

Shigenori Tanaka

List of Publications by Year in descending order

Source: <https://exaly.com/author-pdf/5582653/publications.pdf>

Version: 2024-02-01

147
papers

3,761
citations

94381

37
h-index

175177

52
g-index

162
all docs

162
docs citations

162
times ranked

1784
citing authors

#	ARTICLE	IF	CITATIONS
1	Electron-correlated fragment-molecular-orbital calculations for biomolecular and nano systems. <i>Physical Chemistry Chemical Physics</i> , 2014, 16, 10310-10344.	1.3	251
2	Molecular Interactions between Estrogen Receptor and Its Ligand Studied by the ab Initio Fragment Molecular Orbital Method. <i>Journal of Physical Chemistry B</i> , 2006, 110, 16102-16110.	1.2	118
3	Large scale FMO-MP2 calculations on a massively parallel-vector computer. <i>Chemical Physics Letters</i> , 2008, 457, 396-403.	1.2	113
4	Thermodynamics and Correlational Properties of Finite-Temperature Electron Liquids in the Singwi-Tosi-Land-Sjölander Approximation. <i>Journal of the Physical Society of Japan</i> , 1986, 55, 2278-2289.	0.7	112
5	Intra- and intermolecular interactions between cyclic-AMP receptor protein and DNA: Ab initio fragment molecular orbital study. <i>Journal of Computational Chemistry</i> , 2006, 27, 948-960.	1.5	107
6	A configuration analysis for fragment interaction. <i>Chemical Physics Letters</i> , 2005, 410, 247-253.	1.2	87
7	Fragment Molecular Orbital Based Interaction Analyses on COVID-19 Main Protease Inhibitor N3 Complex (PDB ID: 6LU7). <i>Journal of Chemical Information and Modeling</i> , 2020, 60, 3593-3602.	2.5	84
8	Higher-order correlated calculations based on fragment molecular orbital scheme. <i>Theoretical Chemistry Accounts</i> , 2011, 130, 515-530.	0.5	78
9	Generalized viscoelastic theory of the glass transition for strongly coupled, classical, one-component plasmas. <i>Physical Review Letters</i> , 1986, 56, 2815-2818.	2.9	75
10	Fragment interaction analysis based on local MP2. <i>Theoretical Chemistry Accounts</i> , 2007, 118, 937-945.	0.5	62
11	Development of the four-body corrected fragment molecular orbital (FMO4) method. <i>Chemical Physics Letters</i> , 2012, 523, 128-133.	1.2	56
12	Fragment molecular orbital calculations on large scale systems containing heavy metal atom. <i>Chemical Physics Letters</i> , 2006, 427, 159-165.	1.2	53
13	Theoretical analysis of binding specificity of influenza viral hemagglutinin to avian and human receptors based on the fragment molecular orbital method. <i>Computational Biology and Chemistry</i> , 2008, 32, 198-211.	1.1	52
14	Spin-dependent correlations and thermodynamic functions for electron liquids at arbitrary degeneracy and spin polarization. <i>Physical Review B</i> , 1989, 39, 1036-1051.	1.1	51
15	Acceleration of fragment molecular orbital calculations with Cholesky decomposition approach. <i>Chemical Physics Letters</i> , 2010, 490, 84-89.	1.2	51
16	Parametrized equation of state for electron liquids in the Singwi-Tosi-Land-Sjölander approximation. <i>Physical Review A</i> , 1985, 32, 1896-1899.	1.0	50
17	Possibility of Mutation Prediction of Influenza Hemagglutinin by Combination of Hemadsorption Experiment and Quantum Chemical Calculation for Antibody Binding. <i>Journal of Physical Chemistry B</i> , 2009, 113, 4991-4994.	1.2	49
18	Three- and four-body corrected fragment molecular orbital calculations with a novel subdividing fragmentation method applicable to structure-based drug design. <i>Journal of Molecular Graphics and Modelling</i> , 2013, 41, 31-42.	1.3	48

#	ARTICLE	IF	CITATIONS
19	Visualization analysis of inter-fragment interaction energies of CRPâ€“cAMPâ€“DNA complex based on the fragment molecular orbital method. <i>Biophysical Chemistry</i> , 2007, 130, 1-9.	1.5	47
20	Ab Initio Fragment Molecular Orbital Study of Molecular Interactions in Liganded Retinoid X Receptor: Specification of Residues Associated with Ligand Inducible Information Transmission. <i>Journal of Physical Chemistry B</i> , 2008, 112, 12081-12094.	1.2	47
21	Incorporation of solvation effects into the fragment molecular orbital calculations with the Poissonâ€“Boltzmann equation. <i>Chemical Physics Letters</i> , 2010, 500, 116-119.	1.2	47
22	Fragment Molecular Orbital Calculations with Implicit Solvent Based on the Poissonâ€“Boltzmann Equation: II. Protein and Its Ligand-Binding System Studies. <i>Journal of Physical Chemistry B</i> , 2019, 123, 957-973.	1.2	46
23	Effective Static Approximation: A Fast and Reliable Tool for Warm-Dense Matter Theory. <i>Physical Review Letters</i> , 2020, 125, 235001.	2.9	46
24	Large-scale FMO-MP3 calculations on the surface proteins of influenza virus, hemagglutinin (HA) and neuraminidase (NA). <i>Chemical Physics Letters</i> , 2010, 493, 346-352.	1.2	44
25	Dynamic theory of correlations in strongly coupled, classical one-component plasmas: Glass transition in the generalized viscoelastic formalism. <i>Physical Review A</i> , 1987, 35, 4743-4754.	1.0	43
26	DNA and Estrogen Receptor Interaction Revealed by Fragment Molecular Orbital Calculations. <i>Journal of Physical Chemistry B</i> , 2007, 111, 9621-9627.	1.2	43
27	AutoDock-GIST: Incorporating Thermodynamics of Active-Site Water into Scoring Function for Accurate Protein-Ligand Docking. <i>Molecules</i> , 2016, 21, 1604.	1.7	43
28	Application of the fragment molecular orbital method for determination of atomic charges on polypeptides. II. Towards an improvement of force fields used for classical molecular dynamics simulations. <i>Chemical Physics Letters</i> , 2009, 467, 417-423.	1.2	42
29	Electron Transfer Model for the Electric Field Effect on Quantum Yield of Charge Separation in Bacterial Photosynthetic Reaction Centers. <i>Journal of Physical Chemistry B</i> , 1997, 101, 5031-5045.	1.2	41
30	Accuracy of fragmentation in ab initio calculations of hydrated sodium cation. <i>Chemical Physics Letters</i> , 2009, 478, 295-300.	1.2	41
31	Fragment molecular orbital calculations under periodic boundary condition. <i>Chemical Physics Letters</i> , 2011, 506, 112-116.	1.2	41
32	Theoretical Analysis of Activity Cliffs among Benzofuranone-Class Pim1 Inhibitors Using the Fragment Molecular Orbital Method with Molecular Mechanics Poissonâ€“Boltzmann Surface Area (FMO+MM-PBSA) Approach. <i>Journal of Chemical Information and Modeling</i> , 2017, 57, 2996-3010.	2.5	41
33	Fragment Molecular Orbital Calculations on Red Fluorescent Proteins (DsRed and mFruits). <i>Journal of Physical Chemistry B</i> , 2009, 113, 1153-1161.	1.2	40
34	Statistical correction to effective interactions in the fragment molecular orbital method. <i>Chemical Physics Letters</i> , 2013, 556, 272-277.	1.2	40
35	Ab initio quantum-chemical study on emission spectra of bioluminescent luciferases by fragment molecular orbital method. <i>Chemical Physics Letters</i> , 2009, 472, 118-123.	1.2	39
36	Strongly coupled electron liquid: <i>Ab initio</i> path integral Monte Carlo simulations and dielectric theories. <i>Physical Review B</i> , 2020, 101, .	1.1	38

#	ARTICLE	IF	CITATIONS
37	Ab Initio Fragment Molecular Orbital Study of Molecular Interactions between Liganded Retinoid X Receptor and Its Coactivator; Part II: Influence of Mutations in Transcriptional Activation Function 2 Activating Domain Core on the Molecular Interactions. <i>Journal of Physical Chemistry A</i> , 2008, 112, 1986-1998.	1.1	37
38	Molecular recognition of SARS-CoV-2 spike glycoprotein: quantum chemical hot spot and epitope analyses. <i>Chemical Science</i> , 2021, 12, 4722-4739.	3.7	37
39	Application of the fragment molecular orbital method for determination of atomic charges on polypeptides. <i>Chemical Physics Letters</i> , 2007, 449, 329-335.	1.2	36
40	Developments and applications of ABINIT-MP software based on the fragment molecular orbital method. , 2006, , 39-52.		36
41	Fragment Molecular Orbital Calculations with Implicit Solvent Based on the Poisson-Boltzmann Equation: Implementation and DNA Study. <i>Journal of Physical Chemistry B</i> , 2018, 122, 4457-4471.	1.2	35
42	Correlational and thermodynamic properties of finite-temperature electron liquids in the hypernetted-chain approximation. <i>Journal of Chemical Physics</i> , 2016, 145, 214104.	1.2	34
43	Ab Initio Fragment Molecular Orbital Study of Molecular Interactions between Liganded Retinoid X Receptor and Its Coactivator: Roles of Helix 12 in the Coactivator Binding Mechanism. <i>Journal of Physical Chemistry B</i> , 2007, 111, 3525-3533.	1.2	33
44	Fragment molecular orbital calculations on red fluorescent protein (DsRed). <i>Chemical Physics Letters</i> , 2007, 433, 360-367.	1.2	33
45	Dynamic polarizability calculation with fragment molecular orbital scheme. <i>Chemical Physics Letters</i> , 2006, 418, 418-422.	1.2	31
46	An application of fragment interaction analysis based on local MP2. <i>Chemical Physics Letters</i> , 2008, 463, 189-194.	1.2	30
47	Modeling of peptide-silica interaction based on four-body corrected fragment molecular orbital (FMO4) calculations. <i>Chemical Physics Letters</i> , 2013, 566, 25-31.	1.2	30
48	Thermodynamic properties of water molecules in the presence of cosolute depend on DNA structure: a study using grid inhomogeneous solvation theory. <i>Nucleic Acids Research</i> , 2015, 43, gkv1133.	6.5	29
49	Fragment Molecular Orbital (FMO) and FMO-MO Calculations of DNA: Accuracy Validation of Energy and Interfragment Interaction Energy. <i>Journal of Computational and Theoretical Nanoscience</i> , 2009, 6, 1328-1337.	0.4	26
50	Prediction of probable mutations in influenza virus hemagglutinin protein based on large-scale ab initio fragment molecular orbital calculations. <i>Journal of Molecular Graphics and Modelling</i> , 2011, 30, 110-119.	1.3	26
51	Cosolvent-Based Molecular Dynamics for Ensemble Docking: Practical Method for Generating Druggable Protein Conformations. <i>Journal of Chemical Information and Modeling</i> , 2017, 57, 742-756.	2.5	26
52	Development of an automated fragment molecular orbital (FMO) calculation protocol toward construction of quantum mechanical calculation database for large biomolecules. <i>Chem-Bio Informatics Journal</i> , 2019, 19, 5-18.	0.1	26
53	Roles of K151 and D180 in <i>L-haloacid dehalogenase from Pseudomonas</i> sp. YL: Analysis by molecular dynamics and ab initio fragment molecular orbital calculations. <i>Journal of Computational Chemistry</i> , 2009, 30, 2625-2634.	1.5	25
54	Counterpoise-corrected interaction energy analysis based on the fragment molecular orbital scheme. <i>Chemical Physics Letters</i> , 2011, 509, 67-71.	1.2	24

#	ARTICLE	IF	CITATIONS
55	FMODB: The World's First Database of Quantum Mechanical Calculations for Biomacromolecules Based on the Fragment Molecular Orbital Method. <i>Journal of Chemical Information and Modeling</i> , 2021, 61, 777-794.	2.5	24
56	Charge Clamps of Lysines and Hydrogen Bonds Play Key Roles in the Mechanism to Fix Helix 12 in the Agonist and Antagonist Positions of Estrogen Receptor β : Intramolecular Interactions Studied by the <i>Ab Initio</i> Fragment Molecular Orbital Method. <i>Journal of Physical Chemistry B</i> , 2014, 118, 4993-5008.	1.2	23
57	Newly characterized interaction stabilizes DNA structure: oligoethylene glycols stabilize G-quadruplexes CH π - π interactions. <i>Nucleic Acids Research</i> , 2017, 45, 7021-7030.	6.5	23
58	Effects of salt addition on strength and dynamics of hydrophobic interactions. <i>Chemical Physics Letters</i> , 2007, 434, 42-48.	1.2	22
59	<i>Ab initio</i> Path Integral Molecular Dynamics Based on Fragment Molecular Orbital Method. <i>Journal of the Physical Society of Japan</i> , 2009, 78, 104723.	0.7	22
60	Application of singular value decomposition to the inter-fragment interaction energy analysis for ligand screening. <i>Computational and Theoretical Chemistry</i> , 2018, 1132, 23-34.	1.1	22
61	Towards good correlation between fragment molecular orbital interaction energies and experimental IC50 for ligand binding: A case study of p38 MAP kinase. <i>Computational and Structural Biotechnology Journal</i> , 2018, 16, 421-434.	1.9	22
62	Protein-ligand docking using fitness learning-based artificial bee colony with proximity stimuli. <i>Physical Chemistry Chemical Physics</i> , 2015, 17, 16412-16417.	1.3	21
63	Computational Analysis of the Interaction Energies between Amino Acid Residues of the Measles Virus Hemagglutinin and Its Receptors. <i>Viruses</i> , 2018, 10, 236.	1.5	21
64	Fragment molecular orbital calculations for biomolecules. <i>Current Opinion in Structural Biology</i> , 2022, 72, 127-134.	2.6	21
65	Ion-Density Correlations and Enhancement of Thermonuclear Reaction Rate in Dense, Inertially Confined Fusion Plasmas. <i>Journal of the Physical Society of Japan</i> , 1984, 53, 2039-2048.	0.7	20
66	Stopping Power of Degenerate Electron Liquid at Metallic Densities. <i>Journal of the Physical Society of Japan</i> , 1985, 54, 2537-2542.	0.7	20
67	Nuclear quantum effects on electron transfer reactions in DNA hairpins. <i>Physical Review E</i> , 2003, 68, 031905.	0.8	20
68	DENSITY FUNCTIONAL CALCULATIONS ON THE INTERACTION BETWEEN CATABOLITE ACTIVATOR PROTEIN AND CYCLIC AMP USING THE FRAGMENT MOLECULAR ORBITAL METHOD. <i>Journal of Theoretical and Computational Chemistry</i> , 2005, 04, 183-195.	1.8	20
69	Explicit solvation modulates intra- and inter-molecular interactions within DNA: Electronic aspects revealed by the <i>ab initio</i> fragment molecular orbital (FMO) method. <i>Computational and Theoretical Chemistry</i> , 2015, 1054, 29-37.	1.1	20
70	Interaction analyses of SARS-CoV-2 spike protein based on fragment molecular orbital calculations. <i>RSC Advances</i> , 2021, 11, 3272-3279.	1.7	20
71	Theory of interparticle correlations in dense, high-temperature plasmas. VIII. Shear viscosity. <i>Physical Review A</i> , 1986, 34, 4163-4170.	1.0	19
72	Novel type of virtual ligand screening on the basis of quantum-chemical calculations for protein-ligand complexes and extended clustering techniques. <i>Computational and Theoretical Chemistry</i> , 2015, 1061, 12-22.	1.1	19

#	ARTICLE	IF	CITATIONS
73	Improved equation of state for finite-temperature spin-polarized electron liquids on the basis of Singwi-Tosi-Land-Sjölander approximation. <i>Contributions To Plasma Physics</i> , 2017, 57, 126-136.	0.5	19
74	ATP Converts A^{2+} Oligomer into Off-Pathway Species by Making Contact with Its Backbone Atoms Using Hydrophobic Adenosine. <i>Journal of Physical Chemistry B</i> , 2019, 123, 9922-9933.	1.2	19
75	Fragment molecular orbital (FMO) study on stabilization mechanism of neuro-oncological ventral antigen (NOVA)-RNA complex system. <i>Computational and Theoretical Chemistry</i> , 2010, 962, 45-55.	1.5	18
76	Affinity of Molecular Ions for DNA Structures Is Determined by Solvent-Accessible Surface Area. <i>Journal of Physical Chemistry B</i> , 2014, 118, 9583-9594.	1.2	18
77	Comparative Characterization of Short Monomeric Polyglutamine Peptides by Replica Exchange Molecular Dynamics Simulation. <i>Journal of Physical Chemistry B</i> , 2010, 114, 7056-7061.	1.2	17
78	Interaction energy analysis on specific binding of influenza virus hemagglutinin to avian and human sialosaccharide receptors: Importance of mutation-induced structural change. <i>Journal of Molecular Graphics and Modelling</i> , 2014, 53, 48-58.	1.3	17
79	Dynamic Cooperativity of Ligand-Residue Interactions Evaluated with the Fragment Molecular Orbital Method. <i>Journal of Physical Chemistry B</i> , 2021, 125, 6501-6512.	1.2	17
80	Theory of nonadiabatic electron transfer at electrode/liquid interfaces: Role of quantum effects. <i>Journal of Chemical Physics</i> , 1999, 111, 11117-11137.	1.2	16
81	Fragmentation Method Combined with Quantum Monte Carlo Calculations. <i>Journal of the Physical Society of Japan</i> , 2007, 76, 064301.	0.7	16
82	Antigen-antibody interactions of influenza virus hemagglutinin revealed by the fragment molecular orbital calculation. <i>Theoretical Chemistry Accounts</i> , 2011, 130, 1197-1202.	0.5	16
83	Accuracy of the fragment molecular orbital (FMO) calculations for DNA: Total energy, molecular orbital, and inter-fragment interaction energy. <i>Computational and Theoretical Chemistry</i> , 2014, 1034, 7-16.	1.1	16
84	Application of fragment molecular orbital scheme to silicon-containing systems. <i>Chemical Physics Letters</i> , 2006, 430, 361-366.	1.2	15
85	Sialic Acid Recognition of the Pandemic Influenza 2009 H1N1 Virus: Binding Mechanism Between Human Receptor and Influenza Hemagglutinin. <i>Protein and Peptide Letters</i> , 2011, 18, 530-539.	0.4	15
86	Study of the aggregation mechanism of polyglutamine peptides using replica exchange molecular dynamics simulations. <i>Journal of Molecular Modeling</i> , 2013, 19, 1627-1639.	0.8	15
87	Identification of correlated inter-residue interactions in protein complex based on the fragment molecular orbital method. <i>Journal of Molecular Graphics and Modelling</i> , 2020, 100, 107650.	1.3	15
88	Meteorite Impact-Induced Rapid NH_3 Production on Early Earth: Ab Initio Molecular Dynamics Simulation. <i>Scientific Reports</i> , 2016, 6, 38953.	1.6	14
89	Local thermodynamics of the water molecules around single- and double-stranded DNA studied by grid inhomogeneous solvation theory. <i>Chemical Physics Letters</i> , 2016, 660, 250-255.	1.2	12
90	Statistical interaction analyses between SARS-CoV-2 main protease and inhibitor N3 by combining molecular dynamics simulation and fragment molecular orbital calculation. <i>Applied Physics Express</i> , 2021, 14, 027003.	1.1	12

#	ARTICLE	IF	CITATIONS
91	Ab initio study of molecular interactions in higher plant and <i>Galdieria partita</i> Rubiscos with the fragment molecular orbital method. <i>Biochemical and Biophysical Research Communications</i> , 2007, 361, 367-372.	1.0	10
92	Ab initio path integral Monte Carlo simulations for water trimer with electron correlation effects. <i>Computational and Theoretical Chemistry</i> , 2012, 997, 7-13.	1.1	10
93	The ABINIT-MP Program. , 2021, , 53-67.		10
94	Protein-ligand binding affinity prediction of cyclin-dependent kinase inhibitors by dynamically averaged fragment molecular orbital-based interaction energy. <i>Journal of Computational Chemistry</i> , 2022, 43, 1362-1371.	1.5	10
95	Molecular mechanics and all-electron fragment molecular orbital calculations on mutated polyglutamine peptides. <i>Computational and Theoretical Chemistry</i> , 2010, 944, 12-20.	1.5	9
96	Analysis of electron-transfer rate constant in condensed media with inclusion of inelastic tunneling and nuclear quantum effects. <i>Physical Review E</i> , 2010, 81, 027101.	0.8	9
97	Comparison of binding affinity evaluations for FKBP ligands with state-of-the-art computational methods: FMO, QM/MM, MM-PB/SA and MP-CAFE approaches. <i>Chem-Bio Informatics Journal</i> , 2010, 10, 32-45.	0.1	9
98	Statistical-Mechanical Theory of Cold Nuclear Fusion in Metal Hydrides. <i>Journal of the Physical Society of Japan</i> , 1990, 59, 1333-1340.	0.7	8
99	Modulation of excitation energy transfer by conformational oscillations in biomolecular systems. <i>Chemical Physics Letters</i> , 2011, 508, 139-143.	1.2	8
100	A significant role of Arg41 residue in the enzymatic reaction of haloacid dehalogenase I-DEX YL studied by QM/MM method. <i>Journal of Molecular Catalysis B: Enzymatic</i> , 2014, 110, 23-31.	1.8	8
101	Current Status of ABINIT-MP as a FMO Program and Related Works with Machine Learning. <i>Journal of Computer Chemistry Japan</i> , 2017, 16, 119-122.	0.0	8
102	Comparative study on model parameter evaluations for the energy transfer dynamics in Fenna-Matthews-Olson complex. <i>Chemical Physics</i> , 2020, 539, 110903.	0.9	8
103	Fragment molecular orbital based interaction analyses on complexes between SARS-CoV-2 RBD variants and ACE2. <i>Japanese Journal of Applied Physics</i> , 2021, 60, 090901.	0.8	8
104	Taking Water into Account with the Fragment Molecular Orbital Method. <i>Methods in Molecular Biology</i> , 2020, 2114, 105-122.	0.4	7
105	Collective residue interactions in trimer complexes of SARS-CoV-2 spike proteins analyzed by fragment molecular orbital method. <i>Applied Physics Express</i> , 2022, 15, 017001.	1.1	7
106	Classical density functional calculation of radial distribution functions of liquid water. <i>Chemical Physics</i> , 2014, 430, 18-22.	0.9	6
107	Theoretical prediction and experimental verification on enantioselectivity of haloacid dehalogenase I-DEX YL with chloropropionate. <i>Chemical Physics Letters</i> , 2015, 623, 101-107.	1.2	6
108	Systems approach to excitation-energy and electron transfer reaction networks in photosystem II complex: model studies for chlorophyll a fluorescence induction kinetics. <i>Journal of Theoretical Biology</i> , 2015, 380, 220-237.	0.8	6

#	ARTICLE	IF	CITATIONS
109	Structural transition of solvated H-Ras/GTP revealed by molecular dynamics simulation and local network entropy. <i>Journal of Molecular Graphics and Modelling</i> , 2017, 77, 51-63.	1.3	6
110	Reaction Pathway Sampling and Free-Energy Analyses for Multimeric Protein Complex Disassembly by Employing Hybrid Configuration Bias Monte Carlo/Molecular Dynamics Simulation. <i>ACS Omega</i> , 2021, 6, 4749-4758.	1.6	6
111	Reduced minimum model for the photosynthetic induction processes in photosystem I. <i>Journal of Photochemistry and Photobiology B: Biology</i> , 2016, 160, 364-375.	1.7	5
112	Meteorite impacts on ancient oceans opened up multiple NH ₃ production pathways. <i>Physical Chemistry Chemical Physics</i> , 2017, 19, 11655-11667.	1.3	5
113	Ab initio molecular dynamics study of prebiotic production processes of organic compounds at meteorite impacts on ocean. <i>Journal of Computational Chemistry</i> , 2019, 40, 349-359.	1.5	5
114	New Modified Deoxythymine with Dibranched Tetraethylene Glycol Stabilizes G-Quadruplex Structures. <i>Molecules</i> , 2020, 25, 705.	1.7	5
115	Non-equilibrium Quantum Brain Dynamics II: Formulation in 3+1 dimensions. <i>Physica A: Statistical Mechanics and Its Applications</i> , 2021, 567, 125706.	1.2	5
116	Computational prediction of heteromeric protein complex disassembly order using hybrid Monte Carlo/molecular dynamics simulation. <i>Physical Chemistry Chemical Physics</i> , 2022, 24, 10575-10587.	1.3	5
117	Triplet correlations and bridge functions in classical density functional theory for liquid water. <i>Chemical Physics Letters</i> , 2013, 572, 38-43.	1.2	4
118	Hierarchical coarse-graining model for photosystem II including electron and excitation-energy transfer processes. <i>BioSystems</i> , 2014, 117, 15-29.	0.9	4
119	Diffusion Monte Carlo study on temporal evolution of entropy and free energy in nonequilibrium processes. <i>Journal of Chemical Physics</i> , 2016, 144, 094103.	1.2	4
120	Four-electron model for singlet and triplet excitation energy transfers with inclusion of coherence memory, inelastic tunneling and nuclear quantum effects. <i>Chemical Physics</i> , 2016, 474, 18-24.	0.9	4
121	Machine learning prediction of inter-fragment interaction energies between ligand and amino-acid residues on the fragment molecular orbital calculations for Janus kinase α inhibitor complex. <i>Chemical Physics Letters</i> , 2020, 757, 137883.	1.2	4
122	Remarkable suppression of Δ^2 protomer \leftrightarrow protomer dissociation reaction elucidated by molecular dynamics simulation. <i>Proteins: Structure, Function and Bioinformatics</i> , 2022, 90, 1367-1375.	1.5	4
123	Derivation of extremely slow dynamics of protein motion based on entropy invariance. <i>Physics Letters, Section A: General, Atomic and Solid State Physics</i> , 2008, 372, 1280-1282.	0.9	3
124	Excitation energy transfer modulated by oscillating electronic coupling of a dimeric system embedded in a molecular environment. <i>Physical Review E</i> , 2012, 86, 021914.	0.8	3
125	Non-Equilibrium Quantum Brain Dynamics: Super-Radiance and Equilibration in 21 Dimensions+. <i>Entropy</i> , 2019, 21, 1066.	1.1	3
126	Appearance of Thermal Time. <i>Foundations of Physics</i> , 2021, 51, .	0.6	3

#	ARTICLE	IF	CITATIONS
127	Application of the FMO Method to Specific Molecular Recognition of Biomacromolecules. , 2009, , 133-170.		3
128	Non-Equilibrium Quantum Electrodynamics in Open Systems as a Realizable Representation of Quantum Field Theory of the Brain. Entropy, 2020, 22, 43.	1.1	3
129	Elucidating microscopic events driven by GTP hydrolysis reaction in the Rasâ€“GAP system with semi-reactive molecular dynamics simulations: the alternative role of a phosphate binding loop for mechanical energy storage. Physical Chemistry Chemical Physics, 2021, 23, 26151-26164.	1.3	3
130	Quantum Brain Dynamics and Holography. Dynamics, 2022, 2, 187-218.	0.5	3
131	Renormalization-Group Inspired Approach to Vibrational Energy Transfer in Protein. Journal of the Physical Society of Japan, 2012, 81, 033801.	0.7	2
132	Variational Quantum Monte Carlo with Inclusion of Orbital Correlations. Journal of the Physical Society of Japan, 2013, 82, 075001.	0.7	2
133	Information geometrical characterization of the Onsager-Machlup process. Chemical Physics Letters, 2017, 689, 152-155.	1.2	2
134	Nonequilibrium quantum brain dynamics. Advances in Quantum Chemistry, 2020, 82, 159-180.	0.4	2
135	Nanoscale Quantum Thermal Conductance at Water Interface: Greenâ€™s Function Approach Based on One-Dimensional Phonon Model. Molecules, 2020, 25, 1185.	1.7	2
136	Temperature relaxation in binary hard-sphere mixture system: Molecular dynamics and kinetic theory study. Journal of Chemical Physics, 2020, 153, 034114.	1.2	1
137	Fragment Molecular Orbital Method as Cluster Expansion. , 2021, , 3-14.		1
138	FMO Drug Design Consortium. , 2021, , 127-181.		1
139	Improvement of the Force Field for β -D-Glucose with Machine Learning. Molecules, 2021, 26, 6691.	1.7	1
140	1P-100 Study of RNA base recognition mechanism by aliphatic surface of RNA-binding protein : Case study of NOVA-RNA complex system(Nucleic acid:Interaction & Complex formation, The 47th Annual) Tj ETQq0 0 OogBT /Overlock 10 Tf		0
141	Effects of Bridge Functions on Radial Distribution Functions of Liquid Water. Interdisciplinary Sciences, Computational Life Sciences, 2015, 7, 152-156.	2.2	0
142	Comparison of Various Fragmentation Methods for Quantum Chemical Calculations of Large Molecular Systems. , 2021, , 15-27.		0
143	In silico modeling of PAX8â€“PPAR β fusion protein in thyroid carcinoma: influence of structural perturbation by fusion on ligand-binding affinity. Journal of Computer-Aided Molecular Design, 2021, 35, 629-642.	1.3	0
144	Density-Matrix Based Scheme of Basis Selection for Linear Combination of Fragment Molecular Orbitals. Journal of the Physical Society of Japan, 2021, 90, 064301.	0.7	0

#	ARTICLE	IF	CITATIONS
145	1TP5-05 Study of RNA base recognition mechanism by aliphatic surface of RNA-binding protein : Case study of NOVA-RNA complex system(The 47th Annual Meeting of the Biophysical Society of Japan). Seibutsu Butsuri, 2009, 49, S37-S38.	0.0	0
146	Effects of bridge functions on radial distribution functions of liquid water. Interdisciplinary Sciences, Computational Life Sciences, 2014, , . Quantum Brain Dynamics in $\langle \text{mml:math xmlns:mml}=\text{"http://www.w3.org/1998/Math/MathML"} \text{display}=\text{"inline"} \text{id}=\text{"d1e1106"} \text{altimg}=\text{"si4.svg"} \rangle \langle \text{mml:mrow} \rangle \langle \text{mml:mn} \rangle 2 \langle \text{mml:mn} \rangle \langle \text{mml:mo} \text{linebreak}=\text{"goodbreak"} \text{display}=\text{"inline"} \text{id}=\text{"d1e1106"} \text{altimg}=\text{"si4.svg"} \rangle \langle \text{mml:mrow} \rangle \langle \text{mml:mn} \rangle 1 \langle \text{mml:mn} \rangle \langle \text{mml:mrow} \rangle \langle \text{mml:math} \rangle$ dimensions:	2.2	0
147	Non-equilibrium analysis towards memory formations. Physica A: Statistical Mechanics and Its Applications, 2022, 598, 127397.	1.2	0