

Xiaofeng Gu

List of Publications by Year in descending order

Source: <https://exaly.com/author-pdf/1580815/publications.pdf>

Version: 2024-02-01

127
papers

2,006
citations

257357

24
h-index

289141

40
g-index

129
all docs

129
docs citations

129
times ranked

2639
citing authors

#	ARTICLE	IF	CITATIONS
1	Fourfold Polarization-Sensitive Photodetector Based on GaTe/MoS ₂ van der Waals Heterojunction. <i>Advanced Electronic Materials</i> , 2022, 8, 2100673.	2.6	21
2	Status and prospects of Ohmic contacts on two-dimensional semiconductors. <i>Nanotechnology</i> , 2022, 33, 062005.	1.3	5
3	High-densities of free holes in homoepitaxial n-GaN induced by fluorine-plasma ion implantation. <i>Solid-State Electronics</i> , 2022, 189, 108226.	0.8	1
4	Lithography-free and high-efficiency preparation of black phosphorous devices by direct evaporation through shadow mask. <i>Nanotechnology</i> , 2022, 33, 225201.	1.3	1
5	A Novel DTSCR With Embedded MOS and Island Diodes for ESD Protection of High-Speed ICs. <i>IEEE Transactions on Device and Materials Reliability</i> , 2022, 22, 306-311.	1.5	6
6	Inkjet-printed TMDC-graphene heterostructures for flexible and broadband photodetectors. <i>Journal of Applied Physics</i> , 2022, 131, .	1.1	3
7	Effect of the surface oxide layer on the stability of black phosphorus. <i>Applied Surface Science</i> , 2021, 537, 147850.	3.1	21
8	Controllable synthesis of SnS ₂ flakes and MoS ₂ /SnS ₂ heterostructures by confined-space chemical vapor deposition. <i>CrystEngComm</i> , 2021, 23, 2563-2571.	1.3	8
9	In Situ Ultrafast and Patterned Growth of Transition Metal Dichalcogenides from Inkjet-Printed Aqueous Precursors. <i>Advanced Materials</i> , 2021, 33, e2100260.	11.1	36
10	Controllable Epitaxial Growth of Large-Area MoS ₂ /WS ₂ Vertical Heterostructures by Confined-Space Chemical Vapor Deposition. <i>Small</i> , 2021, 17, e2007312.	5.2	37
11	Highly crystalline Mo _{1-x} Re _x S ₂ monolayers by NaCl-assisted and space-confined chemical vapor deposition. <i>Thin Solid Films</i> , 2021, 722, 138576.	0.8	2
12	Large-scale MoS ₂ (1-x)Se _{2x} monolayers synthesized by confined-space CVD. <i>Nanotechnology</i> , 2021, 32, 355601.	1.3	6
13	Multi-band bandpass filter based on direct-connected T-shaped stub-loaded resonator. <i>Microwave and Optical Technology Letters</i> , 2021, 63, 2715-2722.	0.9	0
14	A centrosymmetric-coupled tri-band bandpass filter constituted by loaded bar and embedded S-shaped resonator. <i>Microwave and Optical Technology Letters</i> , 2021, 63, 2732-2739.	0.9	1
15	Controllable synthesis of WS ₂ (1-x)Se _{2x} monolayers with fast photoresponse by a facile chemical vapor deposition strategy. <i>Materials Science and Engineering B: Solid-State Materials for Advanced Technology</i> , 2021, 269, 115176.	1.7	12
16	A Dual-MOS-Triggered Silicon-Controlled Rectifier for High-Voltage ESD Protection. <i>IEEE Journal of Emerging and Selected Topics in Power Electronics</i> , 2021, 9, 6293-6299.	3.7	5
17	Accurate determination of the peak channel temperature by an electrical method combined with EL mapping technique in In _{0.17} Al _{0.83} N/GaN HEMTs. <i>Microelectronics Reliability</i> , 2021, 127, 114382.	0.9	1
18	Bidirectional doping of two-dimensional thin-layer transition metal dichalcogenides using soft ammonia plasma. <i>Nanoscale</i> , 2021, 13, 15278-15284.	2.8	5

#	ARTICLE	IF	CITATIONS
19	An energy-efficient switching scheme based on distributing most significant bit capacitors for successive approximation register analog-to-digital converter. <i>International Journal of Circuit Theory and Applications</i> , 2021, 49, 820-829.	1.3	3
20	High performance IGZO-based phototransistors by BN/BP interface engineering. <i>Nanotechnology</i> , 2021, 32, 025201.	1.3	2
21	Synthesis and Characterization of Metallic Janus MoSH Monolayer. <i>ACS Nano</i> , 2021, 15, 20319-20331.	7.3	47
22	Controllable Synthesis of Crystalline $\text{ReS}_2(1\bar{1}\bar{0})$ and $\text{ReS}_2(1\bar{1}\bar{0})$ Monolayers on Amorphous SiO_2/Si Substrates with Fast Photoresponse. <i>Advanced Optical Materials</i> , 2020, 8, 1901415.	3.6	23
23	2D atomic crystal molecular superlattices by soft plasma intercalation. <i>Nature Communications</i> , 2020, 11, 5960.	5.8	36
24	Design of a cascade-MOS-triggered SCR with high holding-voltage for high-voltage ESD protection. <i>Solid-State Electronics</i> , 2020, 171, 107861.	0.8	3
25	Humidity Stability of All-Sputtered Metal-Oxide Electric-Double-Layer Transistors. <i>IEEE Transactions on Electron Devices</i> , 2020, 67, 5532-5536.	1.6	9
26	Study on the improvement of p-type multi-crystalline silicon material for solar cells by the hydrogenation with electron injection. <i>Bulletin of Materials Science</i> , 2020, 43, 1.	0.8	2
27	Charge Transport in Vertical GaN Schottky Barrier Diodes: A Refined Physical Model for Conductive Dislocations. <i>IEEE Transactions on Electron Devices</i> , 2020, 67, 841-846.	1.6	21
28	Design of a Dual-directional Diode-triggered SCR for Low Voltage ESD Protection. <i>IEEJ Transactions on Electronics, Information and Systems</i> , 2020, 140, 673-674.	0.1	0
29	Enhanced photoresponsivity of InSe photodetector by molecular doping. <i>Applied Physics Express</i> , 2020, 13, 111005.	1.1	1
30	Recent advances in plasma modification of 2D transition metal dichalcogenides. <i>Nanoscale</i> , 2019, 11, 19202-19213.	2.8	73
31	Compact and low-loss diplexer design and fabrication for WLAN/WiMAX application. <i>Journal of Electromagnetic Waves and Applications</i> , 2019, 33, 2257-2265.	1.0	0
32	Two-Dimensional Alloying Molybdenum Tin Disulfide Monolayers with Fast Photoresponse. <i>ACS Applied Materials & Interfaces</i> , 2019, 11, 39077-39087.	4.0	28
33	Effect of thermal conductivity of substrate on laser-induced phase transition of MoTe_2 . <i>Journal of Raman Spectroscopy</i> , 2019, 50, 755-761.	1.2	17
34	Transition metal dichalcogenides bilayer single crystals by reverse-flow chemical vapor epitaxy. <i>Nature Communications</i> , 2019, 10, 598.	5.8	124
35	Design of a Gate Diode Triggered SCR for Dual-Direction High-Voltage ESD Protection. <i>IEEE Electron Device Letters</i> , 2019, 40, 163-166.	2.2	31
36	Optical studies of the thermal stability of InSe nanosheets. <i>Applied Surface Science</i> , 2019, 467-468, 860-867.	3.1	6

#	ARTICLE	IF	CITATIONS
37	Soft hydrogen plasma induced phase transition in monolayer and few-layer MoTe ₂ . Nanotechnology, 2019, 30, 034004.	1.3	29
38	Collaborative model with adaptive selection scheme for visual tracking. International Journal of Machine Learning and Cybernetics, 2019, 10, 215-228.	2.3	5
39	Enhanced efficiency in bifacial HIT solar cells by gradient doping with AFORS-HET simulation. Materials Science in Semiconductor Processing, 2018, 77, 16-23.	1.9	22
40	Review of status developments of high-efficiency crystalline silicon solar cells. Journal Physics D: Applied Physics, 2018, 51, 123001.	1.3	112
41	Temperature-Dependent Efficiency Droop in GaN-Based Blue LEDs. IEEE Electron Device Letters, 2018, 39, 528-531.	2.2	23
42	Layer-controllable graphene by plasma thinning and post-annealing. Applied Surface Science, 2018, 441, 639-646.	3.1	21
43	A multistandard and resource-efficient Viterbi decoder for a multimode communication system. Frontiers of Information Technology and Electronic Engineering, 2018, 19, 536-543.	1.5	1
44	The effect of graphene on surface plasmon resonance of metal nanoparticles. Physical Chemistry Chemical Physics, 2018, 20, 25078-25084.	1.3	29
45	Controllable one-step growth of bilayer MoS ₂ /WS ₂ /WS ₂ heterostructures by chemical vapor deposition. Nanotechnology, 2018, 29, 455707.	1.3	26
46	Robust Fabrication of Quantum Dots on Few-Layer MoS ₂ by Soft Hydrogen Plasma and Post-Annealing. Particle and Particle Systems Characterization, 2018, 35, 1800060.	1.2	3
47	Producing air-stable InSe nanosheet through mild oxygen plasma treatment. Semiconductor Science and Technology, 2018, 33, 074002.	1.0	24
48	Large-size Mo _{1-x} W _x S ₂ and W _{1-x} Mo _x S ₂ (x = 0-0.5) monolayers by confined-space chemical vapor deposition. Applied Surface Science, 2018, 457, 591-597.	3.1	17
49	Physical model of conductive dislocations in GaN Schottky diodes. Wuli Xuebao/Acta Physica Sinica, 2018, 67, 177202.	0.2	4
50	A Comprehensive Study of Reverse Current Degradation Mechanisms in Au/Ni/n-GaN Schottky Diodes. IEEE Transactions on Electron Devices, 2017, 64, 407-411.	1.6	13
51	Simulation optimizing of n-type HIT solar cells with AFORS-HET. Modern Physics Letters B, 2017, 31, 1740025.	1.0	1
52	GaN-based Schottky barrier ultraviolet photodetectors with graded doping on patterned sapphire substrates. Solid-State Electronics, 2017, 133, 78-82.	0.8	32
53	Layer-by-layer thinning of MoSe ₂ by soft and reactive plasma etching. Applied Surface Science, 2017, 411, 182-188.	3.1	38
54	Starch as ion-based gate dielectric for oxide thin film transistors. Organic Electronics, 2017, 45, 203-208.	1.4	16

#	ARTICLE	IF	CITATIONS
55	Progressive current degradation and breakdown behavior in GaN LEDs under high reverse bias stress. Chinese Physics B, 2017, 26, 087308.	0.7	1
56	Modification of SiO ₂ thickness distribution through evaporation. Thin Solid Films, 2017, 642, 31-35.	0.8	0
57	Shape-Uniform, High-Quality Monolayered MoS ₂ Crystals for Gate-Tunable Photoluminescence. ACS Applied Materials & Interfaces, 2017, 9, 42121-42130.	4.0	51
58	Tunneling-Hopping Transport Model for Reverse Leakage Current in InGaN/GaN Blue Light-Emitting Diodes. IEEE Photonics Technology Letters, 2017, 29, 1447-1450.	1.3	14
59	Atomic-layer soft plasma etching of MoS ₂ . Scientific Reports, 2016, 6, 19945.	1.6	93
60	Investigation on LDMOS-SCR with high holding current for high voltage ESD protection. Microelectronics Reliability, 2016, 61, 120-124.	0.9	5
61	Design and optimization of LDMOS-SCR devices with improved ESD protection performance. Microelectronics Reliability, 2016, 61, 115-119.	0.9	5
62	Hot electrons induced degradation in lattice-matched InAlN/GaN high electron mobility transistors. Microelectronics Reliability, 2016, 56, 34-36.	0.9	5
63	Comparison of electrical characteristics between AlGaIn/GaN and lattice-matched InAlN/GaN heterostructure Schottky barrier diodes. Microelectronics Reliability, 2016, 61, 82-86.	0.9	9
64	Highly textured conductive and transparent ZnO films for HIT solar cell applications. Journal Physics D: Applied Physics, 2015, 48, 305105.	1.3	13
65	Current transport mechanisms in lattice-matched Pt/Au-InAlN/GaN Schottky diodes. Journal of Applied Physics, 2015, 117, .	1.1	16
66	Chemically active plasmas for surface passivation of Si photovoltaics. Catalysis Today, 2015, 252, 201-210.	2.2	4
67	Fabrication and Characterization of a Single Electron Transistor Based on a Silicon-on-Insulator. Chinese Physics Letters, 2015, 32, 047301.	1.3	4
68	RC-Embedded LDMOS-SCR With High Holding Current for High-Voltage I/O ESD Protection. IEEE Transactions on Device and Materials Reliability, 2015, 15, 495-499.	1.5	26
69	Surface Acceptor-Like Trap Model for Gate Leakage Current Degradation in Lattice-Matched InAlN/GaN HEMTs. IEEE Electron Device Letters, 2015, 36, 1281-1283.	2.2	7
70	Hyperplane distance neighbor clustering based on local discriminant analysis for complex chemical processes monitoring. Korean Journal of Chemical Engineering, 2014, 31, 1943-1953.	1.2	2
71	Key factors affecting trigger voltage of SCRS for ESD protection. , 2014, , .		0
72	Batch bioprocess monitoring using multiway localized discriminant embedding approach. , 2014, , .		0

#	ARTICLE	IF	CITATIONS
73	A modified LDMOS device with improved ESD protection performance. IEEJ Transactions on Electrical and Electronic Engineering, 2014, 9, 700-702.	0.8	2
74	Laser-induced breakdown spectroscopy application in environmental monitoring of water quality: a review. Environmental Monitoring and Assessment, 2014, 186, 8969-8980.	1.3	73
75	Drain current model of double-gate MOSFETs considering both electrons and holes. IEEJ Transactions on Electrical and Electronic Engineering, 2014, 9, 262-266.	0.8	1
76	Current and light emission efficiency behaviors in GaN-based LEDs. , 2014, , .		0
77	Luminescence characteristics and growth mechanism of awl-like ZnO Nanostructures fabricated on Ni-coated silicon substrate via chemical vapor deposition method. Ceramics International, 2014, 40, 12293-12298.	2.3	8
78	Packaging and testing of multi-wavelength DFB laser array using REC technology. Optics Communications, 2014, 312, 123-126.	1.0	2
79	Synthesis and cathodoluminescence characteristics of caltrop-like ZnO nanostructures. Superlattices and Microstructures, 2014, 72, 83-90.	1.4	2
80	The Direct Synthesis of Graphene on a Gallium Nitride Substrate. Chemical Vapor Deposition, 2014, 20, 125-129.	1.4	10
81	Structural and cathodoluminescence properties of stalactite-like ZnO nanorods fabricated with assistance of Niâ€Zn alloy catalyst. Materials Letters, 2014, 135, 119-122.	1.3	1
82	An Intelligent System for Lung Cancer Diagnosis Using a New Genetic Algorithm Based Feature Selection Method. Journal of Medical Systems, 2014, 38, 97.	2.2	39
83	Synthesis and optical properties of pencil-like and shuttle-like ZnO microrods. Applied Physics A: Materials Science and Processing, 2014, 116, 1173-1179.	1.1	1
84	An investigation on capacitance-trigger ESD protection devices for high voltage integrated circuits. Microelectronics Reliability, 2014, 54, 1169-1172.	0.9	4
85	Improving fuzzy Câ€means clustering algorithm based on a densityâ€induced distance measure. Journal of Engineering, 2014, 2014, 137-139.	0.6	5
86	A five-item MSLD windowed triple-spectrum-line interpolated FFT algorithm for measuring SFDR. , 2014, , .		0
87	GaN-based pâ€n ultraviolet photodetectors with a thin p-type GaN layer on patterned sapphire substrates. Chinese Optics Letters, 2014, 12, 092301-92304.	1.3	6
88	Fabrication and photoluminescence of caltrop-like ZnO nanostructures on silicon substrate. Materials Letters, 2013, 112, 133-135.	1.3	2
89	Influence of filler waviness and aspect ratio on the percolation threshold of carbon nanomaterials reinforced polymer nanocomposites. Journal of Materials Science, 2013, 48, 5727-5732.	1.7	22
90	Multi-target indoor localization and tracking on video monitoring system in a wireless sensor network. Journal of Network and Computer Applications, 2013, 36, 228-234.	5.8	20

#	ARTICLE	IF	CITATIONS
91	Piezoresponse Force Microscopy Study of Ferroelectric BaTiO ₃ Thin Film Directly Deposited on Si(001) by Magnetron Sputtering. Journal of Nano Research, 2013, 22, 23-30.	0.8	1
92	Forward current transport mechanisms in Ni/Au-AlGaIn/GaN Schottky diodes. Journal of Applied Physics, 2013, 114, .	1.1	48
93	Analytical I-V model and numerical analysis of single electron transistor. Wuli Xuebao/Acta Physica Sinica, 2013, 62, 077301.	0.2	1
94	Capacitance characteristics of atomic layer deposited Al ₂ O ₃ /n-GaN MOS structure. Wuli Xuebao/Acta Physica Sinica, 2013, 62, 197203.	0.2	0
95	Degradation mechanism of leakage current in AlGaIn/GaN high electron mobility transistors. Wuli Xuebao/Acta Physica Sinica, 2013, 62, 157202.	0.2	2
96	A Continuous Regional Current-Voltage Model for Short-channel Double-gate MOSFETs. Journal of Semiconductor Technology and Science, 2013, 13, 237-244.	0.1	1
97	Forward Current Transport Mechanism and Schottky Barrier Characteristics of a Ni/Au Contact on n-GaN. Chinese Physics Letters, 2012, 29, 087204.	1.3	6
98	Localisation algorithm for large-scale and low-density wireless sensor networks. Electronics Letters, 2011, 47, 881.	0.5	13
99	Software Design and Implementation for Obtaining ZigBee Network Structure Information. , 2011, , .		0
100	Design and analysis of centralized wireless positioning system based on ZigBee. , 2011, , .		0
101	Limitation of the Johnson-Mehl-Avrami equation for the kinetic analysis of crystallization in a Ti-based amorphous alloy. International Journal of Minerals, Metallurgy and Materials, 2010, 17, 307-311.	2.4	4
102	Microstructure Changes in Zr-Based Metallic Glass Induced by Ion Milling. Rare Metal Materials and Engineering, 2010, 39, 1693-1696.	0.8	4
103	On discussion of the applicability of local Avrami exponent: Errors and solutions. Materials Letters, 2009, 63, 1153-1155.	1.3	20
104	An integral fitting method for analyzing the isochronal transformation kinetics: Application to the crystallization of a Ti-based amorphous alloy. Journal of Physics and Chemistry of Solids, 2009, 70, 1448-1453.	1.9	16
105	Effects of alloy addition on the improvement of glass forming ability and plasticity of Mg-Cu-Tb bulk metallic glass. Intermetallics, 2009, 17, 253-255.	1.8	21
106	Effect of the kinetic model on parameter distortions in non-isothermal transformations. Journal of Alloys and Compounds, 2009, 479, L22-L25.	2.8	2
107	Determination of kinetic parameters during isochronal crystallization of Ti ₄₀ Zr ₂₅ Ni ₈ Cu ₉ Be ₁₈ metallic glass. Journal of Alloys and Compounds, 2009, 479, 835-839.	2.8	20
108	Effects of Zn addition on the improvement of glass forming ability and plasticity of Mg-Cu-Tb bulk metallic glasses. Journal of Non-Crystalline Solids, 2008, 354, 5368-5371.	1.5	9

#	ARTICLE	IF	CITATIONS
109	Effects of 5%Ni addition on thermal stability and crystallization behavior of Mg ₆₅ Cu ₂₅ Tb ₁₀ bulk metallic glass. Transactions of Nonferrous Metals Society of China, 2008, 18, 1107-1111.	1.7	1
110	Low-density Mg-rich metallic glasses with bending ductility. Scripta Materialia, 2007, 56, 689-692.	2.6	21
111	Mg-Ca-Zn Bulk Metallic Glasses with High Strength and Significant Ductility. Journal of Materials Research, 2005, 20, 1935-1938.	1.2	132
112	Crystallization and mechanical behavior of (Hf, Zr)-Ti-Cu-Ni-Al metallic glasses. Journal of Non-Crystalline Solids, 2003, 317, 112-117.	1.5	46
113	Using Fluctuation Microscopy to Characterize Structural Order in Metallic Glasses. Microscopy and Microanalysis, 2003, 9, 509-515.	0.2	61
114	Structure of Shear Bands in Zirconium-Based Metallic Glasses Observed by Transmission Electron Microscopy. Materials Research Society Symposia Proceedings, 2002, 754, 1.	0.1	0
115	Glass-forming ability and crystallization of bulk metallic glass (Hf _x Zr _{1-x}) _{52.5} Cu _{17.9} Ni _{14.6} Al ₁₀ Ti ₅ . Journal of Non-Crystalline Solids, 2002, 311, 77-82.	1.5	58
116	Medium-Range Order in Metallic Glasses Studied by Fluctuation Microscopy. Microscopy and Microanalysis, 2001, 7, 1260-1261.	0.2	14
117	Anomalous Small-Angle X-ray Scattering Studies of Phase Separation in Bulk Amorphous Zr _{52.5} Ti ₅ Cu _{17.9} Ni _{14.6} Al ₁₀ Ti ₅ . Materials Transactions, 2001, 42, 562-564.		
118	The Enhancement of Band Edge Emission from ZnS/Zn(OH) ₂ Quantum Dots. Materials Research Society Symposia Proceedings, 2000, 642, 3181.	0.1	0
119	Plasticity at Crack Tips in Zr-Based Bulk Metallic Glasses. Materials Research Society Symposia Proceedings, 2000, 644, 12191.	0.1	2
120	Preparation and Mechanical Properties of Hafnium-based Bulk Metallic Glasses. Materials Research Society Symposia Proceedings, 2000, 644, 12161.	0.1	0
121	Effect of annealing on Y/Mo multilayers. Journal of Applied Physics, 1999, 86, 2459-2463.	1.1	4
122	Observation of Coulomb-blockade in a field-effect transistor with silicon nanocrystal floating gate at room temperature. Solid State Communications, 1999, 111, 171-174.	0.9	6
123	Short-Range Order and Nanocrystallization in Amorphous Zr-Ti-Cu-Ni-Al. Materials Research Society Symposia Proceedings, 1999, 580, 381.	0.1	3
124	Electrical characteristics of SiO ₂ /crystalline Si quantum dots/SiO ₂ double-barrier diode. Journal of Non-Crystalline Solids, 1998, 227-230, 1168-1172.	1.5	3
125	Electron Tunneling in nc-Si/a-SiO ₂ Double-Barrier Diode. Chinese Physics Letters, 1998, 15, 216-218.	1.3	2
126	Observation of Coulomb Blockade Effect in Silicon Nanocrystallites at room Temperature. Materials Research Society Symposia Proceedings, 1997, 467, 367.	0.1	3

#	ARTICLE	IF	CITATIONS
127	The fabrication and application of a novel OASLM based on a-Si:H and its alloy. Journal of Non-Crystalline Solids, 1996, 198-200, 1176-1179.	1.5	0