Simon A Rogers

List of Publications by Citations

67 papers	1,676 citations	23 h-index	39 g-index
74 ext. papers	2,017 ext. citations	5.4 avg, IF	5.55 L-index

#	Paper	IF	Citations
67	A sequence of physical processes determined and quantified in LAOS: Application to a yield stress fluid. *Journal of Rheology*, **2011**, 55, 435-458	4.1	161
66	A sequence of physical processes determined and quantified in large-amplitude oscillatory shear (LAOS): Application to theoretical nonlinear models. *Journal of Rheology*, **2012**, 56, 1-25	4.1	126
65	Viscosity of ring polymer melts. *ACS Macro Letters*, **2013**, 2, 874-878	6.6	107
64	Aging, yielding, and shear banding in soft colloidal glasses. *Physical Review Letters*, **2008**, 100, 128304	7.4	95
63	A sequence of physical processes determined and quantified in LAOS: An instantaneous local 2D/3D approach. *Journal of Rheology*, **2012**, 56, 1129-1151	4.1	89
62	Rheology of branched wormlike micelles. *Current Opinion in Colloid and Interface Science*, **2014**, 19, 530-535	7.6	87
61	Dynamic shear rheology of a thixotropic suspension: Comparison of an improved structure-based model with large amplitude oscillatory shear experiments. *Journal of Rheology*, **2016**, 60, 433-450	4.1	69
60	Time-dependent rheology of colloidal star glasses. *Journal of Rheology*, **2010**, 54, 133-158	4.1	59
59	In search of physical meaning: defining transient parameters for nonlinear viscoelasticity. *Rheologica Acta*, **2017**, 56, 501-525	2.3	56
58	The molecular origin of stress generation in worm-like micelles, using a rheo-SANS LAOS approach. *Soft Matter*, **2012**, 8, 7831	3.6	47
57	Elucidating the G? overshoot in soft materials with a yield transition via a time-resolved experimental strain decomposition. *Proceedings of the National Academy of Sciences of the United States of America*, **2020**, 117, 21945-21952	11.5	44
56	The rheology and microstructure of branched micelles under shear. *Journal of Rheology*, **2015**, 59, 1299-1328	4.1	40
55	Dilute solution structure of bottlebrush polymers. *Soft Matter*, **2019**, 15, 2928-2941	3.6	38
54	Time-resolved dynamics of the yielding transition in soft materials. *Journal of Non-Newtonian Fluid Mechanics*, **2019**, 264, 117-134	2.7	34
53	Oscillatory yielding of a colloidal star glass. *Journal of Rheology*, **2011**, 55, 733-752	4.1	30
52	Examining the validity of strain-rate frequency superposition when measuring the linear viscoelastic properties of soft materials. *Journal of Rheology*, **2010**, 54, 187-195	4.1	29
51	Rotational diffusion of spherical colloids close to a wall. *Physical Review Letters*, **2012**, 109, 098305	7.4	27

50	Nonlinear behavior of nematic platelet dispersions in shear flow. *Physical Review Letters*, **2012**, 109, 246001	7.4	27
49	Charge Transport in Conducting Polymers: Polyacetylene Nanofibres. *Molecular Crystals and Liquid Crystals*, **2004**, 415, 115-124	0.5	27
48	Structure-Property Relationships via Recovery Rheology in Viscoelastic Materials. *Physical Review Letters*, **2019**, 122, 248003	7.4	25
47	Large amplitude oscillatory shear: Simple to describe, hard to interpret. *Physics Today*, **2018**, 71, 34-40	0.9	25
46	Ionic Hydrogels with Biomimetic 4D-Printed Mechanical Gradients: Models for Soft-Bodied Aquatic Organisms. *Advanced Functional Materials*, **2019**, 29, 1806723	15.6	24
45	Translational and rotational near-wall diffusion of spherical colloids studied by evanescent wave scattering. *Soft Matter*, **2014**, 10, 4312-23	3.6	23
44	Rheological Analysis of the Gelation Kinetics of an Enzyme Cross-linked PEG Hydrogel. *Biomacromolecules*, **2019**, 20, 2198-2206	6.9	22
43	A sequence of physical processes quantified in LAOS by continuous local measures **2017**, 29, 269-279		21
42	The transient behavior of soft glassy materials far from equilibrium. *Journal of Rheology*, **2018**, 62, 869-888	4.1	21
41	Dynamic shear rheology and structure kinetics modeling of a thixotropic carbon black suspension. *Rheologica Acta*, **2017**, 56, 811-824	2.3	18
40	Understanding steady and dynamic shear banding in a model wormlike micellar solution. *Journal of Rheology*, **2016**, 60, 1001-1017	4.1	18
39	Yielding and recovery of conductive pastes for screen printing. *Rheologica Acta*, **2019**, 58, 361-382	2.3	17
38	An optimized protocol for the analysis of time-resolved elastic scattering experiments. *Soft Matter*, **2016**, 12, 2301-8	3.6	17
37	Unlocking Chain Exchange in Highly Amphiphilic Block Polymer Micellar Systems: Influence of Agitation. *ACS Macro Letters*, **2014**, 3, 1106-1111	6.6	17
36	3D-Printed Hydrogel Composites for Predictive Temporal (4D) Cellular Organizations and Patterned Biogenic Mineralization. *Advanced Healthcare Materials*, **2019**, 8, e1800788	10.1	17
35	Rheological manifestation of microstructural change of colloidal gel under oscillatory shear flow. *Physics of Fluids*, **2020**, 32, 063102	4.4	16
34	Unveiling Temporal Nonlinear Structure-Rheology Relationships under Dynamic Shearing. *Polymers*, **2019**, 11,	4.5	14
33	Unification of the Rheological Physics of Yield Stress Fluids. *Physical Review Letters*, **2021**, 126, 218002	7.4	14

32	Challenges of Size-Exclusion Chromatography for the Analysis of Bottlebrush Polymers. *Macromolecules*, **2020**, 53, 8610-8620	5.5	12
31	Instantaneous dimensionless numbers for transient nonlinear rheology. *Rheologica Acta*, **2019**, 58, 539-556	2.6	11
30	Color, structure, and rheology of a diblock bottlebrush copolymer solution. *Soft Matter*, **2020**, 16, 4919-4931	3.6	11
29	Strain shifts under stress-controlled oscillatory shearing in theoretical, experimental, and structural perspectives: Application to probing zero-shear viscosity. *Journal of Rheology*, **2019**, 63, 863-881	4.1	10
28	The unification of disparate rheological measures in oscillatory shearing. *Physics of Fluids*, **2019**, 31, 073107	4.4	10
27	Frieze group analysis of asymmetric response to large-amplitude oscillatory shear. *Journal of Rheology*, **2010**, 54, 859-880	4.1	10
26	Thermopower and resistivity of carbon nanotube networks and organic conducting polymers. *Current Applied Physics*, **2004**, 4, 407-410	2.6	10
25	Optimal conditions for pre-shearing thixotropic or aging soft materials. *Rheologica Acta*, **2020**, 59, 921-934	2.6	10
24	Diatom Microbubbler for Active Biofilm Removal in Confined Spaces. *ACS Applied Materials & Interfaces*, **2018**, 10, 35685-35692	9.5	9
23	Time-dependent NMR-velocimetry of a colloidal glass. *Rheologica Acta*, **2009**, 48, 735-745	2.3	8
22	The role of elasticity in thixotropy: Transient elastic stress during stepwise reduction in shear rate. *Physics of Fluids*, **2021**, 33, 033112	4.4	8
21	A Printing-Centric Approach to the Electrostatic Modification of Polymer/Clay Composites for Use in 3D Direct-Ink Writing. *Advanced Materials Interfaces*, **2018**, 5, 1701579	4.6	7
20	Microscopic dynamics of stress relaxation in a nanocolloidal soft glass. *Physical Review Materials*, **2020**, 4,	3.2	6
19	Studying Large Amplitude Oscillatory Shear Response of Soft Materials. *Journal of Visualized Experiments*, **2019**,	1.6	4
18	Anomalous structural response of nematic colloidal platelets subjected to large amplitude stress oscillations. *Physics of Fluids*, **2017**, 29, 023102	4.4	4
17	Comparison of Sequence of Physical Processes (SPP) and Fourier Transform Coupled with Chebyshev Polynomials (FTC) methods to Interpret Large Amplitude Oscillatory Shear (LAOS) Response of Viscoelastic Doughs and Viscous Pectin Solution. *Food Hydrocolloids*, **2022**, 107558	10.6	4
16	Revisiting the basis of transient rheological material functions: Insights from recoverable strain measurements. *Journal of Rheology*, **2021**, 65, 129-144	4.1	4
15	Oldroyd's model and the foundation of modern rheology of yield stress fluids. *Journal of Non-Newtonian Fluid Mechanics*, **2021**, 295, 104604	2.7	4

14	The nonlinear rheology of complex yield stress foods. *Physics of Fluids*, **2022**, 34, 023107	4.4	4
13	Mediating the Enhanced Interaction Between Hydroxyapatite and Agarose through Amorphous Calcium Carbonate. *Crystal Growth and Design*, **2020**, 20, 6917-6929	3.5	3
12	Materials Design of Highly Branched Bottlebrush Polymers at the Intersection of Modeling, Synthesis, Processing, and Characterization. *Chemistry of Materials*, **2022**, 34, 1990-2024	9.6	3
11	Catalytic microgelators for decoupled control of gelation rate and rigidity of the biological gels. *Journal of Controlled Release*, **2020**, 317, 166-180	11.7	2
10	Re-entrant solid behavior of 3D-printable epoxy inks. *Rheologica Acta*, **2020**, 59, 631-638	2.3	2
9	Microscopic ergodicity breaking governs the emergence and evolution of elasticity in glass-forming nanoclay suspensions. *Physical Review E*, **2020**, 102, 042619	2.4	1
8	A small-scale study of nonlinear blood rheology shows rapid transient transitions. *Rheologica Acta*, **2020**, 59, 687-705	2.3	1
7	Probing nonlinear velocity profiles of shear-thinning, nematic platelet dispersions in Couette flow using x-ray photon correlation spectroscopy. *Physics of Fluids*, **2021**, 33, 063102	4.4	1
6	oreo: An R package for large amplitude oscillatory analysis. *SoftwareX*, **2021**, 15, 100769	2.7	1
5	Rheological Characteristics of Ionic Liquids under Nanoconfinement.. *Langmuir*, **2022**, 38, 2961-2971	4	1
4	Anomalous dynamic response of nematic platelets studied by spatially resolved rheo-small angle x-ray scattering in the 1□2 plane. *Physics of Fluids*, **2021**, 33, 123104	4.4	1
3	Digital rheometer twins: Learning the hidden rheology of complex fluids through rheology-informed graph neural networks.. *Proceedings of the National Academy of Sciences of the United States of America*, **2022**, 119, e2202234119	11.5	1
2	Charge-Induced Structural Changes of Confined Copolymer Hydrogels for Controlled Surface Morphology, Rheological Response, Adhesion, and Friction. *Advanced Functional Materials*, **2022**, 32, 2111414	15.6	0
1	Self-locomotive, antimicrobial microrobot (SLAM) swarm for enhanced biofilm elimination. *Biomaterials*, **2022**, 121610	15.6	0