Jun-Hui Yuan

List of Publications by Year in Descending Order

44 papers	1,030 citations	16 h-index	31 g-index
46 ext. papers	1,466 ext. citations	6.2 avg, IF	4.72 L-index

#	Paper	IF	Citations
44	Designing stable 2D materials solely from VIA elements. *Applied Physics Letters*, **2021**, 119, 223101	3.4	0
43	Modulation of oxygen transport by incorporating Sb2Te3 layer in HfO2-based memristor. *Applied Physics Letters*, **2021**, 119, 193503	3.4	0
42	Multilevel switching in Mg-doped HfOx memristor through the mutual-ion effect. *Applied Physics Letters*, **2021**, 119, 153505	3.4	5
41	Tailoring the electron and hole dimensionality to achieve efficient and stable metal halide perovskite scintillators. *Nanophotonics*, **2021**, 10, 2249-2256	6.3	3
40	12.7 MA/cm2 On-Current Density and High Uniformity Realized in AgGeSe/Al2O3 Selectors. *IEEE Electron Device Letters*, **2021**, 42, 613-616	4.4	2
39	Lead halide perovskite for efficient optoacoustic conversion and application toward high-resolution ultrasound imaging. *Nature Communications*, **2021**, 12, 3348	17.4	42
38	Prediction of two-dimensional M2As (M□=□Mn, Fe) with high Curie temperature and large perpendicular magnetic anisotropy. *Computational Materials Science*, **2021**, 200, 110838	3.2	1
37	Homo-layer hafnia-based memristor with large analog switching window. *Applied Physics Letters*, **2021**, 118, 043502	3.4	4
36	Unveiling the Structural Descriptor of A3B2X9 Perovskite Derivatives toward X-Ray Detectors with Low Detection Limit and High Stability. *Advanced Functional Materials*, **2020**, 30, 1910648	15.6	67
35	A new family of two-dimensional ferroelastic semiconductors with negative Poisson's ratios. *Nanoscale*, **2020**, 12, 14150-14159	7.7	11
34	One-Dimensional All-Inorganic K2CuBr3 with Violet Emission as Efficient X-ray Scintillators. *ACS Applied Electronic Materials*, **2020**, 2, 2242-2249	4	30
33	PtSe Monolayer: A Highly Efficient Electrocatalyst toward Hydrogen and Oxygen Electrode Reactions. *ACS Applied Materials & Interfaces*, **2020**, 12, 13896-13903	9.5	15
32	Synergic Effect in a New Electrocatalyst Ni2SbTe2 for Oxygen Reduction Reaction. *Journal of Physical Chemistry C*, **2020**, 124, 3671-3680	3.8	7
31	All-Inorganic Copper Halide as a Stable and Self-Absorption-Free X-ray Scintillator. *Journal of Physical Chemistry Letters*, **2020**, 11, 1873-1880	6.4	69
30	Two-dimensional perovskites as sensitive strain sensors. *Journal of Materials Chemistry C*, **2020**, 8, 3814-3820	7.1	13
29	Substrate-modulated ferromagnetism of two-dimensional Fe3GeTe2. *Applied Physics Letters*, **2020**, 116, 042402	3.4	14
28	Controlled Memory and Threshold Switching Behaviors in a Heterogeneous Memristor for Neuromorphic Computing. *Advanced Electronic Materials*, **2020**, 6, 2000309	6.4	21

27	Lead-free violet-emitting K2CuCl3 single crystal with high photoluminescence quantum yield. *Organic Electronics*, **2020**, 86, 105903	3.5	13
26	Nb2SiTe4 and Nb2GeTe4: Unexplored 2D Ternary Layered Tellurides with High Stability, Narrow Band Gap and High Electron Mobility. *Journal of Electronic Materials*, **2020**, 49, 959-968	1.9	16
25	Oxygen migration around the filament region in HfOx memristors. *AIP Advances*, **2019**, 9, 105007	1.5	3
24	KTlO: a metal shrouded 2D semiconductor with high carrier mobility and tunable magnetism. *Nanoscale*, **2019**, 11, 1131-1139	7.7	25
23	Planar penta-transition metal phosphide and arsenide as narrow-gap semiconductors with ultrahigh carrier mobility. *Journal of Materials Science*, **2019**, 54, 7035-7047	4.3	13
22	TlP5: an unexplored direct band gap 2D semiconductor with ultra-high carrier mobility. *Journal of Materials Chemistry C*, **2019**, 7, 639-644	7.1	23
21	Two-dimensional silicon chalcogenides with high carrier mobility for photocatalytic water splitting. *Journal of Materials Science*, **2019**, 54, 11485-11496	4.3	13
20	Heteroepitaxial passivation of CsAgBiBr wafers with suppressed ionic migration for X-ray imaging. *Nature Communications*, **2019**, 10, 1989	17.4	134
19	Ab Initio Simulation of Ta2O5: A High Symmetry Ground State Phase with Application to Interface Calculation. *Annalen Der Physik*, **2019**, 531, 1800524	2.6	5
18	Nb1-xO2 based Universal Selector with Ultra-high Endurance (>1012), high speed (10ns) and Excellent Vth Stability **2019**,		5
17	Promising photocatalysts with high carrier mobility for water splitting in monolayer Ge2P4S2 and Ge2As4S2. *International Journal of Hydrogen Energy*, **2019**, 44, 21536-21545	6.7	7
16	Gallium Thiophosphate: An Emerging Bidirectional Auxetic Two-Dimensional Crystal with Wide Direct Band Gap. *Journal of Physical Chemistry Letters*, **2019**, 10, 4455-4462	6.4	13
15	BaAs3: a narrow gap 2D semiconductor with vacancy-induced semiconductor–metal transition from first principles. *Journal of Materials Science*, **2019**, 54, 12676-12687	4.3	2
14	Lead-Free Halide Rb CuBr as Sensitive X-Ray Scintillator. *Advanced Materials*, **2019**, 31, e1904711	24	194
13	Single-layer planar penta-X2N4 (X = Ni, Pd and Pt) as direct-bandgap semiconductors from first principle calculations. *Applied Surface Science*, **2019**, 469, 456-462	6.7	23
12	Tunable Rashba spin splitting in two-dimensional graphene/As-I heterostructures. *Applied Surface Science*, **2018**, 427, 10-14	6.7	5
11	Improved LDA-1/2 method for band structure calculations in covalent semiconductors. *Computational Materials Science*, **2018**, 153, 493-505	3.2	39
10	Structural disorder in the high-temperature cubic phase of GeTe.. *RSC Advances*, **2018**, 8, 17435-17442	3.7	6

9	Design lateral heterostructure of monolayer ZrS2 and HfS2 from first principles calculations. *Applied Surface Science*, **2018**, 436, 919-926	6.7	21
8	GGA-1/2 self-energy correction for accurate band structure calculations: the case of resistive switching oxides. *Journal of Physics Communications*, **2018**, 2, 105005	1.2	44
7	Theoretical investigation of the Ag filament morphology in conductive bridge random access memories. *Journal of Applied Physics*, **2018**, 124, 152125	2.5	11
6	Ideal strength and elastic instability in single-layer 8-Pmmn borophene. *RSC Advances*, **2017**, 7, 8654-8660	3.7	40
5	Stability, electronic and thermodynamic properties of aluminene from first-principles calculations. *Applied Surface Science*, **2017**, 409, 85-90	6.7	40
4	Prediction of new group IV-V-VI monolayer semiconductors based on first principle calculation. *Computational Materials Science*, **2017**, 135, 160-164	3.2	12
3	Surface regulated arsenenes as Dirac materials: From density functional calculations. *Applied Surface Science*, **2017**, 394, 625-629	6.7	15
2	10 MA cm□2 current density in nanoscale conductive bridge threshold switching selector via densely localized cation sources. *Journal of Materials Chemistry C*,	7.1	2
1	HfO x /AlO y Superlattice-Like Memristive Synapse. *Advanced Science*,2201446	13.6	1