Tina Hecksher

List of Publications by Year
in descending order

41 papers	1,370 citations	361296 20 h-index	330025 37 g-index
41 all docs	41 docs citations	41 times ranked	989 citing authors

#	Article	IF	Citations
1	Little evidence for dynamic divergences in ultraviscous molecular liquids. Nature Physics, 2008, 4, 737-741.	6.5	308
2	Predicting the density-scaling exponent of a glass-forming liquid from Prigogineâ€"Defay ratio measurements. Nature Physics, 2011, 7, 816-821.	6.5	122
3	Shear-Modulus Investigations of Monohydroxy Alcohols: Evidence for a Short-Chain-Polymer Rheological Response. Physical Review Letters, 2014, 112, 098301.	2.9	98
4	Physical aging of molecular glasses studied by a device allowing for rapid thermal equilibration. Journal of Chemical Physics, 2010, 133, 174514.	1.2	87
5	Mechanical spectra of glass-forming liquids. II. Gigahertz-frequency longitudinal and shear acoustic dynamics in glycerol and DC704 studied by time-domain Brillouin scattering. Journal of Chemical Physics, 2013, 138, 12A544.	1.2	54
6	Communication: Identical temperature dependence of the time scales of several linear-response functions of two glass-forming liquids. Journal of Chemical Physics, 2012, 136, 081102.	1.2	48
7	A review of experiments testing the shoving model. Journal of Non-Crystalline Solids, 2015, 407, 14-22.	1.5	48
8	Oscillatory shear and high-pressure dielectric study of 5-methyl-3-heptanol. Colloid and Polymer Science, 2014, 292, 1913-1921.	1.0	42
9	Perspective: Searching for simplicity rather than universality in glass-forming liquids. Journal of Chemical Physics, 2018, 149, 230901.	1.2	42
10	Experimental studies of Debye-like process and structural relaxation in mixtures of 2-ethyl-1-hexanol and 2-ethyl-1-hexyl bromide. Journal of Chemical Physics, 2012, 137, 144502.	1.2	40
11	Mechanical spectra of glass-forming liquids. I. Low-frequency bulk and shear moduli of DC704 and 5-PPE measured by piezoceramic transducers. Journal of Chemical Physics, 2013, 138, 12A543.	1.2	39
12	Slow rheological mode in glycerol and glycerolâ€"water mixtures. Physical Chemistry Chemical Physics, 2018, 20, 1716-1723.	1.3	39
13	Shear and dielectric responses of propylene carbonate, tripropylene glycol, and a mixture of two secondary amides. Journal of Chemical Physics, 2012, 137, 064508.	1.2	37
14	Communication: Supramolecular structures in monohydroxy alcohols: Insights from shear-mechanical studies of a systematic series of octanol structural isomers. Journal of Chemical Physics, 2014, 141, 101104.	1.2	35
15	Predicting nonlinear physical aging of glasses from equilibrium relaxation via the material time. Science Advances, 2022, 8, eabl9809.	4.7	32
16	Broadband dynamics in neat 4-methyl-3-heptanol and in mixtures with 2-ethyl-1-hexanol. Journal of Chemical Physics, 2013, 139, 134503.	1.2	28
17	Communication: Slow supramolecular mode in amine and thiol derivatives of 2-ethyl-1-hexanol revealed by combined dielectric and shear-mechanical studies. Journal of Chemical Physics, 2015, 143, 181102.	1.2	27
18	Experimental Evidence for a State-Point-Dependent Density-Scaling Exponent of Liquid Dynamics. Physical Review Letters, 2019, 122, 055501.	2.9	27

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19	Communication: Direct tests of single-parameter aging. Journal of Chemical Physics, 2015, 142, 241103.	1.2	26
20	Toward broadband mechanical spectroscopy. Proceedings of the National Academy of Sciences of the United States of America, 2017, 114, 8710-8715.	3.3	26
21	Connection between fragility, mean-squared displacement, and shear modulus in two van der Waals bonded glass-forming liquids. Physical Review B, 2017, 95, .	1.1	18
22	Communication: Linking the dielectric Debye process in mono-alcohols to density fluctuations. Journal of Chemical Physics, 2016, 144, 161103.	1.2	17
23	A systematic study of the isothermal crystallization of the mono-alcohol <i>n</i>-butanol monitored by dielectric spectroscopy. Journal of Chemical Physics, 2015, 143, 134501.	1.2	15
24	Generalized single-parameter aging tests and their application to glycerol. Journal of Chemical Physics, 2019, 150, 044501.	1.2	15
25	Long-time structural relaxation of glass-forming liquids: Simple or stretched exponential?. Journal of Chemical Physics, 2020, 152, 041103.	1.2	14
26	Model for the alpha and beta shear-mechanical properties of supercooled liquids and its comparison to squalane data. Journal of Chemical Physics, 2017, 146, 154504.	1.2	12
27	Time-scale ordering in hydrogen- and van der Waals-bonded liquids. Journal of Chemical Physics, 2021, 154, 184508.	1.2	12
28	Fast contribution to the activation energy of a glass-forming liquid. Proceedings of the National Academy of Sciences of the United States of America, 2019, 116, 16736-16741.	3.3	10
29	The dynamic bulk modulus of three glass-forming liquids. Journal of Chemical Physics, 2014, 140, 244508.	1.2	9
30	The macroscopic pancake bounce. European Journal of Physics, 2017, 38, 015006.	0.3	9
31	Identity of the local and macroscopic dynamic elastic responses in supercooled 1-propanol. Physical Chemistry Chemical Physics, 2021, 23, 16537-16541.	1.3	7
32	Method for Direct Measurement of Structural Rolling Resistance for Heavy Vehicles. Transportation Research Record, 2020, 2674, 371-380.	1.0	5
33	Thermalization calorimetry: A simple method for investigating glass transition and crystallization of supercooled liquids. AIP Advances, 2016, 6, 055019.	0.6	4
34	A combined measurement of thermal and mechanical relaxation. Journal of Non-Crystalline Solids, 2011, 357, 346-350.	1.5	3
35	Sanz etÂal. Reply:. Physical Review Letters, 2019, 123, 189602.	2.9	3
36	An energy landscape model for glass-forming liquids in three dimensions. Journal of Non-Crystalline Solids, 2006, 352, 5210-5215.	1.5	2

#	Article	IF	Citations
37	Insights through dimensions. Nature Physics, 2017, 13, 1026-1026.	6.5	2
38	Simple-liquid dynamics emerging in the mechanical shear spectra of poly(propylene glycol). Colloid and Polymer Science, 2017, 295, 2433.	1.0	2
39	High-frequency dynamics and test of the shoving model for the glass-forming ionic liquid Pyr14-TFSI. Physical Review Materials, 2021, 5, .	0.9	2
40	Laboratory for Validation of Rolling-Resistance Models. International Journal of Applied Mechanics, 2021, 13, .	1.3	2
41	Rheological model for the alpha relaxation of glass-forming liquids and its comparison to data for DC704 and DC705. Journal of Chemical Physics, 0, , .	1.2	2