James L Harden

List of Publications by Year
in descending order

42 papers	2,732 citations	257450 24 h-index	276875 41 g-index
43 all docs	43 docs citations	43 times ranked	3290 citing authors

#	Article	IF	Citations
1	Reversible Hydrogels from Self-Assembling Artificial Proteins. , 1998, 281, 389-392.		990
2	Nanoparticle Motion within Glassy Polymer Melts. Physical Review Letters, 2009, 102, 075702.	7.8	135
3	Entanglement-Controlled Subdiffusion of Nanoparticles within Concentrated Polymer Solutions. Physical Review Letters, 2012, 109, 055901.	7.8	110
4	Potent inhibition of ice recrystallization by low molecular weight carbohydrate-based surfactants and hydrogelators. Chemical Science, 2012, 3, 1408.	7.4	102
5	Gel formation and aging in weakly attractive nanocolloid suspensions at intermediate concentrations. Journal of Chemical Physics, 2011, 135, 154903.	3.0	91
6	Anomalous rheological behavior of ordered phases of block copolymers. 1. Macromolecules, 1993, 26, 4928-4934.	4.8	88
7	Brushlike Interactions between Thermoresponsive Microgel Particles. Physical Review Letters, 2010, 104, 128304.	7.8	86
8	Extracellular Forces Cause the Nucleus to Deform in a Highly Controlled Anisotropic Manner. Scientific Reports, 2016, 6, 21300.	3.3	85
9	Inhomogeneous Flows of Complex Fluids: Mechanical Instability Versus Non-Equilibrium Phase Transition. Journal De Physique II, 1997, 7, 459-472.	0.9	82
10	Relationship between rheology and structure of interpenetrating, deforming and compressing microgels. Nature Communications, 2019, 10, 2436.	12.8	73
11	Self-Assembling Protein Hydrogels with Modular Integrin Binding Domains. Biomacromolecules, 2006, 7, 38-47.	5.4	72
12	Controlling cell adhesion to surfaces via associating bioactive triblock proteins. Biomaterials, 2007, 28, 3325-3337.	11.4	60
13	Tyrosine Templating in the Self-Assembly and Crystallization of Silk Fibroin. Biomacromolecules, 2016, 17, 3570-3579.	5.4	54
14	Rheo-XPCS. Current Opinion in Colloid and Interface Science, 2015, 20, 261-271.	7.4	53
15	Simulating the Entropic Collapse of Coarse-Grained Chromosomes. Biophysical Journal, 2015, 108, 810-820.	0.5	52
16	Slow dynamics, aging, and glassy rheology in soft and living matter. Solid State Communications, 2006, 139, 589-598.	1.9	48
17	Echoes in x-ray speckles track nanometer-scale plastic events in colloidal gels under shear. Physical Review E, 2014, 90, 062310.	2.1	45
18	Anomalous rheological behavior of ordered phases of block copolymers. 2. Macromolecules, 1993, 26, 4935-4944.	4.8	44

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19	Enhanced Elasticity and Soft Glassy Rheology of a Smectic in a Random Porous Environment. Physical Review Letters, 2005, 94, 107801.	7.8	43
20	Connecting nanoscale motion and rheology of gel-forming colloidal suspensions. Physical Review E, 2010, 81, 050401.	2.1	39
21	Electrophoresis: When hydrodynamics matter. Current Opinion in Colloid and Interface Science, 2012, 17, 74-82.	7.4	36
22	Molecular Dynamics Simulations of Optimal Dynamic Uncharged Polymer Coatings for Quenching Electro-osmotic Flow. Physical Review Letters, 2009, 102, 108304.	7.8	34
23	Interaction-free ghost-imaging of structured objects. Optics Express, 2019, 27, 2212.	3.4	34
24	A combinatorial approach to the selective capture of circulating malignant epithelial cells by peptide ligands. Biomaterials, 2005, 26, 6077-6086.	11.4	31
25	Influence of Charged Polymer Coatings on Electro-Osmotic Flow: Molecular Dynamics Simulations. Macromolecules, 2011, 44, 9455-9463.	4.8	30
26	Implicit Method for Simulating Electrohydrodynamics of Polyelectrolytes. Physical Review Letters, 2010, 105, 148301.	7.8	22
27	Coarse-grained molecular dynamics simulations of depletion-induced interactions for soft matter systems. Journal of Chemical Physics, 2014, 141, 244910.	3.0	21
28	Thermal fluctuations of thin wetting films on disordered solids. Langmuir, 1992, 8, 2547-2551.	3.5	20
29	Biofunctional Coatings via Targeted Covalent Cross-Linking of Associating Triblock Proteins. Biomacromolecules, 2009, 10, 2408-2417.	5.4	20
30	Microscopic signatures of yielding in concentrated nanoemulsions under large-amplitude oscillatory shear. Physical Review Materials, 2018, 2, .	2.4	19
31	Synthesis and Screening of a Random Dimeric Peptide Library Using the One-Beadâ"One-Dimer Combinatorial Approach. Bioconjugate Chemistry, 2006, 17, 335-340.	3.6	15
32	Enhanced gel formation in binary mixtures of nanocolloids with short-range attraction. Journal of Chemical Physics, 2018, 148, 044902.	3.0	15
33	Enhanced Collagen-like Protein for Facile Biomaterial Fabrication. ACS Biomaterials Science and Engineering, 2021, 7, 1414-1427.	5.2	15
34	Microscopic dynamics of stress relaxation in a nanocolloidal soft glass. Physical Review Materials, 2020, 4, .	2.4	12
35	Spatial-spectral coupling in coherent anti-Stokes Raman scattering microscopy. Optics Express, 2013, 21, 15298.	3.4	11
36	Time dependent stress relaxation and recovery in mechanically strained 3D microtissues. APL Bioengineering, 2020, 4, 036107.	6.2	10

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37	Electrochemically Directed Assembly of Designer Coiled-Coil Telechelic Proteins. ACS Biomaterials Science and Engineering, 2017, 3, 3195-3206.	5.2	9
38	Microscopic ergodicity breaking governs the emergence and evolution of elasticity in glass-forming nanoclay suspensions. Physical Review E, 2020, 102, 042619.	2.1	6
39	Connector Chain Aggregation Effects in Elastomerâ˜Elastomer Adhesion Promotion. Journal of Physical Chemistry B, 1997, 101, 4613-4619.	2.6	5
40	Computer simulations of time-dependent suppression of EOF by polymer coatings. Microfluidics and Nanofluidics, 2012, 13, 91-97.	2.2	5
41	Editorial: Special Issue on Designer Protein Biomaterials. ACS Biomaterials Science and Engineering, 2017, 3, 658-660.	5.2	5
42	Measuring mechanodynamics in an unsupported epithelial monolayer grown at an airâ€“water interface. Molecular Biology of the Cell, 2017, 28, 111-119.	2.1	3