Timothy A Gilbertson

List of Publications by Year in Descending Order

58 papers	2,944 citations	29 h-index	54 g-index
62 ext. papers	3,162 ext. citations	5.9 avg, IF	5.01 L-index

#	Paper	IF	Citations
58	Sex differences in fat taste responsiveness are modulated by estradiol. *American Journal of Physiology - Endocrinology and Metabolism*, **2021**, 320, E566-E580	6	3
57	Ghrelin Receptors Enhance Fat Taste Responsiveness in Female Mice. *Nutrients*, **2021**, 13,	6.7	2
56	GPR84 Is Essential for the Taste of Medium Chain Saturated Fatty Acids. *Journal of Neuroscience*, **2021**, 41, 5219-5228	6.6	1
55	Do polyunsaturated fatty acids protect against bone loss in our aging and osteoporotic population?. *Bone*, **2021**, 143, 115736	4.7	8
54	Spatiotemporal dynamic monitoring of fatty acid-receptor interaction on single living cells by multiplexed Raman imaging. *Proceedings of the National Academy of Sciences of the United States of America*, **2020**, 117, 3518-3527	11.5	9
53	Use of Surface-Enhanced Raman Scattering (SERS) Probes to Detect Fatty Acid Receptor Activity in a Microfluidic Device. *Sensors*, **2019**, 19,	3.8	13
52	SERS-fluorescence bimodal nanoprobes for in vitro imaging of fatty acid responsive receptor GPR120. *Analytical Methods*, **2018**, 10, 22-29	3.2	10
51	Animal models of obesity and type 2 diabetes **2015**, 519-528		
50	High-Fat Diet Alters the Orosensory Sensitivity to Fatty Acids in Obesity-Resistant but not Obesity-Prone Rats. *Journal of Molecular and Genetic Medicine: an International Journal of Biomedical Research*, **2015**, 9,	2.5	3
49	Cell signaling mechanisms of oro-gustatory detection of dietary fat: advances and challenges. *Progress in Lipid Research*, **2014**, 53, 82-92	14.3	67
48	Sensing biophysical alterations of human lung epithelial cells (A549) in the context of toxicity effects of diesel exhaust particles. *Cell Biochemistry and Biophysics*, **2013**, 67, 1147-56	3.2	3
47	Investigation of free fatty acid associated recombinant membrane receptor protein expression in HEK293 cells using Raman spectroscopy, calcium imaging, and atomic force microscopy. *Analytical Chemistry*, **2013**, 85, 1374-81	7.8	11
46	Subcellular spectroscopic markers, topography and nanomechanics of human lung cancer and breast cancer cells examined by combined confocal Raman microspectroscopy and atomic force microscopy. *Analyst, The*, **2013**, 138, 787-97	5	30
45	Activation of oral trigeminal neurons by fatty acids is dependent upon intracellular calcium. *Pflugers Archiv European Journal of Physiology*, **2012**, 464, 227-37	4.6	17
44	TRPM5 is critical for linoleic acid-induced CCK secretion from the enteroendocrine cell line, STC-1. *American Journal of Physiology - Cell Physiology*, **2012**, 302, C210-9	5.4	50
43	Targeted biodegradable nanoparticles for drug delivery to smooth muscle cells. *Journal of Nanoscience and Nanotechnology*, **2012**, 12, 236-44	1.3	9
42	Biophysical assessment of single cell cytotoxicity: diesel exhaust particle-treated human aortic endothelial cells. *PLoS ONE*, **2012**, 7, e36885	3.7	13

41	Effects of poly-(lactide-co-glycolide) nanoparticles on electrophysiological properties of enteroendocrine cells. *Journal of Nanoscience and Nanotechnology*, **2011**, 11, 3533-42	1.3	11
40	Transient receptor potential channel type M5 is essential for fat taste. *Journal of Neuroscience*, **2011**, 31, 8634-42	6.6	80
39	Glucose transporters and ATP-gated K+ (KATP) metabolic sensors are present in type 1 taste receptor 3 (T1r3)-expressing taste cells. *Proceedings of the National Academy of Sciences of the United States of America*, **2011**, 108, 5431-6	11.5	150
38	Insulin activates epithelial sodium channel (ENaC) via phosphoinositide 3-kinase in mammalian taste receptor cells. *American Journal of Physiology - Cell Physiology*, **2011**, 300, C860-71	5.4	34
37	Gustatory Mechanisms for Fat Detection. *Frontiers in Neuroscience*, **2009**, 83-104		1
36	Orosensory detection of fatty acids by obesity-prone and obesity-resistant rats: strain and sex differences. *Chemical Senses*, **2008**, 33, 449-60	4.8	35
35	Expression of aquaporin water channels in rat taste buds. *Chemical Senses*, **2007**, 32, 411-21	4.8	27
34	Water taste: the importance of osmotic sensing in the oral cavity. *Journal of Water and Health*, **2006**, 4, 35-40	2.2	14
33	Water taste: the importance of osmotic sensing in the oral cavity. *Journal of Water and Health*, **2006**, 4 Suppl 1, 35-40	2.2	9
32	Fatty acid responses in taste cells from obesity-prone and -resistant rats. *Physiology and Behavior*, **2005**, 86, 681-90	3.5	101
31	Validation of a rat behavioral avoidance model from a drug delivery perspective. *International Journal of Pharmaceutics*, **2005**, 303, 31-6	6.5	13
30	Expression and characterization of delayed rectifying K+ channels in anterior rat taste buds. *American Journal of Physiology - Cell Physiology*, **2005**, 289, C868-80	5.4	49
29	Taste receptor cells express pH-sensitive leak K+ channels. *Journal of Neurophysiology*, **2004**, 92, 2909-19	3.2	90
28	Taste transduction: appetizing times in gustation. *NeuroReport*, **2003**, 14, 905-911	1.7	34
27	Taste transduction: appetizing times in gustation. *NeuroReport*, **2003**, 14, 905-11	1.7	50
26	Hypoosmotic stimuli activate a chloride conductance in rat taste cells. *Chemical Senses*, **2002**, 27, 383-94	4.8	25
25	Chemoreception of Fat. *ACS Symposium Series*, **2002**, 180-191	0.4	2
24	Distribution of gustatory sensitivities in rat taste cells: whole-cell responses to apical chemical stimulation. *Journal of Neuroscience*, **2001**, 21, 4931-41	6.6	117

23	The molecular physiology of taste transduction. *Current Opinion in Neurobiology*, **2000**, 10, 519-27	7.6	210
22	The effects of restraint stress on intake of preferred and nonpreferred solutions in rodents. *Physiology and Behavior*, **1999**, 65, 697-704	3.5	11
21	Cellular mechanisms of taste transduction. *Annual Review of Physiology*, **1999**, 61, 873-900	23.1	178
20	From channels to behavior: an integrative model of NaCl taste. *Neuron*, **1999**, 22, 213-5	13.9	35
19	Chapter 18 Amiloride-Sensitive Sodium Channels in Taste. *Current Topics in Membranes*, **1999**, 47, 315-336	2.2	10
18	Dietary fat preferences are inversely correlated with peripheral gustatory fatty acid sensitivity. *Annals of the New York Academy of Sciences*, **1998**, 855, 165-8	6.5	107
17	Role of the taste system in ingestive behavior. Studies in NaCl and fatty acid transduction. *Annals of the New York Academy of Sciences*, **1998**, 855, 860-7	6.5	14
16	Gustatory mechanisms for the detection of fat. *Current Opinion in Neurobiology*, **1998**, 8, 447-52	7.6	127
15	Distribution of amiloride-sensitive sodium channels in the oral cavity of the hamster. *Chemical Senses*, **1998**, 23, 495-9	4.8	25
14	Characterization of sodium transport in gustatory epithelia from the hamster and rat. *Chemical Senses*, **1998**, 23, 283-93	4.8	30
13	Self-inhibition in amiloride-sensitive sodium channels in taste receptor cells. *Journal of General Physiology*, **1998**, 111, 667-77	3.4	36
12	Citrate ions enhance behavioral and cellular responses to taste stimuli. *Physiology and Behavior*, **1997**, 62, 491-500	3.5	15
11	Fatty acid modulation of K+ channels in taste receptor cells: gustatory cues for dietary fat. *American Journal of Physiology - Cell Physiology*, **1997**, 272, C1203-10	5.4	245
10	Distribution and characterization of functional amiloride-sensitive sodium channels in rat tongue. *Journal of General Physiology*, **1996**, 107, 545-54	3.4	121
9	Making sense of chemicals. *Chemistry and Biology*, **1996**, 3, 233-7		27
8	Amiloride reduces the aversiveness of acids in preference tests. *Physiology and Behavior*, **1994**, 56, 649-54	3.5	35
7	Proton currents through amiloride-sensitive Na+ channels in isolated hamster taste cells: enhancement by vasopressin and cAMP. *Neuron*, **1993**, 10, 931-42	13.9	140
6	The physiology of vertebrate taste reception. *Current Opinion in Neurobiology*, **1993**, 3, 532-9	7.6	43

5	Proton currents through amiloride-sensitive Na channels in hamster taste cells. Role in acid transduction. *Journal of General Physiology*, **1992**, 100, 803-24	3.4	152
4	Permeation of calcium ions through non-NMDA glutamate channels in retinal bipolar cells. *Science*, **1991**, 251, 1613-5	33.3	191
3	The effects of glycine and GABA on isolated horizontal cells from the salamander retina. *Journal of Neurophysiology*, **1991**, 66, 2002-13	3.2	29
2	IgM rheumatoid factor autoantibody and immunoglobulin-producing precursor cells in the bone marrow of humans. *Cellular Immunology*, **1985**, 95, 157-72	4.4	18
1	Anti-hypervariable region antibody induced by a defined peptide: an approach for studying the structural correlates of idiotypes. *Proceedings of the National Academy of Sciences of the United States of America*, **1984**, 81, 1784-8	11.5	49