Jacinta C Conrad

List of Publications by Year
in descending order

91 papers	3,148 citations	182225 30 h-index	198040 52 g-index
93 all docs	93 docs citations	93 times ranked	4480 citing authors

#	Article	IF	Citations
1	Nanoparticle dispersion in porous media: Effects of attractive particle-media interactions. Physical Review E, 2022, 105, .	0.8	1
2	Electrostatic Repulsion Slows Relaxations of Polyelectrolytes in Semidilute Solutions. ACS Macro Letters, 2022, 11, 854-860.	2.3	6
3	Nanoparticle transport within non-Newtonian fluid flow in porous media. Physical Review E, 2022, 106, .	0.8	2
4	Nanoparticle dispersion in porous media: Effects of hydrodynamic interactions and dimensionality. AICHE Journal, 2021, 67, e17147.	1.8	6
5	Roadmap on emerging concepts in the physical biology of bacterial biofilms: from surface sensing to community formation. Physical Biology, 2021, 18, 051501.	0.8	46
6	Isocratic reporter-exclusion immunoassay using restricted-access adsorbents. Analyst, The, 2021, 146, 4835-4840.	1.7	1
7	Effect of Dispersity on the Conformation of Spherical Polymer Brushes. ACS Macro Letters, 2021, 10, 518-524.	2.3	13
8	Dynamics of Flexible Viruses in Polymer Solutions. Macromolecules, 2021, 54, 4557-4563.	2.2	16
9	Nanoparticle dispersion in porous media: Effects of array geometry and flow orientation. Physical Review E, 2021, 104, 015102.	0.8	4
10	Nanoparticle dynamics in semidilute polymer solutions: Rings versus linear chains. Journal of Rheology, 2021, 65, 745-755.	1.3	5
11	Suppressing Barium Sulfate Crystallization with Hydroxycitrate: A Dual Nucleation and Growth Inhibitor. Chemistry of Materials, 2021, 33, 6997-7007.	3.2	7
12	Alginate as a green inhibitor of barite nucleation and crystal growth. Molecular Systems Design and Engineering, 2021, 6, 508-519.	1.7	9
13	Bacterial aggregation assisted by anionic surfactant and calcium ions. Soft Matter, 2021, 17, 8474-8482.	1.2	4
14	Molecular weight and dispersity affect chain conformation and pH-response in weak polyelectrolyte brushes. Polymer Chemistry, 2021, 12, 6737-6744.	1.9	7
15	Local Confinement Controls Diffusive Nanoparticle Dynamics in Semidilute Polyelectrolyte Solutions. Langmuir, 2020, 36, 9153-9159.	1.6	19
16	Acidic Polysaccharides as Green Alternatives for Barite Scale Dissolution. ACS Applied Materials & Interfaces, 2020, 12, 55434-55443.	4.0	11
17	Biophysical methods to quantify bacterial behaviors at oilâ€“water interfaces. Journal of Industrial Microbiology and Biotechnology, 2020, 47, 725-738.	1.4	11
18	Bacterial motility enhances adhesion to oil droplets. Soft Matter, 2020, 16, 8237-8244.	1.2	14

#	Article	IF	Citations
19	Manuscript Titles: How to Capture Readers and Enhance Citations. ACS Applied Nano Materials, 2020, 3, 3962-3963.	2.4	0
20	Neutral DNAâ€“avidin nanoparticles as ultrasensitive reporters in immuno-PCR. Analyst, The, 2020, 145, 4942-4949.	1.7	1
21	Dynamics of polydisperse hard-spheres under strong confinement. Molecular Physics, 2020, 118, e1728407.	0.8	5
22	Soft Interactions Modify the Diffusive Dynamics of Polymer-Grafted Nanoparticles in Solutions of Free Polymer. ACS Macro Letters, 2019, 8, 917-922.	2.3	18
23	Influence of polymer flexibility on nanoparticle dynamics in semidilute solutions. Soft Matter, 2019, 15, 1260-1268.	1.2	27
24	Contact Networks Enhance Shear Thickening in Attractive Colloid-Polymer Mixtures. Physical Review Letters, 2019, 122, 228003.	2.9	23
25	Structure Dominates Localization of Tracers within Aging Nanoparticle Glasses. Journal of Physical Chemistry Letters, 2019, 10, 1784-1789.	2.1	13
26	A microfluidic approach for probing hydrodynamic effects in barite scale formation. Lab on A Chip, 2019, 19, 1534-1544.	3.1	15
27	Anomalous Dense Liquid Condensates Host the Nucleation of Tumor Suppressor p53 Fibrils. IScience, 2019, 12, 342-355.	1.9	46
28	Rotating oil droplets driven by motile bacteria at interfaces. Soft Matter, 2019, 15, 9368-9375.	1.2	4
29	Tracer transport in attractive and repulsive supercooled liquids and glasses. Journal of Chemical Physics, 2019, 151, 194501.	1.2	9
30	Towards mimicking biological function with responsive surface-grafted polymer brushes. Current Opinion in Solid State and Materials Science, 2019, 23, 1-12.	5.6	14
31	Coupling of Nanoparticle Dynamics to Polymer Center-of-Mass Motion in Semidilute Polymer Solutions. Macromolecules, 2018, 51, 1865-1872.	2.2	32
32	Preface to the Early Career Authors in Fundamental Colloid and Interface Science Special Issue. Langmuir, 2018, 34, 727-728.	1.6	0
33	Tunable Assembly of Gold Nanorods in Polymer Solutions To Generate Controlled Nanostructured Materials. ACS Applied Nano Materials, 2018, 1, 877-885.	2.4	18
34	Confined Flow: Consequences and Implications for Bacteria and Biofilms. Annual Review of Chemical and Biomolecular Engineering, 2018, 9, 175-200.	3.3	59
35	Level of Fimbriation Alters the Adhesion of Escherichia coli Bacteria to Interfaces. Langmuir, 2018, 34, 1133-1142.	1.6	31
36	Adhesion of Marinobacter hydrocarbonoclasticus to Surfactant-Decorated Dodecane Droplets. Langmuir, 2018, 34, 14012-14021.	1.6	21

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37	Dispersity control in atom transfer radical polymerizations through addition of phenylhydrazine. Polymer Chemistry, 2018, 9, 4332-4342.	1.9	44
38	Tracer Transport Probes Relaxation and Structure of Attractive and Repulsive Glassy Liquids. Journal of Physical Chemistry Letters, 2018, 9, 3008-3013.	2.1	11
39	Aqueous Colloid + Polymer Depletion System for Confocal Microscopy and Rheology. Frontiers in Physics, 2018, 6, .	1.0	6
40	Increasing Binding Efficiency via Reporter Shape and Flux in a Viral Nanoparticle Lateral-Flow Assay. ACS Applied Materials & Interfaces, 2017, 9, 6878-6884.	4.0	13
41	Phase behavior of colloidâ€“polymer depletion mixtures with unary or binary depletants. Soft Matter, 2017, 13, 2781-2792.	1.2	10
42	Shear flow suppresses the volume of the nucleation precursor clusters in lysozyme solutions. Journal of Crystal Growth, 2017, 468, 493-501.	0.7	16
43	Particle dispersion in porous media: Differentiating effects of geometry and fluid rheology. Physical Review E, 2017, 96, 022610.	0.8	18
44	Confined Dynamics of Grafted Polymer Chains in Solutions of Linear Polymer. Macromolecules, 2017, 50, 7372-7379.	2.2	23
45	Differential dynamic microscopy of bidisperse colloidal suspensions. Npj Microgravity, 2017, 3, 21.	1.9	11
46	Polymorphism of Lysozyme Condensates. Journal of Physical Chemistry B, 2017, 121, 9091-9101.	1.2	19
47	Tuning Bacterial Attachment and Detachment via the Thickness and Dispersity of a pH-Responsive Polymer Brush. ACS Applied Materials & Interfaces, 2017, 9, 44900-44910.	4.0	46
48	Orientational binding modes of reporters in a viral-nanoparticle lateral flow assay. Analyst, The, 2017, 142, 55-64.	1.7	6
49	Flotation Immunoassay: Masking the Signal from Free Reporters in Sandwich Immunoassays. Scientific Reports, 2016, 6, 24297.	1.6	11
50	Structure and Dynamics of Interacting Nanoparticles in Semidilute Polymer Solutions. Macromolecules, 2016, 49, 6568-6577.	2.2	36
51	Nanoparticle diffusion in crowded and confined media. Soft Matter, 2016, 12, 8407-8416.	1.2	38
52	Gelation in mixtures of polymers and bidisperse colloids. Physical Review E, 2016, 93, 012610.	0.8	9
53	Bacteria differently deploy type-IV pili on surfaces to adapt to nutrient availability. Npj Biofilms and Microbiomes, 2016, 2, 15029.	2.9	35
54	Nanoparticle dispersion in disordered porous media with and without polymer additives. Soft Matter, 2016, 12, 5676-5683.	1.2	22

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55	Subnanometric Roughness Affects the Deposition and Mobile Adhesion of Escherichia coli on Silanized Glass Surfaces. Langmuir, 2016, 32, 5422-5433.	1.6	36
56	Protein Conformational Flexibility Enables the Formation of Dense Liquid Clusters: Tests Using Solution Shear. Journal of Physical Chemistry Letters, 2016, 7, 2339-2345.	2.1	18
57	Hysteretic memory in pH-response of water contact angle on poly(acrylic acid) brushes. Soft Matter, 2016, 12, 3589-3599.	1.2	49
58	Differential dynamic microscopy of weakly scattering and polydisperse protein-rich clusters. Physical Review E, 2015, 92, 042712.	0.8	33
59	Diffusive dynamics of nanoparticles in ultra-confined media. Soft Matter, 2015, 11, 7515-7524.	1.2	34
60	Detection of Viruses By Counting Single Fluorescent Genetically Biotinylated Reporter Immunophage Using a Lateral Flow Assay. ACS Applied Materials & Interfaces, 2015, 7, 2891-2898.	4.0	21
61	Molecular simulation of natural gas transport and storage in shale rocks with heterogeneous nano-pore structures. Journal of Petroleum Science and Engineering, 2015, 133, 401-409.	2.1	41
62	Size-Dependent Dynamics of Nanoparticles in Unentangled Polyelectrolyte Solutions. ACS Macro Letters, 2015, 4, 1169-1173.	2.3	67
63	Aptamer-Phage Reporters for Ultrasensitive Lateral Flow Assays. Analytical Chemistry, 2015, 87, 11660-11665.	3.2	35
64	Transport and Dispersion of Nanoparticles in Periodic Nanopost Arrays. ACS Nano, 2014, 8, 4221-4227.	7.3	35
65	Attachment from Flow ofEscherichia coliBacteria onto Silanized Glass Substrates. Langmuir, 2014, 30, 11147-11155.	1.6	30
66	Mobility of Nanoparticles in Semidilute Polyelectrolyte Solutions. Macromolecules, 2014, 47, 5328-5333.	2.2	46
67	Confocal Imaging of Confined Quiescent and Flowing Colloid-polymer Mixtures. Journal of Visualized Experiments, 2014, , .	0.2	1
68	Regulation of directional cell migration by membrane-induced actin bundling. Journal of Cell Science, 2013, 126, 312-326.	1.2	33
69	Dynamics of confined depletion mixtures of polymers and bidispersed colloids. Soft Matter, 2013, 9, 10617.	1.2	12
70	Diffusive Dynamics of Nanoparticles in Arrays of Nanoposts. ACS Nano, 2013, 7, 5122-5130.	7.3	89
71	Dynamics of confined colloid-polymer mixtures. , 2013, , .		2
72	Quantifying collective behavior in mammalian cells. Proceedings of the National Academy of Sciences of the United States of America, 2012, 109, 7591-7592.	3.3	9

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73	Effects of attraction strength on microchannel flow of colloidâ€“polymer depletion mixtures. Soft Matter, 2012, 8, 10695.	1.2	9
74	Physics of bacterial near-surface motility using flagella and type IV pili: implications for biofilm formation. Research in Microbiology, 2012, 163, 619-629.	1.0	88
75	Structural evolution of cuboidal granular media. Soft Matter, 2012, 8, 4795.	1.2	11
76	Diffusive dynamics of nanoparticles in aqueous dispersions. Soft Matter, 2012, 8, 11933.	1.2	41
77	Confinement-Induced Solidification of Colloid-Polymer Depletion Mixtures. Physical Review Letters, 2012, 109, 028301.	2.9	20
78	Flagella and Pili-Mediated Near-Surface Single-Cell Motility Mechanisms in P. aeruginosa. Biophysical Journal, 2011, 100, 1608-1616.	0.2	197
79	Designing colloidal suspensions for directed materials assembly. Current Opinion in Colloid and Interface Science, 2011, 16, 71-79.	3.4	57
80	Bacteria use type-IV pili to slingshot on surfaces. Proceedings of the National Academy of Sciences of the United States of America, 2011, 108, 12617-12622.	3.3	115
81	Structural Evolution of Colloidal Gels During Constricted Microchannel Flow. Langmuir, 2010, 26, 6102-6107.	1.6	12
82	Bacteria Use Type IV Pili to Walk Upright and Detach from Surfaces. Science, 2010, 330, 197-197.	6.0	168
83	Evaporative lithographic patterning of binary colloidal films. Philosophical Transactions Series A, Mathematical, Physical, and Engineering Sciences, 2009, 367, 5157-5165.	1.6	32
84	Structure of Colloidal Gels during Microchannel Flow. Langmuir, 2008, 24, 7628-7634.	1.6	48
85	Patterning Colloidal Films via Evaporative Lithography. Physical Review Letters, 2007, 98, 148301.	2.9	170
86	Microfluidic Assembly of Homogeneous and Janus Colloid-Filled Hydrogel Granules. Langmuir, 2006, 22, 8618-8622.	1.6	251
87	Contribution of Slow Clusters to the Bulk Elasticity Near the Colloidal Glass Transition. Physical Review Letters, 2006, 97, 265701.	2.9	45
88	Fluids of Clusters in Attractive Colloids. Physical Review Letters, 2006, 96, 028306.	2.9	200
89	Glasslike Arrest in Spinodal Decomposition as a Route to Colloidal Gelation. Physical Review Letters, 2005, 95, 238302.	2.9	166
90	Weak Correlations between Local Density and Dynamics near the Glass Transition. Journal of Physical Chemistry B, 2005, 109, 21235-21240.	1.2	34

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91	Suppressing barite crystallization with organophosphorus compounds. CrystEngComm, 0, , .	1.3	1