Fan Jin

List of Publications by Year
in descending order

47 papers	2,488 citations	236612 25 h-index	205818 48 g-index
60 all docs	60 docs citations	60 times ranked	3350 citing authors

#	Article	IF	Citations
1	Psl trails guide exploration and microcolony formation in Pseudomonas aeruginosa biofilms. Nature, 2013, 497, 388-391.	13.7	308
2	Flagella and Pili-Mediated Near-Surface Single-Cell Motility Mechanisms in P. aeruginosa. Biophysical Journal, 2011, 100, 1608-1616.	0.2	197
3	Bacteria Use Type IV Pili to Walk Upright and Detach from Surfaces. Science, 2010, 330, 197-197.	6.0	168
4	Revisit complexation between DNA and polyethylenimine â€" Effect of uncomplexed chains free in the solution mixture on gene transfection. Journal of Controlled Release, 2011, 155, 67-76.	4.8	155
5	Revisit the complexation of PEI and DNA â€" How to make low cytotoxic and highly efficient PEI gene transfection non-viral vectors with a controllable chain length and structure?. Journal of Controlled Release, 2009, 140, 40-46.	4.8	143
6	Revisit complexation between DNA and polyethylenimine â€" Effect of length of free polycationic chains on gene transfection. Journal of Controlled Release, 2011, 152, 143-151.	4.8	132
7	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
8	Slow Relaxation Mode in Mixtures of Water and Organic Molecules:Â Supramolecular Structures or Nanobubbles?. Journal of Physical Chemistry B, 2007, 111, 2255-2261.	1.2	103
9	Effects of pH and Ionic Strength on the Stability of Nanobubbles in Aqueous Solutions of Î±-Cyclodextrin. Journal of Physical Chemistry B, 2007, 111, 11745-11749.	1.2	103
10	Heterogeneity in surface sensing suggests a division of labor in Pseudomonas aeruginosa populations. ELife, 2019, 8, .	2.8	96
11	Liquid-crystalline ordering of antimicrobial peptideâ€"DNA complexes controls TLR9 activation. Nature Materials, 2015, 14, 696-700.	13.3	75
12	Observation of the First-Order Transition in Ultrafiltration of Flexible Linear Polymer Chains. Physical Review Letters, 2006, 96, 237801.	2.9	66
13	Helical antimicrobial peptides assemble into protofibril scaffolds that present ordered dsDNA to TLR9. Nature Communications, 2019, 10, 1012.	5.8	53
14	Bioprinting Living Biofilms through Optogenetic Manipulation. ACS Synthetic Biology, 2018, 7, 1195-1200.	1.9	51
15	Promoting bidirectional extracellular electron transfer of Shewanella oneidensis MRâ€1 for hexavalent chromium reduction via elevating intracellular cAMP level. Biotechnology and Bioengineering, 2020, 117, 1294-1303.	1.7	48
16	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
17	Twoâ€Photon Ratiometric Fluorescent Mapping of Intracellular Transport Pathways of pHâ€Responsive Block Copolymer Micellar Nanocarriers. Advanced Healthcare Materials, 2013, 2, 1576-1581.	3.9	44
18	Observation of Kinetic and Structural Scalings during Slow Coalescence of Nanobubbles in an Aqueous Solution. Journal of Physical Chemistry B, 2007, 111, 13143-13146.	1.2	43

#	Article	IF	Citations
19	How Much Force Is Needed To Stretch a Coiled Chain in Solution?. Macromolecules, 2009, 42, 4400-4402.	2.2	41
20	Synergistically Enhance Magnetic Resonance/Fluorescence Imaging Performance of Responsive Polymeric Nanoparticles Under Mildly Acidic Biological Milieu. Macromolecular Rapid Communications, 2013, 34, 749-758.	2.0	40
21	Optogenetics Manipulation Enables Prevention of Biofilm Formation of Engineered Pseudomonas aeruginosa on Surfaces. ACS Synthetic Biology, 2018, 7, 200-208.	1.9	40
22	Conditional privatization of a public siderophore enables Pseudomonas aeruginosa to resist cheater invasion. Nature Communications, 2018, 9, 1383.	5.8	39
23	Direct measurement of the nanobubble-induced weak depletion attraction between a spherical particle and a flat surface in an aqueous solution. Soft Matter, 2008, 4, 968.	1.2	36
24	Quantitative study of effects of free cationic chains on gene transfection in different intracellular stages. Journal of Controlled Release, 2016, 238, 71-79.	4.8	36
25	Bacteria differently deploy type-IV pili on surfaces to adapt to nutrient availability. Npj Biofilms and Microbiomes, 2016, 2, 15029.	2.9	35
26	Bacteria slingshot more on soft surfaces. Nature Communications, 2014, 5, 5541.	5.8	25
27	Laser-Light-Scattering Study of Internal Motions of Polymer Chains Grafted on Spherical Latex Particles. Journal of Physical Chemistry B, 2004, 108, 18479-18484.	1.2	23
28	How does a polymer chain pass through a cylindrical pore under anÂelongational flow field?. Polymer, 2015, 67, A1-A13.	1.8	20
29	Charging and discharging of single colloidal particles at oil/water interfaces. Scientific Reports, 2014, 4, 4778.	1.6	20
30	A review of immune amplification via ligand clustering by self-assembled liquidâ€“crystalline DNA complexes. Advances in Colloid and Interface Science, 2016, 232, 17-24.	7.0	18
31	How Are Insoluble Blocks Interacted with and Packed Inside a Micelle Made of Block Copolymers in a Selective Solvent?. Macromolecules, 2008, 41, 8220-8224.	2.2	17
32	Differential Production of Psl in Planktonic Cells Leads to Two Distinctive Attachment Phenotypes in Pseudomonas aeruginosa. Applied and Environmental Microbiology, 2018, 84, .	1.4	16
33	Depletion Attraction between a Polystyrene Particle and a Hydrophilic Surface in a Pluronic Aqueous Solution. Langmuir, 2008, 24, 13912-13917.	1.6	15
34	Carbon Starvation Induces the Expression of PprB-Regulated Genes in Pseudomonas aeruginosa. Applied and Environmental Microbiology, 2019, 85, .	1.4	14
35	Emergence of complex behavior in pili-based motility in early stages of P. aeruginosa surface adaptation. Scientific Reports, 2017, 7, 45467.	1.6	13
36	Engineering Gac/Rsm Signaling Cascade for Optogenetic Induction of the Pathogenicity Switch in Pseudomonas aeruginosa. ACS Synthetic Biology, 2021, 10, 1520-1530.	1.9	13

#	Article	IF	Citations
37	Mechanism of two-dimensional crystal formation from soft microgel particles. Soft Matter, 2013, 9, 9924.	1.2	11
38	Optogenetic Modification of Pseudomonas aeruginosa Enables Controllable Twitching Motility and Host Infection. ACS Synthetic Biology, 2021, 10, 531-541.	1.9	11
39	Dual-Color Fluorescent Timer Enables Detection of Growth-Arrested Pathogenic Bacterium. ACS Infectious Diseases, 2018, 4, 1666-1670.	1.8	10
40	Bis[alkynylplatinum(<scp>ii</scp>)] terpyridine molecular tweezer with conformationally-rigid spacer: modulating the binding selectivity in a three-component supramolecular recognition system. Dalton Transactions, 2016, 45, 17290-17295.	1.6	9
41	Simultaneous Visualization of Multiple Gene Expression in Single Cells Using an Engineered Multicolor Reporter Toolbox and Approach of Spectral Crosstalk Correction. ACS Synthetic Biology, 2019, 8, 2536-2546.	1.9	8
42	Dynamic and structural scalings of the complexation betweenpDNA andbPEI in semidilute and low-salt solutions. Biopolymers, 2010, 93, NA-NA.	1.2	6
43	Influence of an Additive-Free Particle Spreading Method on Interactions between Charged Colloidal Particles at an Oil/Water Interface. Langmuir, 2016, 32, 4909-4916.	1.6	6
44	Strong Shear Flow Persister Bacteria Resist Mechanical Washings on the Surfaces of Various Polymer Materials. Advanced Biology, 2017, 1, e1700161.	3.0	6
45	Imaging the Separation Distance between the Attached Bacterial Cells and the Surface with a Total Internal Reflection Dark-Field Microscope. Langmuir, 2019, 35, 8860-8866.	1.6	4
46	Structure and Kinetics of Cluster Decomposition of Polystyrene Star Chains in Dilute Solutions. Macromolecules, 2007, 40, 6796-6798.	2.2	1
47	A Synthetic Genetic Circuit Enables Precise Quantification of Direct Repeat Deletion in Bacteria. ACS Synthetic Biology, 2020, 9, 1041-1050.	1.9	1