

# Lakshmi P Kotra

## List of Publications by Year in descending order

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98  
papers

4,670  
citations

136950

32  
h-index

102487

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. <i>FASEB Journal</i> , 1998, 12, 1075-1095.	0.5	714
2	Aminoglycosides: Perspectives on Mechanisms of Action and Resistance and Strategies to Counter Resistance. <i>Antimicrobial Agents and Chemotherapy</i> , 2000, 44, 3249-3256.	3.2	442
3	High-Resolution Atomic Force Microscopy Studies of the <i>Escherichia coli</i> Outer Membrane: A Structural Basis for Permeability. <i>Langmuir</i> , 2000, 16, 2789-2796.	3.5	415
4	Potent and Selective Mechanism-Based Inhibition of Gelatinases. <i>Journal of the American Chemical Society</i> , 2000, 122, 6799-6800.	13.7	188
5	Substrate Hydrolysis by Matrix Metalloproteinase-9*. <i>Journal of Biological Chemistry</i> , 2001, 276, 20572-20578.	3.4	170
6	Design of Novel Antibiotics that Bind to the Ribosomal Acyltransfer Site. <i>Journal of the American Chemical Society</i> , 2002, 124, 3229-3237.	13.7	165
7	Aminoglycosides Modified by Resistance Enzymes Display Diminished Binding to the Bacterial Ribosomal Aminoacyl-tRNA Site. <i>Chemistry and Biology</i> , 2002, 9, 455-463.	6.0	160
8	Structural Basis for Clinical Longevity of Carbapenem Antibiotics in the Face of Challenge by the Common Class A $\beta$ -Lactamases from the Antibiotic-Resistant Bacteria. <i>Journal of the American Chemical Society</i> , 1998, 120, 9748-9752.	13.7	138
9	Insights into Class D $\beta$ -Lactamases Are Revealed by the Crystal Structure of the OXA10 Enzyme from <i>Pseudomonas aeruginosa</i> . <i>Structure</i> , 2000, 8, 1289-1298.	3.3	135
10	Characterization of the Monomeric and Dimeric Forms of Latent and Active Matrix Metalloproteinase-9. <i>Journal of Biological Chemistry</i> , 2000, 275, 2661-2668.	3.4	132
11	Complex Pattern of Membrane Type 1 Matrix Metalloproteinase Shedding. <i>Journal of Biological Chemistry</i> , 2002, 277, 26340-26350.	3.4	112
12	Dynamics of the Lipopolysaccharide Assembly on the Surface of <i>Escherichia coli</i> . <i>Journal of the American Chemical Society</i> , 1999, 121, 8707-8711.	13.7	106
13	Common $\beta$ -lactamases inhibit bacterial biofilm formation. <i>Molecular Microbiology</i> , 2005, 58, 1012-1024.	2.5	105
14	Biochemically altered myelin triggers autoimmune demyelination. <i>Proceedings of the National Academy of Sciences of the United States of America</i> , 2018, 115, 5528-5533.	7.1	83
15	Chemical Profiling of Medical Cannabis Extracts. <i>ACS Omega</i> , 2017, 2, 6091-6103.	3.5	76
16	Selection and Characterization of $\beta$ -Lactamase Inactivator-Resistant Mutants following PCR Mutagenesis of the TEM-1 $\beta$ -Lactamase Gene. <i>Antimicrobial Agents and Chemotherapy</i> , 1998, 42, 1542-1548.	3.2	69
17	Cannabis Use Disorder and Perioperative Outcomes in Major Elective Surgeries. <i>Anesthesiology</i> , 2020, 132, 625-635.	2.5	69
18	X-ray Absorption Studies of Human Matrix Metalloproteinase-2 (MMP-2) Bound to a Highly Selective Mechanism-based Inhibitor. <i>Journal of Biological Chemistry</i> , 2001, 276, 17125-17131.	3.4	68

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19	Design, Synthesis, Biological Evaluation, and Structure-Activity Relationships of Substituted Phenyl 4-(2-Oxoimidazolidin-1-yl)benzenesulfonates as New Tubulin Inhibitors Mimicking Combretastatin A-4. <i>Journal of Medicinal Chemistry</i> , 2011, 54, 4559-4580.	6.4	55
20	A Potent, Covalent Inhibitor of Orotidine 5'-Monophosphate Decarboxylase with Antimalarial Activity. <i>Journal of Medicinal Chemistry</i> , 2007, 50, 915-921.	6.4	53
21	The First Structural and Mechanistic Insights for Class D $\beta$ -Lactamases: Evidence for a Novel Catalytic Process for Turnover of $\beta$ -Lactam Antibiotics. <i>Journal of the American Chemical Society</i> , 2000, 122, 6132-6133.	13.7	51
22	Novel Inhibitors of Protein Arginine Deiminase with Potential Activity in Multiple Sclerosis Animal Model. <i>Journal of Medicinal Chemistry</i> , 2013, 56, 1715-1722.	6.4	48
23	Molecular Similarities in the Ligand Binding Pockets of an Odorant Receptor and the Metabotropic Glutamate Receptors. <i>Journal of Biological Chemistry</i> , 2003, 278, 42551-42559.	3.4	47
24	Design of Inhibitors of Orotidine Monophosphate Decarboxylase Using Bioisosteric Replacement and Determination of Inhibition Kinetics. <i>Journal of Medicinal Chemistry</i> , 2006, 49, 4937-4945.	6.4	46
25	Structure-Activity Relationships of C6-Uridine Derivatives Targeting <i>Plasmodium</i> Orotidine Monophosphate Decarboxylase. <i>Journal of Medicinal Chemistry</i> , 2008, 51, 439-448.	6.4	45
26	Extractions of Medical Cannabis Cultivars and the Role of Decarboxylation in Optimal Receptor Responses. <i>Cannabis and Cannabinoid Research</i> , 2019, 4, 183-194.	2.9	44
27	An Unprecedented Twist to ODCase Catalytic Activity. <i>Journal of the American Chemical Society</i> , 2005, 127, 15048-15050.	13.7	38
28	Hydrolytic Mechanism of OXA-58 Enzyme, a Carbapenem-hydrolyzing Class D $\beta$ -Lactamase from <i>Acinetobacter baumannii</i> . <i>Journal of Biological Chemistry</i> , 2011, 286, 37292-37303.	3.4	38
29	Tethered Bisubstrate Derivatives as Probes for Mechanism and as Inhibitors of Aminoglycoside 3'-Phosphotransferases. <i>Journal of Organic Chemistry</i> , 2000, 65, 7422-7431.	3.2	36
30	A structural basis for interferon- $\alpha$ receptor interactions. <i>FASEB Journal</i> , 2007, 21, 3288-3296.	0.5	36
31	Structure-Activity Relationships of Orotidine-5'-Monophosphate Decarboxylase Inhibitors as Anticancer Agents. <i>Journal of Medicinal Chemistry</i> , 2009, 52, 1648-1658.	6.4	33
32	N-Glycosylation pattern of the zymogenic form of human matrix metalloproteinase-9. <i>Bioorganic Chemistry</i> , 2002, 30, 356-370.	4.1	32
33	<i>Cannabis sativa</i> (Hemp) Seeds, $\Delta^9$ -Tetrahydrocannabinol, and Potential Overdose. <i>Cannabis and Cannabinoid Research</i> , 2017, 2, 274-281.	2.9	32
34	Substituted phenyl 4-(2-oxoimidazolidin-1-yl)benzenesulfonamides as antimetabolites. Antiproliferative, antiangiogenic and antitumoral activity, and quantitative structure-activity relationships. <i>European Journal of Medicinal Chemistry</i> , 2011, 46, 5327-5342.	5.5	30
35	Identification of novel class of falcipain-2 inhibitors as potential antimalarial agents. <i>Bioorganic and Medicinal Chemistry</i> , 2015, 23, 2221-2240.	3.0	30
36	Elucidation of Mechanism of Inhibition and X-ray Structure of the TEM-1 $\beta$ -Lactamase from <i>Escherichia coli</i> Inhibited by a N-Sulfonyloxy- $\beta$ -lactam. <i>Journal of the American Chemical Society</i> , 1999, 121, 5353-5359.	13.7	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. <i>Journal of Medicinal Chemistry</i> , 2006, 49, 7646-7660.	6.4	28
38	Substrate Distortion Contributes to the Catalysis of Orotidine 5'-Monophosphate Decarboxylase. <i>Journal of the American Chemical Society</i> , 2013, 135, 17432-17443.	13.7	27
39	Insight into the Complex and Dynamic Process of Activation of Matrix Metalloproteinases. <i>Journal of the American Chemical Society</i> , 2001, 123, 3108-3113.	13.7	26
40	Design and Synthesis of Novel Fluoropeptidomimetics as Potential Mimics of the Transition State during Peptide Hydrolysis. <i>Journal of Organic Chemistry</i> , 2003, 68, 1043-1049.	3.2	26
41	Improved synthesis of pyrylium salts leading to 2,4-disubstituted diarylfurans via novel mechanism. <i>Tetrahedron Letters</i> , 2003, 44, 9271-9274.	1.4	24
42	A novel class of Plasmodial ClpP protease inhibitors as potential antimalarial agents. <i>Bioorganic and Medicinal Chemistry</i> , 2017, 25, 5662-5677.	3.0	24
43	Cyanocobalamin (vitamin B12) conjugates with enhanced solubility. <i>Bioorganic and Medicinal Chemistry</i> , 2007, 15, 1780-1787.	3.0	22
44	Structure-activity relationships of pyrazole derivatives as potential therapeutics for immune thrombocytopenias. <i>Bioorganic and Medicinal Chemistry</i> , 2014, 22, 2739-2752.	3.0	22
45	Structural insight into the binding motifs for the calcium ion and the non-catalytic zinc in matrix metalloproteases. <i>Bioorganic and Medicinal Chemistry Letters</i> , 1998, 8, 853-858.	2.2	21
46	Inhibitors of protein arginine deiminases and their efficacy in animal models of multiple sclerosis. <i>Bioorganic and Medicinal Chemistry</i> , 2017, 25, 2643-2656.	3.0	18
47	Surfactant protein D regulates caspase-8-mediated cascade of the intrinsic pathway of apoptosis while promoting bleb formation. <i>Molecular Immunology</i> , 2017, 92, 190-198.	2.2	18
48	Drug Repurposing in the Development of Anticancer Agents. <i>Current Medicinal Chemistry</i> , 2019, 26, 5410-5427.	2.4	18
49	Structure-based de novo design of ligands using a three-dimensional model of the insulin receptor. <i>Bioorganic and Medicinal Chemistry Letters</i> , 2004, 14, 1407-1410.	2.2	16
50	Structural Characterization of the Molecular Events during a Slow Substrate-Product Transition in Orotidine 5'-Monophosphate Decarboxylase. <i>Journal of Molecular Biology</i> , 2009, 387, 1199-1210.	4.2	16
51	Surfactant protein D delays Fas- and TRAIL-mediated extrinsic pathway of apoptosis in T cells. <i>Apoptosis: an International Journal on Programmed Cell Death</i> , 2017, 22, 730-740.	4.9	16
52	The Impact of Perioperative Cannabis Use: A Narrative Scoping Review. <i>Cannabis and Cannabinoid Research</i> , 2019, 4, 219-230.	2.9	16
53	Structural determinants for the inhibitory ligands of orotidine-5'-monophosphate decarboxylase. <i>Bioorganic and Medicinal Chemistry</i> , 2010, 18, 4032-4041.	3.0	14
54	Disulfide linked pyrazole derivatives inhibit phagocytosis of opsonized blood cells. <i>Bioorganic and Medicinal Chemistry Letters</i> , 2013, 23, 2324-2327.	2.2	14

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55	Guaifenesin Derivatives Promote Neurite Outgrowth and Protect Diabetic Mice from Neuropathy. <i>Journal of Medicinal Chemistry</i> , 2013, 56, 5071-5078.	6.4	13
56	Noncovalent Protein Arginine Deiminase (PAD) Inhibitors Are Efficacious in Animal Models of Multiple Sclerosis. <i>Journal of Medicinal Chemistry</i> , 2017, 60, 8876-8887.	6.4	13
57	Topical Delivery of Muscarinic Receptor Antagonists Prevents and Reverses Peripheral Neuropathy in Female Diabetic Mice. <i>Journal of Pharmacology and Experimental Therapeutics</i> , 2020, 374, 44-51.	2.5	13
58	Unnatural amino acid derived FRET cassettes, terminators and their DNA sequencing potential. <i>Tetrahedron Letters</i> , 2002, 43, 1999-2003.	1.4	12
59	Structural Diversity and Plasticity Associated with Nucleotides Targeting Orotidine Monophosphate Decarboxylase. <i>Journal of Medicinal Chemistry</i> , 2008, 51, 432-438.	6.4	12
60	Novel Interactions of Fluorinated Nucleotide Derivatives Targeting Orotidine 5'-Monophosphate Decarboxylase. <i>Journal of Medicinal Chemistry</i> , 2011, 54, 2891-2901.	6.4	12
61	Hydrogen Bonding and Attenuation of the Rate of Enzymic Catalysis. <i>Journal of the American Chemical Society</i> , 1998, 120, 13003-13007.	13.7	11
62	Stereoselective Reduction of $\alpha$ -Bromopenicillanates by Tributylphosphine. <i>Organic Letters</i> , 2000, 2, 2889-2892.	4.6	11
63	Engineering d-amino acid containing novel protease inhibitors using catalytic site architecture. <i>Bioorganic and Medicinal Chemistry</i> , 2006, 14, 214-236.	3.0	11
64	De Novo Design of Nonpeptidic Compounds Targeting the Interactions between Interferon- $\alpha$ and its Cognate Cell Surface Receptor. <i>Journal of Medicinal Chemistry</i> , 2008, 51, 2734-2743.	6.4	10
65	Mechanism of action of N-phenyl-N-(2-chloroethyl)ureas in the colchicine-binding site at the interface between $\alpha$ - and $\beta$ -tubulin. <i>Bioorganic and Medicinal Chemistry</i> , 2009, 17, 3690-3697.	3.0	10
66	Novel fluoro-peptidomimetics: synthesis, stability studies and protease inhibition. <i>Bioorganic and Medicinal Chemistry</i> , 2005, 13, 2943-2958.	3.0	9
67	Protein kinase C isozymes and their selectivity towards ruboxistaurin. <i>Proteins: Structure, Function and Bioinformatics</i> , 2008, 72, 447-460.	2.6	9
68	Novel Cytidine-Based Orotidine-5'-Monophosphate Decarboxylase Inhibitors with an Unusual Twist. <i>Journal of Medicinal Chemistry</i> , 2012, 55, 9988-9997.	6.4	9
69	Antimalarial Activities of 6-Iodouridine and Its Prodrugs and Potential for Combination Therapy. <i>Journal of Medicinal Chemistry</i> , 2013, 56, 2348-2358.	6.4	9
70	A comparative molecular field and comparative molecular similarity indices analyses (CoMFA and Tj ETQq0 0 0 rgBT /Overlock 10 Tf 50 <i>Bioorganic and Medicinal Chemistry</i> , 2008, 16, 1914-1926.	3.0	8
71	Evaluation of inhibition of the carbenicillin-hydrolyzing $\beta$ -lactamase PSE-4 by the clinically used mechanism-based inhibitors. <i>FEBS Letters</i> , 2000, 470, 285-292.	2.8	7
72	Interrogation of the Active Sites of Protein Arginine Deiminases (PAD1, -2, and -4) Using Designer Probes. <i>ACS Medicinal Chemistry Letters</i> , 2013, 4, 249-253.	2.8	7

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73	Design of inhibitors of ODCase. <i>Future Medicinal Chemistry</i> , 2014, 6, 165-177.	2.3	7
74	A Conserved Residue, Tyrosine (Y) 84, in H5N1 Influenza A Virus NS1 Regulates IFN Signaling Responses to Enhance Viral Infection. <i>Viruses</i> , 2017, 9, 107.	3.3	7
75	Bioactive Chemical Composition of Cannabis Extracts and Cannabinoid Receptors. <i>Molecules</i> , 2020, 25, 3466.	3.8	7
76	Orotidine Monophosphate Decarboxylase – A Fascinating Workhorse Enzyme with Therapeutic Potential. <i>Journal of Genetics and Genomics</i> , 2015, 42, 221-234.	3.9	6
77	Small molecule phagocytosis inhibitors for immune cytopenias. <i>Autoimmunity Reviews</i> , 2016, 15, 843-847.	5.8	6
78	Small molecule mimetics of an interferon- $\lambda$ receptor interacting domain. <i>Bioorganic and Medicinal Chemistry</i> , 2014, 22, 978-985.	3.0	4
79	Small Molecule Agonists for the Type I Interferon Receptor: An <i>In Silico</i> Approach. <i>Journal of Interferon and Cytokine Research</i> , 2016, 36, 180-191.	1.2	3
80	Daring discourse – yes: practical considerations for cannabis use in the perioperative setting. <i>Regional Anesthesia and Pain Medicine</i> , 2020, 45, 524-527.	2.3	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. <i>Nucleic Acids Symposium Series</i> , 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.. <i>ChemInform</i> , 2004, 35, no.	0.0	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