Guangming Tao

List of Publications by Year
in descending order

77 papers	3,144 citations	185998 28 h-index	155451 55 g-index
78 all docs	78 docs citations	78 times ranked	2647 citing authors

#	Article	IF	Citations
1	Hierarchical-morphology metafabric for scalable passive daytime radiative cooling. Science, 2021, 373, 692-696.	6.0	410
2	Emerging Materials and Strategies for Personal Thermal Management. Advanced Energy Materials, 2020, 10, 1903921.	10.2	290
3	Infrared fibers. Advances in Optics and Photonics, 2015, 7, 379.	12.1	274
4	Structured spheres generated by an in-fibre fluid instability. Nature, 2012, 487, 463-467.	13.7	174
5	Thermally drawn advanced functional fibers: New frontier of flexible electronics. Materials Today, 2020, 35, 168-194.	8.3	153
6	Multimaterial Fibers. International Journal of Applied Glass Science, 2012, 3, 349-368.	1.0	128
7	Flexible and Robust Biomaterial Microstructured Colored Textiles for Personal Thermoregulation. ACS Applied Materials & Interfaces, 2020, 12, 19015-19022.	4.0	97
8	Soft bimorph actuator with real-time multiplex motion perception. Nano Energy, 2020, 76, 104926.	8.2	91
9	Wearable Affective Robot. IEEE Access, 2018, 6, 64766-64776.	2.6	86
10	Flexible all-textile dual tactile-tension sensors for monitoring athletic motion during taekwondo. Nano Energy, 2021, 85, 105941.	8.2	77
11	Low Loss, High <scp>NA</scp> Chalcogenide Glass Fibers for Broadband Midâ€Infrared Supercontinuum Generation. Journal of the American Ceramic Society, 2015, 98, 1389-1392.	1.9	75
12	Controlled fragmentation of multimaterial fibres and films via polymer cold-drawing. Nature, 2016, 534, 529-533.	13.7	75
13	Multimaterial preform coextrusion for robust chalcogenide optical fibers and tapers. Optics Letters, 2012, 37, 2751.	1.7	74
14	A multifunctional wearable E-textile <i>via</i> integrated nanowire-coated fabrics. Journal of Materials Chemistry C, 2020, 8, 8399-8409.	2.7	64
15	Living with I-Fabric: Smart Living Powered by Intelligent Fabric and Deep Analytics. IEEE Network, 2020, 34, 156-163.	4.9	61
16	Machine learning-optimized Tamm emitter for high-performance thermophotovoltaic system with detailed balance analysis. Nano Energy, 2020, 72, 104687.	8.2	53
17	Thermal Drawing of High-Density Macroscopic Arrays of Well-Ordered Sub-5-nm-Diameter Nanowires. Nano Letters, 2011, 11, 4768-4773.	4.5	51
18	Fabrication and characterization of multimaterial chalcogenide glass fiber tapers with high numerical apertures. Optics Express, 2015, 23, 23472.	1.7	48

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19	Octave-spanning infrared supercontinuum generation in robust chalcogenide nanotapers using picosecond pulses. Optics Letters, 2012, 37, 4639.	1.7	46
20	In-fiber production of polymeric particles for biosensing and encapsulation. Proceedings of the National Academy of Sciences of the United States of America, 2013, 110, 15549-15554.	3.3	43
21	High-performance zero-standby-power-consumption-under-bending pressure sensors for artificial reflex arc. Nano Energy, 2020, 73, 104743.	8.2	40
22	Third-order nonlinearity in Geâ€"Sbâ€"Se glasses at mid-infrared wavelengths. Materials Research Bulletin, 2015, 70, 204-208.	2.7	39
23	Nonlinear characterization of robust multimaterial chalcogenide nanotapers for infrared supercontinuum generation. Journal of the Optical Society of America B: Optical Physics, 2014, 31, 450.	0.9	38
24	Multifunctional Fiberâ€Enabled Intelligent Health Agents. Advanced Materials, 2022, 34, .	11.1	36
25	Superabsorbent Fibers for Comfortable Disposable Medical Protective Clothing. Advanced Fiber Materials, 2020, 2, 140-149.	7.9	35
26	Robust multimaterial tellurium-based chalcogenide glass fibers for mid-wave and long-wave infrared transmission. Optics Letters, 2014, 39, 4009.	1.7	34
27	Optical Micro/Nano Fibers Enabled Smart Textiles for Humanâ€"Machine Interface. Advanced Fiber Materials, 2022, 4, 1108-1117.	7.9	30
28	High-resolution chalcogenide fiber bundles for infrared imaging. Optics Letters, 2015, 40, 4384.	1.7	29
29	Dispersion characterization of chalcogenide bulk glass, composite fibers, and robust nanotapers. Journal of the Optical Society of America B: Optical Physics, 2013, 30, 2498.	0.9	28
30	Wearable 3.0: From Smart Clothing to Wearable Affective Robot. IEEE Network, 2019, 33, 8-14.	4.9	28
31	Preparation of chalcogenide glass fiber using an improved extrusion method. Optical Engineering, 2016, 55, 056114.	0.5	26
32	In-Fiber Structured Particles and Filament Arrays from the Perspective of Fluid Instabilities. Advanced Fiber Materials, 2020, 2, 1-12.	7.9	25
33	Formation and Properties of a Novel Heavyâ€Metal Chalcogenide Glass Doped with a High Dysprosium Concentration. Journal of the American Ceramic Society, 2009, 92, 2226-2229.	1.9	23
34	Co-axial silicon/perovskite heterojunction arrays for high-performance direct-conversion pixelated X-ray detectors. Nano Energy, 2020, 78, 105335.	8.2	22
35	Magnetoelectrical Clothing Generator for Highâ€Performance Transduction from Biomechanical Energy to Electricity. Advanced Functional Materials, 2022, 32, 2107682.	7.8	21
36	Dual control of the nanofriction of graphene. Journal of Materials Chemistry C, 2019, 7, 6041-6051.	2.7	19

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37	Flexible Fiber Probe for Efficient Neural Stimulation and Detection. Advanced Science, 2020, 7, 2001410.	5.6	19
38	Multimaterial disc-to-fiber approach to efficiently produce robust infrared fibers. Optical Materials Express, 2014, 4, 2143.	1.6	18
39	Negative Information Measurement at AI Edge: A New Perspective for Mental Health Monitoring. ACM Transactions on Internet Technology, 2022, 22, 1-16.	3.0	18
40	Preparation of Low-loss Ge 15 Ga 10 Te 75 chalcogenide glass for far-IR optics applications. Infrared Physics and Technology, 2014, 65, 77-82.	1.3	17
41	Digital design of multimaterial photonic particles. Proceedings of the National Academy of Sciences of the United States of America, 2016, 113, 6839-6844.	3.3	17
42	Robust multimaterial chalcogenide fibers produced by a hybrid fiber-fabrication process. Optical Materials Express, 2017, 7, 2336.	1.6	17
43	High-resilience cotton base yarn for anti-wrinkle and durable heat-insulation fabric. Composites Part B: Engineering, 2021, 212, 108663.	5.9	16
44	Cognitive Wearable Robotics for Autism Perception Enhancement. ACM Transactions on Internet Technology, 2021, 21, 1-16.	3.0	16
45	Fabrication of an IR hollow-core Bragg fiber based on chalcogenide glass extrusion. Applied Physics A: Materials Science and Processing, 2015, 119, 455-460.	1.1	15
46	Influence of the selenium content on thermo-mechanical and optical properties of Geâ€“Gaâ€“Sbâ€“S chalcogenide glasses. Infrared Physics and Technology, 2016, 77, 21-26.	1.3	15
47	High-efficiency solar heat storage enabled by adaptive radiation management. Cell Reports Physical Science, 2021, 2, 100533.	2.8	15
48	Use of machine learning to efficiently predict the confinement loss in anti-resonant hollow-core fiber. Optics Letters, 2021, 46, 1454.	1.7	13
49	Multimaterial Fibers. Springer Series in Surface Sciences, 2015, , 1-26.	0.3	12
50	Scalable In-Fiber Manufacture of Functional Composite Particles. ACS Nano, 2018, 12, 11130-11138.	7.3	12
51	Fiber Changes Our Life. Advanced Fiber Materials, 2019, 1, 1-2.	7.9	12
52	Stretchable electromagnetic fibers for self-powered mechanical sensing. Applied Materials Today, 2020, 20, 100623.	2.3	12
53	Discovering extremely low confinement-loss anti-resonant fibers via swarm intelligence. Optics Express, 2021, 29, 35544.	1.7	12
54	Freely adjusted properties in Geâ€“S based chalcogenide glasses with iodine incorporation. Infrared Physics and Technology, 2015, 69, 118-122.	1.3	10

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55	Multimaterial fibers: a new concept in infrared fiber optics. , 2014, , .		5
56	Fabrication and characterization of Geâ€“Sbâ€“Seâ€“I glasses and fibers. Applied Physics A: Materials Science and Processing, 2015, 120, 127-135.	1.1	5
57	Multimaterial rod-in-tube coextrusion for robust mid-infrared chalcogenide fibers. Proceedings of SPIE, 2014, , .	0.8	4
58	A carbonâ€nanofiber glass composite with high electrical conductivity. International Journal of Applied Glass Science, 2020, 11, 590-600.	1.0	4
59	Tapered chalcogenideâ€“tellurite hybrid microstructured fiber for mid-infrared supercontinuum generation. Journal of Modern Optics, 2015, 62, 729-737.	0.6	3
60	Intelligent Fabric Enabled 6G Semantic Communication System for In-Cabin Scenarios. IEEE Transactions on Intelligent Transportation Systems, 2023, 24, 1153-1162.	4.7	3
61	Mid-infrared Supercontinuum Generation in Robust Step-Index Chalcogenide Nanotapers Pumped with a Thulium Fiber Laser. , 2014, , .		2
62	Drawing robust infrared optical fibers from preforms produced by efficient multimaterial stacked coextrusion. , 2014, , .		1
63	Advances in infrared fibers. Proceedings of SPIE, 2015, , .	0.8	1
64	Functional Probes: Flexible Fiber Probe for Efficient Neural Stimulation and Detection (Adv. Sci.) Tj ETQq0 0 0 rgBT /Overlock 10 Tf 50 38	5.6	1
65	Refractive-index guiding single crystal optical fiber with airâ€“solid cladding. Optical Materials Express, 2021, 11, 2994.	1.6	1
66	Efficient Disc-to-fiber Multimaterial Stacked Coextrusion for Robust Infrared Optical Fibers. , 2013, , .		1
67	One-step Multi-material Preform Extrusion for Robust Chalcogenide Glass Optical Fibers and Tapers. , 2012, , .		1
68	In-fiber fabrication of size-controllable structured particles. , 2012, , .		0
69	Robust fibers for delivering infrared light. SPIE Newsroom, 0, , .	0.1	0
70	One-step Multi-material Preform Extrusion for Robust Chalcogenide Glass Optical Fibers. , 2012, , .		0
71	Multimaterial Fibers for Generating Structured Nanoparticles. , 2012, , .		0
72	Robust Multimaterial Tellurium-based Chalcogenide Glass Infrared Fibers. , 2014, , .		0

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73	Multi-octave mid-infrared supercontinuum generation in robust chalcogenide nanowires using a thulium-fiber laser. , 2016, , .		0
74	Robust Low-Loss Multimaterial Chalcogenide Fiber for Infrared Applications fabricated by a Hybridized approach. , 2016, , .		0
75	Tuning Light with Photonic Particles. , 2016, , .		0
76	Hybridized Fabrication of Robust Low-Loss Multimaterial Chalcogenide Fiber for Infrared Applications. , 2016, , .		0
77	Magnetoelectrical Clothing Generator for Highâ€Performance Transduction from Biomechanical Energy to Electricity (Adv. Funct. Mater. 6/2022). Advanced Functional Materials, 2022, 32, .	7.8	0