

Muthupandian Ashokkumar

List of Publications by Year in descending order

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489
papers

26,473
citations

4960

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135
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505
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505
docs citations

505
times ranked

20484
citing authors

#	ARTICLE	IF	CITATIONS
1	The characterization of acoustic cavitation bubbles – An overview. <i>Ultrasonics Sonochemistry</i> , 2011, 18, 864-872.	8.2	615
2	The use of ultrasonics for nanoemulsion preparation. <i>Innovative Food Science and Emerging Technologies</i> , 2008, 9, 170-175.	5.6	521
3	Minimising oil droplet size using ultrasonic emulsification. <i>Ultrasonics Sonochemistry</i> , 2009, 16, 721-727.	8.2	516
4	A review on BiVO ₄ photocatalyst: Activity enhancement methods for solar photocatalytic applications. <i>Applied Catalysis A: General</i> , 2018, 555, 47-74.	4.3	512
5	Effects of ultrasound on the thermal and structural characteristics of proteins in reconstituted whey protein concentrate. <i>Ultrasonics Sonochemistry</i> , 2011, 18, 951-957.	8.2	489
6	Effect of Power and Frequency on Bubble-Size Distributions in Acoustic Cavitation. <i>Physical Review Letters</i> , 2009, 102, 084302.	7.8	385
7	Modification of food ingredients by ultrasound to improve functionality: A preliminary study on a model system. <i>Innovative Food Science and Emerging Technologies</i> , 2008, 9, 155-160.	5.6	340
8	An overview on semiconductor particulate systems for photoproduction of hydrogen. <i>International Journal of Hydrogen Energy</i> , 1998, 23, 427-438.	7.1	327
9	Sonochemical Synthesis of Gold Nanoparticles: Effects of Ultrasound Frequency. <i>Journal of Physical Chemistry B</i> , 2005, 109, 20673-20675.	2.6	321
10	Ultrasonics in food processing. <i>Ultrasonics Sonochemistry</i> , 2012, 19, 975-983.	8.2	318
11	Bubbles in an acoustic field: An overview. <i>Ultrasonics Sonochemistry</i> , 2007, 14, 470-475.	8.2	280
12	Sonoluminescence, sonochemistry (H ₂ O ₂ yield) and bubble dynamics: Frequency and power effects. <i>Ultrasonics Sonochemistry</i> , 2008, 15, 143-150.	8.2	246
13	Combined advanced oxidation processes for the synergistic degradation of ibuprofen in aqueous environments. <i>Journal of Hazardous Materials</i> , 2010, 178, 202-208.	12.4	241
14	Microbial synthesis of silver nanoparticles by <i>Bacillus</i> sp.. <i>Journal of Nanoparticle Research</i> , 2009, 11, 1811-1815.	1.9	239
15	Applications of ultrasound in food and bioprocessing. <i>Ultrasonics Sonochemistry</i> , 2015, 25, 17-23.	8.2	232
16	Estimation of ultrasound induced cavitation bubble temperatures in aqueous solutions. <i>Ultrasonics Sonochemistry</i> , 2005, 12, 325-329.	8.2	226
17	Recent advances in MoS ₂ nanostructured materials for energy and environmental applications – A review. <i>Journal of Solid State Chemistry</i> , 2017, 252, 43-71.	2.9	216
18	Ultrasonic enhancement of the supercritical extraction from ginger. <i>Ultrasonics Sonochemistry</i> , 2006, 13, 471-479.	8.2	215

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19	Application of advanced materials in sonophotocatalytic processes for the remediation of environmental pollutants. <i>Journal of Hazardous Materials</i> , 2021, 412, 125245.	12.4	215
20	Physical and chemical effects of acoustic cavitation in selected ultrasonic cleaning applications. <i>Ultrasonics Sonochemistry</i> , 2016, 29, 568-576.	8.2	212
21	Photocatalytic and photoelectrochemical studies of visible-light active $\text{Fe}_2\text{O}_3/\text{g-C}_3\text{N}_4$ nanocomposites. <i>RSC Advances</i> , 2014, 4, 38222-38229.	3.6	207
22	Sonolytic Design of Graphene-Au Nanocomposites. Simultaneous and Sequential Reduction of Graphene Oxide and Au(III). <i>Journal of Physical Chemistry Letters</i> , 2010, 1, 1987-1993.	4.6	197
23	Ultrasonics in food processing – Food quality assurance and food safety. <i>Trends in Food Science and Technology</i> , 2012, 26, 88-98.	15.1	192
24	Ultrasonic emulsification: An overview on the preparation of different emulsifiers-stabilized emulsions. <i>Trends in Food Science and Technology</i> , 2020, 105, 363-377.	15.1	189
25	Sonoluminescence from Aqueous Alcohol and Surfactant Solutions. <i>Journal of Physical Chemistry B</i> , 1997, 101, 10845-10850.	2.6	183
26	Synthesis of a visible-light active $\text{V}_2\text{O}_5/\text{g-C}_3\text{N}_4$ heterojunction as an efficient photocatalytic and photoelectrochemical material. <i>New Journal of Chemistry</i> , 2015, 39, 1367-1374.	2.8	183
27	Ultrasonic processing of dairy systems in large scale reactors. <i>Ultrasonics Sonochemistry</i> , 2010, 17, 1075-1081.	8.2	182
28	Inactivation of microorganisms by low-frequency high-power ultrasound: 1. Effect of growth phase and capsule properties of the bacteria. <i>Ultrasonics Sonochemistry</i> , 2014, 21, 446-453.	8.2	182
29	Graphene oxide based Pt-TiO ₂ photocatalyst: Ultrasound assisted synthesis, characterization and catalytic efficiency. <i>Ultrasonics Sonochemistry</i> , 2012, 19, 9-15.	8.2	172
30	Sonochemical Synthesis of Au-Ag Core-Shell Bimetallic Nanoparticles. <i>Journal of Physical Chemistry C</i> , 2008, 112, 15102-15105.	3.1	170
31	Determination of the Size Distribution of Sonoluminescence Bubbles in a Pulsed Acoustic Field. <i>Journal of the American Chemical Society</i> , 2005, 127, 16810-16811.	13.7	169
32	Ultrasonic preparation of stable flax seed oil emulsions in dairy systems – Physicochemical characterization. <i>Food Hydrocolloids</i> , 2014, 39, 151-162.	10.7	169
33	The effect of ultrasound on the physical and functional properties of skim milk. <i>Innovative Food Science and Emerging Technologies</i> , 2012, 16, 251-258.	5.6	165
34	Sonochemical Formation of Gold Sols. <i>Langmuir</i> , 2002, 18, 7831-7836.	3.5	156
35	Sonelectrochemistry for energy and environmental applications. <i>Ultrasonics Sonochemistry</i> , 2020, 63, 104960.	8.2	154
36	The ultrasonic processing of dairy products – An overview. <i>Dairy Science and Technology</i> , 2010, 90, 147-168.	2.2	151

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37	The optimisation of ultrasonic cleaning procedures for dairy fouled ultrafiltration membranes. <i>Ultrasonics Sonochemistry</i> , 2005, 12, 29-35.	8.2	150
38	The use of ultrasonic cleaning for ultrafiltration membranes in the dairy industry. <i>Separation and Purification Technology</i> , 2004, 39, 99-107.	7.9	147
39	Mechanisms for the ultrasonic enhancement of dairy whey ultrafiltration. <i>Journal of Membrane Science</i> , 2005, 258, 106-114.	8.2	147
40	Ultrasonic Synthesis of Stable, Functional Lysozyme Microbubbles. <i>Langmuir</i> , 2008, 24, 10078-10083.	3.5	147
41	Synergistic effect of sono-photocatalytic process for the degradation of organic pollutants using CuO-TiO ₂ /rGO. <i>Ultrasonics Sonochemistry</i> , 2019, 50, 218-223.	8.2	147
42	Recent development on carbon based heterostructures for their applications in energy and environment: A review. <i>Journal of Industrial and Engineering Chemistry</i> , 2018, 64, 16-59.	5.8	146
43	The pasting properties of sonicated waxy rice starch suspensions. <i>Ultrasonics Sonochemistry</i> , 2009, 16, 462-468.	8.2	140
44	Sono-RAFT Polymerization in Aqueous Medium. <i>Angewandte Chemie - International Edition</i> , 2017, 56, 12302-12306.	13.8	139
45	Ultrasound and Sonochemistry for Radical Polymerization: Sound Synthesis. <i>Chemistry - A European Journal</i> , 2019, 25, 5372-5388.	3.3	138
46	Ultrasound assisted photocatalytic degradation of diclofenac in an aqueous environment. <i>Chemosphere</i> , 2010, 80, 747-752.	8.2	133
47	Hot topic: Sonication increases the heat stability of whey proteins. <i>Journal of Dairy Science</i> , 2009, 92, 5353-5356.	3.4	131
48	A review on hybrid techniques for the degradation of organic pollutants in aqueous environment. <i>Ultrasonics Sonochemistry</i> , 2020, 67, 105130.	8.2	131
49	Synthesis and characterization of a CuWO ₃ composite photocatalyst for enhanced visible light photocatalytic activity. <i>RSC Advances</i> , 2015, 5, 52718-52725.	3.6	129
50	CoFe ₂ O ₄ /TiO ₂ nanocatalysts for the photocatalytic degradation of Reactive Red 120 in aqueous solutions in the presence and absence of electron acceptors. <i>Chemical Engineering Journal</i> , 2013, 220, 302-310.	12.7	123
51	Degradation of orange-G by advanced oxidation processes. <i>Ultrasonics Sonochemistry</i> , 2010, 17, 338-343.	8.2	122
52	Sonochemical oxidation of arsenic(III) to arsenic(V) using potassium peroxydisulfate as an oxidizing agent. <i>Water Research</i> , 2010, 44, 3687-3695.	11.3	122
53	ULTRASOUND ASSISTED CHEMICAL PROCESSES. <i>Reviews in Chemical Engineering</i> , 1999, 15, .	4.4	121
54	Determination of Temperatures within Acoustically Generated Bubbles in Aqueous Solutions at Different Ultrasound Frequencies. <i>Journal of Physical Chemistry B</i> , 2006, 110, 13656-13660.	2.6	119

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55	Diffused sunlight driven highly synergistic pathway for complete mineralization of organic contaminants using reduced graphene oxide supported photocatalyst. <i>Journal of Hazardous Materials</i> , 2015, 291, 83-92.	12.4	119
56	Integrated technique of pulsed laser irradiation and sonochemical processes for the production of highly surface-active NiPd spheres. <i>Chemical Engineering Journal</i> , 2021, 411, 128486.	12.7	119
57	Ultrasonic encapsulation – A review. <i>Ultrasonics Sonochemistry</i> , 2017, 35, 605-614.	8.2	116
58	Study of the Coalescence of Acoustic Bubbles as a Function of Frequency, Power, and Water-Soluble Additives. <i>Journal of the American Chemical Society</i> , 2007, 129, 6031-6036.	13.7	114
59	Effect of ultrasound on the physical and functional properties of reconstituted whey protein powders. <i>Journal of Dairy Research</i> , 2011, 78, 226-232.	1.4	114
60	High-intensity ultrasound: A novel technology for the development of probiotic and prebiotic dairy products. <i>Ultrasonics Sonochemistry</i> , 2019, 57, 12-21.	8.2	110
61	Photocatalytic degradation of Acid Red 88 using Au–TiO ₂ nanoparticles in aqueous solutions. <i>Water Research</i> , 2008, 42, 4878-4884.	11.3	109
62	Inactivation of bacteria and yeast using high-frequency ultrasound treatment. <i>Water Research</i> , 2014, 60, 93-104.	11.3	109
63	Synthesis of Tunable, Highly Luminescent QD-Glasses Through Sol-Gel Processing. <i>Advanced Materials</i> , 2001, 13, 985-988.	21.0	107
64	A Comparison between Multibubble Sonoluminescence Intensity and the Temperature within Cavitation Bubbles. <i>Journal of the American Chemical Society</i> , 2005, 127, 5326-5327.	13.7	106
65	Ultrasound Assisted Crystallization of Paracetamol: Crystal Size Distribution and Polymorph Control. <i>Crystal Growth and Design</i> , 2016, 16, 1934-1941.	3.0	105
66	The effect of ultrasound on casein micelle integrity. <i>Journal of Dairy Science</i> , 2012, 95, 6882-6890.	3.4	104
67	APPLICATION OF ULTRASOUND IN MEMBRANE SEPARATION PROCESSES: A REVIEW. <i>Reviews in Chemical Engineering</i> , 2006, 22, .	4.4	103
68	The mechanism of sonophotocatalytic degradation of methyl orange and its products in aqueous solutions. <i>Ultrasonics Sonochemistry</i> , 2011, 18, 974-980.	8.2	103
69	Degradation of acid red 88 by the combination of sonolysis and photocatalysis. <i>Separation and Purification Technology</i> , 2010, 74, 336-341.	7.9	101
70	Synthesis of Hierarchical Cobalt Phosphate Nanoflakes and Their Enhanced Electrochemical Performances for Supercapacitor Applications. <i>ChemistrySelect</i> , 2017, 2, 201-210.	1.5	100
71	Effects of high pressure, microwave and ultrasound processing on proteins and enzyme activity in dairy systems – A review. <i>Innovative Food Science and Emerging Technologies</i> , 2019, 57, 102192.	5.6	100
72	Sonochemically Prepared Platinum–Ruthenium Bimetallic Nanoparticles. <i>Journal of Physical Chemistry B</i> , 2006, 110, 3849-3852.	2.6	99

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73	Selected Applications of Ultrasonics in Food Processing. <i>Food Engineering Reviews</i> , 2009, 1, 31-49.	5.9	99
74	Use of Power Ultrasound to Improve Extraction and Modify Phase Transitions in Food Processing. <i>Food Reviews International</i> , 2013, 29, 67-91.	8.4	99
75	Inactivation of microorganisms by low-frequency high-power ultrasound: 2. A simple model for the inactivation mechanism. <i>Ultrasonics Sonochemistry</i> , 2014, 21, 454-460.	8.2	99
76	Microstructure, optical and FTIR studies of Ni, Cu co-doped ZnO nanoparticles by co-precipitation method. <i>Optical Materials</i> , 2014, 37, 671-678.	3.6	99
77	Recent advances in the application of ultrasound in dairy products: Effect on functional, physical, chemical, microbiological and sensory properties. <i>Ultrasonics Sonochemistry</i> , 2021, 73, 105467.	8.2	93
78	Sonophotocatalytic degradation of monocrotophos using TiO ₂ and Fe ³⁺ . <i>Journal of Hazardous Materials</i> , 2010, 177, 944-949.	12.4	92
79	Ultrasound Assisted Miniemulsion Polymerization for Preparation of Polypyrrole-Zinc Oxide (PPy/ZnO) Functional Latex for Liquefied Petroleum Gas Sensing. <i>Industrial & Engineering Chemistry Research</i> , 2013, 52, 7704-7712.	3.7	92
80	Comparison of the Effects of Water-Soluble Solutes on Multibubble Sonoluminescence Generated in Aqueous Solutions by 20- and 515-kHz Pulsed Ultrasound. <i>Journal of Physical Chemistry B</i> , 2002, 106, 11064-11068.	2.6	91
81	Ultrasound initiated miniemulsion polymerization of methacrylate monomers. <i>Ultrasonics Sonochemistry</i> , 2008, 15, 89-94.	8.2	91
82	Sonochemical and sustainable synthesis of graphene-gold (G-Au) nanocomposites for enzymeless and selective electrochemical detection of nitric oxide. <i>Biosensors and Bioelectronics</i> , 2017, 87, 622-629.	10.1	91
83	Effect of Surfactants on the Rate of Growth of an Air Bubble by Rectified Diffusion. <i>Journal of Physical Chemistry B</i> , 2005, 109, 14595-14598.	2.6	90
84	The Effect of Surface-Active Solutes on Bubble Coalescence in the Presence of Ultrasound. <i>Journal of Physical Chemistry B</i> , 2005, 109, 5095-5099.	2.6	89
85	The interaction of sonochemically synthesized gold nanoparticles with serum albumins. <i>Journal of Pharmaceutical and Biomedical Analysis</i> , 2010, 53, 804-810.	2.8	89
86	Recent developments on bismuth oxyhalides (BiOX; X = Cl, Br, I) based ternary nanocomposite photocatalysts for environmental applications. <i>Chemosphere</i> , 2021, 282, 131054.	8.2	87
87	The application of ultrasound to dairy ultrafiltration: The influence of operating conditions. <i>Journal of Food Engineering</i> , 2007, 81, 364-373.	5.2	86
88	Spatial Distribution of Acoustic Cavitation Bubbles at Different Ultrasound Frequencies. <i>ChemPhysChem</i> , 2010, 11, 1680-1684.	2.1	86
89	The Effect of pH on Multibubble Sonoluminescence from Aqueous Solutions Containing Simple Organic Weak Acids and Bases. <i>Journal of the American Chemical Society</i> , 1999, 121, 7355-7359.	13.7	85
90	Effect of Solutes on Single-Bubble Sonoluminescence in Water. <i>Journal of Physical Chemistry A</i> , 2000, 104, 8462-8465.	2.5	85

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91	Acoustic Emission Spectra from 515 kHz Cavitation in Aqueous Solutions Containing Surface-Active Solutes. <i>Journal of the American Chemical Society</i> , 2007, 129, 2250-2258.	13.7	85
92	Ultrasound assisted preparation of nanoclay Bentonite-FeCo nanocomposite hybrid hydrogel: A potential responsive sorbent for removal of organic pollutant from water. <i>Desalination</i> , 2011, 281, 429-437.	8.2	85
93	The effects of high-intensity ultrasound on the structural and functional properties of α -Lactalbumin, β -Lactoglobulin and their mixtures. <i>Food Research International</i> , 2012, 48, 940-943.	6.2	85
94	Geometric Optimization of Sonoreactors for the Enhancement of Sonochemical Activity. <i>Journal of Physical Chemistry C</i> , 2011, 115, 4096-4103.	3.1	84
95	Carrier separation and charge transport characteristics of reduced graphene oxide supported visible-light active photocatalysts. <i>Physical Chemistry Chemical Physics</i> , 2016, 18, 5179-5191.	2.8	84
96	Effect of Ni doping on electrical, photoluminescence and magnetic behavior of Cu doped ZnO nanoparticles. <i>Journal of Luminescence</i> , 2015, 162, 97-103.	3.1	82
97	Preparation of water-in-oil-in-water emulsions by low frequency ultrasound using skim milk and sunflower oil. <i>Food Hydrocolloids</i> , 2017, 63, 685-695.	10.7	82
98	Quantification of high-power ultrasound induced damage on potato starch granules using light microscopy. <i>Ultrasonics Sonochemistry</i> , 2012, 19, 421-426.	8.2	80
99	One-step electrochemical deposition of Ni _{1-x} Mo _x S ternary sulfides as an efficient counter electrode for dye-sensitized solar cells. <i>Journal of Materials Chemistry A</i> , 2016, 4, 16119-16127.	10.3	80
100	The Physical and Chemical Effects of Ultrasound. <i>Food Engineering Series</i> , 2011, , 1-12.	0.7	79
101	TiO ₂ -NiO nanocomposite with enhanced sonophotocatalytic activity under diffused sunlight. <i>Ultrasonics Sonochemistry</i> , 2017, 35, 655-663.	8.2	78
102	Sonoluminescence Quenching of Organic Compounds in Aqueous Solution: Frequency Effects and Implications for Sonochemistry. <i>Journal of the American Chemical Society</i> , 2004, 126, 2755-2762.	13.7	77
103	Electrical, dielectric, photoluminescence and magnetic properties of ZnO nanoparticles co-doped with Co and Cu. <i>Journal of Magnetism and Magnetic Materials</i> , 2015, 374, 61-66.	2.3	77
104	The detection and control of stable and transient acoustic cavitation bubbles. <i>Physical Chemistry Chemical Physics</i> , 2009, 11, 10118.	2.8	74
105	Sonophotocatalytic degradation of 4-chlorophenol using Bi ₂ O ₃ /TiZrO ₄ as a visible light responsive photocatalyst. <i>Ultrasonics Sonochemistry</i> , 2011, 18, 135-139.	8.2	73
106	Sonophotocatalytic degradation of paracetamol using TiO ₂ and Fe ³⁺ . <i>Separation and Purification Technology</i> , 2013, 103, 114-118.	7.9	73
107	Hybrid Advanced Oxidation Processes Involving Ultrasound: An Overview. <i>Molecules</i> , 2019, 24, 3341.	3.8	73
108	Influence of mixing and ultrasound frequency on antisolvent crystallisation of sodium chloride. <i>Ultrasonics Sonochemistry</i> , 2014, 21, 60-68.	8.2	71

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109	Sonochemical synthesis of Au@TiO ₂ nanoparticles for the sonophotocatalytic degradation of organic pollutants in aqueous environment. <i>Ultrasonics Sonochemistry</i> , 2009, 16, 316-320.	8.2	70
110	Sonochemical Production of Fluorescent and Phosphorescent Latex Particles. <i>Journal of the American Chemical Society</i> , 2003, 125, 525-529.	13.7	69
111	Simple and Efficient Sonochemical Method for the Oxidation of Arsenic(III) to Arsenic(V). <i>Environmental Science & Technology</i> , 2009, 43, 6793-6798.	10.0	69
112	Ultrasonic enhancement of lipase-catalysed transesterification for biodiesel synthesis. <i>Ultrasonics Sonochemistry</i> , 2017, 34, 305-309.	8.2	69
113	Investigating the role of ultrasound in improving the photocatalytic ability of CQD decorated boron-doped g-C ₃ N ₄ for tetracycline degradation and first-principles study of nitrogen-vacancy formation. <i>Carbon</i> , 2022, 192, 405-417.	10.3	68
114	The mechanism of the sonochemical degradation of benzoic acid in aqueous solutions. <i>Research on Chemical Intermediates</i> , 2004, 30, 723-733.	2.7	67
115	Experimental and theoretical investigations on sonoluminescence under dual frequency conditions. <i>Ultrasonics Sonochemistry</i> , 2008, 15, 629-635.	8.2	67
116	Novel One-Pot Synthesis of Magnetite Latex Nanoparticles by Ultrasound Irradiation. <i>Langmuir</i> , 2009, 25, 2593-2595.	3.5	67
117	Acoustic Bubble Sizes, Coalescence, and Sonochemical Activity in Aqueous Electrolyte Solutions Saturated with Different Gases. <i>Langmuir</i> , 2010, 26, 12690-12695.	3.5	67
118	Bubble Coalescence during Acoustic Cavitation in Aqueous Electrolyte Solutions. <i>Langmuir</i> , 2011, 27, 12025-12032.	3.5	66
119	Sonochemical Synthesis of Magnetic Janus Nanoparticles. <i>Langmuir</i> , 2011, 27, 30-33.	3.5	65
120	Development and optimization of acoustic bubble structures at high frequencies. <i>Ultrasonics Sonochemistry</i> , 2011, 18, 92-98.	8.2	65
121	Ultrasonic enhancement of the acidity, surface area and free fatty acids esterification catalytic activity of sulphated ZrO ₂ -TiO ₂ systems. <i>Journal of Catalysis</i> , 2013, 297, 17-26.	6.2	65
122	Sonochemically synthesized mono and bimetallic Au@Ag reduced graphene oxide based nanocomposites with enhanced catalytic activity. <i>Ultrasonics Sonochemistry</i> , 2014, 21, 1948-1953.	8.2	65
123	Graphene oxide/Fe ₃ O ₄ /SO ₃ H nanohybrid: a new adsorbent for adsorption and reduction of Cr(VI) from aqueous solutions. <i>RSC Advances</i> , 2017, 7, 14876-14887.	3.6	65
124	Sonochemical formation of colloidal platinum. <i>Colloids and Surfaces A: Physicochemical and Engineering Aspects</i> , 2000, 169, 219-225.	4.7	64
125	Sonochemical Degradation of a Polydisperse Nonylphenol Ethoxylate in Aqueous Solution. <i>Journal of Physical Chemistry B</i> , 2001, 105, 3338-3342.	2.6	64
126	Synthesis of Fe ³⁺ doped TiO ₂ photocatalysts for the visible assisted degradation of an azo dye. <i>Colloids and Surfaces A: Physicochemical and Engineering Aspects</i> , 2011, 375, 231-236.	4.7	64

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127	Innovative Technologies for Extraction and Microencapsulation of Bioactives from Plant-Based Food Waste and Their Applications in Functional Food Development. <i>Foods</i> , 2021, 10, 279.	4.3	64
128	Sonochemical degradation of martius yellow dye in aqueous solution. <i>Ultrasonics Sonochemistry</i> , 2009, 16, 28-34.	8.2	62
129	A study of the effectiveness and energy efficiency of ultrasonic emulsification. <i>Physical Chemistry Chemical Physics</i> , 2018, 20, 86-96.	2.8	62
130	Phase-controlled synthesis of bismuth oxide polymorphs for photocatalytic applications. <i>Materials Chemistry Frontiers</i> , 2018, 2, 1664-1673.	5.9	62
131	Dissolution and reconstitution of casein micelle containing dairy powders by high shear using ultrasonic and physical methods. <i>Ultrasonics Sonochemistry</i> , 2014, 21, 1658-1665.	8.2	61
132	Antibacterial mechanism of ultrasound against <i>Escherichia coli</i> : Alterations in membrane microstructures and properties. <i>Ultrasonics Sonochemistry</i> , 2021, 73, 105509.	8.2	61
133	Sonoprocessing: From Concepts to Large-Scale Reactors. <i>Chemical Reviews</i> , 2022, 122, 3219-3258.	47.7	61
134	Ultrasound-assisted oxidative-adsorptive desulfurization using highly acidic graphene oxide as a catalyst-adsorbent. <i>Fuel</i> , 2017, 210, 639-645.	6.4	60
135	Correlation between Na ⁺ Emission and "Chemically Active" Acoustic Cavitation Bubbles. <i>ChemPhysChem</i> , 2007, 8, 2331-2335.	2.1	59
136	Theory of Sonochemistry. <i>Topics in Current Chemistry</i> , 2016, 374, 56.	5.8	59
137	A Comparison of the Effectiveness of Sonication, High Shear Mixing and Homogenisation on Improving the Heat Stability of Whey Protein Solutions. <i>Food and Bioprocess Technology</i> , 2014, 7, 556-566.	4.7	58
138	Multibubble sonoluminescence in aqueous salt solutions. <i>Ultrasonics Sonochemistry</i> , 1999, 6, 7-14.	8.2	57
139	The Design of Multifunctional Microbubbles for Ultrasound Image-Guided Cancer Therapy. <i>Current Topics in Medicinal Chemistry</i> , 2010, 10, 1198-1210.	2.1	57
140	The effect of surface active solutes on bubbles in an acoustic field. <i>Physical Chemistry Chemical Physics</i> , 2007, 9, 5631.	2.8	56
141	Viscosity and hydrodynamic radius relationship of high-power ultrasound depolymerised starch pastes with different amylose content. <i>Food Hydrocolloids</i> , 2016, 52, 183-191.	10.7	56
142	Short-lived charge-transfer-to-solvent-states and multiple electronic relaxations following femtosecond excitation of aqueous chloride ion. <i>Chemical Physics</i> , 1995, 197, 167-193.	1.9	55
143	Sonochemistry and Sonoluminescence in Aqueous AuCl ₄ ⁻ Solutions in the Presence of Surface-Active Solutes. <i>Journal of Physical Chemistry B</i> , 1999, 103, 9231-9236.	2.6	55
144	Bubble population phenomena in sonochemical reactor: I Estimation of bubble size distribution and its number density with pulsed sonication " Laser diffraction method. <i>Ultrasonics Sonochemistry</i> , 2010, 17, 473-479.	8.2	55

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145	Functional properties of ultrasonically generated flaxseed oil-dairy emulsions. <i>Ultrasonics Sonochemistry</i> , 2014, 21, 1649-1657.	8.2	55
146	Structural, optical, dielectric and antibacterial studies of Mn doped Zn _{0.96} Cu _{0.04} O nanoparticles. <i>Spectrochimica Acta - Part A: Molecular and Biomolecular Spectroscopy</i> , 2015, 144, 1-7.	3.9	55
147	Process Intensification Approach Using Microreactors for Synthesizing Nanomaterials—A Critical Review. <i>Nanomaterials</i> , 2021, 11, 98.	4.1	55
148	Hydrogen evolution from water with visible radiation in presence of Cu(II)/WO ₃ and electron relay. <i>International Journal of Hydrogen Energy</i> , 1989, 14, 525-528.	7.1	53
149	Acoustic Emission from Cavitating Solutions: Implications for the Mechanisms of Sonochemical Reactions. <i>Journal of Physical Chemistry B</i> , 2005, 109, 17799-17801.	2.6	53
150	Preparation and properties of visible light responsive ZrTiO ₄ /Bi ₂ O ₃ photocatalysts for 4-chlorophenol decomposition. <i>Journal of Hazardous Materials</i> , 2010, 182, 557-562.	12.4	53
151	The Role of Surfactant Headgroup, Chain Length, and Cavitation Microstreaming on the Growth of Bubbles by Rectified Diffusion. <i>Journal of Physical Chemistry C</i> , 2011, 115, 24310-24316.	3.1	53
152	Comparison of Ultrasonic and Conventional Mechanical Soil-Washing Processes for Diesel-Contaminated Sand. <i>Industrial & Engineering Chemistry Research</i> , 2011, 50, 2400-2407.	3.7	53
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