HÃ¼lya BayÄ±r

List of Publications by Year
in descending order

Source: https://exaly.com/author-pdf/7743030/publications.pdf

Version: 2024-02-01

66 papers	11,516 citations	126907 33 h-index	106344 65 g-index
66 all docs	66 docs citations	66 times ranked	11388 citing authors

#	Article	IF	Citations
1	Ferroptosis: A Regulated Cell Death Nexus Linking Metabolism, Redox Biology, and Disease. Cell, 2017, 171, 273-285.	28.9	4,081
2	ACSL4 dictates ferroptosis sensitivity by shaping cellular lipid composition. Nature Chemical Biology, 2017, 13, 91-98.	8.0	2,069
3	Oxidized arachidonic and adrenic PEs navigate cells to ferroptosis. Nature Chemical Biology, 2017, 13, 81-90.	8.0	1,589
4	PEBP1 Wardens Ferroptosis by Enabling Lipoxygenase Generation of Lipid Death Signals. Cell, 2017, 171, 628-641.e26.	28.9	589
5	Lipidomics identifies cardiolipin oxidation as a mitochondrial target for redox therapy of brain injury. Nature Neuroscience, 2012, 15, 1407-1413.	14.8	254
6	Ferroptosis Contributes to Neuronal Death and Functional Outcome After Traumatic Brain Injury*. Critical Care Medicine, 2019, 47, 410-418.	0.9	191
7	Selective early cardiolipin peroxidation after traumatic brain injury: an oxidative lipidomics analysis. Annals of Neurology, 2007, 62, 154-169.	5.3	168
8	Achieving Life through Death: Redox Biology of Lipid Peroxidation in Ferroptosis. Cell Chemical Biology, 2020, 27, 387-408.	5.2	144
9	Therapeutic hypothermia preserves antioxidant defenses after severe traumatic brain injury in infants and children*. Critical Care Medicine, 2009, 37, 689-695.	0.9	141
10	A mitochondrial pathway for biosynthesis of lipid mediators. Nature Chemistry, 2014, 6, 542-552.	13.6	130
11	Bench-to-bedside review: Mitochondrial injury, oxidative stress and apoptosis â€“ there is nothing more practical than a good theory. Critical Care, 2008, 12, 206.	5.8	126
12	Cardiolipin asymmetry, oxidation and signaling. Chemistry and Physics of Lipids, 2014, 179, 64-69.	3.2	109
13	Therapies targeting lipid peroxidation in traumatic brain injury. Brain Research, 2016, 1640, 57-76.	2.2	94
14	Known unknowns of cardiolipin signaling: The best is yet to come. Biochimica Et Biophysica Acta - Molecular and Cell Biology of Lipids, 2017, 1862, 8-24.	2.4	94
15	Cerebrospinal Fluid NLRP3 is Increased After Severe Traumatic Brain Injury in Infants and Children. Neurocritical Care, 2017, 27, 44-50.	2.4	90
16	Elucidating the contribution of mitochondrial glutathione to ferroptosis in cardiomyocytes. Redox Biology, 2021, 45, 102021.	9.0	88
17	Gas Cluster Ion Beam Time-of-Flight Secondary Ion Mass Spectrometry High-Resolution Imaging of Cardiolipin Speciation in the Brain: Identification of Molecular Losses after Traumatic Injury. Analytical Chemistry, 2017, 89, 4611-4619.	6.5	68
18	Resolving the paradox of ferroptotic cell death: Ferrostatin-1 binds to 15LOX/PEBP1 complex, suppresses generation of peroxidized ETE-PE, and protects against ferroptosis. Redox Biology, 2021, 38, 101744.	9.0	67

#	ARTICLE	IF	CITATIONS
19	Oxidized phospholipid signaling in traumatic brain injury. Free Radical Biology and Medicine, 2018, 124, 493-503.	2.9	63
20	Dichotomous roles for externalized cardiolipin in extracellular signaling: Promotion of phagocytosis and attenuation of innate immunity. Science Signaling, 2015, 8, ra95.	3.6	62
21	Repetitive Mild Traumatic Brain Injury in the Developing Brain: Effects on Long-Term Functional Outcome and Neuropathology. Journal of Neurotrauma, 2016, 33, 641-651.	3.4	61
22	Oxidized phospholipids as biomarkers of tissue and cell damage with a focus on cardiolipin. Biochimica Et Biophysica Acta - Biomembranes, 2012, 1818, 2413-2423.	2.6	57
23	Secondaryâ€Ion Mass Spectrometry Images Cardiolipins and Phosphatidylethanolamines at the Subcellular Level. Angewandte Chemie - International Edition, 2019, 58, 3156-3161.	13.8	57
24	Defects of Lipid Synthesis Are Linked to the Age-Dependent Demyelination Caused by Lamin B1 Overexpression. Journal of Neuroscience, 2015, 35, 12002-12017.	3.6	51
25	Deciphering of Mitochondrial Cardiolipin Oxidative Signaling in Cerebral Ischemia-Reperfusion. Journal of Cerebral Blood Flow and Metabolism, 2015, 35, 319-328.	4.3	51
26	Cardiolipin Signaling Mechanisms: Collapse of Asymmetry and Oxidation. Antioxidants and Redox Signaling, 2015, 22, 1667-1680.	5.4	50
27	Autophagy Biomarkers Beclin 1 and p62 are Increased in Cerebrospinal Fluid after Traumatic Brain Injury. Neurocritical Care, 2017, 26, 348-355.	2.4	42
28	Quantitative assessment of cell fate decision between autophagy and apoptosis. Scientific Reports, 2017, 7, 17605.	3.3	42
29	Imaging mass spectrometry reveals loss of polyunsaturated cardiolipins in the cortical contusion, hippocampus, and thalamus after traumatic brain injury. Journal of Neurochemistry, 2016, 139, 659-675.	3.9	41
30	Designing inhibitors of cytochrome c/cardiolipin peroxidase complexes: mitochondria-targeted imidazole-substituted fatty acids. Free Radical Biology and Medicine, 2014, 71, 221-230.	2.9	40
31	The role of autophagy in acute brain injury: A state of flux?. Neurobiology of Disease, 2019, 122, 9-15.	4.4	40
32	A new thiol-independent mechanism of epithelial host defense against Pseudomonas aeruginosa: iNOS/NOâ€¢ sabotage of theft-ferroptosis. Redox Biology, 2021, 45, 102045.	9.0	40
33	Characterization of cardiolipins and their oxidation products by LCâ€“MS analysis. Chemistry and Physics of Lipids, 2014, 179, 3-10.	3.2	39
34	Direct Mapping of Phospholipid Ferroptotic Death Signals in Cells and Tissues by Gas Cluster Ion Beam Secondary Ion Mass Spectrometry (GCIBâ€SIMS). Angewandte Chemie - International Edition, 2021, 60, 11784-11788.	13.8	38
35	Successive High-Resolution (H₂O)_n-GCIB and C₆₀-SIMS Imaging Integrates Multi-Omics in Different Cell Types in Breast Cancer Tissue. Analytical Chemistry, 2021, 93, 8143-8151.	6.5	38
36	â€œRedox lipidomics technology: Looking for a needle in a haystackâ€• Chemistry and Physics of Lipids, 2019, 221, 93-107.	3.2	35

#	Article	IF	Citations
37	Mitochondrial damage & lipid signaling in traumatic brain injury. Experimental Neurology, 2020, 329, 113307.	4.1	34
38	Design and Synthesis of a Mitochondria-Targeted Mimic of Glutathione Peroxidase, MitoEbselen-2, as a Radiation Mitigator. ACS Medicinal Chemistry Letters, 2014, 5, 1304-1307.	2.8	33
39	â€œOnly a Life Lived for Others Is Worth Livingâ€: Redox Signaling by Oxygenated Phospholipids in Cell Fate Decisions. Antioxidants and Redox Signaling, 2018, 29, 1333-1358.	5.4	33
40	Pre-clinical models in pediatric traumatic brain injuryâ€”challenges and lessons learned. Child's Nervous System, 2017, 33, 1693-1701.	1.1	32
41	Brain tissue oxygen monitoring identifies cortical hypoxia and thalamic hyperoxia after experimental cardiac arrest in rats. Pediatric Research, 2014, 75, 295-301.	2.3	31
42	Paths to Successful Translation of New Therapies for Severe Traumatic Brain Injury in the Golden Age of Traumatic Brain Injury Research: A Pittsburgh Vision. Journal of Neurotrauma, 2020, 37, 2353-2371.	3.4	31
43	Peroxidase activation of cytoglobin by anionic phospholipids: Mechanisms and consequences. Biochimica Et Biophysica Acta - Molecular and Cell Biology of Lipids, 2016, 1861, 391-401.	2.4	30
44	Aiming for the target: Mitochondrial drug delivery in traumatic brain injury. Neuropharmacology, 2019, 145, 209-219.	4.1	26
45	C-ferroptosis is an iron-dependent form of regulated cell death in cyanobacteria. Journal of Cell Biology, 2022, 221, .	5.2	26
46	Ischemia-induced autophagy contributes to neurodegeneration in cerebellar Purkinje cells in the developing rat brain and in primary cortical neurons in vitro. Biochimica Et Biophysica Acta - Molecular Basis of Disease, 2015, 1852, 1902-1911.	3.8	25
47	Secondaryâ€ion Mass Spectrometry Images Cardiolipins and Phosphatidylethanolamines at the Subcellular Level. Angewandte Chemie, 2019, 131, 3188-3193.	2.0	23
48	Necrostatin-1 rescues mice from lethal irradiation. Biochimica Et Biophysica Acta - Molecular Basis of Disease, 2016, 1862, 850-856.	3.8	22
49	Mitochondrial Redox Opto-Lipidomics Reveals Mono-Oxygenated Cardiolipins as Pro-Apoptotic Death Signals. ACS Chemical Biology, 2016, 11, 530-540.	3.4	22
50	Global assessment of oxidized free fatty acids in brain reveals an enzymatic predominance to oxidative signaling after trauma. Biochimica Et Biophysica Acta - Molecular Basis of Disease, 2017, 1863, 2601-2613.	3.8	20
51	Metabolic and Structural Imaging at 7 Tesla After Repetitive Mild Traumatic Brain Injury in Immature Rats. ASN Neuro, 2018, 10, 175909141877054.	2.7	20
52	Quantitative and qualitative assessment of glymphatic flux using Evans blue albumin. Journal of Neuroscience Methods, 2019, 311, 436-441.	2.5	20
53	Inhibition of Peroxidase Activity of Cytochrome c: De Novo Compound Discovery and Validation. Molecular Pharmacology, 2015, 88, 421-427.	2.3	19
54	Lipidomics Detection of Brain Cardiolipins in Plasma Is Associated With Outcome After Cardiac Arrest. Critical Care Medicine, 2019, 47, e292-e300.	0.9	19

#	ARTICLE	IF	CITATIONS
55	NOâ—•Represses the Oxygenation of Arachidonoyl PE by 15LOX/PEBP1: Mechanism and Role in Ferroptosis. International Journal of Molecular Sciences, 2021, 22, 5253.	4.1	19
56	Antioxidant Approaches to Management of Ionizing Irradiation Injury. Antioxidants, 2015, 4, 82-101.	5.1	17
57	Genetic re-engineering of polyunsaturated phospholipid profile of Saccharomyces cerevisiae identifies a novel role for Cld1 in mitigating the effects of cardiolipin peroxidation. Biochimica Et Biophysica Acta - Molecular and Cell Biology of Lipids, 2018, 1863, 1354-1368.	2.4	16
58	Detection of brain specific cardiolipins in plasma after experimental pediatric head injury. Experimental Neurology, 2019, 316, 63-73.	4.1	16
59	Inactivation of RIP3 kinase sensitizes to 15LOX/PEBP1-mediated ferroptotic death. Redox Biology, 2022, 50, 102232.	9.0	15
60	Elimination of the unnecessary: Intra- and extracellular signaling by anionic phospholipids. Biochemical and Biophysical Research Communications, 2017, 482, 482-490.	2.1	12
61	Titrating the Dose of Oxygen after Severe Traumatic Brain Injury in the Era of Precision Medicine. Journal of Neurotrauma, 2017, 34, 3067-3069.	3.4	6
62	Amelioration of Amyotrophic Lateral Sclerosis in SOD1^{G93A}Mice by M₂Microglia from Transplanted Marrow. In Vivo, 2019, 33, 675-688.	1.3	4
63	Direct Mapping of Phospholipid Ferroptotic Death Signals in Cells and Tissues by Gas Cluster Ion Beam Secondary Ion Mass Spectrometry (GCIBâ€SIMS). Angewandte Chemie, 2021, 133, 11890-11894.	2.0	4
64	Tandem Therapeutic Plasma Exchange Reduces Continuous Renal Replacement Therapy Downtime. Blood Purification, 2021, , 1-8.	1.8	1
65	Redox Pioneer: Professor Valerian Kagan. Antioxidants and Redox Signaling, 2022, , .	5.4	1
66	2357 Lost and found: Detection of brain cardiolipins in plasma after cardiac arrest. Journal of Clinical and Translational Science, 2018, 2, 17-17.	0.6	0