Elias J Lolis

List of Publications by Year
in descending order

94 papers	7,503 citations	41 h-index (71061)	85 g-index (53190)
95 all docs	95 docs citations	95 times ranked	7320 citing authors

#	Article	IF	Citations
1	A Cysteine Variant at an Allosteric Site Alters MIF Dynamics and Biological Function in Homo- and Heterotrimeric Assemblies. Frontiers in Molecular Biosciences, 2022, 9, 783669.	1.6	3
2	Insights into Binding of Single-Stranded Viral RNA Template to the Replicationâ€"Transcription Complex of SARS-CoV-2 for the Priming Reaction from Molecular Dynamics Simulations. Biochemistry, 2022, 61, 424-432.	1.2	10
3	Mechanism of Inhibition of the Reproduction of SARS-CoV-2 and <i>Ebola</i> Viruses by Remdesivir. Biochemistry, 2021, 60, 1869-1875.	1.2	12
4	A structurally preserved allosteric site in the MIF superfamily affects enzymatic activity and CD74 activation in D-dopachrome tautomerase. Journal of Biological Chemistry, 2021, 297, 101061.	1.6	7
5	Computational insights into the membrane fusion mechanism of SARS-CoV-2 at the cellular level. Computational and Structural Biotechnology Journal, 2021, 19, 5019-5028.	1.9	10
6	Suppression of <i>Plasmodium</i> MIFâ€CD74 signaling protects against severe malaria. FASEB Journal, 2021, 35, e21997.	0.2	6
7	MIF but not MIF-2 recruits inflammatory macrophages in an experimental polymicrobial sepsis model. Journal of Clinical Investigation, 2021, 131, .	3.9	29
8	Regulation of MIF Enzymatic Activity by an Allosteric Site at the Central Solvent Channel. Cell Chemical Biology, 2020, 27, 740-750.e5.	2.5	20
9	High-Throughput Screening of a Functional Human CXCL12-CXCR4 Signaling Axis in a Genetically Modified S. cerevisiae: Discovery of a Novel Up-Regulator of CXCR4 Activity. Frontiers in Molecular Biosciences, 2020, 7, 164.	1.6	2
10	An allosteric site on MKP5 reveals a strategy for small-molecule inhibition. Science Signaling, 2020, 13, eaba3043.	1.6	12
11	The N-terminal length and side-chain composition of CXCL13 affect crystallization, structure and functional activity. Acta Crystallographica Section D: Structural Biology, 2020, 76, 1033-1049.	1.1	2
12	Unraveling the mechanism of recognition of the 3â€™ splice site of the adenovirus major late promoter intron by the alternative splicing factor PUF60. PLoS ONE, 2020, 15, e0242725.	1.1	4
13	A selective small-molecule inhibitor of macrophage migration inhibitory factor-2 (MIF-2), a MIF cytokine superfamily member, inhibits MIF-2 biological activity. Journal of Biological Chemistry, 2019, 294, 18522-18531.	1.6	20
14	Expression, purification and crystallization of the novel Xenopus tropicalis ALDH16B1, a homologue of human ALDH16A1. Chemico-Biological Interactions, 2019, 304, 168-172.	1.7	2
15	Characterization, Dynamics, and Mechanism of CXCR4 Antagonists on a Constitutively Active Mutant. Cell Chemical Biology, 2019, 26, 662-673.e7.	2.5	20
16	Nanosecond Dynamics Regulate the MIFâ€Induced Activity of CD74. Angewandte Chemie - International Edition, 2018, 57, 7116-7119.	7.2	32
17	Identification of an Arg-Leu-Arg tripeptide that contributes to the binding interface between the cytokine MIF and the chemokine receptor CXCR4. Scientific Reports, 2018, 8, 5171.	1.6	42
18	Structural Plasticity in the C-Terminal Region of Macrophage Migration Inhibitory Factor-2 Is Associated with an Induced Fit Mechanism for a Selective Inhibitor. Biochemistry, 2018, 57, 3599-3605.	1.2	17

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19	Nanosecond Dynamics Regulate the MIFâ€Induced Activity of CD74. Angewandte Chemie, 2018, 130, 7234-7237.	1.6	2
20	CD74 is a novel transcription regulator. Proceedings of the National Academy of Sciences of the United States of America, 2017, 114, 562-567.	3.3	113
21	Macrophage Migration Inhibitory Factor-CXCR4 Receptor Interactions. Journal of Biological Chemistry, 2016, 291, 15881-15895.	1.6	65
22	Conformational dynamics of Ca2+-dependent responses in the polycystin-2 C-terminal tail. Biochemical Journal, 2016, 473, 285-296.	1.7	6
23	Modeling of both shared and distinct interactions between MIF and its homologue D-DT with their common receptor CD74. Cytokine, 2016, 88, 62-70.	1.4	18
24	Characterization of PC2 Cterm Calcium-Binding Interaction and its Structural Implications. Biophysical Journal, 2015, 108, 215a.	0.2	0
25	Oligomerization of the Polycystin-2 C-terminal Tail and Effects on Its Ca2+-binding Properties. Journal of Biological Chemistry, 2015, 290, 10544-10554.	1.6	14
26	Interaction of MIF Family Proteins in Myocardial Ischemia/Reperfusion Damage and Their Influence on Clinical Outcome of Cardiac Surgery Patients. Antioxidants and Redox Signaling, 2015, 23, 865-879.	2.5	58
27	An Analysis of MIF Structural Features that Control Functional Activation of CD74. Chemistry and Biology, 2015, 22, 1197-1205.	6.2	73
28	Targeting distinct tautomerase sites of Dâ€DT and MIF with a single molecule for inhibition of neutrophil lung recruitment. FASEB Journal, 2014, 28, 4961-4971.	0.2	62
29	Structural insight into the evolution of a new chemokine family from zebrafish. Proteins: Structure, Function and Bioinformatics, 2014, 82, 708-716.	1.5	5
30	Crystallographic and Receptor Binding Characterization of <i>Plasmodium falciparum</i> Macrophage Migration Inhibitory Factor Complexed to Two Potent Inhibitors. Journal of Medicinal Chemistry, 2014, 57, 8652-8656.	2.9	18
31	ISO-66, a novel inhibitor of macrophage migration inhibitory factor, shows efficacy in melanoma and colon cancer models. International Journal of Oncology, 2014, 45, 1457-1468.	1.4	25
32	Allosteric peptide regulators of chemokine receptors CXCR4 and CXCR7. Biochemical Pharmacology, 2013, 86, 1263-1271.	2.0	19
33	MIF intersubunit disulfide mutant antagonist supports activation of CD74 by endogenous MIF trimer at physiologic concentrations. Proceedings of the National Academy of Sciences of the United States of America, 2013, 110, 10994-10999.	3.3	39
34	Inhibition of Paclitaxel-induced Decreases in Calcium Signaling. Journal of Biological Chemistry, 2012, 287, 37907-37916.	1.6	31
35	A<i>Plasmodium</i>-encoded cytokine suppresses T-cell immunity during malaria. Proceedings of the National Academy of Sciences of the United States of America, 2012, 109, E2117-26.	3.3	71
36	Structural Studies of Small Molecule Inhibitors of MIF. , 2012, , 101-118.		1

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37	A Model of GAG/MIP-2/CXCR2 Interfaces and Its Functional Effects. Biochemistry, 2012, 51, 5642-5654.	1.2	24
38	Structural Interactions Dictate the Kinetics of Macrophage Migration Inhibitory Factor Inhibition by Different Cancer-Preventive Isothiocyanates. Biochemistry, 2012, 51, 7506-7514.	1.2	28
39	The <i>D</i> -dopachrome tautomerase (<i>DDT</i>) gene product is a cytokine and functional homolog of macrophage migration inhibitory factor (MIF). Proceedings of the National Academy of Sciences of the United States of America, 2011, 108, E577-85.	3.3	185
40	Drug Repositioning and Pharmacophore Identification in the Discovery of Hookworm MIF Inhibitors. Chemistry and Biology, 2011, 18, 1089-1101.	6.2	35
41	When antiâ€CCR2 treatment for arthritis strikes out. Arthritis and Rheumatism, 2011, 63, 23-25.	6.7	0
42	A Small-Molecule Macrophage Migration Inhibitory Factor Antagonist Protects against Glomerulonephritis in Lupus-Prone NZB/NZW F1 and MRL/<i>lpr</i> Mice. Journal of Immunology, 2011, 186, 527-538.	0.4	128
43	Protein crystallization facilitated by molecularly imprinted polymers. Proceedings of the National Academy of Sciences of the United States of America, 2011, 108, 11081-11086.	3.3	120
44	K ⁺ Channel Mutations in Adrenal Aldosterone-Producing Adenomas and Hereditary Hypertension. Science, 2011, 331, 768-772.	6.0	866
45	Heterologous quaternary structure of CXCL12 and its relationship to the CC chemokine family. Proteins: Structure, Function and Bioinformatics, 2010, 78, 1331-1337.	1.5	40
46	Allosteric inhibition of macrophage migration inhibitory factor revealed by ibudilast. Proceedings of the National Academy of Sciences of the United States of America, 2010, 107, 11313-11318.	3.3	164
47	Two Independent Histidines, One in Human Prolactin and One in Its Receptor, Are Critical for pH-dependent Receptor Recognition and Activation*. Journal of Biological Chemistry, 2010, 285, 38524-38533.	1.6	29
48	Structural and Kinetic Analyses of Macrophage Migration Inhibitory Factor Active Site Interactions. Biochemistry, 2009, 48, 132-139.	1.2	42
49	Dimerization of FIR upon FUSE DNA binding suggests a mechanism of c-myc inhibition. EMBO Journal, 2008, 27, 277-289.	3.5	54
50	Orthologs of macrophage migration inhibitory factor from parasitic nematodes. Trends in Parasitology, 2008, 24, 355-363.	1.5	86
51	A<i>Leishmania</i>Ortholog of Macrophage Migration Inhibitory Factor Modulates Host Macrophage Responses. Journal of Immunology, 2008, 180, 8250-8261.	0.4	92
52	A Novel, Macrophage Migration Inhibitory Factor Suicide Substrate Inhibits Motility and Growth of Lung Cancer Cells. Cancer Research, 2008, 68, 7253-7257.	0.4	135
53	Structural and Single-Channel Results Indicate That the Rates of Ligand Binding Domain Closing and Opening Directly Impact AMPA Receptor Gating. Journal of Neuroscience, 2008, 28, 932-943.	1.7	82
54	Structural and Functional Basis of CXCL12 (Stromal Cell-derived Factor-1Î±) Binding to Heparin. Journal of Biological Chemistry, 2007, 282, 10018-10027.	1.6	150

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55	Alternative Chemical Modifications Reverse the Binding Orientation of a Pharmacophore Scaffold in the Active Site of Macrophage Migration Inhibitory Factor. Journal of Biological Chemistry, 2007, 282, 23089-23095.	1.6	47
56	Structural and Functional Characterization of a Secreted Hookworm Macrophage Migration Inhibitory Factor (MIF) That Interacts with the Human MIF Receptor CD74. Journal of Biological Chemistry, 2007, 282, 23447-23456.	1.6	87
57	Structural Studies of MIF. , 2007, , 51-63.		0
58	The Structural Biology of Chemokines. , 2007, , 9-30.		4
59	CD44 Is the Signaling Component of the Macrophage Migration Inhibitory Factor-CD74 Receptor Complex. Immunity, 2006, 25, 595-606.	6.6	539
60	Macrophage Migration Inhibitory Factor Promotes Intestinal Tumorigenesis. Gastroenterology, 2005, 129, 1485-1503.	0.6	140
61	Macrophage migration inhibitory factor: A critical component of autoimmune inflammatory diseases. Drug News and Perspectives, 2005, 18, 417.	1.9	30
62	Therapeutic approaches to innate immunity: severe sepsis and septic shock. Nature Reviews Drug Discovery, 2003, 2, 635-645.	21.5	63
63	Tertiary Structure of Thiopurine Methyltransferase from Pseudomonas syringae, a Bacterial Orthologue of a Polymorphic, Drug-metabolizing Enzyme. Journal of Molecular Biology, 2003, 333, 573-585.	2.0	29
64	Identification of Allosteric Peptide Agonists of CXCR4. Journal of Biological Chemistry, 2003, 278, 896-907.	1.6	112
65	Macrophage migration inhibitory factor. Expert Opinion on Therapeutic Targets, 2003, 7, 153-164.	1.5	82
66	The Tautomerase Active Site of Macrophage Migration Inhibitory Factor Is a Potential Target for Discovery of Novel Anti-inflammatory Agents. Journal of Biological Chemistry, 2002, 277, 24976-24982.	1.6	250
67	Aggregation of Human Wild-Type and H27A-Prolactin in Cells and in Solution: Roles of Zn2+, Cu2+, and pH. Endocrinology, 2002, 143, 1302-1309.	1.4	27
68	PAK1 Kinase Is Required for CXCL1-Induced Chemotaxisâ€. Biochemistry, 2002, 41, 7100-7107.	1.2	48
69	Inhibition of MIF Bioactivity by Rational Design of Pharmacological Inhibitors of MIF Tautomerase Activity. Journal of Medicinal Chemistry, 2002, 45, 2410-2416.	2.9	115
70	STRUCTURE, FUNCTION,ANDINHIBITION OFCHEMOKINES. Annual Review of Pharmacology and Toxicology, 2002, 42, 469-499.	4.2	544
71	Aggregation of Human Wild-Type and H27A-Prolactin in Cells and in Solution: Roles of Zn2+, Cu2+, and pH. Endocrinology, 2002, 143, 1302-1309.	1.4	6
72	Glucocorticoid counter regulation: macrophage migration inhibitory factor as a target for drug discovery. Current Opinion in Pharmacology, 2001, 1, 662-668.	1.7	48

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73	CCR2 and CCR5 receptor-binding properties of herpesvirus-8 vMIP-II based on sequence analysis and its solution structure. FEBS Journal, 2001, 268, 2948-2959.	0.2	5
74	Development of chronic colitis is dependent on the cytokine MIF. Nature Immunology, 2001, 2, 1061-1066.	7.0	288
75	A cryocooling technique for protein crystals grown by dialysis from volatile solvents. Journal of Applied Crystallography, 2000, 33, 168-171.	1.9	4
76	Comparison of the Structure of vMIP-II with Eotaxin-1, RANTES, and MCP-3 Suggests a Unique Mechanism for CCR3 Activation,. Biochemistry, 2000, 39, 12837-12844.	1.2	35
77	Pro-1 of Macrophage Migration Inhibitory Factor Functions as a Catalytic Base in the Phenylpyruvate Tautomerase Activity,. Biochemistry, 1999, 38, 7346-7354.	1.2	146
78	Crystallographic Studies of Phosphonate-Based Î±-Reaction Transition-State Analogues Complexed to Tryptophan Synthaseâ€,â€¡. Biochemistry, 1999, 38, 12665-12674.	1.2	47
79	Direct link between cytokine activity and a catalytic site for macrophage migration inhibitory factor. EMBO Journal, 1998, 17, 3534-3541.	3.5	182
80	Accessibility of selenomethionine proteins by total chemical synthesis: structural studies of human herpesvirus-8 MIP-II. FEBS Letters, 1998, 441, 77-82.	1.3	14
81	Solution Structure of Murine Macrophage Inflammatory Protein-2â€,â€¡. Biochemistry, 1998, 37, 8303-8313.	1.2	34
82	Macrophage Migration Inhibitory Factor Interactions with Glutathione and S -Hexylglutathione. Journal of Biological Chemistry, 1998, 273, 14877-14884.	1.6	23
83	Crystal structure of chemically synthesized [N33A] stromal cell-derived factor 1Â, a potent ligand for the HIV-1 "fusin" coreceptor. Proceedings of the National Academy of Sciences of the United States of America, 1998, 95, 6941-6946.	3.3	153
84	Functional and receptor binding characterization of recombinant murine macrophage inflammatory protein 2: Sequence analysis and mutagenesis identify receptor binding epitopes. Protein Science, 1997, 6, 1643-1652.	3.1	29
85	Crystal structure at 2.6-A resolution of human macrophage migration inhibitory factor.. Proceedings of the National Academy of Sciences of the United States of America, 1996, 93, 5191-5196.	3.3	311
86	The subunit structure of human macrophage migration inhibitory factor: evidence for a trimer. Protein Engineering, Design and Selection, 1996, 9, 631-635.	1.0	51
87	Model studies of the maillard reaction of Arg-Lys with D-ribose. Bioorganic and Medicinal Chemistry Letters, 1995, 5, 2929-2930.	1.0	9
88	Crystal Structure of the K12M/G15A Triosephosphate Isomerase Double Mutant and Electrostatic Analysis of the Active Site. Biochemistry, 1994, 33, 2815-2823.	1.2	42
89	Preliminary crystallographic analysis of murine macrophage inflammatory protein 2. Journal of Molecular Biology, 1992, 225, 913-915.	2.0	3
90	Electrophilic catalysis in triosephosphate isomerase: the role of histidine-95. Biochemistry, 1991, 30, 3011-3019.	1.2	137

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91	Crystallographic analysis of the complex between triosephosphate isomerase and 2-phosphoglycolate at 2.5-.ANG. resolution: implications for catalysis. Biochemistry, 1990, 29, 6619-6625.	1.2	245
92	Structure of yeast triosephosphate isomerase at 1.9-.ANG. resolution. Biochemistry, 1990, 29, 6609-6618.	1.2	276
93	Crystallography and Site-directed Mutagenesis of Yeast Triosephosphate Isomerase: What Can We Learn about Catalysis from a "Simple" Enzyme?. Cold Spring Harbor Symposia on Quantitative Biology, 1987, 52, 603-613.	2.0	39
94	Chiral discrimination in the covalent binding of bis(phenanthroline)dichlororuthenium(II) to B-DNA. Journal of the American Chemical Society, 1985, 107, 708-709.	6.6	129