

Peter K Davies

List of Publications by Year in descending order

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63
papers

3,982
citations

201385

27
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123241

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docs citations

63
times ranked

3939
citing authors

#	ARTICLE	IF	CITATIONS
1	Perovskite oxides for visible-light-absorbing ferroelectric and photovoltaic materials. <i>Nature</i> , 2013, 503, 509-512.	13.7	1,110
2	Effect of Ordering-Induced Domain Boundaries on Low-Loss $\text{Ba}(\text{Zn}_{1/3}\text{Ta}_{2/3})\text{O}_3$ Perovskite Microwave Dielectrics. <i>Journal of the American Ceramic Society</i> , 1997, 80, 1727-1740.	1.9	282
3	Enhanced tetragonality in $(x)\text{PbTiO}_3-(1-x)\text{Bi}(\text{Zn}_{1/3}\text{Ta}_{2/3})\text{O}_3$ and related solid solution systems. <i>Applied Physics Letters</i> , 2005, 86, 262905.	1.5	242
4	Predicting morphotropic phase boundary locations and transition temperatures in Pb- and Bi-based perovskite solid solutions from crystal chemical data and first-principles calculations. <i>Journal of Applied Physics</i> , 2005, 98, 094111.	1.1	199
5	Domain Growth in $\text{Pb}(\text{Mg}_{1/3}\text{Ta}_{2/3})\text{O}_3$ Perovskite Relaxor Ferroelectric Oxides. <i>Journal of the American Ceramic Society</i> , 1997, 80, 2933-2936.	1.9	161
6	Crystal Chemistry and Dielectric Properties of Chemically Substituted $(\text{Bi}_{1.5}\text{Zn}_{1.0}\text{Nb}_{1.5})\text{O}_7$ and $(\text{Bi}_2(\text{Zn}_{2/3}\text{Nb}_{4/3})\text{O}_7)$ Pyrochlores. <i>Journal of the American Ceramic Society</i> , 2000, 83, 147-53.	1.9	158
7	Ordering-Induced Microstructures and Microwave Dielectric Properties of the $\text{Ba}(\text{Mg}_{1/3}\text{Nb}_{2/3})\text{O}_3$ System. <i>Journal of the American Ceramic Society</i> , 1998, 81, 670-676.	1.9	158
8	Nano-chessboard superlattices formed by spontaneous phase separation in oxides. <i>Nature Materials</i> , 2007, 6, 586-591.	13.3	109
9	Effect of Sn Substitution on Cation Ordering in $(\text{Zr}_{1-x}\text{Sn}_x)\text{TiO}_4$ Microwave Dielectric Ceramics. <i>Journal of the American Ceramic Society</i> , 1994, 77, 1441-1450.	1.9	106
10	Crystalline Structure and Dielectric Properties of $\text{Li}_{1+x}\text{Nb}_{1-x}\text{Ti}_{x+4}\text{O}_3$ Solid Solutions. <i>Journal of the American Ceramic Society</i> , 2002, 85, 573-578.	1.9	70
11	Potential and Impedance Imaging of Polycrystalline BiFeO_3 Ceramics. <i>Journal of the American Ceramic Society</i> , 2002, 85, 3011-3017.	1.9	83
12	Resonant domain-wall-enhanced tunable microwave ferroelectrics. <i>Nature</i> , 2018, 560, 622-627.	13.7	82
13	Structure of Commensurate and Incommensurate Ordered Phases in the System ZrTiO_4 - $\text{Zr}_5\text{Ti}_7\text{O}_{24}$. <i>Journal of the American Ceramic Society</i> , 1992, 75, 563-569.	1.9	79
14	Effect of V_2O_5 Doping on the Sintering and Dielectric Properties of $\text{Li}_{1+x}\text{Nb}_{1-x}\text{Ti}_{x+4}\text{O}_3$ Ceramics. <i>Journal of the American Ceramic Society</i> , 2004, 87, 1047-1052.	1.9	70
15	Nonequilibrium Phase Formation in Oxides Prepared at Low Temperature: Fergusonite-Related Phases. <i>Journal of the American Ceramic Society</i> , 1995, 78, 2737-2745.	1.9	67
16	Formation and Structural Characterization of 1:1 Ordered Perovskites in the $\text{Ba}(\text{Zn}_{1/3}\text{Ta}_{2/3})\text{O}_3$ System. <i>Journal of the American Ceramic Society</i> , 1997, 80, 3193-3198.	1.9	64
17	Enhanced tetragonality in $(x)\text{PbTiO}_3-(1-x)\text{Bi}(\text{Ba}^{2/3}\text{O}_3)$ systems: $\text{Bi}(\text{Zn}_{3/4}\text{W}_{1/4})\text{O}_3$. <i>Applied Physics Letters</i> , 2006, 89, 132907.	1.5	58
18	Processing and characterization of lead magnesium tantalate ceramics. <i>Journal of Materials Research</i> , 1997, 12, 2617-2622.	1.2	51

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19	Pb-free semiconductor ferroelectrics: A theoretical study of Pd-substituted $\text{Ba}(\text{Mg}_{1/3}\text{Nb}_{2/3})\text{O}_3$. Physical Review B, 2010, 82, .	1.1	48
20	Influence of Cation Order on the Dielectric Properties of $\text{Pb}(\text{Mg}_{1/3}\text{Nb}_{2/3})\text{O}_3$ - $\text{Pb}(\text{Sc}_{1/2}\text{Nb}_{1/2})\text{O}_3$ (PMN-PSN) Relaxor Ferroelectrics. Journal of the American Ceramic Society, 2003, 86, 1861-1866.	1.9	45
21	Thermally Induced Coarsening of the Chemically Ordered Domains in $\text{Pb}(\text{Mg}_{1/3}\text{Nb}_{2/3})\text{O}_3$ (PMN)-Based Relaxor Ferroelectrics. Journal of the American Ceramic Society, 2000, 83, 119-23.	1.9	44
22	Cation Ordering Transformations in the $\text{Ba}(\text{Zn}_{1/3}\text{Nb}_{2/3})\text{O}_3$ - $\text{La}(\text{Zn}_{2/3}\text{Nb}_{1/3})\text{O}_3$ System. Journal of the American Ceramic Society, 1998, 81, 1061-1064.	1.9	43
23	Structure and Dielectric Properties of the $\text{Ba}(\text{Mg}_{1/3}\text{Nb}_{2/3})\text{O}_3$ - $\text{La}(\text{Mg}_{2/3}\text{Nb}_{1/3})\text{O}_3$ System. Journal of the American Ceramic Society, 1998, 81, 2205-2208.	1.9	42
24	Cation Ordering in $\text{Pb}(\text{Mg}_{1/3}\text{Nb}_{2/3})\text{O}_3$? $\text{Pb}(\text{Sc}_{1/2}\text{Nb}_{1/2})\text{O}_3$ (PMN?PSN) Solid Solutions. Journal of the American Ceramic Society, 2002, 85, 2319-2324.	1.9	38
25	Ferroelectric, Optical, and Photovoltaic Properties of Morphotropic Phase Boundary Compositions in the PbTiO_3 - BiFeO_3 - $\text{Bi}(\text{Ni}_{1/2}\text{Ti}_{1/2})\text{O}_3$ System. Chemistry of Materials, 2019, 31, 4184-4194.	3.2	34
26	Synthesis and Dielectric Properties of $\text{Li}_{1-x+y}\text{Ta}_{1-x-3y}\text{Ti}_x+4y\text{O}_3$ M-Phase Solid Solutions. Journal of the American Ceramic Society, 2002, 85, 2487-2491.	1.9	33
27	Influence of Non-Stoichiometry on the Structure and Properties of $\text{Ba}(\text{Zn}_{1/3}\text{Nb}_{2/3})\text{O}_3$ Microwave Dielectrics: II. Compositional Variations in Pure BZN. Journal of the American Ceramic Society, 2006, 89, 060428035142025-???.	1.9	31
28	Materials Design of Visible-Light Ferroelectric Photovoltaics from First Principles. Ferroelectrics, 2015, 483, 1-12.	0.3	27
29	New Phases in the $\text{CaO-M}_2\text{O}_3\text{-CuO}$ (M = Nd, Gd, Y) Systems at 1000oC. Journal of the American Ceramic Society, 1991, 74, 569-573.	1.9	26
30	Influence of Non-Stoichiometry on the Structure and Properties of $\text{Ba}(\text{Zn}_{1/3}\text{Nb}_{2/3})\text{O}_3$ Microwave Dielectrics: I. Substitution of $\text{Ba}_3\text{W}_2\text{O}_9$. Journal of the American Ceramic Society, 2006, 89, 060428035142030-???.	1.9	26
31	Neutron Powder Diffraction of $(\text{Nd}_{7/12}\text{Li}_{1/4})\text{TiO}_3$ Nano-Checkerboard Superlattices. Chemistry of Materials, 2008, 20, 2860-2862.	3.2	26
32	Low-Temperature Phase Equilibria in the Y-Ba-Cu-O System. Journal of the American Ceramic Society, 1995, 78, 1745-1752.	1.9	24
33	Spontaneous Compositional Nanopatterning in Li-Containing Perovskite Oxides. Journal of the American Chemical Society, 2008, 130, 17168-17173.	6.6	24
34	Semiconducting ferroelectric perovskites with intermediate bands via $\text{Bi}_{1-x}\text{Sb}_x\text{TiO}_3$. Physical Review B, 2014, 90, .	1.1	23
35	Structural and ferroelectric phase evolution in $\text{Ba}_{1-x}\text{Ca}_x\text{TiO}_3$. Physical Review B, 2017, 96, .	1.1	23
36	Infrared to Ultraviolet Light-Absorbing BaTiO_3 -Based ferroelectric photovoltaic materials. Journal of the American Ceramic Society, 2019, 102, 4188-4199.	1.9	23

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37	1:1 Ordered Domain Growth in $\text{Pb}(\text{Mg}_{1/3}\text{Ta}_{2/3})\text{O}_3 \text{â€} \text{La}(\text{Mg}_{2/3}\text{Ta}_{1/3})\text{O}_3$ Relaxor Ferroelectric Perovskites. Journal of the American Ceramic Society, 1999, 82, 3481-3484. Pb-free ferroelectrics investigated with density functional theory: SnAl	1.9	19
38	Structure and Dielectric Properties of $\text{Pb}(\text{Sc}_{2/3}\text{W}_{1/3})\text{O}_3 \text{â€} \text{Pb}(\text{Zr/Ti})\text{O}_3$ Relaxors. Journal of the American Ceramic Society, 2004, 87, 2086-2092.	1.9	18
39	Growth of the chemically ordered domains in PMN-type relaxor ferroelectrics. Ferroelectrics, 1999, 221, 27-36.	0.3	17
40	A-site and B-site Order in $(\text{Na}_{1/2}\text{La}_{1/2})(\text{Mg}_{1/3}\text{Nb}_{2/3})\text{O}_3$ Perovskite. Journal of the American Ceramic Society, 2004, 87, 859-863.	1.9	15
41	Stabilization of Ordered Zirconium Titanates through the Chemical Substitution of Ti^{4+} by $\text{Al}^{3+}/\text{Ta}^{5+}$. Journal of the American Ceramic Society, 1994, 77, 743-748.	1.9	13
42	Non-stoichiometric 1:2 ordered perovskites in the $\text{Ba}(\text{Li}_{1/4}\text{Nb}_{3/4})\text{O}_3 \text{â€} \text{Ba}(\text{Li}_{2/5}\text{W}_{3/5})\text{O}_3$ system. Journal of Solid State Chemistry, 2004, 177, 3469-3478.	1.4	13
43	Nanocheckerboard modulations in $(\text{NaNd})(\text{MgW})\text{O}_6$. Applied Physics Letters, 2010, 97, 123101.	1.5	11
44	Ordered perovskites in the $\text{A}_2+(\text{Li}_{1/4}\text{Nb}_{3/4})\text{O}_3 \text{â€} \text{A}_2+(\text{Li}_{2/5}\text{W}_{3/5})\text{O}_3$ ($\text{A}_2+=\text{Sr}, \text{Ca}$) systems. Journal of Solid State Chemistry, 2004, 177, 4305-4315.	1.4	10
45	Multiple dielectric transitions in the $\text{PbTiO}_3\text{-Bi}(\text{Zn}_{1/2}\text{Ti}_{1/2})\text{O}_3\text{-Bi}(\text{Mg}_{1/2}\text{Ti}_{1/2})\text{O}_3$ system. Journal of Applied Physics, 2011, 110, .	1.1	10
46	High-temperature Decomposition of B-site Ordered Perovskite $\text{Ba}(\text{Zn}_{1/2}\text{W}_{1/2})\text{O}_3$. Journal of the American Ceramic Society, 2010, 93, 758-764.	1.9	9
47	Tunable high Q perovskite dielectrics in the $\text{BaO} \text{â€} \text{NiO} \text{â€} \text{Ta}_2\text{O}_5$ system. Journal of Materials Science, 2011, 46, 4715-4718.	1.7	9
48	Analysis of phase distributions in the $\text{Li}_2\text{O} \text{â€} \text{Nb}_2\text{O}_5 \text{â€} \text{TiO}_2$ system by piezoresponse imaging. Journal of Materials Research, 2001, 16, 329-332.	1.2	8
49	1:2 Cation order in $\text{A}(\text{Li}_{1/3}(\text{Nb},\text{Ta})_{2/3})\text{O}_3$ microwave perovskites. Applied Physics Letters, 2004, 84, 1347-1349.	1.5	8
50	Polarization-Modulated Photovoltaic Effect at the Morphotropic Phase Boundary in Ferroelectric Ceramics. Advanced Electronic Materials, 2021, 7, 2100144.	2.6	8
51	High T_c ceramic superconductors: Introduction, background, and challenges to the electron microscopist. Journal of Electron Microscopy Technique, 1988, 8, 247-250.	1.1	5
52	Nanoscale modulations in $(\text{KLa})(\text{CaW})\text{O}_6$ and $(\text{NaLa})(\text{CaW})\text{O}_6$. Journal of Solid State Chemistry, 2012, 191, 220-224.	1.4	5
53	Thermodynamic Study of Reduced Phases in the $\text{BaLa}_4\text{Cu}_5\text{O}_{13.1-x}$ System. Journal of the American Ceramic Society, 1991, 74, 1011-1014.	1.9	4

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55	Low-Temperature Synthesis and Phase Equilibria in the Y-Cu-O Binary System. Journal of the American Ceramic Society, 1994, 77, 1139-1142.	1.9	4
56	Influence of Internal Interfaces on the Dielectric Properties of Ceramic Microwave Resonators. Materials Research Society Symposia Proceedings, 1994, 357, 351.	0.1	4
57	Influence of Non-Stoichiometry on the Structure and Properties of Ba(Zn _{1/3} Nb _{2/3})O ₃ Microwave Dielectrics: III. Effect of the Muffling Environment. Journal of the American Ceramic Society, 2006, 89, 060428035142002-???	1.9	4
58	Influence of Non-Stoichiometry on the Structure and Properties of Ba(Zn _{1/3} Nb _{2/3})O ₃ Microwave Dielectrics. IV. Tuning tau and the Part Size Dependence of Qxf. Journal of the American Ceramic Society, 2006, 89, 060428035142007-???	1.9	4
59	Reply to 'Nanoscale phase separation in perovskites revisited'. Nature Materials, 2014, 13, 217-218.	13.3	4
60	Oxide Reduction in NiO-Containing Solid-Solution Systems During Transmission Electron Microscopy. Journal of the American Ceramic Society, 1986, 69, C-124-C-125.	1.9	3
61	Thermodynamic Mixing Properties of Sodium-Potassium beta"- Aluminas. Journal of the American Ceramic Society, 1986, 69, C-62-C-64.	1.9	1
62	Formation and Stabilization of Extended Defects in Zirconia Titanate Microwave Ceramics. Materials Research Society Symposia Proceedings, 1991, 249, 337.	0.1	0
63	Correlations between the Structure and Dielectric Properties of Pb(Sc _{2/3} W _{1/3})O ₃ - Pb(Ti/Zr)O ₃ Relaxors. AIP Conference Proceedings, 2003, , .	0.3	0