

# Yidong Xia

## List of Publications by Year in descending order

Source: <https://exaly.com/author-pdf/7694416/publications.pdf>

Version: 2024-02-01

37  
papers

691  
citations

516710

16  
h-index

580821

25  
g-index

38  
all docs

38  
docs citations

38  
times ranked

1218  
citing authors

#	ARTICLE	IF	CITATIONS
1	The effect of thermal treatment induced inter-diffusion at the interfaces on the charge trapping performance of HfO <sub>2</sub> /Al <sub>2</sub> O <sub>3</sub> nanolaminate-based memory devices. <i>Journal of Applied Physics</i> , 2013, 114, .	2.5	54
2	Synthesis of Easily Transferred 2D Layered Bi <sub>2</sub> Nanoplates for Flexible Visible-Light Photodetectors. <i>ACS Applied Materials &amp; Interfaces</i> , 2018, 10, 21527-21533.	8.0	50
3	Giant electromechanical strain response in lead-free SrTiO <sub>3</sub> -doped (Bi <sub>0.5</sub> Na <sub>0.5</sub> TiO <sub>3</sub> -BaTiO <sub>3</sub> )-LiNbO <sub>3</sub> piezoelectric ceramics. <i>Journal of the American Ceramic Society</i> , 2017, 100, 4670-4679.	3.8	46
4	Ga <sub>2</sub> Te <sub>3</sub> phase change material for low-power phase change memory application. <i>Applied Physics Letters</i> , 2010, 97, .	3.3	39
5	Strain tunable magnetism in SnX <sub>2</sub> (X=S, Se) monolayers by hole doping. <i>Scientific Reports</i> , 2016, 6, 39218.	3.3	36
6	MoS <sub>2</sub> -based Charge-trapping synaptic device with electrical and optical modulated conductance. <i>Nanophotonics</i> , 2020, 9, 2475-2486.	6.0	36
7	Quantum spin Hall insulator phase in monolayer WTe <sub>2</sub> by uniaxial strain. <i>AIP Advances</i> , 2016, 6, .	1.3	31
8	Large-sized PbI <sub>2</sub> single crystal grown by co-solvent method for visible-light photo-detector application. <i>Materials Letters</i> , 2017, 193, 101-104.	2.6	30
9	Electrical properties of chemical-solution-derived Bi <sub>3.54</sub> Nd <sub>0.46</sub> Ti <sub>3</sub> O <sub>12</sub> ferroelectric thin films. <i>Journal of Applied Physics</i> , 2003, 94, 7376-7378.	2.5	26
10	ZnO nanowire optoelectronic synapse for neuromorphic computing. <i>Nanotechnology</i> , 2022, 33, 065205.	2.6	26
11	Electrical field induced precipitation reaction and percolation in Ag <sub>30</sub> Ge <sub>17</sub> Se <sub>53</sub> amorphous electrolyte films. <i>Applied Physics Letters</i> , 2009, 94, 162112.	3.3	25
12	Silicon-Based Hybrid Optoelectronic Devices with Synaptic Plasticity and Stateful Photoresponse. <i>Advanced Electronic Materials</i> , 2018, 4, 1800242.	5.1	21
13	High-intensity compact ultrasound assisted synthesis of porous N-doped graphene thin microsheets with well-dispersed near-spherical Ni <sub>2</sub> P nanoflowers for energy storage. <i>Chemical Engineering Journal</i> , 2019, 361, 387-397.	12.7	21
14	Memristive learning and memory functions in polyvinyl alcohol polymer memristors. <i>AIP Advances</i> , 2014, 4, .	1.3	20
15	Synthesis of Pb <sub>2</sub> nanowires for high sensitivity photodetectors. <i>RSC Advances</i> , 2016, 6, 59445-59449.	3.6	20
16	High-Performance Visible-Light Photodetectors built on 2D Nanoplate-Assembled Large-Scale Bi <sub>2</sub> Films. <i>Advanced Electronic Materials</i> , 2019, 5, 1900159.	5.1	20
17	An investigation into ultra-thin pseudobinary oxide (TiO <sub>2</sub> ) <sub>x</sub> (Al <sub>2</sub> O <sub>3</sub> ) <sub>1-x</sub> films as high-k gate dielectrics. <i>Applied Physics A: Materials Science and Processing</i> , 2007, 90, 379-384.	2.3	17
18	Binary semiconductor In <sub>2</sub> Te <sub>3</sub> for the application of phase-change memory device. <i>Journal of Materials Science</i> , 2010, 45, 3569-3574.	3.7	16

#	ARTICLE	IF	CITATIONS
19	The chemically driven phase transformation in a memristive abacus capable of calculating decimal fractions. <i>Scientific Reports</i> , 2013, 3, 1230.	3.3	16
20	Enhanced memory performance by tailoring the microstructural evolution of $(\text{ZrO}_2)_{0.6}(\text{SiO}_2)_{0.4}$ charge trapping layer in the nanocrystallites-based charge trap flash memory cells. <i>Applied Physics A: Materials Science and Processing</i> , 2012, 108, 217-222.	2.3	15
21	Light-controlled stateful logic operations using optoelectronic switches based on p-Si/HfO <sub>2</sub> heterostructures. <i>Applied Physics Letters</i> , 2018, 112, .	3.3	14
22	High Visible-Light-Stimulated Plasticity in Optoelectronic Synaptic Transistors for Irradiation History-Dependent Learning. <i>Advanced Electronic Materials</i> , 2020, 6, 1901255.	5.1	13
23	Robust Dirac point in honeycomb-structure nanoribbons with zigzag edges. <i>Physical Review B</i> , 2010, 81, .	3.2	12
24	Half-metallicity in graphitic C <sub>3</sub> N <sub>4</sub> nanoribbons: An ab initio study. <i>Physica Status Solidi (B): Basic Research</i> , 2014, 251, 1386-1392.	1.5	12
25	Studies of two distinct types of (Ba,Sr)TiO <sub>3</sub> -Pt interfaces. <i>Applied Physics Letters</i> , 2008, 92, 102906.	3.3	11
26	High-Performance Pentacene-Based Field-Effect Transistor Memory Using the Electrets of Polymer Blends. <i>Advanced Electronic Materials</i> , 2022, 8, .	5.1	10
27	Effects of applied electric field during postannealing on the tunable properties of (Ba,Sr)TiO <sub>3</sub> thin films. <i>Applied Physics Letters</i> , 2005, 87, 052902.	3.3	9
28	Encoding, training and retrieval in ferroelectric tunnel junctions. <i>Scientific Reports</i> , 2016, 6, 27022.	3.3	8
29	Enhancement of resistive switching ratio induced by competing interfacial oxygen diffusion in tantalum oxide based memories with metal nitride electrode. <i>Applied Physics Letters</i> , 2018, 113, .	3.3	8
30	Continuously-tuned tunneling behaviors of ferroelectric tunnel junctions based on BaTiO <sub>3</sub> /La <sub>0.67</sub> Sr <sub>0.33</sub> MnO <sub>3</sub> heterostructure. <i>AIP Advances</i> , 2014, 4, .	1.3	7
31	Raman shift, Néel temperature, and optical band gap of NiO nanoparticles. <i>Physical Chemistry Chemical Physics</i> , 2020, 22, 5735-5739.	2.8	7
32	Large electromechanical strain and electrostrictive effect in $(1-x)(\text{Bi}_{0.5}\text{Na}_{0.5}\text{TiO}_3-\text{SrTiO}_3)-x\text{LiNbO}_3$ ternary lead-free piezoelectric ceramics. <i>Journal of Materials Science: Materials in Electronics</i> , 2019, 30, 200-211.	2.2	5
33	The roles of the dielectric constant and the relative level of conduction band of high-k composite with Si in improving the memory performance of charge-trapping memory devices. <i>AIP Advances</i> , 2014, 4, 117110.	1.3	4
34	Al <sub>2</sub> O <sub>3</sub> -Cu <sub>2</sub> O composite charge-trapping nonvolatile memory. <i>Journal of Materials Science: Materials in Electronics</i> , 2017, 28, 928-933.	2.2	3
35	UV EMISSION OF TETRAGONAL $\text{ZrO}_2$ NANOCRYSTALS EMBEDDED IN $\text{ZrSiO}_4$ AMORPHOUS MATRIX. <i>Modern Physics Letters B</i> , 2010, 24, 2477-2483.	1.9	2
36	Heating power lowering by downscaling the cell dimensions in nanoscale filamentary resistive switching devices. <i>Applied Physics A: Materials Science and Processing</i> , 2016, 122, 1.	2.3	1

#	ARTICLE	IF	CITATIONS
37	Piezoelectricity in two-dimensional covalent organic frameworks. Journal of Applied Physics, 2017, 121, 225112.	2.5	0