

JesÃ³s Giraldo

List of Publications by Year in descending order

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Version: 2024-02-01

116
papers

2,739
citations

218381

26
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223531

46
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122
all docs

122
docs citations

122
times ranked

3373
citing authors

| # | ARTICLE | IF | CITATIONS |
|----|--|-----|-----------|
| 1 | Characterization of the Calcium-mediated Response to Alkaline Stress in <i>Saccharomyces cerevisiae</i> . <i>Journal of Biological Chemistry</i> , 2004, 279, 43614-43624. | 1.6 | 180 |
| 2 | Pharmacological properties of S1RA, a new sigma α 1 receptor antagonist that inhibits neuropathic pain and activity α 1-induced spinal sensitization. <i>British Journal of Pharmacology</i> , 2012, 166, 2289-2306. | 2.7 | 159 |
| 3 | An allosteric modulator to control endogenous G protein-coupled receptors with light. <i>Nature Chemical Biology</i> , 2014, 10, 813-815. | 3.9 | 147 |
| 4 | Role of Elastin in Spontaneously Hypertensive Rat Small Mesenteric Artery Remodelling. <i>Journal of Physiology</i> , 2003, 552, 185-195. | 1.3 | 122 |
| 5 | Assessing the (a)symmetry of concentration-effect curves. , 2002, 95, 21-45. | | 121 |
| 6 | Chronic 5-HT α 6 receptor modulation by E-6837 induces hypophagia and sustained weight loss in diet-induced obese rats. <i>British Journal of Pharmacology</i> , 2006, 148, 973-983. | 2.7 | 85 |
| 7 | Chromosomal Instability in Amniocytes From Fetuses of Mothers Who Smoke. <i>JAMA - Journal of the American Medical Association</i> , 2005, 293, 1212. | 3.8 | 75 |
| 8 | Increased Superoxide Anion Production by Interleukin-1 β Impairs Nitric Oxide-Mediated Relaxation in Resistance Arteries. <i>Journal of Pharmacology and Experimental Therapeutics</i> , 2006, 316, 42-52. | 1.3 | 69 |
| 9 | The asymmetric/symmetric activation of GPCR dimers as a possible mechanistic rationale for multiple signalling pathways. <i>Trends in Pharmacological Sciences</i> , 2010, 31, 15-21. | 4.0 | 69 |
| 10 | OptoGluNAM4.1, a Photoswitchable Allosteric Antagonist for Real-Time Control of mGlu 4 Receptor Activity. <i>Cell Chemical Biology</i> , 2016, 23, 929-934. | 2.5 | 68 |
| 11 | Pharmacological evidence for a metabotropic glutamate receptor heterodimer in neuronal cells. <i>ELife</i> , 2017, 6, . | 2.8 | 63 |
| 12 | Evidence for Distinct Antagonist-Revealed Functional States of 5-Hydroxytryptamine α 2A α 2B Receptor Homodimers. <i>Molecular Pharmacology</i> , 2009, 75, 1380-1391. | 1.0 | 60 |
| 13 | Illuminating Phenylazopyridines To Photoswitch Metabotropic Glutamate Receptors: From the Flask to the Animals. <i>ACS Central Science</i> , 2017, 3, 81-91. | 5.3 | 58 |
| 14 | Dynamic modulation of inflammatory pain-related affective and sensory symptoms by optical control of amygdala metabotropic glutamate receptor 4. <i>Molecular Psychiatry</i> , 2018, 23, 509-520. | 4.1 | 56 |
| 15 | Overlapping binding sites drive allosteric agonism and positive cooperativity in type 4 metabotropic glutamate receptors. <i>FASEB Journal</i> , 2015, 29, 116-130. | 0.2 | 54 |
| 16 | A Genomewide Screen for Tolerance to Cationic Drugs Reveals Genes Important for Potassium Homeostasis in <i>Saccharomyces cerevisiae</i> . <i>Eukaryotic Cell</i> , 2011, 10, 1241-1250. | 3.4 | 53 |
| 17 | Optical control of pain in vivo with a photoactive mGlu5 receptor negative allosteric modulator. <i>ELife</i> , 2017, 6, . | 2.8 | 48 |
| 18 | Allosteric control of an asymmetric transduction in a G protein-coupled receptor heterodimer. <i>ELife</i> , 2017, 6, . | 2.8 | 48 |

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|----|--|-----|-----------|
| 19 | Quantifying conformational changes in GPCRs: glimpse of a common functional mechanism. BMC Bioinformatics, 2015, 16, 124. | 1.2 | 45 |
| 20 | Advanced age increases chromosome structural abnormalities in human spermatozoa. European Journal of Human Genetics, 2011, 19, 145-151. | 1.4 | 42 |
| 21 | Artificial Intelligence: A Novel Approach for Drug Discovery. Trends in Pharmacological Sciences, 2019, 40, 550-551. | 4.0 | 38 |
| 22 | GNAO1 encephalopathy: further delineation of a severe neurodevelopmental syndrome affecting females. Orphanet Journal of Rare Diseases, 2016, 11, 38. | 1.2 | 36 |
| 23 | Structural insights into positive and negative allosteric regulation of a G protein-coupled receptor through protein-lipid interactions. Scientific Reports, 2018, 8, 4456. | 1.6 | 35 |
| 24 | Transient middle cerebral artery occlusion causes different structural, mechanical, and myogenic alterations in normotensive and hypertensive rats. American Journal of Physiology - Heart and Circulatory Physiology, 2007, 293, H628-H635. | 1.5 | 34 |
| 25 | Effect of N ^G -nitro-L-arginine methylester (L-NAME) on functional and biochemical α_1 -adrenoceptor-mediated responses in rat blood vessels. British Journal of Pharmacology, 1996, 117, 757-763. | 2.7 | 31 |
| 26 | Structural Assessment of Agonist Efficacy in the μ -Opioid Receptor: Morphine and Fentanyl Elicit Different Activation Patterns. Journal of Chemical Information and Modeling, 2021, 61, 1251-1274. | 2.5 | 31 |
| 27 | On the fitting of binding data when receptor dimerization is suspected. British Journal of Pharmacology, 2008, 155, 17-23. | 2.7 | 28 |
| 28 | Computational Analysis of Negative and Positive Allosteric Modulator Binding and Function in Metabotropic Glutamate Receptor 5 (In)Activation. Journal of Chemical Information and Modeling, 2014, 54, 1476-1487. | 2.5 | 28 |
| 29 | Distinct Dopamine D2 Receptor Antagonists Differentially Impact D2 Receptor Oligomerization. International Journal of Molecular Sciences, 2019, 20, 1686. | 1.8 | 27 |
| 30 | α_1 -Adrenoceptor vasoconstriction in the tail artery during ageing. British Journal of Pharmacology, 1997, 121, 1017-1023. | 2.7 | 25 |
| 31 | Empirical models and Hill coefficients. Trends in Pharmacological Sciences, 2003, 24, 63-65. | 4.0 | 25 |
| 32 | The catalytic power of enzymes: Conformational selection or transition state stabilization?. FEBS Letters, 2006, 580, 2170-2177. | 1.3 | 25 |
| 33 | Modeling the Binding and Function of Metabotropic Glutamate Receptors. Journal of Pharmacology and Experimental Therapeutics, 2008, 325, 443-456. | 1.3 | 24 |
| 34 | Mechanistic analysis of the function of agonists and allosteric modulators: reconciling two-state and operational models. British Journal of Pharmacology, 2013, 169, 1189-1202. | 2.7 | 24 |
| 35 | A Complementary Scale of Biased Agonism for Agonists with Differing Maximal Responses. Scientific Reports, 2017, 7, 15389. | 1.6 | 24 |
| 36 | Modelling the interdependence between the stoichiometry of receptor oligomerization and ligand binding for a coexisting dimer/tetramer receptor system. British Journal of Pharmacology, 2009, 156, 28-35. | 2.7 | 22 |

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|----|---|-----|-----------|
| 37 | How inverse can a neutral antagonist be? Strategic questions after the rimonabant issue. <i>Drug Discovery Today</i> , 2010, 15, 411-415. | 3.2 | 22 |
| 38 | Assessing Receptor Affinity for Inverse Agonists: Schild and Cheng-Prusoff Methods Revisited. <i>Current Drug Targets</i> , 2007, 8, 197-202. | 1.0 | 21 |
| 39 | Synthesis toward Bivalent Ligands for the Dopamine D ₂ and Metabotropic Glutamate 5 Receptors. <i>Journal of Medicinal Chemistry</i> , 2018, 61, 8212-8225. | 2.9 | 21 |
| 40 | A method for the quantification of biased signalling at constitutively active receptors. <i>British Journal of Pharmacology</i> , 2018, 175, 2046-2062. | 2.7 | 20 |
| 41 | Insights into adenosine A2A receptor activation through cooperative modulation of agonist and allosteric lipid interactions. <i>PLoS Computational Biology</i> , 2020, 16, e1007818. | 1.5 | 20 |
| 42 | Helix 3 acts as a conformational hinge in Class A GPCR activation: An analysis of interhelical interaction energies in crystal structures. <i>Journal of Structural Biology</i> , 2015, 192, 545-553. | 1.3 | 18 |
| 43 | Paternal Age and Numerical Chromosome Abnormalities in Human Spermatozoa. <i>Cytogenetic and Genome Research</i> , 2016, 148, 241-248. | 0.6 | 18 |
| 44 | Shining Light on an mGlu5 Photoswitchable NAM: A Theoretical Perspective. <i>Current Neuropharmacology</i> , 2016, 14, 441-454. | 1.4 | 18 |
| 45 | Modelling the changes due to the endothelium and hypertension in the alpha-adenoreceptor-mediated responses of rat aorta. <i>Autonomic and Autacoid Pharmacology</i> , 1999, 19, 219-228. | 0.7 | 17 |
| 46 | Evaluation of Operational Models of Agonism and Allosterism at Receptors with Multiple Orthosteric Binding Sites. <i>Molecular Pharmacology</i> , 2020, 97, 35-45. | 1.0 | 17 |
| 47 | Revealing the Mechanism of Agonist-Mediated Cannabinoid Receptor 1 (CB1) Activation and Phospholipid-Mediated Allosteric Modulation. <i>Journal of Medicinal Chemistry</i> , 2019, 62, 5638-5654. | 2.9 | 16 |
| 48 | Endothelial modulation of α_1 -adrenoceptor contractile responses in the tail artery of spontaneously hypertensive rats. <i>British Journal of Pharmacology</i> , 1996, 119, 765-771. | 2.7 | 15 |
| 49 | Selective Protonation of Acidic Residues Triggers Opsin Activation. <i>Journal of Physical Chemistry B</i> , 2015, 119, 9510-9519. | 1.2 | 15 |
| 50 | Remote local photoactivation of morphine produces analgesia without opioid-related adverse effects. <i>British Journal of Pharmacology</i> , 2023, 180, 958-974. | 2.7 | 15 |
| 51 | Analysis of agonism at functional prejunctional of rat vas deferens using operational and null approaches. <i>European Journal of Pharmacology</i> , 1994, 258, 229-238. | 1.7 | 14 |
| 52 | Use of the operational model of agonism and [3H]prazosin binding to assess altered responsiveness of α_1 -adrenoceptors in the vas deferens of spontaneously hypertensive rat. <i>Naunyn-Schmiedeberg's Archives of Pharmacology</i> , 1997, 356, 383-391. | 1.4 | 14 |
| 53 | Rational design of a peptide capture agent for CXCL8 based on a model of the CXCL8: CXCR1 complex. <i>RSC Advances</i> , 2015, 5, 25657-25668. | 1.7 | 14 |
| 54 | Positional isomers of bispyridine benzene derivatives induce efficacy changes on mGlu5 negative allosteric modulation. <i>European Journal of Medicinal Chemistry</i> , 2017, 127, 567-576. | 2.6 | 14 |

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|----|--|-----|-----------|
| 55 | Analysis of positive and negative allosteric modulation in metabotropic glutamate receptors 4 and 5 with a dual ligand. <i>Scientific Reports</i> , 2017, 7, 4944. | 1.6 | 14 |
| 56 | An operational model for GPCR homodimers and its application in the analysis of biased signaling. <i>Drug Discovery Today</i> , 2018, 23, 1591-1595. | 3.2 | 14 |
| 57 | Follow-Up Genotoxic Study: Chromosome Damage Two and Six Years after Exposure to the Prestige Oil Spill. <i>PLoS ONE</i> , 2015, 10, e0132413. | 1.1 | 14 |
| 58 | Agonist induction, conformational selection, and mutant receptors. <i>FEBS Letters</i> , 2004, 556, 13-18. | 1.3 | 13 |
| 59 | A double effect molecular switch leads to a novel potent negative allosteric modulator of metabotropic glutamate receptor 5. <i>MedChemComm</i> , 2014, 5, 1548-1554. | 3.5 | 12 |
| 60 | The effect of the molecular mechanism of G protein-coupled receptor activation on the process of signal transduction. <i>European Journal of Pharmacology</i> , 1997, 335, 73-87. | 1.7 | 11 |
| 61 | Operational models of allosteric modulation: caution is needed. <i>Trends in Pharmacological Sciences</i> , 2015, 36, 1-2. | 4.0 | 11 |
| 62 | The influence of alignment-free sequence representations on the semi-supervised classification of class C G protein-coupled receptors. <i>Medical and Biological Engineering and Computing</i> , 2015, 53, 137-149. | 1.6 | 11 |
| 63 | Angiotensin II type 1/adenosine A 2A receptor oligomers: a novel target for tardive dyskinesia. <i>Scientific Reports</i> , 2017, 7, 1857. | 1.6 | 11 |
| 64 | Text mining and expert curation to develop a database on psychiatric diseases and their genes. <i>Database: the Journal of Biological Databases and Curation</i> , 2017, 2017, . | 1.4 | 11 |
| 65 | Can Adding Constitutive Receptor Activity Redefine Biased Signaling Quantification?. <i>Trends in Pharmacological Sciences</i> , 2019, 40, 156-160. | 4.0 | 11 |
| 66 | Multiple active receptor conformation, agonist efficacy and maximum effect of the system: the conformation-based operational model of agonism. <i>Drug Discovery Today</i> , 2013, 18, 365-371. | 3.2 | 10 |
| 67 | Ecophysiological significance of scale-dependent patterns in prokaryotic genomes unveiled by a combination of statistic and geometric analyses. <i>Genomics</i> , 2008, 91, 538-543. | 1.3 | 9 |
| 68 | Integrated Synthetic, Pharmacological, and Computational Investigation of <i>cis</i> -3,5-Dichlorophenylcarbamoylcyclohexanecarboxylic Acid Enantiomers As Positive Allosteric Modulators of Metabotropic Glutamate Receptor Subtype 4. <i>ChemMedChem</i> , 2011, 6, 131-140. | 1.6 | 9 |
| 69 | Head Circumference Growth Function as a Marker of Neurological Impairment in a Cohort of Microcephalic Infants and Children. <i>Neuropediatrics</i> , 2012, 43, 271-274. | 0.3 | 8 |
| 70 | Chromosomal Bands Affected by Acute Oil Exposure and DNA Repair Errors. <i>PLoS ONE</i> , 2013, 8, e81276. | 1.1 | 8 |
| 71 | Label noise in subtype discrimination of class C G protein-coupled receptors: A systematic approach to the analysis of classification errors. <i>BMC Bioinformatics</i> , 2015, 16, 314. | 1.2 | 8 |
| 72 | Persistence of Breakage in Specific Chromosome Bands 6 Years after Acute Exposure to Oil. <i>PLoS ONE</i> , 2016, 11, e0159404. | 1.1 | 8 |

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|----|--|-----|-----------|
| 73 | Adrenergic and purinergic components in bisected vas deferens from spontaneously hypertensive rats. <i>British Journal of Pharmacology</i> , 1999, 128, 873-880. | 2.7 | 7 |
| 74 | Modeling Cooperativity Effects in Dimeric G Protein-Coupled Receptors. <i>Progress in Molecular Biology and Translational Science</i> , 2013, 115, 349-373. | 0.9 | 7 |
| 75 | Have many estimates of efficacy and affinity been misled? Revisiting the operational model of agonism. <i>Drug Discovery Today</i> , 2016, 21, 1735-1739. | 3.2 | 7 |
| 76 | Systematic Analysis of Primary Sequence Domain Segments for the Discrimination Between Class C GPCR Subtypes. <i>Interdisciplinary Sciences, Computational Life Sciences</i> , 2018, 10, 43-52. | 2.2 | 7 |
| 77 | Mathematical Modeling of G Protein-Coupled Receptor Function: What Can We Learn from Empirical and Mechanistic Models?. <i>Advances in Experimental Medicine and Biology</i> , 2014, 796, 159-181. | 0.8 | 7 |
| 78 | Effect of nucleotide substrate binding on the pKa of catalytic residues in barnase. , 1996, 25, 180-194. | | 6 |
| 79 | Conformational analysis of GpA and GpAp in aqueous solution by molecular dynamics and statistical methods 1 Edited by A. R. Fersht. <i>Journal of Molecular Biology</i> , 1998, 283, 863-882. | 2.0 | 6 |
| 80 | A pH-dependent model of the activation mechanism of the histamine H2 receptor. <i>Biochemical Pharmacology</i> , 1999, 58, 343-353. | 2.0 | 6 |
| 81 | Shift in nucleotide conformational equilibrium contributes to increased rate of catalysis of GpAp versus GpA in barnase. <i>Proteins: Structure, Function and Bioinformatics</i> , 2004, 56, 261-276. | 1.5 | 6 |
| 82 | Statistics for the analysis of molecular dynamics simulations: providing P values for agonist-dependent GPCR activation. <i>Scientific Reports</i> , 2020, 10, 19942. | 1.6 | 6 |
| 83 | Dynamical Correlations Reveal Allosteric Sites in G Protein-Coupled Receptors. <i>International Journal of Molecular Sciences</i> , 2021, 22, 187. | 1.8 | 6 |
| 84 | Spontaneous changes in brain striatal dopamine synthesis and storage dynamics ex vivo reveal end-product feedback-inhibition of tyrosine hydroxylase. <i>Neuropharmacology</i> , 2022, 212, 109058. | 2.0 | 6 |
| 85 | Modelling the changes induced by chronic desipramine treatment on the factors governing the agonism at prejunctional α_2 -adrenoceptors. <i>British Journal of Pharmacology</i> , 1996, 117, 1286-1292. | 2.7 | 5 |
| 86 | The slope parameter and the receptor reserve. <i>Trends in Pharmacological Sciences</i> , 1998, 19, 445. | 4.0 | 5 |
| 87 | Using machine learning tools for protein database biocuration assistance. <i>Scientific Reports</i> , 2018, 8, 10148. | 1.6 | 5 |
| 88 | Discovery of a true bivalent dopamine D2 receptor agonist. <i>European Journal of Medicinal Chemistry</i> , 2021, 212, 113151. | 2.6 | 5 |
| 89 | Changes in electrophysiological properties in the prostatic portion of vas deferens from spontaneously hypertensive rats. <i>Naunyn-Schmiedeberg's Archives of Pharmacology</i> , 2002, 366, 425-430. | 1.4 | 4 |
| 90 | Detecting Loss of Diversity for an Efficient Termination of EAs. , 2013, , . | | 4 |

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| 91 | Reducing the n-gram feature space of class C GPCRs to subtype-discriminating patterns. Journal of Integrative Bioinformatics, 2014, 11, 99-115. | 1.0 | 4 |
| 92 | Visual interpretation of class C GPCR subtype overlapping from the nonlinear mapping of transformed primary sequences. , 2014, , . | | 4 |
| 93 | Exploring the Activation Mechanism of the mGlu5 Transmembrane Domain. Frontiers in Molecular Biosciences, 2020, 7, 38. | 1.6 | 4 |
| 94 | Enhanced noradrenergic transmission in the spontaneously hypertensive rat anococcygeus muscle. British Journal of Pharmacology, 2003, 140, 773-779. | 2.7 | 3 |
| 95 | Human Genotoxic Study Carried Out Two Years after Oil Exposure during the Clean-up Activities Using Two Different Biomarkers. Journal of Marine Science and Engineering, 2015, 3, 1334-1348. | 1.2 | 3 |
| 96 | The extracellular N-terminal domain suffices to discriminate class C G Protein-Coupled Receptor subtypes from n-grams of their sequences. , 2015, , . | | 3 |
| 97 | Representation Learning for Class C G Protein-Coupled Receptors Classification. Molecules, 2018, 23, 690. | 1.7 | 3 |
| 98 | Complementing Kernel-Based Visualization of Protein Sequences with Their Phylogenetic Tree. Lecture Notes in Computer Science, 2012, , 136-149. | 1.0 | 3 |
| 99 | Visual Characterization of Misclassified Class C GPCRs through Manifold-based Machine Learning Methods. Genomics and Computational Biology, 2015, 1, 19. | 0.7 | 3 |
| 100 | The structure and activity of membrane receptors: computational simulation of histamine H2-receptor activation. Computational and Theoretical Chemistry, 1996, 371, 279-286. | 1.5 | 2 |
| 101 | Effects of l -NG -nitro-arginine on noradrenaline induced contraction in the rat anococcygeus muscle. British Journal of Pharmacology, 1997, 120, 1035-1038. | 2.7 | 2 |
| 102 | Coupling of the guanosine glycosidic bond conformation and the ribonucleotide cleavage reaction: Implications for barnase catalysis. Proteins: Structure, Function and Bioinformatics, 2008, 70, 415-428. | 1.5 | 2 |
| 103 | Terminating evolutionary algorithms at their steady state. Computational Optimization and Applications, 2015, 61, 489-515. | 0.9 | 2 |
| 104 | Quantifying the allosteric interactions within a G-protein-coupled receptor heterodimer. Drug Discovery Today, 2018, 23, 7-11. | 3.2 | 2 |
| 105 | Finding Class C GPCR Subtype-Discriminating N-grams through Feature Selection. Advances in Intelligent Systems and Computing, 2014, , 89-96. | 0.5 | 2 |
| 106 | Exploring the Active Conformation of Cyclohexane Carboxylate Positive Allosteric Modulators of the Typeâ€...4 Metabotropic Glutamate Receptor. ChemMedChem, 2014, 9, 2685-2698. | 1.6 | 1 |
| 107 | Reducing the n-gram feature space of class C GPCRs to subtype-discriminating patterns. Journal of Integrative Bioinformatics, 2014, 11, 254. | 1.0 | 1 |
| 108 | In Silico Assessment of the Lipid Fingerprint Signature of ATP2, the Essential P4-ATPase of Malaria Parasites. Membranes, 2022, 12, 702. | 1.4 | 1 |

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|-----|--|-----|-----------|
| 109 | 120. Patterns of Response to Fear learning: A Data-Driven Approach to a Biomarker of Generalized Anxiety Disorders. <i>Biological Psychiatry</i> , 2017, 81, S50-S51. | 0.7 | 0 |
| 110 | Analysis of the Function of Receptor Oligomers by Operational Models of Agonism. , 2021, , . | | 0 |
| 111 | Visual Exploratory Assessment of Class C GPCR Extracellular Domains Discrimination Capabilities. <i>Advances in Intelligent Systems and Computing</i> , 2016, , 31-39. | 0.5 | 0 |
| 112 | Kernel Generative Topographic Mapping of Protein Sequences. , 0, , 817-830. | | 0 |
| 113 | Title is missing!. , 2020, 16, e1007818. | | 0 |
| 114 | Title is missing!. , 2020, 16, e1007818. | | 0 |
| 115 | Title is missing!. , 2020, 16, e1007818. | | 0 |
| 116 | Title is missing!. , 2020, 16, e1007818. | | 0 |