Lu Wang

List of Publications by Year
in descending order

52 papers	1,474 citations	516215 16 h-index	315357 38 g-index
52 all docs	52 docs citations	52 times ranked	841 citing authors

#	Article	IF	Citations
1	Airway smooth muscle dynamics: a common pathway of airway obstruction in asthma. European Respiratory Journal, 2007, 29, 834-860.	3.1	344
2	Effects of length oscillation on the subsequent force development in swine tracheal smooth muscle. Journal of Applied Physiology, 2000, 88, 2246-2250.	1.2	144
3	Selected Contribution: Effect of chronic passive length change on airway smooth muscle length-tension relationship. Journal of Applied Physiology, 2001, 90, 734-740.	1.2	108
4	Myosin thick filament lability induced by mechanical strain in airway smooth muscle. Journal of Applied Physiology, 2001, 90, 1811-1816.	1.2	104
5	On the terminology for describing the length-force relationship and its changes in airway smooth muscle. Journal of Applied Physiology, 2004, 97, 2029-2034.	1.2	81
6	Structure-function correlation in airway smooth muscle adapted to different lengths. American Journal of Physiology - Cell Physiology, 2003, 285, C384-C390.	2.1	74
7	Airway narrowing and internal structural constraints. Journal of Applied Physiology, 2000, 88, 527-533.	1.2	54
8	Adaptation to chronic length change in explanted airway smooth muscle. Journal of Applied Physiology, 2003, 95, 448-453.	1.2	43
9	Deep inspiration and airway smooth muscle adaptation to length change. Respiratory Physiology and Neurobiology, 2003, 137, 169-178.	0.7	39
10	Force maintenance and myosin filament assembly regulated by Rho-kinase in airway smooth muscle. American Journal of Physiology - Lung Cellular and Molecular Physiology, 2015, 308, L1-L10.	1.3	39
11	Mechanical properties of the tracheal mucosal membrane in the rabbit. I. Steady-state stiffness as a function of age. Journal of Applied Physiology, 2000, 88, 1014-1021.	1.2	36
12	Mechanical Strain Inhibits Airway Smooth Muscle Gene Transcription via Protein Kinase C Signaling. American Journal of Respiratory Cell and Molecular Biology, 2004, 31, 54-61.	1.4	35
13	Length oscillation induces force potentiation in infant guinea pig airway smooth muscle. American Journal of Physiology - Lung Cellular and Molecular Physiology, 2005, 289, L909-L915.	1.3	31
14	Changes in force-velocity properties of trachealis due to oscillatory strains. Journal of Applied Physiology, 2002, 92, 1865-1872.	1.2	28
15	Myosin filaments in smooth muscle cells do not have a constant length. Journal of Physiology, 2013, 591, 5867-5878.	1.3	28
16	The Functional Consequences of Structural Changes in the Airways: Implications for Airway Hyperresponsiveness in Asthma. Chest, 2003, 123, 356S-a-362.	0.4	21
17	Ontogenesis of myosin light chain kinase mRNA and protein content in guinea pig tracheal smooth muscle. Pediatric Pulmonology, 2004, 38, 456-464.	1.0	16
18	Three paradigms of airway smooth muscle hyperresponsiveness in young guinea pigsThis article is one of a selection of papers published in the Special Issue on Recent Advances in Asthma Research.. Canadian Journal of Physiology and Pharmacology, 2007, 85, 715-726.	0.7	16

#	Article	IF	Citations
19	Upregulation of smooth muscle Rho-kinase protein expression in human asthma. European Respiratory Journal, 2020, 55, 1901785.	3.1	16
20	Mechanical properties of the tracheal mucosal membrane in the rabbit. II. Morphometric analysis. Journal of Applied Physiology, 2000, 88, 1022-1028.	1.2	15
21	The Huxley crossbridge model as the basic mechanism for airway smooth muscle contraction. American Journal of Physiology - Lung Cellular and Molecular Physiology, 2019, 317, L235-L246.	1.3	15
22	The Functional Consequences of Structural Changes in the Airways. Chest, 2003, 123, 356S-362S.	0.4	14
23	Rho-kinase mediated cytoskeletal stiffness in skinned smooth muscle. Journal of Applied Physiology, 2013, 115, 1540-1552.	1.2	14
24	Smooth muscle function and myosin polymerization. Journal of Cell Science, 2017, 130, 2468-2480.	1.2	13
25	Ontogenesis of myosin light chain phosphorylation in guinea pig tracheal smooth muscle. Pediatric Pulmonology, 2005, 39, 108-116.	1.0	12
26	Bronchodilatory effect of deep inspiration in freshly isolated sheep lungs. American Journal of Physiology - Lung Cellular and Molecular Physiology, 2017, 312, L178-L185.	1.3	12
27	Filament evanescence of myosin II and smooth muscle function. Journal of General Physiology, 2021, 153, .	0.9	12
28	Maturation of guinea pig tracheal strip stiffness. American Journal of Physiology - Lung Cellular and Molecular Physiology, 2005, 289, L902-L908.	1.3	11
29	Biphasic force response to iso-velocity stretch in airway smooth muscle. American Journal of Physiology - Lung Cellular and Molecular Physiology, 2015, 309, L653-L661.	1.3	10
30	Bronchial vasodilatory response to ionic and nonionic contrast media. Journal of Applied Physiology, 1997, 82, 841-845.	1.2	9
31	Airway smooth muscle relaxation is impaired in mice lacking the p47phoxsubunit of NAD(P)H oxidase. American Journal of Physiology - Lung Cellular and Molecular Physiology, 2008, 294, L139-L148.	1.3	8
32	Mechanopharmacology of Rho-kinase antagonism in airway smooth muscle and potential new therapy for asthma. Pharmacological Research, 2020, 159, 104995.	3.1	8
33	NO does not mediate inhibitory neural responses in sheep airway and bronchial vascular smooth muscle. Journal of Applied Physiology, 1998, 84, 809-814.	1.2	7
34	Reduced spontaneous relaxation in immature guinea pig airway smooth muscle is associated with increased prostanoid release. American Journal of Physiology - Lung Cellular and Molecular Physiology, 2008, 294, L964-L973.	1.3	7
35	p116^{Rip} promotes myosin phosphatase activity in airway smooth muscle cells. Journal of Cellular Physiology, 2020, 235, 114-127.	2.0	7
36	Lung resistance and elastance are different in ex vivo sheep lungs ventilated by positive and negative pressures. American Journal of Physiology - Lung Cellular and Molecular Physiology, 2022, 322, L673-L682.	1.3	7

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37	Airway diameter at different transpulmonary pressures in ex vivo sheep lungs: implications for deep inspiration-induced bronchodilation and bronchoprotection. American Journal of Physiology - Lung Cellular and Molecular Physiology, 2021, 321, L663-L674.	1.3	6
38	Fast Fourier transform analysis of dynamic data: sine wave stress - strain analysis of biological tissue. Physics in Medicine and Biology, 1997, 42, 537-547.	1.6	5
39	Mechanisms of airway smooth muscle relaxation during maturation. Canadian Journal of Physiology and Pharmacology, 2005, 83, 833-840.	0.7	5
40	Mucosal Folding and Airway Smooth Muscle Shortening. Chest, 1995, 107, 88S.	0.4	4
41	A Brief History of Airway Smooth Muscleâ€™s Role in Airway Hyperresponsiveness. Journal of Allergy, 2012, 2012, 1-8.	0.7	4
42	Mechanopharmacology and Synergistic Relaxation of Airway Smooth Muscle. Journal of Engineering and Science in Medical Diagnostics and Therapy, 2019, 2, 0110041-110047.	0.3	3
43	A maturational model for the study of airway smooth muscle adaptation to mechanical oscillation. Canadian Journal of Physiology and Pharmacology, 2005, 83, 817-824.	0.7	2
44	Ovalbumin sensitization of guinea pig at birth prevents the ontogenetic decrease in airway smooth muscle responsiveness. Physiological Reports, 2014, 2, e12241.	0.7	2
45	Mediators of human ureteral smooth muscle contractionâ€”a role for erythropoietin, tamsulosin and Gli effectors. Translational Andrology and Urology, 2021, 10, 2953-2961.	0.6	2
46	Airway and parenchymal tissue resistance and elastance in ex vivo sheep lungs: effects of bronchochallenge and deep inspiration. American Journal of Physiology - Lung Cellular and Molecular Physiology, 2022, 322, L882-L889.	1.3	2
47	The importance of complete tissue homogenization for accurate stoichiometric measurement of myosin light chain phosphorylation in airway smooth muscle. Canadian Journal of Physiology and Pharmacology, 2015, 93, 155-162.	0.7	1
48	A Guinea Pig Model of Early Stages of Asthma with Hyperresponsive Tracheal Smooth Muscle but No Airway Inflammation.. , 2009, , .		0
49	Effects Of IgE And IL-4 On Gene Expression In Proliferative And Contractile Human Airway Smooth Muscle Cells. , 2010, , .		0
50	CD4+ Cells In Guinea Pig Airways During Ontogenesis And After Neonatal Allergen Sensitization. , 2010, , .		0
51	Neonatal Allergen Sensitization Prevents The Ontogenetic Increase Of Vimentin And Tissue Stiffness In Guinea Pig Airways. , 2010, , .		0
52	Is Rho-Kinase Expression Up-Regulated in Asthmatic Airway Smooth Muscle?. , 2019, , .		0