Open Access Article. Published on 11 December 2024. Downloaded on 1/21/2026 3:26:45 AM.
This article is licensed under a Creative Commons Attribution 3.0 Unported Licence.

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(48) 9515–9696 (2024)

Cover
See Zihan Tan *et al.*, pp. 9528–9546. Image reproduced by permission of Zihan Tan, Vania Calandrini, Jan K. G. Dhont, Gerhard Nägele, Judit Clopés Llahí from *Soft Matter*, 2024, **20**, 9528. Image credit: Ms. Judit Clopés Llahí.

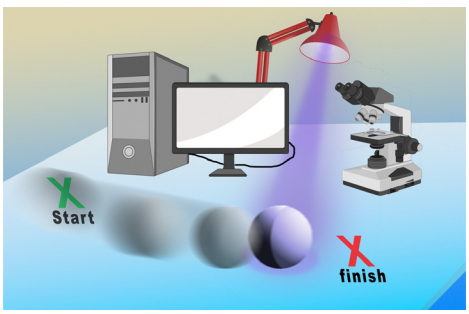
Inside cover
See Alexis Cooper and Anand Bala Subramaniam, pp. 9547–9561. Image reproduced by permission of Alexis Cooper and Anand Bala Subramaniam from *Soft Matter*, 2024, **20**, 9547.

COMMUNICATION

9523

Individual closed-loop control of micromotors by selective light actuation

David P. Rivas, Max Sokolich and Sambeeta Das*

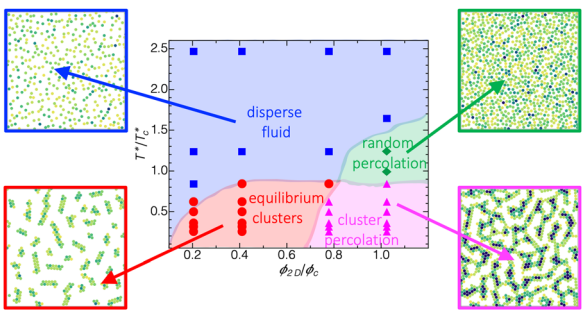


PAPERS

9528

Quasi-two-dimensional dispersions of Brownian particles with competitive interactions: phase behavior and structural properties

Zihan Tan,* Vania Calandrini, Jan K. G. Dhont and Gerhard Nägele



ROYAL SOCIETY OF CHEMISTRY

Royal Society of Chemistry approved training courses

Explore your options.
Develop your skills.
Discover learning that suits you.

Courses in the classroom, the lab, or online

Find something for every stage of your professional development. Search our database by:

- subject area
- location
- event type
- skill level

Members **get at least 10% off**

Visit **rsc.li/cpd-training**

SAVE 10%

Registered charity number: 207890

Open Access Article. Published on 11 December 2024. Downloaded on 1/21/2026 3:26:45 AM.
This article is licensed under a Creative Commons Attribution 3.0 Unported Licence.

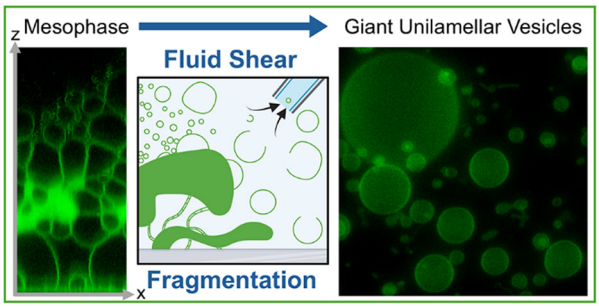
Open Access Article. Published on 11 December 2024. Downloaded on 1/21/2026 3:26:45 AM.
This article is licensed under a Creative Commons Attribution 3.0 Unported Licence.

PAPERS

9547

Ultrahigh yields of giant vesicles obtained through mesophase evolution and breakup

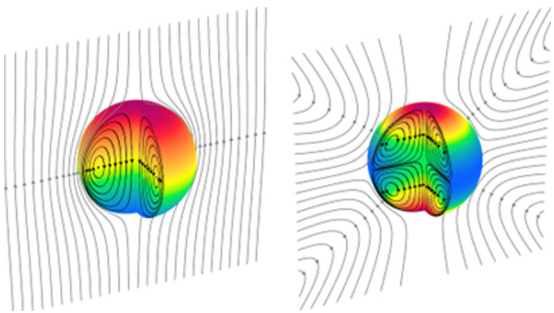
Alexis Cooper and Anand Bala Subramaniam*



9562

Active droplet driven by collective chemotaxis

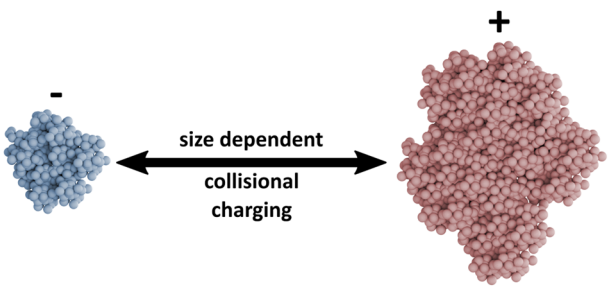
Christian Carlsson and Tong Gao*



9572

Size dependent polarities in tribocharged dust aggregates

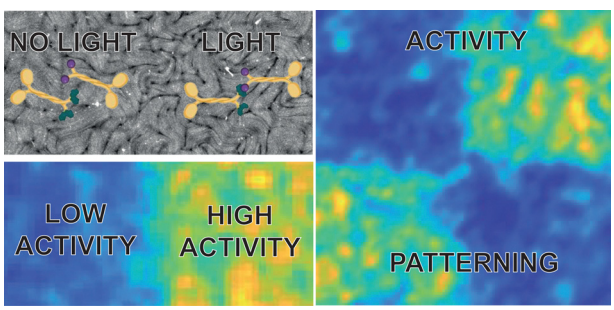
Christopher Grünebeck,* Florence Chioma Onyeagusi, Jens Teiser and Gerhard Wurm



9578

Active nematic coherence probed under spatial patterns of distributed activity

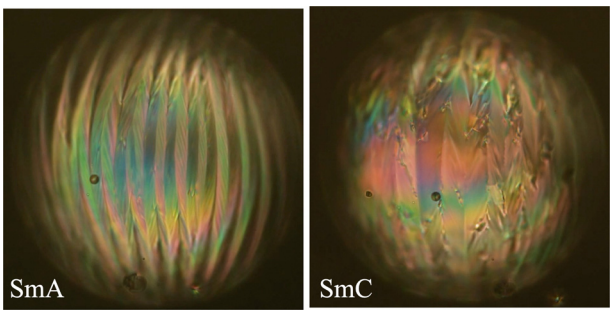
Ignasi Vélez-Cerón, Jordi Ignés-Mullol* and Francesc Sagués



Open Access Article. Published on 11 December 2024. Downloaded on 1/21/2026 3:26:45 AM.
This article is licensed under a Creative Commons Attribution 3.0 Unported Licence.

PAPERS

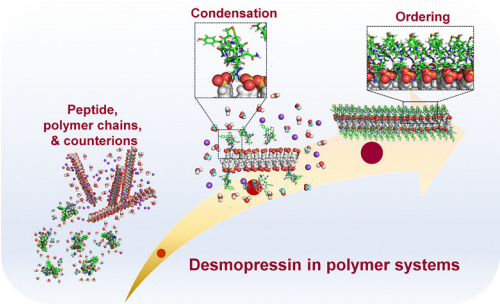
9586



How smectic-A and smectic-C liquid crystals resolve confinement-induced frustration in spherical shells

Anjali Sharma, Mitchell Magrini, Yucen Han, David M. Walba, Apala Majumdar and Jan P. F. Lagerwall*

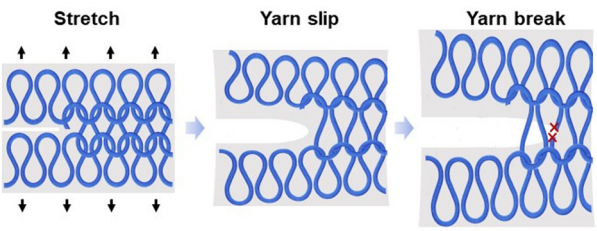
9597



Self-assembly, cytocompatibility, and interactions of desmopressin with sodium polystyrene sulfonate

Ana B. Caliari, Renata N. Bicev, Caroline C. da Silva, Sinval E. G. de Souza, Marta G. da Silva, Louise E. A. Souza, Lucas R. de Mello, Ian W. Hamley, Guacyara Motta, Jéril Degrouard, Guillaume Tresset, Alexandre J. C. Quaresma, Clovis R. Nakaie and Emerson R. da Silva*

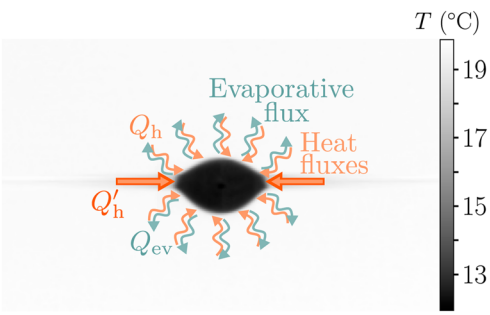
9614



Composite of knitted fabric and soft matrix. I. Crack growth in the course direction

Fengkai Liu, Xi Chen, Zhigang Suo* and Jingda Tang*

9622



Thermal effects on the lifetime of evaporating drops on fibers

Marie Corpart,* Frédéric Restagno and François Boulogne

This journal is © The Royal Society of Chemistry 2024

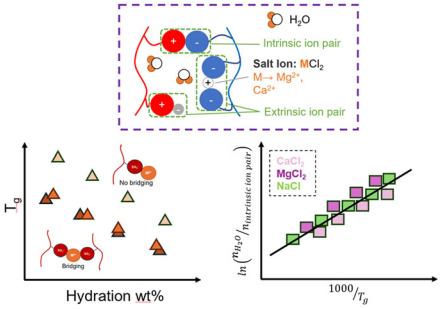
Open Access Article. Published on 11 December 2024. Downloaded on 1/21/2026 3:26:45 AM.
This article is licensed under a Creative Commons Attribution 3.0 Unported Licence.

PAPERS

9631

Divalent cation effects in the glass transition of poly(diallyldimethylammonium)–poly(styrene sulfonate) polyelectrolyte complexes

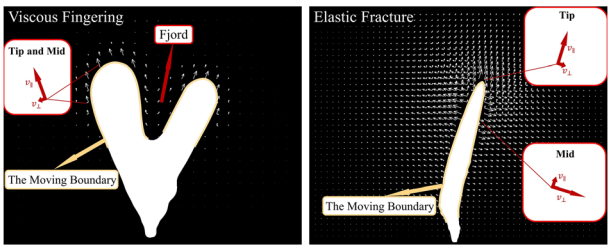
Tamunoemi Braide, Suvesh Manoj Lalwani, Chikaodinaka I. Eneh and Jodie L. Lutkenhaus*



9642

Comparison of velocity field characteristics of gas invasion *via* viscous fingering and elastic fracturing in visco-elasto-plastic fluids

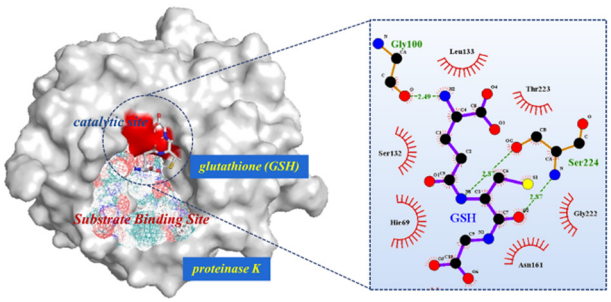
Zhao Jin, Yixuan Hou, Xinzhe Que, Yongchao Zhou and Yiping Zhang*



9654

Probing the binding mode and interactions of proteinase K and glutathione: molecular simulation and experiments

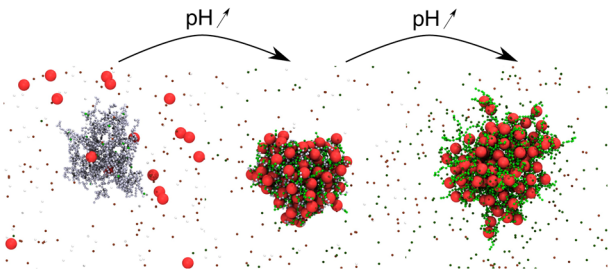
Yuan Yang, Bianxiang Zhang* and Jian Zhang*



9664

Exploring guest molecule uptake in pH-responsive polyelectrolyte microgels *via* Monte Carlo simulations

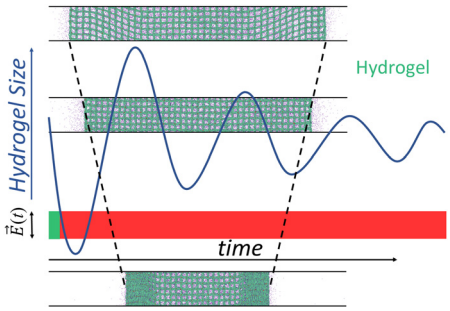
Christian Strauch, Lars Roß and Stefanie Schneider*



Open Access Article. Published on 11 December 2024. Downloaded on 1/21/2026 3:26:45 AM.
This article is licensed under a Creative Commons Attribution 3.0 Unported Licence.

PAPERS

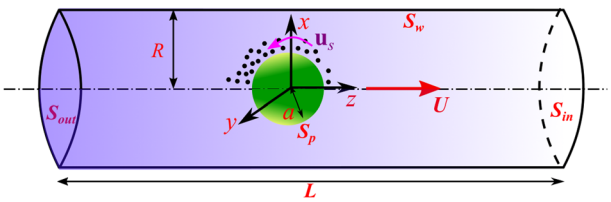
9673



Contraction response of a polyelectrolyte hydrogel to nonuniformly applied electric fields

E. Mert Bahçeci and Aykut Erbaş*

9683



Spontaneous emergence of motion of an isotropic active particle in a Carreau fluid

Suhas Shreekrishna, Shubhadeep Mandal and Sayan Das*

This journal is © The Royal Society of Chemistry 2024