Richard K Heenan

List of Publications by Year
in descending order

141 papers	7,332 citations	47006 47 h-index	64796 79 g-index
145 all docs	145 docs citations	145 times ranked	5742 citing authors

#	Article	IF	Citations
1	Aggregation Behavior of Aqueous Solutions of Ionic Liquids. Langmuir, 2004, 20, 2191-2198.	3.5	653
2	Ionic Liquid-in-Oil Microemulsions. Journal of the American Chemical Society, 2005, 127, 7302-7303.	13.7	371
3	Structural studies of the phase, aggregation and surface behaviour of 1-alkyl-3-methylimidazolium halide + water mixtures. Journal of Colloid and Interface Science, 2007, 307, 455-468.	9.4	287
4	What Is So Special about Aerosol-OT? 2. Microemulsion Systemsâ€. Langmuir, 2000, 16, 8741-8748.	3.5	189
5	Magnetic Control over Liquid Surface Properties with Responsive Surfactants. Angewandte Chemie - International Edition, 2012, 51, 2414-2416.	13.8	181
6	Micellization of Hydrocarbon Surfactants in Supercritical Carbon Dioxide. Journal of the American Chemical Society, 2001, 123, 988-989.	13.7	167
7	Variation of surfactant counterion and its effect on the structure and properties of Aerosol-OT-based water-in-oil microemulsions. Journal of the Chemical Society, Faraday Transactions, 1992, 88, 461.	1.7	164
8	Anionic Surfactants and Surfactant Ionic Liquids with Quaternary Ammonium Counterions. Langmuir, 2011, 27, 4563-4571.	3.5	145
9	A photo-responsive organogel. Chemical Communications, 2004, , 2608-2609.	4.1	133
10	Water-in-CO2Microemulsions Studied by Small-Angle Neutron Scattering. Langmuir, 1997, 13, 6980-6984.	3.5	131
11	Structures of metal bis(2-ethylhexylsulfosuccinate) aggregates in cyclohexane. The Journal of Physical Chemistry, 1993, 97, 1459-1463.	2.9	128
12	Droplet Structure in a Water-in-CO2 Microemulsion. Langmuir, 1996, 12, 1423-1424.	3.5	110
13	Designed CO2-Philes Stabilize Water-in-Carbon Dioxide Microemulsions. Angewandte Chemie - International Edition, 2006, 45, 3675-3677.	13.8	109
14	Properties of a Stilbene-Containing Gemini Photosurfactant:â€‰ Light-Triggered Changes in Surface Tension and Aggregation. Langmuir, 2002, 18, 7837-7844.	3.5	104
15	Nanoemulsions Prepared by a Two-Step Low-Energy Process. Langmuir, 2008, 24, 6092-6099.	3.5	92
16	Fluoro-surfactants at air/water and water/CO2 interfaces. Physical Chemistry Chemical Physics, 2000, 2, 5235-5242.	2.8	90
17	Rod-Like Micelles Thicken CO₂. Langmuir, 2010, 26, 83-88.	3.5	83
18	Universal Surfactant for Water, Oils, and CO₂. Langmuir, 2010, 26, 13861-13866.	3.5	83

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19	Electron diffraction studies of supersonic jets. IV. Conformational cooling of nâ€butane. Journal of Chemical Physics, 1983, 78, 1270-1274.	3.0	81
20	Scalable Method for the Reductive Dissolution, Purification, and Separation of Single-Walled Carbon Nanotubes. ACS Nano, 2012, 6, 54-62.	14.6	81
21	Small-Angle Scattering Studies of Sodium Dodecyl Sulfate Interactions with Gelatin. 1. Langmuir, 1995, 11, 744-749.	3.5	80
22	Interfacial Compositions and Phase Structures in Mixed Surfactant Microemulsions. Langmuir, 1999, 15, 5271-5278.	3.5	77
23	Formation and stability of nanoemulsions with mixed ionicâ€“nonionic surfactants. Physical Chemistry Chemical Physics, 2009, 11, 9772.	2.8	75
24	Solubilisation of C60 in aqueous micellar solution. Journal of the Chemical Society Chemical Communications, 1994, , 173.	2.0	71
25	Properties of New Glucamide Surfactants. Langmuir, 1996, 12, 2701-2705.	3.5	71
26	Polymerization of Cationic Surfactant Phases. Langmuir, 2001, 17, 5388-5397.	3.5	68
27	Structure and stability of microemulsion-based organo-gels. Journal of the Chemical Society, Faraday Transactions, 1991, 87, 3389.	1.7	63
28	Design principles for supercritical CO2 viscosifiers. Soft Matter, 2012, 8, 7044.	2.7	63
29	Triâ€Chain Hydrocarbon Surfactants as Designed Micellar Modifiers for Supercritical CO₂. Angewandte Chemie - International Edition, 2009, 48, 4993-4995.	13.8	62
30	Water-in-oil microemulsions formed by ammonium and tetrapropylammonium salts of Aerosol OT. Langmuir, 1993, 9, 2820-2824.	3.5	61
31	Adsorption and micellisation of partially- and fully-fluorinated surfactants. Colloids and Surfaces A: Physicochemical and Engineering Aspects, 1999, 156, 33-48.	4.7	61
32	Structure of microemulsion-based organo-gels. Journal of the Chemical Society Chemical Communications, 1989, , 1807.	2.0	60
33	Structure and photophysics in C60-micellar solutions. Chemical Physics Letters, 1995, 245, 571-577.	2.6	60
34	Mixing of Alkanes with Surfactant Monolayers in Microemulsions. Langmuir, 1996, 12, 3876-3880.	3.5	60
35	Light-Sensitive Microemulsions. Langmuir, 2004, 20, 1120-1125.	3.5	60
36	Structure and Morphology of Charged Graphene Platelets in Solution by Small-Angle Neutron Scattering. Journal of the American Chemical Society, 2012, 134, 8302-8305.	13.7	60

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37	Photoresponsive Microemulsions. Langmuir, 2003, 19, 6579-6581.	3.5	59
38	Effect of Solvent Quality on Aggregate Structures of Common Surfactants. Langmuir, 2008, 24, 12235-12240.	3.5	59
39	Neutron Scattering from a Poly(oxyethylene)â^'Poly(oxypropylene)â^'Poly(oxyethylene) Copolymer in Dilute Aqueous Solution under Shear Flow. Macromolecules, 1997, 30, 6215-6222.	4.8	56
40	Low Fluorine Content CO₂-philic Surfactants. Langmuir, 2011, 27, 10562-10569.	3.5	56
41	Hybrid CO₂-philic Surfactants with Low Fluorine Content. Langmuir, 2012, 28, 6299-6306.	3.5	56
42	Structure of Reversed Micelles Formed by Metal Salts of Bis(ethylhexyl) Phosphoric Acid. Langmuir, 1996, 12, 1483-1489.	3.5	55
43	Precipitation processes in the Beta-Titanium alloy Tiâ€“5Alâ€“5Moâ€“5Vâ€“3Cr. Journal of Alloys and Compounds, 2015, 646, 946-953.	5.5	54
44	Super-Efficient Surfactant for Stabilizing Water-in-Carbon Dioxide Microemulsions. Langmuir, 2011, 27, 5772-5780.	3.5	52
45	Nanoprecipitation in a beta-titanium alloy. Journal of Alloys and Compounds, 2015, 623, 146-156.	5.5	50
46	Hybrid Fluorocarbonâ^'Hydrocarbon CO2-philic Surfactants. 2. Formation and Properties of Water-in-CO2Microemulsions. Langmuir, 2004, 20, 9960-9967.	3.5	49
47	Surface and Aggregation Behavior of Aqueous Solutions of Ru(II) Metallosurfactants:Â 1. Micellization of [Ru(bipy)2(bipyâ€^)][Cl]2Complexes. Langmuir, 2003, 19, 292-298.	3.5	47
48	Reversible light-induced critical separation. Soft Matter, 2009, 5, 78-80.	2.7	47
49	Dynamic Surface Tensions and Micelle Structures of Dichained Phosphatidylcholine Surfactant Solutions. Langmuir, 1998, 14, 5719-5724.	3.5	46
50	Water-induced structural changes within the L2phase of didodecyldimethylammonium bromideâ€“cyclohexaneâ€“water systems. Journal of the Chemical Society, Faraday Transactions, 1994, 90, 487-492.	1.7	45
51	Hybrid Fluorocarbonâ^'Hydrocarbon CO2-philic Surfactants. 1. Synthesis and Properties of Aqueous Solutions. Langmuir, 2004, 20, 9953-9959.	3.5	45
52	Compositions of Mixed Surfactant Layers in Microemulsions Determined by Small-Angle Neutron Scattering. Langmuir, 2003, 19, 2560-2567.	3.5	43
53	Phosphate Surfactants for Water-in-CO2Microemulsions. Langmuir, 2001, 17, 7948-7950.	3.5	42
54	Amphiphilogels for Drug Delivery: Formulation and Characterization. Pharmaceutical Research, 2004, 21, 1852-1861.	3.5	42

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55	What Is So Special about Aerosol-OT? Part IV. Phenyl-Tipped Surfactants. Langmuir, 2005, 21, 10021-10027.	3.5	42
56	Locus-Specific Microemulsion Catalysts for Sulfur Mustard (HD) Chemical Warfare Agent Decontamination. Journal of the American Chemical Society, 2009, 131, 9746-9755.	13.7	41
57	Separation and Purification of Nanoparticles in a Single Step. Langmuir, 2010, 26, 6989-6994.	3.5	41
58	Location of the Outer Shell and Influence of pH on Carboxylic Acid-Functionalized Poly(propyleneimine) Dendrimers. Macromolecules, 2001, 34, 8380-8383.	4.8	39
59	Stabilization of Distearoylphosphatidylcholine Lamellar Phases in Propylene Glycol Using Cholesterol. Molecular Pharmaceutics, 2013, 10, 4408-4417.	4.6	39
60	Shear aligned lecithin reverse micelles: a small-angle neutron scattering study of the anomalous water-induced micellar growth. Langmuir, 1990, 6, 1800-1803.	3.5	38
61	Surface and Aggregation Behavior of Aqueous Solutions of Ru(II) Metallosurfactants:Â 4. Effect of Chain Number and Orientation on the Aggregation of [Ru(bipy)2(bipyâ€˜)]Cl2Complexes. Langmuir, 2005, 21, 5696-5706.	3.5	38
62	SANS studies of the effects of surfactant head group on aggregation properties in water/glycol and pure glycol systems. Journal of Colloid and Interface Science, 2007, 315, 714-720.	9.4	38
63	What Is So Special about Aerosol-OT? Part IIIGlutaconate versus Sulfosuccinate Headgroups and Oilâ^'Water Interfacial Tensions. Langmuir, 2002, 18, 1505-1510.	3.5	37
64	Micellization of economically viable surfactants in CO2. Journal of Colloid and Interface Science, 2003, 258, 367-373.	9.4	37
65	Generation of metal oxide nanoparticles in optimised microemulsions. Journal of Colloid and Interface Science, 2007, 312, 68-75.	9.4	37
66	Mixing in cationic surfactant films studied by small-angle neutron scattering. Journal of the Chemical Society, Faraday Transactions, 1998, 94, 2143-2150.	1.7	36
67	Controlling Aggregation of Nonionic Surfactants Using Mixed Glycol Media. Langmuir, 2007, 23, 4199-4202.	3.5	36
68	PGSE-NMR and SANS Studies of the Interaction of Model Polymer Therapeutics with Mucin. Biomacromolecules, 2010, 11, 120-125.	5.4	36
69	Micelles of asymmetric chain catanionic surfactants. Colloids and Surfaces A: Physicochemical and Engineering Aspects, 1996, 117, 215-225.	4.7	35
70	Pore Size Engineering in Mesoporous Silicas Using Supercritical CO2. Langmuir, 2005, 21, 4163-4167.	3.5	35
71	Structure of Block Copolymers Adsorbed to Perfluorocarbon Emulsions. The Journal of Physical Chemistry, 1996, 100, 7603-7609.	2.9	33
72	Structure in microemulsions of di-chained surfactants. Journal of the Chemical Society, Faraday Transactions, 1996, 92, 65.	1.7	33

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73	Photoreactive Surfactants: A Facile and Clean Route to Oxide and Metal Nanoparticles in Reverse Micelles. Langmuir, 2011, 27, 9277-9284.	3.5	33
74	Pressure-induced structural changes in water-in-propane microemulsions. Journal of the Chemical Society, Faraday Transactions, 1994, 90, 3121.	1.7	31
75	Amphiphiles for supercritical CO2. Biochimie, 2012, 94, 94-100.	2.6	31
76	Electron diffraction studies of supersonic jets. I. Apparatus and methods. Journal of Chemical Physics, 1983, 78, 236-242.	3.0	30
77	Microemulsion-based gels: A small-angle neutron scattering study. Chemical Physics Letters, 1988, 151, 494-498.	2.6	30
78	Small-angle neutron scattering studies of sodium dodecyl sulfate interactions with gelatin. Part 2.â€"Effect of temperature and pH. Journal of the Chemical Society, Faraday Transactions, 1996, 92, 595-599.	1.7	29
79	Fluorosurfactants at Structural Extremes:Â Adsorption and Aggregation. Langmuir, 2006, 22, 2034-2038.	3.5	29
80	Electron diffraction studies of supersonic jets. II. Formation of benzene clusters. Journal of Chemical Physics, 1983, 78, 243-248.	3.0	28
81	Effect of Counterion Radius on Surfactant Properties in Winsor II Microemulsion Systems. Langmuir, 1994, 10, 1650-1653.	3.5	28
82	Microemulsions with Didodecyldimethylammonium Bromide Studied by Neutron Contrast Variation. Journal of Colloid and Interface Science, 1997, 190, 449-455.	9.4	28
83	Nanostructures in Water-in-CO₂ Microemulsions Stabilized by Double-Chain Fluorocarbon Solubilizers. Langmuir, 2013, 29, 7618-7628.	3.5	28
84	Photoinduced Phase Separation. Journal of the American Chemical Society, 2006, 128, 1468-1469.	13.7	27
85	Photodestructible Vesicles. Langmuir, 2006, 22, 851-853.	3.5	27
86	Structure of cobalt Aerosol-OT reversed micelles studied by small-angle scattering methods. Journal of the Chemical Society, Faraday Transactions, 1994, 90, 2497.	1.7	26
87	Preparation of colloidal cobalt using reversed micelles. Colloids and Surfaces A: Physicochemical and Engineering Aspects, 1996, 119, 123-131.	4.7	26
88	Ammonium Bis(ethylhexyl) Phosphate:â€‰ A New Surfactant for Microemulsions. Langmuir, 1996, 12, 5312-5318.	3.5	25
89	Physicochemical Characterization of Thermoresponsive Poly(N-isopropylacrylamide)â^'poly(ethylene) Tj ETQq1 1 0.784314 rgBT /Over	5.4	25
90	Interaction between Surfactants and Colloidal Latexes in Nonpolar Solvents Studied Using Contrast-Variation Small-Angle Neutron Scattering. Langmuir, 2014, 30, 3422-3431.	3.5	25

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91	Poly(butyl methacrylate-g-methoxypoly(ethylene glycol)) and poly(methyl) Tj ETQq1 1 0.784314 rgBT /Overlock 10 Tf 50 747 Td (metha properties. Journal of Colloid and Interface Science, 2003, 262, 548-559.	9.4	24
92	Control over Microemulsions with Solvent Blends. Langmuir, 2009, 25, 2743-2748.	3.5	24
93	Learning about SANS instruments and data reduction from round robin measurements on samples of polystyrene latex. Journal of Applied Crystallography, 2013, 46, 1289-1297.	4.5	24
94	Revealing the Hidden Details of Nanostructure in a Pharmaceutical Cream. Scientific Reports, 2020, 10, 4082.	3.3	24
95	Structureâ€“property relationships in metallosurfactants. Soft Matter, 2010, 6, 1981.	2.7	22
96	Control over Phase Curvature Using Mixtures of Polymerizable Surfactants. Chemistry of Materials, 2000, 12, 3533-3537.	6.7	21
97	Microemulsion Formation in 1,1,1,2-Tetrafluoroethane (R134a). Langmuir, 2003, 19, 8715-8720.	3.5	21
98	Testing the Scaling Behavior of Microemulsionâ^'Polymer Mixtures. Langmuir, 2009, 25, 3944-3952.	3.5	21
99	The interfacial structure of polymeric surfactant stabilised air-in-water foams. Soft Matter, 2014, 10, 3003-3008.	2.7	21
100	Rigidities of Cationic Surfactant Films in Microemulsions. Journal of Physical Chemistry B, 1997, 101, 944-948.	2.6	20
101	Small-Angle Neutron-Scattering Studies on the Nature of the Incorporation of Polar Oils into Aggregates ofN,N-Dimethyldodecylamine-N-oxide. Langmuir, 2000, 16, 10398-10403.	3.5	20
102	UV Causes Dramatic Changes in Aggregation with Mixtures of Photoactive and Inert Surfactants. Langmuir, 2004, 20, 6120-6126.	3.5	20
103	Photo-stabilised microemulsions. Chemical Communications, 2005, , 2785.	4.1	20
104	Small-Angle Neutron Scattering Study of Microemulsionâ^'Polymer Mixtures in the Protein Limit. Langmuir, 2008, 24, 3053-3060.	3.5	20
105	Effect of Fluorocarbon and Hydrocarbon Chain Lengths in Hybrid Surfactants for Supercritical CO₂. Langmuir, 2015, 31, 7479-7487.	3.5	20
106	Retention of Structure in Microemulsion Polymerization:Â Formation of Nanolatices. Langmuir, 2004, 20, 3509-3512.	3.5	19
107	Microemulsion-based organogels containing inorganic nanoparticles. Soft Matter, 2010, 6, 1291.	2.7	19
108	Droplet Structure in Phosphocholine Microemulsions. Langmuir, 1997, 13, 2490-2493.	3.5	18

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109	Formation of Surfactant-Stabilized Silica Organosols. Langmuir, 2008, 24, 12793-12797.	3.5	18
110	Assembly of small molecule surfactants at highly dynamic airâ€“water interfaces. Soft Matter, 2017, 13, 8807-8815.	2.7	18
111	Polymerization of Styrene in DODAB Vesicles:Â A Small-Angle Neutron Scattering Study. Langmuir, 2002, 18, 2873-2879.	3.5	17
112	Derivatizing weak polyelectrolytesâ€”Solution properties, self-aggregation, and association with anionic surfaces of hydrophobically modified poly(ethylene imine). Journal of Colloid and Interface Science, 2007, 314, 460-469.	9.4	16
113	Surfactant Aggregation in CO₂/Heptane Solvent Mixtures. Langmuir, 2009, 25, 12909-12913.	3.5	16
114	Hydrocarbon Metallosurfactants for CO₂. Langmuir, 2010, 26, 4732-4737.	3.5	16
115	Electron diffraction studies of supersonic jets. III. Clusters of nâ€butane. Journal of Chemical Physics, 1983, 78, 1265-1269.	3.0	15
116	Oligo- and polyethylene glycols in water-in-oil microemulsions. A SANS study. Physical Chemistry Chemical Physics, 1999, 1, 2521-2525.	2.8	15
117	Photosensitive gelatin. Chemical Communications, 2006, , 4407.	4.1	15
118	Puroindoline-a, a lipid binding protein from common wheat, spontaneously forms prolate protein micelles in solution. Physical Chemistry Chemical Physics, 2011, 13, 8881.	2.8	15
119	Lamellar Aggregates in the L2 Phase of a Nonionic Silicone Surfactant (L77-OH). Langmuir, 1994, 10, 2213-2218.	3.5	14
120	Effects of Structure Variation on Solution Properties of Hydrotropes: Phenyl versus Cyclohexyl Chain Tips. Langmuir, 2012, 28, 9332-9340.	3.5	13
121	A study of temperature-induced aggregation of responsive comb copolymers in aqueous solution. Physical Chemistry Chemical Physics, 2003, 5, 2417-2423.	2.8	12
122	Scaling the Structure Factors of Protein Limit Colloidâ€'Polymer Mixtures. Langmuir, 2010, 26, 1630-1634.	3.5	12
123	Films of di-chained surfactants in microemulsions. Colloids and Surfaces A: Physicochemical and Engineering Aspects, 1997, 128, 209-215.	4.7	11
124	A small-angle neutron scattering study of biologically relevant mixed surfactant micelles comprising 1,2-diheptanoyl-sn-phosphatidylcholine and sodium dodecyl sulfate or dodecyltrimethylammonium bromide. Soft Matter, 2005, 1, 152.	2.7	11
125	Surface and micelle properties of novel multi-dentate surfactants. Journal of Colloid and Interface Science, 2007, 314, 707-711.	9.4	11
126	An Investigation into Creep Cavity Development in 316H Stainless Steel. Metals, 2019, 9, 318.	2.3	11

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127	Stabilization of CeO2 nanoparticles in a CO2 rich solvent. Chemical Communications, 2008, , 5628.	4.1	10
128	Structure of a large colloidal crystal â€“ controlling orientation and three-dimensional order. RSC Advances, 2012, 2, 7091.	3.6	10
129	Fluorinated microemulsions as reaction media for fluorous nanoparticles. Soft Matter, 2010, 6, 971.	2.7	9
130	Segregation versus Interdigitation in Highly Dynamic Polymer/Surfactant Layers. Polymers, 2019, 11, 109.	4.5	9
131	Polymerization of Cationic Surfactant Films in Microemulsions. Journal of Dispersion Science and Technology, 2001, 22, 597-607.	2.4	7
132	Neutron reflection and small-angle neutron scattering studies of a fluorocarbon telomer surfactant. Journal of Colloid and Interface Science, 2003, 261, 184-190.	9.4	7
133	Supercritical Fluid Swelling of Liquid Crystal Films. Langmuir, 2008, 24, 6959-6964.	3.5	7
134	Fluorocarbonâ€“hydrocarbon incompatibility in micellar polymerizations. Journal of Colloid and Interface Science, 2009, 330, 437-442.	9.4	7
135	The Influence of Co-Surfactants on Lamellar Liquid Crystal Structures Formed in Creams. Pharmaceutics, 2020, 12, 864.	4.5	7
136	Swelling of Ionic and Nonionic Surfactant Micelles by High Pressure Gases. Langmuir, 2010, 26, 7725-7731.	3.5	5
137	Supramolecular architecture of a multi-component biomimetic lipid barrier formulation. Journal of Colloid and Interface Science, 2021, 587, 597-612.	9.4	5
138	A contrast variation small-angle scattering study of the microstructure of 2,5-dimethyl-7-hydroxy-2,5-diazaheptadecaneâ€“tolueneâ€“butanol oil-in-water metallomicroemulsions. Soft Matter, 2010, 6, 2552.	2.7	2
139	Small-angle neutron scattering from non-crystalline materials on a pulsed neutron source. Journal of Non-Crystalline Solids, 1992, 150, 153-156.	3.1	1
140	Understanding Colicin N Import into Gram Negative Bacterial Cells using Small Angle Neutron Scattering. Biophysical Journal, 2014, 106, 255a.	0.5	1
141	Additions and Corrections. Effect of Counterion Radius on Surfactant Properties in Winsor II Microemulsion Systems. Langmuir, 1994, 10, 3918-3918.	3.5	0