

List of Publications by Citations

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The third column is the impact factor (IF) of the journal, and the fourth column is the number of citations of the article.

129 papers	6,599 citations	42 h-index	79 g-index
138 ext. papers	7,611 ext. citations	9.9 avg, IF	6.38 L-index

#	Paper	IF	Citations
129	Nanoscale cation motion in TaO(x), HfO(x) and TiO(x) memristive systems. <i>Nature Nanotechnology</i> , <b>2016</b> , 11, 67-74	28.7	419
128	Cation size mismatch and charge interactions drive dopant segregation at the surfaces of manganite perovskites. <i>Journal of the American Chemical Society</i> , <b>2013</b> , 135, 7909-25	16.4	358
127	Oxygen diffusion in solid oxide fuel cell cathode and electrolyte materials: mechanistic insights from atomistic simulations. <i>Energy and Environmental Science</i> , <b>2011</b> , 4, 2774	35.4	300
126	Oxygen ion diffusivity in strained yttria stabilized zirconia: where is the fastest strain?. <i>Journal of Materials Chemistry</i> , <b>2010</b> , 20, 4809		262
125	Understanding Chemical Expansion in Non-Stoichiometric Oxides: Ceria and Zirconia Case Studies. <i>Advanced Functional Materials</i> , <b>2012</b> , 22, 1958-1965	15.6	250
124	Improved chemical and electrochemical stability of perovskite oxides with less reducible cations at the surface. <i>Nature Materials</i> , <b>2016</b> , 15, 1010-6	27	238
123	Chemical Heterogeneities on La <sub>0.6</sub> Sr <sub>0.4</sub> CoO <sub>3</sub> Thin Films Correlations to Cathode Surface Activity and Stability. <i>Chemistry of Materials</i> , <b>2012</b> , 24, 1116-1127	9.6	228
122	Glassy nature of water in an ultraconfining disordered material: the case of calcium-silicate-hydrate. <i>Journal of the American Chemical Society</i> , <b>2011</b> , 133, 2499-510	16.4	182
121	Tensile lattice strain accelerates oxygen surface exchange and diffusion in La <sub>1-x</sub> Sr <sub>x</sub> CoO <sub>3</sub> thin films. <i>ACS Nano</i> , <b>2013</b> , 7, 3276-86	16.7	179
120	Stretching the energy landscape of oxides Effects on electrocatalysis and diffusion. <i>MRS Bulletin</i> , <b>2014</b> , 39, 147-156	3.2	171
119	A robust and active hybrid catalyst for facile oxygen reduction in solid oxide fuel cells. <i>Energy and Environmental Science</i> , <b>2017</b> , 10, 964-971	35.4	145
118	Impact of Sr segregation on the electronic structure and oxygen reduction activity of SrTi <sub>1-x</sub> FexO <sub>3</sub> surfaces. <i>Energy and Environmental Science</i> , <b>2012</b> , 5, 7979	35.4	142
117	Post-test evaluation of oxygen electrodes from solid oxide electrolysis stacks. <i>International Journal of Hydrogen Energy</i> , <b>2009</b> , 34, 4198-4207	6.7	139
116	Tuning Electronic Structure of Single Layer MoS through Defect and Interface Engineering. <i>ACS Nano</i> , <b>2018</b> , 12, 2569-2579	16.7	133
115	Surface electronic structure transitions at high temperature on perovskite oxides: the case of strained La <sub>0.8</sub> Sr <sub>0.2</sub> CoO <sub>3</sub> thin films. <i>Journal of the American Chemical Society</i> , <b>2011</b> , 133, 17696-704	16.4	127
114	New Insights into the Strain Coupling to Surface Chemistry, Electronic Structure, and Reactivity of La <sub>0.7</sub> Sr <sub>0.3</sub> MnO <sub>3</sub> . <i>Journal of Physical Chemistry Letters</i> , <b>2011</b> , 2, 801-807	6.4	126
113	Edge dislocation slows down oxide ion diffusion in doped CeO <sub>2</sub> by segregation of charged defects. <i>Nature Communications</i> , <b>2015</b> , 6, 6294	17.4	114

112	Dislocations in SrTiO <sub>3</sub> : easy to reduce but not so fast for oxygen transport. <i>Journal of the American Chemical Society</i> , <b>2015</b> , 137, 4735-48	16.4	112
111	Mechanism for enhanced oxygen reduction kinetics at the (La,Sr)CoO <sub>3</sub> /(La,Sr) <sub>2</sub> CoO <sub>4</sub> +□ hetero-interface. <i>Energy and Environmental Science</i> , <b>2012</b> , 5, 8598	35.4	99
110	Competing strain effects in reactivity of LaCoO <sub>3</sub> with oxygen. <i>Physical Review B</i> , <b>2010</b> , 82,	3.3	99
109	Segregated Chemistry and Structure on (001) and (100) Surfaces of (La <sub>1-x</sub> Sr <sub>x</sub> ) <sub>2</sub> CoO <sub>4</sub> Override the Crystal Anisotropy in Oxygen Exchange Kinetics. <i>Chemistry of Materials</i> , <b>2015</b> , 27, 5436-5450	9.6	94
108	Role of surface oxygen-to-metal ratio on the wettability of rare-earth oxides. <i>Applied Physics Letters</i> , <b>2015</b> , 106, 061601	3.4	91
107	Interstitialcy diffusion of oxygen in tetragonal La <sub>2</sub> CoO <sub>4</sub> +□ <i>Physical Chemistry Chemical Physics</i> , <b>2011</b> , 13, 2242-9	3.6	90
106	Voltage-Controlled Topotactic Phase Transition in Thin-Film SrCoO <sub>x</sub> Monitored by In Situ X-ray Diffraction. <i>Nano Letters</i> , <b>2016</b> , 16, 1186-93	11.5	89
105	First-Principles Assessment of H <sub>2</sub> S and H <sub>2</sub> O Reaction Mechanisms and the Subsequent Hydrogen Absorption on the CeO <sub>2</sub> (111) Surface. <i>Journal of Physical Chemistry C</i> , <b>2012</b> , 116, 2411-2424	3.8	87
104	Degradation Mechanism in La <sub>0.8</sub> Sr <sub>0.2</sub> CoO <sub>3</sub> as Contact Layer on the Solid Oxide Electrolysis Cell Anode. <i>Journal of the Electrochemical Society</i> , <b>2010</b> , 157, B441	3.9	81
103	Structure, Chemistry, and Charge Transfer Resistance of the Interface between Li <sub>7</sub> La <sub>3</sub> Zr <sub>2</sub> O <sub>12</sub> Electrolyte and LiCoO <sub>2</sub> Cathode. <i>Chemistry of Materials</i> , <b>2018</b> , 30, 6259-6276	9.6	79
102	Mapping strain rate dependence of dislocation-defect interactions by atomistic simulations. <i>Proceedings of the National Academy of Sciences of the United States of America</i> , <b>2013</b> , 110, 17756-61	11.5	77
101	Electronic Activation of Cathode Superlattices at Elevated Temperatures [Source of Markedly Accelerated Oxygen Reduction Kinetics. <i>Advanced Energy Materials</i> , <b>2013</b> , 3, 1221-1229	21.8	74
100	Fast oxygen exchange and diffusion kinetics of grain boundaries in Sr-doped LaMnO <sub>3</sub> thin films. <i>Physical Chemistry Chemical Physics</i> , <b>2015</b> , 17, 7659-69	3.6	73
99	Onset mechanism of strain-rate-induced flow stress upturn. <i>Physical Review Letters</i> , <b>2012</b> , 109, 135503	7.4	72
98	Redox Kinetics Study of Fuel Reduced Ceria for Chemical-Looping Water Splitting. <i>Journal of Physical Chemistry C</i> , <b>2016</b> , 120, 16271-16289	3.8	62
97	Intrinsic point-defect equilibria in tetragonal ZrO <sub>2</sub> : Density functional theory analysis with finite-temperature effects. <i>Physical Review B</i> , <b>2012</b> , 86,	3.3	62
96	Charge localization increases chemical expansion in cerium-based oxides. <i>Physical Chemistry Chemical Physics</i> , <b>2012</b> , 14, 12070-4	3.6	61
95	Vertically aligned nanocomposite La <sub>0.8</sub> Sr <sub>0.2</sub> CoO <sub>3</sub> /(La <sub>0.5</sub> Sr <sub>0.5</sub> ) <sub>2</sub> CoO <sub>4</sub> cathodes [Electronic structure, surface chemistry and oxygen reduction kinetics. <i>Journal of Materials Chemistry A</i> , <b>2015</b> , 3, 207-219	13	60

- 94 Dislocations Accelerate Oxygen Ion Diffusion in LaSrMnO Epitaxial Thin Films. *ACS Nano*, **2017**, 11, 11475-11483
- 93 Enhanced one dimensional mobility of oxygen on strained LaCoO<sub>3</sub>(001) surface. *Journal of Materials Chemistry*, **2011**, 21, 18983 57
- 92 Mechanism of void nucleation and growth in bcc Fe: atomistic simulations at experimental time scales. *Physical Review Letters*, **2011**, 106, 125501 7.4 57
- 91 Scalable Oxygen-Ion Transport Kinetics in Metal-Oxide Films: Impact of Thermally Induced Lattice Compaction in Acceptor Doped Ceria Films. *Advanced Functional Materials*, **2014**, 24, 1562-1574 15.6 55
- 90 Electron tunneling characteristics on La<sub>0.7</sub>Sr<sub>0.3</sub>MnO<sub>3</sub> thin-film surfaces at high temperature. *Applied Physics Letters*, **2009**, 95, 092106 3.4 55
- 89 Tunable Oxygen Diffusion and Electronic Conduction in SrTiO<sub>3</sub> by Dislocation-Induced Space Charge Fields. *Advanced Functional Materials*, **2017**, 27, 1700243 15.6 47
- 88 Accelerated oxygen exchange kinetics on Nd<sub>2</sub>NiO<sub>4</sub> thin films with tensile strain along c-axis. *ACS Nano*, **2015**, 9, 1613-21 16.7 46
- 87 Unfaulting mechanism of trapped self-interstitial atom clusters in bcc Fe: A kinetic study based on the potential energy landscape. *Physical Review B*, **2010**, 81, 3.3 41
- 86 High Surface Reactivity and Water Adsorption on NiFe<sub>2</sub>O<sub>4</sub> (111) Surfaces. *Journal of Physical Chemistry C*, **2013**, 117, 5678-5683 3.8 40
- 85 Influence of surface atomic structure demonstrated on oxygen incorporation mechanism at a model perovskite oxide. *Nature Communications*, **2018**, 9, 3710 17.4 40
- 84 Bi-directional tuning of thermal transport in SrCoO with electrochemically induced phase transitions. *Nature Materials*, **2020**, 19, 655-662 27 38
- 83 Protonic solid-state electrochemical synapse for physical neural networks. *Nature Communications*, **2020**, 11, 3134 17.4 37
- 82 Modified Oxygen Defect Chemistry at Transition Metal Oxide Heterostructures Probed by Hard X-ray Photoelectron Spectroscopy and X-ray Diffraction. *Chemistry of Materials*, **2018**, 30, 3359-3371 9.6 37
- 81 Strongly correlated perovskite lithium ion shuttles. *Proceedings of the National Academy of Sciences of the United States of America*, **2018**, 115, 9672-9677 11.5 36
- 80 Origin of fast oxide ion diffusion along grain boundaries in Sr-doped LaMnO. *Physical Chemistry Chemical Physics*, **2018**, 20, 19142-19150 3.6 32
- 79 Polarizing Oxygen Vacancies in Insulating Metal Oxides under a High Electric Field. *Physical Review Letters*, **2017**, 119, 126002 7.4 32
- 78 Non-equilibrium oxidation states of zirconium during early stages of metal oxidation. *Applied Physics Letters*, **2015**, 106, 101603 3.4 30
- 77 Electronic Structure Evolution of SrCoO<sub>x</sub> during Electrochemically Driven Phase Transition Probed by in Situ X-ray Spectroscopy. *Journal of Physical Chemistry C*, **2016**, 120, 24148-24157 3.8 30

76	Electrochemical Polarization Dependence of the Elastic and Electrostatic Driving Forces to Aliovalent Dopant Segregation on LaMnO <sub>3</sub> . <i>Journal of the American Chemical Society</i> , <b>2020</b> , 142, 3548-3563	16.4	29
75	Hydrogen defects in tetragonal ZrO <sub>2</sub> studied using density functional theory. <i>Physical Chemistry Chemical Physics</i> , <b>2014</b> , 16, 1354-65	3.6	29
74	Electronic states of intrinsic surface and bulk vacancies in FeS <sub>2</sub> . <i>Journal of Physics Condensed Matter</i> , <b>2013</b> , 25, 045004	1.8	29
73	Doping in the Valley of Hydrogen Solubility: A Route to Designing Hydrogen-Resistant Zirconium Alloys. <i>Physical Review Applied</i> , <b>2016</b> , 5,	4.3	26
72	The interplay and impact of strain and defect association on the conductivity of rare-earth substituted ceria. <i>Acta Materialia</i> , <b>2019</b> , 166, 447-458	8.4	25
71	Electrochemically Triggered Metal/Insulator Transition between VO <sub>2</sub> and V <sub>2</sub> O <sub>5</sub> . <i>Advanced Functional Materials</i> , <b>2018</b> , 28, 1803024	15.6	25
70	Reducibility of Co at the La <sub>0.8</sub> Sr <sub>0.2</sub> CoO <sub>3</sub> /(La <sub>0.5</sub> Sr <sub>0.5</sub> ) <sub>2</sub> CoO <sub>4</sub> hetero-interface at elevated temperatures. <i>Journal of Materials Chemistry A</i> , <b>2014</b> , 2, 14690	13	24
69	Colossal oxygen vacancy formation at a fluorite-bixbyite interface. <i>Nature Communications</i> , <b>2020</b> , 11, 1371	17.4	23
68	Predicting self-diffusion in metal oxides from first principles: The case of oxygen in tetragonal ZrO <sub>2</sub> . <i>Physical Review B</i> , <b>2014</b> , 89,	3.3	23
67	Enhanced intermediate-temperature CO splitting using nonstoichiometric ceria and ceria-zirconia. <i>Physical Chemistry Chemical Physics</i> , <b>2017</b> , 19, 25774-25785	3.6	23
66	In situ catalyst exsolution on perovskite oxides for the production of CO and synthesis gas in ceramic membrane reactors. <i>Sustainable Energy and Fuels</i> , <b>2019</b> , 3, 2347-2355	5.8	22
65	Predicting point defect equilibria across oxide hetero-interfaces: model system of ZrO/CrO. <i>Physical Chemistry Chemical Physics</i> , <b>2017</b> , 19, 3869-3883	3.6	21
64	Adsorption of CO <sub>2</sub> and Facile Carbonate Formation on BaZrO <sub>3</sub> Surfaces. <i>Journal of Physical Chemistry C</i> , <b>2018</b> , 122, 307-314	3.8	21
63	Self-Arranged Misfit Dislocation Network Formation upon Strain Release in La <sub>0.7</sub> Sr <sub>0.3</sub> MnO <sub>3</sub> /LaAlO <sub>3</sub> (100) Epitaxial Films under Compressive Strain. <i>ACS Applied Materials &amp; Interfaces</i> , <b>2016</b> , 8, 16823-32	9.5	21
62	Effect of crystal orientation on the segregation of aliovalent dopants at the surface of La <sub>0.6</sub> Sr <sub>0.4</sub> CoO <sub>3</sub> . <i>Journal of Materials Chemistry A</i> , <b>2018</b> , 6, 14136-14145	13	20
61	Effect of Niobium on the Defect Chemistry and Oxidation Kinetics of Tetragonal ZrO <sub>2</sub> . <i>Journal of Physical Chemistry C</i> , <b>2014</b> , 118, 20122-20131	3.8	20
60	Improved electrochemical stability at the surface of La(0.8)Sr(0.2)CoO <sub>3</sub> achieved by surface chemical modification. <i>Faraday Discussions</i> , <b>2015</b> , 182, 257-69	3.6	20
59	Adjusting island density and morphology of the SrTiO <sub>3</sub> (110)-(4 × 4) surface: Pulsed laser deposition combined with scanning tunneling microscopy. <i>Surface Science</i> , <b>2016</b> , 651, 76-83	1.8	19

58	The role of ceramic and glass science research in meeting societal challenges: Report from an NSF-sponsored workshop. <i>Journal of the American Ceramic Society</i> , <b>2017</b> , 100, 1777-1803	3.8	17
57	Acidity of surface-infiltrated binary oxides as a sensitive descriptor of oxygen exchange kinetics in mixed conducting oxides. <i>Nature Catalysis</i> , <b>2020</b> , 3, 913-920	36.5	17
56	Autonomous basin climbing method with sampling of multiple transition pathways: application to anisotropic diffusion of point defects in hcp Zr. <i>Journal of Physics Condensed Matter</i> , <b>2014</b> , 26, 365402	1.8	16
55	Voltage control of ferrimagnetic order and voltage-assisted writing of ferrimagnetic spin textures. <i>Nature Nanotechnology</i> , <b>2021</b> , 16, 981-988	28.7	16
54	Diffusion-limited kinetics of the antiferromagnetic to ferrimagnetic transition in Fe <sub>1-x</sub> S. <i>Applied Physics Letters</i> , <b>2015</b> , 106, 092402	3.4	15
53	Interstitial emission at grain boundary in nanolayered alpha-Fe. <i>Acta Materialia</i> , <b>2016</b> , 105, 147-154	8.4	15
52	Thermal conductivity control by oxygen defect concentration modification in reducible oxides: The case of Pr <sub>0.1</sub> Ce <sub>0.9</sub> O <sub>2-x</sub> thin films. <i>Applied Physics Letters</i> , <b>2014</b> , 104, 061911	3.4	15
51	Oxygen self-diffusion mechanisms in monoclinic ZrO <sub>2</sub> revealed and quantified by density functional theory, random walk analysis, and kinetic Monte Carlo calculations. <i>Physical Review B</i> , <b>2018</b> , 97,	3.3	14
50	Surface Defect Chemistry and Electronic Structure of Pr <sub>0.1</sub> Ce <sub>0.9</sub> O <sub>2-x</sub> Revealed in Operando. <i>Chemistry of Materials</i> , <b>2018</b> , 30, 2600-2606	9.6	14
49	Polar or not polar? The interplay between reconstruction, Sr enrichment, and reduction at the La <sub>0.75</sub> Sr <sub>0.25</sub> MnO <sub>3</sub> (001) surface. <i>Physical Review Materials</i> , <b>2020</b> , 4,	3.2	14
48	Magnetic diffusion anomaly at the Néel temperature of pyrrhotite, Fe <sub>(1-x)</sub> S. <i>Physical Chemistry Chemical Physics</i> , <b>2015</b> , 17, 11036-41	3.6	13
47	Threshold catalytic onset of carbon formation on CeO <sub>2</sub> during CO <sub>2</sub> electrolysis: mechanism and inhibition. <i>Journal of Materials Chemistry A</i> , <b>2019</b> , 7, 15233-15243	13	12
46	Doping γ-Al <sub>2</sub> O <sub>3</sub> to reduce its hydrogen permeability: Thermodynamic assessment of hydrogen defects and solubility from first principles. <i>Acta Materialia</i> , <b>2019</b> , 169, 172-183	8.4	12
45	Oxygen Exchange in Dual-Phase LaSrMnO-CeO Composites for Solar Thermochemical Fuel Production. <i>ACS Applied Materials &amp; Interfaces</i> , <b>2020</b> , 12, 32622-32632	9.5	12
44	Thermomechanical stabilization of electron small polarons in SrTiO <sub>3</sub> assessed by the quasiharmonic approximation. <i>Physical Review B</i> , <b>2017</b> , 95,	3.3	12
43	Hydrogen Production Using High-Temperature Steam Electrolysis Supported by Advanced Gas Reactors with Supercritical CO <sub>2</sub> Cycles. <i>Nuclear Technology</i> , <b>2006</b> , 155, 1-21	1.4	12
42	Analogy between glass rheology and crystal plasticity: yielding at high strain rate. <i>Soft Matter</i> , <b>2013</b> , 9, 9511-4	3.6	11
41	Direct probing of nanodimensioned oxide multilayers with the aid of focused ion beam milling. <i>Advanced Materials</i> , <b>2011</b> , 23, 4543-8	24	11



40	Nuclear hydrogen: An assessment of product flexibility and market viability. <i>Energy Policy</i> , <b>2008</b> , 36, 3961-3973	11	3973
39	Highly Durable C2 Hydrocarbon Production via the Oxidative Coupling of Methane Using a BaFe <sub>0.9</sub> Zr <sub>0.1</sub> O <sub>3</sub> Mixed Ionic and Electronic Conducting Membrane and La <sub>2</sub> O <sub>3</sub> Catalyst. <i>ACS Catalysis</i> , <b>2021</b> , 11, 3638-3661	13.1	11
38	Integrated Computational Modeling of Water Side Corrosion in Zirconium Metal Clad Under Nominal LWR Operating Conditions. <i>Jom</i> , <b>2016</b> , 68, 2900-2911	2.1	11
37	Pushing the detection of cation nonstoichiometry to the limit. <i>Physical Review Materials</i> , <b>2019</b> , 3,	3.2	10
36	Hydrogen weakens interlayer bonding in layered transition metal sulfide Fe <sub>1+x</sub> S. <i>Journal of Materials Chemistry A</i> , <b>2017</b> , 5, 5030-5035	13	8
35	Hydrogen tunes magnetic anisotropy by affecting local hybridization at the interface of a ferromagnet with nonmagnetic metals. <i>Physical Review Materials</i> , <b>2020</b> , 4,	3.2	8
34	An antisite defect mechanism for room temperature ferroelectricity in orthoferrites. <i>Nature Communications</i> , <b>2021</b> , 12, 4298	17.4	8
33	Thermally Driven Interfacial Degradation between Li <sub>7</sub> La <sub>3</sub> Zr <sub>2</sub> O <sub>12</sub> Electrolyte and LiNi <sub>0.6</sub> Mn <sub>0.2</sub> Co <sub>0.2</sub> O <sub>2</sub> Cathode. <i>Chemistry of Materials</i> , <b>2020</b> , 32, 9531-9541	9.6	7
32	Charge Transfer Across Oxide Interfaces Probed by in Situ X-ray Photoelectron and Absorption Spectroscopy Techniques. <i>Journal of Physical Chemistry C</i> , <b>2018</b> , 122, 4841-4848	3.8	7
31	First-Principles Assessment of the Reactions of Boric Acid on NiO(001) and ZrO <sub>2</sub> (1 11) Surfaces. <i>Journal of Physical Chemistry C</i> , <b>2012</b> , 116, 10113-10119	3.8	7
30	Solubility Limit of Cu and Factors Governing the Reactivity of Cu <sub>2</sub> TeO <sub>2</sub> Assessed from First-Principles Defect Chemistry and Thermodynamics. <i>Journal of Physical Chemistry C</i> , <b>2019</b> , 123, 399-409	3.8	7
29	Interplay between H <sub>2</sub> O and CO <sub>2</sub> coadsorption and space-charge on Y-doped BaZrO <sub>3</sub> surfaces. <i>Journal of Materials Chemistry A</i> , <b>2018</b> , 6, 24823-24830	13	7
28	Accessible switching of electronic defect type in SrTiO <sub>3</sub> via biaxial strain. <i>Physical Review Materials</i> , <b>2018</b> , 2,	3.2	6
27	Exsolution Synthesis of Nanocomposite Perovskites with Tunable Electrical and Magnetic Properties. <i>Advanced Functional Materials</i> , 2108005	15.6	6
26	Spinel/perovskite cobaltite nanocomposites synthesized by combinatorial pulsed laser deposition. <i>CrystEngComm</i> , <b>2016</b> , 18, 7745-7752	3.3	6
25	Interplay of Grain Size Dependent Electronic and Ionic Conductivity in Electrochemical Polarization Studies on Sr-Doped LaMnO <sub>3</sub> (LSM) Thin Film Cathodes. <i>Journal of the Electrochemical Society</i> , <b>2018</b> , 165, F702-F709	3.9	5
24	Effect of annealing ambient on anisotropic retraction of film edges during solid-state dewetting of thin single crystal films. <i>Journal of Applied Physics</i> , <b>2016</b> , 120, 075306	2.5	5
23	Tailoring Nonstoichiometry and Mixed Ionic Electronic Conductivity in PrCeO/SrTiO Heterostructures. <i>ACS Applied Materials &amp; Interfaces</i> , <b>2019</b> , 11, 34841-34853	9.5	4

22	Chemical, Electronic and Nanostructure Dynamics on Sr(Ti <sub>1-x</sub> Fe <sub>x</sub> )O <sub>3</sub> Thin-Film Surfaces at High Temperatures. <i>ECS Transactions</i> , <b>2011</b> , 35, 2409-2416	1	4
21	In situ Synchrotron X-ray Studies of Dense Thin-Film Strontium-Doped Lanthanum Manganite Solid Oxide Fuel Cell Cathodes. <i>Materials Research Society Symposia Proceedings</i> , <b>2008</b> , 1126, 1		4
20	Hf Deposition Stabilizes the Surface Chemistry of Perovskite Manganite Oxide. <i>Journal of Physical Chemistry C</i> , <b>2021</b> , 125, 3346-3354	3.8	4
19	CMOS-Compatible Protonic Programmable Resistor Based on Phosphosilicate Glass Electrolyte for Analog Deep Learning. <i>Nano Letters</i> , <b>2021</b> , 21, 6111-6116	11.5	4
18	Role of Adsorbate Coverage on the Oxygen Dissociation Rate on Sr-Doped LaMnO <sub>3</sub> Surfaces in the Presence of H <sub>2</sub> O and CO <sub>2</sub> . <i>Chemistry of Materials</i> , <b>2020</b> , 32, 5483-5492	9.6	3
17	Self-interstitial clusters in radiation damage accumulation: coupled molecular dynamics and metadynamics simulations. <i>European Physical Journal B</i> , <b>2013</b> , 86, 1	1.2	3
16	Nanoindentation Induced Deformation Near Grain Boundaries of Corrosion Resistant Nickel Alloys. <i>Materials Research Society Symposia Proceedings</i> , <b>2011</b> , 1297, 187		3
15	Avoiding CO <sub>2</sub> Improves Thermal Stability at the Interface of Li <sub>7</sub> La <sub>3</sub> Zr <sub>2</sub> O <sub>12</sub> Electrolyte with Layered Oxide Cathodes. <i>Advanced Energy Materials</i> , <b>2022</b> , 12, 2102741	21.8	3
14	Quantifying the origin of inter-adsorbate interactions on reactive surfaces for catalyst screening and design. <i>Physical Chemistry Chemical Physics</i> , <b>2015</b> , 17, 22227-34	3.6	2
13	The role of doping and microstructure on hydrogen solubility in monoclinic ZrO <sub>2</sub> : Experimental validations of simulated defect chemistry. <i>Acta Materialia</i> , <b>2020</b> , 195, 172-183	8.4	2
12	Precipitation of dopants on acceptor-doped LaMnO <sub>3</sub> revealed by defect chemistry from first principles. <i>Journal of Chemical Physics</i> , <b>2021</b> , 154, 064702	3.9	2
11	Synthesizing Functional Ceramic Powders for Solid Oxide Cells in Minutes through Thermal Shock. <i>ACS Energy Letters</i> , <b>2022</b> , 7, 1223-1229	20.1	2
10	In situ X-ray Studies of (La,Sr)MnO <sub>3</sub> /(La,Sr)CoO <sub>3</sub> and La <sub>0.6</sub> Sr <sub>0.4</sub> Co <sub>0.2</sub> Fe <sub>0.8</sub> O <sub>3</sub> -Thin Film SOFC Cathodes Grown by Pulse Laser Deposition. <i>Materials Research Society Symposia Proceedings</i> , <b>2013</b> , 1495, 1		1
9	Stabilizing single atoms and a lower oxidation state of Cu by a [110]{100} edge dislocation in CuTeO <sub>2</sub> . <i>Physical Review Materials</i> , <b>2019</b> , 3,	3.2	1
8	METALLIC INTERFACES IN HARSH CHEMO-MECHANICAL ENVIRONMENTS. <i>Nuclear Engineering and Technology</i> , <b>2009</b> , 41, 21-38	2.6	1
7	Structure, Kinetics, and Thermodynamics of Water and Its Ions at the Interface with Monoclinic ZrO <sub>2</sub> Resolved via Ab Initio Molecular Dynamics. <i>Journal of Physical Chemistry C</i> , <b>2021</b> , 125, 15233-15242 <sup>3.8</sup>		1
6	First-principles calculation of oxygen vacancy effects on the magnetic properties of the perovskite SrNiO <sub>3</sub> . <i>Physical Review Materials</i> , <b>2021</b> , 5,	3.2	1
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