Peter K Kilpatrick

List of Publications by Year
in descending order

61	4,694	32	57
papers	citations	h-index	g-index
		136740	143772

61	61	61	2659
all docs	docs citations	times ranked	citing authors

#	Article	IF	Citations
1	Effects of Asphaltene Solvency on Stability of Water-in-Crude-Oil Emulsions. Journal of Colloid and Interface Science, 1997, 189, 242-253.	5.0	514
2	Effects of Asphaltene Aggregation in Model Heptaneâ€"Toluene Mixtures on Stability of Water-in-Oil Emulsions. Journal of Colloid and Interface Science, 1997, 196, 23-34.	5.0	355
3	Water-in-Crude Oil Emulsion Stabilization: Review and Unanswered Questions. Energy & Fuels, 2012, 26, 4017-4026.	2.5	353
4	Effects of petroleum resins on asphaltene aggregation and water-in-oil emulsion formation. Colloids and Surfaces A: Physicochemical and Engineering Aspects, 2003, 220, 9-27.	2.3	341
5	Aggregation and solubility behavior of asphaltenes and their subfractions. Journal of Colloid and Interface Science, 2003, 267, 178-193.	5.0	314
6	The Effects of Inorganic Solid Particles on Water and Crude Oil Emulsion Stability. Industrial & Engineering Chemistry Research, 2002, 41, 3389-3404.	1.8	281
7	Interfacial Rheology of Petroleum Asphaltenes at the Oilâ˘'Water Interface. Langmuir, 2004, 20, 4022-4032.	1.6	251
8	Molecular Characterization of Wax Isolated from a Variety of Crude Oils. Energy & Fuels, 1998, 12, 715-725.	2.5	142
9	Dynamic Asphalteneâ˘'Resin Exchange at the Oil/Water Interface:Â Time-Dependent W/O Emulsion Stability for Asphaltene/Resin Model Oilsâ€. Energy & Fuels, 2007, 21, 1343-1349.	2.5	136
10	Stabilization of Waterâ€inâ€Oil Emulsions by Naphthenic Acids and Their Salts: Model Compounds, Role of pH, and Soap:Acid Ratio. Journal of Dispersion Science and Technology, 2004, 25, 253-261.	1.3	132
11	Asphaltenic aggregates are polydisperse oblate cylinders. Journal of Colloid and Interface Science, 2005, 288, 325-334.	5.0	107
12	Adsorption and Molecular Rearrangement of Amphoteric Species at Oilâ˘'Water Interfaces. Journal of Physical Chemistry B, 2009, 113, 13788-13799.	1.2	107
13	Solvent Entrainment in and Flocculation of Asphaltenic Aggregates Probed by Small-Angle Neutron Scattering. Langmuir, 2006, 22, 4487-4497.	1.6	101
14	The Role of Asphaltene Solubility and Chemical Composition on Asphaltene Aggregation. Petroleum Science and Technology, 2003, 21, 461-489.	0.7	81
15	Comparison of Precipitation and Extrography in the Fractionation of Crude Oil Residua. Energy & Fuels, 1997, 11, 570-585.	2.5	79
16	On the Distribution of Chemical Properties and Aggregation of Solubility Fractions in Asphaltenes. Energy & Fuels, 2006, 20, 705-714.	2.5	74
17	Asphaltene Emulsions. , 2001, , 707-730.		71
18	Water-in-Model Oil Emulsions Studied by Small-Angle Neutron Scattering: Interfacial Film Thickness and Composition. Langmuir, 2008, 24, 12807-12822.	1.6	70

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19	Factors Contributing to Petroleum Foaming. 1. Crude Oil Systems. Energy & Fuels, 2002, 16, 700-710.	2.5	65
20	Asphaltenes and Waxes Do Not Interact Synergistically and Coprecipitate in Solid Organic Depositsâ€. Energy & Fuels, 2005, 19, 1360-1375.	2.5	65
21	Application of Antibody and Fluorophore-Derivatized Liposomes to Heterogeneous Immunoassays for D-dimer. Biotechnology Progress, 1996, 12, 272-280.	1.3	62
22	Association Behavior of Pyrene Compounds as Models for Asphaltenesâ€. Energy & Fuels, 2005, 19, 1268-1271.	2.5	53
23	On-chip electric field driven assembly of biocomposites from live cells and functionalized particles. Soft Matter, 2008, 4, 726.	1.2	52
24	Hexabenzocoronene Model Compounds for Asphaltene Fractions:â€‰ Synthesis & Characterization. Energy & Fuels, 2006, 20, 2439-2447.	2.5	48
25	The Stability of Waterâ€inâ€Crude and Model Oil Emulsions. Canadian Journal of Chemical Engineering, 2007, 85, 793-807.	0.9	47
26	Elucidating the Geometric Substitution of Petroporphyrins by Spectroscopic Analysis and Atomic Force Microscopy Molecular Imaging. Energy & Fuels, 2019, 33, 6088-6097.	2.5	45
27	On-Chip Dielectrophoretic Coassembly of Live Cells and Particles into Responsive Biomaterials. Langmuir, 2010, 26, 3441-3452.	1.6	43
28	Trypsin purification by affinity binding to small unilamellar liposomes. Biotechnology and Bioengineering, 1990, 36, 506-519.	1.7	39
29	FUSED RING AROMATIC SOLVENCY IN DESTABILIZING WATER-IN-ASPHALTENE-HEPTANE-TOLUENE EMULSIONS. Journal of Dispersion Science and Technology, 1999, 20, 279-293.	1.3	39
30	Factors Contributing to Petroleum Foaming. 2. Synthetic Crude Oil Systems. Energy & Fuels, 2002, 16, 711-717.	2.5	39
31	A Novel Process for Demulsification of Water-in-Crude Oil Emulsions by Dense Carbon Dioxide. Industrial & Engineering Chemistry Research, 2003, 42, 6661-6672.	1.8	39
32	The Role of Petroleum Asphaltenes in the Stabilization of Water-in-Oil Emulsions. , 1998, , 377-422.		35
33	Ultrahigh-Purity Vanadyl Petroporphyrins. Energy & Fuels, 2018, 32, 5711-5724.	2.5	35
34	Noncompetitive Immunoassays Using Bifunctional Unilamellar Vesicles or Liposomes. Biotechnology Progress, 1995, 11, 333-341.	1.3	34
35	Asphaltene Adsorption onto Self-Assembled Monolayers of Mixed Aromatic and Aliphatic Trichlorosilanes. Langmuir, 2009, 25, 6260-6269.	1.6	34
36	Asphaltene Adsorption onto Self-Assembled Monolayers of Alkyltrichlorosilanes of Varying Chain Length. ACS Applied Materials & Interfaces, 2009, 1, 1347-1357.	4.0	31

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37	Preferential Solvent Partitioning within Asphaltenic Aggregates Dissolved in Binary Solvent Mixturesâ€. Energy & Fuels, 2007, 21, 1217-1225.	2.5	30
38	Preparation and characterization of bifunctional unilamellar vesicles for enhanced immunosorbent assays. Biotechnology Progress, 1993, 9, 242-258.	1.3	28
39	Study of the Packing Density and Molecular Orientation of Bimolecular Self-Assembled Monolayers of Aromatic and Aliphatic Organosilanes on Silica. Langmuir, 2007, 23, 673-683.	1.6	28
40	Using deuterium NMR lineshapes to analyze lyotropic liquid crystalline phase transitions. Langmuir, 1992, 8, 1679-1687.	1.6	27
41	Evidence of naturally-occurring vanadyl porphyrins containing multiple S and O atoms. Fuel, 2019, 239, 1258-1264.	3.4	27
42	Asphaltene Aggregation: Techniques for Analysis. Instrumentation Science and Technology, 2004, 32, 247-253.	0.9	25
43	Protein purification by affinity binding to unilamellar vesicles. Biotechnology and Bioengineering, 1989, 33, 173-182.	1.7	24
44	High-Purity Vanadyl Petroporphyrins: Their Aggregation and Effect on the Aggregation of Asphaltenes. Energy & Fuels, 2020, 34, 164-178.	2.5	21
45	Effect of oil type on liquid crystalline phase behavior in sodium n-dodecanoate-water-oil mixtures. Langmuir, 1988, 4, 790-796.	1.6	18
46	Affinity precipitation of proteins by surfactant-solubilized, ligand-modified phospholipids. Biotechnology Progress, 1992, 8, 436-453.	1.3	18
47	Competitive immunosorbent assays for biotin using bifunctional unilamellar vesicles. Biotechnology Progress, 1994, 10, 174-186.	1.3	15
48	Aggregation of ligand-modified liposomes by specific interactions with proteins. I: Biotinylated liposomes and avidin. , 1996, 50, 151-168.		14
49	Lyotropic liquid crystalline phase behavior and structure of cesium n-tetradecanoate-water mixtures. Journal of Colloid and Interface Science, 1992, 149, 450-471.	5.0	13
50	Aggregation of ligand-modified liposomes by specific interactions with proteins. II: Biotinylated liposomes and antibiotin antibody. , 1996, 50, 169-183.		13
51	Interfacial Phenomena of Purified Petroporphyrins and Their Impact on Asphaltene Interfacial Film Formation. Energy & Fuels, 2020, 34, 5444-5456.	2.5	13
52	Transitional Liquid Crystalline Phases between the Hexagonal and Lamellar Phases in Ternary Cesium N-Tetradecanoate-Water-Additive Mixtures. Journal of Colloid and Interface Science, 1993, 157, 88-99.	5.0	10
53	Separation of Fischerâ˘'Tropsch Wax from Catalyst Using Near-Critical Fluid Extraction:Â Analysis of Process Feasibility. Energy & Fuels, 1999, 13, 667-677.	2.5	10
54	Location of solubilized oil in lyotropic surfactant liquid crystalline phases and the resulting effects on phase equilibria. Langmuir, 1992, 8, 2192-2199.	1.6	9

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55	Affinity precipitation of an antibody by ligand-modified phospholipids. Biotechnology and Bioengineering, 1994, 44, 509-522.	1.7	8
56	Competitive Immunosorbent Assays Using Ligand-Enzyme Conjugates and Bifunctional Liposomes: Theory and Experiment. Biotechnology Progress, 1996, 12, 519-526.	1.3	7
57	Affinity Precipitation of Avidin by Using Ligand-Modified Surfactants. ACS Symposium Series, 1990, , 212-236.	0.5	5
58	Preparation and Characterization of Ligand-Modified Labelled Liposomes for Solid Phase Immunoassays. Journal of Liposome Research, 1993, 3, 793-804.	1.5	5
59	Rheological Study of Polycrystalline Lyotropic Mesophases in the Cesium <i>n</i>-Tetradecanoateâ€”Water System. ACS Symposium Series, 1994, , 229-238.	0.5	5
60	Electrostatic Modeling of Surfactant Liquid-Crystalline Aggregates:Â The Modified Poissonâˆ’Boltzmann Equation. Industrial & Engineering Chemistry Research, 1996, 35, 2823-2833.	1.8	5
61	Selective Precipitation of Antibody with Ligand-Modified Phospholipids: Effect of Lipid Chain Length. Biotechnology Progress, 1997, 13, 446-452.	1.3	2