Rajesh Kumar Sani

List of Publications by Year
in descending order

Source: https://exaly.com/author-pdf/5025712/publications.pdf

Version: 2024-02-01

126 papers	4,892 citations	94381 37 h-index	110317 64 g-index
173 all docs	173 docs citations	173 times ranked	5463 citing authors

#	Article	IF	Citations
1	Enhanced biohydrogen production with low graphene oxide content using thermophilic bioreactors. Bioresource Technology, 2022, 346, 126574.	4.8	11
2	Transcriptomics and Functional Analysis of Copper Stress Response in the Sulfate-Reducing Bacterium Desulfovibrio alaskensis G20. International Journal of Molecular Sciences, 2022, 23, 1396.	1.8	9
3	Editorial: Genetics, Genomics and -omics of Thermophiles, Volume II. Frontiers in Microbiology, 2022, 13, 879450.	1.5	1
4	Enhancement of Methane Catalysis Rates in Methylosinus trichosporium OB3b. Biomolecules, 2022, 12, 560.	1.8	6
5	Progress in Consolidated Bioprocessing of Lignocellulosic Biomass for Biofuels and Biochemicals. Clean Energy Production Technologies, 2022, , 35-54.	0.3	1
6	Thermophilic Geobacillus WSUCF1 Secretome for Saccharification of Ammonia Fiber Expansion and Extractive Ammonia Pretreated Corn Stover. Frontiers in Microbiology, 2022, 13, .	1.5	0
7	Extremozymes and their applications. , 2022, , 1-39.		1
8	Microbial polymers produced from methane: Overview of recent progress and new perspectives. , 2021, , 117-142.		1
9	Spectroscopy, microscopy, and other techniques for characterization of bacterial nanocellulose and comparison with plant-derived nanocellulose. , 2021, , 419-454.		4
10	Biochar from pyrolyzed Tibetan Yak dung as a novel additive in ensiling sweet sorghum: An alternate to the hazardous use of Yak dung as a fuel in the home. Journal of Hazardous Materials, 2021, 403, 123647.	6.5	10
11	Exopolysaccharide and biopolymer-derived films as tools for transdermal drug delivery. Journal of Controlled Release, 2021, 329, 971-987.	4.8	25
12	Electricity from methane by Methylococcus capsulatus (Bath) and Methylosinus trichosporium OB3b. Bioresource Technology, 2021, 321, 124398.	4.8	14
13	Two new exopolysaccharides from a thermophilic bacterium Geobacillus sp. WSUCF1: Characterization and bioactivities. New Biotechnology, 2021, 61, 29-39.	2.4	19
14	Anaerobic wastewater treatment and reuse enabled by thermophilic bioprocessing integrated with a bioelectrochemical/ultrafiltration module. Bioresource Technology, 2021, 321, 124406.	4.8	8
15	Exopolysaccharides in Drug Delivery Systems. Springer Series on Polymer and Composite Materials, 2021, , 143-199.	0.5	2
16	Metagenomics and Culture Dependent Insights into the Distribution of Firmicutes across Two Different Sample Types Located in the Black Hills Region of South Dakota, USA. Microorganisms, 2021, 9, 113.	1.6	8
17	Biomethanation of agricultural residues: Potential, limitations and possible solutions. Renewable and Sustainable Energy Reviews, 2021, 135, 110217.	8.2	61
18	Multi-Omics Approaches for Extremophilic Microbial, Genetic, and Metabolic Diversity. , 2021, , 311-329.		1

#	Article	IF	Citations
19	Bioleaching of metals from waste printed circuit boards using bacterial isolates native to abandoned gold mine. BioMetals, 2021, 34, 1043-1058.	1.8	13
20	Extremophilic Exopolysaccharides: Biotechnologies and Wastewater Remediation. Frontiers in Microbiology, 2021, 12, 721365.	1.5	29
21	Gene Sets and Mechanisms of Sulfate-Reducing Bacteria Biofilm Formation and Quorum Sensing With Impact on Corrosion. Frontiers in Microbiology, 2021, 12, 754140.	1.5	37
22	A novel biosensor for zinc detection based on microbial fuel cell system. Biosensors and Bioelectronics, 2020, 147, 111763.	5.3	38
23	Bioelectrochemical approach for enhancing lignocellulose degradation and biofilm formation in Geobacillus strain WSUCF1. Bioresource Technology, 2020, 295, 122271.	4.8	12
24	Vitamin-C-enabled reduced graphene oxide chemistry for tuning biofilm phenotypes of methylotrophs on nickel electrodes in microbial fuel cells. Bioresource Technology, 2020, 300, 122642.	4.8	17
25	Sustainable Production of Biogas in Large Bioreactor under Psychrophilic and Mesophilic Conditions. Journal of Environmental Engineering, ASCE, 2020, 146, .	0.7	22
26	Bioelectrosynthesis technology for enhancing methane production using a thermophilic methanogenic consortium. Bioresource Technology, 2020, 314, 123892.	4.8	2
27	Electricity from lignocellulosic substrates by thermophilic Geobacillus species. Scientific Reports, 2020, 10, 17047.	1.6	8
28	Synthesis of Biopolymers from a Geobacillus sp. WSUCF1 Using Unprocessed Corn Stover. ACS Sustainable Chemistry and Engineering, 2020, 8, 9483-9496.	3.2	5
29	Adaptive Enrichment of a Thermophilic Bacterial Isolate for Enhanced Enzymatic Activity. Microorganisms, 2020, 8, 871.	1.6	11
30	Lignocellulosic feedstock: A review of a sustainable platform for cleaner production of natureâ€™s plastics. Journal of Cleaner Production, 2020, 270, 122521.	4.6	65
31	Acetate Production from Cafeteria Wastes and Corn Stover Using a Thermophilic Anaerobic Consortium: A Prelude Study for the Use of Acetate for the Production of Value-Added Products. Microorganisms, 2020, 8, 353.	1.6	5
32	Global Transcriptomic Responses of Roseithermus sacchariphilus Strain RA in Media Supplemented with Beechwood Xylan. Microorganisms, 2020, 8, 976.	1.6	2
33	Environmental Remediation of Antineoplastic Drugs: Present Status, Challenges, and Future Directions. Processes, 2020, 8, 747.	1.3	10
34	Single pot biovalorization of food waste to ethanol by Geobacillus and Thermoanaerobacter spp.. Renewable Energy, 2020, 155, 1032-1041.	4.3	32
35	Surface Modification Approaches for Methane Oxidation in Bioelectrochemical Systems. , 2020, , 343-374.		2
36	Heterologous expression, purification and biochemical characterization of a new endo-1,4-Î²-xylanase from Rhodothermaceae bacterium RA. Protein Expression and Purification, 2019, 164, 105464.	0.6	18

#	Article	IF	Citations
37	Enhanced hydrolysis of lignocellulosic biomass with doping of a highly thermostable recombinant laccase. International Journal of Biological Macromolecules, 2019, 137, 232-237.	3.6	47
38	â€œMINESâ€•method for genomic DNA extraction from deep biosphere biofilms. Journal of Microbiological Methods, 2019, 167, 105730.	0.7	4
39	Editorial: Recent Advances in Bioremediation/Biodegradation by Extreme Microorganisms. Frontiers in Microbiology, 2019, 10, 1851.	1.5	14
40	Characterization of a novel Lytic Polysaccharide Monooxygenase from Malbranchea cinnamomea exhibiting dual catalytic behavior. Carbohydrate Research, 2019, 478, 46-53.	1.1	29
41	Genome analysis of a thermophilic exopolysaccharide-producing bacterium - Geobacillus sp. WSUCF1. Scientific Reports, 2019, 9, 1608.	1.6	24
42	Lignocellulosic Ethanol: Feedstocks and Bioprocessing. , 2019, , 165-185.		10
43	Thermophiles for biohydrogen production in microbial electrolytic cells. Bioresource Technology, 2019, 277, 171-178.	4.8	37
44	Short term atmospheric pressure cold plasma treatment: A novel strategy for enhancing the substrate utilization in a thermophile, Geobacillus sp. strain WSUCF1. Bioresource Technology, 2019, 278, 477-480.	4.8	14
45	Biofilm Engineering for Improving the Performance of Microbial Electrochemical Technologies. , 2019, , 315-338.		6
46	Extremophile Biology for Microbial Electrochemistry Applications. , 2019, , 353-374.		2
47	Taxonomical Diversity of Extremophiles in the Deep Biosphere. , 2019, , 631-656.		5
48	Extremophilic exopolysaccharides: A review and new perspectives on engineering strategies and applications. Carbohydrate Polymers, 2019, 205, 8-26.	5.1	106
49	Methane Monooxygenases. , 2019, , 187-206.		0
50	Rewiring the microbe-electrode interfaces with biologically reduced graphene oxide for improved bioelectrocatalysis. Bioresource Technology, 2018, 256, 195-200.	4.8	22
51	Extremophiles for microbial-electrochemistry applications: A critical review. Bioresource Technology, 2018, 255, 318-330.	4.8	79
52	Hexagonal Boron Nitride: The Thinnest Insulating Barrier to Microbial Corrosion. ACS Nano, 2018, 12, 2242-2252.	7.3	71
53	Biohydrogen production from space crewâ€™s waste simulants using thermophilic consolidated bioprocessing. Bioresource Technology, 2018, 255, 349-353.	4.8	31
54	Pervasiveness of UVC254-resistant Geobacillus strains in extreme environments. Applied Microbiology and Biotechnology, 2018, 102, 1869-1887.	1.7	7

#	Article	IF	Citations
55	Engineering rheology of electrolytes using agar for improving the performance of bioelectrochemical systems. Bioresource Technology, 2018, 263, 242-249.	4.8	10
56	Producing methane, methanol and electricity from organic waste of fermentation reaction using novel microbes. Bioresource Technology, 2018, 258, 270-278.	4.8	28
57	Computational Nanotechnology: A Tool for Screening Therapeutic Nanomaterials Against Alzheimerâ€™s Disease. Neuromethods, 2018, , 613-635.	0.2	1
58	Xylose transport in yeast for lignocellulosic ethanol production: Current status. Journal of Bioscience and Bioengineering, 2018, 125, 259-267.	1.1	27
59	Thermostable Xylanase Production by Geobacillus sp. Strain DUSELR13, and Its Application in Ethanol Production with Lignocellulosic Biomass. Microorganisms, 2018, 6, 93.	1.6	49
60	Thermophilic Anaerobic Digestion: Enhanced and Sustainable Methane Production from Co-Digestion of Food and Lignocellulosic Wastes. Energies, 2018, 11, 2058.	1.6	44
61	Complete genome sequence of Rhodothermaceae bacterium RA with cellulolytic and xylanolytic activities. 3 Biotech, 2018, 8, 376.	1.1	14
62	Single pot bioconversion of prairie cordgrass into biohydrogen by thermophiles. Bioresource Technology, 2018, 266, 232-241.	4.8	34
63	Biohydrogen Production from Lignocellulosic Feedstocks Using Extremophiles. , 2018, , 79-96.		4
64	Rewiring Extremophilic Electrocatalytic Processes for Production of Biofuels and Value-Added Compounds from Lignocellulosic Biomass. , 2018, , 229-245.		3
65	Integrated Consolidated Bioprocessing for Conversion of Lignocellulosic Feedstock to Biofuels and Value-Added Bioproducts. , 2018, , 247-273.		2
66	Biobutanol Production Using Recombinant Microorganisms. , 2018, , 47-62.		1
67	Bioprospecting of Extremophiles for Biotechnology Applications. , 2018, , 1-23.		3
68	Direct Cellulase Gene Amplification From Hot Spring Using the Guidance of 16S rRNA Amplicon Metagenomics. , 2018, , 309-325.		1
69	Extremophilic Enzymatic Processing of Lignocellulosic Feedstocks to Bioenergy. , 2017, , .		12
70	Improved bioethanol production from corn stover: Role of enzymes, inducers and simultaneous product recovery. Applied Energy, 2017, 208, 1420-1429.	5.1	17
71	Simultaneous hydrolysis and fermentation of unprocessed food waste into ethanol using thermophilic anaerobic bacteria. Bioresource Technology, 2017, 244, 733-740.	4.8	30
72	Editorial: Genetics, Genomics and â€“Omics of Thermophiles. Frontiers in Microbiology, 2017, 8, 560.	1.5	5

#	Article	IF	Citations
73	Draft Genome Sequences of Thermophiles Isolated from Yates Shaft, a Deep-Subsurface Environment. Genome Announcements, 2017, 5, .	0.8	3
74	Introduction to Extremozymes. , 2017, , 1-4.		3
75	An Overview on Extremophilic Chitinases. , 2017, , 225-247.		4
76	Fundamentals of Enzymatic Processes. , 2017, , 5-29.		2
77	Bioprospecting of Thermostable Cellulolytic Enzymes through Modeling and Virtual Screening Method. Canadian Journal of Biotechnology, 2017, 1, 19-25.	0.3	10
78	Characterization of a glucose-tolerant Î²-glucosidase from Anoxybacillus sp. DT3-1. Biotechnology for Biofuels, 2016, 9, 174.	6.2	51
79	Impact of different environmental conditions on the aggregation of biogenic U(IV) nanoparticles synthesized by Desulfovibrio alaskensis G20. BioMetals, 2016, 29, 965-980.	1.8	8
80	Highly Thermostable Xylanase Production from A Thermophilic Geobacillus sp. Strain WSUCF1 Utilizing Lignocellulosic Biomass. Frontiers in Bioengineering and Biotechnology, 2015, 3, 84.	2.0	73
81	Thermophilic Biohydrogen Production: Challenges at the Industrial Scale. , 2015, , 3-35.		5
82	Highly thermostable GH39 Î²-xylosidase from a Geobacillus sp. strain WSUCF1. BMC Biotechnology, 2014, 14, 963.	1.7	43
83	Novel thermostable endo-xylanase cloned and expressed from bacterium Geobacillus sp. WSUCF1. Bioresource Technology, 2014, 165, 314-318.	4.8	59
84	Reoxidation of Biogenic Reduced Uranium: A Challenge Toward Bioremediation. Critical Reviews in Environmental Science and Technology, 2014, 44, 391-415.	6.6	32
85	Improved lignocellulose conversion to biofuels with thermophilic bacteria and thermostable enzymes. Bioresource Technology, 2013, 128, 751-759.	4.8	291
86	Influence of Chelating Agents on Biogenic Uraninite Reoxidation by Fe(III) (Hydr)oxides. Environmental Science & Technology, 2013, 47, 364-371.	4.6	25
87	Draft Genome Sequence of Lignocellulose-Degrading Thermophilic Bacterium Geobacillus sp. Strain WSUCF1. Genome Announcements, 2013, 1, .	0.8	25
88	Presence of glucose, xylose, and glycerol fermenting bacteria in the deep biosphere of the former Homestake gold mine, South Dakota. Frontiers in Microbiology, 2013, 4, 18.	1.5	9
89	Molecular Techniques to Assess Microbial Community Structure, Function, and Dynamics in the Environment. , 2011, , 29-57.		151
90	Biogenic uraninite precipitation and its reoxidation by iron(III) (hydr)oxides: A reaction modeling approach. Geochimica Et Cosmochimica Acta, 2011, 75, 4426-4440.	1.6	41

#	Article	IF	Citations
91	Bioprocessing of agricultural residues to ethanol utilizing a cellulolytic extremophile. Extremophiles, 2011, 15, 611-618.	0.9	50
92	Investigation of Microbial Populations in the Extremely Metal-Contaminated Coeur d'Alene River Sediments. Microbial Ecology, 2011, 62, 1-13.	1.4	47
93	Multiple mechanisms of uranium immobilization by Cellulomonas sp. strain ES6. Biotechnology and Bioengineering, 2011, 108, 264-276.	1.7	88
94	Microbial Diversity in Uranium Mining-Impacted Soils as Revealed by High-Density 16S Microarray and Clone Library. Microbial Ecology, 2010, 59, 94-108.	1.4	102
95	Microbial and Mineralogical Characterizations of Soils Collected from the Deep Biosphere of the Former Homestake Gold Mine, South Dakota. Microbial Ecology, 2010, 60, 539-550.	1.4	70
96	Characterization of thermostable cellulases produced by Bacillus and Geobacillus strains. Bioresource Technology, 2010, 101, 8798-8806.	4.8	229
97	The toxicity of lead to Desulfovibrio desulfuricans G20 in the presence of goethite and quartz. Journal of Basic Microbiology, 2010, 50, 160-170.	1.8	10
98	Phylogenetic evidence of noteworthy microflora from the subsurface of the former Homestake gold mine, Lead, South Dakota. Environmental Technology (United Kingdom), 2010, 31, 979-991.	1.2	8
99	Influence of pH and Inorganic Phosphate on Toxicity of Zinc to Arthrobacter sp. Isolated from Heavy-Metal-Contaminated Sediments. Environmental Science & Technology, 2010, 44, 7302-7308.	4.6	39
100	Isolation and characterization of cellulose-degrading bacteria from the deep subsurface of the Homestake gold mine, Lead, South Dakota, USA. Journal of Industrial Microbiology and Biotechnology, 2009, 36, 585-598.	1.4	117
101	Heavy Metalâ€“Mineral Associations in Coeur dâ€™Alene River Sediments: A Synchrotron-Based Analysis. Water, Air, and Soil Pollution, 2009, 201, 195-208.	1.1	23
102	Molecular analysis of prokaryotic diversity in the deep subsurface of the former Homestake gold mine, South Dakota, USA. Journal of Microbiology, 2009, 47, 371-384.	1.3	56
103	Molecular Studies on the Microbial Diversity Associated with Mining-Impacted Coeur dâ€™Alene River Sediments. Microbial Ecology, 2009, 58, 129-139.	1.4	24
104	Influence of heavy metals on microbial growth kinetics including lag time: Mathematical modeling and experimental verification. Environmental Toxicology and Chemistry, 2009, 28, 2020-2029.	2.2	33
105	Toxic Effects of Chromium(VI) on Anaerobic and Aerobic Growth of Shewanella oneidensis MR-1. Biotechnology Progress, 2008, 20, 87-95.	1.3	75
106	Comparison of uranium(VI) removal by Shewanella oneidensis MR-1 in flow and batch reactors. Water Research, 2008, 42, 2993-3002.	5.3	25
107	Biogeochemical reactiveâ€“diffusive transport of heavy metals in Lake Coeur dâ€™Alene sediments. Applied Geochemistry, 2007, 22, 2569-2594.	1.4	39
108	Reduction of Cr(VI) under Acidic Conditions by the Facultative Fe(III)-Reducing BacteriumAcidiphilium cryptum. Environmental Science & Technology, 2007, 41, 146-152.	4.6	72

#	Article	IF	Citations
109	Isolation and characterization of Cr(VI) reducing Cellulomonas spp. from subsurface soils: Implications for long-term chromate reduction. Bioresource Technology, 2007, 98, 612-622.	4.8	51
110	TOXIC EFFECTS OF URANIUM ON DESULFOVIBRIO DESULFURICANS G20. Environmental Toxicology and Chemistry, 2006, 25, 1231.	2.2	32
111	Reoxidation of Reduced Uranium with Iron(III) (Hydr)Oxides under Sulfate-Reducing Conditions. Environmental Science & Technology, 2005, 39, 2059-2066.	4.6	95
112	Reduction of uranium(VI) under sulfate-reducing conditions in the presence of Fe(III)-(hydr)oxides. Geochimica Et Cosmochimica Acta, 2004, 68, 2639-2648.	1.6	122
113	Uranium Immobilization by Sulfate-Reducing Biofilms. Environmental Science & Technology, 2004, 38, 2067-2074.	4.6	105
114	Toxicity of lead in aqueous medium to Desulfovibrio desulfuricans G20. Environmental Toxicology and Chemistry, 2003, 22, 252-260.	2.2	32
115	TOXICITY OF LEAD IN AQUEOUS MEDIUM TO DESULFOVIBRIO DESULFURICANS G20. Environmental Toxicology and Chemistry, 2003, 22, 252.	2.2	4
116	Toxicity of lead in aqueous medium to desulfovibrio desulfuricans G20. Environmental Toxicology and Chemistry, 2003, 22, 252-60.	2.2	5
117	Dissimilatory reduction of Cr(VI), Fe(III), and U(VI) by Cellulomonas isolates. Applied Microbiology and Biotechnology, 2002, 60, 192-199.	1.7	95
118	Assessment of lead toxicity to Desulfovibrio desulfuricans G20: influence of components of lactate C medium. Journal of Environmental Management, 2001, 5, 269-276.	1.7	59
119	Copper-Induced Inhibition of Growth of Desulfovibrio desulfuricans G20: Assessment of Its Toxicity and Correlation with Those of Zinc and Lead. Applied and Environmental Microbiology, 2001, 67, 4765-4772.	1.4	170
120	Purification and characterization of a novel ?-galactosidase from Bacillus sp MTCC 3088. Journal of Industrial Microbiology and Biotechnology, 2000, 24, 58-63.	1.4	21
121	Thermostable alkaline protease from Bacillus brevis and its characterization as a laundry detergent additive. Process Biochemistry, 1999, 35, 213-219.	1.8	179
122	Decolorization of triphenylmethane dyes and textile and dye-stuff effluent by Kurthia sp.. Enzyme and Microbial Technology, 1999, 24, 433-437.	1.6	211
123	Characterization and some reaction-engineering aspects of thermostable extracellular Î²-galactosidase from a newBacillus species. Folia Microbiologica, 1999, 44, 367-371.	1.1	13
124	Comparison of static and shake culture in the decolorization of textile dyes and dye effluents byPhanerochÅ“te chrysosporium. Folia Microbiologica, 1998, 43, 85-88.	1.1	55
125	Biodegradation of triphenylmethane dyes. Enzyme and Microbial Technology, 1998, 22, 185-191.	1.6	284
126	Characterization of L-asparaginase from Bacillus sp. isolated from an intertidal marine alga (Sargassum sp.). Letters in Applied Microbiology, 1995, 21, 380-383.	1.0	22