Slimane Merouani

List of Publications by Year
in descending order

92	3,153	172386 29	168321 53
papers	citations	h-index	g-index

95	95	95	1849
all docs	docs citations	times ranked	citing authors

#	Article	IF	Citations
1	Protonated Hydroxylamineâ€Assisted Iron Catalytic Activation of Persulfate for the Rapid Removal of Persistent Organics from Wastewater. Clean - Soil, Air, Water, 2023, 51, .	0.7	2
2	The multiple role of inorganic and organic additives in the degradation of reactive green 12 by UV/chlorine advanced oxidation process. Environmental Technology (United Kingdom), 2022, 43, 835-847.	1.2	9
3	Methanol sono-pyrolysis for hydrogen recovery: Effect of methanol concentration under an argon atmosphere. Chemical Engineering Journal, 2022, 433, 133272.	6.6	11
4	An alternative technique for determining the number density of acoustic cavitation bubbles in sonochemical reactors. Ultrasonics Sonochemistry, 2022, 82, 105872.	3.8	18
5	Impact of dissolved rare gases (Ar, Xe and He) on single-bubble sonochemistry in the presence of carbon tetrachloride. Chemical Papers, 2022, 76, 3011-3030.	1.0	8
6	Ultrasound/chlorine sono-hybrid-advanced oxidation process: Impact of dissolved organic matter and mineral constituents. Ultrasonics Sonochemistry, 2022, 83, 105918.	3.8	15
7	Clean hydrogen production by ultrasound (sonochemistry): The effect of noble gases. Current Research in Green and Sustainable Chemistry, 2022, 5, 100288.	2.9	4
8	Removal of persistent textile dyes from wastewater by Fe(<scp>ii</scp>)/H₂O₂/H₃NOH⁺ integrated system: process performance and limitations. Environmental Science Advances, 2022, 1, 192-207.	1.0	7
9	Numerical investigation of heat and mass transfer during hydrogen desorption in a large-scale metal hydride reactor coupled to a phase change material with nano-oxide additives. International Journal of Hydrogen Energy, 2022, 47, 14611-14627.	3.8	19
10	The performance of hydrogen desorption from a metal hydride with heat supply by a phase change material incorporated in porous media (metal foam): Heat and mass transfer assessment. Journal of Energy Storage, 2022, 51, 104449.	3.9	24
11	Modeling of Textile Dye Removal from Wastewater Using Innovative Oxidation Technologies (Fe(II)/Chlorine and H₂O₂/Periodate Processes): Artificial Neural Network-Particle Swarm Optimization Hybrid Model. ACS Omega, 2022, 7, 13818-13825.	1.6	16
12	Heat and mass transfer characteristics of charging in a metal hydride-phase change material reactor with nano oxide additives: The large scale-approach. Applied Thermal Engineering, 2022, 213, 118622.	3.0	21
13	Ascorbic Acid Solubility and Thermodynamic Characteristics in Several Neat Solvents with Temperatures Ranging from 293 to 313ÂK. International Journal of Thermophysics, 2022, 43, .	1.0	4
14	The role of reactive chlorine species and hydroxyl radical in the ultrafast removal of Safranin O from wastewater by CCl4/ultrasound sono-process. Chemical Engineering and Processing: Process Intensification, 2022, 178, 109014.	1.8	5
15	Thermodynamics and kinetics analysis of hydrogen absorption in large-scale metal hydride reactor coupled to phase change material-metal foam-based latent heat storage system. International Journal of Hydrogen Energy, 2022, 47, 27617-27632.	3.8	15
16	Fe(III)â€catalyzed degradation of persistent textile dyes by chlorine at slightly acidic conditions: the crucial role of Cl 2 â—ê˙ radical in the degradation process and impacts of mineral and organic competitors. Asia-Pacific Journal of Chemical Engineering, 2021, 16, .	0.8	9
17	Numerical insight into the sonolytic ozonation applied for water treatment. , 2021, , 1-23.		2
18	Computer simulation of N2O/argon gas mixture effect on the acoustic generation of hydroxyl radicals in water: toward understanding the mechanism of N2O inhibited/improved-sonochemical processes. , 2021, , 87-114.		0

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19	The manifold role of heavy metal ions (Cu(II), Cd(II), and Zn(II)) in the solar photocatalytic and sonophotocatalytic treatment of water containing phenol. , 2021, , 467-485.		0
20	On the sonochemical production of nitrite and nitrate in water: A computational study. , 2021, , 429-452.		2
21	Development of a free radical-based kinetics model for the oxidative degradation of chlorazol black in aqueous solution using periodate photoactivated process. Journal of Photochemistry and Photobiology A: Chemistry, 2021, 408, 113102.	2.0	18
22	How do dissolved gases affect the sonochemical process of hydrogen production? An overview of thermodynamic and mechanistic effects â€“ On the â€œhot spot theoryâ€• Ultrasonics Sonochemistry, 2021, 72, 105422.	3.8	40
23	A comprehensive numerical analysis of heat and mass transfer phenomenons during cavitation sono-process. Ultrasonics Sonochemistry, 2021, 73, 105498.	3.8	30
24	Insight into the impact of excluding mass transport, heat exchange and chemical reactions heat on the sonochemical bubble yield: Bubble size-dependency. Ultrasonics Sonochemistry, 2021, 73, 105511.	3.8	22
25	A complete analysis of the effects of transfer phenomenons and reaction heats on sono-hydrogen production from reacting bubbles: Impact of ambient bubble size. International Journal of Hydrogen Energy, 2021, 46, 18767-18779.	3.8	21
26	Theoretical investigation of the effect of ambient pressure on bubble sonochemistry: Special focus on hydrogen and reactive radicals production. Chemical Physics, 2021, 547, 111171.	0.9	24
27	Optimization and prediction of safranin-O cationic dye removal from aqueous solution by emulsion liquid membrane (ELM) using artificial neural network-particle swarm optimization (ANN-PSO) hybrid model and response surface methodology (RSM). Journal of Environmental Chemical Engineering, 2021, 9, 105837.	3.3	29
28	Carbon tetrachloride (CCl4) sonochemistry: A comprehensive mechanistic and kinetics analysis elucidating how CCl4 pyrolysis improves the sonolytic degradation of nonvolatile organic contaminants. Separation and Purification Technology, 2021, 275, 118614.	3.9	19
29	Effect of carbon tetrachloride (CCl4) sonochemistry on the size of active bubbles for the production of reactive oxygen and chlorine species in acoustic cavitation field. Chemical Engineering Journal, 2021, 426, 130251.	6.6	23
30	Numerical insight into the liquid compressibility effect on the sonochemical activity of acoustic bubbles. , 2021, , 453-474.		0
31	Numerical simulation of acoustic cavitation and its chemical effect in seawater: toward understanding the multiple role of salinity in the sonochemical degradation of organic pollutants. , 2021, , 63-85.		2
32	Synergy of combining megahertz ultrasound frequency and heat-activated persulfate for wastewater decontamination: micromodeling of acoustic cavitation and its role in the sono-hybrid process. , 2021, , 405-427.		1
33	Sonophotocatalytic degradation of refractory textile dyes. , 2021, , 111-140.		1
34	Sonochemical Treatment of Textile Wastewater. Environmental Chemistry for A Sustainable World, 2021, , 147-187.	0.3	9
35	A full mechanistic and kinetics analysis of carbon tetrachloride (CCl4) sono-conversion: Liquid temperature effect. Journal of Environmental Chemical Engineering, 2021, 9, 106555.	3.3	4
36	Impact of seawater salinity on the sonochemical removal of emerging organic pollutants. Environmental Technology (United Kingdom), 2020, 41, 2305-2313.	1.2	9

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37	Toward understanding the mechanism of pure CO₂â€quenching sonochemical processes. Journal of Chemical Technology and Biotechnology, 2020, 95, 553-566.	1.6	17
38	Acetone photoactivated process: application to the degradation of refractory organic pollutants in very saline waters. Water and Environment Journal, 2020, 34, 87-94.	1.0	2
39	Heat and mass transfer during the storage of hydrogen in LaNi5-based metal hydride: 2D simulation results for a large scale, multi-pipes fixed-bed reactor. International Journal of Heat and Mass Transfer, 2020, 147, 118939.	2.5	49
40	Liquid compressibility effect on the acoustic generation of free radicals. Journal of Applied Water Engineering and Research, 2020, 8, 247-261.	1.0	7
41	The Sonochemical Approach for Hydrogen Production. Nanotechnology in the Life Sciences, 2020, , 1-29.	0.4	6
42	Influence of processing conditions on the synergism between UV irradiation and chlorine toward the degradation of refractory organic pollutants in UV/chlorine advanced oxidation system. Science of the Total Environment, 2020, 736, 139623.	3.9	31
43	Influence of mineral water constituents, organic matter and water matrices on the performance of the H₂O₂/IO₄^{â^'}-advanced oxidation process. Environmental Science: Water Research and Technology, 2019, 5, 1985-1992.	1.2	23
44	Rapid catalytic degradation of refractory textile dyes in Fe(II)/chlorine system at near neutral pH: Radical mechanism involving chlorine radical anion (Cl2â^)-mediated transformation pathways and impact of environmental matrices. Separation and Purification Technology, 2019, 227, 115685.	3.9	48
45	Sonolytic ozonation for water treatment: efficiency, recent developments, and challenges. Current Opinion in Green and Sustainable Chemistry, 2019, 18, 98-108.	3.2	19
46	H₂O₂/periodate (IO₄^{â^'}): a novel advanced oxidation technology for the degradation of refractory organic pollutants. Environmental Science: Water Research and Technology, 2019, 5, 1113-1123.	1.2	43
47	Relationship between liquid depth and the acoustic generation of hydrogen: design aspect for large cavitational reactors with special focus on the role of the wave attenuation. International Journal of Green Energy, 2019, 16, 423-434.	2.1	7
48	Using photoactivated acetone for the degradation of Chlorazol Black in aqueous solutions: Impact of mineral and organic additives. Science of the Total Environment, 2019, 653, 833-838.	3.9	11
49	Intensification of light green SF yellowish (LGSFY) photodegradion in water by iodate ions: Iodine radicals implication in the degradation process and impacts of water matrix components. Science of the Total Environment, 2019, 652, 1219-1227.	3.9	18
50	UV-photolysis of Chlorazol Black in aqueous media: Process intensification using acetone and evidence of methyl radical implication in the degradation process. Journal of Photochemistry and Photobiology A: Chemistry, 2019, 368, 268-275.	2.0	15
51	New aspect of the effect of liquid temperature on sonochemical degradation of nonvolatile organic pollutants in aqueous media. Separation and Purification Technology, 2018, 200, 68-74.	3.9	27
52	Correlations Between the Sonochemical Production Rate of Hydrogen and the Maximum Temperature and Pressure Reached in Acoustic Bubbles. Arabian Journal for Science and Engineering, 2018, 43, 6109-6117.	1.7	16
53	Probing the radical chemistry and the reaction zone during the sono-degradation of endocrine disruptor 2-phenoxyethanol in water. Ultrasonics Sonochemistry, 2018, 41, 521-526.	3.8	14
54	Acoustic cavitation in 1-butyl-3-methylimidazolium bis(triflluoromethyl-sulfonyl)imide based ionic liquid. Ultrasonics Sonochemistry, 2018, 41, 143-155.	3.8	10

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55	Efficient degradation method of emerging organic pollutants in marine environment using UV/periodate process: Case of chlorazol black. Marine Pollution Bulletin, 2018, 126, 557-564.	2.3	72
56	Characterization and application of a 1700-kHz acoustic cavitation field for water decontamination: a case study with toluidine blue. Applied Water Science, 2018, 8, 1.	2.8	11
57	Depth effect on the inertial collapse of cavitation bubble under ultrasound: Special emphasis on the role of the wave attenuation. Ultrasonics Sonochemistry, 2018, 48, 136-150.	3.8	17
58	Liquid depth effect on the acoustic generation of hydroxyl radical for large scale sonochemical reactors. Separation and Purification Technology, 2018, 206, 118-130.	3.9	12
59	Simulation of hydrogen absorption/desorption on metal hydride LaNi5-H2: Mass and heat transfer. Applied Thermal Engineering, 2018, 142, 110-117.	3.0	41
60	Sonochemical and photosonochemical degradation of endocrine disruptor 2-phenoxyethanol in aqueous media. Separation and Purification Technology, 2018, 206, 356-364.	3.9	9
61	Persulfate-enhanced sonochemical degradation of naphthol blue black in water: Evidence of sulfate radical formation. Ultrasonics Sonochemistry, 2017, 34, 580-587.	3.8	116
62	Improvement of sonochemical degradation of Brilliant blue R in water using periodate ions: Implication of iodine radicals in the oxidation process. Ultrasonics Sonochemistry, 2017, 37, 344-350.	3.8	65
63	Efficient photocatalytic degradation of Safranin O by integrating solar-UV/TiO 2 /persulfate treatment: Implication of sulfate radical in the oxidation process and effect of various water matrix components. Journal of Photochemistry and Photobiology A: Chemistry, 2017, 345, 80-91.	2.0	72
64	Enhanced sonolytic mineralization of basic red 29 in water by integrated ultrasound/Fe2+/TiO2 treatment. Research on Chemical Intermediates, 2017, 43, 1709-1722.	1.3	18
65	Ultrasonic Destruction of Acid Orange 7: Effect of Humic Acid, Surfactants and Complex Matrices. Water Environment Research, 2017, 89, 250-259.	1.3	19
66	Sonochemical degradation of Basic Red 29 in aqueous media. Turkish Journal of Chemistry, 2017, 41, 99-115.	0.5	11
67	Sonochemical degradation of basic fuchsin in water. Desalination and Water Treatment, 2016, 57, 27314-27330.	1.0	24
68	The size of active bubbles for the production of hydrogen in sonochemical reaction field. Ultrasonics Sonochemistry, 2016, 32, 320-327.	3.8	51
69	Computational engineering study of hydrogen production via ultrasonic cavitation in water. International Journal of Hydrogen Energy, 2016, 41, 832-844.	3.8	70
70	Sonolytic degradation of naphthol blue black at 1700 kHz: Effects of salts, complex matrices and persulfate. Journal of Water Process Engineering, 2016, 9, 67-77.	2.6	31
71	Experimental and numerical investigation of the effect of liquid temperature on the sonolytic degradation of some organic dyes in water. Ultrasonics Sonochemistry, 2016, 28, 382-392.	3.8	58
72	Optimum Bubble Temperature for the Production of Hydroxyl Radical in Acoustic Cavitation â€“ Frequency Dependence. Acta Acustica United With Acustica, 2015, 101, 684-689.	0.8	8

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73	Mechanism of the sonochemical production of hydrogen. International Journal of Hydrogen Energy, 2015, 40, 4056-4064.	3.8	77
74	Comprehensive experimental and numerical investigations of the effect of frequency and acoustic intensity on the sonolytic degradation of naphthol blue black in water. Ultrasonics Sonochemistry, 2015, 26, 30-39.	3.8	48
75	Sonochemical degradation of naphthol blue black in water: Effect of operating parameters. Ultrasonics Sonochemistry, 2015, 26, 40-47.	3.8	72
76	New interpretation of the effects of argon-saturating gas toward sonochemical reactions. Ultrasonics Sonochemistry, 2015, 23, 37-45.	3.8	53
77	Computer simulation of chemical reactions occurring in collapsing acoustical bubble: dependence of free radicals production on operational conditions. Research on Chemical Intermediates, 2015, 41, 881-897.	1.3	63
78	A method for predicting the number of active bubbles in sonochemical reactors. Ultrasonics Sonochemistry, 2015, 22, 51-58.	3.8	103
79	Sensitivity of free radicals production in acoustically driven bubble to the ultrasonic frequency and nature of dissolved gases. Ultrasonics Sonochemistry, 2015, 22, 41-50.	3.8	134
80	Modeling of ultrasonic cavitation as an advanced technique for water treatment. Desalination and Water Treatment, 2015, 56, 1465-1475.	1.0	11
81	Theoretical Procedure for the Characterization of Acoustic Cavitation Bubbles. Acta Acustica United With Acustica, 2014, 100, 823-833.	0.8	29
82	Theoretical estimation of the temperature and pressure within collapsing acoustical bubbles. Ultrasonics Sonochemistry, 2014, 21, 53-59.	3.8	128
83	Energy analysis during acoustic bubble oscillations: Relationship between bubble energy and sonochemical parameters. Ultrasonics, 2014, 54, 227-232.	2.1	67
84	Effects of ultrasound frequency and acoustic amplitude on the size of sonochemically active bubbles â€“ Theoretical study. Ultrasonics Sonochemistry, 2013, 20, 815-819.	3.8	133
85	Influence of bicarbonate and carbonate ions on sonochemical degradation of Rhodamine B in aqueous phase. Journal of Hazardous Materials, 2010, 175, 593-599.	6.5	169
86	Influence of experimental parameters on sonochemistry dosimetries: KI oxidation, Fricke reaction and H2O2 production. Journal of Hazardous Materials, 2010, 178, 1007-1014.	6.5	132
87	Modeling of ultrasonic degradation of non-volatile organic compounds by Langmuir-type kinetics. Ultrasonics Sonochemistry, 2010, 17, 773-782.	3.8	81
88	Sonochemical degradation of Rhodamine B in aqueous phase: Effects of additives. Chemical Engineering Journal, 2010, 158, 550-557.	6.6	304
89	Sonochemical degradation of endocrine disruptor propylparaben in pure water, natural water, and seawater. Desalination and Water Treatment, 0, , 1-11.	1.0	6
90	Synergy between solar photocatalysis and high frequency sonolysis toward the degradation of organic pollutants in aqueous phase - case of phenol. , 0, 62, 457-464.		8

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91	Degradation of Safranin O by thermally activated persulfate in the presence of mineral and organic additives: impact of environmental matrices. , 0, 75, 202-212.		10
92	Degradation of C.I. Acid Blue 25 in water using UV/K2S2O8 process: effect of salts and environmental matrix. , 0, 74, 395-401.		8