

# James W Schneider

## List of Publications by Year in descending order

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41  
papers

1,050  
citations

471509

17  
h-index

414414

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43  
all docs

43  
docs citations

43  
times ranked

1203  
citing authors

#	ARTICLE	IF	CITATIONS
1	Rapid, multiplexed detection of the <i>let-7</i> miRNA family using $\hat{\text{PNA}}$ amphiphiles in micelle-tagging electrophoresis. <i>Biopolymers</i> , 2022, 113, e23479.	2.4	1
2	Viral adventitious agent detection using laser force cytology: Intrinsic cell property changes with infection and comparison to in vitro testing. <i>Biotechnology and Bioengineering</i> , 2022, 119, 134-144.	3.3	4
3	Dynamics of a sphere in inertial shear flow between parallel walls. <i>Journal of Fluid Mechanics</i> , 2021, 915, .	3.4	9
4	Determination of the zeta potential of planar solids in nonpolar liquids. <i>Journal of Colloid and Interface Science</i> , 2021, 592, 271-278.	9.4	0
5	Inertial bifurcation of the equilibrium position of a neutrally-buoyant circular cylinder in shear flow between parallel walls. <i>Physical Review Research</i> , 2020, 2, .	3.6	6
6	Formation of Charge Carriers in Liquids. <i>Advances in Colloid and Interface Science</i> , 2017, 244, 21-35.	14.7	23
7	Introduction to Editorial Board Members: Professor Matthew V. Tirrell. <i>Bioengineering and Translational Medicine</i> , 2016, 1, 237-238.	7.1	0
8	A 502-Base Free-Solution Electrophoretic DNA Sequencing Method Using End-Attached Wormlike Micelles. <i>Analytical Chemistry</i> , 2015, 87, 11433-11440.	6.5	3
9	Modeling and global optimization of DNA separation. <i>Computers and Chemical Engineering</i> , 2014, 64, 63-70.	3.8	3
10	Optimization of ELFSE DNA sequencing with EOF counterflow and microfluidics. <i>Electrophoresis</i> , 2014, 35, 3408-3414.	2.4	4
11	High Affinity $\hat{\text{PNA}}$ Sandwich Hybridization Assay for Rapid Detection of Short Nucleic Acid Targets with Single Mismatch Discrimination. <i>Biomacromolecules</i> , 2013, 14, 2253-2261.	5.4	19
12	Projective Integration with an Adaptive Projection Horizon. <i>IFAC Postprint Volumes IPPV / International Federation of Automatic Control</i> , 2013, 46, 721-725.	0.4	0
13	Optimal Design of Microfluidic Devices for Rapid DNA Separations. <i>IFAC Postprint Volumes IPPV / International Federation of Automatic Control</i> , 2013, 46, 137-142.	0.4	5
14	Quasi-Equilibrium AFM Measurement of Disjoining Pressure in Lubricant Nanofilms II: Effect of Substrate Materials. <i>Langmuir</i> , 2009, 25, 2101-2106.	3.5	17
15	Length-dependent DNA separations using multiple end-attached peptide nucleic acid amphiphiles in micellar electrokinetic chromatography. <i>Electrophoresis</i> , 2008, 29, 2779-2789.	2.4	19
16	Identification of PCR Products Using PNA Amphiphiles in Micellar Electrokinetic Chromatography. <i>Analytical Chemistry</i> , 2007, 79, 9513-9519.	6.5	27
17	High Capacity, Charge-Selective Protein Uptake by Polyelectrolyte Brushes. <i>Langmuir</i> , 2007, 23, 4448-4454.	3.5	135
18	Sequence-specific purification of DNA oligomers in hydrophobic interaction chromatography using peptide nucleic acid amphiphiles: Extended dynamic range. <i>Biotechnology and Bioengineering</i> , 2007, 97, 367-376.	3.3	10

#	ARTICLE	IF	CITATIONS
19	A Tapping-Mode AFM Study of the Compression of Grafted Poly(ethylene glycol) Chains. <i>Macromolecules</i> , 2006, 39, 3616-3621.	4.8	22
20	Morphological Characterization of Self-Assembled Peptide Nucleic Acid Amphiphiles. <i>Journal of Physical Chemistry B</i> , 2006, 110, 9027-9033.	2.6	28
21	Quasi-Equilibrium AFM Measurement of Disjoining Pressure in Lubricant Nano-Films I: Fomblin Z03 on Silica. <i>Langmuir</i> , 2006, 22, 11436-11446.	3.5	25
22	Effect of electrostatic interactions on binding and retention of DNA oligomers to PNA liposomes assessed by FRET measurements. <i>Colloids and Surfaces B: Biointerfaces</i> , 2006, 53, 1-8.	5.0	5
23	Measurement of disjoining pressure of Z-type perfluoropolyether lubricants on Si and SiNx surfaces. <i>Tribology International</i> , 2005, 38, 528-532.	5.9	4
24	Thermodynamic and structural characterization of amino acid-linked dialkyl lipids. <i>Chemistry and Physics of Lipids</i> , 2005, 134, 29-39.	3.2	9
25	Sequence-Specific Binding of DNA to Liposomes Containing Di-Alkyl Peptide Nucleic Acid (PNA) Amphiphiles. <i>Langmuir</i> , 2005, 21, 2488-2494.	3.5	29
26	Sequence-Specific Oligonucleotide Purification Using Peptide Nucleic Acid Amphiphiles in Hydrophobic Interaction Chromatography. <i>Biotechnology Progress</i> , 2004, 20, 1776-1782.	2.6	9
27	Direct force measurement of the stability of poly(ethylene glycol)-polyethylenimine graft films. <i>Journal of Colloid and Interface Science</i> , 2004, 276, 306-316.	9.4	21
28	Characterization of Distance-Dependent Damping in Tapping-Mode Atomic Force Microscopy Force Measurements in Liquid. <i>Langmuir</i> , 2004, 20, 3195-3201.	3.5	18
29	Peptide Nucleic Acid (PNA) Amphiphiles: Synthesis, Self-Assembly, and Duplex Stability. <i>Bioconjugate Chemistry</i> , 2004, 15, 1314-1321.	3.6	58
30	Nanometer Scale Surface Properties of Supported Lipid Bilayers Measured with Hydrophobic and Hydrophilic Atomic Force Microscope Probes. <i>Langmuir</i> , 2003, 19, 1899-1907.	3.5	51
31	Tapping-mode AFM - Force Measurement Capabilities on Compliant Surfaces. <i>Materials Research Society Symposia Proceedings</i> , 2003, 790, 1.	0.1	0
32	Surface Force Measurements of Electrostatic and Hydrogen-Bonding Interactions between Bilayers of Glycine Amphiphiles. <i>Langmuir</i> , 2002, 18, 3923-3931.	3.5	10
33	Force Titration of Langmuir-Blodgett Bilayers of Glycine Amphiphiles: JKR-Type Measurements Using the Surface-Force Apparatus. <i>Langmuir</i> , 2002, 18, 2702-2709.	3.5	10
34	Structural Study of Langmuir Monolayers Containing Lipidated Poly(ethylene glycol) and Peptides. <i>Langmuir</i> , 2001, 17, 6931-6937.	3.5	35
35	Atomic Force Microscope Image Contrast Mechanisms on Supported Lipid Bilayers. <i>Biophysical Journal</i> , 2000, 79, 1107-1118.	0.5	121
36	Development and characterization of surface chemistries for microfabricated biosensors. <i>Journal of Vacuum Science and Technology A: Vacuum, Surfaces and Films</i> , 1999, 17, 2623-2628.	2.1	42

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37	Characterization of the physical properties of model biomembranes at the nanometer scale with the atomic force microscope. <i>Faraday Discussions</i> , 1999, 111, 79-94.	3.2	102
38	Direct Measurement of Molecular-Level Forces and Adhesion in Biological Systems. <i>Drugs and the Pharmaceutical Sciences</i> , 1999, , 223-259.	0.1	3
39	Effect of substrate anchoring on the mechanical strength of Langmuir-Blodgett bilayers. <i>Thin Solid Films</i> , 1998, 327-329, 772-777.	1.8	6
40	Force and Adhesion Measurements between Hydrogen-Bonded Layers of Glycine-Functionalized Amphiphiles. <i>Journal of the American Chemical Society</i> , 1998, 120, 3508-3509.	13.7	14
41	Adsorption of Hydrophilic-Hydrophobic Block Copolymers on Silica from Aqueous Solutions. <i>Macromolecules</i> , 1995, 28, 3125-3134.	4.8	136