

Antoni Barrientos

List of Publications by Year in descending order

Source: <https://exaly.com/author-pdf/10555875/publications.pdf>

Version: 2024-02-01

77
papers

6,398
citations

57758

44
h-index

71685

76
g-index

78
all docs

78
docs citations

78
times ranked

6922
citing authors

| # | ARTICLE | IF | CITATIONS |
|----|--|------|-----------|
| 1 | Coordination of metal center biogenesis in human cytochrome c oxidase. <i>Nature Communications</i> , 2022, 13, . | 12.8 | 28 |
| 2 | Distinct Roles of Mitochondrial HIGD1A and HIGD2A in Respiratory Complex and Supercomplex Biogenesis. <i>Cell Reports</i> , 2020, 31, 107607. | 6.4 | 49 |
| 3 | Multiple pathways coordinate assembly of human mitochondrial complex IV and stabilization of respiratory supercomplexes. <i>EMBO Journal</i> , 2020, 39, e103912. | 7.8 | 54 |
| 4 | Regulation of Mitochondrial Respiratory Chain Complex Levels, Organization, and Function by Arginyltransferase 1. <i>Frontiers in Cell and Developmental Biology</i> , 2020, 8, 603688. | 3.7 | 19 |
| 5 | HIGD-Driven Regulation of Cytochrome c Oxidase Biogenesis and Function. <i>Cells</i> , 2020, 9, 2620. | 4.1 | 22 |
| 6 | Respiratory supercomplexes enhance electron transport by decreasing cytochrome <i>c</i> diffusion distance. <i>EMBO Reports</i> , 2020, 21, e51015. | 4.5 | 71 |
| 7 | The mitoribosome-specific protein mS38 is preferentially required for synthesis of cytochrome c oxidase subunits. <i>Nucleic Acids Research</i> , 2019, 47, 5746-5760. | 14.5 | 18 |
| 8 | Yeast Mitoribosome Large Subunit Assembly Proceeds by Hierarchical Incorporation of Protein Clusters and Modules on the Inner Membrane. <i>Cell Metabolism</i> , 2018, 27, 645-656.e7. | 16.2 | 53 |
| 9 | Mitochondrial cytochrome c oxidase biogenesis: Recent developments. <i>Seminars in Cell and Developmental Biology</i> , 2018, 76, 163-178. | 5.0 | 225 |
| 10 | Mitochondrial ribosome bL34 mutants present diminished translation of cytochrome <i>c</i> oxidase subunits. <i>Cell Biology International</i> , 2018, 42, 630-642. | 3.0 | 7 |
| 11 | Human COX7A2L Regulates Complex III Biogenesis and Promotes Supercomplex Organization Remodeling without Affecting Mitochondrial Bioenergetics. <i>Cell Reports</i> , 2018, 25, 1786-1799.e4. | 6.4 | 55 |
| 12 | A <i>CMC1</i> knockout reveals translation-independent control of human mitochondrial complex <i>IV</i> biogenesis. <i>EMBO Reports</i> , 2017, 18, 477-494. | 4.5 | 56 |
| 13 | The DEAD-box helicase Mss116 plays distinct roles in mitochondrial ribogenesis and mRNA-specific translation. <i>Nucleic Acids Research</i> , 2017, 45, 6628-6643. | 14.5 | 53 |
| 14 | Human mitochondrial cytochrome c oxidase assembly factor COX18 acts transiently as a membrane insertase within the subunit 2 maturation module. <i>Journal of Biological Chemistry</i> , 2017, 292, 7774-7783. | 3.4 | 51 |
| 15 | Attenuation of polyglutamine-induced toxicity by enhancement of mitochondrial OXPHOS in yeast and fly models of aging. <i>Microbial Cell</i> , 2016, 3, 338-351. | 3.2 | 15 |
| 16 | Oma1 Links Mitochondrial Protein Quality Control and TOR Signaling To Modulate Physiological Plasticity and Cellular Stress Responses. <i>Molecular and Cellular Biology</i> , 2016, 36, 2300-2312. | 2.3 | 18 |
| 17 | Mitochondrial Cytochrome <i>c</i> Oxidase Biogenesis Is Regulated by the Redox State of a Heme-Binding Translational Activator. <i>Antioxidants and Redox Signaling</i> , 2016, 24, 281-298. | 5.4 | 19 |
| 18 | The Human Mitochondrial DEAD-Box Protein DDX28 Resides in RNA Granules and Functions in Mitoribosome Assembly. <i>Cell Reports</i> , 2015, 10, 854-864. | 6.4 | 109 |

| # | ARTICLE | IF | CITATIONS |
|----|--|------|-----------|
| 19 | Dietary restriction, mitochondrial function and aging: from yeast to humans. <i>Biochimica Et Biophysica Acta - Bioenergetics</i> , 2015, 1847, 1434-1447. | 1.0 | 111 |
| 20 | Elongator-dependent modification of cytoplasmic tRNA ^{Lys} UUU is required for mitochondrial function under stress conditions. <i>Nucleic Acids Research</i> , 2015, 43, 8368-8380. | 14.5 | 30 |
| 21 | Human COX20 cooperates with SCO1 and SCO2 to mature COX2 and promote the assembly of cytochrome c oxidase. <i>Human Molecular Genetics</i> , 2014, 23, 2901-2913. | 2.9 | 82 |
| 22 | A mitochondrial CO ₂ adenyl cyclase cAMP signalosome controls yeast normoxic cytochrome c oxidase activity. <i>FASEB Journal</i> , 2014, 28, 4369-4380. | 0.5 | 35 |
| 23 | I Function, Therefore I Am: Overcoming Skepticism about Mitochondrial Supercomplexes. <i>Cell Metabolism</i> , 2013, 18, 147-149. | 16.2 | 26 |
| 24 | Defects in mitochondrial fatty acid synthesis result in failure of multiple aspects of mitochondrial biogenesis in <i>Saccharomyces cerevisiae</i> . <i>Molecular Microbiology</i> , 2013, 90, 824-840. | 2.5 | 45 |
| 25 | Mitochondrial Cytochrome c Oxidase Assembly in Health and Human Diseases. , 2013, , 239-259. | | 3 |
| 26 | The DEAD Box Protein Mrh4 Functions in the Assembly of the Mitochondrial Large Ribosomal Subunit. <i>Cell Metabolism</i> , 2013, 18, 712-725. | 16.2 | 43 |
| 27 | Redox and Reactive Oxygen Species Regulation of Mitochondrial Cytochrome c Oxidase Biogenesis. <i>Antioxidants and Redox Signaling</i> , 2013, 19, 1940-1952. | 5.4 | 55 |
| 28 | Transcriptional Regulation of Yeast Oxidative Phosphorylation Hypoxic Genes by Oxidative Stress. <i>Antioxidants and Redox Signaling</i> , 2013, 19, 1916-1927. | 5.4 | 29 |
| 29 | hCOA3 Stabilizes Cytochrome c Oxidase 1 (COX1) and Promotes Cytochrome c Oxidase Assembly in Human Mitochondria. <i>Journal of Biological Chemistry</i> , 2013, 288, 8321-8331. | 3.4 | 46 |
| 30 | NAD ⁺ salvage pathway proteins suppress proteotoxicity in yeast models of neurodegeneration by promoting the clearance of misfolded/oligomerized proteins. <i>Human Molecular Genetics</i> , 2013, 22, 1699-1708. | 2.9 | 42 |
| 31 | Mitochondrial Complex I Plays an Essential Role in Human Respirasome Assembly. <i>Cell Metabolism</i> , 2012, 15, 324-335. | 16.2 | 234 |
| 32 | Mitochondrial Respiratory Thresholds Regulate Yeast Chronological Life Span and its Extension by Caloric Restriction. <i>Cell Metabolism</i> , 2012, 16, 55-67. | 16.2 | 156 |
| 33 | A Heme-Sensing Mechanism in the Translational Regulation of Mitochondrial Cytochrome c Oxidase Biogenesis. <i>Cell Metabolism</i> , 2012, 16, 801-813. | 16.2 | 66 |
| 34 | Biogenesis and assembly of eukaryotic cytochrome c oxidase catalytic core. <i>Biochimica Et Biophysica Acta - Bioenergetics</i> , 2012, 1817, 883-897. | 1.0 | 202 |
| 35 | Complementary roles of mitochondrial respiration and ROS signaling on cellular aging and longevity. <i>Aging</i> , 2012, 4, 578-579. | 3.1 | 10 |
| 36 | Regulation of Yeast Chronological Life Span by TORC1 via Adaptive Mitochondrial ROS Signaling. <i>Cell Metabolism</i> , 2011, 13, 668-678. | 16.2 | 273 |

| # | ARTICLE | IF | CITATIONS |
|----|--|-----|-----------|
| 37 | Quick and reliable assessment of chronological life span in yeast cell populations by flow cytometry. <i>Mechanisms of Ageing and Development</i> , 2011, 132, 315-323. | 4.6 | 45 |
| 38 | Cox25 Teams Up with Mss51, Ssc1, and Cox14 to Regulate Mitochondrial Cytochrome c Oxidase Subunit 1 Expression and Assembly in <i>Saccharomyces cerevisiae</i> . <i>Journal of Biological Chemistry</i> , 2011, 286, 555-566. | 3.4 | 69 |
| 39 | The Conserved Mitochondrial Twin Cx9C Protein Cmc2 Is a Cmc1 Homologue Essential for Cytochrome c Oxidase Biogenesis. <i>Journal of Biological Chemistry</i> , 2010, 285, 15088-15099. | 3.4 | 34 |
| 40 | Suppression of polyglutamine-induced cytotoxicity in <i>Saccharomyces cerevisiae</i> by enhancement of mitochondrial biogenesis. <i>FASEB Journal</i> , 2010, 24, 1431-1441. | 0.5 | 43 |
| 41 | Mss51 and Ssc1 Facilitate Translational Regulation of Cytochrome c Oxidase Biogenesis. <i>Molecular and Cellular Biology</i> , 2010, 30, 245-259. | 2.3 | 72 |
| 42 | Evaluation of the Mitochondrial Respiratory Chain and Oxidative Phosphorylation System Using Yeast Models of OXPHOS Deficiencies. <i>Current Protocols in Human Genetics</i> , 2009, 63, Unit19.5. | 3.5 | 14 |
| 43 | Suppression mechanisms of COX assembly defects in yeast and human: Insights into the COX assembly process. <i>Biochimica Et Biophysica Acta - Molecular Cell Research</i> , 2009, 1793, 97-107. | 4.1 | 91 |
| 44 | Synthesis of cytochrome c oxidase subunit 1 is translationally downregulated in the absence of functional F1FO-ATP synthase. <i>Biochimica Et Biophysica Acta - Molecular Cell Research</i> , 2009, 1793, 1776-1786. | 4.1 | 40 |
| 45 | Mitochondrial copper metabolism and delivery to cytochrome c oxidase. <i>IUBMB Life</i> , 2008, 60, 421-429. | 3.4 | 199 |
| 46 | Cytochrome c oxidase biogenesis: New levels of regulation. <i>IUBMB Life</i> , 2008, 60, 557-568. | 3.4 | 143 |
| 47 | Cmc1p Is a Conserved Mitochondrial Twin CX ₉ C Protein Involved in Cytochrome c Oxidase Biogenesis. <i>Molecular and Cellular Biology</i> , 2008, 28, 4354-4364. | 2.3 | 53 |
| 48 | Bot1p Is Required for Mitochondrial Translation, Respiratory Function, and Normal Cell Morphology in the Fission Yeast <i>Schizosaccharomyces pombe</i> . <i>Eukaryotic Cell</i> , 2008, 7, 619-629. | 3.4 | 12 |
| 49 | Transcriptional activators HAP/NF-Y rescue a cytochrome c oxidase defect in yeast and human cells. <i>Human Molecular Genetics</i> , 2008, 17, 775-788. | 2.9 | 45 |
| 50 | Ischemic Preconditioning Targets the Respiration of Synaptic Mitochondria via Protein Kinase C μ . <i>Journal of Neuroscience</i> , 2008, 28, 4172-4182. | 3.6 | 104 |
| 51 | In Vivo Labeling and Analysis of Mitochondrial Translation Products in Budding and in Fission Yeasts. <i>Methods in Molecular Biology</i> , 2008, 457, 113-124. | 0.9 | 20 |
| 52 | Exploring Protein-Protein Interactions Involving Newly Synthesized Mitochondrial DNA-Encoded Proteins. <i>Methods in Molecular Biology</i> , 2008, 457, 125-139. | 0.9 | 7 |
| 53 | Aberrant Translation of CytochromecOxidase Subunit 1 mRNA Species in the Absence of Mss51p in the Yeast <i>Saccharomyces cerevisiae</i> . <i>Molecular Biology of the Cell</i> , 2007, 18, 523-535. | 2.1 | 54 |
| 54 | Role of Cytochrome c in Apoptosis: Increased Sensitivity to Tumor Necrosis Factor Alpha Is Associated with Respiratory Defects but Not with Lack of Cytochrome c Release. <i>Molecular and Cellular Biology</i> , 2007, 27, 1771-1783. | 2.3 | 54 |

| # | ARTICLE | IF | CITATIONS |
|----|--|------|-----------|
| 55 | <i>SIT4</i> regulation of Mig1p-mediated catabolite repression in <i>Saccharomyces cerevisiae</i> . FEBS Letters, 2007, 581, 5658-5663. | 2.8 | 16 |
| 56 | Assembly of mitochondrial cytochrome c-oxidase, a complicated and highly regulated cellular process. American Journal of Physiology - Cell Physiology, 2006, 291, C1129-C1147. | 4.6 | 214 |
| 57 | Cytotoxicity of a mutant huntingtin fragment in yeast involves early alterations in mitochondrial OXPHOS complexes II and III. Human Molecular Genetics, 2006, 15, 3063-3081. | 2.9 | 129 |
| 58 | Mss51p and Cox14p jointly regulate mitochondrial Cox1p expression in <i>Saccharomyces cerevisiae</i> . EMBO Journal, 2004, 23, 3472-3482. | 7.8 | 179 |
| 59 | Defects in the biosynthesis of mitochondrial heme c and heme a in yeast and mammals. Biochimica Et Biophysica Acta - Bioenergetics, 2004, 1659, 153-159. | 1.0 | 47 |
| 60 | COX16 Encodes a Novel Protein Required for the Assembly of Cytochrome Oxidase in <i>Saccharomyces cerevisiae</i> . Journal of Biological Chemistry, 2003, 278, 3770-3775. | 3.4 | 35 |
| 61 | MTG1 Codes for a Conserved Protein Required for Mitochondrial Translation. Molecular Biology of the Cell, 2003, 14, 2292-2302. | 2.1 | 64 |
| 62 | Cytochrome Oxidase Assembly Does Not Require Catalytically Active Cytochrome c. Journal of Biological Chemistry, 2003, 278, 8881-8887. | 3.4 | 34 |
| 63 | Yeast Dihydroxybutanone Phosphate Synthase, an Enzyme of the Riboflavin Biosynthetic Pathway, Has a Second Unrelated Function in Expression of Mitochondrial Respiration. Journal of Biological Chemistry, 2003, 278, 14698-14703. | 3.4 | 16 |
| 64 | Yeast Models of Human Mitochondrial Diseases. IUBMB Life, 2003, 55, 83-95. | 3.4 | 65 |
| 65 | In vivo and in organello assessment of OXPHOS activities. Methods, 2002, 26, 307-316. | 3.8 | 222 |
| 66 | Cytochrome oxidase in health and disease. Gene, 2002, 286, 53-63. | 2.2 | 175 |
| 67 | Shy1p is necessary for full expression of mitochondrial COX1 in the yeast model of Leigh's syndrome. EMBO Journal, 2002, 21, 43-52. | 7.8 | 149 |
| 68 | Transmitochondrial technology in animal cells. Methods in Cell Biology, 2001, 65, 397-412. | 1.1 | 17 |
| 69 | A mutant mitochondrial respiratory chain assembly protein causes complex III deficiency in patients with tubulopathy, encephalopathy and liver failure. Nature Genetics, 2001, 29, 57-60. | 21.4 | 297 |
| 70 | In Vivo Regulation of Oxidative Phosphorylation in Cells Harboring a Stop-codon Mutation in Mitochondrial DNA-encoded Cytochrome c Oxidase Subunit I. Journal of Biological Chemistry, 2001, 276, 46925-46932. | 3.4 | 66 |
| 71 | Functional Constraints of Nuclear-Mitochondrial DNA Interactions in Xenomitochondrial Rodent Cell Lines. Journal of Biological Chemistry, 2000, 275, 31520-31527. | 3.4 | 103 |
| 72 | Cytochrome c Oxidase Assembly in Primates is Sensitive to Small Evolutionary Variations in Amino Acid Sequence. Molecular Biology and Evolution, 2000, 17, 1508-1519. | 8.9 | 44 |

| # | ARTICLE | IF | CITATIONS |
|----|---|-----|-----------|
| 73 | A mutation in the human heme A:farnesyltransferase gene (COX10) causes cytochrome c oxidase deficiency. <i>Human Molecular Genetics</i> , 2000, 9, 1245-1249. | 2.9 | 261 |
| 74 | Titration of the Effects of Mitochondrial Complex I Impairment in the Cell Physiology. <i>Journal of Biological Chemistry</i> , 1999, 274, 16188-16197. | 3.4 | 342 |
| 75 | Human Xenomitochondrial Cybrids. <i>Journal of Biological Chemistry</i> , 1998, 273, 14210-14217. | 3.4 | 174 |
| 76 | Reduced steady-state levels of mitochondrial RNA and increased mitochondrial DNA amount in human brain with aging. <i>Molecular Brain Research</i> , 1997, 52, 284-289. | 2.3 | 140 |
| 77 | Absence of Relationship between the Level of Electron Transport Chain Activities and Aging in Human Skeletal Muscle. <i>Biochemical and Biophysical Research Communications</i> , 1996, 229, 536-539. | 2.1 | 97 |