

Michael D Biegalski

List of Publications by Year in descending order

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52
papers

4,157
citations

126907

33
h-index

168389

53
g-index

55
all docs

55
docs citations

55
times ranked

6209
citing authors

#	ARTICLE	IF	CITATIONS
1	<i>In Situ</i> Observation of Oxygen Vacancy Dynamics and Ordering in the Epitaxial LaCoO ₃ System. ACS Nano, 2017, 11, 6942-6949.	14.6	89
2	Unleashing Strain Induced Ferroelectricity in Complex Oxide Thin Films via Precise Stoichiometry Control. Advanced Functional Materials, 2016, 26, 7271-7279.	14.9	30
3	Thickness dependence of exchange coupling in (111)-oriented perovskite oxide superlattices. Physical Review B, 2016, 93, .	3.2	16
4	Growth Mode Transition in Complex Oxide Heteroepitaxy: Atomically Resolved Studies. Crystal Growth and Design, 2016, 16, 2708-2716.	3.0	13
5	Phase-Controlled Electrochemical Activity of Epitaxial Mg-Spinel Thin Films. ACS Applied Materials & Interfaces, 2015, 7, 28438-28443.	8.0	56
6	Oxygen surface exchange kinetics and stability of (La,Sr) ₂ CoO ₄ /La _{1-x} Sr _x MO ₃ (M = Co) Tj FTQq 0 0 Q rgBT /Ove 2144-2157.	10.3	65
7	Surface Control of Epitaxial Manganite Films <i>via</i> Oxygen Pressure. ACS Nano, 2015, 9, 4316-4327.	14.6	27
8	Towards 3D Mapping of BO ₆ Octahedron Rotations at Perovskite Heterointerfaces, Unit Cell by Unit Cell. ACS Nano, 2015, 9, 8412-8419.	14.6	78
9	Reactivity of Perovskites with Water: Role of Hydroxylation in Wetting and Implications for Oxygen Electrocatalysis. Journal of Physical Chemistry C, 2015, 119, 18504-18512.	3.1	88
10	Dimensionality Controlled Octahedral Symmetry-Mismatch and Functionalities in Epitaxial LaCoO ₃ /SrTiO ₃ Heterostructures. Nano Letters, 2015, 15, 4677-4684.	9.1	71
11	Thickness-Dependent Photoelectrochemical Water Splitting on Ultrathin LaFeO ₃ Films Grown on Nb:SrTiO ₃ . Journal of Physical Chemistry Letters, 2015, 6, 977-985.	4.6	75
12	Impact of symmetry on the ferroelectric properties of CaTiO ₃ thin films. Applied Physics Letters, 2015, 106, .	3.3	42
13	Controlled mechanical modification of manganite surface with nanoscale resolution. Nanotechnology, 2014, 25, 475302.	2.6	8
14	Interrelation between Structure & Magnetic Properties in La _{0.5} Sr _{0.5} CoO ₃ . Advanced Materials Interfaces, 2014, 1, 1400203.	3.7	20
15	Revealing the atomic structure and strontium distribution in nanometer-thick La _{0.8} Sr _{0.2} CoO ₃ grown on (001)-oriented SrTiO ₃ . Energy and Environmental Science, 2014, 7, 1166.	30.8	45
16	Strontium influence on the oxygen electrocatalysis of La _{2-x} Sr _x NiO ₄ (0.0 ≤ x ≤ 1.0) thin films. Journal of Materials Chemistry A, 2014, 2, 6480-6487.	10.3	37
17	Orientation-Dependent Oxygen Evolution Activities of Rutile IrO ₂ and RuO ₂ . Journal of Physical Chemistry Letters, 2014, 5, 1636-1641.	4.6	466
18	Enhanced Oxygen Surface Exchange Kinetics and Stability on Epitaxial La _{0.8} Sr _{0.2} CoO ₃ Thin Films by La _{0.8} Sr _{0.2} MnO ₃ Decoration. Journal of Physical Chemistry C, 2014, 118, 14326-14334.	3.1	34

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19	Smooth cubic commensurate oxides on gallium nitride. <i>Journal of Applied Physics</i> , 2014, 115, .	2.5	9
20	Water Reactivity on the LaCoO_3 (001) Surface: An Ambient Pressure X-ray Photoelectron Spectroscopy Study. <i>Journal of Physical Chemistry C</i> , 2014, 118, 19733-19741.	3.1	84
21	Anomalous Interface and Surface Strontium Segregation in $(\text{La}_{1-x}\text{Sr}_x)_2\text{CoO}_{4+\delta}/\text{La}_{1-x}\text{Sr}_x\text{O}_3$ Heterostructured Thin Films. <i>Journal of Physical Chemistry Letters</i> , 2014, 5, 1027-1034.	4.6	52
22	In Situ Ambient Pressure X-ray Photoelectron Spectroscopy of Cobalt Perovskite Surfaces under Cathodic Polarization at High Temperatures. <i>Journal of Physical Chemistry C</i> , 2013, 117, 16087-16094.	3.1	89
23	In Situ Studies of the Temperature-Dependent Surface Structure and Chemistry of Single-Crystalline (001)-Oriented $\text{La}_{0.8}\text{Sr}_{0.2}\text{CoO}_{3+\delta}$ Perovskite Thin Films. <i>Journal of Physical Chemistry Letters</i> , 2013, 4, 1512-1518.	4.6	52
24	Tuning the Spin State in LaCoO_3 Thin Films for Enhanced High-Temperature Oxygen Electrocatalysis. <i>Journal of Physical Chemistry Letters</i> , 2013, 4, 2493-2499.	4.6	64
25	Reversible redox reactions in an epitaxially stabilized SrCoO_x oxygen sponge. <i>Nature Materials</i> , 2013, 12, 1057-1063.	27.5	349
26	Oxygen Control of Atomic Structure and Physical Properties of SrRuO_3 Surfaces. <i>ACS Nano</i> , 2013, 7, 4403-4413.	14.6	19
27	Mechanical Control of Electroresistive Switching. <i>Nano Letters</i> , 2013, 13, 4068-4074.	9.1	55
28	Nanoscale Probing of Voltage Activated Oxygen Reduction/Evolution Reactions in Nanopatterned $(\text{La}_{1-x}\text{Sr}_x)\text{CoO}_{3+\delta}$ Cathodes. <i>Advanced Energy Materials</i> , 2013, 3, 788-797.	19.5	19
29	Exploiting dimensionality and defect mitigation to create tunable microwave dielectrics. <i>Nature</i> , 2013, 502, 532-536.	27.8	204
30	Effect of stoichiometry on the dielectric properties and soft mode behavior of strained epitaxial SrTiO_3 thin films on DyScO_3 substrates. <i>Applied Physics Letters</i> , 2013, 102, .	3.3	39
31	Strain Influence on the Oxygen Electrocatalysis of the (100)-Oriented Epitaxial $\text{La}_2\text{NiO}_{4+\delta}$ Thin Films at Elevated Temperatures. <i>Journal of Physical Chemistry C</i> , 2013, 117, 18789-18795.	3.1	48
32	Spatially Resolved Mapping of Oxygen Reduction/Evolution Reaction on Solid-Oxide Fuel Cell Cathodes with Sub-10 nm Resolution. <i>ACS Nano</i> , 2013, 7, 3808-3814.	14.6	25
33	Oxygen electrocatalysis on (001)-oriented manganese perovskite films: Mn valency and charge transfer at the nanoscale. <i>Energy and Environmental Science</i> , 2013, 6, 1582.	30.8	146
34	Antisite defects in $\text{La}_{0.7}\text{Sr}_{0.3}\text{MnO}_3$ and $\text{La}_{0.7}\text{Sr}_{0.3}\text{FeO}_3$. <i>Applied Physics Letters</i> , 2013, 102, 151911.	3.3	6
35	Interplay of Octahedral Tilts and Polar Order in BiFeO_3 Films. <i>Advanced Materials</i> , 2013, 25, 2497-2504.	21.0	101
36	Origin of Enhanced Chemical Capacitance in $\text{La}_{0.8}\text{Sr}_{0.2}\text{CoO}_{3+\delta}$ Thin Film Electrodes. <i>Journal of the Electrochemical Society</i> , 2013, 160, F931-F942.	2.9	20

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37	Strain relaxation defects in perovskite oxide superlattices. Journal of Materials Research, 2012, 27, 1436-1444.	2.6	6
38	Reversible Compositional Control of Oxide Surfaces by Electrochemical Potentials. Journal of Physical Chemistry Letters, 2012, 3, 40-44.	4.6	78
39	Oxygen Electrocatalysis on Epitaxial $\text{La}_{0.6}\text{Sr}_{0.4}\text{CoO}_{3-\delta}$ Perovskite Thin Films for Solid Oxide Fuel Cells. Journal of the Electrochemical Society, 2012, 159, F219-F225.	2.9	51
40	Probing oxygen vacancy concentration and homogeneity in solid-oxide fuel-cell cathode materials on the subunit-cell level. Nature Materials, 2012, 11, 888-894.	27.5	282
41	Surface strontium enrichment on highly active perovskites for oxygen electrocatalysis in solid oxide fuel cells. Energy and Environmental Science, 2012, 5, 6081.	30.8	307
42	In Situ Ambient Pressure X-ray Photoelectron Spectroscopy of Epitaxial Strontium Substituted Lanthanum Cobalt Oxides Near Operating Conditions Under Applied Potentials. ECS Meeting Abstracts, 2012, . .	0.0	0
43	Compositional tuning of the strain-induced structural phase transition and of ferromagnetism in $\text{Bi}_{1-x}\text{Ba}_x\text{FeO}_{3-\delta}$. Journal of Materials Research, 2011, 26, 1326-1331.	2.6	17
44	Correlated domain structure in perovskite oxide superlattices exhibiting spin-flop coupling. Physical Review B, 2011, 83, .	3.2	12
45	Enhanced oxygen reduction activity on surface-decorated perovskite thin films for solid oxide fuel cells. Energy and Environmental Science, 2011, 4, 3689.	30.8	200
46	Temperature-Driven Structural Phase Transition in Tetragonal-Like BiFeO_3 . Applied Physics Express, 2011, 4, 095801.	2.4	46
47	Catalytic Activity Enhancement for Oxygen Reduction on Epitaxial Perovskite Thin Films for Solid Oxide Fuel Cells. Angewandte Chemie - International Edition, 2010, 49, 5344-5347.	13.8	133
48	Oxygen Reduction Kinetics Enhancement on a Heterostructured Oxide Surface for Solid Oxide Fuel Cells. Journal of Physical Chemistry Letters, 2010, 1, 3149-3155.	4.6	136
49	Room-temperature electro-optic properties of strained SrTiO_3 films grown on DyScO_3 . Journal of Applied Physics, 2009, 105, .	2.5	10
50	Effect of epitaxial strain on ferroelectric polarization in multiferroic BiFeO_3 films. Applied Physics Letters, 2008, 92, .	3.3	137
51	Polarization rotation transitions in anisotropically strained SrTiO_3 thin films. Applied Physics Letters, 2008, 92, 192902.	3.3	19
52	Large ferroelectric polarization in antiferromagnetic $\text{BiFe}_{0.5}\text{Cr}_{0.5}\text{O}_3$ epitaxial films. Applied Physics Letters, 2007, 91, .	3.3	56