

# Virendra Kumar Saharan

## List of Publications by Year in descending order

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Version: 2024-02-01

49  
papers

2,821  
citations

159525

30  
h-index

243529

44  
g-index

50  
all docs

50  
docs citations

50  
times ranked

1958  
citing authors

#	ARTICLE	IF	CITATIONS
1	Synthesis of titanium doped hydroxyapatite using waste marble powder for the degradation of Congo Red dye in wastewater. <i>Materials Today: Proceedings</i> , 2022, 57, 1645-1653.	0.9	9
2	Green biomaterial hydroxyapatite derived from waste marble powder for applications in water defluoridation: Comparative study on materials synthesized by different processing routes. <i>Materials Today: Proceedings</i> , 2022, 57, 57-64.	0.9	1
3	Critical Review on Hydrodynamic Cavitation as an Intensifying Homogenizing Technique for Oil-in-Water Emulsification: Theoretical Insight, Current Status, and Future Perspectives. <i>Industrial &amp; Engineering Chemistry Research</i> , 2022, 61, 10587-10602.	1.8	10
4	Synthesis of calcium titanate from marble waste powder for the degradation of congo red dye. <i>Materials Today: Proceedings</i> , 2021, 43, 995-1002.	0.9	6
5	Studies on the efficacy of ultrasonication processes in combination with advanced oxidizing agents for alum pretreated tannery waste effluent. <i>Journal of Environmental Chemical Engineering</i> , 2021, 9, 104678.	3.3	6
6	Valorization of waste cooking oil (WCO) into biodiesel using acoustic and hydrodynamic cavitation. , 2021, , 231-272.		1
7	Preparation of novel adsorbent (marble hydroxyapatite) from waste marble slurry for ground water treatment to remove fluoride. , 2021, , 899-927.		2
8	Advanced technologies for wastewater treatment: New trends. , 2021, , 85-133.		0
9	Synthesis, characterization and heat transfer study of reduced graphene oxide-Al <sub>2</sub> O <sub>3</sub> nanocomposite based nanofluids: Investigation on thermal conductivity and rheology. <i>Materials Today Communications</i> , 2021, 26, 101986.	0.9	26
10	Valorisation of low fatty acid content waste cooking oil into biodiesel through transesterification using a basic heterogeneous calcium-based catalyst. <i>Biomass and Bioenergy</i> , 2021, 146, 105984.	2.9	34
11	Adsorption of methyl red dye from aqueous solution onto eggshell waste material: Kinetics, isotherms and thermodynamic studies. <i>Current Research in Green and Sustainable Chemistry</i> , 2021, 4, 100180.	2.9	37
12	Application of hydroxyapatite and its modified forms as adsorbents for water defluoridation: an insight into process synthesis. <i>Reviews in Chemical Engineering</i> , 2020, 36, 369-400.	2.3	25
13	Ultrasound assisted preparation of rGO/TiO <sub>2</sub> nanocomposite for effective photocatalytic degradation of methylene blue under sunlight. <i>Nano Structures Nano Objects</i> , 2020, 21, 100407.	1.9	102
14	Sonochemical preparation of ternary rGO-ZnO-TiO <sub>2</sub> nanocomposite photocatalyst for efficient degradation of crystal violet dye. <i>Optik</i> , 2020, 208, 164555.	1.4	66
15	Controlled Hydrodynamic Cavitation: A Review of Recent Advances and Perspectives for Greener Processing. <i>Processes</i> , 2020, 8, 220.	1.3	74
16	Sonochemical preparation and characterization of rGO/SnO <sub>2</sub> nanocomposite: Electrochemical and gas sensing performance. <i>Ceramics International</i> , 2020, 46, 11290-11296.	2.3	54
17	Preparation and thermal conductivity investigation of reduced graphene oxide-ZnO nanocomposite-based nanofluid synthesised by ultrasound-assisted method. <i>Materials Research Innovations</i> , 2020, 24, 433-441.	1.0	38
18	Investigation on preparation of graphene oxide-CuO nanocomposite based nanofluids with the aid of ultrasound assisted method for intensified heat transfer properties. <i>Materials Chemistry and Physics</i> , 2020, 251, 123102.	2.0	52

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19	Ultrasonic cavitation assisted synthesis of multilayer emulsions as encapsulating and delivery systems for bioactive compounds. , 2020, , 23-52.		4
20	Synthesis and characterization of samarium and nitrogen doped TiO <sub>2</sub> photocatalysts for photo-degradation of 4-acetamidophenol in combination with hydrodynamic and acoustic cavitation. Separation and Purification Technology, 2019, 209, 254-269.	3.9	79
21	Modeling & simulation studies on batch anaerobic digestion of hydrodynamically cavitated tannery waste effluent for higher biogas yield. Ultrasonics Sonochemistry, 2019, 58, 104692.	3.8	26
22	Curcumin Encapsulation in Multilayer Oil-in-Water Emulsion: Synthesis Using Ultrasonication and Studies on Stability and Antioxidant and Release Activities. Langmuir, 2019, 35, 10866-10876.	1.6	45
23	Reduced Graphene Oxide-Fe <sub>3</sub> O <sub>4</sub> Nanocomposite Based Nanofluids: Study on Ultrasonic Assisted Synthesis, Thermal Conductivity, Rheology, and Convective Heat Transfer. Industrial & Engineering Chemistry Research, 2019, 58, 8349-8369.	1.8	84
24	Improved rate of transesterification reaction in biodiesel synthesis using hydrodynamic cavitating devices of high throat perimeter to flow area ratios. Chemical Engineering and Processing: Process Intensification, 2019, 139, 1-13.	1.8	38
25	An advanced pretreatment strategy involving hydrodynamic and acoustic cavitation along with alum coagulation for the mineralization and biodegradability enhancement of tannery waste effluent. Ultrasonics Sonochemistry, 2018, 44, 299-309.	3.8	33
26	Continuous Column Studies for Water Defluoridation Using Synthesized Magnesium-incorporated Hydroxyapatite Pellets: Experimental and Modeling Studies. Environmental Processes, 2018, 5, 261-285.	1.7	4
27	Studies on performance characteristics of calcium and magnesium amended alumina for defluoridation of drinking water. Journal of Environmental Chemical Engineering, 2018, 6, 1364-1377.	3.3	11
28	A comparative study of batch and recirculating flow ultrasonication system for preparation of multilayer olive oil in water emulsion stabilized with whey protein isolate and sodium alginate. Chemical Engineering and Processing: Process Intensification, 2018, 125, 139-149.	1.8	16
29	Synthesis of nano alumina for defluoridation of drinking water. Nano Structures Nano Objects, 2018, 13, 109-120.	1.9	22
30	Treatment of textile dyeing industry effluent using hydrodynamic cavitation in combination with advanced oxidation reagents. Journal of Hazardous Materials, 2018, 344, 1109-1115.	6.5	132
31	In-vitro synthesis of marble apatite as a novel adsorbent for removal of fluoride ions from ground water: An ultrasonic approach. Ultrasonics Sonochemistry, 2018, 40, 664-674.	3.8	35
32	Enhanced synergistic degradation efficiency using hybrid hydrodynamic cavitation for treatment of tannery waste effluent. Journal of Cleaner Production, 2018, 198, 1406-1421.	4.6	45
33	Degradation of a cationic dye (Rhodamine 6G) using hydrodynamic cavitation coupled with other oxidative agents: Reaction mechanism and pathway. Ultrasonics Sonochemistry, 2017, 34, 183-194.	3.8	174
34	Degradation of reactive blue 13 using hydrodynamic cavitation: Effect of geometrical parameters and different oxidizing additives. Ultrasonics Sonochemistry, 2017, 37, 192-202.	3.8	106
35	Low pressure hydrodynamic cavitating device for producing highly stable oil in water emulsion: Effect of geometry and cavitation number. Chemical Engineering and Processing: Process Intensification, 2017, 116, 97-104.	1.8	59
36	Synthesis of hydroxyapatite nanorods for application in water defluoridation and optimization of process variables: Advantage of ultrasonication with precipitation method over conventional method. Ultrasonics Sonochemistry, 2017, 37, 56-70.	3.8	49

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37	Hydrodynamic cavitation: an emerging technology for the intensification of various chemical and physical processes in a chemical process industry. <i>Reviews in Chemical Engineering</i> , 2017, 33, .	2.3	115
38	Process intensification of synthesis of biodiesel using a novel recirculating flow ultrasonication reactor. <i>Chemical Engineering and Processing: Process Intensification</i> , 2017, 122, 21-30.	1.8	27
39	Ultrasonic assisted formation and stability of mustard oil in water nanoemulsion: Effect of process parameters and their optimization. <i>Ultrasonics Sonochemistry</i> , 2017, 35, 422-430.	3.8	134
40	Hydrodynamic cavitation: an advanced oxidation process for the degradation of bio-refractory pollutants. <i>Reviews in Chemical Engineering</i> , 2016, 32, .	2.3	93
41	Computational study of different venturi and orifice type hydrodynamic cavitating devices. <i>Journal of Hydrodynamics</i> , 2016, 28, 293-305.	1.3	58
42	Degradation of reactive orange 4 dye using hydrodynamic cavitation based hybrid techniques. <i>Ultrasonics Sonochemistry</i> , 2014, 21, 1075-1082.	3.8	138
43	Synergetic effect of combination of AOP's (hydrodynamic cavitation and H <sub>2</sub> O <sub>2</sub> ) on the degradation of neonicotinoid class of insecticide. <i>Journal of Hazardous Materials</i> , 2013, 261, 139-147.	6.5	119
44	Effect of geometry of hydrodynamically cavitating device on degradation of orange-G. <i>Ultrasonics Sonochemistry</i> , 2013, 20, 345-353.	3.8	122
45	Intensification of degradation of imidacloprid in aqueous solutions by combination of hydrodynamic cavitation with various advanced oxidation processes (AOPs). <i>Journal of Environmental Chemical Engineering</i> , 2013, 1, 850-857.	3.3	63
46	Hydrodynamic Cavitation as an Advanced Oxidation Technique for the Degradation of Acid Red 88 Dye. <i>Industrial &amp; Engineering Chemistry Research</i> , 2012, 51, 1981-1989.	1.8	149
47	Cavitationally induced biodegradability enhancement of a distillery wastewater. <i>Journal of Hazardous Materials</i> , 2012, 219-220, 69-74.	6.5	68
48	Degradation of Reactive Red 120 dye using hydrodynamic cavitation. <i>Chemical Engineering Journal</i> , 2011, 178, 100-107.	6.6	225
49	Green calcium-based photocatalyst derived from waste marble powder for environmental sustainability: A review on synthesis and application in photocatalysis. <i>Environmental Science and Pollution Research</i> , 0, , .	2.7	3