Stephen H Southworth

List of Publications by Year
in descending order

30 papers	1,830 citations	430874 18 h-index	477307 29 g-index
31 all docs	31 docs citations	31 times ranked	2739 citing authors

#	Article	IF	Citations
1	Femtosecond X-ray Spectroscopy Directly Quantifies Transient Excited-State Mixed Valency. Journal of Physical Chemistry Letters, 2022, 13, 378-386.	4.6	9
2	Perspectives on UV and x-ray photoelectron spectroscopy. Journal of Vacuum Science and Technology A: Vacuum, Surfaces and Films, 2022, 40, 043002.	2.1	0
3	Photon-In/Photon-Out X-ray Free-Electron Laser Studies of Radiolysis. Applied Sciences (Switzerland), 2021, 11, 701.	2.5	1
4	Direct observation of coherent femtosecond solvent reorganization coupled to intramolecular electron transfer. Nature Chemistry, 2021, 13, 343-349.	13.6	59
5	Siteâ€Selective Realâ€Time Observation of Bimolecular Electron Transfer in a Photocatalytic System Using Lâ€Edge Xâ€Ray Absorption Spectroscopy**. ChemPhysChem, 2021, 22, 693-700.	2.1	5
6	Pulse Energy and Pulse Duration Effects in the Ionization and Fragmentation of Iodomethane by Ultraintense Hard X Rays. Physical Review Letters, 2021, 127, 093202.	7.8	6
7	Observation of the fastest chemical processes in the radiolysis of water. Science, 2020, 367, 179-182.	12.6	149
8	Resonant Inelastic X-Ray Scattering Reveals Hidden Local Transitions of the Aqueous OH Radical. Physical Review Letters, 2020, 124, 236001.	7.8	28
9	The role of transient resonances for ultra-fast imaging of single sucrose nanoclusters. Nature Communications, 2020, 11, 167.	12.8	27
10	High intensity x-ray interaction with a model bio-molecule system: double-core-hole states and fragmentation of formamide. Journal of Physics B: Atomic, Molecular and Optical Physics, 2020, 53, 244005.	1.5	5
11	Resonant x-ray absorption of strong-field-ionized CF₃Br. Journal of Physics B: Atomic, Molecular and Optical Physics, 2020, 53, 244009.	1.5	4
12	From synchrotrons for XFELs: the soft x-ray near-edge spectrum of the ESCA molecule. Journal of Physics B: Atomic, Molecular and Optical Physics, 2020, 53, 244011.	1.5	7
13	Observing pre-edge<mml:math xmlns:mml="http://www.w3.org/1998/Math/MathML"><mml:mi>K</mml:mi></mml:math>-shell resonances in Kr, Xe, and<mml:math xmlns:mml="http://www.w3.org/1998/Math/MathML"><mml:msub><mml:mi>XeF</mml:mi><mml:mn>2</mml:mn></mml:msub></m Physical Review A, 2019, 100, .	2.5	11
14	Using Ultrafast X-ray Spectroscopy To Address Questions in Ligand-Field Theory: The Excited State Spin and Structure of [Fe(dcpp)₂]²⁺. Inorganic Chemistry, 2019, 58, 9341-9350.	4.0	29
15	Three-dimensional optical trapping and orientation of microparticles for coherent X-ray diffraction imaging. Proceedings of the National Academy of Sciences of the United States of America, 2019, 116, 4018-4024.	7.1	18
16	Micro-focused MHz pink beam for time-resolved X-ray emission spectroscopy. Journal of Synchrotron Radiation, 2019, 26, 1956-1966.	2.4	7
17	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.	2.6	40
18	Chemical Understanding of the Limited Site-Specificity in Molecular Inner-Shell Photofragmentation. Journal of Physical Chemistry Letters, 2018, 9, 1156-1163.	4.6	31

#	Article	IF	Citations
19	Probing Transient Valence Orbital Changes with Picosecond Valence-to-Core X-ray Emission Spectroscopy. Journal of Physical Chemistry C, 2017, 121, 2620-2626.	3.1	27
20	Hetero-site-specific X-ray pump-probe spectroscopy for femtosecond intramolecular dynamics. Nature Communications, 2016, 7, 11652.	12.8	70
21	Mechanistic Evaluation of a Nickel Proton Reduction Catalyst Using Time-Resolved X-ray Absorption Spectroscopy. Journal of Physical Chemistry C, 2016, 120, 20049-20057.	3.1	21
22	Tracking the Structural and Electronic Configurations of a Cobalt Proton Reduction Catalyst in Water. Journal of the American Chemical Society, 2016, 138, 10586-10596.	13.7	77
23	Detailed Characterization of a Nanosecond-Lived Excited State: X-ray and Theoretical Investigation of the Quintet State in Photoexcited [Fe(terpy)₂]²⁺. Journal of Physical Chemistry C, 2015, 119, 5888-5902.	3.1	72
24	Inner-shell photoionization and core-hole decay of Xe and XeF2. Journal of Chemical Physics, 2015, 142, 224302.	3.0	15
25	Guestâ€“Host Interactions Investigated by Time-Resolved X-ray Spectroscopies and Scattering at MHz Rates: Solvation Dynamics and Photoinduced Spin Transition in Aqueous Fe(bipy)₃²⁺. Journal of Physical Chemistry A, 2012, 116, 9878-9887.	2.5	112
26	Development of high-repetition-rate laser pump/x-ray probe methodologies for synchrotron facilities. Review of Scientific Instruments, 2011, 82, 073110.	1.3	84
27	Unveiling and Driving Hidden Resonances with High-Fluence, High-Intensity X-Ray Pulses. Physical Review Letters, 2011, 107, 233001.	7.8	131
28	Femtosecond electronic response of atoms to ultra-intense X-rays. Nature, 2010, 466, 56-61.	27.8	711
29	X-Ray Microprobe of Orbital Alignment in Strong-Field Ionized Atoms. Physical Review Letters, 2006, 97, 083601.	7.8	71
30	Benchmark Relativistic Delta-Coupled-Cluster Calculations of K-Edge Core-Ionization Energies for Third-Row Elements. Physical Chemistry Chemical Physics, 0, , .	2.8	2