

# Xiaotao Zu

## List of Publications by Year in descending order

Source: <https://exaly.com/author-pdf/9120681/publications.pdf>

Version: 2024-02-01

61  
papers

1,206  
citations

331538

21  
h-index

395590

33  
g-index

63  
all docs

63  
docs citations

63  
times ranked

1682  
citing authors

#	ARTICLE	IF	CITATIONS
1	High humidity enhanced surface acoustic wave (SAW) H <sub>2</sub> S sensors based on sol-gel CuO films. <i>Sensors and Actuators B: Chemical</i> , 2019, 294, 55-61.	4.0	104
2	Quantum corrections to the thermodynamics of Schwarzschild-Tangherlini black hole and the generalized uncertainty principle. <i>European Physical Journal C</i> , 2016, 76, 1.	1.4	92
3	Evidencing the existence of exciting half-metallicity in two-dimensional TiCl <sub>3</sub> and VCl <sub>3</sub> sheets. <i>Scientific Reports</i> , 2016, 6, 19407.	1.6	76
4	NH <sub>3</sub> sensing property and mechanisms of quartz surface acoustic wave sensors deposited with SiO <sub>2</sub> , TiO <sub>2</sub> , and SiO <sub>2</sub> -TiO <sub>2</sub> composite films. <i>Sensors and Actuators B: Chemical</i> , 2018, 254, 1165-1173.	4.0	56
5	Formation of broadband antireflective and superhydrophilic subwavelength structures on fused silica using one-step self-masking reactive ion etching. <i>Scientific Reports</i> , 2015, 5, 13023.	1.6	52
6	PEDOT coated iron phosphide nanorod arrays as high-performance supercapacitor negative electrodes. <i>Chemical Communications</i> , 2018, 54, 794-797.	2.2	52
7	Ab initio molecular dynamics simulations of ion-solid interactions in Gd <sub>2</sub> Zr <sub>2</sub> O <sub>7</sub> and Gd <sub>2</sub> Ti <sub>2</sub> O <sub>7</sub> . <i>Journal of Materials Chemistry C</i> , 2013, 1, 1665.	2.7	40
8	Fermion tunneling from anti-de Sitter spaces. <i>European Physical Journal C</i> , 2008, 56, 119-124.	1.4	37
9	Advanced Mitigation Process (AMP) for Improving Laser Damage Threshold of Fused Silica Optics. <i>Scientific Reports</i> , 2016, 6, 31111.	1.6	37
10	A comparative study of the mechanical and thermal properties of defective ZrC, TiC and SiC. <i>Scientific Reports</i> , 2017, 7, 9344.	1.6	34
11	Room-temperature NH <sub>3</sub> gas sensors based on Ag-doped <sup>13</sup> Fe <sub>2</sub> O <sub>3</sub> /SiO <sub>2</sub> composite films with sub-ppm detection ability. <i>Journal of Hazardous Materials</i> , 2015, 298, 154-161.	6.5	33
12	Photoconductive UV Detectors Based on ZnO Films Prepared by Sol-Gel Method. <i>Journal of Sol-Gel Science and Technology</i> , 2005, 36, 223-226.	1.1	32
13	Area spectra of near extremal black holes. <i>European Physical Journal C</i> , 2010, 69, 289-292.	1.4	31
14	Highly sensitive and selective Love mode surface acoustic wave ammonia sensor based on graphene oxides operated at room temperature. <i>Journal of Materials Science</i> , 2019, 54, 11925-11935.	1.7	28
15	Synthesis of FeP nanotube arrays as negative electrode for solid-state asymmetric supercapacitor. <i>Nanotechnology</i> , 2019, 30, 295401.	1.3	27
16	Sputtered ZnO film on aluminium foils for flexible ultrasonic transducers. <i>Ultrasonics</i> , 2014, 54, 1991-1998.	2.1	26
17	Nebulization of water/glycerol droplets generated by ZnO/Si surface acoustic wave devices. <i>Microfluidics and Nanofluidics</i> , 2015, 19, 273-282.	1.0	24
18	Vertical jetting induced by shear horizontal leaky surface acoustic wave on 36° Y-X LiTaO <sub>3</sub> . <i>Applied Physics Letters</i> , 2017, 110, .	1.5	24

#	ARTICLE	IF	CITATIONS
19	Elastic loading enhanced NH <sub>3</sub> sensing for surface acoustic wave sensor with highly porous nitrogen doped diamond like carbon film. <i>Sensors and Actuators B: Chemical</i> , 2021, 344, 130175.	4.0	22
20	Hawking radiation of vector particles via tunneling from 4-dimensional and 5-dimensional black holes. <i>Astrophysics and Space Science</i> , 2015, 359, 1.	0.5	21
21	Ab initio molecular dynamics simulation of the effects of stacking faults on the radiation response of 3C-SiC. <i>Scientific Reports</i> , 2016, 6, 20669.	1.6	21
22	Electronic excitation induced amorphization in titanate pyrochlores: an ab initio molecular dynamics study. <i>Scientific Reports</i> , 2015, 5, 8265.	1.6	20
23	Ultraviolet Laser-induced ignition of RDX single crystal. <i>Scientific Reports</i> , 2016, 6, 20251.	1.6	20
24	Influence of outgassing organic contamination on the transmittance and laser-induced damage of SiO <sub>2</sub> sol-gel antireflection film. <i>Optical Engineering</i> , 2015, 54, 126101.	0.5	18
25	Theoretical prediction of long-range ferromagnetism in transition-metal atom-doped d <sup>0</sup> dichalcogenide single layers SnS <sub>2</sub> and ZrS <sub>2</sub> . <i>Physical Chemistry Chemical Physics</i> , 2016, 18, 25151-25160.	1.3	18
26	Enhancement of microfluidic efficiency with nanocrystalline diamond interlayer in the ZnO-based surface acoustic wave device. <i>Microfluidics and Nanofluidics</i> , 2013, 15, 377-386.	1.0	17
27	Room-Temperature Ammonia Sensor Based on ZnO Nanorods Deposited on ST-Cut Quartz Surface Acoustic Wave Devices. <i>Sensors</i> , 2017, 17, 1142.	2.1	17
28	Effect of carbon and sintering temperature on the structural and magnetic properties of SrFe <sub>12</sub> O <sub>19</sub> nanoparticles. <i>Journal of Sol-Gel Science and Technology</i> , 2015, 73, 371-378.	1.1	16
29	Engineering the electronic and magnetic properties of d <sup>0</sup> 2D dichalcogenide materials through vacancy doping and lattice strains. <i>Physical Chemistry Chemical Physics</i> , 2016, 18, 7163-7168.	1.3	16
30	Effects of surface defects on two-dimensional electron gas at NdAlO <sub>3</sub> /SrTiO <sub>3</sub> interface. <i>Scientific Reports</i> , 2014, 4, 5477.	1.6	15
31	Chelating agents role on phase formation and surface morphology of single orthorhombic YMn <sub>2</sub> O <sub>5</sub> nanorods via modified polyacrylamide gel route. <i>Science China Chemistry</i> , 2014, 57, 402-408.	4.2	14
32	Laser-Induced Damage Initiation and Growth of Optical Materials. <i>Advances in Condensed Matter Physics</i> , 2014, 2014, 1-10.	0.4	13
33	Synthesis and Photoluminescence of $\text{Al}^{3+}$ -Al <sub>2</sub> O <sub>3</sub> and C-doped $\text{Al}^{3+}$ -Al <sub>2</sub> O <sub>3</sub> Powders. <i>Transactions of the Indian Ceramic Society</i> , 2014, 73, 37-42.	0.4	13
34	Oxygen Vacancy Dependence of Magnetic Behavior in the LaAlO <sub>3</sub> /SrTiO <sub>3</sub> Heterostructures. <i>Advanced Materials Interfaces</i> , 2016, 3, 1600547.	1.9	13
35	Strong Gravitational Lensing in a Brane-World Black Hole. <i>International Journal of Theoretical Physics</i> , 2015, 54, 3103-3114.	0.5	12
36	Spontaneous ripple formation in phosphorene: electronic properties and possible applications. <i>Nanoscale</i> , 2016, 8, 11827-11833.	2.8	11

#	ARTICLE	IF	CITATIONS
37	Ab initio molecular dynamics simulation of low energy radiation responses of $\hat{1}\pm$ -Al <sub>2</sub> O <sub>3</sub> . Scientific Reports, 2017, 7, 3621.	1.6	11
38	Bulk damage and stress behavior of fused silica irradiated by nanosecond laser. Optical Engineering, 2014, 53, 047103.	0.5	9
39	Quantitative correlation between facets defects of RDX crystals and their laser sensitivity. Journal of Hazardous Materials, 2016, 313, 103-111.	6.5	9
40	Evidencing the existence of intrinsic half-metallicity and ferromagnetism in zigzag gallium sulfide nanoribbons. Scientific Reports, 2014, 4, 5773.	1.6	8
41	Tunable electronic and magnetic properties of arsenene nanoribbons. RSC Advances, 2017, 7, 51935-51943.	1.7	8
42	Dehydrogenation: a simple route to modulate magnetism and spatial charge distribution of germanane. Journal of Materials Chemistry C, 2015, 3, 3128-3134.	2.7	7
43	Deformed Hamilton-Jacobi Equations and the Tunneling Radiation of the Higher-Dimensional RN-(A)dS Black Hole. International Journal of Theoretical Physics, 2016, 55, 3079-3087.	0.5	6
44	Defect induced charge trapping in C-doped $\hat{1}\pm$ -Al <sub>2</sub> O <sub>3</sub> . Journal of Applied Physics, 2017, 122, 025702.	1.1	6
45	Effect of UV Laser Conditioning on the Structure of KDP Crystal. Advances in Condensed Matter Physics, 2014, 2014, 1-7.	0.4	5
46	Ab initio study of structural and mechanical property of solid molecular hydrogens. European Physical Journal B, 2015, 88, 1.	0.6	5
47	Scratch defects modulated hot spots generation in laser irradiated RDX crystals: a 3D FDTD simulation. Journal of Materials Science, 2016, 51, 8812-8823.	1.7	4
48	Influence of Ambient Temperature on Nanosecond and Picosecond Laser-Induced Bulk Damage of Fused Silica. Advances in Condensed Matter Physics, 2014, 2014, 1-7.	0.4	3
49	Theory of suppressing avalanche process of carrier in short pulse laser irradiated dielectrics. Journal of Applied Physics, 2014, 115, 203112.	1.1	3
50	Strong Gravitational Lensing in the Einstein-Proca Theory. International Journal of Theoretical Physics, 2015, 54, 1245-1252.	0.5	3
51	Scratch Types and Damage Thresholds of Fused Silica. , 2010, , .		2
52	Ab initio calculations of mechanical properties in $\hat{1}^2$ -MH <sub>2</sub> $\hat{2}$ $\hat{x}$ Hex (M = Er, Sc). European Physical Journal B, 2014, 87, 1.	0.6	2
53	Remnants by fermions' tunneling from a Ho $\hat{A}$ <sup>TM</sup> ava $\hat{a}$ $\hat{e}$ "Lifshitz black hole. Modern Physics Letters A, 2015, 30, 1550016.	0.5	2
54	Modified tunneling radiation of the scalar particles and Dirac particles from a five-dimensional black hole. Modern Physics Letters A, 2016, 31, 1650022.	0.5	2

#	ARTICLE	IF	CITATIONS
55	DFT study of hydrogen and helium defects at the (112̄,1) twin boundary in hcp scandium. International Journal of Modern Physics B, 2017, 31, 1750080.	1.0	2
56	Modified Fermions Tunneling Radiation from Nonstationary, Axially Symmetric Kerr Black Hole. Advances in High Energy Physics, 2019, 2019, 1-7.	0.5	2
57	Low Cost Microstrip Subharmonic Mixer in Millimeter Wave Band. , 2007, , .		1
58	Modeling of Surface Damage Mitigation in Fused Silica With Carbon Dioxide Laser. IEEE Transactions on Applied Superconductivity, 2014, 24, 1-4.	1.1	1
59	Ab initio study of intrinsic defects and diffusion behaviors in solid molecular hydrogens. European Physical Journal B, 2015, 88, 1.	0.6	1
60	Precipitates of Cr at $\{110\}$ $\{112\}$ GB in $\alpha$ -Fe. Materials Research Society Symposia Proceedings, 2014, 1645, 1.	0.1	0
61	He+ Irradiation Induced Cracking and Exfoliating on the Surface of Ti3AlC2. Microscopy and Microanalysis, 2017, 23, 2232-2233.	0.2	0