# Jae Woo Park

## List of Publications by Year in Descending Order



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|---|---|---|---|
| 29 papers | 700 citations | 14 h-index | 26 g-index |
| 31 ext. papers | 848 ext. citations | 7.8 avg, IF | 5.02 L-index |

| # | Paper | IF | Citations |
|---|---|---|---|
| 29 | Near-Exact CASSCF-Level Geometry Optimization with a Large Active Space using Adaptive Sampling Configuration Interaction Self-Consistent Field Corrected with Second-Order Perturbation Theory (ASCI-SCF-PT2). *Journal of Chemical Theory and Computation*, **2021**, 17, 4092-4104 | 6.4 | 0 |
| 28 | Second-Order Orbital Optimization with Large Active Spaces Using Adaptive Sampling Configuration Interaction (ASCI) and Its Application to Molecular Geometry Optimization. *Journal of Chemical Theory and Computation*, **2021**, 17, 1522-1534 | 6.4 | 7 |
| 27 | Nonheme Iron Imido Complexes Bearing a Non-Innocent Ligand: A Synthetic Chameleon Species in Oxidation Reactions. *Chemistry - A European Journal*, **2021**, 27, 17495-17503 | 4.8 | 1 |
| 26 | Analytical Gradient Theory for Resolvent-Fitted Second-Order Extended Multiconfiguration Perturbation Theory (XMCQDPT2). *Journal of Chemical Theory and Computation*, **2021**, 17, 6122-6133 | 6.4 | 0 |
| 25 | Multireference Electron Correlation Methods: Journeys along Potential Energy Surfaces. *Chemical Reviews*, **2020**, 120, 5878-5909 | 68.1 | 44 |
| 24 | Analytical Gradient Theory for Quasidegenerate -Electron Valence State Perturbation Theory (QD-NEVPT2). *Journal of Chemical Theory and Computation*, **2020**, 16, 326-339 | 6.4 | 12 |
| 23 | Analytical First-Order Derivatives of Second-Order Extended Multiconfiguration Quasi-Degenerate Perturbation Theory (XMCQDPT2): Implementation and Application. *Journal of Chemical Theory and Computation*, **2020**, 16, 5562-5571 | 6.4 | 3 |
| 22 | Analytical Gradient Theory for Strongly Contracted (SC) and Partially Contracted (PC) -Electron Valence State Perturbation Theory (NEVPT2). *Journal of Chemical Theory and Computation*, **2019**, 15, 5417-5425 | 6.4 | 13 |
| 21 | Imaginary Shift in CASPT2 Nuclear Gradient and Derivative Coupling Theory. *Journal of Chemical Theory and Computation*, **2019**, 15, 4088-4098 | 6.4 | 17 |
| 20 | Single-State Single-Reference and Multistate Multireference Zeroth-Order Hamiltonians in MS-CASPT2 and Conical Intersections. *Journal of Chemical Theory and Computation*, **2019**, 15, 3960-3973 | 6.4 | 10 |
| 19 | On the accuracy of retinal protonated Schiff base models. *Molecular Physics*, **2018**, 116, 2583-2590 | 1.7 | 13 |
| 18 | Analytical Derivative Coupling for Multistate CASPT2 Theory. *Journal of Chemical Theory and Computation*, **2017**, 13, 2561-2570 | 6.4 | 71 |
| 17 | Coherent intermolecular proton transfer in the acid-base reaction of excited state pyranine. *Physical Chemistry Chemical Physics*, **2017**, 19, 18243-18251 | 3.6 | 16 |
| 16 | On-the-Fly CASPT2 Surface-Hopping Dynamics. *Journal of Chemical Theory and Computation*, **2017**, 13, 3676-3683 | 6.4 | 76 |
| 15 | Emission shaping in fluorescent proteins: role of electrostatics and π-stacking. *Physical Chemistry Chemical Physics*, **2016**, 18, 3944-55 | 3.6 | 19 |
| 14 | Quantum Chemistry Based Arguments about Singlet Oxygen Formation Trends from Fluorescent Proteins. *Rapid Communication in Photoscience*, **2016**, 5, 18-20 | | |
| 13 | Interpolation for molecular dynamics simulations: from ions in gas phase to proteins in solution. *International Journal of Quantum Chemistry*, **2016**, 116, 573-577 | 2.1 | 6 |

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| 12 | Electric Field Keeps Chromophore Planar and Produces High Yield Fluorescence in Green Fluorescent Protein. *Journal of the American Chemical Society*, **2016**, 138, 13619-13629 | 16.4 | 51 |
| 11 | Effect of Chromophore Potential Model on the Description of Exciton-Phonon Interactions. *Journal of Physical Chemistry Letters*, **2015**, 6, 2875-80 | 6.4 | 26 |
| 10 | A structural remedy toward bright dipolar fluorophores in aqueous media. *Chemical Science*, **2015**, 6, 4335-4342 | 9.4 | 109 |
| 9 | Diabatic Population Matrix Formalism for Performing Molecular Mechanics Style Simulations with Multiple Electronic States. *Journal of Chemical Theory and Computation*, **2014**, 10, 5238-53 | 6.4 | 8 |
| 8 | Towards the realization of ab initio dynamics at the speed of molecular mechanics: simulations with interpolated diabatic Hamiltonian. *ChemPhysChem*, **2014**, 15, 3183-93 | 3.2 | 10 |
| 7 | Constructing polyatomic potential energy surfaces by interpolating diabatic Hamiltonian matrices with demonstration on green fluorescent protein chromophore. *Journal of Chemical Physics*, **2014**, 140, 164112 | 3.9 | 10 |
| 6 | Molecular-Shape-Dependent Luminescent Behavior of Dye Aggregates: Bent versus Linear Benzocoumarins. *Crystal Growth and Design*, **2014**, 14, 6613-6619 | 3.5 | 32 |
| 5 | Can Adenosine Triarsenate Role as an Energy Carrier?. *Bulletin of the Korean Chemical Society*, **2013**, 34, 361-362 | 1.2 | 1 |
| 4 | Interpolated mechanics-molecular mechanics study of internal rotation dynamics of the chromophore unit in blue fluorescent protein and its variants. *Journal of Physical Chemistry B*, **2012**, 116, 11137-47 | 3.4 | 15 |
| 3 | All-atom semiclassical dynamics study of quantum coherence in photosynthetic Fenna-Matthews-Olson complex. *Journal of the American Chemical Society*, **2012**, 134, 11640-51 | 16.4 | 58 |
| 2 | Experimental and theoretical determination of the accurate CH/$\pi$ interaction energies in benzene-alkane clusters: correlation between interaction energy and polarizability. *Physical Chemistry Chemical Physics*, **2011**, 13, 14131-41 | 3.6 | 46 |
| 1 | Condensed phase molecular dynamics using interpolated potential energy surfaces with application to the resolvation process of coumarin 153. *Journal of Chemical Physics*, **2011**, 135, 014107 | 3.9 | 26 |