

# Rui Zheng

## List of Publications by Year in descending order

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42  
papers

317  
citations

840776

11  
h-index

996975

15  
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42  
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42  
docs citations

42  
times ranked

242  
citing authors

#	ARTICLE	IF	CITATIONS
1	A DFT/TDDFT investigation of the excited state proton transfer reaction of fisetin chromophore. <i>Spectrochimica Acta - Part A: Molecular and Biomolecular Spectroscopy</i> , 2015, 151, 368-374.	3.9	32
2	Elaborating the excited-state proton transfer behaviors for novel 3H-MC and P2H-CH. <i>Organic Chemistry Frontiers</i> , 2017, 4, 1935-1942.	4.5	31
3	A competitive excited state dynamical process for the 2,2â€²-((1E,1â€²E)-(3,3â€²-dimethyl-[1,1â€²-biphenyl]-4,4â€²-diyl)-bis(azanylylidene))bis(methanylylidene))-diphenol system. <i>RSC Advances</i> , 2017, 7, 1299-1304.		
4	Infrared diode laser spectroscopy of the Krâ€²N<sub>2</sub>O van der Waals complex: the <i>v</i><sub>1</sub> symmetric stretch region of N<sub>2</sub>O. <i>Molecular Physics</i> , 2011, 109, 823-830.	1.7	14
5	A detailed theoretical investigation on the excited-state intramolecular proton-transfer mechanism of 3-BTHPB chemosensor. <i>Theoretical Chemistry Accounts</i> , 2015, 134, 1.	1.4	14
6	Infrared diode laser spectroscopy of the Heâ€²N2O van der Waals complex in the 1285cmâˆ’1 region. <i>Journal of Molecular Spectroscopy</i> , 2009, 253, 88-91.	1.2	13
7	A research on excited-state intramolecular proton-transfer mechanism of a new chemosensor. <i>Theoretical Chemistry Accounts</i> , 2016, 135, 1.	1.4	13
8	Theoretical investigation on ESIPT mechanism of a new fluorescent sensor in different solvents. <i>Spectrochimica Acta - Part A: Molecular and Biomolecular Spectroscopy</i> , 2016, 159, 30-34.	3.9	13
9	Rovibrational spectrum of the Neâ€²N2O van der Waals complex in the 1285cmâˆ’1 region. <i>Journal of Molecular Spectroscopy</i> , 2010, 263, 174-177.	1.2	12
10	Theoretical studies for the N2â€²N2O van der Waals complex: The potential energy surface, intermolecular vibrations, and rotational transition frequencies. <i>Journal of Chemical Physics</i> , 2015, 143, 154304.	3.0	11
11	The ESIPT mechanism of dibenzimidazolo diimine sensor: a detailed TDDFT study. <i>Journal of Physical Organic Chemistry</i> , 2016, 29, 161-165.	1.9	11
12	Solvent controlling excited state proton transfer reaction in quinoline/isoquinolineâ€²pyrazole isomer QPâ€²: A theoretical study. <i>Journal of Physical Organic Chemistry</i> , 2018, 31, e3729.	1.9	11
13	A Theoretical Investigation on Intramolecular Hydrogen Bond: The ESIPT Mechanism of dmahf Sensor. <i>Journal of Cluster Science</i> , 2017, 28, 937-947.	3.3	10
14	Theoretical studies for the infrared spectra of Arâ€²CO2 complex: Fundamental and combination bands. <i>Spectrochimica Acta - Part A: Molecular and Biomolecular Spectroscopy</i> , 2018, 204, 308-316.	3.9	10
15	A DFT/TDDFT Study on Excited State Process of a Novel Probe 4â€²-Fluoroflavonol. <i>Journal of Cluster Science</i> , 2017, 28, 2449-2460.	3.3	9
16	Theoretical study of LiClâˆ’ and LiBrâˆ’ molecular ions. <i>Molecular Physics</i> , 2015, 113, 1433-1441.	1.7	8
17	A theoretical assignment on excitedâ€²state intramolecular proton transfer mechanism for quercetin. <i>Journal of Physical Organic Chemistry</i> , 2017, 30, e3684.	1.9	8
18	Mode specific dynamics in bond selective reaction Oâ€²(3P) + HOD â†’ Oâ€²H + OD/Oâ€²D + OH. <i>Journal of Chemical Physics</i> , 2018, 149, 054304.	3.0	8

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19	Rovibrational spectrum and potential energy surface of the N <sub>2</sub> –N <sub>2</sub> O van der Waals complex. <i>Journal of Molecular Spectroscopy</i> , 2011, 265, 102-105.	1.2	7
20	Theoretical study on the ground electronic state of FO <sup>+</sup> and FO <sup>+</sup> . <i>Spectrochimica Acta - Part A: Molecular and Biomolecular Spectroscopy</i> , 2014, 133, 735-740.	3.9	7
21	Improving analysis of infrared spectrum of van der Waals complex with theoretical calculation: Applied to Xe–N <sub>2</sub> O complex. <i>Journal of Molecular Spectroscopy</i> , 2017, 333, 12-18.	1.2	6
22	Investigations of the Rg-BrCl (Rg = He, Ne, Ar, Kr, Xe) binary van der Waals complexes: ab initio intermolecular potential energy surfaces, vibrational states and predicted pure rotational transition frequencies. <i>Spectrochimica Acta - Part A: Molecular and Biomolecular Spectroscopy</i> , 2017, 174, 105-117.	3.9	6
23	Mode-specific quantum dynamics and kinetics of the hydrogen abstraction reaction OH + H <sub>2</sub> O → H <sub>2</sub> O + OH. <i>Physical Chemistry Chemical Physics</i> , 2019, 21, 24054-24060.	2.8	6
24	Theoretical studies of Ar–AgX (X = F, Cl, Br, I) complexes: Potential energy surfaces, intermolecular vibrations and microwave spectra. <i>Journal of Molecular Spectroscopy</i> , 2018, 353, 28-39.	1.2	4
25	Theoretical study of infrared spectra for the Ar–N <sub>2</sub> O complex: Fundamental and combination bands. <i>Journal of Molecular Spectroscopy</i> , 2019, 357, 24-31.	1.2	4
26	Investigating the spectroscopic characteristics of twelve isotopologues for the Ar–CO <sub>2</sub> complex. <i>Journal of Quantitative Spectroscopy and Radiative Transfer</i> , 2020, 242, 106778.	2.3	4
27	An accurate prediction of the infrared spectra for Rg–CS <sub>2</sub> (Rg = He, Ne, Ar) complexes in the $\hat{1}/2_1 + \hat{1}/2_3$ region of CS <sub>2</sub> monomer. <i>Chemical Physics Letters</i> , 2017, 687, 31-37.	2.6	3
28	Hydrogen bonding and excited state properties of the photoexcited hydrogen-bonded (<i>E</i>)<i>S</i>(2-aminopropyl) 3-(4-hydroxyphenyl)prop-2-ene-thioate complexes. <i>Journal of Physical Organic Chemistry</i> , 2017, 30, e3634.		3
29	An efficient error-correction model to investigate the rotational structure and microwave spectrum of Ar–AgF complex. <i>Chemical Physics</i> , 2022, , 111545.	1.9	3
30	Time-dependent density functional theory study on excited-state spectral and dynamic properties of hydrogen-bonded complexes formed by DMACA and water. <i>RSC Advances</i> , 2016, 6, 79196-79203.	3.6	2
31	Theoretical studies of three-dimensional potential energy surfaces using neural networks and rotational spectra of the Ar–N <sub>2</sub> complex. <i>Molecular Physics</i> , 2016, 114, 72-82.	1.7	2
32	Investigating the influence of intramolecular bond lengths on the intermolecular interaction of H <sub>2</sub> –AgCl complex: Binding energy, intermolecular vibrations, and isotope effects. <i>Journal of Chemical Physics</i> , 2019, 150, 164301.	3.0	2
33	New potential energy surfaces for the complexes Ar–CuX (X = F, Cl, Br, and I). <i>Journal of Quantitative Spectroscopy and Radiative Transfer</i> , 2019, 231, 79-87.	2.3	2
34	Infrared diode laser spectroscopy of the trimers Rg <sub>2</sub> N <sub>2</sub> O (Rg=Ne, Ar, and Kr): The $\hat{1}/2_1$ symmetric stretch region of N <sub>2</sub> O. <i>Journal of Molecular Spectroscopy</i> , 2013, 284-285, 1-7.	1.2	1
35	Rovibrational Spectra of the Polar and Nonpolar Nitrous Oxide Dimers. <i>Spectroscopy Letters</i> , 2015, 48, 198-212.	1.0	1
36	Theoretical studies of infrared spectra for the N <sub>2</sub> –N <sub>2</sub> O complex: The tunneling effects of fundamental and combination bands. <i>Spectrochimica Acta - Part A: Molecular and Biomolecular Spectroscopy</i> , 2019, 221, 117199.	3.9	1

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37	Theoretical investigation of potential energy surface and bound states for the N <sub>2</sub> ⋯OCS van der Waals complex. <i>Spectrochimica Acta - Part A: Molecular and Biomolecular Spectroscopy</i> , 2020, 228, 117768.	3.9	1
38	Structural characterization of the NO(X <sup>2</sup> Σ <sup>+</sup> )⋯N <sub>2</sub> O complex with mid-infrared laser absorption spectroscopy and quantum chemical calculations. <i>Journal of Chemical Physics</i> , 2020, 152, 154303.	3.0	1
39	Theoretical and experimental studies of the isotope effects for He⋯CO <sub>2</sub> and Ne⋯CO <sub>2</sub> complexes. <i>Spectrochimica Acta - Part A: Molecular and Biomolecular Spectroscopy</i> , 2021, 250, 119391.	3.9	1
40	A theoretical study of the intermolecular interactions of H <sub>2</sub> ⋯CuF complex: Intermolecular vibrations, isotope effects, and rotational structure. <i>Spectrochimica Acta - Part A: Molecular and Biomolecular Spectroscopy</i> , 2022, 274, 121134.	3.9	1
41	The regulation mechanism of the excited-state behaviour of 3-Hydroxy-2-(1-ethyl-1H-pyrazol-3-yl)-4H-chromen-4-one fluorophore by solvent polarity: a computational study. <i>Molecular Physics</i> , 0, , .	1.7	1
42	Some new studies on intermolecular interaction of C <sub>3</sub> -Ar complex. <i>Open Chemistry</i> , 2015, 13, .	1.9	0