## Soft Matter

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ISSN 1744-6848 CODEN SMOABF 19(31) 5849-6058 (2023)



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Insights and guidelines to interpret forces and deformations at the nanoscale by using a tapping mode AFM simulator: dForce 2.0

Victor G. Gisbert and Ricardo Garcia\*



#### 5869

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Surya Narayana Sangitra and Ravi Kumar Pujala\*



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Dpen Access Article. Published on 09 August 2023. Downloaded on 7/15/2025 12:48:46 PM.

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Soft Matter (electronic: ISSN 1744-6848)

is published 48 times a year by the Royal Society of Chemistry, Thomas Graham House, Science Park, Milton Road, Cambridge, UK CB4 OWF.

All orders, with cheques made payable to the Royal Society of Chemistry, should be sent to the Royal Society of Chemistry Order Department, Royal Society of Chemistry,

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Md Muhtasim Billah, Hua Deng, Prashanta Dutta and Jin Liu\*



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Daniel Salgado-Blanco,\* Enrique Díaz-Herrera, José A. Martínez-González and Carlos I. Mendoza

Shell viscosity estimation of lipid-coated

Marco Cattaneo\* and Outi Supponen

microbubbles



Microstructure

L<sub>p</sub>: persistence length

Small-angle X-

ray scattering

ξ.: mesh size

1010

Brillouin

spectroscopy

#### Multiscale investigation of viscoelastic properties of aqueous solutions of sodium alginate and evaluation of their biocompatibility

Alberto Varela-Feijoo, Philippe Djemia, Tetsuharu Narita, Frédéric Pignon, Armelle Baeza-Squiban, Valentina Sirri and Alain Ponton\*

5956

5942

10

η (Pa.s)

0.1

0.01

0.01

10-3 10-2 10-1

Macroscopic properties

- Fitting Cross Model

1

Macrorheology

 $\eta_{\alpha} = \eta_{\infty} + \frac{\eta_0 - \eta_{\infty}}{1 + (\alpha_{\zeta} f)^m}$ 

100 10000 Frequency (Hz)

10

Microrheology

10<sup>2</sup> 10<sup>3</sup> 10<sup>4</sup> Frequency (Hz)



Sodium alginate

aqueous solution

105 106 107 108 109

#### Low-intensity mixing process of high molecular weight polymer chains leads to elastomers of long network strands and high fatigue threshold

Xianyang Bao, Guodong Nian, Yakov Kutsovsky, Junsoo Kim, Quan Jiao and Zhigang Suo\*

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Alexandra R. Spitzer and Shelby B. Hutchens\*













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Nicolás Pomeraniec Altieri, Lucy L. Coria-Oriundo, Paula C. Angelomé, Fernando Battaglini, María Luz Martínez Ricci\* and Lucila P. Méndez De Leo\*

## Asymmetric rectified electric and concentration fields in multicomponent electrolytes with surface reactions

Nathan Jarvey, Filipe Henrique and Ankur Gupta\*



#### Microrheology near jamming

Yusuke Hara,\* Hideyuki Mizuno and Atsushi Ikeda