Ben H ErnÃ©

List of Publications by Year
in descending order

83 papers	2,755 citations	201674 27 h-index	189892 50 g-index
85 all docs	85 docs citations	85 times ranked	3178 citing authors

#	Article	IF	Citations
1	Impedance analysis of oil conductivity and pixel non-uniformity in electrowetting displays. Results in Physics, 2020, 18, 103223.	4.1	5
2	Magnetic Sedimentation Velocities and Equilibria in Dilute Aqueous Ferrofluids. Journal of Physical Chemistry B, 2020, 124, 7989-7998.	2.6	6
3	Colloidal Stability of Aqueous Ferrofluids at 10ÂT. Journal of Physical Chemistry Letters, 2020, 11, 5908-5912.	4.6	13
4	Extending Surfaceâ€Enhanced Raman Spectroscopy to Liquids Using Shellâ€Isolated Plasmonic Superstructures. Chemistry - A European Journal, 2019, 25, 15772-15778.	3.3	3
5	Extending Surfaceâ€Enhanced Raman Spectroscopy to Liquids Using Shellâ€Isolated Plasmonic Superstructures. Chemistry - A European Journal, 2019, 25, 15706-15706.	3.3	1
6	Magnetic detection of nanoparticle sedimentation in magnetized ferrofluids. Journal of Magnetism and Magnetic Materials, 2019, 472, 53-58.	2.3	10
7	Interfacial Tension of Phase-Separated Polydisperse Mixed Polymer Solutions. Journal of Physical Chemistry B, 2018, 122, 3354-3362.	2.6	11
8	Coulometry and Calorimetry of Electric Double Layer Formation in Porous Electrodes. Physical Review Letters, 2017, 119, 166002.	7.8	35
9	Chemical physics of waterâ€“water interfaces. Biointerphases, 2016, 11, 018904.	1.6	10
10	Thermodynamic Charge-to-Mass Sensor for Colloids, Proteins, and Polyelectrolytes. ACS Sensors, 2016, 1, 1344-1350.	7.8	1
11	Decreased Interfacial Tension of Demixed Aqueous Polymer Solutions due to Charge. Physical Review Letters, 2015, 115, 078303.	7.8	30
12	Bimodal distribution of the magnetic dipole moment in nanoparticles with a monomodal distribution of the physical size. Journal of Magnetism and Magnetic Materials, 2015, 380, 325-329.	2.3	14
13	Ion Entropy in Phase-Separated Aqueous Mixtures of Polyelectrolyte and Neutral Polymer. Macromolecules, 2015, 48, 2819-2828.	4.8	19
14	Effects of Electric Charge on the Interfacial Tension between Coexisting Aqueous Mixtures of Polyelectrolyte and Neutral Polymer. Macromolecules, 2015, 48, 7335-7345.	4.8	17
15	Tuning the Colloidal Crystal Structure of Magnetic Particles by External Field. Angewandte Chemie - International Edition, 2015, 54, 1803-1807.	13.8	39
16	Water-in-Water Emulsions Stabilized by Nanoplates. ACS Macro Letters, 2015, 4, 965-968.	4.8	122
17	Swelling Enhanced Remanent Magnetization of Hydrogels Cross-Linked with Magnetic Nanoparticles. Langmuir, 2015, 31, 442-450.	3.5	10
18	Composition, concentration and charge profiles of waterâ€“water interfaces. Journal of Physics Condensed Matter, 2014, 26, 464101.	1.8	19

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19	Silica cubes with tunable coating thickness and porosity: From hematite filled silica boxes to hollow silica bubbles. Microporous and Mesoporous Materials, 2014, 195, 75-86.	4.4	33
20	Non-regularized inversion method from light scattering applied to ferrofluid magnetization curves for magnetic size distribution analysis. Journal of Magnetism and Magnetic Materials, 2014, 353, 110-115.	2.3	44
21	Donnan Potentials in Aqueous Phase-Separated Polymer Mixtures. Langmuir, 2014, 30, 5755-5762.	3.5	36
22	Debye Length Dependence of the Anomalous Dynamics of Ionic Double Layers in a Parallel Plate Capacitor. Journal of Physical Chemistry C, 2014, 118, 11584-11592.	3.1	42
23	Self-Assembled CdSe/CdS Nanorod Sheets Studied in the Bulk Suspension by Magnetic Alignment. ACS Nano, 2014, 8, 10486-10495.	14.6	22
24	Size-Dependent Second Virial Coefficients of Quantum Dots from Quantitative Cryogenic Electron Microscopy. Journal of Physical Chemistry B, 2014, 118, 11000-11005.	2.6	18
25	A differential dielectric spectroscopy setup to measure the electric dipole moment and net charge of colloidal quantum dots. Review of Scientific Instruments, 2014, 85, 033903.	1.3	8
26	Diverging electrophoretic and dynamic mobility of model silica colloids at low ionic strength in ethanol. Journal of Colloid and Interface Science, 2014, 422, 65-70.	9.4	2
27	Equilibrium Structures of PbSe and CdSe Colloidal Quantum Dots Detected by Dielectric Spectroscopy. Journal of Physical Chemistry C, 2014, 118, 7185-7194.	3.1	15
28	Spatial Distribution of Nanocrystals Imaged at the Liquid-Air Interface. Physical Review Letters, 2013, 111, 108302.	7.8	13
29	Frequency-Dependent Magnetic Susceptibility of Magnetite and Cobalt Ferrite Nanoparticles Embedded in PAA Hydrogel. International Journal of Molecular Sciences, 2013, 14, 10162-10177.	4.1	59
30	Note: Rapid offset reduction of impedance bridges taking into account instrumental damping and phase shifting. Review of Scientific Instruments, 2013, 84, 036109.	1.3	1
31	Demagnetization Treatment of Remanent Composite Microspheres Studied by Alternating Current Susceptibility Measurements. International Journal of Molecular Sciences, 2013, 14, 18093-18109.	4.1	2
32	Sedimentation equilibria of ferrofluids: I. Analytical centrifugation in ultrathin glass capillaries. Journal of Physics Condensed Matter, 2012, 24, 245103.	1.8	20
33	Sedimentation equilibria of ferrofluids: II. Experimental osmotic equations of state of magnetite colloids. Journal of Physics Condensed Matter, 2012, 24, 245104.	1.8	21
34	Composition tunable cobaltâ€“nickel and cobaltâ€“iron alloy nanoparticles below 10Ânm synthesized using acetonated cobalt carbonyl. Journal of Nanoparticle Research, 2012, 14, 991.	1.9	19
35	Enthalpy and entropy of nanoparticle association from temperature-dependent cryo-TEM. Physical Chemistry Chemical Physics, 2011, 13, 12770.	2.8	23
36	Magnetic Nanoparticles for Diagnosis and Medical Therapy. , 2011, , 85-95.		1

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37	Diverging Geometric and Magnetic Size Distributions of Iron Oxide Nanocrystals. Journal of Physical Chemistry C, 2011, 115, 14598-14605.	3.1	81
38	Stroboscopic Small Angle Neutron Scattering Investigations of Microsecond Dynamics in Magnetic Nanomaterials. Springer Series in Solid-state Sciences, 2009, , 241-263.	0.3	0
39	Role of Germanium on the Nucleation and Growth of Zeolite A from Clear Solutions As Studied by in Situ Small-Angle X-ray Scattering, Wide-Angle X-ray Scattering, and Dynamic Light Scattering. Journal of Physical Chemistry C, 2009, 113, 18614-18622.	3.1	16
40	Glycerol Etherification over Highly Active CaOâ€Based Materials: New Mechanistic Aspects and Related Colloidal Particle Formation. Chemistry - A European Journal, 2008, 14, 2016-2024.	3.3	161
41	Magnetization behavior of ferrofluids with cryogenically imaged dipolar chains. Journal of Physics Condensed Matter, 2008, 20, 204113.	1.8	18
42	Short-range magnetic order in two-dimensional cobalt-ferrite nanoparticle assemblies. Physical Review B, 2008, 77, .	3.2	29
43	Complex magnetic susceptibility setup for spectroscopy in the extremely low-frequency range. Review of Scientific Instruments, 2008, 79, 013901.	1.3	18
44	Low-temperature dynamics of magnetic colloids studied by time-resolved small-angle neutron scattering. Physical Review B, 2008, 77, .	3.2	34
45	Rotational dynamics of magnetic silica spheres studied by measuring the complex magnetic susceptibility. Journal of Physics Condensed Matter, 2007, 19, 286102.	1.8	7
46	Dipolar Structures in Colloidal Dispersions of PbSe and CdSe Quantum Dots. Nano Letters, 2007, 7, 2931-2936.	9.1	77
47	Dipolar structures in magnetite ferrofluids studied with small-angle neutron scattering with and without applied magnetic field. Physical Review E, 2007, 75, 051408.	2.1	76
48	Measurement of the zero-field magnetic dipole moment of magnetizable colloidal silica spheres. Journal of Physics Condensed Matter, 2007, 19, 036105.	1.8	11
49	Low-frequency complex magnetic susceptibility of magnetic composite microspheres in colloidal dispersion. Journal of Magnetism and Magnetic Materials, 2007, 311, 145-149.	2.3	14
50	Surface analysis of magnetite nanoparticles in cyclohexane solutions of oleic acid and oleylamine. Vibrational Spectroscopy, 2007, 43, 243-248.	2.2	140
51	InÂSituImaging of Field-Induced Hexagonal Columns in Magnetite Ferrofluids. Physical Review Letters, 2006, 97, 185702.	7.8	176
52	Quantitative Real-Space Analysis of Self-Assembled Structures of Magnetic Dipolar Colloids. Physical Review Letters, 2006, 96, 037203.	7.8	190
53	Surface reactivity of InSb studied by cyclic voltammetry coupled to XPS. European Physical Journal Special Topics, 2006, 132, 147-151.	0.2	2
54	Comparison of reversible and irreversible dipolar assemblies in a ferrofluid. Journal of Magnetism and Magnetic Materials, 2006, 306, 85-91.	2.3	20

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55	Flux closure in two-dimensional magnetite nanoparticle assemblies. Physical Review B, 2006, 73, .	3.2	26
56	Thermal Motion of Magnetic Iron Nanoparticles in a Frozen Solvent. Langmuir, 2005, 21, 1187-1191.	3.5	17
57	Size Fractionation in a Phase-Separated Colloidal Fluid. Langmuir, 2005, 21, 1802-1805.	3.5	19
58	Macroscopic electric field and osmotic pressure in ultracentrifugal sedimentationâ€“diffusion equilibria of charged colloids. Journal of Physics Condensed Matter, 2005, 17, 2293-2314.	1.8	34
59	Direct Imaging of Zero-Field Dipolar Structures in Colloidal Dispersions of Synthetic Magnetite. Journal of the American Chemical Society, 2004, 126, 16706-16707.	13.7	194
60	Vertical Concentration Profiles in Colloidal Fluids Measured by FTIR-ATR Spectroscopy. Langmuir, 2003, 19, 3081-3083.	3.5	5
61	Rotational Diffusion in Iron Ferrofluids. Langmuir, 2003, 19, 8218-8225.	3.5	67
62	Surface films on HgCdTe and CdTe etched in ferricyanide solution. Applied Surface Science, 2001, 175-176, 579-584.	6.1	5
63	In situ infrared spectroscopy of the semiconductorâˆ£electrolyte interface. Journal of Electroanalytical Chemistry, 2001, 509, 108-118.	3.8	25
64	In situ semiconductor surface characterisation: a comparative infrared study of Si, Ge and GaAs. Electrochimica Acta, 2000, 45, 3205-3211.	5.2	34
65	Porous Anodic Etching of p-Cd[sub 1âˆ’x]Zn[sub x]Te Studied by Photocurrent Spectroscopy. Journal of the Electrochemical Society, 2000, 147, 3759.	2.9	13
66	GaAs/H2O2Electrochemical Interface Studied In Situ by Infrared Spectroscopy and Ultravioletâˆ’Visible Ellipsometry Part I:Â Identification of Chemical Species. Journal of Physical Chemistry B, 2000, 104, 5961-5973.	2.6	11
67	GaAs/H2O2Electrochemical Interface StudiedIn Situby Infrared Spectroscopy and Ultravioletâˆ’Visible Ellipsometry Part II:Â Chemical Origin of Cathodic Oscillations. Journal of Physical Chemistry B, 2000, 104, 5974-5985.	2.6	9
68	Semiconductor Flatband Potential Determination by Electromodulated Infrared Spectroscopy. Journal of Physical Chemistry B, 2000, 104, 11591-11593.	2.6	8
69	Thermodynamics of water superheated in the microwave oven. Journal of Chemical Education, 2000, 77, 1309.	2.3	8
70	Coupled Partial Ionâ€Transfer Steps in the Anodic Dissolution of Metals. Journal of the Electrochemical Society, 1999, 146, 2488-2494.	2.9	20
71	Local pH Change during Diffusion-Limited Proton Reduction Determined by In Situ Infrared Spectroscopy. Electrochemical and Solid-State Letters, 1999, 2, 231.	2.2	15
72	The Mechanism of Hydrogen Gas Evolution on GaAs Cathodes Elucidated by In Situ Infrared Spectroscopy. Journal of Physical Chemistry B, 1999, 103, 2948-2962.	2.6	43

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73	Porosity and Tellurium-Enrichment of Anodized p-Cd[sub 0.95]Zn[sub 0.05]Te. Electrochemical and Solid-State Letters, 1999, 2, 619.	2.2	10
74	Surface Composition of nâ€GaAs Cathodes during Hydrogen Evolution Characterized by In Situ Ultravioletâ€Visible Ellipsometry and In Situ Infrared Spectroscopy. Journal of the Electrochemical Society, 1998, 145, 447-456.	2.9	44
75	Dynamics of Hydrogen Adsorption on GaAs Electrodes. Physical Review Letters, 1998, 80, 4337-4340.	7.8	22
76	The Lowâ€Frequency Impedance of Anodically Dissolving Semiconductor and Metal Electrodes: A Common Origin?. Journal of the Electrochemical Society, 1997, 144, 3385-3392.	2.9	20
77	Morphology and Strongly Enhanced Photoresponse of GaP Electrodes Made Porous by Anodic Etching. Journal of the Electrochemical Society, 1996, 143, 305-314.	2.9	140
78	Porous etching: A means to enhance the photoresponse of indirect semiconductors. Advanced Materials, 1995, 7, 739-742.	21.0	70
79	On the increase of the photocurrent quantum efficiency of GaP photoanodes due to (photo)anodic pretreatments. Electrochimica Acta, 1995, 40, 689-698.	5.2	14
80	HBr-K2Cr2O7-H2O etching system for indium phosphide. Journal of Crystal Growth, 1994, 141, 57-67.	1.5	26
81	The anodic dissolution of InP studied by the optoelectrical impedance methodâ€”1. Competition between electron injection and hole capture at InP photoanodes. Electrochimica Acta, 1993, 38, 2559-2567.	5.2	30
82	The anodic dissolution of InP studied by the optoelectrical impedance methodâ€”2. Interaction between anodic and chemical etching of InP in iodic acid solutions. Electrochimica Acta, 1993, 38, 2569-2575.	5.2	5
83	The system BaCO3 + SrCO3; crystal phase transitions: dta measurements and thermodynamic phase diagram analysis. Calphad: Computer Coupling of Phase Diagrams and Thermochemistry, 1992, 16, 63-72.	1.6	5