Purushothaman Chirakkuzhyil Abhilash

List of Publications by Year
in descending order

109	6,664	76326	64796
papers	citations	40 h-index	79 g-index

119	119	119	6835
all docs	docs citations	times ranked	citing authors

#	ARTICLE	IF	CITATIONS
1	Pesticide use and application: An Indian scenario. Journal of Hazardous Materials, 2009, 165, 1-12.	12.4	661
2	Application of nanotechnology for the encapsulation of botanical insecticides for sustainable agriculture: Prospects and promises. Biotechnology Advances, 2014, 32, 1550-1561.	11.7	364
3	Hexachlorocyclohexane (HCH) as new Stockholm Convention POPsâ€"a global perspective on the management of Lindane and its waste isomers. Environmental Science and Pollution Research, 2011, 18, 152-162.	5.3	359
4	Transgenic plants for enhanced biodegradation and phytoremediation of organic xenobiotics. Biotechnology Advances, 2009, 27, 474-488.	11.7	309
5	Plantâ€"microbe interactions: novel applications for exploitation in multipurpose remediation technologies. Trends in Biotechnology, 2012, 30, 416-420.	9.3	242
6	Genetically engineered bacteria: An emerging tool for environmental remediation and future research perspectives. Gene, 2011, 480, 1-9.	2.2	239
7	Use of botanical insecticides for sustainable agriculture: Future perspectives. Ecological Indicators, 2019, 105, 483-495.	6.3	225
8	Integrated Approach of Agri-nanotechnology: Challenges and Future Trends. Frontiers in Plant Science, 2017, 8, 471.	3.6	164
9	The Indian perspective of utilizing fly ash in phytoremediation, phytomanagement and biomass production. Journal of Environmental Management, 2009, 90, 2943-2958.	7.8	148
10	Influence of inoculation of arsenic-resistant Staphylococcus arlettae on growth and arsenic uptake in Brassica juncea (L.) Czern. Var. R-46. Journal of Hazardous Materials, 2013, 262, 1039-1047.	12.4	142
11	Jatropha curcas: A potential crop for phytoremediation of coal fly ash. Journal of Hazardous Materials, 2009, 172, 269-275.	12.4	141
12	Polymeric and Solid Lipid Nanoparticles for Sustained Release of Carbendazim and Tebuconazole in Agricultural Applications. Scientific Reports, 2015, 5, 13809.	3.3	141
13	Nanoparticles Based on Chitosan as Carriers for the Combined Herbicides Imazapic and Imazapyr. Scientific Reports, 2016, 6, 19768.	3.3	140
14	Exploring marginal and degraded lands for biomass and bioenergy production: An Indian scenario. Renewable and Sustainable Energy Reviews, 2016, 54, 1537-1551.	16.4	138
15	Biogenic silver nanoparticles based on trichoderma harzianum: synthesis, characterization, toxicity evaluation and biological activity. Scientific Reports, 2017, 7, 44421.	3.3	135
16	Nanotechnology Applied to Bio-Encapsulation of Pesticides. Journal of Nanoscience and Nanotechnology, 2016, 16, 1231-1234.	0.9	131
17	Plant Growth-Promoting Microorganisms for Environmental Sustainability. Trends in Biotechnology, 2016, 34, 847-850.	9.3	125
18	Circular economy practices within energy and waste management sectors of India: A meta-analysis. Bioresource Technology, 2020, 304, 123018.	9.6	115

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19	Application of fly ash on the growth performance and translocation of toxic heavy metals within Cajanus cajan L.: Implication for safe utilization of fly ash for agricultural production. Journal of Hazardous Materials, 2009, 166, 255-259.	12.4	111
20	Sustainability of crop production from polluted lands. Energy, Ecology and Environment, 2016, 1, 54-65.	3.9	104
21	Jatropha curcas L.: A crucified plant waiting for resurgence. Renewable and Sustainable Energy Reviews, 2015, 41, 855-862.	16.4	97
22	Low input sustainable agriculture: A viable climate-smart option for boosting food production in a warming world. Ecological Indicators, 2020, 115, 106412.	6.3	95
23	Towards the coupling of phytoremediation with bioenergy production. Renewable and Sustainable Energy Reviews, 2016, 57, 1386-1389.	16.4	92
24	Biotechnological Advances for Restoring Degraded Land for Sustainable Development. Trends in Biotechnology, 2017, 35, 847-859.	9.3	80
25	Phytofiltration of cadmium from water by Limnocharis flava (L.) Buchenau grown in free-floating culture system. Journal of Hazardous Materials, 2009, 170, 791-797.	12.4	79
26	Sustainable clean-up technologies for soils contaminated with multiple pollutants: Plant-microbe-pollutant and climate nexus. Ecological Engineering, 2015, 82, 330-335.	3.6	72
27	Restoring the Unrestored: Strategies for Restoring Global Land during the UN Decade on Ecosystem Restoration (UN-DER). Land, 2021, 10, 201.	2.9	72
28	Remediation and management of POPs-contaminated soils in a warming climate: challenges and perspectives. Environmental Science and Pollution Research, 2013, 20, 5879-5885.	5.3	66
29	Remediation of lindane by Jatropha curcas L: Utilization of multipurpose species for rhizoremediation. Biomass and Bioenergy, 2013, 51, 189-193.	5.7	64
30	Exploring rhizospheric interactions for agricultural sustainability: the need of integrative research on multi-trophic interactions. Journal of Cleaner Production, 2016, 115, 362-365.	9.3	63
31	Matrix solid-phase dispersion extraction versus solid-phase extraction in the analysis of combined residues of hexachlorocyclohexane isomers in plant matrices. Journal of Chromatography A, 2007, 1176, 43-47.	3.7	62
32	Can we use biomass produced from phytoremediation?. Biomass and Bioenergy, 2011, 35, 1371-1372.	5.7	60
33	Agriculturally Important Microbes in Sustainable Food Production. Trends in Biotechnology, 2016, 34, 773-775.	9.3	57
34	Occurrence and distribution of hexachlorocyclohexane isomers in vegetation samples from a contaminated area. Chemosphere, 2008, 72, 79-86.	8.2	52
35	Policy recommendations for enabling transition towards sustainable agriculture in India. Land Use Policy, 2020, 96, 104718.	5.6	52
36	Comparative bioremediation potential of four rhizospheric microbial species against lindane. Chemosphere, 2011, 82, 56-63.	8.2	51

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37	Withania somnifera Dunal-mediated dissipation of lindane from simulated soil: implications for rhizoremediation of contaminated soil. Journal of Soils and Sediments, 2010, 10, 272-282.	3.0	50
38	Revisited Jatropha curcas as an oil plant of multiple benefits: critical research needs and prospects for the future. Environmental Science and Pollution Research, 2011, 18, 127-131.	5.3	49
39	Solid waste management of temple floral offerings by vermicomposting using Eisenia fetida. Waste Management, 2013, 33, 1113-1118.	7.4	49
40	Simplified determination of combined residues of lindane and other HCH isomers in vegetables, fruits, wheat, pulses and medicinal plants by matrix solid-phase dispersion (MSPD) followed by GCâ€“ECD. Food Chemistry, 2009, 113, 267-271.	8.2	44
41	Assessing the impacts of sewage sludge amendment containing nano-TiO2 on tomato plants: A life cycle study. Journal of Hazardous Materials, 2019, 369, 191-198.	12.4	41
42	Fly ash trapping and metal accumulating capacity of plants: Implication for green belt around thermal power plants. Landscape and Urban Planning, 2009, 92, 136-147.	7.5	40
43	Distribution of hexachlorocyclohexane isomers in soil samples from a small scale industrial area of Lucknow, North India, associated with lindane production. Chemosphere, 2008, 73, 1011-1015.	8.2	39
44	Influence of rhizospheric microbial inoculation and tolerant plant species on the rhizoremediation of lindane. Environmental and Experimental Botany, 2011, 74, 127-130.	4.2	38
45	Sustainability Analysis of Prosopis juliflora (Sw.) DC Based Restoration of Degraded Land in North India. Land, 2020, 9, 59.	2.9	38
46	Influence of the application of sugarcane bagasse on lindane (Î³-HCH) mobility through soil column: Implication for biotreatment. Bioresource Technology, 2008, 99, 8961-8966.	9.6	36
47	Domesticating the Undomesticated for Global Food and Nutritional Security: Four Steps. Agronomy, 2019, 9, 491.	3.0	35
48	Agri-food systems in India: Concerns and policy recommendations for building resilience in post COVID-19 pandemic times. Global Food Security, 2021, 29, 100537.	8.1	35
49	From piecemeal to holistic: Introducing sustainability science in Indian Universities to attain UN-Sustainable Development Goals. Journal of Cleaner Production, 2020, 247, 119133.	9.3	34
50	Steering the restoration of degraded agroecosystems during the United Nations Decade on Ecosystem Restoration. Journal of Environmental Management, 2021, 280, 111798.	7.8	34
51	Phytoextraction and dissipation of lindane by Spinacia oleracea L.. Ecotoxicology and Environmental Safety, 2014, 109, 22-26.	6.0	33
52	Agriculture in a changing climate. Journal of Cleaner Production, 2016, 113, 1046-1047.	9.3	31
53	Optimization of eco-friendly novel amendments for sustainable utilization of Fly ash based on growth performance, hormones, antioxidant, and heavy metal translocation in chickpea (Cicer arietinum L.) plant. Chemosphere, 2021, 267, 129216.	8.2	31
54	Structure prediction and binding sites analysis of curcin protein of Jatropha curcas using computational approaches. Journal of Molecular Modeling, 2012, 18, 2971-2979.	1.8	30

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55	Need of transdisciplinary research for accelerating land restoration during the UN Decade on Ecosystem Restoration. Restoration Ecology, 2021, 29, e13531.	2.9	30
56	Seasonal variation of HCH isomers in open soil and plant-rhizospheric soil system of a contaminated environment. Environmental Science and Pollution Research, 2009, 16, 727-740.	5.3	29
57	Sustainable soil amendments for improving the soil quality, yield and nutrient content of Brassica juncea (L.) grown in different agroecological zones of eastern Uttar Pradesh, India. Soil and Tillage Research, 2019, 195, 104418.	5.6	29
58	Planet friendly agriculture: Farming for people and the planet. Current Research in Environmental Sustainability, 2021, 3, 100041.	3.5	29
59	Effect of GrowingSesamum IndicumL. on Enhanced Dissipation of Lindane (1, 2, 3, 4, 5,) Tj ETQq1 1 0.784314 rgBT /Overlock	3.1	25
60	Sustainable agronomic practices for enhancing the soil quality and yield of Cicer arietinum L. under diverse agroecosystems. Journal of Environmental Management, 2020, 262, 110284.	7.8	25
61	Towards the ecological profiling of a pesticide contaminated soil site for remediation and management. Ecological Engineering, 2014, 71, 318-325.	3.6	23
62	Restoring HCHs polluted land as one of the priority activities during the UN-International Decade on Ecosystem Restoration (2021â€“2030): A call for global action. Science of the Total Environment, 2019, 689, 1304-1315.	8.0	23
63	Saline Soil Reclamation Index as an efficient tool for assessing restoration progress of saline land. Land Degradation and Development, 2021, 32, 123-138.	3.9	23
64	Effect of temperature variation on lindane dissipation and microbial activity in soil. Ecological Engineering, 2015, 79, 54-59.	3.6	22
65	Indian spinach: an underutilized perennial leafy vegetable for nutritional security in developing world. Energy, Ecology and Environment, 2018, 3, 195-205.	3.9	22
66	Coping with changes: adaptation of trees in a changing environment. Trends in Plant Science, 2015, 20, 137-138.	8.8	21
67	Remediation of Lindane Using Engineered Nanoparticles. Journal of Biomedical Nanotechnology, 2011, 7, 172-174.	1.1	20
68	Promoting tribal communities and indigenous knowledge as potential solutions for the sustainable development of India. Environmental Development, 2019, 32, 100459.	4.1	20
69	Nanotechnology for soil remediation: Revitalizing the tarnished resource. , 2020, , 345-370.		20
70	Multiple Residue Extraction for Organochlorine Pesticides in Medicinal Plants. Bulletin of Environmental Contamination and Toxicology, 2008, 81, 604-607.	2.7	18
71	Adaptive Agricultural Practices. SpringerBriefs in Environmental Science, 2020, , .	0.3	18
72	Fostering sustainable land restoration through circular economyâ€governed transitions. Restoration Ecology, 2020, 28, 719-723.	2.9	18

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73	Bioremediation for Fueling the Biobased Economy. Trends in Biotechnology, 2016, 34, 775-777.	9.3	15
74	Natureâ€based solutions in soil restoration for improving agricultural productivity. Land Degradation and Development, 2022, 33, 1269-1289.	3.9	15
75	Food for Thought:Putting Wild Edibles Back on The Table for Combating Hidden Hunger in Developing Countries. Current Science, 2018, 115, 611.	0.8	14
76	Varietal dataset of nutritionally important Lablab purpureus (L.) Sweet from Eastern Uttar Pradesh, India. Data in Brief, 2019, 24, 103935.	1.0	13
77	Performance Analysis and Soil Quality Indexing for Dalbergia sissoo Roxb. Grown in Marginal and Degraded Land of Eastern Uttar Pradesh, India. Land, 2019, 8, 63.	2.9	13
78	Impact of Integrated Agronomic Practices on Soil Fertility and Respiration on the Indo-Gangetic Plain of North India. Agronomy, 2021, 11, 402.	3.0	12
79	The Trilogy of Wild Crops, Traditional Agronomic Practices, and UN-Sustainable Development Goals. Agronomy, 2020, 10, 648.	3.0	11
80	Is Vigna radiata (L.) R. Wilczek a suitable crop for Lindane contaminated soil?. Ecological Engineering, 2014, 73, 219-223.	3.6	10
81	Old leaves accumulate more heavy metals than other parts of the desert shrub Calotropis procera at a traffic-polluted site as assessed by two analytical techniques. International Journal of Phytoremediation, 2019, 21, 1254-1262.	3.1	10
82	Belowground Microbial Communities: Key Players for Soil and Environmental Sustainability. SpringerBriefs in Environmental Science, 2020, , 5-22.	0.3	10
83	Unravelling the Soil Microbiome. SpringerBriefs in Environmental Science, 2020, , .	0.3	9
84	Root system engineering: prospects and promises. Trends in Plant Science, 2015, 20, 408-409.	8.8	8
85	Animal manures and plant residue-based amendments for sustainable rice-wheat production and soil fertility improvement in eastern Uttar Pradesh, North India. Ecological Engineering, 2022, 177, 106551.	3.6	8
86	Ecosystem restoration in India during the United Nations decade on ecosystem restoration: the way forward. Restoration Ecology, 2022, 30, .	2.9	8
87	Bioenergy crop production potential and carbon mitigation from marginal and degraded lands of India. Renewable Energy, 2022, 192, 300-312.	8.9	8
88	Assessment of tropical cyclone amphan affected inundation areas using sentinel-1 satellite data. Tropical Ecology, 2022, 63, 9-19.	1.2	7
89	Integrated nutrient management improves soil organic matter and agronomic sustainability of semiarid rainfed Inceptisols of the Indoâ€Gangetic Plains. Journal of Plant Nutrition and Soil Science, 2021, 184, 562-572.	1.9	7
90	Emergy-based sustainability analysis of bioenergy production from marginal and degraded lands of India. Ecological Modelling, 2022, 466, 109903.	2.5	7

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91	Formulation of Water Sustainability Index for India as a performance gauge for realizing the United Nations Sustainable Development Goal 6. Ambio, 2022, 51, 1569-1587.	5.5	7
92	Exploring the â€˜Safe Operating Spaceâ€™ of India for the implementation of UN-Sustainable Development Goals through effectual policy alignment. Sustainability Science, 2020, 15, 1149-1168.	4.9	6
93	Managing agroecosystems for food and nutrition security. Current Research in Environmental Sustainability, 2022, 4, 100127.	3.5	6
94	Adaptive Agronomic Practices for Sustaining Food Production. SpringerBriefs in Environmental Science, 2020, , 11-43.	0.3	5
95	Sustainability science and research for attaining UN-SDGs. Journal of Cleaner Production, 2018, 184, 609-610.	9.3	4
96	The Dasgupta Review: resetting the stage for a new paradigm. Frontiers in Ecology and the Environment, 0, , .	4.0	4
97	Rethinking of higher education institutions as complex adaptive systems for enabling sustainability governance. Journal of Cleaner Production, 2022, 359, 132083.	9.3	4
98	Introducing â€˜Anthropocene Scienceâ€™: A New International Journal for Addressing Human Impact on the Resilience of Planet Earth. Anthropocene Science, 2022, 1, 1-4.	2.9	3
99	Land and Water Conservation Technologies for Building Carbon Positive Villages in India. Land Degradation and Development, 0, , .	3.9	3
100	Advancing Global Biodiversity Governance: Recommendations for Strengthening the Post-2020 Global Biodiversity Framework. Anthropocene Science, 2022, 1, 195-203.	2.9	3
101	Agriculture in aÂChanging Climate. SpringerBriefs in Environmental Science, 2020, , 1-10.	0.3	2
102	Climate Adaptive Agricultural Interventions for Food, Nutritional, Health and Livelihood Security. Disaster Resilience and Green Growth, 2020, , 267-288.	0.2	2
103	Adaptive Agricultural Practices Employed in Eastern Uttar Pradesh, India. SpringerBriefs in Environmental Science, 2020, , 93-122.	0.3	1
104	Increasing Resilience in Crops for Future Changing Environment. SpringerBriefs in Environmental Science, 2020, , 45-61.	0.3	1
105	Managing Soil Resources for Human Health and Environmental Sustainability. , 2021, , 3-11.		1
106	Resource Conserving and Innovative Practices for Agricultural Sustainability. SpringerBriefs in Environmental Science, 2020, , 63-92.	0.3	1
107	Carbon sequestration and harnessing biomaterials from terrestrial plantations for mitigating climate change impacts. , 2022, , 299-313.		1
108	Conclusion and Future Perspectives. SpringerBriefs in Environmental Science, 2020, , 71-75.	0.3	0

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109	Policy Implications, Future Prospects and Conclusion. SpringerBriefs in Environmental Science, 2020, , 123-128.	0.3	0