NashaatÂ N Nassar

List of Publications by Year
in descending order

Source: https://exaly.com/author-pdf/1923476/publications.pdf

Version: 2024-02-01

109 papers	5,672 citations	70961 41 h-index	82410 72 g-index
115 all docs	115 docs citations	115 times ranked	3600 citing authors

#	Article	IF	Citations
1	Rapid removal and recovery of Pb(II) from wastewater by magnetic nanoadsorbents. Journal of Hazardous Materials, 2010, 184, 538-546.	6.5	489
2	Nanoparticle technology for heavy oil in-situ upgrading and recovery enhancement: Opportunities and challenges. Applied Energy, 2014, 133, 374-387.	5.1	294
3	Metal Oxide Nanoparticles for Asphaltene Adsorption and Oxidation. Energy & Fuels, 2011, 25, 1017-1023.	2.5	255
4	Asphaltene Adsorption onto Alumina Nanoparticles: Kinetics and Thermodynamic Studies. Energy & Fuels, 2010, 24, 4116-4122.	2.5	202
5	Application of Nanotechnology for Heavy Oil Upgrading: Catalytic Steam Gasification/Cracking of Asphaltenes. Energy & Fuels, 2011, 25, 1566-1570.	2.5	180
6	Nanoparticles for Inhibition of Asphaltenes Damage: Adsorption Study and Displacement Test on Porous Media. Energy & Fuels, 2013, 27, 2899-2907.	2.5	179
7	Enhanced Heavy Oil Recovery by in Situ Prepared Ultradispersed Multimetallic Nanoparticles: A Study of Hot Fluid Flooding for Athabasca Bitumen Recovery. Energy & Fuels, 2013, 27, 2194-2201.	2.5	156
8	Iron oxide nanoparticles for rapid adsorption and enhanced catalytic oxidation of thermally cracked asphaltenes. Fuel, 2012, 95, 257-262.	3.4	139
9	Effect of surface acidity and basicity of aluminas on asphaltene adsorption and oxidation. Journal of Colloid and Interface Science, 2011, 360, 233-238.	5.0	126
10	Comparative oxidation of adsorbed asphaltenes onto transition metal oxide nanoparticles. Colloids and Surfaces A: Physicochemical and Engineering Aspects, 2011, 384, 145-149.	2.3	123
11	Adsorption and Subsequent Oxidation of Colombian Asphaltenes onto Nickel and/or Palladium Oxide Supported on Fumed Silica Nanoparticles. Energy & Fuels, 2013, 27, 7336-7347.	2.5	112
12	Development of a Population Balance Model to Describe the Influence of Shear and Nanoparticles on the Aggregation and Fragmentation of Asphaltene Aggregates. Industrial & Engineering Chemistry Research, 2015, 54, 8201-8211.	1.8	106
13	Kinetics, Mechanistic, Equilibrium, and Thermodynamic Studies on the Adsorption of Acid Red Dye from Wastewater by Î³-Fe₂O₃Nanoadsorbents. Separation Science and Technology, 2010, 45, 1092-1103.	1.3	103
14	Role of Particle Size and Surface Acidity of Silica Gel Nanoparticles in Inhibition of Formation Damage by Asphaltene in Oil Reservoirs. Industrial & Engineering Chemistry Research, 2016, 55, 6122-6132.	1.8	102
15	The effects of SiO2 nanoparticles on the thermal stability and rheological behavior of hydrolyzed polyacrylamide based polymeric solutions. Journal of Petroleum Science and Engineering, 2017, 159, 841-852.	2.1	99
16	Effect of the Particle Size on Asphaltene Adsorption and Catalytic Oxidation onto Alumina Particles. Energy & Fuels, 2011, 25, 3961-3965.	2.5	94
17	Effects of Resin I on Asphaltene Adsorption onto Nanoparticles: A Novel Method for Obtaining Asphaltenes/Resin Isotherms. Energy & Fuels, 2016, 30, 264-272.	2.5	93
18	A Novel Solidâ€“Liquid Equilibrium Model for Describing the Adsorption of Associating Asphaltene Molecules onto Solid Surfaces Based on the â€œChemical Theoryâ€• Energy & Fuels, 2014, 28, 4963-4975.	2.5	92

#	Article	IF	Citations
19	Polyethylenimine-functionalized pyroxene nanoparticles embedded on Diatomite for adsorptive removal of dye from textile wastewater in a fixed-bed column. Chemical Engineering Journal, 2017, 320, 389-404.	6.6	90
20	Comparing kinetics and mechanism of adsorption and thermo-oxidative decomposition of Athabasca asphaltenes onto TiO2, ZrO2, and CeO2 nanoparticles. Applied Catalysis A: General, 2014, 484, 161-171.	2.2	84
21	Adsorptive removal of oil spill from oil-in-fresh water emulsions by hydrophobic alumina nanoparticles functionalized with petroleum vacuum residue. Journal of Colloid and Interface Science, 2014, 425, 168-177.	5.0	83
22	Transport Behavior of Multimetallic Ultradispersed Nanoparticles in an Oil-Sands-Packed Bed Column at a High Temperature and Pressure. Energy & Fuels, 2012, 26, 1645-1655.	2.5	80
23	Importance of the Adsorption Method Used for Obtaining the Nanoparticle Dosage for Asphaltene-Related Treatments. Energy & Fuels, 2016, 30, 2052-2059.	2.5	79
24	Silica Nanoparticle Enhancement in the Efficiency of Surfactant Flooding of Heavy Oil in a Glass Micromodel. Industrial & Engineering Chemistry Research, 2017, 56, 8528-8534.	1.8	77
25	Nanoparticle Preparation Using the Single Microemulsions Scheme. Current Nanoscience, 2008, 4, 370-380.	0.7	73
26	Kinetics, equilibrium and thermodynamic studies on the adsorptive removal of nickel, cadmium and cobalt from wastewater by superparamagnetic iron oxide nanoadsorbents. Canadian Journal of Chemical Engineering, 2012, 90, 1231-1238.	0.9	69
27	Kinetics of the catalytic thermo-oxidation of asphaltenes at isothermal conditions on different metal oxide nanoparticle surfaces. Catalysis Today, 2013, 207, 127-132.	2.2	69
28	Thermogravimetric studies on catalytic effect of metal oxide nanoparticles on asphaltene pyrolysis under inert conditions. Journal of Thermal Analysis and Calorimetry, 2012, 110, 1327-1332.	2.0	67
29	Influence of Asphaltene Aggregation on the Adsorption and Catalytic Behavior of Nanoparticles. Energy & Fuels, 2015, 29, 1610-1621.	2.5	65
30	Effect of oxide support on Niâ€“Pd bimetallic nanocatalysts for steam gasification of n-C 7 asphaltenes. Fuel, 2015, 156, 110-120.	3.4	57
31	Removal of oil from oil-in-saltwater emulsions by adsorption onto nano-alumina functionalized with petroleum vacuum residue. Journal of Colloid and Interface Science, 2014, 433, 58-67.	5.0	55
32	Oil spill cleanup employing magnetite nanoparticles and yeast-based magnetic bionanocomposite. Journal of Environmental Management, 2019, 230, 405-412.	3.8	55
33	Maghemite nanosorbcats for methylene blue adsorption and subsequent catalytic thermo-oxidative decomposition: Computational modeling and thermodynamics studies. Journal of Colloid and Interface Science, 2016, 461, 396-408.	5.0	52
34	Silica-alumina composite as an effective adsorbent for the removal of metformin from water. Journal of Environmental Chemical Engineering, 2019, 7, 102994.	3.3	51
35	Effects of Surface Acidity and Polarity of SiO2 Nanoparticles on the Foam Stabilization Applied to Natural Gas Flooding in Tight Gas-Condensate Reservoirs. Energy & Fuels, 2018, 32, 5824-5833.	2.5	50
36	Kinetics and mechanisms of the catalytic thermal cracking of asphaltenes adsorbed on supported nanoparticles. Petroleum Science, 2016, 13, 561-571.	2.4	49

#	Article	IF	Citations
37	Adsorptive removal of dyes from synthetic and real textile wastewater using magnetic iron oxide nanoparticles: Thermodynamic and mechanistic insights. Canadian Journal of Chemical Engineering, 2015, 93, 1965-1974.	0.9	47
38	Rapid Adsorption of Methylene Blue from Aqueous Solutions by Goethite Nanoadsorbents. Environmental Engineering Science, 2012, 29, 790-797.	0.8	46
39	In Situ Upgrading of Athabasca Bitumen Using Multimetallic Ultradispersed Nanocatalysts in an Oil Sands Packed-Bed Column: Part 1. Produced Liquid Quality Enhancement. Energy & Fuels, 2014, 28, 1338-1350.	2.5	46
40	Treatment of olive mill based wastewater by means of magnetic nanoparticles: Decolourization, dephenolization and COD removal. Environmental Nanotechnology, Monitoring and Management, 2014, 1-2, 14-23.	1.7	46
41	Conversion of petroleum coke into valuable products using oxy-cracking technique. Fuel, 2018, 215, 865-878.	3.4	45
42	The effect of the nanosize on surface properties of NiO nanoparticles for the adsorption of Quinolin-65. Physical Chemistry Chemical Physics, 2016, 18, 6839-6849.	1.3	43
43	Nanopyroxene-Based Nanofluids for Enhanced Oil Recovery in Sandstone Cores at Reservoir Temperature. Energy & Fuels, 2019, 33, 877-890.	2.5	43
44	Modeling and Prediction of Asphaltene Adsorption Isotherms Using Polanyiâ€™s Modified Theory. Energy & Fuels, 2013, 27, 2908-2914.	2.5	42
45	Effect of microemulsion variables on copper oxide nanoparticle uptake by AOT microemulsions. Journal of Colloid and Interface Science, 2007, 316, 442-450.	5.0	41
46	Fixed-bed column studies of total organic carbon removal from industrial wastewater by use of diatomite decorated with polyethylenimine-functionalized pyroxene nanoparticles. Journal of Colloid and Interface Science, 2018, 513, 28-42.	5.0	40
47	Ultradispersed particles in heavy oil: Part I, preparation and stabilization of iron oxide/hydroxide. Fuel Processing Technology, 2010, 91, 164-168.	3.7	39
48	How Effective Are Nanomaterials for the Removal of Heavy Metals from Water and Wastewater?. Water, Air, and Soil Pollution, 2020, 231, 1.	1.1	38
49	Hydroxyl-functionalized silicate-based nanofluids for enhanced oil recovery. Fuel, 2020, 269, 117462.	3.4	36
50	A New Model for Describing the Adsorption of Asphaltenes on Porous Media at a High Pressure and Temperature under Flow Conditions. Energy & Fuels, 2015, 29, 4210-4221.	2.5	35
51	Development of a support for a NiO catalyst for selective adsorption and post-adsorption catalytic steam gasification of thermally converted asphaltenes. Catalysis Today, 2013, 207, 112-118.	2.2	33
52	Pyrolysis and Oxidation of Asphaltene-Born Coke-like Residue Formed onto in Situ Prepared NiO Nanoparticles toward Advanced in Situ Combustion Enhanced Oil Recovery Processes. Energy & Fuels, 2018, 32, 5033-5044.	2.5	33
53	Preparation and characterization of polyethylenimine-functionalized pyroxene nanoparticles and its application in wastewater treatment. Colloids and Surfaces A: Physicochemical and Engineering Aspects, 2017, 525, 20-30.	2.3	31
54	Ultradispersed particles in heavy oil: Part II, sorption of H2S(g). Fuel Processing Technology, 2010, 91, 169-174.	3.7	30

#	Article	IF	Citations
55	In Situ Upgrading of Athabasca Bitumen Using Multimetallic Ultradispersed Nanocatalysts in an Oil Sands Packed-Bed Column: Part 2. Solid Analysis and Gaseous Product Distribution. Energy & Fuels, 2014, 28, 1351-1361.	2.5	30
56	Thermo-Oxidative Decomposition Behaviors of Different Sources of n-C₇ Asphaltenes under High-Pressure Conditions. Energy & Fuels, 2020, 34, 8740-8758.	2.5	30
57	Study and Modeling of Iron Hydroxide Nanoparticle Uptake by AOT (w/o) Microemulsions. Langmuir, 2007, 23, 13093-13103.	1.6	29
58	Effects of resin I on the catalytic oxidation of n-C₇asphaltenes in the presence of silica-based nanoparticles. RSC Advances, 2016, 6, 74630-74642.	1.7	29
59	Scavenging H2S(g) from oil phases by means of ultradispersed sorbents. Journal of Colloid and Interface Science, 2010, 342, 253-260.	5.0	28
60	Comparative study on thermal cracking of Athabasca bitumen. Journal of Thermal Analysis and Calorimetry, 2013, 114, 465-472.	2.0	27
61	Effects of the size of NiO nanoparticles on the catalytic oxidation of Quinolin-65 as an asphaltene model compound. Fuel, 2017, 207, 423-437.	3.4	27
62	Preparation of iron oxide nanoparticles from FeCl3solid powder using microemulsions. Physica Status Solidi (A) Applications and Materials Science, 2006, 203, 1324-1328.	0.8	26
63	Nanosize effects of NiO nanosorbcats on adsorption and catalytic thermoâ€oxidative decomposition of vacuum residue asphaltenes. Canadian Journal of Chemical Engineering, 2017, 95, 1864-1874.	0.9	25
64	Effect of nanosized and surface-structural-modified nano-pyroxene on adsorption of violanthrone-79. RSC Advances, 2016, 6, 64482-64493.	1.7	25
65	A combined experimental and density functional theory study of metformin oxy-cracking for pharmaceutical wastewater treatment. RSC Advances, 2019, 9, 13403-13413.	1.7	24
66	Clarifying the catalytic role of NiO nanoparticles in the oxidation of asphaltenes. Applied Catalysis A: General, 2013, 462-463, 116-120.	2.2	22
67	Synthesis, solvatochromism and crystal structure of trans -[Cu(Et 2 NCH 2 CH 2 NH 2) 2 .H 2 O](NO 3) 2 complex: Experimental withÂDFTÂcombination. Journal of Molecular Structure, 2017, 1148, 328-338.	1.8	22
68	Catalytic oxy-cracking of petroleum coke on copper silicate for production of humic acids. Applied Catalysis B: Environmental, 2020, 264, 118472.	10.8	22
69	Synergetic effects of cerium and nickel in Ce-Ni-MFI catalysts on low-temperature water-gas shift reaction. Fuel, 2019, 237, 361-372.	3.4	21
70	Theoretical and thermogravimetric study on the thermo-oxidative decomposition of Quinolin-65 as an asphaltene model molecule. RSC Advances, 2016, 6, 54418-54430.	1.7	20
71	Enhancing Chromium (VI) removal from synthetic and real tannery effluents by using diatomite-embedded nanopyroxene. Chemosphere, 2020, 252, 126523.	4.2	20
72	Experimental and theoretical studies on the thermal decomposition of metformin. Journal of Thermal Analysis and Calorimetry, 2019, 138, 433-441.	2.0	19

#	Article	IF	Citations
73	Capturing H₂S_(g)by In Situ-Prepared Ultradispersed Metal Oxide Particles in an Oilsand-Packed Bed Column. Energy & Fuels, 2010, 24, 5903-5906.	2.5	18
74	Experimental and computational modeling studies on silica-embedded NiO/MgO nanoparticles for adsorptive removal of organic pollutants from wastewater. RSC Advances, 2017, 7, 14021-14038.	1.7	18
75	Nanopyroxene Grafting with Î²-Cyclodextrin Monomer for Wastewater Applications. ACS Applied Materials & Interfaces, 2017, 9, 42393-42407.	4.0	18
76	Magnetic Nanostructured White Graphene for Oil Spill and Water Cleaning. Industrial & Engineering Chemistry Research, 2018, 57, 13065-13076.	1.8	18
77	Integrating Silicate-Based Nanoparticles with Low-Salinity Water Flooding for Enhanced Oil Recovery in Sandstone Reservoirs. Industrial & Engineering Chemistry Research, 2020, 59, 16225-16239.	1.8	18
78	Experimental and theoretical studies on oxy-cracking of Quinolin-65 as a model molecule for residual feedstocks. Reaction Chemistry and Engineering, 2017, 2, 703-719.	1.9	16
79	Metformin Removal from Water Using Fixed-bed Column of Silica-Alumina Composite. Colloids and Surfaces A: Physicochemical and Engineering Aspects, 2020, 597, 124814.	2.3	16
80	Enhanced Oil Recovery from Austin Chalk Carbonate Reservoirs Using Faujasite-Based Nanoparticles Combined with Low-Salinity Water Flooding. Energy & Fuels, 2021, 35, 213-225.	2.5	16
81	Design of a laboratory experiment on heat transfer in an agitated vessel. Education for Chemical Engineers, 2011, 6, e83-e89.	2.8	15
82	A combined experimental and computational modeling study on adsorption of propionic acid onto silica-embedded NiO/MgO nanoparticles. Chemical Engineering Journal, 2017, 327, 666-677.	6.6	15
83	Enhanced thermal conductivity and reduced viscosity of aegirine-based VR/VGO nanofluids for enhanced thermal oil recovery application. Journal of Petroleum Science and Engineering, 2020, 185, 106569.	2.1	13
84	Oxy-cracking technique for producing non-combustion products from residual feedstocks and cleaning up wastewater. Applied Energy, 2020, 280, 115890.	5.1	13
85	Catalytic steam gasification of n-C5 asphaltenes by kaolin-based catalysts in a fixed-bed reactor. Applied Catalysis A: General, 2015, 507, 149-161.	2.2	12
86	Enhancement of petroleum coke thermal reactivity using Oxyâ€cracking technique. Canadian Journal of Chemical Engineering, 2019, 97, 2794-2803.	0.9	11
87	Oxy-Cracking Reaction for Enhanced Settling and Dewaterability of Oil Sands Tailings. Industrial & Engineering Chemistry Research, 2019, 58, 4988-4996.	1.8	11
88	Development and characterization of novel combinations of Ceâ€Niâ€MFI solids for water gas shift reaction. Canadian Journal of Chemical Engineering, 2019, 97, 140-151.	0.9	11
89	Agricultural Land Use Change and its Drivers in the Palestinian Landscape Under Political Instability, the Case of Tulkarm City. Journal of Borderlands Studies, 2019, 34, 377-394.	0.8	10
90	Effects of glycerol on the minimization of water readsorption on sub-bituminous coal. Drying Technology, 2017, 35, 249-260.	1.7	9

#	Article	IF	Citations
91	Mechanism of Hierarchical Porosity Development in Hexagonal Boron Nitride Nanocrystalline Microstructures for Biomedical and Industrial Applications. ACS Applied Nano Materials, 2018, 1, 4491-4501.	2.4	9
92	Effect of pressure on thermo-oxidative reactions of saturates, aromatics, and resins (S-Ar-R) from extra-heavy crude oil. Fuel, 2022, 311, 122596.	3.4	9
93	Enhanced Settling and Dewatering of Oil Sands Mature Fine Tailings with Titanomagnetite Nanoparticles Grafted with Polyacrylamide and Lauryl Sulfate. ACS Applied Nano Materials, 2022, 5, 7679-7695.	2.4	9
94	A novel laboratory experiment for demonstrating boiling heat transfer. Education for Chemical Engineers, 2012, 7, e210-e218.	2.8	8
95	Kinetic study of the thermo-oxidative decomposition of metformin by isoconversional and theoretical methods. Thermochimica Acta, 2020, 694, 178797.	1.2	8
96	Size Effects of NiO Nanoparticles on the Competitive Adsorption of Quinolin-65 and Violanthrone-79: Implications for Oil Upgrading and Recovery. ACS Applied Nano Materials, 2020, 3, 5311-5326.	2.4	8
97	A heat-transfer laboratory experiment with shell-and-tube condenser. Education for Chemical Engineers, 2017, 19, 38-47.	2.8	7
98	Influence of CTAB-Grafted Faujasite Nanoparticles on the Dynamic Interfacial Tension of Oil/Water Systems. Energy & Fuels, 0, , .	2.5	6
99	Study and Modeling of Metal Oxide Solubilization in (w/o) Microemulsions. Journal of Dispersion Science and Technology, 2010, 31, 1714-1720.	1.3	5
100	Simultaneous removal of silica and TOC from steam assisted gravity drainage (SAGD) produced water using iron-hydroxide-coated walnut shell filter media. Journal of Water Process Engineering, 2021, 43, 102016.	2.6	5
101	Density functional theory study on the catalytic dehydrogenation of methane on MoO3 (0 1 0) surface. Computational and Theoretical Chemistry, 2022, 1211, 113689.	1.1	5
102	A study on the characteristics of Algerian Hassi-Messaoud asphaltenes: solubility and precipitation. Petroleum Science and Technology, 2022, 40, 1279-1301.	0.7	5
103	Catalytic Steam Gasification of Athabasca Visbroken Residue by NiOâ€“Kaolin-Based Catalysts in a Fixed-Bed Reactor. Energy & Fuels, 2017, 31, 7396-7404.	2.5	4
104	Investigation of the interaction between nanoparticles, asphaltenes, and silica surfaces by realâ€time quartz crystal microbalance with dissipation. Canadian Journal of Chemical Engineering, 2021, 99, 2452-2466.	0.9	4
105	Naturally derived pyroxene nanomaterials: an ore for wide applications. , 2020, , 731-774.		1
106	Nanoparticles as Adsorbents for Asphaltenes. Lecture Notes in Nanoscale Science and Technology, 2021, , 97-129.	0.4	1
107	Nanoparticles for Cleaning up Oil Sands Process-Affected Water. Lecture Notes in Nanoscale Science and Technology, 2021, , 445-496.	0.4	1
108	O-exchange evidenced in Ce-Ni-MFI catalysts during water gas shift reaction: Use of isotopic water (50% H218O - 50% H216O). Applied Catalysis B: Environmental, 2020, 263, 118365.	10.8	0

#	Article	IF	Citations
109	Maximizing the Uptake of Nickel Oxide Nanoparticles by AOT (W/O) Microemulsions. Statistical Science and Interdisciplinary Research, 2012, , 257-269.	0.0	0