

Rajeev Kumar Sukumaran

List of Publications by Year in descending order

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114
papers

7,380
citations

61984
43
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127
all docs

127
docs citations

127
times ranked

7976
citing authors

#	ARTICLE	IF	CITATIONS
1	Sequential mild acid and alkali pretreatment of rice straw to improve enzymatic saccharification for bioethanol production. Preparative Biochemistry and Biotechnology, 2023, 53, 231-238.	1.9	2
2	Integrated bioprocess for structured lipids, emulsifiers and biodiesel production using crude acidic olive pomace oils. Bioresource Technology, 2022, 346, 126646.	9.6	7
3	A highly efficient stratagem for protoplast isolation and genetic transformation in filamentous fungus Colletotrichum falcatum. Folia Microbiologica, 2022, , .	2.3	2
4	Co-hydrothermal liquefaction of phumdi and paragrass an aquatic biomass: Characterization of bio-oil, aqueous fraction and solid residue. Journal of the Energy Institute, 2022, 102, 247-255.	5.3	15
5	A machine learning-based approach to determine infection status in recipients of BBV152 (Covaxin) whole-virion inactivated SARS-CoV-2 vaccine for serological surveys. Computers in Biology and Medicine, 2022, 146, 105419.	7.0	8
6	Enzyme Technology in Food Processing: Recent Developments and Future Prospects. , 2021, , 191-215.		7
7	Chlorpyrifos induced proteome remodelling of Pseudomonas nitroreducens AR-3 potentially aid efficient degradation of the pesticide. Environmental Technology and Innovation, 2021, 21, 101307.	6.1	8
8	Ethanol production by a filamentous fungal strain Byssoschlamys fulva AM130 under alternating aerobic and oxygen-limited conditions. Systems Microbiology and Biomanufacturing, 2021, 1, 111-121.	2.9	4
9	Thermophilic Chitinases: Structural, Functional and Engineering Attributes for Industrial Applications. Applied Biochemistry and Biotechnology, 2021, 193, 142-164.	2.9	19
10	Sono-Assisted Alkali and Dilute Acid Pretreatment of Phragmites karka (Tall Reed Grass) to Enhance Enzymatic Digestibility for Bioethanol Conversion. Frontiers in Energy Research, 2021, 8, .	2.3	4
11	Insights from a Pan India Sero-Epidemiological survey (Phenome-India Cohort) for SARS-CoV2. ELife, 2021, 10, .	6.0	21
12	Production of polyhydroxyalkanoates from propylene oxide saponification wastewater residual sludge using volatile fatty acids and bacterial community succession. Bioresource Technology, 2021, 329, 124912.	9.6	19
13	Addressing challenges in production of cellulases for biomass hydrolysis: Targeted interventions into the genetics of cellulase producing fungi. Bioresource Technology, 2021, 329, 124746.	9.6	51
14	Draft genome of the glucose tolerant β -glucosidase producing rare Aspergillus unguis reveals complete cellulolytic machinery with multiple beta-glucosidase genes. Fungal Genetics and Biology, 2021, 151, 103551.	2.1	3
15	Biological treatment of prawn shell wastes for valorization and waste management. Bioresource Technology Reports, 2021, 15, 100788.	2.7	3
16	Repurposing proteases: An in-silico analysis of the binding potential of extracellular fungal proteases with selected viral proteins. Bioresource Technology Reports, 2021, 15, 100756.	2.7	2
17	Green remediation of the potential hazardous shellfish wastes generated from the processing industries and their bioprospecting. Environmental Technology and Innovation, 2021, 24, 101979.	6.1	18
18	Evaluation of Freshwater Microalgal Isolates for Growth and Oil Production in Seawater Medium. Waste and Biomass Valorization, 2020, 11, 223-230.	3.4	15

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19	Lipase of <i>Pseudomonas guariconesis</i> as an additive in laundry detergents and transesterification biocatalysts. Journal of Basic Microbiology, 2020, 60, 112-125.	3.3	12
20	Preface new horizons in biotechnology – NHBT 2019. Bioresource Technology, 2020, 313, 123774.	9.6	0
21	Sustainable and eco-friendly strategies for shrimp shell valorization. Environmental Pollution, 2020, 267, 115656.	7.5	70
22	Penicillium janthinellum NCIM1366 shows improved biomass hydrolysis and a larger number of CAZymes with higher induction levels over Trichoderma reesei RUT-C30. Biotechnology for Biofuels, 2020, 13, 196.	6.2	14
23	Mild alkaline pretreatment can achieve high hydrolytic and fermentation efficiencies for rice straw conversion to bioethanol. Preparative Biochemistry and Biotechnology, 2020, 50, 814-819.	1.9	22
24	Production of low-calorie structured lipids from spent coffee grounds or olive pomace crude oils catalyzed by immobilized lipase in magnetic nanoparticles. Bioresource Technology, 2020, 307, 123223.	9.6	22
25	Comparative evaluation of laccase mediated oxidized and unoxidized lignin of sugarcane bagasse for the synthesis of lignin-based formaldehyde resin. Industrial Crops and Products, 2020, 150, 112385.	5.2	21
26	Tandem integration of aerobic fungal cellulase production, lignocellulose substrate saccharification and anaerobic ethanol fermentation by a modified gas lift bioreactor. Bioresource Technology, 2020, 302, 122902.	9.6	11
27	Valorization of lignocellulosic residues from the olive oil industry by production of lignin, glucose and functional sugars. Bioresource Technology, 2019, 292, 121936.	9.6	53
28	Biobutanol Production: Microbes, Feedstock, and Strategies. , 2019, , 355-377.		6
29	Characterization of a glucose tolerant Î2-glucosidase from Aspergillus unguis with high potential as a blend-in for biomass hydrolyzing enzyme cocktails. Biotechnology Letters, 2019, 41, 1201-1211.	2.2	10
30	Rapid degradation of the organophosphate pesticide – Chlorpyrifos by a novel strain of Pseudomonas nitroreducens AR-3. Bioresource Technology, 2019, 292, 122025.	9.6	83
31	Value-addition of water hyacinth and para grass through pyrolysis and hydrothermal liquefaction. Carbon Resources Conversion, 2019, 2, 233-241.	5.9	23
32	Evaluation of a wet processing strategy for mixed phumdi biomass conversion to bioethanol. Bioresource Technology, 2019, 289, 121633.	9.6	9
33	Co-pyrolysis of phumdi and para grass biomass from Loktak Lake. Bioresource Technology, 2019, 285, 121308.	9.6	14
34	Thermal assisted alkaline pretreatment of rice husk for enhanced biomass deconstruction and enzymatic saccharification: Physico-chemical and structural characterization. Bioresource Technology, 2018, 263, 199-206.	9.6	48
35	Effect of dilute acid pretreatment of wild rice grass (Zizania latifolia) from Loktak Lake for enzymatic hydrolysis. Bioresource Technology, 2018, 253, 252-255.	9.6	105
36	Bioremediation by Microalgae: Current and Emerging Trends for Effluents Treatments for Value Addition of Waste Streams. Energy, Environment, and Sustainability, 2018, , 355-375.	1.0	16

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37	Lignocellulosic Biorefinery Wastes, or Resources?. , 2018, , 267-297.		36
38	Nutrient Removal From Spent Effluent of Sorghum Biomass Pretreatment by Novel Chlorella Strain: Dual Potential for Spent Effluent Treatment and in Biofuel Application. Current Environmental Engineering, 2018, 5, 185-201.	0.6	0
39	Bioflocculation: An alternative strategy for harvesting of microalgae “ An overview. Bioresource Technology, 2017, 242, 227-235.	9.6	214
40	Strategies for design of improved biocatalysts for industrial applications. Bioresource Technology, 2017, 245, 1304-1313.	9.6	175
41	Recent developments in l-glutaminase production and applications “ An overview. Bioresource Technology, 2017, 245, 1766-1774.	9.6	46
42	Expression system for heterologous protein expression in the filamentous fungus Aspergillus unguis. Bioresource Technology, 2017, 245, 1334-1342.	9.6	27
43	A biorefinery-based approach for the production of ethanol from enzymatically hydrolysed cotton stalks. Bioresource Technology, 2017, 242, 178-183.	9.6	30
44	Potential of Brachiaria mutica (Para grass) for bioethanol production from Loktak Lake. Bioresource Technology, 2017, 242, 133-138.	9.6	24
45	First- and Second-Generation Ethanol in India: A Comprehensive Overview on Feedstock Availability, Composition, and Potential Conversion Yields. , 2017, , 223-246.		5
46	Cellulase production through solid-state tray fermentation, and its use for bioethanol from sorghum stover. Bioresource Technology, 2017, 242, 265-271.	9.6	90
47	International Conference on Current Trends in Biotechnology & post ICCB-2016 conference on Strategies for Environmental Protection and Management (ICSEPM-2016). Bioresource Technology, 2017, 242, 1.	9.6	0
48	Metagenome Analysis: a Powerful Tool for Enzyme Bioprospecting. Applied Biochemistry and Biotechnology, 2017, 183, 636-651.	2.9	96
49	Simultaneous Saccharification and Fermentation of Pretreated Eucalyptus grandis Under High Solids Loading. Industrial Biotechnology, 2017, 13, 131-140.	0.8	17
50	Synthetic Biology and Metabolic Engineering Approaches and Its Impact on Non-Conventional Yeast and Biofuel Production. Frontiers in Energy Research, 2017, 5, .	2.3	32
51	Enzymes for Bioenergy. , 2017, , 3-43.		1
52	Secreted expression of an active human interferon-beta (HuIFN β) in Kluyveromyces lactis. Engineering in Life Sciences, 2016, 16, 379-385.	3.6	11
53	Development of a combined pretreatment and hydrolysis strategy of rice straw for the production of bioethanol and biopolymer. Bioresource Technology, 2016, 215, 110-116.	9.6	31
54	Production of endoglucanase from Trichoderma reesei RUT C30 and its application in deinking of printed office waste paper. Biologia (Poland), 2016, 71, 265-271.	1.5	3

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55	Detoxification of acidic biorefinery waste liquor for production of high value amino acid. Bioresource Technology, 2016, 213, 270-275.	9.6	25
56	Harvesting of microalgal biomass: Efficient method for flocculation through pH modulation. Bioresource Technology, 2016, 213, 216-221.	9.6	131
57	Material balance studies for the conversion of sorghum stover to bioethanol. Biomass and Bioenergy, 2016, 85, 48-52.	5.7	24
58	An evaluation of dilute acid and ammonia fiber explosion pretreatment for cellulosic ethanol production. Bioresource Technology, 2016, 199, 13-20.	9.6	86
59	Evaluation of Amberlyst15 for hydrolysis of alkali pretreated rice straw and fermentation to ethanol. Biochemical Engineering Journal, 2015, 102, 49-53.	3.6	22
60	White Biotechnology in Biosurfactants. , 2015, , 499-521.		20
61	White Biotechnology in Cosmetics. , 2015, , 607-652.		27
62	Prediction of sugar yields during hydrolysis of lignocellulosic biomass using artificial neural network modeling. Bioresource Technology, 2015, 188, 128-135.	9.6	78
63	Signal peptides from filamentous fungi efficiently mediate the secretion of recombinant proteins in Kluyveromyces lactis. Biochemical Engineering Journal, 2015, 102, 31-37.	3.6	9
64	Preface. Bioresource Technology, 2015, 188, 1.	9.6	0
65	Hydrolysis of biomass using a reusable solid carbon acid catalyst and fermentation of the catalytic hydrolysate to ethanol. Bioresource Technology, 2015, 188, 99-102.	9.6	45
66	Rice straw hydrolysate to fuel and volatile fatty acid conversion by Clostridium sporogenes BE01: bio-electrochemical analysis of the electron transport mediators involved. Green Chemistry, 2015, 17, 3047-3058.	9.0	32
67	Crude oil biodegradation aided by biosurfactants from Pseudozyma sp. NII 08165 or its culture broth. Bioresource Technology, 2015, 191, 133-139.	9.6	151
68	Cultivation of the fresh water microalga Chlorococcum sp. RAP13 in sea water for producing oil suitable for biodiesel. Journal of Applied Phycology, 2015, 27, 141-147.	2.8	34
69	Enzyme Technologies: Current and Emerging Technologies for Development of Novel Enzyme Catalysts. , 2015, , 39-66.		1
70	Esterase Active in Polar Organic Solvents from the Yeast <i>Pseudozyma</i> sp. NII 08165. Enzyme Research, 2014, 2014, 1-10.	1.8	16
71	Growth and butanol production by Clostridium sporogenes BE01 in rice straw hydrolysate: kinetics of inhibition by organic acids and the strategies for their removal. Biomass Conversion and Biorefinery, 2014, 4, 277-283.	4.6	5
72	Bioethanol production from dilute acid pretreated Indian bamboo variety (Dendrocalamus sp.) by separate hydrolysis and fermentation. Industrial Crops and Products, 2014, 52, 169-176.	5.2	77

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73	Cultivation of microalgae in dairy effluent for oil production and removal of organic pollution load. Bioresource Technology, 2014, 165, 295-301.	9.6	103
74	Promoter and signal sequence from filamentous fungus can drive recombinant protein production in the yeast <i>Kluyveromyces lactis</i> . Bioresource Technology, 2014, 165, 302-308.	9.6	17
75	Physicochemical characterization of alkali pretreated sugarcane tops and optimization of enzymatic saccharification using response surface methodology. Renewable Energy, 2014, 62, 362-368.	8.9	109
76	Esterases immobilized on aminosilane modified magnetic nanoparticles as a catalyst for biotransformation reactions. Bioresource Technology, 2014, 167, 547-550.	9.6	29
77	Studies on structural and physical characteristics of a novel exopolysaccharide from <i>Pseudozyma</i> sp. NII 08165. International Journal of Biological Macromolecules, 2013, 59, 84-89.	7.5	80
78	Highly glucose tolerant β -glucosidase from <i>Aspergillus unguis</i> : NII 08123 for enhanced hydrolysis of biomass. Journal of Industrial Microbiology and Biotechnology, 2013, 40, 967-975.	3.0	62
79	Role and significance of beta-glucosidases in the hydrolysis of cellulose for bioethanol production. Bioresource Technology, 2013, 127, 500-507.	9.6	459
80	Bioethanol production from bamboo (<i>Dendrocalamus</i> sp.) process waste. Biomass and Bioenergy, 2013, 59, 142-150.	5.7	61
81	A novel surfactant-assisted ultrasound pretreatment of sugarcane tops for improved enzymatic release of sugars. Bioresource Technology, 2013, 135, 67-72.	9.6	88
82	Biobutanol production from rice straw by a non acetone producing <i>Clostridium sporogenes</i> BE01. Bioresource Technology, 2013, 145, 182-187.	9.6	115
83	Studies on biosurfactants from <i>Pseudozyma</i> sp. NII 08165 and their potential application as laundry detergent additives. Biochemical Engineering Journal, 2013, 78, 85-92.	3.6	62
84	Surfactant-Assisted Acid Pretreatment of Sugarcane Tops for Bioethanol Production. Applied Biochemistry and Biotechnology, 2012, 167, 1513-1526.	2.9	26
85	High temperature pretreatment and hydrolysis of cotton stalk for producing sugars for bioethanol production. Fuel, 2012, 92, 340-345.	6.4	86
86	Energy requirement for alkali assisted microwave and high pressure reactor pretreatments of cotton plant residue and its hydrolysis for fermentable sugar production for biofuel application. Bioresource Technology, 2012, 112, 300-307.	9.6	55
87	Short duration microwave assisted pretreatment enhances the enzymatic saccharification and fermentable sugar yield from sugarcane bagasse. Renewable Energy, 2012, 37, 109-116.	8.9	318
88	Organosolvent pretreatment and enzymatic hydrolysis of rice straw for the production of bioethanol. World Journal of Microbiology and Biotechnology, 2012, 28, 473-483.	3.6	77
89	Butanol Fuel from Biomass. , 2011, , 571-586.		13
90	Lipase from marine <i>Aspergillus awamori</i> BTMFW032: Production, partial purification and application in oil effluent treatment. New Biotechnology, 2011, 28, 627-638.	4.4	84

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91	Dilute acid pretreatment and enzymatic saccharification of sugarcane tops for bioethanol production. <i>Bioresource Technology</i> , 2011, 102, 10915-10921.	9.6	176
92	Isolation and characterization of a novel α -amylase from a metagenomic library of Western Ghats of Kerala, India. <i>Biologia (Poland)</i> , 2011, 66, 939-944.	1.5	28
93	Properties of a major α -glucosidase-BGL1 from <i>Aspergillus niger</i> NII-08121 expressed differentially in response to carbon sources. <i>Process Biochemistry</i> , 2011, 46, 1521-1524.	3.7	52
94	Formic Acid as a Potential Pretreatment Agent for the Conversion of Sugarcane Bagasse to Bioethanol. <i>Applied Biochemistry and Biotechnology</i> , 2010, 162, 2313-2323.	2.9	90
95	Molecular cloning and homology modelling of a subtilisin-like serine protease from the marine fungus, <i>Engyodontium album</i> BTMFS10. <i>World Journal of Microbiology and Biotechnology</i> , 2010, 26, 1269-1279.	3.6	12
96	Production of a highly glucose tolerant α -glucosidase by <i>Paecilomyces variotii</i> MG3: optimization of fermentation conditions using Plackett-Burman and Box-Behnken experimental designs. <i>World Journal of Microbiology and Biotechnology</i> , 2010, 26, 1385-1391.	3.6	37
97	Production optimization and properties of beta glucosidases from a marine fungus <i>Aspergillus</i> -SA 58. <i>New Biotechnology</i> , 2010, 27, 347-351.	4.4	21
98	Advancement and comparative profiles in the production technologies using solid-state and submerged fermentation for microbial cellulases. <i>Enzyme and Microbial Technology</i> , 2010, 46, 541-549.	3.2	474
99	Bio-ethanol from water hyacinth biomass: An evaluation of enzymatic saccharification strategy. <i>Bioresource Technology</i> , 2010, 101, 925-930.	9.6	119
100	Bioethanol production from rice straw: An overview. <i>Bioresource Technology</i> , 2010, 101, 4767-4774.	9.6	742
101	Lignocellulosic ethanol in India: Prospects, challenges and feedstock availability. <i>Bioresource Technology</i> , 2010, 101, 4826-4833.	9.6	220
102	Pretreatment of Douglas Fir Wood Biomass for Improving Saccharification Efficiencies. <i>Journal of ASTM International</i> , 2010, 7, 1-8.	0.2	0
103	Optimization of laccase production from a novel strain "Streptomyces psammoticus using response surface methodology. <i>Microbiological Research</i> , 2009, 164, 105-113.	5.3	92
104	Cellulase production using biomass feed stock and its application in lignocellulose saccharification for bio-ethanol production. <i>Renewable Energy</i> , 2009, 34, 421-424.	8.9	411
105	Cellulase Production Under Solid-State Fermentation by <i>Trichoderma reesei</i> RUT C30: Statistical Optimization of Process Parameters. <i>Applied Biochemistry and Biotechnology</i> , 2008, 151, 122-131.	2.9	108
106	Optimization of Enzymatic Clarification of Sapodilla Juice: A Statistical Perspective. <i>Applied Biochemistry and Biotechnology</i> , 2008, 151, 353-363.	2.9	10
107	Response surface methodology for the optimization of alpha amylase production by <i>Bacillus amyloliquefaciens</i> . <i>Bioresource Technology</i> , 2008, 99, 4597-4602.	9.6	211
108	Evaluation of α -galactosidase biosynthesis by <i>Streptomyces griseolalbus</i> in solid-state fermentation using response surface methodology. <i>Letters in Applied Microbiology</i> , 2008, 46, 338-343.	2.2	18

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109	Statistical optimization of simultaneous saccharification and l(+)-lactic acid fermentation from cassava bagasse using mixed culture of lactobacilli by response surface methodology. Biochemical Engineering Journal, 2007, 36, 262-267.	3.6	60
110	Evaluation of fungal culture filtrate containing chitinase as a biocontrol agent against Helicoverpa armigera. Journal of Applied Microbiology, 2007, 103, 1845-1852.	3.1	69
111	Utilization of rice straw for laccase production by Streptomyces psammoticus in solid-state fermentation. Journal of Industrial Microbiology and Biotechnology, 2007, 34, 665-674.	3.0	89
112	Improved Cellulase Production by Trichoderma reesei RUT C30 under SSF Through Process Optimization. Applied Biochemistry and Biotechnology, 2007, 142, 60-70.	2.9	114
113	Cellulase Hyper-Producing Fungus Penicillium janthinellum NCIM 1366 Elaborates a Wider Array of Proteins Involved in Transport and Secretion, Potentially Enabling a Diverse Substrate Range. Bioenergy Research, 0, , 1.	3.9	4
114	Comparative Evaluation of Lignin Derived from Different Sugarcane Bagasse Pretreatments in the Synthesis of Wood Adhesive. Bioenergy Research, 0, , 1.	3.9	2