

Thomas J. Smith

List of Publications by Year in descending order

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124
papers

7,711
citations

34105

52
h-index

56724

83
g-index

132
all docs

132
docs citations

132
times ranked

7201
citing authors

#	ARTICLE	IF	CITATIONS
1	Distinct dissociation rates of murine and human norovirus P-domain dimers suggest a role of dimer stability in virus-host interactions. <i>Communications Biology</i> , 2022, 5, .	4.4	4
2	<i>Ustilago maydis</i> Viruses and Their Killer Toxins. , 2021, , 513-519.		0
3	A Norovirus Uses Bile Salts To Escape Antibody Recognition While Enhancing Receptor Binding. <i>Journal of Virology</i> , 2021, 95, e0017621.	3.4	14
4	Multiple Signals in the Gut Contract the Mouse Norovirus Capsid To Block Antibody Binding While Enhancing Receptor Affinity. <i>Journal of Virology</i> , 2021, 95, e0147121.	3.4	7
5	Structural Studies on the Shapeshifting Murine Norovirus. <i>Viruses</i> , 2021, 13, 2162.	3.3	9
6	Near-Atomic-Resolution Cryo-Electron Microscopy Structures of Cucumber Leaf Spot Virus and Red Clover Necrotic Mosaic Virus: Evolutionary Divergence at the Icosahedral Three-Fold Axes. <i>Journal of Virology</i> , 2020, 94, .	3.4	10
7	The Dynamic Life of Virus Capsids. <i>Viruses</i> , 2020, 12, 618.	3.3	20
8	Bile Salts Alter the Mouse Norovirus Capsid Conformation: Possible Implications for Cell Attachment and Immune Evasion. <i>Journal of Virology</i> , 2019, 93, .	3.4	39
9	Allosteric discrimination at the NADH/ADP regulatory site of glutamate dehydrogenase. <i>Protein Science</i> , 2019, 28, 2080-2088.	7.6	6
10	Dissecting the Antenna in Human Glutamate Dehydrogenase: Understanding Its Role in Subunit Communication and Allosteric Regulation. <i>Biochemistry</i> , 2019, 58, 4195-4206.	2.5	4
11	The Dynamic Capsid Structures of the Noroviruses. <i>Viruses</i> , 2019, 11, 235.	3.3	31
12	Glutamate dehydrogenase: Structure of a hyperinsulinism mutant, corrections to the atomic model, and insights into a regulatory site. <i>Proteins: Structure, Function and Bioinformatics</i> , 2019, 87, 41-50.	2.6	6
13	Glutamate Dehydrogenase, a Complex Enzyme at a Crucial Metabolic Branch Point. <i>Neurochemical Research</i> , 2019, 44, 117-132.	3.3	64
14	Fungal Secretome Analysis via PepSAVI-MS: Identification of the Bioactive Peptide KP4 from <i>Ustilago maydis</i> . <i>Journal of the American Society for Mass Spectrometry</i> , 2018, 29, 859-865.	2.8	7
15	Structural basis for murine norovirus engagement of bile acids and the CD300lf receptor. <i>Proceedings of the National Academy of Sciences of the United States of America</i> , 2018, 115, E9201-E9210.	7.1	82
16	Evolution on the Biophysical Fitness Landscape of an RNA Virus. <i>Molecular Biology and Evolution</i> , 2018, 35, 2390-2400.	8.9	45
17	A severe case of hyperinsulinism due to hemizygous activating mutation of glutamate dehydrogenase. <i>Pediatric Diabetes</i> , 2017, 18, 911-916.	2.9	15
18	Norovirus Escape from Broadly Neutralizing Antibodies Is Limited to Allosteric-Like Mechanisms. <i>MSphere</i> , 2017, 2, .	2.9	30

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19	Stability of Cucumber Necrosis Virus at the Quasi-6-Fold Axis Affects Zoospore Transmission. <i>Journal of Virology</i> , 2017, 91, .	3.4	5
20	Antibody-induced uncoating of human rhinovirus B14. <i>Proceedings of the National Academy of Sciences of the United States of America</i> , 2017, 114, 8017-8022.	7.1	49
21	Identification of a Novel Activator of Mammalian Glutamate Dehydrogenase. <i>Biochemistry</i> , 2016, 55, 6568-6576.	2.5	14
22	A high-throughput drop microfluidic system for virus culture and analysis. <i>Journal of Virological Methods</i> , 2015, 213, 111-117.	2.1	28
23	Newly isolated mAbs broaden the neutralizing epitope in murine norovirus. <i>Journal of General Virology</i> , 2014, 95, 1958-1968.	2.9	22
24	Flexibility in Surface-Exposed Loops in a Virus Capsid Mediates Escape from Antibody Neutralization. <i>Journal of Virology</i> , 2014, 88, 4543-4557.	3.4	32
25	Glutamate Dehydrogenase: Structure, Allosteric Regulation, and Role in Insulin Homeostasis. <i>Neurochemical Research</i> , 2014, 39, 433-445.	3.3	44
26	The Atomic Structure of the Virally Encoded Antifungal Protein, KP6. <i>Journal of Molecular Biology</i> , 2013, 425, 609-621.	4.2	13
27	The virally encoded killer proteins from <i>Ustilago maydis</i> . <i>Fungal Biology Reviews</i> , 2013, 26, 166-173.	4.7	12
28	Atomic Structure of Cucumber Necrosis Virus and the Role of the Capsid in Vector Transmission. <i>Journal of Virology</i> , 2013, 87, 12166-12175.	3.4	21
29	Green Tea and Control of Glutamate Dehydrogenase Activity. , 2013, , 1029-1038.		0
30	Structural and Functional Studies of a Phosphatidic Acid-Binding Antifungal Plant Defensin MtDef4: Identification of an RGFRRR Motif Governing Fungal Cell Entry. <i>PLoS ONE</i> , 2013, 8, e82485.	2.5	120
31	Multidomain Carbohydrate-binding Proteins Involved in <i>Bacteroides thetaiotaomicron</i> Starch Metabolism. <i>Journal of Biological Chemistry</i> , 2012, 287, 34614-34625.	3.4	93
32	Protruding Domain of Capsid Protein Is Necessary and Sufficient To Determine Murine Norovirus Replication and Pathogenesis <i>In Vivo</i> . <i>Journal of Virology</i> , 2012, 86, 2950-2958.	3.4	96
33	Structural Basis for Broad Detection of Genogroup II Noroviruses by a Monoclonal Antibody That Binds to a Site Occluded in the Viral Particle. <i>Journal of Virology</i> , 2012, 86, 3635-3646.	3.4	75
34	The structure and allosteric regulation of mammalian glutamate dehydrogenase. <i>Archives of Biochemistry and Biophysics</i> , 2012, 519, 69-80.	3.0	110
35	Glutamate Dehydrogenase: Structure, Regulation, and Its Role in Insulin Homeostasis. <i>Frontiers in Diabetes</i> , 2012, , 87-99.	0.4	0
36	Structural studies on antibody recognition and neutralization of viruses. <i>Current Opinion in Virology</i> , 2011, 1, 150-156.	5.4	5

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37	Green tea polyphenols in drug discovery: a success or failure?. <i>Expert Opinion on Drug Discovery</i> , 2011, 6, 589-595.	5.0	35
38	The structure and allosteric regulation of glutamate dehydrogenase. <i>Neurochemistry International</i> , 2011, 59, 445-455.	3.8	62
39	Structure-Activity Determinants in Antifungal Plant Defensins MsDef1 and MtDef4 with Different Modes of Action against <i>Fusarium graminearum</i> . <i>PLoS ONE</i> , 2011, 6, e18550.	2.5	159
40	Transgenic maize plants expressing the Totivirus antifungal protein, KP4, are highly resistant to corn smut. <i>Plant Biotechnology Journal</i> , 2011, 9, 857-864.	8.3	40
41	A novel mechanism of Vεtype zinc inhibition of glutamate dehydrogenase results from disruption of subunit interactions necessary for efficient catalysis. <i>FEBS Journal</i> , 2011, 278, 3140-3151.	4.7	17
42	Atomic Structure of Salutaridine Reductase from the Opium Poppy (<i>Papaver somniferum</i>). <i>Journal of Biological Chemistry</i> , 2011, 286, 6532-6541.	3.4	18
43	Green Tea Polyphenols Control Dysregulated Glutamate Dehydrogenase in Transgenic Mice by Hijacking the ADP Activation Site. <i>Journal of Biological Chemistry</i> , 2011, 286, 34164-34174.	3.4	62
44	SusG: A Unique Cell-Membrane-Associated Î±-Amylase from a Prominent Human Gut Symbiont Targets Complex Starch Molecules. <i>Structure</i> , 2010, 18, 200-215.	3.3	115
45	Crystallization and preliminary X-ray diffraction analysis of salutaridine reductase from the opium poppy <i>Papaver somniferum</i> . <i>Acta Crystallographica Section F: Structural Biology Communications</i> , 2010, 66, 163-166.	0.7	6
46	High-Resolution Cryo-Electron Microscopy Structures of Murine Norovirus 1 and Rabbit Hemorrhagic Disease Virus Reveal Marked Flexibility in the Receptor Binding Domains. <i>Journal of Virology</i> , 2010, 84, 5836-5841.	3.4	70
47	High-Resolution X-Ray Structure and Functional Analysis of the Murine Norovirus 1 Capsid Protein Protruding Domain. <i>Journal of Virology</i> , 2010, 84, 5695-5705.	3.4	78
48	Mechanism of Hyperinsulinism in Short-chain 3-Hydroxyacyl-CoA Dehydrogenase Deficiency Involves Activation of Glutamate Dehydrogenase. <i>Journal of Biological Chemistry</i> , 2010, 285, 31806-31818.	3.4	154
49	The Caliciviruses. <i>Current Topics in Microbiology and Immunology</i> , 2010, 343, 23-41.	1.1	2
50	Complex Glycan Catabolism by the Human Gut Microbiota: The Bacteroidetes Sus-like Paradigm. <i>Journal of Biological Chemistry</i> , 2009, 284, 24673-24677.	3.4	540
51	Novel Inhibitors Complexed with Glutamate Dehydrogenase. <i>Journal of Biological Chemistry</i> , 2009, 284, 22988-23000.	3.4	66
52	Antibodies to the Buried N Terminus of Rhinovirus VP4 Exhibit Cross-Serotypic Neutralization. <i>Journal of Virology</i> , 2009, 83, 7040-7048.	3.4	91
53	Structure of a SusD Homologue, BT1043, Involved in Mucin <i>O</i> -Glycan Utilization in a Prominent Human Gut Symbiont. <i>Biochemistry</i> , 2009, 48, 1532-1542.	2.5	49
54	Starch Catabolism by a Prominent Human Gut Symbiont Is Directed by the Recognition of Amylose Helices. <i>Structure</i> , 2008, 16, 1105-1115.	3.3	305

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55	Untangling the glutamate dehydrogenase allosteric nightmare. Trends in Biochemical Sciences, 2008, 33, 557-564.	7.5	94
56	Structure of Antibody-Neutralized Murine Norovirus and Unexpected Differences from Viruslike Particles. Journal of Virology, 2008, 82, 2079-2088.	3.4	90
57	Induction of Particle Polymorphism by Cucumber Necrosis Virus Coat Protein Mutants In Vivo. Journal of Virology, 2008, 82, 1547-1557.	3.4	22
58	The Structure of the Iron-binding Protein, FutA1, from Synechocystis 6803. Journal of Biological Chemistry, 2007, 282, 27468-27477.	3.4	50
59	Possible Regulatory Role for the Histidine-Rich Loop in the Zinc Transport Protein, ZnuA. Biochemistry, 2007, 46, 8734-8743.	2.5	72
60	Pocket Factors Are Unlikely To Play a Major Role in the Life Cycle of Human Rhinovirus. Journal of Virology, 2007, 81, 6307-6315.	3.4	26
61	The Structure of a Cyanobacterial Bicarbonate Transport Protein, CmpA. Journal of Biological Chemistry, 2007, 282, 2606-2614.	3.4	78
62	Structures of T=1 and T=3 Particles of Cucumber Necrosis Virus: Evidence of Internal Scaffolding. Journal of Molecular Biology, 2007, 365, 502-512.	4.2	23
63	VP4 Protein from Human Rhinovirus 14 Is Released by Pressure and Locked in the Capsid by the Antiviral Compound WIN. Journal of Molecular Biology, 2007, 366, 295-306.	4.2	19
64	High Throughput Screening Reveals Several New Classes of Glutamate Dehydrogenase Inhibitors. Biochemistry, 2007, 46, 15089-15102.	2.5	38
65	Developing a new interdisciplinary lab course for undergraduate and graduate students: Plant cells and proteins. Biochemistry and Molecular Biology Education, 2007, 35, 410-415.	1.2	4
66	Aggregation of TMV CP plays a role in CP functions and in coat-protein-mediated resistance. Virology, 2007, 366, 98-106.	2.4	49
67	Plant defensins and virally encoded fungal toxin KP4 inhibit plant root growth. Planta, 2007, 227, 331-339.	3.2	85
68	Atomic structure of a nitrate-binding protein crucial for photosynthetic productivity. Proceedings of the National Academy of Sciences of the United States of America, 2006, 103, 9820-9825.	7.1	70
69	Green Tea Polyphenols Modulate Insulin Secretion by Inhibiting Glutamate Dehydrogenase. Journal of Biological Chemistry, 2006, 281, 10214-10221.	3.4	147
70	Structure of Cowpea mottle virus: a consensus in the genus Carmovirus. Virology, 2004, 321, 349-358.	2.4	15
71	MolViewX: a molecular visualization program for the Macintosh OS X system. Journal of Applied Crystallography, 2004, 37, 654-657.	4.5	6
72	Evolution of Glutamate Dehydrogenase Regulation of Insulin Homeostasis Is an Example of Molecular Exaptation. Biochemistry, 2004, 43, 14431-14443.	2.5	48

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73	Differential Antifungal and Calcium Channel-Blocking Activity among Structurally Related Plant Defensins. <i>Plant Physiology</i> , 2004, 135, 2055-2067.	4.8	205
74	Human rhinovirus capsid dynamics is controlled by canyon flexibility. <i>Virology</i> , 2003, 314, 34-44.	2.4	66
75	Structural Determinants of Metal Specificity in the Zinc Transport Protein ZnuA from <i>Synechocystis</i> 6803. <i>Journal of Molecular Biology</i> , 2003, 333, 1061-1069.	4.2	119
76	Structural Studies on ADP Activation of Mammalian Glutamate Dehydrogenase and the Evolution of Regulation,. <i>Biochemistry</i> , 2003, 42, 3446-3456.	2.5	86
77	Structural Studies on Antibody-Virus Complexes. <i>Advances in Protein Chemistry</i> , 2003, 64, 409-453.	4.4	9
78	The Virally Encoded Fungal Toxin KP4 Specifically Blocks L-Type Voltage-Gated Calcium Channels. <i>Molecular Pharmacology</i> , 2002, 61, 936-944.	2.3	39
79	An Antibody to the Putative Aphid Recognition Site on Cucumber Mosaic Virus Recognizes Pentons but Not Hexons. <i>Journal of Virology</i> , 2002, 76, 12250-12258.	3.4	53
80	Expression, purification and characterization of human glutamate dehydrogenase (GDH) allosteric regulatory mutations. <i>Biochemical Journal</i> , 2002, 363, 81-87.	3.7	75
81	Expression, purification and characterization of human glutamate dehydrogenase (GDH) allosteric regulatory mutations. <i>Biochemical Journal</i> , 2002, 363, 81.	3.7	54
82	The Structure of Apo Human Glutamate Dehydrogenase Details Subunit Communication and Allostery. <i>Journal of Molecular Biology</i> , 2002, 318, 765-777.	4.2	119
83	KP4 fungal toxin inhibits growth in <i>Ustilago maydis</i> by blocking calcium uptake. <i>Molecular Microbiology</i> , 2002, 41, 775-785.	2.5	57
84	Structures of bovine glutamate dehydrogenase complexes elucidate the mechanism of purine regulation11Edited by I. A. Wilson. <i>Journal of Molecular Biology</i> , 2001, 307, 707-720.	4.2	146
85	Viral capsid mobility: A dynamic conduit for inactivation. <i>Proceedings of the National Academy of Sciences of the United States of America</i> , 2001, 98, 2274-2277.	7.1	53
86	Hyperinsulinism/Hyperammonemia Syndrome in Children with Regulatory Mutations in the Inhibitory Guanosine Triphosphate-Binding Domain of Glutamate Dehydrogenase1. <i>Journal of Clinical Endocrinology and Metabolism</i> , 2001, 86, 1782-1787.	3.6	131
87	Hyperinsulinism/Hyperammonemia Syndrome in Children with Regulatory Mutations in the Inhibitory Guanosine Triphosphate-Binding Domain of Glutamate Dehydrogenase. <i>Journal of Clinical Endocrinology and Metabolism</i> , 2001, 86, 1782-1787.	3.6	109
88	The Structure of Cucumber Mosaic Virus and Comparison to Cowpea Chlorotic Mottle Virus. <i>Journal of Virology</i> , 2000, 74, 7578-7586.	3.4	124
89	The structure of bovine glutamate dehydrogenase provides insights into the mechanism of allostery. <i>Structure</i> , 1999, 7, 769-782.	3.3	153
90	Low Temperature and Pressure Stability of Picornaviruses: Implications for Virus Uncoating. <i>Biophysical Journal</i> , 1999, 76, 1270-1279.	0.5	94

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91	Low-Resolution Density Maps from Atomic Models: How Stepping â€œBackâ€•Can Be a Step â€œForwardâ€•. Journal of Structural Biology, 1999, 125, 166-175.	2.8	27
92	Picornaviruses: Epitopes, Canyons, and Pockets. Advances in Virus Research, 1999, 52, 1-23.	2.1	30
93	Identification of viral mutants by mass spectrometry. Proceedings of the National Academy of Sciences of the United States of America, 1998, 95, 8596-8601.	7.1	34
94	Antiviral agent blocks breathing of the common cold virus. Proceedings of the National Academy of Sciences of the United States of America, 1998, 95, 6774-6778.	7.1	241
95	Antibody-Mediated Neutralization of Human Rhinovirus 14 Explored by Means of Cryoelectron Microscopy and X-Ray Crystallography of Virus-Fab Complexes. Journal of Virology, 1998, 72, 4610-4622.	3.4	78
96	Crystallization and Characterization of Bovine Liver Glutamate Dehydrogenase. Journal of Structural Biology, 1997, 120, 73-77.	2.8	29
97	Neutralizing antibody to human rhinovirus 14 penetrates the receptor-binding canyon. Nature, 1996, 383, 350-354.	27.8	192
98	The Structure of a Virally Encoded Fungal Toxin from Ustilago Maydis that Inhibits Fungal and Mammalian Calcium Channels. Molecular Biology Intelligence Unit, 1996, , 291-303.	0.2	1
99	Putative receptor binding sites on alphaviruses as visualized by cryoelectron microscopy.. Proceedings of the National Academy of Sciences of the United States of America, 1995, 92, 10648-10652.	7.1	134
100	Structure and function of a virally encoded fungal toxin from Ustilago maydis: a fungal and mammalian Ca ²⁺ channel inhibitor. Structure, 1995, 3, 805-814.	3.3	57
101	MOLView: A program for analyzing and displaying atomic structures on the Macintosh personal computer. Journal of Molecular Graphics, 1995, 13, 122-125.	1.1	86
102	Nucleocapsid and glycoprotein organization in an enveloped virus. Cell, 1995, 80, 621-630.	28.9	342
103	Structural studies on the mechanisms of antibody-mediated neutralization of human rhinovirus. Seminars in Virology, 1995, 6, 233-242.	3.9	14
104	Breast conservation in elderly women for clinically negative axillary lymph nodes without axillary dissection. Cancer, 1994, 74, 878-883.	4.1	90
105	Structure Determination of an Fab Fragment that Neutralizes Human Rhinovirus 14 and Analysis of the Fab-Virus Complex. Journal of Molecular Biology, 1994, 240, 127-137.	4.2	57
106	Fungal Virus Capsids, Cytoplasmic Compartments for the Replication of Double-stranded RNA, Formed as Icosahedral Shells of Asymmetric Gag Dimers. Journal of Molecular Biology, 1994, 244, 255-258.	4.2	111
107	The characterization and crystallization of a virally encoded Ustilago maydis KP4 toxin. Journal of Molecular Biology, 1994, 243, 792-795.	4.2	14
108	Structural studies of virus-antibody complexes by electron cryomicroscopy and X-ray crystallography. Current Opinion in Structural Biology, 1994, 4, 219-224.	5.7	11

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109	Chapter 4 Purification of Mouse Antibodies and Fab Fragments. <i>Methods in Cell Biology</i> , 1993, 37, 75-93.	1.1	11
110	Purification and crystallization of intact human rhinovirus complexed with a neutralizing fab. <i>Virology</i> , 1992, 191, 600-606.	2.4	4
111	Preparation and crystallization of a human immunodeficiency virus p24-Fab complex.. <i>Proceedings of the National Academy of Sciences of the United States of America</i> , 1990, 87, 9980-9984.	7.1	46
112	Conformational variability of a picornavirus capsid: pH-dependent structural changes of mengo virus related to its host receptor attachment site and disassembly. <i>Virology</i> , 1990, 175, 176-190.	2.4	51
113	Phase II trial of 6-diazo-5-oxo-L-norleucine versus aclacinomycin-A in advanced sarcomas and mesotheliomas. <i>Investigational New Drugs</i> , 1990, 8, 113-9.	2.6	47
114	Preliminary investigation of the phage ϕ X174 crystal structure. <i>Journal of Molecular Biology</i> , 1990, 212, 345-350.	4.2	27
115	Structural analysis of antiviral agents that interact with the capsid of human rhinoviruses. <i>Proteins: Structure, Function and Bioinformatics</i> , 1989, 6, 1-19.	2.6	50
116	Crystal structure of human rhinovirus serotype 1A (HRV1A). <i>Journal of Molecular Biology</i> , 1989, 210, 91-111.	4.2	217
117	Sindbis virus core protein crystals. <i>Journal of Molecular Biology</i> , 1989, 208, 79-82.	4.2	9
118	Enantiomeric effects of homologs of disoxaril on the inhibitory activity against human rhinovirus-14. <i>Journal of Medicinal Chemistry</i> , 1988, 31, 540-544.	6.4	22
119	The isolation of the two electrophoretic forms of cowpea mosaic virus using fast protein liquid chromatography. <i>Journal of Virological Methods</i> , 1987, 16, 263-269.	2.1	8
120	Common cold viruses. <i>Trends in Biochemical Sciences</i> , 1987, 12, 313-318.	7.5	11
121	An exponential gradient maker for use with minigel polyacrylamide electrophoresis systems. <i>Analytical Biochemistry</i> , 1986, 152, 74-77.	2.4	7
122	Investigation of the effects of crosslinking glutamate dehydrogenase with dimethyl pimelimidate. <i>Archives of Biochemistry and Biophysics</i> , 1985, 239, 63-73.	3.0	8
123	Glutamate dehydrogenase in Reye's syndrome Evidence for the presence of an altered enzyme in serum with increased susceptibility to inhibition by GTP. <i>BBA - Proteins and Proteomics</i> , 1983, 749, 42-46.	2.1	5
124	Antibody Interactions with Rhinovirus. , 0, , 39-49.		5