Jeffery J Babon

List of Publications by Year
in descending order

96 papers	7,414 citations	76294 40 h-index	58549 82 g-index
100 all docs	100 docs citations	100 times ranked	10724 citing authors

#	Article	IF	Citations
1	The Pseudokinase MLKL Mediates Necroptosis via a Molecular Switch Mechanism. Immunity, 2013, 39, 443-453.	6.6	958
2	The molecular details of cytokine signaling via the JAK/STAT pathway. Protein Science, 2018, 27, 1984-2009.	3.1	485
3	Activation of the pseudokinase MLKL unleashes the four-helix bundle domain to induce membrane localization and necroptotic cell death. Proceedings of the National Academy of Sciences of the United States of America, 2014, 111, 15072-15077.	3.3	484
4	Leukemia inhibitory factor (LIF). Cytokine and Growth Factor Reviews, 2015, 26, 533-544.	3.2	320
5	The molecular basis of JAK/STAT inhibition by SOCS1. Nature Communications, 2018, 9, 1558.	5.8	298
6	CIS is a potent checkpoint in NK cellâ€“mediated tumor immunity. Nature Immunology, 2016, 17, 816-824.	7.0	289
7	The molecular regulation of Janus kinase (JAK) activation. Biochemical Journal, 2014, 462, 1-13.	1.7	251
8	A robust methodology to subclassify pseudokinases based on their nucleotide-binding properties. Biochemical Journal, 2014, 457, 323-334.	1.7	241
9	Suppression of Cytokine Signaling by SOCS3: Characterization of the Mode of Inhibition and the Basis of Its Specificity. Immunity, 2012, 36, 239-250.	6.6	240
10	SOCS3 binds specific receptorâ€“JAK complexes to control cytokine signaling by direct kinase inhibition. Nature Structural and Molecular Biology, 2013, 20, 469-476.	3.6	229
11	TLR7 gain-of-function genetic variation causes human lupus. Nature, 2022, 605, 349-356.	13.7	208
12	Bass Hepcidin Synthesis, Solution Structure, Antimicrobial Activities and Synergism, and in Vivo Hepatic Response to Bacterial Infections. Journal of Biological Chemistry, 2005, 280, 9272-9282.	1.6	179
13	Suppression of cytokine signaling: The SOCS perspective. Cytokine and Growth Factor Reviews, 2013, 24, 241-248.	3.2	165
14	Inhibition of IL-6 family cytokines by SOCS3. Seminars in Immunology, 2014, 26, 13-19.	2.7	157
15	The Structure of SOCS3 Reveals the Basis of the Extended SH2 Domain Function and Identifies an Unstructured Insertion That Regulates Stability. Molecular Cell, 2006, 22, 205-216.	4.5	140
16	Structural analysis of cooperative RNA binding by the La motif and central RRM domain of human La protein. Nature Structural and Molecular Biology, 2004, 11, 323-329.	3.6	128
17	The SOCS Box Encodes a Hierarchy of Affinities for Cullin5: Implications for Ubiquitin Ligase Formation and Cytokine Signalling Suppression. Journal of Molecular Biology, 2009, 387, 162-174.	2.0	117
18	Structure and function of the SPRY/B30.2 domain proteins involved in innate immunity. Protein Science, 2013, 22, 1-10.	3.1	109

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19	The biology and mechanism of action of suppressor of cytokine signaling 3. Growth Factors, 2012, 30, 207-219.	0.5	101
20	Structure of the C-Terminal Domain of Human La Protein Reveals a Novel RNA Recognition Motif Coupled to a Helical Nuclear Retention Element. Structure, 2003, 11, 833-843.	1.6	96
21	Insights into the evolution of divergent nucleotide-binding mechanisms among pseudokinases revealed by crystal structures of human and mouse MLKL. Biochemical Journal, 2014, 457, 369-377.	1.7	92
22	The SOCS Box Domain of SOCS3: Structure and Interaction with the ElonginBC-Cullin5 Ubiquitin Ligase. Journal of Molecular Biology, 2008, 381, 928-940.	2.0	91
23	The SPRY domainâ€“containing SOCS box protein SPSB2 targets iNOS for proteasomal degradation. Journal of Cell Biology, 2010, 190, 129-141.	2.3	88
24	Stabilization of Neurotoxic Soluble Î²-Sheet-Rich Conformations of the Alzheimer's Disease Amyloid-Î² Peptide. Biophysical Journal, 2008, 94, 2752-2766.	0.2	87
25	Structure and Sodium Channel Activity of an Excitatory I₁-Superfamily Conotoxin[,]. Biochemistry, 2007, 46, 9929-9940.	1.2	78
26	Functional rare and low frequency variants in BLK and BANK1 contribute to human lupus. Nature Communications, 2019, 10, 2201.	5.8	73
27	The SPRY domain of SSB-2 adopts a novel fold that presents conserved Par-4â€“binding residues. Nature Structural and Molecular Biology, 2006, 13, 77-84.	3.6	72
28	COL4A4 mutation in thin basement membrane disease previously described in Alport syndrome11See Editorial by Monnens, p. 799. Kidney International, 2001, 60, 480-483.	2.6	70
29	Mutations in the COL4A4 gene in thin basement membrane disease. Kidney International, 2003, 63, 447-453.	2.6	65
30	Export of malaria proteins requires co-translational processing of the PEXEL motif independent of phosphatidylinositol-3-phosphate binding. Nature Communications, 2016, 7, 10470.	5.8	65
31	Regulation of Janus kinases by SOCS proteins. Biochemical Society Transactions, 2013, 41, 1042-1047.	1.6	62
32	Suppressor of cytokine signaling (SOCS)5 ameliorates influenza infection via inhibition of EGFR signaling. ELife, 2017, 6, .	2.8	61
33	NK cellâ€“derived GM-CSF potentiates inflammatory arthritis and is negatively regulated by CIS. Journal of Experimental Medicine, 2020, 217, .	4.2	60
34	Roquin binds microRNA-146a and Argonaute2 to regulate microRNA homeostasis. Nature Communications, 2015, 6, 6253.	5.8	59
35	The Use of Resolvases T4 Endonuclease VII and T7 Endonuclease I in Mutation Detection. Molecular Biotechnology, 2003, 23, 73-82.	1.3	57
36	Deletion of the SOCS box of suppressor of cytokine signaling 3 (SOCS3) in embryonic stem cells reveals SOCS box-dependent regulation of JAK but not STAT phosphorylation. Cellular Signalling, 2009, 21, 394-404.	1.7	57

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37	Structure of the Eukaryotic Initiation Factor (eIF) 5 Reveals a Fold Common to Several Translation Factors,. Biochemistry, 2006, 45, 4550-4558.	1.2	53
38	Suramin and Suramin Analogues Inhibit Merozoite Surface Protein-1 Secondary Processing and Erythrocyte Invasion by the Malaria Parasite Plasmodium falciparum. Journal of Biological Chemistry, 2003, 278, 47670-47677.	1.6	52
39	Attenuation of AMPK signaling by ROQUIN promotes T follicular helper cell formation. ELife, 2015, 4, .	2.8	52
40	Secondary structure assignment of mouse SOCS3 by NMR defines the domain boundaries and identifies an unstructured insertion in the SH2 domain. FEBS Journal, 2005, 272, 6120-6130.	2.2	45
41	Crystal structure of the TRIM25 B30.2 (PRYSPRY) domain: a key component of antiviral signalling. Biochemical Journal, 2013, 456, 231-240.	1.7	42
42	Suppressor of Cytokine Signaling (SOCS) 5 Utilises Distinct Domains for Regulation of JAK1 and Interaction with the Adaptor Protein Shc-1. PLoS ONE, 2013, 8, e70536.	1.1	42
43	Structural studies on Plasmodium vivax merozoite surface protein-1. Molecular and Biochemical Parasitology, 2007, 153, 31-40.	0.5	40
44	Neutrophils Require SHP1 To Regulate IL-1Î² Production and Prevent Inflammatory Skin Disease. Journal of Immunology, 2011, 186, 1131-1139.	0.4	40
45	Accumulation of JAK activation loop phosphorylation is linked to type I JAK inhibitor withdrawal syndrome in myelofibrosis. Science Advances, 2018, 4, eaat3834.	4.7	39
46	Protein effective rotational correlation times from translational self-diffusion coefficients measured by PFG-NMR. Biophysical Chemistry, 2008, 136, 145-151.	1.5	36
47	Evolution of Transthyretin in Marsupials. FEBS Journal, 1995, 227, 396-406.	0.2	35
48	Reconstruction of an active SOCS3-based E3 ubiquitin ligase complexin vitro: identification of the active components and JAK2 and gp130 as substrates. Growth Factors, 2014, 32, 1-10.	0.5	35
49	Mechanistic insights into activation and SOCS3-mediated inhibition of myeloproliferative neoplasm-associated JAK2 mutants from biochemical and structural analyses. Biochemical Journal, 2014, 458, 395-405.	1.7	33
50	Ptpn6 inhibits caspase-8- and Ripk3/Mlkl-dependent inflammation. Nature Immunology, 2020, 21, 54-64.	7.0	33
51	Heterodimerization of the human RNase P/MRP subunits Rpp20 and Rpp25 is a prerequisite for interaction with the P3 arm of RNase MRP RNA. Nucleic Acids Research, 2010, 38, 4052-4066.	6.5	31
52	Molecular Architecture of the Ankyrin SOCS Box Family of Cul5-Dependent E3 Ubiquitin Ligases. Journal of Molecular Biology, 2013, 425, 3166-3177.	2.0	31
53	Structure and Inter-domain Interactions of Domain II from the Blood-stage Malarial Protein, Apical Membrane Antigen 1. Journal of Molecular Biology, 2005, 350, 641-656.	2.0	30
54	Reactivity of potassium permanganate and tetraethylammonium chloride with mismatched bases and a simple mutation detection protocol. Nucleic Acids Research, 1999, 27, 1866-1874.	6.5	29

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55	Improved strategy for mutation detectionâ€"a modification to the enzyme mismatch cleavage method. Nucleic Acids Research, 1995, 23, 5082-5084.	6.5	27
56	Mutation detection using fluorescent enzyme mismatch cleavage with T4 endonuclease VII. Electrophoresis, 1999, 20, 1162-1170.	1.3	21
57	Interaction of linear homologous DNA duplexes via Holliday junction formation. FEBS Journal, 2001, 268, 7-14.	0.2	18
58	Resonance assignment and secondary structure of an N-terminal fragment of the human La protein. Journal of Biomolecular NMR, 2003, 27, 93-94.	1.6	16
59	In Vitro JAK Kinase Activity and Inhibition Assays. Methods in Molecular Biology, 2013, 967, 39-55.	0.4	16
60	Functional characterization of c-Mpl ectodomain mutations that underlie congenital amegakaryocytic thrombocytopenia. Growth Factors, 2014, 32, 18-26.	0.5	16
61	Persistence of myelofibrosis treated with ruxolitinib: biology and clinical implications. Haematologica, 2021, 106, 1244-1253.	1.7	16
62	Techniques to examine nucleotide binding by pseudokinases. Biochemical Society Transactions, 2013, 41, 975-980.	1.6	15
63	Letter to the Editor: Backbone 1H, 13C and 15N assignments of the 25 kDa SPRY domain-containing SOCS box protein 2 (SSB-2). Journal of Biomolecular NMR, 2005, 31, 69-70.	1.6	14
64	Dynamics of the SPRY domain-containing SOCS box protein 2: Flexibility of key functional loops. Protein Science, 2006, 15, 2761-2772.	3.1	14
65	Structure and Functional Characterization of the Conserved JAK Interaction Region in the Intrinsically Disordered N-Terminus of SOCS5. Biochemistry, 2015, 54, 4672-4682.	1.2	14
66	Cortical Layer Inversion and Deregulation of Reelin Signaling in the Absence of SOCS6 and SOCS7. Cerebral Cortex, 2017, 27, bhv253.	1.6	13
67	Chemical cleavage reactions of DNA on solid support: application in mutation detection. BMC Chemical Biology, 2003, 3, 1.	1.6	12
68	NovelTP53 gene mutations in tumors of Russian patients with breast cancer detected using a new solid phase chemical cleavage of mismatch method and identified by sequencing. Human Mutation, 2004, 23, 186-192.	1.1	12
69	NMR studies of interactions between Bax and BH3 domain-containing peptides in the absence and presence of CHAPS. Archives of Biochemistry and Biophysics, 2014, 545, 33-43.	1.4	11
70	Identification of a second binding site on the TRIM25 B30.2 domain. Biochemical Journal, 2018, 475, 429-440.	1.7	11
71	Heteronuclear NMR spectroscopy of proteins encapsulated in cubic phase lipids. Journal of Magnetic Resonance, 2019, 305, 146-151.	1.2	11
72	The Role of LNK (SH2B3) in the Regulation of JAK-STAT Signalling in Haematopoiesis. Pharmaceuticals, 2022, 15, 24.	1.7	11

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73	Enzymatic Characterization of Wild-Type and Mutant Janus Kinase 1. Cancers, 2019, 11, 1701.	1.7	10
74	Measuring translational diffusion of 15N-enriched biomolecules in complex solutions with a simplified 1H-15N HMQC-filtered BEST sequence. European Biophysics Journal, 2018, 47, 891-902.	1.2	9
75	Physiochemical Characterization and Stability of Lipidic Cubic Phases by Solution NMR. Langmuir, 2020, 36, 6254-6260.	1.6	8
76	Discovery of an exosite on the SOCS2-SH2 domain that enhances SH2 binding to phosphorylated ligands. Nature Communications, 2021, 12, 7032.	5.8	8
77	Purification of SOCS (Suppressor of Cytokine Signaling) SH2 Domains for Structural and Functional Studies. Methods in Molecular Biology, 2017, 1555, 173-182.	0.4	7
78	TGF-Î² and IL-6 family signalling crosstalk: an integrated model. Growth Factors, 2017, 35, 100-124.	0.5	7
79	Membrane-associated RING-CH (MARCH) proteins down-regulate cell surface expression of the interleukin-6 receptor alpha chain (IL6RÎ±). Biochemical Journal, 2019, 476, 2869-2882.	1.7	7
80	JAK1 Takes a FERM Hold of Type II Cytokine Receptors. Structure, 2016, 24, 840-842.	1.6	6
81	The intracellular domains of the EphB6 and EphA10 receptor tyrosine pseudokinases function as dynamic signalling hubs. Biochemical Journal, 2021, 478, 3351-3371.	1.7	6
82	Structural and functional analysis of target recognition by the lymphocyte adaptor protein LNK. Nature Communications, 2021, 12, 6110.	5.8	6
83	Letter to the Editor: Resonance Assignment and Secondary Structure of the La Motif. Journal of Biomolecular NMR, 2004, 29, 449-450.	1.6	5
84	VHL: Cullin-g the Hypoxic Response. Structure, 2015, 23, 435-436.	1.6	5
85	Chemical Exchange of Hydroxyl Groups in Lipidic Cubic Phases Characterized by NMR. Journal of Physical Chemistry B, 2021, 125, 571-580.	1.2	5
86	In Vitro Ubiquitination of Cytokine Signaling Components. Methods in Molecular Biology, 2013, 967, 261-271.	0.4	4
87	Expression and Purification of JAK1 and SOCS1 for Structural and Biochemical Studies. Methods in Molecular Biology, 2018, 1725, 267-280.	0.4	4
88	Proteomic analyses reveal that immune integrins are major targets for regulation by Membraneâ€Associated Ringâ€CH (MARCH) proteins MARCH2, 3, 4 and 9. Proteomics, 2021, 21, 2000244.	1.3	3
89	NMR measurement of biomolecular translational and rotational motion for evaluating changes of protein oligomeric state in solution. European Biophysics Journal, 2022, 51, 193-204.	1.2	3
90	The Use of Resolvases T4 Endonuclease VII and T7 Endonuclease I in Mutation Detection. , 2000, 152, 187-199.		2

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91	Quantitative Analysis of JAK Binding Using Isothermal Titration Calorimetry and Surface Plasmon Resonance. Methods in Molecular Biology, 2013, 967, 57-67.	0.4	2
92	Optimization of Phosphotyrosine Peptides that Target the SH2 Domain of SOCS1 and Block Substrate Ubiquitination. ACS Chemical Biology, 2022, , .	1.6	2
93	Dissecting the molecular control of Interleukin 6 signaling using the M1 cell line. Cytokine, 2021, 146, 155624.	1.4	1
94	A Two-Site Interaction Underpins TRIM25 Activation of the RIG-I Anti-Viral Response. Blood, 2014, 124, 1580-1580.	0.6	1
95	Resonance assignment for the N-terminal region of the eukaryotic initiation factor 5 (eIF5). Journal of Biomolecular NMR, 2006, 36, 42-42.	1.6	0
96	The SPRY domainâ€“containing SOCS box protein SPSB2 targets iNOS for proteasomal degradation. Journal of Experimental Medicine, 2010, 207, i22-i22.	4.2	0