

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(8) 1659–1954 (2024)



Cover

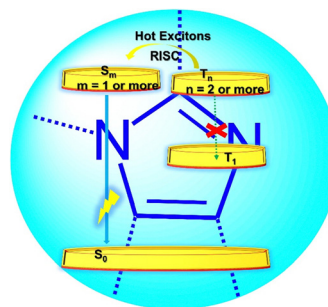
See Andrew J. Spakowitz
et al., pp. 1694–1701.
Image reproduced
by permission of
Andrew Spakowitz
from *Soft Matter*,
2024, 20, 1694.

REVIEW

1669

Overview of imidazole-based fluorescent materials with hybridized local and charge transfer and hot-exciton pathway characteristics in excited states

Krishan Kumar* and Diksha Thakur*

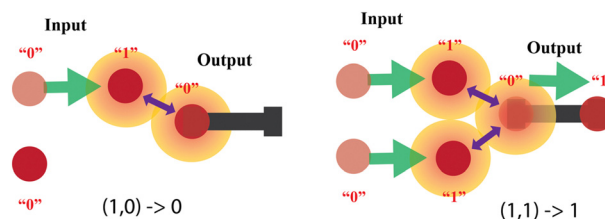


COMMUNICATION

1689

Modulating photothermocapillary interactions for logic operations at the air–water interface

Nabila Tanjeem, Kendra M. Kreienbrink and
Ryan C. Hayward*



RSC Applied Interfaces

GOLD
OPEN
ACCESS

Interfacial and surface research with an applied focus

Interdisciplinary and open access



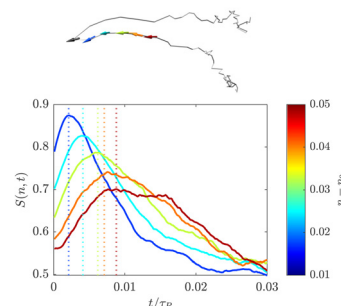
rsc.li/RSCApplInter

Fundamental questions
Elemental answers

1694

Effect of local active fluctuations on structure and dynamics of flexible biopolymers

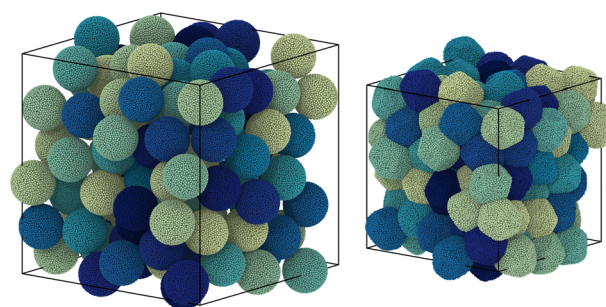
Sayantana Dutta, Ashesh Ghosh and Andrew J. Spakowitz*



1702

A soft departure from jamming: the compaction of deformable granular matter under high pressures

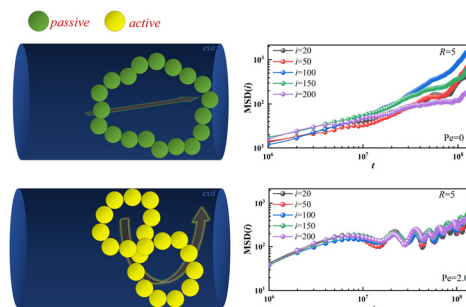
Joel T. Clemmer,* Joseph M. Monti and Jeremy B. Lechman



1719

Escape dynamics of active ring polymers in a cylindrical nanochannel

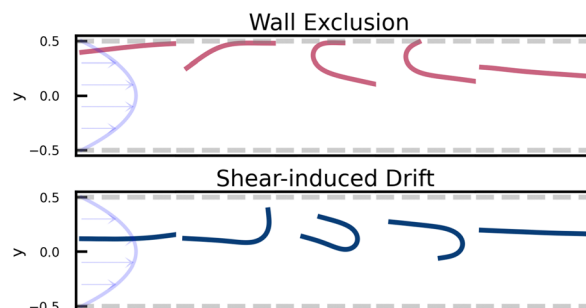
Chuqiao Li, Qiaoyue Chen and Mingming Ding*



1725

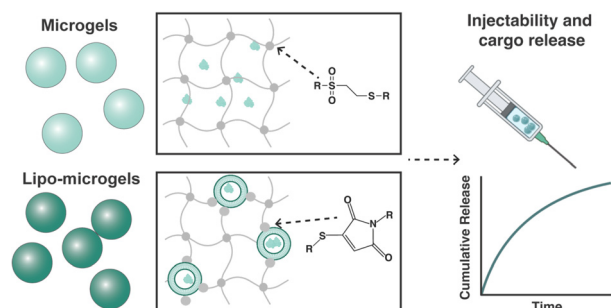
Cross-streamline migration and near-wall depletion of elastic fibers in micro-channel flows

Thomas Nguyen and Harishankar Manikantan*



PAPERS

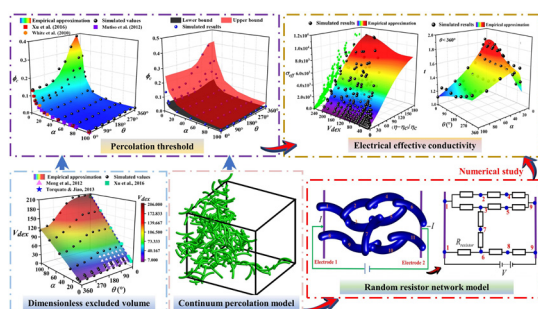
1736



Injectable liposome-containing click hydrogel microparticles for release of macromolecular cargos

Luisa L. Palmese, Paige J. LeValley, Lina Pradhan, Amanda L. Parsons, John S. Oakey, Mathew Abraham, Suzanne M. D'Addio, April M. Kloxin,* Yingkai Liang* and Kristi L. Kiick*

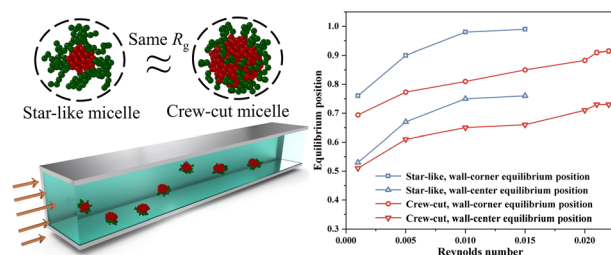
1746



Numerical modeling of the effects of the shape and aspect ratio of 3D curved fiber on the percolation threshold and electrical conductivity of conductive polymer composites

Hui Yuan, Huisu Chen,* Shaobo Sun, Mingqi Li,* Zhiyong Liu* and Lin Liu*

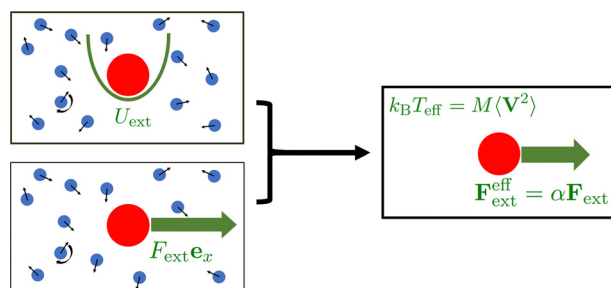
1760



Inertial migration of polymer micelles in a square microchannel

Qingfeng Shi, Jintang Wu, Haisong Chen, Xiaolong Xu, Yong-Biao Yang and Mingming Ding*

1767



Force renormalization for probes immersed in an active bath

Jeanine Shea,* Gerhard Jung and Friederike Schmid*

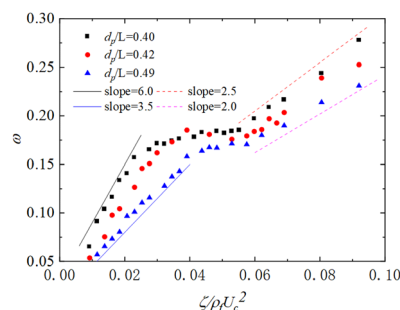


PAPERS

1786

On particle motion in a confined square domain filled with active fluids

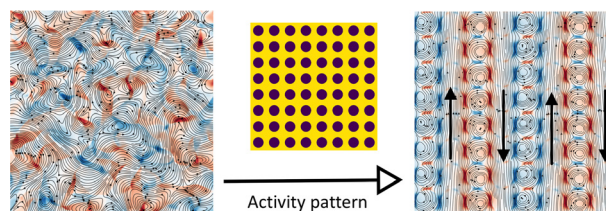
Hao Ye, Zhenyu Ouyang* and Jianzhong Lin*



1800

Controlling active turbulence by activity patterns

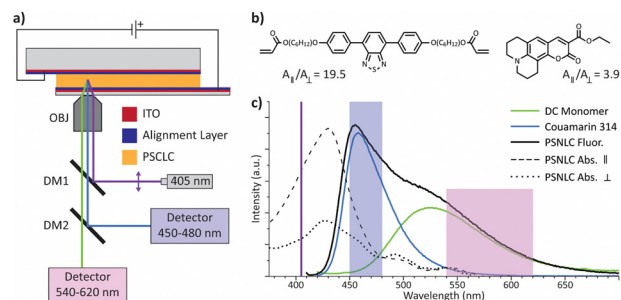
Arghavan Partovifard,* Josua Grawitter and Holger Stark



1815

The association of structural chirality and liquid crystal anchoring in polymer stabilized cholesteric liquid crystals

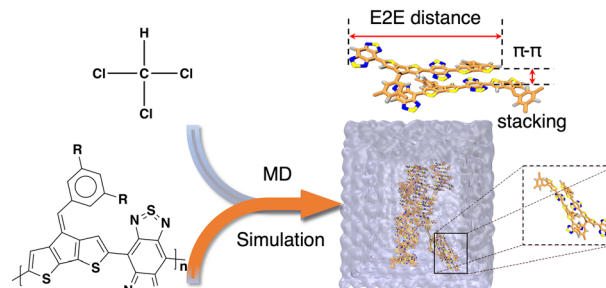
Brian P. Radka, Taewoo Lee, Ivan I. Smalyukh and Timothy J. White*



1824

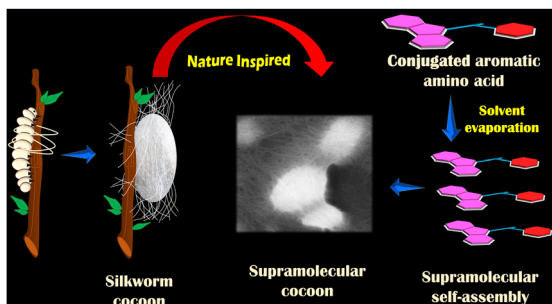
Elucidating the structure of donor–acceptor conjugated polymer aggregates in liquid solution

Chinmoy Saha, Md Masrul Huda, Md Abdus Sabuj and Neeraj Rai*



PAPERS

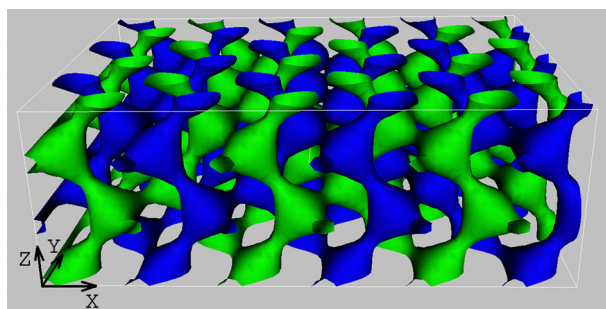
1834



A bio-inspired silkworm 3D cocoon-like hierarchical self-assembled structure from π -conjugated natural aromatic amino acids

Smriti Mukherjee, Samala Murali Mohan Reddy and Ganesh Shanmugam*

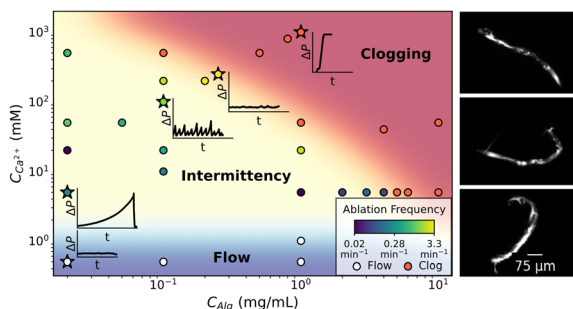
1846



The permeability of diamond and other microphase-separated morphologies in copolymer films

Igor Ya. Erukhimovich, Yury A. Kriksin and Yaroslav V. Kudryavtsev*

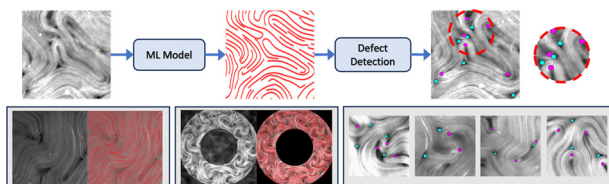
1858



In situ polymer gelation in confined flow controls intermittent dynamics

Barrett T. Smith and Sara M. Hashmi*

1869



A machine learning approach to robustly determine director fields and analyze defects in active nematics

Yunrui Li, Zahra Zarei, Phu N. Tran, Yifei Wang, Aparna Baskaran, Seth Fraden, Michael F. Hagan and Pengyu Hong*

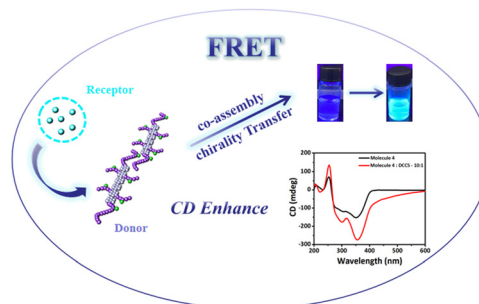


PAPERS

1884

Chirality-induced supramolecular nanodishes: enantioselectivity and energy transfer

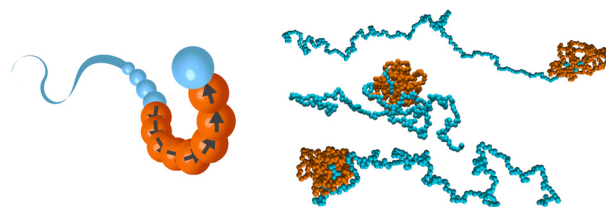
Hui-Yu Zhao, Gui-Lang Liu, Qing Xu, Yi-Rong Pei* and Long Yi Jin*



1892

Conformation and dynamics of partially active linear polymers

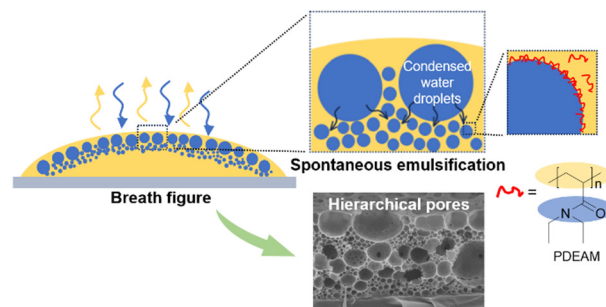
Marin Vatin,* Sumanta Kundu and Emanuele Locatelli



1905

Poly(*N,N*-diethylacrylamide)-endowed spontaneous emulsification during the breath figure process and the formation of membranes with hierarchical pores

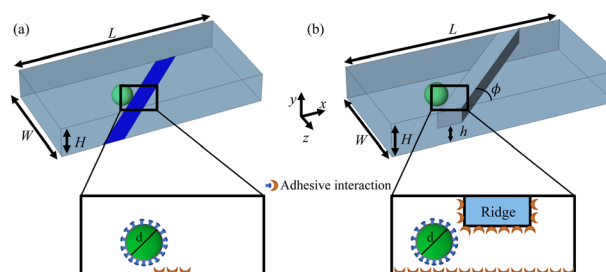
Di Zhou, Ping Fu, Wan-Ting Lin, Wan-Long Li, Zhi-Kang Xu and Ling-Shu Wan*



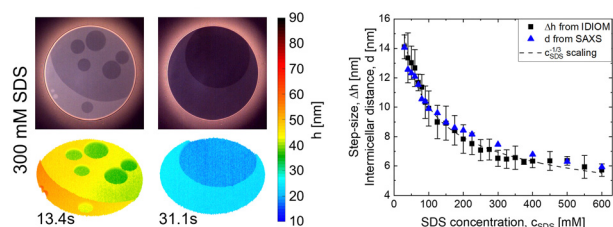
1913

Adhesion-based high-throughput label-free cell sorting using ridged microfluidic channels

Fatima Ezahra Chrit, Peiru Li, Todd Sulchek and Alexander Alexeev*



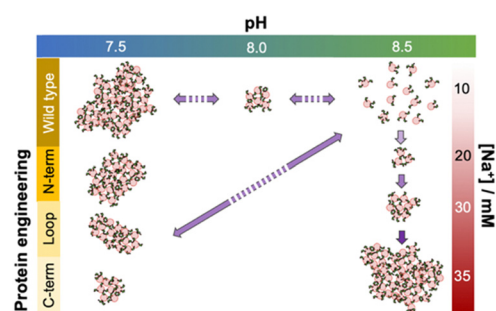
1922



Foam film stratification, viscosity, and small-angle X-ray scattering of micellar SDS solutions over an extended concentration range ($1 < c/CMC < 75$)

Chrystian Ochoa, Shang Gao, Chenxian Xu, Samarvaya Srivastava* and Vivek Sharma*

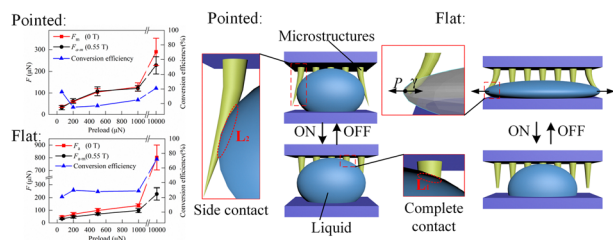
1935



Towards predictive control of reversible nanoparticle assembly with solid-binding proteins

Yifeng Cai, Xin Qi, Julia Boese, Yundi Zhao, Brittney Hellner, Jaehun Chun, Christopher J. Mundy and François Baneyx*

1943



Adhesion performance of magnetically responsive surfaces under wet conditions

Hao Qin, Xianyu Peng, Tonghang Sui, Peng Yi and Jing Li*

