

Robert W Schoenlein

List of Publications by Year in descending order

Source: <https://exaly.com/author-pdf/5299269/publications.pdf>

Version: 2024-02-01

121
papers

10,478
citations

47409

49
h-index

37326

100
g-index

123
all docs

123
docs citations

123
times ranked

10241
citing authors

#	ARTICLE	IF	CITATIONS
1	Femtosecond X-ray Spectroscopy Directly Quantifies Transient Excited-State Mixed Valency. <i>Journal of Physical Chemistry Letters</i> , 2022, 13, 378-386.	2.1	9
2	The magnetic order in multiferroic DyMnO ₃ . <i>Journal of Electron Spectroscopy and Related Phenomena</i> , 2021, 246, 147013.	0.8	0
3	Direct observation of coherent femtosecond solvent reorganization coupled to intramolecular electron transfer. <i>Nature Chemistry</i> , 2021, 13, 343-349.	6.6	59
4	Using X-ray free-electron lasers for spectroscopy of molecular catalysts and metalloenzymes. <i>Nature Reviews Physics</i> , 2021, 3, 264-282.	11.9	60
5	Ultrafast x-ray pump x-ray probe transient absorption spectroscopy: A computational study and proposed experiment probing core-valence electronic correlations in solvated complexes. <i>Journal of Chemical Physics</i> , 2021, 154, 214107.	1.2	5
6	Following Metal-to-Ligand Charge-Transfer Dynamics with Ligand and Spin Specificity Using Femtosecond Resonant Inelastic X-ray Scattering at the Nitrogen K-Edge. <i>Journal of Physical Chemistry Letters</i> , 2021, 12, 6676-6683.	2.1	12
7	Revealing the bonding of solvated Ru complexes with valence-to-core resonant inelastic X-ray scattering. <i>Chemical Science</i> , 2021, 12, 3713-3725.	3.7	17
8	Excited-State Charge Distribution of a Donor-acceptor Zn Porphyrin Probed by N K-Edge Transient Absorption Spectroscopy. <i>Journal of Physical Chemistry Letters</i> , 2021, 12, 1182-1188.	2.1	19
9	Ultrafast Charge Transfer and Electron Delocalization in a Cyanide-Bridged Ru-Ru Dimer Investigated with Femtosecond Transient X-Ray and IR Spectroscopies. , 2020, , .		0
10	Using Ultrafast X-ray Spectroscopy To Address Questions in Ligand-Field Theory: The Excited State Spin and Structure of [Fe(dcpp) ₂] ²⁺ . <i>Inorganic Chemistry</i> , 2019, 58, 9341-9350.	1.9	29
11	Double core hole valence-to-core x-ray emission spectroscopy: A theoretical exploration using time-dependent density functional theory. <i>Journal of Chemical Physics</i> , 2019, 151, 144114.	1.2	11
12	UV-photochemistry of the biologically relevant thiol group and the disulfide bond: Evolution of early photoproducts from picosecond X-ray absorption spectroscopy at the sulfur K-Edge. <i>EPJ Web of Conferences</i> , 2019, 205, 09006.	0.1	0
13	Recent advances in ultrafast X-ray sources. <i>Philosophical Transactions Series A, Mathematical, Physical, and Engineering Sciences</i> , 2019, 377, 20180384.	1.6	89
14	Comprehensive Experimental and Computational Spectroscopic Study of Hexacyanoferrate Complexes in Water: From Infrared to X-ray Wavelengths. <i>Journal of Physical Chemistry B</i> , 2018, 122, 5075-5086.	1.2	40
15	UV-Photochemistry of the Disulfide Bond: Evolution of Early Photoproducts from Picosecond X-ray Absorption Spectroscopy at the Sulfur K-Edge. <i>Journal of the American Chemical Society</i> , 2018, 140, 6554-6561.	6.6	30
16	Transient metal-centered states mediate isomerization of a photochromic ruthenium-sulfoxide complex. <i>Nature Communications</i> , 2018, 9, 1989.	5.8	29
17	Light-Induced Radical Formation and Isomerization of an Aromatic Thiol in Solution Followed by Time-Resolved X-ray Absorption Spectroscopy at the Sulfur K-Edge. <i>Journal of the American Chemical Society</i> , 2017, 139, 4797-4804.	6.6	26
18	Picosecond sulfur K-edge X-ray absorption spectroscopy with applications to excited state proton transfer. <i>Structural Dynamics</i> , 2017, 4, 044021.	0.9	15

#	ARTICLE	IF	CITATIONS
37	Ultrafast charge localization in a stripe-phase nickelate. Nature Communications, 2013, 4, 2643.	5.8	36
38	Time-resolved x-ray photoelectron spectroscopy techniques for real-time studies of interfacial charge transfer dynamics. AIP Conference Proceedings, 2013, , .	0.3	7
39	Ultrafast mid-infrared spectroscopy of the charge- and spin-ordered nickelates. Proceedings of SPIE, 2013, , .	0.8	0
40	Elucidating Charge Delocalization in the High-Spin State of aqueous FeII Spin-Crossover Compounds via Time-Resolved Spectroscopy in the X-ray Water Window. EPJ Web of Conferences, 2013, 41, 05037.	0.1	0
41	Femtosecond Time-Resolved X-ray Photoelectron Spectroscopy Studies of Charge Transfer in Dye-Sensitized Semiconductor Nanocrystals. , 2013, , .		0
42	Ultrafast Mid-infrared Spectroscopy of the Charge- and Spin-Ordered Nickelate La _{1.75} Sr _{0.25} NiO ₄ . EPJ Web of Conferences, 2013, 41, 03016.	0.1	0
43	Observation of Coherent Helimagnons and Gilbert Damping in an Itinerant Magnet. Physical Review Letters, 2012, 109, 247204.	2.9	19
44	Ligand-field symmetry effects in Fe(II) polypyridyl compounds probed by transient X-ray absorption spectroscopy. Faraday Discussions, 2012, 157, 463.	1.6	49
45	Phase fluctuations and the absence of topological defects in a photo-excited charge-ordered nickelate. Nature Communications, 2012, 3, 838.	5.8	85
46	Advances in Ultrafast Control and Probing of Correlated-Electron Materials. IEEE Journal of Selected Topics in Quantum Electronics, 2012, 18, 81-91.	1.9	9
47	Probing the Electronic Structure of a Photoexcited Solar Cell Dye with Transient X-ray Absorption Spectroscopy. Journal of Physical Chemistry Letters, 2012, 3, 1695-1700.	2.1	63
48	Organometallic Chemistry in Solutions Investigated with Time-resolved X-ray Spectroscopy. , 2012, , .		0
49	Femtosecond Soft X-ray Spectroscopy of Solvated Transition-Metal Complexes: Deciphering the Interplay of Electronic and Structural Dynamics. Journal of Physical Chemistry Letters, 2011, 2, 880-884.	2.1	169
50	Ferromagnetic Enhancement of CE-Type Spin Ordering in CaTl_2O_7 . Physical Review Letters, 2011, 106, 186404.	2.1	169
51	Photo-Induced Spin-State Conversion in Solvated Transition Metal Complexes Probed via Time-Resolved Soft X-ray Spectroscopy. Journal of the American Chemical Society, 2010, 132, 6809-6816.	6.6	135
52	Ultrafast Spin-State Conversion in Solvated Transition Metal Complexes Probed with Femtosecond Soft X-ray Spectroscopy. , 2010, , .		0
53	Transient electronic structure of the photoinduced phase of Pr^{2+} with soft x-ray pulses. Physical Review B, 2009, 80, .	1.1	18
54	Probing reaction dynamics of transition-metal complexes in solution via time-resolved X-ray spectroscopy. Journal of Physics: Conference Series, 2009, 148, 012043.	0.3	10

#	ARTICLE	IF	CITATIONS
55	Ultrafast conversions between hydrogen bonded structures in liquid water observed by femtosecond x-ray spectroscopy. <i>Journal of Chemical Physics</i> , 2009, 131, 234505.	1.2	46
56	Probing the hydrogen-bond network of water via time-resolved soft X-ray spectroscopy. <i>Physical Chemistry Chemical Physics</i> , 2009, 11, 3951.	1.3	71
57	Time-resolved studies of phase transition dynamics in strongly correlated manganites. <i>Journal of Physics: Conference Series</i> , 2009, 148, 012013.	0.3	3
58	Probing Reaction Dynamics of Transition-Metal Complexes in Solution via Time-Resolved Soft X-ray Spectroscopy. <i>Springer Series in Chemical Physics</i> , 2009, , 125-127.	0.2	1
59	Optical switching in VO ₂ films by below-gap excitation. <i>Applied Physics Letters</i> , 2008, 92, .	1.5	126
60	Successful completion of the femtosecond slicing upgrade at the ALS. , 2007, , .		1
61	A high-average power femtosecond laser for synchrotron light source applications. , 2007, , .		1
62	Coherent orbital waves in the photo-induced insulator→metal dynamics of LaMnO_3 magnetoresistive manganite. <i>Nature Materials</i> , 2007, 6, 643-647.	13.3	139
63	Control of the electronic phase of a manganite by mode-selective vibrational excitation. <i>Nature</i> , 2007, 449, 72-74.	13.7	512
64	Accelerator-based Ultrafast X-ray Light Sources: New Tools for Probing Correlated Electronic Structure. , 2007, , .		0
65	Picosecond X-ray Absorption Spectroscopy of a Photoinduced Iron(II) Spin Crossover Reaction in Solution. <i>Journal of Physical Chemistry A</i> , 2006, 110, 38-44.	1.1	171
66	Tracking the motion of charges in a terahertz light field by femtosecond X-ray diffraction. <i>Nature</i> , 2006, 442, 664-666.	13.7	94
67	Ultra-Broadband Femtosecond Measurements of the Photo-Induced Phase Transition in VO ₂ : From the Mid-IR to the Hard X-rays. <i>Journal of the Physical Society of Japan</i> , 2006, 75, 011004.	0.7	47
68	Laser Seeding of the Storage-Ring Microbunching Instability for High-Power Coherent Terahertz Radiation. <i>Physical Review Letters</i> , 2006, 97, 074802.	2.9	21
69	Tailored Terahertz Pulses from a Laser-Modulated Electron Beam. <i>Physical Review Letters</i> , 2006, 96, 164801.	2.9	43
70	Picosecond X-ray Absorption Spectroscopy of Photochemical Transient Species in Solution. , 2006, , .		0
71	Band-Selective Measurements of Electron Dynamics in VO ₂ Using Femtosecond Near-Edge X-Ray Absorption. <i>Physical Review Letters</i> , 2005, 95, 067405.	2.9	247
72	Photoinduced phase transition in VO ₂ nanocrystals: ultrafast control of surface-plasmon resonance. <i>Optics Letters</i> , 2005, 30, 558.	1.7	175

#	ARTICLE	IF	CITATIONS
73	Picosecond soft x-ray absorption measurement of the photoinduced insulator-to-metal transition inVO2. Physical Review B, 2004, 69, .	1.1	75
74	A setup for ultrafast time-resolved x-ray absorption spectroscopy. Review of Scientific Instruments, 2004, 75, 24-30.	0.6	91
75	Evidence for a structurally-driven insulator-to-metal transition inVO2: A view from the ultrafast timescale. Physical Review B, 2004, 70, .	1.1	599
76	LUX: a design study for a linac-/laser-based ultrafast x-ray source. , 2004, , .		0
77	Metal-Insulator Transitions in an Expanding Metallic Fluid: Particle Formation Kinetics. Physical Review Letters, 2003, 90, 236102.	2.9	41
78	Observation of a nearly isotropic, high-energy Coulomb explosion group in the fragmentation ofD2by short laser pulses. Physical Review A, 2002, 65, .	1.0	45
79	Ultrafast X-ray diffraction of laser-irradiated crystals. Nuclear Instruments and Methods in Physics Research, Section A: Accelerators, Spectrometers, Detectors and Associated Equipment, 2001, 467-468, 986-989.	0.7	9
80	Measurement of synchrotron pulse durations using surface photovoltage transients. Nuclear Instruments and Methods in Physics Research, Section A: Accelerators, Spectrometers, Detectors and Associated Equipment, 2001, 467-468, 1438-1440.	0.7	17
81	Femtosecond X-rays from relativistic electrons: new tools for probing structural dynamics. Comptes Rendus Physique, 2001, 2, 1373-1388.	0.1	3
82	High-order harmonic pulse broadening in an ionizing medium. Physical Review A, 2001, 63, .	1.0	8
83	Femtosecond X-ray generation through relativistic electron beamâ€“laser interaction. Comptes Rendus Physique, 2000, 1, 279-296.	0.1	2
84	Time-resolved x-ray photoabsorption and diffraction on timescales from ns to fs. AIP Conference Proceedings, 2000, , .	0.3	0
85	Generation of femtosecond X-ray pulses via laserâ€“electron beam interaction. Applied Physics B: Lasers and Optics, 2000, 71, 1-10.	1.1	81
86	Generation of Femtosecond Pulses of Synchrotron Radiation. Science, 2000, 287, 2237-2240.	6.0	571
87	Femtosecond synchrotron radiation pulses generated in the als storage ring. Synchrotron Radiation News, 2000, 13, 28-31.	0.2	2
88	Ultrafast Structural Dynamics in InSb Probed by Time-Resolved X-Ray Diffraction. Physical Review Letters, 1999, 83, 336-339.	2.9	184
89	Low signal FEL gain: measurement, simulation and analysis. , 1999, , .		1
90	Interaction of relativistic electrons with ultrashort laser pulses: generation of femtosecond X-rays and microprobing of electron beams. IEEE Journal of Quantum Electronics, 1997, 33, 1925-1934.	1.0	55

#	ARTICLE	IF	CITATIONS
91	Observation of Laser Assisted Photoelectric Effect and Femtosecond High Order Harmonic Radiation. Physical Review Letters, 1996, 76, 2468-2471.	2.9	278
92	Femtosecond X-ray Pulses at 0.4 Å Generated by 90° Thomson Scattering: A Tool for Probing the Structural Dynamics of Materials. Science, 1996, 274, 236-238.	6.0	439
93	X-Ray Based Subpicosecond Electron Bunch Characterization Using 90° Thomson Scattering. Physical Review Letters, 1996, 77, 4182-4185.	2.9	156
94	Femtosecond Spectroscopy of a 13-Demethylrhodopsin Visual Pigment Analogue: The Role of Nonbonded Interactions in the Isomerization Process. The Journal of Physical Chemistry, 1996, 100, 17388-17394.	2.9	65
95	Vibrationally coherent photochemistry in the femtosecond primary event of vision. Science, 1994, 266, 422-424.	6.0	619
96	Quantum size dependence of femtosecond electronic dephasing and vibrational dynamics in CdSe nanocrystals. Physical Review B, 1994, 49, 14435-14447.	1.1	288
97	Femtosecond dynamics of cis-trans isomerization in a visual pigment analog: isorhodopsin. The Journal of Physical Chemistry, 1993, 97, 12087-12092.	2.9	96
98	Investigation of femtosecond electronic dephasing in CdSe nanocrystals using quantum-beat-suppressed photon echoes. Physical Review Letters, 1993, 70, 1014-1017.	2.9	186
99	The first step in vision occurs in femtoseconds: complete blue and red spectral studies. Proceedings of the National Academy of Sciences of the United States of America, 1993, 90, 11762-11766.	3.3	186
100	<title>Ultrafast dynamics of photoexcited C6O</title>. , 1993, , .		3
101	Carrier dynamics in GaAs. Applied Physics Letters, 1992, 60, 2123-2125.	1.5	59
102	Generation of 312 nm, femtosecond pulses using a poled copolymer film. IEEE Journal of Quantum Electronics, 1992, 28, 2398-2403.	1.0	29
103	The first step in vision: femtosecond isomerization of rhodopsin. Science, 1991, 254, 412-415.	6.0	821
104	Femtosecond relaxation dynamics of image-potential states. Physical Review B, 1991, 43, 4688-4698.	1.1	105
105	Two-dimensional carrier-carrier screening in a quantum well. Physical Review Letters, 1991, 67, 636-639.	2.9	117
106	Generation of blue-green 10 fs pulses using an excimer pumped dye amplifier. Applied Physics Letters, 1991, 58, 801-803.	1.5	64
107	Non-Markovian dephasing of molecules in solution measured with three-pulse femtosecond photon echoes. Physical Review Letters, 1991, 66, 1138-1141.	2.9	188
108	Resonant intervalley scattering in GaAs. Physical Review Letters, 1990, 65, 3429-3432.	2.9	32

#	ARTICLE	IF	CITATIONS
109	Femtosecond dynamics of the $n=2$ image-potential state on Ag(100). <i>Physical Review B</i> , 1990, 41, 5436-5439.	1.1	57
110	Femtosecond excited-state dynamics of polydiacetylene. <i>Applied Physics Letters</i> , 1990, 56, 1600-1602.	1.5	29
111	Corneal Ablation by Nanosecond, Picosecond, and Femtosecond Lasers at 532 and 625 nm. <i>JAMA Ophthalmology</i> , 1989, 107, 587.	2.6	185
112	Femtosecond studies of intervalley scattering in GaAs and Al _x Ga _{1-x} As. <i>Solid-State Electronics</i> , 1989, 32, 1491-1495.	0.8	7
113	Amplification of femtosecond pulses in Ti:Al ₂ O ₃ using an injection-seeded laser. <i>Optics Letters</i> , 1989, 14, 1347.	1.7	13
114	Femtosecond hot carrier energy redistribution in GaAs and AlGaAs. <i>Solid-State Electronics</i> , 1988, 31, 443-446.	0.8	20
115	Femtosecond absorption saturation studies of hot carriers in GaAs and AlGaAs. <i>IEEE Journal of Quantum Electronics</i> , 1988, 24, 267-275.	1.0	164
116	Femtosecond Studies of Image-Potential Dynamics in Metals. <i>Physical Review Letters</i> , 1988, 61, 2596-2599.	2.9	163
117	Femtosecond hot-carrier energy relaxation in GaAs. <i>Applied Physics Letters</i> , 1987, 51, 1442-1444.	1.5	98
118	Femtosecond studies of nonequilibrium electronic processes in metals. <i>Physical Review Letters</i> , 1987, 58, 1680-1683.	2.9	638
119	Femtosecond laser-tissue interactions: Retinal injury studies. <i>IEEE Journal of Quantum Electronics</i> , 1987, 23, 1836-1844.	1.0	59
120	Femtosecond X-Rays and Structural Dynamics in Condensed Matter. <i>Topics in Applied Physics</i> , 0, , 309-338.	0.4	12
121	CHAPTER 23. New Science Opportunities and Experimental Approaches Enabled by High Repetition Rate Soft X-ray Lasers. <i>RSC Energy and Environment Series</i> , 0, , 434-457.	0.2	1