## Seung Kyu Min

List of Publications by Year in descending order

Source: https://exaly.com/author-pdf/304404/publications.pdf

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50 papers

3,781 citations

186265
28
h-index

52 g-index

54 all docs

54 docs citations

times ranked

54

4187 citing authors

| #  | Article  | IF          | Citations |
|----|--|-------------|-----------|
| 1  | Coupled- and Independent-Trajectory Approaches Based on the Exact Factorization Using the PyUNIxMD Package. Topics in Current Chemistry, 2022, 380, 8.   | 5.8         | 4         |
| 2  | Proton affinity and gas phase basicity of diamandoid molecules: diamantane to C <sub>131</sub> H <sub>116</sub> . Physical Chemistry Chemical Physics, 2022, 24, 3470-3477.  | 2.8         | 2         |
| 3  | Spatial distribution modulation of mixed building blocks in metal-organic frameworks. Nature Communications, 2022, 13, 1027.   | 12.8        | 13        |
| 4  | Singlet Oxygen Generation from Polyaminoglycerol by Spin-Flip-Based Electron Transfer. Jacs Au, 2022, 2, 933-942.  | 7.9         | 8         |
| 5  | Electrochemical Formation of a Covalent–Ionic Stage-1 Graphite Intercalation Compound with Trifluoroacetic Acid. Chemistry of Materials, 2022, 34, 217-231.  | 6.7         | 6         |
| 6  | Independent trajectory mixed quantum-classical approaches based on the exact factorization. Journal of Chemical Physics, 2022, 156, 174109.  | 3.0         | 11        |
| 7  | Generalized Formulation of the Density Functional Tight Binding-Based Restricted Ensemble Kohnâ€"Sham Method with Onsite Correction to Long-Range Correction. Journal of Chemical Theory and Computation, 2022, 18, 3391-3409. | 5.3         | 2         |
| 8  | Coupled- and Independent-Trajectory Approaches Based on the Exact Factorization Using the PyUNIxMD Package. Topics in Current Chemistry Collections, 2022, , 153-179.  | 0.5         | 1         |
| 9  | pH-Responsive Amphiphilic Polyether Micelles with Superior Stability for Smart Drug Delivery.<br>Biomacromolecules, 2021, 22, 2043-2056.   | 5.4         | 34        |
| 10 | Study of the Decoherence Correction Derived from the Exact Factorization Approach for Nonadiabatic Dynamics. Journal of Chemical Theory and Computation, 2021, 17, 3852-3862.  | <b>5.</b> 3 | 27        |
| 11 | <scp>PyUNIxMD</scp> : A <scp>Pythonâ€based</scp> excited state molecular dynamics package. Journal of Computational Chemistry, 2021, 42, 1755-1766.  | 3.3         | 24        |
| 12 | Machine Learning-Assisted Excited State Molecular Dynamics with the State-Interaction State-Averaged Spin-Restricted Ensemble-Referenced Kohn–Sham Approach. Journal of Chemical Theory and Computation, 2021, 17, 694-702.    | <b>5.</b> 3 | 12        |
| 13 | Selfâ€Assembly of Mitochondriaâ€Targeted Photosensitizer to Increase Photostability and Photodynamic Therapeutic Efficacy in Hypoxia. Chemistry - A European Journal, 2020, 26, 10695-10701.                                   | 3.3         | 15        |
| 14 | Effect of Pt Crystal Surface on Hydrogenation of Monolayer h-BN and Its Conversion to Graphene. Chemistry of Materials, 2020, 32, 4584-4590.   | 6.7         | 9         |
| 15 | DFTB+, a software package for efficient approximate density functional theory based atomistic simulations. Journal of Chemical Physics, 2020, 152, 124101.   | 3.0         | 589       |
| 16 | Tailorable Degradation of pH-Responsive All-Polyether Micelles: Unveiling the Role of Monomer Structure and Hydrophilic–Hydrophobic Balance. Macromolecules, 2019, 52, 5884-5893.  | 4.8         | 19        |
| 17 | Theoretical modelling of the dynamics of primary photoprocess of cyclopropanone. Physical Chemistry Chemical Physics, 2019, 21, 2489-2498.   | 2.8         | 23        |
| 18 | Metal-organic framework based on hinged cube tessellation as transformable mechanical metamaterial. Science Advances, 2019, 5, eaav4119.   | 10.3        | 28        |

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|----|--|-------------|-----------|
| 19 | Design and photoisomerization dynamics of a new family of synthetic 2-stroke light driven molecular rotary motors. Chemical Communications, 2019, 55, 5247-5250.   | 4.1         | 34        |
| 20 | Formulation and Implementation of the Spin-Restricted Ensemble-Referenced Kohn–Sham Method in the Context of the Density Functional Tight Binding Approach. Journal of Chemical Theory and Computation, 2019, 15, 3021-3032.                             | <b>5.</b> 3 | 10        |
| 21 | Non-adiabatic dynamics of ring opening in cyclohexa-1,3-diene described by an ensemble density-functional theory method. Molecular Physics, 2019, 117, 1128-1141.  | 1.7         | 33        |
| 22 | Surface Hopping Dynamics beyond Nonadiabatic Couplings for Quantum Coherence. Journal of Physical Chemistry Letters, 2018, 9, 1097-1104.   | 4.6         | 80        |
| 23 | Direct Nonadiabatic Dynamics by Mixed Quantum-Classical Formalism Connected with Ensemble Density Functional Theory Method: Application to <i>trans</i> )-Penta-2,4-dieniminium Cation. Journal of Chemical Theory and Computation, 2018, 14, 4499-4512. | 5.3         | 30        |
| 24 | Fulgides as Light-Driven Molecular Rotary Motors: Computational Design of a Prototype Compound. Journal of Physical Chemistry Letters, 2018, 9, 4995-5001.   | 4.6         | 48        |
| 25 | Ab Initio Nonadiabatic Dynamics with Coupled Trajectories: A Rigorous Approach to Quantum (De)Coherence. Journal of Physical Chemistry Letters, 2017, 8, 3048-3055.  | 4.6         | 123       |
| 26 | Adsorption of Carbon Tetrahalides on Coronene and Graphene. Journal of Physical Chemistry C, 2017, 121, 14968-14974.   | 3.1         | 11        |
| 27 | Quantum-Classical Nonadiabatic Dynamics: Coupled- vs Independent-Trajectory Methods. Journal of Chemical Theory and Computation, 2016, 12, 2127-2143.  | 5.3         | 117       |
| 28 | Coupled-Trajectory Quantum-Classical Approach to Electronic Decoherence in Nonadiabatic Processes. Physical Review Letters, 2015, 115, 073001.   | 7.8         | 126       |
| 29 | Semiclassical analysis of the electronâ€nuclear coupling in electronic nonâ€adiabatic processes. Annalen<br>Der Physik, 2015, 527, 546-555.  | 2.4         | 32        |
| 30 | The exact forces on classical nuclei in non-adiabatic charge transfer. Journal of Chemical Physics, 2015, 142, 084303.   | 3.0         | 83        |
| 31 | Is the Molecular Berry Phase an Artifact of the Born-Oppenheimer Approximation?. Physical Review Letters, 2014, 113, 263004.   | 7.8         | 93        |
| 32 | Two Dimensional Molecular Electronics Spectroscopy for Molecular Fingerprinting, DNA Sequencing, and Cancerous DNA Recognition. ACS Nano, 2014, 8, 1827-1833.  | 14.6        | 65        |
| 33 | Noncovalent Interactions of DNA Bases with Naphthalene and Graphene. Journal of Chemical Theory and Computation, 2013, 9, 2090-2096.   | 5.3         | 73        |
| 34 | Theoretical Design of Nanomaterials and Nanodevices: Nanolensing, Supermagnetoresistance, and Ultrafast DNA Sequencing. Journal of Physical Chemistry C, 2011, 115, 16247-16257.   | 3.1         | 20        |
| 35 | Chromium Porphyrin Arrays As Spintronic Devices. Journal of the American Chemical Society, 2011, 133, 9364-9369.   | 13.7        | 167       |
| 36 | The origin of dips for the graphene-based DNA sequencing device. Physical Chemistry Chemical Physics, 2011, 13, 14293.   | 2.8         | 44        |

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|----|--|------|-----------|
| 37 | CO <sub>2</sub> Capturing Mechanism in Aqueous Ammonia: NH <sub>3</sub> -Driven Decompositionâ°Recombination Pathway. Journal of Physical Chemistry Letters, 2011, 2, 689-694.   | 4.6  | 47        |
| 38 | Fast DNA sequencing with a graphene-based nanochannel device. Nature Nanotechnology, 2011, 6, 162-165.   | 31.5 | 517       |
| 39 | Efficient electron dynamics with the planewave-based real-time time-dependent density functional theory: Absorption spectra, vibronic electronic spectra, and coupled electron-nucleus dynamics. Journal of Chemical Physics, 2011, 135, 244112. | 3.0  | 8         |
| 40 | Chiral Transformation in Protonated and Deprotonated Adipic Acids through Multistep Internal Proton Transfer. Chemistry - A European Journal, 2010, 16, 10373-10379.   | 3.3  | 1         |
| 41 | Comparison of cationic, anionic and neutral hydrogen bonded dimers. Physical Chemistry Chemical Physics, 2010, 12, 6278.   | 2.8  | 28        |
| 42 | Near-field focusing and magnification through self-assembled nanoscale spherical lenses. Nature, 2009, 460, 498-501.   | 27.8 | 338       |
| 43 | Application of quantum chemistry to nanotechnology: electron and spin transport in molecular devices. Chemical Society Reviews, 2009, 38, 2319.  | 38.1 | 119       |
| 44 | Comprehensive Energy Analysis for Various Types of π-Interaction. Journal of Chemical Theory and Computation, 2009, 5, 515-529.  | 5.3  | 253       |
| 45 | Complete basis set limit of <i>Ab initio</i> binding energies and geometrical parameters for various typical types of complexes. Journal of Computational Chemistry, 2008, 29, 1208-1221.  | 3.3  | 144       |
| 46 | Dissolution Nature of Cesium Fluoride by Water Moleculesâ€. Journal of Physical Chemistry B, 2006, 110, 3808-3815.   | 2.6  | 28        |
| 47 | Structure and spectral features of H+(H2O)7: Eigen versus Zundel forms. Journal of Chemical Physics, 2006, 125, 234305.  | 3.0  | 52        |
| 48 | Magic and Antimagic Protonated Water Clusters: Exotic Structures with Unusual Dynamic Effects. Angewandte Chemie - International Edition, 2006, 45, 3795-3800.   | 13.8 | 108       |
| 49 | Magic Structures and Quantum Conductance of $[110]$ Silver Nanowires. Physical Review Letters, 2006, 96, 096104.   | 7.8  | 47        |
| 50 | Hydrated copper and gold monovalent cations: Ab initiostudy. Journal of Chemical Physics, 2005, 122, 064314.   | 3.0  | 41        |