Christopher M Waters

List of Publications by Year
in descending order

59 papers	2,701 citations	201674 27 h-index	206112 48 g-index
62 all docs	62 docs citations	62 times ranked	3868 citing authors

#	Article	IF	Citations
1	ASK1 Regulates Bleomycin-induced Pulmonary Fibrosis. American Journal of Respiratory Cell and Molecular Biology, 2022, 66, 484-496.	2.9	10
2	Simple, accurate calculation of mechanical power in pressure controlled ventilation (PCV). Intensive Care Medicine Experimental, 2022, 10, .	1.9	8
3	Quorum sensing provides a molecular mechanism for evolution to tune and maintain investment in cooperation. ISME Journal, 2021, 15, 1236-1247.	9.8	18
4	Au naturale: use of biologically derived cyclic di-nucleotides for cancer immunotherapy. Open Biology, 2021, 11, 210277.	3.6	2
5	K2P2.1 (TREK-1) potassium channel activation protects against hyperoxia-induced lung injury. Scientific Reports, 2020, 10, 22011.	3.3	16
6	Triclosan depletes the membrane potential in Pseudomonas aeruginosa biofilms inhibiting aminoglycoside induced adaptive resistance. PLoS Pathogens, 2020, 16, e1008529.	4.7	11
7	TREK-1 protects the heart against ischemia-reperfusion-induced injury and from adverse remodeling after myocardial infarction. Pflugers Archiv European Journal of Physiology, 2019, 471, 1263-1272.	2.8	13
8	Combating Cholera. F1000Research, 2019, 8, 589.	1.6	20
9	Dynamic airway constriction in rats: heterogeneity and response to deep inspiration. American Journal of Physiology - Lung Cellular and Molecular Physiology, 2019, 317, L39-L48.	2.9	7
10	Apoptosis signal-regulating kinase-1 promotes inflammasome priming in macrophages. American Journal of Physiology - Lung Cellular and Molecular Physiology, 2019, 316, L418-L427.	2.9	9
11	LPS PROMOTES ASCâ€SPECK FORMATION IN TREKâ€1â€DEFICIENT MACROPHAGES. FASEB Journal, 2019, 33, 549.7	0.75	0
12	Feedback regulation of Caulobacter crescentus holdfast synthesis by flagellum assembly via the holdfast inhibitor HfiA. Molecular Microbiology, 2018, 110, 219-238.	2.5	32
13	Calcium-mediated oxidative stress: a common mechanism in tight junction disruption by different types of cellular stress. Biochemical Journal, 2017, 474, 731-749.	3.7	63
14	Hyperoxia treatment of TREK-1/TREK-2/TRAAK-deficient mice is associated with a reduction in surfactant proteins. American Journal of Physiology - Lung Cellular and Molecular Physiology, 2017, 313, L1030-L1046.	2.9	23
15	A heteromeric molecular complex regulates the migration of lung alveolar epithelial cells during wound healing. Scientific Reports, 2017, 7, 2155.	3.3	8
16	Airway Epithelial Repair by a Prebiotic Mannan Derived from Saccharomyces cerevisiae. Journal of Immunology Research, 2017, 2017, 1-7.	2.2	13
17	Polycystin-1 interacts with TAZ to stimulate osteoblastogenesis and inhibit adipogenesis. Journal of Clinical Investigation, 2017, 128, 157-174.	8.2	49
18	Chronic hypersensitivity pneumonitis caused by Saccharopolyspora rectivirgula is not associated with a switch to a Th2 response. American Journal of Physiology - Lung Cellular and Molecular Physiology, 2016, 310, L393-L402.	2.9	15

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19	Live Cell Imaging during Mechanical Stretch. Journal of Visualized Experiments, 2015, , e52737.	0.3	8
20	Kymographic Imaging of the Elastic Modulus of Epithelial Cells during the Onset of Migration. Biophysical Journal, 2015, 109, 2051-2057.	0.5	7
21	Autotaxin and LPA1 and LPA5 Receptors Exert Disparate Functions in Tumor Cells versus the Host Tissue Microenvironment in Melanoma Invasion and Metastasis. Molecular Cancer Research, 2015, 13, 174-185.	3.4	74
22	Sharing the sandbox: Evolutionary mechanisms that maintain bacterial cooperation. F1000Research, 2015, 4, 1504.	1.6	34
23	TREK-1 Regulates Cytokine Secretion from Cultured Human Alveolar Epithelial Cells Independently of Cytoskeletal Rearrangements. PLoS ONE, 2015, 10, e0126781.	2.5	9
24	Cyclic stretch disrupts apical junctional complexes in Caco-2 cell monolayers by a JNK-2-, c-Src-, and MLCK-dependent mechanism. American Journal of Physiology - Renal Physiology, 2014, 306, G947-G958.	3.4	46
25	Hyperoxia increases the elastic modulus of alveolar epithelial cells through Rho kinase. FEBS Journal, 2014, 281, 957-969.	4.7	13
26	The 2-Pore Domain Potassium Channel TREK-1 Regulates Stretch-Induced Detachment of Alveolar Epithelial Cells. PLoS ONE, 2014, 9, e89429.	2.5	24
27	Modulation of Radiation Injury Response in Retinal Endothelial Cells by Quinic Acid Derivative KZ-41 Involves p38 MAPK. PLoS ONE, 2014, 9, e100210.	2.5	14
28	Softening of hyperoxia treated alveolar epithelial cells reduces stretchâ€induced injury. FASEB Journal, 2013, 27, 914.11.	0.5	0
29	CXCR4 regulates migration of lung alveolar epithelial cells through activation of Rac1 and matrix metalloproteinase-2. American Journal of Physiology - Lung Cellular and Molecular Physiology, 2012, 302, L846-L856.	2.9	61
30	Hyperoxia alters the mechanical properties of alveolar epithelial cells. American Journal of Physiology - Lung Cellular and Molecular Physiology, 2012, 302, L1235-L1241.	2.9	34
31	Regulation and function of the two-pore-domain (K2P) potassium channel Trek-1 in alveolar epithelial cells. American Journal of Physiology - Lung Cellular and Molecular Physiology, 2012, 302, L93-L102.	2.9	28
32	Mechanobiology in Lung Epithelial Cells: Measurements, Perturbations, and Responses. , 2012, 2, 1-29.		82
33	Insulin Like Growth Factorâ€1Î± Stimulates Differentiation of ATII Cells to ATIâ€Like Cells Through Wnt5a. FASEB Journal, 2012, 26, 698.3.	0.5	0
34	Hyperoxia Increases Elastic Modulus of Alveolar Epithelial Cells Through Rho Kinase. FASEB Journal, 2012, 26, 1063.11.	0.5	0
35	What do we know about mechanical strain in lung alveoli?. American Journal of Physiology - Lung Cellular and Molecular Physiology, 2011, 301, L625-L635.	2.9	143
36	Balance of life and death in alveolar epithelial type II cells: proliferation, apoptosis, and the effects of cyclic stretch on wound healing. American Journal of Physiology - Lung Cellular and Molecular Physiology, 2011, 301, L536-L546.	2.9	44

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37	Dynamic Imaging of Airways During Bronchoconstriction and Deep Inspiration in Intact Rats. FASEB Journal, 2011, 25, 864.12.	0.5	0
38	Cyclic Mechanical Stretch Decreases Cell Migration by Inhibiting Phosphatidylinositol 3-Kinase- and Focal Adhesion Kinase-mediated JNK1 Activation. Journal of Biological Chemistry, 2010, 285, 4511-4519.	3.4	32
39	Preexposure to hyperoxia causes increased lung injury and epithelial apoptosis in mice ventilated with high tidal volumes. American Journal of Physiology - Lung Cellular and Molecular Physiology, 2010, 299, L711-L719.	2.9	39
40	Epithelial repair mechanisms in the lung. American Journal of Physiology - Lung Cellular and Molecular Physiology, 2010, 298, L715-L731.	2.9	588
41	Mechanical stretch decreases FAK phosphorylation and reduces cell migration through loss of JIP3-induced JNK phosphorylation in airway epithelial cells. American Journal of Physiology - Lung Cellular and Molecular Physiology, 2009, 297, L520-L529.	2.9	32
42	Mechanotransduction and signaling in wounded airway epithelial cells. FASEB Journal, 2009, 23, 772.4.	0.5	0
43	Mechanical stretch decreases migration of alveolar epithelial cells through mechanisms involving Rac1 and Tiam1. American Journal of Physiology - Lung Cellular and Molecular Physiology, 2008, 295, L958-L965.	2.9	57
44	Localized elasticity measured in epithelial cells migrating at a wound edge using atomic force microscopy. American Journal of Physiology - Lung Cellular and Molecular Physiology, 2008, 295, L54-L60.	2.9	49
45	Imaging mechanical strain in small airways before and after acid injury. FASEB Journal, 2008, 22, 763.2.	0.5	0
46	High tidal volume mechanical ventilation with hyperoxia alters alveolar type II cell adhesion. American Journal of Physiology - Lung Cellular and Molecular Physiology, 2007, 293, L769-L778.	2.9	37
47	Airway Strain during Mechanical Ventilation in an Intact Animal Model. American Journal of Respiratory and Critical Care Medicine, 2007, 176, 786-794.	5.6	35
48	Cyclic mechanical strain increases reactive oxygen species production in pulmonary epithelial cells. American Journal of Physiology - Lung Cellular and Molecular Physiology, 2005, 289, L834-L841.	2.9	165
49	Mathematical modeling of airway epithelial wound closure during cyclic mechanical strain. Journal of Applied Physiology, 2004, 96, 566-574.	2.5	69
50	RhoA and Rac1 are both required for efficient wound closure of airway epithelial cells. American Journal of Physiology - Lung Cellular and Molecular Physiology, 2004, 287, L1134-L1144.	2.9	73
51	Actin re-distribution in response to hydrogen peroxide in airway epithelial cells. Journal of Cellular Physiology, 2004, 199, 57-66.	4.1	49
52	Cellular biomechanics in the lung. American Journal of Physiology - Lung Cellular and Molecular Physiology, 2002, 283, L503-L509.	2.9	59
53	A system to impose prescribed homogenous strains on cultured cells. Journal of Applied Physiology, 2001, 91, 1600-1610.	2.5	31
54	Prostaglandin E₂regulates wound closure in airway epithelium. American Journal of Physiology - Lung Cellular and Molecular Physiology, 2001, 280, L421-L431.	2.9	81

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55	Steady-State Pleural Fluid Flow and Pressure and the Effects of Lung Buoyancy. Journal of Biomechanical Engineering, 2001, 123, 485-492.	1.3	9
56	Mechanical stretching of alveolar epithelial cells increases Na⁺-K⁺-ATPase activity. Journal of Applied Physiology, 1999, 87, 715-721.	2.5	61
57	Keratinocyte growth factor accelerates wound closure in airway epithelium during cyclic mechanical strain. Journal of Cellular Physiology, 1999, 181, 424-432.	4.1	72
58	Mechanical strain inhibits repair of airway epithelium in vitro. American Journal of Physiology - Lung Cellular and Molecular Physiology, 1998, 274, L883-L892.	2.9	49
59	The detachment strength and morphology of bone cells contacting materials modified with a peptide sequence found within bone sialoprotein. , 1997, 37, 9-19.		170