Ulrich Dirnagl

List of Publications by Year in Descending Order

386 papers	34,186 citations	93 h-index	175 g-index
429 ext. papers	39,148 ext. citations	7 avg, IF	7.14 L-index

#	Paper	IF	Citations
386	#IchbinHannah and the fight for permanent jobs for postdocs: How a fictitious postdoc (almost) triggered a fundamental reform of German academia: How a fictitious postdoc (almost) triggered a fundamental reform of German academia.. *EMBO Reports*, **2022**, e54623	6.5	2
385	Long-Term Connectome Analysis Reveals Reshaping of Visual, Spatial Networks in a Model With Vascular Dementia Features.. *Stroke*, **2022**, STROKEAHA121036997	6.7	
384	Reproducibility, Relevance and Reliability as Barriers to Efficient and Credible Biomedical Technology Translation.. *Advanced Drug Delivery Reviews*, **2022**, 182, 114118	18.5	4
383	Paracrine Interleukin 6 Induces Cerebral Remodeling at Early Stages After Unilateral Common Carotid Artery Occlusion in Mice.. *Frontiers in Cardiovascular Medicine*, **2021**, 8, 805095	5.4	1
382	PHACTR1 genetic variability is not critical in small vessel ischemic disease patients and PcomA recruitment in C57BL/6J mice. *Scientific Reports*, **2021**, 11, 6072	4.9	1
381	Incorporating equity, diversity, and inclusiveness into the Hong Kong Principles. *PLoS Biology*, **2021**, 19, e3001140	9.7	0
380	Introduction to the EQIPD quality system. *ELife*, **2021**, 10,	8.9	11
379	Improving target assessment in biomedical research: the GOT-IT recommendations. *Nature Reviews Drug Discovery*, **2021**, 20, 64-81	64.1	23
378	Improving preclinical studies through replications. *ELife*, **2021**, 10,	8.9	8
377	Kommentare zu R. Spanagel (2021): Replikationskrise in der prklinischen Suchtforschung und Vorschlge zur Krisenbewltigung. *Sucht*, **2021**, 67, 207-219	0.5	1
376	Ischemic Stroke: Basic Pathophysiology and Clinical Implication **2021**, 1-22		
375	External validity in translational biomedicine: understanding the conditions enabling the cause to have an effect.. *EMBO Molecular Medicine*, **2021**, e14334	12	1
374	Investigating APOE, APP-Ametabolism genes and Alzheimers disease GWAS hits in brain small vessel ischemic disease. *Scientific Reports*, **2020**, 10, 7103	4.9	7
373	Wisdom of the expert crowd prediction of response for 3 neurology randomized trials. *Neurology*, **2020**, 95, e488-e498	6.5	1
372	Improving the trustworthiness, usefulness, and ethics of biomedical research through an innovative and comprehensive institutional initiative. *PLoS Biology*, **2020**, 18, e3000576	9.7	12
371	Resolving the Tension Between Exploration and Confirmation in Preclinical Biomedical Research. *Handbook of Experimental Pharmacology*, **2020**, 257, 71-79	3.2	8
370	Systematic review of guidelines for internal validity in the design, conduct and analysis of preclinical biomedical experiments involving laboratory animals.. *BMJ Open Science*, **2020**, 4, e100046	4.6	16

369	The ARRIVE guidelines 2.0: updated guidelines for reporting animal research. *BMJ Open Science*, **2020**, 4, e100115	4.6	30
368	The worldwide clinical trial research response to the COVID-19 pandemic - the first 100 days. *F1000Research*, **2020**, 9, 1193	3.6	28
367	The worldwide clinical trial research response to the COVID-19 pandemic - the first 100 days. *F1000Research*, **2020**, 9, 1193	3.6	22
366	Improving quality of preclinical academic research through auditing: A feasibility study. *PLoS ONE*, **2020**, 15, e0240719	3.7	0
365	fiddle: a tool to combat publication bias by getting research out of the file drawer and into the scientific community. *Clinical Science*, **2020**, 134, 2729-2739	6.5	2
364	SorCS2 facilitates release of endostatin from astrocytes and controls post-stroke angiogenesis. *Glia* , **2020**, 68, 1304-1316	9	10
363	A Semiquantitative Non-invasive Measurement of PcomA Patency in C57BL/6 Mice Explains Variance in Ischemic Brain Damage in Filament MCAo. *Frontiers in Neuroscience*, **2020**, 14, 576741	5.1	3
362	The ARRIVE guidelines 2.0: Updated guidelines for reporting animal research. *BMC Veterinary Research*, **2020**, 16, 242	2.7	42
361	The ARRIVE guidelines 2.0: Updated guidelines for reporting animal research. *PLoS Biology*, **2020**, 18, e3000410	9.7	757
360	Reporting animal research: Explanation and elaboration for the ARRIVE guidelines 2.0. *PLoS Biology* , **2020**, 18, e3000411	9.7	352
359	The ARRIVE guidelines 2.0: Updated guidelines for reporting animal research. *Journal of Cerebral Blood Flow and Metabolism*, **2020**, 40, 1769-1777	7.3	220
358	The Hong Kong Principles for assessing researchers: Fostering research integrity. *PLoS Biology*, **2020**, 18, e3000737	9.7	75
357	The ARRIVE guidelines 2.0: Updated guidelines for reporting animal research. *British Journal of Pharmacology*, **2020**, 177, 3617-3624	8.6	99
356	Assessing the Organizational Climate for Translational Research with a New Survey Tool. *Science and Engineering Ethics*, **2020**, 26, 2893-2910	3.1	1
355	An exploratory investigation of brain collateral circulation plasticity after cerebral ischemia in two experimental C57BL/6 mouse models. *Journal of Cerebral Blood Flow and Metabolism*, **2020**, 40, 276-287	7.3	11
354	Preregistration of exploratory research: Learning from the golden age of discovery. *PLoS Biology*, **2020**, 18, e3000690	9.7	15
353	Improving quality of preclinical academic research through auditing: A feasibility study **2020**, 15, e0240719		
352	Improving quality of preclinical academic research through auditing: A feasibility study **2020**, 15, e0240719		

351	Improving quality of preclinical academic research through auditing: A feasibility study **2020**, 15, e0240719		
350	Improving quality of preclinical academic research through auditing: A feasibility study **2020**, 15, e0240719		
349	Outcome heterogeneity and bias in acute experimental spinal cord injury: A meta-analysis. *Neurology*, **2019**, 93, e40-e51	6.5	14
348	Exact replication: Foundation of science or game of chance?. *PLoS Biology*, **2019**, 17, e3000188	9.7	12
347	Result dissemination from clinical trials conducted at German university medical centers was delayed and incomplete. *Journal of Clinical Epidemiology*, **2019**, 115, 37-45	5.7	19
346	Human gestational N-methyl-d-aspartate receptor autoantibodies impair neonatal murine brain function. *Annals of Neurology*, **2019**, 86, 656-670	9.4	26
345	3Rs missing: animal research without scientific value is unethical.. *BMJ Open Science*, **2019**, 3,	4.6	20
344	Refining humane endpoints in mouse models of disease by systematic review and machine learning-based endpoint definition. *ALTEX: Alternatives To Animal Experimentation*, **2019**, 36, 555-571	4.3	3
343	Unique properties of PTEN-L contribute to neuroprotection in response to ischemic-like stress. *Scientific Reports*, **2019**, 9, 3183	4.9	8
342	Longitudinal 19F magnetic resonance imaging of brain oxygenation in a mouse model of vascular cognitive impairment using a cryogenic radiofrequency coil. *Magnetic Resonance Materials in Physics, Biology, and Medicine*, **2019**, 32, 105-114	2.8	5
341	Rethinking research reproducibility. *EMBO Journal*, **2019**, 38,	13	15
340	Atlas registration for edema-corrected MRI lesion volume in mouse stroke models. *Journal of Cerebral Blood Flow and Metabolism*, **2019**, 39, 313-323	7.3	26
339	Mendelian adult-onset leukodystrophy genes in Alzheimer's disease: critical influence of CSF1R and NOTCH3. *Neurobiology of Aging*, **2018**, 66, 179.e17-179.e29	5.6	23
338	Die Bedeutung des intestinalen Mikrobioms beim ischämischen Schlaganfall. *Aktuelle Neurologie*, **2018**, 45, 127-134		0
337	Health tips for research groups. *Nature*, **2018**, 557, 302-304	50.4	5
336	Tracking the timely dissemination of clinical studies. Characteristics and impact of 10 tracking variables. *F1000Research*, **2018**, 7, 1863	3.6	2
335	Individual and temporal variability of the retina after chronic bilateral common carotid artery occlusion (BCCAO). *PLoS ONE*, **2018**, 13, e0193961	3.7	8
334	Errors and Error Management in Biomedical Research **2018**, 149-160		1

333	Protocol for a systematic review of guidelines for rigour in the design, conduct and analysis of biomedical experiments involving laboratory animals.. *BMJ Open Science*, **2018**, 2, e000004	4.6	2
332	Exploratory Investigation of Intestinal Function and Bacterial Translocation After Focal Cerebral Ischemia in the Mouse. *Frontiers in Neurology*, **2018**, 9, 937	4.1	7
331	Revision of the ARRIVE guidelines: rationale and scope. *BMJ Open Science*, **2018**, 2, e000002	4.6	20
330	Quality management for academic laboratories: burden or boon? Professional quality management could be very beneficial for academic research but needs to overcome specific caveats. *EMBO Reports*, **2018**, 19,	6.5	13
329	The bench is closer to the bedside than we think: Uncovering the ethical ties between preclinical researchers in translational neuroscience and patients in clinical trials. *PLoS Biology*, **2018**, 16, e2006343	9.7	15
328	Neuroimaging Biomarkers Predict Brain Structural Connectivity Change in a Mouse Model of Vascular Cognitive Impairment. *Stroke*, **2017**, 48, 468-475	6.7	16
327	Increased homocysteine levels impair reference memory and reduce cortical levels of acetylcholine in a mouse model of vascular cognitive impairment. *Behavioural Brain Research*, **2017**, 321, 201-208	3.4	16
326	Long-term functional outcome in patients with acquired infections after acute spinal cord injury. *Neurology*, **2017**, 88, 892-900	6.5	55
325	Increasing efficiency of preclinical research by group sequential designs. *PLoS Biology*, **2017**, 15, e2001307	9.7	25
324	Spinal cord injury-induced immunodeficiency is mediated by a sympathetic-neuroendocrine adrenal reflex. *Nature Neuroscience*, **2017**, 20, 1549-1559	25.5	76
323	Role of the Gut Microbiota in Ischemic Stroke. *Neurology International Open*, **2017**, 01, E287-E293		4
322	Stage 1 Registered Report: Effect of deficient phagocytosis on neuronal survival and neurological outcome after temporary middle cerebral artery occlusion (tMCAo). *F1000Research*, **2017**, 6, 1827	3.6	5
321	Stage 1 Registered Report: Effect of deficient phagocytosis on neuronal survival and neurological outcome after temporary middle cerebral artery occlusion (tMCAo). *F1000Research*, **2017**, 6, 1827	3.6	5
320	Preclinical research: Meet patients to sharpen up research. *Nature*, **2017**, 551, 300	50.4	1
319	Statistics in Experimental Stroke Research: From Sample Size Calculation to Data Description and Significance Testing. *Neuromethods*, **2016**, 301-315	0.4	
318	Human cerebrospinal fluid monoclonal N-methyl-D-aspartate receptor autoantibodies are sufficient for encephalitis pathogenesis. *Brain*, **2016**, 139, 2641-2652	11.2	148
317	Natural Killer (NK) Cell Functionality after human Spinal Cord Injury (SCI): protocol of a prospective, longitudinal study. *BMC Neurology*, **2016**, 16, 170	3.1	9
316	Thomas Willis Lecture: Is Translational Stroke Research Broken, and if So, How Can We Fix It?. *Stroke*, **2016**, 47, 2148-53	6.7	44

315	Ischemic Stroke: Basic Pathophysiology and Clinical Implication **2016**, 3385-3405		
314	Results of the ICTuS 2 Trial (Intravascular Cooling in the Treatment of Stroke 2). *Stroke*, **2016**, 47, 2888-2895	8.7	89
313	Influence of essential amino acids on muscle mass and muscle strength in patients with cerebral stroke during early rehabilitation: protocol and rationale of a randomized clinical trial (AMINO-Stroke Study). *BMC Neurology*, **2016**, 16, 10	3.1	7
312	Gut microbiota impact on stroke outcome: Fad or fact?. *Journal of Cerebral Blood Flow and Metabolism*, **2016**, 36, 891-8	7.3	44
311	Spinal cord injury-induced immune deficiency syndrome enhances infection susceptibility dependent on lesion level. *Brain*, **2016**, 139, 692-707	11.2	119
310	A pocket guide to electronic laboratory notebooks in the academic life sciences. *F1000Research*, **2016**, 5, 2	3.6	21
309	Olfactory Ensheathing Cell Transplantation in Experimental Spinal Cord Injury: Effect size and Reporting Bias of 62 Experimental Treatments: A Systematic Review and Meta-Analysis. *PLoS Biology*, **2016**, 14, e1002468	9.7	60
308	Complexities, Confounders, and Challenges in Experimental Stroke Research: A Checklist for Researchers and Reviewers. *Neuromethods*, **2016**, 317-331	0.4	
307	Where Have All the Rodents Gone? The Effects of Attrition in Experimental Research on Cancer and Stroke. *PLoS Biology*, **2016**, 14, e1002331	9.7	55
306	A Laboratory Critical Incident and Error Reporting System for Experimental Biomedicine. *PLoS Biology*, **2016**, 14, e2000705	9.7	6
305	Methylprednisolone blocks interleukin 1 beta induced calcitonin gene related peptide release in trigeminal ganglia cells. *Journal of Headache and Pain*, **2016**, 17, 19	8.8	19
304	Depletion of Cultivatable Gut Microbiota by Broad-Spectrum Antibiotic Pretreatment Worsens Outcome After Murine Stroke. *Stroke*, **2016**, 47, 1354-63	6.7	119
303	Neuroprotection in acute stroke: targeting excitotoxicity, oxidative and nitrosative stress, and inflammation. *Lancet Neurology, The*, **2016**, 15, 869-881	24.1	551
302	Quality Control and Standard Operating Procedures. *Neuromethods*, **2016**, 291-300	0.4	0
301	The Gut Microbiome as Therapeutic Target in Central Nervous System Diseases: Implications for Stroke. *Neurotherapeutics*, **2016**, 13, 762-774	6.4	65
300	Interaction of ARC and Daxx: A Novel Endogenous Target to Preserve Motor Function and Cell Loss after Focal Brain Ischemia in Mice. *Journal of Neuroscience*, **2016**, 36, 8132-48	6.6	16
299	SCISSOR-Spinal Cord Injury Study on Small molecule-derived Rho inhibition: a clinical study protocol. *BMJ Open*, **2016**, 6, e010651	3	13
298	Results of a preclinical randomized controlled multicenter trial (pRCT): Anti-CD49d treatment for acute brain ischemia. *Science Translational Medicine*, **2015**, 7, 299ra121	17.5	167

297	Vascular change and opposing effects of the angiotensin type 2 receptor in a mouse model of vascular cognitive impairment. *Journal of Cerebral Blood Flow and Metabolism*, **2015**, 35, 476-84	7.3	26
296	Neurovascular coupling during cortical spreading depolarization and -depression. *Stroke*, **2015**, 46, 1392-401	6.7	30
295	Vascular signal transducer and activator of transcription-3 promotes angiogenesis and neuroplasticity long-term after stroke. *Circulation*, **2015**, 131, 1772-82	16.7	46
294	Cholinergic Pathway Suppresses Pulmonary Innate Immunity Facilitating Pneumonia After Stroke. *Stroke*, **2015**, 46, 3232-40	6.7	54
293	Infarct Volume Prediction by Early Magnetic Resonance Imaging in a Murine Stroke Model Depends on Ischemia Duration and Time of Imaging. *Stroke*, **2015**, 46, 3249-59	6.7	12
292	Robust research: Institutions must do their part for reproducibility. *Nature*, **2015**, 525, 25-7	50.4	69
291	Blocking stroke-induced immunodeficiency increases CNS antigen-specific autoreactivity but does not worsen functional outcome after experimental stroke. *Journal of Neuroscience*, **2015**, 35, 7777-94	6.6	46
290	Methylenetetrahydrofolate reductase deficiency alters levels of glutamate and □aminobutyric acid in brain tissue. *Molecular Genetics and Metabolism Reports*, **2015**, 3, 1-4	1.8	15
289	Elevated levels of plasma homocysteine, deficiencies in dietary folic acid and uracil-DNA glycosylase impair learning in a mouse model of vascular cognitive impairment. *Behavioural Brain Research*, **2015**, 283, 215-26	3.4	22
288	Catabolic signaling and muscle wasting after acute ischemic stroke in mice: indication for a stroke-specific sarcopenia. *Stroke*, **2014**, 45, 3675-83	6.7	60
287	Biomedical research: increasing value, reducing waste. *Lancet, The*, **2014**, 383, 101-4	40	527
286	High prevalence of NMDA receptor IgA/IgM antibodies in different dementia types. *Annals of Clinical and Translational Neurology*, **2014**, 1, 822-32	5.3	78
285	Changing the mindset in life sciences toward translation: a consensus. *Science Translational Medicine*, **2014**, 6, 264cm12	17.5	31
284	A dual-labeled Annexin A5 is not suited for SPECT imaging of brain cell death in experimental murine stroke. *Journal of Cerebral Blood Flow and Metabolism*, **2014**, 34,	7.3	7
283	Single-cell resolution mapping of neuronal damage in acute focal cerebral ischemia using thallium autometallography. *Journal of Cerebral Blood Flow and Metabolism*, **2014**, 34, 144-52	7.3	4
282	Distinguishing between exploratory and confirmatory preclinical research will improve translation. *PLoS Biology*, **2014**, 12, e1001863	9.7	136
281	Effect and reporting bias of RhoA/ROCK-blockade intervention on locomotor recovery after spinal cord injury: a systematic review and meta-analysis. *JAMA Neurology*, **2014**, 71, 91-9	17.2	66
280	Modeling immunity and inflammation in stroke: can mice be trusted?. *Stroke*, **2014**, 45, e177-8	6.7	7

279	Histone acetylation and CREB binding protein are required for neuronal resistance against ischemic injury. *PLoS ONE*, **2014**, 9, e95465	3.7	41
278	Old Dogmas, Surprising Complexities, and Novel Therapeutic Targets **2014**, 1-8		
277	The neurovascular unit as a selective barrier to polymorphonuclear granulocyte (PMN) infiltration into the brain after ischemic injury. *Acta Neuropathologica*, **2013**, 125, 395-412	14.3	156
276	Hoffnung auf Neuroprotektion. *InFo Neurologie & Psychiatrie*, **2013**, 15, 22-22	0	
275	The SCIentinel study--prospective multicenter study to define the spinal cord injury-induced immune depression syndrome (SCI-IDS)--study protocol and interim feasibility data. *BMC Neurology*, **2013**, 13, 168	3.1	29
274	Electrochemical failure of the brain cortex is more deleterious when it is accompanied by low perfusion. *Stroke*, **2013**, 44, 490-6	6.7	25
273	The neurotoxicity of hallucinogenic amphetamines in primary cultures of hippocampal neurons. *NeuroToxicology*, **2013**, 34, 254-63	4.4	31
272	Stroke induced Sarcopenia: muscle wasting and disability after stroke. *International Journal of Cardiology*, **2013**, 170, 89-94	3.2	142
271	A functional role of the cyclin-dependent kinase inhibitor 1 (p21(WAF1/CIP1)) for neuronal preconditioning. *Journal of Cerebral Blood Flow and Metabolism*, **2013**, 33, 351-5	7.3	8
270	Investigation of changes in body composition, metabolic profile and skeletal muscle functional capacity in ischemic stroke patients: the rationale and design of the Body Size in Stroke Study (BoSSS). *Journal of Cachexia, Sarcopenia and Muscle*, **2013**, 4, 199-207	10.3	21
269	Ischemic Stroke: Basic Pathophysiology and Clinical Implication **2013**, 2543-2563		1
268	Superiority of preventive antibiotic treatment compared with standard treatment of poststroke pneumonia in experimental stroke: a bed to bench approach. *Journal of Cerebral Blood Flow and Metabolism*, **2013**, 33, 846-54	7.3	34
267	A concerted appeal for international cooperation in preclinical stroke research. *Stroke*, **2013**, 44, 1754-60	6.7	81
266	The microcircualtion--fantastic voyage: introduction. *Stroke*, **2013**, 44, S83	6.7	2
265	Certain types of iron oxide nanoparticles are not suited to passively target inflammatory cells that infiltrate the brain in response to stroke. *Journal of Cerebral Blood Flow and Metabolism*, **2013**, 33, e1-9	7.3	46
264	Specific imaging of inflammation with the 18 kDa translocator protein ligand DPA-714 in animal models of epilepsy and stroke. *PLoS ONE*, **2013**, 8, e69529	3.7	35
263	Pathobiology of injury after stroke: the neurovascular unit and beyond. *Annals of the New York Academy of Sciences*, **2012**, 1268, 21-5	6.5	144
262	Functional neurological recovery after spinal cord injury is impaired in patients with infections. *Brain*, **2012**, 135, 3238-50	11.2	94

261	Essential role of interleukin-6 in post-stroke angiogenesis. *Brain*, **2012**, 135, 1964-80	11.2	139
260	Immune responses after acute ischemic stroke or myocardial infarction. *International Journal of Cardiology*, **2012**, 155, 372-7	3.2	43
259	Visualizing cell death in experimental focal cerebral ischemia: promises, problems, and perspectives. *Journal of Cerebral Blood Flow and Metabolism*, **2012**, 32, 213-31	7.3	93
258	Brain perfusion SPECT in the mouse: normal pattern according to gender and age. *NeuroImage*, **2012**, 63, 1807-17	7.9	20
257	Standard operating procedures (SOP) in experimental stroke research: SOP for middle cerebral artery occlusion in the mouse. *Nature Precedings*, **2012**,		13
256	Small-molecule-induced Rho-inhibition: NSAIDs after spinal cord injury. *Cell and Tissue Research*, **2012**, 349, 119-32	4.2	54
255	Mitochondrial hexokinase II (HKII) and phosphoprotein enriched in astrocytes (PEA15) form a molecular switch governing cellular fate depending on the metabolic state. *Proceedings of the National Academy of Sciences of the United States of America*, **2012**, 109, 1518-23	11.5	46
254	Primary trigeminal afferents are the main source for stimulus-induced CGRP release into jugular vein blood and CSF. *Cephalalgia*, **2012**, 32, 659-67	6.1	39
253	Evidence of intrathecal immunoglobulin synthesis in stroke: a cohort study. *Archives of Neurology*, **2012**, 69, 714-7		29
252	Modeling stroke in mice - middle cerebral artery occlusion with the filament model. *Journal of Visualized Experiments*, **2011**,	1.6	100
251	Protective conditioning of the brain: expressway or roadblock?. *Journal of Physiology*, **2011**, 589, 4147-55	3.9	28
250	Systematic survey of the design, statistical analysis, and reporting of studies published in the 2008 volume of the Journal of Cerebral Blood Flow and Metabolism. *Journal of Cerebral Blood Flow and Metabolism*, **2011**, 31, 1064-72	7.3	42
249	Visualization of cell death in mice with focal cerebral ischemia using fluorescent annexin A5, propidium iodide, and TUNEL staining. *Journal of Cerebral Blood Flow and Metabolism*, **2011**, 31, 1311-20	7.3	34
248	Non-resolving aspects of acute inflammation after spinal cord injury (SCI): indices and resolution plateau. *Brain Pathology*, **2011**, 21, 652-60	6	74
247	Stroke and the immune system: from pathophysiology to new therapeutic strategies. *Lancet Neurology, The*, **2011**, 10, 471-80	24.1	316
246	Effect of 3,4-methylenedioxyamphetamine on dendritic spine dynamics in rat neocortical neurons--involvement of heat shock protein 27. *Brain Research*, **2011**, 1370, 43-52	3.7	5
245	Body weight after stroke: lessons from the obesity paradox. *Stroke*, **2011**, 42, 3646-50	6.7	94
244	SUMO2/3 conjugation is an endogenous neuroprotective mechanism. *Journal of Cerebral Blood Flow and Metabolism*, **2011**, 31, 2152-9	7.3	97

243	IL-1β stimulates COX-2 dependent PGE2 synthesis and CGRP release in rat trigeminal ganglia cells. *PLoS ONE*, **2011**, 6, e17360	3.7	89
242	Hypothermia for Stroke: call to action 2010. *International Journal of Stroke*, **2010**, 5, 489-92	6.3	29
241	Pharmacological uncoupling of activation induced increases in CBF and CMRO2. *Journal of Cerebral Blood Flow and Metabolism*, **2010**, 30, 311-22	7.3	69
240	Neurovascular coupling in rat brain operates independent of hemoglobin deoxygenation. *Journal of Cerebral Blood Flow and Metabolism*, **2010**, 30, 757-68	7.3	74
239	Statistics in experimental cerebrovascular research-comparison of two groups with a continuous outcome variable. *Journal of Cerebral Blood Flow and Metabolism*, **2010**, 30, 474-9	7.3	8
238	Determination of the brain-blood partition coefficient for water in mice using MRI. *Journal of Cerebral Blood Flow and Metabolism*, **2010**, 30, 1821-4	7.3	29
237	Statistics in experimental cerebrovascular research: comparison of more than two groups with a continuous outcome variable. *Journal of Cerebral Blood Flow and Metabolism*, **2010**, 30, 1558-63	7.3	24
236	Oxygen maps in the brain. *Nature Methods*, **2010**, 7, 697-9	21.6	2
235	Standard operating procedures (SOP) in experimental stroke research: SOP for middle cerebral artery occlusion in the mouse. *Nature Precedings*, **2010**,		5
234	Pathophysiological interference with neurovascular coupling - when imaging based on hemoglobin might go blind. *Frontiers in Neuroenergetics*, **2010**, 2,		53
233	CD93/AA4.1: a novel regulator of inflammation in murine focal cerebral ischemia. *Journal of Immunology*, **2010**, 184, 6407-17	5.3	30
232	Pericytes in capillaries are contractile in vivo, but arterioles mediate functional hyperemia in the mouse brain. *Proceedings of the National Academy of Sciences of the United States of America*, **2010**, 107, 22290-5	11.5	298
231	Elevating intracranial pressure reverses the decrease in deoxygenated hemoglobin and abolishes the post-stimulus overshoot upon somatosensory activation in rats. *NeuroImage*, **2010**, 52, 445-54	7.9	18
230	Membrane attack complex inhibitor CD59a protects against focal cerebral ischemia in mice. *Journal of Neuroinflammation*, **2010**, 7, 15	10.1	40
229	Non-invasive surface-stripping for epifluorescence small animal imaging. *Biomedical Optics Express*, **2010**, 1, 97-105	3.5	6
228	Acute pathophysiological processes after ischaemic and traumatic brain injury. *Bailliere's Best Practice and Research in Clinical Anaesthesiology*, **2010**, 24, 495-509	4	79
227	INFECTION - AN AMENDMENT TO THE STROKE MODEL GUIDELINES. *Journal of Experimental Stroke & Translational Medicine*, **2010**, 3, 29-32		2
226	Complexities, Confounders, and Challenges in Experimental Stroke Research: A Checklist for Researchers and Reviewers. *Neuromethods*, **2010**, 263-277	0.4	5

225	Statistics in Experimental Stroke Research: From Sample Size Calculation to Data Description and Significance Testing. *Neuromethods*, **2010**, 249-261	0.4	
224	Quality Control and Standard Operating Procedures. *Neuromethods*, **2010**, 239-248	0.4	1
223	Standard operating procedures (SOP) in experimental stroke research: SOP for middle cerebral artery occlusion in the mouse. *Nature Precedings*, **2009**,		1
222	Reprint: Good laboratory practice: preventing introduction of bias at the bench. *Stroke*, **2009**, 29, 221-3	6.7	236
221	Effects of the PDE5-inhibitor vardenafil in a mouse stroke model. *Brain Research*, **2009**, 1265, 148-57	3.7	46
220	Preconditioning and tolerance against cerebral ischaemia: from experimental strategies to clinical use. *Lancet Neurology, The*, **2009**, 8, 398-412	24.1	466
219	Reprint: Good Laboratory Practice: Preventing Introduction of Bias at the Bench. *Journal of Cerebral Blood Flow and Metabolism*, **2009**, 29, 221-223	7.3	50
218	In vivo near-infrared fluorescence imaging of matrix metalloproteinase activity after cerebral ischemia. *Journal of Cerebral Blood Flow and Metabolism*, **2009**, 29, 1284-92	7.3	59
217	Reprint: Good laboratory practice: preventing introduction of bias at the bench. *International Journal of Stroke*, **2009**, 4, 3-5	6.3	23
216	Stroke research at a road block: the streets from adversity should be paved with meta-analysis and good laboratory practice. *British Journal of Pharmacology*, **2009**, 157, 1154-6	8.6	53
215	Intracisternal injection of inflammatory soup activates the trigeminal nerve system. *Cephalalgia*, **2009**, 29, 1212-7	6.1	10
214	Near-infrared fluorescence imaging with fluorescently labeled albumin: a novel method for non-invasive optical imaging of blood-brain barrier impairment after focal cerebral ischemia in mice. *Journal of Neuroscience Methods*, **2009**, 180, 126-32	3	63
213	Cortical spreading ischaemia is a novel process involved in ischaemic damage in patients with aneurysmal subarachnoid haemorrhage. *Brain*, **2009**, 132, 1866-81	11.2	415
212	Mrp-8 and -14 mediate CNS injury in focal cerebral ischemia. *Biochimica Et Biophysica Acta - Molecular Basis of Disease*, **2009**, 1792, 1198-204	6.9	47
211	Stroke-induced immunodepression and post-stroke infections: lessons from the preventive antibacterial therapy in stroke trial. *Neuroscience*, **2009**, 158, 1184-93	3.9	208
210	Non-invasive visualization of CNS inflammation with nuclear and optical imaging. *Neuroscience*, **2009**, 158, 1161-73	3.9	52
209	Brain-immune interactions in acute and chronic brain disorders. *Neuroscience*, **2009**, 158, 969-71	3.9	4
208	The ischemic cascade and mediators of ischemic injury. *Handbook of Clinical Neurology / Edited By P J Vinken and G W Bruyn*, **2009**, 92, 31-41	3	15

207	Das Centrum f□Schlaganfallforschung Berlin (CSB). *E-Neuroforum*, **2009**, 15, 132-135		
206	Mitochondrial free radical production induced by glucose deprivation in cerebellar granule neurons. *Biochemistry (Moscow)*, **2008**, 73, 149-55	2.9	24
205	Inducible nitric oxide synthase does not mediate brain damage after transient focal cerebral ischemia in mice. *Journal of Cerebral Blood Flow and Metabolism*, **2008**, 28, 526-39	7.3	21
204	5,7-Dihydroxitryptamine toxicity to serotonergic neurons in serum free raphe cultures. *European Journal of Pharmacology*, **2008**, 588, 232-8	5.3	5
203	Doxorubicin induces biphasic neurotoxicity to rat cortical neurons. *NeuroToxicology*, **2008**, 29, 286-93	4.4	32
202	Endogenous neuroprotection: mitochondria as gateways to cerebral preconditioning?. *Neuropharmacology*, **2008**, 55, 334-44	5.5	121
201	Hypothermia effects on neurovascular coupling and cerebral metabolic rate of oxygen. *NeuroImage* , **2008**, 40, 1523-32	7.9	26
200	Cellular immunodepression preceding infectious complications after acute ischemic stroke in humans. *Cerebrovascular Diseases*, **2008**, 25, 50-8	3.2	154
199	Improving outcome after stroke: overcoming the translational roadblock. *Cerebrovascular Diseases*, **2008**, 25, 268-78	3.2	206
198	Empirical evidence of bias in the design of experimental stroke studies: a metaepidemiologic approach. *Stroke*, **2008**, 39, 929-34	6.7	185
197	Nitric oxide modulates spreading depolarization threshold in the human and rodent cortex. *Stroke*, **2008**, 39, 1292-9	6.7	69
196	Towards noninvasive molecular fluorescence imaging of the human brain. *Neurodegenerative Diseases*, **2008**, 5, 296-303	2.3	35
195	Fluorescence tomography technique optimized for noninvasive imaging of the mouse brain. *Journal of Biomedical Optics*, **2008**, 13, 041311	3.5	15
194	In vivo imaging of the inflammatory receptor CD40 after cerebral ischemia using a fluorescent antibody. *Stroke*, **2008**, 39, 2845-52	6.7	52
193	Evidence for the efficacy of NXY-059 in experimental focal cerebral ischaemia is confounded by study quality. *Stroke*, **2008**, 39, 2824-9	6.7	241
192	Preventive antibacterial therapy in acute ischemic stroke: a randomized controlled trial. *PLoS ONE*, **2008**, 3, e2158	3.7	184
191	Improved reperfusion and neuroprotection by creatine in a mouse model of stroke. *Journal of Cerebral Blood Flow and Metabolism*, **2007**, 27, 452-9	7.3	93
190	Phosphatidylinositol 3-Akt-kinase-dependent phosphorylation of p21(Waf1/Cip1) as a novel mechanism of neuroprotection by glucocorticoids. *Journal of Neuroscience*, **2007**, 27, 4562-71	6.6	57

189	Sulfonylureas improve outcome in patients with type 2 diabetes and acute ischemic stroke. *Stroke*, **2007**, 38, 2526-30	6.7	125
188	Neuroprotective effects of the beta-carboline abecarnil studied in cultured cortical neurons and organotypic retinal cultures. *Neuropharmacology*, **2007**, 52, 1488-95	5.5	10
187	Neurotoxicity mechanisms of thioether ecstasy metabolites. *Neuroscience*, **2007**, 146, 1743-57	3.9	84
186	Protection from brain damage and bacterial infection in murine stroke by the novel caspase-inhibitor Q-VD-OPH. *Experimental Neurology*, **2007**, 206, 183-91	5.7	46
185	Stroke-induced immunodepression: experimental evidence and clinical relevance. *Stroke*, **2007**, 38, 770-3	6.7	354
184	Endothelin-1-induced spreading depression in rats is associated with a microarea of selective neuronal necrosis. *Experimental Biology and Medicine*, **2007**, 232, 204-13	3.7	29
183	Functional imaging with laser speckle contrast analysis: vascular compartment analysis and correlation with laser Doppler flowmetry and somatosensory evoked potentials. *Brain Research*, **2006**, 1121, 95-103	3.7	31
182	Roller culture of free-floating retinal slices: a new system of organotypic cultures of adult rat retina. *Ophthalmic Research*, **2006**, 38, 263-9	2.9	13
181	Stroke propagates bacterial aspiration to pneumonia in a model of cerebral ischemia. *Stroke*, **2006**, 37, 2607-12	6.7	154
180	Tracking of systemically administered mononuclear cells in the ischemic brain by high-field magnetic resonance imaging. *NeuroImage*, **2006**, 33, 886-97	7.9	45
179	Impaired cerebrovascular reactivity after cortical spreading depression in rats: Restoration by nitric oxide or cGMP. *Experimental Neurology*, **2006**, 202, 449-55	5.7	29
178	Ecstasy-induced cell death in cortical neuronal cultures is serotonin 2A-receptor-dependent and potentiated under hyperthermia. *Neuroscience*, **2006**, 139, 1069-81	3.9	67
177	Noninvasive Near-infrared Imaging of Fluorochromes within the Brains of Live Mice: An In Vivo Phantom Study. *Molecular Imaging*, **2006**, 5, 7290.2006.00021	3.7	18
176	Effects of parecoxib on plasma protein extravasation and c-fos expression in the rat. *Headache*, **2006**, 46, 276-85	4.2	14
175	Bench to bedside: the quest for quality in experimental stroke research. *Journal of Cerebral Blood Flow and Metabolism*, **2006**, 26, 1465-78	7.3	274
174	Physical activity improves long-term stroke outcome via endothelial nitric oxide synthase-dependent augmentation of neovascularization and cerebral blood flow. *Circulation Research*, **2006**, 99, 1132-40	15.7	197
173	Noninvasive near-infrared imaging of fluorochromes within the brain of live mice: an in vivo phantom study. *Molecular Imaging*, **2006**, 5, 180-7	3.7	12
172	Increased extracellular K+ concentration reduces the efficacy of N-methyl-D-aspartate receptor antagonists to block spreading depression-like depolarizations and spreading ischemia. *Stroke*, **2005**, 36, 1270-7	6.7	67

171	Ion changes in spreading ischaemia induce rat middle cerebral artery constriction in the absence of NO. *Brain*, **2005**, 128, 2042-51	11.2	115
170	System for the measurement of blood flow and oxygenation in tissue applied to neurovascular coupling in brain **2005**,		2
169	CGRP release and c-fos expression within trigeminal nucleus caudalis of the rat following glyceryltrinitrate infusion. *Cephalalgia*, **2005**, 25, 225-36	6.1	59
168	Neuroprotective effects of atorvastatin against glutamate-induced excitotoxicity in primary cortical neurones. *Journal of Neurochemistry*, **2005**, 92, 1386-98	6	165
167	Central nervous system injury-induced immune deficiency syndrome. *Nature Reviews Neuroscience*, **2005**, 6, 775-86	13.5	631
166	Nitric oxide modulates calcium entry through P/Q-type calcium channels and N-methyl-d-aspartate receptors in rat cortical neurons. *Brain Research*, **2005**, 1063, 9-14	3.7	20
165	Neuroprotective role of astrocytes in cerebral ischemia: focus on ischemic preconditioning. *Glia*, **2005**, 50, 307-20	9	216
164	Role of glial cells in cerebral ischemia. *Glia*, **2005**, 50, 281-6	9	237
163	Circulating monocytic cells infiltrate layers of anterograde axonal degeneration where they transform into microglia. *FASEB Journal*, **2005**, 19, 647-9	0.9	93
162	Angiotensin AT2 receptor protects against cerebral ischemia-induced neuronal injury. *FASEB Journal*, **2005**, 19, 617-9	0.9	201
161	Neuroprotective effects of creatine in a mouse model of stroke: An experimental MRI study. *Journal of Cerebral Blood Flow and Metabolism*, **2005**, 25, S6-S6	7.3	
160	Mechanisms of vascular reactivity during cortical spreading depression (CSD) and cortical spreading ischemia (CSI). *Journal of Cerebral Blood Flow and Metabolism*, **2005**, 25, S483-S483	7.3	
159	Increased extracellular potassium concentration reduces the efficacy of N-methyl-D-aspartate receptor antagonists to block spreading depression in human and rat brain slices. *Journal of Cerebral Blood Flow and Metabolism*, **2005**, 25, S470-S470	7.3	
158	Allosteric release of nitric oxide from hemoglobin does not mediate neurovascular coupling. *Journal of Cerebral Blood Flow and Metabolism*, **2005**, 25, S207-S207	7.3	1
157	Therapierelevante Pathophysiologie des akuten ischämischen Schlaganfalls: Was ist gesichert?. *Aktuelle Neurologie*, **2004**, 31, 113-121		0
156	Tyrosine kinase inhibition reduces inflammation in the acute stage of experimental pneumococcal meningitis. *Infection and Immunity*, **2004**, 72, 3294-8	3.7	15
155	Dysexecutive syndrome after mild cerebral ischemia? Mice learn normally but have deficits in strategy switching. *Stroke*, **2004**, 35, 191-5	6.7	55
154	Impaired vascular reactivity of isolated rat middle cerebral artery after cortical spreading depression in vivo. *Journal of Cerebral Blood Flow and Metabolism*, **2004**, 24, 526-30	7.3	17

153	Partial antagonistic effect of adenosine on inverse coupling between spreading neuronal activation and cerebral blood flow in rats. *Neurocritical Care*, **2004**, 1, 85-94	3.3	13
152	Pathophysiology of stroke: lessons from animal models. *Metabolic Brain Disease*, **2004**, 19, 151-67	3.9	231
151	HMG-CoA reductase inhibition causes neurite loss by interfering with geranylgeranylpyrophosphate synthesis. *Journal of Neurochemistry*, **2004**, 89, 24-32	6	79
150	Neuronal gelsolin prevents apoptosis by enhancing actin depolymerization. *Molecular and Cellular Neurosciences*, **2004**, 25, 69-82	4.8	71
149	Preventive antibacterial treatment improves the general medical and neurological outcome in a mouse model of stroke. *Stroke*, **2004**, 35, 2-6	6.7	131
148	ET-1 induces cortical spreading depression via activation of the ETA receptor/phospholipase C pathway in vivo. *American Journal of Physiology - Heart and Circulatory Physiology*, **2004**, 286, H1339-46	5.2	45
147	Increased postischemic brain injury in mice deficient in uracil-DNA glycosylase. *Journal of Clinical Investigation*, **2004**, 113, 1711-1721	15.9	91
146	Increased postischemic brain injury in mice deficient in uracil-DNA glycosylase. *Journal of Clinical Investigation*, **2004**, 113, 1711-21	15.9	41
145	Inflammation in stroke: the good, the bad, and the unknown. *Ernst Schering Research Foundation Workshop*, **2004**, 87-99		18
144	Focal Cerebral Ischemia: The Multifaceted Role of Glial Cells **2004**, 511-520		3
143	Selective neuronal vulnerability following mild focal brain ischemia in the mouse. *Brain Pathology*, **2003**, 13, 452-64	6	74
142	Withdrawal of statin treatment abrogates stroke protection in mice. *Stroke*, **2003**, 34, 551-7	6.7	140
141	Bone marrow-derived cells expressing green fluorescent protein under the control of the glial fibrillary acidic protein promoter do not differentiate into astrocytes in vitro and in vivo. *Journal of Neuroscience*, **2003**, 23, 5004-11	6.6	50
140	Improved protocol for SAGE tag-to-gene allocation. *BioTechniques*, **2003**, 34, 1212-4, 1216-9	2.5	2
139	Neuronal activity-induced changes of local cerebral microvascular blood oxygenation in the rat: effect of systemic hyperoxia or hypoxia. *Brain Research*, **2003**, 975, 135-40	3.7	32
138	Mechanisms of stroke protection by physical activity. *Annals of Neurology*, **2003**, 54, 582-90	9.4	230
137	Ischemia triggered by spreading neuronal activation is induced by endothelin-1 and hemoglobin in the subarachnoid space. *Annals of Neurology*, **2003**, 54, 591-8	9.4	55
136	Role of NAD(P)H:quinone oxidoreductase in the progression of neuronal cell death in vitro and following cerebral ischaemia in vivo. *Journal of Neurochemistry*, **2003**, 84, 1028-39	6	23

135	Cerebrovascular vasodilation to extraluminal acidosis occurs via combined activation of ATP-sensitive and Ca2+-activated potassium channels. *Journal of Cerebral Blood Flow and Metabolism*, **2003**, 23, 1227-38	7.3	82
134	Stroke-induced immunodeficiency promotes spontaneous bacterial infections and is mediated by sympathetic activation reversal by poststroke T helper cell type 1-like immunostimulation. *Journal of Experimental Medicine*, **2003**, 198, 725-36	16.6	672
133	A fluorescence-based method to assess plasma protein extravasation in rat dura mater using confocal laser scanning microscopy. *Brain Research Protocols*, **2003**, 12, 77-82		9
132	Hypoxia-induced stroke tolerance in the mouse is mediated by erythropoietin. *Stroke*, **2003**, 34, 1981-6	6.7	252
131	Ischemic tolerance and endogenous neuroprotection. *Trends in Neurosciences*, **2003**, 26, 248-54	13.3	686
130	Estrogen increases bone marrow-derived endothelial progenitor cell production and diminishes neointima formation. *Circulation*, **2003**, 107, 3059-65	16.7	391
129	Serial analysis of gene expression identifies metallothionein-II as major neuroprotective gene in mouse focal cerebral ischemia. *Journal of Neuroscience*, **2002**, 22, 5879-88	6.6	158
128	Erythropoietin is a paracrine mediator of ischemic tolerance in the brain: evidence from an in vitro model. *Journal of Neuroscience*, **2002**, 22, 10291-301	6.6	408
127	Rosuvastatin, a new HMG-CoA reductase inhibitor, upregulates endothelial nitric oxide synthase and protects from ischemic stroke in mice. *Brain Research*, **2002**, 942, 23-30	3.7	245
126	Focal laminar cortical MR signal abnormalities after subarachnoid hemorrhage. *Annals of Neurology*, **2002**, 52, 825-9	9.4	50
125	Desferrioxamine induces delayed tolerance against cerebral ischemia in vivo and in vitro. *Journal of Cerebral Blood Flow and Metabolism*, **2002**, 22, 520-5	7.3	170
124	Triptans reduce the inflammatory response in bacterial meningitis. *Journal of Cerebral Blood Flow and Metabolism*, **2002**, 22, 988-96	7.3	44
123	Bone marrow-derived progenitor cells modulate vascular reendothelialization and neointimal formation: effect of 3-hydroxy-3-methylglutaryl coenzyme a reductase inhibition. *Arteriosclerosis, Thrombosis, and Vascular Biology*, **2002**, 22, 1567-72	9.4	381
122	Endothelin-1 potently induces Leão cortical spreading depression in vivo in the rat: a model for an endothelial trigger of migrainous aura?. *Brain*, **2002**, 125, 102-12	11.2	160
121	Ischemia Triggered by Red Blood Cell Products in the Subarachnoid Space Is Inhibited by Nimodipine Administration or Moderate Volume Expansion/Hemodilution in Rats. *Neurosurgery*, **2002**, 51, 1457-1467	3.2	71
120	Tolerance against ischemic neuronal injury can be induced by volatile anesthetics and is inducible NO synthase dependent. *Stroke*, **2002**, 33, 1889-98	6.7	239
119	Ischemia Triggered by Red Blood Cell Products in the Subarachnoid Space Is Inhibited by Nimodipine Administration or Moderate Volume Expansion/Hemodilution in Rats. *Neurosurgery*, **2002**, 51, 1457-1467	3.2	49
118	Isoflurane induced prolonged protection against cerebral ischemia in mice: a redox sensitive mechanism?. *NeuroReport*, **2002**, 13, 1431-5	1.7	61

117	Neuroprotective effects of the antifungal drug clotrimazole. *Neuroscience*, **2002**, 113, 47-53	3.9	39
116	Neuronal activation induced changes in microcirculatory haemoglobin oxygenation: to dip or not to dip. *International Congress Series*, **2002**, 1235, 137-144		1
115	Ischemia caused by inverse coupling between neuronal activation and cerebral blood flow in rats. *International Congress Series*, **2002**, 1235, 487-492		10
114	Ischemia and stroke. *Advances in Experimental Medicine and Biology*, **2002**, 513, 455-73	3.6	54
113	Ischemia triggered by red blood cell products in the subarachnoid space is inhibited by nimodipine administration or moderate volume expansion/hemodilution in rats. *Neurosurgery*, **2002**, 51, 1457-65; discussion 1465-7	3.2	34
112	Effects of cerebral ischemia in mice lacking DNA methyltransferase 1 in post-mitotic neurons. *NeuroReport*, **2001**, 12, 3763-6	1.7	84
111	Immune surveillance of mouse brain perivascular spaces by blood-borne macrophages. *European Journal of Neuroscience*, **2001**, 14, 1651-8	3.5	152
110	The trigeminovascular system in bacterial meningitis. *Microscopy Research and Technique*, **2001**, 53, 188-92	2.8	3
109	Proteolysis of oxidized proteins after oxygen-glucose deprivation in rat cortical neurons is mediated by the proteasome. *Journal of Cerebral Blood Flow and Metabolism*, **2001**, 21, 1090-6	7.3	19
108	Targeting gene-modified hematopoietic cells to the central nervous system: use of green fluorescent protein uncovers microglial engraftment. *Nature Medicine*, **2001**, 7, 1356-61	50.5	517
107	Ischaemia triggered by spreading neuronal activation is inhibited by vasodilators in rats. *Journal of Physiology*, **2001**, 531, 515-26	3.9	66
106	Protective effects of PJ34, a novel, potent inhibitor of poly(ADP-ribose) polymerase (PARP) in in vitro and in vivo models of stroke. *International Journal of Molecular Medicine*, **2001**, 7, 255	4.4	31
105	Neogenesis of cerebellar Purkinje neurons from gene-marked bone marrow cells in vivo. *Journal of Cell Biology*, **2001**, 155, 733-8	7.3	221
104	Turnover of rat brain perivascular cells. *Experimental Neurology*, **2001**, 168, 242-9	5.7	95
103	No evidence for early decrease in blood oxygenation in rat whisker cortex in response to functional activation. *NeuroImage*, **2001**, 13, 988-1001	7.9	133
102	The cerebrovascular response to elevated potassium--role of nitric oxide in the in vitro model of isolated rat middle cerebral arteries. *Neuroscience Letters*, **2001**, 306, 61-4	3.3	12
101	Mild cerebral ischemia induces loss of cyclin-dependent kinase inhibitors and activation of cell cycle machinery before delayed neuronal cell death. *Journal of Neuroscience*, **2001**, 21, 5045-53	6.6	205
100	Sulfonylurea Drugs Do Not Influence Initial Stroke Severity and In-Hospital Outcome in Stroke Patients With Diabetes. *Stroke*, **2001**, 32, 2029-2032	6.7	31

99	Nitric oxide from perivascular nerves modulates cerebral arterial pH reactivity. *American Journal of Physiology - Heart and Circulatory Physiology*, **2001**, 281, H1353-63	5.2	28
98	Differential mechanisms of neuroprotection by 17 beta-estradiol in apoptotic versus necrotic neurodegeneration. *Journal of Neuroscience*, **2001**, 21, 2600-9	6.6	140
97	Cerebral Blood Flow, Hemoglobin Oxygenation, and Water Diffusion Changes During Stroke: Fingerprinting with Near-Infrared Spectroscopy and MRI **2001**, 232-240		1
96	DNA methyltransferase contributes to delayed ischemic brain injury. *Journal of Neuroscience*, **2000**, 20, 3175-81	6.6	230
95	Acute treatment of hypertension increases infarct sizes in spontaneously hypertensive rats. *NeuroReport*, **2000**, 11, 355-9	1.7	14
94	Induced hypothermia in experimental pneumococcal meningitis. *Journal of Cerebral Blood Flow and Metabolism*, **2000**, 20, 834-8	7.3	37
93	Saccadic suppression induces focal hypooxygenation in the occipital cortex. *Journal of Cerebral Blood Flow and Metabolism*, **2000**, 20, 1103-10	7.3	63
92	Distinct physiologic properties of microglia and blood-borne cells in rat brain slices after permanent middle cerebral artery occlusion. *Journal of Cerebral Blood Flow and Metabolism*, **2000**, 20, 1537-49	7.3	57
91	Hyperbaric oxygenation induced tolerance against focal cerebral ischemia in mice is strain dependent. *Brain Research*, **2000**, 871, 146-50	3.7	79
90	Products of hemolysis in the subarachnoid space inducing spreading ischemia in the cortex and focal necrosis in rats: a model for delayed ischemic neurological deficits after subarachnoid hemorrhage?. *Journal of Neurosurgery*, **2000**, 93, 658-66	3.2	195
89	Atorvastatin upregulates type III nitric oxide synthase in thrombocytes, decreases platelet activation, and protects from cerebral ischemia in normocholesterolemic mice. *Stroke*, **2000**, 31, 2442-9	6.7	310
88	Melatonin is protective in necrotic but not in caspase-dependent, free radical-independent apoptotic neuronal cell death in primary neuronal cultures. *FASEB Journal*, **2000**, 14, 1814-24	0.9	53
87	Serotonin uptake and release mechanisms in developing cultures of rat embryonic raphe neurons: age- and region-specific differences. *Neuroscience*, **2000**, 99, 519-27	3.9	21
86	Role of nitric oxide in the ethylcholine aziridinium model of delayed apoptotic neurodegeneration in vivo and in vitro. *Neuroscience*, **2000**, 97, 383-93	3.9	26
85	Inhibition of Na(+),K(+)-ATPase activity in cultured rat cerebellar granule cells prevents the onset of apoptosis induced by low potassium. *Neuroscience Letters*, **2000**, 283, 41-4	3.3	53
84	Improved selective, simple, and contrast staining of acidophilic neurons with vanadium acid fuchsin. *Brain Research Protocols*, **2000**, 5, 135-9		44
83	Distinct influence of the group III metabotropic glutamate receptor agonist (R,S)-4-phosphonophenylglycine [(R,S)-PPG] on different forms of neuronal damage. *Neuropharmacology*, **2000**, 39, 911-7	5.5	22
82	Physical model for the spectroscopic analysis of cortical intrinsic optical signals. *Physics in Medicine and Biology*, **2000**, 45, 3749-64	3.8	137

81	A fluorescence based non-radioactive electrophoretic mobility shift assay. *Journal of Biotechnology*, **2000**, 78, 163-70	3.7	69
80	Nitric oxide: a modulator, but not a mediator, of neurovascular coupling in rat somatosensory cortex. *American Journal of Physiology - Heart and Circulatory Physiology*, **1999**, 277, H799-811	5.2	87
79	Noninvasive assessment of changes in cytochrome-c oxidase oxidation in human subjects during visual stimulation. *Journal of Cerebral Blood Flow and Metabolism*, **1999**, 19, 592-603	7.3	85
78	Respiratory chain inhibition induces tolerance to focal cerebral ischemia. *Journal of Cerebral Blood Flow and Metabolism*, **1999**, 19, 1229-37	7.3	135
77	Pathobiology of ischaemic stroke: an integrated view. *Trends in Neurosciences*, **1999**, 22, 391-7	13.3	3094
76	Short-term block of Na+/K+-ATPase in neuro-glial cell cultures of cerebellum induces glutamate dependent damage of granule cells. *FEBS Letters*, **1999**, 456, 41-4	3.8	22
75	Analysis of CO2 vasomotor reactivity and vessel diameter changes by simultaneous venous and arterial Doppler recordings. *Stroke*, **1999**, 30, 81-6	6.7	73
74	Attenuated stroke severity after prodromal TIA: a role for ischemic tolerance in the brain?. *Stroke*, **1999**, 30, 1851-4	6.7	226
73	Zerebrale Ischämie **1999**, 510-541		
72	Increased formation of reactive oxygen species after permanent and reversible middle cerebral artery occlusion in the rat. *Journal of Cerebral Blood Flow and Metabolism*, **1998**, 18, 196-205	7.3	247
71	Nitric oxide scavenging by hemoglobin or nitric oxide synthase inhibition by N-nitro-L-arginine induces cortical spreading ischemia when K+ is increased in the subarachnoid space. *Journal of Cerebral Blood Flow and Metabolism*, **1998**, 18, 978-90	7.3	234
70	Cortical spreading depression-associated hyperemia in rats: involvement of serotonin. *Brain Research*, **1998**, 783, 188-93	3.7	28
69	Evidence that glypican is a receptor mediating beta-amyloid neurotoxicity in PC12 cells. *European Journal of Neuroscience*, **1998**, 10, 2085-93	3.5	13
68	Induction of hypoxia inducible factor 1 by oxygen glucose deprivation is attenuated by hypoxic preconditioning in rat cultured neurons. *Neuroscience Letters*, **1998**, 254, 117-20	3.3	87
67	Tumour necrosis factor alpha induces only minor inflammatory changes in the central nervous system, but augments experimental meningitis. *Neuroscience*, **1998**, 86, 627-34	3.9	23
66	Chemiluminescence detection of nitric oxide production from rat cerebral cortical endothelial cells in culture. *Brain Research Protocols*, **1998**, 2, 175-82		10
65	Separation of changes in light scattering and chromophore concentrations during cortical spreading depression in rats. *Optics Letters*, **1998**, 23, 555-7	3	42
64	Perivascular nerves contribute to cortical spreading depression-associated hyperemia in rats. *American Journal of Physiology - Heart and Circulatory Physiology*, **1998**, 274, H1979-87	5.2	26

63	ZK200775: a phosphonate quinoxalinedione AMPA antagonist for neuroprotection in stroke and trauma. *Proceedings of the National Academy of Sciences of the United States of America*, **1998**, 95, 10960-5	11.5	114
62	Toward noninvasive optical human brain mapping: improvements of the spectral, temporal, and spatial resolution of near-infrared spectroscopy **1997**,		3
61	Vascular imprints of neuronal activity: relationships between the dynamics of cortical blood flow, oxygenation, and volume changes following sensory stimulation. *Proceedings of the National Academy of Sciences of the United States of America*, **1997**, 94, 14826-31	11.5	368
60	Induction of tolerance in rat cortical neurons: hypoxic preconditioning. *FEBS Letters*, **1997**, 414, 117-21	3.8	116
59	Histamine (H1) receptor antagonist inhibits leukocyte rolling in pial vessels in the early phase of bacterial meningitis in rats. *Neuroscience Letters*, **1997**, 226, 17-20	3.3	23
58	Increased hypoxic tolerance by chemical inhibition of oxidative phosphorylation: "chemical preconditioning". *Journal of Cerebral Blood Flow and Metabolism*, **1997**, 17, 257-64	7.3	149
57	Noninvasive near infrared spectroscopy monitoring of regional cerebral blood oxygenation changes during peri-infarct depolarizations in focal cerebral ischemia in the rat. *Journal of Cerebral Blood Flow and Metabolism*, **1997**, 17, 950-4	7.3	52
56	Heparin inhibits leukocyte rolling in pial vessels and attenuates inflammatory changes in a rat model of experimental bacterial meningitis. *Journal of Cerebral Blood Flow and Metabolism*, **1997**, 17, 1221-9	7.3	34
55	Laminar analysis of cerebral blood flow in cortex of rats by laser-Doppler flowmetry: a pilot study. *Journal of Cerebral Blood Flow and Metabolism*, **1997**, 17, 1326-36	7.3	58
54	Rapid Ca2+-dependent NO-production from central nervous system cells in culture measured by NO-nitrite/ozone chemoluminescence. *Brain Research*, **1997**, 748, 1-11	3.7	40
53	Decrease in parietal cerebral hemoglobin oxygenation during performance of a verbal fluency task in patients with Alzheimer's disease monitored by means of near-infrared spectroscopy (NIRS)--correlation with simultaneous rCBF-PET measurements. *Brain Research*, **1997**, 755, 293-303	3.7	310
52	Excessive oxygen or glucose supply does not alter the blood flow response to somatosensory stimulation or spreading depression in rats. *Brain Research*, **1997**, 761, 290-9	3.7	44
51	Towards brain mapping combining near-infrared spectroscopy and high resolution 3D MRI. *Advances in Experimental Medicine and Biology*, **1997**, 413, 139-47	3.6	15
50	Assessment of Local Brain Activation. *Advances in Experimental Medicine and Biology*, **1997**, 149-153	3.6	104
49	Metabolic aspects of neurovascular coupling. *Advances in Experimental Medicine and Biology*, **1997**, 413, 155-9	3.6	14
48	Regulation of Cerebral Blood Flow by Ions **1997**, 75-77		
47	Measurements of Microcirculatory Events in the Brain in Vivo **1997**, 133-136		
46	Simultaneous assessment of cerebral oxygenation and hemodynamics during a motor task. A combined near infrared and transcranial Doppler sonography study. *Advances in Experimental Medicine and Biology*, **1997**, 411, 461-9	3.6	34

45	Length of resting period between stimulation cycles modulates hemodynamic response to a motor stimulus. *Advances in Experimental Medicine and Biology*, **1997**, 411, 471-80	3.6	20
44	Near infrared spectroscopy in the diagnosis of Alzheimer's disease. *Annals of the New York Academy of Sciences*, **1996**, 777, 22-9	6.5	59
43	Nitric oxide synthase inhibition does not affect somatosensory evoked potentials in the rat. *Neuroscience Letters*, **1996**, 216, 207-10	3.3	41
42	Cerebral oxygenation changes in response to motor stimulation. *Journal of Applied Physiology*, **1996**, 81, 1174-83	3.7	196
41	Non-invasive functional mapping of the human motor cortex using near-infrared spectroscopy. *NeuroReport*, **1996**, 7, 1977-81	1.7	104
40	Continuous spectrum near-infrared spectroscopy approach in functional activation studies in the human adult **1996**, 2926, 58		1
39	Pneumococcal cell wall components induce nitric oxide synthase and TNF-alpha in astroglial-enriched cultures. *Glia*, **1996**, 16, 1-6	9	52
38	Simultaneous recording of cerebral blood oxygenation changes during human brain activation by magnetic resonance imaging and near-infrared spectroscopy. *Journal of Cerebral Blood Flow and Metabolism*, **1996**, 16, 817-26	7.3	365
37	Systemic nitric oxide synthase inhibition does not affect brain oxygenation during cortical spreading depression in rats: a noninvasive near-infrared spectroscopy and laser-Doppler flowmetry study. *Journal of Cerebral Blood Flow and Metabolism*, **1996**, 16, 1100-7	7.3	40
36	Role of nitric oxide synthase inhibition in leukocyte-endothelium interaction in the rat pial microvasculature. *Journal of Cerebral Blood Flow and Metabolism*, **1996**, 16, 1143-52	7.3	25
35	The trigeminal nerve and augmentation of regional cerebral blood flow during experimental bacterial meningitis. *Journal of Cerebral Blood Flow and Metabolism*, **1996**, 16, 1319-24	7.3	22
34	Cerebral oxygenation changes during motor and somatosensory stimulation in humans, as measured by near-infrared spectroscopy. *Advances in Experimental Medicine and Biology*, **1996**, 388, 219-24	3.6	31
33	Nitric oxide modulates the CBF response to increased extracellular potassium. *Journal of Cerebral Blood Flow and Metabolism*, **1995**, 15, 914-9	7.3	51
32	Global cerebral ischemia in the rat: online monitoring of oxygen free radical production using chemiluminescence in vivo. *Journal of Cerebral Blood Flow and Metabolism*, **1995**, 15, 929-40	7.3	135
31	Age dependency of changes in cerebral hemoglobin oxygenation during brain activation: a near-infrared spectroscopy study. *Journal of Cerebral Blood Flow and Metabolism*, **1995**, 15, 1103-8	7.3	138
30	Anti ICAM-1 (CD 54) monoclonal antibody reduces inflammatory changes in experimental bacterial meningitis. *Journal of Neuroimmunology*, **1995**, 63, 63-8	3.5	86
29	Fucoidin, a polysaccharide inhibiting leukocyte rolling, attenuates inflammatory responses in experimental pneumococcal meningitis in rats. *Neuroscience Letters*, **1995**, 191, 1-4	3.3	58
28	Age-related changes of oxygen free radical production in the rat brain slice after hypoxia: on-line measurement using enhanced chemiluminescence. *Brain Research*, **1995**, 703, 227-30	3.7	38

27	The Physiological Basis of Functional Magnetic Resonance Imaging**Supported by the Deutsche Forschungsgemeinschaft (Vi 97/7□1, Di 454/4□2), the Sander-Stiftung (90.023.2), and the Human Frontiers Science Program Organization. **1995**, 499-508		
26	Capillary perfusion of the rat brain cortex. An in vivo confocal microscopy study. *Circulation Research*, **1994**, 75, 55-62	15.7	253
25	Role of superoxide anion in rat cerebral blood flow response to somatosensory stimulation.. *Nosotchu*, **1994**, 16, 231-238	0.1	
24	Nitric oxide synthase blockade enhances vasomotion in the cerebral microcirculation of anesthetized rats. *Microvascular Research*, **1993**, 45, 318-23	3.7	49
23	Role of nitric oxide in the coupling of cerebral blood flow to neuronal activation in rats. *Neuroscience Letters*, **1993**, 149, 43-6	3.3	202
22	Near infrared spectroscopy (NIRS): a new tool to study hemodynamic changes during activation of brain function in human adults. *Neuroscience Letters*, **1993**, 154, 101-4	3.3	827
21	Imaging of leukocyte-endothelium interaction using in vivo confocal laser scanning microscopy during the early phase of experimental pneumococcal meningitis. *Journal of Infectious Diseases*, **1993**, 168, 927-33	7	43
20	Cerebral ischemia: the microcirculation as trigger and target. *Progress in Brain Research*, **1993**, 96, 49-65	2.9	18
19	Global forebrain ischaemia in the rat: controlled reduction of cerebral blood flow by hypobaric hypotension and two-vessel occlusion. *Neurological Research*, **1993**, 15, 128-30	2.7	55
18	Subsurface Microscopical visualization of brain tissue in vivo: Present, problems and prospects. *Micron*, **1993**, 24, 611-622	2.3	4
17	Blockade of nitric oxide synthesis in rats strongly attenuates the CBF response to extracellular acidosis. *Journal of Cerebral Blood Flow and Metabolism*, **1993**, 13, 535-9	7.3	61
16	Effect of catalase on regional cerebral blood flow and brain edema during the early phase of experimental pneumococcal meningitis. *Journal of Infectious Diseases*, **1992**, 166, 1442-5	7	29
15	In-vivo confocal scanning laser microscopy of the cerebral microcirculation. *Journal of Microscopy*, **1992**, 165, 147-57	1.9	54
14	Three-dimensional reconstruction of the rat brain cortical microcirculation in vivo. *Journal of Cerebral Blood Flow and Metabolism*, **1991**, 11, 353-60	7.3	51
13	Imaging of leukocytes within the rat brain cortex in vivo. *Microvascular Research*, **1991**, 42, 305-15	3.7	59
12	Microvascular changes during the early phase of experimental bacterial meningitis. *Journal of Cerebral Blood Flow and Metabolism*, **1990**, 10, 914-22	7.3	116
11	Autoregulation of cerebral blood flow in experimental focal brain ischemia. *Journal of Cerebral Blood Flow and Metabolism*, **1990**, 10, 327-36	7.3	152
10	Pre- and post-treatment with MK-801 but not pretreatment alone reduces neocortical damage after focal cerebral ischemia in the rat. *Brain Research*, **1990**, 527, 62-8	3.7	108

9	Continuous measurement of cerebral cortical blood flow by laser-Doppler flowmetry in a rat stroke model. *Journal of Cerebral Blood Flow and Metabolism*, **1989**, 9, 589-96	7.3	425
8	Confocal laser microscopy to study microcirculation on the rat brain surface in vivo. *Brain Research*, **1989**, 504, 159-60	3.7	46
7	B-waves in healthy persons. *Neurological Research*, **1989**, 11, 194-6	2.7	43
6	The Hong Kong Principles for Assessing Researchers: Fostering Research Integrity		15
5	Introduction to the EQIPD Quality System		2
4	Stage 1 Registered Report: Effect of deficient phagocytosis on neuronal survival and neurological outcome after temporary middle cerebral artery occlusion (tMCAo). *F1000Research*,6, 1827	3.6	1
3	The ARRIVE guidelines 2019: updated guidelines for reporting animal research		32
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