Ming Zhang

List of Publications by Year
in descending order

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112	3,454	136950	161849
papers	citations	32 h-index	54 g-index

112	112	112	3696
all docs	docs citations	times ranked	citing authors

#	Article	IF	Citations
1	Transformation processes inLaAlO3: Neutron diffraction, dielectric, thermal, optical, and Raman studies. Physical Review B, 2005, 72, .	3.2	211
2	Metamictization of zircon: Raman spectroscopic study. Journal of Physics Condensed Matter, 2000, 12, 1915-1925.	1.8	163
3	Local Phase Decomposition as a Cause of Polarization Fatigue in Ferroelectric Thin Films. Physical Review Letters, 2006, 97, 177601.	7.8	131
4	Amorphization in zircon: evidence for direct impact damage. Journal of Physics Condensed Matter, 2000, 12, 2401-2412.	1.8	125
5	Phase transitions and the piezoelectricity around morphotropic phase boundary in Ba(Zr0.2Ti0.8)O3-x(Ba0.7Ca0.3)TiO3 lead-free solid solution. Applied Physics Letters, 2014, 105, .	3.3	122
6	Spectroscopic methods applied to zircon. Reviews in Mineralogy and Geochemistry, 2003, 53, 427-467.	4.8	121
7	Annealing of alpha-decay damage in zircon: a Raman spectroscopic study. Journal of Physics Condensed Matter, 2000, 12, 3131-3148.	1.8	102
8	Fatigue as a local phase decomposition: A switching-induced charge-injection model. Physical Review B, 2007, 75, .	3.2	83
9	On the thickness of ferroelastic twin walls in lead phosphate Pb₃(PO₄)₂ an X-ray diffraction study. Phase Transitions, 1994, 48, 135-148.	1.3	78
10	Facile synthesis of three-dimensional structured carbon fiber-NiCo2O4-Ni(OH)2 high-performance electrode for pseudocapacitors. Scientific Reports, 2015, 5, 9277.	3.3	78
11	Phase transition(s) in titanite CaTiSiO5: An infrared spectroscopic, dielectric response and heat capacity study. Physics and Chemistry of Minerals, 1995, 22, 41.	0.8	72
12	A TEM investigation of natural metamict zircons: structure and recovery of amorphous domains. Physics and Chemistry of Minerals, 2000, 27, 545-556.	0.8	71
13	Recent Materials Characterizations of [2D] and [3D] Thin Film Ferroelectric Structures. Journal of the American Ceramic Society, 2005, 88, 1691-1701.	3.8	71
14	Infrared spectroscopic analysis of zircon: Radiation damage and the metamict state. Journal of Physics Condensed Matter, 2001, 13, 3057-3071.	1.8	65
15	Infrared and Raman spectra of ZrSiO4 experimentally shocked at high pressures. Mineralogical Magazine, 2004, 68, 801-811.	1.4	65
16	Dehydroxylation and Transformations of the 2:1 Phyllosilicate Pyrophyllite at Elevated Temperatures: An Infrared Spectroscopic Study. Clays and Clay Minerals, 2002, 50, 272-283.	1.3	60
17	Giant electrocaloric effect in lead-free Ba0.94Ca0.06Ti1â^'xSnxO3 ceramics with tunable Curie temperature. Applied Physics Letters, 2015, 107, .	3.3	60
18	Dehydroxylation, proton migration, and structural changes in heated talc: An infrared spectroscopic study. American Mineralogist, 2006, 91, 816-825.	1.9	57

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19	Recrystallization of almost fully amorphous zircon under hydrothermal conditions: An infrared spectroscopic study. Journal of Nuclear Materials, 2003, 320, 280-291.	2.7	52
20	Temperature dependence of IR absorption of hydrous/hydroxyl species in minerals and synthetic materials. American Mineralogist, 2007, 92, 1502-1517.	1.9	50
21	Thermally-induced structural modification of dental enamel apatite: Decomposition and transformation of carbonate groups. European Journal of Mineralogy, 2005, 17, 769-776.	1.3	45
22	Structural phase transition near 825 K in titanite; evidence from infrared spectroscopic observations. American Mineralogist, 1997, 82, 30-35.	1.9	44
23	Reverse age zonation of zircon formed by metamictisation and hydrothermal fluid leaching. Lithos, 2012, 150, 256-267.	1.4	42
24	Alpha-decay damage and recrystallization in zircon: evidence for an intermediate state from infrared spectroscopy. Journal of Physics Condensed Matter, 2000, 12, 5189-5199.	1.8	37
25	Agate recrystallisation: Evidence from samples found in Archaean and Proterozoic host rocks, Western Australia. Australian Journal of Earth Sciences, 2006, 53, 235-248.	1.0	37
26	Phase transition sequence in Pb-free 0.96(K0.5Na0.5)0.95Li0.05Nb0.93 Sb0.07O3â^'0.04BaZrO3 ceramic with large piezoelectric response. Applied Physics Letters, 2015, 107, .	3.3	37
27	Thermal behavior of vibrational phonons and hydroxyls of muscovite in dehydroxylation: In situ high-temperature infrared spectroscopic investigations. American Mineralogist, 2010, 95, 1444-1457.	1.9	36
28	Thermal response of structure and hydroxyl ion of phengite-2M1: an in situ neutron diffraction and FTIR study. European Journal of Mineralogy, 2001, 13, 545-555.	1.3	35
29	Infrared, Raman, and cathodoluminescence studies of impact glasses. Meteoritics and Planetary Science, 2004, 39, 1273-1285.	1.6	35
30	Infrared spectra of Si-O overtones, hydrous species, and U ions in metamict zircon: radiation damage and recrystallization. Journal of Physics Condensed Matter, 2002, 14, 3333-3352.	1.8	34
31	Formation of magnetite in bismuth ferrrite under voltage stressing. Applied Physics Letters, 2007, 90, 262908.	3.3	33
32	Impact of leach on lead vanado-iodoapatite [Pb5(VO4)3I]: An infrared and Raman spectroscopic study. Materials Science and Engineering B: Solid-State Materials for Advanced Technology, 2007, 137, 149-155.	3.5	33
33	Phase transformation of natural titanite: An infrared, Raman spectroscopic, optical birefringence and X-ray diffraction study. Phase Transitions, 1996, 59, 39-60.	1.3	32
34	Vibrational spectroscopy of beta-eucryptite (LiAlSiO 4): optical phonons and phase transition(s). Physics and Chemistry of Minerals, 2003, 30, 457-462.	0.8	32
35	Periodic precipitation pattern formation in hydrothermally treated metamict zircon. American Mineralogist, 2004, 89, 1341-1347.	1.9	31
36	The crystal chemistry of Fe-bearing sphalerites: An infrared spectroscopic study. American Mineralogist, 2008, 93, 591-597.	1.9	31

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37	Growth of centimeter-sized [(CH₃)₂NH₂][Mn(HCOO)₃] hybrid formate perovskite single crystals and Raman evidence of pressure-induced phase transitions. New Journal of Chemistry, 2017, 41, 151-159.	2.8	31
38	Dehydroxylation and CO2incorporation in annealed mica (sericite): An infrared spectroscopic study. American Mineralogist, 2005, 90, 173-180.	1.9	30
39	Optical properties ofYBa2Cu3O7â^Î´thin films. Physical Review B, 1995, 52, 15582-15591.	3.2	29
40	Exsolution and Al-Si disorder in alkali feldspars; their analysis by infrared spectroscopy. American Mineralogist, 1997, 82, 849-857.	1.9	28
41	DEHYDRATION OF METAMICT TITANITE: AN INFRARED SPECTROSCOPIC STUDY. Canadian Mineralogist, 2000, 38, 119-130.	1.0	28
42	Metamictization and recrystallization of titanite: An infrared spectroscopic study. American Mineralogist, 2002, 87, 882-890.	1.9	28
43	Water incorporation in synthetic and natural MgAl2O4 spinel. Geochimica Et Cosmochimica Acta, 2010, 74, 705-718.	3.9	28
44	Strain Coupling and Dynamic Relaxation in a Molecular Perovskiteâ€Like Multiferroic Metalâ€“Organic Framework. Advanced Functional Materials, 2018, 28, 1806013.	14.9	28
45	Oxidation state of uranium in metamict and annealed zircon: near-infrared spectroscopic quantitative analysis. Journal of Physics Condensed Matter, 2003, 15, 3445-3470.	1.8	27
46	Phase separation in lead zirconate titanate and bismuth titanate during electrical shorting and fatigue. Journal of Applied Physics, 2006, 99, 044101.	2.5	26
47	Exact timing of granulite metamorphism in the Namche-Barwa, eastern Himalayan syntaxis: new constrains from SIMS Uâ€“Pb zircon age. International Journal of Earth Sciences, 2012, 101, 239-252.	1.8	26
48	LiFeSi 2 O 6 and NaFeSi 2 O 6 at low temperatures: an infrared spectroscopic study. Physics and Chemistry of Minerals, 2002, 29, 609-616.	0.8	23
49	Micro-Raman and micro-infrared spectroscopic studies of Pb- and Au-irradiated<mml:math xmlns:mml="http://www.w3.org/1998/Math/MathML" display="inline"><mml:mrow><mml:mi mathvariant="normal">Zr</mml:mi><mml:mi mathvariant="normal">Si</mml:mi><mml:msub><mml:mi mathvariant="normal">O</mml:mi><mml:mn>4</mml:mn></mml:msub></mml:mrow></mml:math>: Optical properties, structural damage, and amorphization. Physical Review B, 2008, 77, .	3.2	23
50	H2O and the dehydroxylation of phyllosilicates: An infrared spectroscopic study. American Mineralogist, 2010, 95, 1686-1693.	1.9	23
51	Rayleigh-like nonlinear dielectric response and its evolution during electrical fatigue in antiferroelectric (Pb,La)(Zr,Ti)O₃ thin film. Applied Physics Letters, 2014, 104, 142904.	3.3	23
52	Infrared absorption spectroscopy of SiO2-moganite. American Mineralogist, 2014, 99, 671-680.	1.9	23
53	An infrared spectroscopic study of Li2B4O7. Journal of Physics Condensed Matter, 2001, 13, 6551-6561.	1.8	22
54	Infrared spectra and second-harmonic generation in barium strontium titanate and lead zirconate-titanate thin films: â€œPolaronâ€•artifacts. Journal of Applied Physics, 2003, 94, 3333-3344.	2.5	22

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55	Intermediate structures in radiation damaged titanite (CaTiSiO₅): a Raman spectroscopic study. Journal of Physics Condensed Matter, 2013, 25, 115402.	1.8	22
56	Composition-induced structural phase transitions in the (Ba1â^'xLax)2In2O5+x (0â©½xâ©½0.6) system. Journal of Solid State Chemistry, 2005, 178, 882-891.	2.9	21
57	Thermal behavior of dental enamel and geologic apatite: An infrared spectroscopic study. American Mineralogist, 2003, 88, 1866-1871.	1.9	20
58	15. Spectroscopic methods applied to zircon. , 2003, , 427-468.		19
59	Mineralogical characteristics of unusual black talc ores in Guangfeng County, Jiangxi Province, China. Applied Clay Science, 2013, 74, 37-46.	5.2	19
60	Infrared Study Of Co₂ Incorporation Into Pyrophyllite [Al₂si₄o₁₀(oh)₂] During Dehydroxylation. Clays and Clay Minerals, 2003, 51, 439-444.	1.3	18
61	Infrared spectroscopy of superionic conductor LiNaSO4: Vibrational modes and thermodynamics. Solid State Ionics, 2006, 177, 37-43.	2.7	18
62	Pb+ irradiation of synthetic zircon (ZrSiO4): Infrared spectroscopic investigation. American Mineralogist, 2008, 93, 1418-1423.	1.9	18
63	Orientational order-disorder of ND4+/NH4+ in synthetic ND4/NH4-phlogopite: a low-temperature infrared study. European Journal of Mineralogy, 2002, 14, 1033-1039.	1.3	17
64	An infrared spectroscopic and single-crystal X-ray study of malayaite, CaSnSiO 5. Physics and Chemistry of Minerals, 1999, 26, 546-553.	0.8	16
65	Hydrous species in crystalline and metamict titanites. American Mineralogist, 2001, 86, 904-909.	1.9	16
66	Polarons, oxygen vacancies, and hydrogen in BaxSr1â€“xTiO3. Journal of the European Ceramic Society, 2001, 21, 1629-1632.	5.7	16
67	Dehydration and recrystallization of radiation-damaged titanite under thermal annealing. Phase Transitions, 2000, 71, 173-187.	1.3	15
68	Orientational order-disorder of N(D,H)₄⁺in tobelite. American Mineralogist, 2002, 87, 1686-1691.	1.9	15
69	Spectroscopic Characterization of Metamictization and Recrystallization in Zircon and Titanite. Phase Transitions, 2003, 76, 117-136.	1.3	15
70	Quartz-bearing Câ€“Oâ€“H fluid inclusions diamond: Retracing the pressureâ€“temperature path in the mantle using calibrated high temperature IR spectroscopy. Geochimica Et Cosmochimica Acta, 2007, 71, 6030-6039.	3.9	15
71	OH in zoned amphiboles of eclogite from the western Tianshan, NW-China. International Journal of Earth Sciences, 2009, 98, 1299-1309.	1.8	15
72	Dehydroxylation of omphacite of eclogite from the Dabie-Sulu. Lithos, 2008, 105, 181-190.	1.4	14

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73	The Î²-Î³ phase transition in titanite and the isosymmetric analogue in malayaite. Phase Transitions, 1999, 68, 545-556.	1.3	13
74	Hydrous species in ceramics for the encapsulation of nuclear waste: OH in zircon. Journal of Physics Condensed Matter, 2006, 18, L277-L281.	1.8	13
75	Effect of polarization fatigue on the Rayleigh coefficients of ferroelectric lead zirconate titanate thin films: Experimental evidence and implications. Applied Physics Letters, 2014, 105, .	3.3	13
76	Phase transitions in between 1.5 K and 850 K: an infrared spectroscopic study. Journal of Physics Condensed Matter, 1998, 10, 11811-11827.	1.8	12
77	Damage production in silicon carbide by dual ion beams irradiation. Journal of Nuclear Materials, 2018, 499, 326-333.	2.7	12
78	Raman studies of oxide minerals: a retrospective on cristobalite phases. Journal of Physics Condensed Matter, 2007, 19, 275201.	1.8	11
79	OH species, U ions, and CO/CO2 in thermally annealed metamict zircon (ZrSiO4). American Mineralogist, 2010, 95, 1717-1724.	1.9	11
80	In situ infrared spectroscopic studies of OH, H2O and CO2 in moganite at high temperatures. European Journal of Mineralogy, 2012, 24, 123-131.	1.3	11
81	Local Phenomena in meta-mict Titanite. Acta Physica Polonica A, 2010, 117, 74-77.	0.5	10
82	Natural titanite and malayaite: Structural investigations and the 500 K anomaly. Phase Transitions, 1998, 67, 27-49.	1.3	9
83	Applications of near-infrared FT-Raman spectroscopy in metamict and annealed zircon: oxidation state of U ions. Physics and Chemistry of Minerals, 2004, 31, 405.	0.8	9
84	Cubicâ€“tetragonal transition in KMnF₃: IR hard-mode spectroscopy and the temperature evolution of the (precursor) order parameter. Journal of Physics Condensed Matter, 2009, 21, 335402.	1.8	9
85	Effective driving voltage on polarization fatigue in (Pb,La)(Zr,Ti)O3 antiferroelectric thin films. Ceramics International, 2015, 41, 109-114.	4.8	9
86	Intensive evaluation of radiation stability of phlogopite single crystals under high doses of Î³-ray irradiation. RSC Advances, 2019, 9, 6199-6210.	3.6	9
87	Crystalline structure variation within phlogopite, muscovite and talc under 0â€“1000â€‰kGy Î³ ray irradiation: A clear dependence on intrinsic characteristic. Applied Clay Science, 2020, 187, 105475.	5.2	9
88	The current-voltage characteristics of single-crystal whiskers of 2:2:1:2 BiSCCO. Physica C: Superconductivity and Its Applications, 1993, 215, 67-76.	1.2	8
89	Vibrational spectroscopy of fast-quenched ZrSiO4melts produced by laser treatments: local structures and decomposed phases. Journal of Physics Condensed Matter, 2005, 17, 6363-6376.	1.8	8
90	Optical phonons, OH vibrations, and structural modifications of phlogopite at high temperatures: An in-situ infrared spectroscopic study. American Mineralogist, 2016, 101, 1873-1883.	1.9	8

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91	Intensive study on structure transformation of muscovite single crystal under high-dose Î³ -ray irradiation and mechanism speculation. Royal Society Open Science, 2019, 6, 190594.	2.4	8
92	Experimental and infrared characterization of the miscibility gap along the tremolite-glaucophane join. American Mineralogist, 2014, 99, 730-741.	1.9	7
93	Damage effects in 6H-SiC single crystals by Si&H dual ion irradiation: A combined Raman and XRD study. Nuclear Instruments & Methods in Physics Research B, 2020, 485, 20-25.	1.4	7
94	An infrared investigation of the otavite-magnesite solid solution. American Mineralogist, 2007, 92, 837-843.	1.9	6
95	Cation ordering and phase transitions in feldspars along the join CaAl2Si2O8-SrAl2Si2O8: a TEM, IR and XRD investigation. Mineralogical Magazine, 2009, 73, 119-130.	1.4	6
96	Polarization fatigue in antiferroelectric (Pb,La)(Zr,Ti)O3 thin films: The role of the effective strength of driving waveform. Ceramics International, 2015, 41, S289-S295.	4.8	6
97	Phonon softening and MIR absorption in superconducting. Superconductor Science and Technology, 1997, 10, 209-212.	3.5	5
98	HIGH-TEMPERATURE AMORPHOUS HAFNIA (HfO2) FOR MICROELECTRONICS. Integrated Ferroelectrics, 2005, 74, 165-172.	0.7	5
99	Pb+ irradiation of synthetic zircon (ZrSiO4): Infrared spectroscopic investigation--Reply. American Mineralogist, 2009, 94, 856-858.	1.9	5
100	Amorphization in natural omphacite and its implications. Journal of Asian Earth Sciences, 2011, 42, 694-703.	2.3	5
101	Positron annihilation lifetime study of radiation-damaged natural zircons. Journal of Nuclear Materials, 2016, 471, 44-50.	2.7	5
102	MECHANISMS OF NANO-SHORTS IN THE ELECTRICAL BREAKDOWN OF FERROELECTRIC THIN FILMS. Integrated Ferroelectrics, 2005, 73, 93-98.	0.7	3
103	In-depth analysis of international collaboration and inter-institutional collaboration in nuclear science and technology during 2006â€“2015. Journal of Nuclear Science and Technology, 2018, 55, 29-40.	1.3	3
104	An intensive exploration on structure transformation of talc under Î³-ray irradiation at 0â€“1000ÂkGy. Journal of Radioanalytical and Nuclear Chemistry, 2020, 325, 33-42.	1.5	3
105	Raman Study of the Crystalline-to-Amorphous State in Alpha- Decayâ€“Damaged Materials. , 0, , .		2
106	Effect of leaching solutions on chemical durability of a natural metamict titanite. Journal of Nuclear Science and Technology, 2020, 57, 792-799.	1.3	2
107	Phonon anomaly at 100-150K in La_{2-x}Sr_xCuO₄. Phase Transitions, 1997, 63, 171-186.	1.3	1
108	Cross-sectional investigation of radiation damage of 2ÂMeV proton-irradiated silicon carbide. Nuclear Science and Techniques/Hewuli, 2018, 29, 1.	3.4	1

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109	Damage effects of Au&He dual ion irradiated silicon carbide. Materials Research Express, 2018, 5, 105902.	1.6	1
110	Influence of radiation damage on the structure and chemical durability of titanites. Applied Radiation and Isotopes, 2020, 164, 109165.	1.5	1
111	Low magnetic field anomalies in the electrical dissipation of superconducting YBa2Cu3O7:Y2BaCuO5 composites. Solid State Communications, 1992, 83, 619-623.	1.9	0
112	Above Tc phonon renormalization in Bi1.7Pb0.3Sr2Ca2Cu3Ox: an infrared spectroscopic study. European Physical Journal D, 1996, 46, 1243-1244.	0.4	0