## **Emil Alexov**

## List of Publications by Year in descending order

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Version: 2024-02-01

|          |                | 53794        | 6 | 2596           |
|----------|----------------|--------------|---|----------------|
| 136      | 7,436          | 45           |   | 80             |
| papers   | citations      | h-index      |   | g-index        |
|          |                |              |   |                |
|          |                |              |   |                |
|          |                |              |   |                |
| 140      | 140            | 140          |   | 7923           |
| all docs | docs citations | times ranked |   | citing authors |

| #  | Article  | IF  | CITATIONS |
|----|--|-----|-----------|
| 1  | Rapid grid-based construction of the molecular surface and the use of induced surface charge to calculate reaction field energies: Applications to the molecular systems and geometric objects. Journal of Computational Chemistry, 2002, 23, 128-137. | 3.3 | 631       |
| 2  | On the Dielectric "Constant―of Proteins: Smooth Dielectric Function for Macromolecular Modeling and Its Implementation in DelPhi. Journal of Chemical Theory and Computation, 2013, 9, 2126-2136.  | 5.3 | 446       |
| 3  | DelPhi: a comprehensive suite for DelPhi software and associated resources. BMC Biophysics, 2012, 5, 9.  | 4.4 | 315       |
| 4  | Using multiple structure alignments, fast model building, and energetic analysis in fold recognition and homology modeling. Proteins: Structure, Function and Bioinformatics, 2003, 53, 430-435.   | 2.6 | 290       |
| 5  | Molecular Mechanisms of Disease-Causing Missense Mutations. Journal of Molecular Biology, 2013, 425, 3919-3936.  | 4.2 | 242       |
| 6  | Progress in the prediction of p <i>K</i> <sub>a</sub> values in proteins. Proteins: Structure, Function and Bioinformatics, 2011, 79, 3260-3275.   | 2.6 | 229       |
| 7  | On the pHâ€optimum of activity and stability of proteins. Proteins: Structure, Function and Bioinformatics, 2010, 78, 2699-2706.   | 2.6 | 228       |
| 8  | Structural and physico-chemical effects of disease and non-disease nsSNPs on proteins. Current Opinion in Structural Biology, 2015, 32, 18-24.   | 5.7 | 165       |
| 9  | Protonation and pK changes in protein–ligand binding. Quarterly Reviews of Biophysics, 2013, 46, 181-209.  | 5.7 | 151       |
| 10 | A mutation in a ganglioside biosynthetic enzyme, ST3GAL5, results in salt & pepper syndrome, a neurocutaneous disorder with altered glycolipid and glycoprotein glycosylation. Human Molecular Genetics, 2014, 23, 418-433.                            | 2.9 | 144       |
| 11 | On the role of electrostatics in protein–protein interactions. Physical Biology, 2011, 8, 035001.  | 1.8 | 139       |
| 12 | Calculation of pKas in RNA: On the Structural Origins and Functional Roles of Protonated Nucleotides. Journal of Molecular Biology, 2007, 366, 1475-1496.  | 4.2 | 137       |
| 13 | On Human Disease-Causing Amino Acid Variants: Statistical Study of Sequence and Structural Patterns. Human Mutation, 2015, 36, 524-534.  | 2.5 | 122       |
| 14 | Modeling Effects of Human Single Nucleotide Polymorphisms on Protein-Protein Interactions.<br>Biophysical Journal, 2009, 96, 2178-2188.  | 0.5 | 117       |
| 15 | Analyzing Effects of Naturally Occurring Missense Mutations. Computational and Mathematical Methods in Medicine, 2012, 2012, 1-15.   | 1.3 | 111       |
| 16 | p <i>K</i> a predictions for proteins, <scp>RNA</scp> s, and <scp>DNA</scp> s with the Gaussian dielectric function using DelPhi p <i>K</i> a. Proteins: Structure, Function and Bioinformatics, 2015, 83, 2186-2197.                                  | 2.6 | 104       |
| 17 | Predicting the Impact of Missense Mutations on Protein–Protein Binding Affinity. Journal of Chemical Theory and Computation, 2014, 10, 1770-1780.  | 5.3 | 102       |
| 18 | PKAD: a database of experimentally measured pKa values of ionizable groups in proteins. Database: the Journal of Biological Databases and Curation, 2019, 2019, .  | 3.0 | 102       |

| #  | Article   | lF  | CITATIONS |
|----|---|-----|-----------|
| 19 | Cancer Missense Mutations Alter Binding Properties of Proteins and Their Interaction Networks. PLoS ONE, 2013, 8, e66273.   | 2.5 | 102       |
| 20 | DelPhiPKa web server: predicting p < i > K < / i > a of proteins, RNAs and DNAs. Bioinformatics, 2016, 32, 614-615.   | 4.1 | 98        |
| 21 | Poisson-Boltzmann Calculations of Nonspecific Salt Effects on Protein-Protein Binding Free Energies.<br>Biophysical Journal, 2007, 92, 1891-1899.   | 0.5 | 96        |
| 22 | Predicting Binding Free Energy Change Caused by Point Mutations with Knowledge-Modified MM/PBSA Method. PLoS Computational Biology, 2015, 11, e1004276.   | 3.2 | 94        |
| 23 | Identification and characterization of a missense mutation in the O-linked $\hat{l}^2$ -N-acetylglucosamine (O-GlcNAc) transferase gene that segregates with X-linked intellectual disability. Journal of Biological Chemistry, 2017, 292, 8948-8963. | 3.4 | 87        |
| 24 | Computational analysis of missense mutations causing Snyder-Robinson syndrome. Human Mutation, 2010, 31, 1043-1049.   | 2.5 | 85        |
| 25 | Predicting folding free energy changes upon single point mutations. Bioinformatics, 2012, 28, 664-671.  | 4.1 | 85        |
| 26 | On the Role of Structural Information in Remote Homology Detection and Sequence Alignment: New Methods Using Hybrid Sequence Profiles. Journal of Molecular Biology, 2003, 334, 1043-1062.  | 4.2 | 84        |
| 27 | An X-linked channelopathy with cardiomegaly due to a CLIC2 mutation enhancing ryanodine receptor channel activity. Human Molecular Genetics, 2012, 21, 4497-4507.   | 2.9 | 84        |
| 28 | Electrostatic Properties of Protein-Protein Complexes. Biophysical Journal, 2006, 91, 1724-1736.  | 0.5 | 81        |
| 29 | A missense mutation in <i>CLIC2</i> associated with intellectual disability is predicted by <i>in silico</i> modeling to affect protein stability and dynamics. Proteins: Structure, Function and Bioinformatics, 2011, 79, 2444-2454.                | 2.6 | 79        |
| 30 | The Role of Protonation States in Ligand-Receptor Recognition and Binding. Current Pharmaceutical Design, 2013, 19, 4182-4190.  | 1.9 | 77        |
| 31 | Numerical calculations of the pH of maximal protein stability. FEBS Journal, 2003, 271, 173-185.  | 0.2 | 76        |
| 32 | SAAFEC: Predicting the Effect of Single Point Mutations on Protein Folding Free Energy Using a Knowledge-Modified MM/PBSA Approach. International Journal of Molecular Sciences, 2016, 17, 512.   | 4.1 | 72        |
| 33 | SAAMBE-3D: Predicting Effect of Mutations on Protein–Protein Interactions. International Journal of Molecular Sciences, 2020, 21, 2563.   | 4.1 | 66        |
| 34 | Characterizing a Partially Folded Intermediate of the Villin Headpiece Domain Under Non-denaturing Conditions: Contribution of His41 to the pH-dependent Stability of the N-terminal Subdomain. Journal of Molecular Biology, 2006, 355, 1078-1094.   | 4.2 | 63        |
| 35 | SAAFEC-SEQ: A Sequence-Based Method for Predicting the Effect of Single Point Mutations on Protein Thermodynamic Stability. International Journal of Molecular Sciences, 2021, 22, 606.   | 4.1 | 63        |
| 36 | Role of the protein side-chain fluctuations on the strength of pair-wise electrostatic interactions: Comparing experimental with computed pKas. Proteins: Structure, Function and Bioinformatics, 2002, 50, 94-103.                                   | 2.6 | 62        |

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|----|---|------|-----------|
| 37 | SAAMBE: Webserver to Predict the Charge of Binding Free Energy Caused by Amino Acids Mutations. International Journal of Molecular Sciences, 2016, 17, 547.   | 4.1  | 59        |
| 38 | Optimization of Electrostatic Interactions in Protein-Protein Complexes. Biophysical Journal, 2007, 93, 3340-3352.  | 0.5  | 55        |
| 39 | Predicting protein–DNA binding free energy change upon missense mutations using modified MM/PBSA approach: SAMPDI webserver. Bioinformatics, 2018, 34, 779-786.   | 4.1  | 55        |
| 40 | In Silico and In Vitro Investigations of the Mutability of Disease-Causing Missense Mutation Sites in Spermine Synthase. PLoS ONE, 2011, 6, e20373.   | 2.5  | 53        |
| 41 | DelPhi Web Server: A Comprehensive Online Suite for Electrostatic Calculations of Biological Macromolecules and Their Complexes. Communications in Computational Physics, 2013, 13, 269-284.  | 1.7  | 52        |
| 42 | Binding Analysis of Methyl-CpG Binding Domain of MeCP2 and Rett Syndrome Mutations. ACS Chemical Biology, 2016, 11, 2706-2715.  | 3.4  | 50        |
| 43 | DelPhiPKa: Including salt in the calculations and enabling polar residues to titrate. Proteins: Structure, Function and Bioinformatics, 2018, 86, 1277-1283.  | 2.6  | 50        |
| 44 | On the electrostatic component of protein-protein binding free energy. PMC Biophysics, 2008, 1, 2.  | 2.3  | 49        |
| 45 | <i>In silico</i> modeling of pHâ€optimum of protein–protein binding. Proteins: Structure, Function and Bioinformatics, 2011, 79, 925-936.   | 2.6  | 49        |
| 46 | Highly efficient and exact method for parallelization of gridâ€based algorithms and its implementation in DelPhi. Journal of Computational Chemistry, 2012, 33, 1960-1966.  | 3.3  | 49        |
| 47 | Calculating proton uptake/release and binding free energy taking into account ionization and conformation changes induced by protein-inhibitor association: Application to plasmepsin, cathepsin D and endothiapepsin-pepstatin complexes. Proteins: Structure, Function and Bioinformatics, 2004, 56, 572-584. | 2.6  | 48        |
| 48 | <i>ZC4H2</i> , an XLID gene, is required for the generation of a specific subset of CNS interneurons. Human Molecular Genetics, 2015, 24, 4848-4861.  | 2.9  | 48        |
| 49 | DelPhiForce, a tool for electrostatic force calculations: Applications to macromolecular binding. Journal of Computational Chemistry, 2017, 38, 584-593.  | 3.3  | 48        |
| 50 | Between Algorithm and Model: Different Molecular Surface Definitions for the Poisson-Boltzmann Based Electrostatic Characterization of Biomolecules in Solution. Communications in Computational Physics, 2013, 13, 61-89.  | 1.7  | 46        |
| 51 | Investigating the linkage between disease-causing amino acid variants and their effect on protein stability and binding. Proteins: Structure, Function and Bioinformatics, 2016, 84, 232-239.   | 2.6  | 46        |
| 52 | Cytoplasmic dynein binding, run length, and velocity are guided by long-range electrostatic interactions. Scientific Reports, 2016, 6, 31523.   | 3.3  | 44        |
| 53 | DelPhiForce web server: electrostatic forces and energy calculations and visualization.<br>Bioinformatics, 2017, 33, 3661-3663.   | 4.1  | 44        |
| 54 | PROTCOM: searchable database of protein complexes enhanced with domain-domain structures. Nucleic Acids Research, 2007, 35, D575-D579.  | 14.5 | 43        |

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|----|--|-------------|-----------|
| 55 | DelPhi web server v2: incorporating atomic-style geometrical figures into the computational protocol. Bioinformatics, 2012, 28, 1655-1657.   | 4.1         | 43        |
| 56 | Homology-based modeling of 3D structures of protein–protein complexes using alignments of modified sequence profiles. International Journal of Biological Macromolecules, 2008, 43, 198-208.                   | <b>7.</b> 5 | 39        |
| 57 | Structural assessment of the effects of Amino Acid Substitutions on protein stability and protein protein interaction. International Journal of Computational Biology and Drug Design, 2010, 3, 334.           | 0.3         | 39        |
| 58 | DelPhi Suite: New Developments and Review of Functionalities. Journal of Computational Chemistry, 2019, 40, 2502-2508.   | 3.3         | 38        |
| 59 | Mutations in FAM50A suggest that Armfield XLID syndrome is a spliceosomopathy. Nature Communications, 2020, 11, 3698.  | 12.8        | 38        |
| 60 | Developing hybrid approaches to predict p <i>K</i> <sub>a</sub> values of ionizable groups. Proteins: Structure, Function and Bioinformatics, 2011, 79, 3389-3399.   | 2.6         | 36        |
| 61 | On the modeling of polar component of solvation energy using smooth Gaussian-based dielectric function. Journal of Theoretical and Computational Chemistry, 2014, 13, 1440002.                                 | 1.8         | 36        |
| 62 | On the energy components governing molecular recognition in the framework of continuum approaches. Frontiers in Molecular Biosciences, 2015, 2, 5.   | 3.5         | 36        |
| 63 | A Y328C missense mutation in spermine synthase causes a mild form of Snyder–Robinson syndrome.<br>Human Molecular Genetics, 2013, 22, 3789-3797.   | 2.9         | 31        |
| 64 | Computational and Experimental Approaches to Reveal the Effects of Single Nucleotide Polymorphisms with Respect to Disease Diagnostics. International Journal of Molecular Sciences, 2014, 15, 9670-9717.      | 4.1         | 31        |
| 65 | Impact of Rett Syndrome Mutations on MeCP2 MBD Stability. Biochemistry, 2015, 54, 6357-6368.   | 2.5         | 30        |
| 66 | Multiscale method for modeling binding phenomena involving large objects: application to kinesin motor domains motion along microtubules. Scientific Reports, 2016, 6, 23249.                                  | <b>3.</b> 3 | 30        |
| 67 | Treating ion distribution with Gaussian-based smooth dielectric function in DelPhi. Journal of Computational Chemistry, 2017, 38, 1974-1979.   | 3.3         | 30        |
| 68 | Forces and Disease: Electrostatic force differences caused by mutations in kinesin motor domains can distinguish between disease-causing and non-disease-causing mutations. Scientific Reports, 2017, 7, 8237. | 3.3         | 30        |
| 69 | Progress in developing Poisson-Boltzmann equation solvers. Computational and Mathematical Biophysics, 2013, 1, 42-62.  | 1.1         | 29        |
| 70 | Revealing the Effects of Missense Mutations Causing Snyder-Robinson Syndrome on the Stability and Dimerization of Spermine Synthase. International Journal of Molecular Sciences, 2016, 17, 77.                | 4.1         | 29        |
| 71 | Predicting Nonspecific Ion Binding Using DelPhi. Biophysical Journal, 2012, 102, 2885-2893.  | 0.5         | 27        |
| 72 | Continuous development of schemes for parallel computing of the electrostatics in biological systems: Implementation in DelPhi. Journal of Computational Chemistry, 2013, 34, 1949-1960.                       | 3.3         | 26        |

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|----|---|-----|-----------|
| 73 | Calculating the Protonation States of Proteins and Small Molecules: Implications to Ligand-Receptor Interactions. Current Computer-Aided Drug Design, 2008, 4, 169-179.   | 1.2 | 24        |
| 74 | Using DelPhi Capabilities to Mimic Protein's Conformational Reorganization with Amino Acid Specific Dielectric Constants. Communications in Computational Physics, 2013, 13, 13-30.   | 1.7 | 23        |
| 75 | Modeling Electrostatic Force in Protein-Protein Recognition. Frontiers in Molecular Biosciences, 2019, 6, 94.   | 3.5 | 22        |
| 76 | Predicting 3D structures of transient protein–protein complexes by homology. Biochimica Et Biophysica Acta - Proteins and Proteomics, 2006, 1764, 1498-1511.  | 2.3 | 21        |
| 77 | A Novel p.Leu(381)Phe Mutation in Presenilin 1 is Associated with Very Early Onset and Unusually Fast Progressing Dementia as well as Lysosomal Inclusions Typically Seen in Kufs Disease. Journal of Alzheimer's Disease, 2014, 39, 23-27. | 2.6 | 21        |
| 78 | Mutations in the KDM5C ARID Domain and Their Plausible Association with Syndromic Claes-Jensen-Type Disease. International Journal of Molecular Sciences, 2015, 16, 27270-27287.  | 4.1 | 21        |
| 79 | E-hooks provide guidance and a soft landing for the microtubule binding domain of dynein. Scientific Reports, 2018, 8, 13266.   | 3.3 | 21        |
| 80 | In Silico Investigation of pH-Dependence of Prolactin and Human Growth Hormone Binding to Human Prolactin Receptor. Communications in Computational Physics, 2013, 13, 207-222.   | 1.7 | 20        |
| 81 | Rational Design of Small-Molecule Stabilizers of Spermine Synthase Dimer by Virtual Screening and Free Energy-Based Approach. PLoS ONE, 2014, 9, e110884.   | 2.5 | 20        |
| 82 | Computational investigation of proton transfer, pKa shifts and pH-optimum of protein-DNA and protein-RNA complexes. Proteins: Structure, Function and Bioinformatics, 2017, 85, 282-295.  | 2.6 | 20        |
| 83 | Key apoptotic genes APAF1 and CASP9 implicated in recurrent folate-resistant neural tube defects. European Journal of Human Genetics, 2018, 26, 420-427.  | 2.8 | 20        |
| 84 | Structural Perspective on Revealing and Altering Molecular Functions of Genetic Variants Linked with Diseases. International Journal of Molecular Sciences, 2019, 20, 548.  | 4.1 | 20        |
| 85 | Enhancing Human Spermine Synthase Activity by Engineered Mutations. PLoS Computational Biology, 2013, 9, e1002924.  | 3.2 | 19        |
| 86 | A rational free energy-based approach to understanding and targeting disease-causing missense mutations. Journal of the American Medical Informatics Association: JAMIA, 2013, 20, 643-651.   | 4.4 | 18        |
| 87 | Structural and functional consequences of single amino acid substitutions in the pyrimidine base binding pocket of Escherichia coli CMP kinase. FEBS Journal, 2007, 274, 3363-3373.   | 4.7 | 17        |
| 88 | Understanding Molecular Effects of Naturally Occurring Genetic Differences. Journal of Molecular Biology, 2013, 425, 3911-3913.   | 4.2 | 17        |
| 89 | Modeling the electrostatic potential of asymmetric lipopolysaccharide membranes: The MEMPOT algorithm implemented in DelPhi. Journal of Computational Chemistry, 2014, 35, 1418-1429.   | 3.3 | 17        |
| 90 | Electrostatic component of binding energy: Interpreting predictions from poisson–boltzmann equation and modeling protocols. Journal of Computational Chemistry, 2016, 37, 2495-2507.  | 3.3 | 17        |

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|-----|---|-------------|-----------|
| 91  | Gaussian-Based Smooth Dielectric Function: A Surface-Free Approach for Modeling Macromolecular Binding in Solvents. Frontiers in Molecular Biosciences, 2018, 5, 25.  | 3.5         | 17        |
| 92  | DFMD: Fast and Effective DelPhiForce Steered Molecular Dynamics Approach to Model Ligand Approach Toward a Receptor: Application to Spermine Synthase Enzyme. Frontiers in Molecular Biosciences, 2019, 6, 74.                        | <b>3.</b> 5 | 17        |
| 93  | SAAMBE-SEQ: a sequence-based method for predicting mutation effect on protein–protein binding affinity. Bioinformatics, 2021, 37, 992-999.  | 4.1         | 17        |
| 94  | ProBLM Web Server: Protein and Membrane Placement and Orientation Package. Computational and Mathematical Methods in Medicine, 2014, 2014, 1-7.   | 1.3         | 16        |
| 95  | A New DelPhi Feature for Modeling Electrostatic Potential around Proteins: Role of Bound Ions and Implications for Zeta-Potential. Langmuir, 2017, 33, 2283-2295.   | 3.5         | 16        |
| 96  | Three additional patients with EED-associated overgrowth: potential mutation hotspots identified?. Journal of Human Genetics, 2019, 64, 561-572.  | 2.3         | 16        |
| 97  | BION web server: predicting non-specifically bound surface ions. Bioinformatics, 2013, 29, 805-806.   | 4.1         | 15        |
| 98  | Reproducing the Ensemble Average Polar Solvation Energy of a Protein from a Single Structure: Gaussian-Based Smooth Dielectric Function for Macromolecular Modeling. Journal of Chemical Theory and Computation, 2018, 14, 1020-1032. | 5.3         | 15        |
| 99  | A super-Gaussian Poisson–Boltzmann model for electrostatic free energy calculation: smooth dielectric distribution for protein cavities and in both water and vacuum states. Journal of Mathematical Biology, 2019, 79, 631-672.      | 1.9         | 15        |
| 100 | Chronic Beryllium Disease: Revealing the Role of Beryllium Ion and Small Peptides Binding to HLA-DP2. PLoS ONE, 2014, 9, e111604.   | 2.5         | 14        |
| 101 | Statistical investigation of surface bound ions and further development of <scp>BION</scp> server to include p <scp>H</scp> and salt dependence. Journal of Computational Chemistry, 2015, 36, 2381-2393.                             | 3.3         | 14        |
| 102 | Structural, Dynamical, and Energetical Consequences of Rett Syndrome Mutation R133C in MeCP2. Computational and Mathematical Methods in Medicine, 2015, 2015, 1-9.  | 1.3         | 14        |
| 103 | On the electrostatic properties of homodimeric proteins. Journal of Theoretical and Computational Chemistry, 2014, 13, 1440007.   | 1.8         | 12        |
| 104 | Computational Investigation of the Missense Mutations in DHCR7 Gene Associated with Smith-Lemli-Opitz Syndrome. International Journal of Molecular Sciences, 2018, 19, 141.   | 4.1         | 11        |
| 105 | Editorial [ Protein-Protein Interactions Guest Editor: Emil Alexov ]. Current Pharmaceutical Biotechnology, 2008, 9, 55-56.   | 1.6         | 10        |
| 106 | Advances in Human Biology: Combining Genetics and Molecular Biophysics to Pave the Way for Personalized Diagnostics and Medicine. Advances in Biology, 2014, 2014, 1-16.  | 1.2         | 10        |
| 107 | Evaluation of performance of leading algorithms for variant pathogenicity predictions and designing a combinatory predictor method: application to Rett syndrome variants. PeerJ, 2019, 7, e8106.                                     | 2.0         | 10        |
| 108 | Ion binding to biological macromolecules. Asian Journal of Physics, 2014, 23, 735-744.  | 0.2         | 9         |

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|-----|---|-----|-----------|
| 109 | Protein–Protein Binding Free Energy Predictions with the MM/PBSA Approach Complemented with the Gaussian-Based Method for Entropy Estimation. ACS Omega, 2022, 7, 11057-11067.  | 3.5 | 9         |
| 110 | Capturing the Effects of Explicit Waters in Implicit Electrostatics Modeling: Qualitative Justification of Gaussian-Based Dielectric Models in DelPhi. Journal of Chemical Information and Modeling, 2020, 60, 2229-2246.                       | 5.4 | 8         |
| 111 | SAMPDI-3D: predicting the effects of protein and DNA mutations on protein–DNA interactions. Bioinformatics, 2021, 37, 3760-3765.  | 4.1 | 8         |
| 112 | Cofactors-loaded quaternary structure of lysine-specific demethylase 5C (KDM5C) protein: Computational model. Proteins: Structure, Function and Bioinformatics, 2016, 84, 1797-1809.  | 2.6 | 7         |
| 113 | Cytoskeletal-like Filaments of Ca <sup>2+</sup> -Calmodulin-Dependent Protein Kinase II Are Formed in a Regulated and Zn <sup>2+</sup> -Dependent Manner. Biochemistry, 2017, 56, 2149-2160.  | 2.5 | 7         |
| 114 | An Ensemble Approach to Predict the Pathogenicity of Synonymous Variants. Genes, 2020, 11, 1102.  | 2.4 | 6         |
| 115 | On regularization of charge singularities in solving the Poisson-Boltzmann equation with a smooth solute-solvent boundary. Mathematical Biosciences and Engineering, 2021, 18, 1370-1405.   | 1.9 | 6         |
| 116 | Increased p53 signaling impairs neural differentiation in HUWE1-promoted intellectual disabilities. Cell Reports Medicine, 2021, 2, 100240.   | 6.5 | 5         |
| 117 | Modeling electrostatics in molecular biology: A tutorial of DelPhi and associated resources [Article v1.0]. Living Journal of Computational Molecular Science, 2019, $1, \dots$   | 6.4 | 5         |
| 118 | BION-2: Predicting Positions of Non-Specifically Bound Ions on Protein Surface by a Gaussian-Based Treatment of Electrostatics. International Journal of Molecular Sciences, 2021, 22, 272.   | 4.1 | 5         |
| 119 | Reproducing ensemble averaged electrostatics with Super-Gaussian-based smooth dielectric function: application to electrostatic component of binding energy of protein complexes. Communications in Information and Systems, 2019, 19, 405-423. | 0.5 | 5         |
| 120 | Predicting interacting and interfacial residues using continuous sequence segments. International Journal of Biological Macromolecules, 2007, 41, 615-623.  | 7.5 | 4         |
| 121 | Protein Nano-Object Integrator (ProNOI) for generating atomic style objects for molecular modeling. BMC Structural Biology, 2012, 12, 31.   | 2.3 | 4         |
| 122 | pH-Dependent Interactions of Apolipophorin-III with a Lipid Disk. Journal of Computational Biophysics and Chemistry, 2021, 20, 153-164.   | 1.7 | 4         |
| 123 | A regularization approach for solving the super-Gaussian Poisson-Boltzmann model with heterogeneous dielectric functions. Journal of Computational Physics, 2022, 464, 111340.  | 3.8 | 4         |
| 124 | The capricious electrostatic force: Revealing the signaling pathway in integrin $\hat{l}\pm 2$ -I domain. Journal of Theoretical and Computational Chemistry, 2018, 17, 1840001.  | 1.8 | 3         |
| 125 | Novel Genetic Markers for Early Detection of Elevated Breast Cancer Risk in Women. International Journal of Molecular Sciences, 2019, 20, 4828.   | 4.1 | 3         |
| 126 | In-silico analysis to identify the role of MEN1 missense mutations in breast cancer. Journal of Theoretical and Computational Chemistry, 2020, 19, 2041002.   | 1.8 | 3         |

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|-----|--|-----|-----------|
| 127 | Opioid Addiction and Opioid Receptor Dimerization: Structural Modeling of the OPRD1 and OPRM1<br>Heterodimer and Its Signaling Pathways. International Journal of Molecular Sciences, 2021, 22, 10290. | 4.1 | 3         |
| 128 | Modeling pKas of unfolded proteins to probe structural models of unfolded state. Journal of Theoretical and Computational Chemistry, 2019, 18, 1950020.  | 1.8 | 2         |
| 129 | A gridâ€based algorithm in conjunction with a gaussianâ€based model of atoms for describing molecular geometry. Journal of Computational Chemistry, 2019, 40, 1290-1304.                               | 3.3 | 2         |
| 130 | Computational chemistry methods to investigate the effects caused by DNA variants linked with disease. Journal of Theoretical and Computational Chemistry, 2020, 19, 1930001.                          | 1.8 | 2         |
| 131 | Ab-initio binding of barnase–barstar with DelPhiForce steered Molecular Dynamics (DFMD) approach.<br>Journal of Theoretical and Computational Chemistry, 2020, 19, 2050016.                            | 1.8 | 2         |
| 132 | Computational Investigation of the pH Dependence of Stability of Melanosome Proteins: Implication for Melanosome formation and Disease. International Journal of Molecular Sciences, 2021, 22, 8273.   | 4.1 | 2         |
| 133 | Navigating through Genomics Data to Deliver Testable Predictions. Human Mutation, 2015, 36, v-v.   | 2.5 | 1         |
| 134 | Processivity vs. Beating: Comparing Cytoplasmic and Axonemal Dynein Microtubule Binding Domain Association with Microtubule. International Journal of Molecular Sciences, 2019, 20, 1090.              | 4.1 | 1         |
| 135 | A Newton-like iterative method implemented in the DelPhi for solving the nonlinear Poisson-Boltzmann equation. Mathematical Biosciences and Engineering, 2020, 17, 6259-6277.                          | 1.9 | O         |
| 136 | pH-dependent interactions of Apolipophorin-III with a lipid disk. Journal of Theoretical and Computational Chemistry, 0, , 2042004.  | 1.8 | 0         |