

Integrated all-photonic non-volatile multi-level memor

Nature Photonics

9, 725-732

DOI: [10.1038/nphoton.2015.182](https://doi.org/10.1038/nphoton.2015.182)

Citation Report

#	ARTICLE	IF	CITATIONS
1	Kerr-induced controllable adiabatic frequency conversion in an ultrahigh Q silica toroid microcavity. <i>Optics Letters</i> , 2016, 41, 5482.	3.3	12
2	Color Depth Modulation and Resolution in Phase-Change Material Nanodisplays. <i>Advanced Materials</i> , 2016, 28, 4720-4726.	21.0	126
3	The effect of surface conductivity and adhesivity on the electrostatic manipulation condition for dielectric microparticles using a single probe. <i>Journal of Micromechanics and Microengineering</i> , 2016, 26, 055010.	2.6	4
4	Phase-Change Memory Materials by Design: A Strain Engineering Approach. <i>Advanced Materials</i> , 2016, 28, 3007-3016.	21.0	123
5	Multi-level storage in non-volatile phase-change nanophotonic memories. , 2016, , .		2
6	Architecting a computer with a full optical RAM. , 2016, , .		2
7	Atomic stacking and van-der-Waals bonding in GeTe/Sb ₂ Te ₃ superlattices. <i>Journal of Materials Research</i> , 2016, 31, 3115-3124.	2.6	53
8	Enhanced Crystallization Behaviors of Silicon-Doped Sb ₂ Te Films: Optical Evidences. <i>Scientific Reports</i> , 2016, 6, 33639.	3.3	17
9	Refractive index modulation of Sb ₇₀ Te ₃₀ phase-change thin films by multiple femtosecond laser pulses. <i>Journal of Applied Physics</i> , 2016, 119, .	2.5	12
10	Microstructure evolution and crystallography of the phase-change material TiSbTe films annealed in situ. <i>Journal of Alloys and Compounds</i> , 2016, 678, 185-192.	5.5	2
11	Stochastic phase-change neurons. <i>Nature Nanotechnology</i> , 2016, 11, 693-699.	31.5	799
12	Thermo-optical Effect in Phase-Change Nanophotonics. <i>ACS Photonics</i> , 2016, 3, 828-835.	6.6	81
13	Origin of arbitrary patterns by direct laser writing in a telluride thin film. <i>RSC Advances</i> , 2016, 6, 45748-45752.	3.6	8
14	High-Performance Light-Emitting Memories: Multifunctional Devices for Unveiling Information by Optical and Electrical Detection. <i>Advanced Optical Materials</i> , 2016, 4, 1744-1749.	7.3	5
15	Correlated Perovskites as a New Platform for Super-Broadband-Tunable Photonics. <i>Advanced Materials</i> , 2016, 28, 9117-9125.	21.0	72
16	Phase-change material-based nanoantennas with tunable radiation patterns. <i>Optics Letters</i> , 2016, 41, 4099.	3.3	45
17	Thermally Tunable Ultrasensitive Infrared Absorption Spectroscopy Platforms Based on Thin Phase-Change Films. <i>ACS Sensors</i> , 2016, 1, 1403-1407.	7.8	17
18	Infrared Response and Optoelectronic Memory Device Fabrication Based on Epitaxial VO ₂ Film. <i>ACS Applied Materials & Interfaces</i> , 2016, 8, 32971-32977.	8.0	72

#	ARTICLE	IF	CITATIONS
19	To scatter or not to scatter. Nature Materials, 2016, 15, 821-822.	27.5	6
20	Oxygen Tuned Local Structure and Phase-Change Performance of Germanium Telluride. ACS Applied Materials & Interfaces, 2016, 8, 20185-20191.	8.0	40
21	Microstructure evolution of the phase change material TiSbTe. , 2016, , .		0
22	Temperature-Dependent Photoluminescence Characteristics of GeSn Epitaxial Layers. ACS Photonics, 2016, 3, 2004-2009.	6.6	43
23	Antenna-assisted picosecond control of nanoscale phase transition in vanadium dioxide. Light: Science and Applications, 2016, 5, e16173-e16173.	16.6	87
24	Ultra-Compact Active TE and TM Pass Polarizers Based on Ge ₂ Sb ₂ Te ₅ in Silicon Waveguide. IEEE Photonics Technology Letters, 2016, 28, 2697-2700.	2.5	13
25	Vacancy Structures and Melting Behavior in Rock-Salt GeSbTe. Scientific Reports, 2016, 6, 25453.	3.3	42
26	Oxidation-Based Continuous Laser Writing in Vertical Nano-Crystalline Graphite Thin Films. Scientific Reports, 2016, 6, 26224.	3.3	4
27	Crystallization of Ge ₂ Sb ₂ Te ₅ thin films by nano- and femtosecond single laser pulse irradiation. Scientific Reports, 2016, 6, 28246.	3.3	68
28	Highly efficient valence state switching of samarium in BaFCl:Sm nanocrystals in the deep UV for multilevel optical data storage. Optical Materials Express, 2016, 6, 3097.	3.0	40
29	Reversible Luminescence Modulation upon an Electric Field on a Full Solid-State Device Based on Lanthanide Dimers. ACS Applied Materials & Interfaces, 2016, 8, 15551-15556.	8.0	8
30	An Optical Content Addressable Memory Cell for Address Look-Up at 10 Gb/s. IEEE Photonics Technology Letters, 2016, 28, 1790-1793.	2.5	17
31	All-optical SR flip-flop based on SOA-MZI switches monolithically integrated on a generic InP platform. Proceedings of SPIE, 2016, , .	0.8	0
32	WDM-Enabled Optical RAM at 5 Gb/s Using a Monolithic InP Flip-Flop Chip. IEEE Photonics Journal, 2016, 8, 1-7.	2.0	25
33	Nichtflüchtiger optischer Speicher in photonischen Schaltkreisen. Physik in Unserer Zeit, 2016, 47, 9-10.	0.0	0
34	Optical Input/Electrical Output Memory Elements based on a Liquid Crystalline Azobenzene Polymer. ACS Applied Materials & Interfaces, 2016, 8, 6563-6569.	8.0	25
35	Thickness-dependent electrical and optical properties of Ge ₈ Sb ₂ Te ₁₁ thin films. Phase Transitions, 2017, 90, 189-199.	1.3	1
36	Can conventional phase-change memory devices be scaled down to single-nanometre dimensions?. Nanotechnology, 2017, 28, 035202.	2.6	25

#	ARTICLE	IF	CITATIONS
37	Holographic image generation with a thin-film resonance caused by chalcogenide phase-change material. <i>Scientific Reports</i> , 2017, 7, 41152.	3.3	54
38	Two-dimensional multiferroics in monolayer group IV monochalcogenides. <i>2D Materials</i> , 2017, 4, 015042.	4.4	275
39	An ultra-fast optical shutter exploiting total light absorption in a phase change material. <i>Proceedings of SPIE</i> , 2017, , .	0.8	8
40	Structural, optical, and electrical properties of phase-controlled cesium lead iodide nanowires. <i>Nano Research</i> , 2017, 10, 1107-1114.	10.4	128
41	Control over emissivity of zero-static-power thermal emitters based on phase-changing material GST. <i>Light: Science and Applications</i> , 2017, 6, e16194-e16194.	16.6	236
42	Crystallization Kinetics of GeSbTe Phase-Change Nanoparticles Resolved by Ultrafast Calorimetry. <i>Journal of Physical Chemistry C</i> , 2017, 121, 8569-8578.	3.1	56
43	Realization of Multilevel States in Phase-Change Thin Films by Fast Laser Pulse Irradiation. <i>Advanced Optical Materials</i> , 2017, 5, 1700169.	7.3	43
44	Ink-Free Reversible Optical Writing in Monolayers by Polymerization of a Trifunctional Monomer: Toward Rewritable "Molecular Paper". <i>Advanced Materials</i> , 2017, 29, 1701220.	21.0	25
45	Multilevel optical information recording in silver-containing photosensitive glasses by UV laser pulses. <i>Optical Engineering</i> , 2017, 56, 047104.	1.0	7
46	Silicon carbide doped Sb ₂ Te ₃ nanomaterial for fast-speed phase change memory. <i>Materials Letters</i> , 2017, 201, 109-113.	2.6	7
47	Recent Advances on Neuromorphic Systems Using Phase-Change Materials. <i>Nanoscale Research Letters</i> , 2017, 12, 347.	5.7	65
48	Optical memristive switches. <i>Journal of Electroceramics</i> , 2017, 39, 239-250.	2.0	40
49	Nonvolatile Perovskite-Based Photomemory with a Multilevel Memory Behavior. <i>Advanced Materials</i> , 2017, 29, 1702217.	21.0	133
50	Nanoscale phase-change materials and devices. <i>Journal Physics D: Applied Physics</i> , 2017, 50, 243002.	2.8	22
51	Synthesis of optical circuits using binary decision diagrams. <i>The Integration VLSI Journal</i> , 2017, 59, 42-51.	2.1	6
52	Reconfigurable metasurfaces that enable light polarization control by light. <i>Light: Science and Applications</i> , 2017, 6, e16254-e16254.	16.6	108
53	Deep learning with coherent nanophotonic circuits. <i>Nature Photonics</i> , 2017, 11, 441-446.	31.4	1,845
54	Ultrahigh Storage Densities via the Scaling of Patterned Probe Phase-Change Memories. <i>IEEE Nanotechnology Magazine</i> , 2017, 16, 767-772.	2.0	13

#	ARTICLE	IF	CITATIONS
55	Optical interconnects. , 2017, , 43-73.		2
56	Ultrafast All-Optical Switching. Advanced Optical Materials, 2017, 5, 1600665.	7.3	185
57	Bistable Beam Propagation in Liquid Crystals. IEEE Journal of Quantum Electronics, 2017, 53, 1-11.	1.9	1
58	Conformal Coating of a Phase Change Material on Ordered Plasmonic Nanorod Arrays for Broadband All-Optical Switching. ACS Nano, 2017, 11, 693-701.	14.6	55
59	Mixed-Mode Operation of Hybrid Phase-Change Nanophotonic Circuits. Nano Letters, 2017, 17, 150-155.	9.1	148
60	Calculating with light using a chip-scale all-optical abacus. Nature Communications, 2017, 8, 1256.	12.8	201
61	Design Method of Tunable Pixel with Phase-Change Material for Diffractive Optical Elements. ETRI Journal, 2017, 39, 390-397.	2.0	8
62	On-chip photonic synapse. Science Advances, 2017, 3, e1700160.	10.3	399
63	Light-Gated Memristor with Integrated Logic and Memory Functions. ACS Nano, 2017, 11, 11298-11305.	14.6	173
64	Temporal correlation detection using computational phase-change memory. Nature Communications, 2017, 8, 1115.	12.8	188
65	Dynamic Thermal Emission Control Based on Ultrathin Plasmonic Metamaterials Including Phase-Change Material GST. Laser and Photonics Reviews, 2017, 11, 1700091.	8.7	180
66	Light-Induced Tuning and Reconfiguration of Nanophotonic Structures. Laser and Photonics Reviews, 2017, 11, 1700108.	8.7	158
67	All-optical signal processing using phase-change nanophotonics. , 2017, , .		3
68	Phase-change devices for simultaneous optical-electrical applications. Scientific Reports, 2017, 7, 9688.	3.3	28
69	Suppression for an intermediate phase in ZnSb films by NiO-doping. Scientific Reports, 2017, 7, 8644.	3.3	14
70	Scalable Electro-Optic Control of Localized Bistable Switching in Broad-Area VCSELs Using Reconfigurable Funnel Waveguides. Physical Review Applied, 2017, 7, .	3.8	1
71	Mixed-Mode Electro-Optical Operation of Ge ₂ Sb ₂ Te ₅ Nanoscale Crossbar Devices. Advanced Electronic Materials, 2017, 3, 1700079.	5.1	24
72	Materials science and engineering of phase change random access memory. Materials Science and Technology, 2017, 33, 1890-1906.	1.6	47

#	ARTICLE	IF	CITATIONS
73	Optical computing device architecture based on Ge ₂ Sb ₂ Te ₅ . , 2017, , .		0
74	Phase-change materials for non-volatile photonic applications. Nature Photonics, 2017, 11, 465-476.	31.4	917
75	Growth of crystalline phase change materials by physical deposition methods. Advances in Physics: X, 2017, 2, 675-694.	4.1	12
76	Fabrication of spherical GeSbTe nanoparticles by laser printing technique. Journal of Physics: Conference Series, 2017, 917, 062017.	0.4	1
77	Element-specific amorphization of vacancy-ordered GeSbTe for ternary-state phase change memory. Acta Materialia, 2017, 136, 242-248.	7.9	30
78	Nonvolatile All-Optical 1 Å– 2 Switch for Chipscale Photonic Networks. Advanced Optical Materials, 2017, 5, 1600346.	7.3	165
79	Cavity nonlinear optics with layered materials. Nanophotonics, 2017, 7, 355-370.	6.0	43
80	Multi-Level Optical Weights in Integrated Circuits. , 2017, , .		11
81	Introductory Chapter: The Prominence of Thin Film Science in Technological Scale. , 2017, , .		0
82	Laser switching and characterisation of chalcogenides: systems, measurements, and applicability to photonics [Invited]. Optical Materials Express, 2017, 7, 3741.	3.0	33
83	Chip-scale demonstration of hybrid III-V/silicon photonic integration for an FBG interrogator. Optica, 2017, 4, 692.	9.3	37
84	A Review on Disorder-Driven Metal-Insulator Transition in Crystalline Vacancy-Rich GeSbTe Phase-Change Materials. Materials, 2017, 10, 862.	2.9	54
85	Integrated Optical Content Addressable Memories (CAM) and Optical Random Access Memories (RAM) for Ultra-Fast Address Look-Up Operations. Applied Sciences (Switzerland), 2017, 7, 700.	2.5	15
86	Broadband Transparent Optical Phase Change Materials. , 2017, , .		25
87	A self-resetting spiking phase-change neuron. Nanotechnology, 2018, 29, 195202.	2.6	22
88	Ultracompact Si-GST Hybrid Waveguides for Nonvolatile Light Wave Manipulation. IEEE Photonics Journal, 2018, 10, 1-10.	2.0	45
89	Optical waveguides in fluoride lead silicate glasses fabricated by carbon ion implantation. Optoelectronics Letters, 2018, 14, 104-108.	0.8	5
90	Photonic Potentiation and Electric Habituation in Ultrathin Memristive Synapses Based on Monolayer MoS ₂ . Small, 2018, 14, e1800079.	10.0	224

#	ARTICLE	IF	CITATIONS
91	Optical Planar Waveguides Fabricated by Using Carbon Ion Implantation in Terbium Gallium Garnet. Journal of the Korean Physical Society, 2018, 72, 765-769.	0.7	12
92	Tunable plasmonic nanocavity with Ge ₂ Sb ₂ Te ₅ film for directional launching of surface plasmons. Japanese Journal of Applied Physics, 2018, 57, 040307.	1.5	3
93	Sb ₂ Te ₃ and Its Superlattices: Optimization by Statistical Design. ACS Applied Materials & Interfaces, 2018, 10, 15040-15050.	8.0	23
94	Electrical and optical properties of epitaxial binary and ternary GeTe-Sb ₂ Te ₃ alloys. Scientific Reports, 2018, 8, 5889.	3.3	17
95	Ultracompact Electro-Optical Modulator-Based Ge ₂ Sb ₂ Te ₅ on Silicon. IEEE Photonics Technology Letters, 2018, 30, 250-253.	2.5	50
96	Operation mode switchable charge-trap memory based on few-layer MoS ₂ . Semiconductor Science and Technology, 2018, 33, 034001.	2.0	20
97	Near-infrared optical properties of Yb ³⁺ -doped silicate glass waveguides prepared by double-energy proton implantation. Results in Physics, 2018, 8, 352-356.	4.1	19
98	Resolving Crystallization Kinetics of GeTe Phase-Change Nanoparticles by Ultrafast Calorimetry. Crystal Growth and Design, 2018, 18, 1041-1046.	3.0	34
99	Waveguiding structures in Yb ³⁺ -doped phosphate glasses by double-energy proton and single-energy carbon-ion implantations. Materials Research Express, 2018, 5, 016404.	1.6	5
100	Embedded scattering eigenstates using resonant metasurfaces. Journal of Optics (United Kingdom), 2018, 20, 064002.	2.2	37
101	Design and Simulations of Ge ₂ Sb ₂ Te ₅ Vertical Photodetector for Silicon Photonic Platform. IEEE Sensors Journal, 2018, 18, 540-546.	4.7	8
102	Toward non-volatile photonic memory: concept, material and design. Materials Horizons, 2018, 5, 641-654.	12.2	91
103	Multi-level coding-recoding by ultrafast phase transition on Ge ₂ Sb ₂ Te ₅ thin films. Scientific Reports, 2018, 8, 4979.	3.3	23
104	Non-volatile optical memory based on a slot nanobeam resonator filled with GST material. , 2018, , .		6
105	All-Optical Switching Based on the Plasma Channel Induced by Laser Pulses. Advances in Condensed Matter Physics, 2018, 2018, 1-7.	1.1	1
106	Multifunctional Optoelectronic Device Based on Resistive Switching Effects. , 0, , .		4
107	Electronic Structures of Ge ₂ Sb ₂ Te ₅ /Co ₂ FeX (X: Al, Tj ETQq0 0 0 rgBT /Overlock 10	3.5	1
108	Engineering Interface-Dependent Photoconductivity in Ge ₂ Sb ₂ Te ₅ Nanoscale Devices. ACS Applied Materials & Interfaces, 2018, 10, 44906-44914.	8.0	19

#	ARTICLE	IF	CITATIONS
109	Toward Fast Neural Computing using All-Photonic Phase Change Spiking Neurons. <i>Scientific Reports</i> , 2018, 8, 12980.	3.3	132
110	Humidity dependence of electrostatic pick-and-place operation of a micro dielectric particle considering surface conductivity and capillary condensation. <i>Journal of Applied Physics</i> , 2018, 124, 064303.	2.5	4
111	Electrical properties and structural transition of $\text{Ge}_2\text{Sb}_2\text{Te}_5$ adjusted by rare-earth element Gd for nonvolatile phase-change memory. <i>Journal of Applied Physics</i> , 2018, 124, .	2.5	15
112	Reconfigurable Nanophotonic Cavities with Nonvolatile Response. <i>ACS Photonics</i> , 2018, 5, 4644-4649.	6.6	32
113	Phase-Change Superlattice Materials toward Low Power Consumption and High Density Data Storage: Microscopic Picture, Working Principles, and Optimization. <i>Advanced Functional Materials</i> , 2018, 28, 1803380.	14.9	119
114	Active-Tuning and Polarization-Independent Absorber and Sensor in the Infrared Region Based on the Phase Change Material of $\text{Ge}_2\text{Sb}_2\text{Te}_5$ (GST). <i>Scientific Reports</i> , 2018, 8, 12433.	3.3	62
115	Influence of polymeric electrets on the performance of derived hybrid perovskite-based photo-memory devices. <i>Nanoscale</i> , 2018, 10, 18869-18877.	5.6	57
116	Rewritable full-color computer-generated holograms based on color-selective diffractive optical components including phase-change materials. <i>Nanoscale</i> , 2018, 10, 21648-21655.	5.6	21
117	Optical Ridge Waveguides in Magneto-Optical Glasses Fabricated by Combination of Silicon Ion Implantation and Femtosecond Laser Ablation. <i>IEEE Photonics Journal</i> , 2018, 10, 1-7.	2.0	8
118	Design of ultra low insertion loss active transverse electric pass polarizer based $\text{Ge}_{19}\text{Sb}_{18}\text{Te}_{18}$ thin films. <i>Optics Communications</i> , 2018, 426, 30-34.	2.1	18
119	Guiding properties of proton-implanted Nd^{3+} -doped phosphate glass waveguides. <i>Chinese Physics B</i> , 2018, 27, 054218.	1.4	6
120	Nanoscale thermal cross-talk effect on phase-change probe memory. <i>Nanotechnology</i> , 2018, 29, 375201.	2.6	4
121	All-Optical Detection of Periodic Structure of Chalcogenide Superlattice Using Coherent Folded Acoustic Phonons. <i>Physica Status Solidi - Rapid Research Letters</i> , 2018, 12, 1800246.	2.4	0
122	Thermal camouflage based on the phase-changing material GST. <i>Light: Science and Applications</i> , 2018, 7, 26.	16.6	255
123	Device-Level Photonic Memories and Logic Applications Using Phase-Change Materials. <i>Advanced Materials</i> , 2018, 30, e1802435.	21.0	129
124	Ultrafast Multilevel Optical Tuning with CSb_2Te_3 Thin Films. <i>Advanced Optical Materials</i> , 2018, 6, 1800360.	7.3	34
125	Light Tuning of the Resistance of NdNiO_3 Films With CoFe_2O_4 Capping. <i>Physica Status Solidi - Rapid Research Letters</i> , 2018, 12, 1800186.	2.4	2
126	A systematic evolution of optical band gap and local ordering in $\text{Ge}_1\text{Sb}_2\text{Te}_4$ and $\text{Ge}_2\text{Sb}_2\text{Te}_5$ materials revealed by in situ optical spectroscopy. <i>Journal Physics D: Applied Physics</i> , 2018, 51, 375104.	2.8	10

#	ARTICLE	IF	CITATIONS
127	Non-volatile All-Optical Quasi-Continuous Switching in GST-on-Silicon Microring Resonators. , 2018, , .		0
128	Tunable dual-band thermal emitter consisting of single-sized phase-changing GST nanodisks. Optics Express, 2018, 26, 4279.	3.4	28
129	GST-on-silicon hybrid nanophotonic integrated circuits: a non-volatile quasi-continuously reprogrammable platform. Optical Materials Express, 2018, 8, 1551.	3.0	166
130	Modified Maxwell Garnett model for hysteresis in phase change materials. Optical Materials Express, 2018, 8, 1988.	3.0	16
131	Tunable enhanced infrared absorption spectroscopy surfaces based on thin VO ₂ films. Optical Materials Express, 2018, 8, 2190.	3.0	7
132	Ultrafast and low-power crystallization in Ge ₁ Sb ₂ Te ₄ and Ge ₁ Sb ₄ Te ₇ thin films using femtosecond laser pulses. Applied Optics, 2018, 57, 178.	1.8	6
133	Silicon chip-scale space-division multiplexing: from devices to system. Science China Information Sciences, 2018, 61, 1.	4.3	20
134	Mie-coupled bound guided states in nanowire geometric superlattices. Nature Communications, 2018, 9, 2781.	12.8	21
135	Reliable Ge ₂ Sb ₂ Te ₅ Integrated High-Density Nanoscale Conductive Bridge Random Access Memory using Facile Nitrogen-Doping Strategy. Advanced Electronic Materials, 2018, 4, 1800360.	5.1	27
136	A Non-Volatile Chalcogenide Switchable Hyperbolic Metamaterial. Advanced Optical Materials, 2018, 6, 1800332.	7.3	16
137	Neuromorphic Computing Based on Silicon Photonics and Reservoir Computing. IEEE Journal of Selected Topics in Quantum Electronics, 2018, 24, 1-10.	2.9	37
138	Optical phase change materials in integrated silicon photonic devices: review. Optical Materials Express, 2018, 8, 2415.	3.0	118
139	Controlled switching of phase-change materials by evanescent-field coupling in integrated photonics [Invited]. Optical Materials Express, 2018, 8, 2455.	3.0	113
140	Nonvolatile tunable silicon-carbide-based midinfrared thermal emitter enabled by phase-changing materials. Optics Letters, 2018, 43, 1295.	3.3	32
141	Particle Shape Effects in the Extinction Spectra of Gold and Silver Nanoparticles. Bulletin of the Russian Academy of Sciences: Physics, 2018, 82, 435-443.	0.6	1
142	Optical characteristics of an oxyfluoride glass waveguide formed by a proton implantation. Results in Physics, 2018, 10, 200-204.	4.1	7
143	Silicon photonic networks: Signal loss and power challenges. Concurrency Computation Practice and Experience, 2019, 31, e4777.	2.2	2
144	Enhanced optical properties of Sn-doped Ge ₂ Sb ₂ Te ₅ thin film with structural evolution. Journal of Alloys and Compounds, 2019, 770, 692-700.	5.5	25

#	ARTICLE	IF	CITATIONS
145	Unconventional phase transition of phase-change-memory materials for optical data storage*. Chinese Physics B, 2019, 28, 104202.	1.4	7
146	Computational phase-change memory: beyond von Neumann computing. Journal Physics D: Applied Physics, 2019, 52, 443002.	2.8	78
147	Miniature Multilevel Optical Memristive Switch Using Phase Change Material. ACS Photonics, 2019, 6, 2205-2212.	6.6	138
148	Independent Memcapacitive Switching Triggered by Bromide Ion Migration for Quaternary Information Storage. Advanced Materials, 2019, 31, e1806424.	21.0	38
149	Ferroicity-driven nonlinear photocurrent switching in time-reversal invariant ferroic materials. Science Advances, 2019, 5, eaav9743.	10.3	62
150	Design of Ultra-Compact Optical Memristive Switches with GST as the Active Material. Micromachines, 2019, 10, 453.	2.9	18
151	Fundamentals and Applications of Chalcogenide Phase-Change Material Photonics. Advanced Theory and Simulations, 2019, 2, 1900094.	2.8	40
152	A Nonvolatile Phase-Change Metamaterial Color Display. Advanced Optical Materials, 2019, 7, 1801782.	7.3	97
153	Revealing Low-Radiative Modes of Nanoresonators with Internal Raman Scattering. JETP Letters, 2019, 110, 25-30.	1.4	5
154	Multilevel Photonic Transistor Memory Devices Using Conjugated/Insulated Polymer Blend Electrets. ACS Applied Materials & Interfaces, 2019, 11, 42429-42437.	8.0	50
155	A Modified Maxwell Garnett Model: Hysteresis in phase change materials. Journal of Physics: Conference Series, 2019, 1322, 012038.	0.4	1
156	The promise of phase-change materials. Science, 2019, 366, 186-187.	12.6	37
157	Coordinated control of four-wheel drive electric vehicle EPS/4WD system. IOP Conference Series: Earth and Environmental Science, 2019, 252, 032139.	0.3	0
158	Robust 2DPCA With $\{F\}$ -Norm Minimization. IEEE Access, 2019, 7, 68083-68090.	4.2	5
159	Improved Method for Interleaving Parameter Estimation in a Non-Cooperative Context. IEEE Access, 2019, 7, 92171-92175.	4.2	13
160	Analog Statistical Design for Manufacturability Using Linear and Nonlinear Response. IEEE Access, 2019, 7, 95739-95750.	4.2	0
161	Fiber-integrated phase-change reconfigurable optical attenuator. APL Photonics, 2019, 4, .	5.7	16
163	Non-Volatile Indium Tin Oxide Electro-Optic Switch. , 2019, , .		0

#	ARTICLE	IF	CITATIONS
164	Roadmap on material-function mapping for photonic-electronic hybrid neural networks. APL Materials, 2019, 7, .	5.1	42
165	Advanced functional materials for soft robotics: tuning physicochemical properties beyond rigidity control. Multifunctional Materials, 2019, 2, 042001.	3.7	13
166	Strong Opto-Structural Coupling in Low Dimensional GeSe ₃ Films. Nano Letters, 2019, 19, 7377-7384.	9.1	11
167	Cobalt germanide precipitates indirectly improve the properties of thermoelectric germanium antimony tellurides. Journal of Materials Chemistry C, 2019, 7, 11419-11430.	5.5	4
168	Phase-change materials in electronics and photonics. MRS Bulletin, 2019, 44, 686-690.	3.5	44
169	Integrated phase-change photonic devices and systems. MRS Bulletin, 2019, 44, 721-727.	3.5	29
170	A role for optics in AI hardware. Nature, 2019, 569, 199-200.	27.8	11
171	Rural areas drive increases in global obesity. Nature, 2019, 569, 200-201.	27.8	19
172	Planar and ridge waveguides in Yb ³⁺ -doped silicate glasses fabricated by proton implantation and precise diamond blade dicing. Optics Communications, 2019, 453, 124344.	2.1	8
173	Broadband transparent optical phase change materials for high-performance nonvolatile photonics. Nature Communications, 2019, 10, 4279.	12.8	349
174	Behavioral modeling of integrated phase-change photonic devices for neuromorphic computing applications. APL Materials, 2019, 7, .	5.1	17
175	Polariton nanophotonics using phase-change materials. Nature Communications, 2019, 10, 4487.	12.8	106
176	Chalcogenide Phase Change Material for Active Terahertz Photonics. Advanced Materials, 2019, 31, e1808157.	21.0	159
177	Photonic In-Memory Computing Primitive for Spiking Neural Networks Using Phase-Change Materials. Physical Review Applied, 2019, 11, .	3.8	93
178	High Resolution Imaging of Chalcogenide Superlattices for Data Storage Applications: Progress and Prospects. Physica Status Solidi - Rapid Research Letters, 2019, 13, 1800562.	2.4	27
179	Active control of anapole states by structuring the phase-change alloy Ge ₂ Sb ₂ Te ₅ . Nature Communications, 2019, 10, 396.	12.8	162
180	Tunable Volatility of Ge ₂ Sb ₂ Te ₅ in Integrated Photonics. Advanced Functional Materials, 2019, 29, 1807571.	14.9	57
181	Solar-blind SnO ₂ nanowire photo-synapses for associative learning and coincidence detection. Nano Energy, 2019, 62, 393-400.	16.0	100

#	ARTICLE	IF	CITATIONS
182	Theoretical analysis and simulation of a tunable mid-infrared filter based on Ge ₂ Sb ₂ Te ₅ (GST) metasurface. Superlattices and Microstructures, 2019, 132, 106169.	3.1	23
183	Multi-Level Memory Comprising Only Amorphous Oxide Thin Film Transistors. IEEE Journal of the Electron Devices Society, 2019, 7, 575-580.	2.1	1
184	Wideband polarization-insensitive dielectric switch for mid-infrared waves realized by phase change material Ge ₃ Sb ₂ Te ₆ . Europhysics Letters, 2019, 126, 27004.	2.0	6
185	Terahertz spectroscopic characterization of Ge ₂ Sb ₂ Te ₅ phase change materials for photonics applications. Journal of Materials Chemistry C, 2019, 7, 8209-8215.	5.5	38
186	All-optical spiking neurosynaptic networks with self-learning capabilities. Nature, 2019, 569, 208-214.	27.8	847
187	Nonvolatile waveguide transmission tuning with electrically-driven ultra-small GST phase-change material. Science Bulletin, 2019, 64, 782-789.	9.0	75
188	Optical properties of an Er ³⁺ -doped phosphate glass waveguide formed by single-energy H ⁺ ion implantation. Optoelectronics Letters, 2019, 15, 104-107.	0.8	2
189	Artificial neural networks enabled by nanophotonics. Light: Science and Applications, 2019, 8, 42.	16.6	189
190	Photonic Synapses for Ultrahigh-Speed Neuromorphic Computing. Physica Status Solidi - Rapid Research Letters, 2019, 13, 1900082.	2.4	53
191	Evolution of quasiperiodic microstructure of Ge ¹⁶ Sb ¹⁶ Te-based films irradiated by multi-pulsed picosecond laser. Journal Physics D: Applied Physics, 2019, 52, 305305.	2.8	1
192	Metasurface with Nanostructured Ge ₂ Sb ₂ Te ₅ as a Platform for Broadband-Operating Wavefront Switch. Advanced Optical Materials, 2019, 7, 1900171.	7.3	78
193	Near-infrared carbon-implanted waveguides in Tb ³⁺ -doped aluminum borosilicate glasses. Frontiers of Optoelectronics, 2019, 12, 392-396.	3.7	10
194	Thermally Controllable High-Efficiency Unidirectional Coupling in a Double-Slit Structure Filled With Phase Change Material. IEEE Photonics Journal, 2019, 11, 1-8.	2.0	3
195	Laser-induced phase transition processes of amorphous Ge ₂ Sb ₂ Te ₅ films. Optik, 2019, 185, 126-131.	2.9	4
196	Efficient Light-to-Heat Conversion by Optical Absorption of a Metal on an Si Microring Resonator. Journal of Lightwave Technology, 2019, 37, 2223-2231.	4.6	10
197	Direct measurement of ϵ -ready-made ϵ -cations in a Ge ₂ Sb _{3.4} Te _{6.2} film. Journal of Materials Science, 2019, 54, 7072-7077.	3.7	3
198	Dynamic Metasurfaces Using Phase-Change Chalcogenides. Advanced Optical Materials, 2019, 7, 1801709.	7.3	139
199	Tailoring the Local Density of Optical States and Directionality of Light Emission by Symmetry Breaking. IEEE Journal of Selected Topics in Quantum Electronics, 2019, 25, 1-7.	2.9	12

#	ARTICLE	IF	CITATIONS
200	Investigations on optical behavior of Crystalline-Ge ₂ Sb ₂ Te ₅ for photo-detection application in near infra-red region. Superlattices and Microstructures, 2019, 130, 1-11.	3.1	5
201	Dual-Functional Nanoscale Devices Using Phase-Change Materials: A Reconfigurable Perfect Absorber with Nonvolatile Resistance-Change Memory Characteristics. Applied Sciences (Switzerland), 2019, 9, 564.	2.5	27
202	Preparation and thermal optimization of the proton-implanted high-gain Nd ³⁺ -doped laser glass waveguide. Japanese Journal of Applied Physics, 2019, 58, 032002.	1.5	4
203	The Pathway to Intelligence: Using Stimuli-Responsive Materials as Building Blocks for Constructing Smart and Functional Systems. Advanced Materials, 2019, 31, e1804540.	21.0	169
204	In-memory computing on a photonic platform. Science Advances, 2019, 5, eaau5759.	10.3	238
205	Sm ³⁺ -doped bismuthate glasses and proton-implanted near-infrared waveguides. International Journal of Modern Physics B, 2019, 33, 1950004.	2.0	1
206	Proton-implanted waveguides in neodymium-doped calcium lithium niobium gallium garnet crystals. Results in Physics, 2019, 15, 102794.	4.1	7
207	Plasmonic nanogap enhanced phase-change devices with dual electrical-optical functionality. Science Advances, 2019, 5, eaaw2687.	10.3	131
208	Non-Volatile Indium Tin Oxide Electro-Optic Switch. , 2019, , .		0
209	3. Integrated on-chip reservoirs. , 2019, , 53-82.		0
210	Energy Efficiency of Microring Resonator (MRR)-Based Binary Decision Diagram (BDD) Circuits. , 2019, , .		3
211	Geometric Nanophotonics: Light Management in Single Nanowires through Morphology. Accounts of Chemical Research, 2019, 52, 3511-3520.	15.6	20
212	Thermally Controllable High-Efficiency Unidirectional Coupling in a Double-Slit Structure Filled with Phase Change Material. , 2019, , .		0
213	All-optical photonic crystal memory cells based on cavities with a dual-argument hysteresis feature. Optics Communications, 2019, 430, 323-335.	2.1	45
214	Low-Loss Integrated Photonic Switch Using Subwavelength Patterned Phase Change Material. ACS Photonics, 2019, 6, 87-92.	6.6	124
215	Inter-diffusion of plasmonic metals and phase change materials. Journal of Materials Science, 2019, 54, 2814-2823.	3.7	44
216	Training Passive Photonic Reservoirs With Integrated Optical Readout. IEEE Transactions on Neural Networks and Learning Systems, 2019, 30, 1943-1953.	11.3	21
217	Large Pockels effect in micro- and nanostructured barium titanate integrated on silicon. Nature Materials, 2019, 18, 42-47.	27.5	311

#	ARTICLE	IF	CITATIONS
218	Nonvolatile Current-Modulated Four-State Magnetoplasmonic Memory. <i>Physical Review Applied</i> , 2019, 11, .	3.8	0
219	Designing crystallization in phase-change materials for universal memory and neuro-inspired computing. <i>Nature Reviews Materials</i> , 2019, 4, 150-168.	48.7	572
220	Low-Loss and Broadband Nonvolatile Phase-Change Directional Coupler Switches. <i>ACS Photonics</i> , 2019, 6, 553-557.	6.6	184
221	Near-infrared optical properties and thermal stability of proton-implanted Er ³⁺ /Yb ³⁺ co-doped silicate glass waveguides. <i>Results in Physics</i> , 2019, 12, 357-360.	4.1	3
222	Silicon Nitride Photonics for the Near-Infrared. <i>IEEE Journal of Selected Topics in Quantum Electronics</i> , 2020, 26, 1-13.	2.9	40
223	Dynamic Terahertz Plasmonics Enabled by Phase-Change Materials. <i>Advanced Optical Materials</i> , 2020, 8, 1900548.	7.3	59
224	Integrated Coherent Ising Machines Based on Self-Phase Modulation in Microring Resonators. <i>IEEE Journal of Selected Topics in Quantum Electronics</i> , 2020, 26, 1-15.	2.9	22
225	Electrochromic Infrared Light Modulation in Optical Waveguides. <i>Advanced Optical Materials</i> , 2020, 8, 1901464.	7.3	9
226	A multilevel vertical photonic memory transistor based on organic semiconductor/inorganic perovskite quantum dot blends. <i>Journal of Materials Chemistry C</i> , 2020, 8, 2861-2869.	5.5	29
227	Reconfigurable Frequency-Selective Resonance Splitting in Chalcogenide Microring Resonators. <i>ACS Photonics</i> , 2020, 7, 499-511.	6.6	19
228	Integration of Nanoscale and Macroscale Graphene Heterostructures for Flexible and Multilevel Nonvolatile Photoelectronic Memory. <i>ACS Applied Nano Materials</i> , 2020, 3, 608-616.	5.0	16
229	Nanostructure patterning of C-Sb ₂ Te ₃ by maskless thermal lithography using femtosecond laser pulses. <i>Applied Surface Science</i> , 2020, 508, 145228.	6.1	20
230	Integrated 256 Cell Photonic Phase-Change Memory With 512-Bit Capacity. <i>IEEE Journal of Selected Topics in Quantum Electronics</i> , 2020, 26, 1-7.	2.9	54
231	Thermally controllable perfect absorber at telecommunication spectrum based on phase change material and cavity grating. <i>Laser Physics</i> , 2020, 30, 026201.	1.2	6
232	Nanoscale amorphous interfaces in phase-change memory materials: structure, properties and design. <i>Journal Physics D: Applied Physics</i> , 2020, 53, 114002.	2.8	4
233	Ultrafast temporal-spatial dynamics of amorphous-to-crystalline phase transition in Ge ₂ Sb ₂ Te ₅ thin film triggered by multiple femtosecond laser pulses irradiation. <i>Nanotechnology</i> , 2020, 31, 115706.	2.6	11
234	Planar and ridge waveguides formed by proton implantation and femtosecond laser ablation in fused silica. <i>Vacuum</i> , 2020, 172, 109093.	3.5	15
235	A proton-implanted planar waveguide fabricated in terbium gallium garnet crystal. <i>Modern Physics Letters B</i> , 2020, 34, 2050062.	1.9	1

#	ARTICLE	IF	CITATIONS
236	Non-volatile Switching for Wavelength-Selective Spatial Routing. , 2020, , .		0
237	Fully photon operated transmistor / all-optical switch based on a layered Ge ₁ Sb ₂ Te ₄ phase change medium. FlatChem, 2020, 23, 100186.	5.6	26
238	Glassy GaS: transparent and unusually rigid thin films for visible to mid-IR memory applications. Physical Chemistry Chemical Physics, 2020, 22, 25560-25573.	2.8	15
239	GeSbTe diffraction grating on a silicon waveguide. , 2020, , .		0
240	Progress in metasurfaces based on Ge ^{Te} Sb ^{Te} phase-change materials. Journal of Applied Physics, 2020, 128, 140904.	2.5	13
241	Photonic Ge-Sb-Te phase change metamaterials and their applications. Progress in Quantum Electronics, 2020, 74, 100299.	7.0	27
242	Programmable photonic circuits. Nature, 2020, 586, 207-216.	27.8	598
243	Photonic tensor cores for machine learning. Applied Physics Reviews, 2020, 7, .	11.3	126
244	Multitask Learning by Multiwave Optical Diffractive Network. Mathematical Problems in Engineering, 2020, 2020, 1-7.	1.1	3
245	Even-Parity Self-Trapped Excitons Lead to Magnetic Dipole Radiation in Two-Dimensional Lead Halide Perovskites. ACS Nano, 2020, 14, 8958-8968.	14.6	23
246	A monolithic artificial iconic memory based on highly stable perovskite-metal multilayers. Applied Physics Reviews, 2020, 7, .	11.3	46
247	Terahertz Nanoimaging and Nanospectroscopy of Chalcogenide Phase-Change Materials. ACS Photonics, 2020, 7, 3499-3506.	6.6	29
248	Realization of 4-Bit Multilevel Optical Switching in Ge ₂ Sb ₂ Te ₅ and Ag ₅ In ₅ Sb ₆₀ Te ₃₀ Phase-Change Materials Enabled in the Visible Region. ACS Applied Electronic Materials, 2020, 2, 3977-3986.	4.3	6
249	Recent advances in optical and optoelectronic data storage based on luminescent nanomaterials. Nanoscale, 2020, 12, 23391-23423.	5.6	47
250	Laser Generation of Sub ^{micrometer} Wrinkles in a Chalcogenide Glass Film as Physical Unclonable Functions. Advanced Materials, 2020, 32, e2003032.	21.0	18
251	Thermally Controllable Infrared Absorption in Cylindrical Groove Array Covered by Phase Change Material. Plasmonics, 2020, 15, 2119-2125.	3.4	4
252	Neuromorphic Engineering for Hardware Computational Acceleration and Biomimetic Perception Motion Integration. Advanced Intelligent Systems, 2020, 2, 2000124.	6.1	17
253	Two-Dimensional Cs ₂ Pb(SCN) ₂ Br ₂ -Based Photomemory Devices Showing a Photoinduced Recovery Behavior and an Unusual Fully Optically Driven Memory Behavior. ACS Applied Materials & Interfaces, 2020, 12, 36398-36408.	8.0	39

#	ARTICLE	IF	CITATIONS
254	Unveiling the structural origin to control resistance drift in phase-change memory materials. <i>Materials Today</i> , 2020, 41, 156-176.	14.2	96
255	Manipulating Photon Propagation via a Perovskite Microwire Array. <i>Journal of Physical Chemistry C</i> , 2020, 124, 24315-24321.	3.1	4
256	Reflection spectra of a thin-film GeSbTe diffraction grating on a silicon nitride waveguide. <i>IOP Conference Series: Materials Science and Engineering</i> , 2020, 840, 012008.	0.6	0
257	Thermal Tuning of Resonant Gratings Using a Phase-Change Material. , 2020, , .		0
258	Doping-driven electronic and lattice dynamics in the phase-change material vanadium dioxide. <i>Physical Review B</i> , 2020, 102, .	3.2	8
259	Plasmonics beyond noble metals: Exploiting phase and compositional changes for manipulating plasmonic performance. <i>Journal of Applied Physics</i> , 2020, 128, .	2.5	54
260	Recent Advances on Neuromorphic Devices Based on Chalcogenide Phase-Change Materials. <i>Advanced Functional Materials</i> , 2020, 30, 2003419.	14.9	144
261	In-Memory Logic Operations and Neuromorphic Computing in Non-Volatile Random Access Memory. <i>Materials</i> , 2020, 13, 3532.	2.9	31
262	Nonvolatile Multistates Memories for High-Density Data Storage. <i>ACS Applied Materials & Interfaces</i> , 2020, 12, 42449-42471.	8.0	101
263	Resistive switching in diamondoid thin films. <i>Scientific Reports</i> , 2020, 10, 19009.	3.3	2
265	Fabrication and thermal optimization of H ⁺ -implanted k9 glass waveguides. <i>International Journal of Modern Physics B</i> , 2020, 34, 2050120.	2.0	1
266	Reversibly Programmable Photonics via Responsive Polyelectrolyte Multilayer Cladding. <i>Advanced Optical Materials</i> , 2020, 8, 2000325.	7.3	1
267	Structural Transitions in Ge ₂ Sb ₂ Te ₅ Phase Change Memory Thin Films Induced by Nanosecond UV Optical Pulses. <i>Materials</i> , 2020, 13, 2082.	2.9	13
268	Optical RAM and integrated optical memories: a survey. <i>Light: Science and Applications</i> , 2020, 9, 91.	16.6	98
269	Optical properties of MIM plasmonic waveguide with an elliptical cavity resonator. <i>Applied Physics A: Materials Science and Processing</i> , 2020, 126, 1.	2.3	34
270	Resistance modulation in Ge ₂ Sb ₂ Te ₅ . <i>Journal of Materials Science and Technology</i> , 2020, 50, 171-177.	10.7	8
271	A programmable chemical computer with memory and pattern recognition. <i>Nature Communications</i> , 2020, 11, 1442.	12.8	41
272	Nonvolatile Negative Optoelectronic Memory Based on Ferroelectric Thin Films. <i>ACS Applied Electronic Materials</i> , 2020, 2, 1035-1040.	4.3	18

#	ARTICLE	IF	CITATIONS
273	O-band N-rich silicon nitride MZI based on GST. Applied Physics Letters, 2020, 116, 093502.	3.3	23
274	Semiconductor Quantum Dots for Memories and Neuromorphic Computing Systems. Chemical Reviews, 2020, 120, 3941-4006.	47.7	203
275	Memory devices and applications for in-memory computing. Nature Nanotechnology, 2020, 15, 529-544.	31.5	968
276	LightBulb: A Photonic-Nonvolatile-Memory-based Accelerator for Binarized Convolutional Neural Networks. , 2020, , .		15
277	Role of resistive memory devices in brain-inspired computing. , 2020, , 3-16.		7
278	Nonvolatile Electrically Reconfigurable Integrated Photonic Switch Enabled by a Silicon PIN Diode Heater. Advanced Materials, 2020, 32, e2001218.	21.0	152
279	Chalcogenide materials for optoelectronic memory and neuromorphic computing. , 2020, , 293-315.		2
280	Overview of Phase-Change Materials Based Photonic Devices. IEEE Access, 2020, 8, 121211-121245.	4.2	44
281	Development of an in-situ nanofabrication instrument for ice lithography. Microelectronic Engineering, 2020, 224, 111251.	2.4	10
282	Construction and investigation of a planar waveguide in photo-thermal-refractive glass by proton implantation. Optik, 2020, 207, 164461.	2.9	7
283	Tunable crystallization mechanism of Sb ₄ Te films by VO ₂ nano-grid framework for breaking through the trade-off between thermal stability and crystallization speed. Journal Physics D: Applied Physics, 2020, 53, 165107.	2.8	2
284	An overview of phase-change memory device physics. Journal Physics D: Applied Physics, 2020, 53, 213002.	2.8	202
285	Thermal properties of carbon nitride toward use as an electrode in phase change memory devices. Applied Physics Letters, 2020, 116, 043502.	3.3	14
286	A comprehensive review on emerging artificial neuromorphic devices. Applied Physics Reviews, 2020, 7, .	11.3	417
287	Fast Reversible Phase Change Silicon for Visible Active Photonics. Advanced Functional Materials, 2020, 30, 1910784.	14.9	19
288	Deep learning approach based on dimensionality reduction for designing electromagnetic nanostructures. Npj Computational Materials, 2020, 6, .	8.7	139
289	A unified mid-gap defect model for amorphous GeTe phase change material. Applied Physics Letters, 2020, 116, .	3.3	7
290	Conversion of p-type conduction type by spinodal decomposition in Zn-Sb-Bi phase-change alloys. NPC Asia Materials, 2020, 12, .	7.9	21

#	ARTICLE	IF	CITATIONS
291	Multi-Level Long-Term Memory Resembling Human Memory Based on Photosensitive Field-Effect Transistors with Stable Interfacial Deep Traps. <i>Advanced Electronic Materials</i> , 2020, 6, 1901044.	5.1	6
292	An asymmetric hot carrier tunneling van der Waals heterostructure for multibit optoelectronic memory. <i>Materials Horizons</i> , 2020, 7, 1331-1340.	12.2	40
293	Metastable Refractive Index Manipulation in Hydrogenated Amorphous Silicon for Reconfigurable Photonics. <i>Advanced Optical Materials</i> , 2020, 8, 1901680.	7.3	9
294	Efficient All-Optical Plasmonic Modulators with Atomically Thin Van Der Waals Heterostructures. <i>Advanced Materials</i> , 2020, 32, e1907105.	21.0	44
295	Grayscale Nanopatterning of Phase-Change Materials for Subwavelength-Scaled, Inherently Planar, Nonvolatile, and Reconfigurable Optical Devices. <i>ACS Applied Nano Materials</i> , 2020, 3, 4486-4493.	5.0	7
296	Time-dependent density-functional theory molecular-dynamics study on amorphization of Sc-Sb-Te alloy under optical excitation. <i>Npj Computational Materials</i> , 2020, 6, .	8.7	32
297	Polyamorphism in $K_2Sb_8Se_{13}$ for multi-level phase-change memory. <i>Journal of Materials Chemistry C</i> , 2020, 8, 6364-6369.	5.5	14
298	Bismuth-Doped Phosphate Glasses and H ⁺ -Implanted Waveguides. <i>Journal of the Korean Physical Society</i> , 2020, 76, 479-483.	0.7	2
299	Perspective on photonic memristive neuromorphic computing. <i>Photonix</i> , 2020, 1, .	13.5	81
300	Inverse design of an integrated-nanophotonics optical neural network. <i>Science Bulletin</i> , 2020, 65, 1177-1183.	9.0	44
301	Modeling Electrical Switching of Nonvolatile Phase-Change Integrated Nanophotonic Structures with Graphene Heaters. <i>ACS Applied Materials & Interfaces</i> , 2020, 12, 21827-21836.	8.0	78
302	Peculiarities of Estimating the Optical Band Gap of Thin Films of Phase Change Memory Materials. <i>Inorganic Materials: Applied Research</i> , 2020, 11, 330-337.	0.5	7
303	Roadmap on emerging hardware and technology for machine learning. <i>Nanotechnology</i> , 2021, 32, 012002.	2.6	104
304	Structure and Dynamics of Supercooled Liquid $Ge_2Sb_2Te_5$ from Machine-Learning-Driven Simulations. <i>Physica Status Solidi - Rapid Research Letters</i> , 2021, 15, 2000403.	2.4	4
305	Multi-Level Electro-Thermal Switching of Optical Phase-Change Materials Using Graphene. <i>Advanced Photonics Research</i> , 2021, 2, 2000034.	3.6	75
306	Recent Progress of Optoelectronic and All-Optical Neuromorphic Devices: A Comprehensive Review of Device Structures, Materials, and Applications. <i>Advanced Intelligent Systems</i> , 2021, 3, 2000119.	6.1	38
307	An infrared 2D Nd ³⁺ -doped phosphate glass waveguide formed by proton implantation and femtosecond laser ablation. <i>Infrared Physics and Technology</i> , 2021, 113, 103578.	2.9	4
308	Two-Dimensional Materials for Integrated Photonics: Recent Advances and Future Challenges. <i>Small Science</i> , 2021, 1, 2000053.	9.9	56

#	ARTICLE	IF	CITATIONS
309	A ridge waveguide constructed by H ⁺ implantation and precise diamond blade dicing in high-gain Nd ³⁺ -doped laser glass. <i>Optik</i> , 2021, 225, 165881.	2.9	6
310	High Stability and Low Noise Multilevel Switching in In ₃ SbTe ₂ Material for Phase Change Photonic Memory Applications. <i>Physica Status Solidi - Rapid Research Letters</i> , 2021, 15, 2000354.	2.4	7
311	Phase change materials in photonic devices. <i>Journal of Applied Physics</i> , 2021, 129, .	2.5	43
312	Programmable phase-change metasurfaces on waveguides for multimode photonic convolutional neural network. <i>Nature Communications</i> , 2021, 12, 96.	12.8	186
313	Antimony thin films demonstrate programmable optical nonlinearity. <i>Science Advances</i> , 2021, 7, .	10.3	42
314	Bulk Glassy GeTe ₂ : A Missing Member of the Tetrahedral GeX ₂ Family and a Precursor for the Next Generation of Phase-Change Materials. <i>Chemistry of Materials</i> , 2021, 33, 1031-1045.	6.7	17
315	Resistive Switching Effect of the Structure Based on Silicon Nitride. <i>Technical Physics</i> , 2021, 66, 133-138.	0.7	1
316	Nonvolatile switching in In ₂ Se ₃ -silicon microring resonators. , 2021, , .		3
317	Parallel convolutional processing using an integrated photonic tensor core. <i>Nature</i> , 2021, 589, 52-58.	27.8	723
318	Chaos in Quantum Cascade Lasers. <i>Springer Theses</i> , 2021, , 39-97.	0.1	0
319	Dynamic Hybrid Metasurfaces. <i>Nano Letters</i> , 2021, 21, 1238-1245.	9.1	85
320	Compositions, structures, and mid-infrared transparency of Sb ²⁺ Te ²⁺ Se thin films synthesized using a combinatorial method. <i>Applied Physics A: Materials Science and Processing</i> , 2021, 127, 1.	2.3	2
321	Optical memories and switching dynamics of counterpropagating light states in microresonators. <i>Optics Express</i> , 2021, 29, 2193.	3.4	19
322	Integrated Nonvolatile Phase-shifter Based on Electrically Reconfigurable Low-loss Phase-change Materials. , 2021, , .		4
323	Phase Change Material Photonics. , 2021, , 487-517.		4
324	Comparison of the phase change process in a GST-loaded silicon waveguide and MMI. <i>Optics Express</i> , 2021, 29, 3503.	3.4	20
325	Optical RAM Row With 20 Gb/s Optical Word Read/Write. <i>Journal of Lightwave Technology</i> , 2021, 39, 7061-7069.	4.6	8
326	System-Level Simulation for Integrated Phase-Change Photonics. <i>Journal of Lightwave Technology</i> , 2021, 39, 6392-6402.	4.6	6

#	ARTICLE	IF	CITATIONS
328	Colored and Translucent Chalcogenide-Oxide Nanocomposite Films Prepared by Spin Coating and Reflow Processes. Transactions on Electrical and Electronic Materials, 2021, 22, 146-149.	1.9	2
329	Exploring Phase-Change Memory: From Material Systems to Device Physics. Physica Status Solidi - Rapid Research Letters, 2021, 15, 2000394.	2.4	9
330	Artificial Synapse with Mnemonic Functionality using GSST-based Photonic Integrated Memory. Applied Computational Electromagnetics Society Journal, 2021, 35, 1447-1449.	0.4	4
331	Subwavelength grating waveguide filter based on cladding modulation with a phase-change material grating. Applied Optics, 2021, 60, 2803.	1.8	30
332	Realizing Nonvolatile Photomemories with Multilevel Memory Behaviors Using Water-Processable Polymer Dots-Based Hybrid Floating Gates. ACS Applied Electronic Materials, 2021, 3, 1708-1718.	4.3	11
333	Change in Structure of Amorphous Sb ₂ Te Phase-Change Materials as a Function of Stoichiometry. Physica Status Solidi - Rapid Research Letters, 2021, 15, 2100064.	2.4	10
334	Optically-reconfigurable phase change material nanoantenna-embedded metamaterial waveguide. Optical Materials Express, 2021, 11, 988.	3.0	7
335	Reconfigurable bandpass optical filters based on subwavelength grating waveguides with a Ge ₂ Sb ₂ Te ₅ cavity. Journal of the Optical Society of America B: Optical Physics, 2021, 38, 1283.	2.1	41
336	Memristive Artificial Synapses for Neuromorphic Computing. Nano-Micro Letters, 2021, 13, 85.	27.0	108
338	Phase Change Metasurfaces by Continuous or Quasi-Continuous Atoms for Active Optoelectronic Integration. Materials, 2021, 14, 1272.	2.9	6
339	A plasmonically enhanced route to faster and more energy-efficient phase-change integrated photonic memory and computing devices. Journal of Applied Physics, 2021, 129, .	2.5	20
340	Reconfigurable chalcogenide phase change metamaterials: a material, device, and fabrication perspective. JPhys Photonics, 2021, 3, 022005.	4.6	34
341	High-Throughput Screening for Phase-Change Memory Materials. Advanced Functional Materials, 2021, 31, 2009803.	14.9	43
342	Non-Volatile Reconfigurable Integrated Photonics Enabled by Broadband Low-Loss Phase Change Material. Advanced Optical Materials, 2021, 9, 2002049.	7.3	102
343	Low-energy room-temperature optical switching in mixed-dimensionality nanoscale perovskite heterojunctions. Science Advances, 2021, 7, .	10.3	41
344	Tunable quantum two-photon interference with reconfigurable metasurfaces using phase-change materials. Optics Express, 2021, 29, 14245.	3.4	5
345	Electrically controlled 1 st - ² tunable switch using a phase change material embedded silicon microring. Applied Optics, 2021, 60, 3559.	1.8	13
346	Stimuli-Responsive Memristive Materials for Artificial Synapses and Neuromorphic Computing. Advanced Materials, 2021, 33, e2006469.	21.0	88

#	ARTICLE	IF	CITATIONS
347	Toward Nonvolatile Switching in Silicon Photonic Devices. <i>Laser and Photonics Reviews</i> , 2021, 15, 2000501.	8.7	31
348	Optical switch with ultra high extinction ratio using electrically controlled metal diffusion. <i>Optics Letters</i> , 2021, 46, 2626.	3.3	9
349	Phase-Change-Memory Process at the Limit: A Proposal for Utilizing Monolayer Sb ₂ Te ₃ . <i>Advanced Science</i> , 2021, 8, 2004185.	11.2	25
350	Numerical investigation on Ge ₂ Sb ₂ Te ₅ -assisted reconfigurable asymmetric directional coupler-based switches. <i>Optical Engineering</i> , 2021, 60, .	1.0	5
351	Myths and truths about optical phase change materials: A perspective. <i>Applied Physics Letters</i> , 2021, 118, .	3.3	76
352	Integrated Neuromorphic Photonics: Synapses, Neurons, and Neural Networks. <i>Advanced Photonics Research</i> , 2021, 2, 2000212.	3.6	32
353	Combining Switchable Phase-Change Materials and Phase-Transition Materials for Thermally Regulated Smart Mid-Infrared Modulators. <i>Advanced Optical Materials</i> , 2021, 9, 2100417.	7.3	20
354	Memory of pressure-induced superconductivity in a phase-change alloy. <i>Physical Review B</i> , 2021, 103, .	3.2	7
355	Universal memory based on phase-change materials: From phase-change random access memory to optoelectronic hybrid storage*. <i>Chinese Physics B</i> , 2021, 30, 058504.	1.4	13
356	On-Chip Integrated Photonic Devices Based on Phase Change Materials. <i>Photonics</i> , 2021, 8, 205.	2.0	21
357	Multimodal Tuning of Synaptic Plasticity Using Persistent Luminescent Memitters. <i>Advanced Materials</i> , 2022, 34, e2101895.	21.0	31
358	The rise of intelligent matter. <i>Nature</i> , 2021, 594, 345-355.	27.8	228
359	Multilevel Photonic Transistor Memory Devices Based on 1D Electrospun Semiconducting Polymer /Perovskite Composite Nanofibers. <i>Advanced Materials Technologies</i> , 2021, 6, 2100080.	5.8	23
360	Flexible Graphene-Channel Memory Devices: A Review. <i>ACS Applied Nano Materials</i> , 2021, 4, 6542-6556.	5.0	10
361	Ambipolar Charge Storage in Type-I Core/Shell Semiconductor Quantum Dots toward Optoelectronic Transistor-Based Memories. <i>Advanced Science</i> , 2021, 8, e2100513.	11.2	9
362	First-principles study of structural and opto-electronic characteristics of ultra-thin amorphous carbon films. <i>Chinese Physics B</i> , 2022, 31, 016102.	1.4	1
363	ITO-based microheaters for reversible multi-stage switching of phase-change materials: towards miniaturized beyond-binary reconfigurable integrated photonics. <i>Optics Express</i> , 2021, 29, 20449.	3.4	62
364	Versatile Logic and Nonvolatile Memory Based on a van der Waals Heterojunction. <i>ACS Applied Electronic Materials</i> , 2021, 3, 3079-3084.	4.3	3

#	ARTICLE	IF	CITATIONS
365	Operando monitoring transition dynamics of responsive polymer using optofluidic microcavities. Light: Science and Applications, 2021, 10, 128.	16.6	40
366	Exploration of the optical behavior of phase-change materials integrated in silicon photonics platforms. , 2021, , .		1
367	Unraveling the optical contrast in Sb ₂ Te and AgInSbTe phase-change materials. JPhys Photonics, 2021, 3, 034011.	4.6	12
368	Stimuli-Responsive Phase Change Materials: Optical and Optoelectronic Applications. Materials, 2021, 14, 3396.	2.9	22
369	Nonthermal Transport of Energy Driven by Photoexcited Carriers in Switchable Solid States of GeTe. Physical Review Applied, 2021, 16, .	3.8	0
370	Design of an electric-driven nonvolatile low-energy-consumption phase change optical switch. Nanotechnology, 2021, 32, 405201.	2.6	6
371	Unraveling the Atomic Structure of Bulk Binary Ga ¹¹⁹ Te Glasses with Surprising Nanotectonic Features for Phase-Change Memory Applications. ACS Applied Materials & Interfaces, 2021, 13, 37363-37379.	8.0	12
372	A universal fully reconfigurable 12-mode quantum photonic processor. Materials for Quantum Technology, 2021, 1, 035002.	3.1	59
373	Long-term optical information storage in glass with ultraviolet-light-preprocessing-induced enhancement of the signal-to-noise ratio. Optics Letters, 2021, 46, 3937.	3.3	8
374	All-Optical Synapse With Directional Coupler Structure Based on Phase Change Material. IEEE Photonics Journal, 2021, 13, 1-6.	2.0	3
375	Nanoscale atomic suspended waveguides for improved vapour coherence times and optical frequency referencing. Nature Photonics, 2021, 15, 772-779.	31.4	17
376	Towards low loss non-volatile phase change materials in mid index waveguides. Neuromorphic Computing and Engineering, 2021, 1, 014004.	5.9	24
377	Electrically-switchable foundry-processed phase change photonic devices. , 2021, , .		5
378	Focusing and defocusing switching of an indium selenide-silicon photonic metalens. Optics Letters, 2021, 46, 4088.	3.3	9
379	Anisotropic photoresponse of layered rhenium disulfide synaptic transistors. Chinese Physics B, 2021, 30, 088503.	1.4	1
380	An optical synapse based on a polymer waveguide with a GST225 active layer. Applied Physics Letters, 2021, 119, 081105.	3.3	4
381	Analog Nanoscale Electro-Optical Synapses for Neuromorphic Computing Applications. ACS Nano, 2021, 15, 14776-14785.	14.6	35
382	Orbital-selective electronic excitation in phase-change memory materials: a brief review. Zeitschrift Fur Naturforschung - Section B Journal of Chemical Sciences, 2021, .	0.7	0

#	ARTICLE	IF	CITATIONS
383	Tunable a temperature-dependent GST-based metamaterial absorber for switching and sensing applications. Journal of Materials Research and Technology, 2021, 14, 772-779.	5.8	26
384	Fast recovery of ion-irradiation-induced defects in Ge ₂ Sb ₂ Te ₅ thin films at room temperature. Optical Materials Express, 2021, 11, 3535.	3.0	2
385	Integrated non-volatile plasmonic switches based on phase-change-materials and their application to plasmonic logic circuits. Scientific Reports, 2021, 11, 18811.	3.3	19
386	Radiation hardness of Ge ₂ Sb ₂ Te ₅ thin films to 80%MeV Si ion irradiation. Radiation Effects and Defects in Solids, 0, , 1-10.	1.2	1
387	Light Assisted Electro-Metallization in Resistive Switch With Optical Accessibility. Journal of Lightwave Technology, 2021, 39, 5869-5874.	4.6	11
388	Optical planar and ridge waveguides formed in Er ³⁺ -doped germanate glass by ion implantation and precise diamond blade dicing. Applied Optics, 2021, 60, 9146.	1.8	6
389	Ultra-Thin Switchable Absorbers Based on Lossy Phase-Change Materials. Advanced Optical Materials, 2021, 9, 2101118.	7.3	19
390	Multilevel Switching in Phase-Change Photonic Memory Devices. Physica Status Solidi - Rapid Research Letters, 2021, 15, 2100291.	2.4	6
391	Effect of structure architecture on optical properties of TiTe ₂ /Sb ₂ Te ₃ multilayer nanofilms. Journal of Alloys and Compounds, 2021, 877, 160270.	5.5	2
392	Optical phase transition of Ge ₂ Sb ₂ Se ₄ Te ₁ thin film using low absorption wavelength in the 1550Ånm window. Optical Materials, 2021, 120, 111450.	3.6	8
393	Optical planar and ridge waveguides in terbium scandium aluminum garnet crystal fabricated by ion implantation and precise diamond blade dicing. Vacuum, 2021, 193, 110493.	3.5	11
394	Bonding nature and optical contrast of TiTe ₂ /Sb ₂ Te ₃ phase-change heterostructure. Materials Science in Semiconductor Processing, 2021, 135, 106080.	4.0	13
395	Multi-level phase-change memory with ultralow power consumption and resistance drift. Science Bulletin, 2021, 66, 2217-2224.	9.0	41
396	Realization of a sensitivity multi-band tunable sensor through modulating the phase change of Ge ₂ Sb ₂ Te ₅ . Optics and Laser Technology, 2021, 144, 107428.	4.6	2
397	Monolithically Integrated InP Bistable Photonic Waveguide Memory. IEEE Photonics Technology Letters, 2021, 33, 1274-1277.	2.5	5
398	Integration of VO ₂ Optical Memory on Silicon Waveguides. , 2021, , .		0
399	A 5 Gb/s monolithically integrated InP SOA-based bistable photonic waveguide memory. , 2021, , .		0
401	Photonics for artificial intelligence and neuromorphic computing. Nature Photonics, 2021, 15, 102-114.	31.4	764

#	ARTICLE	IF	CITATIONS
402	Dynamic Manipulation of THz Waves Enabled by Phase-Transition VO ₂ Thin Film. <i>Nanomaterials</i> , 2021, 11, 114.	4.1	35
403	Structurally and morphologically engineered chalcogenide materials for optical and photonic devices. <i>Journal of Optical Microsystems</i> , 2021, 1, .	1.5	10
404	Phase-change photonic crystal ring resonator for reconfigurable directional-coupler switching. <i>Photonics and Nanostructures - Fundamentals and Applications</i> , 2020, 41, 100798.	2.0	8
405	Conductance Switching in Molecular Self-Assembled Monolayers for Application of Data Storage. <i>Journal of Physical Chemistry C</i> , 2021, 125, 1069-1074.	3.1	6
406	Trap-Assisted Charge Storage in Titania Nanocrystals toward Optoelectronic Nonvolatile Memory. <i>Nano Letters</i> , 2021, 21, 723-730.	9.1	20
407	Controllable crystal growth and fast reversible crystallization-to-amorphization in Sb ₂ Te-TiO ₂ films. <i>Scientific Reports</i> , 2017, 7, 46279.	3.3	5
408	Application of phase-change materials in memory taxonomy. <i>Science and Technology of Advanced Materials</i> , 2017, 18, 406-429.	6.1	29
409	Impact of crystallization process in multilevel optical switching in Ge ₂ Sb ₂ Te ₅ and Ag ₅ In ₅ Sb ₆₀ Te ₃₀ phase-change materials. <i>Journal Physics D: Applied Physics</i> . 2020. 53. 495303.	2.8	7
410	Design of low loss 1 Å– 1 and 1 Å– 2 phase-change optical switches with different crystalline phases of Ge ₂ Sb ₂ Te ₅ films. <i>Nanotechnology</i> , 2020, 31, 455206.	2.6	5
411	Rapid threshold switching dynamics of co-sputtered chalcogenide Ge ₁₅ Te ₈₅ device for selector application. <i>Semiconductor Science and Technology</i> , 2021, 36, 015013.	2.0	6
412	Tunable optical metasurfaces enabled by chalcogenide phase-change materials: from the visible to the THz. <i>Journal of Optics (United Kingdom)</i> , 2020, 22, 114001.	2.2	45
413	Employing vanadium dioxide nanoparticles for flexible metasurfaces with switchable absorption properties at near-infrared frequencies. <i>Journal of Optics (United Kingdom)</i> , 2020, 22, 114002.	2.2	26
414	Synchronization and temporal nonreciprocity of optical microresonators via spontaneous symmetry breaking. <i>Advanced Photonics</i> , 2019, 1, 1.	11.8	11
415	Chipscale plasmonic modulators and switches based on metal-insulator-metal waveguides with Ge ₂ Sb ₂ Te ₅ . <i>Journal of Nanophotonics</i> , 2019, 13, 1.	1.0	7
416	An ultra-high contrast optical modulator with 30 dB isolation at 1.55 Åµm with 25 THz bandwidth. , 2017, , .		3
417	Bistable silicon photonic MEMS switches. , 2019, , .		9
418	Tunable reflective color filters based on asymmetric Fabry-Perot cavities employing ultrathin Ge ₂ Sb ₂ Te ₅ as a broadband absorber. <i>Applied Optics</i> , 2018, 57, 9040.	1.8	26
419	GSST-based photonic memory multilevel perceptron. , 2020, , .		7

#	ARTICLE	IF	CITATIONS
420	Reversible Switching of Optical Phase Change Materials Using Graphene Microheaters. , 2019, , .		9
421	Multichannel mode-selective silicon photonic add/drop multiplexer with phase change material. Journal of the Optical Society of America B: Optical Physics, 2020, 37, 3341.	2.1	7
422	Silicon photonic add-drop filter based on a grating-assisted co-directionally coupled vertical hybrid structure. Optics Express, 2019, 27, 11748.	3.4	7
423	Plasmonically-enhanced all-optical integrated phase-change memory. Optics Express, 2019, 27, 24724.	3.4	35
424	Integrated metamaterial with functionalities of absorption and electromagnetically induced transparency. Optics Express, 2019, 27, 25196.	3.4	74
425	Tuning silicon-rich nitride microring resonances with graphene capacitors for high-performance computing applications. Optics Express, 2019, 27, 35129.	3.4	8
426	Photoelectronic memory based on nitride multiple quantum wells and the hybrid of graphene nanoflakes and a-IGZO film. Optics Express, 2020, 28, 13542.	3.4	5
427	On-chip sub-wavelength Bragg grating design based on novel low loss phase-change materials. Optics Express, 2020, 28, 16394.	3.4	39
428	Fabrication of Ge ₂ Sb ₂ Te ₅ crystal micro/nanostructures through single-shot Gaussian-shape femtosecond laser pulse irradiation. Optics Express, 2020, 28, 25250.	3.4	9
429	Reconfigurable dielectric metasurface for active wavefront modulation based on a phase-change material metamolecule design. Optics Express, 2020, 28, 38241.	3.4	14
430	Ultra-compact non-volatile Mach-Zehnder switch enabled by a high-mobility transparent conducting oxide. Optics Letters, 2020, 45, 1503.	3.3	7
431	Single-shot photon recording for three-dimensional memory with prospects of high capacity. Optics Letters, 2020, 45, 6274.	3.3	17
432	All-optical non-volatile tuning of an AMZI-coupled ring resonator with GST phase-change material. Optics Letters, 2018, 43, 5539.	3.3	34
433	10 ⁶ Gb/s optical random access memory (RAM) cell. Optics Letters, 2019, 44, 1821.	3.3	34
434	Multilevel accumulative switching processes in growth-dominated AgInSbTe phase change material. Optics Letters, 2019, 44, 3134.	3.3	14
435	Non-volatile epsilon-near-zero readout memory. Optics Letters, 2019, 44, 3932.	3.3	15
436	Performance characteristics of phase-change integrated silicon nitride photonic devices in the O and C telecommunications bands. Optical Materials Express, 2020, 10, 1778.	3.0	16
437	Dielectric waveguides with embedded graphene nanoribbons for all-optical broadband modulation. Optical Materials Express, 2019, 9, 4456.	3.0	1

#	ARTICLE	IF	CITATIONS
438	Experimental investigation of silicon and silicon nitride platforms for phase-change photonic in-memory computing. <i>Optica</i> , 2020, 7, 218.	9.3	58
439	Three-dimensional waveguide interconnects for scalable integration of photonic neural networks. <i>Optica</i> , 2020, 7, 640.	9.3	77
440	Fast and reliable storage using a 5-bit, nonvolatile photonic memory cell. <i>Optica</i> , 2019, 6, 1.	9.3	195
441	Thermally-induced optical modulation in a vanadium dioxide-on-silicon waveguide. <i>OSA Continuum</i> , 2020, 3, 132.	1.8	20
442	Wavelength-selective 2×2 optical switch based on a $\text{Ge}_2\text{Sb}_2\text{Te}_5$ -assisted microring. <i>Photonics Research</i> , 2020, 8, 1171.	7.0	58
443	Tunable nanophotonics enabled by chalcogenide phase-change materials. <i>Nanophotonics</i> , 2020, 9, 1189-1241.	6.0	294
444	Artificial Synapse with Mnemonic Functionality using GSST-based Photonic Integrated Memory. , 2020, , .		21
445	LOGIC THRESHOLD FOR MICRORING RESONATOR-BASED BDD CIRCUITS: PHYSICAL AND OPERATIONAL ANALYSES. <i>Turkish Journal of Engineering</i> , 2019, 3, 189-196.	1.2	1
446	Optoelectronic Properties of Ultrathin Indium Tin Oxide Films: A First-Principle Study. <i>Crystals</i> , 2021, 11, 30.	2.2	3
447	Synthesis and Memristor Effect of a Forming-Free ZnO Nanocrystalline Films. <i>Nanomaterials</i> , 2020, 10, 1007.	4.1	26
448	Resonant-enhanced optical switch based on non-volatile phase change material GST. , 2021, , .		0
449	Optical Memristive Switches. <i>Kluwer International Series in Electronic Materials: Science and Technology</i> , 2022, , 355-376.	0.5	0
450	Phase change of $\text{Ge}_2\text{Sb}_2\text{Te}_5$ under terahertz laser illumination. <i>APL Materials</i> , 2021, 9, .	5.1	8
451	Design and Simulation Analysis on TM ⁰ Pass GST-Assisted Asymmetric Directional Coupler-Based Polarizer. <i>Silicon</i> , 0, , 1.	3.3	2
452	Data Storage in a Nanocrystalline Mixture Using Room Temperature Frequency-Selective and Multilevel Spectral Hole-Burning. <i>ACS Photonics</i> , 2021, 8, 3078-3084.	6.6	8
453	A four-state programmable mid-infrared band-stop filter exploiting a $\text{Ge}_2\text{Sb}_2\text{Te}_5$ film and VO_2 nanoparticles. <i>Applied Physics Letters</i> , 2021, 119, .	3.3	7
454	Reconfigurable and dual-polarization Bragg grating filter with phase change materials. <i>Applied Optics</i> , 2021, 60, 9989.	1.8	7
455	Active Low Insertion Loss TE Pass Polarizer. , 2017, , .		0

#	ARTICLE	IF	CITATIONS
456	On-chip phase-change photonic memory and computing. , 2017, , .		1
457	Influence of geometry on speed of phase-change in GST-based nanorods. , 2018, , .		1
458	Noncontact Method of Conducting Elements "Writing" on Insulating Ge"Sb"Te Matrix Using a Laser Beam. Materials Science-Poland, 2018, 36, 217-224.	1.0	0
459	Glass in Integrated Photonics. Springer Handbooks, 2019, , 1441-1481.	0.6	1
460	Light"to"heat conversion by optical absorption in a Si microring resonator. , 2019, , .		0
461	Multilayered Phase Change Materials toward Terahertz Photonics. The Review of Laser Engineering, 2019, 47, 370.	0.0	0
462	Low-loss integrated photonic switch using sub-wavelength patterned phase change material. , 2019, , .		0
463	Integrated Phase-change Photonics: A Strategy for Merging Communication and Computing. , 2019, , .		1
464	Phase-Change Memory and Optical Data Storage. Springer Handbooks, 2019, , 1495-1520.	0.6	0
465	Silicon Photonic Waveguide Embedded Split Structure Ge ₂ Sb ₂ Te ₅ Cell for High Contrast Non-volatile Memory. , 2019, , .		1
466	All-photonic in-memory computing based on phase-change materials. , 2019, , .		0
467	Reshaping light: reconfigurable photonics enabled by broadband low-loss optical phase change materials. , 2019, , .		3
468	Tunable, polarization-sensitive, dual guided-resonance modes in photonic crystals. Optics Express, 2019, 27, 17658.	3.4	1
469	Designing nonvolatile integrated photonics with low-loss optical phase change materials. , 2019, , .		3
470	GST integrated silicon photonics. , 2019, , .		2
471	Programmable metasurface using phase change material for waveguide mode conversion. , 2020, , .		1
472	Nanoscale Optoelectronic Memory with Nonvolatile Phase"Change Photonics. , 2020, , .		0
473	Intelligent edge processing with photonic multilevel memory. , 2020, , .		7

#	ARTICLE	IF	CITATIONS
474	Reconfigurable photonic integrated circuits (RPICs) based on functional materials for integrated optical communication applications. , 2020, , .		0
475	Phase change material integrated silicon photonics: GST and beyond. , 2020, , .		4
476	Memristor structure with the effect of switching resistance based on silicon nitride thin layers. , 2020, 64, 403-410.	0.1	0
477	All-optical modulation at mid-infrared wavelength with QCLs. , 2020, , .		0
478	MODERN TRENDS IN SOLAR ENERGY DEVELOPMENT AND DEFECT ENGINEERING FOR MULTI-CRYSTALLINE SOLAR CELLS. , 2020, , .		0
479	Prospects and applications of photonic neural networks. Advances in Physics: X, 2022, 7, .	4.1	54
480	Ultra-compact optical switch based on Sb ₂ Se ₃ -assisted PhC-like subwavelength structures. , 2021, , .		0
481	Performance of an optical non-volatile Ge ₂ Sb ₂ Te ₅ -based storage element. Journal of Physics: Conference Series, 2020, 1695, 012114.	0.4	1
482	Er ³⁺ /Yb ³⁺ co-doped phosphate glass waveguides formed by the H ⁺ ion implantation. Modern Physics Letters B, 2021, 35, 2150099.	1.9	0
483	Optical switching in multilayer structures based on Ge ₂ Sb ₂ Te ₅ . Journal of Physics: Conference Series, 2020, 1695, 012075.	0.4	2
484	Optical properties of He ⁺ -implanted fused silica glass waveguides. International Journal of Modern Physics B, 2021, 35, 2150026.	2.0	3
485	Design of Phase-Change Memory Using Apertureless Scanning Near-Field Optical Microscopy in the Near-Infrared Region. Physica Status Solidi - Rapid Research Letters, 2021, 15, 2000488.	2.4	1
486	Tunable metasurfaces based on phase-change materials. Wuli Xuebao/Acta Physica Sinica, 2020, 69, 154202.	0.5	5
487	Multi-level Nonvolatile Photonic Memories Using Broadband Transparent Phase change materials. , 2021, , .		3
488	Exciton dissociation in quantum dots connected with photochromic molecule bridges. Journal of Materials Chemistry C, 2021, 9, 16006-16013.	5.5	2
489	A Non-Volatile Optical Memory in Silicon Photonics. , 2021, , .		3
490	Non-volatile integrated photonic memory using GST phase change material on a fully etched Si ₃ N ₄ /SiO ₂ waveguide. , 2020, , .		4
491	Tunable All-Optical Modulation and Building Blocks for Optical Neurons at Mid-Infrared Wavelength. , 2020, , .		0

#	ARTICLE	IF	CITATIONS
492	Novel Electro-optic Components for Integrated Photonic Neural Networks. , 2020, , .		1
493	Intelligent Computing with Photonic Memories. , 2020, , .		0
494	Optical phase-change materials (O-PCMs) for reconfigurable photonics. , 2020, , .		1
495	Contra-directional switching enabled by Si-GST grating. Optics Express, 2020, 28, 1574.	3.4	11
496	Multi-level Nonvolatile Photonic Memories Using Broadband Transparent Phase change materials. , 2020, , .		1
497	The integrated vertically coupled resistive random-access memory (ReRAM)-based microdisk resonator and the relevant performance evaluation. , 2020, , .		0
498	Performance characteristics of phase-change integrated silicon nitride photonic devices in the O and C telecommunications bands. Optical Materials Express, 2020, 10, 1778.	3.0	2
499	Non-Volatile Reconfigurable Silicon Photonics Based on Phase-Change Materials. IEEE Journal of Selected Topics in Quantum Electronics, 2022, 28, 1-17.	2.9	36
500	A Reconfigurable Nanophotonic Architecture based on Phase Change Material. , 2021, , .		1
501	Temporal Analysis of Photo-thermally Induced Reconfigurability in a 1D Gold Grating Filled with a Phase Change Material. Advanced Theory and Simulations, 2022, 5, 2100240.	2.8	6
502	Tailoring the Structural and Optical Properties of Germanium Telluride Phase-Change Materials by Indium Incorporation. Nanomaterials, 2021, 11, 3029.	4.1	9
503	A scheme for simulating multi-level phase change photonics materials. Npj Computational Materials, 2021, 7, .	8.7	27
504	Holographic photonic neuron. Neuromorphic Computing and Engineering, 0, , .	5.9	0
505	Analysis of an electrically reconfigurable metasurface for manipulating polarization of near-infrared light. Journal of the Optical Society of America B: Optical Physics, 2022, 39, 145.	2.1	3
506	Low-threshold power and tunable integrated optical limiter based on an ultracompact VO ₂ /Si waveguide. APL Photonics, 2021, 6, .	5.7	9
507	Integrated Hybrid VO ₂ –Silicon Optical Memory. ACS Photonics, 2022, 9, 217-223.	6.6	36
508	Tunable Metasurface Using Thin-Film Lithium Niobate in the Telecom Regime. ACS Photonics, 2022, 9, 605-612.	6.6	49
509	Reflective and transmissive cross-polarization converter for terahertz wave in a switchable metamaterial. Physica Scripta, 2022, 97, 015501.	2.5	15

#	ARTICLE	IF	CITATIONS
510	Extraction of thermal and optical parameters for As ₂ Se ₃ Te thin films according to phase-change pathways. <i>Materials Chemistry and Physics</i> , 2022, 277, 125620.	4.0	15
511	GSST phase change materials and its utilization in optoelectronic devices: A review. <i>Materials Research Bulletin</i> , 2022, 148, 111679.	5.2	31
512	Programmable Phase-change Metasurface for Multimode Photonic Convolutional Neural Network. , 2020, , .		1
514	Intelligent all-fiber device: storage and logic computing. <i>Photonics Research</i> , 2022, 10, 357.	7.0	8
515	Comparison and analysis of phase change materials-based reconfigurable silicon photonic directional couplers. <i>Optical Materials Express</i> , 2022, 12, 606.	3.0	36
516	Fundamental wave and second-harmonic focusing based on guided wave-driven phase-change materials metasurfaces. <i>Wuli Xuebao/Acta Physica Sinica</i> , 2022, 71, 034208.	0.5	0
517	Nonlinear photonic dynamical systems for unconventional computing. <i>Nonlinear Theory and Its Applications IEICE</i> , 2022, 13, 26-35.	0.6	4
518	Cascaded Dual-Channel Fiber SPR Sensor Based on Ge ₂ Sb ₂ Te ₅ . <i>IEEE Sensors Journal</i> , 2022, 22, 4083-4089.	4.7	8
519	Distributed ARC Structure for Performance Optimization of Phase-Change Material-Based Tunable Photodetection. <i>Journal of Electronic Materials</i> , 2022, 51, 876-887.	2.2	0
520	Optical one-dimensional waveguides in oxyfluoride glass fabricated by Helium Ion implantation. <i>International Journal of Modern Physics B</i> , 0, , .	2.0	1
521	Polarimetry analysis and optical contrast of Sb ₂ S ₃ phase change material. <i>Optical Materials Express</i> , 2022, 12, 1531.	3.0	14
522	Nonvolatile electrical switching of optical and valleytronic properties of interlayer excitons. <i>Light: Science and Applications</i> , 2022, 11, 23.	16.6	9
523	Volatile and Nonvolatile Switching of Phase Change Material Ge ₂ Sb ₂ Te ₅ Revealed by Time-Resolved Terahertz Spectroscopy. <i>Journal of Physical Chemistry Letters</i> , 2022, 13, 947-953.	4.6	9
524	Reconfigurable hybrid silicon waveguide Bragg filter using ultralow-loss phase-change material. <i>Applied Optics</i> , 2022, 61, 1660.	1.8	8
525	Bonding Nature and Optical Properties of As ₂ Te ₃ Phase-Change Material. <i>Physica Status Solidi - Rapid Research Letters</i> , 2022, 16, .	2.4	5
526	Thermal dynamics of phase switching process of an SOI rib waveguide covered with a Ge ₂ Sb ₂ Te ₅ phase change material film. <i>Optical Materials</i> , 2022, 124, 112046.	3.6	6
527	Scaling up silicon photonic-based accelerators: Challenges and opportunities. <i>APL Photonics</i> , 2022, 7, .	5.7	40
528	Investigation of the Crystallization Characteristics of Intermediate States in Ge ₂ Sb ₂ Te ₅ Thin Films Induced by Nanosecond Multi-Pulsed Laser Irradiation. <i>Nanomaterials</i> , 2022, 12, 536.	4.1	1

#	ARTICLE	IF	CITATIONS
529	Fiber End-Facet Integrated Non-Volatile Optical Switch Based On Ge ₂ Sb ₂ Te ₅ . Journal of Lightwave Technology, 2022, 40, 3968-3973.	4.6	1
530	All-Optical Phase-Change Memory with Improved Performance by Plasmonic Effect. Photonics, 2022, 9, 132.	2.0	6
531	Optical Switch Based on Ge ₂ Sb ₂ Se ₄ Te ₁ -Assisted Racetrack Microring. Photonics, 2022, 9, 117.	2.0	6
532	Are phase change materials ideal for programmable photonics?: opinion. Optical Materials Express, 2022, 12, 2368.	3.0	16
533	Ge Ion Implanted Photonic Devices and Annealing for Emerging Applications. Micromachines, 2022, 13, 291.	2.9	2
534	A Non-volatile Quasi-Continuous All-Optical Fiber Programmable Platform Based on GST-Coated Microspheres. ACS Photonics, 2022, 9, 1180-1187.	6.6	7
535	Non-Volatile Programmable Ultra-Small Photonic Arbitrary Power Splitters. Nanomaterials, 2022, 12, 669.	4.1	15
536	Nonvolatile reconfigurable terahertz wave modulator. Photonix, 2022, 3, .	13.5	24
537	Thickness-Dependent Crystallization of Ultrathin Antimony Thin Films for Monatomic Multilevel Reflectance and Phase Change Memory Designs. ACS Applied Materials & Interfaces, 2022, 14, 13593-13600.	8.0	11
538	Ultra-compact nonvolatile plasmonic phase change modulators and switches with dual electricalâ€“optical functionality. AIP Advances, 2022, 12, .	1.3	9
539	Multioperation Mode Ferroelectric Channel Devices for Memory and Computation. Advanced Intelligent Systems, 2022, 4, .	6.1	3
540	Time-resolved reversible optical switching of the ultralow-loss phase change material Sb ₂ Se ₃ . Journal of Optics (United Kingdom), 2022, 24, 064013.	2.2	12
541	Graphene microheater for phase change chalcogenides based integrated photonic components [Invited]. Optical Materials Express, 2022, 12, 1991.	3.0	7
542	Ultracompact Highâ€“Extinctionâ€“Ratio Nonvolatile Onâ€“Chip Switches Based on Structured Phase Change Materials. Laser and Photonics Reviews, 2022, 16, .	8.7	13
543	Phase change materials: the 'silicon' for analog photonic computing?. , 2022, , .		0
544	Unraveling the Singlet Fission Effects on Charge Modulations of Organic Phototransistor Memory Devices. ACS Applied Electronic Materials, 2022, 4, 1266-1276.	4.3	7
545	Endurance of chalcogenide optical phase change materials: a review. Optical Materials Express, 2022, 12, 2145.	3.0	29
546	Artificial Biphasic Synapses Based on Nonvolatile Phaseâ€“Change Photonic Memory Cells. Physica Status Solidi - Rapid Research Letters, 2022, 16, .	2.4	11

#	ARTICLE	IF	CITATIONS
547	Designing fast and efficient electrically driven phase change photonics using foundry compatible waveguide-integrated microheaters. <i>Optics Express</i> , 2022, 30, 13673.	3.4	13
548	At the intersection of optics and deep learning: statistical inference, computing, and inverse design. <i>Advances in Optics and Photonics</i> , 2022, 14, 209.	25.5	23
549	Energy-efficient non-volatile ferroelectric based electrostatic doping multilevel optical readout memory. <i>Optics Express</i> , 2022, 30, 13572.	3.4	5
550	Design, simulation, and measurement of a multiband tunable metamaterial filter. <i>Optical Materials</i> , 2022, 127, 112253.	3.6	11
551	Dynamic photoinduced changes of optical characteristics and effect of optical memory in amorphous As ₂ S film-based waveguides. <i>Journal of Non-Crystalline Solids</i> , 2022, 585, 121528.	3.1	3
552	Design of nonvolatile and efficient Polarization-Rotating optical switch with phase change material. <i>Optics and Laser Technology</i> , 2022, 151, 108065.	4.6	6
553	Brain-Inspired Computing: Adventure from Beyond CMOS Technologies to Beyond von Neumann Architectures ICCAD Special Session Paper. , 2021, , .		1
554	Size effect of the Ge ₂ Sb ₂ Te ₅ cell atop the silicon nitride O-ring resonator on the attenuation coefficient. <i>APL Materials</i> , 2021, 9, .	5.1	7
555	Numerical simulation of effective light transmission through a photonic memory cell. <i>Journal of Physics: Conference Series</i> , 2021, 2086, 012090.	0.4	0
556	All-photonic synapse based on iron-doped lithium niobate double metal-cladding waveguides. <i>Physical Review B</i> , 2021, 104, .	3.2	3
557	Nonvolatile silicon photonic 1 μ m–2 switch by integrating the phase change chalcogenide into microring network. , 2021, , .		0
558	Fast volatile response in GST/Si waveguides for all-optical modulation. , 2021, , .		1
559	Design automation of photonic resonator weights. <i>Nanophotonics</i> , 2022, 11, 3805-3822.	6.0	8
560	Active volume engineered waveguide embedded nonvolatile photonic memory cell. <i>Journal of the Optical Society of America B: Optical Physics</i> , 2022, 39, 1419.	2.1	3
561	Structural Phase Transitions between Layered Indium Selenide for Integrated Photonic Memory. <i>Advanced Materials</i> , 2022, 34, e2108261.	21.0	16
562	Antimony as a Programmable Element in Integrated Nanophotonics. <i>Nano Letters</i> , 2022, 22, 3532-3538.	9.1	19
563	Optical Content Addressable Memory Matchline and RAM table Encoding/Decoding using an integrated CAM cell. , 2022, , .		3
564	The visible light-triggered nonvolatile memory performances in melamine-decorated γ-oriented lead halide perovskites: A photo-responsive structural evolution insight. <i>Chinese Chemical Letters</i> , 2023, 34, 107464.	9.0	2

#	ARTICLE	IF	CITATIONS
565	CO ₂ -induced Melting and Solvation Reconfiguration of Phase-Change Electrolyte. <i>Advanced Materials</i> , 2022, 34, e2202869.	21.0	4
566	Interlaboratory study on Sb ₂ S ₃ interplay between structure, dielectric function, and amorphous-to-crystalline phase change for photonics. <i>IScience</i> , 2022, 25, 104377.	4.1	29
567	An investigation and analysis of plasmonic modulators: a review. <i>Journal of Optical Communications</i> , 2022, .	4.7	4
568	Reconfigurable fiber-to-waveguide coupling module enabled by phase-change material incorporated switchable directional couplers. <i>Scientific Reports</i> , 2022, 12, 7252.	3.3	1
569	Broadband Nonvolatile Electrically Controlled Programmable Units in Silicon Photonics. <i>ACS Photonics</i> , 2022, 9, 2142-2150.	6.6	39
570	Low power reconfigurable multilevel nanophotonic devices based on Sn-doped Ge ₂ Sb ₂ Te ₅ thin films. <i>Acta Materialia</i> , 2022, 234, 117994.	7.9	11
571	Light-induced thermomagnetic recording of thin-film magnet CoFeB on silicon waveguide for on-chip magneto-optical memory. <i>Optics Express</i> , 2022, 30, 18054.	3.4	7
572	All-optical memory based on slow light and Kerr effect in photonic crystal platform with independent write/read/hold control. <i>Physica Scripta</i> , 2022, 97, 065502.	2.5	3
573	Tunable mid-infrared selective emitter based on inverse design metasurface for infrared stealth with thermal management. <i>Optics Express</i> , 2022, 30, 18250.	3.4	20
575	Photonic (computational) memories: tunable nanophotonics for data storage and computing. <i>Nanophotonics</i> , 2022, 11, 3823-3854.	6.0	37
576	Multi-factor-controlled ReRAM devices and their applications. <i>Journal of Materials Chemistry C</i> , 2022, 10, 8895-8921.	5.5	22
577	Ultrafast laser-induced integrated property-structure modulation of Ge ₂ Sb ₂ Te ₅ for multifunction and multilevel rewritable optical recording. <i>Nanophotonics</i> , 2022, 11, 3101-3113.	6.0	8
578	Color-tunable persistent luminescence in 1D zinc-organic halide microcrystals for single-component white light and temperature-gating optical waveguides. <i>Chemical Science</i> , 2022, 13, 7429-7436.	7.4	51
579	Non-Volatile Phase Change Material based Nanophotonic Interconnect. , 2022, , .		0
580	Monadic Pavlovian associative learning in a backpropagation-free photonic network. <i>Optica</i> , 2022, 9, 792.	9.3	13
581	Recent Progress on Waveguide-Based Phase-Change Photonic Storage Memory. <i>Journal of Nanoelectronics and Optoelectronics</i> , 2022, 17, 187-194.	0.5	0
582	Silicon-on-Insulator Optical Buffer Based on Magneto-Optical 1 Å– 3 Micro-Rings Array Coupled Sagnac Ring. <i>Photonics</i> , 2022, 9, 366.	2.0	0
583	Nonvolatile reconfigurable dynamic Janus metasurfaces in the terahertz regime. <i>Photonics Research</i> , 2022, 10, 1731.	7.0	11

#	ARTICLE	IF	CITATIONS
584	A ferroelectric multilevel non-volatile photonic phase shifter. <i>Nature Photonics</i> , 2022, 16, 491-497.	31.4	39
585	First-principles investigation of amorphous Ge-Sb-Se-Te optical phase-change materials. <i>Optical Materials Express</i> , 2022, 12, 2497.	3.0	12
586	A Review of Capabilities and Scope for Hybrid Integration Offered by Silicon-Nitride-Based Photonic Integrated Circuits. <i>Sensors</i> , 2022, 22, 4227.	3.8	15
587	Optical properties and thermal stability of the H ⁺ -implanted Dy ³⁺ /Tm ³⁺ -codoped GeS ₂ •Ga ₂ S ₃ •Pb ₂ chalcogenide glass waveguide. <i>Open Physics</i> , 2022, 20, 458-463.	1.7	2
588	Switchable Wavefront of Mid-Infrared Wave Using GeSbTe Metasurfaces. <i>IEEE Photonics Journal</i> , 2022, 14, 1-5.	2.0	4
589	Resonant multilevel optical switching with phase change material GST. <i>Nanophotonics</i> , 2022, 11, 3437-3446.	6.0	16
590	Rigorous dynamic model of a silicon ring resonator with phase change material for a neuromorphic node. <i>Optics Express</i> , 2022, 30, 25177.	3.4	5
591	Memristor based on two-dimensional titania nanosheets for multi-level storage and information processing. <i>Nano Research</i> , 2022, 15, 8419-8427.	10.4	15
592	Energy-efficient photonic memory cell with spatially separated recording/erasing and readout channels. <i>Physica Status Solidi (B): Basic Research</i> , 0, , .	1.5	1
593	Neuromorphic Photonic Memory Devices Using Ultrafast, Non-Volatile Phase-Change Materials. <i>Advanced Materials</i> , 2023, 35, .	21.0	33
594	Ge ₂ Sb ₂ Se ₄ Te ₁ -assisted non-volatile silicon mode selective switch. <i>Optical Materials Express</i> , 2022, 12, 2584.	3.0	2
595	Structural optimization of integrated non-volatile photonic memory towards high storage density and low energy consumption. <i>Optical Materials Express</i> , 2022, 12, 2668.	3.0	2
596	Ultra-broadband polarization beam splitter with tunable transmissions based on silicon-Ge ^{1/4} . <i>Optical Materials Express</i> , 2022, 12, 2668.	2.1	1
597	Impact of GST thickness on GST-loaded silicon waveguides for optimal optical switching. <i>Scientific Reports</i> , 2022, 12, .	3.3	7
598	Polarization-selective reconfigurability in hybridized-active-dielectric nanowires. <i>Science Advances</i> , 2022, 8, .	10.3	15
599	Multilevel halide perovskite memristors based on optical & electrical resistive switching effects. <i>Materials Chemistry and Physics</i> , 2022, 288, 126393.	4.0	6
600	Performance Enhancement of On-Chip Optical Switch and Memory Using Ge ₂ Sb ₂ Te ₅ Slot-Assisted Microring Resonator. <i>SSRN Electronic Journal</i> , 0, , .	0.4	0
601	Tunable Infrared Detection, Radiative Cooling and Infrared-Laser Compatible Camouflage Based on a Multifunctional Nanostructure with Phase-Change Material. <i>Nanomaterials</i> , 2022, 12, 2261.	4.1	4

#	ARTICLE	IF	CITATIONS
602	Optical properties of He ⁺ -implanted and diamond blade-diced terbium gallium garnet crystal planar and ridge waveguides. Chinese Physics B, 2022, 31, 114203.	1.4	7
603	Ultra-low-energy programmable non-volatile silicon photonics based on phase-change materials with graphene heaters. Nature Nanotechnology, 2022, 17, 842-848.	31.5	94
604	Numerical modeling of an integrated non-volatile reflector switch and mode converter switch based on a low loss phase change material (Sb ₂ Se ₃) in SiN platforms. Optical Materials Express, 2022, 12, 4268.	3.0	6
605	Non-volatile MWIR/LWIR beam reconfigurability with all-dielectric metagratings comprising phase-change materials with a high-refractive-index shift. Optical Materials Express, 2022, 12, 3187.	3.0	5
606	All-fiber nonvolatile broadband optical switch using an all-optical method. Optics Letters, 2022, 47, 3604.	3.3	7
607	Reversible and non-volatile metal-to-insulator chemical transition in molybdenum oxide films. Optical Materials Express, 2022, 12, 3957.	3.0	2
608	A review of tunable photonics: Optically active materials and applications from visible to terahertz. IScience, 2022, 25, 104727.	4.1	22
609	Stacked Ge ₂ Sb ₂ Te ₅ /Indium Tin Oxide Nanoscale-Thick Interference Units for Increased Saturation Reflective Colors and Shortwave Infrared Shielding. ACS Applied Nano Materials, 2022, 5, 10303-10310.	5.0	1
610	Enabling Active Nanotechnologies by Phase Transition: From Electronics, Photonics to Thermotics. Chemical Reviews, 2022, 122, 15450-15500.	47.7	14
611	2.5D-MoS ₂ -Based Non-Volatile Optical Memory for Integrated Photonics. , 2022, , .		0
612	Phase-change materials for energy-efficient photonic memory and computing. MRS Bulletin, 2022, 47, 502-510.	3.5	13
613	Reconfigurable Optical Logic Switches Using Microdisk Resonators. , 2022, , .		0
614	Thin liquid film as an optical nonlinear-nonlocal medium and memory element in integrated optofluidic reservoir computer. Advanced Photonics, 2022, 4, .	11.8	5
615	Stacked Reconfigurable Optical Cavities for Smart Sensing Pixels. IEEE Journal of Selected Topics in Quantum Electronics, 2022, 28, 1-12.	2.9	0
616	Advances in Emerging Photonic Memristive and Memristive-Like Devices. Advanced Science, 2022, 9, .	11.2	15
617	Reconfigurable multifunctional metasurfaces employing hybrid phase-change plasmonic architecture. Nanophotonics, 2022, 11, 3883-3893.	6.0	7
618	Design of plasmonic enhanced all-optical phase-change memory for secondary storage applications. Nanotechnology, 0, , .	2.6	0
619	Terahertz multi-level nonvolatile optically rewritable encryption memory based on chalcogenide phase-change materials. IScience, 2022, 25, 104866.	4.1	5

#	ARTICLE	IF	CITATIONS
620	Ultrahigh-sensitivity SPR fiber temperature sensor based Ge ₂ Sb ₂ Te ₅ and cyclohexane. Sensors and Actuators A: Physical, 2022, 345, 113786.	4.1	4
621	Design, simulation and measurement of a active selector based on metamaterial in 5G frequency band. Optical Materials, 2022, 132, 112806.	3.6	0
622	Active modulation of a metasurface emitter based on phase-change material GST arrays. Optical Materials, 2022, 133, 112832.	3.6	5
623	Emerging phase change memory devices using non-oxide semiconducting glasses. Journal of Non-Crystalline Solids, 2022, 597, 121874.	3.1	13
624	Dynamics of a Photochromic-Actuated Slot Microring Photonic Memristor. IEEE Journal of Selected Topics in Quantum Electronics, 2023, 29, 1-10.	2.9	0
625	Electrical switching of Ge ₂ Sb ₂ Te ₅ memory cells based on silicon photonic waveguide microheaters. , 2022, , .		0
626	4-bit Ultra Low-loss Cascaded Nonvolatile Photonic Memories Using Broadband Transparent Phase change materials. , 2022, , .		4
627	Design of a Reconfigurable Optical Computing Architecture Using Phase Change Material. IFIP Advances in Information and Communication Technology, 2022, , 155-174.	0.7	0
628	16-Bit (4 Å— 4) Optical Random Access Memory (RAM) Bank. Journal of Lightwave Technology, 2023, 41, 949-956.	4.6	5
629	Low Energy Switching of Phase Change Materials Using a 2D Thermal Boundary Layer. ACS Applied Materials & Interfaces, 2022, 14, 41225-41234.	8.0	4
630	StarLight: a photonic neural network accelerator featuring a hybrid mode-wavelength division multiplexing and photonic nonvolatile memory. Optics Express, 2022, 30, 37051.	3.4	9
631	Phase Transformation and Switching Behavior of Magnetron Plasma Sputtered Ge ₂ Sb ₂ Se ₄ Te. Advanced Photonics Research, 2022, 3, .	3.6	10
632	Advances in optoelectronic artificial synapses. Cell Reports Physical Science, 2022, 3, 101037.	5.6	11
633	All-optically modulated nonvolatile optical switching based on a graded-index multimode fiber. Optics Express, 2022, 30, 36691.	3.4	2
634	Opportunities and Challenges for Large-Scale Phase-Change Material Integrated Electro-Photonics. ACS Photonics, 2022, 9, 3181-3195.	6.6	23
635	Optical Memory, Switching, and Neuromorphic Functionality in Metal Halide Perovskite Materials and Devices. Advanced Materials, 2023, 35, .	21.0	12
636	Recent Progress of Neuromorphic Computing Based on Silicon Photonics: Electronicâ€“Photonic Co-Design, Device, and Architecture. Photonics, 2022, 9, 698.	2.0	8
637	Graphene oxide enhanced phase change tolerance of Ge ₂ Sb ₂ Se ₄ Te ₁ for all-optical multilevel non-volatile photonics memory. Journal of the Optical Society of America B: Optical Physics, 2022, 39, 3004.	2.1	3

#	ARTICLE	IF	CITATIONS
638	Plasmonic hot-electron reconfigurable photodetector based on phase-change material Sb_{2S_3} . Optics Express, 2022, 30, 38953.	3.4	5
639	New phase change materials for active photonics. , 2022, , .		0
640	Emerging Devices for Sensing-Memory-Computing Applications. , 2022, , 143-197.		0
641	Active Nanophotonics with Nonvolatile Response: The Case for Phase-Change Materials. , 2022, , .		0
642	Ultra-compact nonvolatile phase shifter based on electrically reprogrammable transparent phase change materials. Photonix, 2022, 3, .	13.5	73
643	Architecting Optically Controlled Phase Change Memory. Transactions on Architecture and Code Optimization, 2022, 19, 1-26.	2.0	7
644	Thermo-optic tuning of silicon nitride microring resonators with low loss non-volatile Sb_{2S_3} phase change material. Scientific Reports, 2022, 12, .	3.3	3
645	Non-volatile compact optical phase shifter based on $\text{Ge}_{2\text{Sb}_2\text{Te}_5}$ operating at 2.3 μm . Optical Materials Express, 2022, 12, 4582.	3.0	4
646	Broadband Photosensitive Medium Based on Amorphous Equichalcogenides. ACS Applied Electronic Materials, 2022, 4, 5397-5405.	4.3	1
647	Comparing Strip and Slot Waveguides for Phase-Change Material Devices in SOI Platforms. , 2022, , .		0
648	All electrical-driven Low insertion loss PCM based Multi-level Nonvolatile Photonic Memories. , 2022, , .		0
649	Phase-Change Nanophotonic Circuits With Crossbar Electrodes and Integrated Microheaters. IEEE Electron Device Letters, 2022, 43, 2192-2195.	3.9	2
650	Programmable low-power consumption all-optical nonlinear activation functions using a micro-ring resonator with phase-change materials. Optics Express, 2022, 30, 44943.	3.4	8
651	Silicon photonic architecture for training deep neural networks with direct feedback alignment. Optica, 2022, 9, 1323.	9.3	18
652	Nano-LED driven phase change evolution of layered chalcogenides for Raman spectroscopy investigations. FlatChem, 2022, 36, 100447.	5.6	4
653	Characterizing optical phase-change materials with spectroscopic ellipsometry and polarimetry. Thin Solid Films, 2022, 763, 139580.	1.8	3
654	Fast modulation of surface plasmons based on the photothermal effect of nonvolatile solid thin films. Nanoscale, 2023, 15, 476-482.	5.6	3
655	Performance enhancement of on-chip optical switch and memory using $\text{Ge}_2\text{Sb}_2\text{Te}_5$ slot-assisted microring resonator. Optics and Lasers in Engineering, 2023, 162, 107436.	3.8	31

#	ARTICLE	IF	CITATIONS
656	Active control of amorphous and crystalline GSST multilayer layouts in a 1D gold grating through thermoplasmonic induced process. International Journal of Thermal Sciences, 2023, 185, 108087.	4.9	1
657	One-dimensional and two-dimensional Er ³⁺ -doped germanate glass waveguides by combination of He ⁺ ion implantation and precise diamond blade dicing. Vacuum, 2023, 209, 111743.	3.5	3
658	Highly tunable $\hat{\Gamma}^2$ -relaxation enables the tailoring of crystallization in phase-change materials. Nature Communications, 2022, 13, .	12.8	9
659	Some novel perspectives of iso-conversional analysis in the study of Meyerâ€Neldel energy for thermally governed crystallization by using Johnsonâ€Mehlâ€Avrami (JMA) theory. Journal of Thermal Analysis and Calorimetry, 0, , .	3.6	0
660	Compact Midâ€Infrared Chalcogenide Glass Photonic Devices Based on Robustâ€Inverse Design. Laser and Photonics Reviews, 2023, 17, .	8.7	2
661	Manipulating mid-infrared wavefront through reflective Ge ₃ Sb ₂ Te ₆ metasurfaces. Physica Scripta, 0, , .	2.5	0
662	Recent Progresses in Optoelectronic Artificial Synapse Devices. Wuji Cailiao Xuebao/Journal of Inorganic Materials, 2022, , 699.	1.3	0
663	Electro-optical synaptic characteristics of ferroelectric liquid crystals for artificial intelligence. Applied Optics, 2023, 62, 914.	1.8	2
664	Perspective on 3D vertically-integrated photonic neural networks based on VCSEL arrays. Nanophotonics, 2023, 12, 827-832.	6.0	4
665	Compact non-volatile ferroelectric electrostatic doping optical memory based on epsilon-near-zero effect. Applied Optics, 0, , .	1.8	0
666	Compute inâ€Memory with Nonâ€Volatile Elements for Neural Networks: A Review from a Coâ€Design Perspective. Advanced Materials, 2023, 35, .	21.0	8
667	Introductory Review on All-Optical Machine Learning Leap in Photonic Integrated Circuits. Optical Memory and Neural Networks (Information Optics), 2022, 31, 393-402.	1.0	0
668	Nanoscale electronic synapses for neuromorphic computing. , 2023, , 189-218.		0
669	Concept of Photoactive Invisible Inks toward Ultralowâ€Cost Fabrication of Transistor Photomemories. Advanced Electronic Materials, 2023, 9, .	5.1	2
670	Proposal of Low-Loss Non-Volatile Mid-Infrared Optical Phase Shifter Based on Ge ₂ Sb ₂ Te ₃ S ₂ . IEEE Transactions on Electron Devices, 2023, 70, 2106-2112.	3.0	5
671	All-Optical Phase Memory Circuit Based on Two Coupled Lasers and External Optical Injection. IEEE Journal of Selected Topics in Quantum Electronics, 2023, 29, 1-11.	2.9	0
672	Low Loss, Broadband, and Non-Volatile â€Directed Logic Operationsâ€™ Using Phase Change Materials in Silicon Photonics. IEEE Journal of Quantum Electronics, 2023, 59, 1-13.	1.9	1
673	Visible and near-infrared ridge waveguides in fused silica glasses by oxygen ion implantation and femtosecond laser ablation. Modern Physics Letters B, 0, , .	1.9	0

#	ARTICLE	IF	CITATIONS
674	Artificial intelligence accelerator using photonic computing. , 2023, , 247-275.		0
675	A Survey on Optical Phase-Change Memory: The Promise and Challenges. IEEE Access, 2023, 11, 11781-11803.	4.2	10
676	CMOS-compatible electro-optical SRAM cavity device based on negative differential resistance. Science Advances, 2023, 9, .	10.3	4
677	Electrically programmable wide bandgap phase-change material Sb ₂ S ₃ enabling multi-level non-volatile photonics. , 2022, , .		0
678	Optical and Electrical Memories for Analog Optical Computing. IEEE Journal of Selected Topics in Quantum Electronics, 2023, 29, 1-12.	2.9	10
679	Low-loss strong index modulated ultra-thermally stable optical phase-change material for broadband nonvolatile photonics. Journal of Applied Physics, 2023, 133, 053101.	2.5	1
680	Precision Machining by Dicing Blades: A Systematic Review. Machines, 2023, 11, 259.	2.2	4
681	Operating Principle and Device Configuration Driven Mechanisms in Low-Dimensional Materials for Neuromorphics. Advanced Intelligent Systems, 2023, 5, .	6.1	0
682	Nonvolatile Multilevel Switching of Silicon Photonic Devices with In ₂ O ₃ /GST Segmented Structures. Advanced Optical Materials, 2023, 11, .	7.3	11
684	Caching With Light: A 16-bit Capacity Optical Cache Memory Prototype. IEEE Journal of Selected Topics in Quantum Electronics, 2023, 29, 1-11.	2.9	2
685	Compact nonvolatile polarization switch using an asymmetric Sb ₂ Se ₃ -loaded silicon waveguide. Optics Express, 2023, 31, 10684.	3.4	1
686	High-Performance On-Chip Racetrack Resonator Based on GSST-Slot for In-Memory Computing. Nanomaterials, 2023, 13, 837.	4.1	5
687	Design and testing of silicon photonic 4F system for convolutional neural networks. , 2023, , .		0
688	Non-volatile phase-change materials for programmable photonics. Science Bulletin, 2023, 68, 783-786.	9.0	5
689	PhotoFourier: A Photonic Joint Transform Correlator-Based Neural Network Accelerator. , 2023, , .		3
690	Nanobridge SQUIDs as Multilevel Memory Elements. Physical Review Applied, 2023, 19, .	3.8	2
691	Metavalent Bonding in Layered Phase-Change Memory Materials. Advanced Science, 2023, 10, .	11.2	9
692	Simulation of Gap Structure Optical Waveguide with Phase Change Materials. , 2022, , .		0

#	ARTICLE	IF	CITATIONS
693	Nonvolatile Reconfigurable Phase-Shifted Bragg Grating Filter With Tunable Wavelength and Extinction Ratio. IEEE Photonics Journal, 2023, 15, 1-7.	2.0	0
694	Non-Volatile Reconfigurable Compact Photonic Logic Gates Based on Phase-Change Materials. Nanomaterials, 2023, 13, 1375.	4.1	1
695	Tunable topological phase transition in the telecommunication wavelength. Optical Materials Express, 2023, 13, 1571.	3.0	1
696	Non-Hermitian optics and photonics: from classical to quantum. Advances in Optics and Photonics, 2023, 15, 442.	25.5	16
697	In-memory photonic dot-product engine with electrically programmable weight banks. Nature Communications, 2023, 14, .	12.8	27
698	Integrated optical pattern generation on thin-film lithium niobate with electro-optic modulators and phase-change material cells. Journal of the Optical Society of America B: Optical Physics, 2023, 40, D78.	2.1	2
699	Optical neural network via loose neuron array and functional learning. Nature Communications, 2023, 14, .	12.8	1
700	Wavelength-shift-free racetrack resonator hybridized with phase change material for photonic in-memory computing. Optics Express, 2023, 31, 18840.	3.4	22
701	Scalable High-Precision Trimming of Photonic Resonances by Polymer Exposure to Energetic Beams. Nano Letters, 2023, 23, 4800-4806.	9.1	3
702	Integrated optical memristors. Nature Photonics, 2023, 17, 561-572.	31.4	30
703	Neuromorphic Photonics Based on Phase Change Materials. Nanomaterials, 2023, 13, 1756.	4.1	5
704	Design Space Exploration for PCM-based Photonic Memory. , 2023, , .		1
705	Non-volatile Optical Memory and Switch with Magnetic Material Integration. , 2023, , .		0
706	Non-volatile electrically programmable integrated photonics with a 5-bit operation. Nature Communications, 2023, 14, .	12.8	25
707	Nitrogen-doped Carbon Quantum Dots on Graphene for Field-effect Transistor Optoelectronic Memories. Advanced Electronic Materials, 2023, 9, .	5.1	2
708	Recent Advances and Future Prospects for Memristive Materials, Devices, and Systems. ACS Nano, 2023, 17, 11994-12039.	14.6	34
709	Comparative analysis of devices working on optical and spintronic based principle. Journal of Optics (India), 0, , .	1.7	0
710	Integrated Photonic Tensor Processing Unit for a Matrix Multiply: A Review. Journal of Lightwave Technology, 2023, 41, 3704-3716.	4.6	15

#	ARTICLE	IF	CITATIONS
711	Organic All-Photonic Artificial Synapses Enabled by Anti-Stokes Photoluminescence. <i>Journal of the American Chemical Society</i> , 2023, 145, 11988-11996.	13.7	6
712	Integrated Reconfigurable Photon-Pair Source Based on High-Q Nonlinear Chalcogenide Glass Microring Resonators. <i>Nano Letters</i> , 2023, 23, 4487-4494.	9.1	1
713	Ultra-Compact and Non-Volatile Nanophotonic Neural Networks. <i>Advanced Optical Materials</i> , 2023, 11, .	7.3	2
714	All-optical nonvolatile optical modulator for in-fiber operation. <i>Nanophotonics</i> , 2023, 12, 3179-3187.	6.0	0
715	Suppressing Structural Relaxation in Nanoscale Antimony to Enable Ultralow-Drift Phase-Change Memory Applications. <i>Advanced Science</i> , 2023, 10, .	11.2	4
716	A Route to Ultra-Fast Amplitude-Only Spatial Light Modulation using Phase-Change Materials. <i>Advanced Optical Materials</i> , 0, , .	7.3	0
717	Reduced rank photonic computing accelerator. <i>Optica</i> , 2023, 10, 1074.	9.3	3
718	Optofluidic memory and self-induced nonlinear optical phase change for reservoir computing in silicon photonics. <i>Nature Communications</i> , 2023, 14, .	12.8	1
719	Time dependent laser irradiation induced structural, linear-nonlinear optical changes in Ag ₁₀ Te ₁₀ As ₂₀ Se ₆₀ quaternary film for optoelectronic applications. <i>European Physical Journal Plus</i> , 2023, 138, .	2.6	1
722	Non-volatile electrically programmable integrated photonics with 5-bit operation based on phase-change material Sb ₂ S ₃ . , 2023, , .		0
723	Integrated photonic-electronic in-memory computing platforms. , 2023, , .		0
724	An optical scheme of on-chip matrixing by phase-change based tunable weighting of photonic tensor unit. <i>Journal Physics D: Applied Physics</i> , 2023, 56, 455104.	2.8	0
725	On-Chip Non-Volatile Reconfigurable THz Varifocal Metalens. <i>Laser and Photonics Reviews</i> , 2023, 17, .	8.7	2
726	Multiscale simulations of growth-dominated Sb ₂ Te phase-change material for non-volatile photonic applications. <i>Npj Computational Materials</i> , 2023, 9, .	8.7	5
727	Silicon Ring Resonator with Phase-Change Material as a Plastic Dynamical Node for Scalable All-Optical Neural Networks with Synaptic Plasticity. , 2023, , .		0
728	Non-volatile tunable optics by design: From chalcogenide phase-change materials to device structures. <i>Materials Today</i> , 2023, 68, 334-355.	14.2	2
729	Recent developments in Chalcogenide phase change material-based nanophotonics. <i>Nanotechnology</i> , 0, , .	2.6	0
730	Silicon Reconfigurable Optical Logic Using Phase-Change Materials. , 2023, , .		0

#	ARTICLE	IF	CITATIONS
731	Wide-range and area-selective threshold voltage tunability in ultrathin indium oxide transistors. Nature Communications, 2023, 14, .	12.8	1
732	End-to-end Optimization for a Compact Optical Neural Network Based on Nanostructured 2D Optical Processors. IEEE Photonics Journal, 2023, , 1-8.	2.0	0
733	One-dimensional molecular crystal alloys capable of full-color emission for low-loss optical waveguide and optical logic gate. Aggregate, 2024, 5, .	9.9	1
734	Microstructure characterization, phase transition, and device application of phase-change memory materials. Science and Technology of Advanced Materials, 2023, 24, .	6.1	2
735	Surface effects on the crystallization kinetics of amorphous antimony. Nanoscale, 2023, 15, 15259-15267.	5.6	1
736	An all-passive Si ₃ N ₄ optical row decoder circuit for addressable optical RAM memories. JPhys Photonics, 2023, 5, 045002.	4.6	0
737	Optical Memory Based on Scattering from Gold Nanoparticles. , 2023, 1, 1559-1565.		0
738	Ferroelectric-programmed photonic computing in monolayer WS ₂ . Applied Physics Letters, 2023, 123, .	3.3	0
739	Optical ridge waveguides in Nd ³⁺ -doped fluorophosphate glasses fabricated by carbon ion implantation and femtosecond laser ablation. Microwave and Optical Technology Letters, 2024, 66, .	1.4	0
740	Analog Photonics Computing for Information Processing, Inference, and Optimization. Advanced Quantum Technologies, 2023, 6, .	3.9	5
741	Electrical programmable multilevel nonvolatile photonic random-access memory. Light: Science and Applications, 2023, 12, .	16.6	13
742	Roadmap for phase change materials in photonics and beyond. IScience, 2023, 26, 107946.	4.1	5
743	Layered Gallium Monosulfide as Phase-Change Material for Reconfigurable Nanophotonic Components On-Chip. Advanced Optical Materials, 0, , .	7.3	1
744	Recent Progress in Silicon-Based Photonic Integrated Circuits and Emerging Applications. Advanced Optical Materials, 2023, 11, .	7.3	2
745	Capping Layer Effects on Sb ₂ S ₃ -Based Reconfigurable Photonic Devices. ACS Photonics, 2023, 10, 3203-3214.	6.6	2
746	Light-Matter Interaction at the Sub-Wavelength Scale: Pathways to Design Nanophotonic Devices. , 2023, , 281-314.		2
747	Fiber-Integrated All-Optical Signal Processing Device for Storage and Computing. ACS Photonics, 2023, 10, 3531-3540.	6.6	0
748	å...%å- éřç°æ€\$æ¿æ´ »å†1/2æ°å™"ä»¶çš„,åžŸç†ă,žã"ç™". Guangxue Xuebao/Acta Optica Sinica, 2023, 43, 1623001.		0

#	ARTICLE	IF	CITATIONS
749	Time-Resolved Temperature Mapping Leveraging the Strong Thermo-Optic Effect in Phase-Change Materials. ACS Photonics, 2023, 10, 3576-3585.	6.6	1
750	High optical contrast and multi-level storage of the ultracompact plasmonic device based on phase change materials. Optics and Laser Technology, 2024, 170, 110239.	4.6	0
752	Nonvolatile photonic switch with magnetic materials on a silicon photonic platform [Invited]. Optical Materials Express, 2023, 13, 2489.	3.0	2
753	Terahertz-infrared spectroscopy of Ge ₂ Sb ₂ Te ₅ films on sapphire: Evolution of broadband electrodynamic response upon phase transitions. Journal of Applied Physics, 2023, 134, .	2.5	1
754	Quantification of fcc-Ge ₂ Sb ₂ Te ₅ stoichiometry variations. Materialia, 2023, 32, 101885.	2.7	0
755	Polarization Reversal of Group IV-VI Semiconductors with Pucker-Like Structure: Mechanism Dissecting And Function Demonstration. Advanced Materials, 0, , .	21.0	0
756	Processing-in-Memory Using Optically-Addressed Phase Change Memory. , 2023, , .		0
757	On-chip multifunctional polarizer based on phase change material. Applied Optics, 2023, 62, 8025.	1.8	0
758	Programming multilevel crystallization states in phase-change-material thin films. Optical Materials Express, 2023, 13, 3113.	3.0	1
759	Reflective Full-Color Structural Colors with High Brightness and High Purity Based on Ge ₂ Sb ₂ Se ₄ Te ₁ Chalcogenide Film. Advanced Optical Materials, 2024, 12, .	7.3	0
760	Scalable orthogonal delay-division multiplexed OEO artificial neural network trained for TI-ADC equalization. Photonics Research, 2024, 12, 85.	7.0	0
761	A Multiphysics Simulation Approach for Photonic Devices Integrating Phase Change Materials. , 2023, , .		0
762	Working Dynamics in Low-dimensional Material-based Neuromorphic Devices. , 2023, , 458-497.		0
763	Non-volatile and reconfigurable on-chip optical digital neural network based on Sb ₂ Se ₃ -assisted phase shifters. , 2023, , .		0
764	Threshold plasticity of SOI-GST microring resonators. Optics Express, 2023, 31, 37325.	3.4	0
765	In-situ nonvolatile and volatile modulation for optical neural networks. Advanced Photonics, 2023, 5, .	11.8	0
766	Optical properties of the proton-implanted waveguide in the Dy ³⁺ -doped Y ₃ Al ₅ O ₁₂ transparent ceramic. Modern Physics Letters B, 2024, 38, .	1.9	0
767	Sb ₂ S ₃ -based optical switch exploiting the Brewster angle phenomenon [Invited]. Optical Materials Express, 2023, 13, 3677.	3.0	2

#	ARTICLE	IF	CITATIONS
768	Photoinduced Nonvolatile Memory Transistor Based on Lead-Free Perovskite Incorporating Fused Conjugated Organic Ligands. <i>Advanced Materials</i> , 2024, 36, .	21.0	2
769	Higher-dimensional processing using a photonic tensor core with continuous-time data. <i>Nature Photonics</i> , 2023, 17, 1080-1088.	31.4	4
770	Event-driven adaptive optical neural network. <i>Science Advances</i> , 2023, 9, .	10.3	1
771	Planar and ridge waveguides prepared by ion implantation and femtosecond laser ablation in Er ³⁺ -doped germanate glasses. <i>Results in Physics</i> , 2023, 54, 107103.	4.1	0
772	Non-volatile optical filter based on a Ge ₂ Sb ₂ Te ₅ assisted microring with a tunable bandwidth and extinction ratio. <i>Journal Physics D: Applied Physics</i> , 0, , .	2.8	0
773	Non-volatile materials for programmable photonics. <i>APL Materials</i> , 2023, 11, .	5.1	1
774	Artificial Intelligence Meets Flexible Sensors: Emerging Smart Flexible Sensing Systems Driven by Machine Learning and Artificial Synapses. <i>Nano-Micro Letters</i> , 2024, 16, .	27.0	5
775	Spatial and temporal control of glassy-crystalline domains in optical phase change materials. <i>Journal of the American Ceramic Society</i> , 0, , .	3.8	0
776	Programmable photonic arrays based on microelectromechanical elements with femtowatt-level standby power consumption. <i>Nature Photonics</i> , 2023, 17, 1089-1096.	31.4	0
777	Hybrid photonic integrated circuits for neuromorphic computing [Invited]. <i>Optical Materials Express</i> , 2023, 13, 3553.	3.0	0
778	Multi-Level Optical Switching by Amorphization in Single- and Multi-Phase Change Material Structures. <i>Advanced Optical Materials</i> , 2024, 12, .	7.3	2
779	An Open-Source Multifunctional Testing Platform for Optical Phase Change Materials. <i>Small Science</i> , 2023, 3, .	9.9	1
780	High-Throughput Study of Amorphous Stability and Optical Properties of Superlattice-Like GeS ₂ -Sb ₂ Te ₃ Thin Films. <i>Small</i> , 0, , .	10.0	0
781	High-Throughput Study of Amorphous Stability and Optical Properties of Superlattice-Like GeS ₂ -Sb ₂ Te ₃ Thin Films. <i>Small</i> , 0, , .	10.0	0
782	All-Fiber Synapse Utilizing Phase Change Materials for Information Recognition and Processing. <i>ACS Photonics</i> , 0, , .	6.6	0
783	Order of Magnitude Increase in Storage Time of Photonic-Phononic Memory. , 2023, , .		0
784	A Nonvolatile Bipolar Optical Fiber Memory Based on Phase Change Materials. <i>ACS Photonics</i> , 0, , .	6.6	0
785	OML-PCM: optical multi-level phase change memory architecture for embedded computing systems. <i>Engineering Research Express</i> , 2023, 5, 045078.	1.6	1

#	ARTICLE	IF	CITATIONS
786	Scalable Non-Volatile Tuning of Photonic Computational Memories by Automated Silicon Ion Implantation. <i>Advanced Materials</i> , 2024, 36, .	21.0	0
787	Unveiling the Delayed Fluorescence Effects of Triplet-Triplet Annihilation Upconversion on the Photoresponse of Transistor Memory. <i>ACS Photonics</i> , 0, , .	6.6	0
788	Modeling of Multilayer Structures with Tunable Optical Characteristics. <i>Journal of Surface Investigation</i> , 2023, 17, 1217-1224.	0.5	0
790	Fabrication and integration of photonic devices for phase-change memory and neuromorphic computing. <i>International Journal of Extreme Manufacturing</i> , 0, , .	12.7	0
791	Photoluminescence Switching and Non-Volatile Memory in Hybrid Metal-Halide Phase-Change Materials. , 0, , 203-211.		1
792	A non-volatile bipolar optical fiber memory based on phase change materials. , 2023, , .		0
793	Nanocavity tuning and formation controlled by the phase change of sub-micron-square GST patterns on Si photonic crystals. <i>Optics Express</i> , 0, , .	3.4	0
794	Tunable wide-angle high-efficiency polarization selectivity based on a one-dimensional photonic crystal containing elliptical metamaterials. <i>Physics Letters, Section A: General, Atomic and Solid State Physics</i> , 2024, 494, 129299.	2.1	2
795	Optical Actuation Performance of Phase-Change RF Switches. <i>IEEE Electron Device Letters</i> , 2024, 45, 500-503.	3.9	0
796	The State-of-the-Art Phase-Change Integrated Photonic Devices With Electrically Driven Microheaters. <i>IEEE Transactions on Electron Devices</i> , 2023, , 1-10.	3.0	0
797	Ultrahigh Endurance and Extinction Ratio in Programmable Silicon Photonics Based on a Phase Change Material with ITO Heater. <i>Laser and Photonics Reviews</i> , 2024, 18, .	8.7	0
798	In situ atomic-scale observation of transformation from disordered to ordered layered structures in Ge-Sb-Te phase change memory thin films. <i>Acta Materialia</i> , 2024, 266, 119670.	7.9	1
799	High-speed and energy-efficient non-volatile silicon photonic memory based on heterogeneously integrated memresonator. <i>Nature Communications</i> , 2024, 15, .	12.8	3
801	Photonic Neural Networks Based on Integrated Silicon Microresonators. , 2024, 3, .		1
802	Freeform direct-write and rewritable photonic integrated circuits in phase-change thin films. <i>Science Advances</i> , 2024, 10, .	10.3	0
803	Spatio-spectral control of coherent nanophotonics. <i>Nanophotonics</i> , 2024, , .	6.0	0
804	Digital metamaterials with nanoscale silicon/Sb ₂ Se ₃ pixels for reconfigurable integrated mode converters. <i>Optical Materials</i> , 2024, 148, 114835.	3.6	0
805	Non-volatile 2 nd - nd optical switch using multimode interference in an Sb ₂ Se ₃ -loaded waveguide. <i>Optics Letters</i> , 2024, 49, 722.	3.3	0

#	ARTICLE	IF	CITATIONS
806	A Purely Electronic Analog Memristive Device Based on a Squaraine Nanowire Mesh. ACS Applied Electronic Materials, 2024, 6, 261-275.	4.3	0
807	Seven Bit Nonvolatile Electrically Programmable Photonics Based on Phase-Change Materials for Image Recognition. ACS Photonics, 2024, 11, 723-730.	6.6	0
808	Inverse design of compact nonvolatile reconfigurable silicon photonic devices with phase-change materials. Nanophotonics, 2024, .	6.0	0
809	Neuromorphic photonics: development of the field. , 2024, , 69-110.		0
810	2D neuromorphic photonics. , 2024, , 141-165.		0
811	Preparation and properties of the H ⁺ -ion implanted Ce ³⁺ :GGG crystal optical waveguide. Optical Engineering, 2024, 63, .	1.0	0
812	Self-Assembly of Delta-Formamidinium Lead Iodide Nanoparticles to Nanorods: Study of Memristor Properties and Resistive Switching Mechanism. Small, 0, , .	10.0	0
813	Perspective on photonic neuromorphic computing. , 2024, , 353-375.		0
814	Generating and processing optical waveforms using spectral singularities. Physical Review A, 2024, 109, .	2.5	0
815	Optimizing Wavelength for Enhanced Cycling Durability of Laser-Induced Phase Change in Sb ₂ S ₃ Films: A Survey on Optical Transmission Phase Shift. Advanced Optical Materials, 2024, 12, .	7.3	0
816	Introduction to phase change photonics. , 2024, , 1-10.		0
817	Configuring phase-change materials for photonics. , 2024, , 67-117.		0
818	New phase-change materials for photonic computing and beyond. , 2024, , 145-192.		0
819	Design and modeling methods for phase-change photonic devices. , 2024, , 119-143.		0
820	Challenges associated with phase-change material selection. , 2024, , 233-250.		0
821	Melting-free integrated photonic memory with layered polymorphs. Nanophotonics, 2024, .	6.0	0
822	Optical nanoimaging of laser-switched phase-change plasmonic infrared antennas. Optics Letters, 2024, 49, 1021.	3.3	0
823	Performance Limits of Phase Change Integrated Photonics. IEEE Journal of Selected Topics in Quantum Electronics, 2024, 30, 1-9.	2.9	0

#	ARTICLE	IF	CITATIONS
824	Compact Implementation of a 1-Bit Adder by Coherent 2-Beam Excitation of a Single Plasmonic Cavity. ACS Photonics, 2024, 11, 752-761.	6.6	0
825	Sb ₂ S ₃ as a low-loss phase-change material for mid-IR photonics. Optical Materials Express, 2024, 14, 862.	3.0	0
826	Metal-insulator transition in ScxSb2Te3 phase-change memory alloys. Applied Physics Letters, 2024, 124, .	3.3	0
827	Fast and robust multilevel optoelectronic memory based on van der Waals heterostructure. Applied Physics Letters, 2024, 124, .	3.3	0
828	Optical properties of Sn-substituted GeTe phase-change materials under high pressure. Ceramics International, 2024, 50, 17727-17735.	4.8	0
829	Neuromorphic Optical Data Storage Enabled by Nanophotonics: A Perspective. ACS Photonics, 2024, 11, 874-891.	6.6	0
830	Coherent General-Purpose Photonic Matrix Processor. ACS Photonics, 2024, 11, 1189-1196.	6.6	0
831	Reconfigurable Micro/Nano-Optical Devices Based on Phase Transitions: From Materials, Mechanisms to Applications. Advanced Science, 0, .	11.2	0
832	Reconfigurable optical logic in silicon platform. Scientific Reports, 2024, 14, .	3.3	0
833	Photonic analog signal processing and neuromorphic computing [Invited]. Chinese Optics Letters, 2024, 22, 032501.	2.9	0