

# W Alan C Mutch

## List of Publications by Year in descending order

Source: <https://exaly.com/author-pdf/1040764/publications.pdf>

Version: 2024-02-01

93  
papers

2,618  
citations

186265  
28  
h-index

197818  
49  
g-index

97  
all docs

97  
docs citations

97  
times ranked

1739  
citing authors

#	ARTICLE	IF	CITATIONS
1	Emerging from the quagmire. Comment on Br J Anaesth 2021; 127: 664-666. British Journal of Anaesthesia, 2022, , .	3.4	1
2	A Promising Subject-Level Classification Model for Acute Concussion Based on Cerebrovascular Reactivity Metrics. Journal of Neurotrauma, 2021, 38, 1036-1047.	3.4	12
3	In reply: Hyperoxia-induced brain ischemia: the Strawman comes up short. Canadian Journal of Anaesthesia, 2021, 68, 152-153.	1.6	2
4	Can self-reported cognitive difficulties predict postoperative delirium?. Canadian Journal of Anaesthesia, 2021, 68, 593-595.	1.6	0
5	Differential regional cerebral blood flow reactivity to alterations in end-tidal gases in healthy volunteers. Canadian Journal of Anaesthesia, 2021, 68, 1497-1506.	1.6	4
6	Physiologically variable ventilation and severe asthma. Comment on Br J Anaesth 2020; 125: 1107-1108. British Journal of Anaesthesia, 2021, 126, e214.	3.4	1
7	Strawman redux: management of end-tidal gases in patients at risk of perioperative neurocognitive disorder. Canadian Journal of Anaesthesia, 2020, 67, 1685-1686.	1.6	2
8	Effects of variable versus non-variable controlled mechanical ventilation. Comment on Br J Anaesth 2020; 124: 430-9. British Journal of Anaesthesia, 2020, 124, e222-e223.	3.4	2
9	Magnetic Resonance Imaging Biomarkers of Brain Connectivity in Predicting Outcome after Mild Traumatic Brain Injury: A Systematic Review. Journal of Neurotrauma, 2020, 37, 1761-1776.	3.4	30
10	Brain BOLD MRI O2 and CO2 stress testing: implications for perioperative neurocognitive disorder following surgery. Critical Care, 2020, 24, 76.	5.8	15
11	The Incidence and Magnitude of Cerebral Desaturation in Traumatic Brain Injury. Journal of Neurosurgical Anesthesiology, 2019, Publish Ahead of Print, 258-262.	1.2	5
12	End-Tidal Hypocapnia Under Anesthesia Predicts Postoperative Delirium. Frontiers in Neurology, 2018, 9, 678.	2.4	31
13	Patient-Specific Alterations in CO2 Cerebrovascular Responsiveness in Acute and Sub-Acute Sports-Related Concussion. Frontiers in Neurology, 2018, 9, 23.	2.4	43
14	Postoperative Delirium, Learning, and Anesthetic Neurotoxicity: Some Perspectives and Directions. Frontiers in Neurology, 2018, 9, 177.	2.4	29
15	Cerebrovascular Resistance: The Basis of Cerebrovascular Reactivity. Frontiers in Neuroscience, 2018, 12, 409.	2.8	33
16	Analysis of facial motor evoked potentials for assessing a central mechanism in hemifacial spasm. Journal of Neurosurgery, 2017, 126, 379-385.	1.6	12
17	Anesthesia and postoperative delirium: the agent is a strawman - the problem is CO2. Canadian Journal of Anaesthesia, 2017, 64, 678-680.	1.6	13
18	A Novel Stress-Diathesis Model to Predict Risk of Post-operative Delirium: Implications for Intra-operative Management. Frontiers in Aging Neuroscience, 2017, 9, 274.	3.4	18

#	ARTICLE	IF	CITATIONS
19	Neuroimaging Assessment of Cerebrovascular Reactivity in Concussion: Current Concepts, Methodological Considerations, and Review of the Literature. <i>Frontiers in Neurology</i> , 2016, 7, 61.	2.4	76
20	Longitudinal Brain Magnetic Resonance Imaging CO2 Stress Testing in Individual Adolescent Sports-Related Concussion Patients: A Pilot Study. <i>Frontiers in Neurology</i> , 2016, 7, 107.	2.4	32
21	Variable ventilation and Jensen's inequality: citation corrections. <i>Critical Care</i> , 2016, 20, 190.	5.8	0
22	Brain magnetic resonance imaging CO2 stress testing in adolescent postconcussion syndrome. <i>Journal of Neurosurgery</i> , 2016, 125, 648-660.	1.6	69
23	Is hemifacial spasm a phenomenon of the central nervous system? The role of desflurane on the lateral spread response. <i>Clinical Neurophysiology</i> , 2015, 126, 1354-1359.	1.5	11
24	Acute Kidney Injury in Patients Undergoing Open Abdominal Aortic Aneurysm Repair: A Pilot Observational Trial. <i>Journal of Cardiothoracic and Vascular Anesthesia</i> , 2015, 29, 1212-1219.	1.3	34
25	Brain MRI CO2 Stress Testing: A Pilot Study in Patients with Concussion. <i>PLoS ONE</i> , 2014, 9, e102181.	2.5	38
26	Cerebral oxygen desaturation during one-lung ventilation: correlation with hemodynamic variables. <i>Canadian Journal of Anaesthesia</i> , 2013, 60, 660-666.	1.6	21
27	Allometry and physiologic time. <i>Physics of Life Reviews</i> , 2013, 10, 229-230.	2.8	1
28	Cerebral Oxygen Saturation: Graded Response to Carbon Dioxide with Isoxia and Graded Response to Oxygen with Isocapnia. <i>PLoS ONE</i> , 2013, 8, e57881.	2.5	18
29	Approaches to Brain Stress Testing: BOLD Magnetic Resonance Imaging with Computer-Controlled Delivery of Carbon Dioxide. <i>PLoS ONE</i> , 2012, 7, e47443.	2.5	41
30	Quantitative computed tomography in porcine lung injury with variable versus conventional ventilation: Recruitment and surfactant replacement*. <i>Critical Care Medicine</i> , 2011, 39, 1721-1730.	0.9	57
31	Resolution of pulmonary edema with variable mechanical ventilation in a porcine model of acute lung injury. <i>Canadian Journal of Anaesthesia</i> , 2011, 58, 740-750.	1.6	25
32	Academic fraud: perspectives from a lifelong anesthesia researcher. <i>Canadian Journal of Anaesthesia</i> , 2011, 58, 782-788.	1.6	3
33	Dementia and Depression with Ischemic Heart Disease: A Population-Based Longitudinal Study Comparing Interventional Approaches to Medical Management. <i>PLoS ONE</i> , 2011, 6, e17457.	2.5	22
34	Lumbar Cerebrospinal Fluid Drainage for Thoracoabdominal Aortic Surgery. <i>Anesthesia and Analgesia</i> , 2010, 111, 46-58.	2.2	141
35	New concepts regarding cerebral vasospasm: glial-centric mechanisms. <i>Canadian Journal of Anaesthesia</i> , 2010, 57, 479-489.	1.6	9
36	Lactate flux during carotid endarterectomy under general anesthesia: correlation with various point-of-care monitors. <i>Canadian Journal of Anaesthesia</i> , 2010, 57, 903-912.	1.6	13

#	ARTICLE	IF	CITATIONS
37	Can we develop a Canadian Perioperative Anesthesiology Clinical Trials Group?. Canadian Journal of Anaesthesia, 2010, 57, 1051-1057.	1.6	7
38	Obstetrical and neonatal outcomes in obese parturients. Journal of Maternal-Fetal and Neonatal Medicine, 2010, 23, 906-913.	1.5	22
39	A comparison of the ability of the EEGo and BIS monitors to assess emergence following neurosurgery. Canadian Journal of Anaesthesia, 2009, 56, 366-373.	1.6	4
40	A Slightly Different Tune: The Multipart Harmony of Noisy Life Support. Anesthesiology, 2009, 111, 681-681.	2.5	0
41	Maternal and neonatal outcomes in obese parturients. Canadian Journal of Anaesthesia, 2008, 55, 4723481-4723482.	1.6	0
42	Physiological noise versus white noise to drive a variable ventilator in a porcine model of lung injury. Canadian Journal of Anaesthesia, 2008, 55, 577-586.	1.6	11
43	Biologically variable ventilation improves gas exchange and respiratory mechanics in a model of severe bronchospasm*. Critical Care Medicine, 2007, 35, 1749-1755.	0.9	54
44	Anesthetic management for a nailgun injury involving a cerebral venous sinus. Canadian Journal of Anaesthesia, 2007, 54, 954-955.	1.6	4
45	Biologically Variable Bypass Reduces Enzymuria After Deep Hypothermic Circulatory Arrest. Annals of Thoracic Surgery, 2006, 82, 1480-1488.	1.3	10
46	Biologically Variable Ventilation Improves Oxygenation and Respiratory Mechanics during One-lung Ventilation. Anesthesiology, 2006, 105, 91-97.	2.5	38
47	Biologically variable ventilation improves oxygenation and respiratory mechanics in a porcine model of one-lung ventilation. Canadian Journal of Anaesthesia, 2006, 53, 26236-26236.	1.6	0
48	Facilitated insertion of the ProSeal <sup>®</sup> laryngeal mask airway using a lightwand. Canadian Journal of Anaesthesia, 2006, 53, 635-636.	1.6	6
49	Convexity, Jensen's inequality, and benefits of noisy or biologically variable life support (Keynote) Tj ETQq1 1 0.784314 rgBT /Overlock		
50	Biologically variable cardiopulmonary bypass enhances systemic perfusion and reduces renal injury after deep hypothermic circulatory arrest. Journal of the American College of Surgeons, 2005, 201, S26.	0.5	0
51	Variable ventilation compared with recruitment manoeuvres in a porcine model of ARDS. Canadian Journal of Anaesthesia, 2005, 52, A52-A52.	1.6	0
52	Fractal ventilation enhances respiratory sinus arrhythmia. Respiratory Research, 2005, 6, 41.	3.6	29
53	Mathematical modelling to centre low tidal volumes following acute lung injury: A study with biologically variable ventilation. Respiratory Research, 2005, 6, 64.	3.6	17
54	Convexity, Jensen's inequality and benefits of noisy mechanical ventilation. Journal of the Royal Society Interface, 2005, 2, 393-396.	3.4	36

#	ARTICLE	IF	CITATIONS
55	A comparison of biologically variable ventilation to recruitment manoeuvres in a porcine model of acute lung injury. <i>Respiratory Research</i> , 2004, 5, 22.	3.6	44
56	Health, 'small-worlds', fractals and complex networks: an emerging field. <i>Medical Science Monitor</i> , 2003, 9, MT19-23.	1.1	6
57	Improved Arterial Oxygenation with Biologically Variable or Fractal Ventilation Using Low Tidal Volumes in a Porcine Model of Acute Respiratory Distress Syndrome. <i>American Journal of Respiratory and Critical Care Medicine</i> , 2002, 165, 456-462.	5.6	106
58	Fractal or biologically variable delivery of cardioplegic solution prevents diastolic dysfunction after cardiopulmonary bypass. <i>Journal of Thoracic and Cardiovascular Surgery</i> , 2002, 123, 63-71.	0.8	18
59	BIOLOGIC VARIABILITY IN MECHANICAL VENTILATION IN A CANINE OLEIC ACID LUNG INJURY MODEL. <i>American Journal of Respiratory and Critical Care Medicine</i> , 2001, 163, 1756-1757.	5.6	9
60	Biologically variable ventilation increases arterial oxygenation over that seen with positive end-expiratory pressure alone in a porcine model of acute respiratory distress syndrome. <i>Critical Care Medicine</i> , 2000, 28, 2457-2464.	0.9	139
61	Biologically variable ventilation prevents deterioration of gas exchange during prolonged anaesthesia. <i>British Journal of Anaesthesia</i> , 2000, 84, 197-203.	3.4	71
62	Biologically Variable or Naturally Noisy Mechanical Ventilation Recruits Atelectatic Lung. <i>American Journal of Respiratory and Critical Care Medicine</i> , 2000, 162, 319-323.	5.6	198
63	Biologically variable pulsation improves jugular venous oxygen saturation during rewarming. <i>Annals of Thoracic Surgery</i> , 2000, 69, 491-497.	1.3	21
64	Computer-Controlled Cardiopulmonary Bypass Increases Jugular Venous Oxygen Saturation During Rewarming. <i>Annals of Thoracic Surgery</i> , 1998, 65, 59-65.	1.3	28
65	Left Ventricular Systolic and Diastolic Function Is Unaltered During Propofol Infusion in Newborn Swine. <i>Anesthesia and Analgesia</i> , 1998, 86, 717-723.	2.2	8
66	Left Ventricular Systolic and Diastolic Function Is Unaltered During Propofol Infusion in Newborn Swine. <i>Anesthesia and Analgesia</i> , 1998, 86, 717-723.	2.2	39
67	Cerebral Hypoxia During Cardiopulmonary Bypass: A Magnetic Resonance Imaging Study. <i>Annals of Thoracic Surgery</i> , 1997, 64, 695-701.	1.3	42
68	Anaesthesia for carotid artery surgery. <i>Canadian Journal of Anaesthesia</i> , 1997, 44, R90-R100.	1.6	4
69	Decreased Cerebrospinal Fluid Pressure with Mannitol and Hypocapnia. <i>Anesthesia and Analgesia</i> , 1996, 83, 663.	2.2	0
70	Decreased Cerebrospinal Fluid Pressure with Mannitol and Hypocapnia. <i>Anesthesia and Analgesia</i> , 1996, 83, 663.	2.2	0
71	Epidural Anesthesia and Acutely Increased Intracranial Pressure. <i>Anesthesiology</i> , 1996, 85, 1086-1091.	2.5	76
72	Isoflurane and halothane impair both systolic and diastolic function in the newborn pig. <i>Canadian Journal of Anaesthesia</i> , 1996, 43, 495-502.	1.6	14

#	ARTICLE	IF	CITATIONS
73	Improved arterial oxygenation after oleic acid lung injury in the pig using a computer-controlled mechanical ventilator.. American Journal of Respiratory and Critical Care Medicine, 1996, 154, 1567-1572.	5.6	127
74	Neurological Outcome in a Porcine Model of Descending Thoracic Aortic Surgery. Stroke, 1996, 27, 2095-2101.	2.0	22
75	Control of Outflow Pressure Provides Spinal Cord Protection During Resection of Descending Thoracic Aortic Aneurysms. Journal of Neurosurgical Anesthesiology, 1995, 7, 133-138.	1.2	8
76	Neuroanesthesia Adjunct Therapy (Mannitol and Hyperventilation) Is as Effective as Cerebrospinal Fluid Drainage for Prevention of Paraplegia After Descending Thoracic Aortic Cross-Clamping in the Dog. Anesthesia and Analgesia, 1995, 81, 800-805.	2.2	13
77	Haemodynamic instability and myocardial ischaemia during carotid endarterectomy: A comparison of propofol and isoflurane. Canadian Journal of Anaesthesia, 1995, 42, 577-587.	1.6	31
78	Authors' Replies. Journal of Cerebral Blood Flow and Metabolism, 1995, 15, 175-177.	4.3	0
79	Jugular bulb saturation and cognitive dysfunction after cardiopulmonary bypass. Annals of Thoracic Surgery, 1995, 60, 231.	1.3	4
80	Cerebral Pressure-Flow Relationship during Cardiopulmonary Bypass in the Dog at Normothermia and Moderate Hypothermia. Journal of Cerebral Blood Flow and Metabolism, 1994, 14, 510-518.	4.3	40
81	Paraplegia following thoracic aortic cross-clamping in dogs. No difference in neurological outcome with a barbiturate versus isoflurane.. Stroke, 1993, 24, 1554-1559.	2.0	29
82	Use of neuroanesthesia adjuncts (hyperventilation and mannitol administration) improves neurological outcome after thoracic aortic cross-clamping in dogs.. Stroke, 1993, 24, 1204-1210.	2.0	19
83	Treatment of Proximal Aortic Hypertension after Thoracic Aortic Cross-clamping in Dogs Phlebotomy versus Sodium Nitroprusside/Isoflurane. Anesthesiology, 1992, 77, 357-364.	2.5	9
84	Phlebotomy Reverses the Hemodynamic Consequences of Thoracic Aortic Cross-clamping. Anesthesiology, 1991, 74, 320-324.	2.5	18
85	Continuous opioid infusions for neurosurgical procedures: a double-blind comparison of alfentanil and fentanyl. Canadian Journal of Anaesthesia, 1991, 38, 710-716.	1.6	8
86	A comparison of the cerebral pressure-flow relationship for halothane and isoflurane at haemodynamically equivalent end-tidal concentrations in the rabbit. Canadian Journal of Anaesthesia, 1990, 37, 223-230.	1.6	17
87	Phenylephrine Increases Regional Cerebral Blood Flow Following Hemorrhage during Isoflurane "Oxygen Anesthesia. Anesthesiology, 1989, 70, 276-279.	2.5	14
88	Regional Cerebral Blood Flow following Hemorrhage during Isoflurane Anesthesia in the Rabbit. Anesthesiology, 1989, 70, 978-983.	2.5	5
89	Regional Cerebral Blood Flow and Response to Carbon Dioxide during Controlled Hypotension with Isoflurane Anesthesia in the Rat. Anesthesia and Analgesia, 1988, 67, 383-388.	2.2	17
90	The Influence of Hypocarbica on the Resolution of Transient Increases in Brain Extracellular Potassium. Anesthesiology, 1987, 66, 350-355.	2.5	3

#	ARTICLE	IF	CITATIONS
91	Brain Extracellular pH Changes During Alterations in Substrate Supply. , 1985, , 189-193.		4
92	Extracellular pH Changes during Spreading Depression and Cerebral Ischemia: Mechanisms of Brain pH Regulation. Journal of Cerebral Blood Flow and Metabolism, 1984, 4, 17-27.	4.3	297
93	Hemodynamic Effects of Intravenous Nitroglycerin. Survey of Anesthesiology, 1983, 27, 191.	0.1	7