

# Alexander X Gray

## List of Publications by Year in descending order

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41

papers

1,928

citations

257450

24

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276875

41

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44

all docs

44

docs citations

44

times ranked

3531

citing authors

#	ARTICLE	IF	CITATIONS
1	Control of the metal–insulator transition in vanadium dioxide by modifying orbital occupancy. <i>Nature Physics</i> , 2013, 9, 661-666.	16.7	448
2	Probing bulk electronic structure with hard X-ray angle-resolved photoemission. <i>Nature Materials</i> , 2011, 10, 759-764.	27.5	153
3	Bulk electronic structure of the dilute magnetic semiconductor $\text{Ga}_{1-x}\text{Mn}_x\text{As}$ through hard X-ray angle-resolved photoemission. <i>Nature Materials</i> , 2012, 11, 957-962.	27.5	117
4	Strain-Engineered Oxygen Vacancies in $\text{CaMnO}_3$ Thin Films. <i>Nano Letters</i> , 2017, 17, 794-799.	9.1	83
5	Temperature-driven nucleation of ferromagnetic domains in FeRh thin films. <i>Applied Physics Letters</i> , 2012, 100, .	3.3	79
6	Correlation-Driven Insulator-Metal Transition in Near-Ideal Vanadium Dioxide Films. <i>Physical Review Letters</i> , 2016, 116, 116403.	7.8	72
7	Interface properties of magnetic tunnel junction $\text{La}_{3-x}\text{Mn}_x\text{O}_3/\text{FeRh}/\text{MgO}$ . <i>Physical Review B</i> , 2010, 82, .	3.2	71
8	Electronic Structure Changes across the Metamagnetic Transition in FeRh via Hard X-Ray Photoemission. <i>Physical Review Letters</i> , 2012, 108, 257208.	7.8	68
9	Nature of the metal-insulator transition in few-unit-cell-thick $\text{LaNiO}_3$ films. <i>Nature Communications</i> , 2018, 9, 2206.	12.8	66
10	Observation of boron diffusion in an annealed Ta/CoFeB/MgO magnetic tunnel junction with standing-wave hard x-ray photoemission. <i>Applied Physics Letters</i> , 2012, 101, .	3.3	64
11	Hard x-ray photoelectron spectroscopy: a snapshot of the state-of-the-art in 2020. <i>Journal of Physics Condensed Matter</i> , 2021, 33, 233001.	1.8	55
12	Ultrafast terahertz field control of electronic and structural interactions in vanadium dioxide. <i>Physical Review B</i> , 2018, 98, .	3.2	49
13	Making use of x-ray optical effects in photoelectron-, Auger electron-, and x-ray emission spectroscopies: Total reflection, standing-wave excitation, and resonant effects. <i>Journal of Applied Physics</i> , 2013, 113, .	2.5	47
14	Chemical stability of the magnetic oxide EuO directly on silicon observed by hard x-ray photoemission spectroscopy. <i>Physical Review B</i> , 2011, 84, .	3.2	46
15	Suppression of Near-Fermi Level Electronic States at the Interface in $\text{La}_{3-x}\text{Mn}_x\text{O}_3/\text{MgO}$ . <i>Physical Review Letters</i> , 2011, 107, 116402.	7.8	39
16	Insulating state of ultrathin epitaxial $\text{LaNiO}_3/\text{MgO}$ thin films detected by hard x-ray photoemission. <i>Physical Review B</i> , 2011, 84, .	3.2	35
17	Momentum-resolved electronic structure at a buried interface from soft X-ray standing-wave angle-resolved photoemission. <i>Europhysics Letters</i> , 2013, 104, 17004.	2.0	35
18	Constructing oxide interfaces and heterostructures by atomic layer-by-layer laser molecular beam epitaxy. <i>Npj Quantum Materials</i> , 2017, 2, .	5.2	34

#	ARTICLE	IF	CITATIONS
19	Inter-Layer Coupling Induced Valence Band Edge Shift in Mono- to Few-Layer MoS <sub>2</sub> . <i>Scientific Reports</i> , 2017, 7, 40559.	3.3	32
20	Future directions in standing-wave photoemission. <i>Journal of Electron Spectroscopy and Related Phenomena</i> , 2014, 195, 399-408.	1.7	30
21	Band offsets in complex-oxide thin films and heterostructures of SrTiO <sub>3</sub> /LaNiO <sub>3</sub> and SrTiO <sub>3</sub> /GdTiO <sub>3</sub> by soft and hard X-ray photoelectron spectroscopy. <i>Journal of Applied Physics</i> , 2013, 113, .	2.5	29
22	Electronic structure of EuO spin filter tunnel contacts directly on silicon. <i>Physica Status Solidi - Rapid Research Letters</i> , 2011, 5, 441-443.	2.4	28
23	Electronic structure of negative charge transfer $\text{CaFeO}_3$ across the metal-insulator transition. <i>Physical Review Materials</i> , 2018, 2, .	2.4	27
24	Electronic structure of delta-doped La:SrTiO <sub>3</sub> layers by hard x-ray photoelectron spectroscopy. <i>Applied Physics Letters</i> , 2012, 100, 261603.	3.3	25
25	Standing-wave excited soft x-ray photoemission microscopy: Application to Co microdot magnetic arrays. <i>Applied Physics Letters</i> , 2010, 97, .	3.3	24
26	Magnetic Switching in Granular FePt Layers Promoted by Near-Field Laser Enhancement. <i>Nano Letters</i> , 2017, 17, 2426-2432.	9.1	22
27	Effects of spin excitons on the surface states of SmB <sub>6</sub> : A photoemission study. <i>Physical Review B</i> , 2016, 94, .	3.3	21
28	Hard x-ray photoemission study of near-Heusler Fe <sub>x</sub> Si <sub>1-x</sub> alloys. <i>Physical Review B</i> , 2011, 83, .	3.2	13
29	Electronic structure of the dilute magnetic semiconductor $\text{LaNi}_{1-x}\text{M}_{x}$ . Depth-resolved charge reconstruction at the $\text{LaNi}_{1-x}\text{M}_{x}/\text{CaMn}$ interface. <i>Physical Review B</i> , 2018, 98, .	3.2	13
30	$\text{O}_{3-x}\text{Mn}_{x}$ interface. <i>Physical Review B</i> , 2018, 98, .	3.2	13
31	Band Gap and Electronic Structure of an Epitaxial, Semiconducting Cr <sub>0.80</sub> Al <sub>0.20</sub> Thin Film. <i>Physical Review Letters</i> , 2010, 105, 236404.	7.8	12
32	Tuning band alignment at a semiconductor-crystalline oxide heterojunction via electrostatic modulation of the interfacial dipole. <i>Physical Review Materials</i> , 2021, 5, .	2.4	12
33	Measurement of collective excitations in VO <sub>2</sub> by resonant inelastic x-ray scattering. <i>Physical Review B</i> , 2016, 94, .	2.5	11
34	Combining Hard and Soft X-ray Photoemission with Standing-Wave Excitation, Resonant Excitation, and Angular Resolution. <i>Synchrotron Radiation News</i> , 2018, 31, 42-49.	0.8	11
35	Progress toward time-resolved molecular imaging: A theoretical study of optimal parameters in static photoelectron holography. <i>Physical Review A</i> , 2014, 89, .	2.5	10
36	Superconductor to Mott insulator transition in YBa <sub>2</sub> Cu <sub>3</sub> O <sub>7</sub> /LaCaMnO <sub>3</sub> heterostructures. <i>Scientific Reports</i> , 2016, 6, 33184.	3.3	10

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37	Strain-Induced Anion-Site Occupancy in Perovskite Oxyfluoride Films. <i>Chemistry of Materials</i> , 2021, 33, 1811-1820.	6.7	10
38	Electronic Structure of a Graphene-like Artificial Crystal of NdNiO <sub>3</sub> . <i>Nano Letters</i> , 2019, 19, 8311-8317.	9.1	7
39	Bulk electronic structure of lanthanum hexaboride ( $T_j ETQq1 1 0.784314 rgBT /Overlock 10 Tf 50 672 Td$ ). <i>Physical Review Materials</i> , 2021, 5, . hard x-ray angle-resolved photoelectron spectroscopy.	2.4	5
40	Probing single-unit-cell resolved electronic structure modulations in oxide superlattices with standing-wave photoemission. <i>Physical Review B</i> , 2019, 100, .	3.2	3
41	Emergent phenomena at oxide interfaces studied with standing-wave photoelectron spectroscopy. <i>Journal of Vacuum Science and Technology A: Vacuum, Surfaces and Films</i> , 2022, 40, 020801.	2.1	2