Alexander X Gray

List of Publications by Citations

42 papers	1,537 citations	22 h-index	39 g-index
44 ext. papers	1,745 ext. citations	6 avg, IF	3.87 L-index

#	Paper	IF	Citations
42	Control of the metal-insulator transition in vanadium dioxide by modifying orbital occupancy. *Nature Physics*, **2013**, 9, 661-666	16.2	365
41	Probing bulk electronic structure with hard X-ray angle-resolved photoemission. *Nature Materials*, **2011**, 10, 759-64	27	129
40	Bulk electronic structure of the dilute magnetic semiconductor Ga(1-x)Mn(x)As through hard X-ray angle-resolved photoemission. *Nature Materials*, **2012**, 11, 957-62	27	98
39	Interface properties of magnetic tunnel junction La0.7Sr0.3MnO3/SrTiO3 superlattices studied by standing-wave excited photoemission spectroscopy. *Physical Review B*, **2010**, 82,	3.3	69
38	Strain-Engineered Oxygen Vacancies in CaMnO Thin Films. *Nano Letters*, **2017**, 17, 794-799	11.5	64
37	Temperature-driven nucleation of ferromagnetic domains in FeRh thin films. *Applied Physics Letters*, **2012**, 100, 262401	3.4	64
36	Correlation-Driven Insulator-Metal Transition in Near-Ideal Vanadium Dioxide Films. *Physical Review Letters*, **2016**, 116, 116403	7.4	56
35	Observation of boron diffusion in an annealed Ta/CoFeB/MgO magnetic tunnel junction with standing-wave hard x-ray photoemission. *Applied Physics Letters*, **2012**, 101, 202402	3.4	56
34	Electronic structure changes across the metamagnetic transition in FeRh via hard X-ray photoemission. *Physical Review Letters*, **2012**, 108, 257208	7.4	56
33	Nature of the metal-insulator transition in few-unit-cell-thick LaNiO films. *Nature Communications*, **2018**, 9, 2206	17.4	44
32	Making use of x-ray optical effects in photoelectron-, Auger electron-, and x-ray emission spectroscopies: Total reflection, standing-wave excitation, and resonant effects. *Journal of Applied Physics*, **2013**, 113, 073513	2.5	39
31	Chemical stability of the magnetic oxide EuO directly on silicon observed by hard x-ray photoemission spectroscopy. *Physical Review B*, **2011**, 84,	3.3	37
30	Suppression of near-Fermi level electronic states at the interface in a LaNiO3/SrTiO3 superlattice. *Physical Review Letters*, **2011**, 107, 116402	7.4	35
29	Ultrafast terahertz field control of electronic and structural interactions in vanadium dioxide. *Physical Review B*, **2018**, 98,	3.3	34
28	Insulating state of ultrathin epitaxial LaNiO3 thin films detected by hard x-ray photoemission. *Physical Review B*, **2011**, 84,	3.3	32
27	Momentum-resolved electronic structure at a buried interface from soft X-ray standing-wave angle-resolved photoemission. *Europhysics Letters*, **2013**, 104, 17004	1.6	31
26	Band offsets in complex-oxide thin films and heterostructures of SrTiO3/LaNiO3 and SrTiO3/GdTiO3 by soft and hard X-ray photoelectron spectroscopy. *Journal of Applied Physics*, **2013**, 113, 143704	2.5	28

25	Constructing oxide interfaces and heterostructures by atomic layer-by-layer laser molecular beam epitaxy. *Npj Quantum Materials*, **2017**, 2,	5	27
24	Electronic structure of EuO spin filter tunnel contacts directly on silicon. *Physica Status Solidi - Rapid Research Letters*, **2011**, 5, 441-443	2.5	26
23	Inter-Layer Coupling Induced Valence Band Edge Shift in Mono- to Few-Layer MoS. *Scientific Reports*, **2017**, 7, 40559	4.9	25
22	Future directions in standing-wave photoemission. *Journal of Electron Spectroscopy and Related Phenomena*, **2014**, 195, 399-408	1.7	24
21	Electronic structure of delta-doped La:SrTiO3 layers by hard x-ray photoelectron spectroscopy. *Applied Physics Letters*, **2012**, 100, 261603	3.4	23
20	Standing-wave excited soft x-ray photoemission microscopy: Application to Co microdot magnetic arrays. *Applied Physics Letters*, **2010**, 97, 062503	3.4	21
19	Electronic structure of negative charge transfer CaFeO3 across the metal-insulator transition. *Physical Review Materials*, **2018**, 2,	3.2	18
18	Hard x-ray photoelectron spectroscopy: a snapshot of the state-of-the-art in 2020. *Journal of Physics Condensed Matter*, **2021**, 33,	1.8	17
17	Magnetic Switching in Granular FePt Layers Promoted by Near-Field Laser Enhancement. *Nano Letters*, **2017**, 17, 2426-2432	11.5	16
16	Effects of spin excitons on the surface states of SmB6: A photoemission study. *Physical Review B*, **2016**, 94,	3.3	15
15	Hard x-ray photoemission study of near-Heusler FexSi1 alloys. *Physical Review B*, **2011**, 83,	3.3	13
14	Band gap and electronic structure of an epitaxial, semiconducting Cr0.80Al0.20 thin film. *Physical Review Letters*, **2010**, 105, 236404	7.4	12
13	Electronic structure of the dilute magnetic semiconductor Ga1MnxP from hard x-ray photoelectron spectroscopy and angle-resolved photoemission. *Physical Review B*, **2018**, 97,	3.3	10
12	Progress toward time-resolved molecular imaging: A theoretical study of optimal parameters in static photoelectron holography. *Physical Review A*, **2014**, 89,	2.6	8
11	Combining Hard and Soft X-ray Photoemission with Standing-Wave Excitation, Resonant Excitation, and Angular Resolution. *Synchrotron Radiation News*, **2018**, 31, 42-49	0.6	8
10	Depth-resolved charge reconstruction at the LaNiO3/CaMnO3 interface. *Physical Review B*, **2018**, 98,	3.3	8
9	Superconductor to Mott insulator transition in YBa2Cu3O7/LaCaMnO3 heterostructures. *Scientific Reports*, **2016**, 6, 33184	4.9	7
8	Measurement of collective excitations in VO2 by resonant inelastic x-ray scattering. *Physical Review B*, **2016**, 94,	3.3	7

7	Strain-Induced Anion-Site Occupancy in Perovskite Oxyfluoride Films. *Chemistry of Materials*, **2021**, 33, 1811-1820	9.6	6
6	Electronic Structure of a Graphene-like Artificial Crystal of NdNiO. *Nano Letters*, **2019**, 19, 8311-8317	11.5	5
5	Bulk electronic structure of lanthanum hexaboride (LaB6) by hard x-ray angle-resolved photoelectron spectroscopy. *Physical Review Materials*, **2021**, 5,	3.2	2
4	Emergent phenomena at oxide interfaces studied with standing-wave photoelectron spectroscopy. *Journal of Vacuum Science and Technology A: Vacuum, Surfaces and Films*, **2022**, 40, 020801	2.9	
3	Nanosession: Spin Tunneling Systems311-322		
2	Nanosession: Advanced Spectroscopy and Scattering123-132		
1	Poster: Advances in Technology and Characterization665-692		