Francisco J Barrantes

List of Publications by Year in descending order

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| | | 43973 | 71532 |
|----------|----------------|--------------|----------------|
| 225 | 7,619 | 48 | 76 |
| papers | citations | h-index | g-index |
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| 233 | 233 | 233 | 5009 |
| all docs | docs citations | times ranked | citing authors |
| | | | |

| # | Article | IF | CITATIONS |
|----|--|------|-----------|
| 1 | How cholesterol interacts with membrane proteins: an exploration of cholesterol-binding sites including CRAC, CARC, and tilted domains. Frontiers in Physiology, 2013, 4, 31. | 1.3 | 391 |
| 2 | Sphingolipid/cholesterol regulation of neurotransmitter receptor conformation and function. Biochimica Et Biophysica Acta - Biomembranes, 2009, 1788, 2345-2361. | 1.4 | 208 |
| 3 | Disclosure of cholesterol recognition motifs in transmembrane domains of the human nicotinic acetylcholine receptor. Scientific Reports, 2011, 1, 69. | 1.6 | 201 |
| 4 | Immobilized lipid in acetylcholine receptor-rich membranes from Torpedo marmorata Proceedings of the United States of America, 1978, 75, 4329-4333. | 3.3 | 191 |
| 5 | Effects of lipids on acetylcholine receptor. Essential need of cholesterol for maintenance of agonist-induced state transitions in lipid vesicles. Biochemistry, 1982, 21, 3622-3629. | 1.2 | 186 |
| 6 | Functional properties of the acetylcholine receptor incorporated in model lipid membranes. Differential effects of chain length and head group of phospholipids on receptor affinity states and receptor-mediated ion translocation Journal of Biological Chemistry, 1984, 259, 9188-9198. | 1.6 | 157 |
| 7 | Structural basis for lipid modulation of nicotinic acetylcholine receptor function. Brain Research Reviews, 2004, 47, 71-95. | 9.1 | 156 |
| 8 | Deficits in cholinergic neurotransmission and their clinical correlates in Parkinson's disease. Npj Parkinson's Disease, 2016, 2, 16001. | 2.5 | 143 |
| 9 | Nanoscale organization of nicotinic acetylcholine receptors revealed by stimulated emission depletion microscopy. Neuroscience, 2007, 144, 135-143. | 1.1 | 130 |
| 10 | Functional properties of the acetylcholine receptor incorporated in model lipid membranes. Differential effects of chain length and head group of phospholipids on receptor affinity states and receptor-mediated ion translocation. Journal of Biological Chemistry, 1984, 259, 9188-98. | 1.6 | 122 |
| 11 | Peptide extraction by alkaline treatment is accompanied by rearrangement of the membrane-bound acetylcholine receptor from torpedo marmorata. FEBS Letters, 1980, 112, 73-78. | 1.3 | 110 |
| 12 | Apoptosis of Retinal Photoreceptors During Development In Vitro: Protective Effect of Docosahexaenoic Acid. Journal of Neurochemistry, 1997, 69, 504-513. | 2.1 | 110 |
| 13 | Mixing liquids in microseconds. Review of Scientific Instruments, 1985, 56, 283-290. | 0.6 | 106 |
| 14 | A mirror code for protein-cholesterol interactions in the two leaflets of biological membranes. Scientific Reports, 2016, 6, 21907. | 1.6 | 105 |
| 15 | Agonist-activated ionic channels in acetylcholine receptor reconstituted into planar lipid bilayers Proceedings of the National Academy of Sciences of the United States of America, 1981, 78, 3586-3590. | 3.3 | 101 |
| 16 | Wnt-7a Induces Presynaptic Colocalization of Â7-Nicotinic Acetylcholine Receptors and Adenomatous Polyposis Coli in Hippocampal Neurons. Journal of Neuroscience, 2007, 27, 5313-5325. | 1.7 | 101 |
| 17 | Direct structural localization of two toxin-recognition sites on an ACh receptor protein. Nature, 1982, 299, 81-84. | 13.7 | 99 |
| 18 | Docosahexaenoic Acid Is Required for the Survival of Rat Retinal Photoreceptors In Vitro. Journal of Neurochemistry, 1996, 66, 1851-1859. | 2.1 | 99 |

| # | Article | IF | CITATIONS |
|----|---|------|-----------|
| 19 | Agonist-mediated changes of the acetylcholine receptor in its membrane environment. Journal of Molecular Biology, 1978, 124, 1-26. | 2.0 | 98 |
| 20 | Cholesterol effects on nicotinic acetylcholine receptor. Journal of Neurochemistry, 2007, 103, 72-80. | 2.1 | 91 |
| 21 | Nicotinic acetylcholine receptor is internalized via a Rac-dependent, dynamin-independent endocytic pathway. Journal of Cell Biology, 2008, 181, 1179-1193. | 2.3 | 88 |
| 22 | The nicotinic cholinergic receptor: Different compositions evidenced by statistical analysis. Biochemical and Biophysical Research Communications, 1975, 62, 407-414. | 1.0 | 87 |
| 23 | Cholesterol depletion activates rapid internalization of submicron-sized acetylcholine receptor domains at the cell membrane. Molecular Membrane Biology, 2007, 24, 1-15. | 2.0 | 86 |
| 24 | Phospholipid chain immobilization and steriod rotational immobilization in acetylcholine receptor-rich membranes from torpedo marmorata. Biochimica Et Biophysica Acta - Biomembranes, 1981, 645, 97-101. | 1.4 | 83 |
| 25 | Physical state of bulk and protein-associated lipid in nicotinic acetylcholine receptor-rich membrane studied by laurdan generalized polarization and fluorescence energy transfer. Biophysical Journal, 1996, 70, 1275-1284. | 0.2 | 81 |
| 26 | Mutations at Lipid-Exposed Residues of the Acetylcholine Receptor Affect Its Gating Kinetics. Molecular Pharmacology, 1998, 54, 146-153. | 1.0 | 81 |
| 27 | Disclosure of Discrete Sites for Phospholipid and Sterols at the Proteinâ^'Lipid Interface in Native Acetylcholine Receptor-Rich Membrane. Biochemistry, 1998, 37, 16653-16662. | 1.2 | 79 |
| 28 | Kinetics of agonist-induced intrinsic fluorescence changes in membrane-bound acetylcholine receptor. Nature, 1976, 263, 429-431. | 13.7 | 77 |
| 29 | Steroid Structural Requirements for Stabilizing or Disrupting Lipid Domainsâ€. Biochemistry, 2003, 42, 14267-14276. | 1.2 | 77 |
| 30 | Structural details of membrane-bound acetylcholine receptor from Tropedo marmorata Proceedings of the National Academy of Sciences of the United States of America, 1980, 77, 952-956. | 3.3 | 74 |
| 31 | Molecular mechanisms of protein-cholesterol interactions in plasma membranes: Functional distinction between topological (tilted) and consensus (CARC/CRAC) domains. Chemistry and Physics of Lipids, 2016, 199, 52-60. | 1.5 | 73 |
| 32 | Modulation of Muscle Nicotinic Acetylcholine Receptors by the Glucocorticoid Hydrocortisone. Journal of Biological Chemistry, 1996, 271, 25835-25841. | 1.6 | 72 |
| 33 | Cholesterol-Recognition Motifs in Membrane Proteins. Advances in Experimental Medicine and Biology, 2019, 1135, 3-25. | 0.8 | 67 |
| 34 | Structuralâ€functional correlates of the nicotinic acetylcholine receptor and its lipid microenvironment. FASEB Journal, 1993, 7, 1460-1467. | 0.2 | 65 |
| 35 | Topography of Nicotinic Acetylcholine Receptor Membrane-embedded Domains. Journal of Biological Chemistry, 2000, 275, 37333-37339. | 1.6 | 65 |
| 36 | Lipidâ^'Protein Interactions and Effect of Local Anesthetics in Acetylcholine Receptor-Rich Membranes fromTorpedo marmorataElectric Organâ€. Biochemistry, 2003, 42, 9167-9175. | 1.2 | 65 |

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|----|---|-----|-----------|
| 37 | Conformational Dynamics of the Nicotinic Acetylcholine Receptor Channel:  A 35-ns Molecular Dynamics Simulation Study. Journal of the American Chemical Society, 2005, 127, 1291-1299. | 6.6 | 64 |
| 38 | <scp>STED</scp> microscopy of living cells – new frontiers in membrane and neurobiology. Journal of Neurochemistry, 2013, 126, 203-212. | 2.1 | 62 |
| 39 | Endogenous Chemical Receptors: Some Physical Aspects. Annual Review of Biophysics and Bioengineering, 1979, 8, 287-321. | 5.3 | 56 |
| 40 | Subcellular localization of creatine kinase in Torpedo electrocytes: association with acetylcholine receptor-rich membranes Journal of Cell Biology, 1985, 100, 1063-1072. | 2.3 | 56 |
| 41 | Relevance of CARC and CRAC Cholesterol-Recognition Motifs in the Nicotinic Acetylcholine Receptor and Other Membrane-Bound Receptors. Current Topics in Membranes, 2017, 80, 3-23. | 0.5 | 56 |
| 42 | Nicotinic acetylcholine receptor channels are influenced by the physical state of their membrane environment. Biophysical Journal, 1996, 70, 2155-2164. | 0.2 | 54 |
| 43 | The lipid habitats of neurotransmitter receptors in brain. Biochimica Et Biophysica Acta - Biomembranes, 2016, 1858, 2662-2670. | 1.4 | 54 |
| 44 | The Lipid Environment of the Nicotinic Acetylcholine Receptor in Native and Reconstituted Membrane. Critical Reviews in Biochemistry and Molecular Biology, 1989, 24, 437-478. | 2.3 | 53 |
| 45 | Recent Developments in the Structure and Function of the Acetylcholine Receptor. International Review of Neurobiology, 1983, 24, 259-341. | 0.9 | 52 |
| 46 | Cholesterol Modulates the Rate and Mechanism of Acetylcholine Receptor Internalization. Journal of Biological Chemistry, 2011, 286, 17122-17132. | 1.6 | 52 |
| 47 | Translational diffusion of acetylcholine receptor (monomeric and dimeric forms) of Torpedo marmorata reconstituted into phospholipid bilayers studied by fluorescence recovery after photobleaching. Biochemistry, 1982, 21, 5750-5755. | 1.2 | 51 |
| 48 | Metabolic cholesterol depletion hinders cell-surface trafficking of the nicotinic acetylcholine receptor. Neuroscience, 2004, 128, 239-249. | 1.1 | 51 |
| 49 | Phylogenetic conservation of protein–lipid motifs in pentameric ligand-gated ion channels. Biochimica Et Biophysica Acta - Biomembranes, 2015, 1848, 1796-1805. | 1.4 | 51 |
| 50 | Mechanics of Channel Gating of the Nicotinic Acetylcholine Receptor. PLoS Computational Biology, 2008, 4, e19. | 1.5 | 49 |
| 51 | Neuronal nicotinic acetylcholine receptor–cholesterol crosstalk in Alzheimer's disease. FEBS Letters, 2010, 584, 1856-1863. | 1.3 | 49 |
| 52 | Association of spin-labeled local anesthetics at the hydrophobic surface of the acetylcholine receptor in native membranes from Torpedo marmorata. Biochemistry, 1990, 29, 8707-8713. | 1.2 | 48 |
| 53 | Targeting Brain α7 Nicotinic Acetylcholine Receptors in Alzheimer's Disease: Rationale and Current Status. CNS Drugs, 2014, 28, 975-987 | 2.7 | 48 |
| 54 | Lipid matters: nicotinic acetylcholine receptor-lipid interactions (Review). Molecular Membrane Biology, 2002, 19, 277-284. | 2.0 | 47 |

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|----|--|-----|-----------|
| 55 | Cholesterol Modulates the Organization of the γM4 Transmembrane Domain of the Muscle Nicotinic Acetylcholine Receptor. Biophysical Journal, 2004, 86, 2261-2272. | 0.2 | 46 |
| 56 | Central Nervous System Targets and Routes for SARS-CoV-2: Current Views and New Hypotheses. ACS Chemical Neuroscience, 2020, 11, 2793-2803. | 1.7 | 46 |
| 57 | Rotational Molecular Dynamics of the Membrane-Bound Acetylcholine Receptor Revealed by Phosphorescene Spectroscopy. FEBS Journal, 1981, 120, 389-397. | 0.2 | 45 |
| 58 | Oligomeric forms of the membrane-bound acetylcholine receptor disclosed upon extraction of the M(r) 43,000 nonreceptor peptide. Journal of Cell Biology, 1982, 92, 60-68. | 2.3 | 45 |
| 59 | The use of a cholinergic fluorescent probe for the study of the receptor proteolipid. Molecular Pharmacology, 1971, 7, 530-7. | 1.0 | 44 |
| 60 | Intrinsic fluorescence of the membrane-bound acetylcholine receptor: Its quenching by suberyldicholine. Biochemical and Biophysical Research Communications, 1976, 72, 479-488. | 1.0 | 43 |
| 61 | Creatine kinase activity in the Torpedo electrocyte and in the nonreceptor, peripheral v proteins from acetylcholine receptor-rich membranes Proceedings of the National Academy of Sciences of the United States of America, 1983, 80, 5440-5444. | 3.3 | 43 |
| 62 | Cells defective in sphingolipids biosynthesis express low amounts of muscle nicotinic acetylcholine receptor. European Journal of Neuroscience, 1999, 11, 1615-1623. | 1.2 | 43 |
| 63 | Composition of Lipids in Elasmobranch Electric Organ and Acetylcholine Receptor Membranes. Journal of Neurochemistry, 1987, 49, 1333-1340. | 2.1 | 42 |
| 64 | Hydrocortisone and 11–desoxycortisone modify acetylcholine receptor channel gating. NeuroReport, 1993, 4, 143-146. | 0.6 | 41 |
| 65 | Modulation of acetylcholine receptor states by thiol modification. Biochemistry, 1980, 19, 2957-2965. | 1.2 | 40 |
| 66 | Fatty Acid Regulation of Voltage- and Ligand-Gated Ion Channel Function. Frontiers in Physiology, 2016, 7, 573. | 1.3 | 40 |
| 67 | Effect of local anaesthetics on steroid-nicotinic acetylcholine receptor interactions in native membranes of Torpedo marmorata electric organ. Biochimica Et Biophysica Acta - Biomembranes, 1990, 1027, 287-294. | 1.4 | 39 |
| 68 | Unique Effects of Different Fatty Acid Species on the Physical Properties of the Torpedo Acetylcholine Receptor Membrane. Journal of Biological Chemistry, 2002, 277, 1249-1254. | 1.6 | 39 |
| 69 | Cholesterol modulation of nicotinic acetylcholine receptor surface mobility. European Biophysics Journal, 2010, 39, 213-227. | 1.2 | 39 |
| 70 | The Anticonvulsive Drug Lamotrigine Blocks Neuronal α4β2 Nicotinic Acetylcholine Receptors. Journal of Pharmacology and Experimental Therapeutics, 2010, 335, 401-408. | 1.3 | 38 |
| 71 | Modulation of Nicotinic Acetylcholine Receptor Conformational State by Free Fatty Acids and Steroids. Journal of Biological Chemistry, 2008, 283, 21478-21486. | 1.6 | 37 |
| 72 | Anandamide Revisited: How Cholesterol and Ceramides Control Receptor-Dependent and Receptor-Independent Signal Transmission Pathways of a Lipid Neurotransmitter. Biomolecules, 2018, 8, 31. | 1.8 | 37 |

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|----|--|------|-----------|
| 73 | Cholesterol Effects on Nicotinic Acetylcholine Receptor: Cellular Aspects. Sub-Cellular Biochemistry, 2010, 51, 467-487. | 1.0 | 37 |
| 74 | Sphingolipids are necessary for nicotinic acetylcholine receptor export in the early secretory pathway. Journal of Neurochemistry, 2007, 101, 1072-1084. | 2.1 | 36 |
| 75 | 1-Pyrene-butyrylcholine: a fluorescent probe for the cholinergic system Proceedings of the National Academy of Sciences of the United States of America, 1975, 72, 3097-3101. | 3.3 | 34 |
| 76 | α7â€ŧype acetylcholine receptor localization and its modulation by nicotine and cholesterol in vascular endothelial cells. Journal of Cellular Biochemistry, 2011, 112, 3276-3288. | 1.2 | 34 |
| 77 | Chaperoning α7 neuronal nicotinic acetylcholine receptors. Biochimica Et Biophysica Acta - Biomembranes, 2012, 1818, 718-729. | 1.4 | 34 |
| 78 | Fluorescence and molecular dynamics studies of the acetylcholine receptor γM4 transmembrane peptide in reconstituted systems. Molecular Membrane Biology, 2005, 22, 471-483. | 2.0 | 33 |
| 79 | Transbilayer asymmetry and sphingomyelin composition modulate the preferential membrane partitioning of the nicotinic acetylcholine receptor in Lo domains. Archives of Biochemistry and Biophysics, 2016, 591, 76-86. | 1.4 | 33 |
| 80 | Boundary Lipids In The Nicotinic Acetylcholine Receptor Microenvironment. Journal of Molecular Neuroscience, 2010, 40, 87-90. | 1.1 | 31 |
| 81 | From hopanoids to cholesterol: Molecular clocks of pentameric ligand-gated ion channels. Progress in Lipid Research, 2016, 63, 1-13. | 5.3 | 31 |
| 82 | The role of nicotinic cholinergic neurotransmission in delusional thinking. NPJ Schizophrenia, 2020, 6, 16. | 2.0 | 31 |
| 83 | Pleiotropic effects of statins on brain cells. Biochimica Et Biophysica Acta - Biomembranes, 2020, 1862, 183340. | 1.4 | 29 |
| 84 | Ceramides modulate cell-surface acetylcholine receptor levels. Biochimica Et Biophysica Acta - Biomembranes, 2008, 1778, 917-930. | 1.4 | 28 |
| 85 | Cholesterol modulates acetylcholine receptor diffusion by tuning confinement sojourns and nanocluster stability. Scientific Reports, 2018, 8, 11974. | 1.6 | 28 |
| 86 | A comparative study of several membrane proteins from the nervous system. Biochemical and Biophysical Research Communications, 1973, 54, 395-402. | 1.0 | 27 |
| 87 | Differences between detergent-extracted acetylcholine receptor and "cholinergic proteolipid― Nature, 1975, 256, 325-327. | 13.7 | 27 |
| 88 | Partition profile of the nicotinic acetylcholine receptor in lipid domains upon reconstitution. Journal of Lipid Research, 2010, 51, 2629-2641. | 2.0 | 27 |
| 89 | Autoimmune Attack of the Neuromuscular Junction in Myasthenia Gravis: Nicotinic Acetylcholine Receptors and Other Targets. ACS Chemical Neuroscience, 2019, 10, 2186-2194. | 1.7 | 27 |
| 90 | Preferential Distribution of the Fluorescent Phospholipid Probes NBD-Phosphatidylcholine and Rhodamine-Phosphatidylethanolamine in the Exofacial Leaflet of Acetylcholine Receptor-Rich Membranes from Torpedo marmorata. Biochemistry, 1995, 34, 4846-4855. | 1.2 | 26 |

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|-----|---|-------------------|-------------------|
| 91 | Transient Cholesterol Effects on Nicotinic Acetylcholine Receptor Cell-Surface Mobility. PLoS ONE, 2014, 9, e100346. | 1.1 | 26 |
| 92 | Prenatal restraint stress decreases the expression of alpha-7 nicotinic receptor in the brain of adult rat offspring. Stress, 2015, 18, 435-445. | 0.8 | 26 |
| 93 | Recent applications of superresolution microscopy in neurobiology. Current Opinion in Chemical Biology, 2014, 20, 16-21. | 2.8 | 25 |
| 94 | Inhibitory action of 1-pyrene butyrylcholine and related compounds on choline uptake by cholinergic nerve endings. Journal of Neurochemistry, 1976, 27, 1253-1255. | 2.1 | 24 |
| 95 | A membrane-associated creatine kinase (EC 2.7.3.2) identified as an acidic species of the non-receptor, peripheralv-proteins inTorpedoacetylcholine receptor membranes. FEBS Letters, 1983, 152, 270-276. | 1.3 | 24 |
| 96 | Endogenous asymmetry of rat brain lipids and dominance of the right cerebral hemisphere in free fatty acid response to electroconvulsive shock. Brain Research, 1985, 339, 315-321. | 1.1 | 24 |
| 97 | Heterologous retinal cultured neurons and cell adhesion molecules induce clustering of acetylcholine receptors and polynucleation in mouse muscle BC3H-1 clonal cell line. Journal of Neuroscience Research, 1996, 43, 639-651. | 1.3 | 24 |
| 98 | Nicotinic Acetylcholine Receptor Induces Lateral Segregation of Phosphatidic Acid and Phosphatidylcholine in Reconstituted Membranesâ€. Biochemistry, 2005, 44, 398-410. | 1.2 | 24 |
| 99 | Conformation-Sensitive Steroid and Fatty Acid Sites in the Transmembrane Domain of the Nicotinic Acetylcholine Receptorâ€. Biochemistry, 2007, 46, 3503-3512. | 1.2 | 24 |
| 100 | A Cholesterol Recognition Motif in Human Phospholipid Scramblase 1. Biophysical Journal, 2014, 107, 1383-1392. | 0.2 | 24 |
| 101 | Steroids differentially inhibit the nicotinic acetylcholine receptor. NeuroReport, 2001, 12, 227-231. | 0.6 | 23 |
| 102 | Unbinding of Nicotine from the Acetylcholine Binding Protein:  Steered Molecular Dynamics Simulations. Journal of Physical Chemistry B, 2008, 112, 4087-4093. | 1.2 | 23 |
| 103 | Isolation and characterization of acetylcholine receptor membrane-associated (nonreceptor) Tj ETQq1 1 0.78431 3024-3034. | 4 rgBT /O 1.6 | verlock 10 23 |
| 104 | Nongenomic effects of steroids on the nicotinic acetylcholine receptor. Kidney International, 2000, 57, 1382-1389. | 2.6 | 22 |
| 105 | The unfolding palette of COVID-19 multisystemic syndrome and its neurological manifestations. Brain, Behavior, & Immunity - Health, 2021, 14, 100251. | 1.3 | 22 |
| 106 | Isolation and characterization of acetylcholine receptor membrane-associated (nonreceptor) Tj ETQq0 0 0 rgBT /0 3024-34. | Overlock 1 1.6 | 0 Tf 50 147 22 |
| 107 | Expression of a neuronal nicotinic acetylcholine receptor in insect and mammalian host cell systems. Neurochemical Research, 2000, 25, 171-180. | 1.6 | 21 |
| 108 | Structure and dynamics of the γM4 transmembrane domain of the acetylcholine receptor in lipid bilayers: insights into receptor assembly and function. Molecular Membrane Biology, 2006, 23, 305-315. | 2.0 | 21 |

| # | Article | IF | CITATIONS |
|-----|--|-----|-----------|
| 109 | Pharmacotherapies for Parkinson's disease symptoms related to cholinergic degeneration. Expert Opinion on Pharmacotherapy, 2016, 17, 2405-2415. | 0.9 | 21 |
| 110 | Modulation of nicotinic acetylcholine receptor function through the outer and middle rings of transmembrane domains. Current Opinion in Drug Discovery & Development, 2003, 6, 620-32. | 1.9 | 21 |
| 111 | Identification of threonine 422 in transmembrane domain $\hat{I}\pm M4$ of the nicotinic acetylcholine receptor as a possible site of interaction with hydrocortisone. Neuropharmacology, 2002, 43, 65-73. | 2.0 | 20 |
| 112 | Sphingomyelin composition and physical asymmetries in native acetylcholine receptor-rich membranes. European Biophysics Journal, 2002, 31, 417-427. | 1.2 | 20 |
| 113 | Homomeric and Heteromeric α7 Nicotinic Acetylcholine Receptors in Health and Some Central Nervous System Diseases. Membranes, 2021, 11, 664. | 1.4 | 20 |
| 114 | The acetylcholine receptor ligand-gated channel as a molecular target of disease and therapeutic agents. Neurochemical Research, 1997, 22, 391-400. | 1.6 | 19 |
| 115 | Lamotrigine is an open-channel blocker of the nicotinic acetylcholine receptor. NeuroReport, 2007, 18, 45-50. | 0.6 | 19 |
| 116 | Asymmetry of Diacylglycerol Metabolism in Rat Cerebral Hemispheres. Journal of Neurochemistry, 1986, 46, 1382-1386. | 2.1 | 18 |
| 117 | Blocking of the Nicotinic Acetylcholine Receptor Ion Channel by Chlorpromazine, a Noncompetitive Inhibitor:Â A Molecular Dynamics Simulation Study. Journal of Physical Chemistry B, 2006, 110, 20640-20648. | 1.2 | 18 |
| 118 | Structural and dynamic studies of the γ-M4 trans-membrane domain of the nicotinic acetylcholine receptor. Molecular Membrane Biology, 2005, 22, 485-496. | 2.0 | 17 |
| 119 | Electron microscopy of proteolipid macromolecules from cerebral cortex. Journal of Molecular Biology, 1970, 52, 221-226. | 2.0 | 16 |
| 120 | Ric-3 chaperone-mediated stable cell-surface expression of the neuronal α7 nicotinic acetylcholine receptor in mammalian cells. Acta Pharmacologica Sinica, 2009, 30, 818-827. | 2.8 | 16 |
| 121 | Cell-surface translational dynamics of nicotinic acetylcholine receptors. Frontiers in Synaptic Neuroscience, 2014, 6, 25. | 1.3 | 16 |
| 122 | Nicotinic α4 Receptor-Mediated Cholinergic Influences on Food Intake and Activity Patterns in Hypothalamic Circuits. PLoS ONE, 2015, 10, e0133327. | 1.1 | 15 |
| 123 | Antibodyâ€induced crosslinking and cholesterolâ€sensitive, anomalous diffusion of nicotinic acetylcholine receptors. Journal of Neurochemistry, 2020, 152, 663-674. | 2.1 | 15 |
| 124 | Purification by affinity chromatography of nicotinic and muscarinic hydrophobic proteins separated by Sephadex LH2O. Biochemical and Biophysical Research Communications, 1975, 63, 194-201. | 1.0 | 14 |
| 125 | Extraction of peripheral proteins is accompanied by selective depletion of certain glycerophospholipid classes and changes in the phosphorylation pattern of acetylcholine-receptor-rich-membrane proteins. Biochemical Journal, 1987, 245, 111-118. | 1.7 | 14 |
| 126 | Changes in channel properties of acetylcholine receptors during the time course of thiol chemical modifications. Pflugers Archiv European Journal of Physiology, 1991, 418, 51-61. | 1.3 | 14 |

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|-----|---|-----|-----------|
| 127 | COVID-19 and neurological sequelae: Vitamin D as a possible neuroprotective and/or neuroreparative agent. Life Sciences, 2022, 297, 120464. | 2.0 | 14 |
| 128 | Studies on proteolipid proteins from cerebral cortex. Biochimica Et Biophysica Acta (BBA) - Protein Structure, 1972, 263, 368-381. | 1.7 | 13 |
| 129 | The position of the double bond in monounsaturated free fatty acids is essential for the inhibition of the nicotinic acetylcholine receptor. Biochimica Et Biophysica Acta - Biomembranes, 2012, 1818, 2511-2520. | 1.4 | 13 |
| 130 | While We Wait for a Vaccine Against SARS-CoV-2, Why Not Think About Available Drugs?. Frontiers in Physiology, 2020, 11, 820. | 1.3 | 13 |
| 131 | Fast kinetics of antagonist-acetylcholine receptor interactions: A temperature-jump relaxation study. Biochemical and Biophysical Research Communications, 1980, 92, 766-774. | 1.0 | 12 |
| 132 | Conversion of acetylcholine receptor dimers to monomers upon depletion of non-receptor peripheral proteins. Biochimica Et Biophysica Acta - General Subjects, 1984, 798, 374-381. | 1.1 | 12 |
| 133 | Lipid composition of purified transverse tubule membranes isolated from amphibian skeletal muscle. Lipids and Lipid Metabolism, 1987, 921, 398-404. | 2.6 | 12 |
| 134 | Lipid Metabolism in Electroplax. Journal of Neurochemistry, 1987, 49, 1341-1347. | 2.1 | 12 |
| 135 | Myogenic differentiation of the muscle clonal cell line BC3H-1 is accompanied by changes in its lipid composition. Lipids, 1992, 27, 669-675. | 0.7 | 12 |
| 136 | Assigning functions to residues in the acetylcholine receptor channel region (Review). Molecular Membrane Biology, 1997, 14, 167-177. | 2.0 | 12 |
| 137 | Antibody-Induced Acetylcholine Receptor Clusters Inhabit Liquid-Ordered and Liquid-Disordered Domains. Biophysical Journal, 2013, 105, 1601-1611. | 0.2 | 12 |
| 138 | The Contribution of Biophysics and Structural Biology to Current Advances in COVID-19. Annual Review of Biophysics, 2021, 50, 493-523. | 4.5 | 12 |
| 139 | Enzymic dissection of cerebral cortex synapses. Brain Research, 1970, 23, 305-313. | 1.1 | 11 |
| 140 | Effects of periodate oxidation and glycosidases on structural and functional properties of the acetylcholine receptor and the non-receptor, peripheral ν-polypeptide (Mr 43,000). Neurochemistry International, 1982, 4, 289-302. | 1.9 | 11 |
| 141 | INTERACTIONS OF THE MEMBRANE-BOUND ACETYLCHOLINE RECEPTOR WITH THE NON-RECEPTOR PERIPHERAL v-PEPTIDE. , 1982, , 315-328. | | 11 |
| 142 | The neuronal nicotinic acetylcholine receptor in some hereditary epilepsies. Neurochemical Research, 2000, 25, 583-590. | 1.6 | 11 |
| 143 | Effect of organochlorine insecticides on nicotinic acetylcholine receptor-rich membranes. Neuropharmacology, 2000, 39, 1095-1106. | 2.0 | 11 |
| 144 | The Nicotinic Acetylcholine Receptor and its Lipid Microenvironment. Jerusalem Symposia on Quantum Chemistry and Biochemistry, 1992, , 185-198. | 0.2 | 11 |

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|-----|---|-----|-----------|
| 145 | Gangliosides in acetylcholine receptor-rich membranes fromTorpedo marmorata andDiscopyge tschudii. Neurochemical Research, 1993, 18, 599-603. | 1.6 | 10 |
| 146 | Lovastatin Differentially Regulates α7 and α4 Neuronal Nicotinic Acetylcholine Receptor Levels in Rat Hippocampal Neurons. Molecules, 2020, 25, 4838. | 1.7 | 10 |
| 147 | Dysregulation of Neuronal Nicotinic Acetylcholine Receptor–Cholesterol Crosstalk in Autism Spectrum Disorder. Frontiers in Molecular Neuroscience, 2021, 14, 744597. | 1.4 | 10 |
| 148 | The constellation of cholesterol-dependent processes associated with SARS-CoV-2 infection. Progress in Lipid Research, 2022, 87, 101166. | 5.3 | 10 |
| 149 | Ca2+ and phospholipid-dependent protein kinase activity in rat cerebral hemispheres. Brain Research, 1988, 440, 386-390. | 1.1 | 9 |
| 150 | Structural and functional crosstalk between acetylcholine receptor and its membrane environment. Molecular Neurobiology, 1992, 6, 463-482. | 1.9 | 9 |
| 151 | Resistance to Inhibitors of Cholinesterase 3 (Ric-3) Expression Promotes Selective Protein Associations with the Human α7-Nicotinic Acetylcholine Receptor Interactome. PLoS ONE, 2015, 10, e0134409. | 1.1 | 9 |
| 152 | Dimeric arrangement and structure of the membrane-bound acetylcholine receptor studied by electron microscopy. EMBO Journal, 1982, 1, 541-7. | 3.5 | 9 |
| 153 | Interaction of merocyanine 540 with nicotinic acetylcholine receptor membranes from Discopyge tschudii electric organ. Biochimica Et Biophysica Acta - Biomembranes, 1994, 1190, 393-401. | 1.4 | 8 |
| 154 | Fluorescence Studies of the Acetylcholine Receptor: Structure and Dynamics in Membranes and Cells. Journal of Fluorescence, 2001, 11, 273-285. | 1.3 | 8 |
| 155 | Structural biology of coronavirus ion channels. Acta Crystallographica Section D: Structural Biology, 2021, 77, 391-402. | 1.1 | 8 |
| 156 | High levels of phosphorylation in minor phospholipids of Discopyge tschudii electrocyte membranes. Neurochemistry International, 1987, 11, 101-106. | 1.9 | 7 |
| 157 | Muscle endplate cholinoreceptors. , 1988, 38, 331-385. | | 7 |
| 158 | Effect of chemical modification of extracellular histidyl residues on the channel properties of the nicotinic acetylcholine receptor. Pflugers Archiv European Journal of Physiology, 1993, 423, 365-371. | 1.3 | 7 |
| 159 | Molecular Pathology of the Nicotinic Acetylcholine Receptor. , 1998, , 175-212. | | 7 |
| 160 | Fluorescence sensors for imaging membrane lipid domains and cholesterol. Current Topics in Membranes, 2021, 88, 257-314. | 0.5 | 7 |
| 161 | Brain asymmetry in phospholipid polar head group metabolism: Parallel in vivo and in vitro studies. Neurochemical Research, 1990, 15, 25-32. | 1.6 | 6 |
| 162 | Asymmetric distribution of phospholipids in acetylcholine receptor-rich membranes from T. marmorata electric organ. International Journal of Biochemistry & Cell Biology, 1990, 22, 785-789. | 0.8 | 6 |

| # | Article | IF | CITATIONS |
|-----|--|-----|-----------|
| 163 | Acetylcholine receptor channel properties are modified by benzyl alcohol. NeuroReport, 1991, 2, 681-684. | 0.6 | 6 |
| 164 | Asymmetric distribution and down-regulation of the muscarinic acetylcholine receptor in rat cerebral cortex. Neurochemical Research, 1993, 18, 565-572. | 1.6 | 6 |
| 165 | Charged amino acid motifs flanking each extreme of the αM4 transmembrane domain are involved in assembly and cell-surface targeting of the muscle nicotinic acetylcholine receptor. Journal of Neuroscience Research, 2007, 85, 285-293. | 1.3 | 6 |
| 166 | A novel agonist effect on the nicotinic acetylcholine receptor exerted by the anticonvulsive drug Lamotrigine. Biochimica Et Biophysica Acta - Biomembranes, 2008, 1778, 2395-2404. | 1.4 | 6 |
| 167 | Morphological and biochemical repercussions of Toxoplasma gondii infection in a 3D human brain neurospheres model. Brain, Behavior, & Immunity - Health, 2021, 11, 100190. | 1.3 | 6 |
| 168 | Cholesterol in myasthenia gravis. Archives of Biochemistry and Biophysics, 2021, 701, 108788. | 1.4 | 6 |
| 169 | Possible implications of dysregulated nicotinic acetylcholine receptor diffusion and nanocluster formation in myasthenia gravis. Neural Regeneration Research, 2021, 16, 242. | 1.6 | 6 |
| 170 | How membrane lipids control the 3D structure and function of receptors. AIMS Biophysics, 2018, 5, 22-35. | 0.3 | 6 |
| 171 | Nanoscale Sub-Compartmentalization of the Dendritic Spine Compartment. Biomolecules, 2021, 11, 1697. | 1.8 | 6 |
| 172 | Statistical Analysis of High-Resolution Light Microscope Images Reveals Effects of Cytoskeleton-Disrupting Drugs on the Membrane Organization of the Nicotinic Acetylcholine Receptor. Journal of Membrane Biology, 2010, 235, 163-175. | 1.0 | 5 |
| 173 | Correlation of the Molecular Structure with Functional Properties of the Acetylcholine Receptor Protein. , 1986, , 385-400. | | 5 |
| 174 | Blocking by α-bungarotoxin of the high affinity binding site of the cholinergic receptor proteolipid from Electrophorus. European Journal of Pharmacology, 1972, 17, 303-305. | 1.7 | 4 |
| 175 | Structural characterization of ordered domains in a hydrophobic membrane protein. Biopolymers, 1979, 18, 2979-2992. | 1.2 | 4 |
| 176 | Screening Structural-Functional Relationships of Neuropharmacologically Active Organic Compounds at the Nicotonic Acetylcholine Receptor. Neuropharmacology, 1997, 36, 269-279. | 2.0 | 4 |
| 177 | Laurdan Studies of Membrane Lipid-Nicotinic Acetylcholine Receptor Protein Interactions. Methods in Molecular Biology, 2007, 400, 531-542. | 0.4 | 4 |
| 178 | Dendritic spine membrane proteome and its alterations in autistic spectrum disorder. Advances in Protein Chemistry and Structural Biology, 2022, 128, 435-474. | 1.0 | 4 |
| 179 | Ultrastructure of Psammobatis extenta (Rajidae) electrolytes and cytochemical localization of acetylcholinesterase, acetylcholine receptor and F-actin. Biocell, 1995, 19, 113-23. | 0.4 | 4 |
| 180 | Phospholipid metabolism under muscarinic cholinergic stimulation exhibits brain asymmetry. Neurochemical Research, 1993, 18, 559-564. | 1.6 | 3 |

| # | Article | IF | CITATIONS |
|-----|---|-----|-----------|
| 181 | Co-distribution of Tropomyosin and α-Actinin With Actin in Psammobatis extenta Electrocytes Brings Out Their Similarity with Muscle Fiber Cytoplasm. Comparative Biochemistry and Physiology A, Comparative Physiology, 1997, 116, 113-118. | 0.7 | 3 |
| 182 | Corticosterone affects the differentiation of a neuronal cerebral cortex-derived cell line through modulation of the nicotinic acetylcholine receptor. Neuroscience, 2014, 274, 369-382. | 1.1 | 3 |
| 183 | Functional nicotinic acetylcholine receptor reconstitution in Au(111)-supported thiolipid monolayers. Nanoscale, 2015, 7, 15789-15797. | 2.8 | 3 |
| 184 | Normal development of spinal axons in early embryo stages and posterior locomotor function is independent of GALâ€1. Journal of Comparative Neurology, 2017, 525, 2861-2875. | 0.9 | 3 |
| 185 | Damage and repair of the axolemmal membrane: From neural development to axonal trauma and restoration. Current Topics in Membranes, 2019, 84, 169-185. | 0.5 | 3 |
| 186 | A deep learning-based approach to model anomalous diffusion of membrane proteins: the case of the nicotinic acetylcholine receptor. Briefings in Bioinformatics, 2022, 23, . | 3.2 | 3 |
| 187 | Molecular Modeling of the Nicotinic Acetylcholine Receptor. , 1998, , 85-108. | | 3 |
| 188 | Interactions of fluorescent cholinergic antagonists with the membrane-bound acetylcholine receptor. Neurochemistry International, 1980, 2, 257-267. | 1.9 | 2 |
| 189 | Fluorescence Studies of the Nicotinic Acetylcholine Receptor in its Membrane Environment. Bioscience Reports, 1999, 19, 335-344. | 1.1 | 2 |
| 190 | Resolution of complex fluorescence spectra of lipids and nicotinic acetylcholine receptor by multivariate analysis reveals protein-mediated effects on the receptor's immediate lipid microenvironment. PMC Biophysics, 2008, 1, 6. | 2.2 | 2 |
| 191 | Spatiotemporal Dynamics of Nicotinic Acetylcholine Receptors and Lipid Platforms. Springer Series in Biophysics, 2017, , 195-217. | 0.4 | 2 |
| 192 | Lithium causes differential effects on postsynaptic stability in normal and denervated neuromuscular synapses. Scientific Reports, 2021, 11, 17285. | 1.6 | 2 |
| 193 | Nanoscale interactions between the nicotinic acetylcholine receptor and cholesterol. Biocell, 2021, 45, 1479-1484. | 0.4 | 2 |
| 194 | Physical State of the Nicotinic Acetylcholine Receptor Membrane and Modulation of the Receptor Channel by the Lipid Environment. , 1997, , 199-216. | | 2 |
| 195 | Altered physical states of the membrane-bound acetylcholine receptor after affinity labelling. European Journal of Pharmacology, 1980, 65, 49-53. | 1.7 | 1 |
| 196 | In vitro turnover of oleate and arachidonate in lipids of Discopyge tschudii electrocyte membranes. Comparative Biochemistry and Physiology Part B: Comparative Biochemistry, 1987, 86, 623-627. | 0.2 | 1 |
| 197 | Rapid method for isolation and purification of protoplasts from epidermal tissue ofVicia faba L. leaves. MIRCEN Journal of Applied Microbiology and Biotechnology, 1988, 4, 275-283. | 0.3 | 1 |
| 198 | Down-regulation of brain muscarinic cholinergic receptor promoted by diacylglycerols and phorbol ester. Neurochemical Research, 1995, 20, 1225-1231. | 1.6 | 1 |

| # | Article | IF | CITATIONS |
|-----|---|-----|-----------|
| 199 | Cholesterol and nicotinic acetylcholine receptor: An intimate nanometer-scale spatialÂrelationship spanning the billion yearÂtime-scale. Biomedical Spectroscopy and Imaging, 2016, 5, S67-S86. | 1.2 | 1 |
| 200 | Diacylglycerol levels modulate the cellular distribution of the nicotinic acetylcholine receptor. International Journal of Biochemistry and Cell Biology, 2016, 74, 1-11. | 1.2 | 1 |
| 201 | The Impact of Apolipoprotein E Allelic Variants on Alzheimer's Disease. , 2021, , 397-418. | | 1 |
| 202 | The Acetylcholine Receptor and its Membrane Environment. , 1988, , 147-175. | | 1 |
| 203 | Neuropsychiatric Symptoms Related to Cholinergic Deficits in Parkinson's Disease. , 2017, , 375-388. | | 1 |
| 204 | Transdisciplinary Assistance and Translational Research Strategies to Improve the Quality of Life of Older Adults at Early Stages of Alzheimer Disease. Psychology and Behavioral Science International Journal, 2018, 9, . | 0.0 | 1 |
| 205 | Laurdan Studies of Membrane Lipid-Nicotinic Acetylcholine Receptor Protein Interactions. , 0, , 531-542. | | 1 |
| 206 | Fluorescence Studies of Nicotinic Acetylcholine Receptor and Its Associated Lipid Milieu: The Influence of Erwin London's Methodological Approaches. Journal of Membrane Biology, 2022, , . | 1.0 | 1 |
| 207 | Reconstitution of the acetylcholine receptor-channel system in planar bilayer membranes below lipid phase transition. Biophysics of Structure and Mechanism, 1980, 6, 135-135. | 1.9 | 0 |
| 208 | Polyphoshoinositide synthesis and protein phosphorylation in the plasma membrane from full-grown Bufo arenarum oocytes. Comparative Biochemistry and Physiology Part B: Comparative Biochemistry, 1992, 102, 585-590. | 0.2 | 0 |
| 209 | Inherited and Experimentally Induced Changes in Gating Kinetics of Muscle Nicotinic Acetylcholine Receptor. Journal of Molecular Neuroscience, 1999, 13, 1-16. | 1.1 | 0 |
| 210 | UNESCO Chair of Biophysics and Molecular Neurobiology. Journal of Biomedicine and Biotechnology, 2001, 1, 97-98. | 3.0 | 0 |
| 211 | Search for alpha4 and alpha7 nicotinic acetylcholine receptor markers in a pedigree of benign familial infantile convulsions (BFIC). Neurochemical Research, 2002, 27, 1563-1568. | 1.6 | 0 |
| 212 | Structure and Dynamics of Nicotinic Acetylcholine Receptor at the Cell Membrane. Biophysical Journal, 2010, 98, 610a. | 0.2 | 0 |
| 213 | A New Putative Cholesterol-Recognition Motif in Transmembrane Proteins. Biophysical Journal, 2012, 102, 117a. | 0.2 | 0 |
| 214 | Proteomic investigation of human α7-nicotinic acetylcholine receptor signaling mechanisms. Biochemical Pharmacology, 2013, 86, 1227-1228. | 2.0 | 0 |
| 215 | Synapses tango to the rhythm of Buenos Aires: advances and outlooks, 5th <scp>ISN</scp> special conference †Synapses and dendritic spines in health and disease'. Journal of Neurochemistry, 2013, 126, 145-145. | 2.1 | 0 |
| 216 | To be or not to be in Membrane Domains: Transbilayer Asymmetry and Sphingomyelin-Dependent Preferential Partitioning of the Acetylcholine Receptor. Biophysical Journal, 2014, 106, 711a. | 0.2 | 0 |

| # | Article | IF | CITATIONS |
|-----|--|-----|-----------|
| 217 | Organization and Dynamics of Nicotinic Acetylcholine Receptor Nanoclusters at the Cell Surface. Biophysical Journal, 2015, 108, 154a. | 0.2 | 0 |
| 218 | Gregorio Weber's Roots in Argentina. Springer Series on Fluorescence, 2016, , 17-40. | 0.8 | 0 |
| 219 | Single-Molecule Localization Super-Resolution Microscopy of Synaptic Proteins. Springer Protocols, 2016, , 157-198. | 0.1 | 0 |
| 220 | Nanoscopy in the Neurosciences. Microscopy and Microanalysis, 2020, 26, 127-128. | 0.2 | 0 |
| 221 | Application of Artificial Intelligence Strategies to the Analysis of Neurotransmitter Receptor Dynamics in Living Cells. Microscopy and Microanalysis, 2020, 26, 17-18. | 0.2 | 0 |
| 222 | Introduction: Structure Meets Function at the Acetylcholine Receptor. , 1998, , 1-10. | | 0 |
| 223 | Genetic Factors Influencing the Development and Treatment of Cognitive Impairment and Psychosis in Parkinson's Disease. , 2019, , 359-370. | | 0 |
| 224 | Cholesterol-recognizing amino acid consensus motifs in transmembrane proteins: Comparative analysis of in silico studies and structural data. , 2022, , 127-145. | | 0 |
| 225 | Fluorescent probes for microscopy visualization of cholesterol topography and dynamics in membranes. , 2022, , 205-225. | | 0 |