

# JosÃ© D Faraldo-GÃ³mez

## List of Publications by Year in descending order

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Version: 2024-02-01

65  
papers

3,720  
citations

147801

31  
h-index

138484

58  
g-index

78  
all docs

78  
docs citations

78  
times ranked

4338  
citing authors

| #  | ARTICLE  | IF   | CITATIONS |
|----|--|------|-----------|
| 1  | Interpreting hydrogen-deuterium exchange experiments with molecular simulations: Tutorials and applications of the HDXer ensemble reweighting software [Article v1.0]. <i>Living Journal of Computational Molecular Science</i> , 2022, 3, . | 6.4  | 3         |
| 2  | Bivalent recognition of fatty acyl-CoA by a human integral membrane palmitoyltransferase. <i>Proceedings of the National Academy of Sciences of the United States of America</i> , 2022, 119, .  | 7.1  | 15        |
| 3  | Asymmetric drug binding in an ATP-loaded inward-facing state of an ABC transporter. <i>Nature Chemical Biology</i> , 2022, 18, 226-235.  | 8.0  | 15        |
| 4  | Structure of the Shaker Kv channel and mechanism of slow C-type inactivation. <i>Science Advances</i> , 2022, 8, eabm7814.   | 10.3 | 49        |
| 5  | Conserved binding site in the N-lobe of prokaryotic MATE transporters suggests a role for Na <sup>+</sup> in ion-coupled drug efflux. <i>Journal of Biological Chemistry</i> , 2021, 296, 100262.  | 3.4  | 8         |
| 6  | On the Role of a Conserved Methionine in the Na <sup>+</sup> -Coupling Mechanism of a Neurotransmitter Transporter Homolog. <i>Neurochemical Research</i> , 2021, , 1.   | 3.3  | 4         |
| 7  | Membrane transporter dimerization driven by differential lipid solvation energetics of dissociated and associated states. <i>ELife</i> , 2021, 10, .   | 6.0  | 39        |
| 8  | Corrections in the CHARMM36 Parametrization of Chloride Interactions with Proteins, Lipids, and Alkali Cations, and Extension to Other Halide Anions. <i>Journal of Chemical Theory and Computation</i> , 2021, 17, 6240-6261.               | 5.3  | 7         |
| 9  | Conserved binding site in the N-lobe of prokaryotic MATE transporters suggests a role for Na in ion-coupled drug efflux. <i>Journal of Biological Chemistry</i> , 2021, , .  | 3.4  | 2         |
| 10 | Force-Correction Analysis Method for Derivation of Multidimensional Free-Energy Landscapes from Adaptively Biased Replica Simulations. <i>Journal of Chemical Theory and Computation</i> , 2021, 17, 6775-6788.                              | 5.3  | 7         |
| 11 | Direct Derivation of Free Energies of Membrane Deformation and Other Solvent Density Variations From Enhanced Sampling Molecular Dynamics. <i>Journal of Computational Chemistry</i> , 2020, 41, 449-459.                                    | 3.3  | 26        |
| 12 | DHHC20 Palmitoyl-Transferase Reshapes the Membrane to Foster Catalysis. <i>Biophysical Journal</i> , 2020, 118, 980-988.   | 0.5  | 10        |
| 13 | The structure of human ATG9A and its interplay with the lipid bilayer. <i>Autophagy</i> , 2020, 16, 2292-2293.   | 9.1  | 6         |
| 14 | An embedded lipid in the multidrug transporter LmrP suggests a mechanism for polyspecificity. <i>Nature Structural and Molecular Biology</i> , 2020, 27, 829-835.  | 8.2  | 57        |
| 15 | Bedaquiline inhibits the yeast and human mitochondrial ATP synthases. <i>Communications Biology</i> , 2020, 3, 452.  | 4.4  | 32        |
| 16 | Structure and Mechanism of DHHC Protein Acyltransferases. <i>Journal of Molecular Biology</i> , 2020, 432, 4983-4998.  | 4.2  | 36        |
| 17 | Structure of Human ATG9A, the Only Transmembrane Protein of the Core Autophagy Machinery. <i>Cell Reports</i> , 2020, 31, 107837.  | 6.4  | 108       |
| 18 | New Molecular-Mechanics Model for Simulations of Hydrogen Fluoride in Chemistry and Biology. <i>Journal of Chemical Theory and Computation</i> , 2020, 16, 5105-5126.  | 5.3  | 15        |

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|----|--|------|-----------|
| 19 | Interpretation of HDX Data by Maximum-Entropy Reweighting of Simulated Structural Ensembles. <i>Biophysical Journal</i> , 2020, 118, 1649-1664.  | 0.5  | 28        |
| 20 | Membrane physiologists of all kinds meet at Woods Hole. <i>Journal of General Physiology</i> , 2019, 151, 273-273.   | 1.9  | 0         |
| 21 | Molecular mechanisms of human P2X3 receptor channel activation and modulation by divalent cation bound ATP. <i>ELife</i> , 2019, 8, .  | 6.0  | 30        |
| 22 | Large-scale state-dependent membrane remodeling by a transporter protein. <i>ELife</i> , 2019, 8, .  | 6.0  | 42        |
| 23 | Mitochondrial ATP synthase dimers spontaneously associate due to a long-range membrane-induced force. <i>Journal of General Physiology</i> , 2018, 150, 763-770.   | 1.9  | 56        |
| 24 | Membrane plasticity facilitates recognition of the inhibitor oligomycin by the mitochondrial ATP synthase rotor. <i>Biochimica Et Biophysica Acta - Bioenergetics</i> , 2018, 1859, 789-796.                               | 1.0  | 6         |
| 25 | High-resolution cryo-EM analysis of the yeast ATP synthase in a lipid membrane. <i>Science</i> , 2018, 360, .  | 12.6 | 163       |
| 26 | The prokaryotic Na <sup>+</sup> /Ca <sup>2+</sup> exchanger NCX_Mj transports Na <sup>+</sup> and Ca <sup>2+</sup> in a 3:1 stoichiometry. <i>Journal of General Physiology</i> , 2018, 150, 51-65.                        | 1.9  | 27        |
| 27 | TRPV1 pore turret dictates distinct DkTx and capsaicin gating. <i>Proceedings of the National Academy of Sciences of the United States of America</i> , 2018, 115, E11837-E11846.  | 7.1  | 45        |
| 28 | Confidence Analysis of DEER Data and Its Structural Interpretation with Ensemble-Biased Metadynamics. <i>Biophysical Journal</i> , 2018, 115, 1200-1216.   | 0.5  | 38        |
| 29 | Broadly conserved Na <sup>+</sup> -binding site in the N-lobe of prokaryotic multidrug MATE transporters. <i>Proceedings of the National Academy of Sciences of the United States of America</i> , 2018, 115, E6172-E6181. | 7.1  | 25        |
| 30 | Predicted Structures of the Proton-Bound Membrane-Embedded Rotor Rings of the <i>Saccharomyces cerevisiae</i> and <i>Escherichia coli</i> ATP Synthases. <i>Journal of Physical Chemistry B</i> , 2017, 121, 3297-3307.    | 2.6  | 6         |
| 31 | Asymmetry of inverted-topology repeats in the AE1 anion exchanger suggests an elevator-like mechanism. <i>Journal of General Physiology</i> , 2017, 149, 1149-1164.  | 1.9  | 32        |
| 32 | Atomistic simulations indicate the c-subunit ring of the F1Fo ATP synthase is not the mitochondrial permeability transition pore. <i>ELife</i> , 2017, 6, .  | 6.0  | 71        |
| 33 | Atomic-resolution dissection of the energetics and mechanism of isomerization of hydrated ATP-Mg <sup>2+</sup> through the SOMA string method. <i>Journal of Computational Chemistry</i> , 2016, 37, 575-586.              | 3.3  | 8         |
| 34 | Mechanism of extracellular ion exchange and binding-site occlusion in a sodium/calcium exchanger. <i>Nature Structural and Molecular Biology</i> , 2016, 23, 590-599.  | 8.2  | 75        |
| 35 | Structure and mechanism of the ATP synthase membrane motor inferred from quantitative integrative modeling. <i>Journal of General Physiology</i> , 2016, 148, 441-457.   | 1.9  | 17        |
| 36 | Structural insights into the mechanism of activation of the TRPV1 channel by a membrane-bound tarantula toxin. <i>ELife</i> , 2016, 5, .   | 6.0  | 71        |

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|----|---|------|-----------|
| 37 | Ensemble-Biased Metadynamics: A Molecular Simulation Method to Sample Experimental Distributions. <i>Biophysical Journal</i> , 2015, 108, 2779-2782.  | 0.5  | 71        |
| 38 | On the principle of ion selectivity in Na <sup>+</sup> /H <sup>+</sup> -coupled membrane proteins: Experimental and theoretical studies of an ATP synthase rotor. <i>Proceedings of the National Academy of Sciences of the United States of America</i> , 2015, 112, E1057-66. | 7.1  | 41        |
| 39 | Coupling of remote alternating-access transport mechanisms for protons and substrates in the multidrug efflux pump AcrB. <i>ELife</i> , 2014, 3, .  | 6.0  | 137       |
| 40 | Channeling your inner energy. <i>Nature Structural and Molecular Biology</i> , 2014, 21, 575-577.   | 8.2  | 1         |
| 41 | Sodium recognition by the Na <sup>+</sup> /Ca <sup>2+</sup> exchanger in the outward-facing conformation. <i>Proceedings of the National Academy of Sciences of the United States of America</i> , 2014, 111, E5354-62.   | 7.1  | 59        |
| 42 | High-resolution structure and mechanism of an F <sub>1</sub> /V-hybrid rotor ring in a Na <sup>+</sup> -coupled ATP synthase. <i>Nature Communications</i> , 2014, 5, 5286.   | 12.8 | 68        |
| 43 | Ceramide-lipid interactions studied by MD simulations and solid-state NMR. <i>Biochimica Et Biophysica Acta - Biomembranes</i> , 2014, 1838, 2511-2519.   | 2.6  | 16        |
| 44 | String Method for Calculation of Minimum Free-Energy Paths in Cartesian Space in Freely Tumbling Systems. <i>Journal of Chemical Theory and Computation</i> , 2013, 9, 4140-4154.   | 5.3  | 26        |
| 45 | A New Type of Na <sup>+</sup> -Driven ATP Synthase Membrane Rotor with a Two-Carboxylate Ion-Coupling Motif. <i>PLoS Biology</i> , 2013, 11, e1001596.  | 5.6  | 61        |
| 46 | Two-state dynamics of the SH3-SH2 tandem of Abl kinase and the allosteric role of the N-cap. <i>Proceedings of the National Academy of Sciences of the United States of America</i> , 2013, 110, E3372-80.  | 7.1  | 33        |
| 47 | Structure of the c10 ring of the yeast mitochondrial ATP synthase in the open conformation. <i>Nature Structural and Molecular Biology</i> , 2012, 19, 485-491.   | 8.2  | 116       |
| 48 | Structure of the yeast F <sub>1</sub> F <sub>o</sub> -ATP synthase dimer and its role in shaping the mitochondrial cristae. <i>Proceedings of the National Academy of Sciences of the United States of America</i> , 2012, 109, 13602-13607.                                    | 7.1  | 413       |
| 49 | Engineering rotor ring stoichiometries in the ATP synthase. <i>Proceedings of the National Academy of Sciences of the United States of America</i> , 2012, 109, E1599-608.  | 7.1  | 89        |
| 50 | Promiscuous archaeal ATP synthase concurrently coupled to Na <sup>+</sup> and H <sup>+</sup> translocation. <i>Proceedings of the National Academy of Sciences of the United States of America</i> , 2012, 109, 947-952.  | 7.1  | 113       |
| 51 | GRIFFIN: A Versatile Methodology for Optimization of Protein-Lipid Interfaces for Membrane Protein Simulations. <i>Journal of Chemical Theory and Computation</i> , 2011, 7, 1167-1176.   | 5.3  | 60        |
| 52 | ATP Synthase - A Paradigmatic Molecular Machine. , 2011, , 208-238.   |      | 20        |
| 53 | Modeling and simulation of ion-coupled and ATP-driven membrane proteins. <i>Current Opinion in Structural Biology</i> , 2011, 21, 173-179.  | 5.7  | 19        |
| 54 | Evidence for an allosteric mechanism of substrate release from membrane-transporter accessory binding proteins. <i>Proceedings of the National Academy of Sciences of the United States of America</i> , 2011, 108, E1285-92.   | 7.1  | 34        |

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|----|--|------|-----------|
| 55 | Structural and energetic basis for H <sup>+</sup> versus Na <sup>+</sup> binding selectivity in ATP synthase Fo rotors. <i>Biochimica Et Biophysica Acta - Bioenergetics</i> , 2010, 1797, 763-772.                            | 1.0  | 58        |
| 56 | Microscopic rotary mechanism of ion translocation in the Fo complex of ATP synthases. <i>Nature Chemical Biology</i> , 2010, 6, 891-899.   | 8.0  | 142       |
| 57 | On the Question of Hydronium Binding to ATP-Synthase Membrane Rotors. <i>Biophysical Journal</i> , 2010, 99, L53-L55.  | 0.5  | 19        |
| 58 | On the Structure of the Proton-Binding Site in the Fo Rotor of Chloroplast ATP Synthases. <i>Journal of Molecular Biology</i> , 2010, 395, 20-27.  | 4.2  | 43        |
| 59 | High-resolution structure of the rotor ring of a proton-dependent ATP synthase. <i>Nature Structural and Molecular Biology</i> , 2009, 16, 1068-1073.  | 8.2  | 194       |
| 60 | Complete Ion-Coordination Structure in the Rotor Ring of Na <sup>+</sup> -Dependent F-ATP Synthases. <i>Journal of Molecular Biology</i> , 2009, 391, 498-507.   | 4.2  | 98        |
| 61 | Characterization of conformational equilibria through Hamiltonian and temperature replica-exchange simulations: Assessing entropic and environmental effects. <i>Journal of Computational Chemistry</i> , 2007, 28, 1634-1647. | 3.3  | 44        |
| 62 | Conformational sampling and dynamics of membrane proteins from 10-nanosecond computer simulations. <i>Proteins: Structure, Function and Bioinformatics</i> , 2004, 57, 783-791.  | 2.6  | 92        |
| 63 | Electrostatics of Ion Stabilization in a ClC Chloride Channel Homologue from <i>Escherichia coli</i> . <i>Journal of Molecular Biology</i> , 2004, 339, 981-1000.  | 4.2  | 111       |
| 64 | Acquisition of siderophores in Gram-negative bacteria. <i>Nature Reviews Molecular Cell Biology</i> , 2003, 4, 105-116.  | 37.0 | 349       |
| 65 | Differential ion dehydration energetics explains selectivity in the non-canonical lysosomal K <sup>+</sup> channel TMEM175. <i>ELife</i> , 0, 11, .  | 6.0  | 9         |