Serge C Thal

List of Publications by Year
in descending order

102 papers	3,438 citations	109321 35 h-index	155660 55 g-index
111 all docs	111 docs citations	111 times ranked	4633 citing authors

#	Article	IF	Citations
1	Perivascular microglia promote blood vessel disintegration in the ischemic penumbra. Acta Neuropathologica, 2015, 129, 279-295.	7.7	198
2	Inhalation of Nitric Oxide Prevents Ischemic Brain Damage in Experimental Stroke by Selective Dilatation of Collateral Arterioles. Circulation Research, 2012, 110, 727-738.	4.5	163
3	Expression of Na⁺-<scp>d</scp>-glucose cotransporter SGLT2 in rodents is kidney-specific and exhibits sex and species differences. American Journal of Physiology - Cell Physiology, 2012, 302, C1174-C1188.	4.6	157
4	The Bloodâ€“Brain Barrier as a Target in Traumatic Brain Injury Treatment. Archives of Medical Research, 2014, 45, 698-710.	3.3	107
5	Combination Therapy in Ischemic Stroke: Synergistic Neuroprotective Effects of Memantine and Clenbuterol. Stroke, 2004, 35, 1197-1202.	2.0	90
6	Characterization of microvascular basal lamina damage and bloodâ€“brain barrier dysfunction following subarachnoid hemorrhage in rats. Brain Research, 2007, 1142, 237-246.	2.2	88
7	Hypoxia-Induced MicroRNA-212/132 Alter Blood-Brain Barrier Integrity Through Inhibition of Tight Junction-Associated Proteins in Human and Mouse Brain Microvascular Endothelial Cells. Translational Stroke Research, 2019, 10, 672-683.	4.2	86
8	Non-invasive intraoperative monitoring of blood pressure and arterial pCO2 during surgical anesthesia in mice. Journal of Neuroscience Methods, 2007, 159, 261-267.	2.5	84
9	Volatile Anesthetics Influence Blood-Brain Barrier Integrity by Modulation of Tight Junction Protein Expression in Traumatic Brain Injury. PLoS ONE, 2012, 7, e50752.	2.5	84
10	Inhaled Nitric Oxide Reduces Secondary Brain Damage after Traumatic Brain Injury in Mice. Journal of Cerebral Blood Flow and Metabolism, 2013, 33, 311-318.	4.3	81
11	Traumatic brain injury results in rapid pericyte loss followed by reactive pericytosis in the cerebral cortex. Scientific Reports, 2015, 5, 13497.	3.3	81
12	Depletion of regulatory T cells increases T cell brain infiltration, reactive astrogliosis, and interferon-Î³ gene expression in acute experimental traumatic brain injury. Journal of Neuroinflammation, 2019, 16, 163.	7.2	80
13	Influence of Age on Brain Edema Formation, Secondary Brain Damage and Inflammatory Response after Brain Trauma in Mice. PLoS ONE, 2012, 7, e43829.	2.5	79
14	Standardized induction of subarachnoid hemorrhage in mice by intracranial pressure monitoring. Journal of Neuroscience Methods, 2010, 190, 164-170.	2.5	78
15	MILD HYPOTHERMIA (33Â°C) REDUCES INTRACRANIAL HYPERTENSION AND IMPROVES FUNCTIONAL OUTCOME AFTER SUBARACHNOID HEMORRHAGE IN RATS. Neurosurgery, 2009, 65, 352-359.	1.1	74
16	Pioglitazone Reduces Secondary Brain Damage after Experimental Brain Trauma by PPAR-Î³-Independent Mechanisms. Journal of Neurotrauma, 2011, 28, 983-993.	3.4	72
17	Selection of Endogenous Control Genes for Normalization of Gene Expression Analysis after Experimental Brain Trauma in Mice. Journal of Neurotrauma, 2008, 25, 785-794.	3.4	67
18	Nitric oxide inhalation reduces brain damage, prevents mortality, and improves neurological outcome after subarachnoid hemorrhage by resolving early pial microvasospasms. Journal of Cerebral Blood Flow and Metabolism, 2016, 36, 2096-2107.	4.3	65

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19	EGFL7 ligates Î±vÎ²3 integrin to enhance vessel formation. Blood, 2013, 121, 3041-3050.	1.4	62
20	Contribution of Matrix Metalloproteinase-9 to Cerebral Edema and Functional Outcome following Experimental Subarachnoid Hemorrhage. Cerebrovascular Diseases, 2011, 32, 289-295.	1.7	60
21	Xenon Improves Neurologic Outcome and Reduces Secondary Injury Following Trauma in an In Vivo Model of Traumatic Brain Injury*. Critical Care Medicine, 2015, 43, 149-158.	0.9	59
22	2â€Methoxyestradiol confers neuroprotection and inhibits a maladaptive <scp>HIF</scp>â€1Î± response after traumatic brain injury in mice. Journal of Neurochemistry, 2014, 129, 940-954.	3.9	58
23	Anesthesia for Euthanasia Influences mRNA Expression in Healthy Mice and after Traumatic Brain Injury. Journal of Neurotrauma, 2014, 31, 1664-1671.	3.4	57
24	Single Administration of Tripeptide Î±-MSH(11â€“13) Attenuates Brain Damage by Reduced Inflammation and Apoptosis after Experimental Traumatic Brain Injury in Mice. PLoS ONE, 2013, 8, e71056.	2.5	56
25	Influence of a Brief Episode of Anesthesia during the Induction of Experimental Brain Trauma on Secondary Brain Damage and Inflammation. PLoS ONE, 2011, 6, e19948.	2.5	55
26	Inhibition of myosin light chain kinase reduces brain edema formation after traumatic brain injury. Journal of Neurochemistry, 2010, 112, 1015-1025.	3.9	52
27	Xenon improves long-term cognitive function, reduces neuronal loss and chronic neuroinflammation, and improves survival after traumatic brain injury in mice. British Journal of Anaesthesia, 2019, 123, 60-73.	3.4	52
28	Inhaled isoflurane via the anaesthetic conserving device versus propofol for sedation of invasively ventilated patients in intensive care units in Germany and Slovenia: an open-label, phase 3, randomised controlled, non-inferiority trial. Lancet Respiratory Medicine,the, 2021, 9, 1231-1240.	10.7	50
29	Inhibition of Proteasomal Glucocorticoid Receptor Degradation Restores Dexamethasone-Mediated Stabilization of the Bloodâ€“Brain Barrier After Traumatic Brain Injury*. Critical Care Medicine, 2013, 41, 1305-1315.	0.9	49
30	Role of Cortical Spreading Depressions for Secondary Brain Damage after Traumatic Brain Injury in Mice. Journal of Cerebral Blood Flow and Metabolism, 2008, 28, 1353-1360.	4.3	48
31	Delayed inhibition of angiotensin II receptor type 1 reduces secondary brain damage and improves functional recovery after experimental brain trauma*. Critical Care Medicine, 2012, 40, 935-944.	0.9	46
32	Propofol Impairs Neurogenesis and Neurologic Recovery and Increases Mortality Rate in Adult Rats After Traumatic Brain Injury*. Critical Care Medicine, 2014, 42, 129-141.	0.9	44
33	Hypertonic Fluid Resuscitation from Subarachnoid Hemorrhage in Rats. Neurosurgery, 2004, 55, 679-687.	1.1	40
34	Brain edema formation and neurological impairment after subarachnoid hemorrhage in rats. Journal of Neurosurgery, 2009, 111, 988-994.	1.6	40
35	Addition of NMDA-receptor antagonist MK801 during oxygen/glucose deprivation moderately attenuates the upregulation of glucose uptake after subsequent reoxygenation in brain endothelial cells. Neuroscience Letters, 2012, 506, 44-49.	2.1	37
36	Proneurotrophin Binding to P75 Neurotrophin Receptor (P75ntr) Is Essential for Brain Lesion Formation and Functional Impairment after Experimental Traumatic Brain Injury. Journal of Neurotrauma, 2015, 32, 1599-1607.	3.4	36

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37	Comparative effects of proportional assist and variable pressure support ventilation on lung function and damage in experimental lung injury*. Critical Care Medicine, 2012, 40, 2654-2661.	0.9	35
38	Role of apoptosis inducing factor (AIF) for hippocampal neuronal cell death following global cerebral ischemia in mice. Neuroscience Letters, 2011, 499, 1-3.	2.1	33
39	Dimethyl fumarate treatment after traumatic brain injury prevents depletion of antioxidative brain glutathione and confers neuroprotection. Journal of Neurochemistry, 2017, 143, 523-533.	3.9	33
40	Neurological impairment in rats after subarachnoid hemorrhageâ€"A comparison of functional tests. Journal of the Neurological Sciences, 2008, 268, 150-159.	0.6	30
41	Neutrophils mediate early cerebral cortical hypoperfusion in a murine model of subarachnoid haemorrhage. Scientific Reports, 2019, 9, 8460.	3.3	30
42	Plasminogen activator inhibitorâ€1 augments damage by impairing fibrinolysis after traumatic brain injury. Annals of Neurology, 2019, 85, 667-680.	5.3	30
43	Low tidal volume pressure support versus controlled ventilation in early experimental sepsis in pigs. Respiratory Research, 2014, 15, 101.	3.6	29
44	PAI-1 but Not PAI-2 Gene Deficiency Attenuates Ischemic Brain Injury After Experimental Stroke. Translational Stroke Research, 2019, 10, 372-380.	4.2	29
45	The Contractile Apparatus Is Essential for the Integrity of the Blood-Brain Barrier After Experimental Subarachnoid Hemorrhage. Translational Stroke Research, 2019, 10, 534-545.	4.2	28
46	Influence of Age on Cerebral Housekeeping Gene Expression for Normalization of Quantitative Polymerase Chain Reaction after Acute Brain Injury in Mice. Journal of Neurotrauma, 2015, 32, 1777-1788.	3.4	26
47	Mild Hypothermia Has No Long-Term Impact on Postischemic Neurogenesis in Rats. Anesthesia and Analgesia, 2009, 109, 1632-1639.	2.2	24
48	Characterization of a 3-vessel occlusion model for the induction of complete global cerebral ischemia in mice. Journal of Neuroscience Methods, 2010, 192, 219-227.	2.5	24
49	Hypertonic fluid resuscitation from subarachnoid hemorrhage in rats: A comparison between small volume resuscitation and mannitol. Journal of the Neurological Sciences, 2006, 241, 73-82.	0.6	23
50	Posttraumatic Propofol Neurotoxicity Is Mediated via the Proâ€"Brain-Derived Neurotrophic Factor-p75 Neurotrophin Receptor Pathway in Adult Mice*. Critical Care Medicine, 2016, 44, e70-e82.	0.9	22
51	Large Vessel Vasospasm Is Not Associated with Cerebral Cortical Hypoperfusion in a Murine Model of Subarachnoid Hemorrhage. Translational Stroke Research, 2019, 10, 319-326.	4.2	22
52	Enantio-selective effects of clenbuterol in cultured neurons and astrocytes, and in a mouse model of cerebral ischemia. European Journal of Pharmacology, 2007, 575, 57-65.	3.5	20
53	Acute Cortical Transhemispheric Diaschisis after Unilateral Traumatic Brain Injury. Journal of Neurotrauma, 2017, 34, 1097-1110.	3.4	19
54	Inhibition of bradykinin B2 receptors before, not after onset of experimental subarachnoid hemorrhage prevents brain edema formation and improves functional outcome. Critical Care Medicine, 2009, 37, 2228-2234.	0.9	17

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55	Comparison of speed-vacuum method and heat-drying method to measure brain water content of small brain samples. Journal of Neuroscience Methods, 2017, 276, 73-78.	2.5	16
56	New cerebral protection strategies. Current Opinion in Anaesthesiology, 2005, 18, 490-495.	2.0	15
57	Inhalation therapy with the synthetic TIP-like peptide AP318 attenuates pulmonary inflammation in a porcine sepsis model. BMC Pulmonary Medicine, 2015, 15, 7.	2.0	15
58	Comparison of different quantification methods to determine hippocampal damage after cerebral ischemia. Journal of Neuroscience Methods, 2015, 240, 67-76.	2.5	15
59	The antioxidative, non-psychoactive tricyclic phenothiazine reduces brain damage after experimental traumatic brain injury in mice. Neuroscience Letters, 2015, 584, 253-258.	2.1	15
60	Lung injury does not aggravate mechanical ventilation-induced early cerebral inflammation or apoptosis in an animal model. PLoS ONE, 2018, 13, e0202131.	2.5	15
61	Systemic PaO2 Oscillations Cause Mild Brain Injury in a Pig Model. Critical Care Medicine, 2016, 44, e253-e263.	0.9	14
62	Angiotensin II Receptor 1 Blockage Limits Brain Damage and Improves Functional Outcome After Brain Injury in Aged Animals Despite Age-Dependent Reduction in AT1 Expression. Frontiers in Aging Neuroscience, 2019, 11, 63.	3.4	14
63	Anticoagulation in patients with traumatic brain injury. Current Opinion in Anaesthesiology, 2013, 26, 529-534.	2.0	13
64	Swelling of the Buccal Cheek: An Unusual Presentation of Primary Tuberculosis. Journal of Oral and Maxillofacial Surgery, 2007, 65, 2108-2111.	1.2	10
65	Multifaceted Mechanisms of WY-14643 to Stabilize the Blood-Brain Barrier in a Model of Traumatic Brain Injury. Frontiers in Molecular Neuroscience, 2017, 10, 149.	2.9	10
66	A segmentation-based volumetric approach to localize and quantify cerebral vasospasm based on tomographic imaging data. PLoS ONE, 2017, 12, e0172010.	2.5	10
67	<scp>RS</scp>1 (Rsc1A1) deficiency limits cerebral <scp>SGLT</scp>1 expression and delays brain damage after experimental traumatic brain injury. Journal of Neurochemistry, 2018, 147, 190-203.	3.9	10
68	Sequestosome 1 Deficiency Delays, but Does Not Prevent Brain Damage Formation Following Acute Brain Injury in Adult Mice. Frontiers in Neuroscience, 2017, 11, 678.	2.8	9
69	Proteasome and Autophagy-Mediated Impairment of Late Long-Term Potentiation (l-LTP) after Traumatic Brain Injury in the Somatosensory Cortex of Mice. International Journal of Molecular Sciences, 2019, 20, 3048.	4.1	9
70	PO2 oscillations induce lung injury and inflammation. Critical Care, 2019, 23, 102.	5.8	9
71	U SO CAREâ€"The Impact of Cardiac Ultrasound during Cardiopulmonary Resuscitation: A Prospective Randomized Simulator-Based Trial. Journal of Clinical Medicine, 2021, 10, 5218.	2.4	9
72	Dose-Dependent Influence of Sevoflurane Anesthesia on Neuronal Survival and Cognitive Outcome After Transient Forebrain Ischemia in Sprague-Dawley Rats. Neurocritical Care, 2011, 15, 577-584.	2.4	8

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73	Analgesic treatment limits surrogate parameters for early stress and pain response after experimental subarachnoid hemorrhage. BMC Neuroscience, 2019, 20, 49.	1.9	8
74	Mice deficient in the anti-haemophilic coagulation factor VIII show increased von Willebrand factor plasma levels. PLoS ONE, 2017, 12, e0183590.	2.5	8
75	The Recovery Room: Transition from a Sleepy Postoperative Unit to a Vibrant and Cost-Effective Multipurpose Perioperative Care Unit. ClinicoEconomics and Outcomes Research, 2021, Volume 13, 893-896.	1.9	8
76	Volumetric analysis of intracranial vessels: a novel tool for evaluation of cerebral vasospasm. International Journal of Computer Assisted Radiology and Surgery, 2019, 14, 157-167.	2.8	7
77	Correlation of cardiac function and cerebral perfusion in a murine model of subarachnoid hemorrhage. Scientific Reports, 2021, 11, 3317.	3.3	7
78	Levosimendan increases brain tissue oxygen levels after cardiopulmonary resuscitation independent of cardiac function and cerebral perfusion. Scientific Reports, 2021, 11, 14220.	3.3	6
79	Experimental lung injury induces cerebral cytokine mRNA production in pigs. PeerJ, 2020, 8, e10471.	2.0	6
80	High dose infusion of activated protein C (rhAPC) fails to improve neuronal damage and cognitive deficit after global cerebral ischemia in rats. Neuroscience Letters, 2013, 551, 28-33.	2.1	5
81	Normalization with Corresponding NaÃ¨ve Tissue Minimizes Bias Caused by Commercial Reverse Transcription Kits on Quantitative Real-Time PCR Results. PLoS ONE, 2016, 11, e0167209.	2.5	5
82	A Volumetric Method for Quantification of Cerebral Vasospasm in a Murine Model of Subarachnoid Hemorrhage. Journal of Visualized Experiments, 2018, , .	0.3	5
83	Fluid resuscitation-related coagulation impairment in a porcine hemorrhagic shock model. PeerJ, 2020, 8, e8399.	2.0	5
84	Effect of Autologous Blood Transfusion on Cerebral Cytokine Expression. Journal of Neurosurgical Anesthesiology, 2011, 23, 215-221.	1.2	4
85	Deficiency of Plasminogen Activator Inhibitor Type 2 Limits Brain Edema Formation after Traumatic Brain Injury. Journal of Neurotrauma, 2019, 36, 2272-2278.	3.4	4
86	Adaptive Mechanisms of Somatostatin-Positive Interneurons after Traumatic Brain Injury through a Switch of Î± Subunits in L-Type Voltage-Gated Calcium Channels. Cerebral Cortex, 2022, 32, 1093-1109.	2.9	4
87	Ribonuclease-1 treatment after traumatic brain injury preserves bloodâ€“brain barrier integrity and delays secondary brain damage in mice. Scientific Reports, 2022, 12, 5731.	3.3	4
88	Evaluation of a new wireless technique for continuous electroencephalography monitoring in neurological intensive care patients. Journal of Clinical Monitoring and Computing, 2021, 35, 765-770.	1.6	3
89	Evolution of brain edema after subarachnoid hemorrhage (SAH) in rats. Journal of Cerebral Blood Flow and Metabolism, 2005, 25, S271-S271.	4.3	3
90	Posttraumatic midazolam administration does not influence brain damage after experimental traumatic brain injury. BMC Anesthesiology, 2022, 22, 60.	1.8	2

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91	The Impact of Withdrawn vs. Agitated Relatives during Resuscitation on Team Workload: A Single-Center Randomised Simulation-Based Study. Journal of Clinical Medicine, 2022, 11, 3163.	2.4	2
92	A Randomized Controlled Trial Comparing Inhaled Isoflurane Via the Anaesthetic Conserving Device (Sedaconda ^{Â®} ACD) with Propofol for Sedation of Invasively Ventilated ICU Patients. SSRN Electronic Journal, 0, , .	0.4	1
93	Influence of rosuvastatin treatment on cerebral inflammation and nitro-oxidative stress in experimental lung injury in pigs. BMC Anesthesiology, 2021, 21, 224.	1.8	1
94	Effect of fluid resuscitation on cerebral integrity. European Journal of Anaesthesiology, 2021, 38, 411-421.	1.7	1
95	Subarachnoid hemorrhage in rats â€“ neuroprotective efficacy of bradykinin B2 receptor blockade. Journal of Cerebral Blood Flow and Metabolism, 2005, 25, S130-S130.	4.3	1
96	Microvascular basal lamina damage after subarachnoid hemorrhage (SAH) in rats. Journal of Cerebral Blood Flow and Metabolism, 2005, 25, S258-S258.	4.3	1
97	Stay Tuned in Neuroanesthesia Using RSS-Feeds. Journal of Neurosurgical Anesthesiology, 2010, 22, 372.	1.2	0
98	A06â€‰Novel Steroid-Based Strategy to Restore Blood Brain Barrier Integrity and combat Tissue Edema after Ischemic Brain Injury. European Journal of Anaesthesiology, 2012, 29, S2.	1.7	0
99	Xenon treatment improves short-term and long-term outcomes in a rodent model of traumatic brain injury. British Journal of Anaesthesia, 2018, 121, e21.	3.4	0
100	Intensive Care Management of Head-Injured Patient. , 2019, , 157-165.		0
101	Analysis of Cerebral Vasospasm in a Murine Model of Subarachnoid Hemorrhage with High Frequency Transcranial Duplex Ultrasound. Journal of Visualized Experiments, 2021, , .	0.3	0
102	Low specificity needs to be considered when STOP-Bang or Mallampati score are used to identify patients at risk for sleep apnea. Minerva Anestesiologica, 2016, 82, 915-6.	1.0	0