Robin A J Smith

List of Publications by Year in descending order

Source: https://exaly.com/author-pdf/11246049/publications.pdf

Version: 2024-02-01

78 papers

12,242 citations

53 h-index 79 g-index

79 all docs

79 docs citations

79 times ranked 13666 citing authors

#	Article	IF	CITATIONS
1	Targeting Antioxidants to Mitochondria by Conjugation to Lipophilic Cations. Annual Review of Pharmacology and Toxicology, 2007, 47, 629-656.	9.4	1,010
2	Delivery of bioactive molecules to mitochondria in vivo. Proceedings of the National Academy of Sciences of the United States of America, 2003, 100, 5407-5412.	7.1	638
3	Targeting an antioxidant to mitochondria decreases cardiac ischemiaâ€reperfusion injury. FASEB Journal, 2005, 19, 1088-1095.	0.5	556
4	Cardioprotection by S-nitrosation of a cysteine switch on mitochondrial complex I. Nature Medicine, 2013, 19, 753-759.	30.7	521
5	A doubleâ€blind, placeboâ€controlled study to assess the mitochondriaâ€targeted antioxidant MitoQ as a diseaseâ€modifying therapy in Parkinson's disease. Movement Disorders, 2010, 25, 1670-1674.	3.9	467
6	Mitochondrial pharmacology. Trends in Pharmacological Sciences, 2012, 33, 341-352.	8.7	430
7	Animal and human studies with the mitochondriaâ€ŧargeted antioxidant MitoQ. Annals of the New York Academy of Sciences, 2010, 1201, 96-103.	3.8	428
8	Selective targeting of an antioxidant to mitochondria. FEBS Journal, 1999, 263, 709-716.	0.2	409
9	Ferredoxin reductase affects p53-dependent, 5-fluorouracil–induced apoptosis in colorectal cancer cells. Nature Medicine, 2001, 7, 1111-1117.	30.7	389
10	Superoxide Activates Mitochondrial Uncoupling Protein 2 from the Matrix Side. Journal of Biological Chemistry, 2002, 277, 47129-47135.	3.4	355
11	Mitochondria-Targeted Small Molecule Therapeutics and Probes. Antioxidants and Redox Signaling, 2011, 15, 3021-3038.	5 . 4	344
12	Mitochondriaâ€targeted antioxidants protect Friedreich Ataxia fibroblasts from endogenous oxidative stress more effectively than untargeted antioxidants. FASEB Journal, 2003, 17, 1-10.	0.5	324
13	Mitochondria-Targeted Antioxidant MitoQ ₁₀ Improves Endothelial Function and Attenuates Cardiac Hypertrophy. Hypertension, 2009, 54, 322-328.	2.7	319
14	Interactions of Mitochondria-targeted and Untargeted Ubiquinones with the Mitochondrial Respiratory Chain and Reactive Oxygen Species. Journal of Biological Chemistry, 2005, 280, 21295-21312.	3.4	318
15	The mitochondria-targeted anti-oxidant mitoquinone decreases liver damage in a phase II study of hepatitis C patients. Liver International, 2010, 30, 1019-1026.	3.9	313
16	Superoxide Activates Uncoupling Proteins by Generating Carbon-centered Radicals and Initiating Lipid Peroxidation. Journal of Biological Chemistry, 2003, 278, 48534-48545.	3.4	283
17	Measurement of H2O2 within Living Drosophila during Aging Using a Ratiometric Mass Spectrometry Probe Targeted to the Mitochondrial Matrix. Cell Metabolism, 2011, 13, 340-350.	16.2	267
18	Antioxidant and prooxidant properties of mitochondrial Coenzyme Q. Archives of Biochemistry and Biophysics, 2004, 423, 47-56.	3.0	245

#	Article	IF	CITATIONS
19	Interaction of the Mitochondria-targeted Antioxidant MitoQ with Phospholipid Bilayers and Ubiquinone Oxidoreductases*. Journal of Biological Chemistry, 2007, 282, 14708-14718.	3.4	213
20	A mitochondria-targeted nitroxide is reduced to its hydroxylamine by ubiquinol in mitochondria. Free Radical Biology and Medicine, 2008, 44, 1406-1419.	2.9	210
21	A mitochondria-targeted <i>S</i> -nitrosothiol modulates respiration, nitrosates thiols, and protects against ischemia-reperfusion injury. Proceedings of the National Academy of Sciences of the United States of America, 2009, 106, 10764-10769.	7.1	205
22	Consequences of long-term oral administration of the mitochondria-targeted antioxidant MitoQ to wild-type mice. Free Radical Biology and Medicine, 2010, 48, 161-172.	2.9	193
23	Specific Modification of Mitochondrial Protein Thiols in Response to Oxidative Stress. Journal of Biological Chemistry, 2002, 277, 17048-17056.	3.4	173
24	Mitochondrial Targeting of Vitamin E Succinate Enhances Its Pro-apoptotic and Anti-cancer Activity via Mitochondrial Complex II. Journal of Biological Chemistry, 2011, 286, 3717-3728.	3 . 4	171
25	Fine-tuning the hydrophobicity of a mitochondria-targeted antioxidant. FEBS Letters, 2004, 571, 9-16.	2.8	170
26	Rapid and extensive uptake and activation of hydrophobic triphenylphosphonium cations within cells. Biochemical Journal, 2008, 411, 633-645.	3.7	168
27	Identification of S-nitrosated mitochondrial proteins by <i>S</i> -nitrosothiol difference in gel electrophoresis (SNO-DIGE): implications for the regulation of mitochondrial function by reversible S-nitrosation. Biochemical Journal, 2010, 430, 49-59.	3.7	130
28	Neuroprotective effects of the mitochondria-targeted antioxidant MitoQ in a model of inherited amyotrophic lateral sclerosis. Free Radical Biology and Medicine, 2014, 70, 204-213.	2.9	126
29	The effects of exogenous antioxidants on lifespan and oxidative stress resistance in Drosophila melanogaster. Mechanisms of Ageing and Development, 2006, 127, 356-370.	4.6	124
30	Prevention of Mitochondrial Oxidative Damage Using Targeted Antioxidants. Annals of the New York Academy of Sciences, 2002, 959, 263-274.	3.8	119
31	Antioxidant properties of MitoTEMPOL and its hydroxylamine. Free Radical Research, 2009, 43, 4-12.	3.3	119
32	Mitochondrial targeting of quinones: Therapeutic implications. Mitochondrion, 2007, 7, S94-S102.	3 . 4	118
33	Synthesis and Characterization of a Triphenylphosphonium-conjugated Peroxidase Mimetic. Journal of Biological Chemistry, 2005, 280, 24113-24126.	3.4	117
34	Mitochondria-targeted antioxidants as therapies. Discovery Medicine, 2011, 11, 106-14.	0.5	113
35	Using the mitochondria-targeted ratiometric mass spectrometry probe MitoB to measure H2O2 in living Drosophila. Nature Protocols, 2012, 7, 946-958.	12.0	108
36	Reactivity of ubiquinone and ubiquinol with superoxide and the hydroperoxyl radical: implications for in vivo antioxidant activity. Free Radical Biology and Medicine, 2009, 46, 105-109.	2.9	106

#	Article	IF	Citations
37	Accumulation of lipophilic dications by mitochondria and cells. Biochemical Journal, 2006, 400, 199-208.	3.7	105
38	Rapid uptake of lipophilic triphenylphosphonium cations by mitochondria in vivo following intravenous injection: Implications for mitochondria-specific therapies and probes. Biochimica Et Biophysica Acta - General Subjects, 2010, 1800, 1009-1017.	2.4	101
39	Mitochondrial targeting of î±-tocopheryl succinate enhances its pro-apoptotic efficacy: A new paradigm for effective cancer therapy. Free Radical Biology and Medicine, 2011, 50, 1546-1555.	2.9	100
40	Mitochondria†Targeted Antioxidants in the Treatment of Disease. Annals of the New York Academy of Sciences, 2008, 1147, 105-111.	3.8	96
41	New copper chemistry. 16. Mechanism of organocuprate conjugate addition: observation of cuprate-olefin complexes and lithium-coordinated intermediates in the reaction of lithium dimethylcuprate(I) with 10-methylDELTA.1,9-2-octalone. Journal of the American Chemical Society, 1989. 111. 8276-8277.	13.7	85
42	Cell-penetrating peptides do not cross mitochondrial membranes even when conjugated to a lipophilic cation: evidence against direct passage through phospholipid bilayers. Biochemical Journal, 2004, 383, 457-468.	3.7	81
43	Targeting Coenzyme Q Derivatives to Mitochondria. Methods in Enzymology, 2004, 382, 45-67.	1.0	80
44	Assessing the Mitochondrial Membrane Potential in Cells and InÂVivo using Targeted Click Chemistry and Mass Spectrometry. Cell Metabolism, 2016, 23, 379-385.	16.2	78
45	Targeting lipoic acid to mitochondria: Synthesis and characterization of a triphenylphosphonium-conjugated $\hat{l}\pm$ -lipoyl derivative. Free Radical Biology and Medicine, 2007, 42, 1766-1780.	2.9	7 5
46	Direct Modification of the Proinflammatory Cytokine Macrophage Migration Inhibitory Factor by Dietary Isothiocyanates. Journal of Biological Chemistry, 2009, 284, 32425-32433.	3.4	70
47	The Mitochondria-Targeted Antioxidant Mitoquinone Protects against Cold Storage Injury of Renal Tubular Cells and Rat Kidneys. Journal of Pharmacology and Experimental Therapeutics, 2011, 336, 682-692.	2.5	66
48	Targeting Dinitrophenol to Mitochondria: Limitations to the Development of a Self-limiting Mitochondrial Protonophore. Bioscience Reports, 2006, 26, 231-243.	2.4	63
49	A ratiometric fluorescent probe for assessing mitochondrial phospholipid peroxidation within living cells. Free Radical Biology and Medicine, 2012, 53, 544-553.	2.9	63
50	The Mechanism of Organocuprate 1,4-Addition Reactions with .alpha.,.betaUnsaturated Ketones: Formation of Cuprate-Enone Complexes with Lithium Dimethylcuprate. Journal of the American Chemical Society, 1994, 116, 2902-2913.	13.7	57
51	Resolution of Mitochondrial Oxidative Stress Rescues Coronary Collateral Growth in Zucker Obese Fatty Rats. Arteriosclerosis, Thrombosis, and Vascular Biology, 2012, 32, 325-334.	2.4	57
52	Using exomarkers to assess mitochondrial reactive species in vivo. Biochimica Et Biophysica Acta - General Subjects, 2014, 1840, 923-930.	2.4	55
53	Delivery of antisense peptide nucleic acids (PNAs) to the cytosol by disulphide conjugation to a lipophilic cation. FEBS Letters, 2004, 556, 180-186.	2.8	54
54	A mitochondria-targeted derivative of ascorbate: MitoC. Free Radical Biology and Medicine, 2015, 89, 668-678.	2.9	54

#	Article	IF	CITATIONS
55	Mitochondrial accumulation of a lipophilic cation conjugated to an ionisable group depends on membrane potential, pH gradient and pK a: implications for the design of mitochondrial probes and therapies. Journal of Bioenergetics and Biomembranes, 2013, 45, 165-173.	2.3	52
56	Protection through postconditioning or a mitochondria-targeted S-nitrosothiol is unaffected by cardiomyocyte-selective ablation of protein kinase G. Basic Research in Cardiology, 2013, 108, 337.	5.9	51
57	A Mitochondria-Targeted Macrocyclic Mn(II) Superoxide Dismutase Mimetic. Chemistry and Biology, 2012, 19, 1237-1246.	6.0	50
58	Pulse Radiolysis Investigation on the Mechanism of the Catalytic Action of Mn(II)â^'Pentaazamacrocycle Compounds as Superoxide Dismutase Mimetics. Journal of Physical Chemistry A, 2008, 112, 4929-4935.	2.5	44
59	A mitochondria-targeted mass spectrometry probe to detect glyoxals: implications for diabetes. Free Radical Biology and Medicine, 2014, 67, 437-450.	2.9	44
60	Re-Directing an Alkylating Agent to Mitochondria Alters Drug Target and Cell Death Mechanism. PLoS ONE, 2013, 8, e60253.	2.5	36
61	Incorporation of triphenylphosphonium functionality improves the inhibitory properties of phenothiazine derivatives in Mycobacterium tuberculosis. Bioorganic and Medicinal Chemistry, 2014, 22, 5320-5328.	3.0	32
62	Synthesis of triphenylphosphonium vitamin E derivatives as mitochondria-targeted antioxidants. Tetrahedron, 2015, 71, 8444-8453.	1.9	32
63	Effect of the mitochondrial antioxidant, Mito Vitamin E, on hypoxic–ischemic striatal injury in neonatal rats: A dose–response and stereological study. Experimental Neurology, 2006, 199, 513-519.	4.1	30
64	Selective Hydrolysis of Thioacetals with Thallium(III) Nitrate. Synthetic Communications, 1979, 9, 301-311.	2.1	29
65	Multiple binding modes of isothiocyanates that inhibit macrophage migration inhibitory factor. European Journal of Medicinal Chemistry, 2015, 93, 501-510.	5 . 5	23
66	Neonatal rat hypoxia–ischemia: Effect of the antiâ€oxidant mitoquinol, and Sâ€PBN. Pediatrics International, 2008, 50, 481-488.	0.5	22
67	Specific targeting of a DNA-alkylating reagent to mitochondria. Synthesis and characterization of [4-((11aS)-7-methoxy-1,2,3,11a-tetrahydro-5H-pyrrolo[2,1-c][1,4]benzodiazepin-5-on-8-oxy)butyl]-triphenylphosp iodide. FEBS Journal, 2003, 270, 2827-2836.	h oz ium	21
68	P-glycoprotein (Mdr1a/1b) and breast cancer resistance protein (Bcrp) decrease the uptake of hydrophobic alkyl triphenylphosphonium cations by the brain. Biochimica Et Biophysica Acta - General Subjects, 2013, 1830, 3458-3465.	2.4	21
69	Some Observations on the Mechanism of Diorganocuprate 1,4-Addition Reactions with α,β-Unsaturated Ketones:  Effects of Diethyl Ether in Reactions of Butylcoppers in Toluene. Journal of Organic Chemistry, 1997, 62, 4629-4634.	3.2	20
70	Assessing the Delivery of Molecules to the Mitochondrial Matrix Using Click Chemistry. ChemBioChem, 2016, 17, 1312-1316.	2.6	17
71	Mitochondrial thiol modification by a targeted electrophile inhibits metabolism in breast adenocarcinoma cells by inhibiting enzyme activity and protein levels. Redox Biology, 2016, 8, 136-148.	9.0	15
72	The novel phloroglucinol PMT7 kills glycolytic cancer cells by blocking autophagy and sensitizing to nutrient stress. Journal of Cellular Biochemistry, 2011, 112, 1869-1879.	2.6	13

#	Article	IF	CITATIONS
73	Effect of Ethers on Reactions of Butylcoppers with $\hat{l}\pm,\hat{l}^2$ -Unsaturated Ketones in Toluene. Journal of Organic Chemistry, 1997, 62, 7637-7643.	3.2	12
74	A Novel Class of Mitochondria-Targeted Soft Electrophiles Modifies Mitochondrial Proteins and Inhibits Mitochondrial Metabolism in Breast Cancer Cells through Redox Mechanisms. PLoS ONE, 2015, 10, e0120460.	2.5	11
75	Confirmation of the Cardioprotective Effect of MitoGamide in the Diabetic Heart. Cardiovascular Drugs and Therapy, 2020, 34, 823-834.	2.6	9
76	SYNTHESIS, CHARACTERIZATION, AND BIOLOGICAL PROPERTIES OF A FULLERENE TRIPHENYLPHOSPHONIUM SALT. Fullerenes, Nanotubes, and Carbon Nanostructures, 2001, 9, 339-350.	0.6	7
77	Anti-Leukemic Activity of Ubiquinone-Based Compounds Targeting Trans-plasma Membrane Electron Transport. Journal of Medicinal Chemistry, 2013, 56, 3168-3176.	6.4	6
78	Clickln: a flexible protocol for quantifying mitochondrial uptake of nucleobase derivatives. Interface Focus, 2017, 7, 20160117.	3.0	4