Wolfgang G Junger

List of Publications by Year
in descending order

112 papers	10,894 citations	46918 47 h-index	31759 101 g-index
113 all docs	113 docs citations	113 times ranked	15947 citing authors

#	Article	IF	Citations
1	Extracellular mitochondria drive CD8 T cell dysfunction in trauma by upregulating CD39. Thorax, 2023, 78, 151-159.	2.7	6
2	Optimized HPLC method to elucidate the complex purinergic signaling dynamics that regulate ATP, ADP, AMP, and adenosine levels in human blood. Purinergic Signalling, 2022, 18, 223-239.	1.1	9
3	Frontline Science: P2Y11 receptors support T cell activation by directing mitochondrial trafficking to the immune synapse. Journal of Leukocyte Biology, 2021, 109, 497-508.	1.5	14
4	Structural and functional characterization of engineered bifunctional fusion proteins of CD39 and CD73 ectonucleotidases. American Journal of Physiology - Cell Physiology, 2021, 320, C15-C29.	2.1	7
5	Purinergic P2Y2 receptors modulate endothelial sprouting. Cellular and Molecular Life Sciences, 2020, 77, 885-901.	2.4	17
6	Adenosine 5â€™-Monophosphate Protects from Hypoxia by Lowering Mitochondrial Metabolism and Oxygen Demand. Shock, 2020, 54, 237-244.	1.0	6
7	Negative feedback control of neuronal activity by microglia. Nature, 2020, 586, 417-423.	13.7	520
8	Mitochondria Synergize With P2 Receptors to Regulate Human T Cell Function. Frontiers in Immunology, 2020, 11, 549889.	2.2	12
9	P2Y2 Is An Epithelial Brush Cell Receptor For ATP-Elicited Cysteinyl Leukotrienes Generation. Journal of Allergy and Clinical Immunology, 2020, 145, AB158.	1.5	0
10	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.	1.5	16
11	Airway brush cells generate cysteinyl leukotrienes through the ATP sensor P2Y2. Science Immunology, 2020, 5, .	5.6	76
12	The purinergic receptor P2Y11 choreographs the polarization, mitochondrial metabolism, and migration of T lymphocytes. Science Signaling, 2020, 13, .	1.6	37
13	Frontline Science: <i>Escherichia coli</i> use LPS as decoy to impair neutrophil chemotaxis and defeat antimicrobial host defense. Journal of Leukocyte Biology, 2019, 106, 1211-1219.	1.5	11
14	Autocrine stimulation of P2Y1 receptors is part of the purinergic signaling mechanism that regulates T cell activation. Purinergic Signalling, 2019, 15, 127-137.	1.1	18
15	Lipopolysaccharide suppresses T cells by generating extracellular ATP that impairs their mitochondrial function via P2Y11 receptors. Journal of Biological Chemistry, 2019, 294, 6283-6293.	1.6	22
16	Plasma Adenylate Levels are Elevated in Cardiopulmonary Arrest Patients and May Predict Mortality. Shock, 2019, 51, 698-705.	1.0	7
17	Adenosine Triphosphate Release is Required for Toll-Like Receptor-Induced Monocyte/Macrophage Activation, Inflammasome Signaling, Interleukin-1Î² Production, and the Host Immune Response to Infection. Critical Care Medicine, 2018, 46, e1183-e1189.	0.4	18
18	Purinergic P2X4 receptors and mitochondrial ATP production regulate T cell migration. Journal of Clinical Investigation, 2018, 128, 3583-3594.	3.9	110

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19	Systemic Adenosine Triphosphate Impairs Neutrophil Chemotaxis and Host Defense in Sepsis. Critical Care Medicine, 2017, 45, e97-e104.	0.4	33
20	Hyperthermia and associated changes in membrane fluidity potentiate P2X7 activation to promote tumor cell death. Oncotarget, 2017, 8, 67254-67268.	0.8	40
21	Cutting off the power: inhibition of leukemia cell growth by pausing basal ATP release and P2X receptor signaling?. Purinergic Signalling, 2016, 12, 439-451.	1.1	32
22	Purinergic Signaling and the Immune Response in Sepsis: A Review. Clinical Therapeutics, 2016, 38, 1054-1065.	1.1	44
23	Adenosine arrests breast cancer cell motility by A3 receptor stimulation. Purinergic Signalling, 2016, 12, 673-685.	1.1	21
24	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.	3.5	13
25	Mitochondrial Dysfunction, Depleted Purinergic Signaling, and Defective T Cell Vigilance and Immune Defense. Journal of Infectious Diseases, 2016, 213, 456-464.	1.9	39
26	Removal of extracellular ATP improves fMLP-induced neutrophil chemotaxis. , 2016, , .		2
27	NADH oxidase-dependent CD39 expression by CD8+ T cells modulates interferon gamma responses via generation of adenosine. Nature Communications, 2015, 6, 8819.	5.8	59
28	Prehospital Resuscitation of Traumatic Hemorrhagic Shock with Hypertonic Solutions Worsens Hypocoagulation and Hyperfibrinolysis. Shock, 2015, 44, 25-31.	1.0	39
29	Inhibition of Neutrophils by Hypertonic Saline Involves Pannexin-1, CD39, CD73, and Other Ectonucleotidases. Shock, 2015, 44, 221-227.	1.0	20
30	Novel method for real-time monitoring of ATP release reveals multiple phases of autocrine purinergic signalling during immune cell activation. Acta Physiologica, 2015, 213, 334-345.	1.8	22
31	mTOR and differential activation of mitochondria orchestrate neutrophil chemotaxis. Journal of Cell Biology, 2015, 210, 1153-1164.	2.3	107
32	CD39 Expression Identifies Terminally Exhausted CD8+ T Cells. PLoS Pathogens, 2015, 11, e1005177.	2.1	296
33	Inflammasome activation: A form of autocrine purinergic signaling in monocytes. FASEB Journal, 2015, 29, 973.5.	0.2	0
34	Systemic ATP Levels Suppress the Function of CD4 + T Cells in Sepsis by Impairing Autocrine Purinergic Signaling. FASEB Journal, 2015, 29, 972.6.	0.2	0
35	Mitochondria Orchestrate Chemotaxis of Neutrophils by Fueling Their Autocrine Purinergic Signaling Systems. FASEB Journal, 2015, 29, 671.2.	0.2	0
36	mTOR and differential activation of mitochondria orchestrate neutrophil chemotaxis. Journal of Experimental Medicine, 2015, 212, 21211OIA93.	4.2	0

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37	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.	1.6	134
38	Abandon the Mouse Research Ship? Not Just Yet!. Shock, 2014, 41, 463-475.	1.0	126
39	Plasma ATP is Required for Neutrophil Activation in a Mouse Sepsis Model. Shock, 2014, 42, 142-147.	1.0	49
40	Mitochondria Regulate Neutrophil Activation by Generating ATP for Autocrine Purinergic Signaling. Journal of Biological Chemistry, 2014, 289, 26794-26803.	1.6	108
41	Mitochondria Are Gate-keepers of T Cell Function by Producing the ATP That Drives Purinergic Signaling. Journal of Biological Chemistry, 2014, 289, 25936-25945.	1.6	86
42	Disordered purinergic signaling and abnormal cellular metabolism are associated with development of liver cancer in<i>Cd39/Entpd1</i>null Mice. Hepatology, 2013, 57, 205-216.	3.6	75
43	Shockwaves Induce Osteogenic Differentiation of Human Mesenchymal Stem Cells Through ATP Release and Activation of P2X7 Receptors. Stem Cells, 2013, 31, 1170-1180.	1.4	106
44	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, 601-609.	1.4	33
45	Prehospital Hypertonic Saline Resuscitation Attenuates the Activation and Promotes Apoptosis of Neutrophils in Patients With Severe Traumatic Brain Injury. Shock, 2013, 40, 366-374.	1.0	43
46	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, 22650-22657.	1.6	91
47	Monocyte Human Leukocyte Antigenâ€“DR Expressionâ€”A Tool to Distinguish Intestinal Bacterial Infections From Inflammatory Bowel Disease?. Shock, 2013, 40, 89-94.	1.0	6
48	CD39 Modulates Hematopoietic Stem Cell Recruitment and Promotes Liver Regeneration in Mice and Humans After Partial Hepatectomy. Annals of Surgery, 2013, 257, 693-701.	2.1	28
49	P2X7 Integrates PI3K/AKT and AMPK-PRAS40-mTOR Signaling Pathways to Mediate Tumor Cell Death. PLoS ONE, 2013, 8, e60184.	1.1	102
50	Purinergic signaling integrates local excitation and global inhibition signals that regulate neutrophil chemotaxis. FASEB Journal, 2013, 27, 729.2.	0.2	0
51	ATP release and autocrine signaling through P2X4 receptors regulate Î³Î´ T cell activation. Journal of Leukocyte Biology, 2012, 92, 787-794.	1.5	46
52	Resuscitation of Traumatic Hemorrhagic Shock Patients With Hypertonic Salineâ€”Without Dextranâ€”Inhibits Neutrophil and Endothelial Cell Activation. Shock, 2012, 38, 341-350.	1.0	62
53	Measurement of Oxidative Burst in Neutrophils. Methods in Molecular Biology, 2012, 844, 115-124.	0.4	132
54	A3 Adenosine Receptor Inhibition Improves the Efficacy of Hypertonic Saline Resuscitation. Shock, 2011, 35, 178-183.	1.0	13

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55	Bacterial DNA Induces Pulmonary Damage Via TLR-9 Through Cross-talk With Neutrophils. Shock, 2011, 36, 548-552.	1.0	31
56	Immune cell regulation by autocrine purinergic signalling. Nature Reviews Immunology, 2011, 11, 201-212.	10.6	680
57	Increased Neutrophil Adenosine A3 Receptor Expression Is Associated With Hemorrhagic Shock and Injury Severity in Trauma Patients. Shock, 2011, 36, 435-439.	1.0	16
58	Pannexin-1 hemichannelâ€“mediated ATP release together with P2X1 and P2X4 receptors regulate T-cell activation at the immune synapse. Blood, 2010, 116, 3475-3484.	0.6	273
59	Purinergic Signaling: A Fundamental Mechanism in Neutrophil Activation. Science Signaling, 2010, 3, ra45.	1.6	181
60	Deletion of CD39 on natural killer cells attenuates hepatic ischemia/reperfusion injury in mice. Hepatology, 2010, 51, 1702-1711.	3.6	66
61	Circulating mitochondrial DAMPs cause inflammatory responses to injury. Nature, 2010, 464, 104-107.	13.7	2,983
62	Hypertonic stress regulates T cell function via pannexin-1 hemichannels and P2X receptors. Journal of Leukocyte Biology, 2010, 88, 1181-1189.	1.5	86
63	Adrenergic receptor activation involves ATP release and feedback through purinergic receptors. American Journal of Physiology - Cell Physiology, 2010, 299, C1118-C1126.	2.1	29
64	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-C464.	2.1	45
65	Autocrine regulation of Tâ€cell activation by ATP release and P2X₇receptors. FASEB Journal, 2009, 23, 1685-1693.	0.2	251
66	Purinergic regulation of neutrophil chemotaxis. Cellular and Molecular Life Sciences, 2008, 65, 2528-2540.	2.4	60
67	Ecto-nucleoside Triphosphate Diphosphohydrolase 1 (E-NTPDase1/CD39) Regulates Neutrophil Chemotaxis by Hydrolyzing Released ATP to Adenosine. Journal of Biological Chemistry, 2008, 283, 28480-28486.	1.6	108
68	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-R1845.	0.9	6
69	Roles of Heat Shock Proteins and Î³Î´T Cells in Inflammation. American Journal of Respiratory Cell and Molecular Biology, 2008, 39, 509-513.	1.4	36
70	Hypertonic saline up-regulates A3 adenosine receptor expression of activated neutrophils and increases acute lung injury after sepsis*. Critical Care Medicine, 2008, 36, 2569-2575.	0.4	50
71	Hypertonic saline increases Î³Î´T cell-mediated killing of activated neutrophils. Critical Care Medicine, 2008, 36, 3220-3225.	0.4	8
72	A3 AND P2Y2 RECEPTORS CONTROL THE RECRUITMENT OF NEUTROPHILS TO THE LUNGS IN A MOUSE MODEL OF SEPSIS. Shock, 2008, 30, 173-177.	1.0	87

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73	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-C1425.	2.1	68
74	Mice lacking P2Y 2 receptors have saltâ€resistant hypertension and facilitated renal Na + and water reabsorption. FASEB Journal, 2007, 21, 3717-3726.	0.2	160
75	HYPERTONIC STRESS REGULATES T-CELL FUNCTION BY THE OPPOSING ACTIONS OF EXTRACELLULAR ADENOSINE TRIPHOSPHATE AND ADENOSINE. Shock, 2007, 27, 242-250.	1.0	27
76	Hypertonic Saline Resuscitation: Efficacy May Require Early Treatment in Severely Injured Patients. Journal of Trauma, 2007, 62, 299-306.	2.3	28
77	Heat Shock Proteins and the Resolution of Inflammation by Lymphocytes. , 2007, , 337-354.		0
78	HEAT SHOCK PROTEIN 72 MARKS PMN FOR ????T CELL-MEDIATED KILLING. Shock, 2006, 26, 11.	1.0	0
79	MODULATION OF T CELL FUNCTION BY ATP, ADENOSINE, AND P1/P2 RECEPTORS. Shock, 2006, 26, 17.	1.0	0
80	SMALL-VOLUME FLUID RESUSCITATION WITH HYPERTONIC SALINE PREVENTS INFLAMMATION BUT NOT MORTALITY IN A RAT MODEL OF HEMORRHAGIC SHOCK. Shock, 2006, 25, 283-289.	1.0	68
81	ATP Release Guides Neutrophil Chemotaxis via P2Y2 and A3 Receptors. Science, 2006, 314, 1792-1795.	6.0	756
82	Surface expression of HSP72 by LPS-stimulated neutrophils facilitates Î³Î´T cell-mediated killing. European Journal of Immunology, 2006, 36, 712-721.	1.6	41
83	CONTROL OF PMN CHEMOTAXIS BY AUTOCRINE FEEDBACK THROUGH PURINERGIC RECEPTORS. Shock, 2006, 26, 18.	1.0	0
84	CELL SURFACE EXPRESSION OF A3 AND A2A ADENOSINE RECEPTORS DEFINES THE RESPONSE OF PMN TO HYPERTONIC SALINE. Shock, 2006, 26, 29.	1.0	5
85	Hypertonic saline enhances neutrophil elastase release through activation of P2 and A3 receptors. American Journal of Physiology - Cell Physiology, 2006, 290, C1051-C1059.	2.1	42
86	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.	0.3	7
87	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, 245-253.	1.5	79
88	Inhibition of Enteral Enzymes by Enteroclysis with Nafamostat Mesilate Reduces Neutrophil Activation and Transfusion Requirements after Hemorrhagic Shock. Journal of Trauma, 2004, 56, 501-511.	2.3	22
89	OSMOTIC REGULATION OF CELL FUNCTION AND POSSIBLE CLINICAL APPLICATIONS. Shock, 2004, 21, 391-400.	1.0	68
90	Hypertonicity Promotes Survival of Corticospinal Motoneurons via Mitogen-Activated Protein Kinase p38 Signaling. Journal of Molecular Neuroscience, 2003, 21, 111-120.	1.1	9

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91	Pancreatic enzymes sustain systemic inflammation after an initial endotoxin challenge. Surgery, 2003, 134, 446-456.	1.0	32
92	Pentoxifylline reduces acute lung injury in chronic endotoxemia. Journal of Surgical Research, 2003, 115, 92-99.	0.8	59
93	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, 4590-4596.	1.6	110
94	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.	1.0	83
95	HYPERTONIC SALINE RESUSCITATION REDUCES APOPTOSIS AND TISSUE DAMAGE OF THE SMALL INTESTINE IN A MOUSE MODEL OF HEMORRHAGIC SHOCK. Shock, 2003, 20, 23-28.	1.0	80
96	Hypertonicity increases cAMP in PMN and blocks oxidative burst by PKA-dependent and -independent mechanisms. American Journal of Physiology - Cell Physiology, 2002, 282, C1261-C1269.	2.1	46
97	Hypertonicity rescues T cells from suppression by trauma-induced anti-inflammatory mediators. American Journal of Physiology - Cell Physiology, 2001, 281, C840-C848.	2.1	63
98	HYPERTONIC SALINE INFUSION. Shock, 2000, 14, 503-508.	1.0	60
99	DOES THE TIMING OF HYPERTONIC SALINE RESUSCITATION AFFECT ITS POTENTIAL TO PREVENT LUNG DAMAGE?. Shock, 2000, 14, 18-23.	1.0	48
100	HYPERTONIC SALINE RESUSCITATION DIMINISHES LUNG INJURY BY SUPPRESSING NEUTROPHIL ACTIVATION AFTER HEMORRHAGIC SHOCK. Shock, 1998, 9, 164-170.	1.0	194
101	Hypertonic Saline Resuscitation Reduces Neutrophil Margination by Suppressing Neutrophil L Selectin Expression. Arteriosclerosis, Thrombosis, and Vascular Biology, 1998, 45, 7-13.	1.1	94
102	HYPERTONIC SALINE RESUSCITATION. Shock, 1997, 8, 235-241.	1.0	160
103	Hypertonic Saline Activates Protein Tyrosine Kinases and Mitogen-activated Protein Kinase p38 in T-cells. Arteriosclerosis, Thrombosis, and Vascular Biology, 1997, 42, 437-445.	1.1	50
104	Hypertonic Saline Resuscitation Decreases Susceptibility to Sepsis after Hemorrhagic Shock. Arteriosclerosis, Thrombosis, and Vascular Biology, 1997, 42, 602-607.	1.1	171
105	Hypertonic Saline Resuscitation Restores Hemorrhage-Induced Immunosuppression by Decreasing Prostaglandin E2and Interleukin-4 Production. Journal of Surgical Research, 1996, 64, 203-209.	0.8	125
106	ACUTE LUNG INJURY IN ENDOTOXEMIC RATS IS ASSOCIATED WITH SUSTAINED CIRCULATING IL-6 LEVELS AND INTRAPULMONARY CINC ACTIVITY AND NEUTROPHIL RECRUITMENTâ€"ROLE OF CIRCULATING TNF-Â± AND IL-Â±?. Shock, 1996, 6, 39-45.	1.0	64
107	Proliferation assays with human, rabbit, rat, and mouse lymphocytes. In Vitro Cellular and Developmental Biology - Animal, 1996, 32, 520-523.	0.7	16
108	Immunosuppression after Endotoxin Shock. Arteriosclerosis, Thrombosis, and Vascular Biology, 1996, 40, 702-709.	1.1	30

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109	TUMOR NECROSIS FACTOR ANTIBODY TREATMENT OF SEPTIC BABOONS REDUCES THE PRODUCTION OF SUSTAINED T-CELL SUPPRESSIVE FACTORS. Shock, 1995, 3, 173-178.	1.0	18
110	HYPERTONIC/HYPERONCOTIC FLUIDS REVERSE PROSTAGLANDIN E2 (PGE2)-INDUCED T-CELL SUPPRESSION. Shock, 1995, 4, 45-49.	1.0	61
111	EFFECTS OF TRAUMA ON IMMUNE CELL FUNCTION. Shock, 1994, 2, 23-28.	1.0	34
112	Alteration in Ca2+ homeostasis by a trauma peptide. Journal of Surgical Research, 1991, 51, 477-483.	0.8	5