Maen M Husein

List of Publications by Year
in descending order

97 papers	2,973 citations	147801 31 h-index	206112 48 g-index
97 all docs	97 docs citations	97 times ranked	2335 citing authors

#	Article	IF	Citations
1	On the evaluation of the viscosity of nanofluid systems: Modeling and data assessment. Renewable and Sustainable Energy Reviews, 2018, 81, 313-329.	16.4	183
2	Adsorption of asphaltenes from heavy oil onto in situ prepared NiO nanoparticles. Journal of Colloid and Interface Science, 2012, 378, 64-69.	9.4	117
3	Toward mechanistic understanding of asphaltene aggregation behavior in toluene: The roles of asphaltene structure, aging time, temperature, and ultrasonic radiation. Journal of Molecular Liquids, 2018, 264, 410-424.	4.9	101
4	Novel Nanoparticle-Based Drilling Fluid with Improved Characteristics. , 2012, , .		92
5	Application of bare nanoparticle-based nanofluids in enhanced oil recovery. Fuel, 2020, 267, 117262.	6.4	88
6	A novel method for the preparation of silver chloride nanoparticles starting from their solid powder using microemulsions. Journal of Colloid and Interface Science, 2005, 288, 457-467.	9.4	80
7	Application of adaptive neuro fuzzy interface system optimized with evolutionary algorithms for modeling CO 2 -crude oil minimum miscibility pressure. Fuel, 2017, 205, 34-45.	6.4	80
8	Modeling minimum miscibility pressure during pure and impure CO2 flooding using hybrid of radial basis function neural network and evolutionary techniques. Fuel, 2018, 220, 270-282.	6.4	76
9	Nanoparticle Preparation Using the Single Microemulsions Scheme. Current Nanoscience, 2008, 4, 370-380.	1.2	73
10	Formation of Silver Chloride Nanoparticles in Microemulsions by Direct Precipitation with the Surfactant Counterion. Langmuir, 2003, 19, 8467-8474.	3.5	69
11	A review of polymer nanohybrids for oil recovery. Advances in Colloid and Interface Science, 2019, 272, 102018.	14.7	69
12	Produced Water Treatment by Micellar-Enhanced Ultrafiltration. Environmental Science & Technology, 2010, 44, 1767-1772.	10.0	66
13	Hydrocracking of Heavy Oil by Means of In Situ Prepared Ultradispersed Nickel Nanocatalyst. Energy & Fuels, 2014, 28, 643-649.	5.1	61
14	Asphaltenes Adsorption onto Metal Oxide Nanoparticles: A Critical Evaluation of Measurement Techniques. Energy & Fuels, 2018, 32, 2213-2223.	5.1	57
15	Formation of silver bromide precipitate of nanoparticles in aÂsingle microemulsion utilizing the surfactant counterion. Journal of Colloid and Interface Science, 2004, 273, 426-434.	9.4	55
16	Rheological Behavior of Surface Modified Silica Nanoparticles Dispersed in Partially Hydrolyzed Polyacrylamide and Xanthan Gum Solutions: Experimental Measurements, Mechanistic Understanding, and Model Development. Energy & Fuels, 2018, 32, 10628-10638.	5.1	52
17	Application of cascade forward neural network and group method of data handling to modeling crude oil pyrolysis during thermal enhanced oil recovery. Journal of Petroleum Science and Engineering, 2021, 205, 108836.	4.2	50
18	A Novel Approach for the Preparation of AgBr Nanoparticles from Their Bulk Solid Precursor Using CTAB Microemulsions. Langmuir, 2006, 22, 2264-2272.	3.5	47

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19	Heavy oil recovery by surface modified silica nanoparticle/HPAM nanofluids. Fuel, 2019, 252, 622-634.	6.4	47
20	Modeling interfacial tension in N2/n-alkane systems using corresponding state theory: Application to gas injection processes. Fuel, 2018, 222, 779-791.	6.4	46
21	Application of nanoparticles for asphaltenes adsorption and oxidation: A critical review of challenges and recent progress. Fuel, 2020, 279, 117763.	6.4	44
22	Effects of Oil Viscosity on the Plugging Performance of Oil-in-Water Emulsion in Porous Media. Industrial & Engineering Chemistry Research, 2018, 57, 7301-7309.	3.7	43
23	Preparation of AgBr Nanoparticles in Microemulsions Via Reaction of AgNO3 with CTAB Counterion. Journal of Nanoparticle Research, 2007, 9, 787-796.	1.9	42
24	Effect of microemulsion variables on copper oxide nanoparticle uptake by AOT microemulsions. Journal of Colloid and Interface Science, 2007, 316, 442-450.	9.4	41
25	Data-driven modeling of interfacial tension in impure CO2-brine systems with implications for geological carbon storage. International Journal of Greenhouse Gas Control, 2019, 90, 102811.	4.6	40
26	Artificial Intelligence Based Methods for Asphaltenes Adsorption by Nanocomposites: Application of Group Method of Data Handling, Least Squares Support Vector Machine, and Artificial Neural Networks. Nanomaterials, 2020, 10, 890.	4.1	40
27	Ultradispersed particles in heavy oil: Part I, preparation and stabilization of iron oxide/hydroxide. Fuel Processing Technology, 2010, 91, 164-168.	7.2	39
28	Dispersed Fe2O3 nanoparticles preparation in heavy oil and their uptake of asphaltenes. Fuel Processing Technology, 2015, 133, 120-127.	7.2	39
29	Impact of PAM-Grafted Nanoparticles on the Performance of Hydrolyzed Polyacrylamide Solutions for Heavy Oil Recovery at Different Salinities. Industrial & Engineering Chemistry Research, 2019, 58, 9888-9899.	3.7	38
30	Removal of Heavy Metals from Aqueous Solutions by Precipitation-Filtration Using Novel Organo-Phosphorus Ligands. Separation Science and Technology, 2008, 43, 3461-3475.	2.5	36
31	Experimental Investigation on Wellbore Strengthening in Shales by Means of Nanoparticle-Based Drilling Fluids. , 2014, , .		35
32	Effect of Hydrophobic and Hydrophilic Metal Oxide Nanoparticles on the Performance of Xanthan Gum Solutions for Heavy Oil Recovery. Nanomaterials, 2019, 9, 94.	4.1	34
33	Modeling heat capacity of ionic liquids using group method of data handling: A hybrid and structure-based approach. International Journal of Heat and Mass Transfer, 2019, 129, 7-17.	4.8	34
34	Evolution of adsorbed layers of asphaltenes at oil-water interfaces: A novel experimental protocol. Journal of Colloid and Interface Science, 2021, 594, 80-91.	9.4	33
35	Improved MEUF removal of naphthenic acids from produced water. Journal of Membrane Science, 2009, 326, 161-167.	8.2	30
36	Ultradispersed particles in heavy oil: Part II, sorption of H2S(g). Fuel Processing Technology, 2010, 91, 169-174.	7.2	30

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37	Study and Modeling of Iron Hydroxide Nanoparticle Uptake by AOT (w/o) Microemulsions. Langmuir, 2007, 23, 13093-13103.	3.5	29
38	A field application of nanoparticle-based invert emulsion drilling fluids. Journal of Nanoparticle Research, 2015, 17, 1.	1.9	29
39	Thermal cracking of Athabasca VR and bitumen and their maltene fraction in a closed reactor system. Fuel, 2017, 190, 396-408.	6.4	29
40	Scavenging H2S(g) from oil phases by means of ultradispersed sorbents. Journal of Colloid and Interface Science, 2010, 342, 253-260.	9.4	28
41	Preparation of iron oxide nanoparticles from FeCl3solid powder using microemulsions. Physica Status Solidi (A) Applications and Materials Science, 2006, 203, 1324-1328.	1.8	26
42	Oxidation of asphaltenes adsorbed onto NiO nanoparticles. Applied Catalysis A: General, 2012, 445-446, 166-171.	4.3	26
43	Electrochemical Behavior of Potassium Ferricyanide in Aqueous and (w/o) Microemulsion Systems in the Presence of Dispersed Nickel Nanoparticles. Separation Science and Technology, 2013, 48, 681-689.	2.5	26
44	In Situ Preparation of Alumina Nanoparticles in Heavy Oil and Their Thermal Cracking Performance. Energy & Fuels, 2014, 28, 6563-6569.	5.1	26
45	Wall slipping behavior of foam with nanoparticle-armored bubbles and its flow resistance factor in cracks. Scientific Reports, 2017, 7, 5063.	3.3	26
46	Development of a powerful zeolitic imidazolate framework (ZIF-8)/carbon fiber nanocomposite for separation of hydrocarbons and crude oil from wastewater. Microporous and Mesoporous Materials, 2020, 307, 110463.	4.4	25
47	Hydrocracking of Athabasca VR Using NiO-WO₃ Zeolite-Based Catalysts. Energy & Fuels, 2018, 32, 2224-2233.	5.1	24
48	Thermal cracking of atmospheric residue versus vacuum residue. Fuel Processing Technology, 2018, 181, 331-339.	7.2	23
49	Modifying ceramic membranes with in situ grown iron oxide nanoparticles and their use for oily water treatment. Journal of Membrane Science, 2021, 617, 118641.	8.2	23
50	Method for Converting Demetallization Products into Dispersed Metal Oxide Nanoparticles in Heavy Oil. Energy & Fuels, 2012, 26, 810-815.	5.1	22
51	Nucleophilic Substitution Sulfonation in Microemulsions and Emulsions. Langmuir, 2000, 16, 9159-9167.	3.5	21
52	A novel oil-in-water drilling mud formulated with extracts from Indian mango seed oil. Petroleum Science, 2020, 17, 196-210.	4.9	21
53	On the evaluation of thermal conductivity of nanofluids using advanced intelligent models. International Communications in Heat and Mass Transfer, 2020, 118, 104825.	5.6	21
54	On the evaluation of crude oil oxidation during thermogravimetry by generalised regression neural network and gene expression programming: application to thermal enhanced oil recovery. Combustion Theory and Modelling, 2021, 25, 1268-1295.	1.9	21

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55	Clay-water interaction inhibition using amine and glycol-based deep eutectic solvents for efficient drilling of shale formations. Journal of Molecular Liquids, 2021, 340, 117134.	4.9	21
56	Enhancing the Performance of HPAM Polymer Flooding Using Nano CuO/Nanoclay Blend. Processes, 2020, 8, 907.	2.8	20
57	Kinetic modelling of thermal cracking of Arabian atmospheric and vacuum residue. Fuel Processing Technology, 2019, 189, 89-97.	7.2	19
58	Synergistic Mechanism of Particulate Matter (PM) from Coal Combustion and Saponin from Camellia Seed Pomace in Stabilizing CO₂ Foam. Energy & Fuels, 2018, 32, 3733-3742.	5.1	18
59	A review on zeolitic imidazolate frameworks use for crude oil spills cleanup. Advances in Geo-Energy Research, 2019, 3, 320-342.	6.0	17
60	Flow characteristics and EOR mechanism of foam flooding in fractured vuggy reservoirs. Journal of Petroleum Science and Engineering, 2022, 211, 110170.	4.2	17
61	In-depth characterization of light, medium and heavy oil asphaltenes as well as asphaltenes subfractions. Fuel, 2022, 324, 124525.	6.4	17
62	Experimental and modeling study of MEUF removal of naphthenic acids. Desalination, 2011, 273, 352-358.	8.2	16
63	Enhancement of cement properties by means of in situ grown nanoparticles. Construction and Building Materials, 2020, 261, 120496.	7.2	16
64	Role of naphthenic acid contaminants in the removal of p-xylene from synthetic produced water by MEUF. Chemical Engineering Research and Design, 2008, 86, 244-251.	5.6	15
65	Catalytic thermal cracking of Athabasca VR in a closed reactor system. Fuel, 2018, 217, 409-419.	6.4	15
66	Three-level structure change of asphaltenes undergoing conversion in a hydrogen donor solvent. Fuel, 2019, 255, 115736.	6.4	15
67	Combined Hydrotreating and Fluid Catalytic Cracking Processing for the Conversion of Inferior Coker Gas Oil: Effect on Nitrogen Compounds and Condensed Aromatics. Energy & Fuels, 2018, 32, 4979-4987.	5.1	14
68	Modelling asphaltene precipitation titration data: A committee of machines and a group method of data handling. Canadian Journal of Chemical Engineering, 2019, 97, 431-441.	1.7	14
69	Modeling asphaltene precipitation during natural depletion of reservoirs and evaluating screening criteria for stability of crude oils. Journal of Petroleum Science and Engineering, 2019, 181, 106127.	4.2	13
70	Environmentally benign invert emulsion mud with optimized performance for shale drilling. Journal of Petroleum Science and Engineering, 2020, 186, 106791.	4.2	13
71	Inferring the role of NiO nanoparticles from the thermal behavior of virgin and adsorbed hydrocarbons. Fuel, 2015, 147, 53-61.	6.4	12
72	Pilot-scale evaluation of hydrotreating inferior coker gas oil prior to its fluid catalytic cracking. Fuel, 2018, 226, 27-34.	6.4	12

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73	Conformance Control in Oil Reservoirs by Citric Acid-Coated Magnetite Nanoparticles. ACS Omega, 2021, 6, 9001-9012.	3.5	12
74	Shape Memory Polyurethane as a Drilling Fluid Lost Circulation Material. Macromolecular Materials and Engineering, 2021, 306, 2100354.	3.6	12
75	Theoretical and Experimental Approach for Understanding the Interactions Among SiO₂Nanoparticles, CaCO₃, and Xanthan Gum Components of Water-Based Mud. Energy & Fuels, 2021, 35, 4803-4814.	5.1	11
76	Salting-Out Induced Aggregation for Selective Separation of Vanadyl-oxide Tetraphenyl-porphyrin from Heavy Oil. Energy & Fuels, 2012, 26, 4420-4425.	5.1	10
77	Treatment of steam-assisted gravity drainage water using low coagulant dose and Fenton oxidation. Environmental Technology (United Kingdom), 2014, 35, 1630-1638.	2.2	8
78	Magnetic Î³-Fe₂O₃/ZIF-7 Composite Particles and Their Application for Oily Water Treatment. ACS Omega, 2022, 7, 3700-3712.	3.5	8
79	Nucleophilic substitution sulfonation in emulsions: effect of the surfactant counterion and different decyl halide reactants. Colloids and Surfaces A: Physicochemical and Engineering Aspects, 2001, 191, 241-252.	4.7	7
80	An integrated approach for predicting asphaltenes precipitation and deposition along wellbores. Journal of Petroleum Science and Engineering, 2021, 203, 108486.	4.2	7
81	Capillary-Driven Ejection of a Droplet from a Micropore into a Channel: A Theoretical Model and a Computational Fluid Dynamics Verification. Langmuir, 2022, 38, 4461-4472.	3.5	7
82	Preparation of nanoscale organosols and hydrosols via the phase transfer route. Journal of Nanoparticle Research, 2017, 19, 1.	1.9	6
83	Improving Polymer Flooding by Addition of Surface Modified Nanoparticles. , 2018, , .		6
84	Hydroconversion of asphaltene in a hydrogen donor solvent: Stability analysis of the asphaltene-solvent colloidal system. Fuel, 2020, 267, 117086.	6.4	6
85	An optimized thermal cracking approach for onsite upgrading of bitumen. Fuel, 2022, 307, 121885.	6.4	6
86	Nucleophilic substitution sulfonation in emulsions: Formation of sodium benzyl sulfonate. Canadian Journal of Chemical Engineering, 2001, 79, 744-750.	1.7	5
87	Using activated biochar for greenhouse gas mitigation and industrial water treatment. Mitigation and Adaptation Strategies for Global Change, 2016, 21, 761-777.	2.1	5
88	Production performance by polymer conformance control in ultra-low permeability heterogeneous sandstone reservoirs produced under their natural energy. Journal of Petroleum Science and Engineering, 2020, 193, 107348.	4.2	5
89	Partial Upgrading of Athabasca Bitumen Using Thermal Cracking. Catalysts, 2019, 9, 431.	3.5	4
90	Hydrocracking of Athabasca Vacuum Residue Using Ni-Mo-Supported Drill Cuttings. Catalysts, 2019, 9, 216.	3.5	4

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91	Effect of coagulant and flocculant addition scheme on the treatment of dairy farm wastewater. Journal of Water Reuse and Desalination, 2015, 5, 271-281.	2.3	3
92	Assessing the performance of foams stabilized by anionic/nonionic surfactant mixture under high temperature and pressure conditions. Colloids and Surfaces A: Physicochemical and Engineering Aspects, 2022, 651, 129699.	4.7	3
93	Nanoparticle Uptake by (W/O) Microemulsions. Surfactant Science, 2008, , .	0.0	1
94	Co-Contaminant-Aided Removal of Organics from Produced Water Using Micellar-Enhanced Ultrafiltration. , 2014, , 173-202.		0
95	9.The Use of Single Microemulsions for Nanoparticle Preparation. , 2018, , 291-312.		0
96	Temporal Scale Analysis of Gas Flow in Tight Gas Reservoirs considering the Nonequilibrium Effect. Geofluids, 2021, 2021, 1-12.	0.7	0
97	Maximizing the Uptake of Nickel Oxide Nanoparticles by AOT (W/O) Microemulsions. Statistical Science and Interdisciplinary Research, 2012, , 257-269.	0.0	0