Neil McN Alford

List of Publications by Year
in descending order

Source: https://exaly.com/author-pdf/7838950/publications.pdf

Version: 2024-02-01

80 papers	4,256 citations	136950 32 h-index	110387 64 g-index
80 all docs	80 docs citations	80 times ranked	4225 citing authors

#	Article	IF	Citations
1	Effect of Porosity and Grain Size on the Microwave Dielectric Properties of Sintered Alumina. Journal of the American Ceramic Society, 1997, 80, 1885-1888.	3.8	819
2	Peculiarities of a Solid-State Synthesis of Multiferroic Polycrystalline BiFeO₃. Chemistry of Materials, 2007, 19, 5431-5436.	6.7	318
3	Sintered alumina with low dielectric loss. Journal of Applied Physics, 1996, 80, 5895-5898.	2.5	252
4	Direct and indirect electrocaloric measurements on â€˜001â€‰-PbMg1/3Nb2/3O3-30PbTiO3 single crystals. Journal of Applied Physics, 2012, 111, .	2.5	165
5	A mechanism for low-temperature sintering. Journal of the European Ceramic Society, 2006, 26, 2777-2783.	5.7	161
6	Dielectric loss caused by oxygen vacancies in titania ceramics. Journal of the European Ceramic Society, 2009, 29, 419-424.	5.7	155
7	Characterization and Microwave Dielectric Properties of M2+Nb2O6 Ceramics. Journal of the American Ceramic Society, 2005, 88, 2466-2471.	3.8	153
8	Do Grain Boundaries Affect Microwave Dielectric Loss in Oxides?. Journal of the American Ceramic Society, 2009, 92, 671-674.	3.8	130
9	Continuous-wave room-temperature diamond maser. Nature, 2018, 555, 493-496.	27.8	117
10	Electrocaloric enhancement near the morphotropic phase boundary in lead-free NBT-KBT ceramics. Applied Physics Letters, 2015, 107, .	3.3	102
11	Review of Ag(Nb, Ta)O3 as a functional material. Journal of the European Ceramic Society, 2007, 27, 2549-2560.	5.7	99
12	Quantifying Figures of Merit for Localized Surface Plasmon Resonance Applications: A Materials Survey. ACS Photonics, 2019, 6, 240-259.	6.6	93
13	Titanium Oxynitride Thin Films with Tunable Double Epsilon-Near-Zero Behavior for Nanophotonic Applications. ACS Applied Materials & Interfaces, 2017, 9, 29857-29862.	8.0	91
14	Synthesis, Crystal Structure, and Characterization of Ba(Ti1/2Mn1/2)O3:â€‰ A High Permittivity 12R-Type Hexagonal Perovskite. Chemistry of Materials, 2004, 16, 2007-2015.	6.7	80
15	Anisotropy of the Electrocaloric Effect in Leadâ€Free Relaxor Ferroelectrics. Advanced Energy Materials, 2014, 4, 1301688.	19.5	63
16	Electrocaloric effect in lead-free Aurivillius relaxor ferroelectric ceramics. Acta Materialia, 2017, 124, 120-126.	7.9	63
17	Relationship between microwave and lattice vibration properties in Ba(Zn1/3Nb2/3)O3-based microwave dielectric ceramics. Journal Physics D: Applied Physics, 2004, 37, 1980-1986.	2.8	61
18	Integrated highâ€Tc multiloop magnetometer. Applied Physics Letters, 1995, 66, 1418-1420.	3.3	58

#	Article	IF	Citations
19	Microwave dielectric properties of (1â^'x)CeO2â€"xCaTiO3 and (1â^'x)CeO2â€"xSm2O3 ceramics. Journal of the European Ceramic Society, 2004, 24, 2583-2589.	5.7	56
20	Lowâ€frequency excess noise in YBa2Cu3O7â^'xdc superconducting quantum interference devices cooled in static magnetic fields. Applied Physics Letters, 1994, 64, 3494-3496.	3.3	52
21	Dielectric measurements on a novel Ba1â€‰â^'â€‰x Ca x TiO3 (BCT) bulk ceramic combinatorial library. Journal of Electroceramics, 2009, 22, 245-251.	2.0	51
22	Microwave Dielectric Properties of Galliumâ€Doped Hexagonal Barium Titanate Ceramics. Journal of the American Ceramic Society, 2003, 86, 511-513.	3.8	50
23	Addendum: â€˜â€˜Low noise YBa2Cu3O7â^'xâ€SrTiO3â€YBa2Cu3O7â^'x multilayers for improved superconducting magnetometersâ€™â€™ [Appl. Phys. Lett. 66, 373 (1995)]. Applied Physics Letters, 1995, 67, 725-726.	3.3	49
24	Scattering of light into silicon by spherical and hemispherical silver nanoparticles. Optics Letters, 2010, 35, 76.	3.3	48
25	Electrocaloric temperature change constrained by the dielectric strength. Materials Chemistry and Physics, 2012, 136, 277-280.	4.0	48
26	Enhanced magnetic Purcell effect in room-temperature masers. Nature Communications, 2015, 6, 6215.	12.8	45
27	Statistical mechanical lattice model of the dual-peak electrocaloric effect in ferroelectric relaxors and the role of pressure. Journal Physics D: Applied Physics, 2011, 44, 375404.	2.8	40
28	Ultralow loss polycrystalline alumina. Applied Physics Letters, 2002, 81, 5021-5023.	3.3	37
29	A reversible water electrolyser with porous PTFE based OHâ^' conductive membrane as energy storage cells. Journal of Power Sources, 2014, 246, 225-231.	7.8	36
30	Manufacture and measurement of combinatorial libraries of dielectric ceramics. Journal of the European Ceramic Society, 2007, 27, 4437-4443.	5.7	35
31	Temperature stability of thin film refractory plasmonic materials. Optics Express, 2018, 26, 15726.	3.4	34
32	Microwave dielectric loss in oxides: Theory and experiment. Journal of Applied Physics, 2004, 95, 2639-2645.	2.5	33
33	Solid-state source of intense yellow light based on a Ce:YAG luminescent concentrator. Optics Express, 2017, 25, 13714.	3.4	33
34	Synthesis, Sintering, and Microwave Dielectric Properties of KTaO₃ Ceramics. Journal of the American Ceramic Society, 2009, 92, 1773-1778.	3.8	30
35	Dielectric Properties of the "Twinned" 8H-Hexagonal Perovskite Ba8Nb4Ti3O24. Journal of the American Ceramic Society, 2006, 89, 336-339.	3.8	26
36	Microwave dielectric properties of CeO2â€"0.5AOâ€"0.5TiO2 (A=Ca, Mg, Zn, Mn, Co, Ni, W) ceramics. Journal of the European Ceramic Society, 2007, 27, 3445-3452.	5.7	26

#	Article	IF	Citations
37	Effect of Ce doping on the electrocaloric effect of SrxBa1â^'xNb2O6 single crystals. Applied Physics Letters, 2014, 104, .	3.3	26
38	Room-temperature cavity quantum electrodynamics with strongly coupled Dicke states. Npj Quantum Information, 2017, 3, .	6.7	26
39	Structureâ€"Property Relations in xBaTiO₃â€"(1â^'x)La(Mg_{1/2}Ti_{1/2})O₃ Solid Solutions. Journal of the American Ceramic Society, 2004, 87, 584-590.	3.8	25
40	Tunable, Low Optical Loss Strontium Molybdate Thin Films for Plasmonic Applications. Advanced Optical Materials, 2017, 5, 1700622.	7.3	24
41	Plasmon-Enhanced Electron Harvesting in Robust Titanium Nitride Nanostructures. Journal of Physical Chemistry C, 2019, 123, 18521-18527.	3.1	23
42	Oxygen transport during formation and decomposition of AgNbO3 and AgTaO3. Journal of Materials Research, 2007, 22, 1650-1655.	2.6	22
43	Quantitative strain analysis and growth mode of pulsed laser deposited epitaxial CoFe2O4 thin films. Acta Materialia, 2011, 59, 514-520.	7.9	22
44	Nanosecond time-resolved characterization of a pentacene-based room-temperature MASER. Scientific Reports, 2017, 7, 41836.	3.3	22
45	Chemistry of post-annealing of epitaxial CoFe2O4 thin films. Thin Solid Films, 2009, 517, 3742-3747.	1.8	21
46	Influence of octahedral tilting on the microwave dielectric properties of A3LaNb3O12 hexagonal perovskites (A=Ba, Sr). Applied Physics Letters, 2009, 94, .	3.3	21
47	Direct measurement of electrocaloric effect in lead-free (Na0.5Bi0.5)TiO3-based multilayer ceramic capacitors. Journal of the European Ceramic Society, 2019, 39, 3315-3319.	5.7	21
48	Electrical Properties of 6H-BaTi0.95M0.05O3?? Ceramics where M = Mn, Fe, Co and Ni. Journal of Electroceramics, 2004, 13, 305-309.	2.0	20
49	Microscopic theory of the electrocaloric effect in the paraelectric phase of potassium dihydrogen phosphate. Applied Physics Letters, 2008, 93, .	3.3	20
50	Improved SrTiO3 thin films using oxygen relaxation technique. Applied Physics Letters, 2005, 87, 222902.	3.3	17
51	Manufacture and measurement of combinatorial libraries of dielectric ceramics. Journal of the European Ceramic Society, 2007, 27, 3861-3865.	5.7	17
52	Anomalous resistive switching phenomenon. Journal of Applied Physics, 2012, 112, .	2.5	16
53	Dielectric properties characterization of La- and Dy-doped BiFeO₃ thin films. Journal of Materials Research, 2007, 22, 2179-2184.	2.6	15
54	Enhanced electrical properties of ferroelectric thin films by ultraviolet radiation. Applied Physics Letters, 2005, 87, 222904.	3.3	14

#	Article	IF	Citations
55	Temperature and frequency dependence of dielectric loss of Ba(Mg1/3Ta2/3)O3 microwave ceramics. Journal of the European Ceramic Society, 2010, 30, 331-334.	5.7	14
56	Growth mechanism and magnetism of CoFe2O4 thin films; Role of the substrate. Journal of Alloys and Compounds, 2013, 578, 286-291.	5.5	14
57	Optimisation of SrBi2(Nb,Ta)2O9 Aurivillius phase for lead-free electrocaloric cooling. Journal of the European Ceramic Society, 2018, 38, 5354-5358.	5.7	14
58	Evaluation of Residual Stress in Thin Ferroelectric Films Using Grazing Incident X-Ray Diffraction. Integrated Ferroelectrics, 2004, 63, 183-189.	0.7	11
59	Dissociation of misfit and threading dislocations in Ba0.75Sr0.25TiO3 epitaxial film. Materials Characterization, 2011, 62, 294-297.	4.4	11
60	Enhanced quality factors in aperiodic reflector resonators. Applied Physics Letters, 2007, 91, .	3.3	10
61	Chemistry, Processing, and Microwave Dielectric Properties of Mnâ€Substituted KTaO₃ Ceramics. Journal of the American Ceramic Society, 2010, 93, 800-805.	3.8	9
62	MEASUREMENT OF ZIGBEE WIRELESS COMMUNICATIONS IN MODE-STIRRED AND MODE-TUNED REVERBERATION CHAMBER. Progress in Electromagnetics Research M, 2011, 18, 171-178.	0.9	9
63	Improved Process for Making Dense Vitreous Silica from Submicrometer Particles by Sintering Near 1000oC. Journal of the American Ceramic Society, 1989, 72, 432-436.	3.8	8
64	High-temperature conductivity evaluation of Nb doped SrTiO3 thin films: Influence of strain and growth mechanism. Thin Solid Films, 2013, 539, 384-390.	1.8	8
65	Sintering Behaviour of BaxSr1-xTiO3. Integrated Ferroelectrics, 2004, 62, 249-252.	0.7	7
66	Influence of point defects in KTaO3 on low-temperature dielectric relaxation. Journal of the European Ceramic Society, 2010, 30, 941-946.	5.7	7
67	Multiphase strontium molybdate thin films for plasmonic local heating applications. Optical Materials Express, 2018, 8, 1806.	3.0	7
68	Perspective on room-temperature solid-state masers. Applied Physics Letters, 2021, 119, .	3.3	7
69	SrRuO₃ thin films grown on MgO substrates at different oxygen partial pressures. Journal of Materials Research, 2013, 28, 702-707.	2.6	6
70	STO/BTO Modulated Superlattice Multilayer Structures with Atomically Sharp Interfaces. Advanced Materials Interfaces, 2014, 1, 1300116.	3.7	6
71	Surface resistance of thick film YBa2Cu3OX. Advanced Materials, 1991, 3, 318-320.	21.0	5
72	Optical characteristics of silicon nanowires grown from tin catalyst layers on silicon coated glass. Optics Express, 2012, 20, 20266.	3.4	5

#	Article	IF	Citations
73	Better than Bragg: Optimizing the quality factor of resonators with aperiodic dielectric reflectors. Applied Physics Letters, 2011, 99, 113515.	3.3	4
74	Processing protocols give ceramics the edge. Physics World, 1991, 4, 26-30.	0.0	3
75	Quasi-classical fluctuation-dissipation description of dielectric loss in oxides with implications for quantum information processing. International Journal of Quantum Chemistry, 2006, 106, 986-993.	2.0	3
76	Selective normal mode excitation in multilayer thin film bulk acoustic wave resonators. Applied Physics Letters, 2014, 105, 162910.	3.3	3
77	DIELECTRIC CONSTANT AND LOSS TANGENT OF THIN FERROELECTRIC FILMS AT MICROWAVE FREQUENCIESâ€"HOW ACCURATELY CAN WE EVALUATE THEM?. Integrated Ferroelectrics, 2008, 97, 27-37.	0.7	2
78	Contrasting critical currents. Nature, 1990, 345, 292-293.	27.8	1
79	Tunable double epsilon-near-zero behavior in niobium oxynitride thin films. Applied Surface Science, 2021, 569, 150912.	6.1	1
80	Formation of V-grooves in SrRuO3 epitaxial film. Journal of Crystal Growth, 2016, 455, 13-18.	1.5	0