

# Carol A Colton

## List of Publications by Year in descending order

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104  
papers

8,595  
citations

53794

45  
h-index

43889

91  
g-index

109  
all docs

109  
docs citations

109  
times ranked

11121  
citing authors

#	ARTICLE	IF	CITATIONS
1	The chemical biology of nitric oxide: Implications in cellular signaling. Free Radical Biology and Medicine, 2008, 45, 18-31.	2.9	809
2	Heterogeneity of Microglial Activation in the Innate Immune Response in the Brain. Journal of NeuroImmune Pharmacology, 2009, 4, 399-418.	4.1	739
3	Nitric oxide and redox mechanisms in the immune response. Journal of Leukocyte Biology, 2011, 89, 873-891.	3.3	603
4	Production of superoxide anions by a CNS macrophage, the microglia. FEBS Letters, 1987, 223, 284-288.	2.8	558
5	Expression profiles for macrophage alternative activation genes in AD and in mouse models of AD. Journal of Neuroinflammation, 2006, 3, 27.	7.2	358
6	Assessing Activation States in Microglia. CNS and Neurological Disorders - Drug Targets, 2010, 9, 174-191.	1.4	347
7	Mechanisms of the Antioxidant Effects of Nitric Oxide. Antioxidants and Redox Signaling, 2001, 3, 203-213.	5.4	341
8	APOE genotype-specific differences in the innate immune response. Neurobiology of Aging, 2009, 30, 1350-1360.	3.1	282
9	Glutamate Acting at NMDA Receptors Stimulates Embryonic Cortical Neuronal Migration. Journal of Neuroscience, 1999, 19, 4449-4461.	3.6	262
10	Skyline for Small Molecules: A Unifying Software Package for Quantitative Metabolomics. Journal of Proteome Research, 2020, 19, 1447-1458.	3.7	253
11	Activated human microglia produce the excitotoxin quinolinic acid. NeuroReport, 1997, 8, 431-434.	1.2	184
12	Progression of Amyloid Pathology to Alzheimer's Disease Pathology in an Amyloid Precursor Protein Transgenic Mouse Model by Removal of Nitric Oxide Synthase 2. Journal of Neuroscience, 2008, 28, 1537-1545.	3.6	172
13	Arginine Deprivation and Immune Suppression in a Mouse Model of Alzheimer's Disease. Journal of Neuroscience, 2015, 35, 5969-5982.	3.6	147
14	APOE and the regulation of microglial nitric oxide production: a link between genetic risk and oxidative stress. Neurobiology of Aging, 2002, 23, 777-785.	3.1	125
15	Characterization of interleukin-1 production by microglia in culture. Brain Research, 1992, 591, 88-93.	2.2	122
16	Accelerating drug discovery for Alzheimer's disease: best practices for preclinical animal studies. Alzheimer's Research and Therapy, 2011, 3, 28.	6.2	116
17	Mitogenic effect of neuropeptide Y in rat vascular smooth muscle cells. Peptides, 1993, 14, 263-268.	2.4	112
18	Apolipoprotein E and Peptide Mimetics Modulate Inflammation by Binding the SET Protein and Activating Protein Phosphatase 2A. Journal of Immunology, 2011, 186, 2535-2542.	0.8	104

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19	Species differences in the generation of reactive oxygen species by microglia. <i>Molecular and Chemical Neuropathology</i> , 1996, 28, 15-20.	1.0	96
20	Advancing the Study of Stroke in Women. <i>Stroke</i> , 2006, 37, 2387-2399.	2.0	96
21	Anti-Amyloid- $\beta$ Immunotherapy in Alzheimer's Disease: Relevance of Transgenic Mouse Studies to Clinical Trials. <i>Journal of Alzheimer's Disease</i> , 2008, 15, 555-569.	2.6	96
22	Orthogonal properties of the redox siblings nitroxyl and nitric oxide in the cardiovascular system: a novel redox paradigm. <i>American Journal of Physiology - Heart and Circulatory Physiology</i> , 2003, 285, H2264-H2276.	3.2	86
23	Amyloid Reduction by Amyloid- $\beta$ Vaccination Also Reduces Mouse Tau Pathology and Protects from Neuron Loss in Two Mouse Models of Alzheimer's Disease. <i>Journal of Neuroscience</i> , 2009, 29, 7957-7965.	3.6	85
24	Microglial Contribution to Oxidative Stress in Alzheimer's Disease. <i>Annals of the New York Academy of Sciences</i> , 2000, 899, 292-307.	3.8	81
25	Apolipoprotein E-Derived Peptides Ameliorate Clinical Disability and Inflammatory Infiltrates into the Spinal Cord in a Murine Model of Multiple Sclerosis. <i>Journal of Pharmacology and Experimental Therapeutics</i> , 2006, 318, 956-965.	2.5	81
26	The Effects of NOS2 Gene Deletion on Mice Expressing Mutated Human A $\beta$ PP. <i>Journal of Alzheimer's Disease</i> , 2008, 15, 571-587.	2.6	81
27	Speaking out about gender imbalance in invited speakers improves diversity. <i>Nature Immunology</i> , 2017, 18, 475-478.	14.5	81
28	Heme Proteins and Nitric Oxide (NO): The Neglected, Eloquent Chemistry in NO Redox Signaling and Regulation. <i>Antioxidants and Redox Signaling</i> , 2003, 5, 307-317.	5.4	80
29	Apolipoprotein E isoform mediated regulation of nitric oxide release 1,2 1Guest Editors: Mark A. Smith and George Perry 2This article is part of a series of reviews on "Causes and Consequences of Oxidative Stress in Alzheimer's Disease." The full list of papers may be found on the homepage of the journal.. <i>Free Radical Biology and Medicine</i> , 2002, 32, 1071-1075.	2.9	79
30	Further evidence for distinct reactive intermediates from nitroxyl and peroxynitrite: effects of buffer composition on the chemistry of Angeli's salt and synthetic peroxynitrite. <i>Archives of Biochemistry and Biophysics</i> , 2002, 401, 134-144.	3.0	78
31	Function of microglia in organotypic slice cultures. <i>Journal of Neuroscience Research</i> , 1999, 56, 644-651.	2.9	76
32	Induction of Superoxide Anion and Nitric Oxide Production in Cultured Microglia <sup>a</sup> . <i>Annals of the New York Academy of Sciences</i> , 1994, 738, 54-63.	3.8	76
33	Immunotherapy, Vascular Pathology, and Microhemorrhages in Transgenic Mice. <i>CNS and Neurological Disorders - Drug Targets</i> , 2009, 8, 50-64.	1.4	76
34	APOE genotype-specific differences in human and mouse macrophage nitric oxide production. <i>Journal of Neuroimmunology</i> , 2004, 147, 62-67.	2.3	74
35	Neurovascular and immune mechanisms that regulate postoperative delirium superimposed on dementia. <i>Alzheimer's and Dementia</i> , 2020, 16, 734-749.	0.8	73
36	Modulation of Nitric Oxide Production in Human Macrophages by Apolipoprotein-E and Amyloid-Beta Peptide. <i>Biochemical and Biophysical Research Communications</i> , 1997, 240, 391-394.	2.1	68

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37	Guide for the use of nitric oxide (NO) donors as probes of the chemistry of NO and related redox species in biological systems. <i>Methods in Enzymology</i> , 2002, 359, 84-105.	1.0	66
38	An Apolipoprotein E-Mimetic Stimulates Axonal Regeneration and Remyelination after Peripheral Nerve Injury. <i>Journal of Pharmacology and Experimental Therapeutics</i> , 2010, 334, 106-115.	2.5	65
39	Sex steroids, APOE genotype and the innate immune system. <i>Neurobiology of Aging</i> , 2005, 26, 363-372.	3.1	63
40	INHIBITION OF MICROGLIAL SUPEROXIDE ANION PRODUCTION BY ISOPROTERENOL AND DEXAMETHASONE**This is one of eight original papers on the subject "microglia". Dr Peter Gebicke-Haerter (Dept. Psychiatry, University of Freiburg, Germany) acted as organiser and executive editor in the refereeing of these articles.. <i>Neurochemistry International</i> , 1996, 29, 43-53.	3.8	59
41	The action of hydrogen peroxide on paired pulse and long-term potentiation in the hippocampus. <i>Free Radical Biology and Medicine</i> , 1989, 7, 3-8.	2.9	51
42	Elevated copper in the amyloid plaques and iron in the cortex are observed in mouse models of Alzheimer's disease that exhibit neurodegeneration. <i>Biomedical Spectroscopy and Imaging</i> , 2013, 2, 129-139.	1.2	50
43	Protection from oxidation enhances the survival of cultured mesencephalic neurons. <i>Experimental Neurology</i> , 1995, 132, 54-61.	4.1	49
44	Immune Heterogeneity in Neuroinflammation: Dendritic Cells in the Brain. <i>Journal of NeuroImmune Pharmacology</i> , 2013, 8, 145-162.	4.1	47
45	Apolipoproteinâ€ Alleleâ€ Specific Regulation of Nitric Oxide Production. <i>Annals of the New York Academy of Sciences</i> , 2002, 962, 212-225.	3.8	46
46	The APOE4 genotype alters the response of microglia and macrophages to 17Î²-estradiol. <i>Neurobiology of Aging</i> , 2008, 29, 1783-1794.	3.1	46
47	Nitric oxideâ€ mediated regulation of â€ amyloid clearance via alterations of <sc>MMP</sc>â€9/<sc>TIMP</sc>â€1. <i>Journal of Neurochemistry</i> , 2012, 123, 736-749.	3.9	46
48	Hypoxia modulates nitric oxide-induced regulation of NMDA receptor currents and neuronal cell death. <i>American Journal of Physiology - Cell Physiology</i> , 1999, 277, C673-C683.	4.6	44
49	Polyribonucleotides induce nitric oxide production by human monocyte-derived macrophages. <i>Journal of Leukocyte Biology</i> , 1997, 62, 369-373.	3.3	42
50	Interaction of NG2<sup>+</sup> glial progenitors and microglia/macrophages from the injured spinal cord. <i>Glia</i> , 2010, 58, 410-422.	4.9	41
51	Diverse Inflammatory Responses in Transgenic Mouse Models of Alzheimer's Disease and the Effect of Immunotherapy on These Responses. <i>ASN Neuro</i> , 2011, 3, AN20110018.	2.7	40
52	Ethanol Induced Changes in Superoxide Anion and Nitric Oxide in Cultured Microglia. <i>Alcoholism: Clinical and Experimental Research</i> , 1998, 22, 710-716.	2.4	39
53	Androgen-Mediated Immune Function Is Altered by the Apolipoprotein E Gene. <i>Endocrinology</i> , 2007, 148, 3383-3390.	2.8	37
54	Lithium Treatment of APPS <sup>w</sup> DI/NOS2 <sup>âˆ’/âˆ’</sup> Mice Leads to Reduced Hyperphosphorylated Tau, Increased Amyloid Deposition and Altered Inflammatory Phenotype. <i>PLoS ONE</i> , 2012, 7, e31993.	2.5	36

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55	Longitudinal Study of Differential Protein Expression in an Alzheimer's Mouse Model Lacking Inducible Nitric Oxide Synthase. <i>Journal of Proteome Research</i> , 2013, 12, 4462-4477.	3.7	35
56	Enhanced production of superoxide anion by microglia from trisomy 16 mice. <i>Brain Research</i> , 1990, 519, 236-242.	2.2	34
57	Activation of matrix metalloproteinases following anti-A $\beta$ immunotherapy; implications for microhemorrhage occurrence. <i>Journal of Neuroinflammation</i> , 2011, 8, 115.	7.2	32
58	Redox regulation of neuronal migration in a down syndrome model. <i>Free Radical Biology and Medicine</i> , 2003, 35, 566-575.	2.9	31
59	<i>Nos2</i> Deletion and Human <i>NOS2</i> Replacement in Alzheimer Disease Models. <i>Journal of Neuropathology and Experimental Neurology</i> , 2014, 73, 752-769.	1.7	30
60	The fornix provides multiple biomarkers to characterize circuit disruption in a mouse model of Alzheimer's disease. <i>NeuroImage</i> , 2016, 142, 498-511.	4.2	30
61	Changes in synaptic transmission produced by hydrogen peroxide. <i>Journal of Free Radicals in Biology &amp; Medicine</i> , 1986, 2, 141-148.	2.1	28
62	BIOLOGICAL ACTIVITY OF INTERLEUKIN-10 IN THE CENTRAL NERVOUS SYSTEM. <i>Neurochemistry International</i> , 1997, 30, 433-439.	3.8	27
63	Compartmentalized Nitrosation and Nitration in Mitochondria. <i>Antioxidants and Redox Signaling</i> , 2003, 5, 349-354.	5.4	25
64	Identifying Vulnerable Brain Networks in Mouse Models of Genetic Risk Factors for Late Onset Alzheimer's Disease. <i>Frontiers in Neuroinformatics</i> , 2019, 13, 72.	2.5	24
65	An electrophysiological analysis of oxygen and pressure on synaptic transmission. <i>Brain Research</i> , 1982, 251, 221-227.	2.2	23
66	Human Apolipoprotein E Redistributes Fibrillar Amyloid Deposition in Tg-SwDI Mice. <i>Journal of Neuroscience</i> , 2008, 28, 5312-5320.	3.6	23
67	The impact of human and mouse differences in <i>NOS2</i> gene expression on the brain's redox and immune environment. <i>Molecular Neurodegeneration</i> , 2014, 9, 50.	10.8	22
68	Blockade of hyperbaric oxygen induced seizures by excitatory amino acid antagonists. <i>Canadian Journal of Physiology and Pharmacology</i> , 1985, 63, 519-521.	1.4	21
69	The action of oxygen and oxygen at high pressure on inhibitory transmission. <i>Brain Research</i> , 1986, 364, 151-158.	2.2	19
70	Characterization of NO and Cytokine Production in Immune-Activated Microglia and Peritoneal Macrophages Derived from a Mouse Model Expressing the Human <i>NOS2</i> Gene on a Mouse <i>NOS2</i> Knockout Background. <i>Antioxidants and Redox Signaling</i> , 2006, 8, 893-901.	5.4	19
71	Trigeminal responses to thermal stimulation of the oral cavity in rattlesnakes ( <i>Crotalus viridis</i> ) before and after bilateral anesthetization of the facial pit organs. <i>Brain Research</i> , 1987, 400, 365-370.	2.2	17
72	Infection and inflammation: New perspectives on Alzheimer's disease. <i>Brain, Behavior, &amp; Immunity - Health</i> , 2022, 22, 100462.	2.5	17

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73	Enhanced Capillary Amyloid Angiopathy-Associated Pathology in Tg-SwDI Mice With Deleted Nitric Oxide Synthase 2. <i>Stroke</i> , 2010, 41, S135-8.	2.0	16
74	Multivariate MR biomarkers better predict cognitive dysfunction in mouse models of Alzheimer's disease. <i>Magnetic Resonance Imaging</i> , 2019, 60, 52-67.	1.8	16
75	Induction of nitric oxide in cultured microglia: Evidence for a cytoprotective role. <i>Advances in Neuroimmunology</i> , 1995, 5, 491-503.	1.8	13
76	Nitric oxide production and regulation of neuronal NOS in tyrosine hydroxylase containing neurons. <i>Experimental Neurology</i> , 2004, 188, 341-350.	4.1	12
77	Location-dependent artifact for no measurement using multiwell plates. <i>Free Radical Biology and Medicine</i> , 1996, 20, 361-363.	2.9	11
78	Mitochondria and Nitric Oxide. <i>Antioxidants and Redox Signaling</i> , 2003, 5, 249-250.	5.4	11
79	Chronic Systemic Immune Dysfunction in African-Americans with Small Vessel-Type Ischemic Stroke. <i>Translational Stroke Research</i> , 2015, 6, 430-436.	4.2	10
80	Microglial-Neuronal Interactions During Neurodegenerative Diseases. <i>Journal of NeuroImmune Pharmacology</i> , 2013, 8, 4-6.	4.1	8
81	The effects of the apoE4 genotype on the developing mouse retina. <i>Experimental Eye Research</i> , 2016, 145, 17-25.	2.6	8
82	Vascular Cellular Adhesion Molecule-1 (VCAM-1) and Memory Impairment in African-Americans after Small Vessel-Type Stroke. <i>Journal of Stroke and Cerebrovascular Diseases</i> , 2020, 29, 104646.	1.6	8
83	Depression of glutamate-mediated synaptic transmission by benzyl alcohol. <i>Canadian Journal of Physiology and Pharmacology</i> , 1977, 55, 917-922.	1.4	7
84	Human Apolipoprotein E2 Promotes Parenchymal Amyloid Deposition and Neuronal Loss in Vasculotropic Mutant Amyloid-Î² Protein Tg-SwDI Mice. <i>Journal of Alzheimer's Disease</i> , 2012, 31, 359-369.	2.6	7
85	Function of microglia in organotypic slice cultures. <i>Journal of Neuroscience Research</i> , 1999, 56, 644-651.	2.9	7
86	Postsynaptic effect of La3+ at the frog neuromuscular junction. <i>Journal of Neurobiology</i> , 1976, 7, 87-91.	3.6	5
87	Capillary Electrophoresis-High Resolution Mass Spectrometry for Measuring In Vivo Arginine Isotope Incorporation in Alzheimer's Disease Mouse Models. <i>Journal of the American Society for Mass Spectrometry</i> , 2021, 32, 1448-1458.	2.8	5
88	Reactive Oxygen Species and Neuronal Function. , 2002, , 569-589.		4
89	Likelihood ratio statistics for gene set enrichment in Alzheimer's disease pathways. <i>Alzheimer's and Dementia</i> , 2021, 17, 561-573.	0.8	4
90	Metabolism-Based Gene Differences in Neurons Expressing Hyperphosphorylated AT8+ Positive (AT8+) Tau in Alzheimer's Disease. <i>ASN Neuro</i> , 2021, 13, 175909142110194.	2.7	4

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91	CVNâ€AD Alzheimer's mice show premature reduction in neurovascular coupling in response to spreading depression and anoxia compared to aged controls. Alzheimer's and Dementia, 2021, 17, 1109-1120.	0.8	3
92	Apolipoprotein E and Mimetics as Targets and Therapeutics for Alzheimerâ€™s Disease. , 2015, , 157-182.		3
93	NPY and chronic neurodegenerative disease. , 2006, , 223-244.		3
94	The action of dantrolene sodium on the lobster neuromuscular junction. Comparative Biochemistry and Physiology Part C: Comparative Pharmacology, 1979, 64, 153-156.	0.2	2
95	Absolute Winding Number Differentiates Mouse Spatial Navigation Strategies With Genetic Risk for Alzheimerâ€™s Disease. Frontiers in Neuroscience, 0, 16, .	2.8	2
96	An Endogenous Source of the Superoxide Anion in the Central Nervous System. , 1988, 49, 1005-1010.		1
97	Slice Cultures for Study of Microglia. , 2001, , 29-37.		0
98	In Memory of Daniel L. Gilbert - A Radical Spirit. Antioxidants and Redox Signaling, 2001, 3, 1-2.	5.4	0
99	An Overview of Reactive Oxygen Species. , 2002, , 679-695.		0
100	P2â€127: Immuneâ€Mediated Nutrient Deprivation and Metabolic Disruption in an Alzheimer's Disease Mouse Model. Alzheimer's and Dementia, 2016, 12, P660.	0.8	0
101	P2â€168: IMMUNEâ€REGULATED METABOLIC PATHWAY ANALYSIS IN AT8â€POSITIVE NEURONS USING LASER CAPTURE MICROSCOPY. Alzheimer's and Dementia, 2018, 14, P733.	0.8	0
102	P3â€070: ANALYSIS OF A SPORADIC MOUSE MODEL OF ALZHEIMER'S DISEASE. Alzheimer's and Dementia, 2018, 14, P1091.	0.8	0
103	Optimizing protocols for white matter tractography in animal models of genetic AD risk. Alzheimer's and Dementia, 2020, 16, e047440.	0.8	0
104	Percutaneous vagus nerve stimulation modulates glia activity and rescues acute AÎ² deposition in a mouse model of delirium superimposed on dementia.. Alzheimer's and Dementia, 2021, 17 Suppl 3, e056571.	0.8	0