Paul S Cremer

List of Publications by Year
in descending order

96 papers	14,828 citations	28190 55 h-index	37111 96 g-index
100 all docs	100 docs citations	100 times ranked	14356 citing authors

#	Article	IF	Citations
1	Interactions between macromolecules and ions: the Hofmeister series. Current Opinion in Chemical Biology, 2006, 10, 658-663.	2.8	1,679
2	Specific Ion Effects on the Water Solubility of Macromolecules:Â PNIPAM and the Hofmeister Series. Journal of the American Chemical Society, 2005, 127, 14505-14510.	6.6	1,188
3	Stochastic sensors inspired by biology. Nature, 2001, 413, 226-230.	13.7	1,046
4	Solid supported lipid bilayers: From biophysical studies to sensor design. Surface Science Reports, 2006, 61, 429-444.	3.8	969
5	Formation and Spreading of Lipid Bilayers on Planar Glass Supports. Journal of Physical Chemistry B, 1999, 103, 2554-2559.	1.2	654
6	Chemistry of Hofmeister Anions and Osmolytes. Annual Review of Physical Chemistry, 2010, 61, 63-83.	4.8	537
7	Beyond the Hofmeister Series: Ion-Specific Effects on Proteins and Their Biological Functions. Journal of Physical Chemistry B, 2017, 121, 1997-2014.	1.2	466
8	Beyond Hofmeister. Nature Chemistry, 2014, 6, 261-263.	6.6	383
9	The inverse and direct Hofmeister series for lysozyme. Proceedings of the National Academy of Sciences of the United States of America, 2009, 106, 15249-15253.	3.3	361
10	Effects of Hofmeister Anions on the LCST of PNIPAM as a Function of Molecular Weightâ€. Journal of Physical Chemistry C, 2007, 111, 8916-8924.	1.5	335
11	Specific Ion Effects on Interfacial Water Structure near Macromolecules. Journal of the American Chemical Society, 2007, 129, 12272-12279.	6.6	294
12	On the Mechanism of the Hofmeister Effect. Journal of the American Chemical Society, 2004, 126, 10522-10523.	6.6	290
13	Effects of end group polarity and molecular weight on the lower critical solution temperature of poly(N-isopropylacrylamide). Journal of Polymer Science Part A, 2006, 44, 1492-1501.	2.5	281
14	Effects of Hofmeister Anions on the Phase Transition Temperature of Elastin-like Polypeptides. Journal of Physical Chemistry B, 2008, 112, 13765-13771.	1.2	277
15	Molecular Mechanisms of Ion-Specific Effects on Proteins. Journal of the American Chemical Society, 2012, 134, 10039-10046.	6.6	268
16	Investigating the Hydrogen-Bonding Model of Urea Denaturation. Journal of the American Chemical Society, 2009, 131, 9304-9310.	6.6	254
17	Fabrication of Phospholipid Bilayer-Coated Microchannels for On-Chip Immunoassays. Analytical Chemistry, 2001, 73, 165-169.	3.2	239
18	Single Ion-Channel Recordings Using Glass Nanopore Membranes. Journal of the American Chemical Society, 2007, 129, 11766-11775.	6.6	238

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19	The complex nature of calcium cation interactions with phospholipid bilayers. Scientific Reports, 2016, 6, 38035.	1.6	208
20	A Microfluidic Device with a Linear Temperature Gradient for Parallel and Combinatorial Measurements. Journal of the American Chemical Society, 2002, 124, 4432-4435.	6.6	173
21	Reversal of the Hofmeister Series: Specific Ion Effects on Peptides. Journal of Physical Chemistry B, 2013, 117, 8150-8158.	1.2	169
22	De novo engineering of intracellular condensates using artificial disordered proteins. Nature Chemistry, 2020, 12, 814-825.	6.6	157
23	Evaporation-Induced Assembly of Quantum Dots into Nanorings. ACS Nano, 2009, 3, 173-180.	7.3	155
24	Cations Bind Only Weakly to Amides in Aqueous Solutions. Journal of the American Chemical Society, 2013, 135, 5062-5067.	6.6	155
25	Positive and negative chemotaxis of enzyme-coated liposome motors. Nature Nanotechnology, 2019, 14, 1129-1134.	15.6	152
26	Electrolytes induce long-range orientational order and free energy changes in the H-bond network of bulk water. Science Advances, 2016, 2, e1501891.	4.7	151
27	Substrateâˆ'Membrane Interactions:â€‰ Mechanisms for Imposing Patterns on a Fluid Bilayer Membrane. Langmuir, 1998, 14, 3347-3350.	1.6	146
28	Investigations of Water Structure at the Solid/Liquid Interface in the Presence of Supported Lipid Bilayers by Vibrational Sum Frequency Spectroscopy. Langmuir, 2001, 17, 7255-7260.	1.6	146
29	Trimethylamine <i>N</i> -oxide stabilizes proteins via a distinct mechanism compared with betaine and glycine. Proceedings of the National Academy of Sciences of the United States of America, 2017, 114, 2479-2484.	3.3	144
30	Collaborative routes to clarifying the murky waters of aqueous supramolecular chemistry. Nature Chemistry, 2018, 10, 8-16.	6.6	143
31	Role of Carboxylate Side Chains in the Cation Hofmeister Series. Journal of Physical Chemistry B, 2012, 116, 7389-7397.	1.2	135
32	Effect of Average Phospholipid Curvature on Supported Bilayer Formation on Glass by Vesicle Fusion. Biophysical Journal, 2006, 90, 1241-1248.	0.2	133
33	The Effects of Hofmeister Cations at Negatively Charged Hydrophilic Surfaces. Journal of Physical Chemistry C, 2012, 116, 5730-5734.	1.5	116
34	Fluorescence modulation sensing of positively and negatively charged proteins on lipid bilayers. Biointerphases, 2013, 8, 1.	0.6	111
35	Artificial water channels enable fast and selective water permeation through water-wire networks. Nature Nanotechnology, 2020, 15, 73-79.	15.6	111
36	Writing and Erasing Barriers to Lateral Mobility into Fluid Phospholipid Bilayers. Langmuir, 1999, 15, 3893-3896.	1.6	106

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37	Cu²⁺ Binds to Phosphatidylethanolamine and Increases Oxidation in Lipid Membranes. Journal of the American Chemical Society, 2016, 138, 1584-1590.	6.6	105
38	Chemotactic Separation of Enzymes. ACS Nano, 2014, 8, 11941-11949.	7.3	96
39	Creating Spatially Addressed Arrays of Planar Supported Fluid Phospholipid Membranes. Journal of the American Chemical Society, 1999, 121, 8130-8131.	6.6	95
40	IRâˆ'Visible SFG Investigations of Interfacial Water Structure upon Polyelectrolyte Adsorption at the Solid/Liquid Interface. Journal of the American Chemical Society, 2000, 122, 12371-12372.	6.6	95
41	Achieving high permeability and enhanced selectivity for Angstrom-scale separations using artificial water channel membranes. Nature Communications, 2018, 9, 2294.	5.8	95
42	Investigation of Water Structure at the TiO2/Aqueous Interface. Langmuir, 2004, 20, 1662-1666.	1.6	89
43	Single Giant Vesicle Rupture Events Reveal Multiple Mechanisms of Glass-Supported Bilayer Formation. Biophysical Journal, 2007, 92, 1988-1999.	0.2	89
44	Calcium Directly Regulates Phosphatidylinositol 4,5-Bisphosphate Headgroup Conformation and Recognition. Journal of the American Chemical Society, 2017, 139, 4019-4024.	6.6	87
45	Investigations of Lysozyme Adsorption at the Air/Water and Quartz/Water Interfaces by Vibrational Sum Frequency Spectroscopy. Langmuir, 2002, 18, 2807-2811.	1.6	86
46	High-Throughput Studies of the Effects of Polymer Structure and Solution Components on the Phase Separation of Thermoresponsive Polymers. Macromolecules, 2004, 37, 1031-1036.	2.2	82
47	Hydrogen Bonding of Î²-Turn Structure Is Stabilized in D₂O. Journal of the American Chemical Society, 2009, 131, 15188-15193.	6.6	79
48	Polyarginine Interacts More Strongly and Cooperatively than Polylysine with Phospholipid Bilayers. Journal of Physical Chemistry B, 2016, 120, 9287-9296.	1.2	76
49	Guanidinium can both Cause and Prevent the Hydrophobic Collapse of Biomacromolecules. Journal of the American Chemical Society, 2017, 139, 863-870.	6.6	76
50	Probing Molecular Structure at Interfaces for Comparison with Bulk Solution Behavior:Â Water/2-Propanol Mixtures Monitored by Vibrational Sum Frequency Spectroscopy. Journal of the American Chemical Society, 2006, 128, 5516-5522.	6.6	72
51	Direct and Reverse Hofmeister Effects on Interfacial Water Structure. Journal of Physical Chemistry C, 2012, 116, 14408-14413.	1.5	68
52	Investigations of Polyelectrolyte Adsorption at the Solid/Liquid Interface by Sum Frequency Spectroscopy:â€‰ Evidence for Long-Range Macromolecular Alignment at Highly Charged Quartz/Water Interfaces. Journal of the American Chemical Society, 2002, 124, 8751-8756.	6.6	67
53	Reusable Platforms for High-Throughput On-Chip Temperature Gradient Assays. Analytical Chemistry, 2002, 74, 5071-5075.	3.2	67
54	Investigations of the Orientation of a Membrane Peptide by Sum Frequency Spectroscopy. Journal of Physical Chemistry B, 2003, 107, 1403-1409.	1.2	66

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55	Phosphatidylserine Reversibly Binds Cu2+with Extremely High Affinity. Journal of the American Chemical Society, 2012, 134, 7773-7779.	6.6	57
56	An NH Moiety Is Not Required for Anion Binding to Amides in Aqueous Solution. Langmuir, 2015, 31, 3459-3464.	1.6	57
57	Weakly hydrated anions bind to polymers but not monomers in aqueous solutions. Nature Chemistry, 2022, 14, 40-45.	6.6	57
58	Detecting Proteinâˆ’Ligand Binding on Supported Bilayers by Local pH Modulation. Journal of the American Chemical Society, 2009, 131, 1006-1014.	6.6	53
59	Molecular Mechanism for the Interactions of Hofmeister Cations with Macromolecules in Aqueous Solution. Journal of the American Chemical Society, 2020, 142, 19094-19100.	6.6	53
60	Organization of Water Layers at Hydrophilic Interfaces. ChemPhysChem, 2003, 4, 1231-1233.	1.0	51
61	Nonadditive Ion Effects Drive Both Collapse and Swelling of Thermoresponsive Polymers in Water. Journal of the American Chemical Society, 2019, 141, 6609-6616.	6.6	51
62	Unquenchable Surface Potential Dramatically Enhances Cu²⁺ Binding to Phosphatidylserine Lipids. Journal of the American Chemical Society, 2015, 137, 7785-7792.	6.6	46
63	Aqueous Two-Phase System Formation Kinetics for Elastin-Like Polypeptides of Varying Chain Length. Biomacromolecules, 2006, 7, 2192-2199.	2.6	42
64	Thermodynamics of Phase Transitions in Langmuir Monolayers Observed by Vibrational Sum Frequency Spectroscopy. Journal of the American Chemical Society, 2003, 125, 11166-11167.	6.6	41
65	Creating Addressable Aqueous Microcompartments above Solid Supported Phospholipid Bilayers Using Lithographically Patterned Poly(dimethylsiloxane) Molds. Analytical Chemistry, 2000, 72, 2587-2589.	3.2	36
66	Sensing Small Molecule Interactions with Lipid Membranes by Local pH Modulation. Analytical Chemistry, 2013, 85, 10240-10248.	3.2	35
67	Supported Lipid Bilayers with Phosphatidylethanolamine as the Major Component. Langmuir, 2017, 33, 13423-13429.	1.6	33
68	Introduction of Positive Charges into Zwitterionic Phospholipid Monolayers Disrupts Water Structure Whereas Negative Charges Enhances It. Journal of Physical Chemistry B, 2018, 122, 12260-12270.	1.2	29
69	Multistep Interactions between Ibuprofen and Lipid Membranes. Langmuir, 2018, 34, 10782-10792.	1.6	28
70	Probing the Mechanism of Aqueous Two-Phase System Formation for Î±-Elastin On-Chip. Journal of the American Chemical Society, 2003, 125, 15630-15635.	6.6	22
71	Templating Water Stains for Nanolithography. Nano Letters, 2007, 7, 2452-2458.	4.5	22
72	Deflected Capillary Force Lithography. ACS Nano, 2012, 6, 1548-1556.	7.3	22

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73	A stepwise mechanism for aqueous two-phase system formation in concentrated antibody solutions. Proceedings of the National Academy of Sciences of the United States of America, 2019, 116, 15784-15791.	3.3	21
74	Effects of End-Group Termination on Salting-Out Constants for Triglycine. Journal of Physical Chemistry Letters, 2013, 4, 4069-4073.	2.1	20
75	The RNA-Binding Site of Poliovirus 3C Protein Doubles as a Phosphoinositide-Binding Domain. Structure, 2017, 25, 1875-1886.e7.	1.6	20
76	Counter Cations Affect Transport in Aqueous Hydroxide Solutions with Ion Specificity. Journal of the American Chemical Society, 2019, 141, 6930-6936.	6.6	18
77	The Jonesâ€"Ray Effect Is Not Caused by Surface-Active Impurities. Journal of Physical Chemistry Letters, 2018, 9, 6739-6743.	2.1	15
78	Oblique Colloidal Lithography for the Fabrication of Nonconcentric Features. ACS Nano, 2017, 11, 6594-6604.	7.3	14
79	Zn²⁺ Binds to Phosphatidylserine and Induces Membrane Blebbing. Journal of the American Chemical Society, 2020, 142, 18679-18686.	6.6	14
80	Fabrication of Split-Rings via Stretchable Colloidal Lithography. ACS Photonics, 2014, 1, 127-134.	3.2	13
81	What Is the Preferred Conformation of Phosphatidylserineâ€"Copper(II) Complexes? A Combined Theoretical and Experimental Investigation. Journal of Physical Chemistry B, 2016, 120, 12883-12889.	1.2	13
82	Monitoring proteinâ€"small molecule interactions by local pH modulation. Biosensors and Bioelectronics, 2012, 38, 74-78.	5.3	10
83	Stepwise Molding, Etching, and Imprinting to Form Libraries of Nanopatterned Substrates. Langmuir, 2013, 29, 6737-6745.	1.6	10
84	Monitoring Phosphatidic Acid Formation in Intact Phosphatidylcholine Bilayers upon Phospholipase D Catalysis. Analytical Chemistry, 2014, 86, 1753-1759.	3.2	9
85	Contact Ion Pairs in the Bulk Affect Anion Interactions with Poly(<i>N</i>-isopropylacrylamide). Journal of Physical Chemistry B, 2021, 125, 680-688.	1.2	9
86	Local Electric Fields in Aqueous Electrolytes. Journal of Physical Chemistry B, 2021, 125, 8484-8493.	1.2	9
87	Simultaneous Detection of Multiple Proteins that Bind to the Identical Ligand in Supported Lipid Bilayers. Analytical Chemistry, 2015, 87, 7163-7170.	3.2	6
88	PIP-on-a-chip: A Label-free Study of Protein-phosphoinositide Interactions. Journal of Visualized Experiments, 2017, , .	0.2	6
89	Contact Ion Pair Formation Is Not Necessarily Stronger than Solvent Shared Ion Pairing. Journal of Physical Chemistry Letters, 2022, 13, 923-930.	2.1	6
90	Immobilization of Phosphatidylinositides Revealed by Bilayer Leaflet Decoupling. Journal of the American Chemical Society, 2020, 142, 13003-13010.	6.6	5

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91	Cation Identity Affects Nonadditivity in Salt Mixtures Containing Iodide and Sulfate. Journal of Solution Chemistry, 2021, 50, 1443-1456.	0.6	5
92	Modulation of Cu2+ Binding to Sphingosine-1-Phosphate by Lipid Charge. Langmuir, 2019, 35, 824-830.	1.6	2
93	Comment on â€œArresting an Unusual Amide Tautomer Using Divalent Cationsâ€• Journal of Physical Chemistry B, 2021, 125, 477-478.	1.2	2
94	Characterization of Proteinâ€"Phospholipid/Membrane Interactions Using a â€œMembrane-on-a-Chipâ€• Microfluidic System. Methods in Molecular Biology, 2021, 2251, 143-156.	0.4	1
95	Giants in Sensing: A Virtual Issue to Celebrate Five Years of ACS Sensors. ACS Sensors, 2020, 5, 1249-1250.	4.0	0
96	Tribute to Dor Ben-Amotz. Journal of Physical Chemistry B, 2022, 126, 2943-2945.	1.2	0