

Polymer Chemistry

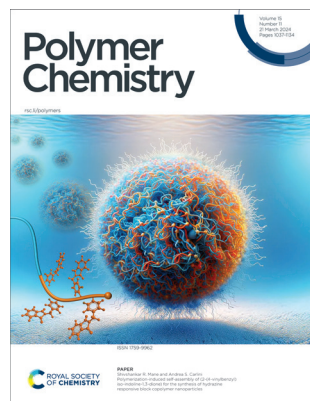
The home for the most innovative and exciting polymer chemistry, with an emphasis on polymer synthesis and applications thereof

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 15(11) 1037-1134 (2024)



Cover

See Shivshankar R. Mane and Andrea S. Carlini, pp. 1043–1051.

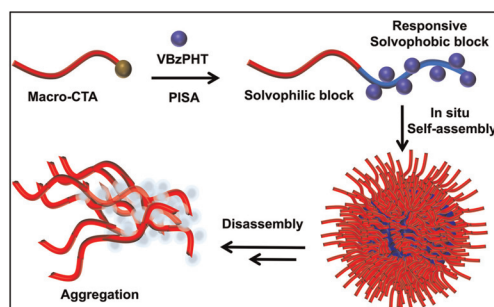
Image reproduced by permission of Shivshankar R. Mane and Andrea S. Carlini from *Polym. Chem.*, 2024, **15**, 1043. Image credit: Lucas Ruggeri and Andrea S. Carlini.

PAPERS

1043

Polymerization-induced self-assembly of (2-(4-vinylbenzyl)iso-indoline-1,3-dione) for the synthesis of hydrazine responsive block copolymer nanoparticles

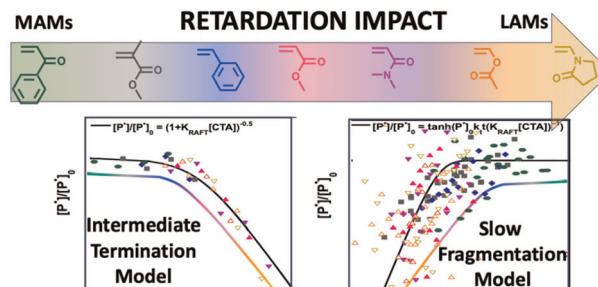
Shivshankar R. Mane* and Andrea S. Carlini*



1052

Rate retardation trends in RAFT – an emerging monomer classification tool?

Tochukwu Nwoko, Khoi Nguyen, Nirob K. Saha, Christopher Barner-Kowollik and Dominik Konkolewicz*



Industrial Chemistry & Materials

GOLD
OPEN
ACCESS

Focus on industrial chemistry
Advance material innovations
Highlight interdisciplinary feature

Innovative.
Interdisciplinary.
Problem solving

APCs currently waived

Learn more about ICM
Submit your high-quality article

 [@IndChemMater](#)

 [@IndChemMater](#)

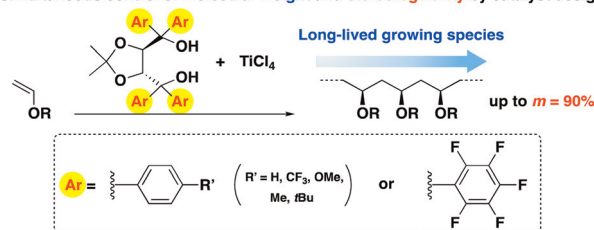
rsc.li/icm

1062

Dual control of stereoregularity and molecular weight in cationic polymerization of vinyl ether by tunable TADDOLs/TiCl₄ initiating systems

Hironobu Watanabe, Yuji Mishima, Arihiro Kanazawa and Sadahito Aoshima*

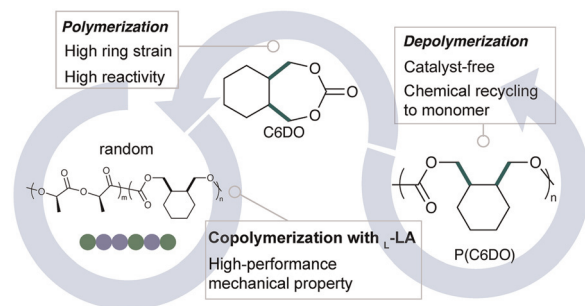
Simultaneous control of molecular weight and stereoregularity by catalyst design



1070

cis-Fused cyclohexane promoted the chemical recycling of polycarbonate to monomer

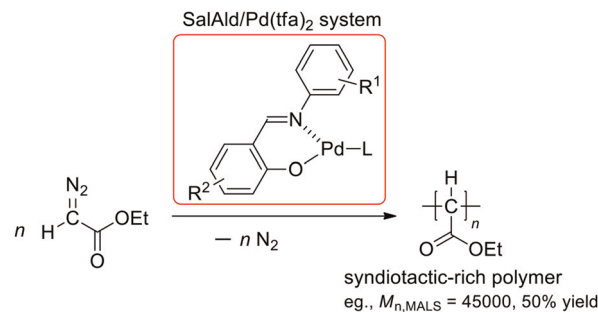
Si-Yi Shan, Wei Zhang, Qing Cao, Yun-Cong Ye, Zhongzheng Cai* and Jian-Bo Zhu*



1077

A salicylaldiminate/Pd(trifluoroacetate)₂ [SalAld/Pd(tfa)₂] initiating system for C1 polymerization of diazoacetate: generation of an active initiator from ordinary reagents with facile procedures

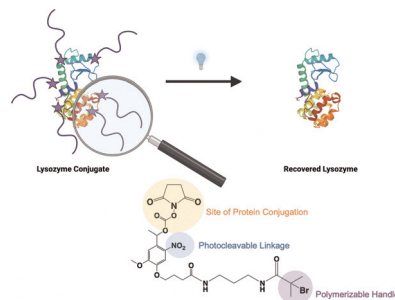
Hiroaki Shimomoto,* Takaya Izumoto, Kazuki Yamashita, Tomomichi Itoh and Eiji Ihara*



1085

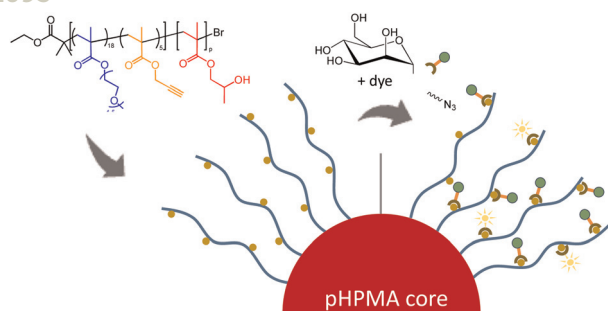
Enzyme-polymer conjugates with photocleavable linkers for control over protein activity

Mikayla F. Tan, Brock M. Hosier, Neil L. Forsythe and Heather D. Maynard*



PAPERS

1093

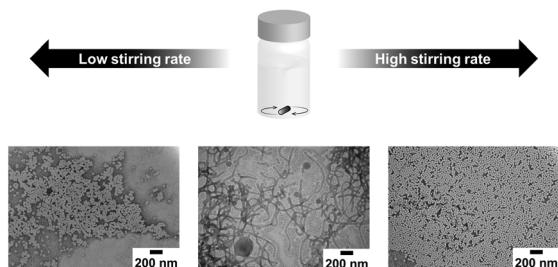


Surface mannosylation of dispersion polymerisation derived nanoparticles by copper mediated click chemistry

Daniela V. Tomasino, Ashfaq Ahmad, Tauseef Ahmad, Golestan Salimbeigi, Jennifer Dowling, Mark Lemoine, Ruth M. Ferrando, Alan Hibbitts, Ruairi P. Branningan, Mathew I. Gibson, Luigi Lay* and Andreas Heise*

1102

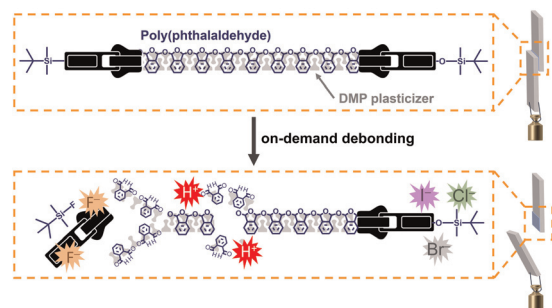
Effects of stirring rate on PISA-derived nanoparticle morphology



Effects of stirring rate on morphology of aqueous RAFT emulsion PISA-derived block copolymer nanoparticles

Hyun Jin Kim, Fumi Ishizuka, Jiang Li, Rhiannon P. Kuchel, Shunsuke Chatani, Hiroshi Niino and Per B. Zetterlund*

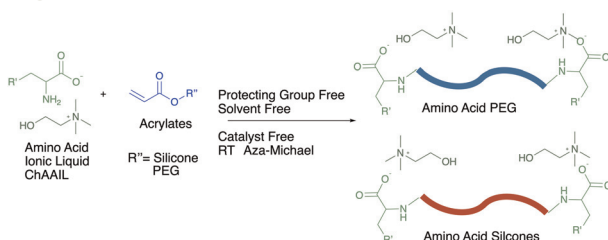
1112



Functional design of stimuli-responsive poly(phthalaldehyde)-based adhesives: depolymerization kinetics and mechanical strength management through plasticizer addition

Patrick Damacet, Hana J. Yarbrough, Nicholas D. Belloch, Hyuk-Jun Noh and Katherine A. Mirica*

1123



Protecting group-free introduction of amino acids to polymers through the aza-Michael reaction

Guanhua Lu and Michael A. Brook*

