

# Aruliah Rajasekar

## List of Publications by Year in descending order

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104  
papers

3,737  
citations

109137

35  
h-index

161609

54  
g-index

107  
all docs

107  
docs citations

107  
times ranked

3130  
citing authors

#	ARTICLE	IF	CITATIONS
1	Integrated Remediation Processes Toward Heavy Metal Removal/Recovery From Various Environments-A Review. <i>Frontiers in Environmental Science</i> , 2019, 7, .	1.5	241
2	Biosurfactant and Degradative Enzymes Mediated Crude Oil Degradation by Bacterium <i>Bacillus subtilis</i> A1. <i>Frontiers in Microbiology</i> , 2017, 8, 193.	1.5	178
3	Characterization of corrosive bacterial consortia isolated from petroleum-product-transporting pipelines. <i>Applied Microbiology and Biotechnology</i> , 2010, 85, 1175-1188.	1.7	154
4	Sequential electrochemical oxidation and bio-treatment of the azo dye congo red and textile effluent. <i>Journal of Photochemistry and Photobiology B: Biology</i> , 2019, 200, 111655.	1.7	111
5	Bioremediation of heavy metals using an endophytic bacterium <i>Paenibacillus</i> sp. RM isolated from the roots of <i>Tridax procumbens</i> . <i>3 Biotech</i> , 2016, 6, 242.	1.1	100
6	Neem extract as a green inhibitor for microbiologically influenced corrosion of carbon steel API 5LX in a hypersaline environments. <i>Journal of Molecular Liquids</i> , 2017, 240, 121-127.	2.3	98
7	Bacteria attachment to surfaces – AFM force spectroscopy and physicochemical analyses. <i>Journal of Colloid and Interface Science</i> , 2011, 364, 213-218.	5.0	93
8	Biodegradation and corrosion behavior of manganese oxidizer <i>Bacillus cereus</i> ACE4 in diesel transporting pipeline. <i>Corrosion Science</i> , 2007, 49, 2694-2710.	3.0	85
9	<i>Allium sativum</i> (garlic extract) as a green corrosion inhibitor with biocidal properties for the control of MIC in carbon steel and stainless steel in oilfield environments. <i>International Biodeterioration and Biodegradation</i> , 2018, 132, 66-73.	1.9	77
10	Microbial Corrosion of Aluminum 2024 Aeronautical Alloy by Hydrocarbon Degrading Bacteria <i>Bacillus cereus</i> ACE4 and <i>Serratia marcescens</i> ACE2. <i>Industrial &amp; Engineering Chemistry Research</i> , 2010, 49, 6054-6061.	1.8	76
11	Assessment of airborne bacteria and fungi in food courts. <i>Building and Environment</i> , 2011, 46, 2081-2087.	3.0	75
12	Bacterial degradation of naphtha and its influence on corrosion. <i>Corrosion Science</i> , 2005, 47, 257-271.	3.0	73
13	<i>Sargassum wightii</i> -synthesized ZnO nanoparticles reduce the fitness and reproduction of the malaria vector <i>Anopheles stephensi</i> and cotton bollworm <i>Helicoverpa armigera</i> . <i>Physiological and Molecular Plant Pathology</i> , 2018, 101, 202-213.	1.3	68
14	Use of Industrial Wastes as Sustainable Nutrient Sources for Bacterial Cellulose (BC) Production: Mechanism, Advances, and Future Perspectives. <i>Polymers</i> , 2021, 13, 3365.	2.0	67
15	Bio-electrokinetic remediation of crude oil contaminated soil enhanced by bacterial biosurfactant. <i>Journal of Hazardous Materials</i> , 2021, 405, 124061.	6.5	62
16	Enhanced biodegradation of hydrophobic organic pollutants by the bacterial consortium: Impact of enzymes and biosurfactants. <i>Environmental Pollution</i> , 2021, 289, 117956.	3.7	60
17	Bioreduction of hexavalent chromium by <i>Pseudomonas stutzeri</i> L1 and <i>Acinetobacter baumannii</i> L2. <i>Annals of Microbiology</i> , 2017, 67, 91-98.	1.1	57
18	Role of Inorganic and Organic Medium in the Corrosion Behavior of <i>Bacillus megaterium</i> and <i>Pseudomonas</i> sp. in Stainless Steel SS 304. <i>Industrial &amp; Engineering Chemistry Research</i> , 2011, 50, 12534-12541.	1.8	56

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19	Biodecolourization of textile dyes by novel, indigenous <i>Pseudomonas stutzeri</i> MN1 and <i>Acinetobacter baumannii</i> MN3. <i>Journal of Environmental Chemical Engineering</i> , 2017, 5, 716-724.	3.3	56
20	Role of <i>Serratia marcescens</i> ACE2 on diesel degradation and its influence on corrosion. <i>Journal of Industrial Microbiology and Biotechnology</i> , 2007, 34, 589-598.	1.4	54
21	Electrochemical decolorization and biodegradation of tannery effluent for reduction of chemical oxygen demand and hexavalent chromium. <i>Journal of Water Process Engineering</i> , 2017, 20, 22-28.	2.6	53
22	Glycolipid biosurfactant as an eco-friendly microbial inhibitor for the corrosion of carbon steel in vulnerable corrosive bacterial strains. <i>Journal of Molecular Liquids</i> , 2018, 261, 473-479.	2.3	52
23	Anti-bacterial and anti-biofilm properties of green-synthesized copper nanoparticles from <i>Cardiospermum halicacabum</i> leaf extract. <i>Bioprocess and Biosystems Engineering</i> , 2020, 43, 1649-1657.	1.7	52
24	Biologically reduced graphene oxide as a green and easily available photocatalyst for degradation of organic dyes. <i>Environmental Research</i> , 2021, 196, 110983.	3.7	51
25	Airborne bacteria, fungi, and endotoxin levels in residential microenvironments: a case study. <i>Aerobiologia</i> , 2012, 28, 375-390.	0.7	50
26	Ureolytic bacteria mediated synthesis of hairy ZnO nanostructure as photocatalyst for decolorization of dyes. <i>Materials Chemistry and Physics</i> , 2020, 243, 122619.	2.0	50
27	Biodegradation of corrosion inhibitors and their influence on petroleum product pipeline. <i>Microbiological Research</i> , 2007, 162, 355-368.	2.5	48
28	Microbial influenced corrosion of processing industry by re-circulating waste water and its control measures - A review. <i>Chemosphere</i> , 2021, 265, 129075.	4.2	45
29	Characterization of hydrocarbon degrading bacteria isolated from Indian crude oil reservoir and their influence on biocorrosion of carbon steel API 5LX. <i>International Biodeterioration and Biodegradation</i> , 2018, 129, 67-80.	1.9	43
30	Ginger extract as green biocide to control microbial corrosion of mild steel. <i>3 Biotech</i> , 2017, 7, 133.	1.1	41
31	Green-synthesized CdS nano-pesticides: Toxicity on young instars of malaria vectors and impact on enzymatic activities of the non-target mud crab <i>Scylla serrata</i> . <i>Aquatic Toxicology</i> , 2017, 188, 100-108.	1.9	40
32	Bacterial Degradation and Corrosion of Naphtha in Transporting Pipeline. <i>Current Microbiology</i> , 2007, 55, 374-381.	1.0	39
33	Biosurfactant and enzyme mediated crude oil degradation by <i>Pseudomonas stutzeri</i> NA3 and <i>Acinetobacter baumannii</i> MN3. <i>3 Biotech</i> , 2017, 7, 278.	1.1	39
34	Biological mediated synthesis of RGO-ZnO composites with enhanced photocatalytic and antibacterial activity. <i>Journal of Hazardous Materials</i> , 2021, 409, 124661.	6.5	39
35	Characterization of two novel strains of <i>Pseudomonas aeruginosa</i> on biodegradation of crude oil and its enzyme activities. <i>Environmental Pollution</i> , 2022, 304, 119223.	3.7	39
36	Bioengineered silver nanoparticles as potent anti-corrosive inhibitor for mild steel in cooling towers. <i>Environmental Science and Pollution Research</i> , 2018, 25, 5412-5420.	2.7	38

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37	Bio-Oxidation and Biocyanidation of Refractory Mineral Ores for Gold Extraction: A Review. <i>Critical Reviews in Environmental Science and Technology</i> , 2015, 45, 1611-1643.	6.6	36
38	Biosurfactant mediated bioelectrokinetic remediation of diesel contaminated environment. <i>Chemosphere</i> , 2021, 264, 128377.	4.2	36
39	Enzyme-mediated biodegradation of long-chain n-alkanes (C32 and C40) by thermophilic bacteria. <i>3 Biotech</i> , 2017, 7, 116.	1.1	35
40	Metagenomic analysis of microbial community and its role in bioelectrokinetic remediation of tannery contaminated soil. <i>Journal of Hazardous Materials</i> , 2021, 412, 125133.	6.5	35
41	Inhibition of Biocorrosion of Aluminum 2024 Aeronautical Alloy by Conductive Ladder Polymer Poly( <i>o</i> -phenylenediamine). <i>Industrial &amp; Engineering Chemistry Research</i> , 2011, 50, 2040-2046.	1.8	33
42	Role of <i>Bacillus subtilis</i> and <i>Pseudomonas aeruginosa</i> on Corrosion Behaviour of Stainless Steel. <i>Arabian Journal for Science and Engineering</i> , 2015, 40, 1825-1836.	1.1	33
43	Iron and iron oxide nanoparticles are highly toxic to <i>Culex quinquefasciatus</i> with little non-target effects on larvivorous fishes. <i>Environmental Science and Pollution Research</i> , 2018, 25, 10504-10514.	2.7	33
44	Electrochemical decolorization of methyl red by RuO <sub>2</sub> -IrO <sub>2</sub> -TiO <sub>2</sub> electrode and biodegradation with <i>Pseudomonas stutzeri</i> MN1 and <i>Acinetobacter baumannii</i> MN3: An integrated approach. <i>Chemosphere</i> , 2017, 183, 204-211.	4.2	31
45	Biosurfactants produced by <i>Bacillus subtilis</i> A1 and <i>Pseudomonas stutzeri</i> NA3 reduce longevity and fecundity of <i>Anopheles stephensi</i> and show high toxicity against young instars. <i>Environmental Science and Pollution Research</i> , 2018, 25, 10471-10481.	2.7	31
46	Bioreduction of hexavalent chromium by chromium resistant alkalophilic bacteria isolated from tannery effluent. <i>Journal of King Saud University - Science</i> , 2020, 32, 1969-1977.	1.6	30
47	A statistical approach of zinc remediation using acidophilic bacterium via an integrated approach of bioleaching enhanced electrokinetic remediation (BEER) technology. <i>Chemosphere</i> , 2018, 207, 753-763.	4.2	29
48	Biodegradation and corrosion behaviour of <i>Serratia marcescens</i> ACE2 isolated from an Indian diesel-transporting pipeline. <i>World Journal of Microbiology and Biotechnology</i> , 2007, 23, 1065-1074.	1.7	28
49	Role of Hydrocarbon Degrading Bacteria <i>Serratia marcescens</i> ACE2 and <i>Bacillus cereus</i> ACE4 on Corrosion of Carbon Steel API 5LX. <i>Industrial &amp; Engineering Chemistry Research</i> , 2011, 50, 10041-10046.	1.8	28
50	Role of 2-mercaptopyridine on control of microbial influenced corrosion of copper CW024A metal in cooling water system. <i>Chemosphere</i> , 2019, 222, 611-618.	4.2	28
51	Characterization of bacterial community in oil-contaminated soil and its biodegradation efficiency of high molecular weight (>C40) hydrocarbon. <i>Chemosphere</i> , 2022, 289, 133168.	4.2	28
52	Phytosynthesis of silver nanoparticles from <i>Jatropha integerrima</i> Jacq. flower extract and their possible applications as antibacterial and antioxidant agent. <i>Saudi Journal of Biological Sciences</i> , 2022, 29, 680-688.	1.8	28
53	Impact of biosurfactant and iron nanoparticles on biodegradation of polyaromatic hydrocarbons (PAHs). <i>Environmental Pollution</i> , 2022, 306, 119384.	3.7	28
54	Impact and Role of Bacterial Communities on Biocorrosion of Metals Used in the Processing Industry. <i>ACS Omega</i> , 2019, 4, 21353-21360.	1.6	27

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55	Electrochemical Behavior of <i>Serratia marcescens</i> ACE2 on Carbon Steel API 5L-X60 in Organic/Aqueous Phase. Industrial & Engineering Chemistry Research, 2008, 47, 6925-6932.	1.8	25
56	Airborne bacteria associated with corrosion of mild steel 1010 and aluminum alloy 1100. Environmental Science and Pollution Research, 2017, 24, 8120-8136.	2.7	25
57	Biocorrosion and Its Impact on Carbon Steel API 5LX by <i>Bacillus subtilis</i> A1 and <i>Bacillus cereus</i> A4 Isolated From Indian Crude Oil Reservoir. Journal of Bio- and Tribo-Corrosion, 2017, 3, 1.	1.2	25
58	An anticorrosive study on potential bioactive compound produced by <i>Pseudomonas aeruginosa</i> TBH2 against the biocorrosive bacterial biofilm on copper metal. Journal of Molecular Liquids, 2017, 243, 706-713.	2.3	25
59	Characterization of crude oil degrading bacterial communities and their impact on biofilm formation. Environmental Pollution, 2021, 286, 117556.	3.7	25
60	Managing wastes as green resources: cigarette butt-synthesized pesticides are highly toxic to malaria vectors with little impact on predatory copepods. Environmental Science and Pollution Research, 2018, 25, 10456-10470.	2.7	24
61	Role of thermophilic bacteria ( <i>Bacillus</i> and <i>Geobacillus</i> ) on crude oil degradation and biocorrosion in oil reservoir environment. 3 Biotech, 2019, 9, 79.	1.1	24
62	Glycyrrhiza glabra extract as an eco-friendly inhibitor for microbiologically influenced corrosion of API 5LX carbon steel in oil well produced water environments. Journal of Molecular Liquids, 2021, 333, 115952.	2.3	24
63	Characterization of Corrosive Bacterial Consortia Isolated from Water in a Cooling Tower. ISRN Corrosion, 2014, 2014, 1-11.	0.3	22
64	Role of Bacterial Plasmid on Biofilm Formation and Its Influence on Corrosion of Engineering Materials. Journal of Bio- and Tribo-Corrosion, 2016, 2, 1.	1.2	22
65	Organic-inorganic hybrid fluorescent sensor thin films of rhodamine B embedded Ag-SBA15 for selective recognition of Hg (II) ions in water. Chinese Chemical Letters, 2017, 28, 1399-1405.	4.8	18
66	A sensitive optical sensor based on DNA-labelled $\text{Si}@\text{SiO}_2$ core-shell nanoparticle for the detection of. Bulletin of Materials Science, 2017, 40, 1455-1462.	0.8	18
67	<i>Bacillus megaterium</i> -induced biocorrosion on mild steel and the effect of <i>Artemisia pallens</i> methanolic extract as a natural corrosion inhibitor. Archives of Microbiology, 2020, 202, 2311-2321.	1.0	18
68	Influence of Thermophilic Bacteria on Corrosion of Carbon Steel in Hyper Chloride Environment. International Journal of Environmental Research, 2017, 11, 339-347.	1.1	16
69	Characterization of methanolic extract of seaweeds as environmentally benign corrosion inhibitors for mild steel corrosion in sodium chloride environment. Journal of Molecular Liquids, 2021, 340, 117011.	2.3	16
70	Biocorrosion of mild steel and copper used in cooling tower water and its control. 3 Biotech, 2018, 8, 178.	1.1	15
71	Electrokinetic (EK) and Bio-electrokinetic (BEK) Remediation of Hexavalent Chromium in Contaminated Soil Using Alkalophilic Bio-anolyte. Indian Geotechnical Journal, 2020, 50, 330-338.	0.7	14
72	Bacterial community analysis of biofilm on API 5LX carbon steel in an oil reservoir environment. Bioprocess and Biosystems Engineering, 2021, 44, 355-368.	1.7	14

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73	Control of corrosive bacterial community by bronopol in industrial water system. 3 Biotech, 2018, 8, 55.	1.1	13
74	Myco-Synthesis of Zinc Oxide Nanoparticles as Potent Anti-corrosion of Copper in Cooling Towers. Journal of Cluster Science, 2019, 30, 1583-1590.	1.7	13
75	Enhanced biological nitrate removal by gC3N4/TiO2 composite and role of extracellular polymeric substances. Environmental Research, 2022, 207, 112158.	3.7	13
76	Treatment of soak liquor and bioelectricity generation in dual chamber microbial fuel cell. Environmental Science and Pollution Research, 2018, 25, 11424-11430.	2.7	12
77	Facile synthesis of reduced graphene oxide using <i>Acalypha indica</i> and <i>Raphanus sativus</i> extracts and their in vitro cytotoxicity activity against human breast (MCF-7) and lung (A549) cancer cell lines. 3 Biotech, 2021, 11, 157.	1.1	12
78	Evaluation of <i>Syzygium aromaticum</i> aqueous extract as an eco-friendly inhibitor for microbiologically influenced corrosion of carbon steel in oil reservoir environment. Bioprocess and Biosystems Engineering, 2021, 44, 1441-1452.	1.7	12
79	Detection of Neonicotinoids in agriculture soil and degradation of thiacloprid through photo degradation, biodegradation and photo-biodegradation. Environmental Pollution, 2022, 306, 119452.	3.7	12
80	Poly(Styrene Sulfonate)/Poly(Allylamine Hydrochloride) Encapsulation of TiO2 Nanoparticles Boosts Their Toxic and Repellent Activity Against Zika Virus Mosquito Vectors. Journal of Cluster Science, 2018, 29, 27-39.	1.7	11
81	Wettability Alteration of the Oil-Wet Carbonate by Viscosity-Augmented Guar Galactomannan for Enhanced Oil Recovery. ACS Applied Polymer Materials, 2021, 3, 1983-1994.	2.0	11
82	Characterization of biospheric bacterial community on reduction and removal of chromium from tannery contaminated soil using an integrated approach of bio-enhanced electrokinetic remediation. Journal of Environmental Chemical Engineering, 2021, 9, 106602.	3.3	11
83	Solution Combustion Synthesis of Hierarchically Structured V2O5 Nanoflakes: Efficacy Against <i>Plasmodium falciparum</i> , <i>Plasmodium berghei</i> and the Malaria Vector <i>Anopheles stephensi</i> . Journal of Cluster Science, 2017, 28, 2337-2348.	1.7	9
84	Novel synthesis of ZnO by Ice-cube method for photo-inactivation of <i>E. coli</i> . Saudi Journal of Biological Sciences, 2020, 27, 1130-1138.	1.8	9
85	Biocorrosion inhibition of Cu70:Ni30 by <i>Bacillus subtilis</i> strain S1X and <i>Pseudomonas aeruginosa</i> strain ZK biofilms. Journal of Basic Microbiology, 2020, 60, 243-252.	1.8	8
86	Intimately coupled gC3N4 photocatalysis and mixed culture biofilm enhanced detoxification of sulfamethoxazole: Elucidating degradation mechanism and toxicity assessment. Environmental Research, 2022, 214, 113824.	3.7	8
87	Biodegradation of Petroleum Hydrocarbon and Its Influence on Corrosion with Special Reference to Petroleum Industry. Environmental Footprints and Eco-design of Products and Processes, 2017, , 307-336.	0.7	7
88	Bismuth Oxyiodide Nanoflakes Showed Toxicity Against the Malaria Vector <i>Anopheles stephensi</i> and In Vivo Antiplasmodial Activity. Journal of Cluster Science, 2018, 29, 337-344.	1.7	7
89	Effect of nano-zerovalent iron incorporated polyvinyl-alginate hybrid hydrogel matrix on inhibition of corrosive bacteria in a cooling tower water environment. SN Applied Sciences, 2019, 1, 1.	1.5	7
90	Bio-approach synthesis of nanosilver impregnation on calcium hydroxyapatite by biological activated ammonia from urinary waste. Arabian Journal of Chemistry, 2020, 13, 5878-5889.	2.3	7

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91	BIOLEACHING OF COPPER FROM BLACK SHALE ORE USING MESOPHILIC MIXED POPULATIONS IN AN AIR UP-LIFT BIOREACTOR. <i>Environmental Engineering and Management Journal</i> , 2012, 11, 1839-1848.	0.2	7
92	Biofilm formation on copper and its control by inhibitor/biocide in cooling water environment. <i>Saudi Journal of Biological Sciences</i> , 2021, 28, 7588-7594.	1.8	7
93	Effect of crude methanolic extract of <i>Lawsonia inermis</i> for anti-biofilm on mild steel 1010 and its effect on corrosion in a re-circulating wastewater system. <i>Journal of King Saud University - Science</i> , 2021, 33, 101611.	1.6	6
94	Integrated approach of photo-assisted electrochemical oxidation and sequential biodegradation of textile effluent. <i>Environmental Pollution</i> , 2022, 307, 119412.	3.7	6
95	Role of calcium-depositing bacteria <i>Agrobacterium tumefaciens</i> and its influence on corrosion of different engineering metals used in cooling water system. <i>3 Biotech</i> , 2017, 7, 374.	1.1	5
96	Insecticidal Activity of Nanoparticles and Mechanism of Action. , 2020, , 243-266.		5
97	Fluorescence spectroscopy as a novel technique for premarital screening of sickle cell disorders. <i>Photodiagnosis and Photodynamic Therapy</i> , 2021, 34, 102276.	1.3	4
98	Macrolepiota-mediated synthesized silver nanoparticles as a green corrosive inhibitor for mild steel in re-circulating cooling water system. <i>Bioprocess and Biosystems Engineering</i> , 2022, 45, 493-501.	1.7	4
99	Evaluation of crude methanolic mangrove leaves extract for antibiofilm efficacy against biofilm-forming bacteria on a cooling tower wastewater system. <i>Arabian Journal of Chemistry</i> , 2022, , 103948.	2.3	4
100	Characterization of active lead molecules from <i>Lissocarinus orbicularis</i> with potential antimicrobial resistance inhibition properties. <i>Journal of Infection and Public Health</i> , 2021, 14, 1903-1910.	1.9	3
101	Impact of Light and Temperature on Growth, Intracellular and Extracellular Pigment, and Lovastatin Yield by <i>Monascus ruber</i> in Synthetic Medium. <i>Advances in Materials Science and Engineering</i> , 2022, 1-6.	1.0	2
102	Biogenic Nanoparticles and Strategies of Nano-bioremediation to Remediate PAHs for a Sustainable Future. , 2021, , 317-337.		1
103	Standardization of an in-house multiplex real-time polymerase chain reaction for the simultaneous detection of <i>Toxoplasma gondii</i> , Rubella virus, cytomegalovirus, herpes simplex Virus 1 and 2, and <i>Treponema pallidum</i> infection among pregnant women. <i>Indian Journal of Public Health</i> , 2021, 65, 369.	0.3	1
104	Synthesis of silver nanoparticles from Indian red yeast rice and its inhibition of biofilm in copper metal in cooling water environment. <i>Environmental Science and Pollution Research</i> , 0, , .	2.7	1