

Soft Matter

Where physics meets chemistry meets biology for fundamental soft matter research

rsc.li/soft-matter-journal

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 1744-6848 CODEN SMOABF 20(25) 4831-5030 (2024)



Cover

See Camille N. Mahyaoui *et al.*, pp. 4859–4867. Image reproduced by permission of C. N. Mahyaoui, P. Davidson, C. Meyer and I. Dozov from *Soft Matter*, 2024, 20, 4859.



Inside cover

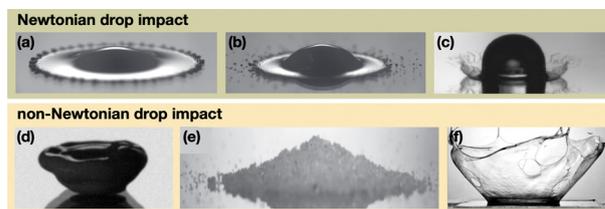
See Jie Feng *et al.*, pp. 4868–4877. Image reproduced by permission of Jie Feng from *Soft Matter*, 2024, 20, 4868.

REVIEW

4839

Drop impact dynamics of complex fluids: a review

Phalguni Shah and Michelle M. Driscoll*

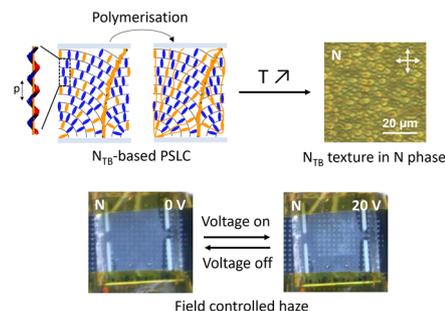


PAPERS

4859

Polymerisation of twist-bend nematic textures for electro-optical applications

Camille N. Mahyaoui,* Patrick Davidson, Claire Meyer and Ivan Dozov



Advance your career in science

with professional recognition that showcases
your **experience, expertise and dedication**

Stand out from the crowd

Prove your commitment
to attaining excellence in
your field

Gain the recognition you deserve

Achieve a professional
qualification that inspires
confidence and trust

Unlock your career potential

Apply for our professional
registers (RSci, RSciTech)
or chartered status
(CChem, CSci, CEnv)

Apply now

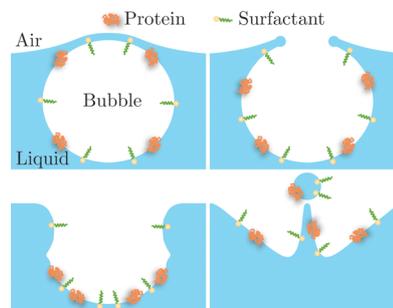
rsc.li/professional-development



4868

Effect of surface viscoelasticity on top jet drops produced by bursting bubbles

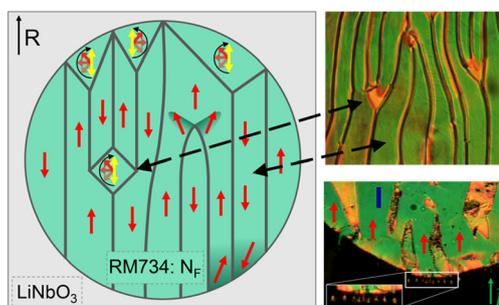
Zhengyu Yang, Sainath Barbhai, Bingqiang Ji* and Jie Feng*



4878

Fluid jets and polar domains, on the relationship between electromechanical instability and topology in ferroelectric nematic liquid crystal droplets

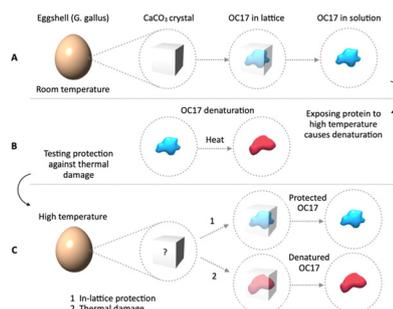
Stefano Marni, Federico Caimi, Raouf Barboza, Noel Clark, Tommaso Bellini* and Liana Lucchetti*



4886

Implications of intracrystalline OC17 on the protection of lattice incorporated proteins

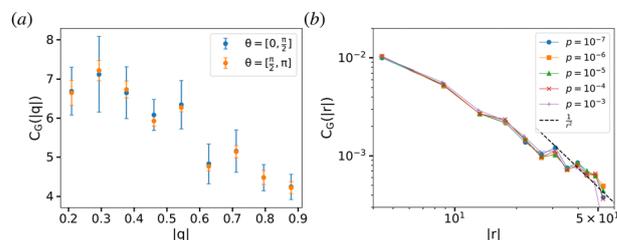
Huseyin Burak Caliskan* and Fatma Isik Ustok



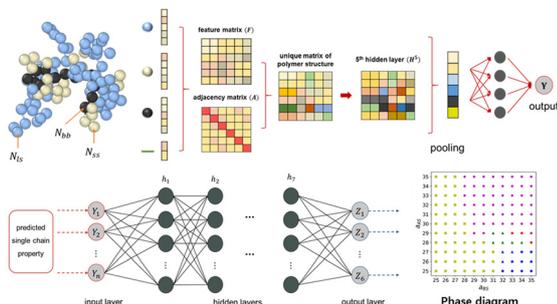
4895

Long-range correlations in elastic moduli and local stresses at the unjamming transition

Surajit Chakraborty* and Kabir Ramola



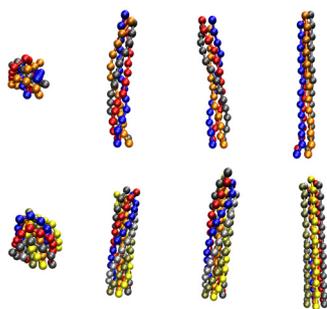
4905



Self-assembly prediction of architecture-controlled bottlebrush copolymers in solution using graph convolutional networks

Wooseop Hwang, Sangwoo Kwon, Won Bo Lee* and YongJoo Kim*

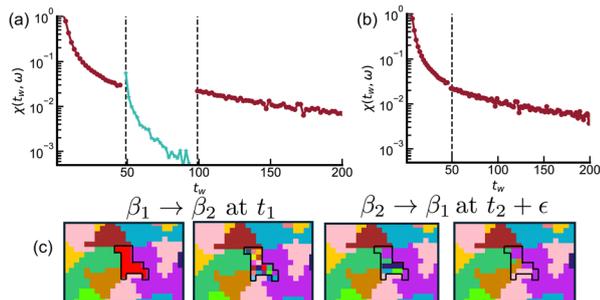
4916



Pulling on grafted flexible polymers can cause twisted bundles

Dustin Warkotsch, Henrik Christiansen, Johannes Zierenberg and Wolfhard Janke*

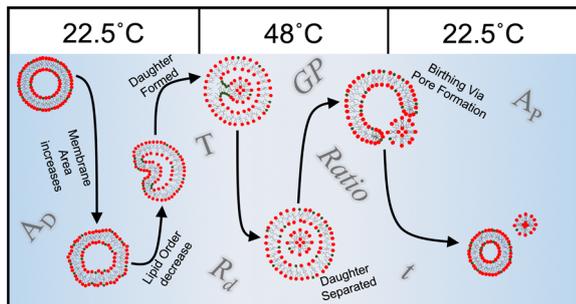
4928



Real-space model for activated processes in rejuvenation and memory behavior of glassy systems

Mahajabin Rahman and Stefan Boettcher

4935



Significance of *in situ* quantitative membrane property-morphology relation (QmPMR) analysis

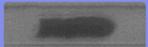
Zachary Nicolella, Yukihiro Okamoto,* Nozomi Morishita, Watanabe, Gary Lee Thompson and Hiroshi Umakoshi*



4950

Morphology, repulsion, and ordering of red blood cells in viscoelastic flows under confinement

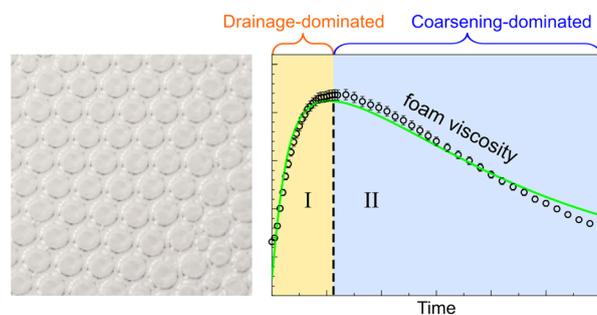
Steffen M. Recktenwald,* Yazdan Rashidi, Ian Graham, Paulo E. Arratia, Francesco Del Giudice and Christian Wagner

Rheology	<i>Newtonian</i>	<i>non-Newtonian</i>
Shape		
Clustering		
Ordering		

4964

The peak viscosity of decaying foam with natural drainage and coarsening

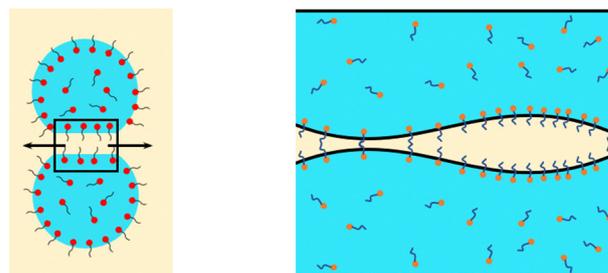
Wei Yu* and Jack H. Y. Lo*



4972

Rupture of thin liquid trilayer films with soluble surfactants: fundamentals and applications to droplet coalescence

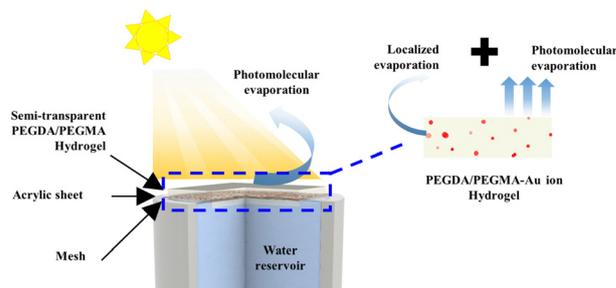
Shu Yang, Satish Kumar* and Cari S. Dutcher*



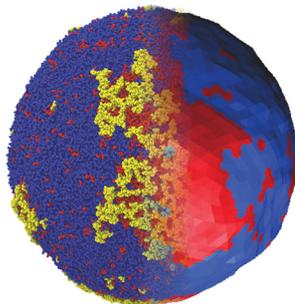
4988

Highly porous hydrogels for efficient solar water evaporation

Akash Ranjan Pati, Young-Su Ko, Changwoo Bae, Inhee Choi, Yun Jung Heo* and Choongyeop Lee*



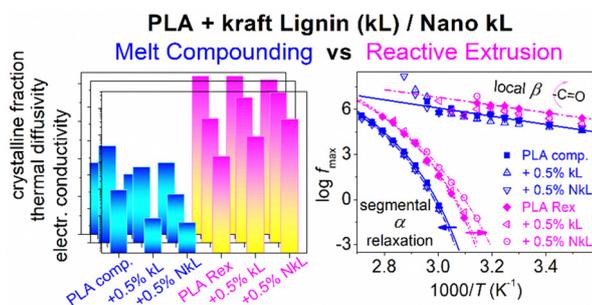
4998



There and back again: bridging meso- and nano-scales to understand lipid vesicle patterning

Julie Cornet, Nelly Coulonges, Weria Pezeshkian, Maël Penissat-Mahaut, Hermes Desgrez-Dautet, Siewert J. Marrink, Nicolas Destainville,* Matthieu Chavent* and Manoel Manghi*

5014



Structure–property relationships in renewable composites of poly(lactic acid) reinforced by low amounts of micro- and nano-kraft-lignin

Sofia P. Makri, Panagiotis A. Klonos,* Giacomo Marra, Alexandros Zoikis Karathanasis, Ioanna Deligkiozi, Miguel Ángel Valera, Ana Mangas, Nikolaos Nikolaidis, Zoi Terzopoulou, Apostolos Kyritsis and Dimitrios N. Bikiaris*

