Yuntao Wu

List of Publications by Year
in descending order

98 papers	2,665 citations	201674 27 h-index	223800 46 g-index
98 all docs	98 docs citations	98 times ranked	2268 citing authors

#	Article	IF	Citations
1	Lead-Free Zero-Dimensional Organic-Copper(I) Halides as Stable and Sensitive X-ray Scintillators. ACS Applied Materials & Interfaces, 2022, 14, 14157-14164.	8.0	45
2	Effects of Clâˆ’ substitution on the scintillation properties of Cs2LiLaBr6-xClx:Ce crystals. Journal of Luminescence, 2022, 247, 118896.	3.1	7
3	Highly Resolved Xâ€Ray Imaging Enabled by In(I) Doped Perovskiteâ€Like Cs₃Cu₂I₅ Single Crystal Scintillator. Advanced Optical Materials, 2022, 10, .	7.3	54
4	Non-Hygroscopic, Self-Absorption Free, and Efficient 1D CsCu₂I₃ Perovskite Single Crystal for Radiation Detection. ACS Applied Materials & Interfaces, 2021, 13, 12198-12202.	8.0	52
5	Ultrabright and Highly Efficient Allâ€Inorganic Zeroâ€Dimensional Perovskite Scintillators. Advanced Optical Materials, 2021, 9, 2100460.	7.3	79
6	Undoped and Tlâ€Doped Cs₃Cu₂I₅ Thin Films as Potential Xâ€ray Scintillators. Physica Status Solidi - Rapid Research Letters, 2021, 15, 2100422.	2.4	9
7	Effects of different Eu concentrations and Cu, Mg or Ba ions co-doping on optical and scintillation properties of LiCaAlF6:Eu single crystals. Radiation Measurements, 2021, 147, 106638.	1.4	1
8	Effects of zirconium codoping on the optical and scintillation properties of SrI2:Eu<mml:math xmlns:mml="http://www.w3.org/1998/Math/MathML" display="inline" overflow="scroll" id="d1e283" altimg="si9.gif"><mml:msup><mml:mrow /><mml:mrow><mml:mn>2</mml:mn><mml:mo>+</mml:mo></mml:mrow></mml:msup></mml:math> single crystals. Nuclear Instruments and Methods in Physics Research, Section A: Accelerators, Spectrometers, Detectors and Associated Equipment, 2020, 954, 161242.	1.6	13
9	Czochralski growth and scintillation properties of Li+, Na+, and K+ codoped (Lu0.75, Y0.25)3Al5O12: Pr3+ single crystals. Journal of Crystal Growth, 2020, 532, 125408.	1.5	7
10	Investigation of CeBr3âˆ’xIx scintillators. Journal of Crystal Growth, 2020, 531, 125365.	1.5	12
11	Zeroâ€Dimensional Cs₃Cu₂I₅ Perovskite Single Crystal as Sensitive Xâ€Ray and Î³â€Ray Scintillator. Physica Status Solidi - Rapid Research Letters, 2020, 14, 2000374.	2.4	87
12	Role of Lithium Codoping in Enhancing the Scintillation Yield of Aluminate Garnets. Physical Review Applied, 2020, 13, .	3.8	8
13	Electron and Hole Trapping in Ce3+ - and Pr3+ -Doped Lutetium Pyrosilicate Scintillator Crystals Studied by Electron Paramagnetic Resonance. Physical Review Applied, 2020, 13, .	3.8	4
14	Self-assembled ^{nat}LiClâ€"CeCl₃ directionally solidified eutectics for thermal neutron detection. CrystEngComm, 2020, 22, 3269-3273.	2.6	5
15	Crystal growth and characterization of high performance KSr2BrxI5âˆ’x:Eu scintillators. Journal of Crystal Growth, 2019, 526, 125213.	1.5	7
16	Bright Luminescence from Nontoxic CsCu₂X₃ (X = Cl, Br, I). , 2019, 1, 459-465.		148
17	Effect of lithium codopant concentration on the luminescence properties of (Lu0.75Y0.25)3Al5O12: Pr3+ single crystals: Before and after air annealing. Journal of Luminescence, 2019, 216, 116751.	3.1	6
18	Unraveling the Critical Role of Site Occupancy of Lithium Codopants in Lu₂SiO₅:Ce³⁺ Single-Crystalline Scintillators. ACS Applied Materials & Interfaces, 2019, 11, 8194-8201.	8.0	24

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19	Czochralski Growth, Optical, Scintillation, and Defect Properties of Cu²⁺ Codoped Lu₂SiO₅:Ce³⁺ Single Crystals. Crystal Growth and Design, 2019, 19, 4081-4089.	3.0	20
20	Characterization of mixed halide scintillators: CsSrBrI2:Eu, CsCaBrI2:Eu and CsSrClBr2:Eu. Journal of Luminescence, 2019, 207, 70-77.	3.1	23
21	On the Role of Li⁺ Codoping in Simultaneous Improvement of Light Yield, Decay Time, and Afterglow of Lu₂SiO₅:Ce³⁺ Scintillation Detectors. Physica Status Solidi - Rapid Research Letters, 2019, 13, 1800472.	2.4	16
22	Growth of large size (â‰¥38Âmm diameter) KCaI3:Eu scintillator crystals. Nuclear Instruments and Methods in Physics Research, Section A: Accelerators, Spectrometers, Detectors and Associated Equipment, 2019, 914, 8-14.	1.6	6
23	Crystal Growth and Scintillation Properties of Eu2+ doped Cs4CaI6 and Cs4SrI6. Journal of Crystal Growth, 2018, 486, 162-168.	1.5	31
24	Tailoring the Properties of Europiumâ€Doped Potassium Calcium Iodide Scintillators Through Defect Engineering. Physica Status Solidi - Rapid Research Letters, 2018, 12, 1700403.	2.4	7
25	Investigating new activators for small-bandgap LaX3 (Xâ€¯=â€¯Br, I) scintillators. Journal of Crystal Growth, 2018, 483, 251-257.	1.5	2
26	Exploring growth conditions and Eu2+ concentration effects for KSr2I5:Eu scintillator crystals II: Ã˜ 25â€¯mm crystals. Journal of Crystal Growth, 2018, 483, 301-307.	1.5	16
27	Crystal structure, electronic structure, optical and scintillation properties of self-activated Cs4YbI6. Journal of Luminescence, 2018, 201, 460-465.	3.1	12
28	Revealing the role of calcium codoping on optical and scintillation homogeneity in Lu2SiO5:Ce single crystals. Journal of Crystal Growth, 2018, 498, 362-371.	1.5	20
29	Improvements in Light Yield and Energy Resolution by Li⁺ Codoping (Lu_{0.75}Y_{0.25})₃Al₅O₁₂:Pr³⁺ Single Crystal Scintillators. Physica Status Solidi - Rapid Research Letters, 2018, 12, 1800280.	2.4	11
30	Discovery of New Compounds and Scintillators of the A₄BX₆ Family: Crystal Structure, Thermal, Optical, and Scintillation Properties. Crystal Growth and Design, 2018, 18, 5220-5230.	3.0	7
31	Zero-dimensional Cs₄EuX₆ (X = Br, I) all-inorganic perovskite single crystals for gamma-ray spectroscopy. Journal of Materials Chemistry C, 2018, 6, 6647-6655.	5.5	66
32	Multi-ampoule Bridgman growth of halide scintillator crystals using the self-seeding method. Journal of Crystal Growth, 2017, 470, 20-26.	1.5	10
33	Defect Engineering by Codoping in <mml:math xmlns:mml="http://www.w3.org/1998/Math/MathML" display="inline"><mml:mrow><mml:mrow><mml:msub><mml:mrow><mml:mi>KCaI</mml:mi></mml:mrow><mml:mrow><mml:mn>3 Single Crystalline Scintillators. Physical Review Applied, 2017, 8, .	3.8	10
34	Scintillation properties of a 2-inch diameter <mml:math xmlns:mml="http://www.w3.org/1998/Math/MathML" id="mml27" display="inline" overflow="scroll" altimg="si27.gif"><mml:msub><mml:mrow><mml:mi mathvariant="normal">KCa</mml:mi></mml:mrow><mml:mrow><mml:mn>0</mml:mn><mml:mo>.</mml:mo><mml:mn>8</mml:mn> mathvariant="normal">Sr</mml:mi></mml:mrow><mml:mrow><mml:mn>0</mml:mn><mml:mo>.</mml:mo><mml:mn>2</mml:mn></ ma. Nuclear Instruments and Methods in Physics Research, Section A: Accelerators, Spectrometers, De	1.6	8
35	Quaternary Iodide K(Ca,Sr)I₃:Eu²⁺ Singleâ€Crystal Scintillators for Radiation Detection: Crystal Structure, Electronic Structure, and Optical and Scintillation Properties. Advanced Optical Materials, 2016, 4, 1518-1532.	7.3	35
36	Effects of melt aging and off-stoichiometric melts on CsSrI₃:Eu²⁺ single crystal scintillators. Physical Chemistry Chemical Physics, 2016, 18, 8453-8461.	2.8	11

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37	Role of hot electron transport in scintillators: A theoretical study. Physica Status Solidi - Rapid Research Letters, 2016, 10, 762-768.	2.4	12
38	Growth of inch-sized KCa_{0.8}Sr_{0.2}I₃:Eu²⁺scintillating crystals and high performance for gamma-ray detection. CrystEngComm, 2016, 18, 7435-7440.	2.6	9
39	Scintillator Design Via Codoping. , 2016, , .		6
40	Toward High Energy Resolution in CsSrI₃/Eu²⁺ Scintillating Crystals: Effects of Off-Stoichiometry and Eu²⁺ Concentration. Crystal Growth and Design, 2016, 16, 7186-7193.	3.0	14
41	Large-Size KCa_{0.8}Sr_{0.2}I₃:Eu²⁺ Crystals: Growth and Characterization of Scintillation Properties. Crystal Growth and Design, 2016, 16, 4129-4135.	3.0	18
42	Effects of increasing size and changing europium activator concentration in KCaI3 scintillator crystals. Journal of Crystal Growth, 2016, 449, 96-103.	1.5	21
43	Eu2+ concentration effects in KCa0.8Sr0.2I3:Eu2+: A novel high-performance scintillator. Nuclear Instruments and Methods in Physics Research, Section A: Accelerators, Spectrometers, Detectors and Associated Equipment, 2016, 820, 132-140.	1.6	24
44	Optical and scintillation properties of Ce-doped (Gd2Y1)Ga2.7Al2.3O12 single crystal grown by Czochralski method. Nuclear Instruments and Methods in Physics Research, Section A: Accelerators, Spectrometers, Detectors and Associated Equipment, 2016, 820, 8-13.	1.6	21
45	Superior radiation-resistant nanoengineered austenitic 304L stainless steel for applications in extreme radiation environments. Scientific Reports, 2015, 5, 7801.	3.3	82
46	Single crystal and optical ceramic multicomponent garnet scintillators: A comparative study. Nuclear Instruments and Methods in Physics Research, Section A: Accelerators, Spectrometers, Detectors and Associated Equipment, 2015, 780, 45-50.	1.6	40
47	Crystal growth and characterization of europium doped KCaI3, a high light yield scintillator. Optical Materials, 2015, 48, 1-6.	3.6	62
48	Crystal growth and spectroscopic performance of large crystalline boules of CsCaI3:Eu scintillator. Journal of Crystal Growth, 2015, 427, 42-47.	1.5	24
49	Defect Engineering in SrI₂:Eu²⁺ Single Crystal Scintillators. Crystal Growth and Design, 2015, 15, 3929-3938.	3.0	29
50	Instabilities of nanoscale patterned metal films. European Physical Journal: Special Topics, 2015, 224, 369-378.	2.6	3
51	A novel LiClâ€“BaCl2:Eu2+ eutectic scintillator for thermal neutron detection. Nuclear Instruments and Methods in Physics Research, Section A: Accelerators, Spectrometers, Detectors and Associated Equipment, 2015, 797, 319-323.	1.6	7
52	Crystal structure, electronic structure, temperature-dependent optical and scintillation properties of CsCe₂Br₇. Journal of Materials Chemistry C, 2015, 3, 11366-11376.	5.5	14
53	Relationship between Ca2+ concentration and the properties of codoped Gd3Ga3Al2O12:Ce scintillators. Nuclear Instruments and Methods in Physics Research, Section A: Accelerators, Spectrometers, Detectors and Associated Equipment, 2015, 797, 138-143.	1.6	16
54	Ultralow-concentration Sm codoping in CsI:Tl scintillator: A case of little things can make a big difference. Optical Materials, 2014, 38, 297-300.	3.6	13

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55	Role of <mml:math xmlns:mml="http://www.w3.org/1998/Math/MathML" display="inline"><mml:mrow><mml:msup><mml:mrow><mml:mi>Ce</mml:mi></mml:mrow><mml:mrow><mml:mn>4</mml:mn><m the Scintillation Mechanism of Codoped<mml:math xmlns:mml="http://www.w3.org/1998/Math/MathML" display="inline"><mml:mrow><mml:msub><mml:mrow><mml:mi>Gd</mml:mi></mml:mrow><mml:mrow><mml:mn>3</mml:mn></m Physical Review Applied, 2014, 2, .	3.8	127
56	Origin of improved scintillation efficiency in (Lu,Gd)3(Ga,Al)5O12:Ce multicomponent garnets: An X-ray absorption near edge spectroscopy study. APL Materials, 2014, 2, .	5.1	36
57	Effect of yttrium on electronâ€"phonon coupling strength of 5d state of Ce3+ ion in LYSO:Ce crystals. Journal of Luminescence, 2014, 154, 260-266.	3.1	21
58	Band-gap engineering in Lu3Al5O12:Pr by Sc3+ or In3+ substitution. Journal of Luminescence, 2014, 145, 371-378.	3.1	3
59	CsI:Tl⁺,Yb²⁺: ultra-high light yield scintillator with reduced afterglow. CrystEngComm, 2014, 16, 3312-3317.	2.6	41
60	Influence of yttrium content on the location of rare earth ions in LYSO:Ce crystals. Journal of Solid State Chemistry, 2014, 209, 56-62.	2.9	29
61	Effects of Bi³⁺ codoping on the optical and scintillation properties of CsI:Tl single crystals. Physica Status Solidi (A) Applications and Materials Science, 2014, 211, 2586-2591.	1.8	12
62	Can divalent ions co-doping strategy make Lu0.8Sc0.2BO3:Ce scintillation materials perform better?. Optical Materials, 2013, 35, 520-525.	3.6	4
63	Energy transfer and radiative recombination processes in (Gd,Lu)3Ga3Al2O12:Pr3+ scintillators. Optical Materials, 2013, 35, 2146-2154.	3.6	27
64	Compositionâ€"property relationships in (Gd3â^'xLux)(GayAl5â^'y)O12:Ce (x=0, 1, 2, 3 and y=0, 1, 2, 3, 4) multicomponent garnet scintillators. Optical Materials, 2013, 36, 476-481.	3.6	34
65	Effects of Zr4+ codoping on the Lu0.8Sc0.2BO3:Ce scintillation materials. Journal of Luminescence, 2013, 134, 345-351.	3.1	1
66	Crystal growth, structure, optical and scintillation properties of Ce3+-doped Tb2.2Lu0.8Al5O12 single crystals. CrystEngComm, 2013, 15, 4153.	2.6	15
67	Thermally induced ionization of 5d1 state of Ce3+ ion in Gd3Ga3Al2O12 host. Chemical Physics Letters, 2013, 574, 56-60.	2.6	35
68	Effects of Gd/Lu Ratio on the Luminescent Properties of Pr3+Activated (Gd,Lu)3Ga3Al2O12. ECS Journal of Solid State Science and Technology, 2013, 2, R49-R55.	1.8	8
69	Enhanced absorption in ultrathin Si by NiSi₂ nanoparticles. Nanomaterials and Energy, 2013, 2, 11-19.	0.2	7
70	Effects of scandium on the bandgap and location of Ce3+ levels in Lu1â^'xScxBO3:Ce scintillators. Applied Physics Letters, 2012, 100, 021904.	3.3	20
71	Energy Levels of ${hbox {Ce}}^{3+}$ in ${hbox {Lu}}_{0.8}{hbox {Sc}}_{0.2}{hbox {BO}}_{3}$ Host: A Comparison Study Between X-Ray Photoelectron Spectroscopy and Pure Optical Method. IEEE Transactions on Nuclear Science, 2012, 59, 2069-2073.	2.0	4
72	Effects of scandium substitution on the crystal structure and luminescence properties of LuBO3: Ce3+. Journal of Solid State Chemistry, 2012, 194, 151-156.	2.9	6

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73	Study of the effects of Ga3+ co-doping on the Lu0.8Sc0.2BO3:Ce scintillation crystals. Journal of Crystal Growth, 2012, 341, 46-52.	1.5	6
74	Luminescence and decay kinetic mechanism of Pr3+ center in Lu0.8Sc0.2BO3 host. Chemical Physics Letters, 2012, 539-540, 35-38.	2.6	6
75	Optical and thermoluminescence properties of Lu2Si2O7:Pr single crystal. Journal of Rare Earths, 2012, 30, 775-779.	4.8	15
76	Temperature-dependence of Raman spectroscopy on the phase transition in LuBO3. Materials Research Bulletin, 2012, 47, 106-110.	5.2	26
77	The annealing effects of Lu0.8Sc0.2BO3:Pr3+ scintillation crystal within different atmospheres. Solid State Sciences, 2012, 14, 635-638.	3.2	2
78	The luminescence and energy transfer in Pr3+â€"Ce3+ co-doped Lu0.8Sc0.2BO3 crystals. Journal of Luminescence, 2012, 132, 251-255.	3.1	11
79	Study on the Luminescence and Energy Level of Lanthanide Ions in Lu_{0.8}Sc_{0.2}BO₃ Host. Journal of Physical Chemistry A, 2011, 115, 13821-13828.	2.5	18
80	Research on phase transition behavior of lutetium orthoborate LuBO₃. Phase Transitions, 2011, 84, 315-324.	1.3	14
81	Competing Liquid Phase Instabilities during Pulsed Laser Induced Self-Assembly of Copper Rings into Ordered Nanoparticle Arrays on SiO₂. Langmuir, 2011, 27, 13314-13323.	3.5	47
82	The optical properties of Cu-Ni nanoparticles produced via pulsed laser dewetting of ultrathin films: The effect of nanoparticle size and composition on the plasmon response. Journal of Materials Research, 2011, 26, 277-287.	2.6	51
83	The influence of Sc/Lu ratio on the phase transformation and luminescence of cerium-doped lutetium scandium orthoborate solid solutions. Journal of Alloys and Compounds, 2011, 509, 366-371.	5.5	34
84	Growth and luminescence characteristics of Pr3+-doped Lu0.8Sc0.2BO3 single crystal. Journal of Alloys and Compounds, 2011, 509, 7139-7142.	5.5	9
85	Luminescence characteristics of Lu0.8Sc0.2BO3:RE3+ (RE=Eu, Tb) polycrystalline powders. Journal of Alloys and Compounds, 2011, 509, 7186-7191.	5.5	13
86	Crystal growth and luminescence properties of Lu0.8Sc0.2BO3 scintillators doped with different Ce concentrations. Materials Science and Engineering B: Solid-State Materials for Advanced Technology, 2011, 176, 889-893.	3.5	17
87	Luminescence characteristics of Ce3+-doped Lu1âˆ'xScxBO3 solid solution single crystals grown by Czochralski method. Optical Materials, 2011, 33, 655-659.	3.6	19
88	The Geometric Contribution to Gauge Factor of Patterned Lines on Substrates. Strain, 2007, 43, 306-310.	2.4	2
89	Periodic corrugation on dynamic fracture surface in brittle bulk metallic glass. Applied Physics Letters, 2006, 89, 181911.	3.3	44
90	Temperature-Dependent Microstructures in Fatigued Ultrafine-Grained Copper Produced by Equal Channel Angular Pressing. Advanced Engineering Materials, 2005, 7, 829-833.	3.5	16

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91	Template-Based Growth of Various Oxide Nanorods by Solâ€"Gel Electrophoresis. Advanced Functional Materials, 2002, 12, 59.	14.9	227
92	Electrophoretic Growth of Lead Zirconate Titanate Nanorods. Advanced Materials, 2001, 13, 1269.	21.0	158
93	Sol-Gel-Derived Mesoporous Silica Films with Low Dielectric Constants. Advanced Materials, 2000, 12, 1695-1698.	21.0	70
94	Dielectric properties of layered perovskite Sr1âˆ'xAxBi2Nb2O9 ferroelectrics (A=La,â€ŠCa and x=0,0.1). Applied Physics Letters, 2000, 76, 2934-2936.	3.3	136
95	A High Cr-Mo Alloy Iron. Journal of Materials Engineering and Performance, 1998, 7, 463-466.	2.5	4
96	Synthesis and Dielectric Properties of SrBi2Nb2O9 Layered Perovskite by Sol-Gel Processing. Materials Research Society Symposia Proceedings, 1998, 541, 253.	0.1	0
97	Synthesis of SrRuO3 by Sol-Gel Processing. Materials Research Society Symposia Proceedings, 1998, 548, 587.	0.1	1
98	Solidification of Undercooled Ni-Sn Eutectic Alloy Under Microgravity Conditions in the Space. Materials Research Society Symposia Proceedings, 1986, 87, 47.	0.1	0