Nicola Jayne Robertson

List of Publications by Year
in descending order

114 papers	5,759 citations	76196 40 h-index	85405 71 g-index
115 all docs	115 docs citations	115 times ranked	4570 citing authors

#	Article	IF	Citations
1	Intrapartum-related neonatal encephalopathy incidence and impairment at regional and global levels for 2010 with trends from 1990. Pediatric Research, 2013, 74, 50-72.	1.1	442
2	Cerebral Magnetic Resonance Biomarkers in Neonatal Encephalopathy: A Meta-analysis. Pediatrics, 2010, 125, e382-e395.	1.0	310
3	Post-mortem MRI versus conventional autopsy in fetuses and children: a prospective validation study. Lancet, The, 2013, 382, 223-233.	6.3	249
4	Melatonin augments hypothermic neuroprotection in a perinatal asphyxia model. Brain, 2013, 136, 90-105.	3.7	222
5	Hypothermia and Other Treatment Options for Neonatal Encephalopathy: An Executive Summary of the Eunice Kennedy Shriver NICHD Workshop. Journal of Pediatrics, 2011, 159, 851-858.e1.	0.9	189
6	Moderate hypothermia within 6 h of birth plus inhaled xenon versus moderate hypothermia alone after birth asphyxia (TOBY-Xe): a proof-of-concept, open-label, randomised controlled trial. Lancet Neurology, The, 2016, 15, 145-153.	4.9	170
7	New horizons for newborn brain protection: enhancing endogenous neuroprotection. Archives of Disease in Childhood: Fetal and Neonatal Edition, 2015, 100, F541-F552.	1.4	164
8	Therapeutic hypothermia for birth asphyxia in low-resource settings: a pilot randomised controlled trial. Lancet, The, 2008, 372, 801-803.	6.3	153
9	Cell therapy for neonatal hypoxiaâ€“ischemia and cerebral palsy. Annals of Neurology, 2012, 71, 589-600.	2.8	153
10	Which Neuroprotective Agents are Ready for Bench to Bedside Translation in the Newborn Infant?. Journal of Pediatrics, 2012, 160, 544-552.e4.	0.9	147
11	Management and investigation of neonatal encephalopathy: 2017 update. Archives of Disease in Childhood: Fetal and Neonatal Edition, 2017, 102, F346-F358.	1.4	140
12	Post-mortem examination of human fetuses: a comparison of whole-body high-field MRI at 9Â·4 T with conventional MRI and invasive autopsy. Lancet, The, 2009, 374, 467-475.	6.3	130
13	Xenon augmented hypothermia reduces early lactate/Nâ€acetylaspartate and cell death in perinatal asphyxia. Annals of Neurology, 2011, 70, 133-150.	2.8	106
14	Remote ischemic conditioning: from experimental observation to clinical application: report from the 8th Biennial Hatter Cardiovascular Institute Workshop. Basic Research in Cardiology, 2015, 110, 453.	2.5	103
15	â€œTherapeutic time windowâ€•duration decreases with increasing severity of cerebral hypoxiaâ€“ischaemia under normothermia and delayed hypothermia in newborn piglets. Brain Research, 2007, 1154, 173-180.	1.1	100
16	Therapeutic hypothermia translates from ancient history in to practice. Pediatric Research, 2017, 81, 202-209.	1.1	95
17	Cerebral Intracellular Lactic Alkalosis Persisting Months after Neonatal Encephalopathy Measured by Magnetic Resonance Spectroscopy. Pediatric Research, 1999, 46, 287-296.	1.1	93
18	Brain Cell Death Is Reduced With Cooling by 3.5Â°C to 5Â°C but Increased With Cooling by 8.5Â°C in a Piglet Asphyxia Model. Stroke, 2015, 46, 275-278.	1.0	82

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19	Brain alkaline intracellular pH after neonatal encephalopathy. Annals of Neurology, 2002, 52, 732-742.	2.8	81
20	Inflammationâ€induced sensitization of the brain in term infants. Developmental Medicine and Child Neurology, 2015, 57, 17-28.	1.1	79
21	Post mortem magnetic resonance imaging in the fetus, infant and child: A comparative study with conventional autopsy (MaRIAS Protocol). BMC Pediatrics, 2011, 11, 120.	0.7	78
22	Diagnostic accuracy of post-mortem magnetic resonance imaging in fetuses, children and adults: A systematic review. European Journal of Radiology, 2010, 75, e142-e148.	1.2	75
23	Early Increases in Brain myo-Inositol Measured by Proton Magnetic Resonance Spectroscopy in Term Infants with Neonatal Encephalopathy. Pediatric Research, 2001, 50, 692-700.	1.1	74
24	Passive cooling for initiation of therapeutic hypothermia in neonatal encephalopathy. Archives of Disease in Childhood: Fetal and Neonatal Edition, 2010, 95, F408-F412.	1.4	73
25	Experimental treatments for hypoxic ischaemic encephalopathy. Early Human Development, 2010, 86, 369-377.	0.8	68
26	AdaPT: An adaptive preterm segmentation algorithm for neonatal brain MRI. NeuroImage, 2013, 65, 97-108.	2.1	68
27	Magnesium Is Not Consistently Neuroprotective for Perinatal Hypoxia-Ischemia in Term-Equivalent Models in Preclinical Studies: A Systematic Review. Developmental Neuroscience, 2014, 36, 73-82.	1.0	63
28	Depth of delayed cooling alters neuroprotection pattern after hypoxia-ischemia. Annals of Neurology, 2005, 58, 75-87.	2.8	62
29	Characterization of Cerebral White Matter Damage in Preterm Infants Using 1H and 31P Magnetic Resonance Spectroscopy. Journal of Cerebral Blood Flow and Metabolism, 2000, 20, 1446-1456.	2.4	60
30	Delayed Whole-Body Cooling to 33 or 35ÂC and the Development of Impaired Energy Generation Consequential to Transient Cerebral Hypoxia-Ischemia in the Newborn Piglet. Pediatrics, 2006, 117, 1549-1559.	1.0	59
31	Magnesium as a Neuroprotective Agent: A Review of Its Use in the Fetus, Term Infant with Neonatal Encephalopathy, and the Adult Stroke Patient. Developmental Neuroscience, 2018, 40, 1-12.	1.0	53
32	Preconditioning and Postinsult Therapies for Perinatal Hypoxicâ€“Ischemic Injury at Term. Anesthesiology, 2010, 113, 233-249.	1.3	52
33	Inhaled 45â€“50% argon augments hypothermic brain protection in a piglet model of perinatal asphyxia. Neurobiology of Disease, 2016, 87, 29-38.	2.1	52
34	Neonatal Encephalopathy With Group B Streptococcal Disease Worldwide: Systematic Review, Investigator Group Datasets, and Meta-analysis. Clinical Infectious Diseases, 2017, 65, S173-S189.	2.9	51
35	Perinatal risk factors for neonatal encephalopathy: an unmatched case-control study. Archives of Disease in Childhood: Fetal and Neonatal Edition, 2018, 103, F250-F256.	1.4	51
36	Na+/H+ Exchangers and Intracellular pH in Perinatal Brain Injury. Translational Stroke Research, 2014, 5, 79-98.	2.3	50

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37	Anticonvulsant effect of xenon on neonatal asphyxial seizures. Archives of Disease in Childhood: Fetal and Neonatal Edition, 2013, 98, F437-F439.	1.4	47
38	Melatonin as an adjunct to therapeutic hypothermia in a piglet model of neonatal encephalopathy: A translational study. Neurobiology of Disease, 2019, 121, 240-251.	2.1	47
39	Prevalence of Bloodstream Pathogens Is Higher in Neonatal Encephalopathy Cases vs. Controls Using a Novel Panel of Real-Time PCR Assays. PLoS ONE, 2014, 9, e97259.	1.1	45
40	Diagnostic accuracy of post mortem MRI for abdominal abnormalities in foetuses and children. European Journal of Radiology, 2015, 84, 474-481.	1.2	45
41	Oxygen dependency of mitochondrial metabolism indicates outcome of newborn brain injury. Journal of Cerebral Blood Flow and Metabolism, 2019, 39, 2035-2047.	2.4	43
42	Early clinical signs in neonates with hypoxic ischemic encephalopathy predict an abnormal amplitude-integrated electroencephalogram at age 6 hours. BMC Pediatrics, 2013, 13, 52.	0.7	42
43	Supra- and sub-baseline phosphocreatine recovery in developing brain after transient hypoxia-ischaemia: relation to baseline energetics, insult severity and outcome. Brain, 2008, 131, 2220-2226.	3.7	39
44	Proton magnetic resonance spectroscopy lactate/N-acetylaspartate within 2 weeks of birth accurately predicts 2-year motor, cognitive and language outcomes in neonatal encephalopathy after therapeutic hypothermia. Archives of Disease in Childhood: Fetal and Neonatal Edition, 2019, 104, fetalneonatal-2018-315478.	1.4	39
45	Magnetic Resonance Spectroscopy Biomarkers in Term Perinatal Asphyxial Encephalopathy: From Neuropathological Correlates to Future Clinical Applications. Current Pediatric Reviews, 2014, 10, 37-47.	0.4	38
46	The fetus at the tipping point: modifying the outcome of fetal asphyxia. Journal of Physiology, 2018, 596, 5571-5592.	1.3	38
47	N-Methyl-isobutyl-amiloride Ameliorates Brain Injury When Commenced Before Hypoxia Ischemia in Neonatal Mice. Pediatric Research, 2006, 59, 227-231.	1.1	37
48	Systemic pro-inflammatory cytokine status following therapeutic hypothermia in a piglet hypoxia-ischemia model. Journal of Neuroinflammation, 2017, 14, 44.	3.1	37
49	Whole-body cooling in neonatal encephalopathy using phase changing material. Archives of Disease in Childhood: Fetal and Neonatal Edition, 2013, 98, F280-F281.	1.4	36
50	Acute LPS sensitization and continuous infusion exacerbates hypoxic brain injury in a piglet model of neonatal encephalopathy. Scientific Reports, 2019, 9, 10184.	1.6	36
51	Cerebral Near Infrared Spectroscopy Monitoring in Term Infants With Hypoxic Ischemic Encephalopathyâ€"A Systematic Review. Frontiers in Neurology, 2020, 11, 393.	1.1	35
52	Therapeutic hypothermia for neonatal encephalopathy: a UK survey of opinion, practice and neuroâ€investigation at the end of 2007. Acta Paediatrica, International Journal of Paediatrics, 2009, 98, 631-635.	0.7	33
53	Techniques for therapeutic hypothermia during transport and in hospital for perinatal asphyxial encephalopathy. Seminars in Fetal and Neonatal Medicine, 2010, 15, 276-286.	1.1	33
54	Immediate Remote Ischemic Postconditioning Reduces Brain Nitrotyrosine Formation in a Piglet Asphyxia Model. Oxidative Medicine and Cellular Longevity, 2016, 2016, 1-11.	1.9	31

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55	Isoflurane Exposure Induces Cell Death, Microglial Activation and Modifies the Expression of Genes Supporting Neurodevelopment and Cognitive Function in the Male Newborn Piglet Brain. PLoS ONE, 2016, 11, e0166784.	1.1	31
56	High-Dose Melatonin and Ethanol Excipient Combined with Therapeutic Hypothermia in a Newborn Piglet Asphyxia Model. Scientific Reports, 2020, 10, 3898.	1.6	30
57	Melatonin for neuroprotection in neonatal encephalopathy: A systematic review & meta-analysis of clinical trials. European Journal of Paediatric Neurology, 2021, 31, 38-45.	0.7	29
58	Systemic effects of whole-body cooling to 35ÂÂ°C, 33.5ÂÂ°C, and 30ÂÂ°C in a piglet model of perinatal asphyxia: implications for therapeutic hypothermia. Pediatric Research, 2012, 71, 573-582.	1.1	28
59	Pressure passivity of cerebral mitochondrial metabolism is associated with poor outcome following perinatal hypoxic ischemic brain injury. Journal of Cerebral Blood Flow and Metabolism, 2019, 39, 118-130.	2.4	27
60	Investigation of the Pattern of the Hemodynamic Response as Measured by Functional Near-Infrared Spectroscopy (fNIRS) Studies in Newborns, Less Than a Month Old: A Systematic Review. Frontiers in Human Neuroscience, 2018, 12, 371.	1.0	26
61	Phosphorus magnetic resonance spectroscopy 2â€ƒh after perinatal cerebral hypoxiaâ€ischemia prognosticates outcome in the newborn piglet. Journal of Neurochemistry, 2008, 107, 1027-1035.	2.1	25
62	Early Childhood Outcomes After Neonatal Encephalopathy in Uganda: A Cohort Study. EClinicalMedicine, 2018, 6, 26-35.	3.2	25
63	Methylâ€isobutyl amiloride reduces brain Lac/<scp>NAA</scp>, cell death and microglial activation in a perinatal asphyxia model. Journal of Neurochemistry, 2013, 124, 645-657.	2.1	24
64	Immediate remote ischemic postconditioning after hypoxia ischemia in piglets protects cerebral white matter but not grey matter. Journal of Cerebral Blood Flow and Metabolism, 2016, 36, 1396-1411.	2.4	24
65	Pilot randomized trial of therapeutic hypothermia with serial cranial ultrasound and 18-22 month follow-up for neonatal encephalopathy in a low resource hospital setting in uganda: study protocol. Trials, 2011, 12, 138.	0.7	23
66	Brain Perfusion Imaging in Neonates: An Overview. American Journal of Neuroradiology, 2016, 37, 1766-1773.	1.2	23
67	Dexmedetomidine Combined with Therapeutic Hypothermia Is Associated with Cardiovascular Instability and Neurotoxicity in a Piglet Model of Perinatal Asphyxia. Developmental Neuroscience, 2017, 39, 156-170.	1.0	23
68	A Systematic Review of Magnesium Sulfate for Perinatal Neuroprotection: What Have We Learnt From the Past Decade?. Frontiers in Neurology, 2020, 11, 449.	1.1	23
69	Superficial brain is cooler in small piglets: Neonatal hypothermia implications. Annals of Neurology, 2006, 60, 578-585.	2.8	22
70	A xenon recirculating ventilator for the newborn piglet. European Journal of Anaesthesiology, 2012, 29, 577-585.	0.7	22
71	Early cranial ultrasound findings among infants with neonatal encephalopathy in Uganda: an observational study. Pediatric Research, 2016, 80, 190-196.	1.1	22
72	Core temperature after birth in babies with neonatal encephalopathy in a subâ€Saharan African hospital setting. Journal of Physiology, 2019, 597, 4013-4024.	1.3	22

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73	Therapies for neonatal encephalopathy: Targeting the latent, secondary and tertiary phases of evolving brain injury. Seminars in Fetal and Neonatal Medicine, 2021, 26, 101256.	1.1	22
74	Computational modelling of the piglet brain to simulate near-infrared spectroscopy and magnetic resonance spectroscopy data collected during oxygen deprivation. Journal of the Royal Society Interface, 2012, 9, 1499-1509.	1.5	20
75	Changes in Cerebral Oxidative Metabolism during Neonatal Seizures Following Hypoxicâ€“Ischemic Brain Injury. Frontiers in Pediatrics, 2016, 4, 83.	0.9	20
76	Beyond basic resuscitation: What are the next steps to improve the outcomes of resuscitation at birth when resources are limited?. Seminars in Fetal and Neonatal Medicine, 2018, 23, 361-368.	1.1	19
77	Short-term effects of early initiation of magnesium infusion combined with cooling after hypoxiaâ€“ischemia in term piglets. Pediatric Research, 2019, 86, 699-708.	1.1	19
78	Melatonin and/or erythropoietin combined with hypothermia in a piglet model of perinatal asphyxia. Brain Communications, 2021, 3, fcaa211.	1.5	19
79	Bench to bedside strategies for optimizing neuroprotection following perinatal hypoxiaâ€“ischaemia in high and low resource settings. Early Human Development, 2007, 83, 801-811.	0.8	18
80	Prospective qualification of early cerebral biomarkers in a randomised trial of treatment with xenon combined with moderate hypothermia after birth asphyxia. EBioMedicine, 2019, 47, 484-491.	2.7	18
81	Proton Magnetic Resonance Spectroscopy Lactate/N-Acetylaspartate Within 48 h Predicts Cell Death Following Varied Neuroprotective Interventions in a Piglet Model of Hypoxiaâ€“Ischemia With and Without Inflammation-Sensitization. Frontiers in Neurology, 2020, 11, 883.	1.1	18
82	Quantification of the severity of hypoxic-ischemic brain injury in a neonatal preclinical model using measurements of cytochrome-c-oxidase from a miniature broadband-near-infrared spectroscopy system. Neurophotonics, 2019, 6, 1.	1.7	17
83	Human umbilical cord mesenchymal stromal cells as an adjunct therapy with therapeutic hypothermia in a piglet model of perinatal asphyxia. Cytotherapy, 2021, 23, 521-535.	0.3	16
84	Surgery increases cell death and induces changes in gene expression compared with anesthesia alone in the developing piglet brain. PLoS ONE, 2017, 12, e0173413.	1.1	16
85	Early clinical predictors of a severely abnormal amplitudeâ€integrated electroencephalogram at 48Âhours in cooled neonates. Acta Paediatrica, International Journal of Paediatrics, 2013, 102, e378-84.	0.7	14
86	Modelling Blood Flow and Metabolism in the Preclinical Neonatal Brain during and Following Hypoxic-Ischaemia. PLoS ONE, 2015, 10, e0140171.	1.1	13
87	Hypothermia and Amiloride Preserve Energetics in a Neonatal Brain Slice Model. Pediatric Research, 2005, 58, 288-296.	1.1	12
88	Role of Optical Neuromonitoring in Neonatal Encephalopathyâ€”Current State and Recent Advances. Frontiers in Pediatrics, 2021, 9, 653676.	0.9	12
89	Neuroscience meets nurture: challenges of prematurity and the critical role of family-centred and developmental care as a key part of the neuroprotection care bundle. Archives of Disease in Childhood: Fetal and Neonatal Edition, 2022, 107, 242-249.	1.4	11
90	MELATONIN AND ITS ROLE IN NEURODEVELOPMENT DURING THE PERINATAL PERIOD: A REVIEW. Fetal and Maternal Medicine Review, 2013, 24, 76-107.	0.3	9

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91	Using animal models to improve care of neonatal encephalopathy. Archives of Disease in Childhood: Education and Practice Edition, 2016, 101, 271-276.	0.3	9
92	Hypothermia is not therapeutic in a neonatal piglet model of inflammation-sensitized hypoxiaâ€“ischemia. Pediatric Research, 2022, 91, 1416-1427.	1.1	9
93	Global application of therapeutic hypothermia to treat perinatal asphyxial encephalopathy. International Health, 2010, 2, 79-81.	0.8	8
94	A critical review of the 2015 International Liaison Committee onÂResuscitation treatment recommendations for resuscitating the newly born infant. Acta Paediatrica, International Journal of Paediatrics, 2016, 105, 442-444.	0.7	8
95	Air or 100% oxygen for asphyxiated babies? Time to decide. Critical Care, 2005, 9, 128.	2.5	7
96	Early Retinal Findings Following Cooling in Neonatal Encephalopathy. Neuropediatrics, 2019, 50, 015-021.	0.3	7
97	Prognostic value of neonatal EEG following therapeutic hypothermia in survivors of hypoxic-ischemic encephalopathy. Clinical Neurophysiology, 2021, 132, 2091-2100.	0.7	7
98	A critical review of the 2020 International Liaison Committee onÂResuscitation treatment recommendations for resuscitating the newly born infant. Acta Paediatrica, International Journal of Paediatrics, 2021, 110, 1107-1112.	0.7	7
99	Comparison of Three Hypothermic Target Temperatures for the Treatment of Hypoxic Ischemia: mRNA Level Responses of Eight Genes in the Piglet Brain. Translational Stroke Research, 2013, 4, 248-257.	2.3	6
100	Neurogenesis Is Reduced at 48 h in the Subventricular Zone Independent of Cell Death in a Piglet Model of Perinatal Hypoxia-Ischemia. Frontiers in Pediatrics, 2022, 10, 793189.	0.9	6
101	Systemic multipotent adult progenitor cells improve long-term neurodevelopmental outcomes after preterm hypoxic-ischemic encephalopathy. Behavioural Brain Research, 2019, 362, 77-81.	1.2	5
102	Melatonin for Neonatal Encephalopathy: From Bench to Bedside. International Journal of Molecular Sciences, 2021, 22, 5481.	1.8	5
103	Efficacy of melatonin in term neonatal models of perinatal hypoxiaâ€ischaemia. Annals of Clinical and Translational Neurology, 2022, 9, 795-809.	1.7	5
104	Depth and Duration of Cooling for Perinatal Asphyxial Encephalopathy. JAMA - Journal of the American Medical Association, 2014, 312, 2623.	3.8	4
105	Helping babies breathe can reduce deaths with the right combination ofÂtraining and expertise. Acta Paediatrica, International Journal of Paediatrics, 2017, 106, 1552-1553.	0.7	4
106	Contribution of perinatal conditions to cerebral palsy in Uganda. The Lancet Global Health, 2018, 6, e248-e249.	2.9	4
107	Optimizing hemodynamic care in neonatal encephalopathy. Seminars in Fetal and Neonatal Medicine, 2020, 25, 101139.	1.1	4
108	Serial blood cytokine and chemokine mRNA and microRNA over 48â€‰h are insult specific in a piglet model of inflammation-sensitized hypoxiaâ€“ischaemia. Pediatric Research, 2021, 89, 464-475.	1.1	4

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109	Elevated serum IL-10 is associated with severity of neonatal encephalopathy and adverse early childhood outcomes. Pediatric Research, 2022, 92, 180-189.	1.1	4
110	Biometric assessments of the posterior fossa by fetal MRI : A systematic review. Prenatal Diagnosis, 2021, 41, 258-270.	1.1	2
111	International Perspectives: Birth-Associated Neonatal Encephalopathy: Postresuscitation Care in West African Newborns. NeoReviews, 2018, 19, e507-e515.	0.4	1
112	Protocol for the Birth Asphyxia in African Newborns (Baby BRAiN) Study: a Neonatal Encephalopathy Feasibility Cohort Study. Gates Open Research, 0, 6, 10.	2.0	1
113	Optimizing neonatal outcomes with melatonin - Huge promise but slow progress. European Journal of Paediatric Neurology, 2021, 31, 102-103.	0.7	0
114	Neurological problems in the newborn. , 2012, , 1065-1223.		0