Philip A Gottlieb

List of Publications by Year
in descending order

70 papers	4,771 citations	117625 34 h-index	98798 67 g-index
70 all docs	70 docs citations	70 times ranked	4199 citing authors

#	Article	IF	Citations
1	Disruption of membrane cholesterol organization impairs the activity of PIEZO1 channel clusters. Journal of General Physiology, 2020, 152, .	1.9	98
2	Shear stress induced nuclear shrinkage through activation of Piezo1 channels in epithelial cells. Journal of Cell Science, 2019, 132, .	2.0	32
3	Amphipathic molecules modulate PIEZO1 activity. Biochemical Society Transactions, 2019, 47, 1833-1842.	3.4	26
4	Functional analyses of heteromeric human PIEZO1 Channels. PLoS ONE, 2018, 13, e0207309.	2.5	5
5	Enantiomeric Aî² peptides inhibit the fluid shear stress response of PIEZO1. Scientific Reports, 2018, 8, 14267.	3.3	52
6	Increased Red Cell KCNN4 Activity in Sporadic Hereditary Xerocytosis Associated With Enhanced Single Channel Pressure Sensitivity of PIEZO1ÂMutant V598M. HemaSphere, 2018, 2, e55.	2.7	10
7	Mechanosensitive ion channel Piezo2 is inhibited by D-GsMTx4. Channels, 2017, 11, 245-253.	2.8	55
8	Mechanosensitive ion channel Piezo2 is important for enterochromaffin cell response to mechanical forces. Journal of Physiology, 2017, 595, 79-91.	2.9	121
9	Human PIEZO1 Ion Channel Functions as a Split Protein. PLoS ONE, 2016, 11, e0151289.	2.5	12
10	Removal of the mechanoprotective influence of the cytoskeleton reveals PIEZO1 is gated by bilayer tension. Nature Communications, 2016, 7, 10366.	12.8	391
11	Ionic Selectivity and Permeation Properties of Human PIEZO1 Channels. PLoS ONE, 2015, 10, e0125503.	2.5	125
12	Protonation of the Human PIEZO1 Ion Channel Stabilizes Inactivation. Journal of Biological Chemistry, 2015, 290, 5167-5173.	3.4	52
13	Hereditary xerocytosis revisited. American Journal of Hematology, 2014, 89, 1142-1146.	4.1	47
14	Small Quantum Dots Conjugated to Nanobodies as Immunofluorescence Probes for Nanometric Microscopy. Bioconjugate Chemistry, 2014, 25, 2205-2211.	3.6	29
15	Human PIEZO1: Removing Inactivation. Biophysical Journal, 2013, 105, 880-886.	0.5	64
16	Mechanosensitive TRPC1 Channels Promote Calpain Proteolysis of Talin to Regulate Spinal Axon Outgrowth. Journal of Neuroscience, 2013, 33, 273-285.	3.6	120
17	Xerocytosis is caused by mutations that alter the kinetics of the mechanosensitive channel PIEZO1. Proceedings of the National Academy of Sciences of the United States of America, 2013, 110, E1162-8.	7.1	261
18	Gating the mechanical channel Piezo1. Channels, 2012, 6, 282-289.	2.8	168

#	Article	IF	Citations
19	Piezo1. Channels, 2012, 6, 214-219.	2.8	103
20	The sensation of stretch. Nature, 2012, 483, 163-164.	27.8	15
21	The Mechanosensitive Ion Channel Piezo1 Is Inhibited by the Peptide GsMTx4. Biochemistry, 2011, 50, 6295-6300.	2.5	376
22	A mechanosensitive ion channel regulating cell volume. American Journal of Physiology - Cell Physiology, 2010, 298, C1424-C1430.	4.6	52
23	Effects of GsMTx4 on Bacterial Mechanosensitive Channels in Inside-Out Patches from Giant Spheroplasts. Biophysical Journal, 2010, 99, 2870-2878.	0.5	39
24	Neurite outgrowth from PC12 cells is enhanced by an inhibitor of mechanical channels. Neuroscience Letters, 2010, 481, 115-119.	2.1	51
25	Hypoxia Activates a Ca2+-Permeable Cation Conductance Sensitive to Carbon Monoxide and to GsMTx-4 in Human and Mouse Sickle Erythrocytes. PLoS ONE, 2010, 5, e8732.	2.5	50
26	Concentration dependent effect of GsMTx4 on mechanosensitive channels of small conductance in E. coli spheroplasts. European Biophysics Journal, 2009, 38, 415-425.	2.2	26
27	Revisiting TRPC1 and TRPC6 mechanosensitivity. Pflugers Archiv European Journal of Physiology, 2008, 455, 1097-1103.	2.8	229
28	The slow force response to stretch in atrial and ventricular myocardium from human heart: Functional relevance and subcellular mechanisms. Progress in Biophysics and Molecular Biology, 2008, 97, 250-267.	2.9	60
29	Angiotensin II and myosin light-chain phosphorylation contribute to the stretch-induced slow force response in human atrial myocardium. Cardiovascular Research, 2008, 79, 642-651.	3.8	22
30	Properties and Mechanism of the Mechanosensitive Ion Channel Inhibitor GsMTx4, a Therapeutic Peptide Derived from Tarantula Venom. Current Topics in Membranes, 2007, 59, 81-109.	0.9	22
31	Surface functionalization of a microfluidic biosensor for bacteria detection and identification. , 2007, , .		2
32	Mechanosensitive ion channels and the peptide inhibitor GsMTx-4: History, properties, mechanisms and pharmacology. Toxicon, 2007, 49, 249-270.	1.6	161
33	Is Lipid Bilayer Binding a Common Property of Inhibitor Cysteine Knot Ion-Channel Blockers?. Biophysical Journal, 2007, 93, L20-L22.	0.5	46
34	Quenching-enhanced fluorescence titration protocol for accurate determination of free energy of membrane binding. Analytical Biochemistry, 2007, 362, 290-292.	2.4	12
35	On-chip microfluidic biosensor for bacterial detection and identification. Sensors and Actuators B: Chemical, 2007, 126, 508-514.	7.8	155
36	Ca2+ Influx through Mechanosensitive Channels Inhibits Neurite Outgrowth in Opposition to Other Influx Pathways and Release from Intracellular Stores. Journal of Neuroscience, 2006, 26, 5656-5664.	3.6	126

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37	Effects of stretchâ€activated channel blockers on [Ca²⁺]_i and muscle damage in the <i>mdx</i> mouse. Journal of Physiology, 2005, 562, 367-380.	2.9	245
38	Volume Cytometry:Â Microfluidic Sensor for High-Throughput Screening in Real Time. Analytical Chemistry, 2005, 77, 1290-1294.	6.5	43
39	Bilayer-dependent inhibition of mechanosensitive channels by neuroactive peptide enantiomers. Nature, 2004, 430, 235-240.	27.8	271
40	Mechanosensitive Ion Channels as Drug Targets. CNS and Neurological Disorders, 2004, 3, 287-295.	4.3	40
41	cDNA sequence and in vitro folding of GsMTx4, a specific peptide inhibitor of mechanosensitive channels. Toxicon, 2003, 42, 263-274.	1.6	74
42	Binding of the Priming Nucleotide in the Initiation of Transcription by T7 RNA Polymerase. Journal of Biological Chemistry, 2003, 278, 2819-2823.	3.4	43
43	Solution Structure of Peptide Toxins That Block Mechanosensitive Ion Channels. Journal of Biological Chemistry, 2002, 277, 34443-34450.	3.4	88
44	Using Nucleotide Analogs to Probe Protein-RNA Interactions. Methods, 2001, 23, 255-263.	3.8	2
45	The mechanism of RNA binding to TRAP: Initiation and cooperative interactions. Rna, 2001, 7, 85-93.	3.5	28
46	Probing the TRAPâ€"RNA interaction with nucleoside analogs. Rna, 1999, 5, 1277-1289.	3.5	31
47	RNA Structure Inhibits the TRAP (rp RNA-binding AttenuationProtein)-RNA Interaction. Journal of Biological Chemistry, 1998, 273, 27146-27153.	3.4	21
48	Single substitutions of phosphorothioates in the HDV ribozyme G73 define regions necessary for optimal self-cleaving activity. Nucleic Acids Research, 1997, 25, 5119-5124.	14.5	10
49	Identification of a Tus Protein Segment That Photo-Cross-Links withTerBDNA and Elucidation of the Role of Certain Thymine Methyl Groups in the Tusâˆ'TerBComplex Using Halogenated Uracil Analogues. Biochemistry, 1996, 35, 15391-15396.	2.5	5
50	Using Modified Nucleotides to Map the DNA Determinants of the Tus-TerB Complex, the Protein-DNA Interaction Associated with Termination of Replication in Escherichia coli. Journal of Biological Chemistry, 1995, 270, 28049-28054.	3.4	13
51	Modified nucleotides reveal the indirect role of the central base pairs in stabilizing thelacrepressor-operator complex. Nucleic Acids Research, 1995, 23, 1502-1511.	14.5	12
52	CD and DNA binding studies of a proline repeat-containing segment of the replication arrest protein Tus. Nucleic Acids Research, 1994, 22, 5024-5030.	14.5	10
53	Evidence that total substitution of adenine with 7-deazaadenine in the HDV antigenomic ribozyme changes the kinetics of RNA folding. Bioorganic and Medicinal Chemistry Letters, 1994, 4, 987-994.	2.2	4
54	Loading Dyes Used in Gel Electrophoresis Alter the Apparent Thermodynamic Equilibrium of the lac Repressor-Operator Complex. Analytical Biochemistry, 1993, 214, 580-582.	2.4	7

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55	Thermodynamic and alkylation interference analysis of the lac repressor-operator substituted with the analog 7-deazaguanine. Biochemistry, 1993, 32, 11374-11384.	2.5	17
56	A sequence element necessary for self-cleavage of the antigenomic hepatitis delta RNA in 20 M formamide. Biochemistry, 1992, 31, 9629-9635.	2.5	22
57	The Tuftsin Receptors. , 1986, , 243-280.		6
58	Binding studies of SV40 T-antigen to SV40 binding site II. Nucleic Acids Research, 1985, 13, 6621-6634.	14.5	16
59	Receptor-mediated endocytosis of tuftsin by macrophage cells. Biochemical and Biophysical Research Communications, 1984, 119, 203-211.	2.1	18
60	Peptide fragments from the tuftsin containing domain of immunoglobulin G synthesis and biological activity. Biochemical and Biophysical Research Communications, 1983, 115, 193-200.	2.1	9
61	Synthetic Pathways to Tuftsin and Radioimmunoassay. Annals of the New York Academy of Sciences, 1983, 419, 12-22.	3.8	6
62	Tuftsin Receptors. Annals of the New York Academy of Sciences, 1983, 419, 93-106.	3.8	19
63	Tuftsin Binding to Various Macrophage Hybridomas. Annals of the New York Academy of Sciences, 1983, 419, 107-113.	3.8	4
64	Tuftsin Analogs for Probing Its Specific Receptor Site on Phagocytic Cells. FEBS Journal, 1982, 125, 631-638.	0.2	18
65	Substrate-mediated channeling of a chemical reagent to the active site of cAMP-dependent protein kinase. FEBS Letters, 1981, 130, 127-132.	2.8	6
66	Tuftsin, Thr-Lys-Pro-Arg. Molecular and Cellular Biochemistry, 1981, 41, 73-97.	3.1	78
67	Tuftsin, Thr-Lys-Pro-Arg. , 1981, , 73-97.		14
68	The phagocytosis stimulating peptide tuftsin: Further look into structure-function relationships. Molecular and Cellular Biochemistry, 1980, 30, 165-70.	3.1	14
69	Enhancement of phagocytosis â€" A newly found activity of Substance P residing in its N-terminal tetrapeptide sequence. Biochemical and Biophysical Research Communications, 1980, 94, 1445-1451.	2.1	303
70	Specific binding sites for the phagocytosis stimulating peptide tuftsin on human polymorphonuclear leukocytes and monocytes. Biochemical and Biophysical Research Communications, 1978, 83, 599-606.	2.1	59