Lakshmi P Kotra

List of Publications by Year
in descending order

98 papers	4,670 citations	136885 32 h-index	102432 66 g-index
102 all docs	102 docs citations	102 times ranked	5830 citing authors

#	Article	IF	Citations
1	Matrix metalloproteinases: structures, evolution, and diversification. FASEB Journal, 1998, 12, 1075-1095.	0.2	714
2	Aminoglycosides: Perspectives on Mechanisms of Action and Resistance and Strategies to Counter Resistance. Antimicrobial Agents and Chemotherapy, 2000, 44, 3249-3256.	1.4	442
3	High-Resolution Atomic Force Microscopy Studies of theEscherichiacoliOuter Membrane:Â Structural Basis for Permeability. Langmuir, 2000, 16, 2789-2796.	1.6	415
4	Potent and Selective Mechanism-Based Inhibition of Gelatinases. Journal of the American Chemical Society, 2000, 122, 6799-6800.	6.6	188
5	Substrate Hydrolysis by Matrix Metalloproteinase-9*. Journal of Biological Chemistry, 2001, 276, 20572-20578.	1.6	170
6	Design of Novel Antibiotics that Bind to the Ribosomal Acyltransfer Site. Journal of the American Chemical Society, 2002, 124, 3229-3237.	6.6	165
7	Aminoglycosides Modified by Resistance Enzymes Display Diminished Binding to the Bacterial Ribosomal Aminoacyl-tRNA Site. Chemistry and Biology, 2002, 9, 455-463.	6.2	160
8	Structural Basis for Clinical Longevity of Carbapenem Antibiotics in the Face of Challenge by the Common Class A Î²-Lactamases from the Antibiotic-Resistant Bacteria. Journal of the American Chemical Society, 1998, 120, 9748-9752.	6.6	138
9	Insights into Class D Î²-Lactamases Are Revealed by the Crystal Structure of the OXA10 Enzyme from Pseudomonas aeruginosa. Structure, 2000, 8, 1289-1298.	1.6	135
10	Characterization of the Monomeric and Dimeric Forms of Latent and Active Matrix Metalloproteinase-9. Journal of Biological Chemistry, 2000, 275, 2661-2668.	1.6	132
11	Complex Pattern of Membrane Type 1 Matrix Metalloproteinase Shedding. Journal of Biological Chemistry, 2002, 277, 26340-26350.	1.6	112
12	Dynamics of the Lipopolysaccharide Assembly on the Surface ofEscherichiacoli. Journal of the American Chemical Society, 1999, 121, 8707-8711.	6.6	106
13	Common Î²-lactamases inhibit bacterial biofilm formation. Molecular Microbiology, 2005, 58, 1012-1024.	1.2	105
14	Biochemically altered myelin triggers autoimmune demyelination. Proceedings of the National Academy of Sciences of the United States of America, 2018, 115, 5528-5533.	3.3	83
15	Chemical Profiling of Medical Cannabis Extracts. ACS Omega, 2017, 2, 6091-6103.	1.6	76
16	Selection and Characterization of Î²-Lactamâ€"Î²-Lactamase Inactivator-Resistant Mutants following PCR Mutagenesis of the TEM-1 Î²-Lactamase Gene. Antimicrobial Agents and Chemotherapy, 1998, 42, 1542-1548.	1.4	69
17	Cannabis Use Disorder and Perioperative Outcomes in Major Elective Surgeries. Anesthesiology, 2020, 132, 625-635.	1.3	69
18	X-ray Absorption Studies of Human Matrix Metalloproteinase-2 (MMP-2) Bound to a Highly Selective Mechanism-based Inhibitor. Journal of Biological Chemistry, 2001, 276, 17125-17131.	1.6	68

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19	Design, Synthesis, Biological Evaluation, and Structureâ€“Activity Relationships of Substituted Phenyl 4-(2-Oxoimidazolidin-1-yl)benzenesulfonates as New Tubulin Inhibitors Mimicking Combretastatin A-4. Journal of Medicinal Chemistry, 2011, 54, 4559-4580.	2.9	55
20	A Potent, Covalent Inhibitor of Orotidine 5â€˜-Monophosphate Decarboxylase with Antimalarial Activity. Journal of Medicinal Chemistry, 2007, 50, 915-921.	2.9	53
21	The First Structural and Mechanistic Insights for Class D Î²-Lactamases:Â Evidence for a Novel Catalytic Process for Turnover of Î²-Lactam Antibiotics. Journal of the American Chemical Society, 2000, 122, 6132-6133.	6.6	51
22	Novel Inhibitors of Protein Arginine Deiminase with Potential Activity in Multiple Sclerosis Animal Model. Journal of Medicinal Chemistry, 2013, 56, 1715-1722.	2.9	48
23	Molecular Similarities in the Ligand Binding Pockets of an Odorant Receptor and the Metabotropic Glutamate Receptors. Journal of Biological Chemistry, 2003, 278, 42551-42559.	1.6	47
24	Design of Inhibitors of Orotidine Monophosphate Decarboxylase Using Bioisosteric Replacement and Determination of Inhibition Kinetics. Journal of Medicinal Chemistry, 2006, 49, 4937-4945.	2.9	46
25	Structureâ€“Activity Relationships of C6-Uridine Derivatives Targeting <i>Plasmodia</i> Orotidine Monophosphate Decarboxylase. Journal of Medicinal Chemistry, 2008, 51, 439-448.	2.9	45
26	Extractions of Medical Cannabis Cultivars and the Role of Decarboxylation in Optimal Receptor Responses. Cannabis and Cannabinoid Research, 2019, 4, 183-194.	1.5	44
27	An Unprecedented Twist to ODCase Catalytic Activity. Journal of the American Chemical Society, 2005, 127, 15048-15050.	6.6	38
28	Hydrolytic Mechanism of OXA-58 Enzyme, a Carbapenem-hydrolyzing Class D Î²-Lactamase from Acinetobacter baumannii. Journal of Biological Chemistry, 2011, 286, 37292-37303.	1.6	38
29	Tethered Bisubstrate Derivatives as Probes for Mechanism and as Inhibitors of Aminoglycoside 3â€˜-Phosphotransferases. Journal of Organic Chemistry, 2000, 65, 7422-7431.	1.7	36
30	A structural basis for interferonâ€Î±â€receptor interactions. FASEB Journal, 2007, 21, 3288-3296.	0.2	36
31	Structureâˆ’Activity Relationships of Orotidine-5â€²-Monophosphate Decarboxylase Inhibitors as Anticancer Agents. Journal of Medicinal Chemistry, 2009, 52, 1648-1658.	2.9	33
32	N-Glycosylation pattern of the zymogenic form of human matrix metalloproteinase-9. Bioorganic Chemistry, 2002, 30, 356-370.	2.0	32
33	<i>Cannabis sativa</i> (Hemp) Seeds, Î”⁹-Tetrahydrocannabinol, and Potential Overdose. Cannabis and Cannabinoid Research, 2017, 2, 274-281.	1.5	32
34	Substituted phenyl 4-(2-oxoimidazolidin-1-yl)benzenesulfonamides as antimitotics. Antiproliferative, antiangiogenic and antitumoral activity, and quantitative structure-activity relationships. European Journal of Medicinal Chemistry, 2011, 46, 5327-5342.	2.6	30
35	Identification of novel class of falcipain-2 inhibitors as potential antimalarial agents. Bioorganic and Medicinal Chemistry, 2015, 23, 2221-2240.	1.4	30
36	Elucidation of Mechanism of Inhibition and X-ray Structure of the TEM-1 Î²-Lactamase from Escherichia coli Inhibited by a N-Sulfonyloxy-Î²-lactam. Journal of the American Chemical Society, 1999, 121, 5353-5359.	6.6	29

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37	A Comparative Molecular Field Analysis (CoMFA) and Comparative Molecular Similarity Indices Analysis (CoMSIA) of Anthranilamide Derivatives That Are Multidrug Resistance Modulators. Journal of Medicinal Chemistry, 2006, 49, 7646-7660.	2.9	28
38	Substrate Distortion Contributes to the Catalysis of Orotidine 5â€²-Monophosphate Decarboxylase. Journal of the American Chemical Society, 2013, 135, 17432-17443.	6.6	27
39	Insight into the Complex and Dynamic Process of Activation of Matrix Metalloproteinases. Journal of the American Chemical Society, 2001, 123, 3108-3113.	6.6	26
40	Design and Synthesis of Novel Fluoropeptidomimetics as Potential Mimics of the Transition State during Peptide Hydrolysis. Journal of Organic Chemistry, 2003, 68, 1043-1049.	1.7	26
41	Improved synthesis of pyrylium salts leading to 2,4-disubstituted diarylfurans via novel mechanism. Tetrahedron Letters, 2003, 44, 9271-9274.	0.7	24
42	A novel class of Plasmodial ClpP protease inhibitors as potential antimalarial agents. Bioorganic and Medicinal Chemistry, 2017, 25, 5662-5677.	1.4	24
43	Cyanocobalamin (vitamin B12) conjugates with enhanced solubility. Bioorganic and Medicinal Chemistry, 2007, 15, 1780-1787.	1.4	22
44	Structureâ€"activity relationships of pyrazole derivatives as potential therapeutics for immune thrombocytopenias. Bioorganic and Medicinal Chemistry, 2014, 22, 2739-2752.	1.4	22
45	Structural insight into the binding motifs for the calcium ion and the non-catalytic zinc in matrix metalloproteases. Bioorganic and Medicinal Chemistry Letters, 1998, 8, 853-858.	1.0	21
46	Inhibitors of protein arginine deiminases and their efficacy in animal models of multiple sclerosis. Bioorganic and Medicinal Chemistry, 2017, 25, 2643-2656.	1.4	18
47	Surfactant protein D regulates caspase-8-mediated cascade of the intrinsic pathway of apoptosis while promoting bleb formation. Molecular Immunology, 2017, 92, 190-198.	1.0	18
48	Drug Repurposing in the Development of Anticancer Agents. Current Medicinal Chemistry, 2019, 26, 5410-5427.	1.2	18
49	Structure-based de novo design of ligands using a three-dimensional model of the insulin receptor. Bioorganic and Medicinal Chemistry Letters, 2004, 14, 1407-1410.	1.0	16
50	Structural Characterization of the Molecular Events during a Slow Substrateâ€"Product Transition in Orotidine 5â€²-Monophosphate Decarboxylase. Journal of Molecular Biology, 2009, 387, 1199-1210.	2.0	16
51	Surfactant protein D delays Fas- and TRAIL-mediated extrinsic pathway of apoptosis in T cells. Apoptosis: an International Journal on Programmed Cell Death, 2017, 22, 730-740.	2.2	16
52	The Impact of Perioperative Cannabis Use: A Narrative Scoping Review. Cannabis and Cannabinoid Research, 2019, 4, 219-230.	1.5	16
53	Structural determinants for the inhibitory ligands of orotidine-5â€²-monophosphate decarboxylase. Bioorganic and Medicinal Chemistry, 2010, 18, 4032-4041.	1.4	14
54	Disulfide linked pyrazole derivatives inhibit phagocytosis of opsonized blood cells. Bioorganic and Medicinal Chemistry Letters, 2013, 23, 2324-2327.	1.0	14

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55	Guaifenesin Derivatives Promote Neurite Outgrowth and Protect Diabetic Mice from Neuropathy. Journal of Medicinal Chemistry, 2013, 56, 5071-5078.	2.9	13
56	Noncovalent Protein Arginine Deiminase (PAD) Inhibitors Are Efficacious in Animal Models of Multiple Sclerosis. Journal of Medicinal Chemistry, 2017, 60, 8876-8887.	2.9	13
57	Topical Delivery of Muscarinic Receptor Antagonists Prevents and Reverses Peripheral Neuropathy in Female Diabetic Mice. Journal of Pharmacology and Experimental Therapeutics, 2020, 374, 44-51.	1.3	13
58	Unnatural amino acid derived FRET cassettes, terminators and their DNA sequencing potential. Tetrahedron Letters, 2002, 43, 1999-2003.	0.7	12
59	Structural Diversity and Plasticity Associated with Nucleotides Targeting Orotidine Monophosphate Decarboxylase. Journal of Medicinal Chemistry, 2008, 51, 432-438.	2.9	12
60	Novel Interactions of Fluorinated Nucleotide Derivatives Targeting Orotidine 5â€²-Monophosphate Decarboxylase. Journal of Medicinal Chemistry, 2011, 54, 2891-2901.	2.9	12
61	Hydrogen Bonding and Attenuation of the Rate of Enzymic Catalysis. Journal of the American Chemical Society, 1998, 120, 13003-13007.	6.6	11
62	Stereoselective Reduction of Î±-Bromopenicillanates by Tributylphosphine. Organic Letters, 2000, 2, 2889-2892.	2.4	11
63	Engineering d-amino acid containing novel protease inhibitors using catalytic site architecture. Bioorganic and Medicinal Chemistry, 2006, 14, 214-236.	1.4	11
64	De Novo Design of Nonpeptidic Compounds Targeting the Interactions between Interferon-Î± and its Cognate Cell Surface Receptor. Journal of Medicinal Chemistry, 2008, 51, 2734-2743.	2.9	10
65	Mechanism of action of N-phenyl-Nâ€²-(2-chloroethyl)ureas in the colchicine-binding site at the interface between Î±- and Î²-tubulin. Bioorganic and Medicinal Chemistry, 2009, 17, 3690-3697.	1.4	10
66	Novel fluoropeptidomimetics: synthesis, stability studies and protease inhibition. Bioorganic and Medicinal Chemistry, 2005, 13, 2943-2958.	1.4	9
67	Protein kinase C isozymes and their selectivity towards ruboxistaurin. Proteins: Structure, Function and Bioinformatics, 2008, 72, 447-460.	1.5	9
68	Novel Cytidine-Based Orotidine-5â€²-Monophosphate Decarboxylase Inhibitors with an Unusual Twist. Journal of Medicinal Chemistry, 2012, 55, 9988-9997.	2.9	9
69	Antimalarial Activities of 6-Iodouridine and Its Prodrugs and Potential for Combination Therapy. Journal of Medicinal Chemistry, 2013, 56, 2348-2358.	2.9	9
70	A comparative molecular field and comparative molecular similarity indices analyses (CoMFA and) Tj ETQq0 0 0 rgBT /Overlock 10 Tf 50 Bioorganic and Medicinal Chemistry, 2008, 16, 1914-1926.	1.4	8
71	Evaluation of inhibition of the carbenicillin-hydrolyzing Î²-lactamase PSE-4 by the clinically used mechanism-based inhibitors. FEBS Letters, 2000, 470, 285-292.	1.3	7
72	Interrogation of the Active Sites of Protein Arginine Deiminases (PAD1, -2, and -4) Using Designer Probes. ACS Medicinal Chemistry Letters, 2013, 4, 249-253.	1.3	7

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73	Design of inhibitors of ODCase. Future Medicinal Chemistry, 2014, 6, 165-177.	1.1	7
74	A Conserved Residue, Tyrosine (Y) 84, in H5N1 Influenza A Virus NS1 Regulates IFN Signaling Responses to Enhance Viral Infection. Viruses, 2017, 9, 107.	1.5	7
75	Bioactive Chemical Composition of Cannabis Extracts and Cannabinoid Receptors. Molecules, 2020, 25, 3466.	1.7	7
76	Orotidine Monophosphate Decarboxylase â€" A Fascinating Workhorse Enzyme with Therapeutic Potential. Journal of Genetics and Genomics, 2015, 42, 221-234.	1.7	6
77	Small molecule phagocytosis inhibitors for immune cytopenias. Autoimmunity Reviews, 2016, 15, 843-847.	2.5	6
78	Small molecule mimetics of an interferon-Î± receptor interacting domain. Bioorganic and Medicinal Chemistry, 2014, 22, 978-985.	1.4	4
79	Small Molecule Agonists for the Type I Interferon Receptor: An <i>In Silico</i> Approach. Journal of Interferon and Cytokine Research, 2016, 36, 180-191.	0.5	3
80	Daring discourse â€" yes: practical considerations for cannabis use in the perioperative setting. Regional Anesthesia and Pain Medicine, 2020, 45, 524-527.	1.1	2
81	Bacillus Infections. , 2007, , 1-7.		1
82	Meningococcal Infections. , 2007, , 1-7.		1
83	Inhibition of Orotidine-5'-monophosphate decarboxylase - Discoveries and lessons. Nucleic Acids Symposium Series, 2008, 52, 85-86.	0.3	1
84	Aminoglycoside Antibiotics. , 0, , 7-20.		1
85	In Silico Molecular Homology Modeling of Neurotransmitter Receptors. , 2007, , 293-304.		1
86	Adrenomedullary Tumors. , 2007, , 1-4.		1
87	Improved Synthesis of Pyrylium Salts Leading to 2,4-Disubstituted Diarylfurans via Novel Mechanism.. ChemInform, 2004, 35, no.	0.1	0
88	Cestode Disease. , 2007, , 1-4.		0
89	Mycobacterium Tuberculosis Infections. , 2007, , 1-7.		0
90	Arbovirus and Arenavirus Infections. , 2007, , 1-6.		0

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91	Diseases Caused by Acid-Fast Bacteria. , 2007, , 1-5.		0
92	Poxvirus Infections. , 2007, , 1-6.		0
93	Bacterial Diseases. , 2007, , 1-2.		0
94	Acinetobacter Infections. , 2007, , 1-9.		0
95	Multiple Endocrine Neoplasias. , 2007, , 1-5.		0
96	Mycobacterium Leprae Infections. , 2007, , 1-7.		0
97	Calymmatobacterium Granulomatis Infections. , 2007, , 1-4.		0
98	Diseases Caused by Enteroviruses. , 2007, , 1-5.		0