Michael B Yaffe

List of Publications by Year
in descending order

132 papers	13,446 citations	53794 45 h-index	28297 105 g-index
290 all docs	290 docs citations	290 times ranked	20113 citing authors

#	Article	IF	Citations
1	Scansite 2.0: proteome-wide prediction of cell signaling interactions using short sequence motifs. Nucleic Acids Research, 2003, 31, 3635-3641.	14.5	1,455
2	Systematic Discovery of In Vivo Phosphorylation Networks. Cell, 2007, 129, 1415-1426.	28.9	702
3	The Molecular Basis for Phosphodependent Substrate Targeting and Regulation of Plks by the Polo-Box Domain. Cell, 2003, 115, 83-95.	28.9	687
4	Proteomic Screen Finds pSer/pThr-Binding Domain Localizing Plk1 to Mitotic Substrates. Science, 2003, 299, 1228-1231.	12.6	634
5	Polo-like kinase-1 is activated by aurora A to promote checkpoint recovery. Nature, 2008, 455, 119-123.	27.8	596
6	The PX domains of p47phox and p40phox bind to lipid products of PI(3)K. Nature Cell Biology, 2001, 3, 675-678.	10.3	567
7	p53-Deficient Cells Rely on ATM- and ATR-Mediated Checkpoint Signaling through the p38MAPK/MK2 Pathway for Survival after DNA Damage. Cancer Cell, 2007, 11, 175-189.	16.8	538
8	A motif-based profile scanning approach for genome-wide prediction of signaling pathways. Nature Biotechnology, 2001, 19, 348-353.	17.5	509
9	Kinases that control the cell cycle in response to DNA damage: Chk1, Chk2, and MK2. Current Opinion in Cell Biology, 2009, 21, 245-255.	5.4	458
10	Tissue plasminogen activator (tPA) treatment for COVIDâ€19 associated acute respiratory distress syndrome (ARDS): A case series. Journal of Thrombosis and Haemostasis, 2020, 18, 1752-1755.	3.8	456
11	MAPKAP Kinase-2 Is a Cell Cycle Checkpoint Kinase that Regulates the G2/M Transition and S Phase Progression in Response to UV Irradiation. Molecular Cell, 2005, 17, 37-48.	9.7	385
12	mTORC1 Phosphorylation Sites Encode Their Sensitivity to Starvation and Rapamycin. Science, 2013, 341, 1236566.	12.6	383
13	Phosphoserine/threonine-binding domains. Current Opinion in Cell Biology, 2001, 13, 131-138.	5.4	331
14	Phosphotyrosine-binding domains in signal transduction. Nature Reviews Molecular Cell Biology, 2002, 3, 177-186.	37.0	328
15	MAP kinase pathways activated by stress: The p38 MAPK pathway. Critical Care Medicine, 2000, 28, N67-N77.	0.9	293
16	The bromodomain protein Brd4 insulates chromatin from DNA damage signalling. Nature, 2013, 498, 246-250.	27.8	278
17	Chemical Genetic Screen for AMPKÎ±2 Substrates Uncovers a Network of Proteins Involved in Mitosis. Molecular Cell, 2011, 44, 878-892.	9.7	232
18	Enhanced efficacy of combined temozolomide and bromodomain inhibitor therapy for gliomas using targeted nanoparticles. Nature Communications, 2018, 9, 1991.	12.8	229

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19	14-3-3Ïƒ controls mitotic translation to facilitate cytokinesis. Nature, 2007, 446, 329-332.	27.8	217
20	DNA Damage Activates a Spatially Distinct Late Cytoplasmic Cell-Cycle Checkpoint Network Controlled by MK2-Mediated RNA Stabilization. Molecular Cell, 2010, 40, 34-49.	9.7	210
21	Pyruvate Kinase Isoform Expression Alters Nucleotide Synthesis to Impact Cell Proliferation. Molecular Cell, 2015, 57, 95-107.	9.7	209
22	Dihydropyrimidine Accumulation Is Required for the Epithelial-Mesenchymal Transition. Cell, 2014, 158, 1094-1109.	28.9	186
23	ISTH interim guidance on recognition and management of coagulopathy in COVIDâ€19: A comment. Journal of Thrombosis and Haemostasis, 2020, 18, 2060-2063.	3.8	178
24	A Nanoparticle-Based Combination Chemotherapy Delivery System for Enhanced Tumor Killing by Dynamic Rewiring of Signaling Pathways. Science Signaling, 2014, 7, ra44.	3.6	172
25	Plk1 Self-Organization and Priming Phosphorylation of HsCYK-4 at the Spindle Midzone Regulate the Onset of Division in Human Cells. PLoS Biology, 2009, 7, e1000111.	5.6	170
26	Coordinated Splicing of Regulatory Detained Introns within Oncogenic Transcripts Creates an Exploitable Vulnerability in Malignant Glioma. Cancer Cell, 2017, 32, 411-426.e11.	16.8	161
27	Synergistic Innate and Adaptive Immune Response to Combination Immunotherapy with Anti-Tumor Antigen Antibodies and Extended Serum Half-Life IL-2. Cancer Cell, 2015, 27, 489-501.	16.8	158
28	Acidification of Tumor at Stromal Boundaries Drives Transcriptome Alterations Associated with Aggressive Phenotypes. Cancer Research, 2019, 79, 1952-1966.	0.9	157
29	Structural and functional analyses of minimal phosphopeptides targeting the polo-box domain of polo-like kinase 1. Nature Structural and Molecular Biology, 2009, 16, 876-882.	8.2	156
30	Spatial Exclusivity Combined with Positive and Negative Selection of Phosphorylation Motifs Is the Basis for Context-Dependent Mitotic Signaling. Science Signaling, 2011, 4, ra42.	3.6	155
31	Serendipitous alkylation of a Plk1 ligand uncovers a new binding channel. Nature Chemical Biology, 2011, 7, 595-601.	8.0	96
32	Protein Regulation in Signal Transduction. Cold Spring Harbor Perspectives in Biology, 2016, 8, a005918.	5.5	94
33	ROS and Oxidative Stress Are Elevated in Mitosis during Asynchronous Cell Cycle Progression and Are Exacerbated by Mitotic Arrest. Cell Systems, 2019, 8, 163-167.e2.	6.2	92
34	Pan-TAM Tyrosine Kinase Inhibitor BMS-777607 Enhances Antiâ€"PD-1 mAb Efficacy in a Murine Model of Triple-Negative Breast Cancer. Cancer Research, 2019, 79, 2669-2683.	0.9	86
35	A Reversible Gene-Targeting Strategy Identifies Synthetic Lethal Interactions between MK2 and p53 in the DNA Damage Response InÂVivo. Cell Reports, 2013, 5, 868-877.	6.4	85
36	BRD4 prevents the accumulation of R-loops and protects against transcriptionâ€"replication collision events and DNA damage. Nature Communications, 2020, 11, 4083.	12.8	83

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37	The Use of In Vitro Peptide-Library Screens in the Analysis of Phosphoserine/Threonine-Binding Domain Structure and Function. Annual Review of Biophysics and Biomolecular Structure, 2004, 33, 225-244.	18.3	78
38	MK2 contributes to tumor progression by promoting M2 macrophage polarization and tumor angiogenesis. Proceedings of the National Academy of Sciences of the United States of America, 2018, 115, E4236-E4244.	7.1	78
39	Is there a role for tissue plasminogen activator as a novel treatment for refractory COVID-19 associated acute respiratory distress syndrome?. Journal of Trauma and Acute Care Surgery, 2020, 88, 713-714.	2.1	77
40	Combined experimental and computational analysis of DNA damage signaling reveals contextâ€dependent roles for Erk in apoptosis and G1/S arrest after genotoxic stress. Molecular Systems Biology, 2012, 8, 568.	7.2	72
41	Phosphorylation of ETS1 by Src Family Kinases Prevents Its Recognition by the COP1 Tumor Suppressor. Cancer Cell, 2014, 26, 222-234.	16.8	71
42	Identification of High Affinity Polo-like Kinase 1 (Plk1) Polo-box Domain Binding Peptides Using Oxime-Based Diversification. ACS Chemical Biology, 2012, 7, 805-810.	3.4	68
43	A Pleiotropic RNA-Binding Protein Controls Distinct Cell Cycle Checkpoints to Drive Resistance of p53 -Defective Tumors to Chemotherapy. Cancer Cell, 2015, 28, 623-637.	16.8	68
44	Kinetics and Role of Plasma Matrix Metalloproteinase-9 Expression in Acute Lung Injury and the Acute Respiratory Distress Syndrome. Shock, 2015, 44, 128-136.	2.1	60
45	Tumor-Targeted Synergistic Blockade of MAPK and PI3K from a Layer-by-Layer Nanoparticle. Clinical Cancer Research, 2015, 21, 4410-4419.	7.0	55
46	Why geneticists stole cancer research even though cancer is primarily a signaling disease. Science Signaling, 2019, 12, .	3.6	52
47	Modeling chemotherapy-induced stress to identify rational combination therapies in the DNA damage response pathway. Science Signaling, 2018, 11, .	3.6	46
48	Comprehensive profiling of the STE20 kinase family defines features essential for selective substrate targeting and signaling output. PLoS Biology, 2019, 17, e2006540.	5.6	41
49	Peptoidâ€"Peptide Hybrid Ligands Targeting the Polo Box Domain of Poloâ€Like Kinase 1. ChemBioChem, 2012, 13, 1291-1296.	2.6	38
50	Fibrinolytic therapy for refractory COVIDâ€19 acute respiratory distress syndrome: Scientific rationale and review. Research and Practice in Thrombosis and Haemostasis, 2020, 4, 524-531.	2.3	37
51	Is post-transcriptional stabilization, splicing and translation of selective mRNAs a key to the DNA damage response?. Cell Cycle, 2011, 10, 23-27.	2.6	36
52	Study of Alteplase for Respiratory Failure in SARS-CoV-2 COVID-19. Chest, 2022, 161, 710-727.	0.8	36
53	TAZ couples Hippo/Wnt signalling and insulin sensitivity through Irs1 expression. Nature Communications, 2019, 10, 421.	12.8	35
54	Comprehensive substrate specificity profiling of the human Nek kinome reveals unexpected signaling outputs. ELife, 2019, 8, .	6.0	35

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55	Multi-omic analysis in injured humans: Patterns align with outcomes and treatment responses. Cell Reports Medicine, 2021, 2, 100478.	6.5	35
56	Identification of a Suppressive Mechanism for Hedgehog Signaling through a Novel Interaction of Gli with 14-3-3. Journal of Biological Chemistry, 2010, 285, 4185-4194.	3.4	34
57	Salvage use of tissue plasminogen activator (tPA) in the setting of acute respiratory distress syndrome (ARDS) due to COVID-19 in the USA: a Markov decision analysis. World Journal of Emergency Surgery, 2020, 15, 29.	5.0	33
58	The injury response to DNA damage in live tumor cells promotes antitumor immunity. Science Signaling, 2021, 14, eabc4764.	3.6	32
59	Transite: A Computational Motif-Based Analysis Platform That Identifies RNA-Binding Proteins Modulating Changes in Gene Expression. Cell Reports, 2020, 32, 108064.	6.4	30
60	Coagulopathy signature precedes and predicts severity of endâ€organ heat stroke pathology in a mouse model. Journal of Thrombosis and Haemostasis, 2020, 18, 1900-1910.	3.8	30
61	Mechanisms Driving Neutrophil-Induced T-cell Immunoparalysis in Ovarian Cancer. Cancer Immunology Research, 2021, 9, 790-810.	3.4	29
62	Monoâ€anionic phosphopeptides produced by unexpected histidine alkylation exhibit high plk1 poloâ€box domainâ€binding affinities and enhanced antiproliferative effects in hela cells. Biopolymers, 2014, 102, 444-455.	2.4	24
63	VISAGE Reveals a Targetable Mitotic Spindle Vulnerability in Cancer Cells. Cell Systems, 2019, 9, 74-92.e8.	6.2	24
64	Reproducibility in science. Science Signaling, 2015, 8, eg5.	3.6	23
65	Criteria for biological reproducibility: What does â€œ n â€•mean?. Science Signaling, 2015, 8, fs7.	3.6	22
66	Substrate-based kinase activity inference identifies MK2 as driver of colitis. Integrative Biology (United) Tj ETQq0 0 0 rgBT /Overlock 10 T	1.3	21
67	Hierarchical Organization Endows the Kinase Domain with Regulatory Plasticity. Cell Systems, 2018, 7, 371-383.e4.	6.2	20
68	Formyl Peptide Receptor-1 Blockade Prevents Receptor Regulation by Mitochondrial Danger-Associated Molecular Patterns and Preserves Neutrophil Function After Trauma. Critical Care Medicine, 2020, 48, e123-e132.	0.9	20
69	Enhancing chemotherapy response through augmented synthetic lethality by co-targeting nucleotide excision repair and cell-cycle checkpoints. Nature Communications, 2020, 11, 4124.	12.8	20
70	Monocyte exocytosis of mitochondrial danger-associated molecular patterns in sepsis suppresses neutrophil chemotaxis. Journal of Trauma and Acute Care Surgery, 2021, 90, 46-53.	2.1	20
71	Monitoring and modeling of lymphocytic leukemia cell bioenergetics reveals decreased ATP synthesis during cell division. Nature Communications, 2020, 11, 4983.	12.8	19
72	Study of alteplase for respiratory failure in severe acute respiratory syndrome coronavirus 2/COVIDâ€19: Study design of the phase IIa STARS trial. Research and Practice in Thrombosis and Haemostasis, 2020, 4, 984-996.	2.3	19

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73	Structure of the Toxoplasma gondii ROP18 Kinase Domain Reveals a Second Ligand Binding Pocket Required for Acute Virulence. Journal of Biological Chemistry, 2013, 288, 34968-34980.	3.4	18
74	Redox priming promotes Aurora A activation during mitosis. Science Signaling, 2020, 13, .	3.6	18
75	MAPKAP Kinase-2 Drives Expression of Angiogenic Factors by Tumor-Associated Macrophages in a Model of Inflammation-Induced Colon Cancer. Frontiers in Immunology, 2020, 11, 607891.	4.8	16
76	Neighborâ€directed histidine N (Ï„)â€“alkylation: A route to imidazoliumâ€containing phosphopeptide macrocycles. Biopolymers, 2015, 104, 663-673.	2.4	14
77	Trauma-induced heme release increases susceptibility to bacterial infection. JCI Insight, 2021, 6, .	5.0	13
78	RNAâ€Peptide nanoplexes drug DNA damage pathways in highâ€grade serous ovarian tumors. Bioengineering and Translational Medicine, 2018, 3, 26-36.	7.1	12
79	NEK10 tyrosine phosphorylates p53 and controls its transcriptional activity. Oncogene, 2020, 39, 5252-5266.	5.9	12
80	Protein kinases display minimal interpositional dependence on substrate sequence: potential implications for the evolution of signalling networks. Philosophical Transactions of the Royal Society B: Biological Sciences, 2012, 367, 2574-2583.	4.0	11
81	Tranexamic acid is associated with reduced complement activation in trauma patients with hemorrhagic shock and hyperfibrinolysis on thromboelastography. Blood Coagulation and Fibrinolysis, 2020, 31, 578-582.	1.0	11
82	Histidine N(Ï„)-cyclized macrocycles as a new genre of polo-like kinase 1 polo-box domain-binding inhibitors. Bioorganic and Medicinal Chemistry Letters, 2018, 28, 3202-3205.	2.2	10
83	Multiplexed Plasma Immune Mediator Signatures Can Differentiate Sepsis From NonInfective SIRS. Annals of Surgery, 2020, 272, 604-610.	4.2	10
84	Kicking Genomic Profiling to the Curb: How Re-wiring the Phosphoproteome Can Explain Treatment Resistance in Glioma. Cancer Cell, 2016, 29, 435-436.	16.8	9
85	Modern Management of Bleeding, Clotting, and Coagulopathy in Trauma Patients: What Is the Role of Viscoelastic Assays?. Current Trauma Reports, 2020, 6, 69-81.	1.3	9
86	A Multivariate Computational Method to Analyze High-Content RNAi Screening Data. Journal of Biomolecular Screening, 2015, 20, 985-997.	2.6	8
87	Circulating Factors in Trauma Plasma Activate Specific Human Immune Cell Subsets. Injury, 2020, 51, 819-829.	1.7	8
88	SH3 Domains. , 2005, , 37-58.		7
89	The WW Domain. , 2005, , 59-72.		7
90	MUlticenter STudy of tissue plasminogen activator (alteplase) use in COVIDâ€19 severe respiratory failure (MUST COVID): AÂretrospective cohort study. Research and Practice in Thrombosis and Haemostasis, 2022, 6, e12669.	2.3	6

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91	"Bits" and Pieces. Science Signaling, 2006, 2006, pe28-pe28.	3.6	5
92	Clot activators do not expedite the time to predict massive transfusion in trauma patients analyzed with tissue plasminogen activator thrombelastography. Surgery, 2019, 166, 408-415.	1.9	5
93	COVID-19: All the wrong moves in all the wrong places. Science Signaling, 2020, 13, .	3.6	5
94	Design and synthesis of a new orthogonally protected glutamic acid analog and its use in the preparation of high affinity polo-like kinase 1 polo-box domain â€“ binding peptide macrocycles. Organic and Biomolecular Chemistry, 2021, 19, 7843-7854.	2.8	5
95	Novel Macrocyclic Peptidomimetics Targeting the Polo-Box Domain of Polo-Like Kinase 1. Journal of Medicinal Chemistry, 2022, 65, 1915-1932.	6.4	5
96	The SH2 Domain: A Prototype for Protein Interaction Modules. , 2005, , 5-36.		4
97	Inducing DNA damage through R-loops to kill cancer cells. Molecular and Cellular Oncology, 2021, 8, 1848233.	0.7	4
98	Chromo and Chromo Shadow Domains. , 2005, , 241-255.		3
99	Are redox changes a critical switch for mitotic progression?. Molecular and Cellular Oncology, 2020, 7, 1832419.	0.7	3
100	A phase 2 study of onvansertib in combination with abiraterone and prednisone in patients with metastatic castration-resistant prostate cancer (mCRPC).. Journal of Clinical Oncology, 2022, 40, TPS219-TPS219.	1.6	3
101	PH Domains. , 2005, , 337-363.		2
102	PX Domains. , 2005, , 389-408.		2
103	Computational Analysis of Modular Protein Architectures. , 2005, , 439-476.		2
104	The Eukaryotic Protein Kinase Domain. , 2005, , 181-209.		2
105	An Integrated Pharmacological, Structural, and Genetic Analysis of Extracellular Versus Intracellular ROS Production in Neutrophils. Journal of Molecular Biology, 2022, 434, 167533.	4.2	2
106	Proteomics of Coagulopathy Following Injury Reveals Limitations of Using Laboratory Assessment to Define Trauma-Induced Coagulopathy to Predict Massive Transfusion. Annals of Surgery Open, 2022, 3, e167.	1.4	2
107	The Structure and Function of the Bromodomain. , 2005, , 227-239.		1
108	PDZ Domains: Intracellular Mediators of Carboxy-Terminal Protein Recognition and Scaffolding. , 2005, , 257-278.		1

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109	Nomenclature for Protein Modules and Their Cognate Motifs. , 2005, , 477-486.		1
110	EVH1/WH1 Domains. , 2005, , 73-101.		1
111	Seeing the Signaling Forest and the Trees. Science Signaling, 2008, 1, .	3.6	1
112	Leveraging signaling research to understand and treat disease. Science Signaling, 2016, 9, eg4.	3.6	1
113	Predicting the future of signaling for 2018. Science Signaling, 2018, 11, .	3.6	1
114	Atlas Drugged. Cell, 2019, 177, 803-805.	28.9	1
115	A phase II study of onvansertib in combination with abiraterone and prednisone in patients with metastatic castration-resistant prostate cancer (mCRPC).. Journal of Clinical Oncology, 2021, 39, TPS186-TPS186.	1.6	1
116	Prologue: An Overview of Protein Modular Domains As Adaptors. , 2005, , 1-4.		0
117	Structure, Specificity, and Mechanism of Protein Lysine Methylation by SET Domain Enzymes. , 2005, , 211-226.		0
118	EH Domains and Their Ligands. , 2005, , 279-290.		0
119	Ubiquitin Binding Modules: The Ubiquitin Network beyond the Proteasome. , 2005, , 291-319.		0
120	The Calponin Homology (CH) Domain. , 2005, , 321-336.		0
121	ENTH and VHS Domains. , 2005, , 365-387.		0
122	Peptide and Protein Repertoires for Global Analysis of Modules. , 2005, , 409-438.		0
123	The GYF Domain. , 2005, , 103-116.		0
124	PTB Domains. , 2005, , 117-141.		0
125	The FHA Domain. , 2005, , 143-162.		0
126	Epilogue: New Levels of Complexity in the Functional Roles of Modular Protein Interaction Domains: Switches and Sockets in the Circuit Diagrams of Cellular Systems Biology. , 2005, , 487-491.		0

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127	The Complex Art of Telling It Simply. Science Signaling, 2011, 4, .	3.6	0
128	14-3-3 proteins in cancer. , 0, , 293-304.		0
129	CADD-03. A VERSATILE AND MODULAR TARGETED NANOPARTICLE PLATFORM FOR DELIVERY OF COMBINATION THERAPIES TO ADULT AND PEDIATRIC CNS TUMORS. Neuro-Oncology, 2018, 20, vi277-vi277.	1.2	0
130	The NADPH oxidae and PI 3â€kinase: the role of p40phox. FASEB Journal, 2007, 21, A604.	0.5	0
131	Intratumoral administration of DNA-damaging chemotherapy-treated tumor cells to enhance therapeutic benefit of systemic immune checkpoint blockade in mouse cancer models.. Journal of Clinical Oncology, 2020, 38, 77-77.	1.6	0
132	Immunogenic cell stress and injury versus immunogenic cell death: implications for improving cancer treatment with immune checkpoint blockade. Molecular and Cellular Oncology, 2022, 9, 2039038.	0.7	0