Gregory A Petsko

List of Publications by Year
in descending order

178 papers	6,226 citations	147801 31 h-index	74163 75 g-index
183 all docs	183 docs citations	183 times ranked	9724 citing authors

#	Article	IF	Citations
1	The neuronal retromer can regulate both neuronal and microglial phenotypes of Alzheimer's disease. Cell Reports, 2022, 38, 110262.	6.4	17
2	Identification of RIOK2 as a master regulator of human blood cell development. Nature Immunology, 2022, 23, 109-121.	14.5	13
3	Elucidating the causes of neurodegeneration. Science, 2022, 377, 31-32.	12.6	6
4	Structural basis of the dynamic human CEACAM1 monomer-dimer equilibrium. Communications Biology, 2021, 4, 360.	4.4	6
5	A new alpha-synuclein missense variant (Thr72Met) in two Turkish families with Parkinson's disease. Parkinsonism and Related Disorders, 2021, 89, 63-72.	2.2	11
6	Targeted stabilization of Munc18â€1 function via pharmacological chaperones. EMBO Molecular Medicine, 2021, 13, e12354.	6.9	12
7	Atypical Kinase RIOK2 Is a Master Regulator of Hematopoietic Cell Fate. Blood, 2021, 138, 300-300.	1.4	0
8	Seeing gene expression in cells: the future of structural biology. Faculty Reviews, 2021, 10, 79.	3.9	1
9	mGreenLantern: a bright monomeric fluorescent protein with rapid expression and cell filling properties for neuronal imaging. Proceedings of the National Academy of Sciences of the United States of America, 2020, 117, 30710-30721.	7.1	76
10	Endosomal recycling reconciles the Alzheimerâ€™s disease paradox. Science Translational Medicine, 2020, 12, .	12.4	33
11	25-Hydroxycholesterol amplifies microglial IL-1Î² production in an apoE isoform-dependent manner. Journal of Neuroinflammation, 2020, 17, 192.	7.2	57
12	PGE1 and PGA1 bind to Nurr1 and activate its transcriptional function. Nature Chemical Biology, 2020, 16, 876-886.	8.0	51
13	F2â€02â€01: ENDOSOMAL TRAFFIC JAMS REPRESENT A PATHOGENIC HUB AND THERAPEUTIC TARGET IN ALZHEIMER'S DISEASE. Alzheimer's and Dementia, 2019, 15, P517.	0.8	0
14	Stabilizing the Retromer Complex in a Human Stem Cell Model of Alzheimerâ€™s Disease Reduces TAU Phosphorylation Independently of Amyloid Precursor Protein. Stem Cell Reports, 2018, 10, 1046-1058.	4.8	82
15	Crystal Structures of Cystathionine Î²-Synthase from Saccharomyces cerevisiae: One Enzymatic Step at a Time. Biochemistry, 2018, 57, 3134-3145.	2.5	25
16	AAVrh.10-Mediated APOE2 Central Nervous System Gene Therapy for APOE4-Associated Alzheimer's Disease. Human Gene Therapy Clinical Development, 2018, 29, 24-47.	3.1	90
17	Crystal Structure of Green Fluorescent Protein Clover and Design of Clover-Based Redox Sensors. Structure, 2018, 26, 225-237.e3.	3.3	17
18	O4â€02â€04: 25â€HYDROXYCHOLESTEROL AMPLIFIES MICROGLIAL NEUROINFLAMMATORY SIGNALING IN AN APOE ISOFORMâ€DEPENDENT MANNER. Alzheimer's and Dementia, 2018, 14, P1403.	0.8	0

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19	High resolution X-ray and NMR structural study of human T-cell immunoglobulin and mucin domain containing protein-3. Scientific Reports, 2018, 8, 17512.	3.3	35
20	Acquired resistance to IDH inhibition through trans or cis dimer-interface mutations. Nature, 2018, 559, 125-129.	27.8	223
21	Cholera toxin inhibits SNX27-retromer mediated delivery of cargo proteins to the plasma membrane. Journal of Cell Science, 2018, 131, .	2.0	17
22	Parkinsonâ€™s Disease and Melanoma: Co-Occurrence and Mechanisms. Journal of Parkinson's Disease, 2018, 8, 385-398.	2.8	72
23	Dual chemistry catalyzed by human acireductone dioxygenase. Protein Engineering, Design and Selection, 2017, 30, 197-204.	2.1	11
24	PLP and GABA trigger GabR-mediated transcription regulation in Bacillus subtilis via external aldimine formation. Proceedings of the National Academy of Sciences of the United States of America, 2017, 114, 3891-3896.	7.1	26
25	Structure and mechanism of benzaldehyde dehydrogenase from Pseudomonas putida ATCC 12633, a member of the Class 3 aldehyde dehydrogenase superfamily. Protein Engineering, Design and Selection, 2017, 30, 273-280.	2.1	7
26	Structure Determination of Mycobacterium tuberculosis Serine Protease Hip1 (Rv2224c). Biochemistry, 2017, 56, 2304-2314.	2.5	10
27	Endosomal Traffic Jams Represent a Pathogenic Hub and Therapeutic Target in Alzheimerâ€™s Disease. Trends in Neurosciences, 2017, 40, 592-602.	8.6	114
28	Dissecting Comorbidity between Parkinsonâ€™s Disease and Melanoma in a Cell Culture Model. FASEB Journal, 2017, 31, 631.1-631.1.	0.5	1
29	Crystal structure of the DNA binding domain of the transcription factor T-bet suggests simultaneous recognition of distant genome sites. Proceedings of the National Academy of Sciences of the United States of America, 2016, 113, E6572-E6581.	7.1	20
30	Caspase-1 causes truncation and aggregation of the Parkinsonâ€™s disease-associated protein Î±-synuclein. Proceedings of the National Academy of Sciences of the United States of America, 2016, 113, 9587-9592.	7.1	202
31	Reducing C-terminal truncation mitigates synucleinopathy and neurodegeneration in a transgenic model of multiple system atrophy. Proceedings of the National Academy of Sciences of the United States of America, 2016, 113, 9593-9598.	7.1	89
32	Metal-Dependent Function of a Mammalian Acireductone Dioxygenase. Biochemistry, 2016, 55, 1398-1407.	2.5	35
33	Amelioration of toxicity in neuronal models of amyotrophic lateral sclerosis by hUPF1. Proceedings of the National Academy of Sciences of the United States of America, 2015, 112, 7821-7826.	7.1	114
34	Targeting Î±-synuclein for treatment of Parkinson's disease: mechanistic and therapeutic considerations. Lancet Neurology, The, 2015, 14, 855-866.	10.2	393
35	Retromer in Alzheimer disease, Parkinson disease and other neurological disorders. Nature Reviews Neuroscience, 2015, 16, 126-132.	10.2	197
36	Nuclear receptor Nurr1 agonists enhance its dual functions and improve behavioral deficits in an animal model of Parkinsonâ€™s disease. Proceedings of the National Academy of Sciences of the United States of America, 2015, 112, 8756-8761.	7.1	147

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37	CEACAM1 regulates TIM-3-mediated tolerance and exhaustion. Nature, 2015, 517, 386-390.	27.8	525
38	Transnitrosylation from DJ-1 to PTEN Attenuates Neuronal Cell Death in Parkinson's Disease Models. Journal of Neuroscience, 2014, 34, 15123-15131.	3.6	88
39	Mycobacterium tuberculosis Hip1 Modulates Macrophage Responses through Proteolysis of GroEL2. PLoS Pathogens, 2014, 10, e1004132.	4.7	40
40	Pharmacological chaperones stabilize retromer to limit APP processing. Nature Chemical Biology, 2014, 10, 443-449.	8.0	189
41	Crystal Cryocooling Distorts Conformational Heterogeneity in a Model Michaelis Complex of DHFR. Structure, 2014, 22, 899-910.	3.3	131
42	Open questions: Zombie projects, translational research, and the real secret of the inside of the cell. BMC Biology, 2013, 11, 97.	3.8	2
43	The dog particle. Genome Biology, 2012, 13, 142.	9.6	0
44	A case of the flu. Genome Biology, 2012, 13, 146.	9.6	0
45	Apocalypse now?. Genome Biology, 2012, 13, 151.	8.8	0
46	Economies of scale. Genome Biology, 2012, 13, 154.	9.6	0
47	Goodbye, Columbus. Genome Biology, 2012, 13, 155.	9.6	10
48	Mending walls. BMC Biology, 2012, 10, 41.	3.8	1
49	Preserving some sanity. Genome Biology, 2011, 12, 102.	9.6	0
50	Bailing out. Genome Biology, 2011, 12, 131.	9.6	1
51	Dominoes. Genome Biology, 2011, 12, 134.	9.6	1
52	The Columnist Manifesto. Genome Biology, 2011, 12, 136.	9.6	1
53	There is a sanity clause. Genome Biology, 2011, 12, 105.	9.6	0
54	The walking dead. Genome Biology, 2011, 12, 108.	9.6	0

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55	The blue marble. Genome Biology, 2011, 12, 112.	9.6	12
56	Risky business. Genome Biology, 2011, 12, 119.	9.6	0
57	Nothing to do and all day to do it in. Genome Biology, 2011, 12, 126.	9.6	0
58	Food of the dogs. Genome Biology, 2011, 12, 122.	9.6	0
59	The one new journal we might actually need. Genome Biology, 2011, 12, 129.	9.6	5
60	A soluble Î±-synuclein construct forms a dynamic tetramer. Proceedings of the National Academy of Sciences of the United States of America, 2011, 108, 17797-17802.	7.1	408
61	When failure should be the option. BMC Biology, 2010, 8, 61.	3.8	34
62	A Faustian bargain. Genome Biology, 2010, 11, 138.	9.6	7
63	Rising in the East. Genome Biology, 2010, 11, 102.	9.6	8
64	Every dog has his day in court. Genome Biology, 2010, 11, 139.	8.8	1
65	The long and the short of it. Genome Biology, 2010, 11, 145.	9.6	0
66	Lost in translation. Genome Biology, 2010, 11, 107.	9.6	3
67	No stone unturned. Genome Biology, 2010, 11, 112.	9.6	11
68	The devil's in the details. Genome Biology, 2010, 11, 117.	9.6	3
69	And they said it wouldn't last.... Genome Biology, 2010, 11, 121.	9.6	1
70	Hand-made biology. Genome Biology, 2010, 11, 124.	9.6	1
71	When the pie is too small. Genome Biology, 2010, 11, 127.	9.6	0
72	The past is a foreign country. Genome Biology, 2010, 11, 131.	8.8	0

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73	Shadows on the wall. Genome Biology, 2010, 11, 136.	9.6	1
74	Wimps? What wimps?. Genome Biology, 2009, 10, 109.	9.6	1
75	What my genome told me - and what it didn't. Genome Biology, 2009, 10, 108.	9.6	2
76	Render unto Darwin. Genome Biology, 2009, 10, 106.	9.6	0
77	Guilt by association. Genome Biology, 2009, 10, 104.	9.6	16
78	Life is a Ponzi scheme. Genome Biology, 2009, 10, 101.	9.6	2
79	The dog days of autumn. Genome Biology, 2009, 10, 112.	9.6	0
80	A harsh climate. Genome Biology, 2009, 10, 115.	9.6	1
81	A seat at the table. Genome Biology, 2008, 9, 113.	9.6	28
82	The wisdom, and madness, of crowds. Genome Biology, 2008, 9, 112.	9.6	3
83	Meta-morphosis. Genome Biology, 2008, 9, 111.	9.6	0
84	When bubbles burst. Genome Biology, 2008, 9, 110.	9.6	15
85	Biodefense versus bioterrorism. Genome Biology, 2008, 9, 108.	9.6	2
86	Having an impact (factor). Genome Biology, 2008, 9, 107.	9.6	14
87	It is alive. Genome Biology, 2008, 9, 106.	9.6	1
88	The new Manichaeans. Genome Biology, 2008, 9, 105.	9.6	0
89	Not debatable. Genome Biology, 2008, 9, 104.	9.6	0
90	The right to be wrong. Genome Biology, 2008, 9, 102.	9.6	3

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91	The story they missed. Genome Biology, 2008, 9, 101.	9.6	0
92	Medicine man. Genome Biology, 2007, 8, 114.	9.6	1
93	What if Watson had said "Apes evolved from man"?. Genome Biology, 2007, 8, 113.	9.6	0
94	They fought the law and the law won. Genome Biology, 2007, 8, 111.	9.6	2
95	Strange days. Genome Biology, 2007, 8, 110.	9.6	0
96	My worries are no longer behind me. Genome Biology, 2007, 8, 109.	9.6	70
97	An idea whose time has gone. Genome Biology, 2007, 8, 107.	9.6	22
98	It can't happen here - can it?. Genome Biology, 2007, 8, 105.	9.6	1
99	A day in the life of a genome biologist in the not-too-distant future. Genome Biology, 2007, 8, 104.	9.6	1
100	And the second shall be first. Genome Biology, 2007, 8, 103.	9.6	13
101	Jumping the shark. Genome Biology, 2007, 8, 101.	8.8	1
102	A model worth considering?. Genome Biology, 2006, 7, 121.	9.6	1
103	Do the math. Genome Biology, 2006, 7, 119.	9.6	9
104	Transformation. Genome Biology, 2006, 7, 117.	9.6	1
105	Senior moments. Genome Biology, 2006, 7, 113.	9.6	1
106	Facts and figures. Genome Biology, 2006, 7, 111.	9.6	0
107	The ninth wave. Genome Biology, 2006, 7, 109.	9.6	1
108	The next epidemic. Genome Biology, 2006, 7, 108.	9.6	5

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109	Instructions for repair. Genome Biology, 2006, 7, 106.	9.6	3
110	The system is broken. Genome Biology, 2006, 7, 105.	9.6	4
111	Sweden has the right idea. Genome Biology, 2006, 7, 103.	9.6	0
112	The highs and lows of scientific conferences. Nature Reviews Molecular Cell Biology, 2006, 7, 231-234.	37.0	7
113	Foxes and hounds. Genome Biology, 2005, 6, 124.	9.6	0
114	H5N1. Genome Biology, 2005, 6, 121.	9.6	2
115	Half right. Genome Biology, 2005, 6, 120.	9.6	0
116	Trinity. Genome Biology, 2005, 6, 118.	9.6	0
117	The life aquatic. Genome Biology, 2005, 6, 116.	9.6	0
118	Eighty years ago. Genome Biology, 2005, 6, 114.	9.6	1
119	How may you help me?. Genome Biology, 2005, 6, 111.	9.6	4
120	A matter of life and death. Genome Biology, 2005, 6, 109.	9.6	1
121	Who owns the data?. Genome Biology, 2005, 6, 107.	9.6	3
122	Feet in mouth disease. Genome Biology, 2005, 6, 105.	9.6	1
123	Tsunami. Genome Biology, 2005, 6, 104.	9.6	0
124	Color blind. Genome Biology, 2004, 5, 119.	9.6	2
125	The emperor's new shibboleth. Genome Biology, 2004, 5, 118.	9.6	0
126	Twilight of a hero. Genome Biology, 2004, 5, 116.	9.6	0

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127	Fame is a bubble, but not for some. Genome Biology, 2004, 5, 114.	9.6	1
128	A drop in the bucket. Genome Biology, 2004, 5, 112.	9.6	1
129	Pharmacogenomics arrives. Genome Biology, 2004, 5, 108.	9.6	2
130	The ascent of man?. Genome Biology, 2004, 5, 106.	9.6	0
131	Doctor Dunsel. Genome Biology, 2004, 5, 104.	9.6	0
132	Good chemistry. Genome Biology, 2004, 5, 103.	9.6	0
133	Bad chemistry. Genome Biology, 2004, 5, 102.	9.6	1
134	Live and let diet. Genome Biology, 2003, 5, 101.	9.6	1
135	For the good of the state. Genome Biology, 2003, 4, 121.	9.6	0
136	Sleeping dogs. Genome Biology, 2003, 4, 120.	9.6	0
137	The usual suspects. Genome Biology, 2003, 4, 118.	9.6	1
138	The road worrier. Genome Biology, 2003, 4, 116.	9.6	0
139	Galileo's stepchildren. Genome Biology, 2003, 4, 114.	9.6	0
140	A new recruit for the army of the men of death. Genome Biology, 2003, 4, 113.	9.6	0
141	Ira. Genome Biology, 2003, 4, 112.	9.6	0
142	War and peace. Genome Biology, 2003, 4, 110.	9.6	1
143	Judgement call. Genome Biology, 2003, 4, 108.	9.6	0
144	Still no flying cars. Genome Biology, 2003, 4, 106.	9.6	0

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145	Funky, not junky. Genome Biology, 2003, 4, 104.	9.6	2
146	Everything I need to know about genomics, I learned from Yogi Berra. Genome Biology, 2002, 4, 102.	9.6	0
147	The guards themselves. Genome Biology, 2002, 3, comment1015.1.	9.6	0
148	An Asilomar moment. Genome Biology, 2002, 3, comment1014.1.	9.6	2
149	Fish tale. Genome Biology, 2002, 3, comment1012.1.	9.6	0
150	No place like Ome. Genome Biology, 2002, 3, comment1010.1.	9.6	1
151	Our own petards. Genome Biology, 2002, 3, comment1009.1.	9.6	0
152	Grain of truth. Genome Biology, 2002, 3, comment1007.1.	9.6	1
153	What's in a name?. Genome Biology, 2002, 3, comment1005.1.	9.6	8
154	The father of us all. Genome Biology, 2002, 3, comment1004.1.	9.6	6
155	A christmas carol. Genome Biology, 2002, 3, COMMENT1001.	8.8	0
156	Inhibition of the Aminopeptidase fromAeromonas proteolyticabyl-Leucinephosphonic Acid. Spectroscopic and Crystallographic Characterization of the Transition State of Peptide Hydrolysisâ€. Biochemistry, 2001, 40, 7035-7046.	2.5	76
157	Design by necessity. Nature, 2000, 403, 606-607.	27.8	21
158	A Gordon Conference Survival Guide. Science, 2000, 288, 1589-1589.	12.6	0
159	David Phillips (1924â€”99). Nature, 1999, 399, 26-26.	27.8	0
160	Tunnel vision. Nature, 1999, 399, 417-418.	27.8	22
161	Structure of a Michaelis Complex Analogue:Â Propionate Binds in the Substrate Carboxylate Site of Alanine Racemaseâ€,â€¡. Biochemistry, 1999, 38, 3293-3301.	2.5	73
162	Inactivation and destruction of conserved Trp159 of Fe-superoxide dismutase from Porphyromonas gingivalis by hydrogen peroxide. FEBS Journal, 1998, 253, 49-56.	0.2	34

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163	Crystal structure of Saccharomyces cerevisiae cytosolic aspartate aminotransferase. Protein Science, 1998, 7, 1380-1387.	7.6	33
164	A comparison between molecular dynamics and X-ray results for dissociated CO in myoglobin. Nature Structural Biology, 1997, 4, 202-208.	9.7	72
165	Crystal structures of HINT demonstrate that histidine triad proteins are GalT-related nucleotide-binding proteins. Nature Structural Biology, 1997, 4, 231-238.	9.7	124
166	The Structural Basis for Pseudoreversion of the H95N Lesion by the Secondary S96P Mutation in Triosephosphate Isomeraseâ€,â€¡. Biochemistry, 1996, 35, 15474-15484.	2.5	15
167	Not just your average structures. Nature Structural Biology, 1996, 3, 565-566.	9.7	24
168	Heavy metal revival. Nature, 1995, 377, 580-581.	27.8	8
169	Purification and crystallization of benzoylformate decarboxylase. Protein Science, 1995, 4, 955-959.	7.6	18
170	Analogous inhibitors of elastase do not always bind analogously. Nature Structural and Molecular Biology, 1994, 1, 55-58.	8.2	88
171	Fishing in Src-infested waters. Nature, 1992, 358, 625-626.	27.8	7
172	Crystalline ribonuclease A loses function below the dynamical transition at 220 K. Nature, 1992, 357, 423-424.	27.8	572
173	DÃ©jÃ¡ vu all over again. Nature, 1991, 352, 104-105.	27.8	24
174	Molecular metamorphosis. Nature, 1991, 354, 22-23.	27.8	3
175	A transport problem?. Nature, 1990, 346, 312-313.	27.8	47
176	Molecular dynamics simulations in biology. Nature, 1990, 347, 631-639.	27.8	946
177	The structure of iron superoxide dismutase from Pseudomonas ovalis complexed with the inhibitor azide. Protein Engineering, Design and Selection, 1990, 4, 113-119.	2.1	25
178	Brain-wide analysis of the supraspinal connectome reveals anatomical correlates to functional recovery after spinal injury. ELife, 0, 11, .	6.0	10