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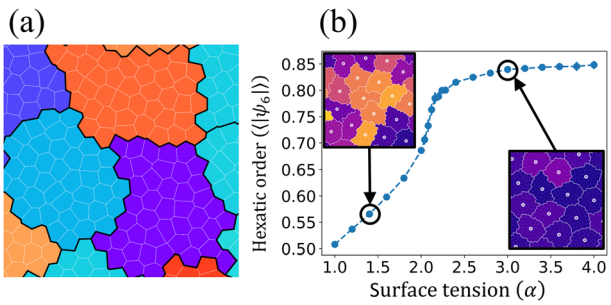
Cover
See Hossein Nemati and J. de Graaf, pp. 8337–8352. Image reproduced by permission of Hossein Nemati from *Soft Matter*, 2024, **20**, 8337.

PAPERS

8337

The cellular Potts model on disordered lattices

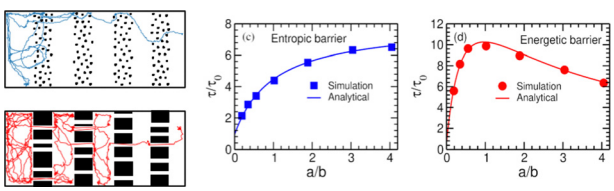
Hossein Nemati* and J. de Graaf



8353

Nature of barriers determines first passage times in heterogeneous media

Moumita Dasgupta,* Sougata Guha, Leon Armbruster, Dibyendu Das and Mithun K. Mitra*



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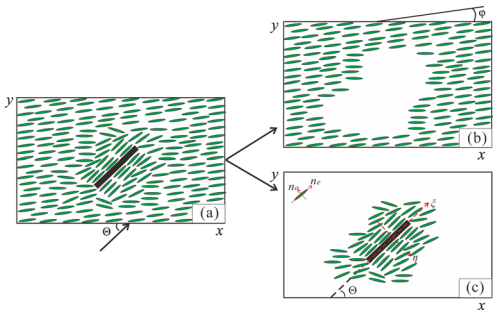
8363

A macroscopic magneto-optical response resulting from local effects in ferronematic liquid crystals

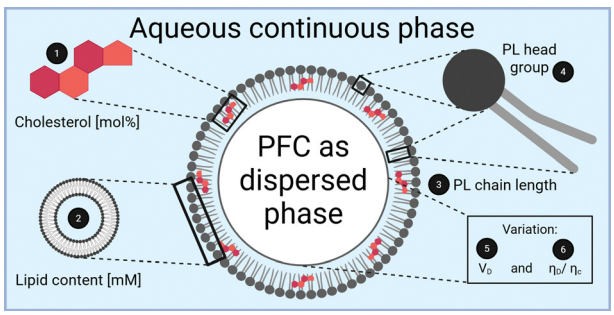
Xiangshen Meng, Xiaowei Li, Jian Li, Yueqiang Lin, Xiaodong Liu and Zhenghong He*



8373

Emulsifying mechanisms of phospholipids in high-pressure homogenization of perfluorocarbon nanoemulsions

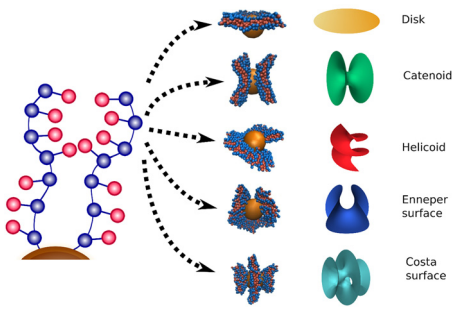
Larissa J. Lubitz, Harden Rieger and Gero Leneweit*



8385

Self-assembly of amphiphilic homopolymers grafted onto spherical nanoparticles: complete embedded minimal surfaces and a machine learning algorithm for their recognition

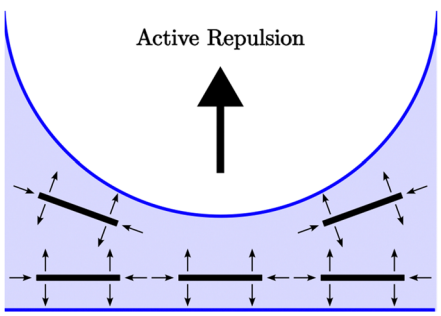
D. A. Mitkovskiy, A. A. Lazutin, A. L. Talis and V. V. Vasilevskaya*



8395

Controlling wall–particle interactions with activity

Luke Neville,* Jens Eggers and Tanniemola B. Liverpool



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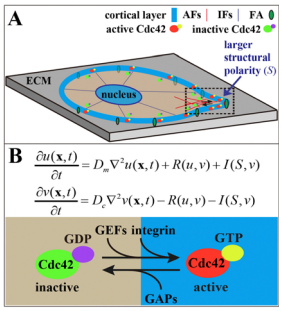
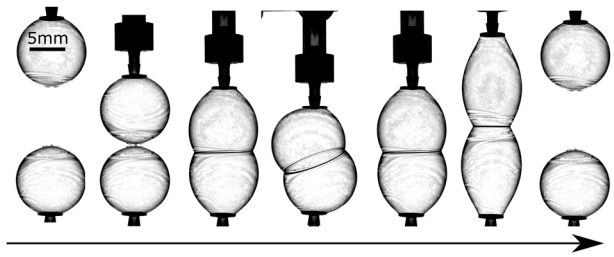
8407



Chemo-mechanical model of cell polarization initiated by structural polarity

Hexiang Wang, Zhimeng Jia and Yuqiang Fang*

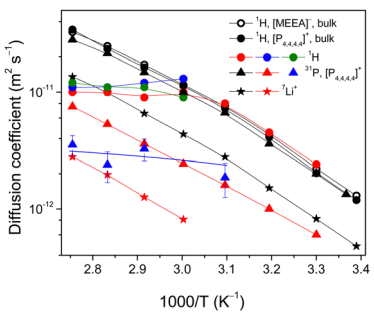
8420



Bubbles and drops between circular frames: shape, force and stability analysis

Friedrich Walzel,* Jonathan Dijoux, Leandro Jacomine, Élodie Harle, Pierre Muller, Thierry Charitat and Wiebke Drenckhan

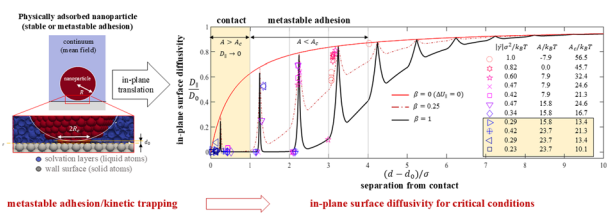
8436



Nanoconfinement effects on the dynamics of an ionic liquid-based electrolyte probed by multinuclear NMR

Andrei Filippov,* Maiia Rudakova, Victor P. Archipov and Faiz Ullah Shah*

8446



The surface diffusivity of nanoparticles physically adsorbed at a solid–liquid interface

Troy Singletary, Nima Iranmanesh and Carlos E. Colosqui*

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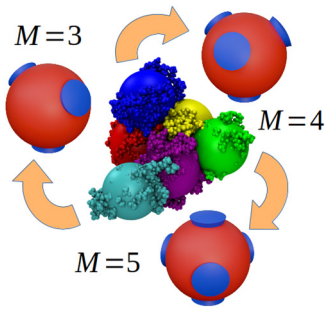
8455

Effective patchiness from critical points of a coarse-grained protein model with explicit shape and charge anisotropy

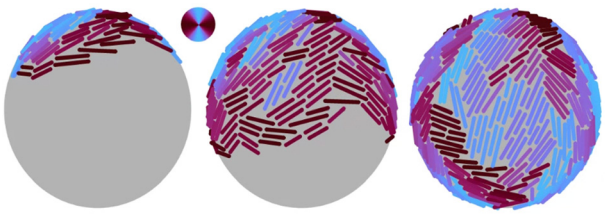
Jens Weimar, Frank Hirschmann and Martin Oettel*



8468

Strain rate controls alignment in growing bacterial monolayers

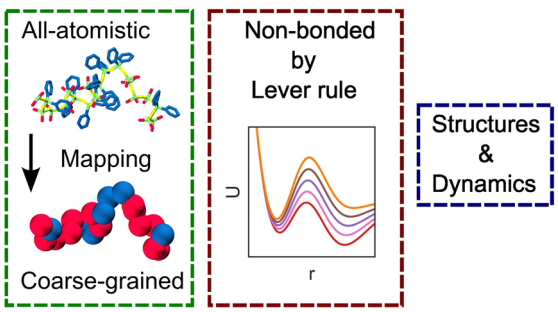
Blake Langeslay and Gabriel Juarez*



8480

Development of a coarse-grained molecular dynamics model for poly(dimethyl-*co*-diphenyl)siloxane

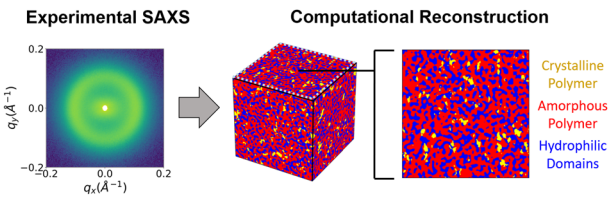
Weikang Xian, Amitesh Maiti, Andrew P. Saab and Ying Li*



8493

Random field reconstruction of three-phase polymer structures with anisotropy from 2D-small-angle scattering data

Stephen Kronenberger, Nitant Gupta, Benjamin Gould, Colin Peterson and Arthi Jayaraman*



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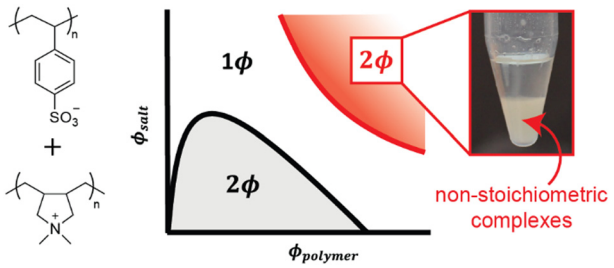
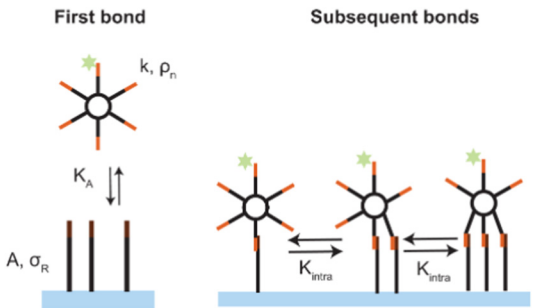


Segregative phase separation of strong polyelectrolyte complexes at high salt and high polymer concentrations

Conner H. Chee, Rotem Benharush, Lexi R. Knight and Jennifer E. Laaser*

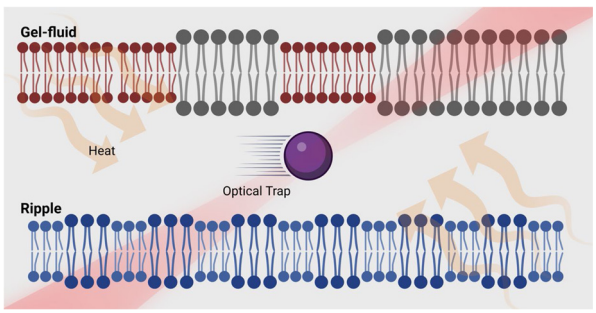
8515



Optimality and cooperativity in superselective surface binding by multivalent DNA nanostars

Christine Linne, Eva Heemskerk, Jos W. Zwanikken, Daniela J. Kraft* and Liedewij Laan*

8524



Mechanical characterization of freestanding lipid bilayers with temperature-controlled phase

Arash Yahyazadeh Shourabi, Roland Kieffer, Djanick de Jong, Daniel Tam* and Marie-Eve Aubin-Tam*