

# Soft Matter

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## IN THIS ISSUE

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### Cover

See Alla B. Dobroserdova *et al.*, pp. 7797–7810. Image reproduced by permission of Sofia Kantorovich from *Soft Matter*, 2024, 20, 7797.



### Inside cover

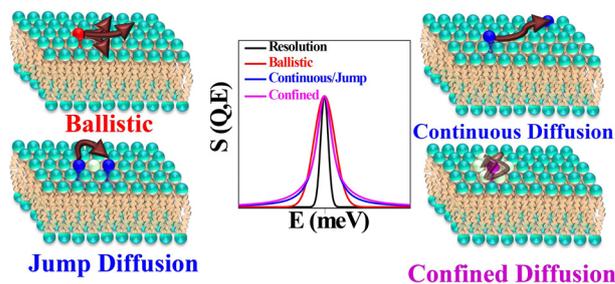
See Richard J. Sheridan *et al.*, pp. 7811–7820. Image reproduced by permission of Duke University (Io Saito) from *Soft Matter*, 2024, 20, 7811. Image credit: Io Saito.

## REVIEW

7763

### Lipid lateral diffusion: mechanisms and modulators

V. K. Sharma,\* H. Srinivasan, J. Gupta and S. Mitra

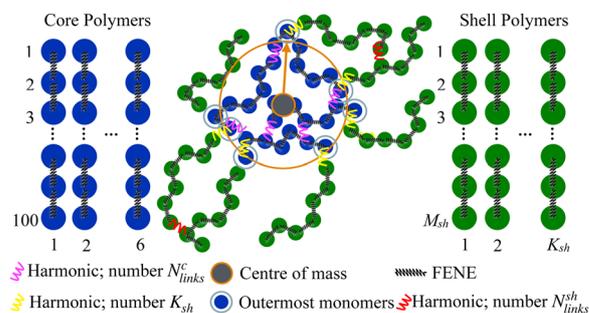


## PAPERS

7797

### Core–shell nanogels: the effects of morphology, electro- and magnetostatic interactions

Alla B. Dobroserdova,\* Elena S. Minina, Pedro A. Sánchez, Christos N. Likos and Sofia S. Kantorovich



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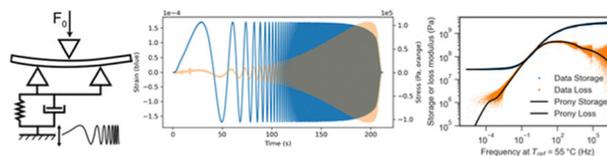
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7811

### BOTTS: broadband optimized time–temperature superposition for vastly accelerated viscoelastic data acquisition

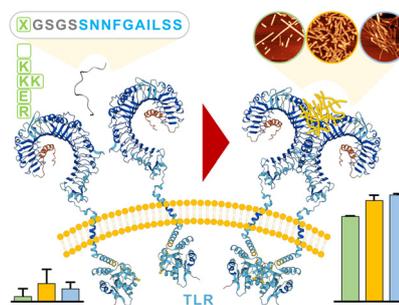
Richard J. Sheridan,\* Stefan Zauscher and L. Catherine Brinson



7821

### Probing the molecular determinants of the activation of toll-like receptor 2/6 by amyloid nanostructures through directed peptide self-assembly

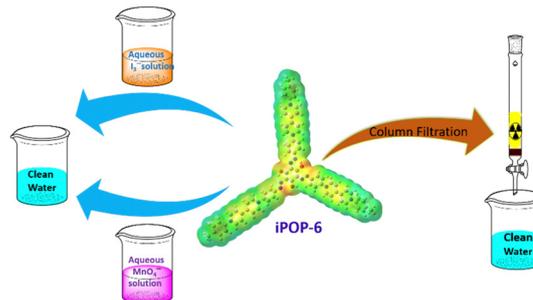
Nadjib Kihal, Marie-Jeanne Archambault, Margaryta Babych, Ali Nazemi and Steve Bourgault\*



7832

### Green synthesis of an ionic porous organic polymer for efficient capture of environmentally toxic $\text{MnO}_4^-$ and $\text{I}_3^-$ from water

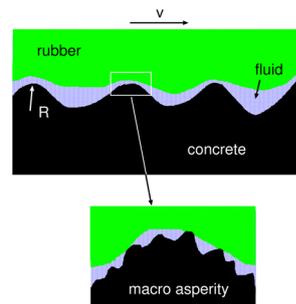
Atikur Hassan, Rishabh Kumar Pandey, Arnab Chakraborty, Sk Abdul Wahed, T. Rajagopala Rao and Neeladri Das\*



7843

### Dry and lubricated sliding friction for rubber on concrete: the role of surface energies

N. Miyashita and B. N. J. Persson\*



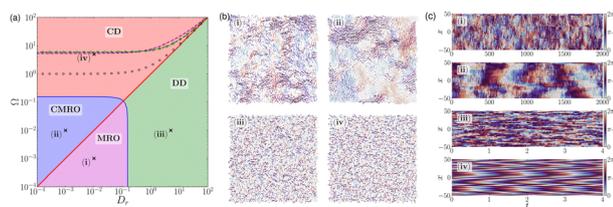
7854



### Core charge of imidazolium annulated triphenylene derivatives induces discotic columnar mesomorphism

Shuai Chen, Hi Taing, Mohamed Ahmida, Hong Yi He, Aiden Carr, Heidi M. Muchall\* and S. Holger Eichhorn\*

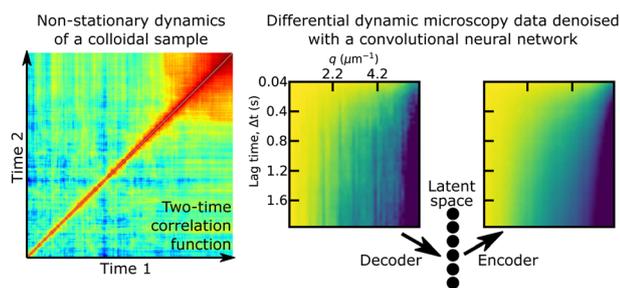
7865



### Emergent mesoscale correlations in active solids with noisy chiral dynamics

Amir Shee, Silke Henkes\* and Cristián Huepe\*

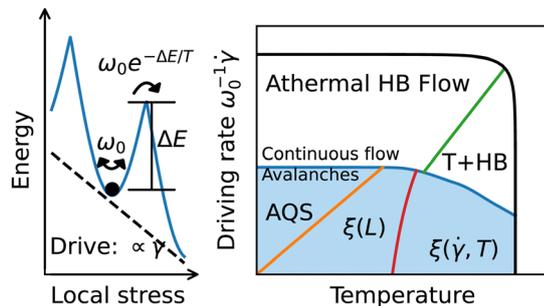
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### Convolutional neural networks applied to differential dynamic microscopy reduces noise when quantifying heterogeneous dynamics

Gildardo Martinez, Justin Siu, Steven Dang, Dylan Gage, Emma Kao, Juan Carlos Avila, Ruilin You and Ryan McGorty\*

7891



### Thermally activated intermittent flow in amorphous solids

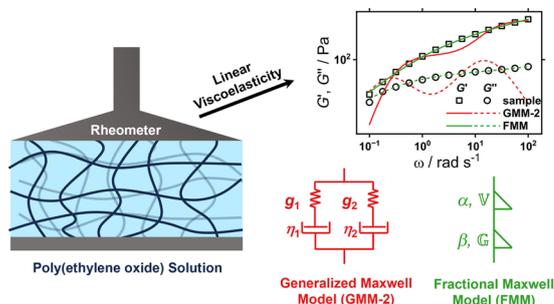
Daniel James Korchinski\* and Jörg Rottler



7914

## Generalized vs. fractional: a comparative analysis of Maxwell models applied to entangled polymer solutions

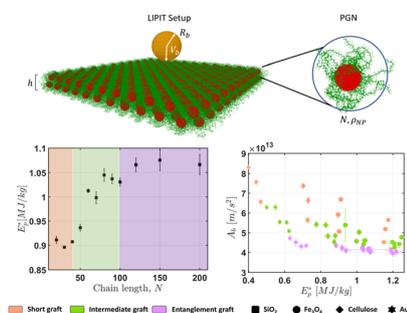
Robert Franz Schmidt,\* Horst Henning Winter and Michael Gradzielski\*



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## Micro-ballistic response of thin film polymer grafted nanoparticle monolayers

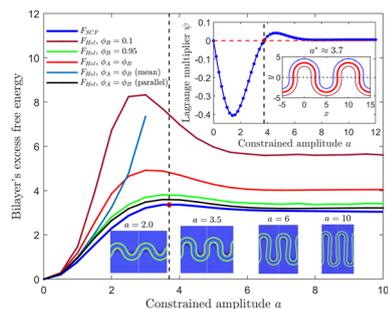
Subhadeep Pal and Sinan Keten\*



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## Periodic cylindrical bilayers self-assembled from diblock polymers

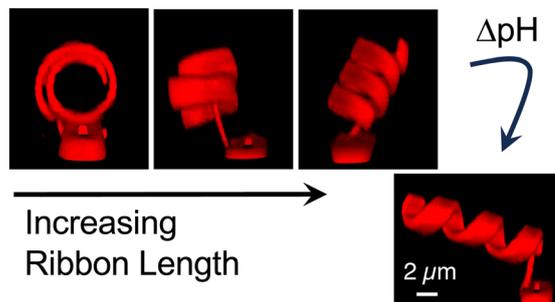
Yongshun Luo, Min Yang, Sirui Li, Yana Di\* and Yongqiang Cai\*



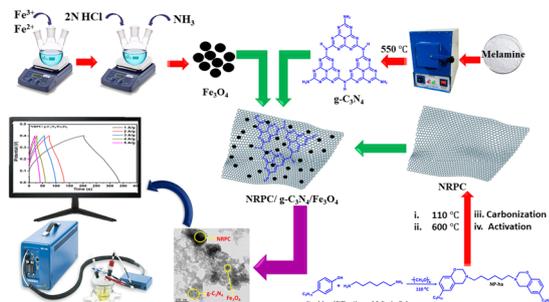
7946

## Controlling the roll-to-helix transformation in electron-beam-patterned gel-based micro-ribbons

Xinpei Wu, Teng Zhang and Matthew Libera\*



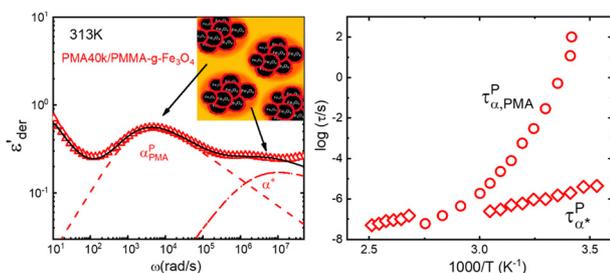
7957



### Nonylphenol polybenzoxazines-derived nitrogen-rich porous carbon (NRPC)-supported g-C<sub>3</sub>N<sub>4</sub>/Fe<sub>3</sub>O<sub>4</sub> nanocomposite for efficient high-performance supercapacitor application

Kumar Selvaraj,\* Bin Yu,\* Marisa E. Spontón,\* Premnath Kumar, Uma Shankar Veerasamy, Arunachalam Arulraj, Ramalinga Viswanathan Mangalaraja,\* Zainab M. Almarhoon, Shaban R. M. Sayed and Dinakaran Kannaiyan

7970



### Dynamics of poly(methyl acrylate)/poly(methyl methacrylate)-grafted-Fe<sub>3</sub>O<sub>4</sub> nanocomposites

Shalin Patil, Christopher Mbonu, Tsengming Chou, Ruhao Li, Di Wu, Pinar Akcora\* and Shiwang Cheng\*

