

Qiwu Shi

List of Publications by Year in descending order

Source: <https://exaly.com/author-pdf/4682390/publications.pdf>

Version: 2024-02-01

97
papers

1,819
citations

331259

21
h-index

360668

35
g-index

97
all docs

97
docs citations

97
times ranked

1907
citing authors

#	ARTICLE	IF	CITATIONS
1	Terahertz Switchable Focusing Planar Lens With a Nanoscale Vanadium Dioxide Integrated Metasurface. IEEE Transactions on Terahertz Science and Technology, 2022, 12, 13-22.	2.0	19
2	THz medical imaging: from in vitro to in vivo. Trends in Biotechnology, 2022, 40, 816-830.	4.9	56
3	Reconfigurable Optical Physical Unclonable Functions Enabled by VO ₂ Nanocrystal Films. ACS Applied Materials & Interfaces, 2022, 14, 5785-5796.	4.0	17
4	Volatile and Nonvolatile Switching of Phase Change Material Ge ₂ Sb ₂ Te ₅ Revealed by Time-Resolved Terahertz Spectroscopy. Journal of Physical Chemistry Letters, 2022, 13, 947-953.	2.1	9
5	Photothermal conversion of Ti ₂ O ₃ film for tuning terahertz waves. IScience, 2022, 25, 103661.	1.9	5
6	The role of lattice dynamics in ferroelectric switching. Nature Communications, 2022, 13, 1110.	5.8	25
7	VO ₂ -metallic hybrid metasurfaces for agile terahertz wave modulation by phase transition. APL Materials, 2022, 10, .	2.2	12
8	Preparation of VO ₂ films via microspacing in-air sublimation method. Vacuum, 2022, 200, 110996.	1.6	3
9	Characterization of cation disorder and oxygen vacancies in Li-rich Li ₂ TiO ₃ . Journal of the American Ceramic Society, 2022, 105, 6407-6416.	1.9	3
10	Preparation of Li ₄ TiO ₄ -Li ₂ TiO ₃ core-shell ceramic pebbles with thick shells and high strength through an improved granulation method. Journal of Nuclear Materials, 2021, 543, 152580.	1.3	13
11	Transcriptome profiling of cells exposed to particular and intense electromagnetic radiation emitted by the "SG-III" prototype laser facility. Scientific Reports, 2021, 11, 2017.	1.6	4
12	Optical-Transparent Self-Assembled MXene Film with High-Efficiency Terahertz Reflection Modulation. ACS Applied Materials & Interfaces, 2021, 13, 10574-10582.	4.0	13
13	Characterization of Li-rich Li ₂ TiO ₃ ceramic pebbles prepared by rolling method sintered in air and vacuum. Journal of Nuclear Materials, 2021, 546, 152786.	1.3	11
14	Highly stable visible-light photocatalytic properties of black rutile TiO ₂ hydrogenated in ultrafast flow. Journal of Materials Science: Materials in Electronics, 2021, 32, 14665-14676.	1.1	1
15	Hollow structured black TiO ₂ with thickness-controllable microporous shells for enhanced visible-light-driven photocatalysis. Microporous and Mesoporous Materials, 2021, 323, 111228.	2.2	18
16	Influence of helium ion radiation on the nano-grained Li ₂ TiO ₃ ceramic for tritium breeding. Ceramics International, 2021, 47, 28357-28366.	2.3	11
17	Flexible VO ₂ /Mica thin films with excellent phase transition properties fabricated by RF magnetron sputtering. Vacuum, 2021, 192, 110407.	1.6	10
18	Improved chemical precipitation prepared rapidly NiCo ₂ S ₄ with high specific capacitance for supercapacitors. Nanotechnology, 2021, 32, 085604.	1.3	9

#	ARTICLE	IF	CITATIONS
19	Two-Channel VO ₂ Memory Meta-Device for Terahertz Waves. <i>Nanomaterials</i> , 2021, 11, 3409.	1.9	9
20	Synthesis, characterization and sintering of Li ₂ TiO ₃ nanoparticles via low temperature solid-state reaction. <i>Ceramics International</i> , 2020, 46, 1816-1823.	2.3	11
21	A novel mass production method for Li ₂ TiO ₃ tritium breeder ceramic pebbles using polyvinyl alcohol (PVA) and polyvinyl pyrrolidone (PVP) assisted granulation method. <i>Ceramics International</i> , 2020, 46, 4167-4173.	2.3	17
22	Synthesis of CoV ₂ O ₆ /CNTs composites via ultrasound as electrode materials for supercapacitors. <i>Journal of Materials Science: Materials in Electronics</i> , 2020, 31, 2388-2397.	1.1	18
23	In-situ stirring assisted hydrothermal synthesis of W-doped VO ₂ (M) nanorods with improved doping efficiency and mid-infrared switching property. <i>Journal of Alloys and Compounds</i> , 2020, 821, 153556.	2.8	13
24	Hydrothermal activated carbon cloth as electrode materials for symmetric supercapacitors. <i>Ionics</i> , 2020, 26, 1457-1464.	1.2	7
25	Synthesis of nanoscale lambda-Ti ₃ O ₅ via a PEG assisted sol-gel method. <i>Journal of Alloys and Compounds</i> , 2020, 848, 156585.	2.8	4
26	A Phase Transition Oxide/Graphene Interface for Incident Angle Agile, Ultrabroadband, and Deep THz Modulation. <i>Advanced Materials Interfaces</i> , 2020, 7, 2001297.	1.9	12
27	Highly efficient preparation of Li ₂ O breeder materials with core-shell structure by oil-based granulation route. <i>Journal of the American Ceramic Society</i> , 2020, 103, 5612-5623.	1.9	2
28	Flexible and Giant Terahertz Modulation Based on Ultra-Strain-Sensitive Conductive Polymer Composites. <i>ACS Applied Materials & Interfaces</i> , 2020, 12, 9790-9796.	4.0	21
29	Fast fabrication of high quality Li ₂ TiO ₃ -Li ₄ SiO ₄ biphasic ceramic pebbles by microwave sintering: In comparison with conventional sintering. <i>Ceramics International</i> , 2019, 45, 19022-19026.	2.3	17
30	Low-temperature fabrication of Li ₂ O porous ceramic pebbles by two-stage support decomposition. <i>International Journal of Hydrogen Energy</i> , 2019, 44, 20249-20256.	3.8	6
31	On-Chip THz Dynamic Manipulation Based on Tunable Spoof Surface Plasmon Polaritons. <i>IEEE Electron Device Letters</i> , 2019, 40, 1844-1847.	2.2	18
32	Pressure Dependence of Electrical Conductivity of Black Titania Hydrogenated at Different Temperatures. <i>Journal of Physical Chemistry C</i> , 2019, 123, 4094-4102.	1.5	11
33	Low-cost fabrication of Li ₂ TiO ₃ tritium breeding ceramic pebbles via low-temperature solid-state precursor method. <i>Ceramics International</i> , 2019, 45, 17114-17119.	2.3	13
34	Development of an advanced core-shell ceramic pebble with Li ₄ TiO ₄ pure phase core and Li ₂ TiO ₃ nanostructured shell by a physical coating method. <i>Journal of Nuclear Materials</i> , 2019, 520, 252-257.	1.3	8
35	Low-temperature preparation of nanostructured Li ₂ TiO ₃ tritium breeder ceramic pebbles using CTAB-modified ultrafine powders by mixed solvent-thermal method. <i>Journal of Nuclear Materials</i> , 2019, 519, 315-321.	1.3	7
36	Surface morphology and microstructure evolution of B ₄ C ceramic hollow microspheres prepared by wet coating method on a pyrolysis substrate. <i>Ceramics International</i> , 2019, 45, 7916-7922.	2.3	7

#	ARTICLE	IF	CITATIONS
37	Tunable terahertz planar lens based on the dynamic meta-surface. , 2019, , .		1
38	Mesoporous hollow black TiO ₂ with controlled lattice disorder degrees for highly efficient visible-light-driven photocatalysis. RSC Advances, 2019, 9, 36907-36914.	1.7	15
39	Tritium release behavior of Li ₄ SiO ₄ and Li ₄ SiO ₄ + 5Åmol% TiO ₂ ceramic pebbles with small grain size. Journal of Nuclear Materials, 2019, 514, 284-289.	1.3	10
40	An innovative process for synthesis of superfine nanostructured Li ₂ TiO ₃ tritium breeder ceramic pebbles via TBOT hydrolysis “ solvothermal method. Ceramics International, 2019, 45, 5189-5194.	2.3	7
41	Phase evolution and formation of δ phase in Ti ₃ O ₅ induced by magnesium doping. Journal of Alloys and Compounds, 2019, 774, 1189-1194.	2.8	22
42	Silica-Coated Gold Nanorods with High Photothermal Efficiency and Biocompatibility as a Contrast Agent for <i>In Vitro</i> Terahertz Imaging. Journal of Biomedical Nanotechnology, 2019, 15, 910-920.	0.5	14
43	Near-perfect terahertz wave amplitude modulation enabled by impedance matching in VO ₂ thin films. Applied Physics Letters, 2018, 112, .	1.5	55
44	A promising tritium breeding material: Nanostructured 2Li ₂ TiO ₃ -Li ₄ SiO ₄ biphasic ceramic pebbles. Journal of Nuclear Materials, 2018, 500, 265-269.	1.3	28
45	Compare the phase transition properties of VO ₂ films from infrared to terahertz range. Phase Transitions, 2018, 91, 649-658.	0.6	0
46	Geometrical morphology optimisation of laser drilling in B ₄ C ceramic: From plate to hollow microsphere. Ceramics International, 2018, 44, 1370-1375.	2.3	9
47	A facile solvothermal method for high-quality Gd ₂ Zr ₂ O ₇ nanopowder preparation. Ceramics International, 2018, 44, 1334-1342.	2.3	25
48	δ -Ti ₃ O ₅ with Temperature and Laser Induced Phase Transition Characteristics for Active Tuning of Terahertz Wave Transmission. , 2018, , .		0
49	Enhanced photoresponses of an optically driven VO ₂ -based terahertz wave modulator near percolation threshold. Applied Physics Letters, 2018, 113, .	1.5	10
50	Enhanced Electrochromic Performance of Mesoporous Titanium Dioxide/Reduced Graphene Oxide Nanocomposite Film Prepared by Electrophoresis Deposition. Journal of the Electrochemical Society, 2018, 165, H804-H812.	1.3	19
51	Rapid preparation and uniformity control of B ₄ C ceramic double-curvature shells: Aim to advance its applications as ICF capsules. Journal of Alloys and Compounds, 2018, 762, 67-72.	2.8	12
52	Microstructure and phase evolution of Li ₄ TiO ₄ ceramics pebbles prepared from a nanostructured precursor powder synthesized by hydrothermal method. Journal of Nuclear Materials, 2018, 508, 434-439.	1.3	22
53	Effect of deposition time on the growth mode and stoichiometric of amorphous boron carbide thin films deposited by electron beam evaporation. Ceramics International, 2018, 44, 17298-17304.	2.3	14
54	Dynamic Photoinduced Controlling of the Large Phase Shift of Terahertz Waves via Vanadium Dioxide Coupling Nanostructures. ACS Photonics, 2018, 5, 3040-3050.	3.2	111

#	ARTICLE	IF	CITATIONS
55	Flexible reduced graphene oxide paper with excellent electromagnetic interference shielding for terahertz wave. <i>Journal of Materials Science: Materials in Electronics</i> , 2018, 29, 17245-17253.	1.1	18
56	Transparent AlON ceramic combined with VO ₂ thin film for infrared and terahertz smart window. <i>Ceramics International</i> , 2018, 44, 13674-13680.	2.3	10
57	Giant impact of self-photothermal on light-induced ultrafast insulator-to-metal transition in VO ₂ nanofilms at terahertz frequency. <i>Optics Express</i> , 2018, 26, 28051.	1.7	12
58	Fabrication of nanostructured Li ₂ TiO ₃ ceramic pebbles as tritium breeders using powder particles synthesised via a CTAB-assisted method. <i>Ceramics International</i> , 2017, 43, 5680-5686.	2.3	31
59	The preparation and phase transformation characteristics of $\hat{\text{I}}^3\text{-Ti}_3\text{O}_5$ thin film. <i>Journal of Materials Science: Materials in Electronics</i> , 2017, 28, 7868-7873.	1.1	1
60	Stabilization of microcrystal $\hat{\text{I}}^3\text{-Ti}_3\text{O}_5$ at room temperature by aluminum-ion doping. <i>Applied Physics Letters</i> , 2017, 111, .	1.5	25
61	Freeze-drying induced nanocrystallization of VO ₂ (M) with improved mid-infrared switching properties. <i>Journal of Alloys and Compounds</i> , 2017, 728, 1076-1082.	2.8	16
62	Low temperature fabrication of hydrangea-like NiCo ₂ S ₄ as electrode materials for high performance supercapacitors. <i>Materials Letters</i> , 2017, 186, 206-209.	1.3	20
63	Preparation of a B ₄ C hollow microsphere through gel-casting for an inertial confinement fusion (ICF) target. <i>Ceramics International</i> , 2017, 43, 571-577.	2.3	10
64	Sol-gel fabrication of WO ₃ /RGO nanocomposite film with enhanced electrochromic performance. <i>RSC Advances</i> , 2016, 6, 67488-67494.	1.7	58
65	One-Step Hydrothermal Synthesis of W-Doped VO ₂ (M) Nanorods with a Tunable Phase-Transition Temperature for Infrared Smart Windows. <i>ACS Omega</i> , 2016, 1, 1139-1148.	1.6	76
66	Fabrication of attractive Li ₄ SiO ₄ pebbles with modified powders synthesized via surfactant-assisted hydrothermal method. <i>Ceramics International</i> , 2016, 42, 10014-10020.	2.3	18
67	Enhanced Electrochromic Performance of Vanadium Pentoxide/Reduced Graphene Oxide Nanocomposite Film Prepared by the Sol-gel Method. <i>Journal of the Electrochemical Society</i> , 2016, 163, H891-H895.	1.3	15
68	Fabrication of nanocrystalline $\hat{\text{I}}^3\text{-Ti}_3\text{O}_5$ with tunable terahertz wave transmission properties across a temperature induced phase transition. <i>Journal of Materials Chemistry C</i> , 2016, 4, 10279-10285.	2.7	24
69	Effect of coating layers on nano-TiO ₂ particles on the preparation of nanocrystalline $\hat{\text{I}}^3\text{-Ti}_3\text{O}_5$ by carbonthermal reduction. <i>Journal of Materials Science: Materials in Electronics</i> , 2016, 27, 4216-4222.	1.1	7
70	High-frequency response in Sr _{1-x} CaxTiO ₃ powders studied by terahertz time-domain spectroscopy. <i>Journal of Materials Science: Materials in Electronics</i> , 2016, 27, 6318-6324.	1.1	3
71	Improving water dispersibility of non-covalent functionalized reduced graphene oxide with l-tryptophan via cleaning oxidative debris. <i>Journal of Materials Science: Materials in Electronics</i> , 2016, 27, 7361-7368.	1.1	14
72	Preparation and phase transition properties of Ti-doped VO ₂ films by sol-gel process. <i>Journal of Sol-Gel Science and Technology</i> , 2016, 78, 19-25.	1.1	23

#	ARTICLE	IF	CITATIONS
73	Fast crystallization of amorphous Gd ₂ Zr ₂ O ₇ induced by thermally activated electron-beam irradiation. <i>Journal of Applied Physics</i> , 2015, 118, 214901.	1.1	15
74	Ultrafast THz modulation characteristics of photo-induced metal-insulator transition of W-doped VO ₂ film. , 2015, , .		0
75	Gas-Phase and Solid-State Simultaneous Mechanism for Two-Step Carbothermal AlON Formation. <i>Journal of the American Ceramic Society</i> , 2015, 98, 1965-1973.	1.9	26
76	Thermal stability of VO ₂ thin films deposited by sol-gel method. <i>Journal of Sol-Gel Science and Technology</i> , 2015, 75, 189-197.	1.1	22
77	Photoluminescence enhancement of YAG:Ce nanophosphors with SiO ₂ additions. <i>Journal of Materials Science: Materials in Electronics</i> , 2015, 26, 2451-2456.	1.1	8
78	Synthesis of ultra-fine and controllable size distribution nanocrystalline MgAl ₂ O ₄ powders and ascertainment of aluminum loss by introducing inert atmosphere pre-calcination during combustion. <i>Journal of Sol-Gel Science and Technology</i> , 2015, 75, 336-344.	1.1	3
79	Preparation and characterization of δ -Ti ₃ O ₅ by carbothermal reduction of TiO ₂ . <i>Journal of Alloys and Compounds</i> , 2015, 621, 404-410.	2.8	32
80	Phase transition properties of vanadium oxide films deposited by polymer-assisted deposition. <i>Journal of Sol-Gel Science and Technology</i> , 2014, 72, 565-570.	1.1	9
81	Nanostructured VO ₂ film with high transparency and enhanced switching ratio in THz range. <i>Applied Physics Letters</i> , 2014, 104, .	1.5	22
82	In situ growth of sol-gel-derived nano-VO ₂ film and its phase transition characteristics. <i>Journal of Nanoparticle Research</i> , 2014, 16, 1.	0.8	5
83	Preparation and ageing-resistant properties of polyester composites modified with functional nanoscale additives. <i>Nanoscale Research Letters</i> , 2014, 9, 215.	3.1	18
84	Temperature dependence of charging characteristic of C-free Li ₂ O ₂ cathode in Li-O ₂ battery. <i>Journal of Solid State Electrochemistry</i> , 2013, 17, 2061-2069.	1.2	12
85	Porous nano-structured VO ₂ films with different surfactants: synthesis mechanisms, characterization, and applications. <i>Journal of Materials Science: Materials in Electronics</i> , 2013, 24, 3823-3829.	1.1	15
86	Characteristics of CeOx-VO ₂ composite thin films synthesized by sol-gel process. <i>Journal of Materials Science: Materials in Electronics</i> , 2013, 24, 3496-3503.	1.1	6
87	A CTAB-assisted hydrothermal synthesis of VO ₂ (B) nanostructures for lithium-ion battery application. <i>Ceramics International</i> , 2013, 39, 6199-6206.	2.3	62
88	Effect of annealing temperature on thermochromic properties of vanadium dioxide thin films deposited by organic sol-gel method. <i>Applied Surface Science</i> , 2013, 268, 556-560.	3.1	68
89	Shape-dependent thermochromic phenomenon in porous nano-structured VO ₂ films. <i>Materials Research Bulletin</i> , 2013, 48, 4146-4149.	2.7	11
90	Preparation and thermochromic properties of Ce-doped VO ₂ films. <i>Materials Research Bulletin</i> , 2013, 48, 2268-2271.	2.7	38

#	ARTICLE	IF	CITATIONS
91	Terahertz transmission characteristics across the phase transition in VO ₂ films deposited on Si, sapphire, and SiO ₂ substrates. <i>Journal of Applied Physics</i> , 2012, 112, .	1.1	35
92	Enhanced hydrophilicity of the Si substrate for deposition of VO ₂ film by sol-gel method. <i>Journal of Materials Science: Materials in Electronics</i> , 2012, 23, 1610-1615.	1.1	11
93	Synthesis and properties of Mo and W ions co-doped porous nano-structured VO ₂ films by sol-gel process. <i>Journal of Sol-Gel Science and Technology</i> , 2012, 64, 493-499.	1.1	47
94	Curing of polyester powder coating modified with rutile nano-sized titanium dioxide studied by DSC and real-time FT-IR. <i>Journal of Thermal Analysis and Calorimetry</i> , 2012, 108, 1243-1249.	2.0	21
95	Effects of porous nano-structure on the metal-insulator transition in VO ₂ films. <i>Applied Surface Science</i> , 2012, 259, 256-260.	3.1	18
96	Giant Phase Transition Properties at Terahertz Range in VO ₂ films Deposited by Sol-gel Method. <i>ACS Applied Materials & Interfaces</i> , 2011, 3, 3523-3527.	4.0	92
97	Preparation and phase transition characterization of VO ₂ thin film on single crystal Si (100) substrate by sol-gel process. <i>Journal of Sol-Gel Science and Technology</i> , 2011, 59, 591-597.	1.1	28