# Dor Ben-Amotz

## List of Publications by Year in Descending Order



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|---|---|---|---|
| 161 papers | 5,424 citations | 43 h-index | 66 g-index |
| 170 ext. papers | 5,978 ext. citations | 5.7 avg, IF | 6.12 L-index |

| # | Paper | IF | Citations |
|---|---|---|---|
| 161 | Scientific Autobiography of Dor Ben-Amotz.. *Journal of Physical Chemistry B*, **2022**, 126, 2946-2951 | 3.4 | |
| 160 | Electric buzz in a glass of pure water.. *Science*, **2022**, 376, 800-801 | 33.3 | 4 |
| 159 | Surfactant aggregate size distributions above and below the critical micelle concentration.. *Journal of Chemical Physics*, **2021**, 155, 224902 | 3.9 | 0 |
| 158 | Spectroscopically Quantifying the Influence of Salts on Nonionic Surfactant Chemical Potentials and Micelle Formation. *Journal of Physical Chemistry Letters*, **2021**, 12, 355-360 | 6.4 | 3 |
| 157 | Hydration and Seamless Integration of Hydrogen Peroxide in Water. *Journal of Physical Chemistry B*, **2021**, | 3.4 | 2 |
| 156 | Complementarity of FT-IR and Raman spectroscopies for the species discrimination of meat and bone meals related to lipid molecular profiles. *Food Chemistry*, **2021**, 345, 128754 | 8.5 | 6 |
| 155 | Spectroscopic and Structural Characterization of Water-Shared Ion-Pairs in Aqueous Sodium and Lithium Hydroxide. *Journal of Physical Chemistry B*, **2021**, 125, 1439-1446 | 3.4 | 7 |
| 154 | The freezing behavior of aqueous -alcohol nanodroplets. *Physical Chemistry Chemical Physics*, **2021**, 23, 9991-10005 | 3.6 | 2 |
| 153 | Spontaneous drying of non-polar deep-cavity cavitand pockets in aqueous solution. *Nature Chemistry*, **2020**, 12, 589-594 | 17.6 | 22 |
| 152 | Influence of crowding on hydrophobic hydration-shell structure. *Physical Chemistry Chemical Physics* , **2020**, 22, 11724-11730 | 3.6 | 8 |
| 151 | Binding of divalent cations to acetate: molecular simulations guided by Raman spectroscopy. *Physical Chemistry Chemical Physics*, **2020**, 22, 24014-24027 | 3.6 | 16 |
| 150 | Quantifying how step-wise fluorination tunes local solute hydrophobicity, hydration shell thermodynamics and the quantum mechanical contributions of solute-water interactions. *Physical Chemistry Chemical Physics*, **2020**, 22, 22997-23008 | 3.6 | 1 |
| 149 | Binding-Induced Unfolding of 1-Bromopropane in Cyclodextrin. *Journal of Physical Chemistry B*, **2020**, 124, 11015-11021 | 3.4 | 1 |
| 148 | Optimally pooled viral testing. *Epidemics*, **2020**, 33, 100413 | 5.1 | 4 |
| 147 | Comparison and chemical structure-related basis of species discrimination of animal fats by Raman spectroscopy using near-infrared and visible excitation lasers. *LWT - Food Science and Technology*, **2020**, 134, 110105 | 5.4 | 2 |
| 146 | Hydrophobic but Water-Friendly: Favorable Water-Perfluoromethyl Interactions Promote Hydration Shell Defects. *Journal of the American Chemical Society*, **2019**, 141, 15856-15868 | 16.4 | 11 |
| 145 | Hiding in the Crowd: Spectral Signatures of Overcoordinated Hydrogen-Bond Environments. *Journal of Physical Chemistry Letters*, **2019**, 10, 6067-6073 | 6.4 | 14 |

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| 144 | Hydration-Shell Vibrational Spectroscopy. *Journal of the American Chemical Society*, **2019**, 141, 10569-10580 | 14.4 | 34 |
| 143 | Cavity Hydration and Competitive Binding in Methylated β-Cyclodextrin. *Journal of Physical Chemistry Letters*, **2019**, 10, 2802-2805 | 6.4 | 5 |
| 142 | Temperature-Dependent Hydrophobic Crossover Length Scale and Water Tetrahedral Order. *Journal of Physical Chemistry Letters*, **2018**, 9, 1012-1017 | 6.4 | 35 |
| 141 | Tribute to Benjamin Widom. *Journal of Physical Chemistry B*, **2018**, 122, 3203-3205 | 3.4 | |
| 140 | The Interplay of Structure and Dynamics in the Raman Spectrum of Liquid Water over the Full Frequency and Temperature Range. *Journal of Physical Chemistry Letters*, **2018**, 9, 851-857 | 6.4 | 56 |
| 139 | Interfacial Adsorption of Neutral and Ionic Solutes in a Water Droplet. *Journal of Physical Chemistry B*, **2018**, 122, 3447-3453 | 3.4 | 9 |
| 138 | Influence of Intermolecular Coupling on the Vibrational Spectrum of Water. *Journal of Physical Chemistry B*, **2018**, 122, 5375-5380 | 3.4 | 10 |
| 137 | Binary Complementary Filters for Compressive Raman Spectroscopy. *Applied Spectroscopy*, **2018**, 72, 69-78 | 3.1 | 18 |
| 136 | Solvent scaling scheme for studying solvent restructuring thermodynamics in solvation processes. *Journal of Molecular Liquids*, **2018**, 270, 114-127 | 6 | 1 |
| 135 | Recent Trends in Compressive Raman Spectroscopy Using DMD-Based Binary Detection. *Journal of Imaging*, **2018**, 5, | 3.1 | 22 |
| 134 | Methane Hydration-Shell Structure and Fragility. *Angewandte Chemie - International Edition*, **2018**, 57, 15133-15137 | 16.4 | 29 |
| 133 | Methane Hydration-Shell Structure and Fragility. *Angewandte Chemie*, **2018**, 130, 15353-15357 | 3.6 | |
| 132 | Temperature and polarization dependent Raman spectra of liquid H2O and D2O. *Journal of Raman Spectroscopy*, **2018**, 49, 1860-1866 | 2.3 | 15 |
| 131 | Linking photons and ultra-light particles. *Chemical Physics*, **2018**, 514, 113-119 | 2.3 | |
| 130 | Hydration-Shell Transformation of Thermosensitive Aqueous Polymers. *Journal of Physical Chemistry Letters*, **2017**, 8, 1360-1364 | 6.4 | 26 |
| 129 | CO Hydration Shell Structure and Transformation. *Journal of Physical Chemistry Letters*, **2017**, 8, 2971-2975 | 6.4 | 13 |
| 128 | Decomposition of the Experimental Raman and Infrared Spectra of Acidic Water into Proton, Special Pair, and Counterion Contributions. *Journal of Physical Chemistry Letters*, **2017**, 8, 5246-5252 | 6.4 | 55 |
| 127 | Joule Heating and Thermal Denaturation of Proteins in Nano-ESI Theta Tips. *Journal of the American Society for Mass Spectrometry*, **2017**, 28, 2001-2010 | 3.5 | 9 |

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| 126 | Interfacial solvation thermodynamics. *Journal of Physics Condensed Matter*, **2016**, 28, 414013 | 1.8 | 30 |
| 125 | Water-mediated aggregation of 2-butoxyethanol. *Physical Chemistry Chemical Physics*, **2016**, 18, 24937-43 | 3.6 | 13 |
| 124 | Influence of Cononsolvency on the Aggregation of Tertiary Butyl Alcohol in Methanol-Water Mixtures. *Journal of the American Chemical Society*, **2016**, 138, 9045-8 | 16.4 | 39 |
| 123 | Water-Mediated Hydrophobic Interactions. *Annual Review of Physical Chemistry*, **2016**, 67, 617-38 | 15.7 | 118 |
| 122 | Specific ion interactions with aromatic rings in aqueous solutions: Comparison of molecular dynamics simulations with a thermodynamic solute partitioning model and Raman spectroscopy. *Chemical Physics Letters*, **2015**, 638, 1-8 | 2.5 | 6 |
| 121 | Hydrophobic Ambivalence: Teetering on the Edge of Randomness. *Journal of Physical Chemistry Letters*, **2015**, 6, 1696-701 | 6.4 | 46 |
| 120 | Fluorescence modeling for optimized-binary compressive detection Raman spectroscopy. *Optics Express*, **2015**, 23, 23935-51 | 3.3 | 8 |
| 119 | Micelle Structure and Hydrophobic Hydration. *Journal of the American Chemical Society*, **2015**, 137, 10809-15 | 14.4 | 83 |
| 118 | Finite lattice model for molecular aggregation equilibria. Boolean statistics, analytical approximations, and the macroscopic limit. *Physical Chemistry Chemical Physics*, **2015**, 17, 21960-7 | 3.6 | 5 |
| 117 | Contacts Between Alcohols in Water Are Random Rather than Hydrophobic. *Journal of Physical Chemistry Letters*, **2015**, 6, 688-92 | 6.4 | 72 |
| 116 | Influence of a Neighboring Charged Group on Hydrophobic Hydration Shell Structure. *Journal of Physical Chemistry B*, **2015**, 119, 9417-22 | 3.4 | 26 |
| 115 | Specific ion effects in amphiphile hydration and interface stabilization. *Journal of the American Chemical Society*, **2014**, 136, 2040-7 | 16.4 | 73 |
| 114 | Charge asymmetry at aqueous hydrophobic interfaces and hydration shells. *Angewandte Chemie - International Edition*, **2014**, 53, 9560-3 | 16.4 | 71 |
| 113 | Molecular aggregation equilibria. Comparison of finite lattice and weighted random mixing predictions. *Journal of Physical Chemistry B*, **2014**, 118, 7878-85 | 3.4 | 8 |
| 112 | Pharmaceutical Application of Fast Raman Hyperspectral Imaging with Compressive Detection Strategy. *Journal of Pharmaceutical Innovation*, **2014**, 9, 1-4 | 1.8 | 12 |
| 111 | On the cooperative formation of non-hydrogen-bonded water at molecular hydrophobic interfaces. *Nature Chemistry*, **2013**, 5, 796-802 | 17.6 | 114 |
| 110 | Rapid classification of pharmaceutical ingredients with Raman spectroscopy using compressive detection strategy with PLS-DA multivariate filters. *Journal of Pharmaceutical and Biomedical Analysis*, **2013**, 80, 63-8 | 3.5 | 24 |
| 109 | Distinguishing aggregation from random mixing in aqueous t-butyl alcohol solutions. *Faraday Discussions*, **2013**, 167, 177-90 | 3.6 | 50 |

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| 108 | Analysis of molecular aggregation equilibria using random mixing statistics. *Journal of Physical Chemistry B*, **2013**, 117, 15667-74 | 3.4 | 4 |
| 107 | Digital compressive chemical quantitation and hyperspectral imaging. *Analyst, The*, **2013**, 138, 4982-90 | 5 | 29 |
| 106 | Quantitative vibrational imaging by hyperspectral stimulated Raman scattering microscopy and multivariate curve resolution analysis. *Analytical Chemistry*, **2013**, 85, 98-106 | 7.8 | 159 |
| 105 | Expulsion of ions from hydrophobic hydration shells. *Journal of the American Chemical Society*, **2013**, 135, 8818-21 | 16.4 | 43 |
| 104 | Interactions between halide anions and a molecular hydrophobic interface. *Faraday Discussions*, **2013**, 160, 255-70; discussion 311-27 | 3.6 | 42 |
| 103 | Water structural transformation at molecular hydrophobic interfaces. *Nature*, **2012**, 491, 582-5 | 50.4 | 378 |
| 102 | Photon level chemical classification using digital compressive detection. *Analytica Chimica Acta*, **2012**, 755, 17-27 | 6.6 | 35 |
| 101 | Application of Raman multivariate curve resolution to solvation-shell spectroscopy. *Applied Spectroscopy*, **2012**, 66, 282-8 | 3.1 | 44 |
| 100 | Hydrogen Bonding in Liquid Water. *Journal of Physical Chemistry Letters*, **2011**, 2, 2930-2933 | 6.4 | 113 |
| 99 | Structure and dynamics of water dangling OH bonds in hydrophobic hydration shells. Comparison of simulation and experiment. *Journal of Physical Chemistry A*, **2011**, 115, 6177-83 | 2.8 | 51 |
| 98 | Multivariate hyperspectral Raman imaging using compressive detection. *Analytical Chemistry*, **2011**, 83, 5086-92 | 7.8 | 59 |
| 97 | Unveiling Electron Promiscuity. *Journal of Physical Chemistry Letters*, **2011**, 2, 1216-22 | 6.4 | 48 |
| 96 | Communication: Length scale dependent oil-water energy fluctuations. *Journal of Chemical Physics*, **2011**, 135, 201102 | 3.9 | 16 |
| 95 | Are long-chain alkanes hydrophilic?. *Journal of Physical Chemistry B*, **2010**, 114, 8646-51 | 3.4 | 28 |
| 94 | Multiplexed concentration quantification using isotopic surface-enhanced resonance Raman scattering. *Journal of Raman Spectroscopy*, **2010**, 41, 752-757 | 2.3 | 9 |
| 93 | Observation of water dangling OH bonds around dissolved nonpolar groups. *Proceedings of the National Academy of Sciences of the United States of America*, **2009**, 106, 12230-4 | 11.5 | 130 |
| 92 | Perturbations of water by alkali halide ions measured using multivariate Raman curve resolution. *Journal of Physical Chemistry B*, **2009**, 113, 1805-9 | 3.4 | 74 |
| 91 | Unraveling water's entropic mysteries: a unified view of nonpolar, polar, and ionic hydration. *Accounts of Chemical Research*, **2008**, 41, 957-67 | 24.3 | 106 |

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| 90 | Virial theorem and energy partitioning in systems with mixed power-law potentials. *Molecular Physics*, **2008**, 106, 547-555 | 1.7 | 2 |
| 89 | Protein quantitation in 2-D gels using fluorescence with water Raman as an internal standard. *Journal of Proteome Research*, **2008**, 7, 1341-5 | 5.6 | 3 |
| 88 | Accurate concentration measurements using surface-enhanced Raman and deuterium exchanged dye pairs. *Applied Spectroscopy*, **2008**, 62, 1001-7 | 3.1 | 12 |
| 87 | Solute-induced perturbations of solvent-shell molecules observed using multivariate Raman curve resolution. *Journal of the American Chemical Society*, **2008**, 130, 4576-7 | 16.4 | 59 |
| 86 | Detection and relative quantification of proteins by surface enhanced Raman using isotopic labels. *Journal of the American Chemical Society*, **2008**, 130, 9624-5 | 16.4 | 27 |
| 85 | Quantification of isotope encoded proteins in 2-D gels using surface enhanced resonance Raman. *Bioconjugate Chemistry*, **2008**, 19, 2212-20 | 6.3 | 7 |
| 84 | Protein-ligand binding detected using ultrafiltration Raman difference spectroscopy. *Analytical Biochemistry*, **2008**, 373, 154-60 | 3.1 | 11 |
| 83 | Proteomic Applications of Drop Coating Deposition Raman Spectroscopy. *ACS Symposium Series*, **2007**, 52-63 | 0.4 | |
| 82 | Analysis of insulin amyloid fibrils by Raman spectroscopy. *Biophysical Chemistry*, **2007**, 128, 150-5 | 3.5 | 44 |
| 81 | Nonideal gas solvation thermodynamics. *Journal of Chemical Physics*, **2007**, 126, 104502 | 3.9 | 11 |
| 80 | Note on the energy density in the solvent induced by a solute. *Proceedings of the National Academy of Sciences of the United States of America*, **2006**, 103, 18887-90 | 11.5 | 7 |
| 79 | The Analysis of Spontaneous Processes Using Equilibrium Thermodynamics. *Journal of Chemical Education*, **2006**, 83, 132 | 2.4 | 5 |
| 78 | The rectified second law of thermodynamics. *Journal of Physical Chemistry B*, **2006**, 110, 19966-72 | 3.4 | 6 |
| 77 | Average entropy dissipation in irreversible mesoscopic processes. *Physical Review Letters*, **2006**, 96, 020602 | 7.4 | 19 |
| 76 | Preface to the Charles B. Harris Festschrift. *Journal of Physical Chemistry B*, **2006**, 110, 19745-19746 | 3.4 | |
| 75 | Generalized solvation heat capacities. *Journal of Physical Chemistry B*, **2006**, 110, 19839-49 | 3.4 | 24 |
| 74 | Revisiting Bohr's semiclassical quantum theory. *Journal of Physical Chemistry B*, **2006**, 110, 19861-6 | 3.4 | 1 |
| 73 | Validation of the drop coating deposition Raman method for protein analysis. *Analytical Biochemistry*, **2006**, 353, 157-66 | 3.1 | 70 |

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| 72 | Solvation thermodynamics: theory and applications. *Journal of Physical Chemistry B*, **2005**, 109, 6866-78 | 3.4 | 94 |
| 71 | Adaptive silver films for detection of antibody-antigen binding. *Langmuir*, **2005**, 21, 8368-73 | 4 | 52 |
| 70 | Isotope edited internal standard method for quantitative surface-enhanced Raman spectroscopy. *Analytical Chemistry*, **2005**, 77, 3563-9 | 7.8 | 88 |
| 69 | Global thermodynamics of hydrophobic cavitation, dewetting, and hydration. *Journal of Chemical Physics*, **2005**, 123, 184504 | 3.9 | 46 |
| 68 | Detection of amino acid and peptide phosphate protonation using Raman spectroscopy. *Analytical Biochemistry*, **2005**, 343, 223-30 | 3.1 | 52 |
| 67 | Anomalous fluorescence in near-infrared Raman spectroscopy of cementitious materials. *Cement and Concrete Research*, **2005**, 35, 1620-1628 | 10.3 | 35 |
| 66 | Adaptive silver films for surface-enhanced Raman spectroscopy of biomolecules. *Journal of Raman Spectroscopy*, **2005**, 36, 648-656 | 2.3 | 52 |
| 65 | Characterization of select members of the Taxane family using Raman spectroscopy. *Journal of Raman Spectroscopy*, **2005**, 36, 1052-1058 | 2.3 | 9 |
| 64 | External Raman standard for absolute intensity and concentration measurements. *Review of Scientific Instruments*, **2005**, 76, 033108 | 1.7 | 27 |
| 63 | New mean-energy formulae for free energy differences. *Molecular Physics*, **2005**, 103, 3209-3221 | 1.7 | 15 |
| 62 | Progress in thermodynamic perturbation theory and self-consistent Ornstein–Zernike approach relevant to structural-arrest problems. *Journal of Physics Condensed Matter*, **2004**, 16, S4887-S4900 | 1.8 | 7 |
| 61 | Hard sphere perturbation theory for fluids with soft-repulsive-core potentials. *Journal of Chemical Physics*, **2004**, 120, 4844-51 | 3.9 | 25 |
| 60 | Identification of insulin variants using Raman spectroscopy. *Analytical Biochemistry*, **2004**, 332, 245-52 | 3.1 | 60 |
| 59 | The Raman detection of peptide tyrosine phosphorylation. *Analytical Biochemistry*, **2004**, 332, 116-21 | 3.1 | 47 |
| 58 | Oligosaccharide identification and mixture quantification using Raman spectroscopy and chemometric analysis. *Carbohydrate Research*, **2004**, 339, 141-5 | 2.9 | 28 |
| 57 | Reformulation of Weeks–Chandler–Andersen Perturbation Theory Directly in Terms of a Hard-Sphere Reference System. *Journal of Physical Chemistry B*, **2004**, 108, 6877-6882 | 3.4 | 62 |
| 56 | Updated Principle of Corresponding States. *Journal of Chemical Education*, **2004**, 81, 142 | 2.4 | 14 |
| 55 | Second-derivative variance minimization method for automated spectral subtraction. *Applied Spectroscopy*, **2004**, 58, 272-8 | 3.1 | 19 |

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| 54 | Chemical segregation and reduction of Raman background interference using drop coating deposition. *Applied Spectroscopy*, **2004**, 58, 929-33 | 3.1 | 47 |
| 53 | Evaluation of folate conjugate uptake and transport by the choroid plexus of mice. *Pharmaceutical Research*, **2003**, 20, 714-9 | 4.5 | 40 |
| 52 | Analytical implementation and critical tests of fluid thermodynamic perturbation theory. *Journal of Chemical Physics*, **2003**, 119, 10777-10788 | 3.9 | 37 |
| 51 | Raman detection of proteomic analytes. *Analytical Chemistry*, **2003**, 75, 5703-9 | 7.8 | 159 |
| 50 | Rectification of thermodynamic inequalities. *Journal of Chemical Physics*, **2003**, 118, 5932-5936 | 3.9 | 11 |
| 49 | Single scan cosmic spike removal using the upper bound spectrum method. *Applied Spectroscopy*, **2003**, 57, 1303-5 | 3.1 | 16 |
| 48 | Optical imaging of metastatic tumors using a folate-targeted fluorescent probe. *Journal of Biomedical Optics*, **2003**, 8, 636-41 | 3.5 | 72 |
| 47 | Perturbed hard fluid theoretical analysis of the effects of solvation on the thermodynamics of a hemiketal formation reaction. *Journal of Chemical Physics*, **2003**, 118, 6427-6436 | 3.9 | 1 |
| 46 | Raman chemical imaging of tribological nitride coated (TiN, TiAlN) surfaces. *Wear*, **2002**, 252, 956-969 | 3.5 | 26 |
| 45 | Raman Chemical Imaging of Tribological Surfaces. *Tribology Transactions*, **2002**, 45, 239-245 | 1.8 | 2 |
| 44 | Perturbed hard-body fluid analysis of the global effects of solvation on conformational thermodynamics. *Journal of Chemical Physics*, **2002**, 117, 6590-6598 | 3.9 | 2 |
| 43 | Improved corresponding states scaling of the equations of state of simple fluids. *Journal of Chemical Physics*, **2002**, 117, 4632-4634 | 3.9 | 12 |
| 42 | Removal of Cosmic Spikes from Hyper-Spectral Images Using a Hybrid Upper-Bound Spectrum Method. *Applied Spectroscopy*, **2002**, 56, 91-98 | 3.1 | 25 |
| 41 | Global Quantitation of Solvent Effects on the Isomerization Thermodynamics of 1,2-Dichloroethane and trans-1,2-Dichlorocyclohexane. *Journal of Physical Chemistry B*, **2002**, 106, 7882-7888 | 3.4 | 14 |
| 40 | Chemical mapping of elemental sulfur on pyrite and arsenopyrite surfaces using near-infrared Raman imaging microscopy. *Applied Surface Science*, **2001**, 178, 105-115 | 6.7 | 54 |
| 39 | Chemical mapping of thaumasite formed in sulfate-attacked cement mortar using near-infrared Raman imaging microscopy. *Cement and Concrete Research*, **2001**, 31, 953-958 | 10.3 | 20 |
| 38 | Self-consistent corrections to the equation of state and chemical potentials of hard chain fluid mixtures. *Journal of Chemical Physics*, **2001**, 114, 5735-5744 | 3.9 | 5 |
| 37 | The influence of molecular shape on chemical reaction thermodynamics. *Journal of Chemical Physics* , **2001**, 115, 9401-9409 | 3.9 | 10 |

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|---|---|---|---|
| 36 | Influence of Laser Illumination Geometry on the Power Distribution Advantage. *Applied Spectroscopy*, **2001**, 55, 61-65 | 3.1 | 17 |
| 35 | Stripping of Cosmic Spike Spectral Artifacts Using a New Upper-Bound Spectrum Algorithm. *Applied Spectroscopy*, **2001**, 55, 1523-1531 | 3.1 | 50 |
| 34 | Cavity Formation and Dipolar Contribution to the Gauche Trans Isomerization of 1-Chloropropane and 1,2-Dichloroethane. *Journal of Physical Chemistry B*, **2001**, 105, 520-526 | 3.4 | 22 |
| 33 | Cavity formation energies for diatomic and spherical solutes in a diatomic hard body fluid. *Journal of Chemical Physics*, **2000**, 113, 4349-4358 | 3.9 | 11 |
| 32 | Enhanced Chemical Classification of Raman Images in the Presence of Strong Fluorescence Interference. *Applied Spectroscopy*, **2000**, 54, 1379-1383 | 3.1 | 65 |
| 31 | Pressure Stabilization and Solvation Thermodynamics of a Hemiketal Reaction Intermediate. *Journal of Physical Chemistry A*, **2000**, 104, 11459-11462 | 2.8 | 8 |
| 30 | Educational Applications of Infrared and Raman Spectroscopy: A Comparison of Experiment and Theory. *Journal of Chemical Education*, **2000**, 77, 654 | 2.4 | 29 |
| 29 | . *Journal of Physical Chemistry B*, **2000**, 104, 7858-7866 | 3.4 | 22 |
| 28 | Towards the DRED of Resin-Supported Combinatorial Libraries: A Non-Invasive Methodology Based on Bead Self-Encoding and Multispectral Imaging This work was supported by Purdue University, the TRASK fund, and the National Science Foundation (CHE-9875390 to HF, DMR-9704162 to DB). HF is a Cottrell Scholar of Research Corporation. DRED=dual recursive deconvolution.. *Angewandte* | 16.4 | 4 |
| 27 | Pressure and temperature-dependent gauche-trans isomerization of 1-bromopropane: Raman measurement and statistical thermodynamic analysis. *Journal of Chemical Physics*, **1999**, 110, 2498-2507 | 3.9 | 6 |
| 26 | Near-infrared Raman imaging microscope based on fiber-bundle image compression. *Journal of Raman Spectroscopy*, **1999**, 30, 757-765 | 2.3 | 37 |
| 25 | Optical Absorption and Fluorescence Spectral Imaging Using Fiber Bundle Image Compression. *Applied Spectroscopy*, **1999**, 53, 1118-1122 | 3.1 | 20 |
| 24 | Modeling tribochemical processes using a combined molecular and hydrodynamic approach. *Tribology Series*, **1999**, 36, 451-456 | | |
| 23 | Cavity formation free energies for rigid chains in hard sphere fluids. *Journal of Chemical Physics*, **1998**, 108, 7294-7300 | 3.9 | 14 |
| 22 | Molecular Force Measurement in Liquids and Solids Using Vibrational Spectroscopy. *Journal of Physical Chemistry B*, **1998**, 102, 3354-3362 | 3.4 | 18 |
| 21 | Pressure Dependent Vibrational Fermi Resonance in Liquid CH3OH and CH2Cl2. *Journal of Physical Chemistry A*, **1998**, 102, 10614-10619 | 2.8 | 29 |
| 20 | Three-body distribution functions in hard sphere fluids. Comparison of excluded-volume-anisotropy model predictions and Monte Carlo simulation. *Journal of Chemical Physics*, **1997**, 107, 6831-6838 | 3.9 | 10 |
| 19 | Chemical potentials of hard polyatomic solutes in hard sphere fluids. *Journal of Chemical Physics*, **1997**, 106, 1181-1186 | 3.9 | 14 |

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| 18 | Excluded volume anisotropy and two-cavity distribution functions in hard sphere fluids. *Journal of Chemical Physics*, **1997**, 106, 5631-5637 | 3.9 | 10 |
| 17 | Quantitation of Poly(Ethylene Glycol) Concentration Using Raman Spectroscopy. *Applied Spectroscopy*, **1997**, 51, 1176-1178 | 3.1 | 7 |
| 16 | Rapid Micro-Raman Imaging Using Fiber-Bundle Image Compression. *Applied Spectroscopy*, **1997**, 51, 1845-1848 | 3.1 | 75 |
| 15 | Theoretical and Experimental Uncertainty in Temperature Measurement of Materials by Raman Spectroscopy. *Applied Spectroscopy*, **1996**, 50, 1034-1038 | 3.1 | 33 |
| 14 | Description and Theory of a Fiber-Optic Confocal and Super-Focal Raman Microspectrometer. *Applied Spectroscopy*, **1996**, 50, 1150-1155 | 3.1 | 16 |
| 13 | Raman spectroscopic studies of diamond in Intralipid. *Optics Letters*, **1995**, 20, 1195-7 | 3 | 9 |
| 12 | Measurement of Fluid Film Thickness on Curved Surfaces by Raman Spectroscopy. *Applied Spectroscopy*, **1995**, 49, 1275-1278 | 3.1 | 7 |
| 11 | Molecular reorientation dynamics and microscopic friction in liquids. *Chemical Physics*, **1994**, 180, 119-129 | 2.3 | 67 |
| 10 | Translational and rotational dynamics in liquids. comparison of experiment, kinetic theory and hydrodynamics. *Chemical Physics*, **1994**, 183, 385-392 | 2.3 | 22 |
| 9 | Molecular Fluorescence Thermometry. *Analytical Chemistry*, **1994**, 66, 2788-2790 | 7.8 | 34 |
| 8 | Optimized perturbed hard sphere expressions for the structure and thermodynamics of Lennard-Jones fluids. *Molecular Physics*, **1993**, 78, 137-149 | 1.7 | 47 |
| 7 | Molecular-optical viscometer based on fluorescence depolarization. *Analytical Chemistry*, **1992**, 64, 700-703 | 7.8 | 16 |
| 6 | Raman Studies of Molecular Potential Energy Surface Changes in Supercritical Fluids. *ACS Symposium Series*, **1992**, 18-30 | 0.4 | 19 |
| 5 | Occurrence and fragmentation of high-mass fullerenes. *Chemical Physics Letters*, **1991**, 183, 149-152 | 2.5 | 40 |
| 4 | Aromatic hydrocarbon derivatives of fullerences. *Rapid Communications in Mass Spectrometry*, **1991**, 5, 472-474 | 2.2 | 30 |
| 3 | Oxygen and methylene adducts of C60 and C70. *Journal of the American Chemical Society*, **1991**, 113, 5907-5908 | 16.4 | 147 |
| 2 | Gas-phase reactivity of fullerene anions. *Journal of the American Chemical Society*, **1991**, 113, 5489-5490 | 16.4 | 33 |
| 1 | Estimation of effective diameters for molecular fluids. *The Journal of Physical Chemistry*, **1990**, 94, 1038-1047 | | 231 |