Susan J Gunst

List of Publications by Year
in descending order

65 papers	3,269 citations	147726 31 h-index	149623 56 g-index
65 all docs	65 docs citations	65 times ranked	2254 citing authors

#	Article	IF	Citations
1	The proprotein convertase furin inhibits IL-13-induced inflammation in airway smooth muscle by regulating integrin-associated signaling complexes. American Journal of Physiology - Lung Cellular and Molecular Physiology, 2021, 321, L102-L115.	1.3	4
2	Promoting our early career members at AJP-Lung: The Editorial Board Fellowship Program and the Next Generation Physiologist Highlights section at our Journal. American Journal of Physiology - Lung Cellular and Molecular Physiology, 2021, 321, L844-L846.	1.3	1
3	S100A4 is activated by RhoA and catalyses the polymerization of nonâ€muscle myosin, adhesion complex assembly and contraction in airway smooth muscle. Journal of Physiology, 2020, 598, 4573-4590.	1.3	5
4	Phenotype transitions induced by mechanical stimuli in airway smooth muscle are regulated by differential interactions of parvin isoforms with paxillin and Akt. American Journal of Physiology - Lung Cellular and Molecular Physiology, 2020, 318, L1036-L1055.	1.3	6
5	S100A4 is secreted by airway smooth muscle tissues and activates inflammatory signaling pathways via receptors for advanced glycation end products. American Journal of Physiology - Lung Cellular and Molecular Physiology, 2020, 319, L185-L195.	1.3	15
6	Molecular Mechanisms for the Mechanical Modulation of Airway Responsiveness. Journal of Engineering and Science in Medical Diagnostics and Therapy, 2019, 2, .	0.3	6
7	Effect of CPAP on airway reactivity and airway inflammation in children with moderateâ€“severe asthma. Respirology, 2019, 24, 338-344.	1.3	3
8	Th17 cells contribute to pulmonary fibrosis and inflammation during chronic kidney disease progression after acute ischemia. American Journal of Physiology - Regulatory Integrative and Comparative Physiology, 2018, 314, R265-R273.	0.9	22
9	Elastase alters contractility and promotes an inflammatory synthetic phenotype in airway smooth muscle tissues. American Journal of Physiology - Lung Cellular and Molecular Physiology, 2018, 314, L626-L634.	1.3	15
10	Rho kinase collaborates with p21â€activated kinase to regulate actin polymerization and contraction in airway smooth muscle. Journal of Physiology, 2018, 596, 3617-3635.	1.3	35
11	Nonâ€muscle (NM) myosin heavy chain phosphorylation regulates the formation of NM myosin filaments, adhesome assembly and smooth muscle contraction. Journal of Physiology, 2017, 595, 4279-4300.	1.3	40
12	p21â€Activated kinase (Pak) regulates airway smooth muscle contraction by regulating paxillin complexes that mediate actin polymerization. Journal of Physiology, 2016, 594, 4879-4900.	1.3	30
13	Focal adhesion kinase (FAK) and mechanical stimulation negatively regulate the transition of airway smooth muscle tissues to a synthetic phenotype. American Journal of Physiology - Lung Cellular and Molecular Physiology, 2016, 311, L893-L902.	1.3	15
14	A novel role for RhoA GTPase in the regulation of airway smooth muscle contraction. Canadian Journal of Physiology and Pharmacology, 2015, 93, 129-136.	0.7	48
15	Vasodilator-stimulated Phosphoprotein (VASP) Regulates Actin Polymerization and Contraction in Airway Smooth Muscle by a Vinculin-dependent Mechanism. Journal of Biological Chemistry, 2015, 290, 11403-11416.	1.6	28
16	Vinculin Phosphorylation at Tyr1065 Regulates Vinculin Conformation and Tension Development in Airway Smooth Muscle Tissues. Journal of Biological Chemistry, 2014, 289, 3677-3688.	1.6	34
17	Role of Airway Smooth Muscle Mechanical Properties in the Regulation of Airway Caliber. , 2014, , 53-64.		1
18	Type V Collagenâ€“induced Tolerance Prevents Airway Hyperresponsiveness. American Journal of Respiratory and Critical Care Medicine, 2013, 187, 454-457.	2.5	5

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19	Use of continuous positive airway pressure reduces airway reactivity in adults with asthma. European Respiratory Journal, 2013, 41, 317-322.	3.1	61
20	Regulation of 130-kDa Smooth Muscle Myosin Light Chain Kinase Expression by an Intronic CArG Element. Journal of Biological Chemistry, 2013, 288, 34647-34657.	1.6	14
21	Conformational Changes in Vinculin Measured by Fluorescence Resonance Energy Transfer (FRET) during Airway Smooth Muscle (ASM) Contraction Depend on Vinculin Phosphorylation at Tyrosine 1065. FASEB Journal, 2013, 27, 923.11.	0.2	0
22	Altered calcium signaling in colonic smooth muscle of type 1 diabetic mice. American Journal of Physiology - Renal Physiology, 2012, 302, G66-G76.	1.6	27
23	Point:Counterpoint: Alterations in airway smooth muscle phenotype do/do not cause airway hyperresponsiveness in asthma. Journal of Applied Physiology, 2012, 113, 837-839.	1.2	9
24	Last Word on Point: Alterations in airway smooth muscle phenotype do cause airway hyperresponsiveness in asthma. Journal of Applied Physiology, 2012, 113, 847-847.	1.2	3
25	The Small GTPase RhoA Regulates the Contraction of Smooth Muscle Tissues by Catalyzing the Assembly of Cytoskeletal Signaling Complexes at Membrane Adhesion Sites. Journal of Biological Chemistry, 2012, 287, 33996-34008.	1.6	80
26	Airway Smooth Muscle and Asthma. , 2012, , 1359-1369.		1
27	Inhibition of p21 Activated Kinase (PAK) Reduces Airway Responsiveness In Vivo and In Vitro in Murine and Human Airways. PLoS ONE, 2012, 7, e42601.	1.1	17
28	Mechanical stimuli and IL-13 interact at integrin adhesion complexes to regulate expression of smooth muscle myosin heavy chain in airway smooth muscle tissue. American Journal of Physiology - Lung Cellular and Molecular Physiology, 2011, 301, L275-L284.	1.3	37
29	Activation of Vinculin Induced by Cholinergic Stimulation Regulates Contraction of Tracheal Smooth Muscle Tissue. Journal of Biological Chemistry, 2011, 286, 3630-3644.	1.6	48
30	Phosphorylation of Vasodilatorâ€Stimulated Phosphoprotein (VASP) Regulates Contractility of Airway Smooth Muscle (ASM) Tissues by Regulating Actin Dynamics. FASEB Journal, 2011, 25, 1115.1.	0.2	0
31	The effects of Type 1 diabetes on colon smooth muscle. FASEB Journal, 2011, 25, 1123.1.	0.2	0
32	The effects of the small GTPase RhoA on the muscarinic contraction of airway smooth muscle result from its role in regulating actin polymerization. American Journal of Physiology - Cell Physiology, 2010, 299, C298-C306.	2.1	37
33	Activation of Vinculin Induced by Cholinergic Stimulation Regulates Tension Development in Tracheal Smooth Muscle (TSM). FASEB Journal, 2009, 23, 781.10.	0.2	1
34	Integrin-linked kinase regulates smooth muscle differentiation marker gene expression in airway tissue. American Journal of Physiology - Lung Cellular and Molecular Physiology, 2008, 295, L988-L997.	1.3	31
35	Actin cytoskeletal dynamics in smooth muscle: a new paradigm for the regulation of smooth muscle contraction. American Journal of Physiology - Cell Physiology, 2008, 295, C576-C587.	2.1	305
36	Actin Depolymerization Factor/Cofilin Activation Regulates Actin Polymerization and Tension Development in Canine Tracheal Smooth Muscle. Journal of Biological Chemistry, 2008, 283, 36522-36531.	1.6	62

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37	Interactions of Airway Smooth Muscle Cells with Their Tissue Matrix: Implications for Contraction. Proceedings of the American Thoracic Society, 2008, 5, 32-39.	3.5	105
38	Cytoskeletal remodeling in differentiated vascular smooth muscle is actin isoform dependent and stimulus dependent. American Journal of Physiology - Cell Physiology, 2008, 295, C768-C778.	2.1	113
39	Integrin-linked Kinase Regulates N-WASp-mediated Actin Polymerization and Tension Development in Tracheal Smooth Muscle. Journal of Biological Chemistry, 2007, 282, 34568-34580.	1.6	51
40	Integrin Linked Kinase (ILK) modulates SmMHC expression in tracheal smooth muscle tissues by regulating the activity of Serum Response Factor (SRF). FASEB Journal, 2007, 21, A1339.	0.2	1
41	Dynamic association between Î±-actinin and Î²-integrin regulates contraction of canine tracheal smooth muscle. Journal of Physiology, 2006, 572, 659-676.	1.3	63
42	Silencing of p21-activated kinase attenuates vimentin phosphorylation on Ser-56 and reorientation of the vimentin network during stimulation of smooth muscle cells by 5-hydroxytryptamine. Biochemical Journal, 2005, 388, 773-783.	1.7	94
43	Does airway inflation stretch the bronchial mucosal membrane?. Journal of Applied Physiology, 2005, 99, 2059-2060.	1.2	4
44	Activation of the Arp2/3 complex by N-WASp is required for actin polymerization and contraction in smooth muscle. American Journal of Physiology - Cell Physiology, 2005, 288, C1145-C1160.	2.1	106
45	The Adapter Protein CrkII Regulates Neuronal Wiskott-Aldrich Syndrome Protein, Actin Polymerization, and Tension Development during Contractile Stimulation of Smooth Muscle. Journal of Biological Chemistry, 2005, 280, 23380-23389.	1.6	85
46	Tension development during contractile stimulation of smooth muscle requires recruitment of paxillin and vinculin to the membrane. American Journal of Physiology - Cell Physiology, 2004, 286, C433-C447.	2.1	119
47	The Small GTPase Cdc42 Regulates Actin Polymerization and Tension Development during Contractile Stimulation of Smooth Muscle. Journal of Biological Chemistry, 2004, 279, 51722-51728.	1.6	91
48	Actions by actin: reciprocal regulation of cortactin activity by tyrosine kinases and F-actin. Biochemical Journal, 2004, 380, e7-e8.	1.7	17
49	Expression of Nonâ€Phosphorylatable Paxillin Mutants in Canine Tracheal Smooth Muscle Inhibits Tension Development. Journal of Physiology, 2003, 553, 21-35.	1.3	59
50	Cytoskeletal remodeling of the airway smooth muscle cell: a mechanism for adaptation to mechanical forces in the lung. Respiratory Physiology and Neurobiology, 2003, 137, 151-168.	0.7	132
51	The first three minutes: smooth muscle contraction, cytoskeletal events, and soft glasses. Journal of Applied Physiology, 2003, 95, 413-425.	1.2	121
52	The focal adhesion protein paxillin regulates contraction in canine tracheal smooth muscle. Journal of Physiology, 2002, 542, 501-513.	1.3	57
53	Invited Review: Focal adhesion and small heat shock proteins in the regulation of actin remodeling and contractility in smooth muscle. Journal of Applied Physiology, 2001, 91, 963-972.	1.2	266
54	Depletion of focal adhesion kinase by antisense depresses contractile activation of smooth muscle. American Journal of Physiology - Cell Physiology, 2001, 280, C874-C883.	2.1	70

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55	Selected Contribution: Plasticity of airway smooth muscle stiffness and extensibility: role of length-adaptive mechanisms. Journal of Applied Physiology, 2001, 90, 741-749.	1.2	106
56	Selected Contribution: Roles of focal adhesion kinase and paxillin in the mechanosensitive regulation of myosin phosphorylation in smooth muscle. Journal of Applied Physiology, 2001, 91, 1452-1459.	1.2	48
57	Role of Rho in Ca²⁺-insensitive contraction and paxillin tyrosine phosphorylation in smooth muscle. American Journal of Physiology - Cell Physiology, 2000, 279, C308-C318.	2.1	36
58	Comparison of the shear modulus of mature and immature rabbit lungs. Journal of Applied Physiology, 1999, 87, 711-714.	1.2	21
59	Mechanosensitive tyrosine phosphorylation of paxillin and focal adhesion kinase in tracheal smooth muscle. American Journal of Physiology - Cell Physiology, 1999, 276, C250-C258.	2.1	140
60	Actin polymerization stimulated by contractile activation regulates force development in canine tracheal smooth muscle. Journal of Physiology, 1999, 519, 829-840.	1.3	217
61	Applicability of the sliding filament/crossbridge paradigm to smooth muscle. , 1999, 134, 7-61.		8
62	Relationship between paxillin and myosin phosphorylation during muscarinic stimulation of smooth muscle. American Journal of Physiology - Cell Physiology, 1998, 274, C741-C747.	2.1	26
63	Limitation of Maximal Bronchoconstriction in Living Dogs. The American Review of Respiratory Disease, 1992, 145, 553-560.	2.9	60
64	Halothane alters the response of isolated airway smooth muscle to carbon dioxide. Respiration Physiology, 1992, 87, 255-268.	2.8	5
65	Dynamics of Cytoskeletal and Contractile Protein Organization: An Emerging Paradigm for Airway Smooth Muscle Contraction. , 0, , 31-51.		2