Joshua Young

List of Publications by Citations

36 papers	2,654 citations	20 h-index	44 g-index
44 ext. papers	3,160 ext. citations	8.3 avg, IF	5.45 L-index

#	Paper	IF	Citations
36	Ruddlesden–Popper Hybrid Lead Iodide Perovskite 2D Homologous Semiconductors. *Chemistry of Materials*, **2016**, 28, 2852-2867	9.6	1166
35	Pb2Ba3(BO3)3Cl: A Material with Large SHG Enhancement Activated by Pb-Chelated BO3 Groups. *Journal of the American Chemical Society*, **2015**, 137, 9417-22	16.4	220
34	Design and Synthesis of the Beryllium-Free Deep-Ultraviolet Nonlinear Optical Material Ba[ZnBO][PO]. *Advanced Materials*, **2015**, 27, 7380-5	24	208
33	Mixed-Metal Carbonate Fluorides as Deep-Ultraviolet Nonlinear Optical Materials. *Journal of the American Chemical Society*, **2017**, 139, 1285-1295	16.4	130
32	M4Mg4(P2O7)3 (M = K, Rb): Structural Engineering of Pyrophosphates for Nonlinear Optical Applications. *Chemistry of Materials*, **2017**, 29, 1845-1855	9.6	121
31	Bidenticity-Enhanced Second Harmonic Generation from Pb Chelation in Pb3Mg3TeP2O14. *Journal of the American Chemical Society*, **2016**, 138, 88-91	16.4	112
30	Electronic, Crystal Chemistry, and Nonlinear Optical Property Relationships in the Dugganite A3B3CD2O14 Family. *Journal of the American Chemical Society*, **2016**, 138, 4984-9	16.4	89
29	Octahedral Rotation Preferences in Perovskite Iodides and Bromides. *Journal of Physical Chemistry Letters*, **2016**, 7, 918-22	6.4	84
28	Learning from data to design functional materials without inversion symmetry. *Nature Communications*, **2017**, 8, 14282	17.4	55
27	Crystal structure and electronic properties of bulk and thin film brownmillerite oxides. *Physical Review B*, **2015**, 92,	3.3	53
26	The Next-Generation of Nonlinear Optical Materials: Rb3Ba3Li2Al4B6O20F—Synthesis, Characterization, and Crystal Growth. *Advanced Optical Materials*, **2017**, 5, 1700840	8.1	52
25	Density Functional Theory Modeling of MnO2 Polymorphs as Cathodes for Multivalent Ion Batteries. *Journal of Physical Chemistry C*, **2018**, 122, 8788-8795	3.8	48
24	Anharmonic lattice interactions in improper ferroelectrics for multiferroic design. *Journal of Physics Condensed Matter*, **2015**, 27, 283202	1.8	44
23	Atomic Scale Design of Polar Perovskite Oxides without Second-Order Jahn–Teller Ions. *Chemistry of Materials*, **2013**, 25, 4545-4550	9.6	39
22	Polar Oxides without Inversion Symmetry through Vacancy and Chemical Order. *Journal of the American Chemical Society*, **2017**, 139, 2833-2841	16.4	27
21	Interplay of Cation Ordering and Ferroelectricity in Perovskite Tin Iodides: Designing a Polar Halide Perovskite for Photovoltaic Applications. *Inorganic Chemistry*, **2017**, 56, 26-32	5.1	27
20	Tuning the ferroelectric polarization in AASMnWO6 double perovskites through A cation substitution. *Dalton Transactions*, **2015**, 44, 10644-53	4.3	25

19	Design of noncentrosymmetric perovskites from centric and acentric basic building units. *Journal of Materials Chemistry C*, **2016**, 4, 4016-4027	7.1	25
18	BaBTeO: A UV Nonlinear Optical Material. *Inorganic Chemistry*, **2018**, 57, 4771-4776	5.1	23
17	Ethylene Carbonate-Based Electrolyte Decomposition and Solid-Electrolyte Interphase Formation on Ca Metal Anodes. *Journal of Physical Chemistry Letters*, **2018**, 9, 3295-3300	6.4	21
16	Comparative Study of Ethylene Carbonate-Based Electrolyte Decomposition at Li, Ca, and Al Anode Interfaces. *ACS Applied Energy Materials*, **2019**, 2, 1676-1684	6.1	19
15	Improper ferroelectricity and piezoelectric responses in rhombohedral (A,A?)B2O6 perovskite oxides. *Physical Review B*, **2014**, 89,	3.3	16
14	Controlling the H to TSstructural phase transition via chalcogen substitution in MoTe monolayers. *Physical Chemistry Chemical Physics*, **2017**, 19, 31874-31882	3.6	12
13	Ab initio investigation of the elastic properties of bismuth-based alloys. *Physical Review B*, **2019**, 100,	3.3	8
12	N8 stabilized single-atom Pd for highly selective hydrogenation of acetylene. *Journal of Catalysis*, **2021**, 395, 46-53	7.3	6
11	Photocatalytically reductive defluorination of perfluorooctanoic acid (PFOA) using Pt/LaTiO nanoplates: Experimental and DFT assessment. *Journal of Hazardous Materials*, **2021**, 419, 126452	12.8	6
10	Inducing spontaneous electric polarizations in double perovskite iodide superlattices for ferroelectric photovoltaic materials. *Physical Review Materials*, **2018**, 2,	3.2	5
9	Valley phenomena in the candidate phase change material WSe2(1-x)Te2x. *Communications Physics*, **2020**, 3,	5.4	3
8	Optical Materials: Design and Synthesis of the Beryllium-Free Deep-Ultraviolet Nonlinear Optical Material Ba3(ZnB5O10)PO4 (Adv. Mater. 45/2015). *Advanced Materials*, **2015**, 27, 7379-7379	24	3
7	Ab initio investigation of the temperature-dependent elastic properties of Bi, Te and Cu. *Journal of Physics Condensed Matter*, **2020**, 32, 485902	1.8	2
6	Preventing Electrolyte Decomposition on a Ca Metal Electrode Interface Using an Artificial Solid-Electrolyte Interphase. *Advanced Theory and Simulations*, **2021**, 4, 2100018	3.5	2
5	Valley phenomena in the candidate phase change material WSeTe. *Communications Physics*, **2020**, 3,	5.4	1
4	Rational Synthesis of Polymeric Nitrogen N8 with Ultraviolet Irradiation and Its Oxygen Reduction Reaction Mechanism Study with In Situ Shell-Isolated Nanoparticle-Enhanced Raman Spectroscopy. *ACS Catalysis*,13034-13040	13.1	1
3	Computational investigation of enhanced properties in functionalized carbon nanotube doped polyvinyl alcohol gel electrolyte systems. *Physical Chemistry Chemical Physics*, **2021**, 23, 21286-21294	3.6	0
2	A practical way to enhance the synthesis of N from an N precursor, studied by both computational and experimental methods. *Physical Chemistry Chemical Physics*, **2021**, 23, 15713-15718	3.6	0

1	Effect of single atom Platinum (Pt) doping and facet dependent on the electronic structure and light absorption of Lanthanum Titanium Oxide (La2Ti2O7): A Density Functional Theory study. *Surface Science*, **2021**, 715, 121949	1.8	0