Craig A J Fisher

List of Publications by Year
in descending order

93 papers	7,958 citations	98859 36 h-index	45319 88 g-index
97 all docs	97 docs citations	97 times ranked	9278 citing authors

#	Article	IF	Citations
1	Self-healing behavior of Sc2Si2O7/SiC composites for environmental barrier coatings. Ceramics International, 2023, 49, 24268-24275.	5.4	16
2	CMAS corrosion behavior of dual-phase composite Gd2Si2O7/Sc2Si2O7 as a promising EBC material. Journal of the European Ceramic Society, 2023, 43, 6440-6448.	6.2	10
3	Oxide-ion diffusion in brownmillerite-type Ca₂AlMnO_{5+<i>Î´</i>} from first-principles calculations. Physical Chemistry Chemical Physics, 2022, 24, 1503-1509.	2.8	6
4	Atomic-Level Changes during Electrochemical Cycling of Oriented LiMn₂O₄ Cathodic Thin Films. ACS Applied Materials & Interfaces, 2022, 14, 6507-6517.	8.1	20
5	Dealumination of small-pore zeolites through pore-opening migration process with the aid of pore-filler stabilization. Science Advances, 2022, 8, .	11.5	37
6	Cooperative Oxide-Ion Transport in Pyrochlore Y₂Ti₂O₇: A First-Principles Molecular Dynamics Study. Journal of Physical Chemistry C, 2021, 125, 20460-20467.	3.2	6
7	Atomic-Scale Analysis of Biphasic Boundaries in the Lithium-Ion Battery Cathode Material LiFePO₄. ACS Applied Energy Materials, 2020, 3, 8009-8016.	5.4	13
8	Oxygen Affinity: The Missing Link Enabling Prediction of Proton Conductivities in Doped Barium Zirconates. Chemistry of Materials, 2020, 32, 7292-7300.	6.9	43
9	A computational search for wurtzite-structured ferroelectrics with low coercive voltages. APL Materials, 2020, 8, .	4.0	46
10	Characterisation of the temperature-dependent M₁ to R phase transition in W-doped VO₂ nanorod aggregates by Rietveld refinement and theoretical modelling. Physical Chemistry Chemical Physics, 2020, 22, 7984-7994.	2.8	9
11	Quantitative prediction of grain boundary thermal conductivities from local atomic environments. Nature Communications, 2020, 11, .	14.2	70
12	Oxygen loss and surface degradation during electrochemical cycling of lithium-ion battery cathode material LiMn₂O₄. Journal of Materials Chemistry A, 2019, 7, 8845-8854.	9.3	88
13	First-principles study of the ferroelectric phase of AgNbO3. , 2019, , 137-159.		1
14	Atomic-scale observation and analysis of chemical ordering in M3B2 and M5B3 borides. Acta Materialia, 2018, 149, 274-284.	8.7	56
15	Systematic analysis of electron energy-loss near-edge structures in Li-ion battery materials. Physical Chemistry Chemical Physics, 2018, 20, 25052-25061.	2.8	24
16	Hierarchically Structured Thermoelectric Materials in Quaternary System Cuâ€“Znâ€“Snâ€“S Featuring a Mosaic-type Nanostructure. ACS Applied Nano Materials, 2018, 1, 2579-2588.	5.4	15
17	Density functional study of the phase stability and Raman spectra of Yb₂O₃, Yb₂SiO₅ and Yb₂Si₂O₇ under pressure. Physical Chemistry Chemical Physics, 2018, 20, 16518-16527.	2.8	37
18	Microscopic mechanism of biphasic interface relaxation in lithium iron phosphate after delithiation. Nature Communications, 2018, 9, .	14.2	43

#	ARTICLE	IF	CITATIONS
19	Quantifying Anharmonic Vibrations in Thermoelectric Layered Cobaltites and Their Role in Suppressing Thermal Conductivity. Scientific Reports, 2018, 8, .	3.7	20
20	Structural changes and their effect on Li-ion conductivity upon quenching of La(1-)/3Li NbO3 solid electrolytes. Acta Materialia, 2018, 156, 379-388.	8.7	18
21	Polarization fluctuations in the perovskite-structured ferroelectric <mml:math xmlns:mml="http://www.w3.org/1998/Math/MathML"><mml:mrow><mml:mi>AgNb</mml:mi><mml:msub><mml:mi mathvariant="normal">O</mml:mi><mml:mn>3</mml:mn></mml:msub></mml:mrow></mml:math>. Physical Review B, 2018, 97, .	3.2	27
22	Atomic scale imaging of structural changes in solid electrolyte lanthanum lithium niobate upon annealing. Acta Materialia, 2017, 127, 211-219.	8.7	12
23	Atomic level changes during capacity fade in highly oriented thin films of cathode material LiCoPO₄. Journal of Materials Chemistry A, 2017, 5, 9329-9338.	9.3	32
24	Advanced electron holography techniques for in situ observation of solid-state lithium ion conductors. Ultramicroscopy, 2017, 173, 64-70.	2.3	11
25	Lattice dynamics and ferroelectric properties of the nitride perovskite <mml:math xmlns:mml="http://www.w3.org/1998/Math/MathML"><mml:msub><mml:mi>LaWN</mml:mi><mml:mn>3</mml:mn></mml:msub></m Physical Review B, 2017, 95, .	3.2	62
26	Advanced electron holography techniques for in situ observation of solid-state lithium ion conductors. Ultramicroscopy, 2017, 176, 86-92.	2.3	3
27	Why is sodium-intercalated graphite unstable?. RSC Advances, 2017, 7, 36550-36554.	4.5	293
28	Atomic scale imaging of structural variations in La(1-)/3Li NbO3 (0Ââ‰ÂxÂâ‰Â0.13) solid electrolytes. Acta Materialia, 2017, 123, 167-176.	8.7	29
29	In situ electron holography of electric potentials inside a solid-state electrolyte: Effect of electric-field leakage. Ultramicroscopy, 2017, 178, 20-26.	2.3	44
30	Quantitative analysis of Li distributions in battery material Li1-xFePO4 using Fe M2,3-edge and valence electron energy loss spectra. Journal of Electron Microscopy, 2017, 66, 254-260.	1.0	4
31	Mechanism of polarization switching in wurtzite-structured zinc oxide thin films. Applied Physics Letters, 2016, 109, .	3.2	51
32	The electric field induced ferroelectric phase transition of AgNbO3. Journal of Applied Physics, 2016, 119, .	2.3	36
33	Elemental intermixing within an ultrathin SrRuO3 electrode layer in epitaxial heterostructure BaTiO3/SrRuO3/SrTiO3. AIP Advances, 2016, 6, .	1.3	6
34	Crystal and electronic structure changes during the charge-discharge process of Na4Co3(PO4)2P2O7. Journal of Power Sources, 2016, 326, 220-225.	8.1	36
35	Atomic-Scale Observations of (010) LiFePO₄ Surfaces Before and After Chemical Delithiation. Nano Letters, 2016, 16, 5409-5414.	8.8	41
36	Isolated energy level in the band gap of<mml:math xmlns:mml="http://www.w3.org/1998/Math/MathML"><mml:mrow><mml:msub><mml:mi>Yb</mml:mi><mml:mn>2</mml:mn></mml: mathvariant="normal">O</mml:mi><mml:mn>7</mml:mn></mml:msub></mml:mrow></mml:math>identified by electron energy-loss spectroscopy. Physical Review B, 2016, 93, .	3.2	13

#	Article	IF	Citations
37	Polytype distributions in low-defect zeolite beta crystals synthesized without an organic structure-directing agent. Microporous and Mesoporous Materials, 2016, 225, 210-215.	4.7	15
38	Domain boundaries and their influence on Li migration in solid-state electrolyte (La,Li)TiO3. Journal of Power Sources, 2015, 276, 203-207.	8.1	87
39	An alternative description of mass transfer through thick oxide films. Scripta Materialia, 2015, 100, 66-69.	5.4	1
40	Cation ordering in A-site-deficient Li-ion conducting perovskites La_{(1â^'x)/3}Li_xNbO₃. Journal of Materials Chemistry A, 2015, 3, 3351-3359.	9.3	44
41	An Improved Method for Quantitatively Predicting the Electrochemical Stabilities of Organic Liquid Electrolytes Using Ab Initio Calculations. Journal of the Electrochemical Society, 2014, 161, G7-G14.	3.1	17
42	Systematic calculations of O<i>n</i> (<i>n</i> = 1 to 6) polytypes of LiCoO₂. Physica Status Solidi - Rapid Research Letters, 2014, 8, 545-548.	2.1	6
43	Ferroelectricity in wurtzite structure simple chalcogenide. Applied Physics Letters, 2014, 104, .	3.2	80
44	Structural Distortion and Compositional Gradients Adjacent to Epitaxial LiMn₂O₄ Thin Film Interfaces. Advanced Materials Interfaces, 2014, 1, .	4.1	39
45	A density functional study of vacancy formation in grain boundaries of undoped <mml:math xmlns:mml="http://www.w3.org/1998/Math/MathML" altimg="si28.gif" overflow="scroll"><mml:mrow><mml:mi>Î±</mml:mi></mml:mrow></mml:math>-alumina. Acta Materialia, 2014, 69, 365-371.	8.7	25
46	Atomicâ€Scale Visualization of Polarization Pinning and Relaxation at Coherent BiFeO₃/LaAlO₃ Interfaces. Advanced Functional Materials, 2014, 24, 793-799.	16.9	35
47	Characterization of grain-boundary phases in Li7La3Zr2O12 solid electrolytes. Materials Characterization, 2014, 91, 101-106.	4.9	20
48	Lithium and sodium battery cathode materials: computational insights into voltage, diffusion and nanostructural properties. Chemical Society Reviews, 2014, 43, 185-204.	38.2	1,019
49	Domain boundary structures in lanthanum lithium titanates. Journal of Materials Chemistry A, 2014, 2, 843-852.	9.3	80
50	Particle shapes and surface structures of olivine NaFePO₄ in comparison to LiFePO₄. Physical Chemistry Chemical Physics, 2014, 16, 21788-21794.	2.8	69
51	A Density Functional Study of Oxygen Adatoms on a Step-Doubled Platinum Surface. Journal of Physical Chemistry C, 2014, 118, 23675-23681.	3.2	3
52	Epitaxial Growth of LiMn₂O₄Thin Films by Chemical Solution Deposition for Multilayer Lithium-Ion Batteries. Journal of Physical Chemistry C, 2014, 118, 19540-19547.	3.2	28
53	Defect chemistry and lithium-ion migration in polymorphs of the cathode material Li2MnSiO4. Journal of Materials Chemistry A, 2013, 1, 4207.	9.3	121
54	First-Principles Study of Point Defect Formation in AgNbO₃. Japanese Journal of Applied Physics, 2013, 52, 09KF08.	2.0	27

#	Article	IF	Citations
55	Adsorption and Diffusion of Oxygen Atoms on a Pt(211) Stepped Surface. Journal of Physical Chemistry C, 2013, 117, 9772-9778.	3.2	25
56	Lithium Atom and A-Site Vacancy Distributions in Lanthanum Lithium Titanate. Chemistry of Materials, 2013, 25, 1607-1614.	6.9	118
57	Efficient, low-cost solar thermoelectric cogenerators comprising evacuated tubular solar collectors and thermoelectric modules. Applied Energy, 2013, 109, 51-59.	11.3	108
58	Chemical Tuning of TiO₂Nanoparticles and Sintered Compacts for Enhanced Thermoelectric Properties. Journal of Physical Chemistry C, 2013, 117, 11487-11497.	3.2	47
59	Accelerated Materials Design of Lithium Superionic Conductors Based on Firstâ€Principles Calculations and Machine Learning Algorithms. Advanced Energy Materials, 2013, 3, 980-985.	22.4	214
60	Cost-effective nanoporous SiO2â€“TiO2 coatings on glass substrates with antireflective and self-cleaning properties. Applied Energy, 2013, 112, 1198-1205.	11.3	72
61	Firstâ€Principles Calculations of Lithiumâ€Ion Migration at a Coherent Grain Boundary in a Cathode Material, LiCoO₂. Advanced Materials, 2013, 25, 618-622.	24.4	167
62	A First-Principles Study of the Ferroelectric Phase of AgNbO₃. Japanese Journal of Applied Physics, 2012, 51, 09LE02.	2.0	11
63	Domain formation in anatase TiO2 thin films on LaAlO3 substrates. Applied Physics Letters, 2012, 101, .	3.2	17
64	A High-Coincidence Twin Boundary in Lithium Battery Material LiCoO₂. Nanoscience and Nanotechnology Letters, 2012, 4, 165-168.	0.5	13
65	The influence of charge ordering on the phase stability of spinel LiNi2O4. RSC Advances, 2012, 2, 12940.	4.5	15
66	Phase transitions in LiCoO2 thin films prepared by pulsed laser deposition. Materials Chemistry and Physics, 2012, 133, 1101-1107.	4.5	31
67	A First-Principles Study of the Ferroelectric Phase of AgNbO₃. Japanese Journal of Applied Physics, 2012, 51, 09LE02.	2.0	9
68	Microstructural Changes in LiNi_{0.8}Co_{0.15}Al_{0.05}O₂ Positive Electrode Material during the First Cycle. Journal of the Electrochemical Society, 2011, 158, A357-A362.	3.1	152
69	First-principles calculations of lattice dynamics in CdTiO<mml:math xmlns:mml="http://www.w3.org/1998/Math/MathML" display="inline"><mml:msub><mml:mrow /><mml:mn>3</mml:mn></mml:msub></mml:math>and CaTiO<mml:math xmlns:mml="http://www.w3.org/1998/Math/MathML" display="inline"><mml:msub><mml:mrow /><mml:mn>3</mml:mn></mml:msub></mml:math>: Phase stability and ferroelectricity. Physical Review B, 2011, 84, .	3.2	65
70	Computer simulation of coherent BaZrO3/MgO interfaces. Journal of the Ceramic Society of Japan, 2011, 119, 861-866.	1.0	1
71	Oxygenâ€Vacancy Ordering at Surfaces of Lithium Manganese(III,IV) Oxide Spinel Nanoparticles. Angewandte Chemie, 2011, 123, 3109-3113.	1.5	14
72	Oxygenâ€Vacancy Ordering at Surfaces of Lithium Manganese(III,IV) Oxide Spinel Nanoparticles. Angewandte Chemie - International Edition, 2011, 50, 3053-3057.	14.9	138

#	Article	IF	Citations
73	Characterization of the interface between LiCoO2 and Li7La3Zr2O12 in an all-solid-state rechargeable lithium battery. Journal of Power Sources, 2011, 196, 764-767.	8.1	377
74	Anisotropic Permittivity of Tetragonal BaTiO₃: A First-Principles Study. Japanese Journal of Applied Physics, 2011, 50, 09NE02.	2.0	22
75	Real-time direct observation of Li in LiCoO2 cathode material. Applied Physics Letters, 2011, 98, .	3.2	64
76	First-Principles Calculations of Phase Transition in CaTiO3 under Negative Static Pressure. Journal of the Korean Physical Society, 2011, 59, 2497-2502.	0.8	6
77	Anisotropic Permittivity of Tetragonal BaTiO₃: A First-Principles Study. Japanese Journal of Applied Physics, 2011, 50, 09NE02.	2.0	5
78	Direct measurement of electron beam induced currents in p-type silicon. Solid-State Electronics, 2010, 54, 777-780.	1.4	7
79	A First-Principles Study of the Role of Na Vacancies in the Thermoelectricity of Na x CoO2. Journal of Electronic Materials, 2010, 39, 1681-1686.	2.4	12
80	Dynamic Visualization of the Electric Potential in an Allâ€Solidâ€State Rechargeable Lithium Battery. Angewandte Chemie - International Edition, 2010, 49, 4414-4417.	14.9	289
81	Quantitative Evaluation of Electrochemical Potential Windows of Electrolytes for Electric Double-Layer Capacitors Using Ab Initio Calculations. Journal of the Electrochemical Society, 2010, 157, A696.	3.1	31
82	First-Principles Calculations of Electronic Structure and Solution Energies of Mn-Doped BaTiO₃. Japanese Journal of Applied Physics, 2010, 49, 09MC01.	2.0	32
83	Oxide-ion and proton conducting electrolyte materials for clean energy applications: structural and mechanistic features. Chemical Society Reviews, 2010, 39, 4370.	38.2	830
84	Defects, Dopants, and Protons in LaNbO₄. Chemistry of Materials, 2010, 22, 5912-5917.	6.9	66
85	First-Principles Calculations of Rare-Earth Dopants in BaTiO3. Japanese Journal of Applied Physics, 2009, 48, 09KC03.	2.0	26
86	Magnetic Properties of Ni Alloys for Superconducting Wire Substrates: A First-Principles Study. Japanese Journal of Applied Physics, 2009, 48, 083003.	2.0	4
87	Surface structures and crystal morphologies of LiFePO4: relevance to electrochemical behaviour. Journal of Materials Chemistry, 2008, 18, 1209.	6.8	239
88	Lithium Battery Materials Li<i>M</i>PO₄ (<i>M</i> = Mn, Fe, Co, and Ni): Insights into Defect Association, Transport Mechanisms, and Doping Behavior. Chemistry of Materials, 2008, 20, 5907-5915.	6.9	527
89	Defect and transport properties of the NdCoO3 catalyst and sensor material. Progress in Solid State Chemistry, 2007, 35, 491-499.	10.3	22
90	Disproportionation, Dopant Incorporation, and Defect Clustering in Perovskite-Structured NdCoO3. Journal of Physical Chemistry B, 2006, 110, 5395-5402.	2.9	22

#	Article	IF	Citations
91	Atomic-Scale Investigation of Defects, Dopants, and Lithium Transport in the LiFePO4 Olivine-Type Battery Material. Chemistry of Materials, 2005, 17, 5085-5092.	6.9	1,077
92	Mixed ionic/electronic conductors Sr2Fe2O5 and Sr4Fe6O13: atomic-scale studies of defects and ion migration. Journal of Materials Chemistry, 2005, 15, 3200.	6.8	50
93	Molecular dynamics simulations of reconstructed NiO surfaces. Scripta Materialia, 2004, 50, 1045-1049.	5.4	36