

# Amit Kumar Rai

## List of Publications by Year in descending order

Source: <https://exaly.com/author-pdf/4548452/publications.pdf>

Version: 2024-02-01

72  
papers

2,373  
citations

218381

26  
h-index

223531

46  
g-index

81  
all docs

81  
docs citations

81  
times ranked

2257  
citing authors

#	ARTICLE	IF	CITATIONS
1	Production of bioactive peptides during soybean fermentation and their potential health benefits. Trends in Food Science and Technology, 2016, 50, 1-10.	7.8	315
2	Enhancement of antioxidant properties of two soybean varieties of Sikkim Himalayan region by proteolytic Bacillus subtilis fermentation. Journal of Functional Foods, 2015, 14, 650-658.	1.6	127
3	Isolation of potential probiotic Bacillus spp. and assessment of their subcellular components to induce immune responses in Labeo rohita against Aeromonas hydrophila. Fish and Shellfish Immunology, 2015, 45, 268-276.	1.6	101
4	Production of angiotensin I converting enzyme inhibitory (ACE-I) peptides during milk fermentation and their role in reducing hypertension. Critical Reviews in Food Science and Nutrition, 2017, 57, 2789-2800.	5.4	93
5	Biotechnological potential of yeasts in functional food industry. Trends in Food Science and Technology, 2019, 83, 129-137.	7.8	90
6	Effect of fermentation ensilaging on recovery of oil from fresh water fish viscera. Enzyme and Microbial Technology, 2010, 46, 9-13.	1.6	80
7	Characteristics and consumer acceptance of healthier meat and meat product formulations—a review. Journal of Food Science and Technology, 2012, 49, 653-664.	1.4	72
8	Production of bioactive hydrolysate using protease, Î²-glucosidase and Î±-amylase of Bacillus spp. isolated from kinema. Bioresource Technology, 2017, 235, 358-365.	4.8	72
9	Simultaneous Recovery of Lipids and Proteins by Enzymatic Hydrolysis of Fish Industry Waste Using Different Commercial Proteases. Applied Biochemistry and Biotechnology, 2011, 164, 115-124.	1.4	69
10	Biodegradation of plastics for sustainable environment. Bioresource Technology, 2022, 347, 126697.	4.8	68
11	Production of bioactive protein hydrolysate using the yeasts isolated from soft chhurpi. Bioresource Technology, 2016, 219, 239-245.	4.8	65
12	Production and characterisation of lipase for application in detergent industry from a novel Pseudomonas helmanticensis HS6. Bioresource Technology, 2020, 309, 123352.	4.8	61
13	Production, characterization and molecular docking of antioxidant peptides from peptidome of kinema fermented with proteolytic Bacillus spp.. Food Research International, 2021, 141, 110161.	2.9	61
14	In vitro antioxidant and antibacterial properties of hydrolysed proteins of delimed tannery fleshings: comparison of acid hydrolysis and fermentation methods. Biodegradation, 2011, 22, 287-295.	1.5	59
15	Fermentative recovery of lipids and proteins from freshwater fish head waste with reference to antimicrobial and antioxidant properties of protein hydrolysate. Journal of Food Science and Technology, 2014, 51, 1884-1892.	1.4	56
16	Application of Native Lactic Acid Bacteria (LAB) for Fermentative Recovery of Lipids and Proteins from Fish Processing Wastes: Bioactivities of Fermentation Products. Journal of Aquatic Food Product Technology, 2011, 20, 32-44.	0.6	50
17	Metagenomic Insights Into the Taxonomic and Functional Features of Kinema, a Traditional Fermented Soybean Product of Sikkim Himalaya. Frontiers in Microbiology, 2019, 10, 1744.	1.5	50
18	Lipid classes and fatty acid profile of selected Indian fresh water fishes. Journal of Food Science and Technology, 2010, 47, 394-400.	1.4	42

#	ARTICLE	IF	CITATIONS
19	A Potential Peptide From Soy Cheese Produced Using <i>Lactobacillus delbrueckii</i> WS4 for Effective Inhibition of SARS-CoV-2 Main Protease and S1 Glycoprotein. <i>Frontiers in Molecular Biosciences</i> , 2020, 7, 601753.	1.6	39
20	Isolation and characterization of potential lactic acid bacteria (LAB) from freshwater fish processing wastes for application in fermentative utilisation of fish processing waste. <i>Brazilian Journal of Microbiology</i> , 2011, 42, 1516-1525.	0.8	38
21	Metagenomics revealing molecular profiling of community structure and metabolic pathways in natural hot springs of the Sikkim Himalaya. <i>BMC Microbiology</i> , 2020, 20, 246.	1.3	32
22	Biosynthesis of 2,5-furan dicarboxylic acid by <i>Aspergillus flavus</i> APLS-1: Process optimization and intermediate product analysis. <i>Bioresource Technology</i> , 2019, 284, 155-160.	4.8	30
23	Biotechnological approaches for the production of designer cheese with improved functionality. <i>Comprehensive Reviews in Food Science and Food Safety</i> , 2021, 20, 960-979.	5.9	30
24	Characterization and application of a native lactic acid bacterium isolated from tannery fleshings for fermentative bioconversion of tannery fleshings. <i>Applied Microbiology and Biotechnology</i> , 2009, 83, 757-766.	1.7	29
25	Biotransformation of 5-hydroxymethylfurfural by <i>Acinetobacter oleivorans</i> S27 for the synthesis of furan derivatives. <i>Bioresource Technology</i> , 2019, 282, 88-93.	4.8	29
26	ADMET profile and virtual screening of plant and microbial natural metabolites as SARS-CoV-2 S1 glycoprotein receptor binding domain and main protease inhibitors. <i>European Journal of Pharmacology</i> , 2021, 890, 173648.	1.7	28
27	Isolation and Characterization of an Endophytic Fungus <i>Colletotrichum coccodes</i> Producing Tyrosol From <i>Houttuynia cordata</i> Thunb. Using ITS2 RNA Secondary Structure and Molecular Docking Study. <i>Frontiers in Bioengineering and Biotechnology</i> , 2021, 9, 650247.	2.0	28
28	Characterization of ACE inhibitory and antioxidant peptides in yak and cow milk hard chhurpi cheese of the Sikkim Himalayan region. <i>Food Chemistry: X</i> , 2022, 13, 100231.	1.8	27
29	A Multifunctional Peptide From <i>Bacillus</i> Fermented Soybean for Effective Inhibition of SARS-CoV-2 S1 Receptor Binding Domain and Modulation of Toll Like Receptor 4: A Molecular Docking Study. <i>Frontiers in Molecular Biosciences</i> , 2021, 8, 636647.	1.6	26
30	Bioefficacy of EPA DHA from lipids recovered from fish processing wastes through biotechnological approaches. <i>Food Chemistry</i> , 2013, 136, 80-86.	4.2	25
31	A novel $\beta$ -glucosidase from a hot-spring metagenome shows elevated thermal stability and tolerance to glucose and ethanol. <i>Enzyme and Microbial Technology</i> , 2021, 145, 109764.	1.6	23
32	Application of native yeast from <i>Garcinia</i> ( <i>Garcinia xanthochumus</i> ) for the preparation of fermented beverage: Changes in biochemical and antioxidant properties. <i>Food Bioscience</i> , 2014, 5, 101-107.	2.0	22
33	Diversity of beneficial microorganisms and their functionalities in community-specific ethnic fermented foods of the Eastern Himalayas. <i>Food Research International</i> , 2021, 148, 110633.	2.9	22
34	Utilization of tannery fleshings: Optimization of conditions for fermenting delimed tannery fleshings using <i>Enterococcus faecium</i> HAB01 by response surface methodology. <i>Bioresource Technology</i> , 2010, 101, 1885-1891.	4.8	21
35	Health Benefits of Tempe. , 2015, , 386-409.		21
36	A novel cold-active type I pullulanase from a hot-spring metagenome for effective debranching and production of resistant starch. <i>Bioresource Technology</i> , 2021, 320, 124288.	4.8	21

#	ARTICLE	IF	CITATIONS
37	Whey valorization by microbial and enzymatic bioprocesses for the production of nutraceuticals and value-added products. <i>Bioresource Technology Reports</i> , 2022, 19, 101144.	1.5	21
38	Production of Garcinia wine: changes in biochemical parameters, organic acids and free sugars during fermentation of Garcinia must. <i>International Journal of Food Science and Technology</i> , 2010, 45, 1330-1336.	1.3	19
39	Production and characterization of bioactive peptides from rice beans using <i>Bacillus subtilis</i> . <i>Bioresource Technology</i> , 2022, 351, 126932.	4.8	19
40	POTENTIAL OF SEAFOOD INDUSTRY BYPRODUCTS AS SOURCES OF RECOVERABLE LIPIDS: FATTY ACID COMPOSITION OF MEAT AND NONMEAT COMPONENT OF SELECTED INDIAN MARINE FISHES. <i>Journal of Food Biochemistry</i> , 2012, 36, 441-448.	1.2	18
41	Characterization of native lactic acid bacteria from traditionally fermented chhurpi of Sikkim Himalayan region for the production of chhurpi cheese with enhanced antioxidant effect. <i>LWT - Food Science and Technology</i> , 2022, 154, 112801.	2.5	18
42	Production and characterization of bioactive peptides in novel functional soybean chhurpi produced using <i>Lactobacillus delbrueckii</i> WS4. <i>Food Chemistry</i> , 2022, 387, 132889.	4.2	18
43	Effect of conventional and pressure frying on lipids and fatty acid composition of fried chicken and oil. <i>Journal of Food Science and Technology</i> , 2013, 50, 381-386.	1.4	17
44	Concomitant production of lipase, protease and enterocin by <i>Enterococcus faecium</i> NCIM5363 and <i>Enterococcus durans</i> NCIM5427 isolated from fish processing waste. <i>International Aquatic Research</i> , 2012, 4, 1.	1.5	16
45	Biotechnological potential of psychrophilic microorganisms as the source of cold-active enzymes in food processing applications. <i>3 Biotech</i> , 2021, 11, 479.	1.1	16
46	Antioxidative, antimicrobial and anti-inflammatory activities and release of ultra-filtered antioxidative and antimicrobial peptides during fermentation of sheep milk: In-vitro, in-silico and molecular interaction studies. <i>Food Bioscience</i> , 2022, 47, 101666.	2.0	16
47	Role of Yeasts in Food Fermentation. , 2017, , 83-113.		14
48	Major ginsenoside contents in rhizomes of <i>Panax sokpayensis</i> and <i>Panax bipinnatifidus</i> . <i>Natural Product Research</i> , 2018, 32, 234-238.	1.0	13
49	Novel insight into valorization of potato peel biomass into type III resistant starch and maltooligosaccharide molecules. <i>Environmental Technology and Innovation</i> , 2021, 24, 101827.	3.0	13
50	Functional peptides in Asian protein rich fermented foods: production and health benefits. <i>Systems Microbiology and Biomanufacturing</i> , 2022, 2, 1-13.	1.5	11
51	Isolation and characterization of potential lactic acid bacteria (LAB) from freshwater fish processing wastes for application in fermentative utilisation of fish processing waste. <i>Brazilian Journal of Microbiology</i> , 2011, 42, 1516-25.	0.8	11
52	Bioconservation of iron and enhancement of antioxidant and antibacterial properties of chicken gizzard protein hydrolysate fermented by <i>Pediococcus acidilactici</i> ATCC 8042. <i>Journal of the Science of Food and Agriculture</i> , 2021, 101, 2718-2726.	1.7	10
53	Effect of feeding lipids recovered from fish processing waste by lactic acid fermentation and enzymatic hydrolysis on antioxidant and membrane bound enzymes in rats. <i>Journal of Food Science and Technology</i> , 2014, 52, 3701-10.	1.4	9
54	Role of enzymatic bioprocesses for the production of functional food and nutraceuticals. , 2020, , 309-334.		9

#	ARTICLE	IF	CITATIONS
55	Potential of edible insects as source of functional foods: biotechnological approaches for improving functionality. <i>Systems Microbiology and Biomanufacturing</i> , 2022, 2, 461-472.	1.5	9
56	Molecular dissemination of emerging antibiotic, biocide, and metal co-resistomes in the Himalayan hot springs. <i>Journal of Environmental Management</i> , 2022, 307, 114569.	3.8	8
57	Biotransformation of hydroquinone into $\beta$ -arbutin by transglucosylation activity of a metagenomic amylosucrase. <i>3 Biotech</i> , 2021, 11, 362.	1.1	7
58	Exopolysaccharide Produced by Probiotic <i>Bacillus albus</i> DM-15 Isolated From Ayurvedic Fermented Dasamoolarishta: Characterization, Antioxidant, and Anticancer Activities. <i>Frontiers in Microbiology</i> , 2022, 13, 832109.	1.5	7
59	An acid-tolerant and cold-active $\beta$ -galactosidase potentially suitable to process milk and whey samples. <i>Applied Microbiology and Biotechnology</i> , 2022, 106, 3599-3610.	1.7	7
60	Recovery of Nutraceuticals from Agri-Food Industry Waste by Lactic Acid Fermentation. <i>Energy, Environment, and Sustainability</i> , 2018, , 185-203.	0.6	6
61	Peptide candidates for the development of therapeutics and vaccines against $\beta$ -coronavirus infection. <i>Bioengineered</i> , 2022, 13, 9435-9454.	1.4	6
62	A highly alkaline pectate lyase from the Himalayan hot spring metagenome and its bioscouring applications. <i>Process Biochemistry</i> , 2022, 115, 100-109.	1.8	6
63	Fermentation of black soybean with <i>Bacillus</i> spp. for the production of kinema: changes in antioxidant potential on fermentation and gastrointestinal digestion. <i>Journal of Food Science and Technology</i> , 2022, 59, 1353-1361.	1.4	5
64	Microbial production and transformation of polyphenols. , 2022, , 189-208.		4
65	Potential of lactic acid bacteria as starter cultures for food fermentation and as producers of biochemicals for value addition. , 2022, , 281-304.		3
66	Advancements in Molecular Techniques for the Detection of Foodborne Pathogens. , 2022, , 195-224.		2
67	Cold-adaptive traits identified by comparative genomic analysis of a lipase-producing <i>Pseudomonas</i> sp. HS6 isolated from snow-covered soil of Sikkim Himalaya and molecular simulation of lipase for wide substrate specificity. <i>Current Genetics</i> , 2022, , .	0.8	2
68	Bioactive Compounds in Fermented Foods. , 0, , .		1
69	Microbial transformation for improving food functionality. , 2022, , 31-45.		1
70	Microbial bioprocesses for production of nutraceuticals and functional foods. , 2022, , 1-29.		1
71	Anti-Inflammatory, ACE Inhibitory, Antioxidative Activities and Release of Novel Antihypertensive and Antioxidative Peptides from Whey Protein Hydrolysate with Molecular Interactions. , 2023, 42, 371-385.		1
72	Microbial Transformation during Gut Fermentation. , 2021, , 365-402.		0