

# Chun-Jian Tan

## List of Publications by Year in descending order

Source: <https://exaly.com/author-pdf/2360048/publications.pdf>

Version: 2024-02-01

26  
papers

931  
citations

623734

14  
h-index

940533

16  
g-index

26  
all docs

26  
docs citations

26  
times ranked

1015  
citing authors

#	ARTICLE	IF	CITATIONS
1	The electronic and optical properties of novel germanene and antimonene heterostructures. Journal of Materials Chemistry C, 2016, 4, 5434-5441.	5.5	154
2	Ab Initio Study of the Adsorption of Small Molecules on Stanene. Journal of Physical Chemistry C, 2016, 120, 13987-13994.	3.1	149
3	First Principles Investigation of Small Molecules Adsorption on Antimonene. IEEE Electron Device Letters, 2017, 38, 134-137.	3.9	109
4	An AlAs/germanene heterostructure with tunable electronic and optical properties via external electric field and strain. Journal of Materials Chemistry C, 2016, 4, 8171-8178.	5.5	81
5	Exploration of new ferromagnetic, semiconducting and biocompatible Nb <sub>3</sub> X <sub>8</sub> (X = Cl, Br or I) monolayers with considerable visible and infrared light absorption. Nanoscale, 2017, 9, 2992-3001.	5.6	74
6	AlN/BP Heterostructure Photocatalyst for Water Splitting. IEEE Electron Device Letters, 2017, 38, 145-148.	3.9	68
7	Design of graphene-like gallium nitride and WS <sub>2</sub> /WSe <sub>2</sub> nanocomposites for photocatalyst applications. Science China Materials, 2016, 59, 1027-1036.	6.3	65
8	SiGe/h-BN heterostructure with inspired electronic and optical properties: a first-principles study. Journal of Materials Chemistry C, 2016, 4, 10082-10089.	5.5	40
9	Considering the spin-orbit coupling effect on the photocatalytic performance of AlN/MX <sub>2</sub> nanocomposites. Journal of Materials Chemistry C, 2017, 5, 9412-9420.	5.5	36
10	The electronic and optical properties of silicene/g-ZnS heterobilayers: a theoretical study. Journal of Materials Chemistry C, 2016, 4, 7004-7012.	5.5	34
11	Tunable electronic structure and enhanced optical properties in quasi-metallic hydrogenated/fluorinated SiC heterobilayer. Journal of Materials Chemistry C, 2016, 4, 7406-7414.	5.5	27
12	Two-dimensional penta-SiAs <sub>2</sub> : a potential metal-free photocatalyst for overall water splitting. Journal of Materials Chemistry C, 2020, 8, 11980-11987.	5.5	24
13	Arsenic Phosphorus Monolayer: A Promising Candidate for H <sub>2</sub> S Sensor and NO Degradation With High Sensitivity and Selectivity. IEEE Electron Device Letters, 2017, 38, 1321-1324.	3.9	23
14	Tuning the electronic and optical properties of graphane/silicane and fhBN/silicane nanosheets via interfacial dihydrogen bonding and electrical field control. Journal of Materials Chemistry C, 2016, 4, 8962-8972.	5.5	16
15	Investigations of SiC VDMOSFET With Floating Island Structure Based on TCAD. IEEE Transactions on Electron Devices, 2019, 66, 2295-2300.	3.0	13
16	Study on single-event burnout of SiC VDMOSFET: failure mechanism and influence factors. , 2019, , .		6
17	The inactivation mechanism of chemical disinfection against SARS-CoV-2: from MD and DFT perspectives. RSC Advances, 2020, 10, 40480-40488.	3.6	4
18	Modelling for electric devices: Adsorption of polluted gases on g-ZnO monolayer. , 2017, , .		3

#	ARTICLE	IF	CITATIONS
19	Reliability Investigation of 4H-SiC MOSFET Based on TCAD Simulation. , 2018, , .		2
20	Design and Simulation of 1800V 40A 4H-SiC SBD Using TCAD. , 2018, , .		1
21	Paper Title The Breakdown Voltage of AlGaIn/GaN HEMT is Restricted to The Structure Parameters of The Device: A Study Based on TCAD. , 2018, , .		1
22	A Novel Hole-Path and Carrier-Stored IGBT with Low Switching Loss and On State Voltage. , 2018, , .		1
23	Ab initio studies of the differences in the chemical reactivity and electronic properties of polyaniline and its derivatives. , 2015, , .		0
24	Tuning electronic properties of bilayer boron-phosphide by stacking order and electric field: A first principles investigation. , 2016, , .		0
25	Modulation of the electric properties of SnSe bi/mono-layer by strain and electrical field. , 2017, , .		0
26	Multi-scale modelling of internal failure mechanism of SiC power MOSFETs. , 2018, , .		0