

Cho Minhaeng

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310
papers

13,345
citations

56
h-index

103
g-index

335
ext. papers

14,496
ext. citations

6.1
avg, IF

6.8
L-index

| # | Paper | IF | Citations |
|-----|---|------|-----------|
| 310 | Two-dimensional spectroscopy of electronic couplings in photosynthesis. <i>Nature</i> , 2005 , 434, 625-8 | 50.4 | 992 |
| 309 | Coherent two-dimensional optical spectroscopy. <i>Chemical Reviews</i> , 2008 , 108, 1331-418 | 68.1 | 621 |
| 308 | CHROMOPHORE-SOLVENT DYNAMICS. <i>Annual Review of Physical Chemistry</i> , 1996 , 47, 109-134 | 15.7 | 579 |
| 307 | Exciton analysis in 2D electronic spectroscopy. <i>Journal of Physical Chemistry B</i> , 2005 , 109, 10542-56 | 3.4 | 360 |
| 306 | Instantaneous normal mode analysis of liquid water. <i>Journal of Chemical Physics</i> , 1994 , 100, 6672-6683 | 3.9 | 315 |
| 305 | Two-Dimensional Optical Spectroscopy | | 314 |
| 304 | Two photon absorption properties of 1,3,5-tricyano-2,4,6-tris(styryl)benzene derivatives. <i>Journal of the American Chemical Society</i> , 2001 , 123, 10039-45 | 16.4 | 289 |
| 303 | The Integrated Photon Echo and Solvation Dynamics. <i>The Journal of Physical Chemistry</i> , 1996 , 100, 11944-11953 | 3.4 | 248 |
| 302 | Correlation between electronic and molecular structure distortions and vibrational properties. II. Amide I modes of NMA/D ₂ O complexes. <i>Journal of Chemical Physics</i> , 2003 , 118, 3491-3498 | 3.9 | 231 |
| 301 | Off-resonant transient birefringence in liquids. <i>Journal of Chemical Physics</i> , 1993 , 99, 2410-2428 | 3.9 | 231 |
| 300 | Amide I vibrational dynamics of N-methylacetamide in polar solvents: the role of electrostatic interactions. <i>Journal of Physical Chemistry B</i> , 2005 , 109, 11016-26 | 3.4 | 201 |
| 299 | Molecular dynamics simulation study of N-methylacetamide in water. I. Amide I mode frequency fluctuation. <i>Journal of Chemical Physics</i> , 2003 , 119, 2247-2255 | 3.9 | 193 |
| 298 | Ultrafast solvent dynamics: Connection between time resolved fluorescence and optical Kerr measurements. <i>Journal of Chemical Physics</i> , 1992 , 96, 5033-5038 | 3.9 | 191 |
| 297 | Two-photon absorption and nonlinear optical properties of octupolar molecules. <i>Journal of the American Chemical Society</i> , 2001 , 123, 10658-67 | 16.4 | 177 |
| 296 | Infrared probes for studying the structure and dynamics of biomolecules. <i>Chemical Reviews</i> , 2013 , 113, 5817-47 | 68.1 | 171 |
| 295 | Molecular dynamics simulation study of N-methylacetamide in water. II. Two-dimensional infrared pump-probe spectra. <i>Journal of Chemical Physics</i> , 2003 , 119, 2256-2263 | 3.9 | 170 |
| 294 | Nitrile and thiocyanate IR probes: quantum chemistry calculation studies and multivariate least-square fitting analysis. <i>Journal of Chemical Physics</i> , 2008 , 128, 134506 | 3.9 | 154 |

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| 293 | The short-time dynamics of solvation. <i>Journal of Chemical Physics</i> , 1994 , 100, 6700-6708 | 3.9 | 141 |
| 292 | Femtosecond characterization of vibrational optical activity of chiral molecules. <i>Nature</i> , 2009 , 458, 310-314 | 3.4 | 134 |
| 291 | Photon echoes and related four-wave-mixing spectroscopies using phase-locked pulses. <i>Journal of Chemical Physics</i> , 1992 , 96, 5618-5629 | 3.9 | 134 |
| 290 | Local Amide I Mode Frequencies and Coupling Constants in Polypeptides. <i>Journal of Physical Chemistry B</i> , 2003 , 107, 9132-9138 | 3.4 | 131 |
| 289 | Non-Gaussian statistics of amide I mode frequency fluctuation of N-methylacetamide in methanol solution: linear and nonlinear vibrational spectra. <i>Journal of Chemical Physics</i> , 2004 , 120, 1477-90 | 3.9 | 124 |
| 288 | Amide I modes in the N-methylacetamide dimer and glycine dipeptide analog: Diagonal force constants. <i>Journal of Chemical Physics</i> , 2003 , 118, 6915-6922 | 3.9 | 124 |
| 287 | Amide I modes of tripeptides: Hessian matrix reconstruction and isotope effects. <i>Journal of Chemical Physics</i> , 2003 , 119, 1451-1461 | 3.9 | 116 |
| 286 | Nitrile and thiocyanate IR probes: molecular dynamics simulation studies. <i>Journal of Chemical Physics</i> , 2008 , 128, 154504 | 3.9 | 113 |
| 285 | Nonequilibrium photoinduced electron transfer. <i>Journal of Chemical Physics</i> , 1995 , 103, 595-606 | 3.9 | 112 |
| 284 | Beta-azidoalanine as an IR probe: application to amyloid A β (16-22) aggregation. <i>Journal of Physical Chemistry B</i> , 2008 , 112, 10352-7 | 3.4 | 97 |
| 283 | Nonlinear optical and two-photon absorption properties of 1,3,5-tricyano-2,4,6-tris(styryl)benzene-containing octupolar oligomers. <i>Chemistry - A European Journal</i> , 2002 , 8, 3907-16 | 4.8 | 93 |
| 282 | Simulation studies of amide I IR absorption and two-dimensional IR spectra of beta hairpins in liquid water. <i>Journal of Physical Chemistry B</i> , 2005 , 109, 11789-801 | 3.4 | 93 |
| 281 | Nanometric Water Channels in Water-in-Salt Lithium Ion Battery Electrolyte. <i>Journal of the American Chemical Society</i> , 2018 , 140, 15661-15667 | 16.4 | 88 |
| 280 | Vibrational Spectroscopic Map, Vibrational Spectroscopy, and Intermolecular Interaction. <i>Chemical Reviews</i> , 2020 , 120, 7152-7218 | 68.1 | 87 |
| 279 | Vibrational Probes: From Small Molecule Solvatochromism Theory and Experiments to Applications in Complex Systems. <i>Accounts of Chemical Research</i> , 2017 , 50, 968-976 | 24.3 | 81 |
| 278 | Local Amide I Mode Frequencies and Coupling Constants in Multiple-Stranded Antiparallel β -Sheet Polypeptides. <i>Journal of Physical Chemistry B</i> , 2004 , 108, 20397-20407 | 3.4 | 79 |
| 277 | Computational vibrational spectroscopy of peptides and proteins in one and two dimensions. <i>Accounts of Chemical Research</i> , 2009 , 42, 1280-9 | 24.3 | 76 |
| 276 | Classical and quantum mechanical/molecular mechanical molecular dynamics simulations of alanine dipeptide in water: comparisons with IR and vibrational circular dichroism spectra. <i>Journal of Chemical Physics</i> , 2008 , 128, 105106 | 3.9 | 75 |

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| 275 | Amide I Modes of β -Helical Polypeptide in Liquid Water: Conformational Fluctuation, Phase Correlation, and Linear and Nonlinear Vibrational Spectra. <i>Journal of Physical Chemistry B</i> , 2004 , 108, 9333-9345 | 3.4 | 74 |
| 274 | Vibrational solvatochromism and electrochromism of infrared probe molecules containing C=O, C-N, C=C, or C-F vibrational chromophore. <i>Journal of Chemical Physics</i> , 2011 , 134, 154513 | 3.9 | 73 |
| 273 | Two-Color Pump-Probe Spectroscopies of Two- and Three-Level Systems: 2-Dimensional Line Shapes and Solvation Dynamics. <i>Journal of Physical Chemistry A</i> , 2003 , 107, 5903-5912 | 2.8 | 72 |
| 272 | Characteristic two-dimensional IR spectroscopic features of antiparallel and parallel beta-sheet polypeptides: simulation studies. <i>Journal of Chemical Physics</i> , 2005 , 123, 084905 | 3.9 | 71 |
| 271 | Computational spectroscopy of ubiquitin: comparison between theory and experiments. <i>Journal of Chemical Physics</i> , 2007 , 126, 045102 | 3.9 | 70 |
| 270 | Azido-derivatized compounds as IR probes of local electrostatic environment: Theoretical studies. <i>Journal of Chemical Physics</i> , 2008 , 129, 174512 | 3.9 | 69 |
| 269 | Amide I vibrational modes in glycine dipeptide analog: Ab initio calculation studies. <i>Journal of Chemical Physics</i> , 2002 , 117, 740-750 | 3.9 | 69 |
| 268 | 1,3,5-Tricyano-2,4,6-tris(vinyl)benzene derivatives with large second-order nonlinear optical properties. <i>Journal of the American Chemical Society</i> , 2001 , 123, 6421-2 | 16.4 | 68 |
| 267 | Molecular Polarizability and First Hyperpolarizability of Octupolar Molecules: Donor-Substituted Triphenylmethane Dyes. <i>Journal of the American Chemical Society</i> , 1998 , 120, 10921-10927 | 16.4 | 67 |
| 266 | Vibrational solvatochromism and electrochromism: coarse-grained models and their relationships. <i>Journal of Chemical Physics</i> , 2009 , 130, 094505 | 3.9 | 66 |
| 265 | Octupolar Crystals for Nonlinear Optics: 1,3,5-Trinitro-2,4,6-tris(styryl)benzene Derivatives. <i>Chemistry of Materials</i> , 2001 , 13, 1438-1440 | 9.6 | 66 |
| 264 | Coherent two-dimensional Raman scattering: Frequency-domain measurement of the intra- and intermolecular vibrational interactions. <i>Journal of Chemical Physics</i> , 1998 , 108, 1326-1334 | 3.9 | 66 |
| 263 | Amide I IR, VCD, and 2d IR spectra of isotope-labeled β -helix in liquid water: Numerical simulation studies. <i>International Journal of Quantum Chemistry</i> , 2005 , 104, 616-634 | 2.1 | 65 |
| 262 | Inter-peptide interaction and delocalization of amide I vibrational excitons in myoglobin and flavodoxin. <i>Journal of Chemical Physics</i> , 2002 , 117, 6821-6832 | 3.9 | 63 |
| 261 | Correlation between electronic and molecular structure distortions and vibrational properties. I. Adiabatic approximations. <i>Journal of Chemical Physics</i> , 2003 , 118, 3480-3490 | 3.9 | 62 |
| 260 | Vibrational dynamics of DNA. I. Vibrational basis modes and couplings. <i>Journal of Chemical Physics</i> , 2006 , 125, 114508 | 3.9 | 61 |
| 259 | Amide I vibrational circular dichroism of dipeptide: Conformation dependence and fragment analysis. <i>Journal of Chemical Physics</i> , 2004 , 120, 4383-92 | 3.9 | 60 |
| 258 | Vibrational solvatochromism of nitrile infrared probes: beyond the vibrational Stark dipole approach. <i>Physical Chemistry Chemical Physics</i> , 2016 , 18, 18094-111 | 3.6 | 59 |

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| 257 | Nonlinear Optical Properties of the Linear Quadrupolar Molecule: Structure-Function Relationship Based on a Three-State Model. <i>Journal of Physical Chemistry B</i> , 1999 , 103, 8221-8229 | 3.4 | 57 |
| 256 | Limitations of a superchiral field. <i>Physical Review A</i> , 2012 , 86, | 2.6 | 56 |
| 255 | The integrated photon echo and solvation dynamics. II. Peak shifts and two-dimensional photon echo of a coupled chromophore system. <i>Journal of Chemical Physics</i> , 2005 , 123, 114506 | 3.9 | 56 |
| 254 | Intrinsic cascading contributions to the fifth- and seventh-order electronically off-resonant Raman spectroscopies. <i>Journal of Chemical Physics</i> , 2000 , 112, 2082-2094 | 3.9 | 56 |
| 253 | Fifth-Order Three-Pulse Scattering Spectroscopy: Can We Separate Homogeneous and Inhomogeneous Contributions to Optical Spectra?. <i>The Journal of Physical Chemistry</i> , 1994 , 98, 3478-3485 | | 56 |
| 252 | Two-Photon Absorption and Second Hyperpolarizability of the Linear Quadrupolar Molecule. <i>Journal of Physical Chemistry A</i> , 2000 , 104, 11033-11040 | 2.8 | 55 |
| 251 | Vibrational solvatochromism and electrochromism of cyanide, thiocyanate, and azide anions in water. <i>Physical Chemistry Chemical Physics</i> , 2010 , 12, 12658-69 | 3.6 | 54 |
| 250 | Ultrafast fluxional exchange dynamics in electrolyte solvation sheath of lithium ion battery. <i>Nature Communications</i> , 2017 , 8, 14658 | 17.4 | 53 |
| 249 | Photon echo measurements in liquids: Numerical calculations with model systems. <i>Journal of Chemical Physics</i> , 1993 , 98, 2848-2859 | 3.9 | 53 |
| 248 | Computational IR spectroscopy of water: OH stretch frequencies, transition dipoles, and intermolecular vibrational coupling constants. <i>Journal of Chemical Physics</i> , 2013 , 138, 174108 | 3.9 | 52 |
| 247 | Theoretical description of two-dimensional vibrational spectroscopy by infrared-infrared-visible sum frequency generation. <i>Physical Review A</i> , 2000 , 61, | 2.6 | 51 |
| 246 | Nonlinear response functions for birefringence and dichroism measurements in condensed phases. <i>Journal of Chemical Physics</i> , 1993 , 98, 5314-5326 | 3.9 | 51 |
| 245 | Two Dimensional Electronic Spectroscopy of Molecular Complexes. <i>Journal of the Chinese Chemical Society</i> , 2006 , 53, 15-24 | 1.5 | 49 |
| 244 | Vibrational contributions to the molecular first and second hyperpolarizabilities of a push-pull polyene. <i>Journal of Chemical Physics</i> , 1997 , 107, 1936-1940 | 3.9 | 48 |
| 243 | IR spectra of N-methylacetamide in water predicted by combined quantum mechanical/molecular mechanical molecular dynamics simulations. <i>Journal of Chemical Physics</i> , 2005 , 123, 134503 | 3.9 | 48 |
| 242 | High Efficiency and Quadratic Nonlinear Optical Properties of a Fully Optimized 2D Octupolar Crystal Characterized by Nonlinear Microscopy. <i>Advanced Materials</i> , 2005 , 17, 196-200 | 2.4 | 48 |
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| 240 | Azido Homocysteine is a Useful Infrared Probe for Monitoring Local Electrostatics and Sidechain Solvation in Proteins. <i>Journal of Physical Chemistry Letters</i> , 2011 , 2, 2158-2162 | 6.4 | 47 |

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| 237 | Infrared Probes Based on Nitrile-Derivatized Prolines: Thermal Insulation Effect and Enhanced Dynamic Range. <i>Journal of Physical Chemistry Letters</i> , 2013 , 4, 2105-2110 | 6.4 | 46 |
| 236 | Vibrational dynamics of DNA. II. Deuterium exchange effects and simulated IR absorption spectra. <i>Journal of Chemical Physics</i> , 2006 , 125, 114509 | 3.9 | 46 |
| 235 | Amide I vibrational circular dichroism of polypeptides: generalized fragmentation approximation method. <i>Journal of Chemical Physics</i> , 2005 , 122, 174903 | 3.9 | 45 |
| 234 | Vibrational interactions of acetonitrile: Doubly vibrationally resonant IR-visible four-wave-mixing spectroscopy. <i>Journal of Chemical Physics</i> , 2002 , 117, 5675-5687 | 3.9 | 45 |
| 233 | Nonlinear Optical (NLO) Properties of the Octupolar Molecule: Structure-Function Relationships and Solvent Effects. <i>Journal of Physical Chemistry B</i> , 1999 , 103, 4992-4996 | 3.4 | 44 |
| 232 | The Bend+Libration Combination Band Is an Intrinsic, Collective, and Strongly Solute-Dependent Reporter on the Hydrogen Bonding Network of Liquid Water. <i>Journal of Physical Chemistry B</i> , 2018 , 122, 2587-2599 | 3.4 | 42 |
| 231 | Nonlinear optical properties of tetrahedral donor-acceptor octupolar molecules: Effective five-state model approach. <i>Journal of Chemical Physics</i> , 2002 , 116, 9165-9173 | 3.9 | 42 |
| 230 | Theoretical calculations of infrared absorption, vibrational circular dichroism, and two-dimensional vibrational spectra of acetylproline in liquids water and chloroform. <i>Journal of Chemical Physics</i> , 2004 , 121, 1849-65 | 3.9 | 41 |
| 229 | Time- and frequency-resolved coherent two-dimensional IR spectroscopy: Its complementary relationship with the coherent two-dimensional Raman scattering spectroscopy. <i>Journal of Chemical Physics</i> , 1998 , 109, 10559-10569 | 3.9 | 41 |
| 228 | Ion aggregation in high salt solutions: ion network versus ion cluster. <i>Journal of Chemical Physics</i> , 2014 , 141, 124510 | 3.9 | 40 |
| 227 | Ion aggregation in high salt solutions. II. Spectral graph analysis of water hydrogen-bonding network and ion aggregate structures. <i>Journal of Chemical Physics</i> , 2014 , 141, 154502 | 3.9 | 40 |
| 226 | Vibrational dynamics of DNA. III. Molecular dynamics simulations of DNA in water and theoretical calculations of the two-dimensional vibrational spectra. <i>Journal of Chemical Physics</i> , 2006 , 125, 114510 | 3.9 | 39 |
| 225 | An elementary description of nonlinear optical properties of octupolar molecules: Four-state model for guanidinium-type molecules. <i>Journal of Chemical Physics</i> , 1998 , 108, 7114-7120 | 3.9 | 39 |
| 224 | Direct quantum mechanical/molecular mechanical simulations of two-dimensional vibrational responses: N-methylacetamide in water. <i>New Journal of Physics</i> , 2010 , 12, 065001 | 2.9 | 37 |
| 223 | Direct calculations of vibrational absorption and circular dichroism spectra of alanine dipeptide analog in water: quantum mechanical/molecular mechanical molecular dynamics simulations. <i>Journal of Chemical Physics</i> , 2009 , 131, 135102 | 3.9 | 37 |
| 222 | Ion-pairing dynamics of Li ⁺ and SCN ⁻ in dimethylformamide solution: chemical exchange two-dimensional infrared spectroscopy. <i>Journal of Chemical Physics</i> , 2011 , 134, 064506 | 3.9 | 37 |

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| 221 | Real-time probing of ion pairing dynamics with 2DIR spectroscopy. <i>ChemPhysChem</i> , 2010 , 11, 3632-7 | 3.2 | 37 |
| 220 | Vibrational spectroscopic characteristics of secondary structure polypeptides in liquid water: constrained MD simulation studies. <i>Biopolymers</i> , 2006 , 83, 519-36 | 2.2 | 37 |
| 219 | Structure of N-acetylproline amide in liquid water: experimentally measured and numerically simulated infrared and vibrational circular dichroism spectra. <i>Journal of Physical Chemistry B</i> , 2006 , 110, 18834-43 | 3.4 | 37 |
| 218 | Two-dimensional vibrational spectroscopy. IV. Relationship between through-space vibrational coupling and intermolecular distance. <i>Journal of Chemical Physics</i> , 2000 , 112, 4553-4556 | 3.9 | 37 |
| 217 | Two-dimensional vibrational spectroscopy. I. Theoretical calculation of the nonlinear Raman response function of CHCl ₃ . <i>Journal of Chemical Physics</i> , 1999 , 111, 4121-4130 | 3.9 | 37 |
| 216 | Globally enhanced chiral field generation by negative-index metamaterials. <i>Physical Review B</i> , 2014 , 89, | 3.3 | 36 |
| 215 | Vibrational solvatochromism. II. A first-principle theory of solvation-induced vibrational frequency shift based on effective fragment potential method. <i>Journal of Chemical Physics</i> , 2014 , 140, 164107 | 3.9 | 36 |
| 214 | Circular dichroism eigenspectra of polyproline II and β -strand conformers of trialanine in water: Singular value decomposition analysis. <i>Chirality</i> , 2010 , 22 Suppl 1, E186-201 | 2.1 | 36 |
| 213 | Revealing the Solvation Structure and Dynamics of Carbonate Electrolytes in Lithium-Ion Batteries by Two-Dimensional Infrared Spectrum Modeling. <i>Journal of Physical Chemistry Letters</i> , 2017 , 8, 5779-5784 | 6.4 | 35 |
| 212 | Water Dynamics in Cytoplasm-Like Crowded Environment Correlates with the Conformational Transition of the Macromolecular Crowder. <i>Journal of the American Chemical Society</i> , 2016 , 138, 16081-16088 | 16.4 | 33 |
| 211 | Vibrational Characteristics and Vibrational Contributions to the Nonlinear Optical Properties of a Push-Pull Polyene in Solution. <i>Journal of Physical Chemistry A</i> , 1998 , 102, 703-707 | 2.8 | 33 |
| 210 | 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. <i>Journal of Chemical Physics</i> , 1999 , 111, 4140-4147 | 3.9 | 32 |
| 209 | Spectral Graph Analyses of Water Hydrogen-Bonding Network and Osmolyte Aggregate Structures in Osmolyte-Water Solutions. <i>Journal of Physical Chemistry B</i> , 2015 , 119, 14402-12 | 3.4 | 31 |
| 208 | Graph Theory and Ion and Molecular Aggregation in Aqueous Solutions. <i>Annual Review of Physical Chemistry</i> , 2018 , 69, 125-149 | 15.7 | 31 |
| 207 | Isonitrile as an Ultrasensitive Infrared Reporter of Hydrogen-Bonding Structure and Dynamics. <i>Journal of Physical Chemistry B</i> , 2016 , 120, 10167-10180 | 3.4 | 31 |
| 206 | Vibrational dynamics of DNA: IV. Vibrational spectroscopic characteristics of A-, B-, and Z-form DNA's. <i>Journal of Chemical Physics</i> , 2007 , 126, 145102 | 3.9 | 31 |
| 205 | Lateral interactions between adsorbed molecules: Investigations of CO on Ru(001) using nonlinear surface vibrational spectroscopies. <i>Physical Review B</i> , 2002 , 65, | 3.3 | 31 |
| 204 | Selective Suppression of Stimulated Raman Scattering with Another Competing Stimulated Raman Scattering. <i>Journal of Physical Chemistry Letters</i> , 2017 , 8, 6118-6123 | 6.4 | 30 |

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| 203 | Vibrational solvatochromism: towards systematic approach to modeling solvation phenomena. <i>Journal of Chemical Physics</i> , 2013 , 139, 044111 | 3.9 | 30 |
| 202 | Rotational dynamics of thiocyanate ions in highly concentrated aqueous solutions. <i>Physical Chemistry Chemical Physics</i> , 2012 , 14, 6233-40 | 3.6 | 29 |
| 201 | A comprehensive library of blocked dipeptides reveals intrinsic backbone conformational propensities of unfolded proteins. <i>Proteins: Structure, Function and Bioinformatics</i> , 2012 , 80, 977-90 | 4.2 | 29 |
| 200 | Infrared optical activity: electric field approaches in time domain. <i>Accounts of Chemical Research</i> , 2010 , 43, 1527-36 | 24.3 | 29 |
| 199 | Vibrational solvatochromism and electrochromism. II. Multipole analysis. <i>Journal of Chemical Physics</i> , 2012 , 137, 114307 | 3.9 | 28 |
| 198 | Calculation of the two-dimensional vibrational response function. <i>Journal of Chemical Physics</i> , 2000 , 113, 7072-7083 | 3.9 | 28 |
| 197 | Two-dimensional vibrational spectroscopy. II. Ab initio calculation of the coherent 2D infrared response function of CHCl ₃ and comparison with the 2D Raman response function. <i>Journal of Chemical Physics</i> , 1999 , 111, 4131-4139 | 3.9 | 28 |
| 196 | Two-Dimensional Infrared Spectroscopy and Molecular Dynamics Simulation Studies of Nonaqueous Lithium Ion Battery Electrolytes. <i>Journal of Physical Chemistry B</i> , 2019 , 123, 6651-6663 | 3.4 | 27 |
| 195 | Modulation of the Hydrogen Bonding Structure of Water by Renal Osmolytes. <i>Journal of Physical Chemistry Letters</i> , 2015 , 6, 2773-9 | 6.4 | 27 |
| 194 | Isocyanalanine as an IR probe: comparison of vibrational dynamics between isonitrile and nitrile-derivatized IR probes. <i>Physical Chemistry Chemical Physics</i> , 2015 , 17, 11770-8 | 3.6 | 27 |
| 193 | Ultrafast vibrational spectroscopy in condensed phases. <i>PhysChemComm</i> , 2002 , 5, 40 | | 27 |
| 192 | Water Hydrogen-Bonding Network Structure and Dynamics at Phospholipid Multibilayer Surface: Femtosecond Mid-IR Pump-Probe Spectroscopy. <i>Journal of Physical Chemistry Letters</i> , 2016 , 7, 741-5 | 6.4 | 26 |
| 191 | Vibrational solvatochromism. III. Rigorous treatment of the dispersion interaction contribution. <i>Journal of Chemical Physics</i> , 2015 , 143, 164111 | 3.9 | 26 |
| 190 | Azido gauche effect on the backbone conformation of α -azidoalanine peptides. <i>Journal of Physical Chemistry B</i> , 2010 , 114, 13021-9 | 3.4 | 26 |
| 189 | Femtosecond measurements of vibrational circular dichroism and optical rotatory dispersion spectra. <i>ChemPhysChem</i> , 2009 , 10, 2209-11 | 3.2 | 26 |
| 188 | Single-shot electronic optical activity interferometry: power and phase fluctuation-free measurement. <i>Physical Review Letters</i> , 2012 , 108, 103901 | 7.4 | 26 |
| 187 | Excited state dynamics of chromophores in glasses and in photosynthetic proteins. <i>Faraday Discussions</i> , 1997 , 108, 23-34 | 3.6 | 26 |
| 186 | Calculations of intermode coupling constants and simulations of amide I, II, and III vibrational spectra of dipeptides. <i>Chemical Physics</i> , 2009 , 361, 168-175 | 2.3 | 25 |

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| 185 | Femtosecond spectral interferometry of optical activity: theory. <i>Journal of Chemical Physics</i> , 2008 , 129, 094507 | 3.9 | 25 |
| 184 | Suppression and enhancement of van der Waals interactions. <i>Journal of Chemical Physics</i> , 1996 , 104, 8730-8741 | 3.9 | 25 |
| 183 | Amplifications in chiroptical spectroscopy, optical enantioselectivity, and weak value measurement. <i>Chemical Science</i> , 2013 , 4, 4107 | 9.4 | 24 |
| 182 | Hofmeister anionic effects on hydration electric fields around water and peptide. <i>Journal of Chemical Physics</i> , 2012 , 136, 124501 | 3.9 | 24 |
| 181 | Two-dimensional circularly polarized pump-probe spectroscopy. <i>Journal of Chemical Physics</i> , 2003 , 119, 7003-7016 | 3.9 | 24 |
| 180 | Two-dimensional vibrational spectroscopy. V. Novel 2-dimensional surface vibrational spectroscopies of adsorbed molecules on surfaces or at interfaces. <i>Journal of Chemical Physics</i> , 2000 , 112, 9978-9985 | 3.9 | 23 |
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| 178 | Ion aggregation in high salt solutions. VII. The effect of cations on the structures of ion aggregates and water hydrogen-bonding network. <i>Journal of Chemical Physics</i> , 2017 , 147, 154107 | 3.9 | 22 |
| 177 | Label-free and live cell imaging by interferometric scattering microscopy. <i>Chemical Science</i> , 2018 , 9, 2690-2697 | 22 | 22 |
| 176 | Electron Transfer and Solvent Dynamics in Two- and Three-State Systems. <i>Advances in Chemical Physics</i> , 2007 , 311-370 | | 22 |
| 175 | Hydrogen bonding dynamics and two-dimensional vibrational spectroscopy: N-methylacetamide in liquid methanol. <i>Journal of Raman Spectroscopy</i> , 2005 , 36, 326-336 | 2.3 | 22 |
| 174 | Time-resolved vibrational optical activity measurement by the infrared-visible sum-frequency-generation with circularly polarized infrared light. <i>Journal of Chemical Physics</i> , 2002 , 116, 1562-1570 | 3.9 | 22 |
| 173 | Excitation transfer in the vicinity of a dielectric surface. <i>Chemical Physics Letters</i> , 1995 , 242, 291-296 | 2.5 | 22 |
| 172 | Ion aggregation in high salt solutions. VI. Spectral graph analysis of chaotropic ion aggregates. <i>Journal of Chemical Physics</i> , 2016 , 145, 174501 | 3.9 | 22 |
| 171 | Direct Calculations of Mid- and Near-IR Absorption and Circular Dichroism Spectra of Chiral Molecules Using QM/MM Molecular Dynamics Simulation Method. <i>Journal of Chemical Theory and Computation</i> , 2011 , 7, 4097-103 | 6.4 | 21 |
| 170 | On the transition from nonadiabatic to adiabatic rate kernel: Schwinger's stationary variational principle and Padé approximation. <i>Journal of Chemical Physics</i> , 1997 , 106, 2654-2661 | 3.9 | 21 |
| 169 | Ultrafast exciton-exciton coherent transfer in molecular aggregates and its application to light-harvesting systems. <i>Journal of Chemical Physics</i> , 2007 , 127, 075101 | 3.9 | 21 |
| 168 | Effects of temperature on the nonlinear response function for two-dimensional vibrational spectroscopy. <i>Journal of Chemical Physics</i> , 2001 , 115, 1422-1428 | 3.9 | 21 |

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| 167 | Site-Specific Characterization of Cytochrome P450cam Conformations by Infrared Spectroscopy. <i>Analytical Chemistry</i> , 2016 , 88, 6598-606 | 7.8 | 21 |
| 166 | Theory of coherent two-dimensional vibrational spectroscopy. <i>Journal of Chemical Physics</i> , 2019 , 150, 100901 | 3.9 | 20 |
| 165 | A Direct, Quantitative Connection between Molecular Dynamics Simulations and Vibrational Probe Line Shapes. <i>Journal of Physical Chemistry Letters</i> , 2018 , 9, 2560-2567 | 6.4 | 20 |
| 164 | Ion aggregation in high salt solutions. IV. Graph-theoretical analyses of ion aggregate structure and water hydrogen bonding network. <i>Journal of Chemical Physics</i> , 2015 , 143, 104110 | 3.9 | 20 |
| 163 | Vibrational spectroscopic determination of local solvent electric field, solute-solvent electrostatic interaction energy, and their fluctuation amplitudes. <i>Journal of Physical Chemistry A</i> , 2012 , 116, 347-57 | 2.8 | 20 |
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