Bin-Wen Liu

List of Publications by Year
in descending order

46 papers	2,187 citations	218677 26 h-index	223800 46 g-index
51 all docs	51 docs citations	51 times ranked	961 citing authors

#	Article	IF	Citations
1	[ABa₂Cl][Ga₄S₈] (A = Rb, Cs): Wide-Spectrum Nonlinear Optical Materials Obtained by Polycation-Substitution-Induced Nonlinear Optical (NLO)-Functional Motif Ordering. Journal of the American Chemical Society, 2020, 142, 10641-10645.	13.7	180
2	[A₃X][Ga₃PS₈] (A = K, Rb; X = Cl, Br): promising IR non-linear optical materials exhibiting concurrently strong second-harmonic generation and high laser induced damage thresholds. Chemical Science, 2016, 7, 6273-6277.	7.4	167
3	Large Second Harmonic Generation (SHG) Effect and High Laserâ€Induced Damage Threshold (LIDT) Observed Coexisting in Gallium Selenide. Angewandte Chemie - International Edition, 2019, 58, 8087-8091.	13.8	145
4	Li[LiCs₂Cl][Ga₃S₆]: A Nanoporous Framework of GaS₄ Tetrahedra with Excellent Nonlinear Optical Performance. Angewandte Chemie - International Edition, 2020, 59, 4856-4859.	13.8	117
5	Second-order nonlinear optical switching with a record-high contrast for a photochromic and thermochromic bistable crystal. Chemical Science, 2017, 8, 7751-7757.	7.4	104
6	New strategy for designing promising mid-infrared nonlinear optical materials: narrowing the band gap for large nonlinear optical efficiencies and reducing the thermal effect for a high laser-induced damage threshold. Chemical Science, 2018, 9, 5700-5708.	7.4	104
7	Semiconductive Nanotube Array Constructed from Giant [Pb^{II}₁₈I₅₄(I₂)₉] Wheel Clusters. Angewandte Chemie - International Edition, 2016, 55, 514-518.	13.8	98
8	Coordination Polymerization of Metal Azides and Powerful Nitrogen-Rich Ligand toward Primary Explosives with Excellent Energetic Performances. Chemistry of Materials, 2017, 29, 9725-9733.	6.7	92
9	Directed self-assembly of viologen-based 2D semiconductors with intrinsic UVâ€“SWIR photoresponse after photo/thermo activation. Nature Communications, 2020, 11, 1179.	12.8	88
10	Superpolyhedron-Built Second Harmonic Generation Materials Exhibit Large Mid-Infrared Conversion Efficiencies and High Laser-Induced Damage Thresholds. Chemistry of Materials, 2017, 29, 1796-1804.	6.7	84
11	Syntheses, Structures, and Nonlinear-Optical Properties of Metal Sulfides Ba₂Ga₈MS₁₆ (M = Si, Ge). Inorganic Chemistry, 2015, 54, 976-981.	4.0	80
12	Oxychalcogenide BaGeOSe₂: Highly Distorted Mixed-Anion Building Units Leading to a Large Second-Harmonic Generation Response. Chemistry of Materials, 2015, 27, 8189-8192.	6.7	74
13	Ln3GaS6 (Ln = Dy, Y): new infrared nonlinear optical materials with high laser induced damage thresholds. Dalton Transactions, 2013, 42, 14223.	3.3	63
14	SrCdSnQ₄ (Q = S and Se): infrared nonlinear optical chalcogenides with mixed NLO-active and synergetic distorted motifs. Journal of Materials Chemistry C, 2019, 7, 4459-4465.	5.5	52
15	Crystal structures and optical properties of iodoplumbates hybrids templated by in situ synthesized 1,4-diazabicyclo[2.2.2]octane derivatives. CrystEngComm, 2013, 15, 10399.	2.6	50
16	Syntheses, Structures, and Nonlinear Optical Properties of Two Sulfides Na₂In₂MS₆ (M = Si, Ge). Inorganic Chemistry, 2016, 55, 1480-1485.	4.0	50
17	Large Second-Harmonic Generation Responses Achieved by the Dimeric [Ge₂Se₄(Î¼-Se₂)]^{4â€“} Functional Motif in Polar Polyselenides A₄Ge₄Se₁₂ (A = Rb, Cs). Chemistry of Materials, 2017, 29, 9200-9207.	6.7	47
18	Phase Matching Achieved by Bandgap Widening in Infrared Nonlinear Optical Materials [ABa ₃ Cl ₂][Ga ₅ S ₁₀] (A= K, Rb, and Cs). CCS Chemistry, 2021, 3, 964-973.	7.8	42

#	ARTICLE	IF	CITATIONS
19	Strong Infrared Nonlinear Optical Efficiency and High Laser Damage Threshold Realized in Quaternary Alkali Metal Sulfides Na₂Ga₂MS₆ (M = Ge, Sn) Containing Mixed Nonlinear Optically Active Motifs. Inorganic Chemistry, 2018, 57, 6783-6786.	4.0	40
20	Synthesis, crystal structure and second-order nonlinear optical property of a novel pentanary selenide (K₃I)[InB₁₂(InSe₄)₃]. Dalton Transactions, 2016, 45, 10459-10465.	3.3	39
21	Phase Transition and Second Harmonic Generation in Thiophosphates Ag₂Cd(P₂S₆) and AgCd₃(PS₄)S₂ Containing Two Second-Order Jahnâ€“Teller Distorted Cations. Inorganic Chemistry, 2017, 56, 114-124.	4.0	39
22	Large Second Harmonic Generation (SHG) Effect and High Laserâ€Induced Damage Threshold (LIDT) Observed Coexisting in Gallium Selenide. Angewandte Chemie, 2019, 131, 8171-8175.	2.0	37
23	Li[LiCs₂Cl][Ga₃S₆]: A Nanoporous Framework of GaS₄ Tetrahedra with Excellent Nonlinear Optical Performance. Angewandte Chemie, 2020, 132, 4886-4889.	2.0	35
24	BaMnSnS₄ and BaCdGeS₄: infrared nonlinear optical sulfides containing highly distorted motifs with centers of moderate electronegativity. Inorganic Chemistry Frontiers, 2019, 6, 2365-2368.	6.0	30
25	Strong SHG Response via High Orientation of Tetrahedral Functional Motifs in Polyselenide A₂Ge₄Se₁₀ (A = Rb, Cs). Advanced Optical Materials, 2018, 6, 1800156.	7.3	29
26	Uncovering a Functional Motif of Nonlinear Optical Materials by In Situ Electron Density and Wavefunction Studies Under Laser Irradiation. Angewandte Chemie - International Edition, 2021, 60, 11799-11803.	13.8	26
27	Strong nonlinear optical effect attained by atom-response-theory aided design in the Na₂M^{II}MIV2Q₆ (M^{II} = Zn, Cd; M^{IV} = Ge, Sn;) Tj ETQq1 1 0.784314 rgB	5.5	25
28	AMnAs₃S₆ (A = Cs, Rb): Phase-Matchable Infrared Nonlinear Optical Functional Motif [As₃S₆]^{3â€“} Obtained via Surfactantâ€“Thermal Method. ACS Applied Materials & Interfaces, 2020, 12, 53950-53956.	8.0	25
29	ASb₅S₈ (A = K, Rb, and Cs): Thermal Switching of Infrared Nonlinear Optical Properties across the Crystal/Glass Transformation. Chemistry of Materials, 2021, 33, 3729-3735.	6.7	23
30	Superior Infrared Nonlinear Optical Performance Achieved by Synergetic Functional Motif and Vacancy Site Modulations. Chemistry of Materials, 2021, 33, 8831-8837.	6.7	23
31	Optimizing the Nonlinear Optical Performance of an A-N-M-Q (A: Alkali Metal; N: <i>d</i>¹⁰) Tj ETQq1 1 0.784314 rgBT 4352-4359.	8.0	23
32	Balanced infrared nonlinear optical performance achieved by modulating the covalency and ionicity distributions in the electron localization function map. Materials Horizons, 2021, 8, 3394-3398.	12.2	22
33	Thiophosphates Containing Ag⁺ and Lone-Pair Cations with Interchiral Double Helix Show Both Ionic Conductivity and Phase Transition. Inorganic Chemistry, 2017, 56, 962-973.	4.0	21
34	Broad transparency and wide band gap achieved in a magnetic infrared nonlinear optical chalcogenide by suppressing dâ€“d transitions. Materials Horizons, 2022, 9, 1513-1517.	12.2	21
35	Ba13In12Zn7S38 and Ba12In12Zn8Se38: infrared nonlinear optical chalcogenides designed by zinc-induced non-centrosymmetry transformation. Journal of Materials Chemistry C, 2020, 8, 3688-3693.	5.5	17
36	A₂Zn₃P₄S₁₃ (A = Rb and Cs): First Infrared Nonlinear Optical Materials with Mixed Thiophosphate Functional Motifs PS₄ and P₂S₆. Journal of Materials Chemistry C, 2022, 10, 9146-9151.	5.5	12

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37	Faceâ€Shared Octahedral Dimer In₂O₇S₂ in the Nonâ€Centrosymmetric Barium Indiumsilicate Oxysulfide Ba₂In₂Si₃O₁₀S. European Journal of Inorganic Chemistry, 2016, 2016, 1846-1850.	2.0	8
38	Infrared nonlinear optical performances of a new sulfide Î²-PbGa2S4. Journal of Alloys and Compounds, 2022, 905, 164090.	5.5	8
39	A new salt-inclusion chalcogenide exhibiting distinctive [Cd11In9S26]3âˆ’ host framework and decent nonlinear optical performances. Journal of Alloys and Compounds, 2022, 902, 163656.	5.5	7
40	AIn₄S₆Cl (A = Rb and Cs) and Pb₅Sn₃Q₁₀Cl₂ (Q = S and Se): quaternary chalcohalides with mixed anionic coordination exhibit photocurrent responses. Dalton Transactions, 2022, 51, 6638-6645.	3.3	6
41	Threeâ€Dimensional Mercury Pnictide [Hg₄Z₂]²⁺ Cationic Frameworks Stabilized by Tetravalent Metal Halide Anions in Supramolecular Complexes: [Hg₄Z₂][MCl₆] (Z = P, As; M = Zr, Hf). European Journal of Inorganic Chemistry, 2013, 2013, 5980-5986.	2.0	3
42	Hg₅AsS₂I₃ â€“ A Narrowâ€Bandâ€Gap 2D Layered Compound with Different Trapped I^{â€“} Anions. European Journal of Inorganic Chemistry, 2015, 2015, 2402-2406.	2.0	2
43	Photocurrent, humidity sensitivity and proton conductivity properties of a new sulfide semiconductor CsCuS₄. Dalton Transactions, 2022, 51, 5561-5566.	3.3	2
44	Frontispiece: Semiconductive Nanotube Array Constructed from Giant [Pb^{II}₁₈I₅₄(I₂)₉] Wheel Clusters. Angewandte Chemie - International Edition, 2016, 55, .	13.8	0
45	Titelbild: Li[LiCs₂Cl][Ga₃S₆]: A Nanoporous Framework of GaS₄ Tetrahedra with Excellent Nonlinear Optical Performance (Angew. Chem. 12/2020). Angewandte Chemie, 2020, 132, 4621-4621.	2.0	0
46	Uncovering a Functional Motif of Nonlinear Optical Materials by In Situ Electron Density and Wavefunction Studies Under Laser Irradiation. Angewandte Chemie, 2021, 133, 11905-11909.	2.0	0