

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(5) 943-1154 (2024)



Cover

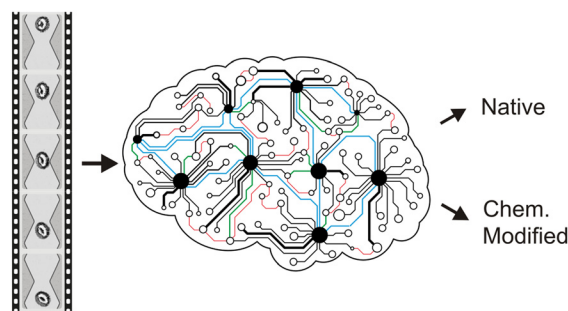
See T. Franke
et al., pp. 952–958.
Image reproduced
by permission of
Thomas Franke
from *Soft Matter*,
2024, 20, 952.
Image credit:
Zachary Owen.

PAPERS

952

Classification of chemically modified red blood cells in microflow using machine learning video analysis

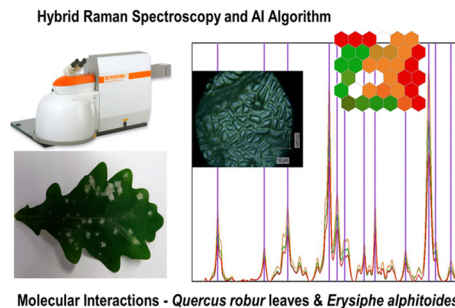
R. K. Rajaram Baskaran, A. Link, B. Porr and T. Franke*



959

Vibrational spectroscopic profiling of biomolecular interactions between oak powdery mildew and oak leaves

Kieran R. Clark and Pola Goldberg Oppenheimer*



RSC Advances

At the heart of open access for
the global chemistry community

Editor-in-chief

Russell J Cox

Leibniz Universität Hannover, Germany

We stand for:



Breadth We publish work in all areas of chemistry and reach a global readership



Affordability Low APCs, discounts and waivers make publishing open access achievable and sustainable



Quality Research to advance the chemical sciences undergoes rigorous peer review for a trusted, society-run journal



Community Led by active researchers, we publish quality work from scientists at every career stage, and all countries

Submit your work now

rsc.li/rsc-advances

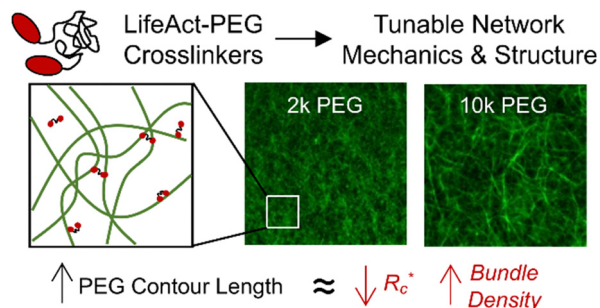
@RSC_Adv



971

Highly flexible PEG-LifeAct constructs act as tunable biomimetic actin crosslinkers

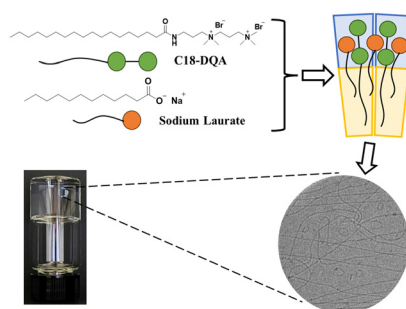
Tyler D. Jorgenson,* Kashmeera D. Baboolall, Cristian Suarez, David R. Kovar, Margaret L. Gardel* and Stuart J. Rowan*



978

Wormlike micellar solutions formed by an anionic surfactant and a cationic surfactant with two head groups

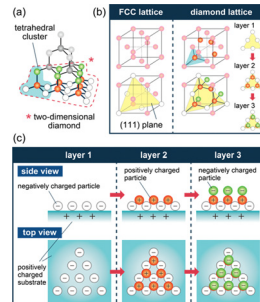
Hongye Li, Zhengrong Lin, Zhao Chen, Zhenggang Cui, Lan Lei and Binglei Song*



985

Formation of two-dimensional diamond-like colloidal crystals using layer-by-layer electrostatic self-assembly

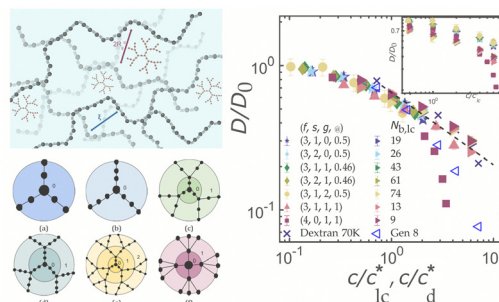
Minori Fujita, Akiko Toyotama, Tohru Okuzono, Hiromasa Niinomi and Junpei Yamanaka*



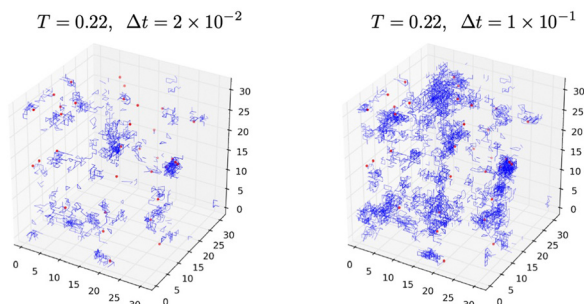
993

Universal scaling of the diffusivity of dendrimers in a semidilute solution of linear polymers

Silpa Mariya, Jeremy J. Barr, P. Sunthar and J. Ravi Prakash*



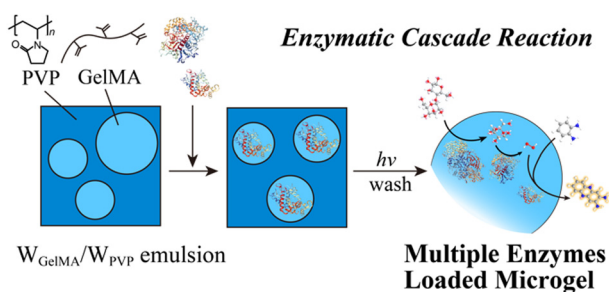
1009



The distinguishable-particle lattice model of glasses in three dimensions

Bo Li, Chun-Shing Lee, Xin-Yuan Gao, Hai-Yao Deng* and Chi-Hang Lam*

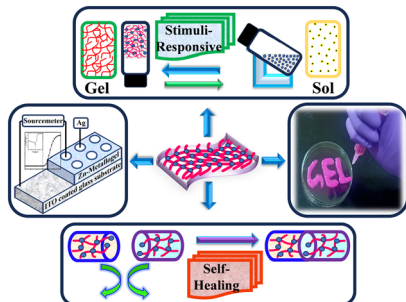
1018



Encapsulation of multiple enzymes within a microgel via water-in-water emulsions for enzymatic cascade reactions

Yota Okuno* and Yasuhiko Iwasaki

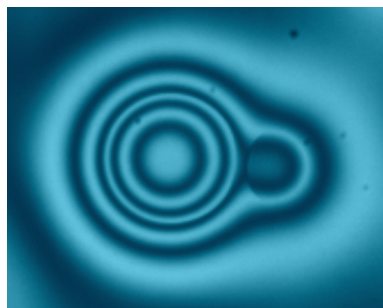
1025



Stimuli-responsive and self-healing supramolecular Zn(II)-guanosine metal-organic gel for Schottky barrier diode application

Surbhi Singh, Atul Kumar Sharma, Hrushikesh M. Gade, Vidhi Agarwal, Rajendar Nasani, Nisha Verma and Bhagwati Sharma*

1036



Coalescence of biphasic droplets embedded in free standing smectic A films

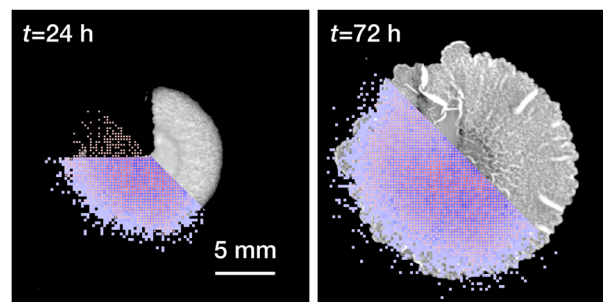
Christoph Klopp,* Torsten Trittel, Kirsten Harth and Ralf Stannarius*



1047

Residual cells and nutrient availability guide wound healing in bacterial biofilms

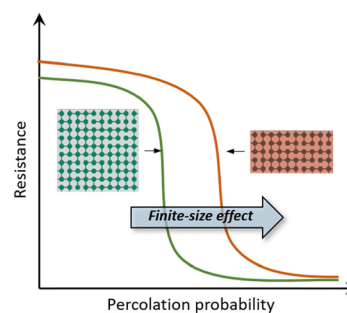
Yusong Ye, Mnar Ghayeb, Sarah Miercke, Sania Arif, Susann Müller, Thorsten Mascher, Liraz Chai* and Vasily Zaboradaev*



1061

Finite-size effect on the percolation and electromechanical behaviors of liquid metal particulate composites

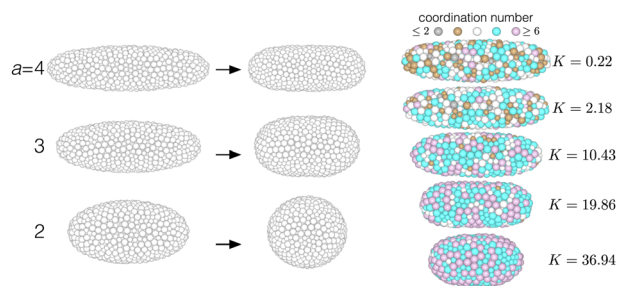
Mohammad Madadi and Pu Zhang*



1070

Jamming on convex deformable surfaces

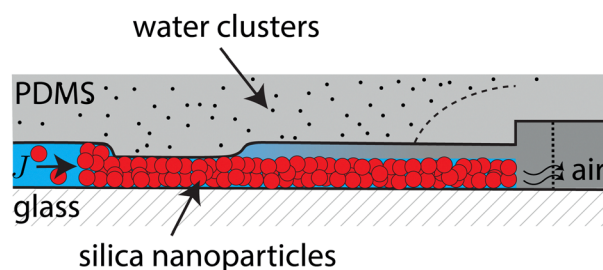
Zhaoyu Xie and Timothy J. Atherton*



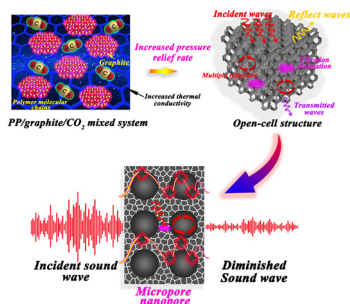
1079

Directional drying of a colloidal dispersion: quantitative description with water potential measurements using water clusters in a poly(dimethylsiloxane) microfluidic chip

Hrishikesh Pingulkar, Sonia Maréchal and Jean-Baptiste Salmon*



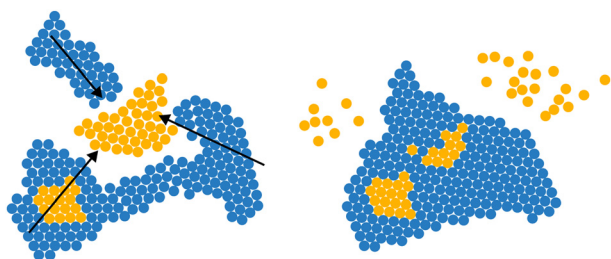
1089



Rational design of a polypropylene composite foam with open-cell structure via graphite conductive network for sound absorption

Zhiyao Li, Chenguang Yang,* Kun Yan, Ming Xia, Zhong Yan, Dong Wang* and Wenwen Wang*

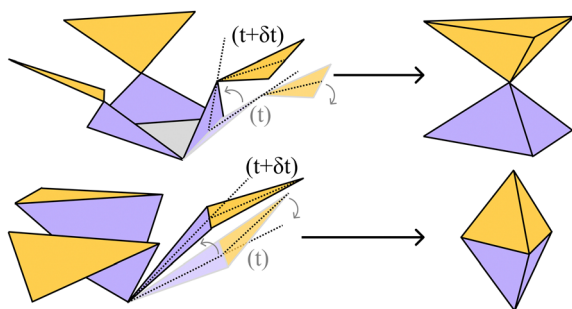
1100



Self-organization of active colloids mediated by chemical interactions

Zhiwei Peng and Raymond Kapral*

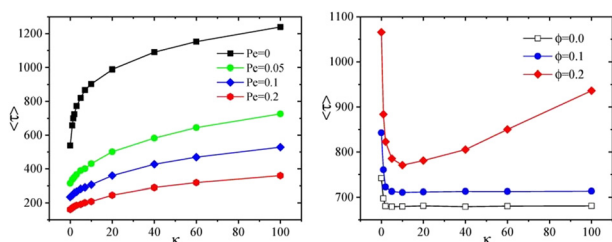
1114



Optimal face-to-face coupling for fast self-folding kirigami

Maks Pecnik Bambic, Nuno A. M. Araújo, Benjamin J. Walker, Duncan R. Hewitt, Qing Xiang Pei, Ran Ni and Giorgio Volpe*

1120



Forced and spontaneous translocation dynamics of a semiflexible active polymer in two dimensions

Fei Tan, Jingli Wang, Ran Yan and Nanrong Zhao*

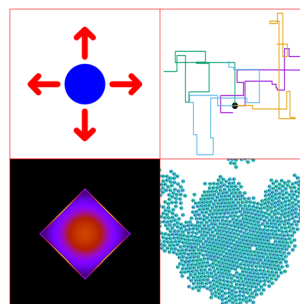


PAPERS

1133

Anisotropic run-and-tumble-turn dynamics

Benjamin Loewe,* Timofey Kozhukhov and Tyler N. Shendruk



CORRECTION

1151

Correction: Multi-layer 3D printed dipeptide-based low molecular weight gels

Max J. S. Hill and Dave J. Adams*

