Holger K Eltzschig

List of Publications by Year
in descending order

126 papers	16,561 citations	25034 57 h-index	17105 122 g-index
128 all docs	128 docs citations	128 times ranked	20674 citing authors

#	Article	IF	Citations
1	Ischemia and reperfusionâ€"from mechanism to translation. Nature Medicine, 2011, 17, 1391-1401.	30.7	2,524
2	Hypoxia and Inflammation. New England Journal of Medicine, 2011, 364, 656-665.	27.0	1,692
3	Nucleotide signalling during inflammation. Nature, 2014, 509, 310-317.	27.8	750
4	Purinergic Signaling during Inflammation. New England Journal of Medicine, 2012, 367, 2322-2333.	27.0	579
5	Ecto-5â€²-nucleotidase (CD73) regulation by hypoxia-inducible factor-1 mediates permeability changes in intestinal epithelia. Journal of Clinical Investigation, 2002, 110, 993-1002.	8.2	569
6	Ecto-5â€²-nucleotidase (CD73) regulation by hypoxia-inducible factor-1 mediates permeability changes in intestinal epithelia. Journal of Clinical Investigation, 2002, 110, 993-1002.	8.2	429
7	Cardioprotection by Ecto-5â€²-Nucleotidase (CD73) and A2BAdenosine Receptors. Circulation, 2007, 115, 1581-1590.	1.6	412
8	Hypoxia-Inducible Factor-1 Is Central to Cardioprotection. Circulation, 2008, 118, 166-175.	1.6	372
9	Hypoxia-inducible factorâ€"dependent induction of netrin-1 dampens inflammation caused by hypoxia. Nature Immunology, 2009, 10, 195-202.	14.5	369
10	ATP Release From Activated Neutrophils Occurs via Connexin 43 and Modulates Adenosine-Dependent Endothelial Cell Function. Circulation Research, 2006, 99, 1100-1108.	4.5	314
11	Targeting hypoxia signalling for the treatment of ischaemic and inflammatory diseases. Nature Reviews Drug Discovery, 2014, 13, 852-869.	46.4	291
12	Myeloid-derived miR-223 regulates intestinal inflammation via repression of the NLRP3 inflammasome. Journal of Experimental Medicine, 2017, 214, 1737-1752.	8.5	289
13	Adora2b-elicited Per2 stabilization promotes a HIF-dependent metabolic switch crucial for myocardial adaptation to ischemia. Nature Medicine, 2012, 18, 774-782.	30.7	278
14	A2B adenosine receptor dampens hypoxia-induced vascular leak. Blood, 2008, 111, 2024-2035.	1.4	265
15	A2B adenosine receptor signaling attenuates acute lung injury by enhancing alveolar fluid clearance in mice. Journal of Clinical Investigation, 2008, 118, 3301-15.	8.2	259
16	Subchondral bone osteoclasts induce sensory innervation and osteoarthritis pain. Journal of Clinical Investigation, 2019, 129, 1076-1093.	8.2	239
17	The polymeric mucin Muc5ac is required for allergic airway hyperreactivity. Nature Communications, 2015, 6, 6281.	12.8	223
18	Hypoxia signaling in human diseases and therapeutic targets. Experimental and Molecular Medicine, 2019, 51, 1-13.	7.7	218

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19	Adenosine: An Old Drug Newly Discovered. Anesthesiology, 2009, 111, 904-915.	2.5	214
20	Central role of Sp1-regulated CD39 in hypoxia/ischemia protection. Blood, 2009, 113, 224-232.	1.4	196
21	CD39/Ectonucleoside Triphosphate Diphosphohydrolase 1 Provides Myocardial Protection During Cardiac Ischemia/Reperfusion Injury. Circulation, 2007, 116, 1784-1794.	1.6	192
22	HIF-1â€“dependent repression of adenosine kinase attenuates hypoxia-induced vascular leak. Blood, 2008, 111, 5571-5580.	1.4	186
23	Circadian rhythm as a therapeutic target. Nature Reviews Drug Discovery, 2021, 20, 287-307.	46.4	177
24	Hypoxia and inflammation are two sides of the same coin. Proceedings of the National Academy of Sciences of the United States of America, 2013, 110, 18351-18352.	7.1	168
25	Adventitial Fibroblasts Induce a Distinct Proinflammatory/Profibrotic Macrophage Phenotype in Pulmonary Hypertension. Journal of Immunology, 2014, 193, 597-609.	0.8	162
26	Neutrophil transfer of miR-223 to lung epithelial cells dampens acute lung injury in mice. Science Translational Medicine, 2017, 9, .	12.4	162
27	Signaling through the A2B Adenosine Receptor Dampens Endotoxin-Induced Acute Lung Injury. Journal of Immunology, 2010, 184, 5271-5279.	0.8	154
28	Netrin1 Produced by Neural Progenitors, Not Floor Plate Cells, Is Required for Axon Guidance in the Spinal Cord. Neuron, 2017, 94, 790-799.e3.	8.1	146
29	HIF1A Reduces Acute Lung Injury by Optimizing Carbohydrate Metabolism in the Alveolar Epithelium. PLoS Biology, 2013, 11, e1001665.	5.6	138
30	MicroRNA miR-223 as regulator of innate immunity. Journal of Leukocyte Biology, 2018, 104, 515-524.	3.3	127
31	Systematic evaluation of a novel model for cardiac ischemic preconditioning in mice. American Journal of Physiology - Heart and Circulatory Physiology, 2006, 291, H2533-H2540.	3.2	123
32	Extracellular nucleotide and nucleoside signaling in vascular and blood disease. Blood, 2014, 124, 1029-1037.	1.4	119
33	Beneficial Role of Erythrocyte Adenosine A2B Receptorâ€“Mediated AMP-Activated Protein Kinase Activation in High-Altitude Hypoxia. Circulation, 2016, 134, 405-421.	1.6	115
34	Neutrophils as Sources of Extracellular Nucleotides: Functional Consequences at the Vascular Interface. Trends in Cardiovascular Medicine, 2008, 18, 103-107.	4.9	110
35	Macrophage-derived netrin-1 promotes abdominal aortic aneurysm formation by activating MMP3 in vascular smooth muscle cells. Nature Communications, 2018, 9, 5022.	12.8	109
36	Selective induction of endothelial P2Y6 nucleotide receptor promotes vascular inflammation. Blood, 2011, 117, 2548-2555.	1.4	106

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37	Neuronal guidance molecule netrin-1 attenuates inflammatory cell trafficking during acute experimental colitis. Gut, 2012, 61, 695-705.	12.1	106
38	Hypoxia-inducible factors as molecular targets for liver diseases. Journal of Molecular Medicine, 2016, 94, 613-627.	3.9	104
39	Eosinophil-mediated signalling attenuates inflammatory responses in experimental colitis. Gut, 2015, 64, 1236-1247.	12.1	103
40	Identification of Hypoxia-Inducible Factor HIF-1A as Transcriptional Regulator of the A2B Adenosine Receptor during Acute Lung Injury. Journal of Immunology, 2014, 192, 1249-1256.	0.8	101
41	Transcriptional control of adenosine signaling by hypoxia-inducible transcription factors during ischemic or inflammatory disease. Journal of Molecular Medicine, 2013, 91, 183-193.	3.9	100
42	Attenuating myocardial ischemia by targeting A2B adenosine receptors. Trends in Molecular Medicine, 2013, 19, 345-354.	6.7	100
43	Hypoxia-inducible factor 2-alpha-dependent induction of amphiregulin dampens myocardial ischemia-reperfusion injury. Nature Communications, 2018, 9, 816.	12.8	100
44	CD73 ⁺ regulatory T cells contribute to adenosineâ€mediated resolution of acute lung injury. FASEB Journal, 2013, 27, 2207-2219.	0.5	99
45	Tissue-Resident NK Cells Mediate Ischemic Kidney Injury and Are Not Depleted by Antiâ€“Asialo-GM1 Antibody. Journal of Immunology, 2015, 195, 4973-4985.	0.8	97
46	Adora2b Adenosine Receptor Engagement Enhances Regulatory T Cell Abundance during Endotoxin-Induced Pulmonary Inflammation. PLoS ONE, 2012, 7, e32416.	2.5	95
47	Crosstalk between the equilibrative nucleoside transporter ENT2 and alveolar Adora2b adenosine receptors dampens acute lung injury. FASEB Journal, 2013, 27, 3078-3089.	0.5	95
48	Nucleotide Metabolism and Cell-Cell Interactions. , 2006, 341, 73-88.		93
49	The hypoxia-adenosine link during inflammation. Journal of Applied Physiology, 2017, 123, 1303-1320.	2.5	90
50	Selective Deletion of the A1 Adenosine Receptor Abolishes Heart-Rate Slowing Effects of Intravascular Adenosine In Vivo. PLoS ONE, 2009, 4, e6784.	2.5	89
51	Extracellular Adenosine: A Safety Signal That Dampens Hypoxia-Induced Inflammation During Ischemia. Antioxidants and Redox Signaling, 2011, 15, 2221-2234.	5.4	83
52	Erythrocytes retain hypoxic adenosine response for faster acclimatization upon re-ascent. Nature Communications, 2017, 8, 14108.	12.8	81
53	Purinergic Signaling in Pulmonary Inflammation. Frontiers in Immunology, 2019, 10, 1633.	4.8	81
54	Alveolar Epithelial A2B Adenosine Receptors in Pulmonary Protection during Acute Lung Injury. Journal of Immunology, 2015, 195, 1815-1824.	0.8	80

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55	Adenosine/A2B Receptor Signaling Ameliorates the Effects of Aging and Counteracts Obesity. Cell Metabolism, 2020, 32, 56-70.e7.	16.2	77
56	Netrin-1 controls sympathetic arterial innervation. Journal of Clinical Investigation, 2014, 124, 3230-3240.	8.2	74
57	Deletion of ADORA2B from myeloid cells dampens lung fibrosis and pulmonary hypertension. FASEB Journal, 2015, 29, 50-60.	0.5	66
58	Purinergic Signaling During Immune Cell Trafficking. Trends in Immunology, 2016, 37, 399-411.	6.8	64
59	Targeting Hypoxia Signaling for Perioperative Organ Injury. Anesthesia and Analgesia, 2018, 126, 308-321.	2.2	64
60	HIF1A upâ€regulates the ADORA2B receptor on alternatively activated macrophages and contributes to pulmonary fibrosis. FASEB Journal, 2017, 31, 4745-4758.	0.5	63
61	Sustained Elevated Adenosine via ADORA2B Promotes Chronic Pain through Neuro-immune Interaction. Cell Reports, 2016, 16, 106-119.	6.4	61
62	A2B Adenosine Receptor Induces Protective Antihelminth Type 2 Immune Responses. Cell Host and Microbe, 2014, 15, 339-350.	11.0	59
63	Elevated Endothelial Hypoxia-Inducible Factor-1Î± Contributes to Glomerular Injury and Promotes Hypertensive Chronic Kidney Disease. Hypertension, 2015, 66, 75-84.	2.7	59
64	Apoptotic brown adipocytes enhance energy expenditure via extracellular inosine. Nature, 2022, 609, 361-368.	27.8	53
65	Assessment of a multimodal analgesia protocol to allow the implementation of enhanced recovery after cardiac surgery: Retrospective analysis of patient outcomes. Journal of Clinical Anesthesia, 2019, 54, 76-80.	1.6	52
66	Targeting the A2B adenosine receptor during gastrointestinal ischemia and inflammation. Expert Opinion on Therapeutic Targets, 2009, 13, 1267-1277.	3.4	51
67	Coordination of ENT2-dependent adenosine transport and signaling dampens mucosal inflammation. JCI Insight, 2018, 3, .	5.0	51
68	Hypoxiaâ€Inducible Factorâ€2Î± Reprograms Liver Macrophages to Protect Against Acute Liver Injury Through the Production of Interleukinâ€6. Hepatology, 2020, 71, 2105-2117.	7.3	50
69	Partial Netrin-1 Deficiency Aggravates Acute Kidney Injury. PLoS ONE, 2011, 6, e14812.	2.5	48
70	Hypoxia signaling during acute lung injury. Journal of Applied Physiology, 2015, 119, 1157-1163.	2.5	48
71	The Hypoxiaâ€“Adenosine Link during Intestinal Inflammation. Journal of Immunology, 2018, 200, 897-907.	0.8	48
72	Short-Term Hypoxia Dampens Inflammation in vivo via Enhanced Adenosine Release and Adenosine 2B Receptor Stimulation. EBioMedicine, 2018, 33, 144-156.	6.1	47

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73	MicroRNAs in mucosal inflammation. Journal of Molecular Medicine, 2017, 95, 935-949.	3.9	45
74	Strategies to Modulate MicroRNA Functions for the Treatment of Cancer or Organ Injury. Pharmacological Reviews, 2020, 72, 639-667.	16.0	45
75	C1P Attenuates Lipopolysaccharide-Induced Acute Lung Injury by Preventing NF-Î²B Activation in Neutrophils. Journal of Immunology, 2016, 196, 2319-2326.	0.8	43
76	Altered Hypoxicâ€“Adenosine Axis and Metabolism in Group III Pulmonary Hypertension. American Journal of Respiratory Cell and Molecular Biology, 2016, 54, 574-583.	2.9	41
77	Extracellular adenosine levels are associated with the progression and exacerbation of pulmonary fibrosis. FASEB Journal, 2016, 30, 874-883.	0.5	38
78	Differential Tissue-Specific Function of Adora2b in Cardioprotection. Journal of Immunology, 2015, 195, 1732-1743.	0.8	34
79	A model-specific role of microRNA-223 as a mediator of kidney injury during experimental sepsis. American Journal of Physiology - Renal Physiology, 2017, 313, F553-F559.	2.7	34
80	Hypoxia-inducible factorâ€“1Î±â€“dependent induction of miR122 enhances hepatic ischemia tolerance. Journal of Clinical Investigation, 2021, 131, .	8.2	33
81	Rescue transoesophageal echocardiography for refractory haemodynamic instability during transvenous lead extraction. European Heart Journal Cardiovascular Imaging, 2014, 15, 926-932.	1.2	32
82	Adenosine at the Interphase of Hypoxia and Inflammation in Lung Injury. Frontiers in Immunology, 2020, 11, 604944.	4.8	32
83	The Role of MicroRNAs in Acute Respiratory Distress Syndrome and Sepsis, From Targets to Therapies: A Narrative Review. Anesthesia and Analgesia, 2020, 131, 1471-1484.	2.2	31
84	Eosinophils attenuate hepatic ischemia-reperfusion injury in mice through ST2-dependent IL-13 production. Science Translational Medicine, 2021, 13, .	12.4	31
85	PMN-derived netrin-1 attenuates cardiac ischemia-reperfusion injury via myeloid ADORA2B signaling. Journal of Experimental Medicine, 2021, 218, .	8.5	30
86	MicroRNAs Modulate the Purinergic Signaling Network. Trends in Molecular Medicine, 2016, 22, 905-918.	6.7	29
87	Netrin-1 guides inflammatory cell migration to control mucosal immune responses during intestinal inflammation. Tissue Barriers, 2013, 1, e24957.	3.2	27
88	Stimulation of A2B adenosine receptors protects against traumaâ€“hemorrhagic shock-induced lung injury. Purinergic Signalling, 2013, 9, 427-432.	2.2	26
89	Transcription-independent Induction of ERBB1 through Hypoxia-inducible Factor 2A Provides Cardioprotection during Ischemia and Reperfusion. Anesthesiology, 2020, 132, 763-780.	2.5	26
90	Erythrocyte purinergic signaling components underlie hypoxia adaptation. Journal of Applied Physiology, 2017, 123, 951-956.	2.5	25

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91	NK cells regulate CXCR2+ neutrophil recruitment during acute lung injury. Journal of Leukocyte Biology, 2017, 101, 471-480.	3.3	24
92	Capturing the multifactorial nature of ARDS - â€œTwo-hitâ€•approach to model murine acute lung injury. Physiological Reports, 2018, 6, e13648.	1.7	24
93	Hypoxiaâ€inducible factor 1Î± (HIFâ€1Î±) is a major determinant in the enhanced function of muscleâ€derived progenitors from MRL/MpJ mice. FASEB Journal, 2019, 33, 8321-8334.	0.5	24
94	Cigarette smokeâ€“induced reduction of C1q promotes emphysema. JCI Insight, 2019, 4, .	5.0	23
95	Use of a Hanging Weight System for Coronary Artery Occlusion in Mice. Journal of Visualized Experiments, 2011, , .	0.3	21
96	HIF-2Î± in Resting Macrophages Tempers Mitochondrial Reactive Oxygen Species To Selectively Repress MARCO-Dependent Phagocytosis. Journal of Immunology, 2016, 197, 3639-3649.	0.8	21
97	Switching-Off Adora2b in Vascular Smooth Muscle Cells Halts the Development of Pulmonary Hypertension. Frontiers in Physiology, 2018, 9, 555.	2.8	21
98	Characterization of articular cartilage homeostasis and the mechanism of superior cartilage regeneration of MRL/MpJ mice. FASEB Journal, 2019, 33, 8809-8821.	0.5	20
99	Targeting alveolarâ€specific succinate dehydrogenase A attenuates pulmonary inflammation during acute lung injury. FASEB Journal, 2021, 35, e21468.	0.5	20
100	Impact of serratus plane block on pain scores and incentive spirometry volumes after chest trauma . Local and Regional Anesthesia, 2019, Volume 12, 59-66.	1.3	18
101	Enhancing Extracellular Adenosine Levels Restores Barrier Function in Acute Lung Injury Through Expression of Focal Adhesion Proteins. Frontiers in Molecular Biosciences, 2021, 8, 636678.	3.5	17
102	Disease Mechanisms of Perioperative Organ Injury. Anesthesia and Analgesia, 2020, 131, 1730-1750.	2.2	16
103	Detrimental ELAVL-1/HuR-dependent GSK3Î² mRNA stabilization impairs resolution in acute respiratory distress syndrome. PLoS ONE, 2017, 12, e0172116.	2.5	16
104	SARS-CoV-2 Infection: Host Response, Immunity, and Therapeutic Targets. Inflammation, 2022, 45, 1430-1449.	3.8	16
105	Hypoxiaâ€inducible factorâ€dependent induction of myeloidâ€derived netrinâ€1 attenuates natural killer cell infiltration during endotoxinâ€induced lung injury. FASEB Journal, 2021, 35, e21334.	0.5	15
106	Diversity and Inclusion in Anesthesiology. Anesthesia and Analgesia, 2022, 134, 1166-1174.	2.2	15
107	Restoration of Megalin-Mediated Clearance of Alveolar Protein as a Novel Therapeutic Approach for Acute Lung Injury. American Journal of Respiratory Cell and Molecular Biology, 2017, 57, 589-602.	2.9	14
108	Elevated ecto-5â€²-nucleotidase: a missing pathogenic factor and new therapeutic target for sickle cell disease. Blood Advances, 2018, 2, 1957-1968.	5.2	14

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109	Markers of Accelerated Skeletal Muscle Regenerative Response in Murphy Roths Large Mice: Characteristics of Muscle Progenitor Cells and Circulating Factors. Stem Cells, 2019, 37, 357-367.	3.2	14
110	Mst1/2 kinases restrain transformation in a novel transgenic model of Ras driven non-small cell lung cancer. Oncogene, 2020, 39, 1152-1164.	5.9	12
111	Sphingosine-1-phosphate receptor signaling during acute kidney injury: the tissue is the issue. Kidney International, 2014, 85, 733-735.	5.2	10
112	Role of Micro-RNA for Pain After Surgery. Anesthesia and Analgesia, 2020, 130, 1638-1652.	2.2	9
113	Patient-derived iPSCs link elevated mitochondrial respiratory complex I function to osteosarcoma in Rothmund-Thomson syndrome. PLoS Genetics, 2021, 17, e1009971.	3.5	9
114	Alternative adenosine Receptor activation: The netrin-Adora2b link. Frontiers in Pharmacology, 0, 13, .	3.5	9
115	The Devil Is in the Detail. Anesthesiology, 2017, 126, 763-765.	2.5	8
116	Novel therapeutic concepts for inflammatory bowel diseaseâ€"from bench to bedside. Journal of Molecular Medicine, 2017, 95, 899-903.	3.9	7
117	Purinergic and Adenosinergic Signaling in Pancreatobiliary Diseases. Frontiers in Physiology, 2022, 13, 849258.	2.8	7
118	Hydroxylation-independent HIF-1Î± stabilization through PKA: A new paradigm for hypoxia signaling. Science Signaling, 2016, 9, fs11.	3.6	6
119	Characterization of a Murine Model System to Study MicroRNA-147 During Inflammatory Organ Injury. Inflammation, 2021, 44, 1426-1440.	3.8	6
120	Neuronal modulation of hepatic lipid accumulation induced by bingelike drinking. American Journal of Physiology - Endocrinology and Metabolism, 2020, 318, E655-E666.	3.5	5
121	Incidence and predictive factors of acute kidney injury following off-pump lung transplantation. Journal of Cardiothoracic and Vascular Anesthesia, 2021, , .	1.3	3
122	Neutrophil Intercellular Communication in Acute Lung Injury: Emerging Roles of Microparticles and Gap Junctions. American Journal of Respiratory Cell and Molecular Biology, 0, , .	2.9	2
123	Adenosine Is A Common Factor Regulating Erythrocyte 2,3-Bisphosphate Induction In Normal Individuals At High Altitude and In Patients With Sickle Cell Disease. Blood, 2013, 122, 952-952.	1.4	2
124	Leadership roles and initiatives for diversity and inclusion in academic anesthesiology departments. Journal of the National Medical Association, 2022, 114, 147-155.	0.8	2
125	A2B adenosine receptor signaling influences epithelial cell-leukocyte crosstalk to induce tissue protection in acute and chronic experimental colitis. Inflammatory Bowel Diseases, 2011, 17, S70.	1.9	1
126	Enhancement of purinergic signaling mediates protection during acute experimental colitis. Inflammatory Bowel Diseases, 2011, 17, S73.	1.9	0