Yonggang Wang

List of Publications by Year in Descending Order

87 papers	2,298 citations	27 h-index	46 g-index
95 ext. papers	2,804 ext. citations	6.9 avg, IF	4.99 L-index

#	Paper	IF	Citations
87	Methodological Approach to the High-Pressure Synthesis of Nonmagnetic Li2B4+B?6+O6 Oxides. *Chemistry of Materials*, **2022**, 34, 186-196	9.6	1
86	Reentrant Negative Linear Compressibility in MIL-53(Al) over an Ultrawide Pressure Range. *Chemistry of Materials*, **2022**, 34, 2764-2770	9.6	0
85	Reversible Mechanically Induced On□Off Photoluminescence in Hybrid Metal Halides. *Advanced Functional Materials*, **2022**, 32, 2110771	15.6	2
84	Simultaneously achieving giant piezoelectricity and record coercive field enhancement in relaxor-based ferroelectric crystals.. *Nature Communications*, **2022**, 13, 2444	17.4	3
83	Pressure Controls the Structure and Nonlinear Optical Properties of Piezochromic CdTeMoO6. *Chemistry of Materials*, **2021**, 33, 2929-2936	9.6	5
82	Pavonite homologues as potential n-type thermoelectric materials: crystal structure and performance. *Materials Chemistry Frontiers*, **2021**, 5, 1283-1294	7.8	6
81	InPbSbS: A Stable Quaternary Chalcogenide with Low Thermal Conductivity. *Inorganic Chemistry*, **2021**, 60, 325-333	5.1	1
80	A general approach to realizing perovskite nanocrystals with insulating metal sulfate shells. *Nanoscale*, **2021**, 13, 10329-10334	7.7	5
79	NaBi(IO): An Alkali-Metal Bismuth Iodate with Intriguing One-Dimensional [BiIO] Chains and Pressure-Induced Structural Transition. *Inorganic Chemistry*, **2021**, 60, 2893-2898	5.1	2
78	Pressure-Driven Sequential Lattice Collapse and Magnetic Collapse in Transition-Metal-Intercalated Compounds FeNbS. *Journal of Physical Chemistry Letters*, **2021**, 12, 6348-6353	6.4	
77	Controllable Syntheses, Crystal Structure Evolution, and Photoluminescence of Polymorphic Zirconium Oxyfluorides. *Inorganic Chemistry*, **2021**, 60, 14382-14389	5.1	1
76	Tricolor Ho^{3+} Photoluminescence Enhancement from Site Symmetry Breakdown in Pyrochlore Ho_{2}Sn_{2}O_{7} after Pressure Treatment. *Physical Review Letters*, **2020**, 125, 245701	7.4	4
75	Pressure-driven chemical lock-in structure and optical properties in Sillen compounds PbBiO2X (X = Cl, Br, and I). *Journal of Materials Chemistry A*, **2020**, 8, 13610-13618	13	6
74	Broadband Photoluminescence in 2D Organic-Inorganic Hybrid Perovskites: (CHN)PbBr and (CHN)PbBr. *Journal of Physical Chemistry Letters*, **2020**, 11, 2934-2940	6.4	35
73	Pressure responses of halide perovskites with various compositions, dimensionalities, and morphologies. *Matter and Radiation at Extremes*, **2020**, 5, 018201	4.7	35
72	Temperature-driven n-p conduction type switching without structural transition in a Cu-rich chalcogenide, NaCuS. *Chemical Communications*, **2020**, 56, 4882-4885	5.8	3
71	Antiperovskites with Exceptional Functionalities. *Advanced Materials*, **2020**, 32, e1905007	24	40

70	Mechanism of enhanced ionic conductivity by rotational nitrite group in antiperovskite Na3ONO2. *Journal of Materials Chemistry A*, **2020**, 8, 21265-21272	13	11
69	A strong zero-phonon line red phosphor BaNbF7:Mn4+ for white LEDs. *Inorganic Chemistry Frontiers* , **2020**, 7, 3371-3378	6.8	8
68	Site-Specific Pressure-Driven Spin-Crossover in LuScFeO. *Journal of Physical Chemistry Letters*, **2020**, 11, 8549-8553	6.4	2
67	Perspective on the pressure-driven evolution of the lattice and electronic structure in perovskite and double perovskite. *Applied Physics Letters*, **2020**, 117, 080502	3.4	2
66	Structural Phase Transition, Optical and Electrical Property Evolutions of Thiospinel AgInS under High Pressure. *Inorganic Chemistry*, **2019**, 58, 12628-12634	5.1	6
65	Pressure-enhanced interplay between lattice, spin, and charge in the mixed perovskite La2FeMnO6. *Physical Review B*, **2019**, 99,	3.3	5
64	Unprecedented Eighteen-Faceted BiOCl with a Ternary Facet Junction Boosting Cascade Charge Flow and Photo-redox. *Angewandte Chemie - International Edition*, **2019**, 58, 9517-9521	16.4	143
63	Aqueous acid-based synthesis of lead-free tin halide perovskites with near-unity photoluminescence quantum efficiency. *Chemical Science*, **2019**, 10, 4573-4579	9.4	77
62	Intrinsic zero thermal expansion in cube cyanurate K6Cd3(C3N3O3)4. *Inorganic Chemistry Frontiers*, **2019**, 6, 2291-2295	6.8	16
61	Pressure-Driven Reversible Switching between n- and p-Type Conduction in Chalcopyrite CuFeS. *Journal of the American Chemical Society*, **2019**, 141, 505-510	16.4	19
60	Nature-Derived Approach to Oxygen and Chlorine Dual-Vacancies for Efficient Photocatalysis and Photoelectrochemistry. *ACS Sustainable Chemistry and Engineering*, **2018**, 6, 2395-2406	8.3	50
59	Valence and spin states of iron are invisible in Earth's lower mantle. *Nature Communications*, **2018**, 9, 1284	17.4	25
58	Selective synthesis, polymorphism, reversible phase transition and structure-dependent optical functionalities of gadolinium oxyfluorides. *Journal of Materials Chemistry C*, **2018**, 6, 11007-11014	7.1	3
57	Pressure-induced structural and electronic transitions, metallization, and enhanced visible-light responsiveness in layered rhenium disulphide. *Physical Review B*, **2018**, 97,	3.3	18
56	Emergent superconductivity in an iron-based honeycomb lattice initiated by pressure-driven spin-crossover. *Nature Communications*, **2018**, 9, 1914	17.4	59
55	Pressure Impact on the Crystal Structure, Optical, and Transport Properties in Layered Oxychalcogenides BiCuChO (Ch = S, Se). *Journal of Physical Chemistry C*, **2018**, 122, 15929-15936	3.8	9
54	High-Pressure Band-Gap Engineering in Lead-Free Cs2AgBiBr6 Double Perovskite. *Angewandte Chemie*, **2017**, 129, 16185-16189	3.6	26
53	High-Pressure Band-Gap Engineering in Lead-Free Cs AgBiBr Double Perovskite. *Angewandte Chemie - International Edition*, **2017**, 56, 15969-15973	16.4	122

52	Measurement of the Energy and High-Pressure Dependence of X-ray-Induced Decomposition of Crystalline Strontium Oxalate. *Journal of Physical Chemistry A*, **2017**, 121, 7108-7113	2.8	7
51	Controllable Synthesis, Polymorphism and Structure-Dependent Photoluminescence Properties of Europium Oxyfluorides. *European Journal of Inorganic Chemistry*, **2017**, 2017, 5121-5126	2.3	5
50	A Multiple Structure-Design Strategy towards Ultrathin Niobate Perovskite Nanosheets with Thickness-Dependent Photocatalytic Hydrogen-Evolution Performance. *Chemistry - an Asian Journal* , **2017**, 12, 2727-2733	4.5	13
49	The impact of nitrogen doping and reduced-niobium self-doping on the photocatalytic activity of ultra-thin NbO nanosheets. *Dalton Transactions*, **2017**, 46, 13854-13861	4.3	14
48	X-ray induced synthesis of a novel material: Stable, doped solid CO at ambient conditions. *Chemical Physics Letters*, **2017**, 686, 183-188	2.5	8
47	Polymorphism of Erbium Oxyfluoride: Selective Synthesis, Crystal Structure, and Phase-Dependent Upconversion Luminescence. *European Journal of Inorganic Chemistry*, **2017**, 2017, 3849-3854	2.3	8
46	Enhanced visible-light-driven photocatalytic activity in yellow and black orthorhombic NaTaO3 nanocubes by surface modification and simultaneous N/Ta(4+) co-doping. *Journal of Colloid and Interface Science*, **2016**, 461, 185-194	9.3	15
45	Giant Pressure-Driven Lattice Collapse Coupled with Intermetallic Bonding and Spin-State Transition in Manganese Chalcogenides. *Angewandte Chemie*, **2016**, 128, 10506-10509	3.6	6
44	Controllable doping of nitrogen and tetravalent niobium affords yellow and black calcium niobate nanosheets for enhanced photocatalytic hydrogen evolution. *RSC Advances*, **2016**, 6, 64930-64936	3.7	22
43	Pressure-Driven Cooperative Spin-Crossover, Large-Volume Collapse, and Semiconductor-to-Metal Transition in Manganese(II) Honeycomb Lattices. *Journal of the American Chemical Society*, **2016**, 138, 15751-15757	16.4	50
42	Sodium Ion Transport Mechanisms in Antiperovskite Electrolytes Na3OBr and Na4OI2: An in Situ Neutron Diffraction Study. *Inorganic Chemistry*, **2016**, 55, 5993-8	5.1	48
41	Mesoporous Cd1-xZnxS microspheres with tunable bandgap and high specific surface areas for enhanced visible-light-driven hydrogen generation. *Journal of Colloid and Interface Science*, **2016**, 467, 97-104	9.3	37
40	Color-tunable and single-band red upconversion luminescence from rare-earth doped Vernier phase ytterbium oxyfluoride nanoparticles. *Journal of Materials Chemistry C*, **2016**, 4, 684-690	7.1	36
39	Reaction mechanism studies towards effective fabrication of lithium-rich anti-perovskites Li3OX (X= Cl, Br). *Solid State Ionics*, **2016**, 284, 14-19	3.3	58
38	Reversible switching between pressure-induced amorphization and thermal-driven recrystallization in VO2(B) nanosheets. *Nature Communications*, **2016**, 7, 12214	17.4	30
37	Enhanced ionic conductivity with Li7O2Br3 phase in Li3OBr anti-perovskite solid electrolyte. *Applied Physics Letters*, **2016**, 109, 101904	3.4	27
36	Robust high pressure stability and negative thermal expansion in sodium-rich antiperovskites Na3OBr and Na4OI2. *Journal of Applied Physics*, **2016**, 119, 025901	2.5	11
35	Elastic, magnetic and electronic properties of iridium phosphide Ir2P. *Scientific Reports*, **2016**, 6, 21787	4.9	14

34	Hexafluorobenzene under Extreme Conditions. *Journal of Physical Chemistry B*, **2016**, 120, 2854-8	3.4	8
33	High pressure studies of potassium perchlorate. *Chemical Physics Letters*, **2016**, 660, 37-42	2.5	9
32	Giant Pressure-Driven Lattice Collapse Coupled with Intermetallic Bonding and Spin-State Transition in Manganese Chalcogenides. *Angewandte Chemie - International Edition*, **2016**, 55, 10350-3	16.4	24
31	Enhanced Structural Stability and Photo Responsiveness of CH NH SnI Perovskite via Pressure-Induced Amorphization and Recrystallization. *Advanced Materials*, **2016**, 28, 8663-8668	24	134
30	Core-shell Cd0.2Zn0.8S@BiOX (X = Cl, Br and I) microspheres: a family of hetero-structured catalysts with adjustable bandgaps, enhanced stability and photocatalytic performance under visible light irradiation. *Dalton Transactions*, **2016**, 45, 13709-16	4.3	10
29	Structural manipulation approaches towards enhanced sodium ionic conductivity in Na-rich antiperovskites. *Journal of Power Sources*, **2015**, 293, 735-740	8.9	69
28	Impact of hydrostatic pressure on the crystal structure and photoluminescence properties of Mn4+-doped BaTiF6 red phosphor. *Dalton Transactions*, **2015**, 44, 7578-85	4.3	35
27	Pressure-Induced Phase Transformation, Reversible Amorphization, and Anomalous Visible Light Response in Organolead Bromide Perovskite. *Journal of the American Chemical Society*, **2015**, 137, 11144-9	16.4	226
26	Organosilane-functionalized graphene quantum dots and their encapsulation into bi-layer hollow silica spheres for bioimaging applications. *Physical Chemistry Chemical Physics*, **2014**, 16, 23188-95	3.6	45
25	Low-Temperature Fluorination Route to Lanthanide-Doped Monoclinic ScOF Host Material for Tunable and Nearly Single Band Up-Conversion Luminescence. *Journal of Physical Chemistry C*, **2014**, 118, 10314-10320	3.8	32
24	Note: Loading method of molecular fluorine using x-ray induced chemistry. *Review of Scientific Instruments*, **2014**, 85, 086110	1.7	10
23	Communication: A novel method for generating molecular mixtures at extreme conditions: the case of hydrogen and oxygen. *Journal of Chemical Physics*, **2014**, 141, 091101	3.9	7
22	Carbon tetrachloride under extreme conditions. *Journal of Chemical Physics*, **2014**, 140, 194503	3.9	9
21	The synthesis, crystal structure and multicolour up-conversion fluorescence of Yb3+/Ln3+ (Ln = Ho, Er, Tm) codoped orthorhombic lutetium oxyfluorides. *Journal of Materials Chemistry C*, **2013**, 1, 5711	7.1	27
20	Multicolour and up-conversion fluorescence of lanthanide doped Vernier phase yttrium oxyfluoride nanocrystals. *Journal of Materials Chemistry C*, **2013**, 1, 1995	7.1	39
19	Synthesis, crystal structure and visible light emission of a new inorganic–organic hybrid pentaborate, [C6H14N][B5O6(OH)4]. *Journal of Molecular Structure*, **2013**, 1048, 1-5	3.4	8
18	Selected-control hydrothermal growths of □and □PbO crystals and orientated pressure-induced phase transition. *CrystEngComm*, **2013**, 15, 3513-3516	3.3	10
17	Synthesis of PbMoO4 nanorods by a simple sonochemical method. *Journal of the Ceramic Society of Japan*, **2013**, 121, 745-748	1	2

16	Controlled synthesis of CaMoO4 and SrMoO4 rods by a simple sonochemical method. *Journal of the Ceramic Society of Japan*, **2012**, 120, 378-381	1	3
15	Morphology-controlled synthesis of PbMoO4 crystals by a simple sonochemical method. *Journal of the Ceramic Society of Japan*, **2012**, 120, 609-612	1	2
14	Facile morphology-controlled synthesis of Ba1-xSrxTiO3 (0 .LEQ. x Journal of the Ceramic Society of Japan, **2012**, 120, 43-46	1	2
13	Hydrothermal growths, optical features and first-principles calculations of sillenite-type crystals comprising discrete MO4 tetrahedra. *CrystEngComm*, **2012**, 14, 1063-1068	3.3	27
12	Syntheses and properties of a series of chromium vanadates ACrV2O7 (A=Na, K, Rb, Cs) with layered structure. *Journal of Solid State Chemistry*, **2012**, 192, 1-6	3.3	2
11	Growth, characterization and the fourth harmonic generation at 266nm of K2Al2B2O7 crystals without UV absorptions and Na impurity. *Journal of Crystal Growth*, **2012**, 348, 1-4	1.6	12
10	Controllable synthesis of CdWO4 nanorods and nanowires via a surfactant-free hydrothermal method. *Journal of the Ceramic Society of Japan*, **2012**, 120, 259-261	1	10
9	High-surface vanadium oxides with large capacities for lithium-ion batteries: from hydrated aerogel to nanocrystalline VO2(B), V6O13 and V2O5. *Journal of Materials Chemistry*, **2011**, 21, 10999		143
8	K2Fe2B2O7: A transparent nonlinear optical crystal with frustrated magnetism. *Journal of Solid State Chemistry*, **2010**, 183, 1221-1225	3.3	18
7	d□ Transitions of Fe3+ ions in Fe-doped K2Al2B2O7 crystal. *Optical Materials*, **2010**, 32, 1313-1316	3.3	20
6	Mineralizer-Assisted Hydrothermal Synthesis and Characterization of BiFeO3 Nanoparticles. *Journal of the American Ceramic Society*, **2007**, 90, 2615-2617	3.8	92
5	Alkali Metal Ions-Assisted Controllable Synthesis of Bismuth Ferrites by a Hydrothermal Method. *Journal of the American Ceramic Society*, **2007**, 90, 3673-3675	3.8	50
4	Synthesis and Characterization of Mesoporous SrTiO3 Spheres via a Poly Vinyl Alcohol-Assisted Hydrothermal Route. *Journal of the American Ceramic Society*, **2007**, 91, 299-302	3.8	16
3	Synthesis of Highly Dispersed Barium Titanate Nanoparticles by a Novel Solvothermal Method. *Journal of the American Ceramic Society*, **2007**, 91, 315-318	3.8	28
2	High pressure resonant X-ray emission studies of WO3 and hydrogenated WO3		2
1	Controllable Preparation of PbMoO4 Nanorods and Nanowires by a Simple Sonochemical Method. *Journal of Cluster Science*,1	3	2