Deborah L Baines

List of Publications by Year
in descending order

55 papers	1,849 citations	218662 26 h-index	265191 42 g-index
55 all docs	55 docs citations	55 times ranked	2228 citing authors

#	Article	IF	Citations
1	Airway glucose concentrations and effect on growth of respiratory pathogens in cystic fibrosis. Journal of Cystic Fibrosis, 2007, 6, 101-109.	0.7	163
2	Hyperglycemia and cystic fibrosis alter respiratory fluid glucose concentrations estimated by breath condensate analysis. Journal of Applied Physiology, 2007, 102, 1969-1975.	2.5	156
3	Metformin reduces airway glucose permeability and hyperglycaemia-inducedStaphylococcus aureusload independently of effects on blood glucose. Thorax, 2013, 68, 835-845.	5.6	96
4	Increased airway glucose increases airway bacterial load in hyperglycaemia. Scientific Reports, 2016, 6, 27636.	3.3	79
5	Hyperglycaemia and pulmonary infection. Proceedings of the Nutrition Society, 2006, 65, 227-235.	1.0	74
6	Sweet talk: insights into the nature and importance of glucose transport in lung epithelium. European Respiratory Journal, 2012, 40, 1269-1276.	6.7	70
7	Airway Glucose Homeostasis. Chest, 2018, 153, 507-514.	0.8	66
8	Phenformin and 5-aminoimidazole-4-carboxamide-1-Î²-D-ribofuranoside (AICAR) activation of AMP-activated protein kinase inhibits transepithelial Na+transport across H441 lung cells. Journal of Physiology, 2005, 566, 781-792.	2.9	60
9	The influence of mode of delivery, hormonal status and postnatal O 2 environment on epithelial sodium channel (ENaC) expression in perinatal guineaâ€pig lung. Journal of Physiology, 2000, 522, 147-157.	2.9	58
10	Glucose homeostasis across human airway epithelial cell monolayers: role of diffusion, transport and metabolism. Pflugers Archiv European Journal of Physiology, 2009, 457, 1061-1070.	2.8	57
11	Estrogen and progesterone regulate Î±, Î², and Î³ENaC subunit mRNA levels in female rat kidney. Kidney International, 2004, 65, 1774-1781.	5.2	54
12	The epithelial sodium channel mediates the directionality of galvanotaxis in human keratinocytes. Journal of Cell Science, 2013, 126, 1942-51.	2.0	51
13	Proinflammatory Mediators Disrupt Glucose Homeostasis in Airway Surface Liquid. Journal of Immunology, 2012, 189, 373-380.	0.8	50
14	Effective silencing of ENaC by siRNA delivered with epithelial-targeted nanocomplexes in human cystic fibrosis cells and in mouse lung. Thorax, 2018, 73, 847-856.	5.6	50
15	Elevated Paracellular Glucose Flux across Cystic Fibrosis Airway Epithelial Monolayers Is an Important Factor for Pseudomonas aeruginosa Growth. PLoS ONE, 2013, 8, e76283.	2.5	50
16	Hyperglycaemia and Pseudomonas aeruginosa acidify cystic fibrosis airway surface liquid by elevating epithelial monocarboxylate transporter 2 dependent lactate-H+ secretion. Scientific Reports, 2016, 6, 37955.	3.3	48
17	Metformin prevents the effects of Pseudomonas aeruginosa on airway epithelial tight junctions and restricts hyperglycaemiaâ€induced bacterial growth. Journal of Cellular and Molecular Medicine, 2016, 20, 758-764.	3.6	46
18	Kinases as Targets for ENaC Regulation. Current Molecular Pharmacology, 2013, 6, 50-64.	1.5	45

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19	Pharmacological activators of AMPâ€activated protein kinase have different effects on Na⁺ transport processes across human lung epithelial cells. British Journal of Pharmacology, 2007, 151, 1204-1215.	5.4	42
20	BMI-1 extends proliferative potential of human bronchial epithelial cells while retaining their mucociliary differentiation capacity. American Journal of Physiology - Lung Cellular and Molecular Physiology, 2017, 312, L258-L267.	2.9	40
21	Forskolin-induced Cell Shrinkage and Apical Translocation of Functional Enhanced Green Fluorescent Protein-Human Î±ENaC in H441 Lung Epithelial Cell Monolayers. Journal of Biological Chemistry, 2006, 281, 5158-5168.	3.4	38
22	Apical and basolateral localisation of GLUT2 transporters in human lung epithelial cells. Pflugers Archiv European Journal of Physiology, 2008, 456, 991-1003.	2.8	38
23	PPARÎ³ agonists inhibit vasopressin-mediated anion transport in the MDCK-C7 cell line. American Journal of Physiology - Renal Physiology, 2009, 297, F55-F62.	2.7	37
24	E-cigarette constituents propylene glycol and vegetable glycerin decrease glucose uptake and its metabolism in airway epithelial cells in vitro. American Journal of Physiology - Lung Cellular and Molecular Physiology, 2020, 319, L957-L967.	2.9	37
25	Fructose transport-deficient Staphylococcus aureus reveals important role of epithelial glucose transporters in limiting sugar-driven bacterial growth in airway surface liquid. Cellular and Molecular Life Sciences, 2014, 71, 4665-4673.	5.4	33
26	Dapagliflozinâ€lowered blood glucose reduces respiratory <scp>Pseudomonas aeruginosa</scp> infection in diabetic mice. British Journal of Pharmacology, 2017, 174, 836-847.	5.4	28
27	Interaction between extracellular matrix molecules and microbial pathogens: evidence for the missing link in autoimmunity with rheumatoid arthritis as a disease model. Frontiers in Microbiology, 2014, 5, 783.	3.5	26
28	Cleavage of endogenous Î³ENaC and elevated abundance of Î±ENaC are associated with increased Na+ transport in response to apical fluid volume expansion in human H441 airway epithelial cells. Pflugers Archiv European Journal of Physiology, 2011, 462, 431-441.	2.8	25
29	AICAR activates AMPK and alters PIP₂ association with the epithelial sodium channel ENaC to inhibit Na⁺ transport in H441 lung epithelial cells. Journal of Physiology, 2008, 586, 4541-4557.	2.9	24
30	Role of endogenous cortisol in basal liquid clearance from distal air spaces in adult guinea-pigs. Journal of Physiology, 1999, 519, 261-272.	2.9	23
31	AMPâ€activated protein kinase (AMPK)â€“dependent and â€“independent pathways regulate hypoxic inhibition of transepithelial Na⁺ transport across human airway epithelial cells. British Journal of Pharmacology, 2012, 167, 368-382.	5.4	21
32	Metformin attenuates the effect of Staphylococcus aureus on airway tight junctions by increasing <scp>PKC</scp>Î¶â€mediated phosphorylation of occludin. Journal of Cellular and Molecular Medicine, 2019, 23, 317-327.	3.6	20
33	KCNQ-encoded channels regulate Na+ transport across H441 lung epithelial cells. Pflugers Archiv European Journal of Physiology, 2009, 457, 785-794.	2.8	14
34	The phosphorylation of endogenous Nedd4-2 In Na+â€”absorbing human airway epithelial cells. European Journal of Pharmacology, 2014, 732, 32-42.	3.5	14
35	Oxygen-evoked changes in transcriptional activity of the 5â€²-flanking region of the human amiloride-sensitive sodium channel (Î±ENaC) gene: role of nuclear factor ÎºB. Biochemical Journal, 2002, 364, 537-545.	3.7	13
36	Vasopressin Regulates the Phosphorylation State of AMP-activated Protein Kinase (AMPK) in MDCK-C7 Cells. Cellular Physiology and Biochemistry, 2008, 22, 487-496.	1.6	12

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37	Erk5 is a mediator to TGFÃŽÂ²1-induced loss of phenotype and function in human podocytes. Frontiers in Pharmacology, 2014, 5, 71.	3.5	12
38	A novel fluorescent sensor protein for detecting changes in airway surface liquid glucose concentration. Biochemical Journal, 2014, 464, 213-220.	3.7	12
39	TGF-Î² activates ERK5 in human renal epithelial cells. Biochemical and Biophysical Research Communications, 2008, 373, 440-444.	2.1	11
40	Effective glucose metabolism maintains low intracellular glucose in airway epithelial cells after exposure to hyperglycemia. American Journal of Physiology - Cell Physiology, 2019, 317, C983-C992.	4.6	11
41	Effects of sodium butyrate on the expression of sodium channels by neuronal cell lines derived from the rat CNS. Molecular Brain Research, 1992, 16, 330-338.	2.3	10
42	Valproic acid protects against haemorrhagic shockâ€induced signalling changes via PPARÎ³ activation in an in vitro model. British Journal of Pharmacology, 2015, 172, 5306-5317.	5.4	9
43	Role played by Disabled-2 in albumin induced MAP Kinase signalling. Biochemical and Biophysical Research Communications, 2008, 366, 675-680.	2.1	8
44	Glucose Transport and Homeostasis in Lung Epithelia. , 2017, , 33-57.		6
45	Culture with apically applied healthy or disease sputum alters the airway surface liquid proteome and ion transport across human bronchial epithelial cells. American Journal of Physiology - Cell Physiology, 2021, 321, C954-C963.	4.6	5
46	A nasty case of the vapours â€“ eâ€cigarettes friend or foe?. Journal of Physiology, 2020, 598, 5025-5025.	2.9	3
47	A modified fluorescent sensor for reporting glucose concentration in the airway lumen. PLoS ONE, 2021, 16, e0254248.	2.5	1
48	Glucose and lactate concentrations in the distal lung are modified by hyperglycaemia and inflammation. , 2015, , .		1
49	Glucose Transport in H441 Lung Epithelial Cells. FASEB Journal, 2006, 20, A348.	0.5	1
50	Differential Effect of LPS on Glucose, Lactate and Inflammatory Markers in the Lungs of Normal and Diabetic Mice. Journal of Pulmonary & Respiratory Medicine, 2017, 2017, .	0.1	1
51	Phenformin and AICAR decrease transepithelial Na+ transport across human H441 lung epithelial cells by different mechanisms. FASEB Journal, 2007, 21, A954.	0.5	0
52	Glucose transport in lung airway epithelial cells. FASEB Journal, 2007, 21, A543.	0.5	0
53	Regulation of Na + transport in H441 cells by AMPK and PIP 2. FASEB Journal, 2008, 22, 1215.3.	0.5	0
54	Transepithelial glucose transport and metabolism in H441 human airway epithelial cells. FASEB Journal, 2008, 22, 764.5.	0.5	0

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55	Lipopolysaccharides modify amilorideâ€sensitive Na + transport processes across H441 lung epithelial cells. FASEB Journal, 2008, 22, 934.2.	0.5	0