

# Shi Jie Wang

## List of Publications by Year in descending order

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218  
papers

7,864  
citations

46918

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64668

79  
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219  
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219  
docs citations

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times ranked

12712  
citing authors

#	ARTICLE	IF	CITATIONS
1	Electrochemically Reduced Single-Layer MoS <sub>2</sub> Nanosheets: Characterization, Properties, and Sensing Applications. <i>Small</i> , 2012, 8, 2264-2270.	5.2	373
2	High-yield synthesis and optical properties of g-C <sub>3</sub> N <sub>4</sub> . <i>Nanoscale</i> , 2015, 7, 12343-12350.	2.8	303
3	TiO <sub>2</sub> /(CdS, CdSe, CdSeS) Nanorod Heterostructures and Photoelectrochemical Properties. <i>Journal of Physical Chemistry C</i> , 2012, 116, 11956-11963.	1.5	241
4	Growth of wafer-scale MoS <sub>2</sub> monolayer by magnetron sputtering. <i>Nanoscale</i> , 2015, 7, 2497-2503.	2.8	225
5	Flexible Visible-Infrared Metamaterials and Their Applications in Highly Sensitive Chemical and Biological Sensing. <i>Nano Letters</i> , 2011, 11, 3232-3238.	4.5	215
6	Comparative Study of Room-Temperature Ferromagnetism in Cu-Doped ZnO Nanowires Enhanced by Structural Inhomogeneity. <i>Advanced Materials</i> , 2008, 20, 3521-3527.	11.1	211
7	Facile Synthesis of Vanadium-Doped Ni <sub>3</sub> S <sub>2</sub> Nanowire Arrays as Active Electrocatalyst for Hydrogen Evolution Reaction. <i>ACS Applied Materials &amp; Interfaces</i> , 2017, 9, 5959-5967.	4.0	196
8	Synergistic effect of 2D Ti <sub>2</sub> C and g-C <sub>3</sub> N <sub>4</sub> for efficient photocatalytic hydrogen production. <i>Journal of Materials Chemistry A</i> , 2017, 5, 16748-16756.	5.2	192
9	Cu-Doped ZnO Nanoneedles and Nanonails: Morphological Evolution and Physical Properties. <i>Journal of Physical Chemistry C</i> , 2008, 112, 9579-9585. Electronic and optical properties of the monolayer group-IV monochalcogenides $MX_2$	1.5	187
10			

#	ARTICLE	IF	CITATIONS
19	Vertically Aligned Cadmium Chalcogenide Nanowire Arrays on Muscovite Mica: A Demonstration of Epitaxial Growth Strategy. <i>Nano Letters</i> , 2011, 11, 3051-3057.	4.5	94
20	Large-scale two-dimensional MoS <sub>2</sub> photodetectors by magnetron sputtering. <i>Optics Express</i> , 2015, 23, 13580.	1.7	93
21	Plasmonic heating from indium nanoparticles on a floating microporous membrane for enhanced solar seawater desalination. <i>Nanoscale</i> , 2017, 9, 12843-12849.	2.8	91
22	Efficient coupling of a hierarchical V <sub>2</sub> O <sub>5</sub> @Ni <sub>3</sub> S <sub>2</sub> hybrid nanoarray for pseudocapacitors and hydrogen production. <i>Journal of Materials Chemistry A</i> , 2017, 5, 17954-17962.	5.2	88
23	Density functional study on ferromagnetism in nitrogen-doped anatase TiO <sub>2</sub> . <i>Applied Physics Letters</i> , 2009, 95, 062505.	1.5	85
24	Fabrication of Silicon Nanowires with Precise Diameter Control Using Metal Nanodot Arrays as a Hard Mask Blocking Material in Chemical Etching. <i>Chemistry of Materials</i> , 2010, 22, 4111-4116.	3.2	83
25	Impact and Origin of Interface States in MOS Capacitor with Monolayer MoS <sub>2</sub> and HfO <sub>2</sub> High-k Dielectric. <i>Scientific Reports</i> , 2017, 7, 40669.	1.6	83
26	Electrostatic Modulation of LaAlO <sub>3</sub> /SrTiO <sub>3</sub> Interface Transport in an Electric Double-Layer Transistor. <i>Advanced Materials Interfaces</i> , 2014, 1, 1300001.	1.9	75
27	Tunable inverted gap in monolayer quasi-metallic MoS <sub>2</sub> induced by strong charge-lattice coupling. <i>Nature Communications</i> , 2017, 8, 486.	5.8	75
28	Modification of Vapor Phase Concentrations in MoS <sub>2</sub> Growth Using a NiO Foam Barrier. <i>ACS Nano</i> , 2018, 12, 1339-1349.	7.3	70
29	Composition-Tunable Vertically Aligned CdS <sub>x</sub> Se <sub>1-x</sub> Nanowire Arrays via van der Waals Epitaxy: Investigation of Optical Properties and Photocatalytic Behavior. <i>Advanced Materials</i> , 2012, 24, 4151-4156.	11.1	69
30	Machine Learning-Driven Biomaterials Evolution. <i>Advanced Materials</i> , 2022, 34, e2102703.	11.1	68
31	Impact of oxide defects on band offset at GeO <sub>2</sub> /Ge interface. <i>Applied Physics Letters</i> , 2009, 94, 142903.	1.5	66
32	Giant Enhancements of Perpendicular Magnetic Anisotropy and Spin-Orbit Torque by a MoS <sub>2</sub> Layer. <i>Advanced Materials</i> , 2019, 31, e1900776.	11.1	65
33	Effect of nitrogen doping on optical properties and electronic structures of SrTiO <sub>3</sub> films. <i>Applied Physics Letters</i> , 2006, 89, 231922.	1.5	63
34	Growth of Cu <sub>2</sub> O on Ga-doped ZnO and their interface energy alignment for thin film solar cells. <i>Journal of Applied Physics</i> , 2010, 108, 033702.	1.1	63
35	Interlayer interactions in 2D WS <sub>2</sub> /MoS <sub>2</sub> heterostructures monolithically grown by <i>in situ</i> physical vapor deposition. <i>Nanoscale</i> , 2018, 10, 22927-22936.	2.8	62
36	The stability of aluminium oxide monolayer and its interface with two-dimensional materials. <i>Scientific Reports</i> , 2016, 6, 29221.	1.6	59

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37	Origin of XPS binding energy shifts in Ni clusters and atoms on rutile TiO <sub>2</sub> surfaces. <i>Surface Science</i> , 2008, 602, 2769-2773.	0.8	58
38	Epitaxial LaAlO <sub>3</sub> thin film on silicon: Structure and electronic properties. <i>Applied Physics Letters</i> , 2007, 90, 181925.	1.5	57
39	Self-Assembled Shape- and Orientation-Controlled Synthesis of Nanoscale Cu <sub>3</sub> Si Triangles, Squares, and Wires. <i>Nano Letters</i> , 2008, 8, 3205-3210.	4.5	55
40	Demonstration of color display metasurfaces via immersion lithography on a 12-inch silicon wafer. <i>Optics Express</i> , 2018, 26, 19548.	1.7	55
41	The energy-band alignment at molybdenum disulphide and high- $\kappa$ dielectrics interfaces. <i>Applied Physics Letters</i> , 2014, 104, .	1.5	53
42	Thermal behavior of localized surface plasmon resonance of Au@TiO <sub>2</sub> core/shell nanoparticle arrays. <i>Applied Physics Letters</i> , 2007, 90, 183117.	1.5	52
43	Heteroepitaxial Decoration of Ag Nanoparticles on Si Nanowires: A Case Study on Raman Scattering and Mapping. <i>Nano Letters</i> , 2010, 10, 3940-3947.	4.5	52
44	Tailoring Optical Properties of Silicon Nanowires by Au Nanostructure Decorations: Enhanced Raman Scattering and Photodetection. <i>Journal of Physical Chemistry C</i> , 2012, 116, 4416-4422.	1.5	51
45	Interface-based tuning of Rashba spin-orbit interaction in asymmetric oxide heterostructures with 3d electrons. <i>Nature Communications</i> , 2019, 10, 3052.	5.8	51
46	Morphology-controlled synthesis and a comparative study of the physical properties of SnO <sub>2</sub> nanostructures: from ultrathin nanowires to ultrawide nanobelts. <i>Nanotechnology</i> , 2009, 20, 135605.	1.3	49
47	Doubly Enhanced Second Harmonic Generation through Structural and Epsilon-near-Zero Resonances in TiN Nanostructures. <i>ACS Photonics</i> , 2018, 5, 2087-2093.	3.2	49
48	Creep behaviour of eutectic SnBi alloy and its constituent phases using nanoindentation technique. <i>Journal of Alloys and Compounds</i> , 2013, 574, 98-103.	2.8	48
49	Transparent free-standing metamaterials and their applications in surface-enhanced Raman scattering. <i>Nanoscale</i> , 2014, 6, 132-139.	2.8	48
50	Au/Ni <sub>12</sub> P <sub>5</sub> core/shell single-crystal nanoparticles as oxygen evolution reaction catalyst. <i>Nano Research</i> , 2017, 10, 3103-3112.	5.8	48
51	Effect of interfacial coupling on photocatalytic performance of large scale MoS <sub>2</sub> /TiO <sub>2</sub> hetero-thin films. <i>Applied Physics Letters</i> , 2015, 106, 081602.	1.5	47
52	Ultraviolet light emission and excitonic fine structures in ultrathin single-crystalline indium oxide nanowires. <i>Applied Physics Letters</i> , 2010, 96, .	1.5	46
53	Band alignment of yttrium oxide on various relaxed and strained semiconductor substrates. <i>Journal of Applied Physics</i> , 2008, 103, .	1.1	45
54	Ferromagnetism in inhomogeneous Zn <sub>1-x</sub> CoxO thin films. <i>Journal of Applied Physics</i> , 2006, 100, 063910.	1.1	44

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55	A Template and Catalyst-Free Metal-Etching-Oxidation Method to Synthesize Aligned Oxide Nanowire Arrays: NiO as an Example. ACS Nano, 2010, 4, 4785-4791.	7.3	44
56	Visible-Near-Infrared-Light-Driven Oxygen Evolution Reaction with Noble-Metal-Free WO <sub>2</sub> -WO <sub>3</sub> Hybrid Nanorods. Langmuir, 2016, 32, 13046-13053.	1.6	44
57	Role of oxygen for highly conducting and transparent gallium-doped zinc oxide electrode deposited at room temperature. Applied Physics Letters, 2011, 98, .	1.5	43
58	Electronic-reconstruction-enhanced hydrogen evolution catalysis in oxide polymorphs. Nature Communications, 2019, 10, 3149.	5.8	42
59	Probing the oxidation behavior of Ti <sub>2</sub> AlC MAX phase powders between 200 and 1000 Å°C. Journal of the European Ceramic Society, 2017, 37, 43-51.	2.8	41
60	Plasma spray of Ti <sub>2</sub> AlC MAX phase powders: Effects of process parameters on coatings' properties. Surface and Coatings Technology, 2017, 325, 429-436.	2.2	40
61	The resistive switching in TiO <sub>2</sub> films studied by conductive atomic force microscopy and Kelvin probe force microscopy. AIP Advances, 2013, 3, .	0.6	39
62	Two-Dimensional C/TiO <sub>2</sub> Heterogeneous Hybrid for Noble-Metal-Free Hydrogen Evolution. ACS Catalysis, 2017, 7, 6892-6900.	5.5	39
63	Magnetic and electrical transport properties of Ge <sup>1-x</sup> Mnx thin films. Journal of Applied Physics, 2006, 100, 103908.	1.1	38
64	Revealing the Grain Boundary Formation Mechanism and Kinetics during Polycrystalline MoS <sub>2</sub> Growth. ACS Applied Materials & Interfaces, 2019, 11, 46090-46100.	4.0	37
65	Chemical stability study of nanoscale thin film yttria-doped barium cerate electrolyte for micro solid oxide fuel cells. Journal of Power Sources, 2014, 268, 804-809.	4.0	36
66	Proton-conducting Micro-solid Oxide Fuel Cells with Improved Cathode Reactions by a Nanoscale Thin Film Gadolinium-doped Ceria Interlayer. Scientific Reports, 2016, 6, 22369.	1.6	35
67	Pulsed laser deposition of high-quality ZnCdO epilayers and ZnCdO/ZnO single quantum well on sapphire substrate. Applied Physics Letters, 2010, 97, 061911.	1.5	34
68	Electronic structure of germanium nitride considered for gate dielectrics. Journal of Applied Physics, 2007, 102, 013507.	1.1	33
69	Effect of oxygen stoichiometry on the insulator-metal phase transition in vanadium oxide thin films studied using optical pump-terahertz probe spectroscopy. Applied Physics Letters, 2013, 103, 151908.	1.5	33
70	X-ray photoelectron spectroscopy studies of nitridation on 4H-SiC (0001) surface by direct nitrogen atomic source. Applied Physics Letters, 2008, 92, 092119.	1.5	32
71	Influence of thin metal nanolayers on the photodetective properties of ZnO thin films. Journal of Applied Physics, 2009, 106, 083110.	1.1	31
72	Atomic N Modified Rutile TiO <sub>2</sub> (110) Surface Layer with Significant Visible Light Photoactivity. Journal of Physical Chemistry C, 2014, 118, 994-1000.	1.5	31

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73	High perpendicular coercive field of (100)-oriented CoFe <sub>2</sub> O <sub>4</sub> thin films on Si (100) with MgO buffer layer. Journal of Applied Physics, 2008, 103, .	1.1	30
74	Band offsets of HfO <sub>2</sub> /ZnO interface: <i>In situ</i> x-ray photoelectron spectroscopy measurement and <i>ab initio</i> calculation. Applied Physics Letters, 2009, 95, .	1.5	29
75	Kerosene-fuelled high velocity oxy-fuel (HVOF) spray of Ti <sub>2</sub> AlC MAX phase powders. Journal of Alloys and Compounds, 2018, 735, 377-385.	2.8	29
76	Interfacial Interaction between HfO <sub>2</sub> and MoS <sub>2</sub> : From Thin Films to Monolayer. Journal of Physical Chemistry C, 2016, 120, 9804-9810.	1.5	27
77	Creep behavior of Sn-Bi solder alloys at elevated temperatures studied by nanoindentation. Journal of Materials Science: Materials in Electronics, 2017, 28, 4114-4124.	1.1	27
78	Fatigue life enhancement in alpha/beta Ti-6Al-4V after shot peening: An EBSD and TEM crystallographic orientation mapping study of surface layer. Materialia, 2020, 12, 100813.	1.3	27
79	Solution-Grown ZnO Films toward Transparent and Smart Dual-Color Light-Emitting Diode. ACS Applied Materials & Interfaces, 2016, 8, 15482-15488.	4.0	26
80	Selective self-assembly of 2,3-diaminophenazine molecules on MoSe <sub>2</sub> mirror twin boundaries. Nature Communications, 2019, 10, 2847.	5.8	26
81	Effects of annealing on the valence band offsets between hafnium aluminate and silicon. Journal of Applied Physics, 2008, 104, .	1.1	24
82	Enhanced low field magnetoresistance in nanocrystalline La <sub>0.7</sub> Sr <sub>0.3</sub> MnO <sub>3</sub> synthesized on MgO nanowires. Applied Physics Letters, 2010, 96, 222501.	1.5	24
83	Pulse laser deposition of epitaxial TiO <sub>2</sub> thin films for high-performance ultraviolet photodetectors. Applied Surface Science, 2015, 355, 398-402.	3.1	24
84	Defect assisted coupling of a MoS <sub>2</sub> /TiO <sub>2</sub> interface and tuning of its electronic structure. Nanotechnology, 2016, 27, 355203.	1.3	24
85	Nanoporous palladium anode for direct ethanol solid oxide fuel cells with nanoscale proton-conducting ceramic electrolyte. Journal of Power Sources, 2017, 340, 98-103.	4.0	24
86	Band alignment and thermal stability of HfO <sub>2</sub> gate dielectric on SiC. Applied Physics Letters, 2008, 93, 052104.	1.5	23
87	Electronic structures of $\beta$ -Si <sub>3</sub> N <sub>4</sub> (0001)/Si(111) interfaces: Perfect bonding and dangling bond effects. Journal of Applied Physics, 2009, 105, .	1.1	23
88	Graphene on $\beta$ -Si <sub>3</sub> N <sub>4</sub> : An ideal system for graphene-based electronics. AIP Advances, 2011, 1, .	0.6	23
89	Temperature-dependent microstructural evolution of Ti <sub>2</sub> AlN thin films deposited by reactive magnetron sputtering. Applied Surface Science, 2016, 368, 88-96.	3.1	23
90	Effect of Surface Polishing Treatment on the Fatigue Performance of Shot-Peened Ti-6Al-4V Alloy. Acta Metallurgica Sinica (English Letters), 2017, 30, 630-640.	1.5	23

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91	Isothermal oxidation of the Ti <sub>2</sub> AlC MAX phase coatings deposited by kerosene-fuelled HVOF spray. Corrosion Science, 2018, 138, 266-274.	3.0	23
92	Unraveling High-Yield Phase-Transition Dynamics in Transition Metal Dichalcogenides on Metallic Substrates. Advanced Science, 2019, 6, 1802093.	5.6	23
93	MoS <sub>2</sub> /Polymer Heterostructures Enabling Stable Resistive Switching and Multistate Randomness. Advanced Materials, 2020, 32, e2002704.	11.1	23
94	Enhancing creep resistance of SnBi solder alloy with non-reactive nano fillers: A study using nanoindentation. Journal of Alloys and Compounds, 2017, 729, 498-506.	2.8	22
95	Electronic properties of atomically thin MoS <sub>2</sub> layers grown by physical vapour deposition: band structure and energy level alignment at layer/substrate interfaces. RSC Advances, 2018, 8, 7744-7752.	1.7	22
96	Hydrogen Evolution Catalyzed by a Molybdenum Sulfide Two-Dimensional Structure with Active Basal Planes. ACS Applied Materials & Interfaces, 2018, 10, 22042-22049.	4.0	22
97	Thermal stability of nitrogen-doped SrTiO <sub>3</sub> films: Electronic and optical properties studies. Journal of Applied Physics, 2007, 101, 063708.	1.1	21
98	Self-Assembled In-Plane Growth of Mg <sub>2</sub> SiO <sub>4</sub> Nanowires on Si Substrates Catalyzed by Au Nanoparticles. Advanced Functional Materials, 2010, 20, 2511-2518.	7.8	21
99	Ultrafast and Robust UV Luminescence from Cu-Doped ZnO Nanowires Mediated by Plasmonic Hot Electrons. Advanced Optical Materials, 2016, 4, 960-966.	3.6	21
100	Nanoscale semiconductor-insulator-metal core/shell heterostructures: facile synthesis and light emission. Nanoscale, 2011, 3, 3170.	2.8	20
101	Examining the transparency of gallium-doped zinc oxide for photovoltaic applications. Solar Energy Materials and Solar Cells, 2011, 95, 2400-2406.	3.0	20
102	Ultrafast insulator-metal phase transition in vanadium dioxide studied using optical pump-terahertz probe spectroscopy. Journal of Physics Condensed Matter, 2012, 24, 415604.	0.7	20
103	Charge Distribution in the Single Crystalline Ti <sub>2</sub> AlN Thin Films Grown on MgO(111) Substrates. Journal of Physical Chemistry C, 2013, 117, 11656-11662.	1.5	20
104	Temperature dependence of weak localization effects of excitons in ZnCdO/ZnO single quantum well. Journal of Applied Physics, 2011, 109, .	1.1	19
105	Near-infrared active metamaterials and their applications in tunable surface-enhanced Raman scattering. Optics Express, 2014, 22, 2989.	1.7	19
106	Tuning Contact Barrier Height between Metals and MoS <sub>2</sub> Monolayer through Interface Engineering. Advanced Materials Interfaces, 2017, 4, 1700035.	1.9	19
107	Defect Evolution Enhanced Visible-Light Photocatalytic Activity in Nitrogen-Doped Anatase TiO <sub>2</sub> Thin Films. Journal of Physical Chemistry C, 2018, 122, 16600-16606.	1.5	19
108	Exciton-Enabled Meta-Optics in Two-Dimensional Transition Metal Dichalcogenides. Nano Letters, 2020, 20, 7964-7972.	4.5	19

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109	Surface-plasmon enhancement of band gap emission from ZnCdO thin films by gold particles. Applied Physics Letters, 2010, 97, 061104.	1.5	18
110	Shape-Controlled Fabrication of Micro/Nanoscale Triangle, Square, Wire-like, and Hexagon Pits on Silicon Substrates Induced by Anisotropic Diffusion and Silicide Sublimation. ACS Nano, 2010, 4, 2901-2909.	7.3	18
111	Pressure induced topological phase transition in layered Bi <sub>2</sub> S <sub>3</sub> . Physical Chemistry Chemical Physics, 2017, 19, 29372-29380.	1.3	18
112	Probing the Ionic and Electrochemical Phenomena during Resistive Switching of NiO Thin Films. ACS Applied Materials & Interfaces, 2018, 10, 8092-8101.	4.0	18
113	Large-scale monolayer molybdenum disulfide (MoS <sub>2</sub> ) for mid-infrared photonics. Nanophotonics, 2020, 9, 4703-4710.	2.9	18
114	Buffer-Layer-Assisted Epitaxial Growth of Perfectly Aligned Oxide Nanorod Arrays in Solution. Crystal Growth and Design, 2011, 11, 4885-4891.	1.4	17
115	Photoluminescence characteristics of ZnCdO/ZnO single quantum well grown by pulsed laser deposition. Applied Physics Letters, 2011, 98, 121903.	1.5	17
116	Temperature dependent photoluminescence studies of ZnO thin film grown on (111) YSZ substrate. Journal of Crystal Growth, 2011, 319, 8-12.	0.7	17
117	Growth of single crystalline TaON on yttria-stabilized zirconia (YSZ). Journal of Solid State Chemistry, 2013, 204, 27-31.	1.4	17
118	Tunable bilayer two-dimensional electron gas in LaAlO <sub>3</sub> /SrTiO <sub>3</sub> superlattices. Applied Physics Letters, 2014, 105, .	1.5	17
119	Interface properties of Ge <sub>3</sub> N <sub>4</sub> /Ge(111): <i>Ab initio</i> and x-ray photoemission spectroscopy study. Applied Physics Letters, 2008, 93, 222907.	1.5	16
120	Enhancement of bandgap emission of Pt-capped MgZnO films: Important role of light extraction versus exciton-plasmon coupling. Optics Express, 2012, 20, 14556.	1.7	16
121	Graphene stabilized high- $\epsilon^{\prime}$ dielectric Y <sub>2</sub> O <sub>3</sub> (111) monolayers and their interfacial properties. RSC Advances, 2015, 5, 83588-83593.	1.7	16
122	Effect of antiphase boundaries on electrical transport properties of Fe <sub>3</sub> O <sub>4</sub> nanostructures. Applied Physics Letters, 2005, 86, 252507.	1.5	15
123	Determination of atomic Ni interaction with TiO <sub>2</sub> by XPS. Surface and Interface Analysis, 2010, 42, 878-881.	0.8	15
124	Alleviating delamination of Ti <sub>2</sub> AlC coating upon oxidation at 600 °C with heavy incorporation of TiC. Journal of Alloys and Compounds, 2019, 790, 536-546.	2.8	15
125	Growth studies of (2 $\times$ 2), (2 $\times$ 0) and (1 $\times$ 1) oriented MgO films on Si (0 $\times$ 0 $\times$ 1), without buffer layer. Physics D: Applied Physics, 2007, 40, 3678-3682.	1.3	14
126	Low-temperature deposition of $\mu$ c-Si:H thin films by a low-frequency inductively coupled plasma for photovoltaic applications. Journal Physics D: Applied Physics, 2013, 46, 215501.	1.3	14



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127	Electrical oscillation in Pt/VO <sub>2</sub> bilayer strips. <i>Journal of Applied Physics</i> , 2015, 117, 064502.	1.1	14
128	Band alignment of 2D WS <sub>2</sub> /HfO <sub>2</sub> interfaces from x-ray photoelectron spectroscopy and first-principles calculations. <i>Applied Physics Letters</i> , 2018, 112, 171604.	1.5	14
129	Effects of oxygen and moisture on the I-V characteristics of TiO <sub>2</sub> thin films. <i>Journal of Materiomics</i> , 2018, 4, 228-237.	2.8	14
130	Wafer-scale 2H-MoS <sub>2</sub> Monolayer for High Surface-enhanced Raman Scattering Performance: Charge-Transfer Coupled with Molecule Resonance. <i>Advanced Materials Technologies</i> , 2022, 7, .	3.0	14
131	Atomic and electronic structures at ZnO and ZrO <sub>2</sub> interface for transparent thin-film transistors. <i>Physica Status Solidi (A) Applications and Materials Science</i> , 2010, 207, 1731-1734.	0.8	13
132	Desorption of Al and Phase Transformation of Ti <sub>2</sub> AlN MAX Thin Film upon Annealing in Ultra-High-Vacuum. <i>Journal of Physical Chemistry C</i> , 2014, 118, 20927-20939.	1.5	13
133	Origin of Al Deficient Ti <sub>2</sub> AlN and Pathways of Vacancy-Assisted Diffusion. <i>Journal of Physical Chemistry C</i> , 2015, 119, 16606-16613.	1.5	13
134	Biomaterials by design: Harnessing data for future development. <i>Materials Today Bio</i> , 2021, 12, 100165.	2.6	13
135	Gallium-Doped Zinc Oxide Nanostructures for Tunable Transparent Thermoelectric Films. <i>ACS Applied Nano Materials</i> , 2022, 5, 8631-8639.	2.4	13
136	Size Dependence of the 2p <sub>3/2</sub> and 3d <sub>5/2</sub> Binding Energy Shift of Ni Nanostructures: Skin-Depth Charge and Energy Trapping. <i>Journal of Physical Chemistry C</i> , 2009, 113, 10939-10946.	1.5	12
137	<i>In situ</i> photoemission spectroscopy study on formation of HfO <sub>2</sub> dielectrics on epitaxial graphene on SiC substrate. <i>Applied Physics Letters</i> , 2010, 96, 072111.	1.5	12
138	Interfacial Properties of Silicon Nitride Grown on Epitaxial Graphene on 6H-SiC Substrate. <i>Journal of Physical Chemistry C</i> , 2012, 116, 22315-22318.	1.5	12
139	Highly conductive and transparent aluminum-doped zinc oxide thin films deposited on polyethylene terephthalate substrates by pulsed laser deposition. <i>Thin Solid Films</i> , 2013, 545, 285-290.	0.8	12
140	Exciton energy recycling from ZnO defect levels: towards electrically driven hybrid quantum-dot white light-emitting-diodes. <i>Nanoscale</i> , 2016, 8, 5835-5841.	2.8	12
141	Development of a highly transparent superamphiphobic plastic sheet by nanoparticle and chemical coating. <i>Journal of Colloid and Interface Science</i> , 2016, 467, 245-252.	5.0	12
142	Fabrication of nonspherical colloidal particles via reactive ion etching of surface-patterned colloidal crystals. <i>Colloids and Surfaces A: Physicochemical and Engineering Aspects</i> , 2006, 277, 27-36.	2.3	11
143	Ab initio study on intrinsic defect properties of germanium nitride considered for gate dielectric. <i>Applied Physics Letters</i> , 2007, 91, 132906.	1.5	11
144	Surface plasmon induced exciton redistribution in ZnCdO/ZnO coaxial multiquantum-well nanowires. <i>Applied Physics Letters</i> , 2010, 97, .	1.5	11

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145	Effects of nitrogen incorporation on the electronic structure of rutile-TiO <sub>2</sub> . Journal of Applied Physics, 2011, 109, .	1.1	11
146	Oxidation of Single Crystalline Ti <sub>2</sub> AlN Thin Films between 300 and 900 Å°C: A Perspective from Surface Analysis. Journal of Physical Chemistry C, 2016, 120, 18520-18528.	1.5	11
147	Probing electrochemically induced resistive switching of TiO <sub>2</sub> using SPM techniques. Physical Chemistry Chemical Physics, 2017, 19, 31399-31409.	1.3	11
148	Energy Band Alignment of a Monolayer MoS <sub>2</sub> with SiO <sub>2</sub> and Al <sub>2</sub> O <sub>3</sub> Insulators from Internal Photoemission. Physica Status Solidi (A) Applications and Materials Science, 2019, 216, 1800616.	0.8	11
149	Magnetic and transport properties of Ge:Mn granular system. Thin Solid Films, 2006, 505, 54-56.	0.8	10
150	Scanning tunneling microscopy study of nitrogen incorporated HfO <sub>2</sub> . Journal of Applied Physics, 2008, 104, 064119.	1.1	10
151	Pulsed laser deposition of Ba <sub>0.5</sub> Sr <sub>0.5</sub> Co <sub>0.8</sub> Fe <sub>0.2</sub> O <sub>3-δ</sub> thin film cathodes for low temperature solid oxide fuel cells. Surface and Coatings Technology, 2017, 320, 344-348.	2.2	10
152	Three-Dimensional Resonant Exciton in Monolayer Tungsten Diselenide Actuated by Spin-Orbit Coupling. ACS Nano, 2019, 13, 14529-14539.	7.3	10
153	Employing a Bifunctional Molybdate Precursor To Grow the Highly Crystalline MoS <sub>2</sub> for High-Performance Field-Effect Transistors. ACS Applied Materials & Interfaces, 2019, 11, 14239-14248.	4.0	10
154	Ag <sub>2</sub> S monolayer: an ultrasoft inorganic Lieb lattice. Nanoscale, 2021, 13, 14008-14015.	2.8	10
155	Mechanism of insulator-to-metal transition in heavily Nb doped anatase TiO <sub>2</sub> . Materials Research Express, 2014, 1, 015911.	0.8	9
156	P-type Ge epitaxy on GaAs (100) substrate grown by MOCVD. Applied Surface Science, 2016, 376, 236-240.	3.1	9
157	Local phenomena at grain boundaries: An alternative approach to grasp the role of oxygen vacancies in metallization of VO <sub>2</sub> . Journal of Materiomics, 2018, 4, 360-367.	2.8	9
158	Formation of two-dimensional small polarons at the conducting LaAlO <sub>3</sub> /SrTiO <sub>3</sub> interface. Physical Review B, 2019, 100, .	1.3	9
159	Band alignments at SrZrO <sub>3</sub> /Ge(001) interface: Thermal annealing effects. Applied Surface Science, 2010, 256, 4850-4853.	3.1	8
160	Epitaxial growth of ZnO film on Si(111) with CeO <sub>2</sub> (111) as buffer layer. Journal Physics D: Applied Physics, 2012, 45, 415306.	1.3	8
161	Correlation of the resistive switching and polarization switching in zinc oxide thin films using scanning probe microscopy techniques. Journal of Materials Research, 2015, 30, 3431-3442.	1.2	8
162	In-situ growth of HfO <sub>2</sub> on clean 2H-MoS <sub>2</sub> surface: Growth mode, interface reactions and energy band alignment. Applied Surface Science, 2017, 420, 523-534.	3.1	8

#	ARTICLE	IF	CITATIONS
163	Structure dependent and strain tunable magnetic ordering in ultrathin chromium telluride. <i>Journal of Alloys and Compounds</i> , 2022, 893, 162223.	2.8	8
164	Synthesis of silica supported titania nanocomposite in controllable phase content and morphology. <i>Applied Physics A: Materials Science and Processing</i> , 2009, 95, 555-562.	1.1	7
165	Comparative study of aluminium-doped zinc oxide and ruthenium-aluminium co-doped zinc oxide by magnetron co-sputtering. <i>Thin Solid Films</i> , 2010, 518, e93-e97.	0.8	7
166	Delayed onset of photochromism in molybdenum oxide films caused by photoinduced defect formation. <i>Science and Technology of Advanced Materials</i> , 2011, 12, 055010.	2.8	7
167	Pulsed laser deposition of epitaxial MgO buffer layer for proton-conducting ceramic electrolytes. <i>Surface and Coatings Technology</i> , 2017, 320, 339-343.	2.2	7
168	The partial pressure effect on the growth of YSZ film and YSZ buffered multilayers on silicon. <i>Ceramics International</i> , 2004, 30, 1257-1261.	2.3	6
169	Growth and band alignment of epitaxial Ni metal gate on crystalline LaAlO <sub>3</sub> (001) dielectric film. <i>Applied Physics Letters</i> , 2009, 94, .	1.5	6
170	Temperature-dependent exciton luminescence from an Au-nanopattern-coated ZnCdO film. <i>Europhysics Letters</i> , 2012, 99, 27003.	0.7	6
171	Modulation of New Excitons in Transition Metal Dichalcogenide-Perovskite Oxide System. <i>Advanced Science</i> , 2019, 6, 1900446.	5.6	6
172	Anisotropic Collective Charge Excitations in Quasimetallic 2D Transition-Metal Dichalcogenides. <i>Advanced Science</i> , 2020, 7, 1902726.	5.6	6
173	Selective hydrogenation improves interface properties of high-k dielectrics on 2D semiconductors. <i>Nano Research</i> , 2022, 15, 4646-4652.	5.8	6
174	Evolution of the 2p satellite of Ni nano-clusters on TiO <sub>2</sub> (001) surfaces. <i>Journal of Physics Condensed Matter</i> , 2008, 20, 485002.	0.7	5
175	Structural, optical, magnetic and electrical properties of Zn <sub>1-x</sub> Co <sub>x</sub> O thin films. <i>Journal of Materials Science: Materials in Electronics</i> , 2009, 20, 60-73.	1.1	5
176	Manipulating Optical Properties of ZnO/Ga:ZnO Core-Shell Nanorods Via Spatially Tailoring Electronic Bandgap. <i>Advanced Optical Materials</i> , 2015, 3, 1066-1071.	3.6	5
177	Layer-dependent semiconductor-metal transition of SnO/Si(001) heterostructure and device application. <i>Scientific Reports</i> , 2017, 7, 2570.	1.6	5
178	Origin of anomalous laminar cracking, volume expansion and weight increase of Ti <sub>2</sub> AlC MAX phase powders at 600 Å°C. <i>Corrosion Science</i> , 2020, 164, 108349.	3.0	5
179	Simultaneous Monitoring of Molecular Thin Film Morphology and Crystal Structure by X-ray Scattering. <i>Crystal Growth and Design</i> , 2020, 20, 5269-5276.	1.4	5
180	A first principles study of uniaxial strain-stabilized long-range ferromagnetic ordering in electrenes. <i>Journal of Materials Chemistry C</i> , 2021, 9, 16576-16580.	2.7	5



#	ARTICLE	IF	CITATIONS
199	Empirical Formulae in Correlating Droplet Shape and Contact Angle. Australian Journal of Chemistry, 2016, 69, 431.	0.5	2
200	TiNbO <sub>2</sub> -Based Photodetectors With Low Dark Current and High UV-to-Visible Rejection Ratio. IEEE Photonics Technology Letters, 2016, 28, 837-840.	1.3	2
201	Oxygen electronic screening and hybridization determining the insulator-metal transition of Physical Review B, 2018, 98, .	1.1	2
202	Effect of Dopants on the Band Structure of Barium Strontium Titanate Thin Films. Materials Research Society Symposia Proceedings, 2005, 872, 1.	0.1	1
203	Development of electronic structure of Ni thin films on Cu(001) surfaces. Surface Science, 2009, 603, 709-715.	0.8	1
204	Enhanced Raman Scattering of Silicon Nanowires by Ag Nanoparticles in-situ Decoration. , 2010, , .		1
205	Fabrication of a $\text{TiN}/\text{Ni}/\text{Au}$ Contact on ZnO Films With High Thermal Stability and Low Resistance. IEEE Transactions on Electron Devices, 2011, 58, 4297-4300.	1.6	1
206	Orientation control of epitaxial Ge thin films growth on SrTiO <sub>3</sub> (100) by ultrahigh vacuum sputtering. Thin Solid Films, 2012, 520, 4880-4883.	0.8	1
207	INVESTIGATION OF Ta/Ni-Al INTEGRATED FILM USED AS A DIFFUSION BARRIER LAYER BETWEEN Cu AND Si. Surface Review and Letters, 2014, 21, 1450079.	0.5	1
208	Photoluminescence: Ultrafast and Robust UV Luminescence from Cu-Doped ZnO Nanowires Mediated by Plasmonic Hot Electrons (Advanced Optical Materials 6/2016). Advanced Optical Materials, 2016, 4, 959-959.	3.6	1
209	Memory Devices: MoS <sub>2</sub> /Polymer Heterostructures Enabling Stable Resistive Switching and Multistate Randomness (Adv. Mater. 42/2020). Advanced Materials, 2020, 32, 2070317.	11.1	1
210	Internal photoemission of electrons from 2D semiconductor/3D metal barrier structures. Journal Physics D: Applied Physics, 2021, 54, 295101.	1.3	1
211	Pushing ArF Dry Scanner Beyond Limitation. International Journal of Mechanical Engineering and Robotics Research, 2016, , .	0.7	1
212	Transition-Metal Dichalcogenides: Anisotropic Collective Charge Excitations in Quasimetallic 2D Transition-Metal Dichalcogenides (Adv. Sci. 10/2020). Advanced Science, 2020, 7, .	5.6	1
213	3D printing of fibre-reinforced ceramic composites with hierarchical structure. Advances in Applied Ceramics, 2022, 121, 46-51.	0.6	1
214	Si substrate controlled in-plane synthesis of self-assembled nanostructures catalyzed by Au nanoparticles. , 2010, , .		0
215	First-principles study of NiSi <sub>2</sub> /HfO <sub>2</sub> interfaces: energetics and Schottky-barrier heights. Journal Physics D: Applied Physics, 2011, 44, 405302.	1.3	0
216	Prospect of large scale 2D transition metal dichalcogenides nanophotonics for optical communications. , 2015, , .		0

#	ARTICLE	IF	CITATIONS
217	Fatigue Enhancement of Ti-6Al-4V via Ex-situ Warm-Shot-Peening (WSP). Lecture Notes in Mechanical Engineering, 2022, , 58-61.	0.3	0
218	Defects Elimination for ArF Implant Lithography. International Journal of Mechanical Engineering and Robotics Research, 2016, , .	0.7	0