Steven S An

List of Publications by Year in Descending Order

81 papers	4,090 citations	34 h-index	63 g-index
104 ext. papers	4,907 ext. citations	9.1 avg, IF	5.01 L-index

#	Paper	IF	Citations
81	Degradation of Premature-miR-181b by the Translin/Trax RNase Increases Vascular Smooth Muscle Cell Stiffness. *Hypertension*, **2021**, 78, 831-839	8.5	1
80	Identification and characterization of an atypical G-biased AR agonist that fails to evoke airway smooth muscle cell tachyphylaxis. *Proceedings of the National Academy of Sciences of the United States of America*, **2021**, 118,	11.5	4
79	Inhibition of ABCC1 Decreases cAMP Egress and Promotes Human Airway Smooth Muscle Cell Relaxation. *American Journal of Respiratory Cell and Molecular Biology*, **2021**,	5.7	1
78	PGC1/PPAR drive cardiomyocyte maturation at single cell level via YAP1 and SF3B2. *Nature Communications*, **2021**, 12, 1648	17.4	13
77	Mechanical stress determines the configuration of TGFactivation in articular cartilage. *Nature Communications*, **2021**, 12, 1706	17.4	18
76	Role of Isocitrate Dehydrogenase 2 on DNA Hydroxymethylation in Human Airway Smooth Muscle Cells. *American Journal of Respiratory Cell and Molecular Biology*, **2020**, 63, 36-45	5.7	5
75	FFAR1 activation attenuates histamine-induced myosin light chain phosphorylation and cortical tension development in human airway smooth muscle cells. *Respiratory Research*, **2020**, 21, 317	7.3	3
74	Identification and Characterization of Novel Bronchodilator Agonists Acting at Human Airway Smooth Muscle Cell TAS2R5. *ACS Pharmacology and Translational Science*, **2020**, 3, 1069-1075	5.9	1
73	The odorant receptor OR2W3 on airway smooth muscle evokes bronchodilation via a cooperative chemosensory tradeoff between TMEM16A and CFTR. *Proceedings of the National Academy of Sciences of the United States of America*, **2020**, 117, 28485-28495	11.5	4
72	Cystic fibrosis transmembrane conductance regulator function, not TAS2R38 gene haplotypes, predict sinus surgery in children and young adults with cystic fibrosis. *International Forum of Allergy and Rhinology*, **2020**, 10, 748-754	6.3	0
71	YAP and TAZ regulate cell volume. *Journal of Cell Biology*, **2019**, 218, 3472-3488	7.3	16
70	Asporin Restricts Mesenchymal Stromal Cell Differentiation, Alters the Tumor Microenvironment, and Drives Metastatic Progression. *Cancer Research*, **2019**, 79, 3636-3650	10.1	27
69	Lysyl oxidase-like 2 depletion is protective in age-associated vascular stiffening. *American Journal of Physiology - Heart and Circulatory Physiology*, **2019**, 317, H49-H59	5.2	14
68	A nonapoptotic endothelial barrier-protective role for caspase-3. *American Journal of Physiology - Lung Cellular and Molecular Physiology*, **2019**, 316, L1118-L1126	5.8	13
67	A microphysiological model of the bronchial airways reveals the interplay of mechanical and biochemical signals in bronchospasm. *Nature Biomedical Engineering*, **2019**, 3, 532-544	19	17
66	Transforming Growth Factor-1 Decreases Agonist-induced Relaxation in Human Airway Smooth Muscle. *American Journal of Respiratory Cell and Molecular Biology*, **2019**, 61, 209-218	5.7	14
65	Deletion of the microRNA-degrading nuclease, translin/trax, prevents pathogenic vascular stiffness. *American Journal of Physiology - Heart and Circulatory Physiology*, **2019**, 317, H1116-H1124	5.2	8

64	Desmin Phosphorylation Triggers Preamyloid Oligomers Formation and Myocyte Dysfunction in Acquired Heart Failure. *Circulation Research*, **2018**, 122, e75-e83	15.7	23
63	TGF reinforces arterial aging in the vascular smooth muscle cell through a long-range regulation of the cytoskeletal stiffness. *Scientific Reports*, **2018**, 8, 2668	4.9	22
62	Taste and smell GPCRs in the lung: Evidence for a previously unrecognized widespread chemosensory system. *Cellular Signalling*, **2018**, 41, 82-88	4.9	47
61	Biased signaling of the proton-sensing receptor OGR1 by benzodiazepines. *FASEB Journal*, **2018**, 32, 862-874	0.9	20
60	TGF- Evokes Human Airway Smooth Muscle Cell Shortening and Hyperresponsiveness via Smad3. *American Journal of Respiratory Cell and Molecular Biology*, **2018**, 58, 575-584	5.7	49
59	Opsin 3 and 4 mediate light-induced pulmonary vasorelaxation that is potentiated by G protein-coupled receptor kinase 2 inhibition. *American Journal of Physiology - Lung Cellular and Molecular Physiology*, **2018**, 314, L93-L106	5.8	25
58	Biomechanical interplay between anisotropic re-organization of cells and the surrounding matrix underlies transition to invasive cancer spread. *Scientific Reports*, **2018**, 8, 14210	4.9	10
57	Impaired Relaxation of Airway Smooth Muscle in Mice Lacking the Actin-Binding Protein Gelsolin. *American Journal of Respiratory Cell and Molecular Biology*, **2017**, 56, 628-636	5.7	14
56	Tissue Transglutaminase Modulates Vascular Stiffness and Function Through Crosslinking-Dependent and Crosslinking-Independent Functions. *Journal of the American Heart Association*, **2017**, 6,	6	38
55	Coupling of Airway Smooth Muscle Bitter Taste Receptors to Intracellular Signaling and Relaxation Is via G. *American Journal of Respiratory Cell and Molecular Biology*, **2017**, 56, 762-771	5.7	32
54	Role of differentially expressed microRNA-139-5p in the regulation of phenotypic internal anal sphincter smooth muscle tone. *Scientific Reports*, **2017**, 7, 1477	4.9	7
53	TWIST1-WDR5- Regulates Chromatin to Facilitate Prostate Cancer Metastasis. *Cancer Research*, **2017**, 77, 3181-3193	10.1	68
52	G facilitates shortening in human airway smooth muscle by modulating phosphoinositide 3-kinase-mediated activation in a RhoA-dependent manner. *British Journal of Pharmacology*, **2017**, 174, 4383-4395	8.6	19
51	AIM1 is an actin-binding protein that suppresses cell migration and micrometastatic dissemination. *Nature Communications*, **2017**, 8, 142	17.4	24
50	Cigarette smoke disrupts monolayer integrity by altering epithelial cell-cell adhesion and cortical tension. *American Journal of Physiology - Lung Cellular and Molecular Physiology*, **2017**, 313, L581-L591	5.8	36
49	Germline Variants in Asporin Vary by Race, Modulate the Tumor Microenvironment, and Are Differentially Associated with Metastatic Prostate Cancer. *Clinical Cancer Research*, **2016**, 22, 448-58	12.9	19
48	-Adrenergic Receptors Chaperone Trapped Bitter Taste Receptor 14 to the Cell Surface as a Heterodimer and Exert Unidirectional Desensitization of Taste Receptor Function. *Journal of Biological Chemistry*, **2016**, 291, 17616-28	5.4	16
47	Common polygenic variation and risk for childhood-onset schizophrenia. *Molecular Psychiatry*, **2016**, 21, 94-6	15.1	41

46	Directed migration of cancer cells guided by the graded texture of the underlying matrix. *Nature Materials*, **2016**, 15, 792-801	27	120
45	An inflammation-independent contraction mechanophenotype of airway smooth muscle in asthma. *Journal of Allergy and Clinical Immunology*, **2016**, 138, 294-297.e4	11.5	31
44	Interdicting Gq Activation in Airway Disease by Receptor-Dependent and Receptor-Independent Mechanisms. *Molecular Pharmacology*, **2016**, 89, 94-104	4.3	39
43	Defining an olfactory receptor function in airway smooth muscle cells. *Scientific Reports*, **2016**, 6, 38231	4.9	60
42	COX-2 dependent regulation of mechanotransduction in human breast cancer cells. *Cancer Biology and Therapy*, **2015**, 16, 430-7	4.6	17
41	Androgen-Regulated SPARCL1 in the Tumor Microenvironment Inhibits Metastatic Progression. *Cancer Research*, **2015**, 75, 4322-34	10.1	19
40	Glycolysis is the primary bioenergetic pathway for cell motility and cytoskeletal remodeling in human prostate and breast cancer cells. *Oncotarget*, **2015**, 6, 130-43	3.3	99
39	Structure-function studies of the bHLH phosphorylation domain of TWIST1 in prostate cancer cells. *Neoplasia*, **2015**, 17, 16-31	6.4	16
38	LAMC2 enhances the metastatic potential of lung adenocarcinoma. *Cell Death and Differentiation*, **2015**, 22, 1341-52	12.7	59
37	Pleiotropic Effects of Bitter Taste Receptors on [Ca2+]i Mobilization, Hyperpolarization, and Relaxation of Human Airway Smooth Muscle Cells. *PLoS ONE*, **2015**, 10, e0131582	3.7	34
36	Senescent stromal cells induce cancer cell migration via inhibition of RhoA/ROCK/myosin-based cell contractility. *Oncotarget*, **2015**, 6, 30516-31	3.3	20
35	Spatial control of adult stem cell fate using nanotopographic cues. *Biomaterials*, **2014**, 35, 2401-2410	15.6	100
34	Agonist-mediated relaxation of airway smooth muscle is protein kinase A-dependent. *Journal of Biological Chemistry*, **2014**, 289, 23065-23074	5.4	54
33	H2S relaxes isolated human airway smooth muscle cells via the sarcolemmal K(ATP) channel. *Biochemical and Biophysical Research Communications*, **2014**, 446, 393-8	3.4	37
32	Resveratrol prevents high fat/sucrose diet-induced central arterial wall inflammation and stiffening in nonhuman primates. *Cell Metabolism*, **2014**, 20, 183-90	24.6	163
31	Bitter taste receptor function in asthmatic and nonasthmatic human airway smooth muscle cells. *American Journal of Respiratory Cell and Molecular Biology*, **2014**, 50, 678-83	5.7	59
30	Targeted transgenesis identifies GS as the bottleneck in 2-adrenergic receptor cell signaling and physiological function in airway smooth muscle. *American Journal of Physiology - Lung Cellular and Molecular Physiology*, **2014**, 307, L775-80	5.8	6
29	The twist box domain is required for Twist1-induced prostate cancer metastasis. *Molecular Cancer Research*, **2013**, 11, 1387-400	6.6	48

28	Increased tissue transglutaminase activity contributes to central vascular stiffness in eNOS knockout mice. *American Journal of Physiology - Heart and Circulatory Physiology*, **2013**, 305, H803-10	5.2	54
27	Acquisition of paclitaxel resistance is associated with a more aggressive and invasive phenotype in prostate cancer. *Journal of Cellular Biochemistry*, **2013**, 114, 1286-93	4.7	49
26	The GPCR OGR1 (GPR68) mediates diverse signalling and contraction of airway smooth muscle in response to small reductions in extracellular pH. *British Journal of Pharmacology*, **2012**, 166, 981-90	8.6	75
25	TAS2R activation promotes airway smooth muscle relaxation despite β(2)-adrenergic receptor tachyphylaxis. *American Journal of Physiology - Lung Cellular and Molecular Physiology*, **2012**, 303, L304-11	5.8	68
24	Regulation of brain tumor dispersal by NKCC1 through a novel role in focal adhesion regulation. *PLoS Biology*, **2012**, 10, e1001320	9.7	105
23	Reply to: Activation of BK channels may not be required for bitter tastant-induced bronchodilation. *Nature Medicine*, **2012**, 18, 650-1	50.5	25
22	A novel small molecule target in human airway smooth muscle for potential treatment of obstructive lung diseases: a staged high-throughput biophysical screening. *Respiratory Research*, **2011**, 12, 8	7.3	21
21	Bronchodilator activity of bitter tastants in human tissue. *Nature Medicine*, **2011**, 17, 776-8	50.5	35
20	Bitter taste receptors on airway smooth muscle bronchodilate by localized calcium signaling and reverse obstruction. *Nature Medicine*, **2010**, 16, 1299-304	50.5	436
19	Human lung parenchyma but not proximal bronchi produces fibroblasts with enhanced TGF-beta signaling and alpha-SMA expression. *American Journal of Respiratory Cell and Molecular Biology*, **2010**, 43, 641-51	5.7	51
18	Cell stiffness, contractile stress and the role of extracellular matrix. *Biochemical and Biophysical Research Communications*, **2009**, 382, 697-703	3.4	44
17	Rottlerin causes pulmonary edema in vivo: a possible role for PKCdelta. *Journal of Applied Physiology*, **2007**, 103, 2084-94	3.7	25
16	Universal physical responses to stretch in the living cell. *Nature*, **2007**, 447, 592-5	50.4	537
15	Airway smooth muscle dynamics: a common pathway of airway obstruction in asthma. *European Respiratory Journal*, **2007**, 29, 834-60	13.6	299
14	Cytoskeleton dynamics: fluctuations within the network. *Biochemical and Biophysical Research Communications*, **2007**, 355, 324-30	3.4	81
13	Biophysical basis for airway hyperresponsiveness. *Canadian Journal of Physiology and Pharmacology* , **2007**, 85, 700-14	2.4	21
12	Airway smooth muscle proliferation and mechanics: effects of AMP kinase agonists. *MCB Molecular and Cellular Biomechanics*, **2007**, 4, 143-57	1.2	12
11	Do biophysical properties of the airway smooth muscle in culture predict airway hyperresponsiveness?. *American Journal of Respiratory Cell and Molecular Biology*, **2006**, 35, 55-64	5.7	103

10	Rat airway smooth muscle cell during actin modulation: rheology and glassy dynamics. *American Journal of Physiology - Cell Physiology*, **2005**, 289, C1388-95	5.4	66
9	Hypoxia alters biophysical properties of endothelial cells via p38 MAPK- and Rho kinase-dependent pathways. *American Journal of Physiology - Cell Physiology*, **2005**, 289, C521-30	5.4	59
8	Role of heat shock protein 27 in cytoskeletal remodeling of the airway smooth muscle cell. *Journal of Applied Physiology*, **2004**, 96, 1701-13	3.7	78
7	Stiffness changes in cultured airway smooth muscle cells. *American Journal of Physiology - Cell Physiology*, **2002**, 283, C792-801	5.4	137
6	Mechanical signals and mechanosensitive modulation of intracellular [Ca(2+)] in smooth muscle. *American Journal of Physiology - Cell Physiology*, **2000**, 279, C1375-84	5.4	22
5	Mechanical strain modulates maximal phosphatidylinositol turnover in airway smooth muscle. *American Journal of Physiology - Lung Cellular and Molecular Physiology*, **1999**, 277, L968-74	5.8	10
4	Biophysical Basis of Airway Smooth Muscle Contraction and Hyperresponsiveness in Asthma1-30		
3	PGC1/PPAR Drive Cardiomyocyte Maturation through Regulation of Yap1 and SF3B2		4
2	YAP/TAZ as a Novel Regulator of cell volume		1
1	Selective Signal Capture from Multidimensional GPCR Outputs with Biased Agonists: Progress Towards Novel Drug Development. *Molecular Diagnosis and Therapy*,	4.5	