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See Rui Xiao, Huaping Wu et al., pp. 5314-5323. Image reproduced by permission of Ye Tian from Soft Matter, 2024, 20, 5314.

# **EDITORIAL**

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### **Introduction to Soft Robotics**

Anand Kumar Mishra, Zhihong Nie,\* Jamie Paik and Robert Shepherd\*

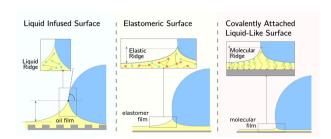


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# Wetting on silicone surfaces

Lukas Hauer,\* Abhinav Naga, Rodrique G. M. Badr, Jonathan T. Pham, William S. Y. Wong and Doris Vollmer





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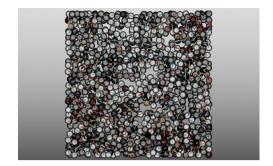
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### 5296

# Dynamic compaction of cohesive granular materials: scaling behavior and bonding structures

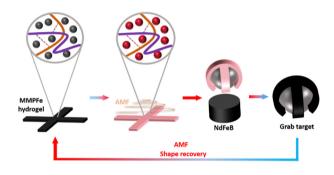
Max Sonzogni, Jean-Mathieu Vanson, Katerina Ioannidou, Yvan Reynier, Sébastien Martinet and Farhang Radjai\*



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# Magnetic-field induced shape memory hydrogels for deformable actuators

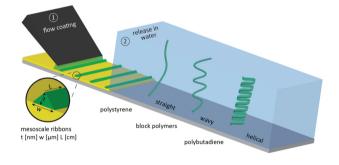
Ye Tian, Zhirui Xu, Hao Qi, Xiaojun Lu, Ting Jiang, Ligian Wang, Guang Zhang, Rui Xiao\* and Huaping Wu\*



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# Fabricating mesoscale polymer ribbons with tunable mechanical properties via evaporative deposition and dewetting

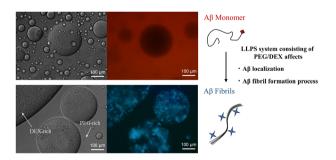
Cornelia Meissner, M. Saad Bhamla, Todd Emrick\* and Alfred J. Crosby\*



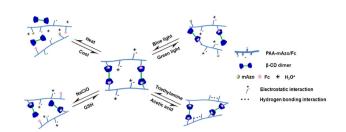
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# Liquid-liquid phase separation induced by crowding condition affects amyloid-ß aggregation mechanism

Ryuki Kobayashi and Hideki Nabika\*



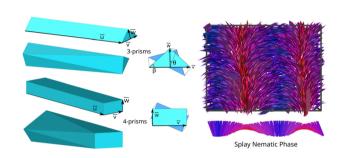
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# A quadruple-stimuli responsive supramolecular hydrogel constructed from a poly(acrylic acid) derivative and β-cyclodextrin dimer

Hongchao Yan, Juan Wang, Xichan He, Dongsheng Yu, Yuan Qiu,\* Yonggui Liao\* and Xiaolin Xie

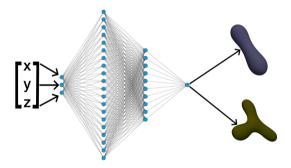
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# The effect of particle geometry and initial configuration on the phase behavior of twisted convex n-prisms

Poshika Gandhi\* and Anja Kuhnhold

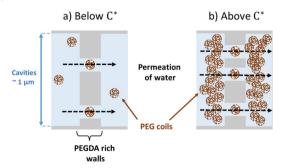
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Yousef Rohanizadegan,\* Hong Li and Jeff Z. Y. Chen\*

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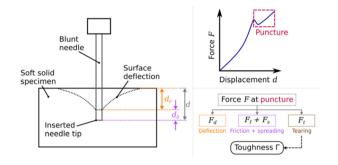
# Tuning the water intrinsic permeability of PEGDA hydrogel membranes by adding free PEG chains of varying molar masses

Malak Alaa Eddine, Alain Carvalho, Marc Schmutz, Thomas Salez, Sixtine de Chateauneuf-Randon, Bruno Bresson, Nadège Pantoustier, Cécile Monteux\* and Sabrina Belbekhouche\*

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# Force decomposition and toughness estimation from puncture experiments in soft solids

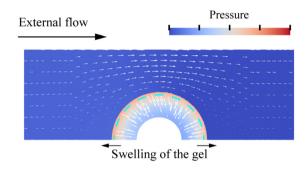
Pranav Shrestha.\* Curtis Geffner. Matthew Jaffev. Zhongnan Wu, Martina Iapichino, Mattia Bacca and Boris Stoeber\*



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# A theory of hydrogel mechanics that couples swelling and external flow

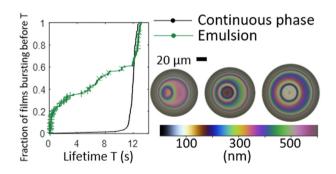
Zelai Xu, Pengtao Yue and James J. Feng\*



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# How emulsified droplets induce the bursting of suspended films of liquid mixtures

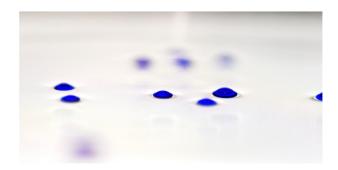
Léa Delance, Enric Santanach-Carreras, Nicolas Passade-Boupat, François Lequeux, Laurence Talini\* and Emilie Verneuil



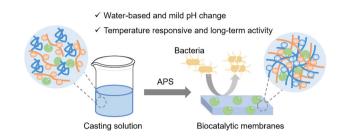
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# Electrically mediated self-assembly and manipulation of drops at an interface

Paul R. Kaneelil,\* J. Pedro de Souza, Günther Turk, Amir A. Pahlavan and Howard A. Stone\*



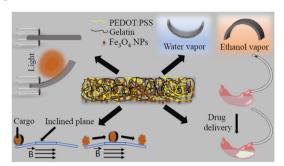
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# Biocatalytic PEI-PSS membranes through aqueous phase separation: influence of casting solution pH and operational temperature

Lijie Li, Muhammad Irshad Baig, Wiebe M. de Vos and Saskia Lindhoud\*

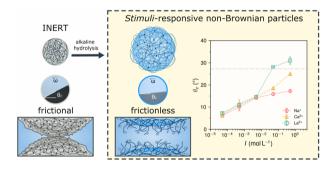
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# Responsive soft actuator: harnessing multi-vapor, light, and magnetic field stimuli

Vipin Kumar and Dillip K. Satapathy\*

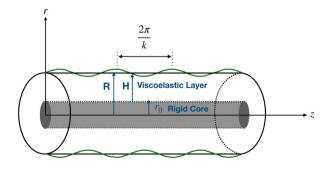
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# Granular aqueous suspensions with controlled interparticular friction and adhesion

Lily Blaiset, Bruno Bresson, Ludovic Olanier, Élisabeth Guazzelli,\* Matthieu Roché\* and Nicolas Sanson\*

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# Plateau-Rayleigh instability of a soft layer coated on a rigid cylinder

Bharti, Andreas Carlson and Tak Shing Chan\*