Wei-Qiang Liao

List of Publications by Year
in descending order

108	11,759	41344 49	27406 106
papers	citations	h-index	g-index

108	108	108	8099
all docs	docs citations	times ranked	citing authors

#	Article	IF	Citations
1	An unprecedented azobenzene-based organic single-component ferroelectric. Chemical Science, 2022, 13, 4936-4943.	7.4	12
2	Optically Controlled Polarization Switching in an Organic Ferroelectric with Light- and Temperature-Triggered Phase Transitions. Chemistry of Materials, 2022, 34, 3067-3075.	6.7	8
3	Domain memory effect in the organic ferroics. Nature Communications, 2022, 13, 2379.	12.8	17
4	Unprecedented Ferroelectricity and Ferromagnetism in a Cr²⁺â€Based Twoâ€Dimensional Hybrid Perovskite. Angewandte Chemie, 2022, 134, .	2.0	3
5	Unprecedented Ferroelectricity and Ferromagnetism in a Cr²⁺â€Based Twoâ€Dimensional Hybrid Perovskite. Angewandte Chemie - International Edition, 2022, 61, .	13.8	32
6	A high-T_c organic-ionic phase transition crystal obtained from a trivalent cation. CrystEngComm, 2021, 23, 264-267.	2.6	1
7	A lead-free bismuth iodide organicâ€“inorganic ferroelectric semiconductor. Chemical Communications, 2021, 57, 647-650.	4.1	16
8	Homochiral anionic modification toward the chemical design of organic enantiomeric ferroelectrics. Chemical Communications, 2021, 57, 5171-5174.	4.1	8
9	PFM (piezoresponse force microscopy)-aided design for molecular ferroelectrics. Chemical Society Reviews, 2021, 50, 8248-8278.	38.1	63
10	Homochiral one-dimensional ABX₃ lead halide perovskites with high-T_c quadratic nonlinear optical and dielectric switchings. Materials Chemistry Frontiers, 2021, 5, 4756-4763.	5.9	36
11	Highly Efficient 1D/3D Ferroelectric Perovskite Solar Cell. Advanced Functional Materials, 2021, 31, 2100205.	14.9	24
12	Evident Dielectric Relaxation in an Organicâ€Inorganic Halide Perovskite. European Journal of Inorganic Chemistry, 2021, 2021, 2749-2754.	2.0	6
13	Enantiomeric perovskite with a dual phase transition at high temperature. Journal of Materials Chemistry C, 2021, 9, 1918-1922.	5.5	16
14	Room-temperature dielectric switching in a hostâ€“guest crown ether inclusion complex. Inorganic Chemistry Frontiers, 2021, 8, 4896-4902.	6.0	15
15	H/F substitution for advanced molecular ferroelectrics. Trends in Chemistry, 2021, 3, 1088-1099.	8.5	48
16	Optically Induced Ferroelectric Polarization Switching in a Molecular Ferroelectric with Reversible Photoisomerization. Advanced Science, 2021, 8, e2102614.	11.2	31
17	Multichannel Control of Multiferroicity in Single-Component Homochiral Organic Crystals. Journal of the American Chemical Society, 2021, 143, 21685-21693.	13.7	52
18	A Molecular Thermochromic Ferroelectric. Angewandte Chemie, 2020, 132, 3523-3527.	2.0	15

#	Article	IF	Citations
19	A Molecular Thermochromic Ferroelectric. Angewandte Chemie - International Edition, 2020, 59, 3495-3499.	13.8	57
20	An Above-Room-Temperature Molecular Ferroelectric: [Cyclopentylammonium]₂CdBr₄. Inorganic Chemistry, 2020, 59, 829-836.	4.0	48
21	Molecular Ferroelectricsâ€Driven Highâ€Performance Perovskite Solar Cells. Angewandte Chemie - International Edition, 2020, 59, 19974-19982.	13.8	71
22	Organic Ferroelectric Vortexâ€“Antivortex Domain Structure. Journal of the American Chemical Society, 2020, 142, 21932-21937.	13.7	31
23	Highest-T_c organic enantiomeric ferroelectrics obtained by F/H substitution. Chemical Communications, 2020, 56, 7033-7036.	4.1	33
24	Precise Molecular Design Toward Organicâ€“Inorganic Zinc Chloride ABX₃ Ferroelectrics. Journal of the American Chemical Society, 2020, 142, 6236-6243.	13.7	74
25	Homochiral Nickel Nitrite ABX₃ (X = NO₂^{â€“}) Perovskite Ferroelectrics. Journal of the American Chemical Society, 2020, 142, 6946-6950.	13.7	45
26	A Three-Dimensional Lead Halide Perovskite-Related Ferroelectric. Journal of the American Chemical Society, 2020, 142, 4604-4608.	13.7	97
27	A Chiral Thermochromic Ferroelastic with Seven Physical Channel Switches. Angewandte Chemie, 2020, 132, 9661-9665.	2.0	16
28	A Chiral Thermochromic Ferroelastic with Seven Physical Channel Switches. Angewandte Chemie - International Edition, 2020, 59, 9574-9578.	13.8	106
29	Switchable Dielectric Phase Transition with Drastic Symmetry Breaking in a Sn(IV)-Based Perovskite-Type Halide Semiconductor. Journal of Physical Chemistry C, 2019, 123, 21161-21166.	3.1	31
30	High-Temperature Dielectric Switching and Photoluminescence in a Corrugated Lead Bromide Layer Hybrid Perovskite Semiconductor. Inorganic Chemistry, 2019, 58, 10357-10363.	4.0	43
31	A Threeâ€Dimensional M₃ABâ€Type Hybrid Organicâ€“Inorganic Antiperovskite Ferroelectric: [C₃H₇FN]₃[SnCl₆]Cl. Chemistry - A European Journal, 2019, 25, 16625-16629.	3.3	18
32	Opticalâ€Dielectric Duple Bistable Switches: Photoluminescence of Reversible Phase Transition Molecular Material. Chemistry - an Asian Journal, 2019, 14, 3863-3867.	3.3	6
33	Two-Dimensional Organicâ€“Inorganic Perovskite Ferroelectric Semiconductors with Fluorinated Aromatic Spacers. Journal of the American Chemical Society, 2019, 141, 18334-18340.	13.7	157
34	Above room-temperature dielectric and nonlinear optical switching materials based on [(CH3)3S]2[MBr4] (M = Cd, Mn and Zn). Dalton Transactions, 2019, 48, 11292-11297.	3.3	34
35	H/Fâ€Substitutionâ€Induced Homochirality for Designing Highâ€T_c Molecular Perovskite Ferroelectrics. Advanced Materials, 2019, 31, e1902163.	21.0	117
36	Reversible high temperature dielectric switching in a 2H-perovskite compound: [Me₃NCH₂CH₃]CdCl₃. CrystEngComm, 2019, 21, 2669-2674.	2.6	15

#	Article	IF	Citations
37	The First 2D Homochiral Lead Iodide Perovskite Ferroelectrics: [Râ€•and Sâ€‐(4â€Chlorophenyl)ethylammonium]₂PbI₄. Advanced Materials, 2019, 31, e1808088.	21.0	268
38	Organic enantiomeric high- T _c ferroelectrics. Proceedings of the National Academy of Sciences of the United States of America, 2019, 116, 5878-5885.	7.1	137
39	[C₆N₂H₁₈][SbI₅]: A Lead-free Hybrid Halide Semiconductor with Exceptional Dielectric Relaxation. Inorganic Chemistry, 2019, 58, 4337-4343.	4.0	24
40	A molecular perovskite solid solution with piezoelectricity stronger than lead zirconate titanate. Science, 2019, 363, 1206-1210.	12.6	401
41	Ultrahigh phase transition temperature in a metalâ€“halide perovskite-type material containing unprecedented hydrogen bonding interactions. Dalton Transactions, 2019, 48, 6621-6626.	3.3	16
42	A high temperature optic-electric duple switching organic ionic compound: 1,4,7-triazoniacyclononane tetrafluoroborate dichloride. Journal of Materials Chemistry C, 2019, 7, 5348-5352.	5.5	9
43	Unprecedented Dielectric Bistable Switching in a Binuclear HgII Based Hybrid Compound. European Journal of Inorganic Chemistry, 2019, 2019, 800-807.	2.0	10
44	Fluorine Substitution Induced High T_c of Enantiomeric Perovskite Ferroelectrics: (R)- and (S)-3-(Fluoropyrrolidinium)MnCl₃. Journal of the American Chemical Society, 2019, 141, 4474-4479.	13.7	160
45	A Semiconducting Organicâ€“Inorganic Hybrid Perovskiteâ€type Nonâ€ferroelectric Piezoelectric with Excellent Piezoelectricity. Chemistry - an Asian Journal, 2019, 14, 1028-1033.	3.3	18
46	Atomistic Mechanism of Broadband Emission in Metal Halide Perovskites. Journal of Physical Chemistry Letters, 2019, 10, 501-506.	4.6	190
47	Directional Intermolecular Interactions for Precise Molecular Design of a High-T_c Multiaxial Molecular Ferroelectric. Journal of the American Chemical Society, 2019, 141, 1781-1787.	13.7	74
48	Competitive Halogen Bond in the Molecular Ferroelectric with Large Piezoelectric Response. Journal of the American Chemical Society, 2018, 140, 3975-3980.	13.7	151
49	High-temperature reversible phase transitions and exceptional dielectric anomalies in cobalt(<scp>ii</scp>) based ionic crystals: [Me₃NCH₂X]₂[CoX₄] (X = Cl and Br). Dalton Transactions, 2018, 47, 6218-6224.	3.3	28
50	High-temperature sequential structural transitions with distinct switchable dielectric behaviors in two organic ionic plastic crystals: [C₄H₁₁NBr] [ClO₄] and [C₄H₁₁NBr] [BF₄]. CrystEngComm, 2018, 20, 454-459.	2.6	19
51	The Narrowest Band Gap Ever Observed in Molecular Ferroelectrics: Hexaneâ€1,6â€diammonium Pentaiodobismuth(III). Angewandte Chemie, 2018, 130, 535-539.	2.0	72
52	The Narrowest Band Gap Ever Observed in Molecular Ferroelectrics: Hexaneâ€1,6â€diammonium Pentaiodobismuth(III). Angewandte Chemie - International Edition, 2018, 57, 526-530.	13.8	85
53	A temperature-triggered triplex bistable switch in a hybrid multifunctional material: [(CH₂)₄N(CH₂)₄]₂[MnBr₄]. Dalton Transactions, 2018, 47, 16995-17003.	3.3	43
54	High-Temperature Ferroelastic Phase Transition in an Organicâ€“Inorganic Hybrid: [(CH₃)₃NCH₂Br]₂â€“ZnBr₄. Journal of Physical Chemistry C, 2018, 122, 23111-23116.	3.1	30

#	Article	IF	Citations
55	Switchable dielectric phase transition behaviors in two organicâ€“inorganic copper(<scp>ii</scp>) halides with distinct coordination geometries. CrystEngComm, 2018, 20, 6261-6266.	2.6	8
56	A Room-Temperature Hybrid Lead Iodide Perovskite Ferroelectric. Journal of the American Chemical Society, 2018, 140, 12296-12302.	13.7	168
57	Experimental Evidence for a Triboluminescent Antiperovskite Ferroelectric: Tris(trimethylammonium) catenaâ€Triâ€¼â€chloroâ€manganate(II) Tetrachloromanganate(II). Angewandte Chemie, 2018, 130, 12115-12118.	2.0	17
58	Three-dimensional organicâ€“inorganic hybrid sodium halide perovskite: C₄H₁₂N₂Â·NaI₃ and a hydrogen-bonded supramolecular three-dimensional network in 3C₄H₁₂N₂Â·NaI₄Â·3IÂ·H₂O. Acta Crystallographica Section C, Structural Chemistry, 2018, 74, 728-733.	0.5	6
59	Experimental Evidence for a Triboluminescent Antiperovskite Ferroelectric: Tris(trimethylammonium) catenaâ€Triâ€¼â€chloroâ€manganate(II) Tetrachloromanganate(II). Angewandte Chemie - International Edition, 2018, 57, 11939-11942.	13.8	24
60	Metal-free three-dimensional perovskite ferroelectrics. Science, 2018, 361, 151-155.	12.6	570
61	A high-temperature molecular ferroelastic phase transition and switchable dielectric response in the trimethylbromomethylammonium salt [C₄H₁₁NBr] [PF₆]. New Journal of Chemistry, 2018, 42, 14909-14913.	2.8	13
62	Multiaxial Molecular Ferroelectric Thin Films Bring Light to Practical Applications. Journal of the American Chemical Society, 2018, 140, 8051-8059.	13.7	160
63	Discovery of an Antiperovskite Ferroelectric in [(CH₃)₃NH]₃(MnBr₃)(MnBr₄). Journal of the American Chemical Society, 2018, 140, 8110-8113.	13.7	79
64	A semiconducting molecular ferroelectric with a bandgap much lower than that of BiFeO3. NPG Asia Materials, 2017, 9, e342-e342.	7.9	54
65	Low-bandgap mixed tinâ€“lead iodide perovskite absorbers with long carrier lifetimes for all-perovskite tandem solar cells. Nature Energy, 2017, 2, .	39.5	634
66	Dielectric and ferroelectric sensing based on molecular recognition in Cu(1,10-phenlothroline)2SeO4Â·(diol) systems. Nature Communications, 2017, 8, 14551.	12.8	36
67	Tunable Dielectric Responses Triggered by Dimensionality Modification in Organicâ€“Inorganic Hybrid Phase Transition Compounds (C₅H₆N)Cd_nCl_{2n+1} (n = 1 and 2). Inorganic Chemistry, 2017, 56, 3506-3511.	4.0	22
68	Understanding and Eliminating Hysteresis for Highly Efficient Planar Perovskite Solar Cells. Advanced Energy Materials, 2017, 7, 1700414.	19.5	190
69	Synergistic Effects of Lead Thiocyanate Additive and Solvent Annealing on the Performance of Wide-Bandgap Perovskite Solar Cells. ACS Energy Letters, 2017, 2, 1177-1182.	17.4	190
70	An Aboveâ€Roomâ€Temperature Phase Transition with Dielectricâ€Switching Properties in a Halogenobismuthate(III) â€“ Tris(Cyclohexylmethylammonium) Pentabromobismuthate(III) Bromide. European Journal of Inorganic Chemistry, 2017, 2017, 3555-3560.	2.0	5
71	Unprecedented Ferroelectricâ€“Antiferroelectricâ€“Paraelectric Phase Transitions Discovered in an Organicâ€“Inorganic Hybrid Perovskite. Journal of the American Chemical Society, 2017, 139, 8752-8757.	13.7	105
72	Compositional and morphological engineering of mixed cation perovskite films for highly efficient planar and flexible solar cells with reduced hysteresis. Nano Energy, 2017, 35, 223-232.	16.0	162

#	Article	IF	Citations
73	Phaseâ€Transition and Photoluminescence Properties of a Hybrid Layered Perovskite: Bis[(cyclohexylmethyl)ammonium] Tetrabromidolead(II). European Journal of Inorganic Chemistry, 2017, 2017, 938-942.	2.0	21
74	Notable Broad Dielectric Relaxation and Highly Efficient Red Photoluminescence in a Perovskite-Type Compound: (N-Methylpyrrolidinium)MnCl₃. Inorganic Chemistry, 2017, 56, 12193-12198.	4.0	45
75	A room temperature reversible phase transition containing dielectric switching of a hostâ€“guest supramolecular metalâ€“halide compound. Dalton Transactions, 2017, 46, 12760-12765.	3.3	10
76	Tracking the maximum power point of hysteretic perovskite solar cells using a predictive algorithm. Journal of Materials Chemistry C, 2017, 5, 10152-10157.	5.5	18
77	Precise Molecular Design of High-T_c 3D Organicâ€“Inorganic Perovskite Ferroelectric: [MeHdabco]RbI₃ (MeHdabco =) Tj ETQq1 1 0.784314 rgBT /Overlock 10 Tf 50 582 Td (N-Methyl-1,4-d 10897-10902.	13.7	190
78	An organic-inorganic perovskite ferroelectric with large piezoelectric response. Science, 2017, 357, 306-309.	12.6	744
79	Large Piezoelectric Effect in a Lead-Free Molecular Ferroelectric Thin Film. Journal of the American Chemical Society, 2017, 139, 18071-18077.	13.7	160
80	Modulating molecular structures and dielectric transitions in organicâ€“inorganic hybrid crystals. RSC Advances, 2017, 7, 52024-52029.	3.6	3
81	Unusual two-step sequential reversible phase transitions with coexisting switchable nonlinear optical and dielectric behaviors in [(CH₃)₃NCH₂Cl]₂[ZnCl₄]. Journal of Materials Chemistry C, 2017, 5, 11873-11878.	5.5	40
82	A Molecular Polycrystalline Ferroelectric with Recordâ€High Phase Transition Temperature. Advanced Materials, 2017, 29, 1700831.	21.0	72
83	Low-temperature plasma-enhanced atomic layer deposition of tin oxide electron selective layers for highly efficient planar perovskite solar cells. Journal of Materials Chemistry A, 2016, 4, 12080-12087.	10.3	210
84	Structureâ€Triggered High Quantum Yield Luminescence and Switchable Dielectric Properties in Manganese(II) Based Hybrid Compounds. Chemistry - an Asian Journal, 2016, 11, 981-985.	3.3	49
85	Symmetry breaking in molecular ferroelectrics. Chemical Society Reviews, 2016, 45, 3811-3827.	38.1	499
86	Leadâ€Free Inverted Planar Formamidinium Tin Triiodide Perovskite Solar Cells Achieving Power Conversion Efficiencies up to 6.22%. Advanced Materials, 2016, 28, 9333-9340.	21.0	636
87	A symmetry breaking phase transition-triggered high-temperature solid-state quadratic nonlinear optical switch coupled with a switchable dielectric constant in an organicâ€“inorganic hybrid compound. Chemical Communications, 2016, 52, 11135-11138.	4.1	57
88	Thermally evaporated methylammonium tin triiodide thin films for lead-free perovskite solar cell fabrication. RSC Advances, 2016, 6, 90248-90254.	3.6	114
89	Symmetry Breaking Phase Transition, Second-Order Nonlinear Optical and Dielectric Properties of a One-Dimensional Organicâ€“Inorganic Hybrid Zigzag Chain Compound [NH₃(CH₂)₅NH₃]SbBr₅. Crystal Growth and Design, 2016, 16, 6105-6110.	3.0	19
90	Fabrication of Efficient Low-Bandgap Perovskite Solar Cells by Combining Formamidinium Tin Iodide with Methylammonium Lead Iodide. Journal of the American Chemical Society, 2016, 138, 12360-12363.	13.7	362

#	Article	IF	Citations
91	Temperature-Triggered Dielectric-Optical Duple Switch Based on an Organicâ€“Inorganic Hybrid Phase Transition Crystal: [C₅N₂H₁₆]₂SbBr₅. Inorganic Chemistry, 2016, 55, 7661-7666.	4.0	31
92	Improving the Performance of Formamidinium and Cesium Lead Triiodide Perovskite Solar Cells using Lead Thiocyanate Additives. ChemSusChem, 2016, 9, 3288-3297.	6.8	178
93	Employing Lead Thiocyanate Additive to Reduce the Hysteresis and Boost the Fill Factor of Planar Perovskite Solar Cells. Advanced Materials, 2016, 28, 5214-5221.	21.0	487
94	Bandgap Engineering of Leadâ€Halide Perovskiteâ€Type Ferroelectrics. Advanced Materials, 2016, 28, 2579-2586.	21.0	298
95	Design and Prominent Dielectric Properties of a Layered Phase-Transition Crystal: (Cyclohexylmethylammonium)₂CdCl₄. Crystal Growth and Design, 2016, 16, 3912-3916.	3.0	24
96	Photovoltaic Properties of Two-Dimensional (CH₃NH₃)₂Pb(SCN)₂I₂ Perovskite: A Combined Experimental and Density Functional Theory Study. Journal of Physical Chemistry Letters, 2016, 7, 1213-1218.	4.6	135
97	Structural characterization, phase transition and switchable dielectric behaviors in a new zigzag chain organicâ€“inorganic hybrid compound: [C₃H₇NH₃]₂SbI₅. Dalton Transactions, 2016, 45, 5229-5233.	3.3	30
98	Dielectric and photoluminescence properties of a layered perovskite-type organicâ€“inorganic hybrid phase transition compound: NH₃(CH₂)₅NH₃MnCl₄. Journal of Materials Chemistry C, 2016, 4, 1881-1885.	5.5	84
99	The First Organicâ€“Inorganic Hybrid Luminescent Multiferroic: (Pyrrolidinium)MnBr₃. Advanced Materials, 2015, 27, 3942-3946.	21.0	263
100	A lead-halide perovskite molecular ferroelectric semiconductor. Nature Communications, 2015, 6, 7338.	12.8	538
101	Phase transitions and dielectric properties of a hexagonal ABX₃perovskite-type organicâ€“inorganic hybrid compound: [C₃H₄NS][CdBr₃]. Dalton Transactions, 2015, 44, 10614-10620.	3.3	60
102	Highly Efficient Red-Light Emission in An Organicâ€“Inorganic Hybrid Ferroelectric: (Pyrrolidinium)MnCl₃. Journal of the American Chemical Society, 2015, 137, 4928-4931.	13.7	308
103	High-Temperature Ferroelectricity and Photoluminescence in a Hybrid Organicâ€“Inorganic Compound: (3-Pyrrolinium)MnCl₃. Journal of the American Chemical Society, 2015, 137, 13148-13154.	13.7	246
104	Sequential structural transitions with distinct dielectric responses in a layered perovskite organicâ€“inorganic hybrid material: [C₄H₉N]₂[PbBr₄]. Dalton Transactions, 2015, 44, 20406-20412.	3.3	56
105	Structural phase transitions coupled with prominent dielectric anomalies and dielectric relaxation in a one-dimensional organicâ€“inorganic hybrid compound [C₃H₄NS][CdCl₃]. Journal of Materials Chemistry C, 2015, 3, 8535-8541.	5.5	22
106	Temperature-Triggered Reversible Dielectric and Nonlinear Optical Switch Based on the One-Dimensional Organicâ€“Inorganic Hybrid Phase Transition Compound [C₆H₁₁NH₃]₂CdCl₄. Inorganic Chemistry, 2014, 53, 11146-11151.	4.0	85
107	Structural Phase Transitions of a Layered Organicâ€“Inorganic Hybrid Compound: Tetra(cyclopentylammonium) Decachlorotricadmate(II), [C₅H₉NH₃]₄Cd₃Cl₁₀. Inorganic Chemistry, 2014, 53, 8913-8918.	4.0	50
108	Reversible Phase Transition of 1,4-Diazoniabicyclo[2.2.2]octane-1-acetate-4-acetic Acid Chloride Trihydrate. Crystal Growth and Design, 2013, 13, 4025-4030.	3.0	35