Wolfgang G Junger

List of Publications by Year in Descending Order

107 papers	8,471 citations	44 h-index	91 g-index
113 ext. papers	9,774 ext. citations	6.4 avg, IF	5.95 L-index

#	Paper	IF	Citations
107	Optimized HPLC method to elucidate the complex purinergic signaling dynamics that regulate ATP, ADP, AMP, and adenosine levels in human blood.. *Purinergic Signalling*, **2022**, 1	3.8	2
106	Frontline Science: P2Y11 receptors support T cell activation by directing mitochondrial trafficking to the immune synapse. *Journal of Leukocyte Biology*, **2021**, 109, 497-508	6.5	4
105	Structural and functional characterization of engineered bifunctional fusion proteins of CD39 and CD73 ectonucleotidases. *American Journal of Physiology - Cell Physiology*, **2021**, 320, C15-C29	5.4	5
104	Mitochondria Synergize With P2 Receptors to Regulate Human T Cell Function. *Frontiers in Immunology*, **2020**, 11, 549889	8.4	2
103	RIG-I and TLR4 responses and adverse outcomes in pediatric influenza-related critical illness. *Journal of Allergy and Clinical Immunology*, **2020**, 145, 1673-1680.e11	11.5	3
102	Airway brush cells generate cysteinyl leukotrienes through the ATP sensor P2Y2. *Science Immunology*, **2020**, 5,	28	35
101	The purinergic receptor P2Y11 choreographs the polarization, mitochondrial metabolism, and migration of T lymphocytes. *Science Signaling*, **2020**, 13,	8.8	17
100	Adenosine 5RMonophosphate Protects from Hypoxia by Lowering Mitochondrial Metabolism and Oxygen Demand. *Shock*, **2020**, 54, 237-244	3.4	5
99	Negative feedback control of neuronal activity by microglia. *Nature*, **2020**, 586, 417-423	50.4	179
98	Purinergic P2Y receptors modulate endothelial sprouting. *Cellular and Molecular Life Sciences*, **2020**, 77, 885-901	10.3	13
97	Autocrine stimulation of P2Y1 receptors is part of the purinergic signaling mechanism that regulates T cell activation. *Purinergic Signalling*, **2019**, 15, 127-137	3.8	8
96	Lipopolysaccharide suppresses T cells by generating extracellular ATP that impairs their mitochondrial function via P2Y11 receptors. *Journal of Biological Chemistry*, **2019**, 294, 6283-6293	5.4	14
95	Frontline Science: Escherichia coli use LPS as decoy to impair neutrophil chemotaxis and defeat antimicrobial host defense. *Journal of Leukocyte Biology*, **2019**, 106, 1211-1219	6.5	5
94	Plasma Adenylate Levels are Elevated in Cardiopulmonary Arrest Patients and May Predict Mortality. *Shock*, **2019**, 51, 698-705	3.4	3
93	Purinergic P2X4 receptors and mitochondrial ATP production regulate T cell migration. *Journal of Clinical Investigation*, **2018**, 128, 3583-3594	15.9	71
92	Adenosine Triphosphate Release is Required for Toll-Like Receptor-Induced Monocyte/Macrophage Activation, Inflammasome Signaling, Interleukin-1 Production, and the Host Immune Response to Infection. *Critical Care Medicine*, **2018**, 46, e1183-e1189	1.4	14
91	Systemic Adenosine Triphosphate Impairs Neutrophil Chemotaxis and Host Defense in Sepsis. *Critical Care Medicine*, **2017**, 45, e97-e104	1.4	23

90	Hyperthermia and associated changes in membrane fluidity potentiate P2X7 activation to promote tumor cell death. *Oncotarget*, **2017**, 8, 67254-67268	3.3	25
89	Adenosine arrests breast cancer cell motility by A3 receptor stimulation. *Purinergic Signalling*, **2016**, 12, 673-685	3.8	15
88	Shock wave-induced ATP release from osteosarcoma U2OS cells promotes cellular uptake and cytotoxicity of methotrexate. *Journal of Experimental and Clinical Cancer Research*, **2016**, 35, 161	12.8	7
87	Mitochondrial Dysfunction, Depleted Purinergic Signaling, and Defective T Cell Vigilance and Immune Defense. *Journal of Infectious Diseases*, **2016**, 213, 456-64	7	32
86	Removal of extracellular ATP improves fMLP-induced neutrophil chemotaxis **2016**,		2
85	Cutting off the power: inhibition of leukemia cell growth by pausing basal ATP release and P2X receptor signaling?. *Purinergic Signalling*, **2016**, 12, 439-51	3.8	22
84	Purinergic Signaling and the Immune Response in Sepsis: A Review. *Clinical Therapeutics*, **2016**, 38, 1054-65	3.3	25
83	mTOR and differential activation of mitochondria orchestrate neutrophil chemotaxis. *Journal of Cell Biology*, **2015**, 210, 1153-64	7.3	68
82	NADH oxidase-dependent CD39 expression by CD8(+) T cells modulates interferon gamma responses via generation of adenosine. *Nature Communications*, **2015**, 6, 8819	17.4	46
81	Prehospital Resuscitation of Traumatic Hemorrhagic Shock with Hypertonic Solutions Worsens Hypocoagulation and Hyperfibrinolysis. *Shock*, **2015**, 44, 25-31	3.4	34
80	Inhibition of Neutrophils by Hypertonic Saline Involves Pannexin-1, CD39, CD73, and Other Ectonucleotidases. *Shock*, **2015**, 44, 221-7	3.4	14
79	Novel method for real-time monitoring of ATP release reveals multiple phases of autocrine purinergic signalling during immune cell activation. *Acta Physiologica*, **2015**, 213, 334-45	5.6	19
78	CD39 Expression Identifies Terminally Exhausted CD8+ T Cells. *PLoS Pathogens*, **2015**, 11, e1005177	7.6	183
77	Inflammasome activation: A form of autocrine purinergic signaling in monocytes. *FASEB Journal*, **2015**, 29, 973.5	0.9	
76	Systemic ATP Levels Suppress the Function of CD4+ T Cells in Sepsis by Impairing Autocrine Purinergic Signaling. *FASEB Journal*, **2015**, 29, 972.6	0.9	
75	Mitochondria Orchestrate Chemotaxis of Neutrophils by Fueling Their Autocrine Purinergic Signaling Systems. *FASEB Journal*, **2015**, 29, 671.2	0.9	
74	mTOR and differential activation of mitochondria orchestrate neutrophil chemotaxis. *Journal of Experimental Medicine*, **2015**, 212, 21211OIA93	16.6	
73	Mitochondria regulate neutrophil activation by generating ATP for autocrine purinergic signaling. *Journal of Biological Chemistry*, **2014**, 289, 26794-26803	5.4	72

72	Mitochondria are gate-keepers of T cell function by producing the ATP that drives purinergic signaling. *Journal of Biological Chemistry*, **2014**, 289, 25936-45	5.4	64
71	Shock wave treatment enhances cell proliferation and improves wound healing by ATP release-coupled extracellular signal-regulated kinase (ERK) activation. *Journal of Biological Chemistry*, **2014**, 289, 27090-27104	5.4	103
70	Abandon the mouse research ship? Not just yet!. *Shock*, **2014**, 41, 463-75	3.4	111
69	Plasma ATP is required for neutrophil activation in a mouse sepsis model. *Shock*, **2014**, 42, 142-7	3.4	35
68	Disordered purinergic signaling and abnormal cellular metabolism are associated with development of liver cancer in Cd39/ENTPD1 null mice. *Hepatology*, **2013**, 57, 205-16	11.2	63
67	Shockwaves induce osteogenic differentiation of human mesenchymal stem cells through ATP release and activation of P2X7 receptors. *Stem Cells*, **2013**, 31, 1170-80	5.8	93
66	Pulmonary natural killer T cells play an essential role in mediating hyperoxic acute lung injury. *American Journal of Respiratory Cell and Molecular Biology*, **2013**, 48, 601-9	5.7	24
65	Prehospital hypertonic saline resuscitation attenuates the activation and promotes apoptosis of neutrophils in patients with severe traumatic brain injury. *Shock*, **2013**, 40, 366-74	3.4	37
64	Pannexin 1 channels link chemoattractant receptor signaling to local excitation and global inhibition responses at the front and back of polarized neutrophils. *Journal of Biological Chemistry*, **2013**, 288, 22650-7	5.4	70
63	Monocyte human leukocyte antigen-DR expression-a tool to distinguish intestinal bacterial infections from inflammatory bowel disease?. *Shock*, **2013**, 40, 89-94	3.4	3
62	CD39 modulates hematopoietic stem cell recruitment and promotes liver regeneration in mice and humans after partial hepatectomy. *Annals of Surgery*, **2013**, 257, 693-701	7.8	25
61	P2X7 integrates PI3K/AKT and AMPK-PRAS40-mTOR signaling pathways to mediate tumor cell death. *PLoS ONE*, **2013**, 8, e60184	3.7	73
60	Purinergic signaling integrates local excitation and global inhibition signals that regulate neutrophil chemotaxis. *FASEB Journal*, **2013**, 27, 729.2	0.9	
59	Measurement of oxidative burst in neutrophils. *Methods in Molecular Biology*, **2012**, 844, 115-24	1.4	78
58	ATP release and autocrine signaling through P2X4 receptors regulate □T cell activation. *Journal of Leukocyte Biology*, **2012**, 92, 787-94	6.5	36
57	Resuscitation of traumatic hemorrhagic shock patients with hypertonic saline-without dextran-inhibits neutrophil and endothelial cell activation. *Shock*, **2012**, 38, 341-50	3.4	53
56	A3 adenosine receptor inhibition improves the efficacy of hypertonic saline resuscitation. *Shock*, **2011**, 35, 178-83	3.4	13
55	Bacterial DNA induces pulmonary damage via TLR-9 through cross-talk with neutrophils. *Shock*, **2011**, 36, 548-52	3.4	28

54	Immune cell regulation by autocrine purinergic signalling. *Nature Reviews Immunology*, **2011**, 11, 201-12	36.5	546
53	Increased neutrophil adenosine a3 receptor expression is associated with hemorrhagic shock and injury severity in trauma patients. *Shock*, **2011**, 36, 435-9	3.4	14
52	Circulating mitochondrial DAMPs cause inflammatory responses to injury. *Nature*, **2010**, 464, 104-7	50.4	2358
51	Hypertonic stress regulates T cell function via pannexin-1 hemichannels and P2X receptors. *Journal of Leukocyte Biology*, **2010**, 88, 1181-9	6.5	70
50	Adrenergic receptor activation involves ATP release and feedback through purinergic receptors. *American Journal of Physiology - Cell Physiology*, **2010**, 299, C1118-26	5.4	24
49	Shockwaves increase T-cell proliferation and IL-2 expression through ATP release, P2X7 receptors, and FAK activation. *American Journal of Physiology - Cell Physiology*, **2010**, 298, C457-64	5.4	40
48	Pannexin-1 hemichannel-mediated ATP release together with P2X1 and P2X4 receptors regulate T-cell activation at the immune synapse. *Blood*, **2010**, 116, 3475-84	2.2	219
47	Purinergic signaling: a fundamental mechanism in neutrophil activation. *Science Signaling*, **2010**, 3, ra45	8.8	142
46	Deletion of CD39 on natural killer cells attenuates hepatic ischemia/reperfusion injury in mice. *Hepatology*, **2010**, 51, 1702-11	11.2	59
45	Autocrine regulation of T-cell activation by ATP release and P2X7 receptors. *FASEB Journal*, **2009**, 23, 1685-93	0.9	213
44	Ecto-nucleoside triphosphate diphosphohydrolase 1 (E-NTPDase1/CD39) regulates neutrophil chemotaxis by hydrolyzing released ATP to adenosine. *Journal of Biological Chemistry*, **2008**, 283, 28480-6	5.4	91
43	Hypertonic saline reduces neutrophil-epithelial interactions in vitro and gut tissue damage in a mouse model of colitis. *American Journal of Physiology - Regulatory Integrative and Comparative Physiology*, **2008**, 295, R1839-45	3.2	4
42	Roles of heat shock proteins and gamma delta T cells in inflammation. *American Journal of Respiratory Cell and Molecular Biology*, **2008**, 39, 509-13	5.7	30
41	Hypertonic saline up-regulates A3 adenosine receptor expression of activated neutrophils and increases acute lung injury after sepsis. *Critical Care Medicine*, **2008**, 36, 2569-75	1.4	25
40	Hypertonic saline increases gammadeltaT cell-mediated killing of activated neutrophils. *Critical Care Medicine*, **2008**, 36, 3220-5	1.4	8
39	Purinergic regulation of neutrophil chemotaxis. *Cellular and Molecular Life Sciences*, **2008**, 65, 2528-40	10.3	48
38	A3 and P2Y2 receptors control the recruitment of neutrophils to the lungs in a mouse model of sepsis. *Shock*, **2008**, 30, 173-7	3.4	77
37	Heat Shock Proteins and the Resolution of Inflammation by Lymphocytes **2007**, 337-354		

36	A novel method using fluorescence microscopy for real-time assessment of ATP release from individual cells. *American Journal of Physiology - Cell Physiology*, **2007**, 293, C1420-5	5.4	67
35	Mice lacking P2Y2 receptors have salt-resistant hypertension and facilitated renal Na+ and water reabsorption. *FASEB Journal*, **2007**, 21, 3717-26	0.9	147
34	Hypertonic stress regulates T-cell function by the opposing actions of extracellular adenosine triphosphate and adenosine. *Shock*, **2007**, 27, 242-50	3.4	25
33	Hypertonic saline resuscitation: efficacy may require early treatment in severely injured patients. *Journal of Trauma*, **2007**, 62, 299-306		23
32	Surface expression of HSP72 by LPS-stimulated neutrophils facilitates gammadeltaT cell-mediated killing. *European Journal of Immunology*, **2006**, 36, 712-21	6.1	39
31	CELL SURFACE EXPRESSION OF A3 AND A2A ADENOSINE RECEPTORS DEFINES THE RESPONSE OF PMN TO HYPERTONIC SALINE. *Shock*, **2006**, 26, 29	3.4	3
30	Hypertonic saline enhances neutrophil elastase release through activation of P2 and A3 receptors. *American Journal of Physiology - Cell Physiology*, **2006**, 290, C1051-9	5.4	39
29	Small-volume fluid resuscitation with hypertonic saline prevents inflammation but not mortality in a rat model of hemorrhagic shock. *Shock*, **2006**, 25, 283-9	3.4	56
28	ATP release guides neutrophil chemotaxis via P2Y2 and A3 receptors. *Science*, **2006**, 314, 1792-5	33.3	639
27	Whole-Blood Assay to Measure Oxidative Burst and Degranulation of Neutrophils for Monitoring Trauma Patients. *European Journal of Trauma and Emergency Surgery*, **2005**, 31, 379-388		6
26	A putative osmoreceptor system that controls neutrophil function through the release of ATP, its conversion to adenosine, and activation of A2 adenosine and P2 receptors. *Journal of Leukocyte Biology*, **2004**, 76, 245-53	6.5	72
25	Inhibition of enteral enzymes by enteroclysis with nafamostat mesilate reduces neutrophil activation and transfusion requirements after hemorrhagic shock. *Journal of Trauma*, **2004**, 56, 501-10; discussion 510-1		22
24	Osmotic regulation of cell function and possible clinical applications. *Shock*, **2004**, 21, 391-400	3.4	65
23	Effect of dose of hypertonic saline on its potential to prevent lung tissue damage in a mouse model of hemorrhagic shock. *Shock*, **2003**, 20, 29-34	3.4	71
22	Hypertonic saline resuscitation reduces apoptosis and tissue damage of the small intestine in a mouse model of hemorrhagic shock. *Shock*, **2003**, 20, 23-8	3.4	72
21	Hypertonicity promotes survival of corticospinal motoneurons via mitogen-activated protein kinase p38 signaling. *Journal of Molecular Neuroscience*, **2003**, 21, 111-20	3.3	9
20	Pancreatic enzymes sustain systemic inflammation after an initial endotoxin challenge. *Surgery*, **2003**, 134, 446-56	3.6	28
19	Pentoxifylline reduces acute lung injury in chronic endotoxemia. *Journal of Surgical Research*, **2003**, 115, 92-9	2.5	51

18	Hypertonic stress increases T cell interleukin-2 expression through a mechanism that involves ATP release, P2 receptor, and p38 MAPK activation. *Journal of Biological Chemistry*, **2003**, 278, 4590-6	5.4	91
17	Hypertonicity increases cAMP in PMN and blocks oxidative burst by PKA-dependent and -independent mechanisms. *American Journal of Physiology - Cell Physiology*, **2002**, 282, C1261-9	5.4	43
16	Hypertonicity rescues T cells from suppression by trauma-induced anti-inflammatory mediators. *American Journal of Physiology - Cell Physiology*, **2001**, 281, C840-8	5.4	57
15	HYPERTONIC SALINE INFUSION. *Shock*, **2000**, 14, 503-508	3.4	47
14	Does the timing of hypertonic saline resuscitation affect its potential to prevent lung damage?. *Shock*, **2000**, 14, 18-23	3.4	43
13	Hypertonic saline resuscitation diminishes lung injury by suppressing neutrophil activation after hemorrhagic shock. *Shock*, **1998**, 9, 164-70	3.4	169
12	Hypertonic saline resuscitation reduces neutrophil margination by suppressing neutrophil L selectin expression. *Arteriosclerosis, Thrombosis, and Vascular Biology*, **1998**, 45, 7-12; discussion 12-3	9.4	85
11	HYPERTONIC SALINE RESUSCITATION. *Shock*, **1997**, 8, 235-241	3.4	152
10	Hypertonic saline activates protein tyrosine kinases and mitogen-activated protein kinase p38 in T-cells. *Arteriosclerosis, Thrombosis, and Vascular Biology*, **1997**, 42, 437-43; discussion 443-5	9.4	42
9	Hypertonic saline resuscitation decreases susceptibility to sepsis after hemorrhagic shock. *Arteriosclerosis, Thrombosis, and Vascular Biology*, **1997**, 42, 602-6; discussion 606-7	9.4	154
8	Hypertonic saline resuscitation restores hemorrhage-induced immunosuppression by decreasing prostaglandin E2 and interleukin-4 production. *Journal of Surgical Research*, **1996**, 64, 203-9	2.5	111
7	Acute lung injury in endotoxemic rats is associated with sustained circulating IL-6 levels and intrapulmonary CINC activity and neutrophil recruitment--role of circulating TNF-alpha and IL-beta?. *Shock*, **1996**, 6, 39-45	3.4	55
6	Proliferation assays with human, rabbit, rat, and mouse lymphocytes. *In Vitro Cellular and Developmental Biology - Animal*, **1996**, 32, 520-3	2.6	12
5	Immunosuppression after endotoxin shock: the result of multiple anti-inflammatory factors. *Arteriosclerosis, Thrombosis, and Vascular Biology*, **1996**, 40, 702-9	9.4	25
4	Hypertonic/hyperoncotic fluids reverse prostaglandin E2 (PGE2)-induced T-cell suppression. *Shock*, **1995**, 4, 45-9	3.4	53
3	Tumor necrosis factor antibody treatment of septic baboons reduces the production of sustained T-cell suppressive factors. *Shock*, **1995**, 3, 173-8	3.4	18
2	Effects of trauma on immune cell function: impairment of intracellular calcium signaling. *Shock*, **1994**, 2, 23-8	3.4	31
1	Alteration in Ca2+ homeostasis by a trauma peptide. *Journal of Surgical Research*, **1991**, 51, 477-83	2.5	5