Yong Yan

List of Publications by Year
in descending order

38 papers	833 citations	516710 16 h-index	501196 28 g-index
39 all docs	39 docs citations	39 times ranked	1290 citing authors

#	Article	IF	Citations
1	Multiple exciton generation for photoelectrochemical hydrogen evolution reactions with quantum yields exceeding 100%. Nature Energy, 2017, 2, .	39.5	172
2	Direct Wide Bandgap 2D GeSe₂ Monolayer toward Anisotropic UV Photodetection. Advanced Optical Materials, 2019, 7, 1900622.	7.3	70
3	Influence of sputtering power on composition, structure and electrical properties of RF sputtered CuIn1â^'xGaxSe2 thin films. Applied Surface Science, 2012, 258, 5222-5229.	6.1	42
4	Crossâ€Substitution Promoted Ultrawide Bandgap up to 4.5ÂeV in a 2D Semiconductor: Gallium Thiophosphate. Advanced Materials, 2021, 33, e2008761.	21.0	41
5	Reversible Half Wave Rectifier Based on 2D InSe/GeSe Heterostructure with Nearâ€Broken Band Alignment. Advanced Science, 2021, 8, 1903252.	11.2	38
6	Photovoltaic Field-Effect Photodiodes Based on Double van der Waals Heterojunctions. ACS Nano, 2021, 15, 14295-14304.	14.6	37
7	Broadband ultrafast photovoltaic detectors based on large-scale topological insulator Sb₂Te₃/STO heterostructures. Nanoscale, 2017, 9, 9325-9332.	5.6	34
8	Effect of film thickness on physical properties of RF sputtered In2S3 layers. Surface and Coatings Technology, 2015, 276, 587-594.	4.8	32
9	Significant effect of substrate temperature on the phase structure, optical and electrical properties of RF sputtered CIGS films. Applied Surface Science, 2013, 264, 197-201.	6.1	31
10	Effect of annealing temperature on properties of RF sputtered Cu(In,Ga)Se2 thin films. Applied Surface Science, 2012, 258, 8527-8532.	6.1	26
11	Monophase Î³-In2Se3 thin film deposited by magnetron radio-frequency sputtering. Vacuum, 2014, 99, 228-232.	3.5	26
12	Electrical transport properties and morphology of topological insulator Bi2Se3 thin films with different thickness prepared by magnetron sputtering. Thin Solid Films, 2016, 603, 289-293.	1.8	25
13	Microwave-Assisted Hydrothermal Synthesis of CuS Nanoplate Films on Conductive Substrates as Efficient Counter Electrodes for Liquid-Junction Quantum Dot-Sensitized Solar Cells. Journal of the Electrochemical Society, 2017, 164, H215-H224.	2.9	24
14	Two-dimensional Janus-In2STe/InSe heterostructure with direct gap and staggered band alignment. Applied Surface Science, 2020, 509, 145317.	6.1	23
15	Structure and properties of CIGS films based on one-stage RF-sputtering process at low substrate temperature. Journal of Modern Transportation, 2014, 22, 37-44.	2.5	16
16	One-pot hydrothermal synthesis of thioglycolic acid-capped CdSe quantum dots-sensitized mesoscopic TiO2 photoanodes for sensitized solar cells. Solar Energy Materials and Solar Cells, 2018, 176, 418-426.	6.2	16
17	Properties of different temperature annealed Cu(In,Ga)Se2 and Cu(In,Ga)2Se3.5 films prepared by RF sputtering. Applied Surface Science, 2012, 261, 353-359.	6.1	15
18	Aqueous synthesis of alloyed CdSexTe1-x colloidal quantum dots and their In-situ assembly within mesoporous TiO2 for solar cells. Solar Energy, 2020, 196, 513-520.	6.1	15

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19	Few-layer In_{4/3}P₂Se₆ nanoflakes for high detectivity photodetectors. Nanoscale, 2021, 13, 3757-3766.	5.6	15
20	In-plane ferroelectricity in few-layered GeS and its van der Waals ferroelectric diodes. Nanoscale, 2021, 13, 16122-16130.	5.6	15
21	Influence of indium concentration on the structural and optoelectronic properties of indium selenide thin films. Optical Materials, 2014, 38, 217-222.	3.6	14
22	Fabrication of high-quality Î³-In2Se3 nanostructures using magnetron sputtering. Materials Letters, 2013, 109, 291-294.	2.6	12
23	Cu(In,Ga)Se2 thin films annealed with SnSe2 for solar cell absorber fabricated by magnetron sputtering. Solar Energy, 2017, 155, 601-607.	6.1	12
24	Effects of pressure and deposition time on the characteristics of In2Se3 films grown by magnetron sputtering. Electronic Materials Letters, 2014, 10, 1093-1101.	2.2	11
25	Control over the preferred orientation of CIGS films deposited by magnetron sputtering using a wetting layer. Electronic Materials Letters, 2016, 12, 59-66.	2.2	10
26	In-situ annealing of Inâ€“Se amorphous precursors sputtered at low temperature. Journal of Alloys and Compounds, 2014, 614, 368-372.	5.5	9
27	Transport properties of Bi₂Se₃ thin films grown by magnetron sputtering. Functional Materials Letters, 2015, 08, 1550020.	1.2	8
28	Lead sulfide films synthesized by microwave-assisted chemical bath deposition method as efficient counter electrodes for CdS/CdSe sensitized ZnO nanorod solar cells. Solar Energy, 2019, 177, 672-678.	6.1	8
29	Substrate-induced phase control of In2Se3 thin films. Journal of Alloys and Compounds, 2020, 845, 156270.	5.5	8
30	Low-temperature deposition of 2D SnS nanoflakes on PET substrates for flexible photodetectors with broadband response. Semiconductor Science and Technology, 2020, 35, 115016.	2.0	8
31	Fabrication of three-dimensionally ordered macroporous TiO₂ film and its application in quantum dots-sensitized solar cells. Optics Express, 2018, 26, A855.	3.4	7
32	One-Step CVD Synthesis of Few-Layer SnS2/MoS2 Vertical Heterostructures. Nano, 2019, 14, 1950129.	1.0	4
33	Reducing the dark current of cuprous oxide/Au schottky photodetector for high signal-to-noise ratio imaging. Journal Physics D: Applied Physics, 2020, 53, 224003.	2.8	3
34	Phase-controlled synthesis of SnS₂ and SnS flakes and photodetection properties. Journal of Physics Condensed Matter, 2022, 34, 285701.	1.8	3
35	Layered SnSe_xS_{2â”x} alloys with fully chemical compositions and band gaps for photoelectrochemical water oxidation. Journal Physics D: Applied Physics, 2020, 53, 185101.	2.8	2
36	Annealing pressure dependence of Cu₂ZnSnSe₄ composition and properties. Materials Research Society Symposia Proceedings, 2014, 1603, 1.	0.1	1

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37	The Effect of Sputtering Power on the Properties of One-step Deposited Cu2ZnSnSe4 Thin Films. Materials Research Society Symposia Proceedings, 2014, 1603, 1.	0.1	0
38	Photodetectors: Crossâ€Substitution Promoted Ultrawide Bandgap up to 4.5ÂeV in a 2D Semiconductor: Gallium Thiophosphate (Adv. Mater. 22/2021). Advanced Materials, 2021, 33, 2170169.	21.0	0