Barney L Bales

List of Publications by Year
in descending order

47 papers	2,510 citations	172457 29 h-index	223800 46 g-index
48 all docs	48 docs citations	48 times ranked	1692 citing authors

#	Article	IF	Citations
1	Effect of the Nature of the Counterion on the Properties of Anionic Surfactants. 1. Cmc, Ionization Degree at the Cmc and Aggregation Number of Micelles of Sodium, Cesium, Tetramethylammonium, Tetraethylammonium, Tetrapropylammonium, and Tetrabutylammonium Dodecyl Sulfates. Journal of Physical Chemistry B, 2003, 107, 13432-13440.	2.6	285
2	Growth of Sodium Dodecyl Sulfate Micelles with Detergent Concentration. The Journal of Physical Chemistry, 1995, 99, 17028-17031.	2.9	221
3	Precision Relative Aggregation Number Determinations of SDS Micelles Using a Spin Probe. A Model of Micelle Surface Hydration. Journal of Physical Chemistry B, 1998, 102, 10347-10358.	2.6	207
4	Characterization of Micelles of Quaternary Ammonium Surfactants as Reaction Media I:Â Dodeclytrimethylammonium Bromide and Chloride. Journal of Physical Chemistry B, 2002, 106, 1926-1939.	2.6	160
5	A Definition of the Degree of Ionization of a Micelle Based on Its Aggregation Number. Journal of Physical Chemistry B, 2001, 105, 6798-6804.	2.6	113
6	Fluorescence Quenching of Pyrene by Copper(II) in Sodium Dodecyl Sulfate Micelles. Effect of Micelle Size as Controlled by Surfactant Concentration. The Journal of Physical Chemistry, 1995, 99, 15153-15162.	2.9	104
7	Cloud Point of Aqueous Solutions of Tetrabutylammonium Dodecyl Sulfate Is a Function of the Concentration of Counterions in the Aqueous Phase. Langmuir, 2004, 20, 1579-1581.	3.5	103
8	Surfactant- and Salt-Induced Growth of Normal Sodium Alkyl Sulfate Micelles Well above Their Critical Micelle Concentrations. Journal of Physical Chemistry B, 2000, 104, 2260-2264.	2.6	84
9	EPR Line Shifts and Line Shape Changes Due to Spin Exchange of Nitroxide Free Radicals in Liquids. Journal of Physical Chemistry B, 1997, 101, 8707-8716.	2.6	83
10	Role of Counterion Concentration in Determining Micelle Aggregation:Â Evaluation of the Combination of Constraints from Small-Angle Neutron Scattering, Electron Paramagnetic Resonance, and Time-Resolved Fluorescence Quenching. Journal of Physical Chemistry B, 2004, 108, 3810-3816.	2.6	70
11	Effect of the Nature of the Counterion on the Properties of Anionic Surfactants. 3. Self-Association Behavior of Tetrabutylammonium Dodecyl Sulfate and Tetradecyl Sulfate:Â Clouding and Micellar Growth. Journal of Physical Chemistry B, 2004, 108, 18195-18203.	2.6	68
12	Characterization of Mixed Micelles of SDS and a Sugar-Based Nonionic Surfactant as a Variable Reaction Medium. Journal of Physical Chemistry B, 2001, 105, 7465-7473.	2.6	66
13	Statistical distributions and collision rates of additive molecules in compartmentalized liquids studied by EPR spectroscopy. 1. Sodium dodecyl sulfate micelles, 5-doxylstearic acid ester, and cobalt(II). The Journal of Physical Chemistry, 1993, 97, 3418-3433.	2.9	60
14	EPR Line Shifts and Line Shape Changes Due to Spin Exchange of Nitroxide Free Radicals in Liquids 2. Extension to High Spin Exchange Frequencies and Inhomogeneously Broadened Spectra. Journal of Physical Chemistry A, 2002, 106, 4846-4854.	2.5	57
15	Krafft Temperature and Micelle Ionization of Aqueous Solutions of Cesium Dodecyl Sulfate. Journal of Physical Chemistry B, 2002, 106, 9033-9035.	2.6	52
16	Contributions to the Gaussian Line Broadening of the Proxyl Spin Probe EPR Spectrum Due to Magnetic-Field Modulation and Unresolved Proton Hyperfine Structure. Journal of Magnetic Resonance, 1998, 132, 279-286.	2.1	46
17	A Spin-Probe Study of the Modification of the Hydration of SDS Micelles by Insertion of Sugar-Based Nonionic Surfactant Molecules. Journal of Physical Chemistry B, 2000, 104, 264-270.	2.6	45
18	Simple Test of the Effect of an Electric Field on the 14N-Hyperfine Coupling Constant in Nitroxide Spin Probes. Journal of Physical Chemistry B, 1997, 101, 8735-8739.	2.6	44

#	Article	IF	Citations
19	Effect of the Nature of the Counterion on the Properties of Anionic Surfactants. 2. Aggregation Number-Based Micelle Ionization Degrees for Micelles of Tetraalkylammonium Dodecylsulfates. Journal of Physical Chemistry B, 2004, 108, 14948-14955.	2.6	43
20	Size, Hydration, and Shape of SDS/Heptane Micelles Investigated by Time-Resolved Fluorescence Quenching and Electron Spin Resonance. Langmuir, 2001, 17, 6765-6770.	3.5	41
21	EPR Line Shifts and Line Shape Changes Due to Spin Exchange of Nitroxide-Free Radicals in Liquids 4. Test of a Method to Measure Re-Encounter Rates in Liquids Employing ¹⁵N and ¹⁴N Nitroxide Spin Probes. Journal of Physical Chemistry A, 2008, 112, 2177-2181.	2.5	40
22	Time-Resolved Fluorescence Quenching and Electron Paramagnetic Resonance Studies of the Hydration of Lithium Dodecyl Sulfate Micelles. Journal of Physical Chemistry B, 2000, 104, 256-263.	2.6	39
23	Electron Paramagnetic Resonance Line Shifts and Line Shape Changes Due to Spin Exchange between Nitroxide Free Radicals in Liquids. 3. Extension to Five Hyperfine Lines. Additional Line Shifts Due to Re-encounters. Journal of Physical Chemistry A, 2003, 107, 9086-9098.	2.5	36
24	Paramagnetic Relaxation of Silver Species in Î³â€Irradiated Frozen Aqueous Solutions. Journal of Chemical Physics, 1970, 52, 4644-4653.	3.0	35
25	EPR Line Shifts and Line Shape Changes due to Spin Exchange of Nitroxide Free Radicals in Liquids: 6. Separating Line Broadening due to Spin Exchange and Dipolar Interactions. Journal of Physical Chemistry A, 2009, 113, 4930-4940.	2.5	35
26	Matrix ENDOR Linewidths of Trapped Electrons in Glassy Matrices at 77Â°K. Journal of Chemical Physics, 1972, 57, 723-729.	3.0	32
27	Effect of the Nature of the Counterion on the Properties of Anionic Surfactants. 5. Self-Association Behavior and Micellar Properties of Ammonium Dodecyl Sulfate. Journal of Physical Chemistry B, 2005, 109, 15997-16004.	2.6	32
28	Nitroxide spin exchange due to re-encounter collisions in a series of n-alkanes. Journal of Chemical Physics, 2008, 129, 064501.	3.0	31
29	Toward a Hydrodynamic Description of Bimolecular Collisions in Micelles. An Experimental Test of the Effect of the Nature of the Quencher on the Fluorescence Quenching of Pyrene in SDS Micelles and in Bulk Liquids. Journal of Physical Chemistry B, 2003, 107, 10312-10318.	2.6	29
30	EPR investigation of the intermediate spin exchange regime. Journal of Chemical Physics, 1984, 80, 2997-3004.	3.0	25
31	Electron Paramagnetic Resonance and Small-Angle Neutron Scattering Studies of Mixed Sodium Dodecyl Sulfate and (Tetradecylmalono)bis(N-methylglucamide) Surfactant Micelles. Langmuir, 2002, 18, 1065-1072.	3.5	25
32	Effect of the Nature of the Counterion on the Properties of Anionic Surfactants. 4. Characterizing Micelles of Tetraalkylammonium Dodecyl Sulfate as Reaction Media. Journal of Physical Chemistry B, 2005, 109, 7987-7997.	2.6	25
33	Location of Spectroscopic Probes in Self-Aggregating Assemblies. I. The Case for 5-Doxylstearic Acid Methyl Ester Serving as a Benchmark Spectroscopic Probe to Study Micelles. Journal of Physical Chemistry B, 2006, 110, 9791-9799.	2.6	24
34	Location of Spectroscopic Probes in Self-Aggregating Assemblies. II. The Location of Pyrene and Other Probes in Sodium Dodecyl Sulfate Micelles. Journal of Physical Chemistry B, 2007, 111, 5781-5793.	2.6	22
35	The Current State of Measuring Bimolecular Spin Exchange Rates by the EPR Spectral Manifestations of the Exchange and Dipoleâ€“Dipole Interactions in Dilute Solutions of Nitroxide Free Radicals with Proton Hyperfine Structure. Applied Magnetic Resonance, 2017, 48, 1399-1445.	1.2	22
36	Electron Paramagnetic Resonance Line Shifts and Line Shape Changes Due to Heisenberg Spin Exchange and Dipoleâ€“Dipole Interactions of Nitroxide Free Radicals in Liquids 8. Further Experimental and Theoretical Efforts to Separate the Effects of the Two Interactions. Journal of Physical Chemistry A, 2012, 116, 2855-2866.	2.5	20

#	Article	IF	Citations
37	Spin Exchange Between Charged Paramagnetic Particles in Dilute Solutions. Applied Magnetic Resonance, 2014, 45, 911-940.	1.2	17
38	Electron Paramagnetic Resonance Line Shifts and Line Shape Changes Due to Spin Exchange of Nitroxide Free Radicals in Liquids. 7. Singly Charged Surfactant Nitroxide. Journal of Physical Chemistry A, 2009, 113, 9295-9303.	2.5	14
39	EPR Line Shifts and Line Shape Changes Due to Heisenberg Spin Exchange and Dipoleâ€“Dipole Interactions of Nitroxide Free Radicals in Liquids: 9. An Alternative Method to Separate the Effects of the Two Interactions Employing ¹⁵N and ¹⁴N. Journal of Physical Chemistry A, 2014, 118, 6154-6162.	2.5	12
40	Experimental Method to Measure the Effect of Charge on Bimolecular Collision Rates in Electrolyte Solutions. Journal of Physical Chemistry A, 2011, 115, 10903-10910.	2.5	8
41	EPR Line Shifts and Line Shape Changes Due to Spin Exchange Between Nitroxide Free Radicals in Liquids 10. Spin-Exchange Frequencies of the Order of the Nitrogen Hyperfine Interaction: A Hypothesis. Applied Magnetic Resonance, 2017, 48, 175-200.	1.2	8
42	Bimolecular Encounters and Re-Encounters (Cage Effect) of a Spin-Labeled Analogue of Cholestane in a Series of n-Alkanes: Effect of Anisotropic Exchange Integral. Journal of Physical Chemistry A, 2012, 116, 12460-12469.	2.5	7
43	Hydrodynamic and Nonhydrodynamic Contributions to the Bimolecular Collision Rates of Solute Molecules in Supercooled Bulk Water. Journal of Physical Chemistry B, 2014, 118, 7128-7135.	2.6	7
44	A Simple, Accurate Method to Determine the Effective Value of the Magnetic Induction of the Microwave Field from the Continuous Saturation of EPR Spectra of Fremyâ€™s Salt Solutions. Representative values of $$T_{1}$$. Applied Magnetic Resonance, 2019, 50, 919-942.	1.2	7
45	A Simple Analytical Approximation to an Inhomogeneously-Broadened Dispersion Spectrum. Application to Absorption-Dispersion Admixtures. Cell Biochemistry and Biophysics, 2017, 75, 171-184.	1.8	3
46	The Effect of Power Saturation on the Line Shapes of Nitroxide Spin Probes Under the Influence of Spin-Exchange and Dipoleâ€“Dipole Interactions Studied by CW EPR. Applied Magnetic Resonance, 2022, 53, 1275-1315.	1.2	3
47	The Dobryakovâ€“Lebedev Relation Extended to Partially Resolved EPR Spectra. Applied Magnetic Resonance, 0, , 1.	1.2	0