

# Natchimuthu Karmegam

## List of Publications by Year in descending order

Source: <https://exaly.com/author-pdf/6202442/publications.pdf>

Version: 2024-02-01

87  
papers

2,864  
citations

117571

34  
h-index

189801

50  
g-index

89  
all docs

89  
docs citations

89  
times ranked

1424  
citing authors

#	ARTICLE	IF	CITATIONS
1	Heterogeneous base catalysts: Synthesis and application for biodiesel production – A review. <i>Bioresource Technology</i> , 2021, 331, 125054.	4.8	137
2	Enriched pressmud vermicompost production with green manure plants using <i>Eudrilus eugeniae</i> . <i>Bioresource Technology</i> , 2020, 299, 122578.	4.8	115
3	Removal of emerging micropollutants originating from pharmaceuticals and personal care products (PPCPs) in water and wastewater by advanced oxidation processes: A review. <i>Environmental Technology and Innovation</i> , 2021, 23, 101757.	3.0	102
4	Vermicomposting of paper industry sludge with cowdung and green manure plants using <i>Eisenia fetida</i> : A viable option for cleaner and enriched vermicompost production. <i>Journal of Cleaner Production</i> , 2019, 228, 718-728.	4.6	95
5	Biosurfactants: Potential and Eco-Friendly Material for Sustainable Agriculture and Environmental Safety – A Review. <i>Agronomy</i> , 2022, 12, 662.	1.3	86
6	Vermistabilization of pressmud using <i>Perionyx ceylanensis</i> Mich.. <i>Bioresource Technology</i> , 2010, 101, 8464-8468.	4.8	85
7	Phycoremediation of wastewater for pollutant removal: A green approach to environmental protection and long-term remediation. <i>Environmental Pollution</i> , 2021, 290, 117989.	3.7	84
8	Cleaner production of agriculturally valuable benignant materials from industry generated bio-wastes: A review. <i>Bioresource Technology</i> , 2021, 320, 124281.	4.8	78
9	Vermiconversion of biowastes with low-to-high C/N ratio into value added vermicompost. <i>Bioresource Technology</i> , 2020, 297, 122398.	4.8	76
10	Plant-Mediated Synthesis, Characterization and Bactericidal Potential of Emerging Silver Nanoparticles Using Stem Extract of <i>Phyllanthus pinnatus</i> : A Recent Advance in Phytonanotechnology. <i>Journal of Cluster Science</i> , 2019, 30, 1481-1488.	1.7	72
11	Earthworms and vermicompost: an eco-friendly approach for repaying nature’s debt. <i>Environmental Geochemistry and Health</i> , 2020, 42, 1617-1642.	1.8	69
12	Chemico-nanotreatment methods for the removal of persistent organic pollutants and xenobiotics in water – A review. <i>Bioresource Technology</i> , 2021, 324, 124678.	4.8	69
13	Effect of biochar amendment on compost quality, gaseous emissions and pathogen reduction during in-vessel composting of chicken manure. <i>Chemosphere</i> , 2021, 283, 131129.	4.2	69
14	Precomposting and green manure amendment for effective vermitransformation of hazardous coir industrial waste into enriched vermicompost. <i>Bioresource Technology</i> , 2021, 319, 124136.	4.8	65
15	Indigenous-plant extracts as larvicidal agents against <i>Culex quinquefasciatus</i> Say. <i>Bioresource Technology</i> , 1997, 59, 137-140.	4.8	62
16	Centrality of cattle solid wastes in vermicomposting technology – A cleaner resource recovery and biowaste recycling option for agricultural and environmental sustainability. <i>Environmental Pollution</i> , 2021, 268, 115688.	3.7	61
17	Extraction of microplastics from commonly used sea salts in India and their toxicological evaluation. <i>Chemosphere</i> , 2021, 263, 128181.	4.2	59
18	Optimization of binary acids pretreatment of corncob biomass for enhanced recovery of cellulose to produce bioethanol. <i>Fuel</i> , 2022, 321, 124060.	3.4	56

#	ARTICLE	IF	CITATIONS
19	Enhanced biogas production from food waste and activated sludge using advanced techniques – A review. <i>Bioresource Technology</i> , 2022, 355, 127234.	4.8	52
20	Emerging trends and nanotechnology advances for sustainable biogas production from lignocellulosic waste biomass: A critical review. <i>Fuel</i> , 2022, 312, 122928.	3.4	51
21	Antibacterial activity of silver nanoparticles phytosynthesized from <i>Glochidion candolleianum</i> leaves. <i>Materials Letters</i> , 2022, 311, 131572.	1.3	50
22	Co-composting of food waste and swine manure augmenting biochar and salts: Nutrient dynamics, gaseous emissions and microbial activity. <i>Bioresource Technology</i> , 2022, 344, 126300.	4.8	49
23	Investigating efficiency of <i>Lampito mauritii</i> (Kinberg) and <i>Perionyx ceylanensis</i> Michaelsen for vermicomposting of different types of organic substrates. <i>The Environmentalist</i> , 2009, 29, 287-300.	0.7	47
24	Graphene oxide-based nanomaterials for the treatment of pollutants in the aquatic environment: Recent trends and perspectives – A review. <i>Environmental Pollution</i> , 2022, 306, 119377.	3.7	45
25	Recent development patterns, utilization and prospective of biofuel production: Emerging nanotechnological intervention for environmental sustainability – A review. <i>Fuel</i> , 2022, 314, 122757.	3.4	44
26	Municipal solid waste (MSW) vermicomposting with an epigeic earthworm, <i>Perionyx ceylanensis</i> Mich.. <i>Bioresource Technology</i> , 2011, 102, 6769-6773.	4.8	43
27	Vermistabilization of paper mill sludge by an epigeic earthworm <i>Perionyx excavatus</i> : Mitigation strategies for sustainable environmental management. <i>Ecological Engineering</i> , 2018, 120, 187-197.	1.6	43
28	Environment-friendly management of textile mill wastewater sludge using epigeic earthworms: Bioaccumulation of heavy metals and metallothionein production. <i>Journal of Environmental Management</i> , 2020, 254, 109813.	3.8	43
29	Nutrient recovery and vermicompost production from livestock solid wastes with epigeic earthworms. <i>Bioresource Technology</i> , 2020, 313, 123690.	4.8	43
30	Metallothionein dependent-detoxification of heavy metals in the agricultural field soil of industrial area: Earthworm as field experimental model system. <i>Chemosphere</i> , 2021, 267, 129240.	4.2	43
31	The urge of algal biomass-based fuels for environmental sustainability against a steady tide of biofuel conflict analysis: Is third-generation algal biorefinery a boon?. <i>Fuel</i> , 2022, 317, 123494.	3.4	43
32	Seaweeds as bioresources for vermicompost production using the earthworm, <i>Perionyx excavatus</i> (Perrier). <i>Bioresource Technology</i> , 2019, 275, 394-401.	4.8	41
33	Emerging nano-structured innovative materials as adsorbents in wastewater treatment. <i>Bioresource Technology</i> , 2021, 320, 124394.	4.8	41
34	Earthworm intervened nutrient recovery and greener production of vermicompost from <i>Ipomoea staphylina</i> – An invasive weed with emerging environmental challenges. <i>Chemosphere</i> , 2021, 263, 128080.	4.2	41
35	The Role of Earthworms in Tropics with Emphasis on Indian Ecosystems. <i>Applied and Environmental Soil Science</i> , 2010, 2010, 1-16.	0.8	37
36	Synthesis of bioactive compounds from vermicast isolated actinomycetes species and its antimicrobial activity against human pathogenic bacteria. <i>Microbial Pathogenesis</i> , 2018, 121, 155-165.	1.3	35

#	ARTICLE	IF	CITATIONS
37	Activation of biochar through exoenzymes prompted by earthworms for vermibiochar production: A viable resource recovery option for heavy metal contaminated soils and water. <i>Chemosphere</i> , 2021, 278, 130458.	4.2	35
38	Valorization of food waste and poultry manure through co-composting amending saw dust, biochar and mineral salts for value-added compost production. <i>Bioresource Technology</i> , 2022, 346, 126442.	4.8	33
39	Growth, reproductive biology and life cycle of the vermicomposting earthworm, <i>Perionyx ceylanensis</i> Mich. (Oligochaeta: Megascolecidae). <i>Bioresource Technology</i> , 2009, 100, 4790-4796.	4.8	32
40	Biosynthesis of silver nanoparticles from <i>Premna serratifolia</i> L. leaf and its anticancer activity in CCl <sub>4</sub> -induced hepato-cancerous Swiss albino mice. <i>Applied Nanoscience (Switzerland)</i> , 2015, 5, 937-944.	1.6	32
41	Earthworm casts as an alternate carrier material for biofertilizers: Assessment of endurance and viability of <i>Azotobacter chroococcum</i> , <i>Bacillus megaterium</i> and <i>Rhizobium leguminosarum</i> . <i>Scientia Horticulturae</i> , 2010, 124, 286-289.	1.7	31
42	Vermistabilization of seaweeds using an indigenous earthworm species, <i>Perionyx excavatus</i> (Perrier). <i>Ecological Engineering</i> , 2019, 130, 23-31.	1.6	31
43	Assessment, characterization, and quantification of microplastics from river sediments. <i>Chemosphere</i> , 2022, 298, 134268.	4.2	30
44	Recycling of leather industrial sludge through vermitechnology for a cleaner environment – A review. <i>Industrial Crops and Products</i> , 2020, 155, 112791.	2.5	29
45	Effect of turkey litter ( <i>Meleagris gallopavo</i> L.) vermicompost on growth and yield characteristics of paddy, <i>Oryza sativa</i> (ADT-37). <i>African Journal of Biotechnology</i> , 2011, 10, .	0.3	27
46	Waste Ox bone based heterogeneous catalyst synthesis, characterization, utilization and reaction kinetics of biodiesel generation from <i>Jatropha curcas</i> oil. <i>Chemosphere</i> , 2022, 288, 132534.	4.2	26
47	Efficiency of microbial fuel cells in the treatment and energy recovery from food wastes: Trends and applications - A review. <i>Chemosphere</i> , 2022, 287, 132439.	4.2	25
48	Extraction, identification, and environmental risk assessment of microplastics in commercial toothpaste. <i>Chemosphere</i> , 2022, 296, 133976.	4.2	25
49	Advances in bioremediation of emerging contaminants from industrial wastewater by oxidoreductase enzymes. <i>Bioresource Technology</i> , 2022, 359, 127444.	4.8	25
50	Nanomaterials for transforming barrier properties of lignocellulosic biomass towards potential applications – A review. <i>Fuel</i> , 2022, 316, 123444.	3.4	24
51	Vermi transformation of monogastric <i>Elephas maximus</i> and ruminant <i>Bos taurus</i> excrements into vermicompost using <i>Eudrilus eugeniae</i> . <i>Bioresource Technology</i> , 2021, 320, 124302.	4.8	22
52	Dynamics of nutrients and microflora during vermicomposting of mango leaf litter ( <i>Mangifera</i> ) Tj ETQq0 0 0 rgBT /Overlock 10 Tf 50 142	0.1	19
53	Detoxification of coir pith through refined vermicomposting engaging <i>Eudrilus eugeniae</i> . <i>Chemosphere</i> , 2022, 291, 132675.	4.2	19
54	Vermiremediation of Urban and Agricultural Biomass Residues for Nutrient Recovery and Vermifertilizer Production. <i>Waste and Biomass Valorization</i> , 2020, 11, 6483-6497.	1.8	18

#	ARTICLE	IF	CITATIONS
55	Comparative Study of Biochemical Responses in Three Species of Earthworms Exposed to Pesticide and Metal Contaminated Soil. <i>Environmental Processes</i> , 2016, 3, 167-178.	1.7	15
56	Green Synthesis of Zinc Sulfide Nanoparticles Using <i>Abrus precatorius</i> and Its Effect on Coelomic Fluid Protein Profile and Enzymatic Activity of the Earthworm, <i>Eudrilus eugeniae</i> . <i>BioNanoScience</i> , 2020, 10, 149-156.	1.5	13
57	Aqueous two-phase partitioning and characterization of xylanase produced by <i>Streptomyces geysiriensis</i> from low cost lignocellulosic substrates. <i>Journal of Bioscience and Bioengineering</i> , 2020, 130, 571-576.	1.1	13
58	Graphene materials: Armor against nosocomial infections and biofilm formation – A review. <i>Environmental Research</i> , 2022, 214, 113867.	3.7	13
59	Vermiremediation of engine oil contaminated soil employing indigenous earthworms, <i>Drawida modesta</i> and <i>Lampito mauritii</i> . <i>Journal of Environmental Management</i> , 2022, 301, 113849.	3.8	10
60	Lignolytic valorization of agricultural residues by <i>Aspergillus nomius</i> and <i>Trichoderma harzianum</i> isolated from gut and comb of <i>Odontotermes obesus</i> (Termitidae). <i>Chemosphere</i> , 2021, 284, 131384.	4.2	9
61	Effect of vermiwash prepared from livestock biowaste as vermiponics medium on the growth and biochemical indices of <i>Amaranthus viridis</i> L.. <i>Environmental Technology and Innovation</i> , 2021, 21, 101300.	3.0	8
62	Enrichment of Biogas Slurry Vermicompost with <i>Azotobacter chroococcum</i> and <i>Bacillus megaterium</i> . <i>Journal of Environmental Science and Technology</i> , 2012, 5, 91-108.	0.3	8
63	Advanced thermochemical conversion of algal biomass to liquid and gaseous biofuels: A comprehensive review of recent advances. <i>Sustainable Energy Technologies and Assessments</i> , 2022, 52, 102211.	1.7	8
64	Assessment of earthworm diversity and pesticide toxicity in <i>Eudrilus Eugeniae</i> . <i>Environmental Chemistry and Ecotoxicology</i> , 2021, 3, 23-30.	4.6	7
65	Microbial Enrichment of Vermicompost. <i>ISRN Soil Science</i> , 2012, 2012, 1-13.	0.8	6
66	Synergistic Antibacterial Activity of Four Medicinal Plants Collected from Dharapuram Taluk of Tiruppur District, South India. <i>Journal of Plant Sciences</i> , 2011, 7, 32-38.	0.2	6
67	Extraction, separation and characterization of bioactive compounds produced by <i>Streptomyces</i> isolated from vermicast soil. <i>Research Journal of Pharmacy and Technology</i> , 2018, 11, 4569.	0.2	6
68	Effect of pre-composting on seed viability and subsequent vermicomposting of an invasive alien weed, <i>Alternanthera ficoidea</i> (L.) P. Beauv.. <i>International Journal of Current Research in Biosciences and Plant Biology</i> , 2020, 7, 37-45.	0.1	5
69	Impact of biosynthesized CuO nanoparticles on seed germination and cyto-physiological responses of <i>Trigonella foenum-graecum</i> and <i>Vigna radiata</i> . <i>Materials Letters</i> , 2022, 313, 131756.	1.3	5
70	Gc- ms analysis of ethyl acetate extract Of <i>sterptomycesspecies</i> isolated From vermicast. <i>International Journal of Pharma and Bio Sciences</i> , 2016, 7, .	0.1	4
71	Optimization of culture medium for improved production of antimicrobial compounds by <i>Amycolatopsis</i> sp. -AS9 isolated from vermicasts. <i>Biocatalysis and Agricultural Biotechnology</i> , 2019, 20, 101186.	1.5	3
72	Antibacterial Activity of Ethanol Extracts of <i>Sesamum alatum</i> Thonn. Leaves. <i>International Journal of Current Research in Biosciences and Plant Biology</i> , 2018, 5, 38-41.	0.1	2

#	ARTICLE	IF	CITATIONS
73	Some new combinations and new names for Flora of India. International Journal of Current Research in Biosciences and Plant Biology, 2019, 6, 33-46.	0.1	2
74	Status, Trends, and Advances in Earthworm Research and Vermitechnology. Applied and Environmental Soil Science, 2010, 2010, 1-2.	0.8	1
75	Floral Diversity of Vaigai River in Thiruppuvanam Region of Sivagangai District, Tamil Nadu, Southern India. International Journal of Current Research in Biosciences and Plant Biology, 2016, 3, 96-105.	0.1	1
76	Alarming spread of invasive weeds: A qualitative assessment and scope for sustainable weed biomass utilization. International Journal of Current Research in Biosciences and Plant Biology, 2019, 6, 20-25.	0.1	1
77	Antimicrobial Activity of Ethnomedicinally Important Asclepiads from Shervaroyan Hills, Southern Eastern Ghats. International Journal of Current Research in Biosciences and Plant Biology, 2018, 5, 86-94.	0.1	1
78	Statistical optimization of culture conditions for the production of bioactive compounds by Streptomyces spp. isolated from vermicasts. International Journal of Current Research in Biosciences and Plant Biology, 2019, 6, 1-7.	0.1	1
79	Bio-management of Textile Industrial Wastewater Sludge Using Earthworms: A Doable Strategy Toward Sustainable Environment. , 2021, , 1-19.		0
80	Biosynthesis Of Cellulase Protein From Cheaper Substrates Using Mixed Culture Of Trichoderma Reesei And Penicillium Funiculosum - A Novel Approach. International Journal on Applied Bio-Engineering, 2009, 3, 11-16.	0.2	0
81	In vitro Cytotoxic Evaluation of Hugonia mystax Linn. Leaf and Stem Bark Extracts. International Journal of Botany, 2011, 7, 300-304.	0.2	0
82	Tropical Earthworms. , 2013, , .		0
83	Floristic Composition of Weeds in Coconut (Cocos nucifera L.) Plantations of Sivagangai District, Tamil Nadu, Southern India. International Journal of Current Research in Biosciences and Plant Biology, 2016, 3, 121-126.	0.1	0
84	Amelioration of Allelopathic Effect of Lantana camara L. on Germination, Seedling Growth and Chlorophyll Contents of Sorghum bicolor (L.) Conrad Moench Using Vermicompost. International Journal of Current Research in Biosciences and Plant Biology, 2018, 5, 53-59.	0.1	0
85	GC-MS Analysis of Phytocomponents in the Ethanol Extract of Sesamum alatum Thonn. Leaves. International Journal of Current Research in Biosciences and Plant Biology, 2018, 5, 74-81.	0.1	0
86	Memecylon royenii Blume (Olisbeoideae: Melastomataceae): A new record for Tamil Nadu, India. International Journal of Current Research in Biosciences and Plant Biology, 2019, 6, 26-28.	0.1	0
87	Bio-management of Textile Industrial Wastewater Sludge Using Earthworms: A Doable Strategy Toward Sustainable Environment. , 2022, , 1337-1355.		0