Cho Minhaeng

List of Publications by Year
in descending order

317 papers	15,531 citations	20759 60 h-index	24915 109 g-index
336 all docs	336 docs citations	336 times ranked	7906 citing authors

#	Article	IF	Citations
1	Two-dimensional spectroscopy of electronic couplings in photosynthesis. Nature, 2005, 434, 625-628.	13.7	1,115
2	Coherent Two-Dimensional Optical Spectroscopy. Chemical Reviews, 2008, 108, 1331-1418.	23.0	724
3	CHROMOPHORE-SOLVENT DYNAMICS. Annual Review of Physical Chemistry, 1996, 47, 109-134.	4.8	627
4	Exciton Analysis in 2D Electronic Spectroscopy. Journal of Physical Chemistry B, 2005, 109, 10542-10556.	1.2	391
5	Instantaneous normal mode analysis of liquid water. Journal of Chemical Physics, 1994, 100, 6672-6683.	1.2	350
6	Two Photon Absorption Properties of 1,3,5-Tricyano-2,4,6-tris(styryl)benzene Derivatives. Journal of the American Chemical Society, 2001, 123, 10039-10045.	6.6	306
7	The Integrated Photon Echo and Solvation Dynamics. The Journal of Physical Chemistry, 1996, 100, 11944-11953.	2.9	272
8	Offâ€resonant transient birefringence in liquids. Journal of Chemical Physics, 1993, 99, 2410-2428.	1.2	248
9	Correlation between electronic and molecular structure distortions and vibrational properties. II. Amide I modes of NMAâ€“nD2O complexes. Journal of Chemical Physics, 2003, 118, 3491-3498.	1.2	245
10	Amide I Vibrational Dynamics ofN-Methylacetamide in Polar Solvents:Â The Role of Electrostatic Interactions. Journal of Physical Chemistry B, 2005, 109, 11016-11026.	1.2	225
11	Ultrafast solvent dynamics: Connection between time resolved fluorescence and optical Kerr measurements. Journal of Chemical Physics, 1992, 96, 5033-5038.	1.2	213
12	Molecular dynamics simulation study of N-methylacetamide in water. I. Amide I mode frequency fluctuation. Journal of Chemical Physics, 2003, 119, 2247-2255.	1.2	206
13	Vibrational Spectroscopic Map, Vibrational Spectroscopy, and Intermolecular Interaction. Chemical Reviews, 2020, 120, 7152-7218.	23.0	205
14	Two-Photon Absorption and Nonlinear Optical Properties of Octupolar Molecules. Journal of the American Chemical Society, 2001, 123, 10658-10667.	6.6	200
15	Infrared Probes for Studying the Structure and Dynamics of Biomolecules. Chemical Reviews, 2013, 113, 5817-5847.	23.0	190
16	Molecular dynamics simulation study of N-methylacetamide in water. II. Two-dimensional infrared pumpâ€“probe spectra. Journal of Chemical Physics, 2003, 119, 2256-2263.	1.2	184
17	Nitrile and thiocyanate IR probes: Quantum chemistry calculation studies and multivariate least-square fitting analysis. Journal of Chemical Physics, 2008, 128, 134506.	1.2	168
18	Femtosecond characterization of vibrational optical activity of chiral molecules. Nature, 2009, 458, 310-313.	13.7	168

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19	The shortâ€time dynamics of solvation. Journal of Chemical Physics, 1994, 100, 6700-6708.	1.2	151
20	Photon echoes and related fourâ€waveâ€mixing spectroscopies using phaseâ€locked pulses. Journal of Chemical Physics, 1992, 96, 5618-5629.	1.2	145
21	Nanometric Water Channels in Water-in-Salt Lithium Ion Battery Electrolyte. Journal of the American Chemical Society, 2018, 140, 15661-15667.	6.6	144
22	Local Amide I Mode Frequencies and Coupling Constants in Polypeptides. Journal of Physical Chemistry B, 2003, 107, 9132-9138.	1.2	139
23	Non-Gaussian statistics of amide I mode frequency fluctuation of N-methylacetamide in methanol solution: Linear and nonlinear vibrational spectra. Journal of Chemical Physics, 2004, 120, 1477-1490.	1.2	136
24	Amide I modes in the N-methylacetamide dimer and glycine dipeptide analog: Diagonal force constants. Journal of Chemical Physics, 2003, 118, 6915-6922.	1.2	134
25	Amide I modes of tripeptides: Hessian matrix reconstruction and isotope effects. Journal of Chemical Physics, 2003, 119, 1451-1461.	1.2	126
26	Nitrile and thiocyanate IR probes: Molecular dynamics simulation studies. Journal of Chemical Physics, 2008, 128, 154504.	1.2	124
27	Nonequilibrium photoinduced electron transfer. Journal of Chemical Physics, 1995, 103, 595-606.	1.2	117
28	Î²-Azidoalanine as an IR Probe: Application to Amyloid Aβ(16-22) Aggregation. Journal of Physical Chemistry B, 2008, 112, 10352-10357.	1.2	108
29	Simulation Studies of Amide I IR Absorption and Two-Dimensional IR Spectra of Î² Hairpins in Liquid Water. Journal of Physical Chemistry B, 2005, 109, 11789-11801.	1.2	103
30	Nonlinear Optical and Two-Photon Absorption Properties of 1,3,5-Tricyano-2,4,6-tris(styryl)benzene-Containing Octupolar Oligomers. Chemistry - A European Journal, 2002, 8, 3907-3916.	1.7	101
31	Vibrational Probes: From Small Molecule Solvatochromism Theory and Experiments to Applications in Complex Systems. Accounts of Chemical Research, 2017, 50, 968-976.	7.6	98
32	Local Amide I Mode Frequencies and Coupling Constants in Multiple-Stranded Antiparallel Î²-Sheet Polypeptides. Journal of Physical Chemistry B, 2004, 108, 20397-20407.	1.2	87
33	Two-Color Pumpâ^'Probe Spectroscopies of Two- and Three-Level Systems:â€‰ 2-Dimensional Line Shapes and Solvation Dynamics. Journal of Physical Chemistry A, 2003, 107, 5903-5912.	1.1	82
34	Computational Vibrational Spectroscopy of Peptides and Proteins in One and Two Dimensions. Accounts of Chemical Research, 2009, 42, 1280-1289.	7.6	82
35	Vibrational solvatochromism and electrochromism of infrared probe molecules containing Câ‰¡O, Câ‰¡N, C=O, or Câ^'F vibrational chromophore. Journal of Chemical Physics, 2011, 134, 154513.	1.2	82
36	1,3,5-Tricyano-2,4,6-tris(vinyl)benzene Derivatives with Large Second-Order Nonlinear Optical Properties. Journal of the American Chemical Society, 2001, 123, 6421-6422.	6.6	80

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37	Amide I vibrational modes in glycine dipeptide analog: Ab initio calculation studies. Journal of Chemical Physics, 2002, 117, 740-750.	1.2	79
38	Classical and quantum mechanical/molecular mechanical molecular dynamics simulations of alanine dipeptide in water: Comparisons with IR and vibrational circular dichroism spectra. Journal of Chemical Physics, 2008, 128, 105106.	1.2	78
39	Molecular Polarizability and First Hyperpolarizability of Octupolar Molecules: Donor-Substituted Triphenylmethane Dyes. Journal of the American Chemical Society, 1998, 120, 10921-10927.	6.6	77
40	Characteristic two-dimensional IR spectroscopic features of antiparallel and parallel Î²-sheet polypeptides: Simulation studies. Journal of Chemical Physics, 2005, 123, 084905.	1.2	77
41	Amide I Modes of Î±-Helical Polypeptide in Liquid Water:Â Conformational Fluctuation, Phase Correlation, and Linear and Nonlinear Vibrational Spectra. Journal of Physical Chemistry B, 2004, 108, 9333-9345.	1.2	76
42	Computational spectroscopy of ubiquitin: Comparison between theory and experiments. Journal of Chemical Physics, 2007, 126, 045102.	1.2	76
43	The Bend+Libration Combination Band Is an Intrinsic, Collective, and Strongly Solute-Dependent Reporter on the Hydrogen Bonding Network of Liquid Water. Journal of Physical Chemistry B, 2018, 122, 2587-2599.	1.2	76
44	Octupolar Crystals for Nonlinear Optics:Â 1,3,5-Trinitro-2,4,6-tris(styryl)benzene Derivatives. Chemistry of Materials, 2001, 13, 1438-1440.	3.2	74
45	Vibrational solvatochromism and electrochromism: Coarse-grained models and their relationships. Journal of Chemical Physics, 2009, 130, 094505.	1.2	74
46	Vibrational solvatochromism of nitrile infrared probes: beyond the vibrational Stark dipole approach. Physical Chemistry Chemical Physics, 2016, 18, 18094-18111.	1.3	73
47	Azido-derivatized compounds as IR probes of local electrostatic environment: Theoretical studies. Journal of Chemical Physics, 2008, 129, 174512.	1.2	72
48	Coherent two-dimensional Raman scattering: Frequency-domain measurement of the intra- and intermolecular vibrational interactions. Journal of Chemical Physics, 1998, 108, 1326-1334.	1.2	71
49	Vibrational dynamics of DNA. I. Vibrational basis modes and couplings. Journal of Chemical Physics, 2006, 125, 114508.	1.2	70
50	Amide I IR, VCD, and 2d IR spectra of isotope-labeled Î±-helix in liquid water: Numerical simulation studies. International Journal of Quantum Chemistry, 2005, 104, 616-634.	1.0	69
51	Ultrafast fluxional exchange dynamics in electrolyte solvation sheath of lithium ion battery. Nature Communications, 2017, 8, 14658.	5.8	68
52	Inter-peptide interaction and delocalization of amide I vibrational excitons in myoglobin and flavodoxin. Journal of Chemical Physics, 2002, 117, 6821-6832.	1.2	67
53	Amide I vibrational circular dichroism of dipeptide:â€,Conformation dependence and fragment analysis. Journal of Chemical Physics, 2004, 120, 4383-4392.	1.2	66
54	Correlation between electronic and molecular structure distortions and vibrational properties. I. Adiabatic approximations. Journal of Chemical Physics, 2003, 118, 3480-3490.	1.2	65

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55	Two Dimensional Electronic Spectroscopy of Molecular Complexes. Journal of the Chinese Chemical Society, 2006, 53, 15-24.	0.8	64
56	Nonlinear Optical Properties of the Linear Quadrupolar Molecule:Â Structureâ"Function Relationship Based on a Three-State Model. Journal of Physical Chemistry B, 1999, 103, 8221-8229.	1.2	62
57	The integrated photon echo and solvation dynamics. II. Peak shifts and two-dimensional photon echo of a coupled chromophore system. Journal of Chemical Physics, 2005, 123, 114506.	1.2	62
58	Intrinsic cascading contributions to the fifth- and seventh-order electronically off-resonant Raman spectroscopies. Journal of Chemical Physics, 2000, 112, 2082-2094.	1.2	61
59	Limitations of a superchiral field. Physical Review A, 2012, 86, .	1.0	61
60	Fifth-Order Three-Pulse Scattering Spectroscopy: Can We Separate Homogeneous and Inhomogeneous Contributions to Optical Spectra?. The Journal of Physical Chemistry, 1994, 98, 3478-3485.	2.9	60
61	Two-Photon Absorption and Second Hyperpolarizability of the Linear Quadrupolar Molecule. Journal of Physical Chemistry A, 2000, 104, 11033-11040.	1.1	60
62	Vibrational solvatochromism and electrochromism of cyanide, thiocyanate, and azide anions in water. Physical Chemistry Chemical Physics, 2010, 12, 12658.	1.3	59
63	Computational IR spectroscopy of water: OH stretch frequencies, transition dipoles, and intermolecular vibrational coupling constants. Journal of Chemical Physics, 2013, 138, 174108.	1.2	58
64	Nonlinear response functions for birefringence and dichroism measurements in condensed phases. Journal of Chemical Physics, 1993, 98, 5314-5326.	1.2	57
65	Theoretical description of two-dimensional vibrational spectroscopy by infrared-infrared-visible sum frequency generation. Physical Review A, 2000, 61, .	1.0	57
66	Photon echo measurements in liquids: Numerical calculations with model systems. Journal of Chemical Physics, 1993, 98, 2848-2859.	1.2	56
67	Nonlinear optical properties of tetrahedral donorâ€"acceptor octupolar molecules: Effective five-state model approach. Journal of Chemical Physics, 2002, 116, 9165-9173.	1.2	54
68	Novel Surface Vibrational Spectroscopy: Infrared-Infrared-Visible Sum-Frequency Generation. Physical Review Letters, 2001, 86, 1566-1569.	2.9	53
69	Vibrational dynamics of DNA. II. Deuterium exchange effects and simulated IR absorption spectra. Journal of Chemical Physics, 2006, 125, 114509.	1.2	53
70	Azido Homoalanine is a Useful Infrared Probe for Monitoring Local Electrostatistics and Side-Chain Solvation in Proteins. Journal of Physical Chemistry Letters, 2011, 2, 2158-2162.	2.1	52
71	Ion aggregation in high salt solutions: Ion network versus ion cluster. Journal of Chemical Physics, 2014, 141, 124510.	1.2	52
72	Nonlinear response functions for the three-dimensional spectroscopies. Journal of Chemical Physics, 2001, 115, 4424-4437.	1.2	51

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73	Vibrational interactions of acetonitrile: Doubly vibrationally resonant IRâ€“IRâ€“visible four-wave-mixing spectroscopy. Journal of Chemical Physics, 2002, 117, 5675-5687.	1.2	51
74	Amide I vibrational circular dichroism of polypeptides: Generalized fragmentation approximation method. Journal of Chemical Physics, 2005, 122, 174903.	1.2	51
75	IR spectra of N-methylacetamide in water predicted by combined quantum mechanical/molecular mechanical molecular dynamics simulations. Journal of Chemical Physics, 2005, 123, 134503.	1.2	51
76	Infrared Probes Based on Nitrile-Derivatized Prolines: Thermal Insulation Effect and Enhanced Dynamic Range. Journal of Physical Chemistry Letters, 2013, 4, 2105-2110.	2.1	51
77	Graph Theory and Ion and Molecular Aggregation in Aqueous Solutions. Annual Review of Physical Chemistry, 2018, 69, 125-149.	4.8	51
78	Nonlinear Optical (NLO) Properties of the Octupolar Molecule:Â Structureâ”Function Relationships and Solvent Effects. Journal of Physical Chemistry B, 1999, 103, 4992-4996.	1.2	50
79	High Efficiency and Quadratic Nonlinear Optical Properties of a Fully Optimized 2D Octupolar Crystal Characterized by Nonlinear Microscopy. Advanced Materials, 2005, 17, 196-200.	11.1	50
80	Vibrational contributions to the molecular first and second hyperpolarizabilities of a pushâ€“pull polyene. Journal of Chemical Physics, 1997, 107, 1936-1940.	1.2	49
81	Phenol-benzene complexation dynamics: Quantum chemistry calculation, molecular dynamics simulations, and two dimensional IR spectroscopy. Journal of Chemical Physics, 2006, 125, 244508.	1.2	49
82	Ion aggregation in high salt solutions. II. Spectral graph analysis of water hydrogen-bonding network and ion aggregate structures. Journal of Chemical Physics, 2014, 141, 154502.	1.2	49
83	Time- and frequency-resolved coherent two-dimensional IR spectroscopy: Its complementary relationship with the coherent two-dimensional Raman scattering spectroscopy. Journal of Chemical Physics, 1998, 109, 10559-10569.	1.2	48
84	Label-free and live cell imaging by interferometric scattering microscopy. Chemical Science, 2018, 9, 2690-2697.	3.7	45
85	Globally enhanced chiral field generation by negative-index metamaterials. Physical Review B, 2014, 89, .	1.1	44
86	Revealing the Solvation Structure and Dynamics of Carbonate Electrolytes in Lithium-Ion Batteries by Two-Dimensional Infrared Spectrum Modeling. Journal of Physical Chemistry Letters, 2017, 8, 5779-5784.	2.1	44
87	Theoretical calculations of infrared absorption, vibrational circular dichroism, and two-dimensional vibrational spectra of acetylproline in liquids water and chloroform. Journal of Chemical Physics, 2004, 121, 1849-1865.	1.2	43
88	Vibrational dynamics of DNA. III. Molecular dynamics simulations of DNA in water and theoretical calculations of the two-dimensional vibrational spectra. Journal of Chemical Physics, 2006, 125, 114510.	1.2	43
89	Ion-pairing dynamics of Li+ and SCNâ” in dimethylformamide solution: Chemical exchange two-dimensional infrared spectroscopy. Journal of Chemical Physics, 2011, 134, 064506.	1.2	43
90	Cytoplasmic Protein Imaging with Mid-Infrared Photothermal Microscopy: Cellular Dynamics of Live Neurons and Oligodendrocytes. Journal of Physical Chemistry Letters, 2019, 10, 2857-2861.	2.1	43

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91	Direct calculations of vibrational absorption and circular dichroism spectra of alanine dipeptide analog in water: Quantum mechanical/molecular mechanical molecular dynamics simulations. Journal of Chemical Physics, 2009, 131, 135102.	1.2	42
92	Selective Suppression of Stimulated Raman Scattering with Another Competing Stimulated Raman Scattering. Journal of Physical Chemistry Letters, 2017, 8, 6118-6123.	2.1	42
93	An elementary description of nonlinear optical properties of octupolar molecules: Four-state model for guanidinium-type molecules. Journal of Chemical Physics, 1998, 108, 7114-7120.	1.2	41
94	Two-dimensional vibrational spectroscopy. IV. Relationship between through-space vibrational coupling and intermolecular distance. Journal of Chemical Physics, 2000, 112, 4553-4556.	1.2	40
95	Direct quantum mechanical/molecular mechanical simulations of two-dimensional vibrational responses:N-methylacetamide in water. New Journal of Physics, 2010, 12, 065001.	1.2	40
96	Vibrational solvatochromism. II. A first-principle theory of solvation-induced vibrational frequency shift based on effective fragment potential method. Journal of Chemical Physics, 2014, 140, 164107.	1.2	40
97	Theory of coherent two-dimensional vibrational spectroscopy. Journal of Chemical Physics, 2019, 150, 100901.	1.2	40
98	Two-dimensional vibrational spectroscopy. I. Theoretical calculation of the nonlinear Raman response function of CHCl3. Journal of Chemical Physics, 1999, 111, 4121-4130.	1.2	39
99	Vibrational spectroscopic characteristics of secondary structure polypeptides in liquid water: Constrained MD simulation studies. Biopolymers, 2006, 83, 519-536.	1.2	39
100	Realâ€Time Probing of Ion Pairing Dynamics with 2DIR Spectroscopy. ChemPhysChem, 2010, 11, 3632-3637.	1.0	39
101	Circular dichroism eigenspectra of polyproline II and Î²â€strand conformers of trialanine in water: Singular value decomposition analysis. Chirality, 2010, 22, E186-201.	1.3	39
102	Water Dynamics in Cytoplasm-Like Crowded Environment Correlates with the Conformational Transition of the Macromolecular Crowder. Journal of the American Chemical Society, 2016, 138, 16081-16088.	6.6	39
103	Structure ofN-Acetylproline Amide in Liquid Water:Â Experimentally Measured and Numerically Simulated Infrared and Vibrational Circular Dichroism Spectraâ€. Journal of Physical Chemistry B, 2006, 110, 18834-18843.	1.2	38
104	Infrared Optical Activity: Electric Field Approaches in Time Domain. Accounts of Chemical Research, 2010, 43, 1527-1536.	7.6	37
105	Spectral Graph Analyses of Water Hydrogen-Bonding Network and Osmolyte Aggregate Structures in Osmolyteâ€“Water Solutions. Journal of Physical Chemistry B, 2015, 119, 14402-14412.	1.2	37
106	Isonitrile as an Ultrasensitive Infrared Reporter of Hydrogen-Bonding Structure and Dynamics. Journal of Physical Chemistry B, 2016, 120, 10167-10180.	1.2	37
107	Two-Dimensional Infrared Spectroscopy and Molecular Dynamics Simulation Studies of Nonaqueous Lithium Ion Battery Electrolytes. Journal of Physical Chemistry B, 2019, 123, 6651-6663.	1.2	37
108	Vibrational Characteristics and Vibrational Contributions to the Nonlinear Optical Properties of a Pushâ^'Pull Polyene in Solution. Journal of Physical Chemistry A, 1998, 102, 703-707.	1.1	36

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109	Vibrational dynamics of DNA: IV. Vibrational spectroscopic characteristics of A-, B-, and Z-form DNAâ€™s. Journal of Chemical Physics, 2007, 126, 145102.	1.2	36
110	Î²-Isocyanoalanine as an IR probe: comparison of vibrational dynamics between isonitrile and nitrile-derivatized IR probes. Physical Chemistry Chemical Physics, 2015, 17, 11770-11778.	1.3	36
111	Unveiling the pathway to Z-DNA in the protein-induced Bâ€“Z transition. Nucleic Acids Research, 2018, 46, 4129-4137.	6.5	36
112	Two-dimensional vibrational spectroscopy. III. Theoretical description of the coherent two-dimensional IR-Raman spectroscopy for the investigation of the coupling between both IR- and Raman-active vibrational modes. Journal of Chemical Physics, 1999, 111, 4140-4147.	1.2	35
113	Lateral interactions between adsorbed molecules: Investigations of CO on Ru(001) using nonlinear surface vibrational spectroscopies. Physical Review B, 2002, 65, .	1.1	35
114	Modeling and Simulation of Concentrated Aqueous Solutions of LiTFSI for Battery Applications. Journal of Physical Chemistry C, 2020, 124, 11790-11799.	1.5	35
115	Vibrational solvatochromism: Towards systematic approach to modeling solvation phenomena. Journal of Chemical Physics, 2013, 139, 044111.	1.2	34
116	Modulation of the Hydrogen Bonding Structure of Water by Renal Osmolytes. Journal of Physical Chemistry Letters, 2015, 6, 2773-2779.	2.1	34
117	Operando Raman and UV-Vis spectroscopic investigation of the coloring and bleaching mechanism of self-powered photochromic devices for smart windows. Nano Energy, 2021, 82, 105721.	8.2	34
118	Amplifications in chiroptical spectroscopy, optical enantioselectivity, and weak value measurement. Chemical Science, 2013, 4, 4107.	3.7	33
119	Wettability of graphene and interfacial water structure. CheM, 2021, 7, 1602-1614.	5.8	33
120	Two-dimensional vibrational spectroscopy. II. Ab initio calculation of the coherent 2D infrared response function of CHCl3 and comparison with the 2D Raman response function. Journal of Chemical Physics, 1999, 111, 4131-4139.	1.2	32
121	Femtosecond spectral interferometry of optical activity: Theory. Journal of Chemical Physics, 2008, 129, 094507.	1.2	32
122	Single-Shot Electronic Optical Activity Interferometry: Power and Phase Fluctuation-Free Measurement. Physical Review Letters, 2012, 108, 103901.	2.9	32
123	Two-dimensional circularly polarized pumpâ€“probe spectroscopy. Journal of Chemical Physics, 2003, 119, 7003-7016.	1.2	31
124	Water Hydrogen-Bonding Network Structure and Dynamics at Phospholipid Multibilayer Surface: Femtosecond Mid-IR Pumpâ€“Probe Spectroscopy. Journal of Physical Chemistry Letters, 2016, 7, 741-745.	2.1	31
125	Interferometric Scattering Microscopy with Polarization-Selective Dual Detection Scheme: Capturing the Orientational Information of Anisotropic Nanometric Objects. ACS Photonics, 2018, 5, 797-804.	3.2	31
126	Calculation of the two-dimensional vibrational response function. Journal of Chemical Physics, 2000, 113, 7072-7083.	1.2	30

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127	Ultrafast vibrational spectroscopy in condensed phases. PhysChemComm, 2002, 5, 40.	0.8	30
128	Vibrational solvatochromism and electrochromism. II. Multipole analysis. Journal of Chemical Physics, 2012, 137, 114307.	1.2	30
129	Rotational dynamics of thiocyanate ions in highly concentrated aqueous solutions. Physical Chemistry Chemical Physics, 2012, 14, 6233.	1.3	30
130	A comprehensive library of blocked dipeptides reveals intrinsic backbone conformational propensities of unfolded proteins. Proteins: Structure, Function and Bioinformatics, 2012, 80, 977-990.	1.5	30
131	Ab initio Modeling of the Vibrational Sum-Frequency Generation Spectrum of Interfacial Water. Journal of Physical Chemistry Letters, 2019, 10, 1153-1158.	2.1	30
132	Direct Calculations of Mid- and Near-IR Absorption and Circular Dichroism Spectra of Chiral Molecules Using QM/MM Molecular Dynamics Simulation Method. Journal of Chemical Theory and Computation, 2011, 7, 4097-4103.	2.3	29
133	Ion aggregation in high salt solutions. VII. The effect of cations on the structures of ion aggregates and water hydrogen-bonding network. Journal of Chemical Physics, 2017, 147, 154107.	1.2	29
134	Vibrational solvatochromism. III. Rigorous treatment of the dispersion interaction contribution. Journal of Chemical Physics, 2015, 143, 164111.	1.2	28
135	Suppression and enhancement of van der Waals interactions. Journal of Chemical Physics, 1996, 104, 8730-8741.	1.2	27
136	Excited state dynamics of chromophores in glasses and in photosynthetic proteins. Faraday Discussions, 1997, 108, 23-34.	1.6	27
137	Electron Transfer and Solvent Dynamics in Two- and Three-State Systems. Advances in Chemical Physics, 2007, , 311-370.	0.3	27
138	Calculations of intermode coupling constants and simulations of amide I, II, and III vibrational spectra of dipeptides. Chemical Physics, 2009, 361, 168-175.	0.9	27
139	Azido Gauche Effect on the Backbone Conformation of Î²-Azidoalanine Peptides. Journal of Physical Chemistry B, 2010, 114, 13021-13029.	1.2	27
140	Hofmeister anionic effects on hydration electric fields around water and peptide. Journal of Chemical Physics, 2012, 136, 124501.	1.2	27
141	Terahertz Chiroptical Spectroscopy of an Î±-Helical Polypeptide: A Molecular Dynamics Simulation Study. Journal of Physical Chemistry B, 2014, 118, 12837-12843.	1.2	27
142	Ion aggregation in high salt solutions. IV. Graph-theoretical analyses of ion aggregate structure and water hydrogen bonding network. Journal of Chemical Physics, 2015, 143, 104110.	1.2	27
143	Femtosecond Measurements of Vibrational Circular Dichroism and Optical Rotatory Dispersion Spectra. ChemPhysChem, 2009, 10, 2209-2211.	1.0	26
144	Time-resolved vibrational optical activity measurement by the infrared-visible sum-frequency-generation with circularly polarized infrared light. Journal of Chemical Physics, 2002, 116, 1562-1570.	1.2	25

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145	Hydrogen bonding dynamics and two-dimensional vibrational spectroscopy:N-methylacetamide in liquid methanol. Journal of Raman Spectroscopy, 2005, 36, 326-336.	1.2	25
146	Phase sensitive detection of vibrational optical activity free-induction-decay: vibrational CD and ORD. Journal of the Optical Society of America B: Optical Physics, 2009, 26, 1008.	0.9	25
147	A Direct, Quantitative Connection between Molecular Dynamics Simulations and Vibrational Probe Line Shapes. Journal of Physical Chemistry Letters, 2018, 9, 2560-2567.	2.1	25
148	TWO-DIMENSIONAL VIBRATIONAL SPECTROSCOPY. Advances in Multi-photon Processes and Spectroscopy, 1999, , 229-300.	0.6	25
149	Excitation transfer in the vicinity of a dielectric surface. Chemical Physics Letters, 1995, 242, 291-296.	1.2	24
150	Two-dimensional vibrational spectroscopy. V. Novel 2-dimensional surface vibrational spectroscopies of adsorbed molecules on surfaces or at interfaces. Journal of Chemical Physics, 2000, 112, 9978-9985.	1.2	24
151	Ultrafast exciton-exciton coherent transfer in molecular aggregates and its application to light-harvesting systems. Journal of Chemical Physics, 2007, 127, 075101.	1.2	24
152	Ion aggregation in high salt solutions. VI. Spectral graph analysis of chaotropic ion aggregates. Journal of Chemical Physics, 2016, 145, 174501.	1.2	24
153	Dual-Frequency Comb Transient Absorption: Broad Dynamic Range Measurement of Femtosecond to Nanosecond Relaxation Processes. Journal of Physical Chemistry Letters, 2018, 9, 1866-1871.	2.1	24
154	On the resonant coherent two-dimensional Raman scattering. Journal of Chemical Physics, 1998, 109, 5327-5337.	1.2	23
155	Effects of temperature on the nonlinear response function for two-dimensional vibrational spectroscopy. Journal of Chemical Physics, 2001, 115, 1422-1428.	1.2	23
156	Two-dimensional nonlinear optical activity spectroscopy of coupled multi-chromophore system. Physical Chemistry Chemical Physics, 2008, 10, 3839.	1.3	23
157	Broadband near UV to visible optical activity measurement using self-heterodyned method. Optics Express, 2011, 19, 10017.	1.7	23
158	Site-Specific Characterization of Cytochrome P450cam Conformations by Infrared Spectroscopy. Analytical Chemistry, 2016, 88, 6598-6606.	3.2	23
159	New Insights into the Photodegradation Mechanism of the PTB7-Th Film: Photooxidation of Ï€-Conjugated Backbone upon Sunlight Illumination. Journal of Physical Chemistry C, 2020, 124, 2762-2770.	1.5	23
160	Coherent electric field characterization of molecular chirality in the time domain. Chemical Society Reviews, 2012, 41, 4457.	18.7	22
161	Conformational distributions of denatured and unstructured proteins are similar to those of 20ÂÃ—Â20 blocked dipeptides. Journal of Biomolecular NMR, 2012, 53, 25-41.	1.6	22
162	The effect of Hofmeister anions on water structure at protein surfaces. Physical Chemistry Chemical Physics, 2017, 19, 20008-20015.	1.3	22

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163	Cyanamide as an Infrared Reporter: Comparison of Vibrational Properties between Nitriles Bonded to N and C Atoms. Journal of Physical Chemistry B, 2018, 122, 4035-4044.	1.2	22
164	On the transition from nonadiabatic to adiabatic rate kernel: Schwingerâ€™s stationary variational principle and PadÃ© approximation. Journal of Chemical Physics, 1997, 106, 2654-2661.	1.2	21
165	Amide I Raman optical activity of polypeptides: Fragment approximation. Journal of Chemical Physics, 2009, 130, 014503.	1.2	21
166	Ultrafast internal rotational dynamics of the azido group in (4S)-azidoproline: Chemical exchange 2DIR spectroscopic investigations. Chemical Physics, 2012, 396, 23-29.	0.9	21
167	Computational Infrared and Two-Dimensional Infrared Photon Echo Spectroscopy of Both Wild-Type and Double Mutant Myoglobin-CO Proteins. Journal of Physical Chemistry B, 2013, 117, 15462-15478.	1.2	21
168	Distributed Multipolar Expansion Approach to Calculation of Excitation Energy Transfer Couplings. Journal of Chemical Theory and Computation, 2015, 11, 3259-3266.	2.3	21
169	Frequency comb single-photon interferometry. Communications Physics, 2018, 1, .	2.0	21
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