

Simon E Wall

List of Publications by Year in descending order

Source: <https://exaly.com/author-pdf/5332379/publications.pdf>

Version: 2024-02-01

48
papers

2,218
citations

304743

22
h-index

265206

42
g-index

50
all docs

50
docs citations

50
times ranked

3239
citing authors

#	ARTICLE	IF	CITATIONS
1	Multi-mode excitation drives disorder during the ultrafast melting of a C4-symmetry-broken phase. Nature Communications, 2022, 13, 238.	12.8	7
2	Nonthermal breaking of magnetic order via photogenerated spin defects in the spin-orbit coupled insulator $\text{Sr}_3\text{Ir}_2\text{O}_7$. Physical Review B, 2022, 105, .	3.2	8
3	Fermionic Chern insulator from twisted light with linear polarization. Physical Review B, 2022, 105, .	3.2	8
4	Programmable chalcogenide-based all-optical deep neural networks. Nanophotonics, 2022, 11, 4073-4088.	6.0	29
5	Attosecond state-resolved carrier motion in quantum materials probed by soft x-ray XANES. Applied Physics Reviews, 2021, 8, .	11.3	30
6	Laser-induced transient magnons in $\text{Sr}_3\text{Ir}_2\text{O}_7$ throughout the Brillouin zone. Proceedings of the National Academy of Sciences of the United States of America, 2021, 118, .	7.1	19
7	Quantitative hyperspectral coherent diffractive imaging spectroscopy of a solid-state phase transition in vanadium dioxide. Science Advances, 2021, 7, .	10.3	12
8	An achromatic pump-probe setup for broadband, few-cycle ultrafast spectroscopy in quantum materials. Review of Scientific Instruments, 2021, 92, 103003.	1.3	2
9	Does VO_2 Host a Transient Monoclinic Metallic Phase?. Physical Review X, 2020, 10, .	8.9	20
10	Measurement of 10â€%fs pulses across the entire Visible to Near-Infrared Spectral Range. Scientific Reports, 2020, 10, 4690.	3.3	14
11	Nanoscale phase separation and pseudogap in the hole-doped cuprates from fluctuating Cu-O-Cu bonds. Physical Review B, 2020, 101, .	3.2	5
12	Study of second and third harmonic generation from an indium tin oxide nanolayer: Influence of nonlocal effects and hot electrons. APL Photonics, 2020, 5, .	5.7	42
13	Volt-per-Å...ngstrom terahertz fields from X-ray free-electron lasers. Journal of Synchrotron Radiation, 2020, 27, 796-798.	2.4	0
14	Ultrafast evolution and transient phases of a prototype out-of-equilibrium Mott-Hubbard material. Nature Communications, 2019, 10, 4034.	12.8	1
15	Ultrafast dynamics of spin and orbital correlations in quantum materials: an energy- and momentum-resolved perspective. Philosophical Transactions Series A, Mathematical, Physical, and Engineering Sciences, 2019, 377, 20170480.	3.4	20
16	Probing the lattice anharmonicity of superconducting $\text{YBa}_2\text{Cu}_3\text{O}_7$ via phonon harmonics. Physical Review B, 2019, 100, .	3.2	4
17	Ultrafast disordering of vanadium dimers in photoexcited VO_2 . Science, 2018, 362, 572-576.	12.6	159
18	Imaging Nanometer Phase Coexistence at Defects During the Insulator-Metal Phase Transformation in VO_2 Thin Films by Resonant Soft X-ray Holography. Nano Letters, 2018, 18, 3449-3453.	9.1	24

#	ARTICLE	IF	CITATIONS
19	Ultrafast and Broadband Tuning of Resonant Optical Nanostructures Using Phase-Change Materials. <i>Advanced Optical Materials</i> , 2016, 4, 1060-1066.	7.3	67
20	Ultrafast energy- and momentum-resolved dynamics of magnetic correlations in the photo-doped Mott insulator Sr ₂ IrO ₄ . <i>Nature Materials</i> , 2016, 15, 601-605.	27.5	120
21	Recent Developments in Ultrafast X-ray Techniques for Materials Science Applications. <i>Synchrotron Radiation News</i> , 2016, 29, 13-18.	0.8	7
22	Resonant optical control of the structural distortions that drive ultrafast demagnetization in CrO ₂ . <i>Physical Review B</i> , 2016, 94, .	3.2	25
23	Ultrafast optical response of the amorphous and crystalline states of the phase change material Ge ₂ Sb ₂ Te ₅ . <i>Physical Review B</i> , 2016, 94, .	3.2	25
24	High-Field High-Repetition-Rate Sources for the Coherent THz Control of Matter. <i>Scientific Reports</i> , 2016, 6, 22256.	3.3	121
25	Strain-engineered diffusive atomic switching in two-dimensional crystals. <i>Nature Communications</i> , 2016, 7, 11983.	12.8	85
26	Sub-nanometre resolution of atomic motion during electronic excitation in phase-change materials. <i>Scientific Reports</i> , 2016, 6, 20633.	3.3	29
27	Light control of orbital domains: case of the prototypical manganite La _{0.5} Sr _{1.5} MnO ₄ . <i>Physica Scripta</i> , 2016, 91, 124002.	2.5	3
28	Time-domain separation of optical properties from structural transitions in resonantly bonded materials. <i>Nature Materials</i> , 2015, 14, 991-995.	27.5	166
29	Terahertz field control of in-plane orbital order in La _{0.5} Sr _{1.5} MnO ₄ . <i>Nature Communications</i> , 2015, 6, 8175.	12.8	19
30	Competition Between Thermal and Non-Thermal Processes During Femtosecond Switching of Phase Change Materials. , 2014, , .		0
31	Witnessing the formation and relaxation of dressed quasi-particles in a strongly correlated electron system. <i>Nature Communications</i> , 2014, 5, 5112.	12.8	58
32	Tracking the evolution of electronic and structural properties of VO ₂ during the ultrafast photoinduced insulator-metal transition. <i>Physical Review B</i> , 2013, 87, .	3.2	69
33	Measuring 3D magnetic correlations during the photo-induced melting of electronic order in La _{0.5} Sr _{1.5} MnO ₄ . <i>EPI Web of Conferences</i> , 2013, 41, 03003.	0.3	0
34	Evolution of three-dimensional correlations during the photoinduced melting of antiferromagnetic order in La _{0.5} Sr _{1.5} MnO ₄ . <i>Physical Review B</i> , 2013, 87, .	3.2	19
35	Ultrafast changes in lattice symmetry probed by coherent phonons. <i>Nature Communications</i> , 2012, 3, 721.	12.8	177
36	Advances in Ultrafast Control and Probing of Correlated-Electron Materials. <i>IEEE Journal of Selected Topics in Quantum Electronics</i> , 2012, 18, 81-91.	2.9	9

#	ARTICLE	IF	CITATIONS
37	Driving magnetic order in a manganite by ultrafast lattice excitation. <i>Physical Review B</i> , 2011, 84, .	3.2	130
38	Phase retrieval and compression of low-power white-light pulses. <i>Applied Physics Letters</i> , 2011, 99, .	3.3	17
39	Photoinduced Melting of Antiferromagnetic Order in $\text{La}_{0.5}\text{Sr}$ Using Ultrafast Resonant Soft X-Ray Diffraction. <i>Physical Review Letters</i> , 2011, 106, 217401.	7.8	89
40	Quantum interference between charge excitation paths in a solid-state Mott insulator. <i>Nature Physics</i> , 2011, 7, 114-118.	16.7	134
41	Ultrafast Coupling between Light, Coherent Lattice Vibrations, and the Magnetic Structure of Semicovalent LaMnO_3 . <i>Physical Review Letters</i> , 2009, 103, 097402.	7.8	81
42	Transient electronic structure of the photoinduced phase of Pr with soft x-ray pulses. <i>Physical Review B</i> , 2009, 80, .	3.2	18
43	Coherent Orbital Waves in Manganites. <i>Springer Series in Chemical Physics</i> , 2009, , 170-172.	0.2	0
44	Probing strongly correlated electron dynamics on extreme timescales. <i>Journal of Physics: Conference Series</i> , 2009, 148, 012018.	0.4	0
45	Optical switching in VO ₂ films by below-gap excitation. <i>Applied Physics Letters</i> , 2008, 92, .	3.3	126
46	Coherent orbital waves in the photo-induced insulator-metal dynamics of a magnetoresistive manganite. <i>Nature Materials</i> , 2007, 6, 643-647.	27.5	139
47	Lattice Motions from THz phonon polaritons measured with Femtosecond X-ray Diffraction. <i>Springer Series in Chemical Physics</i> , 2007, , 716-718.	0.2	0
48	Tracking the motion of charges in a terahertz light field by femtosecond X-ray diffraction. <i>Nature</i> , 2006, 442, 664-666.	27.8	94