Gopal Achari

List of Publications by Year
in descending order

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96 papers	2,249 citations	257357 24 h-index	265120 42 g-index
97 all docs	97 docs citations	97 times ranked	2430 citing authors

#	Article	IF	Citations
1	Potential human health risks due to environmental exposure to nano- and microplastics and knowledge gaps: A scoping review. Science of the Total Environment, 2021, 757, 143872.	3.9	359
2	Cr(VI) removal from aqueous solutions by hydrothermal synthetic layered double hydroxides: Adsorption performance, coexisting anions and regeneration studies. Colloids and Surfaces A: Physicochemical and Engineering Aspects, 2014, 457, 33-40.	2.3	127
3	A Comparative Approach for Ranking Contaminated Sites Based on the Risk Assessment Paradigm Using Fuzzy PROMETHEE. Environmental Management, 2009, 44, 952-967.	1.2	90
4	Degradation of pharmaceutical mixtures in aqueous solutions using UV/peracetic acid process: Kinetics, degradation pathways and comparison with UV/H2O2. Chemosphere, 2020, 248, 125911.	4.2	72
5	Degradation of sulfolane using activated persulfate with UV and UV-Ozone. Water Research, 2017, 125, 325-331.	5.3	69
6	Facile synthesis of NiS₂ nanoparticles ingrained in a sulfur-doped carbon nitride framework with enhanced visible light photocatalytic activity: two functional roles of thiourea. Journal of Materials Chemistry A, 2018, 6, 13448-13466.	5.2	65
7	A multicenter study investigating SARS-CoV-2 in tertiary-care hospital wastewater. viral burden correlates with increasing hospitalized cases as well as hospital-associated transmissions and outbreaks. Water Research, 2021, 201, 117369.	5.3	64
8	Characterization of an LED Based Photoreactor to Degrade 4-Chlorophenol in an Aqueous Medium Using Coumarin (C-343) Sensitized TiO₂. Journal of Physical Chemistry A, 2008, 112, 10310-10314.	1.1	56
9	A comparison of several nanoscale photocatalysts in the degradation of a common pollutant using LEDs and conventional UV light. Water Research, 2009, 43, 4499-4506.	5.3	56
10	Biofiltration of methane. Bioresource Technology, 2018, 268, 759-772.	4.8	49
11	Degradation of sulfolane in aqueous media by integrating activated sludge and advanced oxidation process. Chemosphere, 2019, 222, 1-8.	4.2	48
12	Application of Photocatalysts and LED Light Sources in Drinking Water Treatment. Catalysts, 2013, 3, 726-743.	1.6	47
13	An integrated performance assessment framework for water treatment plants. Water Research, 2012, 46, 1673-1683.	5.3	46
14	A model to estimate the methane generation rate constant in sanitary landfills using fuzzy synthetic evaluation. Waste Management and Research, 2006, 24, 363-375.	2.2	43
15	LED-Based Photocatalytic Treatment of Pesticides and Chlorophenols. Journal of Environmental Engineering, ASCE, 2013, 139, 1146-1151.	0.7	40
16	Removal and recovery of selenium species from wastewater: Adsorption kinetics and co-precipitation mechanisms. Journal of Water Process Engineering, 2020, 38, 101666.	2.6	39
17	Mineralization of sulfolane in aqueous solutions by Ozone/CaO2 and Ozone/CaO with potential for field application. Chemosphere, 2018, 197, 535-540.	4.2	38
18	Fuzzy-stochastic characterization of site uncertainty and variability in groundwater flow and contaminant transport through a heterogeneous aquifer. Journal of Contaminant Hydrology, 2009, 106, 73-82.	1.6	34

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19	A Comprehensive Numerical Model Simulating Gas, Heat, and Moisture Transport in Sanitary Landfills and Methane Oxidation in Final Covers. Environmental Modeling and Assessment, 2010, 15, 397-410.	1.2	34
20	Application of machine learning techniques to model a full-scale wastewater treatment plant with biological nutrient removal. Journal of Environmental Chemical Engineering, 2022, 10, 107430.	3.3	32
21	Development of an ensemble of machine learning algorithms to model aerobic granular sludge reactors. Water Research, 2021, 189, 116657.	5.3	31
22	Application of UV based advanced oxidation to treat sulfolane in an aqueous medium. Chemosphere, 2016, 160, 155-161.	4.2	29
23	Biofiltration of methane using hybrid mixtures of biochar, lava rock and compost. Environmental Pollution, 2018, 241, 45-54.	3.7	28
24	Synergetic photocatalytic ozonation using modified graphitic carbon nitride for treatment of emerging contaminants under UVC, UVA and visible irradiation. Chemical Engineering Science, 2019, 209, 115181.	1.9	26
25	Development of Land-Use/Land-Cover Maps Using Landsat-8 and MODIS Data, and Their Integration for Hydro-Ecological Applications. Sensors, 2019, 19, 4891.	2.1	26
26	Environmental Impacts of Selenium Contamination: A Review on Current-Issues and Remediation Strategies in an Aqueous System. Water (Switzerland), 2021, 13, 1473.	1.2	25
27	Photocatalytic dechlorination of PCB 138 using leuco-methylene blue and visible light; reaction conditions and mechanisms. Journal of Hazardous Materials, 2010, 181, 393-398.	6.5	23
28	Advanced oxidative degradation of bisphenol A and bisphenol S. Journal of Environmental Engineering and Science, 2015, 10, 92-102.	0.3	21
29	Impact of support characteristics and preparation method on photocatalytic activity of TiO ₂ /ZSM-5/silica gel composite photocatalyst. Royal Society Open Science, 2018, 5, 180918.	1.1	21
30	Predicting River Flow Using an AI-Based Sequential Adaptive Neuro-Fuzzy Inference System. Water (Switzerland), 2020, 12, 1622.	1.2	21
31	Coaggregation of bacterial communities in aerobic granulation and its application on the biodegradation of sulfolane. Journal of Hazardous Materials, 2019, 377, 206-214.	6.5	20
32	Photocatalytic degradation of agricultural antibiotics using a UV-LED light source. Journal of Environmental Science and Health - Part B Pesticides, Food Contaminants, and Agricultural Wastes, 2014, 49, 35-40.	0.7	19
33	Photocatalytic ozonation of pesticides in a fixed bed flow through UVA-LED photoreactor. Environmental Science and Pollution Research, 2016, 23, 21313-21318.	2.7	19
34	The pathway of dechlorination of PCB congener by a photochemical chain process in 2-propanol: The role of medium and quenching. Chemosphere, 2008, 73, 1328-1334.	4.2	18
35	Uncertainty propagation in environmental decision making using random sets. Procedia Environmental Sciences, 2010, 2, 576-584.	1.3	17
36	Enhancement of LED based photocatalytic degradation of sulfolane by integration with oxidants and nanomaterials. Chemosphere, 2021, 263, 128124.	4.2	17

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37	A Methodology for Clustering Lakes in Alberta on the basis of Water Quality Parameters. Clean - Soil, Air, Water, 2011, 39, 916-924.	0.7	16
38	Machine learning approaches to predict coagulant dosage in water treatment plants. International Journal of Systems Assurance Engineering and Management, 2013, 4, 205-214.	1.5	16
39	Mineralisation of sulfolane by UV/O₃/H₂O₂ in a tubular reactor. Journal of Environmental Engineering and Science, 2016, 11, 44-51.	0.3	16
40	Degradation of Carbamazepine by Photo-assisted Ozonation: Influence of Wavelength and Intensity of Radiation. Ozone: Science and Engineering, 2018, 40, 113-121.	1.4	16
41	Health Impact Assessment of Sulfolane on Embryonic Development of Zebrafish (Danio rerio). Toxics, 2019, 7, 42.	1.6	14
42	Degradation of Bisphenol S Using O3 and/or H2O2 with UV in a Flow-Through Reactor. Journal of Environmental Engineering, ASCE, 2016, 142, .	0.7	13
43	Some Observations on the Development of Superior Photocatalytic Systems for Application to Water Purification by the â€œAdsorb and Shuttleâ€•or the Interphase Charge Transfer Mechanisms. Molecules, 2014, 19, 19557-19572.	1.7	12
44	Design and evaluation of a UV LED Photocatalytic Reactor Using Anodized TiO₂ Nanotubes. Water Environment Research, 2016, 88, 785-791.	1.3	12
45	Effect of UV dose on degradation of venlafaxine using UV/H2O2: perspective of augmenting UV units in wastewater treatment. Environmental Technology (United Kingdom), 2020, 41, 1107-1116.	1.2	12
46	Photocatalytic Degradation of Sulfolane Using a LED-Based Photocatalytic Treatment System. Catalysts, 2021, 11, 624.	1.6	12
47	Photodechlorination of Aroclor 1254 in a Pilot-Scale Flow through Photoreactor. Journal of Environmental Engineering, ASCE, 2007, 133, 646-654.	0.7	11
48	Photocatalytic Dechlorination of Polychlorinated Biphenyls Using Leuco-methylene Blue Sensitization, Broad Spectrum Visible Lamps, or Light Emitting Diodes. Environmental Science & Technology, 2010, 44, 9075-9079.	4.6	11
49	Reductive Dechlorination of PCBs Using Photocatalyzed UV Light. Clean - Soil, Air, Water, 2012, 40, 455-460.	0.7	11
50	Cost scenarios for small drinking water treatment technologies. Desalination and Water Treatment, 2013, 51, 3628-3638.	1.0	11
51	Cost Recovery and Affordability in Small Drinking Water Treatment Plants in Alberta, Canada. Journal - American Water Works Association, 2016, 108, E290-E298.	0.2	11
52	Performance management of small water treatment plant operations: a decision support system. Water and Environment Journal, 2017, 31, 330-344.	1.0	11
53	Sunlight mediated passive wastewater treatment technology using photochemical reduction of ferric iron for decontamination of various aqueous contaminants. Solar Energy, 2018, 173, 470-477.	2.9	11
54	The influence of biochar and compost mixtures, water content, and gas flow rate, on the continuous adsorption of methane in a fixed bed column. Journal of Environmental Management, 2019, 233, 175-183.	3.8	11

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55	Pilot-Scale Treatment of Neutral Pharmaceuticals in Municipal Wastewater Using Reverse Osmosis and Ozonation. Journal of Environmental Engineering, ASCE, 2020, 146, 04020121.	0.7	11
56	Field evaluation of a pressurized ozone treatment system to degrade sulfolane in contaminated groundwaters. Journal of Environmental Chemical Engineering, 2020, 8, 104037.	3.3	11
57	Modelling river flow in cold and ungauged regions: a review of the purposes, methods, and challenges. Environmental Reviews, 2022, 30, 159-173.	2.1	11
58	Use of Bathymetric and LiDAR Data in Generating Digital Elevation Model over the Lower Athabasca River Watershed in Alberta, Canada. Water (Switzerland), 2017, 9, 19.	1.2	10
59	A Field Pilot Study on Treating Groundwater Contaminated with Sulfolane Using UV/H2O2. Water (Switzerland), 2020, 12, 1200.	1.2	10
60	Adsorption by Granular Activated Carbon and Nano Zerovalent Iron from Wastewater: A Study on Removal of Selenomethionine and Selenocysteine. Water (Switzerland), 2021, 13, 23.	1.2	10
61	A review of mechanistic and data-driven models of aerobic granular sludge. Journal of Environmental Chemical Engineering, 2022, 10, 107500.	3.3	10
62	Application of Fuzzy Logic to Estimate Flow of Methane for Energy Generation at a Sanitary Landfill. Journal of Energy Engineering - ASCE, 2007, 133, 212-223.	1.0	9
63	Advanced Oxidation Based Treatment of Soil Wash Water Contaminated with Sulfolane. Water (Switzerland), 2019, 11, 2152.	1.2	9
64	Laboratory and Field Investigation of Sulfolane Removal from Water Using Activated Carbon. Journal of Environmental Engineering, ASCE, 2020, 146, .	0.7	9
65	Development of Remote Sensing Based Models for Surface Water Quality. Clean - Soil, Air, Water, 2014, 42, 1044-1051.	0.7	8
66	Design and Evaluation of a Novel Light-Emitting Diode Photocatalytic Reactor for Water Treatment. Journal of Environmental Engineering, ASCE, 2018, 144, 04018014.	0.7	8
67	Influence of UV dose on the UV/H2O2 process for the degradation of carbamazepine in wastewater. Environmental Technology (United Kingdom), 2019, 40, 3031-3039.	1.2	8
68	Short-Term River Flow Forecasting Framework and Its Application in Cold Climatic Regions. Water (Switzerland), 2020, 12, 3049.	1.2	8
69	A review on physiochemical treatment of sulfolane in aqueous media. Journal of Environmental Chemical Engineering, 2021, 9, 105691.	3.3	8
70	Integration of aerobic granulation and UV/H₂O₂ processes in a continuous flow system for the degradation of sulfolane in contaminated water. Environmental Science: Water Research and Technology, 2020, 6, 1711-1722.	1.2	8
71	Visible-Light Driven Photocatalytic Degradation of 4-Chlorophenol Using Graphitic Carbon Nitride-Based Nanocomposites. Catalysts, 2022, 12, 281.	1.6	8
72	A comparison of numerical solutions of partial differential equations with probabilistic and possibilistic parameters for the quantification of uncertainty in subsurface solute transport. Journal of Contaminant Hydrology, 2009, 110, 45-59.	1.6	7

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73	Incorporating linguistic, probabilistic, and possibilistic information in a riskâ€based approach for ranking contaminated sites. Integrated Environmental Assessment and Management, 2010, 6, 711-724.	1.6	7
74	Practical Method to Extract and Dechlorinate PCBs in Soils. Practice Periodical of Hazardous, Toxic and Radioactive Waste Management, 2010, 14, 98-103.	0.4	7
75	Comparative Study of Four TiO2-Based Photocatalysts to Degrade 2,4-D in a Semi-Passive System. Water (Switzerland), 2019, 11, 621.	1.2	7
76	Investigation of Biologically Stable Biofilter Medium for Methane Mitigation by Methanotrophic Bacteria. Journal of Hazardous, Toxic, and Radioactive Waste, 2018, 22, 04018013.	1.2	6
77	Field-scale biopiles for remediation of sulfolane-contaminated soil. Journal of Environmental Engineering and Science, 2021, 16, 130-137.	0.3	6
78	Electron transfer sensitized photodechlorination of surfactant solubilized PCB 138. Chemosphere, 2013, 90, 2347-2351.	4.2	5
79	Application-Scale Parametric Evaluation of Ultraviolet Photolysis (UV) and UV/H2O2 for the Degradation of Neutral Pharmaceuticals in Municipal Wastewaters. Journal of Environmental Engineering, ASCE, 2021, 147, .	0.7	5
80	Passive Solar Photocatalytic Treatment of Emerging Contaminants in Water: A Field Study. Catalysts, 2019, 9, 1045.	1.6	4
81	Quantifying relations and similarities of the meteorological parameters among the weather stations in the Alberta Oil Sands region. PLoS ONE, 2022, 17, e0261610.	1.1	4
82	Suitability Assessment of Weather Networks for Wind Data Measurements in the Athabasca Oil Sands Area. Climate, 2022, 10, 10.	1.2	4
83	Sulfolane in contaminated sites: environmental toxicity and bioremediation technologies. Environmental Reviews, 2022, 30, 217-227.	2.1	4
84	Dechlorination of polychlorinated biphenyls in transformer oil using UV and visible light. Journal of Environmental Science and Health - Part A Toxic/Hazardous Substances and Environmental Engineering, 2013, 48, 92-98.	0.9	3
85	Design of a homogeneous radiation field in an LED photo-reactor. Journal of Environmental Engineering and Science, 2014, 9, 214-223.	0.3	3
86	Abandoned oil and gas well site environmental risk estimation. Toxicological and Environmental Chemistry, 2016, , 1-23.	0.6	3
87	Oil- and Gas-Wellsite-Reclamation-Liability Estimation. SPE Economics and Management, 2016, 8, 097-107.	0.8	3
88	Efficacy of UV-C photolysis of bisphenol A on transcriptome alterations of genes in zebrafish embryos. Journal of Environmental Science and Health - Part A Toxic/Hazardous Substances and Environmental Engineering, 2016, 51, 877-883.	0.9	3
89	Removal of Organoselenium from Aqueous Solution by Nanoscale Zerovalent Iron Supported on Granular Activated Carbon. Water (Switzerland), 2022, 14, 987.	1.2	3
90	An Alternative Process to Treat Boiler Feed Water for Reuse. Water Environment Research, 2012, 84, 725-732.	1.3	2

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91	A well site reclamation prioritisation model framework. Journal of Environmental Engineering and Science, 2015, 10, 62-72.	0.3	2
92	A laboratory and field investigation of aerobic biodegradation of sulfolane in groundwater. Journal of Chemical Technology and Biotechnology, 2021, 96, 2865-2871.	1.6	2
93	Aerobic biodegradation of sulfolane using Archaea and Pseudomonas strains. Journal of Chemical Technology and Biotechnology, 2022, 97, 1763-1770.	1.6	2
94	An integrated health risk assessment of contaminated sites under aleatory and epistemic uncertainties. International Journal of Risk Assessment and Management, 2011, 15, 4.	0.2	1
95	Extraction of PCBs from Transformer Oil and Its Dechlorination Using Visible Light. Journal of Environmental Engineering, ASCE, 2013, 139, 627-632.	0.7	1
96	Protocols for the analysis of transformer oil and its degradation in soil by hydrogen peroxide. Journal of Environmental Engineering and Science, 2013, 8, 371-381.	0.3	1