Craig J Fennie

List of Publications by Citations

45 papers	3,331 citations	23 h-index	46 g-index
46 ext. papers	3,977 ext. citations	12.8 avg, IF	5.43 L-index

#	Paper	IF	Citations
45	Hybrid improper ferroelectricity: a mechanism for controllable polarization-magnetization coupling. *Physical Review Letters*, **2011**, 106, 107204	7.4	481
44	Ferroelectric transition in YMnO3 from first principles. *Physical Review B*, **2005**, 72,	3.3	314
43	Elastic strain engineering of ferroic oxides. *MRS Bulletin*, **2014**, 39, 118-130	3.2	309
42	Stacking-Dependent Magnetism in Bilayer CrI. *Nano Letters*, **2018**, 18, 7658-7664	11.5	270
41	Atomically engineered ferroic layers yield a room-temperature magnetoelectric multiferroic. *Nature*, **2016**, 537, 523-7	50.4	221
40	Polar metals by geometric design. *Nature*, **2016**, 533, 68-72	50.4	203
39	Pressure-controlled interlayer magnetism in atomically thin CrI. *Nature Materials*, **2019**, 18, 1303-1308	27	178
38	Exploiting dimensionality and defect mitigation to create tunable microwave dielectrics. *Nature*, **2013**, 502, 532-6	50.4	170
37	Interplay of spin-orbit interactions, dimensionality, and octahedral rotations in semimetallic SrIrO(3). *Physical Review Letters*, **2015**, 114, 016401	7.4	148
36	Bulk magnetoelectricity in the hexagonal manganites and ferrites. *Nature Communications*, **2014**, 5, 2998	17.4	143
35	Turning ABO3 Antiferroelectrics into Ferroelectrics: Design Rules for Practical Rotation-Driven Ferroelectricity in Double Perovskites and A3B2O7 Ruddlesden-Popper Compounds. *Advanced Functional Materials*, **2013**, 23, n/a-n/a	15.6	98
34	Direct visualization of magnetoelectric domains. *Nature Materials*, **2014**, 13, 163-7	27	90
33	Strain-induced ferroelectricity in orthorhombic CaTiO3 from first principles. *Physical Review B*, **2009**, 79,	3.3	74
32	Interface control of emergent ferroic order in Ruddlesden-Popper Sr(n+1)Ti(n)O(3n+1). *Physical Review Letters*, **2011**, 107, 257602	7.4	64
31	Strain Control of Fermiology and Many-Body Interactions in Two-Dimensional Ruthenates. *Physical Review Letters*, **2016**, 116, 197003	7.4	56
30	Optical band gap and magnetic properties of unstrained EuTiO3 films. *Applied Physics Letters*, **2009**, 94, 212509	3.4	56
29	Interplay of Octahedral Rotations and Lone Pair Ferroelectricity in CsPbF3. *Inorganic Chemistry*, **2015**, 54, 8536-43	5.1	44

28	Domains and ferroelectric switching pathways in Ca3Ti2O7 from first principles. *Physical Review B*, **2016**, 94,	3.3	41
27	Electrical properties of improper ferroelectrics from first principles. *Physical Review B*, **2012**, 86,	3.3	40
26	Direct band gaps in multiferroic h-LuFeO3. *Applied Physics Letters*, **2015**, 106, 082902	3.4	31
25	Hierarchical spin-orbital polarization of a giant Rashba system. *Science Advances*, **2015**, 1, e1500495	14.3	27
24	Evidence for topologically protected surface states and a superconducting phase in [Tl4](Tl(1-x)Sn(x))Te3 using photoemission, specific heat, and magnetization measurements, and density functional theory. *Physical Review Letters*, **2014**, 112, 017002	7.4	27
23	Broadband dielectric spectroscopy of Ruddlesden Popper Srn+1TinO3n+1 (n=1,2,3) thin films. *Applied Physics Letters*, **2009**, 94, 042908	3.4	23
22	Manipulating superconductivity in ruthenates through Fermi surface engineering. *Physical Review B* , **2016**, 94,	3.3	21
21	Effect of film thickness and biaxial strain on the curie temperature of EuO. *Applied Physics Letters*, **2013**, 102, 062404	3.4	20
20	Magnetodielectric effect and phonon properties of compressively strained EuTiO3 thin films deposited on (001)(LaAlO3)0.29-(SrAl1/2Ta1/2O3)0.71. *Physical Review B*, **2012**, 85,	3.3	19
19	Spin-lattice coupling and phonon dispersion of CdCr2O4 from first principles. *Physical Review B*, **2012**, 86,	3.3	19
18	Structural control of magnetic anisotropy in a strain-driven multiferroic EuTiO3 thin film. *Physical Review B*, **2013**, 88,	3.3	17
17	Atomic scale imaging of competing polar states in a Ruddlesden-Popper layered oxide. *Nature Communications*, **2016**, 7, 12572	17.4	17
16	RbFe2+Fe3+F6: Synthesis, structure, and characterization of a new charge-ordered magnetically frustrated pyrochlore-related mixed-metal fluoride. *Chemical Science*, **2012**, 3, 741-751	9.4	16
15	Targeted chemical pressure yields tuneable millimetre-wave dielectric. *Nature Materials*, **2020**, 19, 176-181	27	14
14	Infrared nano-spectroscopy of ferroelastic domain walls in hybrid improper ferroelectric CaTiO. *Nature Communications*, **2019**, 10, 5235	17.4	14
13	Ferroelectricity: Octahedral Rotation-Induced Ferroelectricity in Cation Ordered Perovskites (Adv. Mater. 15/2012). *Advanced Materials*, **2012**, 24, 1918-1918	24	11
12	Strain-stabilized superconductivity. *Nature Communications*, **2021**, 12, 59	17.4	9
11	Topological superconductivity in metal/quantum-spin-ice heterostructures. *Npj Quantum Materials*, **2017**, 2,	5	8

10	Engineering Carrier Effective Masses in Ultrathin Quantum Wells of IrO_{2}. *Physical Review Letters*, **2018**, 121, 176802	7.4	8
9	Optimizing accuracy and efficacy in data-driven materials discovery for the solar production of hydrogen. *Energy and Environmental Science*, **2021**, 14, 2335-2348	35.4	8
8	Ferroelectrics: The positives of going negative. *Nature Materials*, **2015**, 14, 969-70	27	7
7	Direct Visualization of Trimerized States in 1T^{}-TaTe_{2}. *Physical Review Letters*, **2020**, 125, 165302	7.4	6
6	Coupled structural distortions, domains, and control of phase competition in polar SmBaMn2O6. *Physical Review B*, **2019**, 100,	3.3	6
5	Site-specific spectroscopic measurement of spin and charge in (LuFeO)/(LuFeO) multiferroic superlattices. *Nature Communications*, **2020**, 11, 5582	17.4	2
4			
3	Imaging Local Polarization and Domain Boundaries in Multiferroic (LuFeO3)m/(LuFe2O4)n Superlattices. *Microscopy and Microanalysis*, **2015**, 21, 1303-1304	0.5	
2	Nanosession: Multiferroics - High Transition Temperatures **2013**, 347-355		
1	Imaging Local Polarization and Domain Boundaries with Picometer-Precision Scanning Transmission Electron Microscopy. *Microscopy and Microanalysis*, **2016**, 22, 898-899	0.5	