# Carlos Gutierrez-Merino

List of Publications by Year
in descending order



| 92 | 2,563 | 186265 | 214800 |
|---|---|---|---|
| papers | citations | 28 h-index | 47 g-index |

| 93 | 93 | 93 | 2817 |
|---|---|---|---|
| all docs | docs citations | times ranked | citing authors |

| # | Article | IF | Citations |
|---|---|---|---|
| 1 | Structural Features of Cytochrome b5â€“Cytochrome b5 Reductase Complex Formation and Implications for the Intramolecular Dynamics of Cytochrome b5 Reductase. International Journal of Molecular Sciences, 2022, 23, 118. | 4.1 | 6 |
| 2 | Design and Experimental Evaluation of a Peptide Antagonist against Amyloid Î²(1â€“42) Interactions with Calmodulin and Calbindin-D28k. International Journal of Molecular Sciences, 2022, 23, 2289. | 4.1 | 4 |
| 3 | Kaempferol prevents the activation of complement C3 protein and the generation of reactive A1 astrocytes that mediate rat brain degeneration induced by 3-nitropropionic acid. Food and Chemical Toxicology, 2022, 164, 113017. | 3.6 | 16 |
| 4 | Special Issue â€œMolecular and Cellular Mechanisms of Action of Markers of Tissue Degenerationâ€: International Journal of Molecular Sciences, 2022, 23, 6358. | 4.1 | 0 |
| 5 | Binding of Amyloid Î²(1â€“42)-Calmodulin Complexes to Plasma Membrane Lipid Rafts in Cerebellar Granule Neurons Alters Resting Cytosolic Calcium Homeostasis. International Journal of Molecular Sciences, 2021, 22, 1984. | 4.1 | 14 |
| 6 | The Relevance of Amyloid Î²-Calmodulin Complexation in Neurons and Brain Degeneration in Alzheimerâ€™s Disease. International Journal of Molecular Sciences, 2021, 22, 4976. | 4.1 | 13 |
| 7 | Gold Compounds Inhibit the Ca2+-ATPase Activity of Brain PMCA and Human Neuroblastoma SH-SY5Y Cells and Decrease Cell Viability. Metals, 2021, 11, 1934. | 2.3 | 7 |
| 8 | Human erythrocytes exposure to juglone leads to an increase of superoxide anion production associated with cytochrome b5 reductase uncoupling. Biochimica Et Biophysica Acta - Bioenergetics, 2020, 1861, 148134. | 1.0 | 5 |
| 9 | Modulation of CYP2C9 activity and hydrogen peroxide production by cytochrome b5. Scientific Reports, 2020, 10, 15571. | 3.3 | 13 |
| 10 | Early Reactive A1 Astrocytes Induction by the Neurotoxin 3-Nitropropionic Acid in Rat Brain. International Journal of Molecular Sciences, 2020, 21, 3609. | 4.1 | 20 |
| 11 | Methylene Blue Blocks and Reverses the Inhibitory Effect of Tau on PMCA Function. International Journal of Molecular Sciences, 2019, 20, 3521. | 4.1 | 12 |
| 12 | Ligand accessibility to heme cytochrome b5 coordinating sphere and enzymatic activity enhancement upon tyrosine ionization. Journal of Biological Inorganic Chemistry, 2019, 24, 317-330. | 2.6 | 4 |
| 13 | Peroxidase-like activity of cytochrome b 5 is triggered upon hemichrome formation in alkaline pH. Biochimica Et Biophysica Acta - Proteins and Proteomics, 2018, 1866, 373-378. | 2.3 | 6 |
| 14 | Cytochrome b5 reductase is the component from neuronal synaptic plasma membrane vesicles that generates superoxide anion upon stimulation by cytochrome c. Redox Biology, 2018, 15, 109-114. | 9.0 | 12 |
| 15 | Methyl-Î²-Cyclodextrin Impairs the Phosphorylation of the Î²2 Subunit of L-Type Calcium Channels and Cytosolic Calcium Homeostasis in Mature Cerebellar Granule Neurons. International Journal of Molecular Sciences, 2018, 19, 3667. | 4.1 | 9 |
| 16 | Methylene blue activates the PMCA activity and cross-interacts with amyloid Î²-peptide, blocking AÎ²-mediated PMCA inhibition. Neuropharmacology, 2018, 139, 163-172. | 4.1 | 15 |
| 17 | Creatine Protects Against Cytosolic Calcium Dysregulation, Mitochondrial Depolarization and Increase of Reactive Oxygen Species Production in Rotenone-Induced Cell Death of Cerebellar Granule Neurons. Neurotoxicity Research, 2018, 34, 717-732. | 2.7 | 15 |
| 18 | STIM1 deficiency is linked to Alzheimerâ€™s disease and triggers cell death in SH-SY5Y cells by upregulation of L-type voltage-operated Ca2+ entry. Journal of Molecular Medicine, 2018, 96, 1061-1079. | 3.9 | 54 |

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| 19 | Topography of human cytochrome b5/cytochrome b5 reductase interacting domain and redox alterations upon complex formation. Biochimica Et Biophysica Acta - Bioenergetics, 2018, 1859, 78-87. | 1.0 | 13 |
| 20 | High affinity binding of amyloid Î² -peptide to calmodulin: Structural and functional implications. Biochemical and Biophysical Research Communications, 2017, 486, 992-997. | 2.1 | 37 |
| 21 | Correlation between the potency of flavonoids for cytochrome c reduction and inhibition of cardiolipinâ€induced peroxidase activity. BioFactors, 2017, 43, 451-468. | 5.4 | 32 |
| 22 | Phospholipids and calmodulin modulate the inhibition of PMCA activity by tau. Biochimica Et Biophysica Acta - Molecular Cell Research, 2017, 1864, 1028-1035. | 4.1 | 16 |
| 23 | The critical role of lipid rafts nanodomains in the cross-talk between calcium and reactive oxygen and nitrogen species in cerebellar granule neurons apoptosis by extracellular potassium deprivation. AIMS Molecular Science, 2016, 3, 12-29. | 0.5 | 5 |
| 24 | Cytosolic Calcium Homeostasis in Neurons â€" Control Systems, Modulation by Reactive Oxygen and Nitrogen Species, and Space and Time Fluctuations. , 2014, , . | | 4 |
| 25 | Purified NADH-cytochrome b5 reductase is a novel superoxide anion source inhibited by apocynin: sensitivity to nitric oxide and peroxynitrite. Free Radical Biology and Medicine, 2014, 73, 174-189. | 2.9 | 27 |
| 26 | The decrease of NAD(P)H:quinone oxidoreductase 1 activity and increase of ROS production by NADPH oxidases are early biomarkers in doxorubicin cardiotoxicity. Biomarkers, 2014, 19, 142-153. | 1.9 | 26 |
| 27 | Caveolin-rich lipid rafts of the plasma membrane of mature cerebellar granule neurons are microcompartments for calcium/reactive oxygen and nitrogen species cross-talk signaling. Cell Calcium, 2014, 56, 108-123. | 2.4 | 34 |
| 28 | L-type voltage-operated calcium channels, N-methyl-d-aspartate receptors and neuronal nitric-oxide synthase form a calcium/redox nano-transducer within lipid rafts. Biochemical and Biophysical Research Communications, 2012, 420, 257-262. | 2.1 | 25 |
| 29 | Stimulation and clustering of cytochrome b5 reductase in caveolin-rich lipid microdomains is an early event in oxidative stress-mediated apoptosis of cerebellar granule neurons. Journal of Proteomics, 2012, 75, 2934-2949. | 2.4 | 28 |
| 30 | Reactivity of hydrogen sulfide with peroxynitrite and other oxidants of biological interest. Free Radical Biology and Medicine, 2011, 50, 196-205. | 2.9 | 199 |
| 31 | Complex I and cytochrome c are molecular targets of flavonoids that inhibit hydrogen peroxide production by mitochondria. Biochimica Et Biophysica Acta - Bioenergetics, 2011, 1807, 1562-1572. | 1.0 | 142 |
| 32 | Early disruption of the actin cytoskeleton in cultured cerebellar granule neurons exposed to 3-morpholinosydnonimine-oxidative stress is linked to alterations of the cytosolic calcium concentration. Cell Calcium, 2011, 49, 174-183. | 2.4 | 18 |
| 33 | L-type calcium channels and cytochrome b5 reductase are components of protein complexes tightly associated with lipid rafts microdomains of the neuronal plasma membrane. Journal of Proteomics, 2010, 73, 1502-1510. | 2.4 | 21 |
| 34 | Peroxynitrite-mediated oxidative modifications of myosin and implications on structure and function. Free Radical Research, 2010, 44, 1317-1327. | 3.3 | 13 |
| 35 | Kaempferol protects against rat striatal degeneration induced by 3â€nitropropionic acid. Journal of Neurochemistry, 2009, 111, 473-487. | 3.9 | 77 |
| 36 | Hydrogen sulfide is a reversible inhibitor of the NADH oxidase activity of synaptic plasma membranes. Biochemical and Biophysical Research Communications, 2009, 388, 718-722. | 2.1 | 23 |

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| 37 | Clustering of plasma membrane-bound cytochrome b reductase within â€˜lipid raftâ€™ microdomains of the neuronal plasma membrane. Molecular and Cellular Neurosciences, 2009, 40, 14-26. | 2.2 | 42 |
| 38 | Reduction of ascorbate free radical by the plasma membrane of synaptic terminals from rat brain. Archives of Biochemistry and Biophysics, 2008, 469, 243-254. | 3.0 | 16 |
| 39 | Vanadate Induces Necrotic Death in Neonatal Rat Cardiomyocytes Through Mitochondrial Membrane Depolarization. Chemical Research in Toxicology, 2008, 21, 607-618. | 3.3 | 53 |
| 40 | Hydrogen Sulfide Raises Cytosolic Calcium in Neurons Through Activation of L-Type Ca2+ Channels. Antioxidants and Redox Signaling, 2008, 10, 31-42. | 5.4 | 118 |
| 41 | Mitochondria as a target for decavanadate toxicity in Sparus aurata heart. Aquatic Toxicology, 2007, 83, 1-9. | 4.0 | 47 |
| 42 | Biological Effects of Decavanadate: Muscle Contraction, In Vivo Oxidative Stress, and Mitochondrial Toxicity. ACS Symposium Series, 2007, , 249-263. | 0.5 | 6 |
| 43 | Binding modes of decavanadate to myosin and inhibition of the actomyosin ATPase activity. Biochimica Et Biophysica Acta - Proteins and Proteomics, 2007, 1774, 474-480. | 2.3 | 32 |
| 44 | Blood micromolar concentrations of kaempferol afford protection against ischemia/reperfusion-induced damage in rat brain. Brain Research, 2007, 1182, 123-137. | 2.2 | 75 |
| 45 | Inhibition of Skeletal Muscle S1-Myosin ATPase by Peroxynitrite. Biochemistry, 2006, 45, 3794-3804. | 2.5 | 49 |
| 46 | Peroxynitrite induces F-actin depolymerization and blockade of myosin ATPase stimulation. Biochemical and Biophysical Research Communications, 2006, 342, 44-49. | 2.1 | 25 |
| 47 | Decavanadate interactions with actin: Inhibition of G-actin polymerization and stabilization of decameric vanadate. Journal of Inorganic Biochemistry, 2006, 100, 1734-1743. | 3.5 | 67 |
| 48 | Regionalization of Plasma Membrane-Bound Flavoproteins of Cerebellar Granule Neurons in Culture by Fluorescence Energy Transfer Imaging. Journal of Fluorescence, 2006, 16, 393-401. | 2.5 | 10 |
| 49 | Transfemoral selective â€œintraluminal wiringâ€•technique for transient middle cerebral artery occlusion in rats. Journal of Neuroscience Methods, 2005, 149, 82-89. | 2.5 | 11 |
| 50 | Alteration of cytosolic free calcium homeostasis by SIN-1: high sensitivity of L-type Ca2+ channels to extracellular oxidative/nitrosative stress in cerebellar granule cells. Journal of Neurochemistry, 2005, 92, 973-989. | 3.9 | 46 |
| 51 | Modulation of sarcoplasmic reticulum Ca2+-ATPase by chronic and acute exposure to peroxynitrite. FEBS Journal, 2004, 271, 2647-2657. | 0.2 | 52 |
| 52 | Kaempferol blocks oxidative stress in cerebellar granule cells and reveals a key role for reactive oxygen species production at the plasma membrane in the commitment to apoptosis. Free Radical Biology and Medicine, 2004, 37, 48-61. | 2.9 | 106 |
| 53 | Fluorescence Measurements of Steady State Peroxynitrite Production Upon SIN-1 Decomposition: NADH Versus Dihydrodichlorofluorescein and Dihydrorhodamine 123. Journal of Fluorescence, 2004, 14, 17-23. | 2.5 | 91 |
| 54 | Decavanadate Binding to a High Affinity Site near the Myosin Catalytic Centre Inhibits F-Actin-Stimulated Myosin ATPase Activityâ€. Biochemistry, 2004, 43, 5551-5561. | 2.5 | 47 |

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| 55 | Synaptosomal plasma membrane Ca2+ pump activity inhibition by repetitive micromolar ONOOâ˜ pulses. Free Radical Biology and Medicine, 2002, 32, 46-55. | 2.9 | 25 |
| 56 | Sphingomyelin composition and physical asymmetries in native acetylcholine receptor-rich membranes. European Biophysics Journal, 2002, 31, 417-427. | 2.2 | 20 |
| 57 | The NADH oxidase activity of the plasma membrane of synaptosomes is a major source of superoxide anion and is inhibited by peroxynitrite. Journal of Neurochemistry, 2002, 82, 604-614. | 3.9 | 27 |
| 58 | Inhibition of oxidative stress produced by plasma membrane NADH oxidase delays low-potassium-induced apoptosis of cerebellar granule cells. Journal of Neurochemistry, 2002, 82, 705-715. | 3.9 | 45 |
| 59 | Title is missing!. Journal of Fluorescence, 2002, 12, 87-90. | 2.5 | 8 |
| 60 | Potassium-Induced Apoptosis in Rat Cerebellar Granule Cells Involves Cell-Cycle Blockade at the G1/S Transition. Journal of Molecular Neuroscience, 2001, 15, 155-166. | 2.3 | 35 |
| 61 | pH and ligand binding modulate the strength of proteinâ€“protein interactions in the Ca2+-ATPase from sarcoplasmic reticulum membranes. Biochimica Et Biophysica Acta - Biomembranes, 1999, 1420, 203-213. | 2.6 | 3 |
| 62 | Plausible Stoichiometry of the Interacting Nucleotide-Binding Sites in the Ca2+-ATPase from Sarcoplasmic Reticulum Membranes. Archives of Biochemistry and Biophysics, 1999, 368, 298-302. | 3.0 | 4 |
| 63 | Structural Changes of the Sarcoplasmic Reticulum Ca(II)-ATPase Nucleotide Binding Domain by pH and La(III). Archives of Biochemistry and Biophysics, 1997, 348, 152-156. | 3.0 | 3 |
| 64 | Quantitative variation of flavonoids among individuals of a Cistus ladanifer population. Biochemical Systematics and Ecology, 1997, 25, 429-435. | 1.3 | 11 |
| 65 | Role of Ecological Variables in the Seasonal Variation of Flavonoid Content of Cistus ladanifer Exudate. Journal of Chemical Ecology, 1997, 23, 579-603. | 1.8 | 93 |
| 66 | Hypothalamic Hypophyseal Inhibitory Factor (HHIF) Increases Intrasynaptosomal Free Calcium Concentration. Hypertension, 1997, 29, 1337-1343. | 2.7 | 1 |
| 67 | Rate of Na+/Ca2+ exchange across the plasma membrane of synaptosomes measured using the fluorescence of chlorotetracycline. Implications to calcium homeostasis in synaptic terminals. Biochimica Et Biophysica Acta - Biomembranes, 1996, 1280, 257-264. | 2.6 | 10 |
| 68 | A Comparative Kinetic Analysis of the Flavin-Photosensitized Oxidation and Reduction of Plastocyanin and Cytochrome c6from Different Organisms. Photochemistry and Photobiology, 1996, 63, 86-91. | 2.5 | 5 |
| 69 | Fluorescnece anisotropy of fluorescein phosphatidylethanolthiocarbamide in lipid bilayers and in Ca2+-ATPase/lipid reconstituted systems. Bioelectrochemistry, 1995, 38, 117-121. | 1.0 | 0 |
| 70 | Interaction between Glycogen Phosphorylase and Sarcoplasmic Reticulum Membranes and Its Functional Implications. Journal of Biological Chemistry, 1995, 270, 11998-12004. | 3.4 | 21 |
| 71 | Quantification and removal of glycogen phosphorylase and other enzymes associated with sarcoplasmic reticulum membrane preparations. Biochimica Et Biophysica Acta - Biomembranes, 1994, 1194, 35-43. | 2.6 | 24 |
| 72 | Thermal unfolding of monomeric Ca(II),Mg(II)-ATPase from sarcoplasmic reticulum of rabbit skeletal muscle. FEBS Letters, 1994, 343, 155-159. | 2.8 | 18 |

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| 73 | Fluorescence energy transfer as a tool to locate functional sites in membrane proteins. Biochemical Society Transactions, 1994, 22, 784-788. | 3.4 | 14 |
| 74 | Differential scanning calorimetry study of the thermal unfolding of sarcoplasmic reticulum Ca2+, Mg2+-ATPase from rabbit skeletal muscle. Biochemical Society Transactions, 1994, 22, 384S-384S. | 3.4 | 2 |
| 75 | Seasonal variation of exudate ofCistus ladanifer. Journal of Chemical Ecology, 1993, 19, 2577-2591. | 1.8 | 45 |
| 76 | Location of functional centers in the microsomal cytochrome P450 system. Biochemistry, 1992, 31, 8473-8481. | 2.5 | 27 |
| 77 | Differential scanning calorimetry study of glycogen phosphorylaseb-detergent interactions. Journal of Bioenergetics and Biomembranes, 1992, 24, 625-634. | 2.3 | 6 |
| 78 | Unfolding and trypsin inactivation studies reveal a conformation drift of glucose-6-phosphate dehydrogenase upon binding of NADP. BBA - Proteins and Proteomics, 1992, 1122, 99-106. | 2.1 | 2 |
| 79 | Hemin and hemeprotein bleaching during linoleic acid oxidation by lipoxygenases. Lipids and Lipid Metabolism, 1991, 1082, 310-318. | 2.6 | 5 |
| 80 | Modulation by phosphorylation of glycogen phosphorylase-sarcoplasmic reticulum interaction. FEBS Letters, 1991, 283, 273-276. | 2.8 | 24 |
| 81 | Kinetic characterization of the normal and procaine-perturbed reaction cycles of the sarcoplasmic reticulum calcium pump. FEBS Journal, 1991, 202, 559-567. | 0.2 | 14 |
| 82 | Modulation of Calcium Fluxes Across Synaptosomal Plasma Membrane by Local Anesthetics. Journal of Neurochemistry, 1990, 55, 370-378. | 3.9 | 28 |
| 83 | Distances between functional sites of the Ca2+ + Mg2+-ATPase from sarcoplasmic reticulum using Co2+ as a spectroscopic ruler. FEBS Journal, 1990, 194, 663-670. | 0.2 | 24 |
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| 91 | Quantitation of the fÃ¶rster energy transfer for two-dimensional systems. Biophysical Chemistry, 1981, 14, 247-257. | 2.8 | 28 |
| 92 | Quantitation of the fÃ¶rster energy transfer for two-dimensional systems. Biophysical Chemistry, 1981, 14, 259-266. | 2.8 | 37 |