## Irina Moreira

## List of Publications by Year in descending order

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279487 182168 2,826 85 23 51 h-index citations g-index papers 95 95 95 4053 docs citations times ranked citing authors all docs

#	Article	IF	CITATIONS
1	Hot spots-A review of the protein-protein interface determinant amino-acid residues. Proteins: Structure, Function and Bioinformatics, 2007, 68, 803-812.	1.5	639
2	Allosteric communication between protomers of dopamine class A GPCR dimers modulates activation. Nature Chemical Biology, 2009, 5, 688-695.	3.9	323
3	Computational alanine scanning mutagenesis—An improved methodological approach. Journal of Computational Chemistry, 2007, 28, 644-654.	1.5	230
4	Protein–protein docking dealing with the unknown. Journal of Computational Chemistry, 2010, 31, 317-342.	1.5	100
5	Identification of a small-molecule inhibitor of the PICK1 PDZ domain that inhibits hippocampal LTP and LTD. Proceedings of the National Academy of Sciences of the United States of America, 2010, 107, 413-418.	3.3	100
6	Structural features of the G-protein/GPCR interactions. Biochimica Et Biophysica Acta - General Subjects, 2014, 1840, 16-33.	1.1	100
7	Performance of HADDOCK and a simple contact-based protein–ligand binding affinity predictor in the D3R Grand Challenge 2. Journal of Computer-Aided Molecular Design, 2018, 32, 175-185.	1.3	97
8	Vascular Endothelial Growth Factor (VEGF) Inhibition - A Critical Review. Anti-Cancer Agents in Medicinal Chemistry, 2007, 7, 223-245.	0.9	90
9	Membrane proteins structures: A review on computational modeling tools. Biochimica Et Biophysica Acta - Biomembranes, 2017, 1859, 2021-2039.	1.4	87
10	SpotOn: High Accuracy Identification of Protein-Protein Interface Hot-Spots. Scientific Reports, 2017, 7, 8007.	1.6	77
11	Computational Alanine Scanning Mutagenesis: MM-PBSA vs Tl. Journal of Chemical Theory and Computation, 2013, 9, 1311-1319.	2.3	67
12	Unraveling the Importance of Proteinâ^Protein Interaction:Â Application of a Computational Alanine-Scanning Mutagenesis to the Study of the IgG1 Streptococcal Protein G (C2 Fragment) Complex. Journal of Physical Chemistry B, 2006, 110, 10962-10969.	1.2	60
13	A Machine Learning Approach for Hot-Spot Detection at Protein-Protein Interfaces. International Journal of Molecular Sciences, 2016, 17, 1215.	1.8	46
14	Evolution of Drug Resistance: Insight on TEM & Drug Resistance: Insight on	1.1	44
15	The Central Role of Non-Structural Protein 1 (NS1) in Influenza Biology and Infection. International Journal of Molecular Sciences, 2020, 21, 1511.	1.8	39
16	Unravelling Hot Spots: a comprehensive computational mutagenesis study. Theoretical Chemistry Accounts, 2006, 117, 99-113.	0.5	35
17	Understanding the importance of the aromatic amino-acid residues as hot-spots. Biochimica Et Biophysica Acta - Proteins and Proteomics, 2013, 1834, 404-414.	1.1	34
18	Solvent Accessible Surface Area-Based Hot-Spot Detection Methods for Protein–Protein and Protein–Nucleic Acid Interfaces. Journal of Chemical Information and Modeling, 2015, 55, 1077-1086.	2.5	33

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19	Computational Alanine Scanning Mutagenesis—An Improved Methodological Approach for Protein–DNA Complexes. Journal of Chemical Theory and Computation, 2013, 9, 4243-4256.	2.3	32
20	Hot Spot Occlusion from Bulk Water:Â a Comprehensive Study of the Complex between the Lysozyme HEL and the Antibody FVD1.3. Journal of Physical Chemistry B, 2007, 111, 2697-2706.	1.2	31
21	Structure–activity relationships of a small-molecule inhibitor of the PDZ domain of PICK1. Organic and Biomolecular Chemistry, 2010, 8, 4281.	1.5	31
22	Accuracy of the numerical solution of the Poisson–Boltzmann equation. Computational and Theoretical Chemistry, 2005, 729, 11-18.	1.5	29
23	A Complete Assessment of Dopamine Receptor-Ligand Interactions through Computational Methods. Molecules, 2019, 24, 1196.	1.7	23
24	Solventâ€accessible surface area: How well can be applied to hotâ€spot detection?. Proteins: Structure, Function and Bioinformatics, 2014, 82, 479-490.	1.5	22
25	General AMBER Force Field Parameters for Diphenyl Diselenides and Diphenyl Ditellurides. Journal of Physical Chemistry A, 2016, 120, 4389-4400.	1.1	22
26	Hot spot computational identification: Application to the complex formed between the hen egg white lysozyme (HEL) and the antibody HyHEL-10. International Journal of Quantum Chemistry, 2007, 107, 299-310.	1.0	21
27	Protein–protein recognition: a computational mutagenesis study of the MDM2–P53 complex. Theoretical Chemistry Accounts, 2008, 120, 533-542.	0.5	21
28	Detailed microscopic study of the full zipA:FtsZ interface. Proteins: Structure, Function and Bioinformatics, 2006, 63, 811-821.	1.5	19
29	Understanding the Differential Selectivity of Arrestins toward the Phosphorylation State of the Receptor. ACS Chemical Neuroscience, 2016, 7, 1212-1224.	1.7	18
30	Prediction and Targeting of Interaction Interfaces in G-protein Coupled Receptor Oligomers. Current Topics in Medicinal Chemistry, 2018, 18, 714-746.	1.0	18
31	In Silico Studies Targeting G-protein Coupled Receptors for Drug Research Against Parkinson's Disease. Current Neuropharmacology, 2018, 16, 786-848.	1.4	18
32	SARS-CoV-2 Membrane Protein: From Genomic Data to Structural New Insights. International Journal of Molecular Sciences, 2022, 23, 2986.	1.8	15
33	Insights into the structural determinants for selective inhibition of nitric oxide synthase isoforms. Journal of Molecular Modeling, 2013, 19, 1537-1551.	0.8	14
34	A new scoring function for protein–protein docking that identifies native structures with unprecedented accuracy. Physical Chemistry Chemical Physics, 2015, 17, 2378-2387.	1.3	14
35	The Role of Water Occlusion for the Definition of a Protein Binding Hot-Spot. Current Topics in Medicinal Chemistry, 2015, 15, 2068-2079.	1.0	14
36	CompASM: an Amber-VMD alanine scanning mutagenesis plug-in. Theoretical Chemistry Accounts, 2012, 131, 1.	0.5	13

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37	Theoretical studies on the binding of rhenium(I) complexes to inducible nitric oxide synthase. Journal of Molecular Graphics and Modelling, 2013, 45, 13-25.	1.3	13
38	Prediction and targeting of GPCR oligomer interfaces. Progress in Molecular Biology and Translational Science, 2020, 169, 105-149.	0.9	13
39	Network biology and artificial intelligence drive the understanding of the multidrug resistance phenotype in cancer. Drug Resistance Updates, 2022, 60, 100811.	6.5	13
40	New designs for MRI contrast agents. Journal of Computer-Aided Molecular Design, 2003, 17, 463-473.	1.3	12
41	Backbone Importance for Proteinâ^'Protein Binding. Journal of Chemical Theory and Computation, 2007, 3, 885-893.	2.3	12
42	SPOTONE: Hot Spots on Protein Complexes with Extremely Randomized Trees via Sequence-Only Features. International Journal of Molecular Sciences, 2020, 21, 7281.	1.8	12
43	Are hot-spots occluded from water?. Journal of Biomolecular Structure and Dynamics, 2014, 32, 186-197.	2.0	11
44	An overview of dataâ€driven HADDOCK strategies in CAPRI rounds 38â€45. Proteins: Structure, Function and Bioinformatics, 2020, 88, 1029-1036.	1.5	11
45	Computational Approaches in Antibody-drug Conjugate Optimization for Targeted Cancer Therapy. Current Topics in Medicinal Chemistry, 2018, 18, 1091-1109.	1.0	11
46	Integrated in Silico and Experimental Approach towards the Design of a Novel Recombinant Protein Containing an Anti-HER2 scFv. International Journal of Molecular Sciences, 2021, 22, 3547.	1.8	10
47	In Silico End-to-End Protein–Ligand Interaction Characterization Pipeline: The Case of SARS-CoV-2. ACS Synthetic Biology, 2021, 10, 3209-3235.	1.9	9
48	The Evolutionary Portrait of Metazoan NAD Salvage. PLoS ONE, 2013, 8, e64674.	1.1	8
49	Re(I) and Tc(I) Complexes for Targeting Nitric Oxide Synthase: Influence of the Chelator in the Affinity for the Enzyme. Chemical Biology and Drug Design, 2015, 86, 1072-1086.	1.5	8
50	Understanding the Binding Specificity of G-Protein Coupled Receptors toward G-Proteins and Arrestins: Application to the Dopamine Receptor Family. Journal of Chemical Information and Modeling, 2020, 60, 3969-3984.	2.5	8
51	Ligand-Induced Structural Changes in TEM-1 Probed by Molecular Dynamics and Relative Binding Free Energy Calculations. Journal of Chemical Information and Modeling, 2013, 53, 2648-2658.	2.5	7
52	Extending the applicability of the O-ring theory to protein–DNA complexes. Computational Biology and Chemistry, 2013, 44, 31-39.	1.1	7
53	Computational studies of G protein-coupled receptor complexes: Structure and dynamics. Methods in Cell Biology, 2017, 142, 205-245.	0.5	7
54	Computational modeling on mitochondrial channel nanotoxicity. Nano Today, 2020, 34, 100913.	6.2	7

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55	The Treasury Chest of Text Mining: Piling Available Resources for Powerful Biomedical Text Mining. Biochem, 2021, 1, 60-80.	0.5	7
56	Dynamical Rearrangement of Human Epidermal Growth Factor Receptor 2 upon Antibody Binding: Effects on the Dimerization. Biomolecules, 2019, 9, 706.	1.8	6
57	Computational Determination of the Relative Free Energy of Binding – Application to Alanine Scanning Mutagenesis. Challenges and Advances in Computational Chemistry and Physics, 2007, , 305-339.	0.6	6
58	Structural Determinants of a Typical Leucine-Rich Repeat Protein. Communications in Computational Physics, 2013, 13, 238-255.	0.7	5
59	An Overview of Antiretroviral Agents for Treating HIV Infection in Paediatric Population. Current Medicinal Chemistry, 2020, 27, 760-794.	1.2	5
60	Dynamic Structure of NGF and proNGF Complexed with p75NTR: Pro-Peptide Effect. Journal of Chemical Information and Modeling, 2014, 54, 2051-2067.	2.5	4
61	Structural Basis of Dopamine Receptor Activation. , 2010, , 47-73.		4
62	SicknessMiner: a deep-learning-driven text-mining tool to abridge disease-disease associations. BMC Bioinformatics, 2021, 22, 482.	1.2	4
63	Decoding Partner Specificity of Opioid Receptor Family. Frontiers in Molecular Biosciences, 2021, 8, 715215.	1.6	3
64	Aberrant hippocampal transmission and behavior in mice with a stargazin mutation linked to intellectual disability. Molecular Psychiatry, 2022, 27, 2457-2469.	4.1	3
65	Computer-Aided Drug Design Approaches to Study Key Therapeutic Targets in Alzheimer's Disease. Neuromethods, 2018, , 61-106.	0.2	2
66	MENSAdb: a thorough structural analysis of membrane protein dimers. Database: the Journal of Biological Databases and Curation, 2021, 2021, .	1.4	2
67	Predicting Hot Spots Using a Deep Neural Network Approach. Methods in Molecular Biology, 2021, 2190, 267-288.	0.4	2
68	Using machineâ€learningâ€driven approaches to boost hotâ€spot's knowledge. Wiley Interdisciplinary Reviews: Computational Molecular Science, 2022, 12, .	6.2	2
69	Discovery of Virus-Host interactions using bioinformatic tools. Methods in Cell Biology, 2022, , .	0.5	2
70	Class A and C GPCR dimers in neurodegenerative diseases. Current Neuropharmacology, 2022, 20, .	1.4	2
71	Modulation of Protein-Protein Interactions for the Development of Effective Therapeutics - From a Joint Perspective of Experiment and Computation. Current Topics in Medicinal Chemistry, 2018, 18, 645-646.	1.0	1
72	Structural Characterization of Membrane Protein Dimers. Methods in Molecular Biology, 2019, 1958, 403-436.	0.4	1

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73	CompASM: an Amber-VMD alanine scanning mutagenesis plug-in. Highlights in Theoretical Chemistry, 2014, , 81-87.	0.0	1
74	Are Hot-Spots Occluded from Water?. Biophysical Journal, 2013, 104, 505a.	0.2	0
75	Hot-Spots Detection - Application to a Variety of Different Protein-Based Systems. Biophysical Journal, 2014, 106, 697a.	0.2	O
76	Spoton: A Machine-Learning Approach for Hot-Spot Determination. Biophysical Journal, 2017, 112, 45a.	0.2	0
77	Targeting GPCRs Via Multi-Platforms Arrays and Al. , 2021, , .		O
78	Guardians of the Cell: State-of-the-Art of Membrane Proteins from a Computational Point-of-View. Methods in Molecular Biology, 2021, 2315, 3-28.	0.4	0
79	Computational proteomics: from methodological developments to biological applications. , 2011, , 181-220.		O
80	<strong>Solvent Accessible Surface Area Hot-Spot Detection Method</strong> ., 0, , .		0
81	Co-evolution importance on binding Hot-Spot prediction methods. , 0, , .		O
82	$<\!$ strong>Creating a valid $<\!$ m>in silico $<\!$ /em> Dopamine D2-receptor model for small molecular docking studies $<\!$ /strong>. , 0, , .		0
83	<code><strong>Structural</strong></code> and dynamic understanding of the ghrelin receptor high constitutive activity <code>.,0,,.</code>		0
84	Alpha-helical and beta-sheet membrane- membrane protein dimers: centralizing information. , 0, , .		0
85	Using big-data to understand the protein interface landscape. , 0, , .		0