

# Jeongho Kim

## List of Publications by Year in descending order

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106  
papers

4,297  
citations

87888

38  
h-index

118850

62  
g-index

112  
all docs

112  
docs citations

112  
times ranked

5404  
citing authors

#	ARTICLE	IF	CITATIONS
1	Tailor-Made Charged Catechol-Based Polymeric Ligands to Build Robust Fuel Cells Containing Antioxidative Nanoparticles. <i>Advanced Electronic Materials</i> , 2022, 8, .	5.1	6
2	Water-assisted formation of amine-bridged carbon nitride: A structural insight into the photocatalytic performance for H <sub>2</sub> evolution under visible light. <i>Applied Catalysis B: Environmental</i> , 2022, 310, 121313.	20.2	37
3	Photoactivation of triosmium dodecacarbonyl at 400 nm probed with time-resolved X-ray liquidography. <i>Chemical Communications</i> , 2022, 58, 7380-7383.	4.1	2
4	Remarkable variation of visible light photocatalytic activities of M/Sn <sub>0.9</sub> Sb <sub>0.1</sub> O <sub>2</sub> /TiO <sub>2</sub> (M=Au, Ag, Pt) heterostructures depending on the loaded metals. <i>Chemosphere</i> , 2021, 265, 129160.	8.2	7
5	Acid-activated carbon nitrides as photocatalysts for degrading organic pollutants under visible light. <i>Chemosphere</i> , 2021, 273, 129731.	8.2	21
6	Filming ultrafast roaming-mediated isomerization of bismuth triiodide in solution. <i>Nature Communications</i> , 2021, 12, 4732.	12.8	14
7	Optical Kerr Effect of Liquid Acetonitrile Probed by Femtosecond Time-Resolved X-ray Liquidography. <i>Journal of the American Chemical Society</i> , 2021, 143, 14261-14273.	13.7	11
8	Structural Dynamics of C <sub>2</sub> F <sub>4</sub> I <sub>2</sub> in Cyclohexane Studied via Time-Resolved X-ray Liquidography. <i>International Journal of Molecular Sciences</i> , 2021, 22, 9793.	4.1	4
9	Enhancement of the photovoltaic properties of Ag <sub>2</sub> Bi <sub>5</sub> by Cu doping. <i>Sustainable Energy and Fuels</i> , 2021, 5, 1439-1447.	4.9	13
10	Production of C, N Alternating 2D Materials Using Covalent Modification and Their Electroluminescence Performance. <i>Small Science</i> , 2021, 1, 2000042.	9.9	9
11	Exciton delocalization length in chlorosomes investigated by lineshape dynamics of two-dimensional electronic spectra. <i>Physical Chemistry Chemical Physics</i> , 2021, 23, 24111-24117.	2.8	4
12	Molecular-Level Understanding of Excited States of N-Annulated Rylene Dye for Dye-Sensitized Solar Cells. <i>Journal of Physical Chemistry C</i> , 2020, 124, 22993-23003.	3.1	12
13	Enhancement of Energy Transfer Efficiency with Structural Control of Multichromophore Light-Harvesting Assembly. <i>Advanced Science</i> , 2020, 7, 2001623.	11.2	6
14	Production of Metal-Free C, N Alternating Nanoplatelets and Their In Vivo Fluorescence Imaging Performance without Labeling. <i>Advanced Functional Materials</i> , 2020, 30, 2004800.	14.9	5
15	Mapping the emergence of molecular vibrations mediating bond formation. <i>Nature</i> , 2020, 582, 520-524.	27.8	55
16	Dramatic Change of Morphological, Photophysical, and Photocatalytic H <sub>2</sub> Evolution Properties of C <sub>3</sub> N <sub>4</sub> Materials by the Removal of Carbon Impurities. <i>ACS Applied Energy Materials</i> , 2020, 3, 4812-4820.	5.1	20
17	Fate of transient isomer of CH <sub>2</sub> I <sub>2</sub> : Mechanism and origin of ionic photoproducts formation unveiled by time-resolved x-ray liquidography. <i>Journal of Chemical Physics</i> , 2019, 150, 224201.	3.0	10
18	Ultrafast charge transfer coupled with lattice phonons in two-dimensional covalent organic frameworks. <i>Nature Communications</i> , 2019, 10, 1873.	12.8	93

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19	Structural Dynamics of Bismuth Triiodide in Solution Triggered by Photoinduced Ligand-to-Metal Charge Transfer. <i>Journal of Physical Chemistry Letters</i> , 2019, 10, 1279-1285.	4.6	12
20	Enhancement of open circuit voltage for CuSCN-based perovskite solar cells by controlling the perovskite/CuSCN interface with functional molecules. <i>Journal of Materials Chemistry A</i> , 2019, 7, 6028-6037.	10.3	49
21	Solvent-dependent complex reaction pathways of bromoform revealed by time-resolved X-ray solution scattering and X-ray transient absorption spectroscopy. <i>Structural Dynamics</i> , 2019, 6, 064902.	2.3	8
22	Novel $\pi$ -extended porphyrin-based hole-transporting materials with triarylamine donor units for high performance perovskite solar cells. <i>Dyes and Pigments</i> , 2019, 163, 734-739.	3.7	27
23	Direct Observation of a Transiently Formed Isomer During Iodoform Photolysis in Solution by Time-Resolved X-ray Liquidography. <i>Journal of Physical Chemistry Letters</i> , 2018, 9, 647-653.	4.6	15
24	Structural insights into photocatalytic performance of carbon nitrides for degradation of organic pollutants. <i>Journal of Solid State Chemistry</i> , 2018, 258, 559-565.	2.9	21
25	Silver bismuth iodides in various compositions as potential Pb-free light absorbers for hybrid solar cells. <i>Sustainable Energy and Fuels</i> , 2018, 2, 294-302.	4.9	81
26	SVD-aided pseudo principal-component analysis: A new method to speed up and improve determination of the optimum kinetic model from time-resolved data. <i>Structural Dynamics</i> , 2017, 4, 044013.	2.3	19
27	New insight of the photocatalytic behaviors of graphitic carbon nitrides for hydrogen evolution and their associations with grain size, porosity, and photophysical properties. <i>Applied Catalysis B: Environmental</i> , 2017, 218, 349-358.	20.2	77
28	Ultrafast X-Ray Crystallography and Liquidography. <i>Annual Review of Physical Chemistry</i> , 2017, 68, 473-497.	10.8	37
29	Formation of pristine CuSCN layer by spray deposition method for efficient perovskite solar cell with extended stability. <i>Nano Energy</i> , 2017, 32, 414-421.	16.0	111
30	Significant light absorption enhancement by a single heterocyclic unit change in the $\pi$ -bridge moiety from thieno[3,2-b]benzothiophene to thieno[3,2-b]indole for high performance dye-sensitized and tandem solar cells. <i>Journal of Materials Chemistry A</i> , 2017, 5, 2297-2308.	10.3	200
31	Porphyrin Sensitizers with Donor Structural Engineering for Superior Performance Dye-Sensitized Solar Cells and Tandem Solar Cells for Water Splitting Applications. <i>Advanced Energy Materials</i> , 2017, 7, 1602117.	19.5	193
32	Simple synthesis and molecular engineering of low-cost and star-shaped carbazole-based hole transporting materials for highly efficient perovskite solar cells. <i>Journal of Materials Chemistry A</i> , 2017, 5, 20263-20276.	10.3	92
33	Silicotungstate, a Potential Electron Transporting Layer for Low-Temperature Perovskite Solar Cells. <i>ACS Applied Materials &amp; Interfaces</i> , 2017, 9, 25257-25264.	8.0	12
34	Triphenylamine-based organic sensitizers with $\pi$ -spacer structural engineering for dye-sensitized solar cells: Synthesis, theoretical calculations, molecular spectroscopy and structure-property-performance relationships. <i>Dyes and Pigments</i> , 2017, 136, 496-504.	3.7	49
35	Femtosecond X-ray solution scattering reveals that bond formation mechanism of a gold trimer complex is independent of excitation wavelength. <i>Structural Dynamics</i> , 2016, 3, 043209.	2.3	26
36	Reactivity of molecular oxygen with aluminum clusters: Density functional and <i>Ab Initio</i> molecular dynamics simulation study. <i>International Journal of Quantum Chemistry</i> , 2016, 116, 547-554.	2.0	4

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37	Enhanced Polarization Ratio of Electrospun Nanofibers with Increased Intrachain Order by Postsolvent Treatments. <i>Journal of Physical Chemistry B</i> , 2016, 120, 12981-12987.	2.6	6
38	Atomistic characterization of the active-site solvation dynamics of a model photocatalyst. <i>Nature Communications</i> , 2016, 7, 13678.	12.8	74
39	Cooperative protein structural dynamics of homodimeric hemoglobin linked to water cluster at subunit interface revealed by time-resolved X-ray solution scattering. <i>Structural Dynamics</i> , 2016, 3, 023610.	2.3	22
40	Tracking reaction dynamics in solution by pump-probe X-ray absorption spectroscopy and X-ray liquidography (solution scattering). <i>Chemical Communications</i> , 2016, 52, 3734-3749.	4.1	35
41	Combined probes of X-ray scattering and optical spectroscopy reveal how global conformational change is temporally and spatially linked to local structural perturbation in photoactive yellow protein. <i>Physical Chemistry Chemical Physics</i> , 2016, 18, 8911-8919.	2.8	22
42	Novel spherical TiO <sub>2</sub> aggregates with diameter of 100 nm for efficient mesoscopic perovskite solar cells. <i>Nano Energy</i> , 2016, 20, 272-282.	16.0	50
43	Rotational dephasing of a gold complex probed by anisotropic femtosecond x-ray solution scattering using an x-ray free-electron laser. <i>Journal of Physics B: Atomic, Molecular and Optical Physics</i> , 2015, 48, 244005.	1.5	18
44	Thieno[3,2-b][1]benzothiophene Derivative as a New Bridge Unit in A Structural Organic Sensitizers with Over 10.47% Efficiency for Dye-Sensitized Solar Cells. <i>Advanced Energy Materials</i> , 2015, 5, 1500300.	19.5	138
45	Direct observation of bond formation in solution with femtosecond X-ray scattering. <i>Nature</i> , 2015, 518, 385-389.	27.8	207
46	Enhancement of photovoltaic properties of CH <sub>3</sub> NH <sub>3</sub> PbBr <sub>3</sub> heterojunction solar cells by modifying mesoporous TiO <sub>2</sub> surfaces with carboxyl groups. <i>Journal of Materials Chemistry A</i> , 2015, 3, 9264-9270.	10.3	69
47	Single-step fabrication of quantum funnels via centrifugal colloidal casting of nanoparticle films. <i>Nature Communications</i> , 2015, 6, 7772.	12.8	68
48	Role of thermal excitation in ultrafast energy transfer in chlorosomes revealed by two-dimensional electronic spectroscopy. <i>Physical Chemistry Chemical Physics</i> , 2015, 17, 17872-17879.	2.8	12
49	Size-dependence of plasmonic Au nanoparticles in photocatalytic behavior of Au/TiO <sub>2</sub> and Au@SiO <sub>2</sub> /TiO <sub>2</sub> . <i>Applied Catalysis A: General</i> , 2015, 499, 47-54.	4.3	65
50	50 nm sized spherical TiO <sub>2</sub> nanocrystals for highly efficient mesoscopic perovskite solar cells. <i>Nanoscale</i> , 2015, 7, 8898-8906.	5.6	68
51	Protein Structural Dynamics Revealed by Time-Resolved X-ray Solution Scattering. <i>Accounts of Chemical Research</i> , 2015, 48, 2200-2208.	15.6	41
52	Identifying the major intermediate species by combining time-resolved X-ray solution scattering and X-ray absorption spectroscopy. <i>Physical Chemistry Chemical Physics</i> , 2015, 17, 23298-23302.	2.8	15
53	Novel Carbazole-Based Hole-Transporting Materials with Star-Shaped Chemical Structures for Perovskite-Sensitized Solar Cells. <i>ACS Applied Materials &amp; Interfaces</i> , 2015, 7, 22213-22217.	8.0	104
54	New thieno[3,2-b][1]benzothiophene-based organic sensitizers containing $\pi$ -extended thiophene spacers for efficient dye-sensitized solar cells. <i>RSC Advances</i> , 2015, 5, 80859-80870.	3.6	16

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55	Solvent-dependent structure of molecular iodine probed by picosecond X-ray solution scattering. <i>Physical Chemistry Chemical Physics</i> , 2015, 17, 8633-8637.	2.8	16
56	Topical Review: Molecular reaction and solvation visualized by time-resolved X-ray solution scattering: Structure, dynamics, and their solvent dependence. <i>Structural Dynamics</i> , 2014, 1, 011301.	2.3	37
57	Density functional and multireference ab initio study of the ground and excited states of Ru <sup>2+</sup> . <i>Chemical Physics Letters</i> , 2014, 592, 24-29.	2.6	11
58	Density functional and multiconfigurational <i>ab initio</i> study of the ground and excited states of Os <sup>2+</sup> . <i>International Journal of Quantum Chemistry</i> , 2014, 114, 1466-1471.	2.0	5
59	Conformational Substates of Myoglobin Intermediate Resolved by Picosecond X-ray Solution Scattering. <i>Journal of Physical Chemistry Letters</i> , 2014, 5, 804-808.	4.6	23
60	Coherent Oscillations in Chlorosome Elucidated by Two-Dimensional Electronic Spectroscopy. <i>Journal of Physical Chemistry Letters</i> , 2014, 5, 1386-1392.	4.6	23
61	Sub-100-ps structural dynamics of horse heart myoglobin probed by time-resolved X-ray solution scattering. <i>Chemical Physics</i> , 2014, 442, 137-142.	1.9	19
62	Ultrafast Energy Transfer in Chlorosome Probed by Femtosecond Pump-Probe Polarization Anisotropy. <i>Bulletin of the Korean Chemical Society</i> , 2014, 35, 703-704.	1.9	1
63	A dual role of phenylboronic acid as a receptor for carbohydrates as well as a quencher for neighboring pyrene fluorophore. <i>Tetrahedron</i> , 2013, 69, 11057-11063.	1.9	19
64	Prospect of Retrieving Vibrational Wave Function by Single-Object Scattering Sampling. <i>Journal of Physical Chemistry Letters</i> , 2013, 4, 3345-3350.	4.6	4
65	Femtosecond X-ray Absorption Spectroscopy at a Hard X-ray Free Electron Laser: Application to Spin Crossover Dynamics. <i>Journal of Physical Chemistry A</i> , 2013, 117, 735-740.	2.5	183
66	Multireference Ab Initio Study of the Ground and Low-Lying Excited States of Cr(CO) <sub>2</sub> and Cr(CO) <sub>3</sub> . <i>Journal of Physical Chemistry A</i> , 2013, 117, 3861-3868.	2.5	4
67	Filming the Birth of Molecules and Accompanying Solvent Rearrangement. <i>Journal of the American Chemical Society</i> , 2013, 135, 3255-3261.	13.7	59
68	Solvent-Dependent Molecular Structure of Ionic Species Directly Measured by Ultrafast X-Ray Solution Scattering. <i>Physical Review Letters</i> , 2013, 110, 165505.	7.8	44
69	Global Reaction Pathways in the Photodissociation of I <sub>3</sub> <sup>+</sup> Ions in Solution at 267 and 400 nm Studied by Picosecond X-ray Liquidography. <i>ChemPhysChem</i> , 2013, 14, 3687-3697.	2.1	18
70	Two-dimensional measurements of the solvent structural relaxation dynamics in dipolar solvation. <i>Physical Chemistry Chemical Physics</i> , 2012, 14, 8116.	2.8	19
71	Protein Structural Dynamics of Photoactive Yellow Protein in Solution Revealed by Pump-Probe X-ray Solution Scattering. <i>Journal of the American Chemical Society</i> , 2012, 134, 3145-3153.	13.7	95
72	Direct Observation of Cooperative Protein Structural Dynamics of Homodimeric Hemoglobin from 100 ps to 10 ms with Pump-Probe X-ray Solution Scattering. <i>Journal of the American Chemical Society</i> , 2012, 134, 7001-7008.	13.7	82

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73	Structural Dynamics of 1,2-Diiodoethane in Cyclohexane Probed by Picosecond X-ray Liquidography. <i>Journal of Physical Chemistry A</i> , 2012, 116, 2713-2722.	2.5	25
74	Direct observation of myoglobin structural dynamics from 100 picoseconds to 1 microsecond with picosecond X-ray solution scattering. <i>Chemical Communications</i> , 2011, 47, 289-291.	4.1	39
75	Solvent structural relaxation dynamics in dipolar solvation studied by resonant pump polarizability response spectroscopy. <i>Physical Chemistry Chemical Physics</i> , 2011, 13, 214-223.	2.8	18
76	Anisotropic Picosecond X-ray Solution Scattering from Photoselectively Aligned Protein Molecules. <i>Journal of Physical Chemistry Letters</i> , 2011, 2, 350-356.	4.6	38
77	Protein Folding Dynamics of Cytochrome <i>c</i> Seen by Transient Grating and Transient Absorption Spectroscopies. <i>Journal of Physical Chemistry B</i> , 2011, 115, 3127-3135.	2.6	13
78	Spin relaxation in zinc blende and wurtzite CdSe quantum dots. <i>Chemical Physics Letters</i> , 2010, 491, 187-192.	2.6	29
79	Ultrafast X-ray diffraction in liquid, solution and gas: present status and future prospects. <i>Acta Crystallographica Section A: Foundations and Advances</i> , 2010, 66, 270-280.	0.3	32
80	Photochemistry of HgBr <sub>2</sub> in methanol investigated using time-resolved X-ray liquidography. <i>Physical Chemistry Chemical Physics</i> , 2010, 12, 11536.	2.8	33
81	Ultrafast X-ray scattering: structural dynamics from diatomic to protein molecules. <i>International Reviews in Physical Chemistry</i> , 2010, 29, 453-520.	2.3	76
82	Measurement of Electron Correlation Using Two-Dimensional Electronic Double-Quantum Coherence Spectroscopy. , 2010, , .		0
83	Measurement of Electron-Electron Interactions and Correlations Using Two-Dimensional Electronic Double-Quantum Coherence Spectroscopy. <i>Journal of Physical Chemistry A</i> , 2009, 113, 12122-12133.	2.5	28
84	Two-Dimensional Electronic Double-Quantum Coherence Spectroscopy. <i>Accounts of Chemical Research</i> , 2009, 42, 1375-1384.	15.6	113
85	Relaxation in the Exciton Fine Structure of Semiconductor Nanocrystals. <i>Journal of Physical Chemistry C</i> , 2009, 113, 795-811.	3.1	54
86	Protein Tertiary Structural Changes Visualized by Time-Resolved X-ray Solution Scattering. <i>Journal of Physical Chemistry B</i> , 2009, 113, 13131-13133.	2.6	51
87	Exciton Fine Structure and Spin Relaxation in Semiconductor Colloidal Quantum Dots. <i>Accounts of Chemical Research</i> , 2009, 42, 1037-1046.	15.6	81
88	Density Functional and ab Initio Investigation of CF <sub>2</sub> ICF <sub>2</sub> I and CF <sub>2</sub> CF <sub>2</sub> I Radicals in Gas and Solution Phases. <i>Journal of Physical Chemistry A</i> , 2009, 113, 11059-11066.	2.5	10
89	Radiationless Transitions and Angular Momentum Transfer in Semiconductor Nanocrystals. <i>Springer Series in Chemical Physics</i> , 2009, , 268-270.	0.2	0
90	Ultrafast Dynamics of Polarons in Conductive Polyaniline: Comparison of Primary and Secondary Doped Forms. <i>Journal of Physical Chemistry B</i> , 2008, 112, 15576-15587.	2.6	26

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91	Control of Exciton Spin Relaxation by Electron-Hole Decoupling in Type-II Nanocrystal Heterostructures. Nano Letters, 2008, 8, 4007-4013.	9.1	41
92	Measurement and Control of Ultrafast Relaxation in the Fine Structure of Nanocrystal Excitons. , 2008, , .		0
93	Sizing up the Exciton in Complex-Shaped Semiconductor Nanocrystals. Nano Letters, 2007, 7, 3884-3890.	9.1	27
94	Ultrafast light harvesting dynamics in the cryptophyte phycocyanin 645. Photochemical and Photobiological Sciences, 2007, 6, 964-975.	2.9	62
95	Selective measurement of ultrafast exciton spin relaxation in quantum dots. Springer Series in Chemical Physics, 2007, , 701-703.	0.2	0
96	Nanocrystal Shape and the Mechanism of Exciton Spin Relaxation. Nano Letters, 2006, 6, 1765-1771.	9.1	45
97	Mechanism and Origin of Exciton Spin Relaxation in CdSe Nanorods. Journal of Physical Chemistry B, 2006, 110, 25371-25382.	2.6	34
98	Exciton spin relaxation in quantum dots measured using ultrafast transient polarization grating spectroscopy. Physical Review B, 2006, 73, .	3.2	62
99	Optical coherence and theoretical study of the excitation dynamics of a highly symmetric cyclophane-linked oligophenylenevinylene dimer. Journal of Chemical Physics, 2006, 124, 194904.	3.0	47
100	Selective measurement of ultrafast exciton spin relaxation in quantum dots. , 2006, , .		0
101	Transmission of quantum dot exciton spin states via resonance energy transfer. , 2005, , .		2
102	Solvent intermolecular polarizability response in solvation. Journal of Chemical Physics, 2003, 118, 3917-3920.	3.0	38
103	The vibrational spectrum of the hydrated proton: Comparison of experiment, simulation, and normal mode analysis. Journal of Chemical Physics, 2002, 116, 737-746.	3.0	200
104	Ultrafast Dephasing of Photoexcited Polarons in Primary Doped Polyaniline. Journal of Physical Chemistry B, 2002, 106, 12866-12873.	2.6	11
105	Femtosecond Studies of the Initial Events in the Photocycle of Photoactive Yellow Protein (PYP). , 0, , 381-390.		3
106	Synchrotron-Based Time-Resolved X-ray Solution Scattering (Liquidography). , 0, , .		1