Chun Huh

List of Publications by Year
in descending order

79 papers	4,033 citations	136950 32 h-index	161849 54 g-index
82 all docs	82 docs citations	82 times ranked	2919 citing authors

#	Article	IF	Citations
1	Interfacial tensions and solubilizing ability of a microemulsion phase that coexists with oil and brine. Journal of Colloid and Interface Science, 1979, 71, 408-426.	9.4	561
2	Nanoparticle-stabilized carbon dioxide-in-water foams with fine texture. Journal of Colloid and Interface Science, 2013, 391, 142-151.	9.4	189
3	A 2.5-D glass micromodel for investigation of multi-phase flow in porous media. Lab on A Chip, 2017, 17, 640-646.	6.0	159
4	Nanoparticle-Stabilized Emulsions for Applications in Enhanced Oil Recovery. , 2010, , .		147
5	A critical review on use of polymer microgels for conformance control purposes. Journal of Petroleum Science and Engineering, 2014, 122, 741-753.	4.2	139
6	Nanoparticle-Stabilized Supercritical CO2 Foams for Potential Mobility Control Applications. , 2010, , .		136
7	Size-dependent properties of silica nanoparticles for Pickering stabilization of emulsions and foams. Journal of Nanoparticle Research, 2016, 18, 1.	1.9	129
8	Viscosity and stability of ultra-high internal phase CO2-in-water foams stabilized with surfactants and nanoparticles with or without polyelectrolytes. Journal of Colloid and Interface Science, 2016, 461, 383-395.	9.4	123
9	Investigation of Nanoparticle Adsorption During Transport in Porous Media. SPE Journal, 2015, 20, 667-677.	3.1	119
10	A Microfluidic Investigation of the Synergistic Effect of Nanoparticles and Surfactants in Macro-Emulsion-Based Enhanced Oil Recovery. SPE Journal, 2017, 22, 459-469.	3.1	87
11	Enhanced Migration of Surface-Treated Nanoparticles in Sedimentary Rocks. , 2009, , .		86
12	Use of nanoparticles for oil production applications. Journal of Petroleum Science and Engineering, 2019, 172, 97-114.	4.2	81
13	Theoretical and experimental investigation of the motion of multiphase fluids containing paramagnetic nanoparticles in porous media. Journal of Petroleum Science and Engineering, 2012, 81, 129-144.	4.2	72
14	Graphene oxide nanoplatelet dispersions in concentrated NaCl and stabilization of oil/water emulsions. Journal of Colloid and Interface Science, 2013, 403, 1-6.	9.4	72
15	Ultradry Carbon Dioxide-in-Water Foams with Viscoelastic Aqueous Phases. Langmuir, 2016, 32, 28-37.	3.5	71
16	Effect of Adsorbed Amphiphilic Copolymers on the Interfacial Activity of Superparamagnetic Nanoclusters and the Emulsification of Oil in Water. Macromolecules, 2012, 45, 5157-5166.	4.8	66
17	Stabilization of Iron Oxide Nanoparticles in High Sodium and Calcium Brine at High Temperatures with Adsorbed Sulfonated Copolymers. Langmuir, 2013, 29, 3195-3206.	3.5	65
18	Recent Advances Incorporating Superparamagnetic Nanoparticles into Immunoassays. ACS Applied Nano Materials, 2018, 1, 512-521.	5.0	64

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19	Stable Citrate-Coated Iron Oxide Superparamagnetic Nanoclusters at High Salinity. Industrial & Engineering Chemistry Research, 2010, 49, 12435-12443.	3.7	63
20	Aggregation of silica nanoparticles and its impact on particle mobility under high-salinity conditions. Journal of Petroleum Science and Engineering, 2015, 133, 376-383.	4.2	62
21	Microfluidic Investigation of Nanoparticlesâ€™ Role in Mobilizing Trapped Oil Droplets in Porous Media. Langmuir, 2015, 31, 13673-13679.	3.5	60
22	A Rheological Model for pH-Sensitive Ionic Polymer Solutions for Optimal Mobility-Control Applications. , 2005, , .		59
23	Foams and Emulsions Stabilized With Nanoparticles for Potential Conformance Control Applications. , 2009, , .		58
24	Equilibrium of a Microemulsion That Coexists With Oil or Brine. Society of Petroleum Engineers Journal, 1983, 23, 829-847.	0.9	52
25	Superparamagnetic nanoclusters coated with oleic acid bilayers for stabilization of emulsions of water and oil at low concentration. Journal of Colloid and Interface Science, 2010, 351, 225-232.	9.4	52
26	Stabilization of Superparamagnetic Iron Oxide Nanoclusters in Concentrated Brine with Cross-Linked Polymer Shells. Langmuir, 2011, 27, 10962-10969.	3.5	50
27	Chemical and Hydrodynamic Mechanisms for Long-Term Geological Carbon Storage. Journal of Physical Chemistry C, 2014, 118, 15103-15113.	3.1	50
28	Crosswell Magnetic Sensing of Superparamagnetic Nanoparticles for Subsurface Applications. SPE Journal, 2015, 20, 1067-1082.	3.1	46
29	Screening Criteria and Considerations of Offshore Enhanced Oil Recovery. Energies, 2016, 9, 44.	3.1	45
30	Transport of Nanoparticle-Stabilized CO $$_2$$ 2 -Foam in Porous Media. Transport in Porous Media, 2016, 111, 265-285.	2.6	44
31	Development of a Viscoelastic Property Database for EOR Polymers. , 2010, , .		43
32	Adsorption of iron oxide nanoclusters stabilized with sulfonated copolymers on silica in concentrated NaCl and CaCl2 brine. Journal of Colloid and Interface Science, 2013, 398, 217-226.	9.4	41
33	Mechanistic Model for Nanoparticle Retention in Porous Media. Transport in Porous Media, 2016, 115, 387-406.	2.6	41
34	Fly ash nanoparticles as a CO2 foam stabilizer. Powder Technology, 2015, 283, 77-84.	4.2	39
35	Carbon Dioxide-in-Water Foams Stabilized with a Mixture of Nanoparticles and Surfactant for CO2 Storage and Utilization Applications. Energy Procedia, 2014, 63, 7929-7938.	1.8	37
36	Effects of Magnetic Field on the Motion of Multiphase Fluids Containing Paramagnetic Particles in Porous Media. , 2010, , .		36

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37	Nanoparticle Stabilized Carbon Dioxide in Water Foams for Enhanced Oil Recovery. , 2012, , .		36
38	Formation of a middle-phase from a lower or upper-phase microemulsion. Journal of Colloid and Interface Science, 1984, 97, 201-219.	9.4	35
39	Viscosity Model of Preformed Microgels for Conformance and Mobility Control. Energy & Fuels, 2011, 25, 5033-5037.	5.1	34
40	Modeling fracture propagation and cleanup for dry nanoparticle-stabilized-foam fracturing fluids. Journal of Petroleum Science and Engineering, 2016, 146, 210-221.	4.2	32
41	Conditions for Generating Nanoparticle-Stabilized CO2 Foams in Fracture and Matrix Flow. , 2013, , .		31
42	Flow enhancement of water-based nanoparticle dispersion through microscale sedimentary rocks. Scientific Reports, 2015, 5, 8702.	3.3	30
43	Transport Model Implementation and Simulation of Microgel Processes for Conformance and Mobility Control Purposes. Energy & Fuels, 2011, 25, 5063-5075.	5.1	28
44	Fly Ash Nanoparticle-Stabilized CO2-in-Water Foams for Gas Mobility Control Applications. , 2015, , .		23
45	Artificial Neural Network Model to Estimate the Viscosity of Polymer Solutions for Enhanced Oil Recovery. Applied Sciences (Switzerland), 2016, 6, 188.	2.5	23
46	Foam Generation Hysteresis in Porous Media: Experiments and New Insights. Transport in Porous Media, 2017, 116, 687-703.	2.6	23
47	Measuring and modeling the magnetic settling of superparamagnetic nanoparticle dispersions. Journal of Colloid and Interface Science, 2015, 447, 58-67.	9.4	21
48	An experimental and numerical study of wellbore leakage mitigation using pH-triggered polymer gelant. Fuel, 2018, 217, 444-457.	6.4	21
49	Control of magnetite primary particle size in aqueous dispersions of nanoclusters for high magnetic susceptibilities. Journal of Colloid and Interface Science, 2016, 462, 359-367.	9.4	20
50	Focused Magnetic Heating Utilizing Superparamagnetic Nanoparticles for Improved Oil Production Applications. , 2012, , .		19
51	Nanoparticle-Stabilized Emulsions for Improved Mobility Control for Adverse-mobility Waterflooding. , 2016, , .		17
52	Multi-Scale Evaluation of Nanoparticle-Stabilized CO2-in-Water Foams: From the Benchtop to the Field. , 2015, , .		16
53	Oil Droplet Removal from Produced Water Using Nanoparticles and Their Magnetic Separation. , 2016, , .		15
54	Development and Use of a Simulation Model for Mobility/Conformance Control Using a pH-Sensitive Polymer. , 2007, , .		14

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55	Accelerated Oil Droplet Separation from Produced Water Using Magnetic Nanoparticles. , 2014, , .		14
56	The Use of a pH-Triggered Polymer Gelant to Seal Cement Fractures in Wells. SPE Drilling and Completion, 2016, 31, 225-235.	1.6	14
57	Efficient Removal of Enhanced-Oil-Recovery Polymer From Produced Water With Magnetic Nanoparticles and Regeneration/Reuse of Spent Particles. SPE Production and Operations, 2017, 32, 374-381.	0.6	13
58	Nanoparticle-Stabilized Natural Gas Liquid-in-Water Emulsions for Residual Oil Recovery. , 2016, , .		12
59	On the feasibility of inducing oil mobilization in existing reservoirs via wellbore harmonic fluid action. Journal of Petroleum Science and Engineering, 2011, 76, 116-123.	4.2	11
60	Application of pH-Triggered Polymers in Fractured Reservoirs to Increase Sweep Efficiency. , 2008, , .		10
61	Highly porous CO2 hydrate generation aided by silica nanoparticles for potential secure storage of CO2 and desalination. RSC Advances, 2017, 7, 9545-9550.	3.6	10
62	Theoretical and Experimental Investigation of the Motion of Multiphase Fluids Containing Paramagnetic Nanoparticles in Porous Media. , 2010, , .		9
63	One-Step Synthesis and Functionalization of High-Salinity-Tolerant Magnetite Nanoparticles with Sulfonated Phenolic Resin. Langmuir, 2019, 35, 8769-8775.	3.5	9
64	Maximization of Oil Mobility within a Hydrocarbon Reservoir for Elastic Wave-based Enhanced Oil Recovery. , 2011, , .		8
65	Quasi-static analysis of a ferrofluid blob in a capillary tube. Journal of Applied Physics, 2012, 111, 074901.	2.5	8
66	Crosswell Magnetic Sensing of Superparamagnetic Nanoparticles for Subsurface Applications. , 2013, , .		8
67	Efficient Removal of EOR Polymer from Produced Water Using Magnetic Nanoparticles and Regeneration/Re-Use of Spent Particles. , 2016, , .		8
68	Precision Control of Gel Formation Using Superparamagnetic Nanoparticle-Based Heating. , 2015, , .		7
69	Excitable Nanoparticles for Trapped Oil Mobilization. , 2014, , .		5
70	The Use of a pH-Triggered Polymer Gelant to Seal Cement Fractures in Wells. , 2015, , .		5
71	Alkaline Earth Element Adsorption onto PAA-Coated Magnetic Nanoparticles. Energies, 2017, 10, 223.	3.1	5
72	Estimation of Oil Production Rates in Reservoirs Exposed to Focused Vibrational Energy. , 2014, , .		4

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73	Temperature Dependence of the Shear-Thinning Behavior o Partially Hydrolyzed Polyacrylamide Solution for Enhanced Oil Recovery. Journal of Energy Resources Technology, Transactions of the ASME, 2021, 143, .	2.3	4
74	Viscosity and Stability of Dry CO2 Foams for Improved Oil Recovery. , 2016, , .		3
75	A two-site filtration model for silica nanoaggregate mobility in porous media under high salinity conditions. Journal of Nanoparticle Research, 2018, 20, 1.	1.9	3
76	Temperature dependence of relaxation time of hydrolyzed polyacrylamide solution for enhanced oil recovery. Journal of Industrial and Engineering Chemistry, 2019, 78, 257-264.	5.8	3
77	Silica, Fly Ash and Magnetite Nanoparticles for Improved Oil and Gas Production. Journal of the Korean Society of Mineral and Energy Resources Engineers, 2018, 55, 272-284.	0.4	3
78	Spontaneous generation of stable CO2 emulsions via the dissociation of nanoparticle-aided CO2 hydrate. Journal of Petroleum Science and Engineering, 2021, , 109203.	4.2	1
79	Retention of Iron-Oxide Nanoparticles in Sandstone Rocks with High Salinity. Journal of Computational and Theoretical Nanoscience, 2016, 13, 5693-5698.	0.4	1