Benjamin E Turk

List of Publications by Year
in descending order

114 papers	12,147 citations	47006 47 h-index	26613 107 g-index
124 all docs	124 docs citations	124 times ranked	20302 citing authors

#	Article	IF	Citations
1	Tousled-like kinase 2 targets ASF1 histone chaperones through client mimicry. Nature Communications, 2022, 13, 749.	12.8	9
2	Calcium/calmodulin-dependent protein kinase kinase 2 regulates hepatic fuel metabolism. Molecular Metabolism, 2022, 62, 101513.	6.5	8
3	Structure of a GRK5-Calmodulin Complex Reveals Molecular Mechanism of GRK Activation and Substrate Targeting. Molecular Cell, 2021, 81, 323-339.e11.	9.7	13
4	TNIK Is a Therapeutic Target in Lung Squamous Cell Carcinoma and Regulates FAK Activation through Merlin. Cancer Discovery, 2021, 11, 1411-1423.	9.4	26
5	PPP6C negatively regulates oncogenic ERK signaling through dephosphorylation of MEK. Cell Reports, 2021, 34, 108928.	6.4	17
6	Phosphorylation of Pal2 by the protein kinases Kin1 and Kin2 modulates HAC1 mRNA splicing in the unfolded protein response in yeast. Science Signaling, 2021, 14, .	3.6	5
7	Phosphorylated WNK kinase networks in recoded bacteria recapitulate physiological function. Cell Reports, 2021, 36, 109416.	6.4	5
8	Pazopanib ameliorates acute lung injuries via inhibition of MAP3K2 and MAP3K3. Science Translational Medicine, 2021, 13, .	12.4	7
9	Scaffold association factor B (SAFB) is required for expression of prenyltransferases and RAS membrane association. Proceedings of the National Academy of Sciences of the United States of America, 2020, 117, 31914-31922.	7.1	9
10	A kinase bioscavenger provides antibiotic resistance by extremely tight substrate binding. Science Advances, 2020, 6, eaaz9861.	10.3	17
11	Recognition of physiological phosphorylation sites by p21-activated kinase 4. Journal of Structural Biology, 2020, 211, 107553.	2.8	7
12	Global view of the RAF-MEK-ERK module and its immediate downstream effectors. Scientific Reports, 2019, 9, 10865.	3.3	12
13	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
14	Ancestral reconstruction reveals mechanisms of ERK regulatory evolution. ELife, 2019, 8, .	6.0	24
15	Comprehensive substrate specificity profiling of the human Nek kinome reveals unexpected signaling outputs. ELife, 2019, 8, .	6.0	35
16	Characterization of MAP kinase docking specificity with yeast genetic screens. FASEB Journal, 2019, 33, lb265.	0.5	0
17	Glycogen synthase kinaseâ€3Î² regulation: another kinase gets in on the AKT. FEBS Letters, 2018, 592, 535-536.	2.8	1
18	Homing in: Mechanisms of Substrate Targeting by Protein Kinases. Trends in Biochemical Sciences, 2018, 43, 380-394.	7.5	154

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19	In Silico Design and in Vitro Characterization of Universal Tyrosine Kinase Peptide Substrates. Biochemistry, 2018, 57, 1847-1851.	2.5	8
20	Filamin A Phosphorylation at Serine 2152 by the Serine/Threonine Kinase Ndr2 Controls TCR-Induced LFA-1 Activation in T Cells. Frontiers in Immunology, 2018, 9, 2852.	4.8	20
21	Exceptionally Selective Substrate Targeting by the Metalloprotease Anthrax Lethal Factor. Advances in Experimental Medicine and Biology, 2018, 1111, 189-203.	1.6	4
22	Substrate priming enhances phosphorylation by the budding yeast kinases Kin1 and Kin2. Journal of Biological Chemistry, 2018, 293, 18353-18364.	3.4	3
23	Kinase Substrate Profiling Using a Proteome-wide Serine-Oriented Human Peptide Library. Biochemistry, 2018, 57, 4717-4725.	2.5	16
24	Identification of PNG kinase substrates uncovers interactions with the translational repressor TRAL in the oocyte-to-embryo transition. ELife, 2018, 7, .	6.0	20
25	Ssp2 Binding Activates the Smk1 Mitogen-Activated Protein Kinase. Molecular and Cellular Biology, 2017, 37, .	2.3	7
26	Differential regulation of PKD isoforms in oxidative stress conditions through phosphorylation of a conserved Tyr in the P+1 loop. Scientific Reports, 2017, 7, 887.	3.3	15
27	Identification of a Substrate-selective Exosite within the Metalloproteinase Anthrax Lethal Factor. Journal of Biological Chemistry, 2017, 292, 814-825.	3.4	11
28	Rational Redesign of a Functional Protein Kinase-Substrate Interaction. ACS Chemical Biology, 2017, 12, 1194-1198.	3.4	16
29	A high throughput assay to identify substrate-selective inhibitors of the ERK protein kinases. Biochemical Pharmacology, 2017, 142, 39-45.	4.4	9
30	Csk-homologous kinase (Chk) is an efficient inhibitor of Src-family kinases but a poor catalyst of phosphorylation of their C-terminal regulatory tyrosine. Cell Communication and Signaling, 2017, 15, 29.	6.5	10
31	Structural Basis for Noncanonical Substrate Recognition of Cofilin/ADF Proteins by LIM Kinases. Molecular Cell, 2016, 62, 397-408.	9.7	44
32	Control of serotonin transporter phosphorylation by conformational state. Proceedings of the National Academy of Sciences of the United States of America, 2016, 113, E2776-83.	7.1	40
33	Loss of TRIM33 causes resistance to BET bromodomain inhibitors through MYC- and TGF-Î²â€“dependent mechanisms. Proceedings of the National Academy of Sciences of the United States of America, 2016, 113, E4558-66.	7.1	40
34	Structure of the Human Protein Kinase ZAK in Complex with Vemurafenib. ACS Chemical Biology, 2016, 11, 1595-1602.	3.4	19
35	Analysis of Protein Tyrosine Kinase Specificity Using Positional Scanning Peptide Microarrays. Methods in Molecular Biology, 2016, 1352, 27-34.	0.9	2
36	Rapid Identification of Protein Kinase Phosphorylation Site Motifs Using Combinatorial Peptide Libraries. Methods in Molecular Biology, 2016, 1360, 203-216.	0.9	22

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37	Inhibitors of the Metalloproteinase Anthrax Lethal Factor. Current Topics in Medicinal Chemistry, 2016, 16, 2350-2358.	2.1	9
38	Comparative Analysis of Two Gene-Targeting Approaches Challenges the Tumor-Suppressive Role of the Protein Kinase MK5/PRAK. PLoS ONE, 2015, 10, e0136138.	2.5	15
39	Signaling, Regulation, and Specificity of the Type II p21-activated Kinases. Journal of Biological Chemistry, 2015, 290, 12975-12983.	3.4	51
40	Small Molecule Inhibition of the Autophagy Kinase ULK1 and Identification of ULK1 Substrates. Molecular Cell, 2015, 59, 285-297.	9.7	561
41	Structure and vascular function of MEKK3â€“cerebral cavernous malformations 2 complex. Nature Communications, 2015, 6, 7937.	12.8	69
42	Kinome-wide Decoding of Network-Attacking Mutations Rewiring Cancer Signaling. Cell, 2015, 163, 202-217.	28.9	168
43	Unmasking Determinants of Specificity in the Human Kinome. Cell, 2015, 163, 187-201.	28.9	86
44	Biochemical characterization of FIKK8 â€“ A unique protein kinase from the malaria parasite Plasmodium falciparum and other apicomplexans. Molecular and Biochemical Parasitology, 2015, 201, 85-89.	1.1	14
45	Elucidating Anthrax Lethal Factor Interactions with MAP Kinase Kinase Substrates. FASEB Journal, 2015, 29, 894.4.	0.5	0
46	The Toxoplasma Pseudokinase ROP5 Forms Complexes with ROP18 and ROP17 Kinases that Synergize to Control Acute Virulence in Mice. Cell Host and Microbe, 2014, 15, 537-550.	11.0	230
47	Phosphoproteomic analysis identifies the tumor suppressor PDCD4 as a RSK substrate negatively regulated by 14-3-3. Proceedings of the National Academy of Sciences of the United States of America, 2014, 111, E2918-27.	7.1	70
48	Modulation of the Chromatin Phosphoproteome by the Haspin Protein Kinase. Molecular and Cellular Proteomics, 2014, 13, 1724-1740.	3.8	37
49	An AMPK-Independent Signaling Pathway Downstream of the LKB1 Tumor Suppressor Controls Snail1 and Metastatic Potential. Molecular Cell, 2014, 55, 436-450.	9.7	105
50	Global Analysis of Human Nonreceptor Tyrosine Kinase Specificity Using High-Density Peptide Microarrays. Journal of Proteome Research, 2014, 13, 4339-4346.	3.7	42
51	Early Steps in Autophagy Depend on Direct Phosphorylation of Atg9 by the Atg1 Kinase. Molecular Cell, 2014, 53, 471-483.	9.7	274
52	Identification of a Major Determinant for Serine-Threonine Kinase Phosphoacceptor Specificity. Molecular Cell, 2014, 53, 140-147.	9.7	91
53	Ancestral resurrection reveals evolutionary mechanisms of kinase plasticity. ELife, 2014, 3, .	6.0	53
54	mTORC1 Phosphorylation Sites Encode Their Sensitivity to Starvation and Rapamycin. Science, 2013, 341, 1236566.	12.6	383

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55	Construction of human activityâ€based phosphorylation networks. Molecular Systems Biology, 2013, 9, 655.	7.2	153
56	Coupling Protein Engineering with Probe Design To Inhibit and Image Matrix Metalloproteinases with Controlled Specificity. Journal of the American Chemical Society, 2013, 135, 9139-9148.	13.7	35
57	Exploiting the Unique ATP-Binding Pocket of Toxoplasma Calcium-Dependent Protein Kinase 1 To Identify Its Substrates. ACS Chemical Biology, 2013, 8, 1155-1162.	3.4	54
58	Substrate and Inhibitor Specificity of the Type II p21-Activated Kinase, PAK6. PLoS ONE, 2013, 8, e77818.	2.5	19
59	Reciprocal Phosphorylation of Yeast Glycerol-3-Phosphate Dehydrogenases in Adaptation to Distinct Types of Stress. Molecular and Cellular Biology, 2012, 32, 4705-4717.	2.3	99
60	Identification of neuronal substrates implicates Pak5 in synaptic vesicle trafficking. Proceedings of the National Academy of Sciences of the United States of America, 2012, 109, 4116-4121.	7.1	20
61	Cyclic GMP-dependent Stimulation of Serotonin Transport Does Not Involve Direct Transporter Phosphorylation by cGMP-dependent Protein Kinase. Journal of Biological Chemistry, 2012, 287, 36051-36058.	3.4	15
62	Type II p21-activated kinases (PAKs) are regulated by an autoinhibitory pseudosubstrate. Proceedings of the National Academy of Sciences of the United States of America, 2012, 109, 16107-16112.	7.1	73
63	A Peptide Photoaffinity Probe Specific for the Active Conformation of the Abl Tyrosine Kinase. ChemBioChem, 2012, 13, 2510-2512.	2.6	5
64	Analysis of substrate specificity and cyclin Y binding of PCTAIRE-1 kinase. Cellular Signalling, 2012, 24, 2085-2094.	3.6	17
65	Identification of Exosite-Targeting Inhibitors of Anthrax Lethal Factor by High-Throughput Screening. Chemistry and Biology, 2012, 19, 875-882.	6.0	21
66	Corrigendum to â€œPurification and characterization of tagless recombinant human elongation factor 2 kinase (eEF-2K) expressed in Escherichia coliâ€•[Protein Expression and Purification 79 (2011) 237â€“244]. Protein Expression and Purification, 2012, 85, 250.	1.3	0
67	Purification and characterization of tagless recombinant human elongation factor 2 kinase (eEF-2K) expressed in Escherichia coli. Protein Expression and Purification, 2011, 79, 237-244.	1.3	25
68	Identification of specificity determining residues in peptide recognition domains using an information theoretic approach applied to large-scale binding maps. BMC Biology, 2011, 9, 53.	3.8	16
69	Deciphering Protein Kinase Specificity Through Large-Scale Analysis of Yeast Phosphorylation Site Motifs. Science Signaling, 2010, 3, ra12.	3.6	341
70	MOTIPS: Automated Motif Analysis for Predicting Targets of Modular Protein Domains. BMC Bioinformatics, 2010, 11, 243.	2.6	28
71	Designed Inhibitors of Insulin-Degrading Enzyme Regulate the Catabolism and Activity of Insulin. PLoS ONE, 2010, 5, e10504.	2.5	91
72	The Arabidopsis ABA-Activated Kinase OST1 Phosphorylates the bZIP Transcription Factor ABF3 and Creates a 14-3-3 Binding Site Involved in Its Turnover. PLoS ONE, 2010, 5, e13935.	2.5	197

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73	Analysis of Serineâ€Threonine Kinase Specificity Using Arrayed Positional Scanning Peptide Libraries. Current Protocols in Molecular Biology, 2010, 91, Unit 18.14.	2.9	13
74	Structural Bases of PAS Domain-regulated Kinase (PASK) Activation in the Absence of Activation Loop Phosphorylation. Journal of Biological Chemistry, 2010, 285, 41034-41043.	3.4	26
75	Phosphorylation of Immunity-Related GTPases by a Toxoplasma gondii-Secreted Kinase Promotes Macrophage Survival and Virulence. Cell Host and Microbe, 2010, 8, 484-495.	11.0	286
76	Kinase Domain Insertions Define Distinct Roles of CLK Kinases in SR Protein Phosphorylation. Structure, 2009, 17, 352-362.	3.3	106
77	Structural recognition of an optimized substrate for the ephrin family of receptor tyrosine kinases. FEBS Journal, 2009, 276, 4395-4404.	4.7	26
78	Structural insights into the inhibited states of the Mer receptor tyrosine kinase. Journal of Structural Biology, 2009, 165, 88-96.	2.8	47
79	Mixture-Based Peptide Libraries for Identifying Protease Cleavage Motifs. Methods in Molecular Biology, 2009, 539, 79-91.	0.9	3
80	Understanding and exploiting substrate recognition by protein kinases. Current Opinion in Chemical Biology, 2008, 12, 4-10.	6.1	64
81	Linear Motif Atlas for Phosphorylation-Dependent Signaling. Science Signaling, 2008, 1, ra2.	3.6	418
82	Activation segment dimerization: a mechanism for kinase autophosphorylation of non-consensus sites. EMBO Journal, 2008, 27, 704-714.	7.8	147
83	A versatile strategy to define the phosphorylation preferences of plant protein kinases and screen for putative substrates. Plant Journal, 2008, 55, 104-117.	5.7	123
84	Structure of the Human Protein Kinase MPSK1 Reveals an Atypical Activation Loop Architecture. Structure, 2008, 16, 115-124.	3.3	38
85	AMPK Phosphorylation of Raptor Mediates a Metabolic Checkpoint. Molecular Cell, 2008, 30, 214-226.	9.7	3,147
86	Structural Coupling of SH2-Kinase Domains Links Fes and Abl Substrate Recognition and Kinase Activation. Cell, 2008, 134, 793-803.	28.9	190
87	Substrate Discrimination among Mitogen-activated Protein Kinases through Distinct Docking Sequence Motifs. Journal of Biological Chemistry, 2008, 283, 19511-19520.	3.4	130
88	Discovery and Development of Anthrax Lethal Factor Metalloproteinase Inhibitors. Current Pharmaceutical Biotechnology, 2008, 9, 24-33.	1.6	44
89	Specificity Profiling of Pak Kinases Allows Identification of Novel Phosphorylation Sites. Journal of Biological Chemistry, 2007, 282, 15667-15678.	3.4	116
90	IÎºB Kinase Î² Phosphorylates the K63 Deubiquitinase A20 To Cause Feedback Inhibition of the NF-ÎºB Pathway. Molecular and Cellular Biology, 2007, 27, 7451-7461.	2.3	158

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91	Manipulation of host signalling pathways by anthrax toxins. Biochemical Journal, 2007, 402, 405-417.	3.7	134
92	Structural and Functional Characterization of the Human Protein Kinase ASK1. Structure, 2007, 15, 1215-1226.	3.3	98
93	MMP-20 Is Predominately a Tooth-Specific Enzyme with a Deep Catalytic Pocket that Hydrolyzes Type V Collagenâ€. Biochemistry, 2006, 45, 3863-3874.	2.5	39
94	Determining protein kinase substrate specificity by parallel solution-phase assay of large numbers of peptide substrates. Nature Protocols, 2006, 1, 375-379.	12.0	66
95	Identification of Yin-Yang Regulators and a Phosphorylation Consensus for Male Germ Cell-Associated Kinase (MAK)-Related Kinase. Molecular and Cellular Biology, 2006, 26, 8639-8654.	2.3	76
96	Measuring kinase activity: finding needles in a haystack. Nature Methods, 2005, 2, 251-252.	19.0	6
97	Structure and Substrate Specificity of the Pim-1 Kinase. Journal of Biological Chemistry, 2005, 280, 41675-41682.	3.4	164
98	A Multi-enzyme Cascade of Hemoglobin Proteolysis in the Intestine of Blood-feeding Hookworms. Journal of Biological Chemistry, 2004, 279, 35950-35957.	3.4	155
99	A rapid method for determining protein kinase phosphorylation specificity. Nature Methods, 2004, 1, 27-29.	19.0	340
100	The structural basis for substrate and inhibitor selectivity of the anthrax lethal factor. Nature Structural and Molecular Biology, 2004, 11, 60-66.	8.2	182
101	Identification of small molecule inhibitors of anthrax lethal factor. Nature Structural and Molecular Biology, 2004, 11, 67-72.	8.2	136
102	Using peptide libraries to identify optimal cleavage motifs for proteolytic enzymes. Methods, 2004, 32, 398-405.	3.8	21
103	Peptide libraries: at the crossroads of proteomics and bioinformatics. Drug Discovery Today, 2004, 9, S47-52.	6.4	0
104	Peptide libraries: at the crossroads of proteomics and bioinformatics. Current Opinion in Chemical Biology, 2003, 7, 84-90.	6.1	51
105	Binding Specificity and Regulation of the Serine Protease and PDZ Domains of HtrA2/Omi. Journal of Biological Chemistry, 2003, 278, 49417-49427.	3.4	116
106	Peptide Substrate Specificities and Protein Cleavage Sites of Human Endometase/Matrilysin-2/Matrix Metalloproteinase-26. Journal of Biological Chemistry, 2002, 277, 35168-35175.	3.4	54
107	Determination of protease cleavage site motifs using mixture-based oriented peptide libraries. Nature Biotechnology, 2001, 19, 661-667.	17.5	524
108	Marked Differences between Metalloproteases Meprin A and B in Substrate and Peptide Bond Specificity. Journal of Biological Chemistry, 2001, 276, 13248-13255.	3.4	103

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109	Selective inhibition of amino-terminal methionine processing by TNP-470 and ovalicin in endothelial cells. Chemistry and Biology, 1999, 6, 823-833.	6.0	93
110	Enhanced potency of perfluorinated thalidomide derivatives for inhibition of LPS-induced tumor necrosis factor-Î± production is associated with a change of mechanism of action. Bioorganic and Medicinal Chemistry Letters, 1998, 8, 1071-1076.	2.2	21
111	Synthetic analogues of TNP-470 and ovalicin reveal a common molecular basis for inhibition of angiogenesis and immunosuppression1In honor of Professor Stuart Schreiber for his pioneering contributions to the interface between chemistry and biology.1. Bioorganic and Medicinal Chemistry, 1998, 6, 1163-1169.	3.0	51
112	Methionine aminopeptidase (type 2) is the common target for angiogenesis inhibitors AGM-1470 and ovalicin. Chemistry and Biology, 1997, 4, 461-471.	6.0	388
113	Potent Inhibition of Tumor Necrosis Factor-Î± Production by Tetrafluorothalidomide and Tetrafluorophthalimides. Journal of Medicinal Chemistry, 1996, 39, 3044-3045.	6.4	59
114	Intramolecular photocycloaddition reactions of 3-(2-propenoxy)cyclopent-2-en-1-ones and 3-(2-propenoxy)cyclohex-2-en-1-ones. Journal of Organic Chemistry, 1992, 57, 4632-4638.	3.2	12