Arbind Kumar

List of Publications by Year
in descending order

Source: https://exaly.com/author-pdf/8323244/publications.pdf

Version: 2024-02-01

60 papers	1,309 citations	361045 20 h-index	395343 33 g-index
60 all docs	60 docs citations	60 times ranked	1413 citing authors

#	Article	IF	Citations
1	Strategies for optimization of heterologous protein expression in E. coli: Roadblocks and reinforcements. International Journal of Biological Macromolecules, 2018, 106, 803-822.	3.6	245
2	Immobilization, stability and esterification studies of a lipase from a Bacillus sp.. Biotechnology and Applied Biochemistry, 2002, 36, 7.	1.4	77
3	Lipid hydrolizing enzymes in virulence:Mycobacterium tuberculosisas a model system. Critical Reviews in Microbiology, 2010, 36, 259-269.	2.7	70
4	Engineering of Bacillus lipase by directed evolution for enhanced thermal stability: effect of isoleucine to threonine mutation at protein surface. Molecular Biology Reports, 2011, 38, 2919-2926.	1.0	45
5	Engineering of a metagenome derived lipase toward thermal tolerance: Effect of asparagine to lysine mutation on the protein surface. Gene, 2012, 491, 264-271.	1.0	39
6	Cloning, expression and characterization of a metagenome derived thermoactive/thermostable pectinase. Molecular Biology Reports, 2012, 39, 8353-8361.	1.0	39
7	Characterization of LipN (Rv2970c) ofMycobacterium TuberculosisH37Rv and its Probable Role in Xenobiotic Degradation. Journal of Cellular Biochemistry, 2016, 117, 390-401.	1.2	38
8	A thermostable lipolytic enzyme from a thermophilic Bacillus sp.: Purification and characterization. Molecular and Cellular Biochemistry, 2006, 290, 17-22.	1.4	32
9	Characterization of a thermostable lipase showing loss of secondary structure at ambient temperature. Molecular Biology Reports, 2012, 39, 2795-2804.	1.0	32
10	Characterization of a novel esterase Rv1497 of Mycobacterium tuberculosis H37Rv demonstrating Î²-lactamase activity. Enzyme and Microbial Technology, 2016, 82, 180-190.	1.6	29
11	Characterization of an acid inducible lipase Rv3203 from Mycobacterium tuberculosis H37Rv. Molecular Biology Reports, 2014, 41, 285-296.	1.0	28
12	Modulation of Trehalose Dimycolate and Immune System by Rv0774c Protein Enhanced the Intracellular Survival of Mycobacterium smegmatis in Human Macrophages Cell Line. Frontiers in Cellular and Infection Microbiology, 2017, 7, 289.	1.8	28
13	Molecular Characterization of Oxidative Stress-Inducible LipD of Mycobacterium tuberculosis H37Rv. Current Microbiology, 2014, 68, 387-396.	1.0	27
14	Characterization and molecular modelling of an engineered organic solvent tolerant, thermostable lipase with enhanced enzyme activity. Journal of Molecular Catalysis B: Enzymatic, 2013, 97, 243-251.	1.8	26
15	Functional characterization of hypothetical proteins ofMycobacterium tuberculosiswith possible esterase/lipase signature: a cumulativein silicoandin vitroapproach. Journal of Biomolecular Structure and Dynamics, 2017, 35, 1226-1243.	2.0	26
16	Multifaceted role of lipids inMycobacterium leprae. Future Microbiology, 2017, 12, 315-335.	1.0	24
17	Biochemical Analysis of a Native and Proteolytic Fragment of a High-Molecular-Weight Thermostable Lipase from a Mesophilic Bacillus sp.. Protein Expression and Purification, 2002, 24, 71-75.	0.6	23
18	Primer Based Approach for PCR Amplification of High GC Content Gene:MycobacteriumGene as a Model. Molecular Biology International, 2014, 2014, 1-7.	1.7	23

#	Article	IF	Citations
19	Dynamics of fluoroquinolones induced resistance in DNA gyrase of Mycobacterium tuberculosis. Journal of Biomolecular Structure and Dynamics, 2018, 36, 362-375.	2.0	23
20	mesT, a unique epoxide hydrolase, is essential for optimal growth of Mycobacterium tuberculosis in the presence of styrene oxide. Future Microbiology, 2017, 12, 527-546.	1.0	22
21	Engineering lipases for temperature adaptation: Structure function correlation. Biochimica Et Biophysica Acta - Proteins and Proteomics, 2019, 1867, 140261.	1.1	22
22	Rv0518, a nutritive stress inducible GDSL lipase of Mycobacterium tuberculosis, enhanced intracellular survival of bacteria by cell wall modulation. International Journal of Biological Macromolecules, 2019, 135, 180-195.	3.6	21
23	Enantiomeric separation of pharmaceutically important drug intermediates using a Metagenomic lipase and optimization of its large scale production. International Journal of Biological Macromolecules, 2017, 95, 995-1003.	3.6	20
24	Characterization of ML0314c of Mycobacterium leprae and deciphering its role in the immune response in leprosy patients. Gene, 2018, 643, 26-34.	1.0	20
25	Characterization and evolution of a metagenome-derived lipase towards enhanced enzyme activity and thermostability. Molecular and Cellular Biochemistry, 2013, 373, 149-159.	1.4	19
26	Rv0774c, an iron stress inducible, extracellular esterase is involved in immune-suppression associated with altered cytokine and TLR2 expression. International Journal of Medical Microbiology, 2017, 307, 126-138.	1.5	19
27	Combinatorial reshaping of a lipase structure for thermostability: Additive role of surface stabilizing single point mutations. Biochemical and Biophysical Research Communications, 2014, 447, 626-632.	1.0	18
28	Alanine mutation of the catalytic sites of Pantothenate Synthetase causes distinct conformational changes in the ATP binding region. Scientific Reports, 2018, 8, 903.	1.6	18
29	Rv2037c, a stress induced conserved hypothetical protein of Mycobacterium tuberculosis, is a phospholipase: Role in cell wall modulation and intracellular survival. International Journal of Biological Macromolecules, 2020, 153, 817-835.	3.6	18
30	Rv1288, a Two Domain, Cell Wall Anchored, Nutrient Stress Inducible Carboxyl-Esterase of Mycobacterium tuberculosis, Modulates Cell Wall Lipid. Frontiers in Cellular and Infection Microbiology, 2018, 8, 421.	1.8	16
31	Insights into controlling role of substitution mutation, E315G on thermostability of a lipase cloned from metagenome of hot spring soil. 3 Biotech, 2014, 4, 189-196.	1.1	15
32	Point Mutation Ile137-Met Near Surface Conferred Psychrophilic Behaviour and Improved Catalytic Efficiency to Bacillus Lipase of 1.4 Subfamily. Applied Biochemistry and Biotechnology, 2016, 178, 753-765.	1.4	15
33	Cell Wall Associated Factors of Mycobacterium tuberculosis as Major Virulence Determinants: Current Perspectives in Drugs Discovery and Design. Current Drug Targets, 2017, 18, 1904-1918.	1.0	15
34	Structural and functional insights into thermostable and organic solvent stable variant Pro247-Ser of Bacillus lipase. International Journal of Biological Macromolecules, 2018, 108, 845-852.	3.6	15
35	Point mutation Gln121-Arg increased temperature optima of Bacillus lipase (1.4 subfamily) by fifteen degrees. International Journal of Biological Macromolecules, 2016, 88, 507-514.	3.6	13
36	Characterization of an extracellular protein, Rv1076 from M. tuberculosis with a potential role in humoral response. International Journal of Biological Macromolecules, 2017, 101, 621-629.	3.6	13

#	Article	IF	Citations
37	Thirty-degree shift in optimum temperature of a thermophilic lipase by a single-point mutation: effect of serine to threonine mutation on structural flexibility. Molecular and Cellular Biochemistry, 2017, 430, 21-30.	1.4	12
38	Drug targeted virtual screening and molecular dynamics of LipU protein of Mycobacterium tuberculosis and Mycobacterium leprae. Journal of Biomolecular Structure and Dynamics, 2019, 37, 1254-1269.	2.0	12
39	Structural and functional insights about unique extremophilic bacterial lipolytic enzyme from metagenome source. International Journal of Biological Macromolecules, 2020, 152, 593-604.	3.6	12
40	Disruption of N terminus long range non covalent interactions shifted temp.opt 25Â°C to cold: Evolution of point mutant Bacillus lipase by error prone PCR. Gene, 2016, 576, 237-243.	1.0	11
41	The immunosuppressive effects of a novel recombinant LipQ (Rv2485c) protein of Mycobacterium tuberculosis on human macrophage cell lines. Microbial Pathogenesis, 2017, 107, 361-367.	1.3	9
42	Gene expression analysis for selection and validation of suitable housekeeping gene(s) in cadmium exposed pigeonpea plants inoculated with arbuscular mycorrhizae. Plant Physiology and Biochemistry, 2021, 162, 592-602.	2.8	9
43	Rv0646c, an esterase from M. tuberculosis, up-regulates the host immune response in THP-1 macrophages cells. Molecular and Cellular Biochemistry, 2018, 447, 189-202.	1.4	8
44	Pharmaco-immunomodulatory interventions for averting cytokine storm-linked disease severity in SARS-CoV-2 infection. Inflammopharmacology, 2022, 30, 23-49.	1.9	8
45	mbtJ: an iron stress-induced acetyl hydrolase/esterase of Mycobacterium tuberculosis helps bacteria to survive during iron stress. Future Microbiology, 2018, 13, 547-564.	1.0	6
46	Rv2223c, an acid inducible carboxyl-esterase of Mycobacterium tuberculosis enhanced the growth and survival of Mycobacterium smegmatis. Future Microbiology, 2019, 14, 1397-1415.	1.0	6
47	Molecular Dynamics Assisted Mechanistic Insight of Val430-Ala Mutation of Rv1592c Protein in Isoniazid Resistant Mycobacterium Tuberculosis. Current Computer-Aided Drug Design, 2021, 17, 95-106.	0.8	6
48	Combating the progression of novel coronavirus SARS-CoV-2 infectious Disease: Current state and future prospects in molecular diagnostic and drug discovery. Current Molecular Medicine, 2021, 21, .	0.6	6
49	The lipolytic activity of LipJ, a stress-induced enzyme, is regulated by its C-terminal adenylate cyclase domain. Future Microbiology, 2021, 16, 487-507.	1.0	5
50	New Insight into Old Bacillus Lipase: Solvent Stable Mesophilic Lipase Demonstrating Enzyme Activity towards Cold. Journal of Molecular Microbiology and Biotechnology, 2015, 25, 340-348.	1.0	4
51	Mutation in Eth A protein of Mycobacterium tuberculosis conferred drug tolerance against enthinoamide in Mycobacterium smegmatis mc2155. Computational Biology and Chemistry, 2022, 98, 107677.	1.1	4
52	Differential expression of two members of Rv1922-LipD operon in Mycobacterium tuberculosis: Does rv1923 qualify for membership?. Pathogens and Disease, 2015, 73, .	0.8	3
53	Conserved cysteine variants of metagenomic derived polygalacturonase concurrently shift its optima at acidic pH and enhanced thermostability: structural and functional analysis. Journal of Biomolecular Structure and Dynamics, 2019, 37, 265-273.	2.0	3
54	Correlation of over-expression of rv1900c with enhanced survival of M. smegmatis under stress conditions: Modulation of cell surface properties. Gene, 2021, 791, 145720.	1.0	3

#	Article	IF	Citations
55	In-Silico Characterization of a Hypothetical Protein, Rv1288 of Mycobacterium tuberculosis Containing an Esterase Signature and an Uncommon LytE Domain. Current Computer-Aided Drug Design, 2017, 13, 101-111.	0.8	3
56	Comparative analysis of point mutations on protein COOH terminal near surface and its hydrophobic core provide insights on thermostability of Bacillus Lipase LipJ. Journal of Molecular Catalysis B: Enzymatic, 2016, 133, S482-S490.	1.8	2
57	Environment dependent expression of mycobacterium hormone sensitive lipases: expression pattern under ex-vivo and individual in-vitro stress conditions in M. tuberculosis H37Ra. Molecular Biology Reports, 2022, 49, 4583-4593.	1.0	2
58	Molecular characterization and immunogenic function of ML1899 (LipG) of Mycobacterium leprae. Journal of Medical Microbiology, 2019, 68, 1629-1640.	0.7	1
59	A Phagosomally Expressed Gene, rv0428c, of Mycobacterium tuberculosis Demonstrates Acetyl Transferase Activity and Plays a Protective Role Under Stress Conditions. Protein Journal, 2022, 41, 260-273.	0.7	1
60	Studies on Recombinant Lipase Production byÂE. Coli: Effect of Media And Bacterial Expression System Optimization. International Journal of Molecular Biology Open Access, 2017, 2, .	0.2	0