

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 21(39) 7575-7728 (2025)



Cover

See Remco Tuinier *et al.*, pp. 7582–7593. Image reproduced by permission of Eleonora Foschino, Irene E. Hulsen, Alessandro Ianaro, Remco Tuinier and Mark Vis from *Soft Matter*, 2025, **21**, 7582. Image credit: Silvia Valeria Boretti



Inside cover

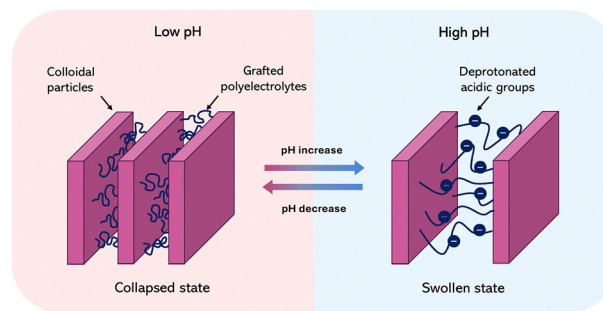
See F. Zhou, B. N. J. Persson *et al.*, pp. 7594–7609. Image reproduced by permission of Ruibin Xu from *Soft Matter*, 2025, **21**, 7594.

PAPERS

7582

Self-consistent field description of polyelectrolyte-grafted colloidal actuators

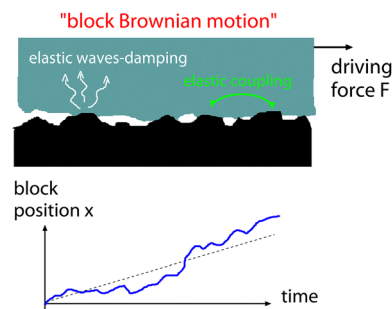
Eleonora Foschino, Irene E. Hulsen, Alessandro Ianaro, Remco Tuinier* and Mark Vis



7594

Friction dynamics: displacement fluctuations during sliding friction

R. Xu, F. Zhou* and B. N. J. Persson*



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



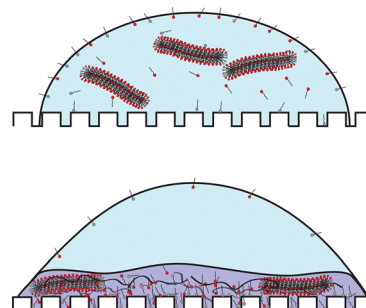
**SAVE
10%**



7610

Tunable phase separation and interfacial behaviour of mixed surfactant micelle–polymer complex coacervates

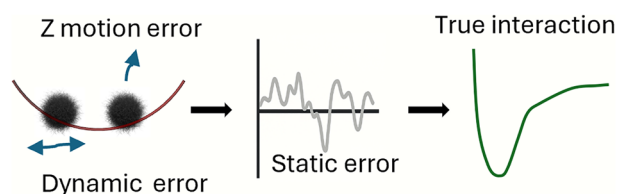
Sulochana Ekanayaka Mudiyansele, Qutell Adderley, Marne Pierre, Sai Venkatesh Pingali and Amy Y. Xu*



7622

Quantifying experimental errors in measuring colloidal interaction potentials with optical tweezers

José Muñetón-Díaz, Augustin Muster, Luis S. Froufe-Pérez, Frank Scheffold* and Chi Zhang*

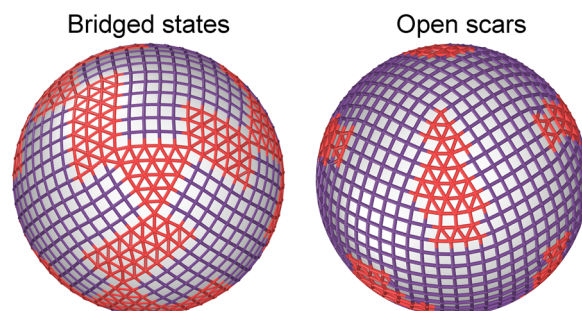


Decoupling and correcting experimental errors in optical tweezer measurements

7631

Transitional patterns on a spherical surface: from scars to domain defects of mixed lattices

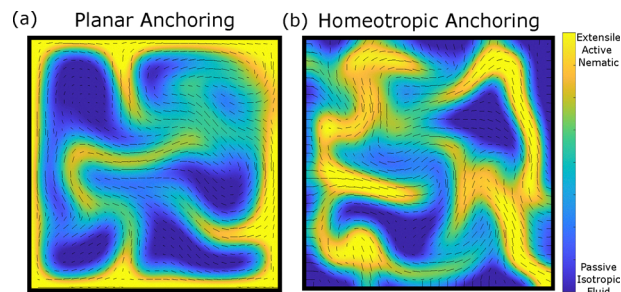
Wenyu Liu, Han Xie, Yu Du, Baohui Li,* Jeff Z. Y. Chen* and Yao Li*



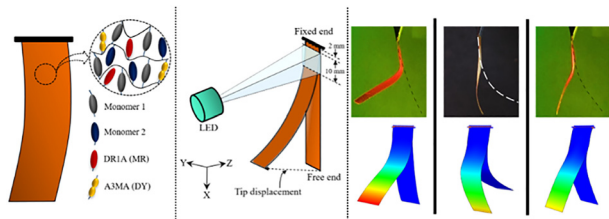
7641

Active sorting to boundaries in active nematic–passive isotropic fluid mixtures

Saraswat Bhattacharyya and Julia M. Yeomans*



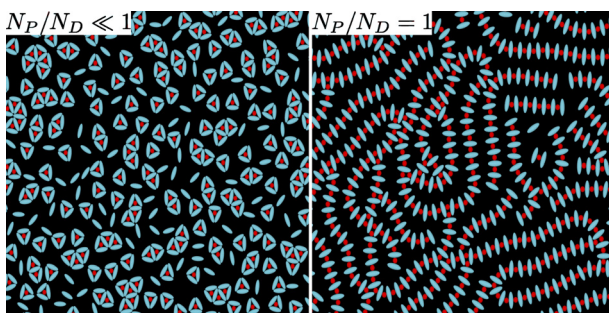
7650



Multi-wavelength actuation of dual-dye-doped liquid crystal network thin films: experiments and simulations

C. S. Neeraj, Divya Jayoti, Akhil Reddy Peeketi and Ratna Kumar Annabattula*

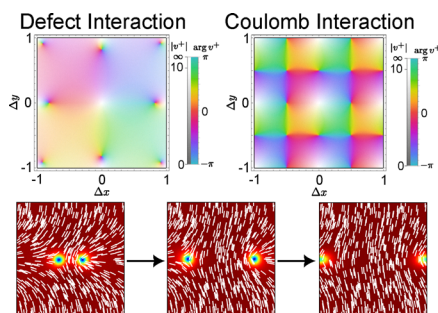
7662



Directed assembly of binary suspensions of magnetizable ellipsoids

David H. Harris and Isaac Torres-Díaz*

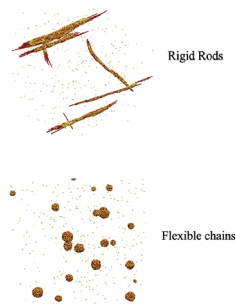
7673



Defect interactions through periodic boundaries in two-dimensional p -atics

Cody D. Schimming

7685



Bridging-induced aggregation in neutral polymers: dynamics and morphologies

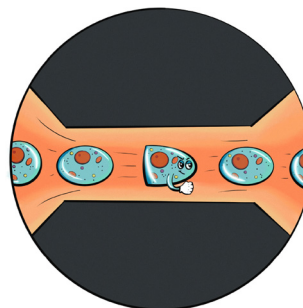
Hitesh Garg and Satyavani Vemparala*



7697

A unified approach to suspension cell mechanics

Muzaffar H. Panhwar, Peter Nestler,
 Yesaswini Komaragiri, Doreen Biedenweg, Bob Fregin,
 Eric Sündermann, Stefan Groß and Oliver Otto*



7710

Surfactant-laden micro-scale droplet coalescence in Bancroft-breaking systems

Yun Chen, Negin Bahadori and Cari S. Dutcher*

