Yu Zhang

List of Publications by Year in descending order

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54 papers	1,718 citations	19 h-index	276539 41 g-index
54	54	54	1887 citing authors
all docs	docs citations	times ranked	

#	Article	IF	CITATIONS
1	Software for the frontiers of quantum chemistry: An overview of developments in the Q-Chem 5 package. Journal of Chemical Physics, 2021, 155, 084801.	1.2	518
2	Multidimensional Attosecond Resonant X-Ray Spectroscopy of Molecules: Lessons from the Optical Regime. Annual Review of Physical Chemistry, 2013, 64, 101-127.	4.8	170
3	Core and valence excitations in resonant X-ray spectroscopy using restricted excitation window time-dependent density functional theory. Journal of Chemical Physics, 2012, 137, 194306.	1.2	83
4	Two-dimensional stimulated resonance Raman spectroscopy of molecules with broadband x-ray pulses. Journal of Chemical Physics, 2012, 136, 174117.	1.2	66
5	Direct observation of coherent femtosecond solvent reorganization coupled to intramolecular electron transfer. Nature Chemistry, 2021, 13, 343-349.	6.6	59
6	First-principles time-dependent quantum transport theory. Physical Review B, 2013, 87, .	1.1	51
7	Simulating Valence-to-Core X-ray Emission Spectroscopy of Transition Metal Complexes with Time-Dependent Density Functional Theory. Journal of Chemical Theory and Computation, 2015, 11, 5804-5809.	2.3	49
8	Stimulated X-Ray Emission Spectroscopy in Transition Metal Complexes. Physical Review Letters, 2018, 120, 133203.	2.9	48
9	Watching energy transfer in metalloporphyrin heterodimers using stimulated X-ray Raman spectroscopy. Proceedings of the National Academy of Sciences of the United States of America, 2013, 110, 15597-15601.	3.3	42
10	Comprehensive Experimental and Computational Spectroscopic Study of Hexacyanoferrate Complexes in Water: From Infrared to X-ray Wavelengths. Journal of Physical Chemistry B, 2018, 122, 5075-5086.	1.2	40
11	Monitoring conical intersections in the ring opening of furan by attosecond stimulated X-ray Raman spectroscopy. Structural Dynamics, 2016, 3, 023601.	0.9	38
12	A first-principles molecular dynamics approach for predicting optical phonon lifetimes and far-infrared reflectance of polar materials. Journal of Quantitative Spectroscopy and Radiative Transfer, 2012, 113, 1683-1688.	1.1	33
13	Nonlinear Spectroscopy of Core and Valence Excitations Using Short X-Ray Pulses: Simulation Challenges. Topics in Current Chemistry, 2014, 368, 273-345.	4.0	30
14	Multidimensional resonant nonlinear spectroscopy with coherent broadband x-ray pulses. Physica Scripta, 2016, T169, 014002.	1.2	30
15	Time-, frequency-, and wavevector-resolved x-ray diffraction from single molecules. Journal of Chemical Physics, 2014, 140, 204311.	1.2	29
16	X-ray circular dichroism signals: a unique probe of local molecular chirality. Chemical Science, 2017, 8, 5969-5978.	3.7	27
17	Entangled Valence Electron–Hole Dynamics Revealed by Stimulated Attosecond X-ray Raman Scattering. Journal of Physical Chemistry Letters, 2012, 3, 2326-2331.	2.1	25
18	Dissipative time-dependent quantum transport theory. Journal of Chemical Physics, 2013, 138, 164121.	1.2	25

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19	Multidimensional x-ray spectroscopy of valence and core excitations in cysteine. Journal of Chemical Physics, 2013, 138, 144303.	1.2	23
20	Observation of Seeded Mn K \hat{l}^2 Stimulated X-Ray Emission Using Two-Color X-Ray Free-Electron Laser Pulses. Physical Review Letters, 2020, 125, 037404.	2.9	20
21	First Principles Nonadiabatic Excited-State Molecular Dynamics in NWChem. Journal of Chemical Theory and Computation, 2020, 16, 6418-6427.	2.3	20
22	Monitoring Long-Range Electron Transfer Pathways in Proteins by Stimulated Attosecond Broadband X-ray Raman Spectroscopy. Journal of Physical Chemistry Letters, 2014, 5, 3656-3661.	2.1	18
23	Study of double core hole excitations in molecules by X-ray double-quantum-coherence signals: a multi-configuration simulation. Chemical Science, 2016, 7, 5922-5933.	3.7	18
24	X-ray Raman optical activity of chiral molecules. Chemical Science, 2019, 10, 898-908.	3.7	18
25	Double-core excitations in formamide can be probed by X-ray double-quantum-coherence spectroscopy. Journal of Chemical Physics, 2013, 138, 144301.	1.2	17
26	Three-dimensional attosecond resonant stimulated X-ray Raman spectroscopy of electronic excitations in core-ionized glycine. Physical Chemistry Chemical Physics, 2014, 16, 24323-24331.	1.3	16
27	Time-dependent density functional theory for quantum transport. Frontiers of Physics, 2014, 9, 698-710.	2.4	16
28	Ï€ Donation and Its Effects on the Excited-State Lifetimes of Luminescent Platinum(II) Terpyridine Complexes in Solution. Inorganic Chemistry, 2013, 52, 8476-8482.	1.9	14
29	Multiple Core and Vibronic Coupling Effects in Attosecond Stimulated X-Ray Raman Spectroscopy. Journal of Chemical Theory and Computation, 2013, 9, 5479-5489.	2.3	12
30	Coherent (photon) vs incoherent (current) detection of multidimensional optical signals from single molecules in open junctions. Journal of Chemical Physics, 2015, 142, 212445.	1.2	12
31	Quantum mechanical modeling the emission pattern and polarization of nanoscale light emitting diodes. Nanoscale, 2016, 8, 13168-13173.	2.8	12
32	Electroluminescence in Molecular Junctions: A Diagrammatic Approach. Journal of Chemical Theory and Computation, 2015, 11, 4304-4315.	2.3	11
33	Double core hole valence-to-core x-ray emission spectroscopy: A theoretical exploration using time-dependent density functional theory. Journal of Chemical Physics, 2019, 151, 144114.	1.2	11
34	Near-Edge X-ray Absorption Fine Structure Spectroscopy of Heteroatomic Core-Hole States as a Probe for Nearly Indistinguishable Chemical Environments. Journal of Physical Chemistry Letters, 2020, 11, 556-561.	2.1	11
35	Identifying Cu(<scp>ii</scp>)–amyloid peptide binding intermediates in the early stages of aggregation by resonance Raman spectroscopy: a simulation study. Physical Chemistry Chemical Physics, 2017, 19, 31103-31112.	1.3	10
36	Transferability of Atomic Properties in Molecular Partitioning: A Comparison. Journal of Chemical Theory and Computation, 2010, 6, 3312-3318.	2.3	9

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37	Nonlinear light scattering in molecules triggered by an impulsive x-ray Raman process. Physical Review A, 2013, 87, 53826.	1.0	9
38	Role of the Isolable Hydride Intermediate in the Hydrosilylation of Carbonyl Compounds Catalyzed by the Highâ€Valent Monoâ€Oxido–Rhenium(V) Complex. European Journal of Inorganic Chemistry, 2014, 2014, 5714-5723.	1.0	9
39	Femtosecond X-ray Spectroscopy Directly Quantifies Transient Excited-State Mixed Valency. Journal of Physical Chemistry Letters, 2022, 13, 378-386.	2.1	9
40	Multidimensional scattering of attosecond x-ray pulses detected by photon-coincidence. Journal of Physics B: Atomic, Molecular and Optical Physics, 2014, 47, 124037.	0.6	8
41	Understanding excitation energy transfer in metalloporphyrin heterodimers with different linkers, bonding structures, and geometries through stimulated X-ray Raman spectroscopy. Journal of Modern Optics, 2014, 61, 558-567.	0.6	8
42	Coherent control of long-range photoinduced electron transfer by stimulated X-ray Raman processes. Proceedings of the National Academy of Sciences of the United States of America, 2016, 113, 10001-10006.	3.3	8
43	Two-dimensional x-ray correlation spectroscopy of remote core states. Structural Dynamics, 2014, 1, 014101.	0.9	7
44	Resonant Stimulated X-ray Raman Spectroscopy of Mixed-Valence Manganese Complexes. Journal of Physical Chemistry Letters, 2021, 12, 5925-5931.	2.1	7
45	Characterizing the Intermediates Compound I and II in the Cytochrome P450 Catalytic Cycle with Nonlinear Xâ€ray Spectroscopy: A Simulation Study. ChemPhysChem, 2015, 16, 2006-2014.	1.0	5
46	Monitoring Ultrafast Spin Crossover Intermediates in an Iron(II) Complex by Broad Band Stimulated X-ray Raman Spectroscopy. Journal of Physical Chemistry A, 2018, 122, 6524-6531.	1.1	5
47	Photothermally Probing Vibrational Excited-State Absorption with Nanoscale Spatial Resolution through Frequency-Domain Pump–Probe Peak Force Infrared Microscopy. Journal of Physical Chemistry C, 2021, 125, 8333-8338.	1.5	4
48	Generation of intense phase-stable femtosecond hard X-ray pulse pairs. Proceedings of the National Academy of Sciences of the United States of America, 2022, 119, e2119616119.	3.3	4
49	Density-functional derivative discontinuities at the maximum number of bound electrons. Physical Review A, 2012, 85, .	1.0	3
50	Monitoring Excited State Charge Transfer of Transition Metal Mixed-Valence Complexes with Femtosecond X-ray Absorption and Emission Spectroscopy. , 2016, , .		1
51	Dissecting X-Ray Raman Resonances Using Four-Wave Mixing. EPJ Web of Conferences, 2013, 41, 05040.	0.1	0
52	Far Infrared Thermal Radiative Properties of Polar Materials From First-Principle Simulations., 2011,,.		0
53	Attosecond Stimulated X-ray Raman Probes of Energy and Electron Transfer in Porphyrin Dimers and Proteins. , 2014, , .		O
54	Resonant Stimulated X-Ray Raman Spectroscopy of Molecule Following Core Ionization. Springer Proceedings in Physics, 2015, , 584-586.	0.1	0