

# Guilherme Colherinhas

## List of Publications by Year in descending order

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55  
papers

746  
citations

471061  
17  
h-index

610482  
24  
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all docs

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docs citations

55  
times ranked

396  
citing authors

#	ARTICLE	IF	CITATIONS
1	The Band Gap of Graphene Is Efficiently Tuned by Monovalent Ions. Journal of Physical Chemistry Letters, 2015, 6, 302-307.	2.1	50
2	Molecular Dynamics Study of Surfactant-Like Peptide Based Nanostructures. Journal of Physical Chemistry B, 2014, 118, 12215-12222.	1.2	49
3	Storing Energy in Biodegradable Electrochemical Supercapacitors. ACS Omega, 2018, 3, 13869-13875.	1.6	46
4	Theoretical analysis of the hydration of C <sub>60</sub> in normal and supercritical conditions. Carbon, 2011, 49, 187-192.	5.4	29
5	Molecular Description of Surfactant-like Peptide Based Membranes. Journal of Physical Chemistry C, 2014, 118, 9598-9603.	1.5	29
6	Can inorganic salts tune electronic properties of graphene quantum dots?. Physical Chemistry Chemical Physics, 2015, 17, 17413-17420.	1.3	29
7	Elucidating the stability of bolaamphiphilic polypeptide nanosheets using atomistic molecular dynamics. Physical Chemistry Chemical Physics, 2017, 19, 31921-31928.	1.3	26
8	Assessing the interaction between surfactant-like peptides and lipid membranes. RSC Advances, 2017, 7, 35973-35981.	1.7	22
9	Isotropic magnetic shielding constants of retinal derivatives in aprotic and protic solvents. Journal of Chemical Physics, 2013, 139, 094502.	1.2	20
10	Predicting the properties of a new class of host-guest complexes: C <sub>60</sub> fullerene and CB[9] cucurbituril. Physical Chemistry Chemical Physics, 2014, 16, 22823-22829.	1.3	20
11	Spectroscopic properties of vitamin E models in solution. Chemical Physics Letters, 2015, 628, 49-53.	1.2	20
12	Elucidating NH <sub>2</sub> -I3V3A3G3K3-COOH and NH <sub>2</sub> -K3G3A3V3I3-COOH polypeptide membranes: A classical molecular dynamics study. Journal of Molecular Liquids, 2019, 279, 740-749.	2.3	20
13	A6H polypeptide membranes: Molecular dynamics simulation, GIAO-DFT-NMR and TD-DFT spectroscopy analysis. Journal of Molecular Liquids, 2020, 316, 113850.	2.3	19
14	Stability and Structural Analysis of A <sub>6</sub> R Polypeptide Nanosheets: A Theoretical Study Using the Classical Molecular Dynamics Simulation. Journal of Physical Chemistry C, 2018, 122, 24445-24453.	1.5	18
15	Can CHARMM36 atomic charges described correctly the interaction between amino acid and water molecules by molecular dynamics simulations?. Journal of Molecular Liquids, 2020, 317, 113919.	2.3	18
16	Isomerization effects on chemical shifts and spin-spin coupling constants of polyacetylene chains: A GIAO-DFT study. International Journal of Quantum Chemistry, 2011, 111, 1616-1625.	1.0	17
17	Investigating the asymmetry in the EDL response of C <sub>60</sub> /graphene supercapacitors. Physical Chemistry Chemical Physics, 2019, 21, 15362-15371.	1.3	17
18	Solvent effects on the first hyperpolarizability of retinal derivatives. Chemical Physics Letters, 2014, 598, 43-47.	1.2	16

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19	Understanding the stability of polypeptide membranes in ionic liquids: a theoretical molecular dynamics study. <i>New Journal of Chemistry</i> , 2019, 43, 10151-10161.	1.4	16
20	The influence of polar and non-polar interactions on the self-assembly of peptide nanomembranes and their applications: An atomistic study using classical molecular dynamics. <i>Journal of Molecular Liquids</i> , 2020, 318, 114263.	2.3	15
21	Assessing the DOPC-cholesterol interactions and their influence on fullerene C60 partitioning in lipid bilayers. <i>Journal of Molecular Liquids</i> , 2020, 315, 113698.	2.3	15
22	Atomistic molecular dynamics study on the influence of high temperatures on the structure of peptide nanomembranes candidates for organic supercapacitor electrode. <i>Journal of Molecular Liquids</i> , 2021, 334, 116126.	2.3	15
23	GIAO-DFT isotropic magnetic shielding constants and spin-spin coupling of tartaric acid in water solution. <i>Chemical Physics Letters</i> , 2016, 644, 205-211.	1.2	14
24	Design and analysis of polypeptide nanofiber using full atomistic Molecular Dynamic. <i>Journal of Molecular Liquids</i> , 2020, 302, 112610.	2.3	14
25	Alternative proposal for the generation of the displaced number state. <i>Physica A: Statistical Mechanics and Its Applications</i> , 2005, 351, 251-259.	1.2	13
26	The influence of flexibility on the spectroscopic properties for organic molecules in solution: A theoretical study applied to A3R polypeptide. <i>Journal of Molecular Liquids</i> , 2018, 263, 334-341.	2.3	13
27	On the calculation of magnetic properties of nucleic acids in liquid water with the sequential QM/MM method. <i>Journal of Molecular Liquids</i> , 2019, 294, 111611.	2.3	13
28	Solvent effects on the spectroscopic properties of Damascone derivatives: A sequential Monte Carlo/Quantum Mechanics study. <i>Chemical Physics Letters</i> , 2019, 730, 531-537.	1.2	12
29	Update of CHARMM36's atomic charges for aromatic amino acids in water solution simulations and spectroscopy analysis via sequential molecular dynamics and DFT calculations. <i>Journal of Molecular Liquids</i> , 2021, 321, 114739.	2.3	12
30	Updating atomic charge parameters of aliphatic amino acids: a quest to improve the performance of molecular modeling via sequential molecular dynamics and DFT-GIAO-NMR calculations. <i>Physical Chemistry Chemical Physics</i> , 2021, 23, 8413-8425.	1.3	12
31	TD-DFT and GIAO-NMR spectroscopy studies for maltose and ( $\alpha$ - and $\beta$ -)glucose in water solution using S-MC/QM polarization methodology. <i>Journal of Molecular Liquids</i> , 2017, 237, 295-303.	2.3	11
32	$^{13}\text{C}$ chemical shifts of polyacetylene chains with charged conformational defects: A GIAO-DFT study. <i>Chemical Physics Letters</i> , 2011, 503, 191-196.	1.2	10
33	Potential energy surface of excited semiconductors: Graphene quantum dot and BODIPY. <i>Chemical Physics</i> , 2016, 474, 1-6.	0.9	9
34	A molecular dynamics study of graphyne-based electrode and biocompatible ionic liquid for supercapacitor applications. <i>Journal of Molecular Liquids</i> , 2022, 360, 119494.	2.3	9
35	All-boron fullerene exhibits a strong affinity to inorganic anions. <i>Chemical Physics Letters</i> , 2017, 671, 107-112.	1.2	6
36	Hydration properties of the polyalanines by atomistic molecular dynamics. <i>Journal of Molecular Liquids</i> , 2017, 244, 285-290.	2.3	6

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37	Spectroscopic properties and solute-solvent structural analyses for $A_N R$ polypeptides in water solution: a sequential Monte Carlo/quantum mechanics (S-MC/QM) theoretical study. <i>New Journal of Chemistry</i> , 2018, 42, 19692-19700.	1.4	6
38	Solvent effects on the electrical and magnetic spectroscopic properties of azo-enaminone derivatives in methanol and in water. <i>New Journal of Chemistry</i> , 2018, 42, 12032-12044.	1.4	6
39	Hydroxylic, sulfur-containing and amidic amino acids in water solution: Atomic charges parameters for computational modeling using molecular dynamics simulation and DFT calculations. <i>Journal of Molecular Liquids</i> , 2021, 339, 116815.	2.3	6
40	Nonlinear displaced number states. <i>Physics Letters, Section A: General, Atomic and Solid State Physics</i> , 2005, 339, 275-282.	0.9	5
41	GIAO-DFT-NMR characterization of fullerene-cucurbituril complex: the effects of the C60@CB[9] host-guest mutual interactions. <i>Journal of Molecular Modeling</i> , 2018, 24, 181.	0.8	5
42	Fullerene C60 spectroscopy in [BMIM][PF6] ionic liquid: Molecular dynamics study using polarization effects. <i>Journal of Molecular Structure</i> , 2022, 1250, 131887.	1.8	5
43	NONLINEAR EVEN AND ODD DISPLACED NUMBER STATE. <i>Modern Physics Letters B</i> , 2006, 20, 1135-1146.	1.0	4
44	Versatile interactions of boron fullerene $B_{80}$ with gas molecules. <i>RSC Advances</i> , 2016, 6, 78684-78691.	1.7	4
45	TD-DFT absorption spectrum of (poly)threonine in water: A study combining molecular dynamics and quantum mechanics calculations. <i>Chemical Physics Letters</i> , 2021, 779, 138876.	1.2	4
46	Laminar peptide structure: Energetic and structural evaluation using molecular dynamics. <i>Journal of Molecular Liquids</i> , 2021, 341, 117261.	2.3	4
47	Molecular dynamics study of hydrogen bond in peptide membrane at 150-300 K. <i>Journal of Molecular Liquids</i> , 2022, 349, 118165.	2.3	4
48	Statistical and energetic analysis of hydrogen bonds in short and long peptide nanotapes/nanofibers using molecular dynamics simulations. <i>Journal of Molecular Liquids</i> , 2022, 359, 119308.	2.3	4
49	Robust Entanglement Generation in Lithium Ions Mediated by Graphene Quantum Dots Interaction. <i>Journal of Physical Chemistry A</i> , 2019, 123, 1790-1795.	1.1	3
50	EVEN AND ODD DISPLACED NUMBER STATE. <i>Modern Physics Letters B</i> , 2005, 19, 1347-1360.	1.0	2
51	Molecular dynamic simulations, GIAO-NMR and TD-DFT spectroscopy analyze for zwitterionic isoleucine ( $ILE_N$ ), in water solution. <i>Journal of Computational Chemistry</i> , 2021, 42, 344-357.		
52	SCATTERING OF ATOMS BY LIGHT: MEASURING THE QUANTUM STATE OF THE FIELD IN A CAVITY. <i>International Journal of Modern Physics B</i> , 2006, 20, 325-339.	1.0	1
53	GIAO-NMR spectroscopy of the xanthine structures in water solution using S-MC/QM methodology: an evaluation of the DFT-functionals efficiency. <i>Journal of Molecular Liquids</i> , 2021, , 117955.	2.3	1
54	INTERACTION OF A TWO-LEVEL ATOM WITH A SQUEEZED DISPLACED NUMBER STATE. <i>International Journal of Modern Physics B</i> , 2007, 21, 2723-2733.	1.0	0

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55	Matemática básica aplicada ao ensino de física: relação entre competências e habilidades técnicas necessárias para a resolução de problemas de física segundo o Inep. Ensino E Tecnologia Em Revista, 2018, 2, 3.	0.0	0