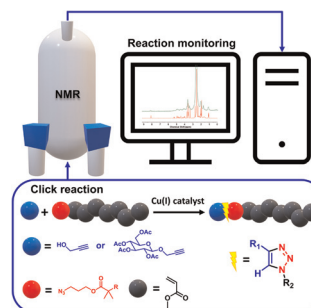
Hui Tian, Yifan Wang, Chunji Wu, Xiaohui Kang* and Baoli Wang*



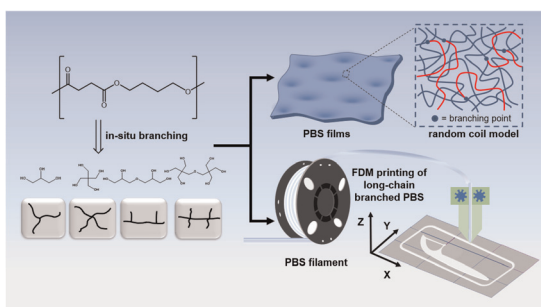
1065

Optimisation of azide–alkyne click reactions of polyacrylates using online monitoring and flow chemistry

Despina Coursari, Spyridon Efstathiou, Lucas Al-Shok, Mia D. Hall, Ahmed M. Eissa, Evelina Liarou and David M. Haddleton*



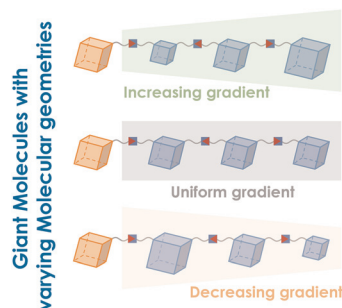
1072



Poly(butylene succinate) filaments for fused deposition modelling (FDM) 3D-printing

Yong Chen, Jielin Xu, Ye Chen, Chaosheng Wang,*
Huaping Wang and Jing Wu*

1085



Giant molecules with varying geometric features by programming the unit sequence

Ze Yang, Zhongguo Liu, Shuai Wang, Gang Li* and
Xue-Hui Dong*

1096



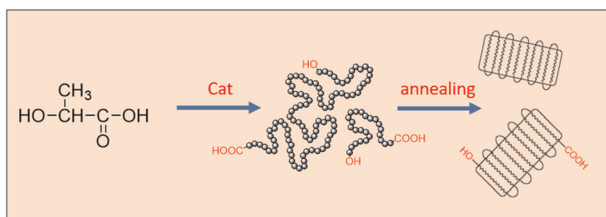
✓ **Chemoselective and Controlled Polymerization**

✓ **Functionalized COCs (7 examples)**

Functionalized cyclic olefin copolymers: chemoselective polymerization of a cyclopropane-containing norbornadiene dimer using a titanium catalyst and post-polymerization modification

Yusuke Iwata, Takeshi Shiono and Shin-ichi Matsuoka*

1102



Polycondensation of L-lactic acid: a deeper look into solid state polycondensation

Hans R. Kricheldorf,* Steffen M. Weidner and
Felix Scheliga

