Peter K Davies

List of Publications by Year in Descending Order

62 papers	3,395 citations	26 h-index	58 g-index
63 ext. papers	3,673 ext. citations	6.2 avg, IF	5.19 L-index

#	Paper	IF	Citations
62	Polarization-Modulated Photovoltaic Effect at the Morphotropic Phase Boundary in Ferroelectric Ceramics. *Advanced Electronic Materials*, **2021**, 7, 2100144	6.4	4
61	Ferroelectric, Optical, and Photovoltaic Properties of Morphotropic Phase Boundary Compositions in the PbTiO3–BiFeO3–Bi(Ni1/2Ti1/2)O3 System. *Chemistry of Materials*, **2019**, 31, 4184-4194	9.6	21
60	Infrared-to-ultraviolet light-absorbing BaTiO3-based ferroelectric photovoltaic materials. *Journal of the American Ceramic Society*, **2019**, 102, 4188-4199	3.8	14
59	Resonant domain-wall-enhanced tunable microwave ferroelectrics. *Nature*, **2018**, 560, 622-627	50.4	48
58	Structural and ferroelectric phase evolution in [KNbO3]1−x[BaNi1/2Nb1/2O3]x (x=0,0.1). *Physical Review B*, **2017**, 96,	3.3	20
57	Materials Design of Visible-Light Ferroelectric Photovoltaics from First Principles. *Ferroelectrics*, **2015**, 483, 1-12	0.6	27
56	Reply to "Nanoscale phase separation in perovskites revisited". *Nature Materials*, **2014**, 13, 217-8	27	4
55	Semiconducting ferroelectric perovskites with intermediate bands via B-site Bi5+ doping. *Physical Review B*, **2014**, 90,	3.3	19
54	Perovskite oxides for visible-light-absorbing ferroelectric and photovoltaic materials. *Nature*, **2013**, 503, 509-12	50.4	883
53	Nanoscale modulations in (KLa)(CaW)O6 and (NaLa)(CaW)O6. *Journal of Solid State Chemistry*, **2012**, 191, 220-224	3.3	5
52	Pb-free ferroelectrics investigated with density functional theory: SnAl1/2Nb1/2O3 perovskites. *Physical Review B*, **2011**, 83,	3.3	19
51	Tunable high Q perovskite dielectrics in the BaO–NiO–Ta2O5 system. *Journal of Materials Science*, **2011**, 46, 4715-4718	4.3	8
50	Multiple dielectric transitions in the PbTiO3-Bi(Zn1/2Ti1/2)O3-Bi(Mg1/2Ti1/2)O3 system. *Journal of Applied Physics*, **2011**, 110, 074110	2.5	8
49	High-Temperature Decomposition of B-Site-Ordered Perovskite Ba(Zn1/2W1/2)O3. *Journal of the American Ceramic Society*, **2010**, 93, 758-764	3.8	9
48	Nanocheckerboard modulations in (NaNd)(MgW)O6. *Applied Physics Letters*, **2010**, 97, 123101	3.4	11
47	Pb-free semiconductor ferroelectrics: A theoretical study of Pd-substituted Ba(Ti1−xCex)O3 solid solutions. *Physical Review B*, **2010**, 82,	3.3	45
46	Spontaneous compositional nanopatterning in Li-containing perovskite oxides. *Journal of the American Chemical Society*, **2008**, 130, 17168-73	16.4	22

45	Neutron Powder Diffraction of (Nd7/12Li1/4)TiO3 Nano-Checkerboard Superlattices. *Chemistry of Materials*, **2008**, 20, 2860-2862	9.6	26
44	Nano-chessboard superlattices formed by spontaneous phase separation in oxides. *Nature Materials*, **2007**, 6, 586-91	27	94
43	Enhanced tetragonality in (x)PbTiO3(1-x)Bi(B?B?)O3 systems: Bi(Zn3/4W1/4)O3. *Applied Physics Letters*, **2006**, 89, 132907	3.4	52
42	Influence of Non-Stoichiometry on the Structure and Properties of Ba(Zn1/3Nb2/3)O3 Microwave Dielectrics: I. Substitution of Ba3W2O9. *Journal of the American Ceramic Society*, **2006**, 89, 060428035142030-???	3.8	6
41	Influence of Non-Stoichiometry on the Structure and Properties of Ba(Zn1/3Nb2/3)O3 Microwave Dielectrics: II. Compositional Variations in Pure BZN. *Journal of the American Ceramic Society*, **2006**, 89, 060428035142025-???	3.8	11
40	Influence of Non-Stoichiometry on the Structure and Properties of Ba(Zn1/3Nb2/3)O3 Microwave Dielectrics: III. Effect of the Muffling Environment. *Journal of the American Ceramic Society*, **2006**, 89, 060428035142002-???	3.8	1
39	Influence of Non-Stoichiometry on the Structure and Properties of Ba(Zn1/3Nb2/3)O3 Microwave Dielectrics. IV. Tuning ε and the Part Size Dependence of Qf. *Journal of the American Ceramic Society*, **2006**, 89, 060428035142007-???	3.8	
38	Effect of Ordering-Induced Domain Boundaries on Low-Loss Ba(Zn1/3Ta2/3)O3-BaZrO3 Perovskite Microwave Dielectrics. *Journal of the American Ceramic Society*, **2005**, 80, 1727-1740	3.8	249
37	Ordering-Induced Microstructures and Microwave Dielectric Properties of the Ba(Mg1/3Nb2/3)O3-BaZrO3 System. *Journal of the American Ceramic Society*, **2005**, 81, 670-676	3.8	149
36	Structure and Dielectric Properties of the Ba(Mg1/3Nb2/3)O3-La(Mg2/3Nb1/3)O3 System. *Journal of the American Ceramic Society*, **2005**, 81, 2205-2208	3.8	37
35	Structure and Dielectric Properties of Pb(Sc2/3W1/3)O3-Pb(Zr/Ti)O3 Relaxors. *Journal of the American Ceramic Society*, **2005**, 87, 2086-2092	3.8	16
34	Formation and Structural Characterization of 1:1 Ordered Perovskites in the Ba(Zn1/3Ta2/3)O3-BaZrO3 System. *Journal of the American Ceramic Society*, **2005**, 80, 3193-3198	3.8	57
33	Cation Ordering Transformations in the Ba(Zn1/3Nb2/3)O3-La(Zn2/3Nb1/3)O3 System. *Journal of the American Ceramic Society*, **2005**, 81, 1061-1064	3.8	40
32	Enhanced tetragonality in (x)PbTiO3-(1-x)Bi(Zn1/2Ti1/2)O3 and related solid solution systems. *Applied Physics Letters*, **2005**, 86, 262905	3.4	224
31	Predicting morphotropic phase boundary locations and transition temperatures in Pb- and Bi-based perovskite solid solutions from crystal chemical data and first-principles calculations. *Journal of Applied Physics*, **2005**, 98, 094111	2.5	171
30	1:2 Cation order in A(Li1/3(Nb,Ta)2/3)O3 microwave perovskites. *Applied Physics Letters*, **2004**, 84, 1347-1349	3.4	7
29	Crystalline Structure and Dielectric Properties of Li1+xyNb1-x-3yTix+4yO3M-Phase Solid Solutions. *Journal of the American Ceramic Society*, **2004**, 85, 573-578	3.8	86
28	Potential and Impedance Imaging of Polycrystalline BiFeO3 Ceramics. *Journal of the American Ceramic Society*, **2004**, 85, 3011-3017	3.8	78

27	A-Site and B-Site Order in (Na1/2La1/2)(Mg1/3Nb2/3)O3 Perovskite. *Journal of the American Ceramic Society*, **2004**, 87, 859-863	3.8	13
26	Effect of V2O5 Doping on the Sintering and Dielectric Properties of M-Phase Li1+xyNb1-3yTix+4yO3 Ceramics. *Journal of the American Ceramic Society*, **2004**, 87, 1047-1052	3.8	62
25	1:1 Ordered Domain Growth in Pb(Mg1/3Ta2/3)O3-La(Mg2/3Ta1/3)O3 Relaxor Ferroelectric Perovskites. *Journal of the American Ceramic Society*, **2004**, 82, 3481-3484	3.8	19
24	Ordered perovskites in the A2+(Li1/4Nb3/4)O3-A2+(Li2/5W3/5)O3 (A2+=Sr, Ca) systems. *Journal of Solid State Chemistry*, **2004**, 177, 4305-4315	3.3	9
23	Non-stoichiometric 1:2 ordered perovskites in the Ba(Li1/4Nb3/4)O3-Ba(Li2/5W3/5)O3 system. *Journal of Solid State Chemistry*, **2004**, 177, 3469-3478	3.3	12
22	Influence of Cation Order on the Dielectric Properties of Pb(Mg1/3Nb2/3)O3-Pb(Sc1/2Nb1/2)O3 (PMN-PSN) Relaxor Ferroelectrics. *Journal of the American Ceramic Society*, **2003**, 86, 1861-1866	3.8	38
21	Cation Ordering in Pb(Mg1/3Nb2/3)O3-Pb(Sc1/2Nb1/2)O3 (PMN-PSN) Solid Solutions. *Journal of the American Ceramic Society*, **2002**, 85, 2319-2324	3.8	31
20	Synthesis and Dielectric Properties of Li1-x+yTa1-3yTix+4yO3M-Phase Solid Solutions. *Journal of the American Ceramic Society*, **2002**, 85, 2487-2491	3.8	31
19	Analysis of phase distributions in the Li2O-Nb2O5-TiO2 system by piezoresponse imaging. *Journal of Materials Research*, **2001**, 16, 329-332	2.5	8
18	Thermally Induced Coarsening of the Chemically Ordered Domains in Pb(Mg1/3Nb2/3)O3 (PMN)-Based Relaxor Ferroelectrics. *Journal of the American Ceramic Society*, **2000**, 83, 119-23	3.8	39
17	Crystal Chemistry and Dielectric Properties of Chemically Substituted (Bi1.5Zn1.0Nb1.5)O7 and Bi2(Zn2/3Nb4/3)O7 Pyrochlores. *Journal of the American Ceramic Society*, **2000**, 83, 147-53	3.8	142
16	Growth of the chemically ordered domains in PMN-type relaxor ferroelectrics. *Ferroelectrics*, **1999**, 221, 27-36	0.6	15
15	Processing and characterization of lead magnesium tantalate ceramics. *Journal of Materials Research*, **1997**, 12, 2617-2622	2.5	50
14	Domain Growth in Pb(Mg1/3Ta2/3)O3 Perovskite Relaxor Ferroelectric Oxides. *Journal of the American Ceramic Society*, **1997**, 80, 2933-2936	3.8	155
13	Nonequilibrium Phase Formation in Oxides Prepared at Low Temperature: Fergusonite-Related Phases. *Journal of the American Ceramic Society*, **1995**, 78, 2737-2745	3.8	54
12	Low-Temperature Phase Equilibria in the Y-Ba-Cu-O System. *Journal of the American Ceramic Society*, **1995**, 78, 1745-1752	3.8	22
11	Stabilization of Ordered Zirconium Titanates through the Chemical Substitution of Ti4+by Al3+/Ta5+. *Journal of the American Ceramic Society*, **1994**, 77, 743-748	3.8	12
10	Low-Temperature Synthesis and Phase Equilibria in the Y-Cu-O Binary System. *Journal of the American Ceramic Society*, **1994**, 77, 1139-1142	3.8	4

9	Effect of Sn Substitution on Cation Ordering in (Zr1−xSnx)TiO4 Microwave Dielectric Ceramics. *Journal of the American Ceramic Society*, **1994**, 77, 1441-1450	3.8	98
8	Influence of Internal Interfaces on the Dielectric Properties of Ceramic Microwave Resonators. *Materials Research Society Symposia Proceedings*, **1994**, 357, 351		3
7	Structure of Commensurate and Incommensurate Ordered Phases in the System ZrTiO4–Zr5Ti7O24. *Journal of the American Ceramic Society*, **1992**, 75, 563-569	3.8	73
6	Formation and Stabilization of Extended Defects in Zirconia Titanate Microwave Ceramics. *Materials Research Society Symposia Proceedings*, **1991**, 249, 337		
5	New Phases in the CaO–M2O3–CuO (M = Nd, Gd, Y) Systems at 1000°C. *Journal of the American Ceramic Society*, **1991**, 74, 569-573	3.8	24
4	Thermodynamic Study of Reduced Phases in the BaLa4Cu5O13.1−x System. *Journal of the American Ceramic Society*, **1991**, 74, 1011-1014	3.8	3
3	High Tc ceramic superconductors: introduction, background, and challenges to the electron microscopist. *Journal of Electron Microscopy Technique*, **1988**, 8, 247-50		4
2	Thermodynamic Mixing Properties of Sodium-Potassium β- Aluminas. *Journal of the American Ceramic Society*, **1986**, 69, C-62-C-64	3.8	1
1	Oxide Reduction in NiO-Containing Solid-Solution Systems During Transmission Electron Microscopy. *Journal of the American Ceramic Society*, **1986**, 69, C-124-C-125	3.8	2