

# Soft Matter

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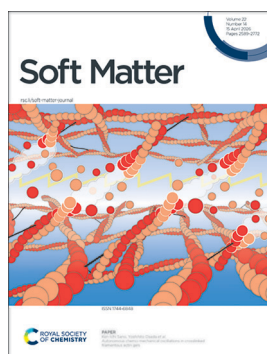
## IN THIS ISSUE

ISSN 1744-6848 CODEN SMOABF 22(14) 2589-2772 (2026)



### Cover

See Jason E. Bara, Jihong A. Ma *et al.*, pp. 2608–2622. Image reproduced by permission of Jihong Ma and Fatemeh Sabokroozroozbahani from *Soft Matter*, 2026, 22, 2608. Cover image modified with AI.



### Inside cover

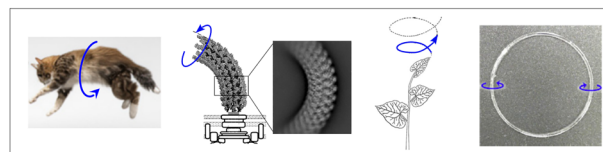
See Ken-Ichi Sano, Yoshihito Osada *et al.*, pp. 2623–2628. Image reproduced by permission of Ryuzo Kawamura from *Soft Matter*, 2026, 22, 2623.

## TUTORIAL REVIEW

2597

### The hidden wheel-within

Falko Ziebert and Igor M. Kulić\*

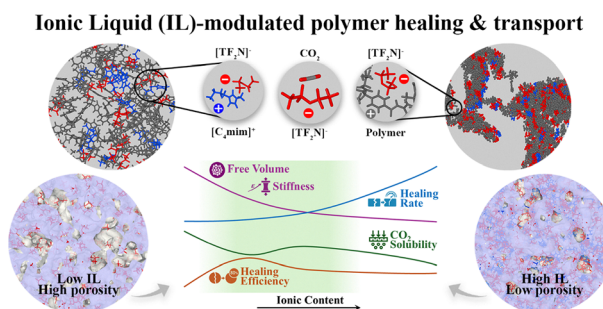


## PAPERS

2608

### Ionic-content-driven restructuring of spirobisindane ionene networks: implications for mechanics, self-healing, and gas transport

Fatemeh Sabokroozroozbahani, Sudhir Ravula, Alain Tundidor Camba, Pravin S. Shinde, Jong Keum, Jason E. Bara\* and Jihong A. Ma\*



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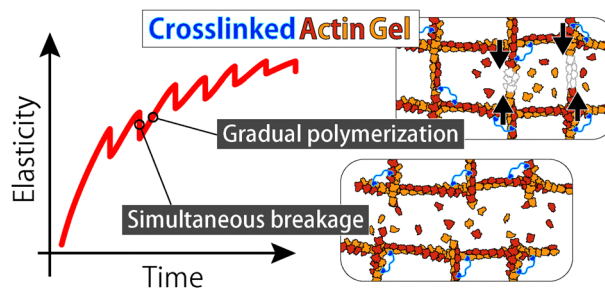
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2623

### Autonomous chemo-mechanical oscillations in crosslinked filamentous actin gels

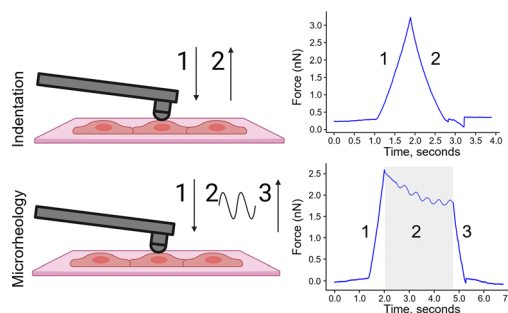
Ken-Ichi Sano,\* Ryuzo Kawamura and Yoshihito Osada\*



2629

### Retina microrheology via oscillatory atomic force microscopy

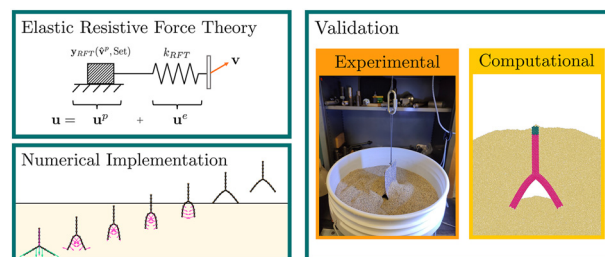
Connor D Amelung, Colter E Oroke, Lucas Ramirez and Sharon Gerecht\*



2638

### Elastic resistive force theory: development and applications to flexible intruders

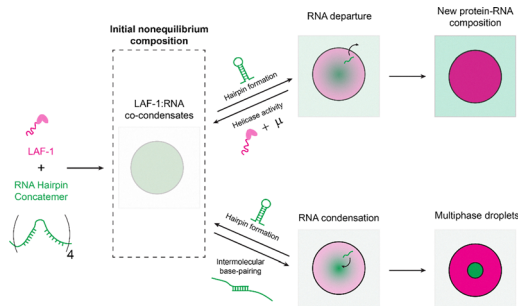
Lale Yilmaz, Madison Douglas, J. Taylor Perron and Ken Kamrin\*



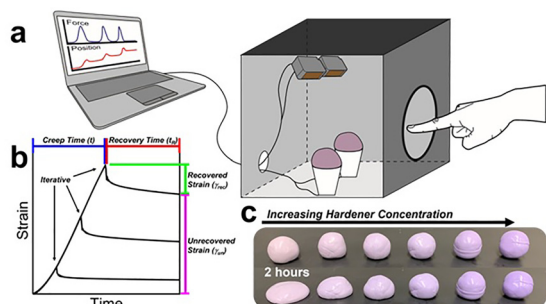
2656

### Nonequilibrium phases of a biomolecular condensate facilitated by enzyme activity

Sebastian Coupe and Nikta Fakhri\*



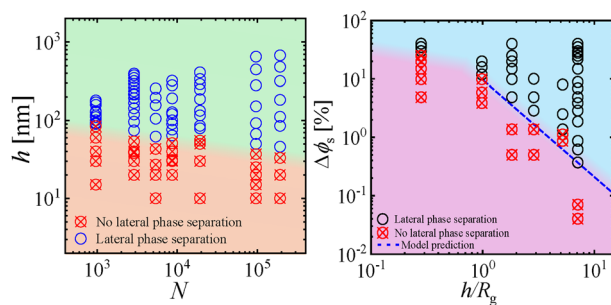
2666



### Establishing direct relationships between soft material perception and rheology

Eric M. Burgeson, Jeffrey D. Martin, Matjaž Jogan and Simon A. Rogers\*

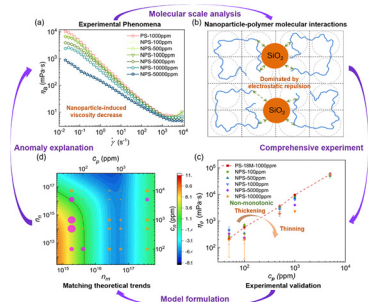
2678



### Finite size scaling of spinodal suppression in confined blends of strongly segregating polymers

Pankaj Mahawar, Parth Pandya and Sivasurender Chandran\*

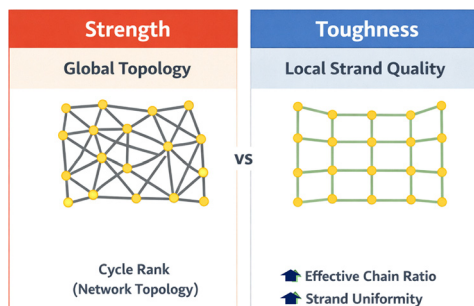
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### Viscosity reduction of HPAM solutions induced by silica nanoparticle additives

Mingbao Zhang, Xukang Lu and Moran Wang\*

2704



### Decoupling the structural origins of strength and toughness in industrially relevant heterogeneous elastomers

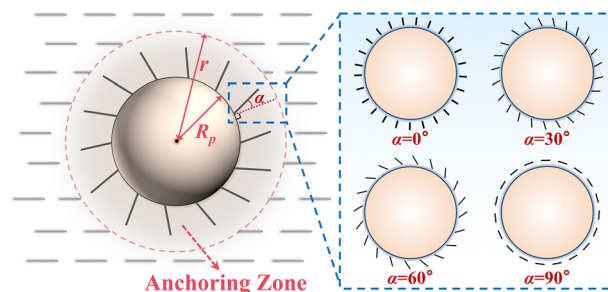
Yuri Ishikura, Erica Uehara and Yuji Higuchi\*



2713

### Colloidal transport controlled by surface anchoring in active nematic fluids

Wang Bo, Ye Hao, Sheng Qingyun, Quan Jingru and Lin Jianzhong\*

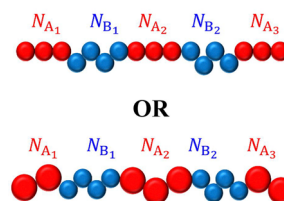


2733

### Phase diagrams of conformationally asymmetric pentablock copolymer melts: a theory and simulation study

Tristan Myers, So Jung Park and Arthi Jayaraman\*

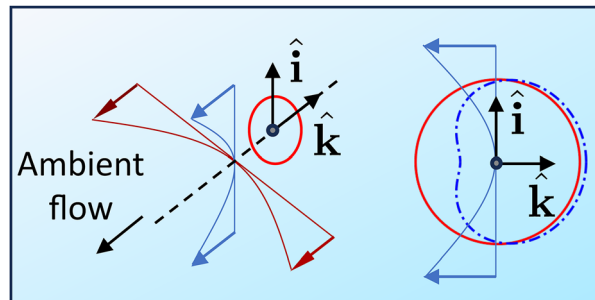
#### Conformationally Asymmetric Pentablock Copolymers



2746

### Dynamics of an internally actuated weakly elastic sphere in a general quadratic flow

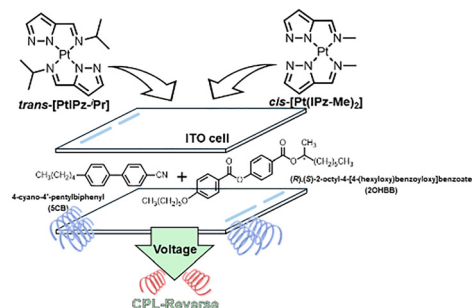
Shashikant Verma and Navaneeth Kizhakke Marath\*



2762

### Electric-field-induced switching of circularly polarized luminescence in a multicomponent emissive liquid-crystal system

Issei Nakano, Shufang Huang, Daiya Suzuki, Kosuke Kaneko, Junki Maegawa, Soichiro Kawamorita,\* Shuichi Suzuki and Yoshitane Imai\*



## CORRECTION

2769

**Correction: Cancer cell dynamics navigating the complex microenvironment: active nematics and dynamic heterogeneity**

Trevor Reid, Colton Ramsey, Yang Jiao, Yanping Liu\* and Bo Sun\*

