Peter W Wilson

List of Publications by Year
in descending order

44 papers	1,746 citations	20 h-index	42 g-index
44 all docs	44 docs citations	44 times ranked	1701 citing authors

361045

264894

#	Article	IF	Citations
1	Inhibition of ice nucleation by slippery liquid-infused porous surfaces (SLIPS). Physical Chemistry Chemical Physics, 2013, 15, 581-585.	1.3	284
2	Inhibition of growth of nonbasal planes in ice by fish antifreezes.. Proceedings of the National Academy of Sciences of the United States of America, 1989, 86, 881-885.	3.3	162
3	Ice nucleation in nature: supercooling point (SCP) measurements and the role of heterogeneous nucleation. Cryobiology, 2003, 46, 88-98.	0.3	156
4	Development of Solâ€"Gel Icephobic Coatings: Effect of Surface Roughness and Surface Energy. ACS Applied Materials & Interfaces, 2014, 6, 20685-20692.	4.0	146
5	Heterogeneous nucleation of supercooled water, and the effect of an added catalyst. Proceedings of the National Academy of Sciences of the United States of America, 2002, 99, 9631-9634.	3.3	92
6	Heterogeneous nucleation of clathrates from supercooled tetrahydrofuran (THF)/water mixtures, and the effect of an added catalyst. Chemical Engineering Science, 2005, 60, 2937-2941.	1.9	67
7	Stabilization of supercooled fluids by thermal hysteresis proteins. Biophysical Journal, 1995, 68, 2098-2107.	0.2	57
8	Hydrate formation and re-formation in nucleating THF/water mixtures show no evidence to support a â€œmemoryâ€• effect. Chemical Engineering Journal, 2010, 161, 146-150.	6.6	55
9	Ice nucleation behaviour on solâ€"gel coatings with different surface energy and roughness. Physical Chemistry Chemical Physics, 2015, 17, 21492-21500.	1.3	55
10	Development of a high pressure automated lag time apparatus for experimental studies and statistical analyses of nucleation and growth of gas hydrates. Review of Scientific Instruments, 2011, 82, 065109.	0.6	53
11	Liquid-to-crystal nucleation: Automated lag-time apparatus to study supercooled liquids. Journal of Chemical Physics, 2001, 115, 7599-7608.	1.2	52
12	Type I Antifreeze Proteins Enhance Ice Nucleation above Certain Concentrations. Journal of Biological Chemistry, 2010, 285, 34741-34745.	1.6	51
13	Recrystallization in a Freezing Tolerant Antarctic Nematode,Panagrolaimus davidi,and an Alpine Weta,Hemideina maori(Orthoptera; Stenopelmatidae). Cryobiology, 1996, 33, 607-613.	0.3	47
14	Antifreeze glycopeptide adsorption on single crystal ice surfaces using ellipsometry. Biophysical Journal, 1993, 64, 1878-1884.	0.2	46
15	Thickness and anisotropy of the ice-water interface. The Journal of Physical Chemistry, 1993, 97, 11053-11055.	2.9	46
16	Extrinsic Premelting at the Ice-Glass Interface. The Journal of Physical Chemistry, 1994, 98, 8096-8100.	2.9	46
17	Workmanâ˘Reynolds Freezing Potential Measurements between Ice and Dilute Salt Solutions for Single Ice Crystal Faces. Journal of Physical Chemistry B, 2008, 112, 11750-11755.	1.2	37
18	Effect of solutes on the heterogeneous nucleation temperature of supercooled water: an experimental determination. Physical Chemistry Chemical Physics, 2009, 11, 2679.	1.3	33

#	Article	IF	Citations
19	Ice Premelting during Differential Scanning Calorimetry. Biophysical Journal, 1999, 77, 2850-2855.	0.2	31
20	Microstructural-induced anisotropy in thin films for optical applications. Critical Reviews in Solid State and Materials Sciences, 1988, 15, 27-61.	6.8	25
21	The Spread of Nucleation Temperatures of a Sample of Supercooled Liquid Is Independent of the Average Nucleation Temperature. Journal of Physical Chemistry B, 2012, 116, 13472-13475.	1.2	20
22	A Model for Thermal Hysteresis Utilizing the Anisotropic Interfacial Energy of Ice Crystals. Cryobiology, 1994, 31, 406-412.	0.3	19
23	Hexagonal shaped ice spicules in frozen antifreeze protein solutions. Cryobiology, 2002, 44, 240-250.	0.3	16
24	Effect of Ice Growth Rate on the Measured Workmanâ˘'Reynolds Freezing Potential between Ice and Dilute NaCl Solutions. Journal of Physical Chemistry B, 2010, 114, 12585-12588.	1.2	16
25	Mechanically Robust Transparent Antiâ€Icing Coatings: Roles of Dispersion Status of Titanate Nanotubes. Advanced Materials Interfaces, 2018, 5, 1800773.	1.9	16
26	Determining optical properties of thin films by modified attenuated total reflection with a charge coupled device. Journal of Vacuum Science and Technology A: Vacuum, Surfaces and Films, 1988, 6, 2386-2389.	0.9	14
27	Hemolymph ice nucleating proteins from the New Zealand alpine weta Hemideina maori (Orthoptera:) Tj ETQq1 1 0.784314 rgBT /Ov 1995, 112, 535-542.	0.7	14
28	Antifreeze glycoproteins from the antarctic fish Dissostichus mawsoni studied by differential scanning calorimetry (DSC) in combination with nanolitre osmometry. Cryo-Letters, 2005, 26, 73-84.	0.1	13
29	Anisotropic optical scatter from moisture patches in thin films deposited obliquely. Journal of Applied Physics, 1986, 59, 1453-1455.	1.1	10
30	Suppression of droplets freezing on glass surfaces on which antifreeze polypeptides are adhered by a silane coupling agent. PLoS ONE, 2018, 13, e0204686.	1.1	10
31	The Workmanâ€"Reynolds â€œFreezing Potentialâ€: A new look at the inherent physical process. Journal of Molecular Liquids, 2017, 228, 243-246.	2.3	8
32	Reflection anisotropy in evaporated aluminum: Consequences for telescope mirror coatings. Journal of Vacuum Science and Technology A: Vacuum, Surfaces and Films, 1986, 4, 1875-1878.	0.9	7
33	COMPARISON OF THE FREEZE/THAW CHARACTERISTICS OF ANTARCTIC COD (DISSOSTICHUS MAWSONI) AND BLACK COD (PARANOTOTHENIA AUGUSTATA) ? POSSIBLE EFFECTS OF ANTIFREEZE GLYCOPROTEINS. Journal of Muscle Foods, 1994, 5, 233-244.	0.5	7
34	The Inhibition of Icing and Frosting on Glass Surfaces by the Coating of Polyethylene Glycol and Polypeptide Mimicking Antifreeze Protein. Biomolecules, 2020, 10, 259.	1.8	7
35	The effect of stirring on the heterogeneous nucleation of water and of clathrates of tetrahydrofuran/water mixtures. Condensed Matter Physics, 2016, 19, 23602.	0.3	6
36	Comment on â€œWorkmanâ˘'Reynolds Freezing Potential Measurements between Ice and Dilute Salt Solutions for Single Ice Crystal Facesâ€. Journal of Physical Chemistry B, 2008, 112, 15260-15260.	1.2	5

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37	Scatter from fluid patches in optical thin-film coatings. Applied Optics, 1986, 25, 2688.	2.1	3
38	Nucleation from a Supercooled Binary Mixture Studied by Crossed Polarizersâ€. Journal of Physical Chemistry A, 2005, 109, 11354-11357.	1.1	3
39	Effects of Winter Flounder Antifreeze Protein on the Growth of Ice Particles in an Ice Slurry Flow in Mini-Channels. Biomolecules, 2019, 9, 70.	1.8	3
40	Demonstration of neutron radiation-induced nucleation of supercooled water. Physical Chemistry Chemical Physics, 2021, 23, 13440-13446.	1.3	3
41	Characterization of Ice Binding Proteins from Sea Ice Algae. Methods in Molecular Biology, 2014, 1166, 241-253.	0.4	2
42	Characterization of Ice-Binding Proteins from Sea-Ice. Methods in Molecular Biology, 2020, 2156, 289-302.	0.4	2
43	Presence of a basic secretory protein in xylem sap and shoots of poplar in winter and its physicochemical activities against winter environmental conditions. Journal of Plant Research, 2019, 132, 655-665.	1.2	1
44	Nucleation in the presence of fish and insect ice-growth inhibition (â€œantifreezeâ€) molecules. AIP Conference Proceedings, 2000, , .	0.3	0