

# Phase-change materials for rewriteable data storage

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Citation Report

#	ARTICLE	IF	CITATIONS
1	Phase-change materials for rewriteable data storage. Nature Materials, 2007, 6, 824-832.	13.3	3,054
2	Nanoionics-based resistive switching memories. Nature Materials, 2007, 6, 833-840.	13.3	4,518
3	Nanoelectronics from the bottom up. Nature Materials, 2007, 6, 841-850.	13.3	1,419
5	Reversible switching in phase-change materials. Materials Today, 2008, 11, 20-27.	8.3	153
6	Unusual Solid Solutions in the System $\text{Ge}_{4x}\text{Sb}_{2y}\text{Te}_7$ ( $x, y \approx 0.1$ ) is Isostructural to that of $\text{Ge}_3\text{Sb}_2\text{Te}_6$ . Zeitschrift Fur Anorganische Und Allgemeine Chemie, 2008, 634, 2557-2561.	0.6	29
7	Phasenwechselerbindungen auf Chalkogenidbasis für die optische und elektrische Datenspeicherung. Zeitschrift Fur Anorganische Und Allgemeine Chemie, 2008, 634, 2009-2009.	0.6	1
8	Realstruktur fehlgeordneter Telluride im B1- oder A7-Typ. Zeitschrift Fur Anorganische Und Allgemeine Chemie, 2008, 634, 2021-2021.	0.6	1
9	Platinum Lead Nanostructures: Formation, Phase Behavior, and Electrocatalytic Properties. Advanced Functional Materials, 2008, 18, 2745-2753.	7.8	45
10	Characteristic Ordering in Liquid Phase-Change Materials. Advanced Materials, 2008, 20, 4535-4540.	11.1	48
11	Electric-pulse-driven Electronic Phase Separation, Insulator-Metal Transition, and Possible Superconductivity in a Mott Insulator. Advanced Materials, 2008, 20, 2760-2765.	11.1	70
12	Electric-pulse-induced resistive switching and possible superconductivity in the Mott insulator $\text{GaTa}_4\text{Se}_8$ . Microelectronic Engineering, 2008, 85, 2430-2433.	1.1	28
13	Status and challenges of phase change memory modeling. Solid-State Electronics, 2008, 52, 1443-1451.	0.8	18
14	In situ dynamic HR-TEM and EELS study on phase transitions of $\text{Ge}_2\text{Sb}_2\text{Te}_5$ chalcogenides. Ultramicroscopy, 2008, 108, 1408-1419.	0.8	43
15	A chemically driven insulator-metal transition in non-stoichiometric and amorphous gallium oxide. Nature Materials, 2008, 7, 391-398.	13.3	166
16	Resonant bonding in crystalline phase-change materials. Nature Materials, 2008, 7, 653-658.	13.3	959
17	A map for phase-change materials. Nature Materials, 2008, 7, 972-977.	13.3	637
18	Electronic two-terminal bistable graphitic memories. Nature Materials, 2008, 7, 966-971.	13.3	137
19	Comparison of the crystallization of $\text{GeSbTe}$ and $\text{SiSbTe}$ in a constant-temperature annealing process. Scripta Materialia, 2008, 58, 977-980.	2.6	14

#	ARTICLE	IF	CITATIONS
20	Performance improvement of phase-change memory cell with cup-shaped bottom electrode contact. Applied Physics Letters, 2008, 93, 103107.	1.5	15
21	Structure of the liquid and the crystal of the phase-change material $\langle \text{mml:math} \text{xmlns:mml="http://www.w3.org/1998/Math/MathML"} \text{display="inline"} \rangle \langle \text{mml:mrow} \rangle \langle \text{mml:msub} \rangle \langle \text{mml:mrow} \rangle \langle \text{mml:mtext} \rangle \text{SnSe} \langle \text{mml:mrow} \rangle \langle \text{mml:mn} \rangle 2 \langle \text{mml:mrow} \rangle \langle \text{mml:mn} \rangle 16 \langle \text{mml:mrow} \rangle \langle \text{mml:mtext} \rangle$ First-principles molecular dynamics. Physical Review B, 2008, 78, .	2.1	16
22	Nonvolatile Switching in Graphene Field-Effect Devices. IEEE Electron Device Letters, 2008, 29, 952-954.	2.2	148
23	Core-Shell Heterostructured Phase Change Nanowire Multistate Memory. Nano Letters, 2008, 8, 2056-2062.	4.5	103
24	Dielectric quantification of conductivity limitations due to nanofiller size in conductive powders and nanocomposites. Physical Review B, 2008, 77, .	1.1	7
25	Investigation of SnSe, SnSe <sub>2</sub> , and Sn <sub>2</sub> Se <sub>3</sub> alloys for phase change memory applications. Journal of Applied Physics, 2008, 103, .	1.1	159
26	Band calculation for the hexagonal and FCC chalcogenide Ge <sub>2</sub> Sb <sub>2</sub> Te <sub>5</sub> . , 2008, , .		0
27	Threshold switching and phase transition numerical models for phase change memory simulations. Journal of Applied Physics, 2008, 103, .	1.1	217
28	Compact thermal model for phase change memory nanodevices. Intersociety Conference on Thermal and Thermomechanical Phenomena in Electronic Systems, 2008, , .	0.0	9
29	Holographic Recording in Cross-Linked Polymeric Matrices through Photoacid Generation. Chemistry of Materials, 2008, 20, 3669-3674.	3.2	6
30	Acridizinium-Substituted Dendrimers As a New Potential Rewritable Optical Data Storage Material for Blu-ray. Chemistry of Materials, 2008, 20, 6715-6720.	3.2	25
31	Structural Features of Ge <sub>1</sub> Sb <sub>4</sub> Te <sub>7</sub> , an Intermetallic Compound in the GeTe-Sb <sub>2</sub> Te <sub>3</sub> Homologous Series. Chemistry of Materials, 2008, 20, 5750-5755.	3.2	21
32	A new approach to the design, fabrication, and testing of chalcogenide-based multi-state phase-change nonvolatile memory. , 2008, , .		3
33	Investigation of SET and RESET States Resistance in Ohmic Regime for Phase-Change Memory. Materials Research Society Symposia Proceedings, 2008, 1072, 1.	0.1	5
34	Size-Dependent Surface-Induced Heterogeneous Nucleation Driven Phase-Change in Ge <sub>2</sub> Sb <sub>2</sub> Te <sub>5</sub> Nanowires. Nano Letters, 2008, 8, 3303-3309.	4.5	72
35	Reversible photoswitching behavior in bulk resistance and in color of polycrystalline AgI at room temperature. Applied Physics Letters, 2008, 93, .	1.5	14
36	Void Formation Induced Electrical Switching in Phase-Change Nanowires. Nano Letters, 2008, 8, 4562-4567.	4.5	69
37	Un-stability of Sputtered Ge <sub>2</sub> Sb <sub>2</sub> Te <sub>5</sub> Films in Electrical Phase Changes. Applied Physics Express, 0, 1, 021501.	1.1	5

#	ARTICLE	IF	CITATIONS
38	Germanium ALD/CVD Precursors for Deposition of Ge/GeTe Films. Materials Research Society Symposia Proceedings, 2008, 1071, 1.	0.1	9
39	Characterization of RF magnetron sputtered Se-doped Ge <sub>2</sub> Sb <sub>2.3</sub> Te <sub>5</sub> thin films. Materials Research Society Symposia Proceedings, 2008, 1072, 1.	0.1	0
40	Local structure of liquid Ge <sub>1</sub> Sb <sub>2</sub> Te <sub>4</sub> for rewritable data storage use. Journal of Physics Condensed Matter, 2008, 20, 205102.	0.7	16
41	Investigation of environmental friendly Te-free SiSb material for applications of phase-change memory. Semiconductor Science and Technology, 2008, 23, 055010.	1.0	17
42	Insights into the structure of the stable and metastable $\langle \text{mml:math xmlns:mml="http://www.w3.org/1998/Math/MathML"} \rangle$		

#	ARTICLE	IF	CITATIONS
56	Experimentally constrained density-functional calculations of the amorphous structure of the prototypical phase-change material Ge <sub>2</sub> Sb <sub>2</sub> Te <sub>5</sub> . Physical Review B, 2009, 80, .	1.1	77
57	Unravelling the Mechanism of Pressure Induced Amorphization of Phase Change Materials. Physical Review Letters, 2009, 102, 205502.	2.9	94
58	Atomistic origins of the phase transition mechanism in Ge <sub>2</sub> Sb <sub>2</sub> Te <sub>5</sub> . Journal of Applied Physics, 2009, 106, .	1.1	29
59	Reversible resistance switching in La <sub>0.225</sub> Pr <sub>0.4</sub> Ca <sub>0.375</sub> MnO <sub>3</sub> : The Joule-heat-assisted phase transition. Applied Physics Letters, 2009, 95, 143502.	1.5	16
60	Polarity-dependent resistance switching in GeSbTe phase-change thin films: The importance of excess Sb in filament formation. Applied Physics Letters, 2009, 95, .	1.5	30
61	Common signature of many-body thermal excitation in structural relaxation and crystallization of chalcogenide glasses. Applied Physics Letters, 2009, 94, .	1.5	40
62	Multistate storage through successive phase change and resistive change. Applied Physics Letters, 2009, 94, .	1.5	17
63	Direct evidence of phase separation in Ge <sub>2</sub> Sb <sub>2</sub> Te <sub>5</sub> in phase change memory devices. Applied Physics Letters, 2009, 94, .	1.5	81
64	Nature of Atomic Bonding and Atomic Structure in the Phase-Change $\text{Ge}_{2.9}\text{Sb}_{1.51}\text{Te}_{1.59}$ Physical Review Letters, 2009, 103, 195502.	2.9	151
65	The growth of metallic nanofilaments in resistive switching memory devices based on solid electrolytes. Applied Physics Letters, 2009, 94, .	1.5	23
66	A body-centered-cubic polymorph of the Ge <sub>2</sub> Sb <sub>2</sub> Te <sub>5</sub> phase change alloy. Applied Physics Letters, 2009, 95, .	1.5	18
67	Crystallization Characteristics of Ge-Sb Phase Change Materials. Materials Research Society Symposia Proceedings, 2009, 1160, 1.	0.1	2
68	Phase Transitions at the Nanoscale in Functional Materials. MRS Bulletin, 2009, 34, 804-813.	1.7	20
69	First-principles study of crystalline and amorphous Ge <sub>2</sub> Sb <sub>2</sub> Te <sub>5</sub> and the effects of stoichiometric defects. Journal of Physics Condensed Matter, 2009, 21, 255501.	0.7	122
70	Si <sub>2</sub> Sb <sub>2</sub> Te <sub>5</sub> phase change material studied by an atomic force microscope nano-tip. Journal of Semiconductors, 2009, 30, 063003.	2.0	2
71	The structure of hybrid radial superlattices. Journal Physics D: Applied Physics, 2009, 42, 103001.	1.3	34
72	High-Productivity Combinatorial PVD and ALD Workflows for Semiconductor Logic & Memory Applications. Materials Research Society Symposia Proceedings, 2009, 1159, 1021.	0.1	2
73	On Fluidization of Borosilicate Glasses in Intense Radiation Fields. , 2009, , .		1

#	ARTICLE	IF	CITATIONS
74	Sn <sub>12</sub> Sb <sub>88</sub> material for phase change memory. Applied Physics Letters, 2009, 95, 032105.	1.5	72
75	The construction of Si <sub>2</sub> Sb <sub>2</sub> Te <sub>5</sub> electrical probe storage based on UV nanoimprint lithography. Nanotechnology, 2009, 20, 315304.	1.3	4
76	Development of Picosecond Time-Resolved Microbeam X-ray Diffraction Technique for Investigation of Optical Recording Process. Japanese Journal of Applied Physics, 2009, 48, 03A001.	0.8	8
77	Plastic Deformation and Failure Analysis of Phase Change Random Access Memory. Japanese Journal of Applied Physics, 2009, 48, 04C064.	0.8	3
78	Vibrational properties of hexagonal Ge <sub>2</sub> Sb <sub>2</sub> Te <sub>5</sub> from first principles. Journal of Physics Condensed Matter, 2009, 21, 245401.	0.7	55
79	Nanoscaling of Phase Change Memory Cells for High Speed Memory Applications. Japanese Journal of Applied Physics, 2009, 48, 04C060.	0.8	4
80	Structural origin of set-reset processes in Ge <sub>15</sub> Te <sub>83</sub> Si <sub>2</sub> glass investigated using in situ Raman scattering and transmission electron microscopy. Journal of Applied Physics, 2009, 105, 084517.	1.1	6
81	Crystallization of sputtered-deposited and ion implanted amorphous Ge <sub>2</sub> Sb <sub>2</sub> Te <sub>5</sub> thin films. Journal of Applied Physics, 2009, 105, .	1.1	27
82	Origin of oxygen vacancies in resistive switching memory devices. Journal of Physics: Conference Series, 2009, 190, 012074.	0.3	7
83	Study on Adhesive Strength between Ge <sub>2</sub> Sb <sub>2</sub> Te <sub>5</sub> Film and Electrodes for Phase Change Memory Application. Japanese Journal of Applied Physics, 2009, 48, 101601.	0.8	11
84	Comparison of Thermal Stability and Electrical Characterization between Ge <sub>2</sub> Sb <sub>2</sub> Te <sub>5</sub> and Ge <sub>1</sub> Sb <sub>2</sub> Te <sub>4</sub> Phase-Change Materials. Japanese Journal of Applied Physics, 2009, 48, 121104.	0.8	4
85	Electric-Field-Induced Mass Movement of Ge <sub>2</sub> Sb <sub>2</sub> Te <sub>5</sub> in Bottleneck Geometry Line Structures. Electrochemical and Solid-State Letters, 2009, 12, H155.	2.2	28
86	Nanoionics Switching Devices: "Atomic Switches". MRS Bulletin, 2009, 34, 929-934.	1.7	55
87	Evolution of the Transrotational Structure During Crystallization of Amorphous Ge <sub>2</sub> Sb <sub>2</sub> Te <sub>5</sub> Thin Films. Materials Research Society Symposia Proceedings, 2009, 1160, 1.	0.1	0
88	The influence of Se doping upon the phase change characteristics of GeSb <sub>2</sub> Te <sub>4</sub> . Solid State Sciences, 2009, 11, 683-687.	1.5	13
89	Compact Thermal Model for Vertical Nanowire Phase-Change Memory Cells. IEEE Transactions on Electron Devices, 2009, , .	1.6	16
90	Tunable Memory Characteristics of Nanostructured, Nonvolatile Charge Trap Memory Devices Based on a Binary Mixture of Metal Nanoparticles as a Charge Trapping Layer. Advanced Materials, 2009, 21, 178-183.	11.1	97
91	Redox-Based Resistive Switching Memories " Nanoionic Mechanisms, Prospects, and Challenges. Advanced Materials, 2009, 21, 2632-2663.	11.1	4,447

#	ARTICLE	IF	CITATIONS
93	Reversible Phase Transitions in a Buckybowl Monolayer. <i>Angewandte Chemie - International Edition</i> , 2009, 48, 1966-1969.	7.2	65
94	Fabrication, constructions and electrical property of Si <sub>2</sub> Sb <sub>2</sub> Te <sub>5</sub> electrical probe storage system. <i>Microsystem Technologies</i> , 2009, 15, 1389-1393.	1.2	2
95	Temperature dependence of thermal properties of Ag <sub>8</sub> In <sub>14</sub> Sb <sub>55</sub> Te <sub>23</sub> phase-change memory materials. <i>Applied Physics A: Materials Science and Processing</i> , 2009, 94, 627-631.	1.1	34
96	Chalcogenide glasses in Japan: A review on photoinduced phenomena. <i>Physica Status Solidi (B): Basic Research</i> , 2009, 246, 1744-1757.	0.7	27
97	Phase change materials: The importance of resonance bonding. <i>Physica Status Solidi (B): Basic Research</i> , 2009, 246, 1820-1825.	0.7	14
98	Local structure of amorphous Ge <sub>1-x</sub> Sb <sub>x</sub> Te alloys: Ge umbrella flip vs. DFT simulations. <i>Physica Status Solidi (B): Basic Research</i> , 2009, 246, 1826-1830.	0.7	12
99	Imprinting the Optical Near Field of Microstructures with Nanometer Resolution. <i>Small</i> , 2009, 5, 1825-1829.	5.2	34
100	The bridge to redox switches. <i>Nature Materials</i> , 2009, 8, 88-89.	13.3	15
101	Micelles make a living. <i>Nature Materials</i> , 2009, 8, 89-91.	13.3	25
102	Atomic layer deposition of Ge <sub>2</sub> Sb <sub>2</sub> Te <sub>5</sub> thin films. <i>Microelectronic Engineering</i> , 2009, 86, 1946-1949.	1.1	64
103	Electrical properties of Pt interconnects for passive crossbar memory arrays. <i>Microelectronic Engineering</i> , 2009, 86, 2275-2278.	1.1	5
104	Investigation of electrical characteristics of the In <sub>3</sub> Sb <sub>1</sub> Te <sub>2</sub> ternary alloy for application in phase-change memory. <i>Physica Status Solidi - Rapid Research Letters</i> , 2009, 3, 103-105.	1.2	62
105	Mechanism of shear transformation in Ge-Bi-Te alloys. <i>Physica Status Solidi - Rapid Research Letters</i> , 2009, 3, 254-256.	1.2	4
106	Topics in the theory of amorphous materials. <i>European Physical Journal B</i> , 2009, 68, 1-21.	0.6	114
107	Solid State Polyselenides and Polytellurides: A Large Variety of Se-Se and Te-Te Interactions. <i>Molecules</i> , 2009, 14, 3115-3131.	1.7	64
108	Memristive switching of MgO based magnetic tunnel junctions. <i>Applied Physics Letters</i> , 2009, 95, .	1.5	69
109	Resistive Switching Memory Devices Composed of Binary Transition Metal Oxides Using Sol-Gel Chemistry. <i>Langmuir</i> , 2009, 25, 4274-4278.	1.6	49
110	Spatial distribution of oxygen vacancies in Cr-doped SrTiO <sub>3</sub> during an electric-field-driven insulator-to-metal transition. <i>Applied Physics Letters</i> , 2009, 94, 013513.	1.5	21

#	ARTICLE	IF	CITATIONS
111	Integration of IC Industry Feature Sizes with University Back-End-of-Line Post Processing: Example Using a Phase-Change Memory Test Chip. , 2009, .		2
112	Initial Structure Memory of Pressure-Induced Changes in the Phase-Change Memory Alloy $\text{Ge}_{2-x}\text{Sb}_x\text{Te}$ Physical Review Letters, 2009, 103, 115502.	3.9	51
113	On angle resolved RF magnetron sputtering of $\text{Ge}_{1-x}\text{Sb}_x\text{Te}$ thin films. Journal of Non-Crystalline Solids, 2009, 355, 1935-1938.	1.5	4
114	Rapid quenching and glass formation in chalcogenide glasses: Preparation and properties of $\text{Ge}_{1-x}\text{As}_x\text{Te}$ glasses over an extended composition ranges. Journal of Non-Crystalline Solids, 2009, 355, 2045-2049.	1.5	7
115	Thermal conductivities and phase transition temperatures of various phase-change materials measured by the $3\bar{1}\%$ method. Applied Physics Letters, 2009, 94, .	1.5	62
116	Proposal of a grating-based optical reflection switch using phase change materials. Optics Express, 2009, 17, 16947.	1.7	13
117	Formation of Large Voids in the Amorphous Phase-Change Memory $\text{Ge}_{2-x}\text{Sb}_x\text{Te}$ Physical Review Letters, 2009, 102, 075504.	3.9	102
118	Characterization of phase change memory materials using phase change bridge devices. Journal of Applied Physics, 2009, 106, 054308.	1.1	24
119	Threshold field of phase change memory materials measured using phase change bridge devices. Applied Physics Letters, 2009, 95, .	1.5	127
120	Optical nonlinear absorption characteristics of $\text{AgInSbTe}$ phase change thin films. Journal of Applied Physics, 2009, 106, .	1.1	41
121	Nature of Glasses. , 2009, , 39-62.		1
122	<i>Phase transitions</i> and ferroelectrics: revival and the future in the field. Phase Transitions, 2009, 82, 633-661.	0.6	47
123	Evidence of Germanium precipitation in phase-change $\text{Ge}_{1-x}\text{Te}_x$ thin films by Raman scattering. Applied Physics Letters, 2009, 95, 031908.	1.5	37
124	Short and Long-Range Order in Phase Change Materials. , 2009, , 149-174.		2
125	$\text{Ge}_{1-x}\text{Sb}_x\text{Te}$ thin films deposited by pulsed laser: An ellipsometry and Raman scattering spectroscopy study. Journal of Applied Physics, 2009, 106, .	1.1	89
126	Phase-Change Characteristics and Thermal Stability of $\text{GeTe/Sb}_2\text{Te}_3$ Nanocomposite Multilayer Films. Japanese Journal of Applied Physics, 2009, 48, 115503.	0.8	5
127	Nanosecond switching in $\text{GeTe}$ phase change memory cells. Applied Physics Letters, 2009, 95, .	1.5	385
128	Vibrational properties of crystalline $\text{Sb}_2\text{Te}_3$ from first principles. Journal of Physics Condensed Matter, 2009, 21, 095410.	0.7	100



#	ARTICLE	IF	CITATIONS
129	Optical properties of pseudobinary GeTe, $\langle \text{mml:math} \text{xmlns:mml="http://www.w3.org/1998/Math/MathML"} \text{display="inline"} \rangle \langle \text{mml:mrow} \rangle \langle \text{mml:msub} \rangle \langle \text{mml:mrow} \rangle \langle \text{mml:mtext} \rangle \text{Ge} \langle \text{mml:mtext} \rangle \langle \text{mml:mrow} \rangle \langle \text{mml:mn} \rangle 2 \langle \text{mml:mrow} \rangle \langle \text{mml:msub} \rangle \langle \text{mml:mrow} \rangle \langle \text{mml:mtext} \rangle$ Physical Review B, 2009, 80, .	11.1	128
130	Chalcogenide phase change induced with single-wall carbon nanotube heaters. , 2009, , .		0
131	Observation of the Role of Subcritical Nuclei in Crystallization of a Glassy Solid. Science, 2009, 326, 980-984.	6.0	169
132	Phase Change Materials. Annual Review of Materials Research, 2009, 39, 25-48.	4.3	269
134	The Glass Computer. Physics Teacher, 2009, 47, 80-86.	0.2	2
135	Excitation wavelength dependence of photoinduced phase transition in polycrystalline AgI at room temperature. Journal of Physics: Conference Series, 2009, 148, 012021.	0.3	1
136	Nanoelectronics from the bottom up. , 2009, , 137-146.		15
137	Nanoionics-based resistive switching memories. , 2009, , 158-165.		71
138	Silver(I)-(poly)chalcogenide Halides $\text{â€} \text{ Ion and Electron High Potentials. Zeitschrift Fur Physikalische Chemie, 2010, 224, 1505-1531.}$	1.4	3
139	Growth Rate Determination through Automated TEM Image Analysis: Crystallization Studies of Doped SbTe Phase-Change Thin Films. Microscopy and Microanalysis, 2010, 16, 291-299.	0.2	9
140	Atomic structure of amorphous and crystallized Ge <sub>15</sub> Sb <sub>85</sub> . Journal of Applied Physics, 2010, 107, .	1.1	27
141	Crystallization behavior of amorphous Al <sub>x</sub> (Ge <sub>2</sub> Sb <sub>2</sub> Te <sub>5</sub> ) <sub>1-âˆ’x</sub> thin films. Journal of Applied Physics, 2010, 108, .	1.1	34
142	Ultrafast Structural Change in A GeSbTe Thin Film Induced by A Single Femtosecond Laser Pulse. The Review of Laser Engineering, 2010, 38, 96-100.	0.0	0
143	Nanowire transistors made easy. Nature Nanotechnology, 2010, 5, 178-179.	15.6	85
144	Chalcogenide glasses in active plasmonics. Physica Status Solidi - Rapid Research Letters, 2010, 4, 274-276.	1.2	53
145	Prospects of Colloidal Nanocrystals for Electronic and Optoelectronic Applications. Chemical Reviews, 2010, 110, 389-458.	23.0	3,708
146	Thin Film Metal-Oxides. , 2010, , .		59
147	Thermal and optical analysis of Te-substituted Sn $\text{â€} \text{Sbâ€} \text{Se chalcogenide semiconductors. Applied Physics A: Materials Science and Processing, 2010, 99, 181-187.}$	1.1	18

#	ARTICLE	IF	CITATIONS
148	Optical-electrical hybrid operation with amorphous Ge <sub>1</sub> Sb <sub>4</sub> Te <sub>7</sub> phase change thin films. Applied Physics A: Materials Science and Processing, 2010, 98, 795-800.	1.1	3
149	Performance improvement of phase-change memory cell with Ge <sub>2</sub> Sb <sub>2</sub> Te <sub>5</sub> -HfO <sub>2</sub> composite films. Applied Physics A: Materials Science and Processing, 2010, 99, 767-770.	1.1	27
150	Investigation on Ge <sub>5-x</sub> Sb <sub>x</sub> Te <sub>5</sub> phase-change materials by first-principles method. Applied Physics A: Materials Science and Processing, 2010, 99, 961-964.	1.1	4
151	Phase stability and electronic structure of Si <sub>2</sub> Sb <sub>2</sub> Te <sub>5</sub> phase-change material. Journal of Physics and Chemistry of Solids, 2010, 71, 1165-1167.	1.9	2
152	Electronic Structures of Rare-earth Half-metallic Ferromagnet CoLa <sub>2</sub> O <sub>4</sub> . Journal of Superconductivity and Novel Magnetism, 2010, 23, 957-960.	0.8	0
153	Binary semiconductor In <sub>2</sub> Te <sub>3</sub> for the application of phase-change memory device. Journal of Materials Science, 2010, 45, 3569-3574.	1.7	16
154	A New Transient Model for Recovery and Relaxation Oscillations in Phase-Change Memories. IEEE Transactions on Electron Devices, 2010, 57, 1838-1845.	1.6	19
155	The Atomic Switch. Proceedings of the IEEE, 2010, 98, 2228-2236.	16.4	60
156	Ge <sub>2</sub> Sb <sub>2</sub> Te <sub>5</sub> and PbZr <sub>0.30</sub> Ti <sub>0.70</sub> O <sub>3</sub> composite films for application in phase change random access memory. Materials Letters, 2010, 64, 317-319.	1.3	12
157	Phase transition behaviors and thermal conductivity measurements of nitrogen-doped Sb <sub>2</sub> Te <sub>3</sub> thin films. Materials Letters, 2010, 64, 2314-2316.	1.3	15
158	Sb <sub>2</sub> Te <sub>3</sub> -Ta <sub>2</sub> O <sub>5</sub> nano-composite films for low-power phase-change memory application. Materials Letters, 2010, 64, 2728-2730.	1.3	13
159	Amorphous structure and electronic properties of the Ge <sub>1</sub> Sb <sub>2</sub> Te <sub>4</sub> phase change material. Solid State Sciences, 2010, 12, 193-198.	1.5	36
160	Fluctuation Transmission Electron Microscopy: Detecting Nanoscale Order in Disordered Structures. ChemPhysChem, 2010, 11, 2311-2317.	1.0	12
161	Multifunctional Shape-Memory Polymers. Advanced Materials, 2010, 22, 3388-3410.	11.1	835
162	Fiber Field-Effect Device Via In Situ Channel Crystallization. Advanced Materials, 2010, 22, 4162-4166.	11.1	29
163	Optische Speichermedien. Phasenwechselmaterialien. Chemie in Unserer Zeit, 2010, 44, 92-107.	0.1	18
164	Effective method for preparation of oxide-free Ge <sub>2</sub> Sb <sub>2</sub> Te <sub>5</sub> surface: An X-ray photoelectron spectroscopy study. Applied Surface Science, 2010, 256, 7696-7699.	3.1	13
165	Nano-scale quasi-melting of alkali-borosilicate glasses under electron irradiation. Journal of Nuclear Materials, 2010, 396, 264-271.	1.3	43

#	ARTICLE	IF	CITATIONS
166	Phase transformation in MgSb thin films. <i>Thin Solid Films</i> , 2010, 518, 7403-7406.	0.8	16
167	First-principles investigation on the phase stability and chemical bonding of phase-change random alloys. <i>Solid State Communications</i> , 2010, 150, 1375-1377.	0.9	10
168	Function by defects at the atomic scale – New concepts for non-volatile memories. <i>Solid-State Electronics</i> , 2010, 54, 830-840.	0.8	46
169	Ge/Sb <sub>2</sub> Te <sub>3</sub> nanocomposite multilayer films for high data retention phase-change random access memory application. <i>Applied Surface Science</i> , 2010, 257, 949-953.	3.1	13
170	Enhanced thermal efficiency for amorphization in nano-structured Ge <sub>2</sub> Sb <sub>2</sub> Te <sub>5</sub> TiO <sub>x</sub> films. <i>Current Applied Physics</i> , 2010, 10, e83-e86.	1.1	3
171	Reversible structural phase transition of pyridinium-4-carboxylic acid perchlorate. <i>Journal of Applied Crystallography</i> , 2010, 43, 1031-1035.	1.9	19
172	GeSb <sub>4</sub> Te <sub>4</sub> – a New <i>9&lt;i&gt;P&lt;/i&gt;</i> Type Phase in the System Ge/Sb/Te. <i>Zeitschrift Fur Anorganische Und Allgemeine Chemie</i> , 2010, 636, 137-143.	0.6	6
173	Interpretation and consequences of Meyer–Neldel rule for conductivity of phase change alloys. <i>Physica Status Solidi (A) Applications and Materials Science</i> , 2010, 207, 627-630.	0.8	16
174	Computer simulation design of new phase change memory materials. <i>Physica Status Solidi (A) Applications and Materials Science</i> , 2010, 207, 510-515.	0.8	24
175	197 Au irradiation study of phase-change memory cell with GeSbTe alloy. <i>Physica Status Solidi (A) Applications and Materials Science</i> , 2010, 207, 2395-2398.	0.8	0
176	Photoassisted Formation of an Atomic Switch. <i>Small</i> , 2010, 6, 1745-1748.	5.2	33
177	Synthesis of a metal oxide with a room-temperature photoreversible phase transition. <i>Nature Chemistry</i> , 2010, 2, 539-545.	6.6	221
178	Illuminated oxides. <i>Nature Chemistry</i> , 2010, 2, 517-519.	6.6	2
179	Towards artificial terpene cyclases. <i>Nature Chemistry</i> , 2010, 2, 519-520.	6.6	24
180	Anion transport as easy as pi. <i>Nature Chemistry</i> , 2010, 2, 516-517.	6.6	24
181	Memory grows up. <i>Nature Nanotechnology</i> , 2010, 5, 177-178.	15.6	29
182	Understanding Phase Change Memory Reliability and Scaling by Physical Models of the Amorphous Chalcogenide Phase. <i>Materials Research Society Symposia Proceedings</i> , 2010, 1251, 1.	0.1	1
183	GeTe-filled Carbon Nanotubes for Data Storage Applications. <i>Materials Research Society Symposia Proceedings</i> , 2010, 1251, 3.	0.1	1

#	ARTICLE	IF	CITATIONS
184	Improvement of Crystallization Rate in Post-Annealed Ge <sub>2</sub> Sb <sub>2</sub> Te <sub>5</sub> Films. Key Engineering Materials, 0, 459, 23-26.	0.4	0
185	FORMATION, STRUCTURE AND PROPERTIES OF HIGHLY ORDERED SUB-30-nm PHASE CHANGE MATERIALS (GST) NANOPARTICLE ARRAYS. Surface Review and Letters, 2010, 17, 405-410.	0.5	1
186	Grey Relational Analysis between Particle Size Distribution of Power Storage Porous Ceramsite and Thermal Conductivity of PCM Gypsum Board. Advanced Materials Research, 0, 158, 130-139.	0.3	3
187	The role of vacancies in the pressure amorphisation phenomenon observed in Ge-Sb-Te phase change alloys. Materials Research Society Symposia Proceedings, 2010, 1251, 10.	0.1	0
188	Amorphization of Crystalline Phase Change Material by Ion Implantation. Materials Research Society Symposia Proceedings, 2010, 1251, 6.	0.1	9
189	Optical and Transport Properties of as Prepared and Annealed Te-Substituted Sn-Sb-Se Thin Films. Materials Science Forum, 0, 663-665, 16-24.	0.3	0
190	Unipolar Switching in Pt <sup>x</sup> GeSe <sub>x</sub> Te <sub>1-x</sub> Pt. Electrochemical and Solid-State Letters, 2010, 13, G111.	2.2	5
191	Stress Limited Scaling of Ge <sub>2</sub> Sb <sub>2</sub> Te <sub>5</sub> . Materials Research Society Symposia Proceedings, 2010, 1251, 2.	0.1	3
192	Density-controllable nonvolatile memory devices having metal nanocrystals through chemical synthesis and assembled by spin-coating technique. Journal of Semiconductors, 2010, 31, 124011.	2.0	0
193	Atomic and electronic structures of amorphous Ge <sub>2</sub> Sb <sub>2</sub> Te <sub>5</sub> ; melt-quenched versus ideal glasses. Journal of Physics Condensed Matter, 2010, 22, 205504.	0.7	16
194	Prediction of topological insulating behavior in crystalline Ge-Sb-Te. Physical Review B, 2010, 82, .	1.1	75
195	Pressure-induced crystallization of amorphous Ge <sub>2</sub> Sb <sub>2</sub> Te <sub>5</sub> . Journal of Applied Physics, 2010, 108, 083519.	1.1	27
196	Ultraviolet optical near-fields of microspheres imprinted in phase change films. Applied Physics Letters, 2010, 96, 193108.	1.5	19
197	Metamaterial electro-optic switch of nanoscale thickness. Applied Physics Letters, 2010, 96, .	1.5	287
198	First-principles calculations on the energetics of nitrogen-doped hexagonal Ge <sub>2</sub> Sb <sub>2</sub> Te <sub>5</sub> . Journal of Applied Physics, 2010, 107, .	1.1	9
199	First-principles study of liquid and amorphous $Sb_2$ Physical Review B, 2010, 81, .	1.1	94
200	Switching Casimir forces with phase-change materials. Physical Review A, 2010, 82, .	1.0	101
201	Coherent optical phonon spectroscopy studies of femtosecond-laser modified Sb <sub>2</sub> Te <sub>3</sub> films. Applied Physics Letters, 2010, 97, 171908.	1.5	29

#	ARTICLE	IF	CITATIONS
202	Crystallization of ion amorphized Ge <sub>2</sub> Sb <sub>2</sub> Te <sub>5</sub> thin films in presence of cubic or hexagonal phase. Journal of Applied Physics, 2010, 107, .	1.1	23
203	The role of defects in resistively switching chalcogenides. International Journal of Materials Research, 2010, 101, 182-198.	0.1	12
204	Epitaxial growth and structure of Ge <sub>2</sub> Sb <sub>2</sub> Te <sub>5</sub> phase change materials on GaSb. Journal of Vacuum Science and Technology B: Nanotechnology and Microelectronics, 2010, 28, C3E1-C3E5.	0.6	8
205	Understanding amorphous phase-change materials from the viewpoint of Maxwell rigidity. Physical Review B, 2010, 81, .	1.1	76
206	Thermoelectric heating of Ge <sub>2</sub> Sb <sub>2</sub> Te <sub>5</sub> in phase change memory devices. Applied Physics Letters, 2010, 96, .	1.5	38
207	Bonding origin of optical contrast in phase-change memory materials. Physical Review B, 2010, 81, .	1.1	209
208	Influence of Nitrogen Doping upon the Phase Change Characteristics and Optical Band Gap of Sb <sub>2</sub> Te <sub>3</sub> Thin Films. Ferroelectrics, 2010, 410, 152-158.	0.3	3
209	Local Order and Crystallization of Laser Quenched and Ion Implanted Amorphous Ge <sub>1-x</sub> Te <sub>x</sub> Thin Films. Materials Research Society Symposia Proceedings, 2010, 1251, 8.	0.1	0
210	Local Order and Crystallization of Laser Quenched and Ion Implanted Amorphous Ge <sub>[sub 1-x]</sub> Te <sub>[sub x]</sub> Thin Films. Electrochemical and Solid-State Letters, 2010, 13, H317.	2.2	11
211	An intrinsic formation mechanism for midgap electronic states in semiconductor glasses. Journal of Chemical Physics, 2010, 132, 044508.	1.2	19
212	Crystallization Behaviors of Laser Induced Ge <sub>[sub 2]</sub> Sb <sub>[sub 2]</sub> Te <sub>[sub 5]</sub> in Different Amorphous States. Journal of the Electrochemical Society, 2010, 157, H264.	1.3	10
213	Crystallization dynamics of as-deposited amorphous AgInSbTe thin film induced by picosecond laser pulses. Journal Physics D: Applied Physics, 2010, 43, 175401.	1.3	9
214	Electronic structure and the glass transition in pnictide and chalcogenide semiconductor alloys. II. The intrinsic electronic midgap states. Journal of Chemical Physics, 2010, 133, 234504.	1.2	21
215	Processing and properties of centimeter-long, in-fiber, crystalline-selenium filaments. Applied Physics Letters, 2010, 96, .	1.5	52
216	Lone-pair states as a key to understanding impact ionization in chalcogenide semiconductors. Journal of Physics Condensed Matter, 2010, 22, 355803.	0.7	6
217	A memristor-based nonvolatile latch circuit. Nanotechnology, 2010, 21, 235203.	1.3	71
218	Structure, topology and chemical order in Ge <sub>2</sub> As <sub>2</sub> Te glasses: a high-energy x-ray diffraction study. Journal of Physics Condensed Matter, 2010, 22, 405401.	0.7	17
219	Signature of Tetrahedral Ge in the Raman Spectrum of Amorphous Phase-Change Materials. Physical Review Letters, 2010, 104, 085503.	2.9	164

#	ARTICLE	IF	CITATIONS
220	Bipolar Resistive Switching in Oxides for Memory Applications. , 2010, , 131-167.		6
221	Controllable Growth of Nanoscale Conductive Filaments in Solid-Electrolyte-Based ReRAM by Using a Metal Nanocrystal Covered Bottom Electrode. ACS Nano, 2010, 4, 6162-6168.	7.3	426
222	Flexible Organic Transistor Memory Devices. Nano Letters, 2010, 10, 2884-2890.	4.5	355
223	Ga <sub>2</sub> Te <sub>3</sub> phase change material for low-power phase change memory application. Applied Physics Letters, 2010, 97, .	1.5	39
224	Toward the Ultimate Limit of Phase Change in Ge <sub>2</sub> Sb <sub>2</sub> Te <sub>5</sub> . Nano Letters, 2010, 10, 414-419.	4.5	226
225	Embedded Binary Eutectic Alloy Nanostructures: A New Class of Phase Change Materials. Nano Letters, 2010, 10, 2794-2798.	4.5	27
226	Ab initio study of the structure and chemical bonding of stable Ge <sub>3</sub> Sb <sub>2</sub> Te <sub>6</sub> . Physical Chemistry Chemical Physics, 2010, 12, 1585.	1.3	37
227	First principles study of the optical contrast in phase change materials. Journal of Physics Condensed Matter, 2010, 22, 315801.	0.7	47
228	Liquid-Phase Synthesis of Uniform Cube-Shaped GeTe Microcrystals. Chemistry of Materials, 2010, 22, 3236-3240.	3.2	29
229	Strongly Nonlinear Optical Glass Fibers from Noncentrosymmetric Phase-Change Chalcogenide Materials. Journal of the American Chemical Society, 2010, 132, 384-389.	6.6	85
230	Ultrafast amorphization in Ge <sub>10</sub> Sb <sub>2</sub> Te <sub>13</sub> thin film induced by single femtosecond laser pulse. Applied Optics, 2010, 49, 3470.	2.1	60
231	Optical-electrical properties of AgInSbTe phase change thin films under single picosecond laser pulse irradiation. Journal of Non-Crystalline Solids, 2010, 356, 889-892.	1.5	11
232	Thermally induced phase separation of Si-Sb-Te alloy. Journal of Non-Crystalline Solids, 2010, 356, 884-888.	1.5	15
233	Physical properties of Ge <sub>x</sub> As <sub>2x</sub> Te <sub>100-3x</sub> glasses and Raman spectroscopic analysis of their short-range structure. Journal of Non-Crystalline Solids, 2010, 356, 2083-2088.	1.5	58
234	Multilevel phase-change memory. , 2010, , .		38
235	Vanadium(II) Heptacyanomolybdate(III)-Based Magnet Exhibiting a High Curie Temperature of 110 K. Inorganic Chemistry, 2010, 49, 1298-1300.	1.9	63
236	Structural diversity of rare earth and transition metal thiophosphates. CrystEngComm, 2010, 12, 1003-1015.	1.3	35
237	Organic Field-Effect Transistor-Based Nonvolatile Memory Devices Having Controlled Metallic Nanoparticle/Polymer Composite Layers. Electrochemical and Solid-State Letters, 2010, 13, H134.	2.2	17

#	ARTICLE	IF	CITATIONS
238	Electronic structure and the glass transition in pnictide and chalcogenide semiconductor alloys. I. The formation of the p <sub>i</sub> f-network. Journal of Chemical Physics, 2010, 133, 234503.	1.2	21
239	Current Status of Nonvolatile Semiconductor Memory Technology. Japanese Journal of Applied Physics, 2010, 49, 100001.	0.8	72
240	From phase-change materials to thermoelectrics?. Zeitschrift für Kristallographie, 2010, 225, .	1.1	58
241	Effective method to identify the vacancies in crystalline GeTe. Applied Physics Letters, 2010, 97, .	1.5	30
242	Influence of stress and strain on the kinetic stability and phase transitions of cubic and pseudocubic Ge-Sb-Te materials. Physical Review B, 2010, 81, .	1.1	41
243	Phase Change Materials and Their Application to Nonvolatile Memories. Chemical Reviews, 2010, 110, 240-267.	23.0	730
244	Modulable cooperativity in a valence tautomeric complex functionalized with branched alkyl chains. Chemical Communications, 2010, 46, 3729.	2.2	16
245	Integrating carbon-based nanoelectronics with chalcogenide phase change memory. , 2010, , .		1
246	Ultra-low power phase change memory with carbon nanotube interconnects. , 2010, , .		3
247	First demonstration of phase change memory device using solution processed GeTe nanoparticles. , 2011, , .		9
248	The generation of palladium silicide nanoalloy particles in a SiCN matrix and their catalytic applications. Journal of Materials Chemistry, 2011, 21, 18825.	6.7	47
249	Materials engineering for Phase Change Random Access Memory. , 2011, , .		2
250	Electrically switchable graphene photo-sensor using phase-change gate filter for non-volatile data storage application with high-speed data writing and access. , 2011, , .		0
251	Resistive Switching Driven by Electric Field in the Mott Insulators AM <sub>4</sub> X <sub>8</sub> (A = Ga, Ge; M= V, Nb, Ta; X =) Tj ETQq1 1 0.784314 1 rgBT /Ove		
252	Novel materials by atomic layer deposition and molecular layer deposition. MRS Bulletin, 2011, 36, 877-884.	1.7	45
253	Probing the Out-of-Plane Distortion of Single Point Defects in Atomically Thin Hexagonal Boron Nitride at the Picometer Scale. Physical Review Letters, 2011, 106, 126102.	2.9	62
254	High-Resolution Transmission Electron Microscopy Study of Electrically-Driven Reversible Phase Change in Ge <sub>2</sub> Sb <sub>2</sub> Te <sub>5</sub> Nanowires. Nano Letters, 2011, 11, 1364-1368.	4.5	58
255	First-principles study of nitrogen doping in cubic and amorphous Ge <sub>2</sub> Sb <sub>2</sub> Te <sub>5</sub> . Journal of Physics Condensed Matter, 2011, 23, 265801.	0.7	38

#	ARTICLE	IF	CITATIONS
256	Nature of phase transitions in crystalline and amorphous GeTe-Sb <sub>2</sub> Te <sub>3</sub> phase change materials. Journal of Chemical Physics, 2011, 135, 124510.	1.2	17
257	Thin Films of GeSbTe-Based Phase Change Materials: Microstructure and in Situ Transformation. Chemistry of Materials, 2011, 23, 3871-3878.	3.2	37
258	Raman spectra of cubic and amorphous GeSb <sub>2</sub> Te <sub>3</sub> . $\frac{Sb}{Ge}$	1.1	106
259	Real Structure and Thermoelectric Properties of GeTe-Rich Germanium Antimony Tellurides. Chemistry of Materials, 2011, 23, 4349-4356.	3.2	146
260	Resistance switching at the nanometre scale in amorphous carbon. New Journal of Physics, 2011, 13, 013020.	1.2	75
261	Interfacial phase-change memory. Nature Nanotechnology, 2011, 6, 501-505.	15.6	630
262	Bulk and surface nucleation processes in AgS <sub>2</sub> conductance switches. Physical Review B, 2011, 84, .	1.1	33
263	Nanofilamentary resistive switching in binary oxide system; a review on the present status and outlook. Nanotechnology, 2011, 22, 254002.	1.3	530
264	Coherent optical phonons in different phases of Ge <sub>2</sub> Sb <sub>2</sub> Te <sub>5</sub> upon strong laser excitation. Applied Physics Letters, 2011, 98, 251906.	1.5	23
265	Resistive switching effects in single metallic tunneling junction with nanometer-scale gap. Applied Physics Letters, 2011, 98, .	1.5	8
266	Size-Dependent Polar Ordering in Colloidal GeTe Nanocrystals. Nano Letters, 2011, 11, 1147-1152.	4.5	84
267	Thermal conductivity of chalcogenide material with superlattice-like structure. Applied Physics Letters, 2011, 98, .	1.5	29
269	Phase-change control of ferromagnetism in GeTe-based phase change magnetic thin-films by pulsed laser deposition. Applied Physics Letters, 2011, 99, 081908.	1.5	21
270	Amorphous Chalcogenide Semiconductors and Related Materials. , 2011, , .		166
271	Phase change memory for synaptic plasticity application in neuromorphic systems. , 2011, , .		16
272	Performance improvement of Sb <sub>2</sub> Te <sub>3</sub> phase change material by Al doping. Applied Surface Science, 2011, 257, 10667-10670.	3.1	60
273	Ultrafast optical manipulation of atomic arrangements in chalcogenide alloy memory materials. Optics Express, 2011, 19, 1260.	1.7	84
274	Fabrication of phase-change chalcogenide Ge <sub>2</sub> Sb <sub>2</sub> Te <sub>5</sub> patterns by laser-induced forward transfer. Optics Express, 2011, 19, 16975.	1.7	49



#	ARTICLE	IF	CITATIONS
275	Free carrier accumulation during direct laser writing in chalcogenide glass by light filamentation. Optics Express, 2011, 19, 20088.	1.7	17
276	Microscopic origin of demixing in Ge <sub>20</sub> Se <sub>x</sub> Te <sub>80-x</sub> alloys. Journal of Alloys and Compounds, 2011, 509, 5190-5194.	2.8	10
277	Nucleation and growth kinetics of co-deposited copper and selenium precursors to form metastable copper selenides. Journal of Alloys and Compounds, 2011, 509, 9631-9637.	2.8	14
278	N-doped Sb <sub>2</sub> Te phase change materials for higher data retention. Journal of Alloys and Compounds, 2011, 509, 10105-10109.	2.8	46
279	Electronic thermal switching and memory in chalcogenide glassy semiconductors. Journal of Non-Crystalline Solids, 2011, 357, 992-995.	1.5	18
280	New insight into phase change memories. Journal of Non-Crystalline Solids, 2011, 357, 2626-2631.	1.5	4
281	Nucleation and grain growth in as deposited and ion implanted GeTe thin films. Journal of Non-Crystalline Solids, 2011, 357, 2197-2201.	1.5	19
282	<sup>125</sup> Te NMR chemical shifts and tellurium coordination environments in crystals and glasses in the Ge-As-Sb-Te system. Journal of Non-Crystalline Solids, 2011, 357, 3036-3041.	1.5	24
283	Density functional theory study of TiO <sub>2</sub> /Ag interfaces and their role in memristor devices. Physical Review B, 2011, 83, .	1.1	43
284	Amorphous and Glassy Semiconducting Chalcogenides. , 2011, , 206-261.		19
285	Phase-Change Memories on a Diet. Science, 2011, 332, 543-544.	6.0	124
286	Voltage polarity effects in Ge <sub>2</sub> Sb <sub>2</sub> Te <sub>5</sub> -based phase change memory devices. Journal of Applied Physics, 2011, 110, .	1.1	56
287	Electronic and optical switching of solution-phase deposited SnSe <sub>2</sub> phase change memory material. Journal of Applied Physics, 2011, 109, .	1.1	51
288	Effect of indium additive on the heat capacity of Se-Zn chalcogenide glasses. EPJ Applied Physics, 2011, 55, 11103.	0.3	4
289	Experimental and theoretical investigations on effects of hydrostatic pressure on the electrical properties of rhombohedral Sb <sub>2</sub> Te <sub>3</sub> . AIP Advances, 2011, 1, .	0.6	5
290	Low electric field, easily reversible electrical <i>set</i> and <i>reset</i> processes in a Ge <sub>15</sub> Te <sub>83</sub> Si <sub>2</sub> glass for phase change memory applications. Journal of Applied Physics, 2011, 109, .	1.1	4
291	Effective coordination concept applied for phase change (GeTe) <sub>m</sub> (Sb <sub>2</sub> Te <sub>3</sub> ) <sub>n</sub> compounds. Journal of Applied Physics, 2011, 109, .	1.1	83
292	Near-infrared Nano-imaging Spectroscopy of Semiconductor Quantum Dots using a Phase Change Mask Layer. , 2011, , .		0

#	ARTICLE	IF	CITATIONS
293	Distortion-triggered loss of long-range order in solids with bonding energy hierarchy. <i>Nature Chemistry</i> , 2011, 3, 311-316.	6.6	178
294	From local structure to nanosecond recrystallization dynamics in AgInSbTe phase-change materials. <i>Nature Materials</i> , 2011, 10, 129-134.	13.3	238
295	Disorder-induced localization in crystalline phase-change materials. <i>Nature Materials</i> , 2011, 10, 202-208.	13.3	515
296	Ab initio study of $Sb_2SexTe_{3-x}$ ( $x=0, 1, 2$ ) phase change materials. <i>Solid State Sciences</i> , 2011, 13, 131-134.	1.5	7
297	Thermodynamic, kinetic and electrical switching studies on $Si_{15}Te_{85}$ In glasses: Observation of Boolchand intermediate phase. <i>Journal of Solid State Chemistry</i> , 2011, 184, 3345-3352.	1.4	10
298	Rapid crystallization of $SiO_2/Sb_{80}Te_{20}$ nanocomposite multilayer films for phase-change memory applications. <i>Scripta Materialia</i> , 2011, 64, 645-648.	2.6	30
299	Nitrogen incorporated GeTe phase change thin film for high-temperature data retention and low-power application. <i>Scripta Materialia</i> , 2011, 65, 327-330.	2.6	43
300	The thickness dependence of the crystallization behavior in sandwiched amorphous $Ge_2Sb_2Te_5$ thin films. <i>Physica B: Condensed Matter</i> , 2011, 406, 4436-4439.	1.3	6
301	Catalyst-free growth of $Sb_2Te_3$ nanowires. <i>Materials Letters</i> , 2011, 65, 812-814.	1.3	6
302	C-Sb Materials as Candidate for Phase-Change Memory. <i>IEEE Transactions on Magnetics</i> , 2011, 47, 645-648.	1.2	8
303	Laser nano-manufacturing – State of the art and challenges. <i>CIRP Annals - Manufacturing Technology</i> , 2011, 60, 735-755.	1.7	177
304	Dynamics of laser-induced phase switching in GeTe films. <i>Journal of Applied Physics</i> , 2011, 109, 123102.	1.1	33
305	Nanoscale Effects on the Stability of the $Ti_3O_5$ Polymorph. <i>Chemistry - an Asian Journal</i> , 2011, 6, 1886-1890.	1.7	26
306	Low-Power Switching of Phase-Change Materials with Carbon Nanotube Electrodes. <i>Science</i> , 2011, 332, 568-570.	6.0	474
307	Detecting hidden spatial and spatio-temporal structures in glasses and complex physical systems by multiresolution network clustering. <i>European Physical Journal E</i> , 2011, 34, 105.	0.7	57
308	Memory effects in complex materials and nanoscale systems. <i>Advances in Physics</i> , 2011, 60, 145-227.	35.9	677
309	Intrinsic constraints on thermally-assisted memristive switching. <i>Applied Physics A: Materials Science and Processing</i> , 2011, 102, 851-855.	1.1	27
310	Dc current transport behavior in amorphous GeSe films. <i>Applied Physics A: Materials Science and Processing</i> , 2011, 102, 1027-1032.	1.1	6

#	ARTICLE	IF	CITATIONS
311	Artificial cognitive memoryâ€”changing from density driven to functionality driven. Applied Physics A: Materials Science and Processing, 2011, 102, 865-875.	1.1	21
312	Evidence for correlated structural and electrical changes in a Ge <sub>2</sub> Sb <sub>2</sub> Te <sub>5</sub> thin film from combined synchrotron X-ray techniques and sheet resistance measurements during <i>in situ</i> thermal annealing. Journal of Applied Crystallography, 2011, 44, 858-864.	1.9	13
313	Milli-electronvolt monochromatization of hard X-rays with a sapphire backscattering monochromator. Journal of Synchrotron Radiation, 2011, 18, 802-810.	1.0	52
314	Fabrication of super water repellent silver flake/copolymer blend films and their potential as smart fabrics. Polymer Composites, 2011, 32, 576-585.	2.3	19
315	Ovonic Memory Switching in Multimaterial Fibers. Advanced Functional Materials, 2011, 21, 1095-1101.	7.8	26
316	Phase Change Materials: Vibrational Softening upon Crystallization and Its Impact on Thermal Properties. Advanced Functional Materials, 2011, 21, 2232-2239.	7.8	120
317	Design Rules for Phase Change Materials in Data Storage Applications. Advanced Materials, 2011, 23, 2030-2058.	11.1	432
318	Switchable Magnetic Metamaterials Using Micromachining Processes. Advanced Materials, 2011, 23, 1792-1796.	11.1	228
319	Phase Change Memory in Bi <sub>2</sub> Te <sub>3</sub> Nanowires. Advanced Materials, 2011, 23, 1871-1875.	11.1	49
320	Two-Photon 3D Optical Data Storage via Aggregate Switching of Excimer-Forming Dyes. Advanced Materials, 2011, 23, 2425-2429.	11.1	80
321	Arithmetic and Biologically Inspired Computing Using Phase Change Materials. Advanced Materials, 2011, 23, 3408-3413.	11.1	237
322	Synthesis, Structure, and Thermoelectric Properties of Barium Copper Polychalcogenides with Chalcogen-Centered Cu Clusters and Te <sub>2</sub> <sup>2+</sup> Dumbbells. European Journal of Inorganic Chemistry, 2011, 2011, 4037-4042.	1.0	18
323	Precession Electron Diffraction â€” a versatile tool for the characterization of Phase Change Materials. Crystal Research and Technology, 2011, 46, 561-568.	0.6	22
325	Strongly Nonlinear Optical Chalcogenide Thin Films of APSe <sub>6</sub> (A=K, Rb) from Spin-Coating. Angewandte Chemie - International Edition, 2011, 50, 10867-10870.	7.2	43
326	Electron or ion irradiation-induced phase-change mechanism between amorphous and crystalline state. Acta Materialia, 2011, 59, 2221-2228.	3.8	46
327	Experimental and theoretical study of silicon-doped Sb <sub>2</sub> Te <sub>3</sub> thin films: Structure and phase stability. Applied Surface Science, 2011, 257, 4566-4568.	3.1	18
328	High thermal stability and low thermal conductivity in Ga <sub>30</sub> Sb <sub>70</sub> /Sb <sub>80</sub> Te <sub>20</sub> nanocomposite multilayer films. Applied Surface Science, 2011, 257, 6296-6299.	3.1	6
329	Comparison of optical and electrical transient response during nanosecond laser pulse-induced phase transition of Ge <sub>2</sub> Sb <sub>2</sub> Te <sub>5</sub> thin films. Chemical Physics Letters, 2011, 507, 203-207.	1.2	14

#	ARTICLE	IF	CITATIONS
330	Electrodeposition of antimony telluride thin films from acidic nitrate-tartrate baths. <i>Electrochimica Acta</i> , 2011, 56, 5611-5615.	2.6	39
331	Synthesis, crystal and electronic structure, and physical properties of the new lanthanum copper telluride La <sub>3</sub> Cu <sub>5</sub> Te <sub>7</sub> . <i>Journal of Solid State Chemistry</i> , 2011, 184, 516-522.	1.4	10
332	Chalcogenide materials and their application to Non-Volatile Memories. <i>Microelectronic Engineering</i> , 2011, 88, 807-813.	1.1	54
333	Chalcogenide phase-change memory nanotubes for lower writing current operation. <i>Nanotechnology</i> , 2011, 22, 254012.	1.3	18
334	Force modulation for enhanced nanoscale electrical sensing. <i>Nanotechnology</i> , 2011, 22, 355706.	1.3	4
335	Nano-scaled chalcogenide-based memories. <i>Nanotechnology</i> , 2011, 22, 254021.	1.3	14
336	Generalized lucky-drift model for impact ionization in semiconductors with disorder. <i>Journal of Physics Condensed Matter</i> , 2011, 23, 055802.	0.7	25
337	Crystallization kinetics and x-ray photoelectron spectroscopy of Ga <sub>2</sub> TeSb <sub>7</sub> thin film. <i>Journal of Vacuum Science and Technology B: Nanotechnology and Microelectronics</i> , 2011, 29, 04D111.	0.6	1
338	New Structural Picture of the $\text{Ge}_2\text{Sb}_7\text{Te}_{12}$ Alloy. <i>Physical Review Letters</i> , 2011, 106, 025501.	1.1	172
339	Influence of silicon on the thermally-induced crystallization process of Si-Sb <sub>4</sub> Te phase change materials. <i>Applied Physics Letters</i> , 2011, 99, .	1.5	36
340	Investigation of GeTe/Ge <sub>2</sub> Sb <sub>2</sub> Te <sub>5</sub> Nanocomposite Multilayer Films for Phase-Change Memory Applications. <i>Electrochemical and Solid-State Letters</i> , 2011, 14, H258.	2.2	8
341	A micromachined optical delay line by switchable metamaterials. , 2011, , . Local atomic order of crystalline $\text{Ge}_8\text{Sb}_2\text{Te}_{12}$		0
342	$\text{Ge}_8\text{Sb}_2\text{Te}_{12}$ and as-deposited amorphous structures in $\text{Ge}_8\text{Sb}_2\text{Te}_{12}$	1.1	18
343	Electrical-field induced giant magnetoresistivity in (non-magnetic) phase change films. <i>Applied Physics Letters</i> , 2011, 99, 152105.	1.5	74
344	Computer Simulation of the Early Stages of Crystallization: Application to $\text{Ge}_2\text{Sb}_7\text{Te}_{12}$ Materials. <i>Physical Review Letters</i> , 2011, 107, 145702.	3.9	145
345	$\text{Ge}_2\text{Sb}_7\text{Te}_{12}$ and as-deposited amorphous structures in $\text{Ge}_2\text{Sb}_7\text{Te}_{12}$	1.1	75
346	Band alignment between GeTe and SiO <sub>2</sub> /metals for characterization of junctions in nonvolatile resistance change elements. <i>Applied Physics Letters</i> , 2011, 98, .	1.5	15
347	Insulator-metal transition in GeTe/Sb <sub>2</sub> Te <sub>3</sub> multilayer induced by grain growth and interface barrier. <i>Applied Physics Letters</i> , 2011, 99, .	1.5	18

#	Article	IF	CITATIONS
348	Atomic complexity of the melt-quenched amorphous Ge <sub>2</sub> Sb <sub>2</sub> Te thin films studied by spectroscopic ellipsometry. Journal of Applied Physics, 2011, 109, .	1.1	109
349	Optical characteristics of pulsed laser deposited Ge <sub>2</sub> Sb <sub>2</sub> Te thin films studied by spectroscopic ellipsometry. Journal of Applied Physics, 2011, 109, .	1.1	41
350	Role of Electronic Excitation in the Amorphization of Ge-Sb-Te Alloys. Physical Review Letters, 2011, 107, 015501.	2.9	107
351	Sb-rich Si-Sb-Te phase change material for multilevel data storage: The degree of disorder in the crystalline state. Applied Physics Letters, 2011, 99, .	1.5	29
352	Pressure-induced structural transitions in phase-change materials based on Ge-free Sb-Te alloys. Physical Review B, 2011, 83, .	1.1	13
353	Microstructures corresponding to multilevel resistances of In <sub>3</sub> Sb <sub>1</sub> Te <sub>2</sub> phase-change memory. Applied Physics Letters, 2011, 98, 091915.	1.5	24
354	Negative slopes characterize phase change processes: Case of the Ge <sub>1</sub> Sb <sub>1</sub> Te <sub>1</sub> phase change materials. Applied Physics Letters, 2011, 98, 091915.	1.1	6
355	Physical origin of the resistance drift exponent in amorphous phase change materials. Applied Physics Letters, 2011, 98, .	1.5	116
356	Effects of hydrostatic pressure on the electrical properties of hexagonal Ge <sub>2</sub> Sb <sub>2</sub> Te <sub>5</sub> : Experimental and theoretical approaches. Applied Physics Letters, 2011, 98, .	1.5	10
357	Atomic structure and electronic properties of the Sr <sub>2</sub> Ge <sub>2</sub> Te <sub>5</sub> phase change material. Applied Physics Letters, 2011, 98, 091915.	1.1	7
358	First-principles study of liquid and amorphous In <sub>2</sub> Ge <sub>2</sub> Te <sub>5</sub> phase change materials. Applied Physics Letters, 2011, 98, 091915.	1.1	26
359	Reversible switching of an optical gate based on Si rib waveguides with a Ge <sub>2</sub> Sb <sub>2</sub> Te <sub>5</sub> thin film. Journal of Applied Physics, 2011, 109, 034503.	1.1	56
360	The influence of a temperature dependent bandgap on the energy scale of modulated photocurrent experiments. Journal of Applied Physics, 2011, 110, .	1.1	32
361	Band offsets between SiO <sub>2</sub> and phase change materials in the (GeTe) <sub>x</sub> (Sb <sub>2</sub> Te <sub>3</sub> ) <sub>1-x</sub> pseudobinary system. Applied Physics Letters, 2011, 98, .	1.5	3
362	Instability of nitrogen doped Sb <sub>2</sub> Te <sub>3</sub> for phase change memory application. Journal of Applied Physics, 2011, 110, .	1.1	14
363	Role of mechanical stress in the resistance drift of Ge <sub>2</sub> Sb <sub>2</sub> Te <sub>5</sub> films and phase change memories. Applied Physics Letters, 2011, 99, 223513.	1.5	39
364	Stress reduction and performance improvement of phase change memory cell by using Ge <sub>2</sub> Sb <sub>2</sub> Te <sub>5</sub> /TaOx composite films. Journal of Applied Physics, 2011, 109, 034503.	1.1	29
365	Reversible switching of an optical gate based on Si rib waveguides with a Ge <sub>2</sub> Sb <sub>2</sub> Te <sub>5</sub> thin film. , 2011, , .		0

#	ARTICLE	IF	CITATIONS
366	Reversible phase changes in Ge–Au nanoparticles. Applied Physics Letters, 2011, 98, 193101.	1.5	7
367	Properties of Phase Change Materials Modified by Ion Implantation. Materials Research Society Symposia Proceedings, 2011, 1338, 50601.	0.1	2
368	A Study of Phase Transition Behaviors of Chalcogenide Layers Using In-situ AC Impedance Spectroscopy. Materials Research Society Symposia Proceedings, 2011, 1338, 30801.	0.1	0
369	Polymorphism of Amorphous Ge <sub>2</sub> Sb <sub>2</sub> Te <sub>5</sub> Probed by EXAFS and Raman Spectroscopy. Electrochemical and Solid-State Letters, 2011, 14, H480.	2.2	16
370	Evidence of Crystallization-Induced Segregation in the Phase Change Material Te-Rich GST. Journal of the Electrochemical Society, 2011, 158, H965.	1.3	40
371	Amorphous-Crystal Phase Transitions in Ge <sub>x</sub> Te <sub>1-x</sub> Alloys. Journal of the Electrochemical Society, 2011, 159, H130-H139.	1.3	32
372	Phase Change Behavior in Ag <sub>[sub 10]</sub> Ge <sub>[sub 15]</sub> Te <sub>[sub 75]</sub> and the Electrolytic Resistive Switching in Both Amorphous and Crystalline Ag <sub>[sub 10]</sub> Ge <sub>[sub 15]</sub> Te <sub>[sub 75]</sub> Films. Electrochemical and Solid-State Letters, 2011, 14, H99.	2.2	5
373	Evidence of Heterogeneous Strain during Crystallization of Ge <sub>2</sub> Sb <sub>2</sub> Te <sub>5</sub> Thin Film. Electrochemical and Solid-State Letters, 2011, 14, H285.	2.2	2
374	Phase Change Characteristics of SiO <sub>2</sub> Doped Sb <sub>2</sub> Te <sub>3</sub> Materials for Phase Change Memory Application. Electrochemical and Solid-State Letters, 2011, 14, H404.	2.2	14
375	Epitaxy of Single Crystal Phase Change Materials on Si(111). Materials Research Society Symposia Proceedings, 2011, 1338, 5-10-01.	0.1	2
376	Ion Irradiation on Phase Change Materials. Materials Research Society Symposia Proceedings, 2011, 1354, 73.	0.1	1
377	Tuning the Crystallization Temperature of Amorphous Ge <sub>[sub 2]</sub> Sb <sub>[sub 2]</sub> Te <sub>[sub 5]</sub> by O and Si Recoil Implantation. Electrochemical and Solid-State Letters, 2011, 14, H124.	2.2	13
378	Electronic Excitation Induced Solid-State Amorphization in Ge-Sb-Te Alloy. Materials Research Society Symposia Proceedings, 2011, 1370, 77.	0.1	0
379	Thermal and elastic properties of Ge-Sb-Te based phase-change materials. Materials Research Society Symposia Proceedings, 2011, 1338, 301.	0.1	2
380	Broken Symmetry, Ferroic Phase Transitions and Multifunctional Materials. Integrated Ferroelectrics, 2011, 131, 3-24.	0.3	10
381	Phase Change Line Memory Cell Based on Ge <sub>2</sub> Sb <sub>2</sub> Te <sub>5</sub> Fabricated Using Focused Ion Beam. Japanese Journal of Applied Physics, 2011, 50, 070211.	0.8	1
382	Multi-State Data Storage of Ge <sub>2</sub> Sb <sub>2</sub> Te <sub>5</sub> •Ga <sub>30</sub> Sb <sub>70</sub> Multilayer Films for Phase Change Memory. Electrochemical and Solid-State Letters, 2012, 15, H115.	2.2	7
383	Endurance Enhancement of Elevated-Confined Phase Change Random Access Memory. Japanese Journal of Applied Physics, 2012, 51, 02BD09.	0.8	0

#	ARTICLE	IF	CITATIONS
384	The Influence of Sputtering Power on Phase-Change Films. <i>Electrochemical and Solid-State Letters</i> , 2012, 15, H205.	2.2	0
385	Sb Rich Ge <sub>2</sub> Sb <sub>5</sub> Te <sub>5</sub> Alloy for High-Speed Phase Change Random Access Memory Applications. <i>Chinese Physics Letters</i> , 2012, 29, 107802.	1.3	0
386	Nanometer Resolution XANES Imaging of Individual PC-RAM Devices. <i>Materials Research Society Symposia Proceedings</i> , 2012, 1431, 26.	0.1	0
387	Laser Annealing to Form High-Temperature Phase of FeS <sub>2</sub> . <i>Japanese Journal of Applied Physics</i> , 2012, 51, 02BP10.	0.8	12
388	Polarization dependent optical control of atomic arrangement in multilayer Ge-Sb-Te phase change materials. <i>Applied Physics Letters</i> , 2012, 101, 232101.	1.5	15
389	Ultra-small, self-holding, optical gate switch using Ge <sub>2</sub> Sb <sub>2</sub> Te <sub>5</sub> with a multi-mode Si waveguide. <i>Optics Express</i> , 2012, 20, 10283.	1.7	92
390	Quantitative imaging of the optical near field. <i>Optics Express</i> , 2012, 20, 22063.	1.7	13
391	Band gap widening with time induced by structural relaxation in amorphous Ge <sub>2</sub> Sb <sub>2</sub> Te <sub>5</sub> films. <i>Applied Physics Letters</i> , 2012, 100, 013505.	1.5	62
392	Photonic non-volatile memories using phase change materials. <i>Applied Physics Letters</i> , 2012, 101, .	1.5	139
393	Interface-controlled thermal transport properties in nano-clustered phase change materials. <i>Journal of Applied Physics</i> , 2012, 111, 073528.	1.1	1
394	Phase change behaviors of Zn-doped Ge <sub>2</sub> Sb <sub>2</sub> Te <sub>5</sub> films. <i>Applied Physics Letters</i> , 2012, 101, 051906.	1.5	61
395	Superlattice-like electrode for low-power phase-change random access memory. <i>Applied Physics Letters</i> , 2012, 101, 113104.	1.5	18
396	Electrical and heat conduction mechanisms of GeTe alloy for phase change memory application. <i>Journal of Applied Physics</i> , 2012, 112, 053712.	1.1	22
397	Schottky barrier formation at amorphous-crystalline interfaces of GeSb phase change materials. <i>Applied Physics Letters</i> , 2012, 100, .	1.5	10
398	Coherent Control of the Route of an Ultrafast Magnetic Phase Transition via Low-Amplitude Spin Precession. <i>Physical Review Letters</i> , 2012, 108, 157601.	2.9	107
399	Disorder enhancement due to structural relaxation in amorphous Ge <sub>2</sub> Sb <sub>2</sub> Te <sub>5</sub> . <i>Applied Physics Letters</i> , 2012, 100, 213506.	1.5	27
400	Te-Centric View of the Phase Change Mechanism in Ge-Sb-Te Alloys. <i>Physical Review Letters</i> , 2012, 108, 195506.	2.9	23
401	Synthesis and properties of phase-change Ge-Sb nanoparticles. <i>Journal of Applied Physics</i> , 2012, 112, 034308.	1.1	3

#	ARTICLE	IF	CITATIONS
402	Near-infrared nano-spectroscopy of semiconductor quantum dots using a phase-change mask layer. Applied Physics Letters, 2012, 100, 063111.	1.5	5
403	Recrystallization of an amorphized epitaxial phase-change alloy: A phoenix arising from the ashes. Applied Physics Letters, 2012, 101, 061903.	1.5	18
404	A study of phase transition behaviors of chalcogenide layers using in situ alternative-current impedance spectroscopy. Journal of Applied Physics, 2012, 111, 123706.	1.1	9
405	Weak antilocalization and disorder-enhanced electron interactions in annealed films of the phase-change compound $\text{GeSb}_2\text{Te}_5$ . Physical Review B, 2012, 86, .	1.1	62
406	Observation of polymorphism in the phase change alloy $\text{Ge}_1\text{Sb}_2\text{Te}_4$ . Applied Physics Letters, 2012, 101, .	1.5	20
407	$\text{Ge}_2\text{Sb}_2\text{Te}_5$ phase-change films on polyimide substrates by pulsed laser deposition. Applied Physics Letters, 2012, 101, 031905.	1.5	10
408	Atomic crystal structure of ordered $\text{In}_3\text{Sb}_1\text{Te}_2$ ternary alloy studied by high-resolution transmission electron microscopy. Applied Physics Letters, 2012, 100, .	1.5	11
409	Multiresistance Characteristics of PCRAM With $\text{Ge}_1\text{Cu}_2\text{Te}_3$ and $\text{Ge}_2\text{Sb}_2\text{Te}_5$ Films. IEEE Electron Device Letters, 2012, 33, 1399-1401.	2.2	7
410	Density functional simulations of Sb-rich $\text{GeSbTe}$ phase change alloys. Journal of Physics Condensed Matter, 2012, 24, 385803.	0.7	18
411	Stability of Sb-Te layered structures: First-principles study. Physical Review B, 2012, 85, .	1.1	12
412	Amorphous $\text{Ge}_{15}\text{Te}_{85}$ : density functional, high-energy x-ray and neutron diffraction study. Journal of Physics Condensed Matter, 2012, 24, 015802.	0.7	43
413	Why leaves have stones. Nature Materials, 2012, 11, 271-271.	13.3	4
414	Peierls distortion mediated reversible phase transition in $\text{GeTe}$ under pressure. Proceedings of the National Academy of Sciences of the United States of America, 2012, 109, 5948-5952.	3.3	67
415	Pressure tunes electrical resistivity by four orders of magnitude in amorphous $\text{Ge}_2\text{Sb}_2\text{Te}_5$ phase-change memory alloy. Proceedings of the National Academy of Sciences of the United States of America, 2012, 109, E1055-62.	3.3	58
416	Modeling of Threshold-Voltage Drift in Phase-Change Memory (PCM) Devices. IEEE Transactions on Electron Devices, 2012, 59, 3084-3090.	1.6	18
417	Modeling of Threshold Voltage Drift in Phase Change Memory (PCM) Devices. , 2012, , .		1
418	Crystallization of Nanometer $\text{Ge}_2\text{Sb}_2\text{Te}_5$ Amorphous Regions Embedded in the Hexagonal Close Packed Structure. Electrochemical and Solid-State Letters, 2012, 15, H105.	2.2	5
419	Phonon Properties and Low Thermal Conductivity of Phase Change Material with Superlattice-Like Structure. Applied Physics Express, 2012, 5, 031201.	1.1	10



#	ARTICLE	IF	CITATIONS
420	Application of Positron Beams to the Investigation of Memristive Materials and Diluted Magnetic Semiconductors. Defect and Diffusion Forum, 0, 331, 235-251.	0.4	0
421	Improved thermal and electrical properties of Al-doped $\text{Ge}_2\text{Sb}_2\text{Te}_5$ films for phase-change random access memory. Journal Physics D: Applied Physics, 2012, 45, 375302.	1.3	40
422	Scaling properties of phase-change line memory. Chinese Physics B, 2012, 21, 098401.	0.7	2
423	Thermodynamic, Raman and electrical switching studies on $\text{Si}_{15}\text{Te}_{85-x}\text{Ag}_x$ ( $4 \leq x \leq 20$ ) glasses. Journal of Applied Physics, 2012, 111, .	1.1	12
424	$\text{SixSb}_2\text{Te}$ materials with stable phase for phase change random access memory applications. Journal of Applied Physics, 2012, 111, .	1.1	15
425	On the density of states of germanium telluride. Journal of Applied Physics, 2012, 112, .	1.1	37
426	Crystallization Kinetics of Chalcogenide Glasses. , 2012, , .		0
427	Electrical conductivity and crystallization kinetics in Te-Se glassy system. Journal of Applied Physics, 2012, 111, .	1.1	18
428	Simultaneous calorimetric and quick-EXAFS measurements to study the crystallization process in phase-change materials. Journal of Synchrotron Radiation, 2012, 19, 806-813.	1.0	8
429	Amorphous and crystallized $\text{GeSbTe}$ thin films deposited by pulsed laser: Local structure using Raman scattering spectroscopy. Materials Chemistry and Physics, 2012, 136, 935-941.	2.0	104
430	$\text{CsHgInS}_3$ : a New Quaternary Semiconductor for $\beta$ -ray Detection. Chemistry of Materials, 2012, 24, 4434-4441.	3.2	56
431	$\text{Te}_2\text{Sb}_3$ and $\text{Sb}_3\text{Te}_2$ materials. Journal of Applied Physics, 2012, 111, .	1.1	114
432	Micro-Raman spectroscopy of mechanically exfoliated few-quintuple layers of $\text{Bi}_2\text{Te}_3$ , $\text{Bi}_2\text{Se}_3$ , and $\text{Sb}_2\text{Te}_3$ materials. Journal of Applied Physics, 2012, 111, .	1.1	267
433	Long-lived photoinduced magnetization in copper-doped $\text{ZnSe/CdSe}$ core-shell nanocrystals. Nature Nanotechnology, 2012, 7, 792-797.	15.6	110
434	Threshold switching via electric field induced crystallization in phase-change memory devices. Applied Physics Letters, 2012, 100, 253105.	1.5	26
435	Emerging memories: resistive switching mechanisms and current status. Reports on Progress in Physics, 2012, 75, 076502.	8.1	881
436	A reconsideration of the thermodynamics of phase-change switching. Physica Status Solidi (B): Basic Research, 2012, 249, 1932-1938.	0.7	15
437	Phase change materials: Chalcogenides with remarkable properties due to an unconventional bonding mechanism. Physica Status Solidi (B): Basic Research, 2012, 249, 1843-1850.	0.7	24

#	ARTICLE	IF	CITATIONS
438	Origin, secret, and application of the ideal phase-change material GeSbTe. Physica Status Solidi (B): Basic Research, 2012, 249, 1837-1842.	0.7	90
439	Epitaxial phase-change materials. Physica Status Solidi - Rapid Research Letters, 2012, 6, 415-417.	1.2	29
440	The Science and Technology of Phase Change Materials. Zeitschrift Fur Anorganische Und Allgemeine Chemie, 2012, 638, 2455-2465.	0.6	80
441	Multiscale Quantum Simulation of Resistance Switching in Amorphous Carbon. Procedia Computer Science, 2012, 9, 641-650.	1.2	5
442	Simulation of non-volatile memory cell using chalcogenide glasses. Journal of Alloys and Compounds, 2012, 536, S516-S521.	2.8	4
443	Nanowire phase change memory with carbon nanotube electrodes. , 2012, , .		2
444	Amorphization and amorphous stability of Bi <sub>2</sub> Te <sub>3</sub> chalcogenide films. Applied Physics Letters, 2012, 100, .	1.5	10
445	Heat transfer in nanoelectronics by quantum mechanics. , 2012, , .		2
446	Effect of amorphization on the structural stability and reversibility of Ge <sub>2</sub> Sb <sub>2</sub> Te <sub>5</sub> and oxygen incorporated Ge <sub>2</sub> Sb <sub>2</sub> Te <sub>5</sub> films. Journal of Materials Chemistry, 2012, 22, 16527.	6.7	13
447	Hot-carrier trap-limited transport in switching chalcogenides. Journal of Applied Physics, 2012, 112, .	1.1	36
448	Investigation of threshold switching of Ge <sub>2</sub> Sb <sub>2</sub> Te <sub>5</sub> under triangle current pulses. , 2012, , .		0
449	Phase change materials: Density functional / molecular dynamics simulations of Ag/In-doped Sb <sub>4</sub> Te alloy. , 2012, , .		0
450	Large-area, scalable fabrication of conical TiN/GST/TiN nanoarray for low-power phase change memory. Journal of Materials Chemistry, 2012, 22, 1347-1351.	6.7	9
451	Influence of Partial Substitution of Te by Se and Ge by Sn on the Properties of the Blu-ray Phase-Change Material Ge <sub>8</sub> Sb <sub>2</sub> Te <sub>11</sub> . Chemistry of Materials, 2012, 24, 3582-3590.	3.2	41
452	Si/SnSe <sub>2</sub> Multilayer Films for Phase Change Memory Applications. Integrated Ferroelectrics, 2012, 140, 1-7.	0.3	26
453	First-sharp diffraction peaks in amorphous GeTe and Ge <sub>2</sub> Sb <sub>2</sub> Te <sub>5</sub> films prepared by vacuum-thermal deposition. AIP Advances, 2012, 2, .	0.6	11
454	Creation of Light Scattering Images in a Polymer Film by Quantum Amplified Isomerization. Chemistry of Materials, 2012, 24, 1950-1953.	3.2	2
455	Electrical Wind Force-Driven and Dislocation-Templated Amorphization in Phase-Change Nanowires. Science, 2012, 336, 1561-1566.	6.0	162

#	ARTICLE	IF	CITATIONS
457	Crystal Structure and Physical Properties of the New One-Dimensional Metal Ba <sub>2</sub> Cu <sub>7</sub> Te <sub>6</sub> . Inorganic Chemistry, 2012, 51, 5299-5304.	1.9	7
458	Effect of Pb additive on crystallization kinetics of Se <sub>80</sub> In <sub>20</sub> glassy matrix. Physica B: Condensed Matter, 2012, 407, 3472-3478.	1.3	10
459	Effects of Si-ion implantation on crystallization behavior of Ge <sub>2</sub> Sb <sub>2</sub> Te <sub>5</sub> film. Thin Solid Films, 2012, 520, 6636-6641.	0.8	14
460	Roles of icosahedral and crystal-like order in the hard spheres glass transition. Nature Communications, 2012, 3, 974.	5.8	241
461	Structure of the Amorphous Phase. Springer Series in Materials Science, 2012, , 181-215.	0.4	0
462	Combined experimental and computational study of the recrystallization process induced by electronic interactions of swift heavy ions with silicon carbide crystals. Physical Review B, 2012, 86, .	1.1	80
463	ZnO Nanorod Arrays/ZnO Thin Film Bilayer Structure: From Homojunction Diode and High-Performance Memristor to Complementary 1D1R Application. ACS Nano, 2012, 6, 8407-8414.	7.3	132
464	Characterization of local piezoelectric behavior of ferroelectric GeTe and Ge <sub>2</sub> Sb <sub>2</sub> Te <sub>5</sub> thin films. Journal of Applied Physics, 2012, 112, 052018.	1.1	27
465	Thermal transport in phase-change materials from atomistic simulations. Physical Review B, 2012, 86, .	1.1	75
466	Neural network interatomic potential for the phase change material GeTe. Physical Review B, 2012, 85, .	1.1	198
467	Effect of selenium addition on the GeTe phase change memory alloys. Journal of Alloys and Compounds, 2012, 537, 127-132.	2.8	40
468	Enthalpic relaxation in Ge <sub>2</sub> Sb <sub>2</sub> Se <sub>5</sub> glass. Journal of Non-Crystalline Solids, 2012, 358, 804-809.	1.5	16
469	First-principles simulations of local structure contrast for liquid Ge <sub>1</sub> Sb <sub>2</sub> Te <sub>4</sub> , Ge <sub>2</sub> Sb <sub>2</sub> Te <sub>5</sub> , and Ge <sub>4</sub> Sb <sub>1</sub> Te <sub>5</sub> alloys. Computational Materials Science, 2012, 61, 287-290.	1.4	10
470	Perspective: Supercooled liquids and glasses. Journal of Chemical Physics, 2012, 137, 080901.	1.2	427
471	Capacitance characterization of Ge <sub>15</sub> Sb <sub>85</sub> phase-change thin films. Physica Status Solidi (A) Applications and Materials Science, 2012, 209, 2476-2480.	0.8	10
472	Making the semiconductor-metal transition in a growth-dominant phase-change alloy InSb for double density blue-ray super-ROM disc. Physica Status Solidi (B): Basic Research, 2012, 249, 1992-1998.	0.7	8
473	Dynamics of crystallization with fractal geometry: Extended KJMA approach in glasses. Physica Status Solidi (B): Basic Research, 2012, 249, 2024-2027.	0.7	8
474	Breakdown of Stokes-Einstein relation in the supercooled liquid state of phase change materials. Physica Status Solidi (B): Basic Research, 2012, 249, 1880-1885.	0.7	75

#	ARTICLE	IF	CITATIONS
475	Characterization of Ge <sub>2</sub> Sb <sub>2</sub> Te <sub>5</sub> thin film alloys using conductive tip atomic force microscopy. Physica Status Solidi (B): Basic Research, 2012, 249, 1945-1950.	0.7	3
476	Bonding and optical contrast in phase change memory materials. Physica Status Solidi (B): Basic Research, 2012, 249, 1867-1873.	0.7	6
477	On the epitaxy of germanium telluride thin films on silicon substrates. Physica Status Solidi (B): Basic Research, 2012, 249, 1939-1944.	0.7	35
478	Midgap states, Raman scattering, glass homogeneity, percolative rigidity and stress transitions in chalcogenides. Physica Status Solidi (B): Basic Research, 2012, 249, 2013-2018.	0.7	16
479	Phase change processors, memristors and memflectors. Physica Status Solidi (B): Basic Research, 2012, 249, 1978-1984.	0.7	22
480	Role of electronic excitation in phase change memory materials: A brief review. Physica Status Solidi (B): Basic Research, 2012, 249, 1861-1866.	0.7	33
481	Observing the amorphous to crystalline phase transition in Ge <sub>2</sub> Sb <sub>2</sub> Te <sub>5</sub> non-volatile memory materials from <i>ab initio</i> molecular dynamics simulations. Physica Status Solidi (B): Basic Research, 2012, 249, 1886-1889.	0.7	5
482	Crystal Structures of Photovoltaic Chalcogenides, an Intricate Puzzle to Solve: the Cases of CIGSe and CZTS Materials. Zeitschrift Fur Anorganische Und Allgemeine Chemie, 2012, 638, 2571-2577.	0.6	111
483	Bond orientational order in liquids: Towards a unified description of water-like anomalies, liquid-liquid transition, glass transition, and crystallization. European Physical Journal E, 2012, 35, 113.	0.7	274
484	Topological materials. Reports on Progress in Physics, 2012, 75, 096501.	8.1	339
485	Photomagnetism in Cyano-Bridged Bimetal Assemblies. Accounts of Chemical Research, 2012, 45, 1749-1758.	7.6	260
486	Crystallization Kinetics in Amorphous and Glassy Materials. Hot Topics in Thermal Analysis and Calorimetry, 2012, , 291-324.	0.5	1
487	Ultra-thin perfect absorber employing a tunable phase change material. Applied Physics Letters, 2012, 101, .	1.5	519
488	Metal Oxide Resistive Switching Memory. Springer Series in Materials Science, 2012, , 303-335.	0.4	17
489	Te-based chalcogenide films with high thermal stability for phase change memory. Journal of Applied Physics, 2012, 111, 093514.	1.1	4
490	Phase Transformation of Alternately Layered Bi/Se Structures to Well-Ordered Single Crystalline Bi <sub>2</sub> Se <sub>3</sub> Structures by a Self-Organized Ordering Process. Journal of Physical Chemistry C, 2012, 116, 3737-3746.	1.5	14
491	Effect of metals and annealing on specific contact resistivity of GeTe/metal contacts. Applied Physics Letters, 2012, 101, .	1.5	22
492	Molecular Germanium Selenophosphate Salts: Phase-Change Properties and Strong Second Harmonic Generation. Journal of the American Chemical Society, 2012, 134, 20733-20744.	6.6	74

#	ARTICLE	IF	CITATIONS
493	Phase Change Memory and Chalcogenide Materials for Neuromorphic Applications: Emphasis on Synaptic Plasticity. , 2012, , 155-178.		4
494	Ti <sub>10</sub> Sb <sub>60</sub> Te <sub>30</sub> for phase change memory with high-temperature data retention and rapid crystallization speed. Applied Physics Letters, 2012, 100, .	1.5	69
495	Investigation of CuSb <sub>4</sub> Te <sub>2</sub> alloy for high-speed phase change random access memory applications. Applied Physics Letters, 2012, 100, .	1.5	52
496	Structural transformation of Sb-based high-speed phase-change material. Acta Crystallographica Section B: Structural Science, 2012, 68, 559-570.	1.8	9
497	Defect models and electrical storage mechanism in GeSbTe phase change materials. Journal of Non-Crystalline Solids, 2012, 358, 2393-2397.	1.5	18
498	Sub-gap states in Ge <sub>2</sub> Sb <sub>2</sub> Te <sub>5</sub> phase change films. Journal of Non-Crystalline Solids, 2012, 358, 2366-2368.	1.5	7
499	Investigation on Sb-rich Sbâ€“Seâ€“Te phase-change material for phase change memory application. Journal of Non-Crystalline Solids, 2012, 358, 2409-2411.	1.5	22
500	Thermally reversing window in Ge <sub>15</sub> Te <sub>85</sub> âˆ“In glasses: Nanoindentation and micro-Raman studies. Journal of Non-Crystalline Solids, 2012, 358, 3103-3108.	1.5	15
501	Switching and memory effects in partly crystallized amorphous Ge <sub>2</sub> Sb <sub>2</sub> Te <sub>5</sub> films in a current controlled mode. Journal of Non-Crystalline Solids, 2012, 358, 3299-3303.	1.5	17
502	Locally formation of Ag nanoparticles in chalcogenide phase change thin films induced by nanosecond laser pulses. Materials Chemistry and Physics, 2012, 135, 467-473.	2.0	15
503	Role of vacancies in metalâ€“insulator transitions of crystalline phase-change materials. Nature Materials, 2012, 11, 952-956.	13.3	258
504	Ultra-fast calorimetry study of Ge <sub>2</sub> Sb <sub>2</sub> Te <sub>5</sub> crystallization between dielectric layers. Applied Physics Letters, 2012, 101, 091906.	1.5	43
505	Embedded Binary Eutectic Alloy Nanostructures. Jom, 2012, 64, 1158-1164.	0.9	4
506	Nanosecond threshold switching of GeTe <sub>6</sub> cells and their potential as selector devices. Applied Physics Letters, 2012, 100, .	1.5	120
507	Metamaterials Application in Sensing. Sensors, 2012, 12, 2742-2765.	2.1	434
508	Phase-Change Materials Exhibiting Tristability: Interconverting Forms of Crystalline Î±-, Î²-, and Glassy K <sub>2</sub> ZnSn <sub>3</sub> S <sub>8</sub> . Inorganic Chemistry, 2012, 51, 7963-7965.	1.9	25
509	Minerals as Advanced Materials II. , 2012, , .		16
510	Laser Writing of Multiscale Chiral Polymer Metamaterials. Advances in OptoElectronics, 2012, 2012, 1-7.	0.6	13

#	ARTICLE	IF	CITATIONS
511	Phase change writing in Ge-Sb-Te film with ultraviolet laser. , 2012, , .		0
512	Observation of high pressure o-GeTe phase at ambient pressure in Si-Te-Ge glasses. AIP Advances, 2012, 2, 012172.	0.6	1
513	Study of interfaces between phase-change material Ge <sub>2</sub> Sb <sub>2</sub> Te <sub>5</sub> and prevalent complementary metal-oxide semiconductor materials by XPS. Surface and Interface Analysis, 2012, 44, 1013-1017.	0.8	5
514	Structural, electrical, and optical properties of thermally evaporated GeTe, GeSbTe, and SbTe thin films. Physica Status Solidi (A) Applications and Materials Science, 2012, 209, 2014-2019.	0.8	13
515	Density functional study of the TiN/Ge <sub>2</sub> Sb <sub>2</sub> Te <sub>5</sub> interface. Physica Status Solidi (B): Basic Research, 2012, 249, 2140-2144.	0.7	9
516	Two centuries of memristors. Nature Materials, 2012, 11, 478-481.	13.3	334
517	Nature of defects and gap states in GeTe model phase change materials. Physical Review B, 2012, 85, .	1.1	35
518	Fast transformers. Nature Materials, 2012, 11, 270-271.	13.3	44
519	Phase Change Materials: Challenges on the Path to a Universal Storage Device. Annual Review of Condensed Matter Physics, 2012, 3, 215-237.	5.2	80
520	The Roles of the GeTe Core Network and the SbTe Pseudo Network During Rapid Nucleation-Dominated Crystallization of Amorphous Ge <sub>2</sub> Sb <sub>2</sub> Te <sub>5</sub> . Advanced Functional Materials, 2012, 22, 2251-2257.	7.8	29
521	An Electronic Version of Pavlov's Dog. Advanced Functional Materials, 2012, 22, 2744-2749.	7.8	168
522	Casimir Force Contrast Between Amorphous and Crystalline Phases of AIST. Advanced Functional Materials, 2012, 22, 3729-3736.	7.8	35
523	Distinct Molecular Motions in a Switchable Chromophore Dielectric 4-(Dimethylamino)-4'-methylstilbazolium Trifluoromethanesulfonate. Advanced Functional Materials, 2012, 22, 4855-4861.	11.1	133
524	Patterning Techniques for Metal Organic Frameworks. Advanced Materials, 2012, 24, 3153-3168.	11.1	111
525	Magnetic Properties of Crystalline and Amorphous Phase-Change Materials Doped with 3d Impurities. Advanced Materials, 2012, 24, 4387-4391.	11.1	33
526	Characterization of supercooled liquid Ge <sub>2</sub> Sb <sub>2</sub> Te <sub>5</sub> and its crystallization by ultrafast-heating calorimetry. Nature Materials, 2012, 11, 279-283.	13.3	423
527	Invited paper: Composition-dependent electrical properties of ternary Ag <sub>x</sub> Sb <sub>1-x</sub> Te <sub>y</sub> thin films synthesized by cationic exchange reaction. Electronic Materials Letters, 2012, 8, 219-224.	1.0	1
528	Amorphous and nanophase microstructures of bulk Se-based chalcogenide alloys. Optoelectronics Letters, 2012, 8, 165-167.	0.4	1

#	ARTICLE	IF	CITATIONS
529	Selective etching characteristics of the AgInSbTe phase-change film in laser thermal lithography. Applied Physics A: Materials Science and Processing, 2012, 107, 221-225.	1.1	13
530	Ferroelectric $\text{PbTiO}_3$ Nanodots Shattered Using Atomic Force Microscopy. Journal of the American Ceramic Society, 2012, 95, 480-482.	1.9	3
531	Role of local structure in the phase change of $\text{GeTe}$ films. Chemical Physics Letters, 2012, 534, 58-61.	1.2	14
532	Size-dependent nucleation rate of $\text{Ge}_2\text{Sb}_2\text{Te}_5$ nanowires in the amorphous phase and crystallization activation energy. Materials Letters, 2012, 76, 138-140.	1.3	8
533	Superlattice-like GaSb/Sb <sub>2</sub> Te <sub>3</sub> films for low-power phase change memory. Scripta Materialia, 2012, 66, 702-705.	2.6	21
534	In situ transmission electron microscopy investigation of Six Sb <sub>100-x</sub> phase-change materials. Materials Letters, 2012, 84, 20-23.	1.3	1
535	Multi-variable thermal design of T-structured phase-change memory cell using advanced response surface method. Microelectronic Engineering, 2012, 91, 1-8.	1.1	1
536	Dynamic switching characteristic dependence on sidewall angle for phase change memory. Solid-State Electronics, 2012, 67, 1-5.	0.8	6
537	Optical and electrical properties of Te-substituted $\text{SnSbSe}$ semiconducting thin films. Thin Solid Films, 2012, 520, 1757-1761.	0.8	11
538	Electrical switching and optical studies on amorphous $\text{Ge}_x\text{Se}_{35-x}\text{Te}_{65}$ thin films. Thin Solid Films, 2012, 520, 2278-2282.	0.8	15
539	Spectroscopic investigation on phase transitions for $\text{Ge}_2\text{Sb}_2\text{Te}_5$ in a wide photon energy and high temperature region. Thin Solid Films, 2012, 520, 3458-3463.	0.8	10
540	Combinatorial thin film materials science: From alloy discovery and optimization to alloy design. Thin Solid Films, 2012, 520, 5491-5499.	0.8	73
541	Electron beam evaporation deposition and properties of Abrupt GST/Si heterojunction structure. Vacuum, 2012, 86, 804-807.	1.6	2
542	Different crystallization processes of as-deposited amorphous $\text{Ge}_2\text{Sb}_2\text{Te}_5$ films on nano- and picosecond single laser pulse irradiation. Physica B: Condensed Matter, 2012, 407, 2447-2450.	1.3	25
543	An Ultra-Low Reset Current Cross-Point Phase Change Memory With Carbon Nanotube Electrodes. IEEE Transactions on Electron Devices, 2012, 59, 1155-1163.	1.6	79
544	Photoinduced etching of thin films of chalcogenide glassy semiconductors. Semiconductors, 2012, 46, 504-508.	0.2	11
545	Physics of switching and memory effects in chalcogenide glassy semiconductors. Semiconductors, 2012, 46, 559-590.	0.2	58
546	Atomic Switch: Atom/Ion Movement Controlled Devices for Beyond VonNeumann Computers. Advanced Materials, 2012, 24, 252-267.	11.1	338

#	ARTICLE	IF	CITATIONS
547	Magnetic Contrast in Phase-Change Materials Doped with Fe Impurities. <i>Advanced Materials</i> , 2012, 24, 1429-1433.	11.1	23
548	Studies on electrical switching behavior and optical band gap of amorphous Ge <sub>40</sub> Te <sub>40</sub> Sn thin films. <i>Applied Physics A: Materials Science and Processing</i> , 2012, 106, 989-994.	1.1	14
549	Optical properties of cubic and rhombohedral GeTe. <i>Journal of Applied Physics</i> , 2013, 113, .	1.1	21
550	Creation of a longitudinally polarized subwavelength hotspot with an ultra-thin planar lens: vectorial Rayleigh-Sommerfeld method. <i>Laser Physics Letters</i> , 2013, 10, 065004.	0.6	53
551	An explanation of the crystallization of amorphous Ge <sub>2</sub> Sb <sub>2</sub> Te <sub>5</sub> films induced by a short Gaussian laser pulse. <i>Applied Physics Letters</i> , 2013, 103, 051905.	1.5	23
552	Structural evolution of Ga-Ge-Te glasses by combined EXAFS and XPS analysis. <i>Journal of Chemical Physics</i> , 2013, 139, 054508.	1.2	15
553	A Proposal for Hybrid Memristor-CMOS Spiking Neuromorphic Learning Systems. <i>IEEE Circuits and Systems Magazine</i> , 2013, 13, 74-88.	2.6	56
554	Enhanced modulation of scattered light from phase-change nanoparticles by tailored plasmonic mirror image. <i>Applied Physics Letters</i> , 2013, 103, 041108.	1.5	5
555	Phase-Change Nanodot Material for an Optical Memory. <i>Advanced Optical Materials</i> , 2013, 1, 820-826.	3.6	10
556	Atomic-Scale Interfacial Structure in Rock Salt and Tetradymite Chalcogenide Thermoelectric Materials. <i>Jom</i> , 2013, 65, 390-400.	0.9	24
557	Nanostructural Anisotropy Underlies Anisotropic Electrical Bistability. <i>Advanced Materials</i> , 2013, 25, 1623-1628.	11.1	8
558	Atomistic origin of rapid crystallization of Ag-doped Ge-Sb-Te alloys: A joint experimental and theoretical study. <i>Physica Status Solidi (B): Basic Research</i> , 2013, 250, 1785-1790.	0.7	12
559	Magnetoresistance in granular films formed by CoFe and phase change material. <i>Applied Physics A: Materials Science and Processing</i> , 2013, 113, 221-229.	1.1	5
560	Investigation of a selective switching device using a phase-change material for a 3-dimensional PCRAM array. <i>Journal of the Korean Physical Society</i> , 2013, 62, 1258-1263.	0.3	2
561	Phase homogeneity and crystal structure of Sb <sub>88</sub> Te <sub>12</sub> synthesized by melt-quench method. <i>Acta Metallurgica Sinica (English Letters)</i> , 2013, 26, 441-446.	1.5	3
562	Performance improvement of phase-change memory cell using AlSb <sub>3</sub> Te and atomic layer deposition TiO <sub>2</sub> buffer layer. <i>Nanoscale Research Letters</i> , 2013, 8, 77.	3.1	11
563	Au-catalyzed synthesis and characterisation of phase change Ge-doped Sb <sub>40</sub> Te nanowires by MOCVD. <i>Journal of Crystal Growth</i> , 2013, 370, 323-327.	0.7	18
564	Overcoming the retention vs. voltage-trade-off in nonvolatile organic memory: Ag nanoparticles covered with dipolar self-assembled monolayers as robust charge storage nodes. <i>Organic Electronics</i> , 2013, 14, 3260-3266.	1.4	19



#	ARTICLE	IF	CITATIONS
565	Polarity-dependent reversible resistance switching in as-deposited AgInSbTe phase change film. <i>Physica B: Condensed Matter</i> , 2013, 408, 12-15.	1.3	2
566	Nanoscale electronic synapses using phase change devices. <i>ACM Journal on Emerging Technologies in Computing Systems</i> , 2013, 9, 1-20.	1.8	123
567	Structural, electrical and optical study of thermally evaporated Ge <sub>8</sub> Sb <sub>2</sub> Te <sub>11</sub> thin films. <i>Thin Solid Films</i> , 2013, 531, 577-582.	0.8	10
568	Temperature-Induced and Photo-Induced Phase Transition in a Bistable Metal-Cyanide Polymer. , 2013, , 693-727.		0
569	Crystal structures of $\epsilon$ -phase in the Sb-Te binary alloy system. <i>Crystal Research and Technology</i> , 2013, 48, 1011-1021.	0.6	20
570	Thermal properties of Te-based phase-change materials. <i>Proceedings of SPIE</i> , 2013, , .	0.8	4
571	Chemical mechanical planarization of amorphous Ge <sub>2</sub> Sb <sub>2</sub> Te <sub>5</sub> using KClO <sub>4</sub> as oxidizer in acidic slurry. , 2013, , .		1
572	Density functional simulations of hexagonal Ge <sub>2</sub> Sb <sub>2</sub> Te <sub>5</sub> at high pressure. <i>Physical Review B</i> , 2013, 87, .	1.1	5
573	Real-time measurement of electrical and optical transients of as-deposited amorphous AgInSbTe thin films during crystallization induced by single-shot picosecond laser pulses. , 2013, , .		0
574	Interpretation of experimental dependencies of the switching effect in Ge <sub>S</sub> b <sub>T</sub> e. <i>Physica Status Solidi (B): Basic Research</i> , 2013, 250, 1563-1567.	0.7	3
575	Optical properties and phase transition in photodoped amorphous Ge-Sb-Te:Ag thin films. <i>Thin Solid Films</i> , 2013, 540, 271-276.	0.8	9
576	Fast Crystallization of the Phase Change Compound GeTe by Large-Scale Molecular Dynamics Simulations. <i>Journal of Physical Chemistry Letters</i> , 2013, 4, 4241-4246.	2.1	133
577	Nanoscale optical features via hot-stamping of As <sub>2</sub> Se <sub>3</sub> glass. <i>Proceedings of SPIE</i> , 2013, , .	0.8	7
578	Models and Materials for Topological Insulators. <i>Contemporary Concepts of Condensed Matter Science</i> , 2013, 6, 59-89.	0.5	3
579	Bonding and elastic properties of amorphous AlYB. <i>Solid State Communications</i> , 2013, 169, 6-9.	0.9	31
580	Effect of antimony addition on thermal stability and crystallization kinetics of germanium-selenium alloys. <i>Journal of Non-Crystalline Solids</i> , 2013, 371-372, 1-5.	1.5	9
581	Development of a laboratory system hard X-ray photoelectron spectroscopy and its applications. <i>Journal of Electron Spectroscopy and Related Phenomena</i> , 2013, 190, 210-221.	0.8	38
582	<sup>125</sup> Te NMR chemical-shift trends in PbTe-GeTe and PbTe-SnTe alloys. <i>Solid State Nuclear Magnetic Resonance</i> , 2013, 55-56, 79-83.	1.5	11

#	ARTICLE	IF	CITATIONS
583	Study on GeGaSbTe film for long data retention phase change memory application. Journal of Non-Crystalline Solids, 2013, 381, 54-57.	1.5	9
584	Evidence for topological band inversion of the phase change material Ge <sub>2</sub> Sb <sub>2</sub> Te <sub>5</sub> . Applied Physics Letters, 2013, 103, .	1.5	28
585	Non-volatile memory based on the ferroelectric photovoltaic effect. Nature Communications, 2013, 4, 1990.	5.8	394
586	Telluroether and Selenoether Complexes as Single Source Reagents for Low Pressure Chemical Vapor Deposition of Crystalline Ga <sub>2</sub> Te <sub>3</sub> and Ga <sub>2</sub> Se <sub>3</sub> Thin Films. Chemistry of Materials, 2013, 25, 1829-1836.	3.2	37
587	Phase transition characteristics of Al-Sb phase change materials for phase change memory application. Applied Physics Letters, 2013, 103, 072114.	1.5	57
588	Modeling of readback signal generated by scanning PCM surfaces. , 2013, , .		1
589	Building Neuromorphic Circuits with Memristive Devices. IEEE Circuits and Systems Magazine, 2013, 13, 56-73.	2.6	95
590	Endurance Improvement Technology With Nitrogen Implanted in the Interface of $\{m WSiO\}_{f x}$ Resistance Switching Device. IEEE Electron Device Letters, 2013, 34, 864-866.	2.2	40
591	Temperature dependent resonant X-ray diffraction of single-crystalline Ge <sub>2</sub> Sb <sub>2</sub> Te <sub>5</sub> . CrystEngComm, 2013, 15, 4823.	1.3	55
592	Characterization of Physical Properties for Zn-Doped Sb <sub>3</sub> Te Films. Applied Physics Express, 2013, 6, 095801.	1.1	4
593	A comparative study on optical properties of Seâ€“Znâ€“In and Seâ€“Znâ€“Teâ€“In chalcogenide glasses. Optik, 2013, 124, 2187-2190.	1.4	12
594	Memristive devices for computing. Nature Nanotechnology, 2013, 8, 13-24.	15.6	3,019
595	Facile solution routes for the syntheses of GeTe nanocrystals. RSC Advances, 2013, 3, 288-292.	1.7	9
596	Low operation voltage macromolecular composite memory assisted by graphene nanoflakes. Journal of Materials Chemistry C, 2013, 1, 552-559.	2.7	46
597	Nucleation and growth phenomena in nanosized electrochemical systems for resistive switching memories. Journal of Solid State Electrochemistry, 2013, 17, 365-371.	1.2	80
598	Description of enthalpy relaxation dynamics in terms of TNM model. Journal of Non-Crystalline Solids, 2013, 378, 186-195.	1.5	61
599	Nucleation and growth in amorphous (GeS <sub>2</sub> ) <sub>0.9</sub> (Sb <sub>2</sub> S <sub>3</sub> ) <sub>0.1</sub> thin films. Journal of Crystal Growth, 2013, 382, 87-93.	0.7	7
600	The amount of Ge tunes the atomic structure of amorphous Ge <sub>x</sub> Te <sub>1-x</sub> alloy. Chemical Physics Letters, 2013, 556, 108-112.	1.2	7

#	ARTICLE	IF	CITATIONS
601	Effect of Sn addition on the optical constants of Ge <sub>1-x</sub> Sb <sub>x</sub> S thin films based only on their measured reflectance spectra. <i>Journal of Alloys and Compounds</i> , 2013, 561, 284-290.	2.8	52
602	Phase-change behaviors of Sb <sub>80</sub> Te <sub>20</sub> /SbSe nanocomposite multilayer films. <i>Scripta Materialia</i> , 2013, 68, 522-525.	2.6	9
603	The race of phase change memories to nanoscale storage and applications. <i>Microelectronic Engineering</i> , 2013, 109, 351-356.	1.1	76
604	Electronic structure and optical band gap of silver photo-diffused Ge <sub>2</sub> Sb <sub>2</sub> Te <sub>5</sub> thin film. <i>Applied Surface Science</i> , 2013, 273, 437-443.	3.1	14
605	Facile and highly efficient microencapsulation of a phase change material using tubular microfluidics. <i>Colloids and Surfaces A: Physicochemical and Engineering Aspects</i> , 2013, 422, 61-67.	2.3	55
606	Combined in situ x-ray scattering and electrical measurements for characterizing phase transformations in nanometric functional films. <i>Thin Solid Films</i> , 2013, 541, 21-27.	0.8	11
607	Correlation between crystallization behavior, electrical switching and local atomic structure of Ge <sub>1-x</sub> Te glasses. <i>Journal of Non-Crystalline Solids</i> , 2013, 368, 34-39.	1.5	18
608	Towards artificial neurons and synapses: a materials point of view. <i>RSC Advances</i> , 2013, 3, 3169.	1.7	171
609	Laser-induced synthesis of selenium, silver and silver <sub>2</sub> selenide nanocrystallites in amorphous Se <sub>98</sub> Ag <sub>2</sub> alloy. <i>Philosophical Magazine Letters</i> , 2013, 93, 174-181.	0.5	0
610	Self-Assembled Incorporation of Modulated Block Copolymer Nanostructures in Phase-Change Memory for Switching Power Reduction. <i>ACS Nano</i> , 2013, 7, 2651-2658.	7.3	74
611	Physical ageing in Se <sub>1-x</sub> Te <sub>x</sub> Sb glasses. <i>Journal of Physics and Chemistry of Solids</i> , 2013, 74, 804-810.	1.9	15
612	BiFeO <sub>3</sub> single crystal as resistive switching element for application in microelectronic devices. <i>Phase Transitions</i> , 2013, 86, 284-289.	0.6	7
613	Crystal structure assessment of Ge <sub>1-x</sub> Sb <sub>x</sub> Te phase change nanowires. <i>Nanoscale</i> , 2013, 5, 1557.	2.8	23
614	Synchronic Transformations of Molecular States and Macroscopic Phases in Valence $\tau$ tautomer Complexes. <i>European Journal of Inorganic Chemistry</i> , 2013, 2013, 642-652.	1.0	15
615	Light control in Ge <sub>2</sub> Sb <sub>2</sub> Te <sub>5</sub> -coated opaline photonic crystals mediated by interplay of Wood anomalies and 3D Bragg diffraction. <i>Journal of Applied Physics</i> , 2013, 113, 144311.	1.1	5
616	Influences of metal, non-metal precursors, and substrates on atomic layer deposition processes for the growth of selected functional electronic materials. <i>Coordination Chemistry Reviews</i> , 2013, 257, 3154-3176.	9.5	48
617	Single Pulse Laser $\tau$ nduced Phase Transitions of PLD $\tau$ Deposited Ge <sub>2</sub> Sb <sub>2</sub> Te <sub>5</sub> Films. <i>Advanced Functional Materials</i> , 2013, 23, 3621-3627.	7.8	34
618	Phase-change material Ge <sub>0.61</sub> Sb <sub>2</sub> Te for application in high-speed phase change random access memory. <i>Applied Physics Letters</i> , 2013, 102, .	1.5	23

#	ARTICLE	IF	CITATIONS
619	Elastic resistance change and action potential generation of non-faradaic Pt/TiO <sub>2</sub> /Pt capacitors. <i>Nanoscale</i> , 2013, 5, 6363.	2.8	16
620	Applications of high throughput (combinatorial) methodologies to electronic, magnetic, optical, and energy-related materials. <i>Journal of Applied Physics</i> , 2013, 113, .	1.1	202
621	Mechanisms of Atomic Motion Through Crystalline GeTe. <i>Chemistry of Materials</i> , 2013, 25, 2220-2226.	3.2	38
622	First principles simulation of amorphous InSb. <i>Physical Review B</i> , 2013, 87, .	1.1	16
623	Reversible Amorphous-to-Amorphous Transitions in Chalcogenide Films: Correlating Changes in Structure and Optical Properties. <i>Advanced Functional Materials</i> , 2013, 23, 2052-2059.	7.8	20
624	Direct Observation of a Metastable Crystal Phase of Li <sub>x</sub> FePO <sub>4</sub> under Electrochemical Phase Transition. <i>Journal of the American Chemical Society</i> , 2013, 135, 5497-5500.	6.6	177
625	Size-dependent chemical transformation, structural phase change, and optical properties of nanowires. <i>Philosophical Magazine</i> , 2013, 93, 2089-2121.	0.7	23
626	An All-Optical, Non-volatile, Bidirectional, Phase-Change Meta-Switch. <i>Advanced Materials</i> , 2013, 25, 3050-3054.	11.1	409
627	GeTe <sub>4</sub> as a Candidate for Phase Change Memory Application. <i>Chinese Physics Letters</i> , 2013, 30, 058101.	1.3	4
628	Vacancy mediated three-center four electron bonds in GeTe <sub>2</sub> Te <sub>3</sub> phase-change memory alloys. <i>Physical Review B</i> , 2013, 87, .	1.1	76
629	Recent advances in IV-VI semiconductor nanocrystals: synthesis, mechanism, and applications. <i>RSC Advances</i> , 2013, 3, 8104.	1.7	76
630	Photodynamics of Schiff Base Salicylideneaniline: Trajectory Surface-Hopping Simulations. <i>Journal of Physical Chemistry A</i> , 2013, 117, 4574-4583.	1.1	78
631	Wavelength Dependence of Photostructural Transformations in As <sub>2</sub> S <sub>3</sub> Thin Films. <i>Physics Procedia</i> , 2013, 44, 75-81.	1.2	7
632	Electrical Performance and Scalability of Pt Dispersed SiO <sub>2</sub> Nanometallic Resistance Switch. <i>Nano Letters</i> , 2013, 13, 3213-3217.	4.5	175
633	Comparison of optical transients during the picosecond laser pulse-induced crystallization of GeSbTe and AgInSbTe phase-change thin films: Nucleation-driven versus growth-driven processes. <i>Physica B: Condensed Matter</i> , 2013, 424, 1-7.	1.3	10
634	Crystallization characteristics of Mg-doped Ge <sub>2</sub> Sb <sub>2</sub> Te <sub>5</sub> films for phase change memory applications. <i>Applied Surface Science</i> , 2013, 264, 269-272.	3.1	29
635	Lithographically Patterned p-Type Sb <sub>x</sub> Te <sub>y</sub> Nanoribbons with Controlled Morphologies and Dimensions. <i>Journal of Physical Chemistry C</i> , 2013, 117, 17303-17308.	1.5	4
636	Large Resistive Switching in Ferroelectric BiFeO <sub>3</sub> Nano-Island Based Switchable Diodes. <i>Advanced Materials</i> , 2013, 25, 2339-2343.	11.1	192

#	ARTICLE	IF	CITATIONS
637	Stress-Induced Crystallization of Ge-Doped Sb Phase-Change Thin Films. <i>Crystal Growth and Design</i> , 2013, 13, 220-225.	1.4	16
638	Telluride glasses for far infrared photonic applications. <i>Optical Materials Express</i> , 2013, 3, 1049.	1.6	61
639	Self-Aligned Nanotubeâ€Nanowire Phase Change Memory. <i>Nano Letters</i> , 2013, 13, 464-469.	4.5	118
640	Solution-Based Synthesis of GeTe Octahedra at Low Temperature. <i>Inorganic Chemistry</i> , 2013, 52, 14326-14333.	1.9	20
641	Three-Dimensional Nanomechanical Mapping of Amorphous and Crystalline Phase Transitions in Phase-Change Materials. <i>ACS Applied Materials &amp; Interfaces</i> , 2013, 5, 11441-11445.	4.0	15
642	Reversible Phase Transition of 1,4-Diazoniabicyclo[2.2.2]octane-1-acetate-4-acetic Acid Chloride Trihydrate. <i>Crystal Growth and Design</i> , 2013, 13, 4025-4030.	1.4	35
643	Confined Crystals of the Smallest Phase-Change Material. <i>Nano Letters</i> , 2013, 13, 4020-4027.	4.5	73
644	The Solid Solution Series (GeTe) <sub>x</sub> (LiSbTe) <sub>2</sub> (1 ≤ x ≤ 100) Tj ETQq1 1 0.784314 <i>Inorganic Chemistry</i> , 2013, 52, 11288-11294.	1.9	23
645	DFT Studies of Pristine Hexagonal Ge <sub>1</sub> Sb <sub>2</sub> Te <sub>4</sub> (0001), Ge <sub>2</sub> Sb <sub>2</sub> Te <sub>5</sub> (0001), and Ge <sub>1</sub> Sb <sub>4</sub> Te <sub>7</sub> (0001) Surfaces. <i>Journal of Physical Chemistry C</i> , 2013, 117, 15075-15089.	1.5	29
646	(GeTe) <sub>x</sub> â€(Sb <sub>2</sub> Te <sub>3</sub> ) <sub>1</sub> phaseâ€change thin films as potential thermoelectric materials. <i>Physica Status Solidi (A) Applications and Materials Science</i> , 2013, 210, 147-152.	0.8	61
647	Stoichiometry dependence of resistance drift phenomena in amorphous GeSnTe phase-change alloys. <i>Journal of Applied Physics</i> , 2013, 113, .	1.1	31
648	TWO CENTURIES OF MEMRISTORS. , 2013, , 508-517.		5
649	Origin of the unusual reflectance and density contrasts in the phase-change material Cu <sub>2</sub> GeTe <sub>3</sub> . <i>Applied Physics Letters</i> , 2013, 102, 224105.	1.5	37
650	Local order of Ge atoms in amorphous GeTe nanoscale ultrathin films. <i>Applied Physics Letters</i> , 2013, 103, .	1.5	21
651	Communication: Van der Waals corrections for an improved structural description of telluride based materials. <i>Journal of Chemical Physics</i> , 2013, 138, 061103.	1.2	37
652	Characterization of the thermal properties for Si-implanted Sb <sub>2</sub> Te <sub>3</sub> phase change material. <i>Applied Physics Letters</i> , 2013, 102, .	1.5	10
653	Temperature dependence of the thermal properties of InSb materials used in data storage. <i>Journal of Applied Physics</i> , 2013, 114, .	1.1	22
654	Terahertz and direct current losses and the origin of non-Drude terahertz conductivity in the crystalline states of phase change materials. <i>Journal of Applied Physics</i> , 2013, 114, 233105.	1.1	10

#	ARTICLE	IF	CITATIONS
655	Observation of T2-like coherent optical phonons in epitaxial Ge <sub>2</sub> Sb <sub>2</sub> Te <sub>5</sub> /GaSb(001) films. Scientific Reports, 2013, 3, 2965.	1.6	7
656	System of laser pump and synchrotron radiation probe microdiffraction to investigate optical recording process. Review of Scientific Instruments, 2013, 84, 063902.	0.6	2
657	Reactive potential for the study of phase-change materials: GeTe. New Journal of Physics, 2013, 15, 123006.	1.2	18
658	Determination of the atomic stacking sequence of Ge-Sb-Te nanowires by HAADF STEM. Materials Research Society Symposia Proceedings, 2013, 1512, 1.	0.1	0
659	Ge <sub>2</sub> Sb <sub>2</sub> Te <sub>5</sub> Film Fabrication by Tellurization of Chemical Vapor Deposited GeSb. Japanese Journal of Applied Physics, 2013, 52, 128006.	0.8	11
660	Controlling Thermal Radiation with Surface Waves. Challenges and Advances in Computational Chemistry and Physics, 2013, , 283-327.	0.6	1
661	Phase Transition Behaviors and Thermal Conductivity of Ge Doped Sb <sub>2</sub> Te Thin Films for Phase Change Random Access Memory. Applied Mechanics and Materials, 0, 367, 26-31.	0.2	0
662	Determination of the distribution of elements with similar electron counts: a practical guide for resonant X-ray scattering. Journal of Applied Crystallography, 2013, 46, 769-778.	1.9	21
663	Calorimetric study of specific heat in glassy Se-Te-Sn-Bi system using MDSC technique: effect of Bi incorporation. Phase Transitions, 2013, 86, 971-976.	0.6	6
664	Selective detection of tetrahedral units in amorphous GeTe-based phase change alloys using Ge L3-edge x-ray absorption near-edge structure spectroscopy. Applied Physics Letters, 2013, 102, 111904.	1.5	28
665	Vibrational properties and stabilization mechanism of the amorphous phase of doped GeTe. Physical Review B, 2013, 88, .	1.1	24
666	First-principles study of the amorphous In <sub>3</sub> SbTe phase change compound. Physical Review B, 2013, 88, .	1.1	34
667	Resistive switching of oxygen enhanced TiO <sub>2</sub> thin-film devices. Applied Physics Letters, 2013, 102, .	1.5	54
668	Characteristics of hafnium oxide resistance random access memory with different setting compliance current. Applied Physics Letters, 2013, 103, .	1.5	44
669	A Comparative Study of Purification Routes for S <sub>2</sub> Se <sub>3</sub> Chalcogenide Glass. International Journal of Applied Glass Science, 2013, 4, 31-41.	1.0	26
670	Electrical current-induced gradual failure of crystalline Ge <sub>2</sub> Sb <sub>2</sub> Te <sub>5</sub> for phase-change memory. Applied Physics Letters, 2013, 103, .	1.5	20
671	Optical switch based on microring resonators and phase change materials. , 2013, , .		0
672	Optical switching at 1.55 $\mu\text{m}$ in silicon racetrack resonators using phase change materials. Applied Physics Letters, 2013, 103, .	1.5	185

#	ARTICLE	IF	CITATIONS
673	Switching of localized surface plasmon resonance of gold nanoparticles on a GeSbTe film mediated by nanoscale phase change and modification of surface morphology. Applied Physics Letters, 2013, 103, .	1.5	29
674	Review of Emerging New Solid-State Non-Volatile Memories. Japanese Journal of Applied Physics, 2013, 52, 040001.	0.8	109
675	Towards ultra-subwavelength optical latches. Applied Physics Letters, 2013, 103, .	1.5	11
676	Sensitivity of micromechanical actuation on amorphous to crystalline phase transformations under the influence of Casimir forces. Physical Review B, 2013, 88, .	1.1	38
677	Conductive preferential paths of hot carriers in amorphous phase-change materials. Applied Physics Letters, 2013, 103, .	1.5	25
678	High-pressure Raman spectroscopy of phase change materials. Applied Physics Letters, 2013, 103, .	1.5	21
679	Quasi-equilibrium size distribution of subcritical nuclei in amorphous phase change AgIn-Sb <sub>2</sub> Te. Journal of Applied Physics, 2013, 114, 034904.	1.1	7
680	Unusual crystallization behavior in Ga-Sb phase change alloys. APL Materials, 2013, 1, .	2.2	25
681	Dislocation-templated amorphization of Ge <sub>2</sub> Sb <sub>2</sub> Te <sub>5</sub> nanowires under electric pulses: A theoretical model. Journal of Applied Physics, 2013, 113, 243507.	1.1	4
682	Phase transition in stoichiometric GaSb thin films: Anomalous density change and phase segregation. Applied Physics Letters, 2013, 103, .	1.5	24
683	Defects in amorphous phase-change materials. Journal of Materials Research, 2013, 28, 1139-1147.	1.2	40
684	Beyond von Neumann Computing with Nanoscale Phase-Change Memory Devices. Advanced Functional Materials, 2013, 23, 2248-2254.	7.8	336
685	Two Synthetic Approaches to Ag <sub>3.4</sub> In <sub>3.7</sub> Sb <sub>76.4</sub> Te <sub>16.5</sub> Bulk Samples and their Transport Properties. Zeitschrift Fur Anorganische Und Allgemeine Chemie, 2013, 639, 2868-2874.	0.6	2
687	Investigation of Ge-Sn-Te alloy for long data retention and high speed phase change memory application. Applied Physics Letters, 2013, 103, .	1.5	7
688	Competing local orders in liquid and amorphous structures of Ge <sub>2</sub> Sb <sub>2</sub> Te <sub>5</sub> : Influence of exchange-correlation functional. Journal of Applied Physics, 2013, 113, 134302.	1.1	10
689	Structural Features in the Widely used Practical Phase-change Recording Materials. Materia Japan, 2013, 52, 49-57.	0.1	0
690	Calorimetric study of thermal crystallization kinetics in Se <sub>78-x</sub> Te <sub>20</sub> Sn <sub>2</sub> Pb <sub>x</sub> (0 ≤ x ≤ 6) alloys. EPJ Applied Physics, 2013, 62, 20106.	0.3	1
691	Picosecond amorphization of chalcogenides material: From scattering to ionization. Applied Physics Letters, 2013, 102, .	1.5	4

#	ARTICLE	IF	CITATIONS
692	Role of activation energy in resistance drift of amorphous phase change materials. <i>Frontiers in Physics</i> , 2014, 2, .	1.0	38
694	Low power ovonic threshold switching characteristics of thin GeTe <sub>6</sub> films using conductive atomic force microscopy. <i>Applied Physics Letters</i> , 2014, 105, .	1.5	21
695	Silicon versus the rest. <i>Canadian Journal of Physics</i> , 2014, 92, 553-560.	0.4	1
696	Superior bipolar resistive switching behaviors of solution-processed HfAlO <sub>x</sub> /thin film for nonvolatile memory applications. <i>Japanese Journal of Applied Physics</i> , 2014, 53, 08NE03.	0.8	5
697	Phase transformation in Mg <sup>2+</sup> Sb <sub>3</sub> Te thin films. <i>Chinese Physics B</i> , 2014, 23, 087301.	0.7	1
698	Nature of gap states in GeSbTe phase change memory materials. <i>Canadian Journal of Physics</i> , 2014, 92, 671-674.	0.4	8
699	Low-power phase change memory with multilayer TiN/W nanostructure electrode. <i>Applied Physics A: Materials Science and Processing</i> , 2014, 117, 1933-1940.	1.1	9
700	Nanostructured Ge <sub>2</sub> Sb <sub>2</sub> Te <sub>5</sub> chalcogenide films produced by laser electrodispersion. <i>Semiconductors</i> , 2014, 48, 1567-1570.	0.2	7
702	Characteristics of phase transition in boron-implanted Ge <sub>2</sub> Sb <sub>2</sub> Te <sub>5</sub> thin films for phase change memory applications. <i>Surface and Interface Analysis</i> , 2014, 46, 1178-1182.	0.8	2
703	PCRAM. , 2014, , 123-148.		0
704	Memristive Devices: Switching Effects, Modeling, and Applications. , 2014, , 195-221.		4
705	Examination of laser-induced heating on multi-component chalcogenide glass. , 2014, , .		1
706	Effect of annealing on carrier concentration in Ge <sub>2</sub> Sb <sub>2</sub> Te <sub>5</sub> films. <i>Canadian Journal of Physics</i> , 2014, 92, 681-683.	0.4	3
707	Investigation of the Properties of Al Incorporated into Sb <sub>2</sub> Te <sub>3</sub> Phase Change Material. <i>Advanced Materials Research</i> , 2014, 950, 7-12.	0.3	0
708	Calculations of Absorbed Dose in Heavy-Ion Irradiated Phase-Change Memory Cells. <i>Advanced Materials Research</i> , 2014, 906, 81-88.	0.3	0
709	Spike-Timing-Dependent-Plasticity in Hybrid Memristive-CMOS Spiking Neuromorphic Systems. , 2014, , 353-377.		1
710	Efficient numerics for thermally-assisted trap-limited conduction in chalcogenides. , 2014, , .		0
711	Nanosecond laser-induced phase transitions in pulsed laser deposition-deposited GeTe films. <i>Journal of Applied Physics</i> , 2014, 116, .	1.1	17



#	ARTICLE	IF	CITATIONS
712	Nanoscale order and crystallization in nitrogen-alloyed amorphous GeTe. Applied Physics Letters, 2014, 105, 191903.	1.5	3
713	Understanding the early cycling evolution behaviors for phase change memory application. Journal of Applied Physics, 2014, 116, .	1.1	10
714	Ultrafast crystalline-to-amorphous phase transition in Ge <sub>2</sub> Sb <sub>2</sub> Te <sub>5</sub> chalcogenide alloy thin film using single-shot imaging spectroscopy. Applied Physics Letters, 2014, 104, .	1.5	57
715	Coherent phonon study of (GeTe) <sub>1-x</sub> (Sb <sub>2</sub> Te <sub>3</sub> ) <sub>x</sub> interfacial phase change memory materials. Applied Physics Letters, 2014, 105, 151902.	1.5	14
716	<i>In situ</i> transmission electron microscopy investigation of the interfacial reaction between Ni and Al during rapid heating in a nanocalorimeter. APL Materials, 2014, 2, 116102.	2.2	45
717	Effect of indium doping on the properties of Ge <sub>1-x</sub> S <sub>x</sub> phase-change alloy. Physica Status Solidi (A) Applications and Materials Science, 2014, 211, 645-650.	0.8	14
718	Reversible amorphous-crystalline phase changes in a wide range of Se <sub>1-x</sub> Te <sub>x</sub> alloys studied using ultrafast differential scanning calorimetry. Journal of Chemical Physics, 2014, 141, 024502.	1.2	23
719	Controlling light on the nanoscale with chalcogenide thin films. , 2014, , 471-508.		2
720	Resistive switching characteristics of indium-tin-oxide thin film devices. Physica Status Solidi (A) Applications and Materials Science, 2014, 211, 1194-1199.	0.8	3
721	Atomic scale insight into the amorphous structure of Cu doped GeTe phase-change material. Journal of Applied Physics, 2014, 116, 153501.	1.1	8
722	Long-range crystal-lattice distortion fields of epitaxial Ge-Sb-Te phase-change materials. Physica Status Solidi (B): Basic Research, 2014, 251, 769-773.	0.7	3
723	Distribution of nanoscale nuclei in the amorphous dome of a phase change random access memory. Applied Physics Letters, 2014, 104, .	1.5	25
724	Origin of stochastic resistive switching in devices with phenomenologically identical initial states. , 2014, , .		0
725	Self-organization of a periodic structure between amorphous and crystalline phases in a GeTe thin film induced by femtosecond laser pulse amorphization. Applied Physics Letters, 2014, 105, 031907.	1.5	25
726	Structure and phonon behavior of crystalline GeTe ultrathin film. Applied Physics Letters, 2014, 105, .	1.5	12
727	Dynamical Heterogeneity in the Supercooled Liquid State of the Phase Change Material GeTe. Journal of Physical Chemistry B, 2014, 118, 13621-13628.	1.2	57
728	Impact of Maxwell rigidity transitions on resistance drift phenomena in Ge <sub>x</sub> Te <sub>1-x</sub> glasses. Applied Physics Letters, 2014, 105, .	1.5	23
729	Ab-initio calculations and structural studies of (SiTe) <sub>2</sub> (Sb <sub>2</sub> Te <sub>3</sub> ) <sub>n</sub> (n : 1, 2, 4 and 6) phase-change superlattice films. Physica Status Solidi - Rapid Research Letters, 2014, 8, 302-306.	1.2	29

#	ARTICLE	IF	CITATIONS
730	Study on the nitrogen-doped W-Sb-Te material for phase change memory application. Applied Physics Letters, 2014, 104, .	1.5	16
731	Nanowire Phase-Change Memory. RSC Smart Materials, 2014, , 111-166.	0.1	1
732	Nanoscale nuclei in phase change materials: Origin of different crystallization mechanisms of Ge <sub>2</sub> Sb <sub>2</sub> Te <sub>5</sub> and AgInSbTe. Journal of Applied Physics, 2014, 115, .	1.1	60
733	Memristors and Memristive Systems. , 2014, , .		109
734	Bonding Nature of Local Structural Motifs in Amorphous GeTe. Angewandte Chemie - International Edition, 2014, 53, 10817-10820.	7.2	125
735	Modulation of Surface Trap Induced Resistive Switching by Electrode Annealing in Individual PbS Micro/Nanowire-Based Devices for Resistance Random Access Memory. ACS Applied Materials & Interfaces, 2014, 6, 20812-20818.	4.0	19
736	On-Chip Photonic Memory Elements Employing Phase-Change Materials. Advanced Materials, 2014, 26, 1372-1377.	11.1	189
737	Micro-electro-mechanically switchable near infrared complementary metamaterial absorber. Applied Physics Letters, 2014, 104, .	1.5	76
738	Direct imaging of crystal structure and defects in metastable Ge <sub>2</sub> Sb <sub>2</sub> Te <sub>5</sub> by quantitative aberration-corrected scanning transmission electron microscopy. Applied Physics Letters, 2014, 104, .	1.5	51
739	Implementation of nitrogen-doped titanium-tungsten tunable heater in phase change random access memory and its effects on device performance. Applied Physics Letters, 2014, 105, 153501.	1.5	3
740	Coexistence of memory resistance and memory capacitance in TiO <sub>2</sub> solid-state devices. Nanoscale Research Letters, 2014, 9, 552.	3.1	29
741	Casimir and hydrodynamic force influence on microelectromechanical system actuation in ambient conditions. Applied Physics Letters, 2014, 104, 074108.	1.5	7
742	Phase Transition Originating from Order-Disorder Transformations of Carboxy Oxygen Atoms Coupled with Dynamic Proton Motions in [PhCH <sub>2</sub> NH(CH <sub>3</sub> ) <sub>2</sub> C <sub>2</sub> O <sub>4</sub> ...H <sub>2</sub> C <sub>2</sub> ]. Chemistry - an Asian Journal, 2014, 9, 1771-1776.	1.7	23
743	Competing Crystal Growth in Ge-Sb Phase-Change Films. Advanced Functional Materials, 2014, 24, 1687-1694.	7.8	18
744	Nanowire phase change memory (PCM) technologies: principles, fabrication and characterization techniques. , 2014, , 200-230.		0
745	Access devices for 3D crosspoint memory. Journal of Vacuum Science and Technology B: Nanotechnology and Microelectronics, 2014, 32, .	0.6	276
747	Discrete-dipole approximation model for control and optimization of a holographic metamaterial antenna. Applied Optics, 2014, 53, 5791.	0.9	40
748	Chronological change of electrical resistance in GeCu <sub>2</sub> Te <sub>3</sub> amorphous film induced by surface oxidation. Journal Physics D: Applied Physics, 2014, 47, 475302.	1.3	7

#	ARTICLE	IF	CITATIONS
749	Simulations of silver-doped germanium-selenide glasses and their response to radiation. <i>Nanoscale Research Letters</i> , 2014, 9, 594.	3.1	7
750	Ordered horizontal Sb <sub>2</sub> Te <sub>3</sub> nanowires induced by femtosecond lasers. <i>Applied Physics Letters</i> , 2014, 105, .	1.5	2
751	<sup>121</sup> Sb and <sup>125</sup> Te nuclear inelastic scattering in Sb <sub>2</sub> Te <sub>3</sub> under high pressure. <i>Semiconductor Science and Technology</i> , 2014, 29, 124001.	1.0	5
752	Fabrication of Phase-Change Polymer Colloidal Photonic Crystals. <i>Journal of Nanomaterials</i> , 2014, 2014, 1-7.	1.5	4
753	Mesoscale computational study of the nanocrystallization of amorphous Ge via a self-consistent atomistic phase-field model. <i>Acta Materialia</i> , 2014, 77, 335-351.	3.8	15
754	Homogeneous phase W <sup>+</sup> Ge <sup>-</sup> Te material with improved overall phase-change properties for future nonvolatile memory. <i>Acta Materialia</i> , 2014, 74, 49-57.	3.8	27
755	Mass transport in Ti <sub>0.5</sub> Sb <sub>2</sub> Te <sub>3</sub> phase-change nanobridge. <i>Acta Materialia</i> , 2014, 73, 48-55.	3.8	4
756	Ab initio investigation of amorphous Sb <sub>2</sub> Te. <i>Monatshefte für Chemie</i> , 2014, 145, 97-101.	0.9	18
757	Emerging Applications of Phase-Change Materials (PCMs): Teaching an Old Dog New Tricks. <i>Angewandte Chemie - International Edition</i> , 2014, 53, 3780-3795.	7.2	292
758	Phase change characteristics of Sb-rich Ga <sup>-</sup> Sb <sup>-</sup> Se materials. <i>Journal of Alloys and Compounds</i> , 2014, 586, 669-673.	2.8	37
759	Ultra Low Power Magnetic Flip-Flop Based on Checkpointing/Power Gating and Self-Enable Mechanisms. <i>IEEE Transactions on Circuits and Systems I: Regular Papers</i> , 2014, 61, 1755-1765.	3.5	79
760	Superior resistive switching behaviors of FeWO <sub>4</sub> single-crystalline nanowires array. <i>Chemical Physics Letters</i> , 2014, 604, 127-130.	1.2	26
761	90-degree optical switching of output second-harmonic light in chiral photomagnet. <i>Nature Photonics</i> , 2014, 8, 65-71.	15.6	276
762	Atomic Layer Deposition for Semiconductors. , 2014, , .		75
763	Reversible crystal-to-amorphous-to-crystal phase transition and a large magnetocaloric effect in a spongelike metal organic framework material. <i>Chemical Communications</i> , 2014, 50, 1915.	2.2	59
764	The effect of Se doping on spectroscopic and electrical properties of GeTe. <i>Thin Solid Films</i> , 2014, 550, 569-574.	0.8	15
765	Perovskite Oxides as Resistive Switching Memories: A Review. <i>Ferroelectrics</i> , 2014, 471, 23-64.	0.3	86
766	Deposition techniques for chalcogenide thin films. , 2014, , 265-309.		21

#	ARTICLE	IF	CITATIONS
767	n-type chalcogenides by ion implantation. Nature Communications, 2014, 5, 5346.	5.8	58
768	Phase Change Characteristics in GeTe/CuTe Pseudobinary Alloy Films. Journal of Physical Chemistry C, 2014, 118, 26973-26980.	1.5	24
769	Density change upon crystallization of Ga-Sb films. Applied Physics Letters, 2014, 105, 181910.	1.5	17
770	First-principles study of magnetic interactions in $\text{Ge}_3\text{Te}_5$ transition metal-doped phase-change materials. Physical Review B, 2014, 90, .		18
771	Chalcogenide systems at the border of the glass-formation domain: A key for understanding the memory-switching phenomena. Physica Status Solidi (B): Basic Research, 2014, 251, 1334-1339.	0.7	5
772	Electron interactions and Dirac fermions in graphene-Ge <sub>2</sub> Sb <sub>2</sub> Te <sub>5</sub> superlattices. Journal of Applied Physics, 2014, 115, 233714.	1.1	14
773	Nanothermal characterization of amorphous and crystalline phases in chalcogenide thin films with scanning thermal microscopy. Journal of Applied Physics, 2014, 116, 134904.	1.1	21
774	Ab initio study of molecular and atomic oxygen on GeTe(111) surfaces. Journal of Applied Physics, 2014, 116, .	1.1	10
775	Characterization of Oxygen Accumulation in Indium-Tin-Oxide for Resistance Random Access Memory. IEEE Electron Device Letters, 2014, 35, 630-632.	2.2	55
776	Recent progress in resistive random access memories: Materials, switching mechanisms, and performance. Materials Science and Engineering Reports, 2014, 83, 1-59.	14.8	1,160
777	Phase change memory (PCM) materials and devices. , 2014, , 161-199.		8
778	A sequentially switchable molecular dielectric material tuned by the stepwise ordering in diisopropylammonium trifluoromethanesulfonate. Journal of Materials Chemistry C, 2014, 2, 2341-2345.	2.7	56
779	Role of the nano amorphous interface in the crystallization of Sb <sub>2</sub> Te <sub>3</sub> towards non-volatile phase change memory: insights from first principles. Physical Chemistry Chemical Physics, 2014, 16, 10810.	1.3	24
780	Temperature and concentration dependent crystallization behavior of Ge <sub>2</sub> Sb <sub>2</sub> Te <sub>5</sub> phase change films: tungsten doping effects. RSC Advances, 2014, 4, 57218-57222.	1.7	28
781	Structural deformation and void formation driven by phase transformation in the Ge <sub>2</sub> Sb <sub>2</sub> Te <sub>5</sub> film. Journal of Materials Chemistry C, 2014, 2, 2001.	2.7	5
782	Fast crystallization and low-power amorphization of Mg/Sb/Te reversible phase-change films. CrystEngComm, 2014, 16, 7401-7405.	1.3	6
783	Memristive switching: physical mechanisms and applications. Modern Physics Letters B, 2014, 28, 1430003.	1.0	24
784	Mean coordination and topological constraints in chalcogenide network glasses. , 2014, , 58-81.		2

#	ARTICLE	IF	CITATIONS
785	RESET Distribution Improvement of Phase Change Memory: The Impact of Pre-Programming. IEEE Electron Device Letters, 2014, 35, 536-538.	2.2	24
786	Crystallization behaviors of Zn <sub>x</sub> Sb <sub>100-x</sub> thin films for ultralong data retention phase change memory applications. CrystEngComm, 2014, 16, 757-762.	1.3	60
787	Novel Phase-Transition Materials Coupled with Switchable Dielectric, Magnetic, and Optical Properties: [(CH <sub>3</sub> ) <sub>4</sub> P][FeCl <sub>4</sub> ] and [(CH <sub>3</sub> ) <sub>4</sub> P][FeBr <sub>4</sub> ]. Chemistry of Materials, 2014, 26, 6042-6049.	3.2	101
788	Ferromagnetism modulation by phase change in Mn-doped GeTe chalcogenide magnetic materials. Applied Physics A: Materials Science and Processing, 2014, 117, 2115-2119.	1.1	6
789	Thermal properties of chalcogenide glasses. , 2014, , 82-112.		6
790	Above-room-temperature molecular ferroelectric and fast switchable dielectric of diisopropylammonium perchlorate. Journal of Materials Chemistry C, 2014, 2, 9957-9963.	2.7	53
791	Strain-mediated multilevel ferroelectric random access memory operating through a magnetic field. RSC Advances, 2014, 4, 45382-45388.	1.7	9
792	Enhanced resistive switching effect upon illumination in self-assembled NiWO <sub>4</sub> nano-nests. Chemical Communications, 2014, 50, 13142-13145.	2.2	107
793	Mercury thioarsenate glasses: a hybrid chain/pyramidal network. RSC Advances, 2014, 4, 49236-49246.	1.7	13
794	Sol-gel synthesis of nanosized TiO <sub>2</sub> crystals. IOP Conference Series: Materials Science and Engineering, 2014, 54, 012008.	0.3	11
795	Laser-Induced Nondestructive Patterning of a Thin Ferroelectric Polymer Film with Controlled Crystals using Ge <sub>8</sub> Sb <sub>2</sub> Te <sub>11</sub> Alloy Layer for Nonvolatile Memory. ACS Applied Materials & Interfaces, 2014, 6, 15171-15178.	4.0	13
796	Tailoring Transient Amorphous States: Towards Fast and Power-Efficient Phase-Change Memory and Neuromorphic Computing. Advanced Materials, 2014, 26, 7493-7498.	11.1	68
797	Lattice strain induced phase selection and epitaxial relaxation in crystalline GeTe thin film. Thin Solid Films, 2014, 568, 70-73.	0.8	2
798	Nucleation in As <sub>2</sub> Se <sub>3</sub> glass studied by DSC. Thermochimica Acta, 2014, 593, 16-21.	1.2	8
799	Fast and slow crystal growth kinetics in glass-forming melts. Journal of Chemical Physics, 2014, 140, 214504.	1.2	93
800	Ge <sub>2</sub> Sb <sub>2</sub> Te <sub>5</sub> /SnSe <sub>2</sub> nanocomposite multilayer thin films for phase change memory application. Applied Surface Science, 2014, 316, 286-291.	3.1	14
801	Reversible Optical Switching of Infrared Antenna Resonances with Ultrathin Phase-Change Layers Using Femtosecond Laser Pulses. ACS Photonics, 2014, 1, 833-839.	3.2	181
802	Unraveling Crystal Growth in GeSb Phase-Change Films in between the Glass-Transition and Melting Temperatures. Crystal Growth and Design, 2014, 14, 3392-3397.	1.4	34

#	ARTICLE	IF	CITATIONS
803	Ultrafast Characterization of Phase-Change Material Crystallization Properties in the Melt-Quenched Amorphous Phase. <i>Nano Letters</i> , 2014, 14, 3419-3426.	4.5	102
804	A physics-based three dimensional readout model for phase-change probe memory. <i>Current Applied Physics</i> , 2014, 14, 1296-1300.	1.1	3
805	Formation of monatomic metallic glasses through ultrafast liquid quenching. <i>Nature</i> , 2014, 512, 177-180.	13.7	365
806	Engineering Shadows to Fabricate Optical Metasurfaces. <i>ACS Nano</i> , 2014, 8, 11061-11070.	7.3	91
807	Reversibility and Stability of ZnO-Sb <sub>2</sub> Te <sub>3</sub> Nanocomposite Films for Phase Change Memory Applications. <i>ACS Applied Materials &amp; Interfaces</i> , 2014, 6, 8488-8496.	4.0	22
808	Ultrafast phase-change logic device driven by melting processes. <i>Proceedings of the National Academy of Sciences of the United States of America</i> , 2014, 111, 13272-13277.	3.3	56
809	Amorphous-to-crystalline transition in Te-doped Ge <sub>2</sub> Sb <sub>2</sub> Se <sub>5</sub> glass. <i>Journal of Thermal Analysis and Calorimetry</i> , 2014, 117, 1073-1083.	2.0	21
810	Ultraviolet and visible range plasmonics in the topological insulator Bi <sub>1.5</sub> Sb <sub>0.5</sub> Te <sub>1.8</sub> Se <sub>1.2</sub> . <i>Nature Communications</i> , 2014, 5, 5139.	5.8	129
811	Structural Phase Transitions of a Layered Organic-Inorganic Hybrid Compound: Tetra(cyclopentylammonium) Decachlorotricadmate(II), [C <sub>5</sub> H <sub>9</sub> NH <sub>3</sub> ] <sub>4</sub> Cd <sub>3</sub> Cl <sub>10</sub> . <i>Inorganic Chemistry</i> , 2014, 53, 8913-8918.	1.9	50
812	Origin of the OFF state variability in ReRAM cells. <i>Journal Physics D: Applied Physics</i> , 2014, 47, 145102.	1.3	25
813	ICREGA™14 - Renewable Energy: Generation and Applications. <i>Springer Proceedings in Energy</i> , 2014, , .	0.2	4
814	An optoelectronic framework enabled by low-dimensional phase-change films. <i>Nature</i> , 2014, 511, 206-211.	13.7	599
815	Soft-phonon mediated structural phase transition in GeTe. <i>Physical Review B</i> , 2014, 89, .	1.1	56
816	Influence of bismuth on the optical properties of Ge <sub>2</sub> Sb <sub>2</sub> Te <sub>5</sub> thin films. <i>Semiconductors</i> , 2014, 48, 577-583.	0.2	6
817	Short-Range Order in GeAsTe Glasses. <i>Journal of the American Ceramic Society</i> , 2014, 97, 1625-1632.	1.9	19
818	Time resolved spectra of optical and electrical transient response induced by nanosecond laser pulses in amorphous AgInSbTe films. <i>Optik</i> , 2014, 125, 5943-5946.	1.4	1
819	The next generation mass storage devices - Physical principles and current status. <i>Contemporary Physics</i> , 2014, 55, 75-93.	0.8	16
820	Specific Heat of (GeTe) <sub>x</sub> (Sb <sub>2</sub> Te <sub>3</sub> ) <sub>1-x</sub> Phase-Change Materials: The Impact of Disorder and Anharmonicity. <i>Chemistry of Materials</i> , 2014, 26, 2307-2312.	3.2	40

#	ARTICLE	IF	CITATIONS
821	Characteristics and mechanism of Al <sub>1.3</sub> Sb <sub>3</sub> Te etched by Cl <sub>2</sub> /BCl <sub>3</sub> inductively coupled plasmas. <i>Microelectronic Engineering</i> , 2014, 115, 51-54.	1.1	3
822	Etching of new phase change material Ti <sub>0.5</sub> Sb <sub>2</sub> Te <sub>3</sub> by Cl <sub>2</sub> /Ar and CF <sub>4</sub> /Ar inductively coupled plasmas. <i>Applied Surface Science</i> , 2014, 311, 68-73.	3.1	6
823	Temperature-induced reversible isostructural phase transition in N-isopropylbenzylammonium trifluoromethanesulfonate. <i>Inorganic Chemistry Communication</i> , 2014, 41, 79-83.	1.8	5
824	Phase change material W <sub>0.04</sub> (Sb <sub>4</sub> Te) <sub>0.96</sub> for application in high-speed phase change memory. <i>Journal of Alloys and Compounds</i> , 2014, 594, 82-86.	2.8	21
825	Polymer memristor for information storage and neuromorphic applications. <i>Materials Horizons</i> , 2014, 1, 489.	6.4	209
826	Theoretical and experimental investigations of the properties of Ge <sub>2</sub> Sb <sub>2</sub> Te <sub>5</sub> and indium-doped Ge <sub>2</sub> Sb <sub>2</sub> Te <sub>5</sub> phase change material. <i>Applied Physics A: Materials Science and Processing</i> , 2014, 117, 1307-1314.	1.1	14
827	Structural evolution and corresponding electrical properties of V-doped Ge <sub>2</sub> Sb <sub>2</sub> Te <sub>5</sub> with increased temperature. <i>Materials Letters</i> , 2014, 128, 329-332.	1.3	17
828	Structural basis of temperature-dependent electrical resistance of evaporation-deposited amorphous GeSe film. <i>Scripta Materialia</i> , 2014, 86, 56-59.	2.6	6
829	High thermal stability and low density variation of carbon-doped Ge <sub>2</sub> Sb <sub>2</sub> Te <sub>5</sub> for phase-change memory application. <i>Applied Physics Letters</i> , 2014, 105, .	1.5	57
830	Degenerate Ising model for atomistic simulation of crystal-melt interfaces. <i>Journal of Chemical Physics</i> , 2014, 140, 074704.	1.2	6
831	In-situ crystallization of GeTeGaSb phase change memory stacked films. <i>Journal of Applied Physics</i> , 2014, 116, 234306.	1.1	25
832	Multi-step phase-change behavior in Ga <sub>30</sub> Sb <sub>70</sub> /SnSe <sub>2</sub> nanocomposite multilayer thin films. <i>Journal of Applied Physics</i> , 2014, 115, .	1.1	5
834	Local Clusters in a Distorted Rocksalt GeTe Crystal Found by X-ray Fluorescence Holography. <i>Journal of the Physical Society of Japan</i> , 2014, 83, 124602.	0.7	10
835	Anomalous x-ray scattering studies of functional disordered materials. <i>Journal of Physics: Conference Series</i> , 2014, 502, 012014.	0.3	11
836	Enhanced thermoelectric performance driven by high-temperature phase transition in the phase change material Ge <sub>4</sub> Sb <sub>5</sub> . <i>Journal of Materials Research</i> , 2015, 30, 2605-2610.	1.2	7
837	Density-functional theory guided advances in phase-change materials and memories. <i>MRS Bulletin</i> , 2015, 40, 856-869.	1.7	57
838	Understanding the crystallization mechanism of Ge-Te-Ti phase change material. , 2015, , .		1
839	Disorder-induced Localization in Crystalline Pseudo-binary GeTe-Sb <sub>2</sub> Te <sub>3</sub> Alloys between Ge <sub>3</sub> Sb <sub>2</sub> Te <sub>6</sub> and GeTe. <i>Advanced Functional Materials</i> , 2015, 25, 6399-6406.	7.8	58

#	ARTICLE	IF	CITATIONS
840	Low-temperature transport in crystalline $\text{Ge}_{1-x}\text{Sb}_x\text{Te}_4$ . <i>Advanced Functional Materials</i> , 2015, 25, 6390-6398.	7.8	42
841	Prospective of Semiconductor Memory Devices: from Memory System to Materials. <i>Advanced Electronic Materials</i> , 2015, 1, 1400056.	2.6	152
842	Self-organized van der Waals epitaxy of layered chalcogenide structures. <i>Physica Status Solidi (B): Basic Research</i> , 2015, 252, 2151-2158.	0.7	61
843	Enhancement of spatial resolution using metamaterial sensor in NonDestructive Evaluation. , 2015, , 569-575.		0
844	Resistive switching characteristics of mixed oxides. <i>Emerging Materials Research</i> , 2015, 4, 18-31.	0.4	2
845	Role of the van der Waals interactions and impact of the exchange-correlation functional in determining the structure of glassy $\text{GeTe}_4$ . <i>Physical Review B</i> , 2015, 92, .	1.1	43
846	Glass-ferroic composite caused by the crystallization of ferroic glass. <i>Physical Review B</i> , 2015, 92, .	1.1	12
847	Modeling of switching mechanism in $\text{GeSbTe}$ chalcogenide superlattices. <i>Scientific Reports</i> , 2015, 5, 12612.	1.6	84
848	Ultrafast time-resolved electron diffraction revealing the nonthermal dynamics of near-UV photoexcitation-induced amorphization in $\text{Ge}_2\text{Sb}_2\text{Te}_5$ . <i>Scientific Reports</i> , 2015, 5, 13530.	1.6	36
849	Relation between bandgap and resistance drift in amorphous phase change materials. <i>Scientific Reports</i> , 2015, 5, 17362.	1.6	45
850	Mastering Technology for High-Density Optical Disc. , 2015, , 153-192.		1
851	Work function contrast and energy band modulation between amorphous and crystalline $\text{Ge}_2\text{Sb}_2\text{Te}_5$ films. <i>Applied Physics Letters</i> , 2015, 107, .	1.5	21
852	Microstructure-dependent DC set switching behaviors of $\text{Ge}^{\delta}\text{Sb}^{\delta}\text{Te}$ -based phase-change random access memory devices accessed by in situ TEM. <i>NPG Asia Materials</i> , 2015, 7, e194-e194.	3.8	18
853	Transport properties of cubic crystalline $\text{Ge}_2\text{Sb}_2\text{Te}_5$ : A potential low-temperature thermoelectric material. <i>Applied Physics Letters</i> , 2015, 106, .	1.5	17
854	<i>In-situ</i> characterization of the optical and electronic properties in $\text{GeTe}$ and $\text{GaSb}$ thin films. <i>Journal of Applied Physics</i> , 2015, 118, .	1.1	14
855	Crystallization processes of $\text{Sb}_{100-x}\text{Zn}_x$ (0 $\leq$ x $\leq$ 70) amorphous films for use as phase change memory materials. <i>AIP Advances</i> , 2015, 5, 097151.	0.6	5
856	Imaging of phase change materials below a capping layer using correlative infrared near-field microscopy and electron microscopy. <i>Applied Physics Letters</i> , 2015, 107, .	1.5	18
857	High-field electrical transport in amorphous phase-change materials. <i>Journal of Applied Physics</i> , 2015, 118, .	1.1	25



#	ARTICLE	IF	CITATIONS
858	Defect induced structural and thermoelectric properties of Sb <sub>2</sub> Te <sub>3</sub> alloy. Journal of Applied Physics, 2015, 118, .	1.1	48
859	Effects of stoichiometry on the transport properties of crystalline phase-change materials. Scientific Reports, 2015, 5, 13496.	1.6	30
860	Vanadium doped Sb <sub>2</sub> Te <sub>3</sub> material with modified crystallization mechanism for phase-change memory application. Applied Physics Letters, 2015, 106, 243103.	1.5	19
861	Disorder-induced anomalously signed Hall effect in crystalline GeTe/Sb <sub>2</sub> Te <sub>3</sub> superlattice-like materials. Journal of Applied Physics, 2015, 118, .	1.1	8
862	Penn gap rule in phase-change memory materials: No clear evidence for resonance bonds. APL Materials, 2015, 3, .	2.2	14
863	Quantum Hooke's Law to Classify Pulse Laser Induced Ultrafast Melting. Scientific Reports, 2015, 5, 8212.	1.6	8
864	Threshold-voltage modulated phase change heterojunction for application of high density memory. Applied Physics Letters, 2015, 107, .	1.5	3
865	B21-P-09The crystal micro-structure evolution of in-situ annealed phase change material TiSbTe film. Microscopy (Oxford, England), 2015, 64, i101.2-i101.	0.7	0
866	Origin of high data retention for Ge <sub>1</sub> Cu <sub>2</sub> Te <sub>3</sub> phase-change memory. , 2015, , .		0
867	Role of the changing sign of effective electronâ€“electron correlation energy for information recording in PCM. Physica Status Solidi (B): Basic Research, 2015, 252, 1339-1344.	0.7	0
868	Performance Enhancement of Electronic and Energy Devices via Block Copolymer Selfâ€“Assembly. Advanced Materials, 2015, 27, 3982-3998.	11.1	91
869	A Switchable Midâ€“infrared Plasmonic Perfect Absorber with Multispectral Thermal Imaging Capability. Advanced Materials, 2015, 27, 4597-4603.	11.1	487
871	Bournonite PbCuSbS <sub>3</sub> : Stereochemically Active Loneâ€“Pair Electrons that Induce Low Thermal Conductivity. ChemPhysChem, 2015, 16, 3264-3270.	1.0	56
872	Physics of the Switching Kinetics in Resistive Memories. Advanced Functional Materials, 2015, 25, 6306-6325.	7.8	233
873	Shape without Structure: An Intriguing Formation Mechanism in the Solvothermal Synthesis of the Phaseâ€“Change Material Sb <sub>2</sub> Te <sub>3</sub> . Angewandte Chemie - International Edition, 2015, 54, 6632-6636.	7.2	18
874	Electrophysical properties of PCM-materials in crystalline and amorphous states. Journal of Physics: Conference Series, 2015, 586, 012009.	0.3	0
875	Simple square pulses for implementing spikeâ€“timingâ€“dependent plasticity in phaseâ€“change memory. Physica Status Solidi - Rapid Research Letters, 2015, 9, 414-419.	1.2	31
876	Crystallization Properties of the Ge <sub>2</sub> Sb <sub>2</sub> Te <sub>5</sub> Phaseâ€“Change Compound from Advanced Simulations. Advanced Functional Materials, 2015, 25, 6407-6413.	7.8	78

#	ARTICLE	IF	CITATIONS
877	Annealing induced structural changes in sputtered AgInSbTe thin films and its implication on electrical properties. <i>Materials Research Express</i> , 2015, 2, 066403.	0.8	1
878	Microscopic Complexity in Phase-Change Materials and its Role for Applications. <i>Advanced Functional Materials</i> , 2015, 25, 6343-6359.	7.8	78
879	Microscopic Mechanism of Doping-Induced Kinetically Constrained Crystallization in Phase-Change Materials. <i>Advanced Materials</i> , 2015, 27, 5477-5483.	11.1	54
880	Reversing the Resistivity Contrast in the Phase-Change Memory Material GeSb <sub>2</sub> Te <sub>4</sub> Using High Pressure. <i>Advanced Electronic Materials</i> , 2015, 1, 1500240.	2.6	19
881	The Route for Ultra-High Recording Density Using Probe-Based Data Storage Device. <i>Nano</i> , 2015, 10, 1550118.	0.5	17
882	Annealing temperature dependence of structural and electrical properties of Sb <sub>2</sub> Te and GeInSbTe thin films. <i>Materials Research Express</i> , 2015, 2, 126401.	0.8	1
883	Enhancement of Spatial Resolution Using a Metamaterial Sensor in Nondestructive Evaluation. <i>Applied Sciences (Switzerland)</i> , 2015, 5, 1412-1430.	1.3	15
884	Fabrication-resolution enhancement method based on low-energy multiple exposures. <i>Optics Express</i> , 2015, 23, 29353.	1.7	3
885	Scalability of Phase Change Materials in Nanostructure Template. <i>International Journal of Photoenergy</i> , 2015, 2015, 1-4.	1.4	0
886	Switching the Localized Surface Plasmon Resonance of Single Gold Nanorods with a Phase-Change Material and the Implementation of a Cellular Automata Algorithm Using a Plasmon Particle Array. <i>Advances in Optical Technologies</i> , 2015, 2015, 1-5.	0.8	8
887	Synthesis of SnSb <sub>2</sub> Te <sub>4</sub> Microplatelets by High-energy Ball Milling. <i>Materials Research</i> , 2015, 18, 953-956.	0.6	6
888	Electron-phonon interaction and thermal boundary resistance at the crystal-amorphous interface of the phase change compound GeTe. <i>Journal of Applied Physics</i> , 2015, 117, .	1.1	41
889	A Novel Sb <sub>2</sub> Te <sub>3</sub> Polymorph Stable at the Nanoscale. <i>Chemistry of Materials</i> , 2015, 27, 4368-4373.	3.2	13
890	Novel electrical conductivity properties in Ca-doped BiFeO <sub>3</sub> nanoparticles. <i>Journal of Nanoparticle Research</i> , 2015, 17, 1.	0.8	19
891	Electronic control of germanium telluride (GeTe) phase transition for electronic memory applications. , 2015, , .		1
892	Self-Structured Conductive Filament Nanoheater for Chalcogenide Phase Transition. <i>ACS Nano</i> , 2015, 9, 6587-6594.	7.3	26
893	Evaluating Broader Impacts of Nanoscale Thermal Transport Research. <i>Nanoscale and Microscale Thermophysical Engineering</i> , 2015, 19, 127-165.	1.4	69
894	Boundaries of the homologous phases in Sb-Te and Bi-Te binary alloy systems. <i>Journal of Alloys and Compounds</i> , 2015, 645, 382-387.	2.8	4

#	ARTICLE	IF	CITATIONS
895	Study on the phase change material Cr-doped Sb <sub>3</sub> Te <sub>1</sub> for application in phase change memory. Journal of Non-Crystalline Solids, 2015, 422, 46-50.	1.5	14
896	Photo-induced optical activity in phase-change memory materials. Scientific Reports, 2015, 5, 8770.	1.6	26
897	Active Control of Surface Plasmon Waveguides with a Phase Change Material. ACS Photonics, 2015, 2, 669-674.	3.2	104
898	Growth-Dominant Superlattice-Like Medium and Its Application in Phase Change Memory. ECS Journal of Solid State Science and Technology, 2015, 4, N13-N17.	0.9	2
899	Thermal characterization of SeTe thin films. Journal of Alloys and Compounds, 2015, 644, 40-46.	2.8	29
900	Multiple structural transformations coupled with switchable magnetic and dielectric responses in an amphidynamic crystal of 4-tert-butylbenzylpyridinium bis(maleonitriledithiolate)nickelate. Journal of Materials Chemistry C, 2015, 3, 7906-7915.	2.7	12
901	Stability of GeTe-based phase change material stack under thermal stress: Reaction with Ti studied by combined in-situ x-ray diffraction, sheet resistance and atom probe tomography. , 2015, , .		1
902	Disorder Control in Crystalline GeSb <sub>2</sub> Te <sub>4</sub> Using High Pressure. Advanced Science, 2015, 2, 1500117.	5.6	36
903	B23-O-14 Direct observation the vacant sites in the GeSbTe metastable polycrystalline phase. Microscopy (Oxford, England), 2015, 64, i59.2-i59.	0.7	0
904	All-photonic nonvolatile memory cells using phase-change materials. , 2015, , .		0
905	Ab initio study of the structural, vibrational and thermal properties of Ge <sub>2</sub> Sb <sub>2</sub> Te <sub>5</sub> . International Journal of Computational Materials Science and Engineering, 2015, 04, 1550009.	0.5	0
906	Reverse-directional explosive crystallization of microstructures in transparent film on absorbing substrate by a multipulse femtosecond radiation. Solid State Communications, 2015, 224, 5-9.	0.9	2
907	Strong and Weak Topology Probed by Surface Science. , 2015, , .		2
908	Reduced operating voltage in nanotube-shaped Ge <sub>2</sub> Sb <sub>2</sub> Te <sub>5</sub> units by nanosphere lithography. Crystal Research and Technology, 2015, 50, 160-163.	0.6	0
909	Impact of vacancy ordering on thermal transport in crystalline phase-change materials. Reports on Progress in Physics, 2015, 78, 013001.	8.1	84
910	Thermal behavior of Se-rich Ge <sub>2</sub> Sb <sub>2</sub> Se(5 $\hat{\sim}$ y)Te <sub>y</sub> chalcogenide system. Journal of Alloys and Compounds, 2015, 627, 287-298.	2.8	25
911	Ni-doped GST materials for high speed phase change memory applications. Materials Research Bulletin, 2015, 64, 333-336.	2.7	52
912	Influence of the exchange and correlation functional on the structure of amorphous Ge <sub>2</sub> Sb <sub>2</sub> Te <sub>5</sub> . Physica Status Solidi (B): Basic Research, 2015, 252, 260-266.	0.7	13

#	ARTICLE	IF	CITATIONS
913	A density-functional study on the electronic and vibrational properties of layered antimony telluride. <i>Journal of Physics Condensed Matter</i> , 2015, 27, 085402.	0.7	18
914	Vacancy Associates-Rich Ultrathin Nanosheets for High Performance and Flexible Nonvolatile Memory Device. <i>Journal of the American Chemical Society</i> , 2015, 137, 3102-3108.	6.6	141
915	Emulation of spike-timing dependent plasticity in nano-scale phase change memory. <i>Neurocomputing</i> , 2015, 155, 153-158.	3.5	15
916	Photoswitching of Salicylidene Methylamine: A Theoretical Photodynamics Study. <i>Journal of Physical Chemistry B</i> , 2015, 119, 2702-2710.	1.2	40
917	Tellurium Speciation, Connectivity, and Chemical Order in $\text{As}_{1-x}\text{Te}_{100-x}$ Glasses: Results from Two-Dimensional $^{125}\text{Te}$ NMR Spectroscopy. <i>Journal of Physical Chemistry B</i> , 2015, 119, 2081-2088.	1.2	34
918	Color Switching with Enhanced Optical Contrast in Ultrathin Phase-Change Materials and Semiconductors Induced by Femtosecond Laser Pulses. <i>ACS Photonics</i> , 2015, 2, 178-182.	3.2	74
919	Oxygen incorporation into GST phase-change memory matrix. <i>Applied Surface Science</i> , 2015, 332, 533-541.	3.1	47
920	Resistive switching characteristics of mixed oxides. <i>Emerging Materials Research</i> , 2015, 4, 18-31.	0.4	1
921	Templating gold nanorods with liquid crystalline DNA. <i>Journal of Optics (United Kingdom)</i> , 2015, 17, 025001.	1.0	5
922	Phase-change memory function of correlated electrons in organic conductors. <i>Physical Review B</i> , 2015, 91, .	1.1	25
923	Diffusion-driven and size-dependent phase changes of gallium oxide nanocrystals in a glassy host. <i>Physical Chemistry Chemical Physics</i> , 2015, 17, 5141-5150.	1.3	11
924	Local order origin of thermal stability enhancement in amorphous Ag doping GeTe. <i>Applied Physics Letters</i> , 2015, 106, .	1.5	21
925	Heterogeneous Crystallization of the Phase Change Material GeTe via Atomistic Simulations. <i>Journal of Physical Chemistry C</i> , 2015, 119, 6428-6434.	1.5	28
926	Anomalous temperature-induced volume contraction in GeTe. <i>Physical Review B</i> , 2015, 91, .	1.1	49
927	Giant multiferroic effects in topological $\text{GeTe-Sb}_2\text{Te}_3$ superlattices. <i>Science and Technology of Advanced Materials</i> , 2015, 16, 014402.	2.8	73
928	Bipolar resistive switching behavior of an amorphous $\text{Ge}_2\text{Sb}_2\text{Te}_5$ thin films with a Te layer. <i>Nanoscale</i> , 2015, 7, 6340-6347.	2.8	42
929	Thermoelectric efficiency of $(1-x)(\text{GeTe})_x(\text{Bi}_2\text{Se}_3)_{0.2}\text{Te}_{2.8}$ and implementation into highly performing thermoelectric power generators. <i>Dalton Transactions</i> , 2015, 44, 2835-2843.	1.6	37
930	All-optical switching of localized surface plasmon resonance in single gold nanosandwich using GeSbTe film as an active medium. <i>Applied Physics Letters</i> , 2015, 106, .	1.5	33

#	ARTICLE	IF	CITATIONS
931	Simulations of Silicon-on-Insulator Channel-Waveguide Electrooptical 2 Å– 2 Switches and 1 Å– 1 Modulators Using a $\text{Ge}_2\text{Sb}_2\text{Te}_5$ Self-Holding Layer. <i>Journal of Lightwave Technology</i> , 2015, 33, 1805-1813.	2.7	79
932	Amorphous Phase Change Materials: Structure, Stability and Relation with Their Crystalline Phase. <i>Springer Series in Materials Science</i> , 2015, , 485-509.	0.4	3
933	Metadynamics Simulations of Nucleation. <i>Springer Series in Materials Science</i> , 2015, , 57-85.	0.4	1
934	Two reversible ferroelectric phase transitions in diisopropylammonium perchlorate. <i>RSC Advances</i> , 2015, 5, 62647-62651.	1.7	19
935	Characterization of Ge Doping on $\text{Sb}_2\text{Te}_3$ for High-Speed Phase Change Memory Application. <i>Chinese Physics Letters</i> , 2015, 32, 077302.	1.3	2
936	Time-domain separation of optical properties from structural transitions in resonantly bonded materials. <i>Nature Materials</i> , 2015, 14, 991-995.	13.3	166
937	Ultra-flexible nonvolatile memory based on donor-acceptor diketopyrrolopyrrole polymer blends. <i>Scientific Reports</i> , 2015, 5, 10683.	1.6	43
938	Influence of experimental conditions on enthalpy relaxation observed by cyclic measurement with constant heating rate. <i>Journal of Non-Crystalline Solids</i> , 2015, 426, 169-174.	1.5	5
939	How Supercooled Liquid Phase-Change Materials Crystallize: Snapshots after Femtosecond Optical Excitation. <i>Chemistry of Materials</i> , 2015, 27, 5641-5646.	3.2	44
940	Vibrational properties and bonding nature of $\text{Sb}_2\text{Se}_3$ and their implications for chalcogenide materials. <i>Chemical Science</i> , 2015, 6, 5255-5262.	3.7	89
941	Physical principles and current status of emerging non-volatile solid state memories. <i>Electronic Materials Letters</i> , 2015, 11, 505-543.	1.0	56
942	First-Principle Investigation on the Secondary Bond in Stable $\text{GeTe}_n\text{Sb}_{2-n}\text{Te}_{3-n}$ Pseudo-Binary Chalcogenides. <i>Materials Science Forum</i> , 2015, 817, 778-783.	0.3	0
943	A zero density change phase change memory material: $\text{GeTe-O}$ structural characteristics upon crystallisation. <i>Scientific Reports</i> , 2015, 5, 11150.	1.6	44
944	Mott Memory and Neuromorphic Devices. <i>Proceedings of the IEEE</i> , 2015, 103, 1289-1310.	16.4	264
945	Unusually Large Band Gap Changes in Breathing Metal-Organic Framework Materials. <i>Journal of Physical Chemistry C</i> , 2015, 119, 16667-16677.	1.5	52
946	Aging mechanisms in amorphous phase-change materials. <i>Nature Communications</i> , 2015, 6, 7467.	5.8	212
947	How fragility makes phase-change data storage robust: insights from ab initio simulations. <i>Scientific Reports</i> , 2014, 4, 6529.	1.6	66
948	Order-disorder phase transition coupled with torsion in tri-n-butylammonium trichloroacetate (TBAT). <i>Journal of Materials Chemistry C</i> , 2015, 3, 6053-6057.	2.7	15

#	ARTICLE	IF	CITATIONS
949	Polarization-Controlled Bicolor Recording Enhances Holographic Memory in Ag/TiO <sub>2</sub> Nanocomposite Films. <i>Journal of Physical Chemistry C</i> , 2015, 119, 18559-18566.	1.5	17
950	Functional Properties of Phase Change Materials from Atomistic Simulations. <i>Springer Series in Materials Science</i> , 2015, , 415-440.	0.4	1
951	Electron-phonon interaction and thermal boundary resistance at the interfaces of Ge <sub>2</sub> Sb <sub>2</sub> Te <sub>5</sub> with metals and dielectrics. <i>Journal of Physics Condensed Matter</i> , 2015, 27, 175009.	0.7	8
952	Sb-Te alloy nanostructures produced on a graphite surface by a simple annealing process. <i>Applied Surface Science</i> , 2015, 346, 366-371.	3.1	1
953	ABX <sub>3</sub> -Type Organic-Inorganic Hybrid Phase Transition Material: 1-Pentyl-3-methylimidazolium Tribromoplumbate. <i>Inorganic Chemistry</i> , 2015, 54, 7136-7138.	1.9	41
954	Transient Structures and Possible Limits of Data Recording in Phase-Change Materials. <i>ACS Nano</i> , 2015, 9, 6728-6737.	7.3	39
955	Laser-driven switching dynamics in phase change materials investigated by time-resolved X-ray absorption spectroscopy. <i>Phase Transitions</i> , 2015, 88, 82-89.	0.6	3
956	Solvothermally Synthesized Sb <sub>2</sub> Te <sub>3</sub> Platelets Show Unexpected Optical Contrasts in Mid-Infrared Near-Field Scanning Microscopy. <i>Nano Letters</i> , 2015, 15, 2787-2793.	4.5	23
957	Origin of high thermal stability of amorphous Ge <sub>1</sub> Cu <sub>2</sub> Te <sub>3</sub> alloy: A significant Cu-bonding reconfiguration modulated by Te lone-pair electrons for crystallization. <i>Acta Materialia</i> , 2015, 90, 88-93.	3.8	42
958	Understanding the role of Zn in improving the phase change behaviors of Sb <sub>2</sub> Te <sub>3</sub> films. <i>Thin Solid Films</i> , 2015, 585, 57-65.	0.8	11
959	Controllable crystallization of Ge <sub>2</sub> Sb <sub>2</sub> Te <sub>5</sub> phase-change memory thin films driven by multiple femtosecond laser pulses. <i>Materials Science and Engineering B: Solid-State Materials for Advanced Technology</i> , 2015, 193, 189-197.	1.7	17
960	Temperature-dependent ordering phenomena in single crystals of germanium antimony tellurides. <i>Journal of Solid State Chemistry</i> , 2015, 227, 223-231.	1.4	5
961	Phase transformation of Sn-based nanowires under electron beam irradiation. <i>Journal of Materials Chemistry C</i> , 2015, 3, 5389-5397.	2.7	13
962	Analysis of electron beam-induced effect on electrical switching properties of glass chalcogenide GeTe thin films through Raman spectroscopy. <i>Applied Physics A: Materials Science and Processing</i> , 2015, 119, 49-54.	1.1	6
963	Composition dependence of some thermo-physical properties of multi-component Se <sub>78-x</sub> Te <sub>20</sub> Sn <sub>2</sub> Bi <sub>x</sub> (0 ≤ x ≤ 6) chalcogenide glasses. <i>Journal of Materials Science</i> , 2015, 50, 210-218.	1.7	3
964	Influence of the local structure in phase-change materials on their dielectric permittivity. <i>Nanoscale Research Letters</i> , 2015, 10, 33.	3.1	5
965	The nanostructuring of surfaces and films using interference lithography and chalcogenide photoresist. <i>Nanoscale Research Letters</i> , 2015, 10, 83.	3.1	1
966	Phase-change properties of GeSbTe thin films deposited by plasma-enhanced atomic layer deposition. <i>Nanoscale Research Letters</i> , 2015, 10, 89.	3.1	20

#	ARTICLE	IF	CITATIONS
967	Tuning of bowtie nano-antenna resonance using As <sub>2</sub> S <sub>3</sub> chalcogenide glass substrate. , 2015, , .		0
968	Understanding the crystallization behavior of as-deposited TiSbTe alloys through real-time radial distribution functions. Nanoscale, 2015, 7, 9935-9944.	2.8	29
969	New horizons for glass formation and stability. Nature Materials, 2015, 14, 542-546.	13.3	102
970	Non-aqueous electrodeposition of functional semiconducting metal chalcogenides: Ge <sub>2</sub> Sb <sub>2</sub> Te <sub>5</sub> phase change memory. Materials Horizons, 2015, 2, 420-426.	6.4	28
971	Syntheses of pure GeTe crystals from single source precursors (R <sub>2</sub> GeTe) <sub>3</sub> (R=Et, Bu). Materials Letters, 2015, 156, 121-124.	1.3	8
972	Surface plasmon resonance: concept and applications for nano-sensors and optical active devices. Proceedings of SPIE, 2015, , .	0.8	3
973	Exposure strategy and crystallization of Ge-Sb-Te thin film by maskless phase-change lithography. Optical Engineering, 2015, 54, 045103.	0.5	1
974	External stimulation-controllable heat-storage ceramics. Nature Communications, 2015, 6, 7037.	5.8	82
975	Crystal structures, phase transitions, and switchable dielectric behaviors: comparison of a series of N-heterocyclic ammonium perchlorates. Dalton Transactions, 2015, 44, 8221-8231.	1.6	23
976	Flexible and transparent resistive switching devices using Au nanoparticles decorated reduced graphene oxide in polyvinyl alcohol matrix. Current Applied Physics, 2015, 15, 706-710.	1.1	35
977	Hierarchically Self-Assembled Block Copolymer Blends for Templating Hollow Phase-Change Nanostructures with an Extremely Low Switching Current. Chemistry of Materials, 2015, 27, 2673-2677.	3.2	11
978	Large resistive switching and switchable photovoltaic response in ferroelectric doped BiFeO <sub>3</sub> -based thin films by chemical solution deposition. Journal of Materials Chemistry C, 2015, 3, 4706-4712.	2.7	43
979	Crystal cell oriented-rotation triggered phase transition of porous upconversion nanocrystals synthesis in hydrothermal system. Journal of Materials Chemistry B, 2015, 3, 3948-3958.	2.9	3
980	<i>In Situ</i> Temperature-Dependent Transmission Electron Microscopy Studies of Pseudobinary GeTe <sub>2</sub> Bi <sub>2</sub> Te <sub>3</sub> ( $x = 3 \times 10^{-8}$ ) Nanowires and First-Principles Calculations. Nano Letters, 2015, 15, 3923-3930.	4.5	12
981	First-principles study of amorphous Ga <sub>1-x</sub> Bi <sub>x</sub> alloys. Physical Review B, 2015, 91, .		
982	The structure and dielectric properties of ionic compounds with flexible ammonium moiety. Chinese Chemical Letters, 2015, 26, 382-386.	4.8	7
983	Next-generation thermo-plasmonic technologies and plasmonic nanoparticles in optoelectronics. Progress in Quantum Electronics, 2015, 41, 23-70.	3.5	65
984	Optimizing thermoelectric property of antimony telluride nanowires by tailoring composition and crystallinity. Materials Research Express, 2015, 2, 085006.	0.8	4

#	ARTICLE	IF	CITATIONS
985	Femtosecond structural transformation of phase-change materials far from equilibrium monitored by coherent phonons. <i>Nature Communications</i> , 2015, 6, 8367.	5.8	62
986	High speed, high temperature electrical characterization of phase change materials: metastable phases, crystallization dynamics, and resistance drift. <i>Nanoscale</i> , 2015, 7, 16625-16630.	2.8	48
987	Integrated all-photonics non-volatile multi-level memory. <i>Nature Photonics</i> , 2015, 9, 725-732.	15.6	833
988	Improved terahertz modulation using germanium telluride (GeTe) chalcogenide thin films. <i>Applied Physics Letters</i> , 2015, 107, .	1.5	19
989	Information on real-structure phenomena in metastable GeTe-rich germanium antimony tellurides (GeTe) <sub>n</sub> Sb <sub>2</sub> Te <sub>3</sub> (n ≠ 3) by semi-quantitative analysis of diffuse X-ray scattering. <i>Zeitschrift Fur Kristallographie - Crystalline Materials</i> , 2015, 230, .	0.4	9
990	Colour performance and stack optimisation in phase change material based nano-displays. <i>Proceedings of SPIE</i> , 2015, , .	0.8	6
991	Strength in diversity. <i>Nature Photonics</i> , 2015, 9, 714-716.	15.6	2
992	Phase-change memory. <i>Nature Photonics</i> , 2015, 9, 712-714.	15.6	33
993	A Switchable Molecular Dielectric with Two Sequential Reversible Phase Transitions: [(CH <sub>3</sub> ) <sub>4</sub> P] <sub>4</sub> [Mn(SCN) <sub>6</sub> ]. <i>Inorganic Chemistry</i> , 2015, 54, 10642-10647.	1.9	32
994	Electronic structure and metal-insulator transition in crystalline magnetic phase-change material Ge <sub>1-x</sub> FexTe. <i>Journal of Alloys and Compounds</i> , 2015, 650, 70-74.	2.8	6
995	Coherent phonon modes of crystalline and amorphous Ge <sub>2</sub> Sb <sub>2</sub> Te <sub>5</sub> thin films: A fingerprint of structure and bonding. <i>Journal of Applied Physics</i> , 2015, 117, 025306.	1.1	7
996	Electrical performance of phase change memory cells with Ge <sub>3</sub> Sb <sub>2</sub> Te <sub>6</sub> deposited by molecular beam epitaxy. <i>Applied Physics Letters</i> , 2015, 106, .	1.5	17
997	Controllable formation of nano-crystalline in Sb <sub>4</sub> Te films by Zn doping. <i>Journal of Applied Physics</i> , 2015, 117, .	1.1	7
998	Intrinsic evolutions of dielectric function and electronic transition in tungsten doping Ge <sub>2</sub> Sb <sub>2</sub> Te <sub>5</sub> phase change films discovered by ellipsometry at elevated temperatures. <i>Applied Physics Letters</i> , 2015, 106, .	1.5	19
999	Observation of amorphous to crystalline phase transformation in Te substituted Sn-Sb-Se thin films. <i>AIP Conference Proceedings</i> , 2015, , .	0.3	0
1000	Femtosecond laser-induced crystallization of amorphous N-doped Ge <sub>8</sub> Sb <sub>92</sub> films and <i>in situ</i> characterization by coherent phonon spectroscopy. <i>Journal of Applied Physics</i> , 2015, 117, .	1.1	17
1001	Disorder-induced structural transitions in topological insulating Ge-Sb-Te compounds. <i>Journal of Applied Physics</i> , 2015, 117, 195701.	1.1	7
1002	Structural phase transitions coupled with prominent dielectric anomalies and dielectric relaxation in a one-dimensional organic-inorganic hybrid compound [C <sub>3</sub> H <sub>4</sub> NS][CdCl <sub>3</sub> ]. <i>Journal of Materials Chemistry C</i> , 2015, 3, 8535-8541.	2.7	22



#	ARTICLE	IF	CITATIONS
1003	Phase-Change and Redox-Based Resistive Switching Memories. Proceedings of the IEEE, 2015, 103, 1274-1288.	16.4	142
1004	Three dimensional finite element modeling and characterization of intermediate states in single active layer phase change memory devices. Journal of Applied Physics, 2015, 117, .	1.1	12
1005	Phase change alloy viscosities down to $T_g$ using Adam-Gibbs-equation fittings to excess entropy data: A fragile-to-strong transition. Journal of Applied Physics, 2015, 118, .	1.1	60
1006	The role of atomic vacancies on phonon confinement in $\text{GeTe}$ . AIP Advances, 2015, 5, 047127.	0.6	11
1007	Optically-Triggered Nanoscale Memory Effect in a Hybrid Plasmonic-Phase Changing Nanostructure. ACS Photonics, 2015, 2, 1306-1313.	3.2	105
1008	Dibutylammonium Hydrogen Oxalate: An Above-Room-Temperature Order-Disorder Phase Transition Molecular Material. Crystal Growth and Design, 2015, 15, 5263-5268.	1.4	18
1009	Memristive phase switching in two-dimensional $\text{1T-TaS}_2$ crystals. Science Advances, 2015, 1, e1500606.	4.7	224
1010	Free-standing $\text{BiSbTe}$ films derived from thermal annealing of sputter-deposited $\text{Sb}_2\text{Te}_3/\text{Bi}_2\text{Te}_3$ multilayer films for thermoelectric applications. CrystEngComm, 2015, 17, 7522-7527.	1.3	9
1011	Influence of materials' optical response on actuation dynamics by Casimir forces. Journal of Physics Condensed Matter, 2015, 27, 214014.	0.7	8
1012	Information storage and retrieval in a single levitating colloidal particle. Nature Nanotechnology, 2015, 10, 886-891.	15.6	25
1013	Microscopic origin of resistance drift in the amorphous state of the phase-change compound $\text{GeTe}$ . Physical Review B, 2015, 92, .	1.1	82
1014	Computations with near-field coupled plasmon particles interacting with phase-change materials. Applied Physics A: Materials Science and Processing, 2015, 121, 1323-1327.	1.1	3
1015	Infrared fibers. Advances in Optics and Photonics, 2015, 7, 379.	12.1	274
1016	A chemical link between $\text{GeSbTe}$ and $\text{InSbTe}$ phase-change materials. Journal of Materials Chemistry C, 2015, 3, 9519-9523.	2.7	44
1017	Theory of the structural glass transition: a pedagogical review. Advances in Physics, 2015, 64, 283-443.	35.9	50
1018	Crystallization kinetics of $\text{GeTe}$ phase-change thin films grown by pulsed laser deposition. Journal Physics D: Applied Physics, 2015, 48, 295304.	1.3	16
1019	Phase-Change Memory Properties of Electrodeposited $\text{Ge-Sb-Te}$ Thin Film. Nanoscale Research Letters, 2015, 10, 432.	3.1	12
1020	High speed and high reliability in $\text{Ge}_8\text{Sb}_9\text{Ga}_3\text{Sb}_7\text{O}$ stacked thin films for phase change memory applications. Journal of Alloys and Compounds, 2015, 653, 334-337.	2.8	15

#	ARTICLE	IF	CITATIONS
1021	The structures and dielectric properties of high temperature phase transition compounds with 4-(dimethylamino)pyridinium. <i>Inorganic Chemistry Communication</i> , 2015, 62, 85-90.	1.8	4
1022	Crystal growth in $(\text{GeS}_2)_x(\text{Sb}_2\text{S}_3)_{1-x}$ thin films. <i>Journal of Non-Crystalline Solids</i> , 2015, 410, 7-13.	1.5	11
1023	The role of local structure in dynamical arrest. <i>Physics Reports</i> , 2015, 560, 1-75.	10.3	338
1024	Orbital mixing in solids as a descriptor for materials mapping. <i>Solid State Communications</i> , 2015, 203, 31-34.	0.9	16
1025	Thermodynamic Phase Transition Triggered by Distinct Distortion and Ordering of Dipropylammonium Picrate. <i>Chemistry - an Asian Journal</i> , 2015, 10, 247-251.	1.7	13
1026	Linking naturally and unnaturally spun silks through the forced reeling of <i>Bombyx mori</i> . <i>Acta Biomaterialia</i> , 2015, 11, 247-255.	4.1	41
1027	In situ TEM Observation of Resistance Switching in Titanate Based Device. <i>Scientific Reports</i> , 2014, 4, 3890.	1.6	32
1028	Crystallization processes in $\text{Ge}_2\text{Sb}_2\text{Se}_4\text{Te}$ glass. <i>Materials Research Bulletin</i> , 2015, 61, 207-214.	2.7	7
1029	EXAFS spectroscopic refinement of amorphous structures of evaporation-deposited $\text{GeSe}$ films. <i>Journal of Alloys and Compounds</i> , 2015, 622, 189-193.	2.8	10
1031	A Phase Space Approach to Supercooled Liquids and a Universal Collapse of Their Viscosity. <i>Frontiers in Materials</i> , 2016, 3, .	1.2	15
1032	Dynamics of Carrier Transport in Nanoscale Materials: Origin of Non-Drude Behavior in the Terahertz Frequency Range. <i>Applied Sciences (Switzerland)</i> , 2016, 6, 50.	1.3	10
1033	Multi-color modulation in solid-state display based on phase changing materials. , 2016, , .		0
1034	All-optical tuning of EIT-like dielectric metasurfaces by means of chalcogenide phase change materials. <i>Optics Express</i> , 2016, 24, 30411.	1.7	48
1035	Crystallization Kinetics of the Phase Change Material $\text{GeSb}_6\text{Te}$ Measured with Dynamic Transmission Electron Microscopy. <i>Microscopy and Microanalysis</i> , 2016, 22, 1514-1515.	0.2	0
1036	Thermal conductivity of carbon doped $\text{GeTe}$ thin films in amorphous and crystalline state measured by modulated photo thermal radiometry. <i>Journal of Physics: Conference Series</i> , 2016, 745, 032104.	0.3	20
1037	Recent advances in metamaterial split-ring-resonator circuits as biosensors and therapeutic agents. <i>Biosensors and Bioelectronics</i> , 2016, 86, 595-608.	5.3	98
1038	Temperature-dependent electrical transport mechanism in amorphous $\text{Ge}_2\text{Sb}_2\text{Te}_5$ films. <i>Physica Status Solidi (B): Basic Research</i> , 2016, 253, 1855-1860.	0.7	3
1039	Multidimensional Simulation of Threshold Switching in $\text{NbO}_2$ Based on an Electric Field Triggered Thermal Runaway Model. <i>Advanced Electronic Materials</i> , 2016, 2, 1600169.	2.6	95

#	ARTICLE	IF	CITATIONS
1040	Nanoscale multilevel switching in Ge <sub>2</sub> Sb <sub>2</sub> Te <sub>5</sub> thin film with conductive atomic force microscopy. Nanotechnology, 2016, 27, 035706.	1.3	13
1041	Kinetic Studies of Melting, Crystallization, and Glass Formation. , 2016, , 633-660.		1
1042	Structural Phase Transition Effect on Resistive Switching Behavior of MoS <sub>2</sub> â€Polyvinylpyrrolidone Nanocomposites Films for Flexible Memory Devices. Small, 2016, 12, 2077-2084.	5.2	98
1043	Exploring the applicability of amorphous films of system In-Sb-Te as phase change materials. Journal of Non-Crystalline Solids, 2016, 447, 315-321.	1.5	5
1044	Rewriting magnetic phase change memory by laser heating. Journal Physics D: Applied Physics, 2016, 49, 165005.	1.3	3
1045	Mott lecture: How bonding concepts can help understand amorphous semiconductor behavior. Physica Status Solidi (A) Applications and Materials Science, 2016, 213, 1641-1652.	0.8	17
1046	Ordered Mesoporous Cobalt Phosphate with Crystallized Walls toward Highly Active Water Oxidation Electrocatalysts. Small, 2016, 12, 1709-1715.	5.2	153
1047	Phaseâ€Change Memory Materials by Design: A Strain Engineering Approach. Advanced Materials, 2016, 28, 3007-3016.	11.1	123
1048	Atomic mobility in the overheated amorphous GeTe compound for phase change memories. Physica Status Solidi (A) Applications and Materials Science, 2016, 213, 329-334.	0.8	9
1049	Effect of surface cleaning on contact resistivity of amorphous GeCu <sub>2</sub> Te <sub>3</sub> to a W electrode. MRS Advances, 2016, 1, 2731-2736.	0.5	2
1050	Ultrafast and Broadband Tuning of Resonant Optical Nanostructures Using Phaseâ€Change Materials. Advanced Optical Materials, 2016, 4, 1060-1066.	3.6	67
1051	Sub-nanosecond threshold-switching dynamics and <i>set</i> process of In <sub>3</sub> SbTe <sub>2</sub> phase-change memory devices. Applied Physics Letters, 2016, 108, .	1.5	11
1052	Formation of recessed hole by NF <sub>3</sub> /O <sub>2</sub> etching for phase change memory. Proceedings of SPIE, 2016, , .	0.8	0
1053	Comprehensive analysis and optimization of interface in device. Proceedings of SPIE, 2016, , .	0.8	0
1054	Laser induced structural transformation in chalcogenide based superlattices. Applied Physics Letters, 2016, 108, .	1.5	14
1055	Exploring mechanism on nano-structuring manipulation of crystallization temperature of superlattice-like [GeSb/Ge] <sub>3</sub> phase-change films. Proceedings of SPIE, 2016, , .	0.8	3
1056	Redefining the Speed Limit of Phase Change Memory Revealed by Time-resolved Steep Threshold-Switching Dynamics of AgInSbTe Devices. Scientific Reports, 2016, 6, 37868.	1.6	27
1057	Development and application of a new CMP slurry for phase change memory. , 2016, , .		0

#	ARTICLE	IF	CITATIONS
1058	Compact extreme ultraviolet source for laboratory-based photoemission spectromicroscopy. Applied Physics Letters, 2016, 108, .	1.5	8
1059	Multi-level storage in non-volatile phase-change nanophotonic memories. , 2016, , .		2
1060	Examination of the temperature dependent electronic behavior of GeTe for switching applications. Journal of Applied Physics, 2016, 119, .	1.1	17
1061	Pulse voltage induced phase change characteristics of the Zn <sub>x</sub> Sb <sub>y</sub> Te <sub>z</sub> phase-change prototype device. AIP Advances, 2016, 6, 105211.	0.6	2
1062	Plasmonic photoheating of gold nanorods in thermo-responsive chiral liquid crystals. Journal of Optics (United Kingdom), 2016, 18, 125005.	1.0	7
1063	Simulation of phase-change random access memory with 35nm diameter of the TiN bottom electrode by finite element modeling. , 2016, , .		0
1064	Temperature field simulation of phase change material/metal bilayer structure upon femtosecond laser pulse irradiation. Proceedings of SPIE, 2016, , .	0.8	0
1065	Nonvolatile transtance change random access memory based on magnetoelectric P(VDF-TrFE)/Metglas heterostructures. Applied Physics Letters, 2016, 109, .	1.5	24
1066	Element-resolved atomic structure imaging of rocksalt Ge <sub>2</sub> Sb <sub>2</sub> Te <sub>5</sub> phase-change material. Applied Physics Letters, 2016, 108, .	1.5	89
1067	Time-dependent evolution process of Sb <sub>2</sub> Te <sub>3</sub> from nanoplates to nanorods and their Raman scattering properties. Chinese Physics B, 2016, 25, 107105.	0.7	2
1070	Low work function of crystalline GeTe/Sb <sub>2</sub> Te <sub>3</sub> superlattice-like films induced by Te dangling bonds. Journal Physics D: Applied Physics, 2016, 49, 495302.	1.3	14
1072	Epitaxial Ge <sub>2</sub> Sb <sub>2</sub> Te <sub>5</sub> probed by single cycle THz pulses of coherent synchrotron radiation. Applied Physics Letters, 2016, 109, .	1.5	7
1073	Low-energy phase change memory with graphene confined layer. Applied Physics Letters, 2016, 108, .	1.5	17
1074	Nanocolumnar association and domain formation in porous thin films grown by evaporation at oblique angles. Nanotechnology, 2016, 27, 395702.	1.3	23
1075	Ge-doped GaSb thin films with zero mass density change upon crystallization for applications in phase change memories. Applied Physics Letters, 2016, 108, .	1.5	39
1076	Atomic stacking and van-der-Waals bonding in GeTe/Sb <sub>2</sub> Te <sub>3</sub> superlattices. Journal of Materials Research, 2016, 31, 3115-3124.	1.2	53
1077	All-dielectric phase-change reconfigurable metasurface. Applied Physics Letters, 2016, 109, .	1.5	214
1078	Monolayer MoS <sub>2</sub> metal insulator transition based memcapacitor modeling with extension to a ternary device. AIP Advances, 2016, 6, .	0.6	15

#	ARTICLE	IF	CITATIONS
1079	Emulating short-term synaptic dynamics with memristive devices. Scientific Reports, 2016, 6, 18639.	1.6	104
1080	Observation of an intermediate phase in tungsten doped Sb <sub>2</sub> Te phase change thin films by temperature dependent measurements of structural, optical, and electronic properties. Journal Physics D: Applied Physics, 2016, 49, 265105.	1.3	3
1081	Enhanced Crystallization Behaviors of Silicon-Doped Sb <sub>2</sub> Te Films: Optical Evidences. Scientific Reports, 2016, 6, 33639.	1.6	17
1082	Ultrathin phase-change coatings on metals for electrothermally tunable colors. Applied Physics Letters, 2016, 109, .	1.5	23
1083	A multilevel nonvolatile magnetoelectric memory. Scientific Reports, 2016, 6, 34473.	1.6	48
1084	Influence of the exchange and correlation functional on the structure of amorphous InSb and In <sub>3</sub> SbTe <sub>2</sub> compounds. Journal of Chemical Physics, 2016, 144, 204508.	1.2	8
1085	Epitaxial growth of diluted magnetic semiconductor Ge <sub>1-x</sub> Cr <sub>x</sub> Te with high Cr composition. Applied Physics Letters, 2016, 108, .	1.5	3
1086	Crystal growth in Se <sub>70</sub> Te <sub>30</sub> thin films followed by SEM and <i>in situ</i> XRD. Journal of Applied Physics, 2016, 120, .	1.1	6
1087	Metal - Insulator Transition Driven by Vacancy Ordering in GeSbTe Phase Change Materials. Scientific Reports, 2016, 6, 23843.	1.6	93
1088	Security engineering of nanostructures and nanomaterials. , 2016, , .		0
1089	Size-dependent and tunable crystallization of GeSbTe phase-change nanoparticles. Scientific Reports, 2016, 6, 39546.	1.6	30
1090	Refractive index modulation of Sb <sub>70</sub> Te <sub>30</sub> phase-change thin films by multiple femtosecond laser pulses. Journal of Applied Physics, 2016, 119, .	1.1	12
1091	High-speed laser writing of arbitrary patterns in polar coordinate system. Review of Scientific Instruments, 2016, 87, 125118.	0.6	17
1092	Intermolecular electron transfer from intramolecular excitation and coherent acoustic phonon generation in a hydrogen-bonded charge-transfer solid. Journal of Chemical Physics, 2016, 144, 104701.	1.2	8
1093	A two-step process for growth of highly oriented Sb <sub>2</sub> Te <sub>3</sub> using sputtering. AIP Advances, 2016, 6, .	0.6	47
1094	Atomic Layering, Intermixing and Switching Mechanism in Ge-Sb-Te based Chalcogenide Superlattices. Scientific Reports, 2016, 6, 37325.	1.6	38
1095	Evidence for thermally assisted threshold switching behavior in nanoscale phase-change memory cells. Journal of Applied Physics, 2016, 119, .	1.1	78
1096	Control surface wettability with nanoparticles from phase-change materials. Applied Physics Letters, 2016, 109, 234102.	1.5	9

#	ARTICLE	IF	CITATIONS
1097	Electronic and Thermoelectric Properties of Layered Sn- and Pb-Doped Ge <sub>2</sub> Sb <sub>2</sub> Te <sub>5</sub> Alloys Using First Principle Calculations. <i>Journal of Electronic Materials</i> , 2016, 45, 2950-2956.	1.0	4
1098	Crystallization kinetics of the phase change material GeSb <sub>6</sub> Te measured with dynamic transmission electron microscopy. <i>Dalton Transactions</i> , 2016, 45, 9988-9995.	1.6	13
1099	Amorphous-to-crystalline transition in Ge <sub>8</sub> Sb <sub>(2-x)</sub> Bi <sub>x</sub> Te <sub>11</sub> phase-change materials for data recording. <i>Journal of Alloys and Compounds</i> , 2016, 674, 63-72.	2.8	17
1100	Impact of interfaces on scenario of crystallization of phase change materials. <i>Acta Materialia</i> , 2016, 110, 142-148.	3.8	54
1101	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.	2.8	2
1102	Structural and optical properties of Ge <sub>60</sub> Te <sub>40</sub> : experimental and theoretical verification. <i>Journal Physics D: Applied Physics</i> , 2016, 49, 155105.	1.3	5
1103	Recently emerging trends in thermal conductivity of polymer nanocomposites. <i>Reviews in Chemical Engineering</i> , 2016, 32, .	2.3	76
1104	Resistive switching memories based on metal oxides: mechanisms, reliability and scaling. <i>Semiconductor Science and Technology</i> , 2016, 31, 063002.	1.0	662
1105	Crystal Nucleation in Liquids: Open Questions and Future Challenges in Molecular Dynamics Simulations. <i>Chemical Reviews</i> , 2016, 116, 7078-7116.	23.0	635
1106	Magnetic Field-Dependent Magneto-Optical Kerr Effect in [(GeTe) <sub>2</sub> (Sb <sub>2</sub> Te <sub>3</sub> ) <sub>1</sub> ] <sub>8</sub> Topological Superlattice. <i>Journal of Electronic Materials</i> , 2016, 45, 2496-2500.	1.0	4
1107	Microstructure evolution in pulsed laser deposited epitaxial Ge-Sb-Te chalcogenide thin films. <i>Journal of Alloys and Compounds</i> , 2016, 676, 582-590.	2.8	32
1108	Selenium Chain Length Distribution in Ge <sub>x</sub> Se <sub>100-x</sub> Glasses: Insights from <sup>77</sup> Se NMR Spectroscopy and Quantum Chemical Calculations. <i>Journal of Physical Chemistry B</i> , 2016, 120, 4513-4521.	1.2	15
1109	Conductance switching behavior of GeTe/Sb <sub>2</sub> Te <sub>3</sub> superlattice upon hot-electron injection: a scanning probe microscopy study. <i>MRS Advances</i> , 2016, 1, 375-380.	0.5	0
1110	Reversible optical switching of highly confined phonon polaritons with an ultrathin phase-change material. <i>Nature Materials</i> , 2016, 15, 870-875.	13.3	330
1111	LOBSTER: A tool to extract chemical bonding from plane-wave based DFT. <i>Journal of Computational Chemistry</i> , 2016, 37, 1030-1035.	1.5	1,791
1112	Dependence of short and intermediate-range order on preparation in experimental and modeled pure a-Si. <i>Journal of Non-Crystalline Solids</i> , 2016, 438, 26-36.	1.5	17
1113	CHF <sub>3</sub> /O <sub>2</sub> -Based Plasma Reactive Ion Etching of GeTe for Nonvolatile Phase Change Memory. <i>IEEE Transactions on Semiconductor Manufacturing</i> , 2016, 29, 98-103.	1.4	2
1114	A model structure for interfacial phase change memories: Epitaxial trigonal Ge <sub>1</sub> Sb <sub>2</sub> Te <sub>4</sub> . <i>Journal of Alloys and Compounds</i> , 2016, 679, 285-292.	2.8	44

#	ARTICLE	IF	CITATIONS
1115	Spectral dependence of photoinduced optical effects in AsSSe thin films. <i>Thin Solid Films</i> , 2016, 608, 8-15.	0.8	5
1116	Thermo-optical Effect in Phase-Change Nanophotonics. <i>ACS Photonics</i> , 2016, 3, 828-835.	3.2	81
1117	Laser-induced effects on dielectric relaxation of multi-component Se <sub>76</sub> Te <sub>20</sub> Sn <sub>2</sub> Cd <sub>2</sub> chalcogenide glass. <i>Materials Chemistry and Physics</i> , 2016, 178, 39-48.	2.0	5
1118	Recent Progress in Phase-Change Memory Technology. <i>IEEE Journal on Emerging and Selected Topics in Circuits and Systems</i> , 2016, 6, 146-162.	2.7	273
1119	Direct evidence of reactive ion etching induced damages in Ge <sub>2</sub> Sb <sub>2</sub> Te <sub>5</sub> based on different halogen plasmas. <i>Applied Surface Science</i> , 2016, 378, 163-166.	3.1	22
1120	Surface etching mechanism of carbon-doped Ge <sub>2</sub> Sb <sub>2</sub> Te <sub>5</sub> phase change material in fluorocarbon plasma. <i>Applied Physics A: Materials Science and Processing</i> , 2016, 122, 1.	1.1	5
1121	Optical chiral metamaterials: a review of the fundamentals, fabrication methods and applications. <i>Nanotechnology</i> , 2016, 27, 412001.	1.3	282
1123	Improved thermal stability of C-doped Sb <sub>2</sub> Te films by increasing degree of disorder for memory application. <i>Thin Solid Films</i> , 2016, 615, 345-350.	0.8	13
1124	The AgI-HgS-As <sub>2</sub> S <sub>3</sub> glassy system: Macroscopic properties and Raman scattering studies. <i>Journal of Alloys and Compounds</i> , 2016, 685, 752-760.	2.8	5
1125	Time-temperature-transformation and continuous-heating-transformation diagrams of GeSb <sub>2</sub> Te <sub>4</sub> from nanosecond-long ab initio molecular dynamics simulations. <i>Acta Materialia</i> , 2016, 121, 257-265.	3.8	13
1126	Thermally Assisted Nonvolatile Memory in Monolayer MoS <sub>2</sub> Transistors. <i>Nano Letters</i> , 2016, 16, 6445-6451.	4.5	47
1127	Three-Dimensional Simulations of RESET Operation in Phase-Change Random Access Memory with Blade-Type Like Phase Change Layer by Finite Element Modeling. <i>Chinese Physics Letters</i> , 2016, 33, 098502.	1.3	7
1128	Electronic excitation-induced semiconductor-to-metal transition in monolayer MoTe <sub>2</sub> . <i>Physical Review B</i> , 2016, 94, .	4.8	48
1129	Electronic Structure and Spin Configuration Trends of Single Transition Metal Impurity in Phase Change Material. <i>Journal of Electronic Materials</i> , 2016, 45, 5158-5169.	1.0	4
1130	Changes in electrical and structural properties of phase-change Ge-Sb-Te films by Zr addition. <i>Journal of Non-Crystalline Solids</i> , 2016, 452, 9-13.	1.5	16
1131	Ultrafast Ge-Te bond dynamics in a phase-change superlattice. <i>Physical Review B</i> , 2016, 94, .	1.1	6
1132	Active dielectric metasurface based on phase-change medium. <i>Laser and Photonics Reviews</i> , 2016, 10, 986-994.	4.4	313
1133	Atomic electron tomography: 3D structures without crystals. <i>Science</i> , 2016, 353, .	6.0	181

#	ARTICLE	IF	CITATIONS
1134	Atomic Migration Induced Crystal Structure Transformation and Core-Centered Phase Transition in Single Crystal Ge <sub>2</sub> Sb <sub>2</sub> Te <sub>5</sub> Nanowires. Nano Letters, 2016, 16, 6078-6085.	4.5	10
1135	Initial Atomic Motion Immediately Following Femtosecond-Laser Excitation in Phase-Change Materials. Physical Review Letters, 2016, 117, 135501.	2.9	45
1136	Comparative study of atomic arrangements in equiatomic GeSe and GeTe films before and after crystallization. Journal of Alloys and Compounds, 2016, 686, 273-280.	2.8	11
1137	Synaptic electronics and neuromorphic computing. Science China Information Sciences, 2016, 59, 1.	2.7	76
1138	An Antimony Selenide Molecular Ink for Flexible Broadband Photodetectors. Advanced Electronic Materials, 2016, 2, 1600182.	2.6	31
1139	Reversible phase transition driven by order-disorder transformations of metal-halide moieties in [(C <sub>6</sub> H <sub>14</sub> )NH <sub>2</sub> ] <sub>2</sub> ·CuBr <sub>4</sub> . Journal of Materials Chemistry C, 2016, 4, 7537-7540.	2.7	44
1140	Temperature-triggered order-disorder phase transition in molecular-ionic material N-butyl-diethanolammonium picrate monohydrate. RSC Advances, 2016, 6, 69546-69550.	1.7	7
1141	Chemical Short-Range Order in Selenide and Telluride Glasses. Journal of Physical Chemistry B, 2016, 120, 9204-9214.	1.2	29
1142	Picosecond Electric-Field-Induced Threshold Switching in Phase-Change Materials. Physical Review Letters, 2016, 117, 067601.	2.9	59
1143	Reversible Phase Change Characteristics of Cr-Doped Sb <sub>2</sub> Te <sub>3</sub> Films with Different Initial States Induced by Femtosecond Pulses. ACS Applied Materials & Interfaces, 2016, 8, 20885-20893.	4.0	12
1144	Influence of connectivity on the rigidity of the covalently bonded (GeTe <sub>4</sub> ) <sub>100</sub> ·x(As <sub>2</sub> Se <sub>3</sub> ) <sub>x</sub> glasses. Journal of Non-Crystalline Solids, 2016, 447, 178-182.	1.5	12
1145	Nanoelectronics, Circuits and Nanoprocessors. Nanoscience and Technology, 2016, , 103-142.	1.5	4
1146	Overview of Probe-based Storage Technologies. Nanoscale Research Letters, 2016, 11, 342.	3.1	18
1147	Correlated Perovskites as a New Platform for Superbroadband-Tunable Photonics. Advanced Materials, 2016, 28, 9117-9125.	11.1	72
1148	Phase-change material-based nanoantennas with tunable radiation patterns. Optics Letters, 2016, 41, 4099.	1.7	45
1149	A High-Temperature Order-Disorder Phase Transition Coupled With Conformational Change in the Hybrid Material [C <sub>6</sub> H <sub>13</sub> NH] <sub>2</sub> ·...ZnBr <sub>4</sub> . Chemistry - an Asian Journal, 2016, 11, 2876-2881.	1.7	15
1150	Status and Prospects of ZnO-Based Resistive Switching Memory Devices. Nanoscale Research Letters, 2016, 11, 368.	3.1	188
1151	Understanding the Shape of GeTe Nanocrystals from First Principles. Chemistry of Materials, 2016, 28, 6682-6688.	3.2	16



#	ARTICLE	IF	CITATIONS
1152	Nonvolatile Memory Based on Nonlinear Magnetoelectric Effects. <i>Physical Review Applied</i> , 2016, 6, .	1.5	61
1154	Improving the thermoelectric performance of metastable rock-salt GeTe-rich Ge-Sb-Te thin films through tuning of grain orientation and vacancies. <i>Physica Status Solidi (A) Applications and Materials Science</i> , 2016, 213, 3122-3129.	0.8	9
1155	Thermally Tunable Ultrasensitive Infrared Absorption Spectroscopy Platforms Based on Thin Phase-Change Films. <i>ACS Sensors</i> , 2016, 1, 1403-1407.	4.0	17
1157	Interband characterization and electronic transport control of nanoscaled GeTe. <i>Physical Review B</i> , 2016, 94, .		
1158	Yttrium-Doped Sb <sub>2</sub> Te <sub>3</sub> : A Promising Material for Phase-Change Memory. <i>ACS Applied Materials &amp; Interfaces</i> , 2016, 8, 26126-26134.	4.0	99
1159	Rapid dielectric bistable switching materials without a time/temperature responsive blind area in the linarite-like type molecular large-size single crystals. <i>Journal of Materials Chemistry C</i> , 2016, 4, 9009-9020.	2.7	28
1160	Carrier-Multiplication-Induced Structural Change during Ultrafast Carrier Relaxation and Nonthermal Phase Transition in Semiconductors. <i>Physical Review Letters</i> , 2016, 117, 126402.	2.9	29
1161	Symmetry Breaking Phase Transition, Second-Order Nonlinear Optical and Dielectric Properties of a One-Dimensional Organic-Inorganic Hybrid Zigzag Chain Compound [NH <sub>3</sub> (CH <sub>2</sub> ) <sub>5</sub> NH <sub>3</sub> ]SbBr <sub>5</sub> . <i>Crystal Growth and Design</i> , 2016, 16, 6105-6110.	1.4	19
1162	Atomic Layer Deposition of GeTe Films Using Ge{N[Si(CH <sub>3</sub> ) <sub>3</sub> ] <sub>2</sub> }, {(CH <sub>3</sub> ) <sub>3</sub> Si} <sub>2</sub> Te, and Methanol. <i>Chemistry of Materials</i> , 2016, 28, 7158-7166.	3.2	26
1163	Electrical pump-probe characterization technique for phase change materials. , 2016, , .		1
1165	Temperature-Triggered Dielectric-Optical Duplex Switch Based on an Organic-Inorganic Hybrid Phase Transition Crystal: [C <sub>5</sub> N <sub>2</sub> H <sub>16</sub> ] <sub>2</sub> SbBr <sub>5</sub> . <i>Inorganic Chemistry</i> , 2016, 55, 7661-7666.	1.9	31
1166	Structural origin of resistance drift in amorphous GeTe. <i>Physical Review B</i> , 2016, 93, .	1.1	59
1167	Strain coupling, microstructure dynamics, and acoustic mode softening in germanium telluride. <i>Physical Review B</i> , 2016, 93, . <a href="#">Electronic structure of layered quaternary chalcogenide materials for band-gap engineering: The example of</a>	1.1	19
1168	<a href="#">example of</a> $M_{10}M_3IV$ . <i>Physical Review B</i> , 2016, 93, .		
1169	Tuning electronic properties of graphene heterostructures by amorphous-to-crystalline phase transitions. <i>Physical Review B</i> , 2016, 93, .	1.1	4
1170	Oxygen Tuned Local Structure and Phase-Change Performance of Germanium Telluride. <i>ACS Applied Materials &amp; Interfaces</i> , 2016, 8, 20185-20191.	4.0	40
1171	High performance thermoelectric materials and devices based on GeTe. <i>Journal of Materials Chemistry C</i> , 2016, 4, 7520-7536.	2.7	194
1172	Coupled magnetic, structural, and electronic phase transitions in FeRh. <i>Journal Physics D: Applied Physics</i> , 2016, 49, 323002.	1.3	99

#	ARTICLE	IF	CITATIONS
1173	Ultrafast optical response of the amorphous and crystalline states of the phase change material Physical Review B, 2016, 94, .	1.1	25
1174	Microstructure evolution of the phase change material TiSbTe. , 2016, , .		0
1175	Photo-induced magnetization and first-principles calculations of a two-dimensional cyanide-bridged Coâ€“W bimetal assembly. Dalton Transactions, 2016, 45, 19249-19256.	1.6	14
1176	Anisotropic lattice response induced by a linearly-polarized femtosecond optical pulse excitation in interfacial phase change memory material. Scientific Reports, 2016, 6, 19758.	1.6	9
1177	Energy spectrum of holes in Sb <sub>2</sub> Te <sub>2.9</sub> Se <sub>0.1</sub> solid solution according to the data on the transfer phenomena. Physics of the Solid State, 2016, 58, 2290-2293.	0.2	7
1178	Orientalional ordering of guest induced structural phase transition coupled with switchable dielectric properties in a hostâ€“guest crystal: bis(thiourea) thiazolium chloride. RSC Advances, 2016, 6, 108028-108033.	1.7	2
1179	Atmospheric annealing effect on TiO <sub>2</sub> /Sb <sub>2</sub> S <sub>3</sub> /P3HT heterojunction hybrid solar cell performance. RSC Advances, 2016, 6, 99282-99290.	1.7	28
1180	Two-terminal floating-gate memory with van der Waals heterostructures for ultrahigh on/off ratio. Nature Communications, 2016, 7, 12725.	5.8	271
1181	Search for the Mysterious SiTeâ€“An Examination of the Binary Siâ€“Te System Using First-Principles-Based Methods. Crystal Growth and Design, 2016, 16, 6152-6155.	1.4	23
1182	Morphology and Electric Conductance Change Induced by Voltage Pulse Excitation in (GeTe) <sub>2</sub> /Sb <sub>2</sub> Te <sub>3</sub> Superlattices. Scientific Reports, 2016, 6, 33223.	1.6	6
1183	Epitaxial Ge <sub>2</sub> Sb <sub>2</sub> Te <sub>5</sub> films on Si(111) prepared by pulsed laser deposition. Thin Solid Films, 2016, 619, 81-85.	0.8	14
1184	Sub-nanometre resolution of atomic motion during electronic excitation in phase-change materials. Scientific Reports, 2016, 6, 20633.	1.6	29
1185	New pathway for the formation of metallic cubic phase Ge-Sb-Te compounds induced by an electric current. Scientific Reports, 2016, 6, 21466.	1.6	9
1186	Revisiting the Local Structure in Ge-Sb-Te based Chalcogenide Superlattices. Scientific Reports, 2016, 6, 22353.	1.6	63
1187	Vacancy Structures and Melting Behavior in Rock-Salt GeSbTe. Scientific Reports, 2016, 6, 25453.	1.6	42
1188	Competing covalent and ionic bonding in Ge-Sb-Te phase change materials. Scientific Reports, 2016, 6, 25981.	1.6	35
1189	Pulsed laser deposited GeTe-rich GeTe-Sb <sub>2</sub> Te <sub>3</sub> thin films. Scientific Reports, 2016, 6, 26552.	1.6	30
1190	Local atomic arrangements and lattice distortions in layered Ge-Sb-Te crystal structures. Scientific Reports, 2016, 6, 26724.	1.6	42

#	ARTICLE	IF	CITATIONS
1191	Structural, electronic and kinetic properties of the phase-change material Ge <sub>2</sub> Sb <sub>2</sub> Te <sub>5</sub> in the liquid state. <i>Scientific Reports</i> , 2016, 6, 27434.	1.6	37
1192	Crystallization of Ge <sub>2</sub> Sb <sub>2</sub> Te <sub>5</sub> thin films by nano- and femtosecond single laser pulse irradiation. <i>Scientific Reports</i> , 2016, 6, 28246.	1.6	68
1193	Temperature dependence of magneto-optical Kerr signal in GeTe/Sb <sub>2</sub> Te <sub>3</sub> topological superlattice. <i>AIP Advances</i> , 2016, 6, .	0.6	7
1194	Reactive ion etching effects on carbon-doped Ge <sub>2</sub> Sb <sub>2</sub> Te <sub>5</sub> phase change material in CF <sub>4</sub> /Ar plasma. <i>Proceedings of SPIE</i> , 2016, , .	0.8	0
1195	Changes in morphology and local conductance of GeTe/Sb <sub>2</sub> Te <sub>3</sub> superlattice films on silicon observed by scanning probe microscopy in a lithography mode. <i>Japanese Journal of Applied Physics</i> , 2016, 55, 04EK02.	0.8	4
1196	Direct evidence for phase transition in thin Ge <sub>1</sub> Sb <sub>4</sub> Te <sub>7</sub> films using <i>in situ</i> UV-Vis-NIR spectroscopy and Raman scattering studies. <i>Physica Status Solidi (B): Basic Research</i> , 2016, 253, 1069-1075.	0.7	14
1197	A large scale perfect absorber and optical switch based on phase change material (Ge <sub>2</sub> Sb <sub>2</sub> Te <sub>5</sub> ) thin film. <i>Science China Materials</i> , 2016, 59, 165-172.	3.5	24
1198	Bipolar resistive switching in PbO nanoscale thin films. , 2016, , .		2
1199	Multicolor Changeable Optical Coating by Adopting Multiple Layers of Ultrathin Phase Change Material Film. <i>ACS Photonics</i> , 2016, 3, 1265-1270.	3.2	73
1200	Etching characteristics of phase change material GeTe in inductively coupled BCl <sub>3</sub> /Ar plasma for phase change memory. <i>Microelectronic Engineering</i> , 2016, 161, 69-73.	1.1	1
1201	A review of metasurfaces: physics and applications. <i>Reports on Progress in Physics</i> , 2016, 79, 076401.	8.1	1,524
1202	Resistive switching characteristics in memristors with Al <sub>2</sub> O <sub>3</sub> /TiO <sub>2</sub> and TiO <sub>2</sub> /Al <sub>2</sub> O <sub>3</sub> bilayers. <i>Japanese Journal of Applied Physics</i> , 2016, 55, 08PB02.	0.8	26
1203	Electrical transport properties and Mott's parameters of chalcogenide cadmium sulphoselenide bulk glasses. <i>Journal of Non-Crystalline Solids</i> , 2016, 432, 471-479.	1.5	57
1204	3d transition metal complexes with a julolidine-quinoline based ligand: structures, spectroscopy and optical properties. <i>Inorganic Chemistry Frontiers</i> , 2016, 3, 286-295.	3.0	10
1205	Influence of pulse fluences on the phase change processes of AgInSbTe thin films under nanosecond laser pulse. <i>Optik</i> , 2016, 127, 2121-2124.	1.4	1
1206	Zig-zag twins and helical phase transformations. <i>Philosophical Transactions Series A, Mathematical, Physical, and Engineering Sciences</i> , 2016, 374, 20150208.	1.6	11
1207	High-temperature dehydration behavior and ionic conduction of 2,5-dimethylanilinium chloride monohydrate. <i>Journal of Alloys and Compounds</i> , 2016, 672, 86-92.	2.8	2
1208	Determination of the Anisotropic Elastic Properties of Rocksalt Ge <sub>2</sub> Sb <sub>2</sub> Te <sub>5</sub> by XRD, Residual Stress, and DFT. <i>Journal of Physical Chemistry C</i> , 2016, 120, 5624-5629.	1.5	10

#	ARTICLE	IF	CITATIONS
1209	Structural semiconductor-to-semimetal phase transition in two-dimensional materials induced by electrostatic gating. Nature Communications, 2016, 7, 10671.	5.8	318
1210	Crystallization Kinetics of Supercooled Liquid GeSb Based on Ultrafast Calorimetry. Crystal Growth and Design, 2016, 16, 242-248.	1.4	44
1211	Structural characterization, phase transition and switchable dielectric behaviors in a new zigzag chain organic-inorganic hybrid compound: [C <sub>3</sub> H <sub>7</sub> NH <sub>3</sub> ] <sub>2</sub> Sb <sub>5</sub> . Dalton Transactions, 2016, 45, 5229-5233.	1.6	30
1212	Control over electrically bistable properties of layer-by-layer-assembled polymer/organometal multilayers. Polymer Journal, 2016, 48, 481-486.	1.3	3
1213	HAXPES Applications to Advanced Materials. Springer Series in Surface Sciences, 2016, , 467-531.	0.3	1
1214	Inverse simulated annealing: Improvements and application to amorphous InSb. Computational Materials Science, 2016, 117, 7-14.	1.4	2
1215	Study of pulsed-DC sputtering induced Ge <sub>2</sub> Sb <sub>2</sub> Te <sub>5</sub> thin films using facile thermoelectric measurement. Materials and Design, 2016, 98, 254-261.	3.3	20
1216	memory device. Chemical Research in Chinese Universities, 2016, 32, 76-81.	1.3	4
1217	Optimized $ZT$ $B_i T_{i2}$	1.1	15
1218	Thermal behavior of Se-rich GeSb <sub>2</sub> Se <sub>4-y</sub> Tey (glassy) system. Journal of Alloys and Compounds, 2016, 670, 222-228.	2.8	11
1219	Exothermic Self-Sustained Waves with Amorphous Nickel. Journal of Physical Chemistry C, 2016, 120, 5827-5838.	1.5	23
1220	Uniform silicon carbide doped Sb <sub>2</sub> Te nanomaterial for high temperature and high speed PCM applications. Journal of Alloys and Compounds, 2016, 664, 591-594.	2.8	4
1221	Reversible phase transition triggered by order-disorder transformations and distortions in dipropylammonium-d(+)-10-camphorsulfonate. CrystEngComm, 2016, 18, 2852-2856.	1.3	9
1222	Role of Bi incorporation on glass transition kinetics in glassy Se <sub>78</sub> Te <sub>20</sub> Sn <sub>2</sub> alloy. Phase Transitions, 2016, 89, 1103-1118.	0.6	3
1223	Homogenization of Periodic Structured Materials With Chiral Properties. IEEE Transactions on Antennas and Propagation, 2016, 64, 1751-1758.	3.1	15
1224	Functional materials for information and energy technology: Insights by photoelectron spectroscopy. Journal of Electron Spectroscopy and Related Phenomena, 2016, 208, 24-32.	0.8	11
1225	The dependence of crystallization on temperature in the nanosecond timescale for GeTe-based fast phase-change resistor. Chemical Physics Letters, 2016, 650, 102-106.	1.2	3
1226	Reversible Phase Transition Triggered by Order-Disorder Transformation of Carboxyl Oxygen Atoms Coupled with Distinct Reorientations in [HN(C <sub>4</sub> H <sub>9</sub> ) <sub>3</sub> ] <sub>0.5</sub> ·(fumarate) <sub>0.5</sub> ·(fumaric) Tj ETQq1 1 0.784314 rgBT /Overlock 10 Tf 50	1.4	20

#	ARTICLE	IF	CITATIONS
1227	Structural and optical properties of In doped Se <sub>2</sub> Te phase-change thin films: A material for optical data storage. <i>Optical Materials</i> , 2016, 52, 69-74.	1.7	34
1228	Real-space imaging of atomic arrangement and vacancy layers ordering in laser crystallised Ge <sub>2</sub> Sb <sub>2</sub> Te <sub>5</sub> phase change thin films. <i>Acta Materialia</i> , 2016, 105, 1-8.	3.8	84
1229	Performance improvement in a Ti <sub>2</sub> Sb <sub>2</sub> Te phase change material by GaSb doping. <i>CrystEngComm</i> , 2016, 18, 787-792.	1.3	8
1230	Ultra-high speed and low-power superlattice-like Sn <sub>18</sub> Sb <sub>82</sub> SnSe <sub>2</sub> thin films for phase change memory applications. <i>Materials Letters</i> , 2016, 163, 20-23.	1.3	15
1231	The improvement of nitrogen doped Ge <sub>2</sub> Sb <sub>2</sub> Te <sub>5</sub> on the phase change memory resistance distributions. <i>Solid-State Electronics</i> , 2016, 116, 119-123.	0.8	11
1232	Molecular simulation for thermoelectric properties of c-axis oriented hexagonal GeSbTe model clusters. <i>Materials and Design</i> , 2016, 89, 957-963.	3.3	16
1233	Impact of deposition conditions on the crystallization kinetics of amorphous GeTe films. <i>Journal of Materials Science</i> , 2016, 51, 1864-1872.	1.7	34
1234	Interplay between topological and thermodynamic stability in a metastable magnetic skyrmion lattice. <i>Nature Physics</i> , 2016, 12, 62-66.	6.5	164
1235	Synthesis and characterization of Bi <sub>x</sub> (Se <sub>80</sub> Te <sub>20</sub> ) <sub>100-x</sub> amorphous thin films. <i>Indian Journal of Physics</i> , 2016, 90, 529-537.	0.9	2
1236	Quenching of Charge and Spin Degrees of Freedom in Condensed Matter. <i>Advanced Materials</i> , 2017, 29, 1601979.	11.1	38
1237	van der Waals Metal-Organic Framework as an Excitonic Material for Advanced Photonics. <i>Advanced Materials</i> , 2017, 29, 1606034.	11.1	67
1238	Dynamics of the current filament formation and its steady-state characteristics in chalcogenide based PCM. <i>Solid-State Electronics</i> , 2017, 129, 10-15.	0.8	11
1239	The role of the alkali and chalcogen atoms on the stability of the layered chalcogenide $\mathbf{A}_2\mathbf{M}^{\text{II}}\mathbf{M}_3^{\text{IV}}\mathbf{Q}_8$ (A=alkali-metal; M=metal-cations; Q=chalcogen compounds: a density functional theory investigation within van der Waals corrections. <i>Journal of Physics Condensed Matter</i> , 2017, 29, 035402.	0.7	7
1240	Threshold response using modulated continuous wave illumination for multilayer 3D optical data storage. <i>Journal of Applied Physics</i> , 2017, 121, .	1.1	33
1241	PVDF-Based Ferroelectric Polymers in Modern Flexible Electronics. <i>Advanced Electronic Materials</i> , 2017, 3, 1600460.	2.6	321
1242	Analyzing and Driving Cluster Formation in Atomistic Simulations. <i>Journal of Chemical Theory and Computation</i> , 2017, 13, 1317-1327.	2.3	82
1243	The mechanism of texture formation during crystallization process of Ge <sub>2</sub> Sb <sub>2</sub> Te <sub>5</sub> thin films. <i>Crystal Research and Technology</i> , 2017, 52, 1600243.	0.6	2
1244	Realization of III-V Semiconductor Periodic Nanostructures by Laser Direct Writing Technique. <i>Nanoscale Research Letters</i> , 2017, 12, 12.	3.1	17

#	ARTICLE	IF	CITATIONS
1245	Class transition kinetics and thermal stability of $\text{Se}_{82}\text{Te}_{18}\text{Sbx}$ ( $x=0, 4, 8$ and $12$ at %) glassy alloys. Journal of Materials Science: Materials in Electronics, 2017, 28, 6208-6216.	1.1	13
1246	Time-Resolved X-Ray Powder Diffraction Study of Photoinduced Phase Transitions in $\text{Ti}_3\text{O}_5$ Nanoparticles. ChemPhysChem, 2017, 18, 1385-1392.	1.0	8
1247	Iso-conversional kinetic analysis of quaternary glass re-crystallization. Heliyon, 2017, 3, e00249.	1.4	7
1248	Grayscale image recording on $\text{Ge}_2\text{Sb}_2\text{Te}_5$ thin films through laser-induced structural evolution. Scientific Reports, 2017, 7, 42712.	1.6	25
1249	High-temperature structural phase transition coupled with dielectric switching in an organic-inorganic hybrid crystal: $[\text{NH}_3(\text{CH}_2)_2\text{Br}]_3\text{CdBr}_5$ . Dalton Transactions, 2017, 46, 4711-4716.	1.6	20
1250	Electrical properties of $\text{Ge}_{1-x}\text{Se}_{2.5-x}\text{Sn}_{0.4x}$ glasses. Materials Research Express, 2017, 4, 045203.	0.8	11
1251	Structural phase transition of $\text{Ti}_3\text{O}_5$ glass under high hydrostatic pressure: Polyamorphism, relaxation, and metallization. Physical Review B, 2017, 95, 044111.	1.1	15
1252	Light-Induced Metastable Magnetic Texture Uncovered by <i>in situ</i> Lorentz Microscopy. Physical Review Letters, 2017, 118, 097203.	2.9	50
1253	Detection of N-Te bonds in the as-deposited amorphous nitrogen-doped GeTe-based phase change alloys using N K-edge XANES spectroscopy and their impact on crystallization. Journal of Alloys and Compounds, 2017, 704, 254-259.	2.8	5
1254	Linear and non-linear optical properties of Ag-doped $\text{Ge}_2\text{Sb}_2\text{Te}_5$ thin films estimated by single transmission spectra. Semiconductor Science and Technology, 2017, 32, 045015.	1.0	46
1255	Unerwartete Ge-Ge-Kontakte in der zweidimensionalen Phase $\text{Ge}_4\text{Se}_3\text{Te}$ und Analyse ihres chemischen Ursprungs mittels Energiedichte(DOE)-Funktion. Angewandte Chemie, 2017, 129, 10338-10342.	1.6	2
1256	Tunable Dielectric Responses Triggered by Dimensionality Modification in Organic-Inorganic Hybrid Phase Transition Compounds $(\text{C}_5\text{H}_6\text{N})\text{Cd}_n\text{Cl}_{2n+1}$ ( $n = 1$ and $2$ ). Inorganic Chemistry, 2017, 56, 3506-3511.	1.9	22
1257	Canonical free-energy barrier of particle and polymer cluster formation. Nature Communications, 2017, 8, 14546.	5.8	31
1258	Effect of the crystal structure on the electronic structure and electrical properties of thermoelectric $\text{GeSb}_6\text{Te}_{10}$ prepared by hot pressing. Scripta Materialia, 2017, 133, 96-100.	2.6	1
1259	A supra-molecular switchable dielectric material with non-linear optical properties. Journal of Materials Chemistry C, 2017, 5, 2865-2870.	2.7	64
1260	Unexpected Ge-Ge Contacts in the Two-Dimensional $\text{Ge}_4\text{Se}_3\text{Te}$ Phase and Analysis of Their Chemical Cause with the Density of Energy (DOE) Function. Angewandte Chemie - International Edition, 2017, 56, 10204-10208.	7.2	64
1261	Control over emissivity of zero-static-power thermal emitters based on phase-changing material GST. Light: Science and Applications, 2017, 6, e16194-e16194.	7.7	236
1262	Thermal stability improvement and optical band gap behavior in $\text{Ge}_2\text{Te}$ films by Mg-doping. Vacuum, 2017, 141, 188-191.	1.6	5

#	ARTICLE	IF	CITATIONS
1263	Investigation of multilayer SnSb <sub>4</sub> /ZnSb thin films for phase change memory applications. Applied Physics Express, 2017, 10, 055504.	1.1	8
1264	Inverting polar domains via electrical pulsing in metallic germanium telluride. Nature Communications, 2017, 8, 15033.	5.8	29
1265	Optical band gap tuning of Ag doped Ge <sub>2</sub> Sb <sub>2</sub> Te <sub>5</sub> thin films. Journal of Materials Science: Materials in Electronics, 2017, 28, 11300-11305.	1.1	31
1266	The Relation between Chemical Bonding and Ultrafast Crystal Growth. Advanced Materials, 2017, 29, 1700814.	11.1	51
1267	On the nature of chemical bonding in phase change materials on the base of (GeTe) <sub>m</sub> -(Sb <sub>2</sub> Te <sub>3</sub> ) <sub>n</sub> alloys. Solid State Communications, 2017, 258, 7-10.	0.9	8
1268	Crystallization Kinetics of GeSbTe Phase-Change Nanoparticles Resolved by Ultrafast Calorimetry. Journal of Physical Chemistry C, 2017, 121, 8569-8578.	1.5	56
1269	Molybdenum Carbamate Nanosheets as a New Class of Potential Phase Change Materials. Nano Letters, 2017, 17, 3902-3906.	4.5	3
1270	Modulation of van der Waals and classical epitaxy induced by strain at the Si step edges in GeSbTe alloys. Scientific Reports, 2017, 7, 1466.	1.6	21
1271	Realization of Multilevel States in Phase-Change Thin Films by Fast Laser Pulse Irradiation. Advanced Optical Materials, 2017, 5, 1700169.	3.6	43
1272	Investigation on the crystallization properties and structure of oxygen-doped Ge <sub>8</sub> Sb <sub>92</sub> phase change thin films. Journal Physics D: Applied Physics, 2017, 50, 095602.	1.3	20
1273	Attaining resistive switching characteristics and selector properties by varying forming polarities in a single HfO <sub>2</sub> -based RRAM device with a vanadium electrode. Nanoscale, 2017, 9, 8586-8590.	2.8	56
1274	Ti-Sb-Te Phase Change Materials: Component Optimisation, Mechanism and Applications. Springer Theses, 2017, , .	0.0	7
1275	Crystallization Behavior of Ti-Sb-Te Alloy. Springer Theses, 2017, , 59-74.	0.0	0
1276	Phase Change Mechanism of Ti-Sb-Te Alloy. Springer Theses, 2017, , 87-101.	0.0	0
1277	Ferroelectric or non-ferroelectric: Why so many materials exhibit "ferroelectricity" on the nanoscale. Applied Physics Reviews, 2017, 4, .	5.5	240
1278	Optical properties of Cr-doped Sb <sub>2</sub> Te thin films during ultrafast crystallization processes. Journal of Non-Crystalline Solids, 2017, 469, 56-61.	1.5	14
1279	N-Methylpyrrolidinium hydrogen tartrate (NMPHT): an above-room-temperature order-disorder molecular switchable dielectric material. RSC Advances, 2017, 7, 24368-24373.	1.7	11
1280	Silicon carbide doped Sb <sub>2</sub> Te <sub>3</sub> nanomaterial for fast-speed phase change memory. Materials Letters, 2017, 201, 109-113.	1.3	7

#	ARTICLE	IF	CITATIONS
1281	Microstructure and magnetic behavior of Mn doped GeTe chalcogenide semiconductors based phase change materials. <i>Solid State Communications</i> , 2017, 259, 19-23.	0.9	6
1282	Single-Atom Scale Structural Selectivity in Te Nanowires Encapsulated Inside Ultranarrow, Single-Walled Carbon Nanotubes. <i>ACS Nano</i> , 2017, 11, 6178-6185.	7.3	69
1283	Physical properties of madocite: A quaternary chalcogenide with very low thermal conductivity. <i>Journal of Solid State Chemistry</i> , 2017, 251, 113-115.	1.4	1
1284	Nonideal Behavior of Glass and Crystal. <i>Journal of Physical Chemistry B</i> , 2017, 121, 5116-5124.	1.2	4
1285	Localized states evolution and nitrides separation before crystallization in nitrogen incorporated GeTe: Evidence from ellipsometric spectra. <i>Applied Physics Letters</i> , 2017, 110, 161906.	1.5	5
1286	Effects of plasma treatment time on surface characteristics of indium-tin-oxide film for resistive switching storage applications. <i>Applied Surface Science</i> , 2017, 414, 224-229.	3.1	19
1287	Heat guiding and focusing using ballistic phonon transport in phononic nanostructures. <i>Nature Communications</i> , 2017, 8, 15505.	5.8	143
1288	Optical memristive switches. <i>Journal of Electroceramics</i> , 2017, 39, 239-250.	0.8	40
1289	Unraveling the Crystallization Kinetics of Supercooled Liquid GeTe by Ultrafast Calorimetry. <i>Crystal Growth and Design</i> , 2017, 17, 3687-3693.	1.4	87
1290	Periodic cycle number modulating effect on crystallization temperature in superlattice-like [Ge/Ge <sub>8</sub> Sb <sub>92</sub> ] <sub>n</sub> phase-change films and exploration of mechanism. <i>AIP Advances</i> , 2017, 7, 065209.	0.6	0
1291	An Above-Room-Temperature Phase Transition with Dielectric Switching Properties in a Halogenobismuthate(III) Tris(Cyclohexylmethylammonium) Pentabromobismuthate(III) Bromide. <i>European Journal of Inorganic Chemistry</i> , 2017, 2017, 3555-3560.	1.0	5
1292	A new method for synthesis of As-Te chalcogenide films. <i>Superlattices and Microstructures</i> , 2017, 111, 173-180.	1.4	23
1293	Electrically Activated Conductivity and White Light Emission of a Hydrocarbon Nanoring-Iodine Assembly. <i>Angewandte Chemie</i> , 2017, 129, 11348-11354.	1.6	17
1294	Nanoscale phase-change materials and devices. <i>Journal Physics D: Applied Physics</i> , 2017, 50, 243002.	1.3	22
1295	Mechanical model of giant photoexpansion in a chalcogenide glass and the role of photofluidity. <i>Physica B: Condensed Matter</i> , 2017, 516, 85-91.	1.3	7
1296	Synthesis and Screening of Phase Change Chalcogenide Thin Film Materials for Data Storage. <i>ACS Combinatorial Science</i> , 2017, 19, 478-491.	3.8	35
1297	Dynamic reconfiguration of van der Waals gaps within GeTeSb <sub>2</sub> Te <sub>3</sub> based superlattices. <i>Nanoscale</i> , 2017, 9, 8774-8780.	2.8	71
1298	Nanoscale Stabilization of Nonequilibrium Rock Salt BiAgSeS: Colloidal Synthesis and Temperature Driven Unusual Phase Transition. <i>Chemistry of Materials</i> , 2017, 29, 3769-3777.	3.2	16



#	ARTICLE	IF	CITATIONS
1299	Nonoxide Tellurium-Based Glasses. Springer Series in Materials Science, 2017, , 59-91.	0.4	1
1300	Study of dielectric relaxation and thermally activated a.c. conduction in lead containing topological glassy semiconductors. RSC Advances, 2017, 7, 19085-19097.	1.7	35
1301	Pair potential modeling of atomic rearrangement in GeTe-Sb <sub>2</sub> Te <sub>3</sub> superlattice via first-principles calculations. Journal of Applied Physics, 2017, 121, .	1.1	8
1302	Recessed cell structure for high performance phase change memory. Materials Science in Semiconductor Processing, 2017, 64, 143-146.	1.9	2
1303	Improved structural and electrical properties in native Sb <sub>2</sub> Te <sub>3</sub> /Ge <sub>x</sub> Sb <sub>2</sub> Te <sub>3+x</sub> van der Waals superlattices due to intermixing mitigation. APL Materials, 2017, 5, .	2.2	26
1304	Technological Advances in Tellurite Glasses. Springer Series in Materials Science, 2017, , .	0.4	39
1305	Enhanced temperature stability and exceptionally high electrical contrast of selenium substituted Ge <sub>2</sub> Sb <sub>2</sub> Te <sub>5</sub> phase change materials. RSC Advances, 2017, 7, 17164-17172. <a href="#">calculation of lattice thermal conductivity in crystalline phase change materials: GeTe</a> , <mml:math xmlns:mml="http://www.w3.org/1998/Math/MathML"><mml:mrow><mml:msub><mml:mi mathvariant="bold">Sb</mml:mi><mml:mn>2</mml:mn></mml:msub><mml:msub><mml:mi mathvariant="bold">Te</mml:mi><mml:mn>3</mml:mn></mml:msub></mml:mrow></mml:math>, and	1.7	26
1306	<a href="#">GeTe</a> , <mml:math xmlns:mml="http://www.w3.org/1998/Math/MathML"><mml:mrow><mml:msub><mml:mi mathvariant="bold">Sb</mml:mi><mml:mn>2</mml:mn></mml:msub><mml:msub><mml:mi mathvariant="bold">Te</mml:mi><mml:mn>3</mml:mn></mml:msub></mml:mrow></mml:math>, and	1.1	86
1307	Role of Nanostructuring and Microstructuring in Silver Antimony Telluride Compounds for Thermoelectric Applications. ACS Applied Materials & Interfaces, 2017, 9, 14779-14790.	4.0	28
1308	Modulation of phase change characteristics in Ag-incorporated Ge <sub>2</sub> Sb <sub>2</sub> Te <sub>5</sub> owing to changes in structural distortion and bond strength. Journal of Materials Chemistry C, 2017, 5, 3973-3982.	2.7	20
1309	Programming power reduction in confined phase change memory cells with titanium dioxide clad layer. Applied Physics Letters, 2017, 110, .	1.5	5
1310	Insight into the role of oxygen in the phase-change material GeTe. Journal of Materials Chemistry C, 2017, 5, 3592-3599.	2.7	18
1311	Dielectric properties of amorphous phase-change materials. Physical Review B, 2017, 95, .	1.1	41
1312	Enhanced Thermal Energy Storage Performance of Polyethylene Glycol by Using Interfacial Interaction of Copper-Based Metal Oxide. Advanced Engineering Materials, 2017, 19, 1600601.	1.6	16
1313	The correlation of electrical conductivity with the microstructure of Ge <sub>2</sub> Sb <sub>2</sub> Te <sub>5</sub> thin films alloyed with Sn. Materials Research Express, 2017, 4, 016407.	0.8	6
1314	Calorimetric studies of crystallization for multi-component glasses of Se-Te-Sn-Ag (STSA) system using model-free and model-fitting non-isothermal methods. Journal of Thermal Analysis and Calorimetry, 2017, 128, 907-914.	2.0	10
1315	Cohesive and adhesive properties of ultrathin amorphous and crystalline Ge <sub>2</sub> Sb <sub>2</sub> Te <sub>5</sub> films on polyimide substrates. Acta Materialia, 2017, 126, 264-271.	3.8	20
1316	Polymorphism-dependent aggregation-induced emission of pyrrolopyrrole-based derivative and its multi-stimuli response behaviors. Dyes and Pigments, 2017, 139, 664-671.	2.0	48

#	ARTICLE	IF	CITATIONS
1317	Chemical and structural arrangement of the trigonal phase in GeSbTe thin films. <i>Nanotechnology</i> , 2017, 28, 065706.	1.3	39
1318	Thiophosphates Containing Ag <sup>+</sup> and Lone-Pair Cations with Interchiral Double Helix Show Both Ionic Conductivity and Phase Transition. <i>Inorganic Chemistry</i> , 2017, 56, 962-973.	1.9	21
1319	Conformal Coating of a Phase Change Material on Ordered Plasmonic Nanorod Arrays for Broadband All-Optical Switching. <i>ACS Nano</i> , 2017, 11, 693-701.	7.3	55
1320	Phase Transition and Second Harmonic Generation in Thiophosphates Ag <sub>2</sub> Cd(P <sub>2</sub> S <sub>6</sub> ) and AgCd <sub>3</sub> (PS <sub>4</sub> )S <sub>2</sub> Containing Two Second-Order Jahn-Teller Distorted Cations. <i>Inorganic Chemistry</i> , 2017, 56, 114-124.	1.9	39
1321	Notable Broad Dielectric Relaxation and Highly Efficient Red Photoluminescence in a Perovskite-Type Compound: (N-Methylpyrrolidinium)MnCl <sub>3</sub> . <i>Inorganic Chemistry</i> , 2017, 56, 12193-12198.	1.9	45
1322	Electrically Driven Reversible Phase Changes in Layered In <sub>2</sub> Se <sub>3</sub> Crystalline Film. <i>Advanced Materials</i> , 2017, 29, 1703568.	11.1	77
1323	Structural Complexity and Thermoelectric Properties of Quaternary and Quinary Tellurides (Ge <sub>x</sub> Sn <sub>1-x</sub> ) <sub>0.8</sub> (In <sub>y</sub> Sb <sub>1-y</sub> ) <sub>0.13</sub> with 0 ≤ x, y ≤ 1. <i>Zeitschrift Fur Anorganische Und Allgemeine Chemie</i> , 2017, 643, 1962-1970.		
1324	Revealing Cation-Exchange-Induced Phase Transformations in Multielemental Chalcogenide Nanoparticles. <i>Chemistry of Materials</i> , 2017, 29, 9192-9199.	3.2	19
1325	In-situ study of athermal reversible photocrystallization in a chalcogenide glass. <i>Journal of Applied Physics</i> , 2017, 122, .	1.1	6
1326	Calculating with light using a chip-scale all-optical abacus. <i>Nature Communications</i> , 2017, 8, 1256.	5.8	201
1327	Molybdenum oxide-base phase change resistive switching material. <i>Applied Physics Letters</i> , 2017, 111, .	1.5	8
1328	Investigating the Influence of Resonant Bonding on the Optical Properties of Phase Change Materials (GeTe) <sub>x</sub> SnSb <sub>2</sub> Se <sub>4</sub> . <i>Chemistry of Materials</i> , 2017, 29, 9320-9327.	3.2	18
1329	Structural phase transition in monolayer MoTe <sub>2</sub> driven by electrostatic doping. <i>Nature</i> , 2017, 550, 487-491.	13.7	548
1330	A High On/Off Ratio Floating Gate Memristor Array on a Flexible Substrate via CVD-Grown Large Area 2D Layer Stacking. <i>Advanced Materials</i> , 2017, 29, 1703363.	11.1	116
1331	Enhancement of coherent phonon amplitude in phase-change materials by near-infrared laser irradiation. <i>Applied Physics Letters</i> , 2017, 111, .	1.5	4
1332	Phase-Change Memory Towards a Storage-Class Memory. <i>IEEE Transactions on Electron Devices</i> , 2017, 64, 4374-4385.	1.6	291
1333	Compositional tuning in sputter-grown highly-oriented BiTe films and their optical and electronic structures. <i>Nanoscale</i> , 2017, 9, 15115-15121.	2.8	19
1334	On-chip photonic synapse. <i>Science Advances</i> , 2017, 3, e1700160.	4.7	399

#	ARTICLE	IF	CITATIONS
1335	Atomistic Simulations of the Crystallization and Aging of GeTe Nanowires. <i>Journal of Physical Chemistry C</i> , 2017, 121, 23827-23838.	1.5	42
1336	Heat-Treatment-Induced Compositional Evolution and Magnetic State Transition in Magnetic Chalcogenide Semiconductor GeFeTe without Structural Phase Change. <i>ACS Applied Materials &amp; Interfaces</i> , 2017, 9, 38651-38661.	4.0	16
1337	Topological quantum phase transition from mirror to time reversal symmetry protected topological insulator. <i>Nature Communications</i> , 2017, 8, 968.	5.8	31
1338	Composition-dependent nanoelectronics of amido-phenazines: non-volatile RRAM and WORM memory devices. <i>Scientific Reports</i> , 2017, 7, 13308.	1.6	31
1339	Two-Way Transformation between fcc- and Nonfcc-Structured Gold Nanoclusters. <i>Journal of Physical Chemistry Letters</i> , 2017, 8, 5338-5343.	2.1	47
1340	Direct Evidence for a Systematic Evolution of Optical Band Gap and Local Disorder in Ag, In Doped Sb <sub>2</sub> Te Phase Change Material. <i>Physica Status Solidi - Rapid Research Letters</i> , 2017, 11, 1700273.	1.2	9
1341	Large-Scale, Long-Range-Ordered Patterning of Nanocrystals via Capillary-Bridge Manipulation. <i>Advanced Materials</i> , 2017, 29, 1703143.	11.1	59
1342	High-precision measurements of the compressibility and the electrical resistivity of bulk g-As <sub>2</sub> Te <sub>3</sub> glasses at a hydrostatic pressure up to 8.5 GPa. <i>Journal of Experimental and Theoretical Physics</i> , 2017, 125, 451-464.	0.2	7
1343	Switching of localized surface plasmon resonance of gold nanoparticles using phase-change materials and implementation of computing functionality. <i>Applied Physics A: Materials Science and Processing</i> , 2017, 123, 1.	1.1	7
1344	Grüneisen parameters and thermal conductivity in the phase change compound GeTe. <i>Journal of Computational Electronics</i> , 2017, 16, 997-1002.	1.3	13
1345	Active Control over the Interplay between the Dark and Hidden Sides of Plasmonics Using Metallodielectric Au-Ge <sub>2</sub> Sb <sub>2</sub> Te <sub>5</sub> Unit Cells. <i>Journal of Physical Chemistry C</i> , 2017, 121, 19966-19974.	1.5	42
1346	Light-Induced Tuning and Reconfiguration of Nanophotonic Structures. <i>Laser and Photonics Reviews</i> , 2017, 11, 1700108.	4.4	158
1347	The high-thermal stability and ultrafast phase change memory based on Ge <sub>1.6</sub> Te-GaSb nano-composite alloys. <i>Journal of Alloys and Compounds</i> , 2017, 727, 1288-1292.	2.8	5
1348	Revisiting the Si-Te System: SiTe <sub>2</sub> Finally Found by Means of Experimental and Quantum-Chemical Techniques. <i>Inorganic Chemistry</i> , 2017, 56, 11398-11405.	1.9	21
1349	Development of ferroelectric oxides based resistive switching materials. <i>Materials Science and Technology</i> , 2017, 33, 2010-2023.	0.8	5
1350	A Magnetoresistance Induced by a Nonzero Berry Phase in GeTe/Sb <sub>2</sub> Te <sub>3</sub> Chalcogenide Superlattices. <i>Advanced Functional Materials</i> , 2017, 27, 1702243.	7.8	24
1351	A room temperature reversible phase transition containing dielectric switching of a host-guest supramolecular metal-halide compound. <i>Dalton Transactions</i> , 2017, 46, 12760-12765.	1.6	10
1352	Phase preference in some Ag-In-Sb-Te alloys. <i>AIP Conference Proceedings</i> , 2017, , .	0.3	1

#	ARTICLE	IF	CITATIONS
1353	Low Power Phase Change Memory With Vertical Carbon Nanotube Electrode. IEEE Journal of the Electron Devices Society, 2017, 5, 362-366.	1.2	5
1354	Atomic Layer Deposition of GeTe and Ge <sub>1-x</sub> Sb <sub>x</sub> Te Films Using HGeCl <sub>3</sub> , Sb(OC <sub>2</sub> H <sub>5</sub> ) <sub>3</sub> , and {(CH <sub>3</sub> ) <sub>3</sub> Si} <sub>2</sub> Te and Their Reaction Mechanisms. Chemistry of Materials, 2017, 29, 8065-8072.	3.2	24
1355	Study of non-equilibrium thermal transport in Ge <sub>2</sub> Sb <sub>2</sub> Te <sub>5</sub> thin films under ultrafast laser excitation using a photo-excited carrier integrated semiconductor model. Journal of Applied Physics, 2017, 122, .	1.1	8
1356	Optical properties of GST nanoparticles fabricated by laser printing technique. AIP Conference Proceedings, 2017, , .	0.3	0
1357	Atomic structure and dynamic reconfiguration of layered defects in van der Waals layered Ge-Sb-Te based materials. Acta Materialia, 2017, 141, 92-96.	3.8	59
1358	Memristive computing devices and applications. Journal of Electroceramics, 2017, 39, 4-20.	0.8	47
1359	Multi-Photon Absorption in Metal-Organic Frameworks. Angewandte Chemie - International Edition, 2017, 56, 14743-14748.	7.2	79
1360	Multi-level storage and ultra-high speed of superlattice-like Ge <sub>50</sub> Te <sub>50</sub> /Ge <sub>8</sub> Sb <sub>92</sub> thin film for phase-change memory application. Nanotechnology, 2017, 28, 405206.	1.3	22
1361	Multiphotonenabsorption in Metall-organischen Gerüstverbindungen. Angewandte Chemie, 2017, 129, 14938-14943.	1.6	18
1362	Flexible nonvolatile resistive memory devices based on SrTiO <sub>3</sub> nanosheets and polyvinylpyrrolidone composites. Journal of Materials Chemistry C, 2017, 5, 9799-9805.	2.7	33
1363	One-step phase transition and thermal stability improvement of Ge <sub>2</sub> Sb <sub>2</sub> Te <sub>5</sub> films by erbium-doping. Vacuum, 2017, 145, 258-261.	1.6	3
1364	Features of the electron density distribution in antimony telluride Sb <sub>2</sub> Te <sub>3</sub> . Physics of the Solid State, 2017, 59, 1302-1309.	0.2	5
1365	Glass Transitions, Semiconductor-Metal Transitions, and Fragilities in $\langle \text{mml:mrow} \langle \text{mml:mi} \rangle \text{Ge} \langle \text{mml:mi} \rangle \langle \text{mml:mtext} \rangle \hat{\sim} \langle \text{mml:mtext} \rangle \langle \text{mml:mi} \rangle \text{V} \langle \text{mml:mi} \rangle \langle \text{mml:mtext} \rangle \hat{\sim} \langle \text{mml:mtext} \rangle \langle \text{mml:math} \text{xmlns:mml="http://www.w3.org/1998/Math/MathML"} \rangle \text{Tj ETQq0 0 0 rgBT /Overlock 10 Tf 50 252 Td (display="inline") \rangle \langle \text{mml:mtext} \rangle$	1.3	36
1366	A weak electric field-assisted ultrafast electrical switching dynamics in In <sub>3</sub> Sb <sub>2</sub> Te <sub>2</sub> phase-change memory devices. AIP Advances, 2017, 7, .	0.6	4
1367	Mixed-Mode Electro-Optical Operation of Ge <sub>2</sub> Sb <sub>2</sub> Te <sub>5</sub> Nanoscale Crossbar Devices. Advanced Electronic Materials, 2017, 3, 1700079.	2.6	24
1368	Design Parameters for Phase-Change Materials for Nanostructure Resonance Tuning. Advanced Optical Materials, 2017, 5, 1700261.	3.6	55
1369	Chemical Tuning of Carrier Type and Concentration in a Homologous Series of Crystalline Chalcogenides. Chemistry of Materials, 2017, 29, 6749-6757.	3.2	18
1370	Solving the Scaling Issue of Increasing Forming Voltage in Resistive Random Access Memory Using High-k Spacer Structure. Advanced Electronic Materials, 2017, 3, 1700171.	2.6	19

#	ARTICLE	IF	CITATIONS
1371	Volume Resistive Switching in metallic perovskite oxides driven by the Metal-Insulator Transition. Journal of Electroceramics, 2017, 39, 185-196.	0.8	26
1372	Phase-change materials for non-volatile photonic applications. Nature Photonics, 2017, 11, 465-476.	15.6	917
1373	Increasing the thermoelectric power factor of Ge <sub>17</sub> Sb <sub>2</sub> Te <sub>20</sub> by adjusting the Ge/Sb ratio. Journal of Applied Physics, 2017, 122, 045105.	1.1	16
1374	Fast and slow integrated single-molecule dual dielectric switch based on a crystal/flexible thin film. Journal of Materials Chemistry C, 2017, 5, 6945-6953.	2.7	23
1375	Study on the physical properties and structure of titanium antimony thin films for phase change memory application. Journal of Materials Science, 2017, 52, 11598-11607.	1.7	21
1376	A Dimeric NHC-Silicon Monotelluride: Synthesis, Isomerization, and Reactivity. Angewandte Chemie, 2017, 129, 11723-11727.	1.6	6
1377	A Dimeric NHC-Silicon Monotelluride: Synthesis, Isomerization, and Reactivity. Angewandte Chemie - International Edition, 2017, 56, 11565-11569.	7.2	14
1378	Classical-nucleation-theory analysis of priming in chalcogenide phase-change memory. Acta Materialia, 2017, 139, 226-235.	3.8	56
1379	Giant lattice expansion by quantum stress and universal atomic forces in semiconductors under instant ultrafast laser excitation. Physical Chemistry Chemical Physics, 2017, 19, 24735-24741.	1.3	7
1380	Electronic Structure of Transition-Metal Based Cu <sub>2</sub> GeTe <sub>3</sub> Phase Change Material: Revealing the Key Role of Cu d-Electrons. Chemistry of Materials, 2017, 29, 7440-7449.	3.2	24
1381	GeTe: a simple compound blessed with a plethora of properties. CrystEngComm, 2017, 19, 5324-5335.	1.3	41
1382	A computational study of cyclic thermal response of shape memory alloy thin-film island structures. Acta Mechanica, 2017, 228, 3497-3509.	1.1	2
1383	Thermodynamic stability of Si <sub>2</sub> Te <sub>3</sub> (s) and SiTe <sub>2</sub> (s) compounds. Journal of Alloys and Compounds, 2017, 726, 1101-1105.	2.8	4
1384	Growth of crystalline phase change materials by physical deposition methods. Advances in Physics: X, 2017, 2, 675-694.	1.5	12
1385	Structural and optical properties of arsenic sulfide films synthesized by a novel PECVD-based approach. Superlattices and Microstructures, 2017, 111, 1104-1112.	1.4	40
1386	Avalanche atomic switching in strain engineered Sb <sub>2</sub> Te <sub>3</sub> -GeTe interfacial phase-change memory cells. Nano Futures, 2017, 1, 025003.	1.0	37
1387	Weyl node assisted conductivity switch in interfacial phase-change memory with van der Waals interfaces. Physical Review B, 2017, 96, .	1.1	16
1388	Exploring the subsurface atomic structure of the epitaxially grown phase change material $\text{Ge}_2\text{Sb}_2\text{Te}_5$ . Physical Review B, 2017, 96, .	1.1	10

#	ARTICLE	IF	CITATIONS
1389	A comparative study on the electronic and optical properties of Sb <sub>2</sub> Se <sub>3</sub> thin film. Semiconductors, 2017, 51, 1615-1624.	0.2	25
1390	Reduction of thermal conductivity in Y <sub>x</sub> Sb <sub>2-x</sub> Te <sub>3</sub> for phase change memory. Journal of Applied Physics, 2017, 122, .	1.1	21
1391	Thermal diodes, regulators, and switches: Physical mechanisms and potential applications. Applied Physics Reviews, 2017, 4, 041304.	5.5	322
1392	Controlling the H to T <sup>2</sup> structural phase transition via chalcogen substitution in MoTe <sub>2</sub> monolayers. Physical Chemistry Chemical Physics, 2017, 19, 31874-31882.	1.3	19
1393	Tailor-made temperature-dependent thermal conductivity via interparticle constriction. Science Advances, 2017, 3, eaao5238.	4.7	14
1394	Structural Analyses of Phase Stability in Amorphous and Partially Crystallized Ge-Rich GeTe Films Prepared by Atomic Layer Deposition. ACS Applied Materials & Interfaces, 2017, 9, 41387-41396.	4.0	9
1395	Stabilization of microcrystal $\delta$ -Ti <sub>3</sub> O <sub>5</sub> at room temperature by aluminum-ion doping. Applied Physics Letters, 2017, 111, .	1.5	25
1396	Nanoscale Bipolar Electrical Switching of Ge <sub>2</sub> Sb <sub>2</sub> Te <sub>5</sub> Phase-Change Material Thin Films. Advanced Electronic Materials, 2017, 3, 1700283.	2.6	26
1397	Chaotic behavior in Casimir oscillators: A case study for phase-change materials. Physical Review E, 2017, 96, 042215.	0.8	17
1398	Modulating molecular structures and dielectric transitions in organic-inorganic hybrid crystals. RSC Advances, 2017, 7, 52024-52029.	1.7	3
1399	Nanopatterning of GeTe phase change films via heated-probe lithography. Nanoscale, 2017, 9, 8815-8824.	2.8	23
1400	Phase Change and Magnetic Memories for Solid-State Drive Applications. Proceedings of the IEEE, 2017, 105, 1790-1811.	16.4	26
1401	Structural and electronic phase transitions in ferromagnetic monolayer VS <sub>2</sub> induced by charge doping. Physical Review B, 2017, 95, .	1.1	14
1402	Local structure of the crystalline and amorphous states of Ga <sub>2</sub> alloy without resonant bonding: A combined x-ray absorption and <i>ab initio</i> study. Physical Superconductivity in multiple phases of compressed VS <sub>2</sub> . Physical Review B, 2017, 95, .	1.1	13
1403	Local structure of amorphous Ag <sub>5</sub> In <sub>5</sub> Sb <sub>60</sub> Te <sub>30</sub> and In <sub>3</sub> SbTe <sub>2</sub> phase change materials revealed by X-ray photoelectron and Raman spectroscopic studies. Journal of Applied Physics, 2017, 122, .	1.1	17
1404	Element-specific amorphization of vacancy-ordered GeSbTe for ternary-state phase change memory. Acta Materialia, 2017, 136, 242-248.	3.8	30
1406	Controllable phase separation and improved grain growth mode of Mg-doped Sb <sub>7</sub> Te <sub>3</sub> films. Ceramics International, 2017, 43, 12452-12458.	2.3	6

#	ARTICLE	IF	CITATIONS
1407	Pressure-Induced Phase Transitions in GeTe-Rich Ge <sub>1-x</sub> Sb <sub>x</sub> Te Alloys across the Rhombohedral-to-Cubic Transitions. <i>Inorganic Chemistry</i> , 2017, 56, 7687-7693.	1.9	3
1408	Manipulating the Bulk Band Structure of Artificially Constructed van der Waals Chalcogenide Heterostructures. <i>ACS Applied Materials &amp; Interfaces</i> , 2017, 9, 23918-23925.	4.0	17
1409	Evolution of crystal structures in GeTe during phase transition. <i>Scientific Reports</i> , 2017, 7, 955.	1.6	32
1410	Cycle number manipulating effect on crystallization temperature of superlattice-like [Ge/Ge <sub>8</sub> Sb <sub>92</sub> ] <sub>n</sub> phase-change films. <i>Journal of Alloys and Compounds</i> , 2017, 723, 936-941.	2.8	7
1411	Kinetic and structural fragility—a correlation between structures and dynamics in metallic liquids and glasses. <i>Journal of Physics Condensed Matter</i> , 2017, 29, 023002.	0.7	42
1412	Nonvolatile All-Optical 1 Å– 2 Switch for Chipscale Photonic Networks. <i>Advanced Optical Materials</i> , 2017, 5, 1600346.	3.6	165
1413	Thermal and Electrical Conductivity of Ge <sub>1</sub> Sb <sub>4</sub> Te <sub>7</sub> Chalcogenide Alloy. <i>Journal of Electronic Materials</i> , 2017, 46, 955-960.	1.0	5
1414	Epitaxial formation of cubic and trigonal Ge-Sb-Te thin films with heterogeneous vacancy structures. <i>Materials and Design</i> , 2017, 115, 138-146.	3.3	36
1415	Using Ge Secondary Phases to Enhance the Power Factor and Figure of Merit of Ge <sub>17</sub> Sb <sub>2</sub> Te <sub>20</sub> . <i>Journal of Electronic Materials</i> , 2017, 46, 2652-2661.	1.0	6
1416	Crystal structure assessment of Ge-Sb-Te nanowires. <i>Materials Science in Semiconductor Processing</i> , 2017, 65, 77-87.	1.9	4
1417	Crystallization properties of Sb-rich GeSbTe alloys by in-situ morphological and electrical analysis. <i>Materials Science in Semiconductor Processing</i> , 2017, 65, 100-107.	1.9	7
1418	Properties of Ti <sub>1-x</sub> Sb <sub>x</sub> Te doped with SbSe alloy for application in nonvolatile phase change memory. <i>Journal of Materials Science: Materials in Electronics</i> , 2017, 28, 923-927.	1.1	2
1419	Dielectric and optical constants of $\lambda$ -Ti <sub>3</sub> O <sub>5</sub> film measured by spectroscopic ellipsometry. <i>Materials Letters</i> , 2017, 188, 8-12.	1.3	10
1420	Temperature dependence of capacitance-voltage characteristics for GeTe <sub>2</sub> thin films. <i>Journal of Alloys and Compounds</i> , 2017, 694, 163-167.	2.8	5
1421	Aluminosilicate glass thin films elaborated by pulsed laser deposition. <i>Applied Surface Science</i> , 2017, 397, 13-18.	3.1	7
1422	High transmittance contrast in amorphous to hexagonal phase of Ge <sub>2</sub> Sb <sub>2</sub> Te <sub>5</sub> : Reversible NIR-window. <i>Applied Physics Letters</i> , 2017, 111, .	1.5	27
1423	Current-driven phase-change optical gate switch using indium-tin-oxide heater. <i>Applied Physics Express</i> , 2017, 10, 072201.	1.1	125
1424	An ultrafast programmable electrical tester for enabling time-resolved, sub-nanosecond switching dynamics and programming of nanoscale memory devices. <i>Review of Scientific Instruments</i> , 2017, 88, 123906.	0.6	6

#	ARTICLE	IF	CITATIONS
1425	Atomic-scale structure of the glassy $\text{Ge}_{20}\text{Sb}_{20}\text{Te}_{60}$ phase change material: A quantitative assessment via first-principles molecular dynamics. Physical Review B, 2017, 96, .	1.1	24
1426	Chalcogenide phase change materials: An electronic perspective. , 2017, , .		0
1427	Low Power Phase Change Memory at High Endurance With a Slice Bottom Electrode. IEEE Transactions on Device and Materials Reliability, 2017, 17, 805-807.	1.5	8
1430	RESET failure analysis of phase change memory based on $\text{Ge}_{20}\text{Sb}_{20}\text{Te}_{60}$ . IEICE Electronics Express, 2017, 14, 20170673-20170673.	0.3	3
1431	Understanding the influence of RESET current due to the active region of phase change memory. IEICE Electronics Express, 2017, 14, 20170474-20170474.	0.3	0
1432	Metasurfaces Based on Phase-Change Material as a Reconfigurable Platform for Multifunctional Devices. Materials, 2017, 10, 1046.	1.3	122
1433	Numerical study of tunable enhanced chirality in multilayer stack achiral phase-change metamaterials. Optics Express, 2017, 25, 9911.	1.7	28
1434	Multi-color modulation of solid-state display based on thermally induced color changes of indium tin oxide and phase changing materials. Optics Express, 2017, 25, 1405.	1.7	14
1435	Switching of the direction of reflectionless light propagation at exceptional points in non-PT-symmetric structures using phase-change materials. Optics Express, 2017, 25, 27283.	1.7	26
1436	A Review on Disorder-Driven Metal-Insulator Transition in Crystalline Vacancy-Rich $\text{GeSbTe}$ Phase-Change Materials. Materials, 2017, 10, 862.	1.3	54
1438	Atomistic and electronic structures of functional disordered materials revealed by a combination of quantum-beam measurements and computer simulations. Journal of the Ceramic Society of Japan, 2017, 125, 799-807.	0.5	9
1439	The microstructure and texture of $\text{Ge}_{20}\text{Sb}_{20}\text{Te}_{60}$ thin films for phase change memory. , 2017, , .		0
1440	Phase Change Chalcogenide Materials for Optical Data Storage. Indian Journal of Science and Technology, 2017, 10, 1-14.	0.5	31
1441	Ferroelasticity and piezoelectricity of organic-inorganic hybrid materials with a one-dimensional anionic structure: so similar, yet so different. CrystEngComm, 2018, 20, 2112-2119.	1.3	16
1442	Mapping the band structure of $\text{GeSbTe}$ phase change alloys around the Fermi level. Communications Physics, 2018, 1, .	2.0	16
1443	Programming Nanoparticles in Multiscale: Optically Modulated Assembly and Phase Switching of Silicon Nanoparticle Array. ACS Nano, 2018, 12, 2231-2241.	7.3	32
1444	Understanding phase-change materials with unexpectedly low resistance drift for phase-change memories. Journal of Materials Chemistry C, 2018, 6, 3387-3394.	2.7	20
1445	High performance $\text{Al}_3\text{Sc}$ alloy doped $\text{Al}_3\text{ScSb}_2\text{Te}$ chalcogenides for phase change memory application. Journal of Materials Chemistry C, 2018, 6, 4177-4182.	2.7	19



#	ARTICLE	IF	CITATIONS
1446	Tunable dielectric transitions in layered organic-inorganic hybrid perovskite-type compounds: $[\text{NH}_3(\text{CH}_2)_2\text{Cl}]_2[\text{CdCl}_4\text{Br}_4]$ ( $x = 0, 1/4, 1$ ). Dalton Transactions, 2018, 47, 7005-7012.	1.6	14
1447	Nonvolatile Memory Materials for Neuromorphic Intelligent Machines. Advanced Materials, 2018, 30, e1704729.	11.1	187
1448	Thermal stability of phase change GaSbGeTe, SnSeGeTe and GaSbSnSe double stacked films revealed by X-ray reflectometry and X-ray diffraction. Journal of Non-Crystalline Solids, 2018, 492, 11-17.	1.5	11
1449	Chemical interactions in the atomic layer deposition of Ge-Sb-Se-Te films and their ovonic threshold switching behavior. Journal of Materials Chemistry C, 2018, 6, 5025-5032.	2.7	33
1450	Laser-Rewritable Ferromagnetism at Thin-Film Surfaces. ACS Applied Materials & Interfaces, 2018, 10, 15232-15239.	4.0	32
1451	Investigation of the phase change mechanism of Ge <sub>6</sub> Sn <sub>2</sub> Sb <sub>2</sub> Te <sub>11</sub> . Acta Materialia, 2018, 152, 278-287.	3.8	15
1452	Unique Bond Breaking in Crystalline Phase Change Materials and the Quest for Metavalent Bonding. Advanced Materials, 2018, 30, e1706735.	11.1	175
1453	Pulse laser-induced size-controllable and symmetrical ordering of single-crystal Si islands. Nanoscale, 2018, 10, 8133-8138.	2.8	9
1454	Evolution of short- and medium-range order in the melt-quenching amorphization of Ge <sub>2</sub> Sb <sub>2</sub> Te <sub>5</sub> . Journal of Materials Chemistry C, 2018, 6, 5001-5011.	2.7	38
1455	Sb <sub>2</sub> Te <sub>3</sub> and Its Superlattices: Optimization by Statistical Design. ACS Applied Materials & Interfaces, 2018, 10, 15040-15050.	4.0	23
1456	Electrical and optical properties of epitaxial binary and ternary GeTe-Sb <sub>2</sub> Te <sub>3</sub> alloys. Scientific Reports, 2018, 8, 5889.	1.6	17
1457	Significant Volume Expansion as a Precursor to Ablation and Micropattern Formation in Phase Change Material Induced by Intense Terahertz Pulses. Scientific Reports, 2018, 8, 2914.	1.6	55
1458	Local structural environments of Ge doped in eutectic Sb-Te film before and after crystallization. Journal of Physics and Chemistry of Solids, 2018, 117, 81-85.	1.9	2
1459	Mechanical properties of amorphous Ge <sub>2</sub> Sb <sub>2</sub> Te <sub>5</sub> thin layers. Surface and Coatings Technology, 2018, 355, 227-233.	2.2	9
1460	Effect of gradual ordering of Ge/Sb atoms on chemical bonding: A proposed mechanism for the formation of crystalline Ge <sub>2</sub> Sb <sub>2</sub> Te <sub>5</sub> . Journal of Solid State Chemistry, 2018, 260, 124-131.	1.4	7
1461	Phase change materials in microactuators: Basics, applications and perspectives. Sensors and Actuators A: Physical, 2018, 271, 303-347.	2.0	43
1462	Fast Switching On/Off-Chiral Surface Plasmon Polaritons in Graphene-Coated Ge <sub>2</sub> Sb <sub>2</sub> Te <sub>5</sub> Nanowire. ACS Applied Nano Materials, 2018, 1, 759-767.	2.4	17
1463	Novel facile self-assembly approach to construct graphene oxide-decorated phase-change microcapsules with enhanced photo-to-thermal conversion performance. Journal of Materials Chemistry A, 2018, 6, 4535-4543.	5.2	75

#	ARTICLE	IF	CITATIONS
1464	Investigations on the effects of electrode materials on the device characteristics of ferroelectric memory thin film transistors fabricated on flexible substrates. Japanese Journal of Applied Physics, 2018, 57, 03DB02.	0.8	7
1465	Gold fillings unravel the vacancy role in the phase transition of GeTe. Applied Physics Letters, 2018, 112, 071902.	1.5	10
1466	Theoretical potential for low energy consumption phase change memory utilizing electrostatically-induced structural phase transitions in 2D materials. Npj Computational Materials, 2018, 4, .	3.5	40
1467	Laser-induced persistent photo-dielectric effects in Se <sup>2+</sup> Te <sup>4+</sup> Sn <sup>2+</sup> Cd chalcogenide glassy semiconductors (STSC ChGs). Journal of Materials Chemistry C, 2018, 6, 2747-2759.	2.7	9
1468	[(18-crown-6)K][Fe(1)Cl(1) <sub>4</sub> ] <sub>0.5</sub> [Fe(2)Cl(2) <sub>4</sub> ] <sub>0.5</sub> : A Multifunctional Molecular Switch of Dielectric, Conductivity and Magnetic Properties. Chemistry - an Asian Journal, 2018, 13, 656-663.	1.7	9
1469	High-temperature sequential structural transitions with distinct switchable dielectric behaviors in two organic ionic plastic crystals: [C <sub>4</sub> H <sub>11</sub> NBr][ClO <sub>4</sub> ] and [C <sub>4</sub> H <sub>11</sub> NBr][BF <sub>4</sub> ]. CrystEngComm, 2018, 20, 454-459.	1.3	19
1470	Operation mode switchable charge-trap memory based on few-layer MoS <sub>2</sub> . Semiconductor Science and Technology, 2018, 33, 034001.	1.0	20
1471	Nitrogen Doping of Hexagonal and Cubic Ge <sub>2</sub> Sb <sub>2</sub> Te <sub>5</sub> Nanocrystals: An <i>in Ab Initio</i> Study. International Journal of Nanoscience, 2018, 17, 1850009.	0.4	3
1472	Strain engineering of van der Waals heterostructures. Nanoscale, 2018, 10, 1474-1480.	2.8	34
1473	Metal-Insulator Transition of Ge <sup>2+</sup> Sb <sup>2+</sup> Te Superlattice: An Electron Counting Model Study. IEEE Nanotechnology Magazine, 2018, 17, 140-146.	1.1	31
1474	Phase Stability and Anisotropic Sublimation of Cubic Ge <sup>2+</sup> Sb <sup>2+</sup> Te Alloy Observed by In Situ Transmission Electron Microscopy. Journal of Physical Chemistry C, 2018, 122, 2968-2974.	1.5	9
1475	Resolving Crystallization Kinetics of GeTe Phase-Change Nanoparticles by Ultrafast Calorimetry. Crystal Growth and Design, 2018, 18, 1041-1046.	1.4	34
1476	Thermally Triggered Nanocapillary Encapsulation of Lauric Acid in Polystyrene Hollow Fibers for Efficient Thermal Energy Storage. ACS Sustainable Chemistry and Engineering, 2018, 6, 2656-2666.	3.2	21
1477	Inverse Resistance Change Cr <sub>2</sub> Ge <sub>2</sub> Te <sub>6</sub> -Based PCRAM Enabling Ultralow-Energy Amorphization. ACS Applied Materials & Interfaces, 2018, 10, 2725-2734.	4.0	85
1478	Room-Temperature Nonvolatile Memory Based on a Single-Phase Multiferroic Hexaferrite. Advanced Functional Materials, 2018, 28, 1705771.	7.8	73
1479	Optical Data Storage and Multicolor Emission Readout on Flexible Films Using Deep-Trap Persistent Luminescence Materials. Advanced Functional Materials, 2018, 28, 1705769.	7.8	271
1480	Insight into the role of W in amorphous GeTe for phase-change memory. Journal of Alloys and Compounds, 2018, 738, 270-276.	2.8	17
1481	Tailoring the epitaxy of Sb <sub>2</sub> Te <sub>3</sub> and GeTe thin films using surface passivation. CrystEngComm, 2018, 20, 340-347.	1.3	12

#	ARTICLE	IF	CITATIONS
1482	Theoretical prediction of a charge-transfer phase transition. <i>Scientific Reports</i> , 2018, 8, 63.	1.6	26
1483	Observation of carrier localization in cubic crystalline Ge <sub>2</sub> Sb <sub>2</sub> Te <sub>5</sub> by field effect measurement. <i>Scientific Reports</i> , 2018, 8, 486.	1.6	13
1484	Nonvolatile Reconfigurable Phase-Change Metadevices for Beam Steering in the Near Infrared. <i>Advanced Functional Materials</i> , 2018, 28, 1704993.	7.8	187
1485	Crystal packing, high-temperature phase transition, second-order nonlinear optical and biological activities in a hybrid material: [(S) C <sub>7</sub> H <sub>16</sub> N <sub>2</sub> ][CuBr <sub>4</sub> ]. <i>Journal of Molecular Structure</i> , 2018, 1167, 316-326.	1.8	11
1486	Understanding the fast phase-change mechanism of tetrahedrally bonded Cu <sub>2</sub> Ge <sub>2</sub> Sb <sub>2</sub> Te <sub>5</sub> : Comprehensive analyses of electronic structure and transport phenomena. <i>Physical Review B</i> , 2018, 97, .	1.1	11
1487	Directional Forces by Momentumless Excitation and Order-to-Order Transition in Peierls-Distorted Solids: The Case of GeTe. <i>Physical Review Letters</i> , 2018, 120, 185701.	2.9	38
1488	Scandium doping brings speed improvement in Sb <sub>2</sub> Te alloy for phase change random access memory application. <i>Scientific Reports</i> , 2018, 8, 6839.	1.6	24
1489	Role of vacancies in the high-temperature pseudodisplacive phase transition in GeTe. <i>Physical Review B</i> , 2018, 97, .	1.1	50
1490	Understanding the thermal properties of amorphous solids using machine-learning-based interatomic potentials. <i>Molecular Simulation</i> , 2018, 44, 866-880.	0.9	69
1491	Structural signature and transition dynamics of Sb <sub>2</sub> Te <sub>3</sub> melt upon fast cooling. <i>Physical Chemistry Chemical Physics</i> , 2018, 20, 11768-11775.	1.3	33
1492	Ab-initio calculation of surface phonons at the Sb <sub>2</sub> Te <sub>3</sub> (111) surface. <i>Surface Science</i> , 2018, 678, 46-51.	0.8	7
1493	Reversible phase-change behavior in two-dimensional antimony telluride (Sb <sub>2</sub> Te <sub>3</sub> ) nanosheets. <i>Applied Physics Letters</i> , 2018, 112, 133101.	1.5	17
1494	Toward non-volatile photonic memory: concept, material and design. <i>Materials Horizons</i> , 2018, 5, 641-654.	6.4	91
1495	Exploring ferroelectric and magnetic properties of Tb-substituted <i>m</i> = 5 layered Aurivillius phase thin films. <i>Journal of Applied Physics</i> , 2018, 123, .	1.1	17
1496	Multi-level coding-recoding by ultrafast phase transition on Ge <sub>2</sub> Sb <sub>2</sub> Te <sub>5</sub> thin films. <i>Scientific Reports</i> , 2018, 8, 4979.	1.6	23
1497	Unconventional two-dimensional germanium dichalcogenides. <i>Nanoscale</i> , 2018, 10, 7363-7368.	2.8	26
1498	Phase-change materials for non-volatile memory devices: from technological challenges to materials science issues. <i>Semiconductor Science and Technology</i> , 2018, 33, 013002.	1.0	180
1499	Controllable multilevel resistance state of superlattice-like GaSb/Ge <sub>2</sub> Te films for ultralong retention phase-change memory. <i>Journal of Non-Crystalline Solids</i> , 2018, 481, 110-115.	1.5	16

#	ARTICLE	IF	CITATIONS
1500	Synthesis, electronic structure and physical properties of polycrystalline Ba <sub>2</sub> FePnSe <sub>5</sub> (Pn = Sb, Bi). <i>Materials Chemistry and Physics</i> , 2018, 203, 202-211.	2.0	4
1501	Active Plasmonics: Principles, Structures, and Applications. <i>Chemical Reviews</i> , 2018, 118, 3054-3099.	23.0	483
1502	Nonadiabatic dynamics simulation of photoisomerization mechanism of the second stablest isomer of N-salicylidene-methyl-furylamine. <i>Spectrochimica Acta - Part A: Molecular and Biomolecular Spectroscopy</i> , 2018, 191, 315-324.	2.0	7
1503	Triethylammonium picrate: An above-room-temperature phase transition material to switch quadratic nonlinear optical properties. <i>Chinese Chemical Letters</i> , 2018, 29, 285-288.	4.8	38
1504	Effect of visible light on the structural and optical properties of (Ge <sub>2</sub> Sb <sub>2</sub> Te <sub>5</sub> ) <sub>100-x</sub> Ag <sub>x</sub> (x = 0, 1 and 3) thin films. <i>Journal of Materials Science: Materials in Electronics</i> , 2018, 29, 1042-1047.	1.1	8
1505	Strong electron-polarized atom chain in amorphous phase-change memory Ge-Sb-Te alloy. <i>Acta Materialia</i> , 2018, 143, 102-106.	3.8	24
1506	Acidic polymeric ionic liquids based reduced graphene oxide: An efficient and rewriteable catalyst for oxidative desulfurization. <i>Chemical Engineering Journal</i> , 2018, 334, 285-295.	6.6	69
1507	Van der Waals interfacial bonding and intermixing in GeTe-Sb <sub>2</sub> Te <sub>3</sub> -based superlattices. <i>Nano Research</i> , 2018, 11, 1676-1686.	5.8	62
1508	Homogenization of periodic bi-isotropic composite materials. <i>Waves in Random and Complex Media</i> , 2018, 28, 523-532.	1.6	6
1509	Gradient metasurfaces: a review of fundamentals and applications. <i>Reports on Progress in Physics</i> , 2018, 81, 026401.	8.1	374
1510	Electrical and Thermal Conductivity and Conduction Mechanism of Ge <sub>2</sub> Sb <sub>2</sub> Te <sub>5</sub> Alloy. <i>Journal of Electronic Materials</i> , 2018, 47, 3184-3188.	1.0	9
1511	Understanding the fast crystallization kinetics of In-Sb-Te by using ultrafast calorimetry. <i>CrystEngComm</i> , 2018, 20, 159-163.	1.3	4
1512	Sebacic acid/CNT sponge phase change material with excellent thermal conductivity and photo-thermal performance. <i>Solar Energy Materials and Solar Cells</i> , 2018, 179, 217-222.	3.0	83
1513	Electrical Transport in Crystalline and Amorphous Chalcogenide. , 2018, , 11-39.		2
1514	Self-Consistent Numerical Model. , 2018, , 65-88.		8
1515	Structure and Properties of Chalcogenide Materials for PCM. , 2018, , 125-179.		9
1516	Material Engineering for PCM Device Optimization. , 2018, , 181-222.		7
1517	Phase Change Memory. , 2018, , .		25

#	ARTICLE	IF	CITATIONS
1518	Phase engineering and supercompatibility of shape memory alloys. <i>Materials Today</i> , 2018, 21, 265-277.	8.3	122
1519	Anticipating critical materials implications from the Internet of Things (IOT): Potential stress on future supply chains from emerging data storage technologies. <i>Sustainable Materials and Technologies</i> , 2018, 15, 27-32.	1.7	11
1520	An Optically-Triggered Switchable Mid-Infrared Perfect Absorber Based on Phase-Change Material of Vanadium Dioxide. <i>Plasmonics</i> , 2018, 13, 1393-1402.	1.8	37
1521	Effect of laser irradiation on micro-hardness, compactness and Raman spectrum of glassy Se <sub>76</sub> Te <sub>20</sub> Sn <sub>2</sub> Cd <sub>2</sub> alloy. <i>Journal of Materials Research and Technology</i> , 2018, 7, 39-44.	2.6	1
1522	Ultrafast interfacial transformation from 2D- to 3D-bonded structures in layered GeSbTe thin films and heterostructures. <i>Nanoscale</i> , 2018, 10, 22946-22953.	2.8	36
1523	Charge-governed phase manipulation of few-layer tellurium. <i>Nanoscale</i> , 2018, 10, 22263-22269.	2.8	28
1524	Silicon microring resonators tuned with GST phase change material. , 2018, , .		4
1525	Overview of Phase-Change Electrical Probe Memory. <i>Nanomaterials</i> , 2018, 8, 772.	1.9	13
1526	Coding two-dimensional patterns into mode spectrum of silicon microcavity covered with a phase-change film. <i>Applied Physics A: Materials Science and Processing</i> , 2018, 124, 1.	1.1	0
1527	Tunable Plasmonic Absorber Using a Nanoslit Array Patterned on a Ge <sub>2</sub> Sb <sub>2</sub> Te <sub>5</sub> -Inserted Fabry-Pérot Resonator. <i>Journal of Lightwave Technology</i> , 2018, 36, 5857-5862.	2.7	17
1528	Structural and thermoelectric properties of Se doped In <sub>2</sub> Te <sub>3</sub> thin films. <i>AIP Advances</i> , 2018, 8, 115015.	0.6	4
1529	Estimation of the Temperature of the Current Filament that Forms upon Switching in GeSbTe. <i>Semiconductors</i> , 2018, 52, 1607-1610.	0.2	3
1530	Metasurfaces Enabled by Locally Tailoring Disorder in Phase-Change Materials. <i>ACS Photonics</i> , 2018, 5, 5103-5109.	3.2	12
1531	Solid-Phase Epitaxial Growth of an Alumina Layer Having a Stacking-Mismatched Domain Structure of the Intermediate $\hat{\Gamma}^3$ -Phase. <i>ACS Applied Materials &amp; Interfaces</i> , 2018, 10, 41487-41496.	4.0	4
1532	Connecting post-pulsing electrical and microstructural features in GeTe-based inline phase change switches. <i>Journal of Applied Physics</i> , 2018, 124, .	1.1	4
1533	Consensus for Non-volatile Main Memory. , 2018, , .		2
1534	Ultrafast light-induced softening of chalcogenide thin films above the rigidity percolation transition. <i>Journal of Applied Physics</i> , 2018, 124, 125702.	1.1	3
1535	Opto-Mechanics Driven Fast Martensitic Transition in Two-Dimensional Materials. <i>Nano Letters</i> , 2018, 18, 7794-7800.	4.5	38

#	ARTICLE	IF	CITATIONS
1536	Electronic Structures of $\text{Ge}_2\text{Sb}_2\text{Te}_5/\text{Co}_2\text{FeX}$ (X: Al, Tj ETQq0 0.0 rgBT /Qverlock 10	1.6	1
1537	$\text{Sb}_2\text{Te}_3$ Growth Study Reveals That Formation of Nanoscale Charge Carrier Domains Is an Intrinsic Feature Relevant for Electronic Applications. ACS Applied Nano Materials, 2018, 1, 6834-6842.	2.4	11
1538	Origin of electronic localization in metal-insulator transition of phase change materials. Applied Physics Letters, 2018, 113, .	1.5	4
1539	Phase Transitions in Confinements: Controlling Solid to Fluid Transitions of Xenon Atoms in an On-€Surface Network. Small, 2019, 15, e1803169.	5.2	5
1540	Thermal Conductivity during Phase Transitions. Advanced Materials, 2019, 31, e1806518.	11.1	80
1541	Tunable near-infrared perfect absorber based on the hybridization of phase-change material and nanocross-shaped resonators. Applied Physics Letters, 2018, 113, .	1.5	27
1542	Reduction of Rocksalt Phase in $\text{Ag}_{1-x}\text{Ge}_x\text{Sb}_2\text{Te}_5$ Doped $\text{Ge}_2\text{Sb}_2\text{Te}_5$ : A Potential Material for Reversible Near-Infrared Window. Physical Review Applied, 2018, 10, .	1.5	24
1543	Breakdown of the Stokes-Einstein relation above the melting temperature in a liquid phase-change material. Science Advances, 2018, 4, eaat8632.	4.7	43
1544	Challenges in materials and devices for resistive-switching-based neuromorphic computing. Journal of Applied Physics, 2018, 124, .	1.1	155
1545	Super-bandgap light stimulated reversible transformation and laser-driven mass transport at the surface of $\text{As}_2\text{S}_3$ chalcogenide nanolayers studied <i>in situ</i> . Journal of Chemical Physics, 2018, 149, 214702.	1.2	4
1546	Kinetic approach to superconductivity hidden behind a competing order. Science Advances, 2018, 4, eaau3489.	4.7	21
1547	Continuously variable atomic structure in monatomic metallic glasses through active icosahedral dynamics below glass transition temperature. Journal of Applied Physics, 2018, 124, .	1.1	9
1548	Dynamics of $\text{GeSbTe}$ phase-change nanoparticles deposited on graphene. Nanotechnology, 2018, 29, 505706.	1.3	8
1549	$\text{GeTe/Sb}_4\text{Te}$ films: A candidate for multilevel phase change memory. Materials Science and Engineering B: Solid-State Materials for Advanced Technology, 2018, 231, 81-85.	1.7	16
1550	Atomistic insights toward strengthening of $\text{GeTe}$ phase change material by impurity doping and grain boundary engineering. Journal of Applied Physics, 2018, 124, .	1.1	3
1551	Ab initio computer simulations of non-equilibrium radiation-induced cascades in amorphous $\text{Ge}_2\text{Sb}_2\text{Te}_5$ . Journal of Physics Condensed Matter, 2018, 30, 455401.	0.7	6
1552	A Reversible Rocksalt to Amorphous Phase Transition Involving Anion Redox. Scientific Reports, 2018, 8, 15086.	1.6	21
1553	Visualization of tetrahedral disordering in amorphous germanium through local atomic motifs. Journal of Applied Crystallography, 2018, 51, 1544-1550.	1.9	1

#	ARTICLE	IF	CITATIONS
1554	Incipient Metals: Functional Materials with a Unique Bonding Mechanism. <i>Advanced Materials</i> , 2018, 30, e1803777.	11.1	255
1555	Mechanism of electron transport and bipolar resistive switching in lead oxide thin films. <i>AIP Advances</i> , 2018, 8, .	0.6	20
1556	Activation energy of metastable amorphous Ge <sub>2</sub> Sb <sub>2</sub> Te <sub>5</sub> from room temperature to melt. <i>AIP Advances</i> , 2018, 8, .	0.6	10
1557	An Unusual Ln <sup>III</sup> -Based Metal-Organic Framework with Dinuclear Nodes Exhibiting Single-Molecular Magnet Behavior. <i>European Journal of Inorganic Chemistry</i> , 2018, 2018, 5007-5011.	1.0	3
1558	Phase transition and electronic structure evolution of $\text{MoTe}_2$ induced by W substitution. <i>Physical Review B</i> , 2018, 98, .		
1559	Zener Tunneling Breakdown in Phase-Change Materials Revealed by Intense Terahertz Pulses. <i>Physical Review Letters</i> , 2018, 121, 165702.	2.9	17
1560	Reconfigurable Nanophotonic Cavities with Nonvolatile Response. <i>ACS Photonics</i> , 2018, 5, 4644-4649.	3.2	32
1561	Physical Models for Resistive Switching Devices. , 2018, , .		0
1562	Tetrahedral amorphous carbon resistive memories with graphene-based electrodes. <i>2D Materials</i> , 2018, 5, 045028.	2.0	9
1563	Impact of doping on bonding energy hierarchy and melting of phase change materials. <i>Journal of Applied Physics</i> , 2018, 124, .	1.1	6
1564	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.	7.8	119
1565	Specific Features of the IR Reflectance and Raman Spectra of Sb <sub>2</sub> Te <sub>3</sub> Crystals. <i>Semiconductors</i> , 2018, 52, 1317-1322.	0.2	2
1566	Active hyperbolic metamaterials: progress, materials and design. <i>Journal of Optics (United Kingdom)</i> , 2018, 20, 103001.	1.0	43
1567	Rewritable full-color computer-generated holograms based on color-selective diffractive optical components including phase-change materials. <i>Nanoscale</i> , 2018, 10, 21648-21655.	2.8	21
1568	Unique interface-driven crystallization mechanism and element-resolved structure imaging of ZnO-Ge <sub>2</sub> Sb <sub>2</sub> Te <sub>5</sub> nanocomposites. <i>Ceramics International</i> , 2018, 44, 22497-22503.	2.3	7
1569	Modeling the Phase-Change Memory Material, Ge <sub>2</sub> Sb <sub>2</sub> Te <sub>5</sub> , with a Machine-Learned Interatomic Potential. <i>Journal of Physical Chemistry B</i> , 2018, 122, 8998-9006.	1.2	102
1570	Electrochemical metallization cell with solid phase tunable Ge <sub>2</sub> Sb <sub>2</sub> Te <sub>5</sub> electrolyte. <i>Scientific Reports</i> , 2018, 8, 12101.	1.6	15
1571	Crystallization mechanism and kinetics of Cr <sub>2</sub> Ge <sub>2</sub> Te <sub>6</sub> phase change material. <i>MRS Communications</i> , 2018, 8, 1167-1172.	0.8	14

#	ARTICLE	IF	CITATIONS
1572	Plasmonic Metasurfaces for Switchable Photonic Spin-Orbit Interactions Based on Phase Change Materials. <i>Advanced Science</i> , 2018, 5, 1800835.	5.6	109
1573	Solid-state reflective displays (SRD <sup>®</sup> ) for video-rate, full color, outdoor readable displays. <i>Journal of the Society for Information Display</i> , 2018, 26, 619-624.	0.8	13
1574	Contact resistance change memory using N-doped Cr <sub>2</sub> Ge <sub>2</sub> Te <sub>6</sub> phase-change material showing non-bulk resistance change. <i>Applied Physics Letters</i> , 2018, 112, .	1.5	28
1575	Distortion of Local Atomic Structures in Amorphous Ge-Sb-Te Phase Change Materials. <i>Physical Review Letters</i> , 2018, 120, 205502.	2.9	35
1576	Glass Forming Ability in Systems with Competing Orderings. <i>Physical Review X</i> , 2018, 8, .	2.8	35
1577	Electronic Structure Control of Sub-nanometer 1D SnTe via Nanostructuring within Single-Walled Carbon Nanotubes. <i>ACS Nano</i> , 2018, 12, 6023-6031.	7.3	42
1578	Thermoelectric properties of p-type cubic and rhombohedral GeTe. <i>Journal of Applied Physics</i> , 2018, 123, .	1.1	40
1579	A review of gap-surface plasmon metasurfaces: fundamentals and applications. <i>Nanophotonics</i> , 2018, 7, 1129-1156.	2.9	250
1580	Reconfigurable, graphene-coated, chalcogenide nanowires with a sub-10-nm enantioselective sorting capability. <i>Microsystems and Nanoengineering</i> , 2018, 4, 7.	3.4	17
1581	Photothermal effects during nanodiamond synthesis from a carbon aerogel in a laser-heated diamond anvil cell. <i>Diamond and Related Materials</i> , 2018, 87, 134-142.	1.8	12
1582	Phonon Instability and Broken Long-Range Bond in Ge-Sb-Te Phase-Change Materials from First Principles. <i>Physical Review Applied</i> , 2018, 9, .	1.5	6
1583	Increasing the Atomic Packing Efficiency of Phase-Change Memory Glass to Reduce the Density Change upon Crystallization. <i>Advanced Electronic Materials</i> , 2018, 4, 1800127.	2.6	17
1584	Magnetic Metal-Organic Framework Exhibiting Quick and Selective Solvatochromic Behavior along with Reversible Crystal-to-Amorphous-to-Crystal Transformation. <i>Inorganic Chemistry</i> , 2018, 57, 7006-7014.	1.9	38
1585	Effect of visible light on the optical properties of a-(Ge <sub>2</sub> Sb <sub>2</sub> Te <sub>5</sub> ) <sub>90</sub> Ag <sub>10</sub> thin film. <i>AIP Conference Proceedings</i> , 2018, , .	0.3	1
1586	Impact of Stoichiometry on the Structure of van der Waals Layered GeTe/Sb <sub>2</sub> Te <sub>3</sub> Superlattices Used in Interfacial Phase-Change Memory (iPCM) Devices. <i>Small</i> , 2018, 14, e1704514.	5.2	42
1587	A novel CNT encapsulated phase change material with enhanced thermal conductivity and photo-thermal conversion performance. <i>Solar Energy Materials and Solar Cells</i> , 2018, 184, 82-90.	3.0	105
1588	Combining Ultrafast Calorimetry and Electron Microscopy: Reversible Phase Transformations in SeTeAs Alloys. <i>Crystal Growth and Design</i> , 2018, 18, 3668-3673.	1.4	5
1589	Reconfiguration of van der Waals Gaps as the Key to Switching in GeTe/Sb <sub>2</sub> Te <sub>3</sub> Superlattices. <i>MRS Advances</i> , 2018, 3, 3413-3418.	0.5	2



#	ARTICLE	IF	CITATIONS
1590	Genesis and Effects of Swapping Bilayers in Hexagonal GeSb <sub>2</sub> Te <sub>4</sub> . Chemistry of Materials, 2018, 30, 4770-4777.	3.2	36
1591	Reprogrammable Braille on an elastic shell. Proceedings of the National Academy of Sciences of the United States of America, 2018, 115, 7509-7514.	3.3	15
1592	All-Optical Detection of Periodic Structure of Chalcogenide Superlattice Using Coherent Folded Acoustic Phonons. Physica Status Solidi - Rapid Research Letters, 2018, 12, 1800246.	1.2	0
1593	Ultrafast Multilevel Optical Tuning with CSb <sub>2</sub> Te <sub>3</sub> Thin Films. Advanced Optical Materials, 2018, 6, 1800360.	3.6	34
1594	Light Tuning of the Resistance of NdNiO <sub>3</sub> Films With CoFe <sub>2</sub> O <sub>4</sub> Capping. Physica Status Solidi - Rapid Research Letters, 2018, 12, 1800186.	1.2	2
1595	Graphene Aerogels Enhanced Phase Change Materials prepared by one-pot method with high thermal conductivity and large latent energy storage. Solar Energy Materials and Solar Cells, 2018, 185, 487-493.	3.0	101
1596	Kinetic mechanism for reversible structural transition in $\text{MoTe}_2$ induced by excess charge carriers. Physical Review B, 2018, 97, .		
1597	Synthesis and properties of nanostructured GeSb <sub>4</sub> Te <sub>7</sub> prepared by mechanical alloying. Journal of Materials Science, 2018, 53, 13451-13463.	1.7	5
1598	First-principles study of the properties for crystal Ge <sub>2</sub> Sb <sub>2</sub> Te <sub>5</sub> with Ge vacancy. AIP Advances, 2018, 8, .	0.6	4
1599	Thermal Behavior of Chalcogenide Glasses. Handbook of Thermal Analysis and Calorimetry, 2018, , 487-517.	1.6	0
1600	Chalcogenides for Phase-Change Memory. Handbook of Thermal Analysis and Calorimetry, 2018, 6, 685-734.	1.6	8
1601	Perspective: 2D for beyond CMOS. APL Materials, 2018, 6, .	2.2	37
1602	Enhanced electrical behavior from the galvanic effect in Ag-Cu alloy electrode conductive bridging resistive switching memory. Applied Physics Letters, 2018, 113, .	1.5	27
1603	A systematic evolution of optical band gap and local ordering in Ge <sub>1</sub> Sb <sub>2</sub> Te <sub>4</sub> and Ge <sub>2</sub> Sb <sub>2</sub> Te <sub>5</sub> materials revealed by <i>in situ</i> optical spectroscopy. Journal Physics D: Applied Physics, 2018, 51, 375104.	1.3	10
1604	Understanding the crystallization behavior and structure of titanium addition in germanium antimony phase change thin films. Journal of Materials Chemistry C, 2018, 6, 9081-9092.	2.7	28
1605	Photonic Synapses Based on Inorganic Perovskite Quantum Dots for Neuromorphic Computing. Advanced Materials, 2018, 30, e1802883.	11.1	437
1606	GST-on-silicon hybrid nanophotonic integrated circuits: a non-volatile quasi-continuously reprogrammable platform. Optical Materials Express, 2018, 8, 1551.	1.6	166
1607	Tunable enhanced infrared absorption spectroscopy surfaces based on thin VO <sub>2</sub> films. Optical Materials Express, 2018, 8, 2190.	1.6	7

#	ARTICLE	IF	CITATIONS
1608	Laser-induced metastable phase in crystalline phase-change films by confocal Raman spectrometer. <i>Spectrochimica Acta - Part A: Molecular and Biomolecular Spectroscopy</i> , 2018, 205, 551-556.	2.0	10
1609	Reconfigurable near-IR metasurface based on Ge <sub>2</sub> Sb <sub>2</sub> Te <sub>5</sub> phase-change material. <i>Optical Materials Express</i> , 2018, 8, 2264.	1.6	72
1610	Ultralow-fluence single-shot optical crystalline-to-amorphous phase transition in GeSbTe nanoparticles. <i>Nanoscale</i> , 2018, 10, 16574-16580.	2.8	5
1611	Ultrafast and low-power crystallization in Ge <sub>1</sub> Sb <sub>2</sub> Te <sub>4</sub> and Ge <sub>1</sub> Sb <sub>4</sub> Te <sub>7</sub> thin films using femtosecond laser pulses. <i>Applied Optics</i> , 2018, 57, 178.	0.9	6
1612	Topological Phase Buried in a Chalcogenide Superlattice Monitored by Helicity-Dependent Kerr Measurement. <i>ACS Applied Materials &amp; Interfaces</i> , 2018, 10, 26781-26786.	4.0	4
1613	Crystal growth of Ge <sub>2</sub> Sb <sub>2</sub> Te <sub>5</sub> at high temperatures. <i>MRS Communications</i> , 2018, 8, 1018-1023.	0.8	27
1614	Microstructure and crystallization kinetics of Ge <sub>2</sub> Sb <sub>2</sub> Te <sub>5</sub> -Sn phase change materials. <i>Journal of Materials Science: Materials in Electronics</i> , 2018, 29, 16523-16533.	1.1	8
1615	A tale about square dancers and maze runners. <i>Nature Materials</i> , 2018, 17, 655-656.	13.3	1
1616	Switching photonic nanostructures between cloaking and superscattering regimes using phase-change materials [Invited]. <i>Optical Materials Express</i> , 2018, 8, 1672.	1.6	17
1617	Broader color gamut of color-modulating optical coating display based on indium tin oxide and phase change materials. <i>Applied Optics</i> , 2018, 57, 3385.	0.9	21
1618	Amorphization Optimization of Ge <sub>2</sub> Sb <sub>2</sub> Te <sub>5</sub> Media for Electrical Probe Memory Applications. <i>Nanomaterials</i> , 2018, 8, 368.	1.9	6
1619	Phase-Change Metadevices for the Dynamic and Reconfigurable Control of Light. , 2018, , .		0
1620	Structural and optical properties of optimized amorphous GeTe films for memory applications. <i>Journal of Non-Crystalline Solids</i> , 2018, 499, 1-7.	1.5	25
1621	A Phase Change Material for Reconfigurable Circuit Applications. <i>Applied Sciences (Switzerland)</i> , 2018, 8, 130.	1.3	7
1622	The Electrical and Structural Properties of Nitrogen Ge <sub>1</sub> Sb <sub>2</sub> Te <sub>4</sub> Thin Film. <i>Coatings</i> , 2018, 8, 117.	1.2	4
1623	The Crystal Orbital Hamilton Population (COHP) Method as a Tool to Visualize and Analyze Chemical Bonding in Intermetallic Compounds. <i>Crystals</i> , 2018, 8, 225.	1.0	199
1624	From octahedral structure motif to sub-nanosecond phase transitions in phase change materials for data storage. <i>Science China Information Sciences</i> , 2018, 61, 1.	2.7	19
1625	Molecular Engineering toward Coexistence of Dielectric and Optical Switch Behavior in Hybrid Perovskite Phase Transition Material. <i>Journal of Physical Chemistry A</i> , 2018, 122, 6416-6423.	1.1	25

#	ARTICLE	IF	CITATIONS
1626	Enhancement of polaron-hopping-based a.c. conduction in semiconducting STS (Se <sub>1-x</sub> Te <sub>x</sub> Sn) glass by silver incorporation. Dalton Transactions, 2018, 47, 10187-10194.	1.6	5
1627	Improvement in cyclic operation of unit pixel device using Sb-excess Ge <sub>2</sub> Sb <sub>2</sub> Te <sub>5</sub> thin films for hologram image implementation. Japanese Journal of Applied Physics, 2018, 57, 082201.	0.8	3
1628	Metalenses: Advances and Applications. Advanced Optical Materials, 2018, 6, 1800554.	3.6	149
1629	Tunable Magnetoelectric Nonvolatile Memory Devices Based on SmFeO <sub>3</sub> /P(VDF-TrFE) Nanocomposite Films. ACS Applied Nano Materials, 2018, 1, 3196-3203.	2.4	32
1630	The race to the bottom: approaching the ideal glass?. Journal of Physics Condensed Matter, 2018, 30, 363001.	0.7	39
1631	A quantitative criterion for determining the order of magnetic phase transitions using the magnetocaloric effect. Nature Communications, 2018, 9, 2680.	5.8	273
1632	Grazing incident X-ray fluorescence combined with X-ray reflectometry metrology protocol of telluride-based films using in-lab and synchrotron instruments. Spectrochimica Acta, Part B: Atomic Spectroscopy, 2018, 149, 143-149.	1.5	9
1633	A Non-Volatile Chalcogenide Switchable Hyperbolic Metamaterial. Advanced Optical Materials, 2018, 6, 1800332.	3.6	16
1634	Optical Properties and Local Structure Evolution during Crystallization of Ga <sub>16</sub> Sb <sub>84</sub> Alloy. Scientific Reports, 2018, 8, 9605.	1.6	3
1635	Dependence of chaotic actuation dynamics of Casimir oscillators on optical properties and electrostatic effects. European Physical Journal B, 2018, 91, 1.	0.6	2
1636	Phase-Change Metasurfaces for Dynamic Beam Steering and Beam Shaping in the Infrared. , 2018, , .		10
1637	Structural disorder in the high-temperature cubic phase of GeTe. RSC Advances, 2018, 8, 17435-17442.	1.7	12
1638	Phase-Change Magnetic Memory: Rewritable Ferromagnetism by Laser Quenching of Chemical Disorder in $\text{Fe}_{60}\text{Al}_{40}$ Alloy. Physical Review Applied, 2018, 10, .	1.5	17
1639	Vanadium Dioxide: The Multistimuli Responsive Material and Its Applications. Small, 2018, 14, e1802025.	5.2	167
1640	Controlled switching of phase-change materials by evanescent-field coupling in integrated photonics [Invited]. Optical Materials Express, 2018, 8, 2455.	1.6	113
1641	In-situ transmission electron microscopy studies of the crystallization of N-doped Ge-rich GeSbTe materials. MRS Communications, 2018, 8, 1145-1152.	0.8	22
1642	Controlled Crystal Growth of Indium Selenide, $\text{In}_2\text{Se}_3$ , and the Crystal Structures of $\text{In}_2\text{Se}_3$ . Inorganic Chemistry, 2018, 57, 11775-11781.	1.9	97
1643	Design of a 4-level active photonics phase change switch using VO <sub>2</sub> and Ge <sub>2</sub> Sb <sub>2</sub> Te <sub>5</sub> . Applied Physics Letters, 2018, 113, .	1.5	34

#	ARTICLE	IF	CITATIONS
1644	Microscopic investigations of switching phenomenon in memristive systems: a mini review. RSC Advances, 2018, 8, 28763-28774.	1.7	9
1645	Strategies on Phase Control in Transition Metal Dichalcogenides. Advanced Functional Materials, 2018, 28, 1802473.	7.8	90
1646	Oxygen filling voids and direct element imaging of metastable ZnSb structures by aberration-corrected scanning transmission electron microscopy. Scripta Materialia, 2018, 157, 115-119.	2.6	8
1647	Thermal stability and microstructure of germanium antimony telluride thin films under interdiffusion conditions. Japanese Journal of Applied Physics, 2018, 57, 081201.	0.8	2
1648	Colloidal Phase-Change Materials: Synthesis of Monodisperse GeTe Nanoparticles and Quantification of Their Size-Dependent Crystallization. Chemistry of Materials, 2018, 30, 6134-6143.	3.2	24
1649	Selective synthesis, polymorphism, reversible phase transition and structure-dependent optical functionalities of gadolinium oxyfluorides. Journal of Materials Chemistry C, 2018, 6, 11007-11014.	2.7	10
1650	Pump-probe scanning-tunneling-microscope light-emission spectroscopy of Sb <sub>2</sub> Te <sub>3</sub> . Journal of Applied Physics, 2018, 124, 075104.	1.1	0
1651	Role of electronic thermal transport in amorphous metal recrystallization: A molecular dynamics study. Journal of Chemical Physics, 2018, 149, 064502.	1.2	2
1652	Impact of disorder on optical reflectivity contrast of epitaxial Ge <sub>2</sub> Sb <sub>2</sub> Te <sub>5</sub> thin films. CrystEngComm, 2018, 20, 3688-3695.	1.3	22
1653	Glass-forming ability and thermal stability of Se <sub>100-x</sub> (Ge <sub>2</sub> Sb <sub>2</sub> Te <sub>5</sub> ) <sub>x</sub> glassy alloys. Journal of Thermal Analysis and Calorimetry, 2018, 134, 923-931.	2.0	2
1654	Microstructure evolution of the crystallization of amorphous Ge <sub>2</sub> Sb <sub>2</sub> Te <sub>5</sub> thin films induced by single picosecond pulsed laser. Journal of Non-Crystalline Solids, 2018, 498, 1-7.	1.5	14
1655	Investigation of laser-irradiated structure evolution and surface modification by in situ Micro-Raman spectroscopy. Vacuum, 2018, 155, 376-379.	1.6	1
1656	Tunable Thermal Emission Using Chalcogenide Metasurface. Advanced Optical Materials, 2018, 6, 1800169.	3.6	93
1657	Optical constants acquisition and phase change properties of Ge <sub>2</sub> Sb <sub>2</sub> Te <sub>5</sub> thin films based on spectroscopy. RSC Advances, 2018, 8, 21040-21046.	1.7	48
1658	Supertetrahedral T <sub>2</sub> clusters in 3d-4f {Fe <sub>4</sub> Ln <sub>6</sub> }: Synthesis, crystal structure, magnetic and photoluminescent properties. Inorganica Chimica Acta, 2018, 482, 240-245.	1.2	9
1659	Electric field effects in chalcogenides. MRS Advances, 2018, 3, 3419-3425.	0.5	0
1660	Si-doped Ge <sub>2</sub> Sb <sub>2</sub> Te <sub>5</sub> Phase-Change Material: A Candidate for High-Density Embedded Memory Application. Advanced Electronic Materials, 2018, 4, 1800083.	2.6	25
1661	Resistive switching in optoelectronic III-V materials based on deep traps. Scientific Reports, 2018, 8, 9483.	1.6	2

#	ARTICLE	IF	CITATIONS
1662	<i>Ab initio</i> density functional theory study of the electronic, dynamic, and thermoelectric properties of the crystalline pseudobinary chalcogenide $(\text{GeTe})_{1-x}(\text{Sb}_2\text{Te}_3)_x$ . Physical Review B, 2018, 97, .	1.1	18
1663	Monatomic phase change memory. Nature Materials, 2018, 17, 681-685.	13.3	221
1664	Single-element glass to record data. Nature Materials, 2018, 17, 654-655.	13.3	43
1665	Effect of laser irradiation on $\text{Ag}_4\text{In}_{12}\text{Sb}_{56}\text{Te}_{28}$ . AIP Conference Proceedings, 2018, , .	0.3	0
1666	Unconventional phase transition of phase-change-memory materials for optical data storage*. Chinese Physics B, 2019, 28, 104202.	0.7	7
1667	Computational phase-change memory: beyond von Neumann computing. Journal Physics D: Applied Physics, 2019, 52, 443002.	1.3	78
1668	Direct atomic insight into the role of dopants in phase-change materials. Nature Communications, 2019, 10, 3525.	5.8	56
1669	Van der Waals 2D Transition Metal Tellurides. Advanced Materials Interfaces, 2019, 6, 1900741.	1.9	48
1670	Visual low-high interchange in a dielectric switch for trimethylchloroethylamine tetrachlorozincate with a large leap symmetry breaking. Materials Chemistry Frontiers, 2019, 3, 2077-2082.	3.2	10
1671	Fully photon modulated heterostructure for neuromorphic computing. Nano Energy, 2019, 65, 104000.	8.2	110
1672	Investigation of optical and electrical properties of Cobalt-doped Ge-Sb-S thin film. Results in Physics, 2019, 13, 102218.	2.0	3
1673	On the Dielectric Study and AC Conductivity Measurements of Quaternary Se-Te-Ge-Pb Nano-chalcogenide Alloys. Journal of Electronic Materials, 2019, 48, 7089-7098.	1.0	4
1674	Optomechanical control of stacking patterns of h-BN bilayer. Nano Research, 2019, 12, 2634-2639.	5.8	20
1675	Switching between Crystallization from the Glassy and the Undercooled Liquid Phase in Phase Change Material $\text{Ge}_2\text{Sb}_2\text{Te}_5$ . Advanced Materials, 2019, 31, e1900784.	11.1	64
1676	Investigation on the Scaling Performances of Carbon-Doped $\text{Ge}_2\text{Sb}_2\text{Te}_5$ Thin Films for Phase Change Random Access Memory in a 40-nm Process. Physica Status Solidi (A) Applications and Materials Science, 2019, 216, 1900439.	0.8	1
1677	A Unified Capacitive-Coupled Memristive Model for the Nonpinched Current-Voltage Hysteresis Loop. Nano Letters, 2019, 19, 6461-6465.	4.5	128
1678	Tunable Duplex Metalens Based on Phase-Change Materials in Communication Range. Nanomaterials, 2019, 9, 993.	1.9	31
1679	Nonscattering-to-Superscattering Switch with Phase-Change Materials. ACS Photonics, 2019, 6, 2126-2132.	3.2	45

#	ARTICLE	IF	CITATIONS
1680	Threshold switching dynamics of pseudo-binary $\text{GeTe}_{1-x}\text{Sb}_x\text{Te}_3$ phase change memory devices. <i>Journal Physics D: Applied Physics</i> , 2019, 52, 375301.	1.3	6
1681	Layered Switching Mechanisms in $\text{Sb}_2\text{Te}_3$ . <i>Physica Status Solidi - Rapid Research Letters</i> , 2019, 13, 1900320.	1.2	20
1682	The phase change memory features high-temperature characteristic based on Ge-Sb-Se-Te alloys. <i>Materials Letters</i> , 2019, 254, 182-185.	1.3	10
1683	Temperature Dependence of Electrical Resistance in Ge-Sb-Te Thin Films. <i>Materials Research</i> , 2019, 22, .	0.6	7
1684	A Nonvolatile Phase-Change Metamaterial Color Display. <i>Advanced Optical Materials</i> , 2019, 7, 1801782.	3.6	97
1685	Effects of biaxial strain on interfacial intermixing and local structures in strain engineered $\text{GeTe-Sb}_2\text{Te}_3$ superlattices. <i>Applied Surface Science</i> , 2019, 493, 904-912.	3.1	11
1686	Effect of yttrium ion on the properties of tri ethyl ammonium picrate single crystals. <i>Heliyon</i> , 2019, 5, e02091.	1.4	4
1687	Studies of high field conduction and resistive switching in $\text{Se}_{78-x}\text{Te}_{20}\text{Sn}_2\text{Ge}_x$ ( $0 \leq x \leq 6$ ) bulk glasses using current-voltage characteristics. <i>Journal of Alloys and Compounds</i> , 2019, 806, 660-667.	2.8	12
1688	Impact of Bonding on the Stacking Defects in Layered Chalcogenides. <i>Advanced Functional Materials</i> , 2019, 29, 1902332.	7.8	21
1689	The impact of vacancies on the stability of cubic phases in $\text{Sb-Te}$ binary compounds. <i>NPG Asia Materials</i> , 2019, 11, .	3.8	5
1690	Investigation of dielectric relaxation and a.c. conductivity of third generation multi-component $\text{Ge}_{10-x}\text{Se}_{60}\text{Te}_{30}\text{Sb}_x$ ( $0 \leq x \leq 6$ ) chalcogenide glasses. <i>Journal of Materials Science: Materials in Electronics</i> , 2019, 30, 13797-13809.		3
1691	Chemical phase segregation during the crystallization of Ge-rich $\text{GeSbTe}$ alloys. <i>Journal of Materials Chemistry C</i> , 2019, 7, 8720-8729.	2.7	40
1692	Thermophysical characterisation of $\text{VO}_2$ thin films hysteresis and its application in thermal rectification. <i>Scientific Reports</i> , 2019, 9, 8728.	1.6	34
1693	Effect of Ag and $\gamma$ -ray irradiation on the specific heat of glass transition of $\text{Se}_{78}\text{Te}_{20}\text{Sn}_2$ glassy alloy. <i>Materials Research Express</i> , 2019, 6, 095201.	0.8	1
1694	Understanding $\text{CrGeTe}_3$ : an abnormal phase change material with inverse resistance and density contrast. <i>Journal of Materials Chemistry C</i> , 2019, 7, 9025-9030.	2.7	28
1695	Advances in nanowire PCM. , 2019, , 443-518.		1
1696	Graphene grain size-dependent synthesis of single-crystalline $\text{Sb}_2\text{Te}_3$ nanoplates and the interfacial thermal transport analysis by Raman thermometry. <i>Carbon</i> , 2019, 153, 164-172.	5.4	6
1697	Relation between density and optical contrasts upon crystallization in $\text{Cr}_2\text{Ge}_2\text{Te}_6$ phase-change material: coexistence of a positive optical contrast and a negative density contrast. <i>Journal Physics D: Applied Physics</i> , 2019, 52, 325111.	1.3	10

#	ARTICLE	IF	CITATIONS
1698	Atomic Layer Deposition of Nanocrystalline-As-Deposited (GeTe) <sub>x</sub> (Sb <sub>2</sub> Te <sub>3</sub> ) <sub>2</sub> Films for Endurable Phase Change Memory. Chemistry of Materials, 2019, 31, 8752-8763.	3.2	15
1699	Cr-Triggered Local Structural Change in Cr <sub>2</sub> Ge <sub>2</sub> Te <sub>6</sub> Phase Change Material. ACS Applied Materials & Interfaces, 2019, 11, 43320-43329.	4.0	26
1700	Machine Learning Interatomic Potentials as Emerging Tools for Materials Science. Advanced Materials, 2019, 31, e1902765.	11.1	389
1701	Direct Measurement of Crystal Growth Velocity in Epitaxial Phase-Change Material Thin Films. ACS Applied Materials & Interfaces, 2019, 11, 41544-41550.	4.0	13
1702	Near-infrared optical properties and proposed phase-change usefulness of transition metal disulfides. Applied Physics Letters, 2019, 115, .	1.5	19
1703	Thermal-optical readout of multi-level thermal emissivity Ge <sub>2</sub> Sb <sub>2</sub> Te <sub>5</sub> patterns. Materials Letters, 2019, 257, 126728.	1.3	0
1704	Light induced effects & defects in chalcogenide glassy semiconductors: A review. Infrared Physics and Technology, 2019, 102, 103056.	1.3	8
1705	Kinetics Features Conducive to Cache-Type Nonvolatile Phase-Change Memory. Chemistry of Materials, 2019, 31, 8794-8800.	3.2	35
1706	Structural and electronic properties of liquid, amorphous, and supercooled liquid phases of In <sub>2</sub> Te <sub>5</sub> from first-principles. Journal of Chemical Physics, 2019, 151, 134503.	1.2	8
1707	Temperature dependence of structural, dynamical, and electronic properties of amorphous Bi <sub>2</sub> Te <sub>3</sub> : an ab initio study. New Journal of Physics, 2019, 21, 093062.	1.2	4
1708	Understanding the Structure and Properties of Sesqui-Chalcogenides (i.e., Tj ETQq0 0 0 rgBT /Overlock 10 Tf 50 347 Td (V <sub>2</sub> /s	11.1	98
1710	Flexible Thin Film and Bulk Switchable Relaxor Coexisting Most Optimal 473 nm Blue Light without Blue-Light Hazard/Visual Injury. Journal of Physical Chemistry C, 2019, 123, 28385-28391.	1.5	9
1711	High-speed and large-window C-doped Sb-rich GeSbTe alloy for phase-change memory applications. Applied Physics Express, 2019, 12, 125006.	1.1	5
1712	Switchable Piezoresistive SmS Thin Films on Large Area. Sensors, 2019, 19, 4390.	2.1	8
1713	The Rise of Bioinspired Ionotronics. Advanced Intelligent Systems, 2019, 1, 1900073.	3.3	43
1714	Effect of Airborne Hydrocarbons on the Wettability of Phase Change Nanoparticle Decorated Surfaces. ACS Nano, 2019, 13, 13430-13438.	7.3	16
1715	Phase Transition and Superconductivity Enhancement in Se-Substituted MoTe <sub>2</sub> Thin Films. Advanced Materials, 2019, 31, e1904641.	11.1	34
1716	Boundaries of the X Phases in Sb-Te and Bi-Te Binary Alloy Systems. Crystals, 2019, 9, 447.	1.0	4

#	ARTICLE	IF	CITATIONS
1717	Exploring Chemical Bonding in Phase-Change Materials with Orbital-Based Indicators. Physica Status Solidi - Rapid Research Letters, 2019, 13, 1800579.	1.2	22
1718	Improvement of phase change speed and thermal stability in Ge <sub>5</sub> Sb <sub>95</sub> /ZnSb multilayer thin films for phase change memory application. Semiconductor Science and Technology, 2019, 34, 105022.	1.0	4
1719	Cobalt germanide precipitates indirectly improve the properties of thermoelectric germanium antimony tellurides. Journal of Materials Chemistry C, 2019, 7, 11419-11430.	2.7	4
1720	High Speed Test System of Current Pulse for Phase Change Memory Devices. Journal of Physics: Conference Series, 2019, 1237, 042064.	0.3	1
1721	Spectroscopic properties of few-layer tin chalcogenides. JPhys Materials, 2019, 2, 044005.	1.8	12
1722	Lattice hardening due to vacancy diffusion in (GeTe) <sub>m</sub> Sb <sub>2</sub> Te <sub>3</sub> alloys. Journal of Applied Physics, 2019, 126, 055106.	1.1	8
1723	Enhanced stability of guanidinium-based organic-inorganic hybrid lead triiodides in resistance switching. APL Materials, 2019, 7, .	2.2	12
1724	Composition-Controlled Atomic Layer Deposition of Phase-Change Memories and Ovonic Threshold Switches with High Performance. ACS Nano, 2019, 13, 10440-10447.	7.3	30
1725	Reducing structural change in the phase transition of Ge-doped Bi <sub>0.5</sub> Sb <sub>1.5</sub> Te <sub>3</sub> to enable high-speed and low-energy memory switching. Journal of Materials Chemistry C, 2019, 7, 11813-11823.	2.7	10
1726	Phase-change materials in electronics and photonics. MRS Bulletin, 2019, 44, 686-690.	1.7	44
1727	Harnessing machine learning potentials to understand the functional properties of phase-change materials. MRS Bulletin, 2019, 44, 705-709.	1.7	24
1728	Phase-change materials: Empowered by an unconventional bonding mechanism. MRS Bulletin, 2019, 44, 699-704.	1.7	15
1729	Ovonic threshold switching selectors for three-dimensional stackable phase-change memory. MRS Bulletin, 2019, 44, 715-720.	1.7	70
1730	Phase-change materials: The view from the liquid phase and the metallicity parameter. MRS Bulletin, 2019, 44, 691-698.	1.7	28
1731	Atomistic Simulations of Phase Change Materials for Electronic Memories. International Journal of Nanoscience, 2019, 18, 1940082.	0.4	0
1732	Characterization of Ge ions implantation in Sb <sub>2</sub> Te <sub>3</sub> thin films for high speed phase change memory application. Applied Physics Letters, 2019, 115, 103105.	1.5	4
1733	Waveguide Grating Color Reflector Using Germanium Telluride. , 2019, , .		2
1734	Switching hydrogen bonds to readily interconvert two room-temperature long-term stable crystalline polymorphs in chiral molecular perovskites. Chemical Communications, 2019, 55, 11555-11558.	2.2	18



#	ARTICLE	IF	CITATIONS
1735	Crystallization properties of arsenic doped GST alloys. Scientific Reports, 2019, 9, 12985.	1.6	14
1736	Low-pressure-responsive heat-storage ceramics for automobiles. Scientific Reports, 2019, 9, 13203.	1.6	23
1737	Crystal structure of Sb <sub>8</sub> Te <sub>3</sub> and Sb <sub>10</sub> Te <sub>3</sub> . AIP Conference Proceedings, 2019, , .	0.3	0
1738	Progressive amorphization of GeSbTe phase-change material under electron beam irradiation. APL Materials, 2019, 7, .	2.2	25
1739	Developing Precursor Chemistry for Atomic Layer Deposition of High-Density, Conformal GeTe Films for Phase-Change Memory. Chemistry of Materials, 2019, 31, 8663-8672.	3.2	12
1740	Polariton nanophotonics using phase-change materials. Nature Communications, 2019, 10, 4487.	5.8	106
1741	[Ge(Te <sub>n</sub> Bu) <sub>4</sub> ] – a single source precursor for the chemical vapour deposition of germanium telluride thin films. Dalton Transactions, 2019, 48, 117-124.	1.6	7
1742	Priming effects in the crystallization of the phase change compound GeTe from atomistic simulations. Faraday Discussions, 2019, 213, 287-301.	1.6	18
1743	Identity crisis in alchemical space drives the entropic colloidal glass transition. Nature Communications, 2019, 10, 64.	5.8	16
1744	Successive near-room-temperature dielectric phase transitions in a lead-free hybrid perovskite-like compound. Inorganic Chemistry Frontiers, 2019, 6, 233-237.	3.0	14
1745	Chalcogenide Phase Change Material for Active Terahertz Photonics. Advanced Materials, 2019, 31, e1808157.	11.1	159
1746	Spin-orbit-torque-driven multilevel switching in Ta/CoFeB/MgO structures without initialization. Applied Physics Letters, 2019, 114, .	1.5	31
1747	Nonvolatile Memories Based on Graphene and Related 2D Materials. Advanced Materials, 2019, 31, e1806663.	11.1	230
1748	Direct atomic identification of cation migration induced gradual cubic-to-hexagonal phase transition in Ge <sub>2</sub> Sb <sub>2</sub> Te <sub>5</sub> . Communications Chemistry, 2019, 2, .	2.0	32
1749	High Resolution Imaging of Chalcogenide Superlattices for Data Storage Applications: Progress and Prospects. Physica Status Solidi - Rapid Research Letters, 2019, 13, 1800562.	1.2	27
1750	Polyethylene glycol/halloysite@Ag nanocomposite PCM for thermal energy storage: Simultaneously high latent heat and enhanced thermal conductivity. Solar Energy Materials and Solar Cells, 2019, 193, 237-245.	3.0	113
1751	Tunable Volatility of Ge <sub>2</sub> Sb <sub>2</sub> Te <sub>5</sub> in Integrated Photonics. Advanced Functional Materials, 2019, 29, 1807571.	7.8	57
1752	Stabilizing amorphous Sb by adding alien seeds for durable memory materials. Physical Chemistry Chemical Physics, 2019, 21, 4494-4500.	1.3	31

#	ARTICLE	IF	CITATIONS
1753	Metal organic vapor phase epitaxy of $\text{Ge}_1\text{Sb}_2\text{Te}_4$ thin films on Si(111) substrate. Applied Physics A: Materials Science and Processing, 2019, 125, 1.	1.1	3
1754	A Review of Germanium-Antimony-Telluride Phase Change Materials for Non-Volatile Memories and Optical Modulators. Applied Sciences (Switzerland), 2019, 9, 530.	1.3	143
1755	Understanding of relationship between dopant and substitutional site to develop novel phase-change materials based on $\text{In}_3\text{SbTe}_2$ . Japanese Journal of Applied Physics, 2019, 58, SBBB02.	0.8	15
1756	Amorphization of pure hafnium nanocontacts and continuous conductance control via phase transition treatment using nanosecond pulse voltage energization. Japanese Journal of Applied Physics, 2019, 58, 055005.	0.8	4
1757	Advanced Optical Programming of Individual Meta-Atoms Beyond the Effective Medium Approach. Advanced Materials, 2019, 31, e1901033.	11.1	47
1758	Native filament-to-dielectric interfaces in phase change superlattice memories. Microelectronic Engineering, 2019, 215, 111007.	1.1	5
1759	Effect of Si doping on the structure and optical properties of $\text{Ge}_2\text{Sb}_2\text{Te}_5$ studied by ab initio calculations. Computational Materials Science, 2019, 168, 253-259.	1.4	8
1760	The changing phase of data storage. Nature Nanotechnology, 2019, 14, 643-644.	15.6	8
1761	Annealing induced transformations in structural and optical properties of $\text{Ge}_{30}\text{Se}_{70-x}\text{Bi}_x$ thin films. Phase Transitions, 2019, 92, 683-698.	0.6	11
1762	Cross-point Resistive Memory. ACM Transactions on Design Automation of Electronic Systems, 2019, 24, 1-37.	1.9	24
1763	Neuromorphic computing with resistive switching memory devices. , 2019, , 603-631.		4
1764	Novel non-fiber optical metamaterial waveguide for monitoring canal and pipeline structures. Journal of Civil Structural Health Monitoring, 2019, 9, 369-383.	2.0	0
1765	Controlling Multiphoton Absorption Efficiency by Chromophore Packing in Metal-Organic Frameworks. Journal of the American Chemical Society, 2019, 141, 11594-11602.	6.6	56
1766	Above room-temperature dielectric and nonlinear optical switching materials based on $[(\text{CH}_3)_3\text{S}]_2[\text{MBr}_4]$ (M = Cd, Mn and Zn). Dalton Transactions, 2019, 48, 11292-11297.	1.6	34
1767	Reconfigurable parity-time symmetry transition in phase change metamaterials. Nanoscale, 2019, 11, 15828-15835.	2.8	14
1768	Memristive devices based on emerging two-dimensional materials beyond graphene. Nanoscale, 2019, 11, 12413-12435.	2.8	87
1769	Bias-Voltage Driven Switching of the Charge-Density-Wave and Normal Metallic Phases in $1\text{T-TaS}_2$ Thin-Film Devices. ACS Nano, 2019, 13, 7231-7240.	7.3	57
1770	Peculiarities of the Electron Structure of Pseudobinary Alloys $(\text{GeTe})_m(\text{Sb}_2\text{Te}_3)_n$ . Crystallography Reports, 2019, 64, 422-427.	0.1	0

#	ARTICLE	IF	CITATIONS
1771	Prediction of low energy phase transition in metal doped MoTe <sub>2</sub> from first principle calculations. Journal of Applied Physics, 2019, 125, .	1.1	5
1772	Revealing the Nature of Chemical Bonding in an Al <sub>2</sub> Ag <sub>3</sub> Te <sub>5</sub> -Type Alkaline-Metal (A) Lanthanide (Ln) Silver Telluride. Inorganics, 2019, 7, 70.	1.2	12
1773	Wideband polarization-insensitive dielectric switch for mid-infrared waves realized by phase change material Ge <sub>3</sub> Sb <sub>2</sub> Te <sub>6</sub> . Europhysics Letters, 2019, 126, 27004.	0.7	6
1774	Electronic structure and conductivity of off-stoichiometric and Si-doped Ge <sub>2</sub> Sb <sub>2</sub> Te <sub>5</sub> crystals from multiple-scattering theory. Physical Review B, 2019, 99, .	1.1	4
1775	Structural Origin of Optical Band Edge Shift in Se <sub>70</sub> Ge <sub>30</sub> Bi <sub>x</sub> (0 ≤ x ≤ 10) Glassy Alloys. ChemistrySelect, 2019, 4, 6833-6843.	0.7	0
1776	Femtosecond x-ray diffraction reveals a liquid-liquid phase transition in phase-change materials. Science, 2019, 364, 1062-1067.	6.0	120
1777	In-situ observation of Ge <sub>2</sub> Sb <sub>2</sub> Te <sub>5</sub> crystallization at the passivated interface. Ceramics International, 2019, 45, 19542-19546.	2.3	6
1778	Terahertz spectroscopic characterization of Ge <sub>2</sub> Sb <sub>2</sub> Te <sub>5</sub> phase change materials for photonics applications. Journal of Materials Chemistry C, 2019, 7, 8209-8215.	2.7	38
1779	Natural Microtubule-Encapsulated Phase-Change Material with Simultaneously High Latent Heat Capacity and Enhanced Thermal Conductivity. ACS Applied Materials & Interfaces, 2019, 11, 20828-20837.	4.0	47
1780	All-optical spiking neurosynaptic networks with self-learning capabilities. Nature, 2019, 569, 208-214.	13.7	847
1781	Switching at the contacts in Ge <sub>9</sub> Sb <sub>1</sub> Te <sub>5</sub> phase-change nanowire devices. Nanotechnology, 2019, 30, 335706.	1.3	5
1782	Topological Axion States in the Magnetic Insulator $MnBi$ with the Quantized Magnetoelectric Effect. Physical Review Letters, 2019, 122, 206401.	2.9	554
1783	Optical Metasurfaces: Evolving from Passive to Adaptive. Advanced Optical Materials, 2019, 7, 1801786.	3.6	95
1784	Crystallization accompanied by local distortion behavior of Sn-doped amorphous Ge <sub>2</sub> Sb <sub>2</sub> Te <sub>5</sub> induced by a picosecond pulsed laser. Journal of Non-Crystalline Solids, 2019, 516, 99-105.	1.5	12
1785	Evolution of quasiperiodic microstructure of GeSbTe-based films irradiated by multi-pulsed picosecond laser. Journal Physics D: Applied Physics, 2019, 52, 305305.	1.3	1
1786	Crystallization-induced semiconductor-metal transition in an amorphous CoFeTaBO magnetic semiconductor nanocomposite. Journal of Alloys and Compounds, 2019, 797, 606-611.	2.8	4
1787	Spatiotemporal light control with active metasurfaces. Science, 2019, 364, .	6.0	581
1788	A review of microencapsulated and composite phase change materials: Alteration of strength and thermal properties of cement-based materials. Renewable and Sustainable Energy Reviews, 2019, 110, 467-484.	8.2	135

#	ARTICLE	IF	CITATIONS
1789	Effect of Electrode Material on the Crystallization of GeTe Grown by Atomic Layer Deposition for Phase Change Random Access Memory. <i>Micromachines</i> , 2019, 10, 281.	1.4	8
1790	Metasurface with Nanostructured Ge <sub>2</sub> Sb <sub>2</sub> Te <sub>5</sub> as a Platform for Broadband Operating Wavefront Switch. <i>Advanced Optical Materials</i> , 2019, 7, 1900171.	3.6	78
1791	Atomic-Scale Observation of Carbon Distribution in High-Performance Carbon-Doped Ge <sub>2</sub> Sb <sub>2</sub> Te <sub>5</sub> and Its Influence on Crystallization Behavior. <i>Journal of Physical Chemistry C</i> , 2019, 123, 13377-13384.	1.5	34
1792	<i>In situ</i> observations of the reversible vacancy ordering process in van der Waals-bonded GeSbTe thin films and GeTeSb <sub>2</sub> Te <sub>3</sub> superlattices. <i>Nanoscale</i> , 2019, 11, 10838-10845.	2.8	43
1793	Localised states and their capture characteristics in amorphous phase-change materials. <i>Scientific Reports</i> , 2019, 9, 6592.	1.6	5
1794	Chemical Design Principles for Cache-Type ScSbTe Phase-Change Memory Materials. <i>Chemistry of Materials</i> , 2019, 31, 4008-4015.	3.2	44
1795	Disorder and compositional dependences in Urbach-Martienssen tails in amorphous (GeTe) <sub>x</sub> (Sb <sub>2</sub> Te <sub>3</sub> ) <sub>1-x</sub> alloys. <i>Scientific Reports</i> , 2019, 9, 6030.	1.6	21
1796	Structural and Mössbauer study of (Sb <sub>0.70</sub> Te <sub>0.30</sub> ) <sub>100-x</sub> Sn <sub>x</sub> alloys with x = 0, 2.5, 5.0 and 7.5. <i>Journal of Alloys and Compounds</i> , 2019, 795, 27-33.	2.8	5
1797	The enhanced two-photon absorption behavior of twistfuranacenes to phenylacetylene-functionalized twistacenes. <i>Journal of Materials Chemistry C</i> , 2019, 7, 6344-6351.	2.7	28
1798	Higher-Temperature Dielectric Molecular Motor Induced by Unusual Chair-to-Rotator Motion. <i>Inorganic Chemistry</i> , 2019, 58, 4600-4608.	1.9	16
1799	Exploring the Compositional Ternary Diagram of Ge/S/Cu Glasses for Resistance Switching Memories. <i>Journal of Physical Chemistry C</i> , 2019, 123, 9486-9495.	1.5	6
1800	A Semiconducting Organic-Inorganic Hybrid Metal Halide with Switchable Dielectric and High Phase Transition Temperature. <i>Journal of Physical Chemistry C</i> , 2019, 123, 9364-9370.	1.5	32
1801	Synthesis and thermal characterization of novel phase change materials (PCMs) of the SeTeSnGe (STSG) multi-component system: calorimetric studies of the glass/crystal phase transition. <i>Dalton Transactions</i> , 2019, 48, 4719-4729.	1.6	10
1802	Optical creation of a supercrystal with three-dimensional nanoscale periodicity. <i>Nature Materials</i> , 2019, 18, 377-383.	13.3	105
1803	Evidence for Thermal-Induced Transition in Superlattice Phase Change Memory. <i>Physica Status Solidi - Rapid Research Letters</i> , 2019, 13, 1800634.	1.2	40
1804	Emerging Artificial Synaptic Devices for Neuromorphic Computing. <i>Advanced Materials Technologies</i> , 2019, 4, 1900037.	3.0	175
1805	Direct measurement of pre-existing defects in a Ge <sub>2</sub> Sb <sub>3.4</sub> Te <sub>6.2</sub> film. <i>Journal of Materials Science</i> , 2019, 54, 7072-7077.	1.7	3
1806	Recent Developments and Perspectives for Memristive Devices Based on Metal Oxide Nanowires. <i>Advanced Electronic Materials</i> , 2019, 5, 1800909.	2.6	94

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1807	Dynamic Metasurfaces Using Phase-Change Chalcogenides. <i>Advanced Optical Materials</i> , 2019, 7, 1801709.	3.6	139
1808	Phase-Change Hyperbolic Heterostructures for Nanopolaritonics: A Case Study of hBN/VO <sub>2</sub> . <i>Advanced Materials</i> , 2019, 31, e1900251.	11.1	43
1809	Yttrium-doped Sb <sub>2</sub> Te as high speed phase-change materials with good thermal stability. <i>Materials Letters</i> , 2019, 247, 60-62.	1.3	13
1810	Electro-Optical Operation of Electrical Probe Phase-Change Memory With Ultra-High Electrically Conductive Capping Layer. <i>IEEE Access</i> , 2019, 7, 32327-32332.	2.6	4
1811	2D Atomic Crystals: A Promising Solution for Next-Generation Data Storage. <i>Advanced Electronic Materials</i> , 2019, 5, 1800944.	2.6	28
1812	Memristive Devices and Networks for Brain-Inspired Computing. <i>Physica Status Solidi - Rapid Research Letters</i> , 2019, 13, 1900029.	1.2	66
1813	Sensing Avian Influenza Viruses Using Terahertz Metamaterial Reflector. <i>IEEE Sensors Journal</i> , 2019, 19, 5161-5166.	2.4	90
1814	Ionic transport and atomic structure of AgI-HgS-GeS <sub>2</sub> glasses. <i>Pure and Applied Chemistry</i> , 2019, 91, 1807-1820.	0.9	4
1815	[C <sub>6</sub> N <sub>2</sub> H <sub>18</sub> ][Sb <sub>5</sub> ]: A Lead-free Hybrid Halide Semiconductor with Exceptional Dielectric Relaxation. <i>Inorganic Chemistry</i> , 2019, 58, 4337-4343.	1.9	24
1816	Ultra compact electrochemical metallization cells offering reproducible atomic scale memristive switching. <i>Communications Physics</i> , 2019, 2, .	2.0	35
1817	Laser synthesis and functionalization of nanostructures. <i>International Journal of Extreme Manufacturing</i> , 2019, 1, 012002.	6.3	15
1818	Lattice Thermal Conductivity of mGeTe <sub>n</sub> Sb <sub>2</sub> Te <sub>3</sub> Phase-Change Materials: A First-Principles Study. <i>Crystals</i> , 2019, 9, 136.	1.0	5
1819	Dual-Functional Nanoscale Devices Using Phase-Change Materials: A Reconfigurable Perfect Absorber with Nonvolatile Resistance-Change Memory Characteristics. <i>Applied Sciences (Switzerland)</i> , 2019, 9, 564.	1.3	27
1820	A Perspective of Non-Fiber-Optical Metamaterial and Piezoelectric Material Sensing in Automated Structural Health Monitoring. <i>Sensors</i> , 2019, 19, 1490.	2.1	5
1821	Systematic materials design for phase-change memory with small density changes for high-endurance non-volatile memory applications. <i>Applied Physics Express</i> , 2019, 12, 051008.	1.1	7
1822	Pressure-Induced Phase Transitions in Germanium Telluride: Raman Signatures of Anharmonicity and Oxidation. <i>Physical Review Letters</i> , 2019, 122, 145701.	2.9	33
1823	Recent Progress in Three-Terminal Artificial Synapses: From Device to System. <i>Small</i> , 2019, 15, e1900695.	5.2	206
1824	Highly Confined and Switchable Mid-Infrared Surface Phonon Polariton Resonances of Planar Circular Cavities with a Phase Change Material. <i>Nano Letters</i> , 2019, 19, 2549-2554.	4.5	43

#	ARTICLE	IF	CITATIONS
1825	Atomic-scale observation of defects motion in van der Waals layered chalcogenide based materials. <i>Scripta Materialia</i> , 2019, 166, 154-158.	2.6	17
1826	A comparative study of the atomic structures of Ge-doped As <sub>4</sub> S <sub>3</sub> and P <sub>4</sub> Se <sub>3</sub> molecular glasses. <i>Journal of Non-Crystalline Solids</i> , 2019, 514, 83-89.	1.5	5
1827	Chalcogenide van der Waals superlattices: a case example of interfacial phase-change memory. <i>Pure and Applied Chemistry</i> , 2019, 91, 1777-1786.	0.9	5
1828	Origin of resistivity contrast in interfacial phase-change memory: The crucial role of Ge/Sb intermixing. <i>Applied Physics Letters</i> , 2019, 114, .	1.5	37
1829	A Semiconducting Organic-Inorganic Hybrid Metal Halide [(C <sub>6</sub> H <sub>15</sub> ClNO) <sub>2</sub> CdBr <sub>4</sub> ] with Switchable Dielectric and Large Phase Transition Thermal Hysteresis. <i>ChemistrySelect</i> , 2019, 4, 3921-3925.	0.7	15
1830	Influence of substrate dimensionality on the growth mode of epitaxial 3D-bonded GeTe thin films: From 3D to 2D growth. <i>Materials and Design</i> , 2019, 168, 107657.	3.3	18
1831	The Pathway to Intelligence: Using Stimuli-Responsive Materials as Building Blocks for Constructing Smart and Functional Systems. <i>Advanced Materials</i> , 2019, 31, e1804540.	11.1	169
1832	Thermoelectric GeTe with Diverse Degrees of Freedom Having Secured Superhigh Performance. <i>Advanced Materials</i> , 2019, 31, e1807071.	11.1	197
1833	In-memory computing on a photonic platform. <i>Science Advances</i> , 2019, 5, eaau5759.	4.7	238
1834	Interface-Driven Phase Transition of Phase-Change Material. <i>Crystal Growth and Design</i> , 2019, 19, 2123-2130.	1.4	5
1835	Stoichiometric Engineering of Chalcogenide Semiconductor Alloys for Nanophotonic Applications. <i>Advanced Materials</i> , 2019, 31, e1807083.	11.1	32
1836	A high-temperature multiaxial precision time-delayed dielectric switch crystal triggered by linear/propeller/ball three-form motion. <i>Journal of Materials Chemistry C</i> , 2019, 7, 2994-3002.	2.7	8
1837	Unconventional Inorganic-Based Memristive Devices for Advanced Intelligent Systems. <i>Advanced Materials Technologies</i> , 2019, 4, 1900080.	3.0	14
1838	No-Interference Reading for Optical Information Storage and Ultra-Multiple Anti-Counterfeiting Applications by Designing Targeted Recombination in Charge Carrier Trapping Phosphors. <i>Advanced Optical Materials</i> , 2019, 7, 1900006.	3.6	87
1839	What Will Come After V-NAND? Vertical Resistive Switching Memory?. <i>Advanced Electronic Materials</i> , 2019, 5, 1800914.	2.6	61
1840	Dynamically reconfigurable topological edge state in phase change photonic crystals. <i>Science Bulletin</i> , 2019, 64, 814-822.	4.3	55
1841	Charge Density Wave Phase Transitions in Large-Scale Few-Layer 1T-VTe <sub>2</sub> Grown by Molecular Beam Epitaxy. <i>ACS Applied Materials &amp; Interfaces</i> , 2019, 11, 10729-10735.	4.0	42
1842	Crystallization Study of Ge-Rich (GeTe) <sub>m</sub> (Sb <sub>2</sub> Te <sub>3</sub> ) <sub>n</sub> Using Two-Step Annealing Process. <i>Physica Status Solidi - Rapid Research Letters</i> , 2019, 13, 1800632.	1.2	5

#	ARTICLE	IF	CITATIONS
1843	Supersensitive and Tunable Nano-Biosensor for Cancer Detection. IEEE Sensors Journal, 2019, 19, 4874-4881.	2.4	88
1844	Lanthanide chain assembled in metal-organic frameworks: Slow relaxation of the magnetization in Dy(III) and Er(III) complexes. Inorganic Chemistry Communication, 2019, 102, 30-34.	1.8	4
1845	Nano Resistive Memory (Re-RAM) Devices and their Applications. Reviews on Advanced Materials Science, 2019, 58, 248-270.	1.4	21
1846	Wavelength-selective, tunable and switchable plasmonic perfect absorbers based on phase change materials Ge <sub>2</sub> Sb <sub>2</sub> Te <sub>5</sub> . Europhysics Letters, 2019, 128, 67001.	0.7	16
1847	Origin of Band Modulation in GeTe-Rich GeSbTe Thin Film. ACS Applied Electronic Materials, 2019, 1, 2619-2625.	2.0	3
1848	Modeling and Circuit Design of Associative Memories With Spin-Orbit Torque FETs. IEEE Journal on Exploratory Solid-State Computational Devices and Circuits, 2019, 5, 197-205.	1.1	6
1849	First-principles prediction of multiple stationary states in glass-forming liquids. Journal of Chemical Physics, 2019, 151, 234501.	1.2	3
1850	Exploring ultrafast threshold switching in In <sub>3</sub> SbTe <sub>2</sub> phase change memory devices. Scientific Reports, 2019, 9, 19251.	1.6	28
1851	Synthesis and characterization of a new organic-inorganic hybrid ferroelectric: (C <sub>4</sub> H <sub>10</sub> N) <sub>6</sub> [InBr <sub>6</sub> ][InBr <sub>4</sub> ] <sub>3</sub> ·H <sub>2</sub> O Dalton Transactions, 2019, 48, 17402-17407.	1.2	3
1852	Plasmonic nanogap enhanced phase-change devices with dual electrical-optical functionality. Science Advances, 2019, 5, eaaw2687.	4.7	131
1853	Actively Tunable Metalens Array Based on Patterned Phase Change Materials. Applied Sciences (Switzerland), 2019, 9, 4927.	1.3	13
1854	Light Matter Interaction of Ge <sub>2</sub> Sb <sub>2</sub> Te <sub>5</sub> on Different Substrate Platforms for Photo-detection Application. , 2019, , .		2
1855	Persistence of spin memory in a crystalline, insulating phase-change material. Npj Quantum Materials, 2019, 4, .	1.8	13
1856	Experimental and theoretical study of thermoelectric properties of rhombohedral GeSb <sub>5</sub> Te <sub>10</sub> thin films. Materials Science and Engineering B: Solid-State Materials for Advanced Technology, 2019, 250, 114439.	1.7	6
1857	Transition Metal Doping of Phase Change Materials: Atomic Arrangement of Cr-Doped Ge <sub>2</sub> Sb <sub>2</sub> Te <sub>5</sub> . Journal of Physical Chemistry C, 2019, 123, 30640-30648.	1.5	10
1858	Phase change thin films for non-volatile memory applications. Nanoscale Advances, 2019, 1, 3836-3857.	2.2	97
1859	Electrical transport mechanism of the amorphous phase in Cr <sub>2</sub> Ge <sub>2</sub> Te <sub>6</sub> phase change material. Journal Physics D: Applied Physics, 2019, 52, 105103.	1.3	16
1860	Low-Loss Integrated Photonic Switch Using Subwavelength Patterned Phase Change Material. ACS Photonics, 2019, 6, 87-92.	3.2	124

#	ARTICLE	IF	CITATIONS
1861	Accelerated Ionic Motion in Amorphous Memristor Oxides for Nonvolatile Memories and Neuromorphic Computing. <i>Advanced Functional Materials</i> , 2019, 29, 1804782.	7.8	51
1862	Bismuth and antimony chalcogenides: Peculiarities of electron density distribution, unusual magnetic properties and superconductivity. <i>Journal of Magnetism and Magnetic Materials</i> , 2019, 475, 627-634.	1.0	9
1863	The Structure of Phase-Change Chalcogenides and Their High-Pressure Behavior. <i>Physica Status Solidi - Rapid Research Letters</i> , 2019, 13, 1800506.	1.2	23
1864	Thermal stability improvement and crystallization behavior of Ag doped Ge <sub>2</sub> Sb <sub>2</sub> Te <sub>5</sub> phase change materials. <i>Journal of Materials Science: Materials in Electronics</i> , 2019, 30, 3604-3610.	1.1	7
1865	Role of carbon-rings in polycrystalline GeSb <sub>2</sub> Te <sub>4</sub> phase-change material. <i>Journal of Alloys and Compounds</i> , 2019, 782, 852-858.	2.8	20
1866	A phase-change thin film-tuned photonic crystal device. <i>Nanotechnology</i> , 2019, 30, 045203.	1.3	5
1867	Inter-diffusion of plasmonic metals and phase change materials. <i>Journal of Materials Science</i> , 2019, 54, 2814-2823.	1.7	44
1868	Above Room Temperature Organic Dielectric Switchable Material: Diprotonated 1,4-Diazabicyclo[2.2.2]octane Shifts between Two Pyruvic Acids. <i>Zeitschrift Fur Anorganische Und Allgemeine Chemie</i> , 2019, 645, 3-7.	0.6	1
1869	Effect of Te proportion on the properties of Ge <sub>25</sub> Sb <sub>10</sub> Se <sub>65</sub> -Te chalcogenide glasses. <i>Infrared Physics and Technology</i> , 2019, 96, 361-365.	1.3	13
1870	Re-amorphization of GeSbTe alloys not through a melt-quenching process. <i>Applied Physics Express</i> , 2019, 12, 015504.	1.1	5
1871	Local Structural Origin of the Crystallization Tendency of Pure and Alloyed Sb. <i>Physica Status Solidi - Rapid Research Letters</i> , 2019, 13, 1800552.	1.2	24
1872	Study of dielectric relaxation and thermally activated a.c. conduction in multicomponent Ge <sub>10</sub> Se <sub>60</sub> Te <sub>30</sub> In <sub>x</sub> (0 ≤ x ≤ 6) chalcogenide glasses using CBH model. <i>Results in Physics</i> , 2019, 12, 223-236.	2.0	54
1873	Analysis of crystal growth and viscosity in Ge-Sb-Se-Te undercooled melts. <i>Journal of Non-Crystalline Solids</i> , 2019, 505, 1-8.	1.5	8
1874	Ten States of Nonvolatile Memory through Engineering Ferromagnetic Remanent Magnetization. <i>Advanced Functional Materials</i> , 2019, 29, 1806460.	7.8	15
1875	A Quantum-Mechanical Map for Bonding and Properties in Solids. <i>Advanced Materials</i> , 2019, 31, e1806280.	11.1	206
1876	Room-temperature nonvolatile four-state memory based on multiferroic Sr <sub>3</sub> Co <sub>2</sub> Fe <sub>21.6</sub> O <sub>37.4</sub> . <i>Journal of Alloys and Compounds</i> , 2019, 779, 115-120.	2.8	18
1877	Fabrication and characterisation of viscose fibre with photoinduced heat-generating properties. <i>Cellulose</i> , 2019, 26, 1631-1640.	2.4	18
1878	Disorder Control in Crystalline GeSb <sub>2</sub> Te <sub>4</sub> and its Impact on Characteristic Length Scales. <i>Physica Status Solidi - Rapid Research Letters</i> , 2019, 13, 1800578.	1.2	8



#	ARTICLE	IF	CITATIONS
1879	Designing crystallization in phase-change materials for universal memory and neuro-inspired computing. <i>Nature Reviews Materials</i> , 2019, 4, 150-168.	23.3	572
1880	Structural and chemical homogeneity of chalcogenide glass prepared by melt-rocking. <i>Journal of Chemical Physics</i> , 2019, 150, 014505.	1.2	16
1881	Low-Loss and Broadband Nonvolatile Phase-Change Directional Coupler Switches. <i>ACS Photonics</i> , 2019, 6, 553-557.	3.2	184
1882	Effect of copper doping on the crystallization behavior of TiSbTe for fast-speed phase change memory. <i>Materials Letters</i> , 2019, 241, 148-151.	1.3	4
1883	Effect of substrate on phase-change characteristics of GeSb thin films and its potential application in three-level electrical storage. <i>AIP Advances</i> , 2019, 9, .	0.6	3
1884	Rapid Faraday Rotation on $\mu$ -Iron Oxide Magnetic Nanoparticles by Visible and Terahertz Pulsed Light. <i>Journal of the American Chemical Society</i> , 2019, 141, 1775-1780.	6.6	57
1885	Dynamics of the phase-change material GeTe across the structural phase transition. <i>Frontiers of Physics</i> , 2019, 14, 1.	2.4	8
1886	Realizing Bidirectional Threshold Switching in Ag/Ta <sub>2</sub> O <sub>5</sub> /Pt Diffusive Devices for Selector Applications. <i>Journal of Electronic Materials</i> , 2019, 48, 517-525.	1.0	14
1887	Crystallization characteristics and local grain abnormal growth of amorphous Ge <sub>2</sub> Sb <sub>2</sub> Te <sub>5</sub> films induced by a Gaussian picosecond laser. <i>Optics and Laser Technology</i> , 2019, 111, 585-591.	2.2	8
1888	Soft hydrogen plasma induced phase transition in monolayer and few-layer MoTe <sub>2</sub> . <i>Nanotechnology</i> , 2019, 30, 034004.	1.3	29
1889	Intermediate crystallization kinetics in Germanium-Tellurides. <i>Acta Materialia</i> , 2019, 164, 473-480.	3.8	18
1890	Pressure induced short-range structural changes in supercooled liquid Ge <sub>2</sub> Sb <sub>2</sub> Te <sub>5</sub> . <i>Journal of Non-Crystalline Solids</i> , 2019, 503-504, 382-388.	1.5	3
1891	Electric-field induced structural transition in vertical MoTe <sub>2</sub> - and Mo <sub>1-x</sub> W <sub>x</sub> Te <sub>2</sub> -based resistive memories. <i>Nature Materials</i> , 2019, 18, 55-61.	13.3	300
1892	Assembly of Zeolitic Crystals From a Model of Mesogenic Patchy Nanoparticles. <i>Journal of Physical Chemistry C</i> , 2019, 123, 971-978.	1.5	7
1893	Wide Bandgap Phase Change Material Tuned Visible Photonics. <i>Advanced Functional Materials</i> , 2019, 29, 1806181.	7.8	192
1894	Active all-dielectric bifocal metalens assisted by germanium antimony telluride. <i>Journal Physics D: Applied Physics</i> , 2019, 52, 095106.	1.3	28
1895	Metasurfaces for independent manipulation of the wavefronts in the different states of phase change materials. <i>Applied Physics Express</i> , 2019, 12, 012003.	1.1	2
1896	Pressure-Driven Reversible Switching between <i>n</i> - and <i>p</i> -Type Conduction in Chalcopyrite CuFeS <sub>2</sub> . <i>Journal of the American Chemical Society</i> , 2019, 141, 505-510.	6.6	36

#	ARTICLE	IF	CITATIONS
1897	Nitrogen ion implanted ultrananocrystalline diamond films: A better electrostatic charge storage medium. <i>Carbon</i> , 2019, 141, 123-133.	5.4	7
1898	Memristor devices for neural networks. <i>Journal Physics D: Applied Physics</i> , 2019, 52, 023003.	1.3	86
1899	Phase evolution and formation of $\delta$ phase in Ti3O5 induced by magnesium doping. <i>Journal of Alloys and Compounds</i> , 2019, 774, 1189-1194.	2.8	22
1900	The local structural differences in amorphous Ge-Sb-Te alloys. <i>Journal of Alloys and Compounds</i> , 2019, 774, 748-757.	2.8	24
1901	Viscosity of chalcogenide glass-formers. <i>International Materials Reviews</i> , 2020, 65, 63-101.	9.4	23
1902	First principles investigation on anomalous lattice shrinkage of W alloyed rock salt GeTe. <i>Journal of Physics and Chemistry of Solids</i> , 2020, 137, 109220.	1.9	7
1903	Silicon Nitride Photonics for the Near-Infrared. <i>IEEE Journal of Selected Topics in Quantum Electronics</i> , 2020, 26, 1-13.	1.9	40
1904	Correlation between threshold voltage and its pre-exponential factor in resistive switching. <i>Materials Chemistry and Physics</i> , 2020, 241, 122326.	2.0	7
1905	Preferred selenium incorporation and unexpected interlayer bonding in the layered structure of $\text{Sb}_2\text{Te}_3$ - $\text{Sb}_2\text{Se}_3$ . <i>Zeitschrift Fur Naturforschung - Section B Journal of Chemical Sciences</i> , 2020, 75, 41-50.	0.3	2
1906	Temperature dependent structural evolution and crystallization properties of thin $\text{Ge}_{15}\text{Te}_{85}$ film revealed by <i>in situ</i> resistance, x-ray diffraction and scanning electron microscopic studies. <i>Journal Physics D: Applied Physics</i> , 2020, 53, 025108.	1.3	10
1907	A multi-level optical storage scheme via two-step picosecond laser irradiations: time/space modulations of microstructure and its optical property. <i>Semiconductor Science and Technology</i> , 2020, 35, 035025.	1.0	2
1908	Surface Polariton-Like Polarized Waveguide Modes in Switchable Dielectric Thin Films on Polar Crystals. <i>Advanced Optical Materials</i> , 2020, 8, 1901056.	3.6	16
1909	Dynamic Terahertz Plasmonics Enabled by Phase-Change Materials. <i>Advanced Optical Materials</i> , 2020, 8, 1900548.	3.6	59
1910	MLC STT-MRAM-Aware Memory Subsystem for Smart Image Applications. <i>IEEE Transactions on Multimedia</i> , 2020, 22, 717-729.	5.2	3
1911	Chalcogenide Thermoelectrics Empowered by an Unconventional Bonding Mechanism. <i>Advanced Functional Materials</i> , 2020, 30, 1904862.	7.8	148
1913	Impact of Thermal Boundary Resistance on the Performance and Scaling of Phase-Change Memory Device. <i>IEEE Transactions on Computer-Aided Design of Integrated Circuits and Systems</i> , 2020, 39, 1834-1840.	1.9	13
1914	Emerging neuromorphic devices. <i>Nanotechnology</i> , 2020, 31, 092001.	1.3	177
1915	Band transport and localised states in modelling the electric switching of chalcogenide materials. <i>Journal of Computational Electronics</i> , 2020, 19, 128-136.	1.3	4

#	ARTICLE	IF	CITATIONS
1916	Laser irradiation-induced structural, microstructural and optical properties change in Bi-doped As <sub>40</sub> Se <sub>60</sub> thin films. Phase Transitions, 2020, 93, 148-157.	0.6	2
1917	Temperature-dependent opto-electronic properties of Ge <sub>2.53</sub> Sb <sub>4.89</sub> Te <sub>2.50</sub> thin films. Phase Transitions, 2020, 93, 134-147.	0.6	3
1918	Recent Progress and Perspectives of Thermally Drawn Multimaterial Fiber Electronics. Advanced Materials, 2020, 32, e1904911.	11.1	143
1919	Ultrafast crystallization in nanoscale phase change film of monobasic antimony. Applied Surface Science, 2020, 505, 144337.	3.1	15
1920	Sub-nanosecond threshold switching dynamics in GeSb <sub>2</sub> Te <sub>4</sub> phase change memory device. Journal Physics D: Applied Physics, 2020, 53, 025103.	1.3	7
1921	A layered Ge <sub>2</sub> Sb <sub>2</sub> Te <sub>5</sub> phase change material. Nanoscale, 2020, 12, 3351-3358.	2.8	5
1922	Effect of vacancy disorder in phase-change materials. Journal of Physics Condensed Matter, 2020, 32, 175401.	0.7	1
1923	Chemical understanding of resistance drift suppression in Ge–Sn–Te phase-change memory materials. Journal of Materials Chemistry C, 2020, 8, 71-77.	2.7	36
1924	Rheology of supercooled Se-Te chain liquids: Role of Te as an interchain cross-linker. Journal of Non-Crystalline Solids, 2020, 529, 119764.	1.5	4
1925	Atomistic simulations of thermal conductivity in GeTe nanowires. Journal Physics D: Applied Physics, 2020, 53, 054001.	1.3	20
1926	A method to predict energy barriers in stress modulated solid–solid phase transitions. Journal of the Mechanics and Physics of Solids, 2020, 137, 103857.	2.3	16
1927	Zn-doped Sb <sub>70</sub> Se <sub>30</sub> thin films with multiple phase transition for high storage density and low power consumption phase change memory applications. Scripta Materialia, 2020, 178, 324-328.	2.6	13
1928	Controlling Polarity of MoTe <sub>2</sub> Transistors for Monolithic Complementary Logic via Schottky Contact Engineering. ACS Nano, 2020, 14, 1457-1467.	7.3	31
1929	Nanoscale boron carbonitride semiconductors for photoredox catalysis. Nanoscale, 2020, 12, 3593-3604.	2.8	27
1930	Integrated 256 Cell Photonic Phase-Change Memory With 512-Bit Capacity. IEEE Journal of Selected Topics in Quantum Electronics, 2020, 26, 1-7.	1.9	54
1931	The effect of thickness on texture of Ge <sub>2</sub> Sb <sub>2</sub> Te <sub>5</sub> phase-change films. Journal of Materials Science: Materials in Electronics, 2020, 31, 5848-5853.	1.1	3
1932	Thermally controllable perfect absorber at telecommunication spectrum based on phase change material and cavity grating. Laser Physics, 2020, 30, 026201.	0.6	6
1933	Investigation of the crystallization behavior of laser-irradiated EXTREME pattern by Raman spectroscopy. International Journal of Applied Glass Science, 2020, 11, 415-420.	1.0	3

#	ARTICLE	IF	CITATIONS
1934	Recent Progress in Photonic Synapses for Neuromorphic Systems. <i>Advanced Intelligent Systems</i> , 2020, 2, 1900136.	3.3	132
1935	The crystallization mechanism of zirconium-doped Sb <sub>2</sub> Te <sub>3</sub> material for phase-change random-access memory application. <i>Journal of Materials Science: Materials in Electronics</i> , 2020, 31, 5861-5865.	1.1	4
1936	Nanoscale amorphous interfaces in phase-change memory materials: structure, properties and design. <i>Journal Physics D: Applied Physics</i> , 2020, 53, 114002.	1.3	4
1937	Optical and photoluminescence performance of electrodeposited arsenic selenide thin film doped with erbium ion. <i>Optical Materials</i> , 2020, 99, 109556.	1.7	3
1938	In-situ derived graphene from solid sodium acetate for enhanced photothermal conversion, thermal conductivity, and energy storage capacity of phase change materials. <i>Solar Energy Materials and Solar Cells</i> , 2020, 205, 110269.	3.0	28
1939	A Model for R(t) Elements and R(t)-Based Spike-Timing-Dependent Plasticity With Basic Circuit Examples. <i>IEEE Transactions on Neural Networks and Learning Systems</i> , 2020, 31, 4206-4216.	7.2	2
1940	Local- and Intermediate-Range Structures on Ordinary and Exotic Phase-Change Materials by Anomalous X-ray Scattering. <i>Analytical Sciences</i> , 2020, 36, 5-9.	0.8	7
1941	Nonvolatile Memory and Artificial Synapse Based on the Cu/P(VDF-TrFE)/Ni Organic Memtransistor. <i>ACS Applied Materials &amp; Interfaces</i> , 2020, 12, 4673-4677.	4.0	15
1942	Fully photon operated transmittor / all-optical switch based on a layered Ge <sub>1</sub> Sb <sub>2</sub> Te <sub>4</sub> phase change medium. <i>FlatChem</i> , 2020, 23, 100186.	2.8	26
1943	Revealing the Bonding Nature in an Al <sub>n</sub> ZnTe <sub>3</sub> -Type Alkaline-Metal (A) Lanthanide (Ln) Zinc Telluride by Means of Experimental and Quantum-Chemical Techniques. <i>Crystals</i> , 2020, 10, 916.	1.0	10
1944	Studying phase change memory devices by coupling scanning precession electron diffraction and energy dispersive X-ray analysis. <i>Acta Materialia</i> , 2020, 201, 72-78.	3.8	4
1945	Tunable GST metasurfaces for chromatic aberration compensation in the mid-infrared. <i>Optical Materials</i> , 2020, 109, 110284.	1.7	28
1946	Glassy GaS: transparent and unusually rigid thin films for visible to mid-IR memory applications. <i>Physical Chemistry Chemical Physics</i> , 2020, 22, 25560-25573.	1.3	15
1947	A review of melting and freezing processes of PCM/nano-PCM and their application in energy storage. <i>Energy</i> , 2020, 211, 118698.	4.5	271
1948	Recipe for ultrafast and persistent phase-change memory materials. <i>NPG Asia Materials</i> , 2020, 12, .	3.8	29
1949	Phase change memory based on TaSbTe alloy Towards a universal memory. <i>Materials Today Physics</i> , 2020, 15, 100266.	2.9	24
1950	Atomistic mechanism of stress modulated phase transition in monolayer MoTe <sub>2</sub> . <i>Extreme Mechanics Letters</i> , 2020, 40, 100946.	2.0	14
1951	A one-dimensional switchable dielectric material with Pd uptake function: [(CH <sub>2</sub> ) <sub>3</sub> NH <sub>2</sub> S] <sub>2</sub> BiCl <sub>5</sub> . <i>Chemical Communications</i> , 2020, 56, 13764-13767.	2.2	13

#	ARTICLE	IF	CITATIONS
1952	Synthesis of nanoscale lambda-Ti3O5 via a PEG assisted sol-gel method. Journal of Alloys and Compounds, 2020, 848, 156585.	2.8	4
1953	In situ TEM study of crystallization and chemical changes in an oxidized uncapped Ge2Sb2Te5 film. Journal of Applied Physics, 2020, 128, 124505.	1.1	7
1954	Delayed Concentration Quenching of Luminescence Caused by Eu <sup>3+</sup> -Induced Phase Transition in LaSc <sub>3</sub> (BO <sub>3</sub> ) <sub>4</sub> . Chemistry of Materials, 2020, 32, 6958-6967.	3.2	71
1955	New Mn(II) and Cu(II) Complexes of Naphtaldimine Schiff Base Ligands: Synthesis, Characterization and Crystal Structures. Journal of Structural Chemistry, 2020, 61, 57-65.	0.3	2
1956	Near-Infrared Rewritable, Non-Volatile Subwavelength Absorber Based on Chalcogenide Phase Change Materials. Nanomaterials, 2020, 10, 1222.	1.9	17
1957	Simulation of Chemical Order-Disorder Transitions Induced Thermally at the Nanoscale for Magnetic Recording and Data Storage. ACS Applied Nano Materials, 2020, 3, 7668-7677.	2.4	4
1958	Ultrafast Topological Engineering in Metamaterials. Physical Review Letters, 2020, 125, 037403.	2.9	16
1959	The optimization effect of titanium on the phase change properties of SnSb <sub>4</sub> thin films for phase change memory applications. CrystEngComm, 2020, 22, 5002-5009.	1.3	4
1960	Specific Features of Formation of Laser-Induced Periodic Surface Structures on Ge <sub>2</sub> Sb <sub>2</sub> Te <sub>5</sub> Amorphous Thin Films under Illumination by Femtosecond Laser Pulses. Physica Status Solidi (B): Basic Research, 2020, 257, 1900617.	0.7	13
1961	Photoexcitation Induced Ultrafast Nonthermal Amorphization in Sb <sub>2</sub> Te <sub>3</sub> . Journal of Physical Chemistry Letters, 2020, 11, 10242-10249.	2.1	12
1962	Reversible phase-change characteristics and structural origin in Cr doped Ge2Sb2Te5 thin films. Thin Solid Films, 2020, 716, 138434.	0.8	10
1963	Simulation of Phase-Change Memory and Thermoelectric Materials using Machine-Learned Interatomic Potentials: Sb <sub>2</sub> Te <sub>3</sub> . Physica Status Solidi (B): Basic Research, 2021, 258, 2000416.	0.7	16
1964	Microwave AC Resonance Induced Phase Change in Sb <sub>2</sub> Te <sub>3</sub> Nanowires. Nano Letters, 2020, 20, 8668-8674.	4.5	1
1965	On-the-fly closed-loop materials discovery via Bayesian active learning. Nature Communications, 2020, 11, 5966.	5.8	167
1966	Nanoscale phase change on Ge2Sb2Te5 thin films induced by optical near fields with photoassisted scanning tunneling microscope. Applied Physics Letters, 2020, 117, 211102.	1.5	3
1967	X-Ray Diffraction Analysis of the Amorphous-Crystalline Phase Transition in Ni. Technical Physics, 2020, 65, 1652-1658.	0.2	0
1968	Terahertz Nanoimaging and Nanospectroscopy of Chalcogenide Phase-Change Materials. ACS Photonics, 2020, 7, 3499-3506.	3.2	29
1969	Synthesis of Macroscopic Single Crystals of Ge2Sb2Te5 via Single-Shot Femtosecond Optical Excitation. Crystal Growth and Design, 2020, 20, 6660-6667.	1.4	0

#	ARTICLE	IF	CITATIONS
1970	Phase-change Janus particles with switchable dual properties. Applied Physics Letters, 2020, 117, 221601.	1.5	9
1971	Realization of 4-Bit Multilevel Optical Switching in Ge <sub>2</sub> Sb <sub>2</sub> Te <sub>5</sub> and Ag <sub>5</sub> In <sub>5</sub> Sb <sub>60</sub> Te <sub>30</sub> Phase-Change Materials Enabled in the Visible Region. ACS Applied Electronic Materials, 2020, 2, 3977-3986.	2.0	6
1972	Resistive switching characteristics of Co <sub>2</sub> FeSi and Mn with Al <sub>2</sub> O <sub>3</sub> granular nanocomposites. Journal of Magnetism and Magnetic Materials, 2020, 516, 167336.	1.0	3
1973	Phase-field modeling of the non-congruent crystallization of a ternary Ge-Sb-Te alloy for phase-change memory applications. Journal of Applied Physics, 2020, 128, .	1.1	8
1974	Thermally Controllable Infrared Absorption in Cylindrical Groove Array Covered by Phase Change Material. Plasmonics, 2020, 15, 2119-2125.	1.8	4
1975	Critical analysis of the different glass stability criteria in chalcogenide glasses. Boletin De La Sociedad Espanola De Ceramica Y Vidrio, 2021, 60, 369-379.	0.9	0
1976	Electronic and elastic properties of rhombohedral GeTe: Exfoliation energy of a monolayer from (111) surface. Materials Today: Proceedings, 2020, 28, 1771-1775.	0.9	2
1977	Improved thermal stability and fast phase change speed of Y-doped Sb <sub>7</sub> Se <sub>3</sub> thin film for phase change memory applications. Applied Surface Science, 2020, 532, 147370.	3.1	13
1978	On the charge transport mechanisms in Ge-rich GeSbTe alloys. Solid-State Electronics, 2020, 172, 107871.	0.8	5
1979	Sound Speed in Glassy As <sub>x</sub> Se <sub>1-x</sub> (x = 0.4, 0.5, and 0.6) by Inelastic X-Ray Scattering. Physica Status Solidi (B): Basic Research, 2020, 257, 2000134.	0.7	0
1980	Direct Observation of Phase Transformations in Ge-Sb-Te Materials. Microscopy and Microanalysis, 2020, 26, 1418-1420.	0.2	5
1981	Metrology and Inspection: Challenges and Solutions for Emerging Technology Nodes. , 2020, , .		0
1982	VLS growth of pure and Au decorated $\hat{I}^2$ -Ga <sub>2</sub> O <sub>3</sub> nanowires for room temperature CO gas sensor and resistive memory applications. Applied Surface Science, 2020, 533, 147476.	3.1	56
1983	Unveiling the structural origin to control resistance drift in phase-change memory materials. Materials Today, 2020, 41, 156-176.	8.3	96
1984	Photo-Seebeck study of amorphous germanium-tellurium-oxide films. Journal of Materials Science: Materials in Electronics, 2020, 31, 22000-22011.	1.1	1
1985	Recent advances in multi-dimensional metasurfaces holographic technologies. Photonix, 2020, 1, .	5.5	140
1986	Reconfigurable slow light in phase change photonic crystal waveguide. Journal of Applied Physics, 2020, 128, .	1.1	12
1987	Effect of Ion Irradiation on Amorphous and Crystalline Ge-Se and Their Application as Phase Change Temperature Sensor. Physica Status Solidi (B): Basic Research, 2021, 258, 2000429.	0.7	8

#	ARTICLE	IF	CITATIONS
1988	Gas-Dependent Reversible Structural and Magnetic Transformation between Two Ladder Compounds. Crystals, 2020, 10, 841.	1.0	1
1989	Synthesis of $\text{Ti}_3\text{O}_5$ nanocrystals using a block copolymer. Materials Today Energy, 2020, 18, 100525.	2.5	4
1990	Review of electrical contacts to phase change materials and an unexpected trend between metal work function and contact resistance to germanium telluride. Journal of Vacuum Science and Technology A: Vacuum, Surfaces and Films, 2020, 38, .	0.9	9
1991	Photocurrent Imaging of Multi-Memristive Charge Density Wave Switching in Two-Dimensional $\text{1T-TaS}_2$ . Nano Letters, 2020, 20, 7200-7206.	4.5	22
1992	Doping-driven electronic and lattice dynamics in the phase-change material vanadium dioxide. Physical Review B, 2020, 102, .	1.1	8
1993	Thin Film Preparation and Optical Properties of Se $\text{Te}$ Based Chalcogenide Glasses for Optoelectronic Applications. Glass Physics and Chemistry, 2020, 46, 341-349.	0.2	16
1994	Temperature-Dependent Local Structural Changes of Amorphous Thin Ge <sub>20</sub> Te <sub>80</sub> Film Revealed by In Situ Resistance, X-Ray Diffraction, and Raman Spectroscopy Studies. Physica Status Solidi (B): Basic Research, 2020, 257, 2000451.	0.7	1
1995	Plasmonics beyond noble metals: Exploiting phase and compositional changes for manipulating plasmonic performance. Journal of Applied Physics, 2020, 128, .	1.1	54
1996	Recent Progress in Optoelectronic Synapses for Artificial Visual Perception System. Small Structures, 2020, 1, 2000029.	6.9	90
1997	Efficient Training of Machine Learning Potentials by a Randomized Atomic-System Generator. Journal of Physical Chemistry B, 2020, 124, 8704-8710.	1.2	4
1998	Nitrogen doping-induced local structure change in a $\text{Cr}_2\text{Ge}_2\text{Te}_6$ inverse resistance phase-change material. Materials Advances, 2020, 1, 2426-2432.	2.6	9
1999	Nonvolatile Multistates Memories for High-Density Data Storage. ACS Applied Materials & Interfaces, 2020, 12, 42449-42471.	4.0	101
2000	Metal-insulator transition and doping-induced phase change in $\text{Ge}_2\text{Sb}_2\text{Se}_5\text{Te}_5$ . Applied Physics Letters, 2020, 117, 193503.	1.5	4
2001	Investigation of the evolution of free carriers during femtosecond laser-induced ultrafast amorphization in nitrogen doped $\text{Ge}_2\text{Sb}_2\text{Te}_5$ films. Journal of Physics: Conference Series, 2020, 1676, 012113.	0.3	2
2002	Atomic Structure of Glassy $\text{GeTe}_4$ as a Playground to Assess the Performances of Density Functional Schemes Accounting for Dispersion Forces. Journal of Physical Chemistry B, 2020, 124, 11273-11279.	1.2	7
2003	In Situ Polymerization of Chiral Poly(fluorene-alt-benzothiadiazole) Nanocomposites with Enhanced Chirality. Applied Sciences (Switzerland), 2020, 10, 8740.	1.3	1
2004	Physical origin of glass formation from multicomponent systems. Science Advances, 2020, 6, .	4.7	37
2005	Refractive Uses of Layered and Two-Dimensional Materials for Integrated Photonics. ACS Photonics, 2020, 7, 3270-3285.	3.2	23

#	ARTICLE	IF	CITATIONS
2006	The importance of contacts in Cu <sub>2</sub> GeTe <sub>3</sub> phase change memory devices. <i>Journal of Applied Physics</i> , 2020, 128, .	1.1	11
2007	High $\chi$ and Its Origin in Sb-doped GeTe Single Crystals. <i>Advanced Science</i> , 2020, 7, 2002494.	5.6	36
2008	Sequential two-stage displacive transformation from $\hat{\Gamma}^2$ to $\hat{\Gamma}^{\pm}$ via $\hat{\Gamma}^2$ phase in polymorphic MnTe film. <i>Materials and Design</i> , 2020, 196, 109141.	3.3	7
2009	Chemical Nature of Electrode and the Switching Response of RF-Sputtered NbO <sub>x</sub> Films. <i>Nanomaterials</i> , 2020, 10, 2164.	1.9	28
2010	Synthesis of nanosize tetratitanium heptoxide and its anomalous phase transition. <i>Materials Research Letters</i> , 2020, 8, 261-267.	4.1	5
2011	Phase-Change Materials for Controlled Release and Related Applications. <i>Advanced Materials</i> , 2020, 32, e2000660.	11.1	140
2012	Nanoscale Correlations between Metal-Insulator Transition and Resistive Switching Effect in Metallic Perovskite Oxides. <i>Small</i> , 2020, 16, e2001307.	5.2	20
2013	Optical Properties of Amorphous and Crystalline GeTe Nanoparticle Thin Films: A Phase-Change Material for Tunable Photonics. <i>ACS Applied Nano Materials</i> , 2020, 3, 4314-4320.	2.4	20
2014	Investigations on transient regime of Ge <sub>2</sub> Sb <sub>2</sub> Te <sub>5</sub> -based vertical photodetector integrated with silicon-on-insulator waveguide. <i>Photonics and Nanostructures - Fundamentals and Applications</i> , 2020, 40, 100796.	1.0	2
2015	Intermixing suppression through the interface in GeTe/Sb <sub>2</sub> Te <sub>3</sub> superlattice. <i>Applied Physics Express</i> , 2020, 13, 075503.	1.1	13
2016	Violation of the Stokes-Einstein relation in Ge <sub>2</sub> Sb <sub>2</sub> Te <sub>5</sub> , GeTe, Ag <sub>4</sub> In <sub>3</sub> Sb <sub>6</sub> Te <sub>26</sub> , and Ge <sub>15</sub> Sb <sub>85</sub> , and its connection to fast crystallization. <i>Acta Materialia</i> , 2020, 195, 491-500.	3.8	19
2017	Vacancy formation energy and its connection with bonding environment in solid: A high-throughput calculation and machine learning study. <i>Computational Materials Science</i> , 2020, 183, 109803.	1.4	17
2018	Thermal conductivity of amorphous and crystalline GeTe thin film at high temperature: Experimental and theoretical study. <i>Physical Review B</i> , 2020, 101, .	1.1	19
2019	Probing the Validity of the Zintl-Klemm Concept for Alkaline-Metal Copper Tellurides by Means of Quantum-Chemical Techniques. <i>Materials</i> , 2020, 13, 2178.	1.3	11
2020	Monatomic 2D phase-change memory for precise neuromorphic computing. <i>Applied Materials Today</i> , 2020, 20, 100641.	2.3	46
2021	Direct synthesis of metastable phases of 2D transition metal dichalcogenides. <i>Chemical Society Reviews</i> , 2020, 49, 3952-3980.	18.7	142
2022	Chemical order in binary Se-Te glasses: Results from high-resolution 2D <sup>77</sup> Se and <sup>125</sup> Te MATPASS NMR spectroscopy. <i>Journal of Non-Crystalline Solids</i> , 2020, 544, 120212.	1.5	3
2023	Diameter-controlled Growth of GeTe Phase-change Nanowires via a Au Catalyst-assisted Vapor-liquid-solid Mechanism. , 2020, , .		1



#	ARTICLE	IF	CITATIONS
2024	A method to quantify crystallinity in amorphous metal alloys: A differential scanning calorimetry study. <i>PLoS ONE</i> , 2020, 15, e0234774.	1.1	20
2025	Solid-state photochromism of spironaphthoxazine loaded microcapsules with photo-patterning and thermo-regulating features. <i>Journal of Colloid and Interface Science</i> , 2020, 578, 379-389.	5.0	37
2026	Pathways to efficient neuromorphic computing with non-volatile memory technologies. <i>Applied Physics Reviews</i> , 2020, 7, .	5.5	94
2027	Nonthermal Dynamics of Dielectric Functions in a Resonantly Bonded Photoexcited Material. <i>Advanced Functional Materials</i> , 2020, 30, 2002821.	7.8	8
2028	Resistive Random Access Memory (RRAM): an Overview of Materials, Switching Mechanism, Performance, Multilevel Cell (mlc) Storage, Modeling, and Applications. <i>Nanoscale Research Letters</i> , 2020, 15, 90.	3.1	451
2029	Structural Metastability in Chalcogenide Semiconductors: The Role of Chemical Bonding. <i>Physica Status Solidi (B): Basic Research</i> , 2020, 257, 2000138.	0.7	3
2030	Role of Oxygen on Chemical Segregation in Uncapped Ge <sub>2</sub> Sb <sub>2</sub> Te <sub>5</sub> Thin Films on Silicon Nitride. <i>ECS Journal of Solid State Science and Technology</i> , 2020, 9, 054007.	0.9	11
2031	Resistance modulation in Ge <sub>2</sub> Sb <sub>2</sub> Te <sub>5</sub> . <i>Journal of Materials Science and Technology</i> , 2020, 50, 171-177.	5.6	8
2032	Unique 2D→3D Structure Transformations in Trichalcogenide CrSiTe <sub>3</sub> under High Pressure. <i>Journal of Physical Chemistry C</i> , 2020, 124, 15600-15606.	1.5	15
2033	Unique Design Strategy for Dual Phase Transition That Successfully Validates Dual Switch Implementation in the Dielectric Material. <i>Inorganic Chemistry</i> , 2020, 59, 4720-4728.	1.9	16
2034	UV-Vis-NIR broadband-photostimulated luminescence of LiTaO <sub>3</sub> :Bi <sup>3+</sup> long-persistent phosphor and the optical storage properties. <i>Chemical Engineering Journal</i> , 2020, 392, 124807.	6.6	91
2035	O-band N-rich silicon nitride MZI based on GST. <i>Applied Physics Letters</i> , 2020, 116, 093502.	1.5	23
2036	Chalcogenides by Design: Functionality through Metavalent Bonding and Confinement. <i>Advanced Materials</i> , 2020, 32, e1908302.	11.1	179
2037	Phase engineering of nanomaterials. <i>Nature Reviews Chemistry</i> , 2020, 4, 243-256.	13.8	438
2038	Optical phase change in bismuth through structural distortions induced by laser irradiation. <i>Radiation Effects and Defects in Solids</i> , 2020, 175, 291-306.	0.4	1
2039	High-quality sputter-grown layered chalcogenide films for phase change memory applications and beyond. <i>Journal Physics D: Applied Physics</i> , 2020, 53, 284002.	1.3	23
2040	Femtosecond-laser-irradiation-induced structural organization and crystallinity of Bi <sub>2</sub> WO <sub>6</sub> . <i>Scientific Reports</i> , 2020, 10, 4613.	1.6	9
2041	Near-field imaging of the multi-resonant mode induced broadband tunable metamaterial absorber. <i>RSC Advances</i> , 2020, 10, 5146-5151.	1.7	11

#	ARTICLE	IF	CITATIONS
2042	The interplay between Peierls distortions and metavalent bonding in IV-VI compounds: comparing GeTe with related monochalcogenides. <i>Journal Physics D: Applied Physics</i> , 2020, 53, 234002.	1.3	43
2043	Improved phase change properties in layered $\text{Sc}_x\text{In}_{2-x}\text{Se}_3$ for multilevel information storage. <i>Journal Physics D: Applied Physics</i> , 2020, 53, 285101.	1.3	1
2044	Electrochemical Mechanism of Tellurium Reduction in Alkaline Medium. <i>Frontiers in Chemistry</i> , 2020, 8, 84.	1.8	5
2045	Role of resistive memory devices in brain-inspired computing. , 2020, , 3-16.		7
2046	Structure of amorphous $\text{Cu}_{1-x}\text{Te}_x$ and the implications for its phase-change properties. <i>Physical Review B</i> , 2020, 101, .		
2047	Thermal Properties of the Very Low Thermal Conductivity Ternary Chalcogenide $\text{Cu}_4\text{Bi}_4\text{M}_9$ ( $\text{M}=\text{S, Te}$ ). <i>Journal of Applied Physics</i> , 2020, 122, 045101.	1.2	4
2048	Surface $\text{Sb}_2\text{Te}_3$ Templates Enable Fast Memory Switching of Phase Change Material $\text{GeSb}_2\text{Te}_4$ with Growth-Dominated Crystallization. <i>ACS Applied Materials &amp; Interfaces</i> , 2020, 12, 33397-33407.	4.0	53
2049	Origin of functionality for functional materials at atomic scale. <i>Nano Select</i> , 2020, 1, 183-199.	1.9	12
2050	Effect of bismuth incorporation on thermal properties of quaternary chalcogenide glass $\text{Se}_{80}\text{Te}_{15-x}\text{Cd}_5\text{Bi}_x$ ( $x=0,5,10$ ) alloys. <i>Ceramics International</i> , 2020, 46, 24850-24859.	2.3	9
2051	Structural, vibrational and electronic properties in the glass-crystal transition of thin films $\text{Sb}_{70}\text{Te}_{30}$ doped with Sn. <i>Journal of Alloys and Compounds</i> , 2020, 845, 156307.	2.8	11
2052	CMOS compatible novel integration solution for broad range tunable photodetection using phase-change material based heterostructures. <i>Scientific Reports</i> , 2020, 10, 11131.	1.6	11
2053	Hybrid CMOS-PCM temperature sensor. <i>AIP Advances</i> , 2020, 10, .	0.6	5
2054	Nonvolatile Electrically Reconfigurable Integrated Photonic Switch Enabled by a Silicon PIN Diode Heater. <i>Advanced Materials</i> , 2020, 32, e2001218.	11.1	152
2055	In situ TEM observation of void formation and migration in phase change memory devices with confined nanoscale $\text{Ge}_2\text{Sb}_2\text{Te}_5$ . <i>Nanoscale Advances</i> , 2020, 2, 3841-3848.	2.2	19
2056	Ionic glasses: Structure, properties and classification. <i>Journal of Non-Crystalline Solids: X</i> , 2020, 8, 100054.	0.5	34
2057	Phase-change memory. , 2020, , 63-96.		3
2058	Chalcogenide materials for optoelectronic memory and neuromorphic computing. , 2020, , 293-315.		2
2059	The structural study of $(\text{Se}_{80}\text{Te}_{20})_{93}\text{Ge}_6\text{Sb}_1$ chalcogenide glass. <i>AIP Conference Proceedings</i> , 2020, , .	0.3	0

#	ARTICLE	IF	CITATIONS
2060	Overview of Phase-Change Materials Based Photonic Devices. IEEE Access, 2020, 8, 121211-121245.	2.6	44
2061	Topologically Nontrivial Phase-Change Compound $\text{GeSb}_2\text{Te}_4$ . ACS Nano, 2020, 14, 9059-9065.	7.3	15
2062	Bonding similarities and differences between $\text{YbSbTe}$ and $\text{ScSbTe}$ phase-change memory materials. Journal of Materials Chemistry C, 2020, 8, 3646-3654.	2.7	28
2063	Exploring high-performance integration in a plastic crystal/film with switching and semiconducting behavior. Inorganic Chemistry Frontiers, 2020, 7, 1239-1249.	3.0	14
2064	Design criterion based on the cohesive energy and defect patterns of $\text{VO}_2$ thermally induced phase transition materials. Ceramics International, 2020, 46, 13615-13621.	2.3	8
2065	Use of a Ti Buffer Layer to Improve the Mechanical Properties of $\text{Ge}_2\text{Sb}_2\text{Te}_5$ Thin Films for Phase-Change Memory. Jom, 2020, 72, 2146-2153.	0.9	3
2066	An overview of phase-change memory device physics. Journal Physics D: Applied Physics, 2020, 53, 213002.	1.3	202
2067	Direct observation of elastic softening immediately after femtosecond-laser excitation in a phase-change material. Physical Review B, 2020, 101, .	1.1	3
2068	Light Emission from Self-Assembled and Laser-Crystallized Chalcogenide Metasurface. Advanced Optical Materials, 2020, 8, 1901236.	3.6	6
2069	Composition- and Size-Controlled $\text{In}_x\text{V}_y\text{VI}$ Semiconductor Nanocrystals. Chemistry of Materials, 2020, 32, 2078-2085.	3.2	16
2070	All-crystalline phase transition in nonmetal doped germanium-antimony-tellurium films for high-temperature non-volatile photonic applications. Acta Materialia, 2020, 188, 121-130.	3.8	17
2071	A comprehensive review on emerging artificial neuromorphic devices. Applied Physics Reviews, 2020, 7, .	5.5	417
2072	Effect of ion irradiation on the optical properties of Ag-doped $\text{Ge}_2\text{Sb}_2\text{Te}_5$ (GST) thin films. Nuclear Instruments & Methods in Physics Research B, 2020, 467, 40-43.	0.6	8
2073	Realization of a near-infrared active Fano-resonant asymmetric metasurface by precisely controlling the phase transition of $\text{Ge}_2\text{Sb}_2\text{Te}_5$ . Nanoscale, 2020, 12, 8758-8767.	2.8	57
2074	A unified mid-gap defect model for amorphous $\text{GeTe}$ phase change material. Applied Physics Letters, 2020, 116, .	1.5	7
2075	Local structure and phase change behavior in interfacial intermixing $\text{GeTeSb}_2\text{Te}_3$ superlattices. Journal of Physics Condensed Matter, 2020, 32, 255401.	0.7	3
2076	Resistive switching materials for information processing. Nature Reviews Materials, 2020, 5, 173-195.	23.3	668
2077	Nonvolatile Resistive Switching in Nanocrystalline Molybdenum Disulfide with Ion-Based Plasticity. Advanced Electronic Materials, 2020, 6, 1900892.	2.6	19

#	ARTICLE	IF	CITATIONS
2078	Normal-to-topological insulator martensitic phase transition in group-IV monochalcogenides driven by light. <i>NPG Asia Materials</i> , 2020, 12, .	3.8	18
2079	Reversible single-crystal-to-single-crystal conversion of a photoreactive coordination network for rewritable optical memory storage. <i>Chemical Communications</i> , 2020, 56, 1984-1987.	2.2	32
2080	Memory materials and devices: From concept to application. <i>Informa-Materially</i> , 2020, 2, 261-290.	8.5	181
2081	Low-Power Switching through Disorder and Carrier Localization in Bismuth-Doped Germanium Telluride Phase Change Memory Nanowires. <i>ACS Nano</i> , 2020, 14, 2162-2171.	7.3	13
2082	Impact of interfaces on bipolar resistive switching behavior in amorphous Ge <sub>2</sub> Sb <sub>2</sub> Te thin films. <i>Journal Physics D: Applied Physics</i> , 2020, 53, 184002.	1.3	13
2083	In situ study of vacancy disordering in crystalline phase-change materials under electron beam irradiation. <i>Acta Materialia</i> , 2020, 187, 103-111.	3.8	27
2084	The role of Ge <sub>2</sub> Sb <sub>2</sub> Te <sub>5</sub> in enhancing the performance of functional plasmonic devices. <i>Materials Today Physics</i> , 2020, 12, 100178.	2.9	82
2085	Dielectric phase transition of an A <sub>2</sub> BX <sub>4</sub> -type perovskite with a pentahedral to octahedral transformation. <i>Dalton Transactions</i> , 2020, 49, 2218-2224.	1.6	21
2086	Uncovering $\hat{\rho}$ -relaxations in amorphous phase-change materials. <i>Science Advances</i> , 2020, 6, eaay6726.	4.7	33
2087	Fully-transparent resistance switching memristor based on indium-tin-oxide material. <i>Journal of Micromechanics and Microengineering</i> , 2020, 30, 045003.	1.5	5
2088	Recent advances of polymeric phase change composites for flexible electronics and thermal energy storage system. <i>Composites Part B: Engineering</i> , 2020, 195, 108094.	5.9	77
2089	Applications of Phase Change Materials in Electrical Regime From Conventional Storage Memory to Novel Neuromorphic Computing. <i>IEEE Access</i> , 2020, 8, 76471-76499.	2.6	12
2090	Bandgap tunability endowed by isovalent sulphur doping in SeTe glassy films: Correlation with Kastner's and single oscillator models. <i>Journal of Alloys and Compounds</i> , 2020, 835, 155441.	2.8	10
2091	First-Principles Study of Electromigration in the Metallic Liquid State of GeTe and Sb <sub>2</sub> Te <sub>3</sub> Phase-Change Compounds. <i>Journal of Physical Chemistry C</i> , 2020, 124, 9599-9603.	1.5	7
2092	Revisiting the Zintl-Klemm Concept for Al <sub>2</sub> Ag <sub>3</sub> Te <sub>5</sub> -Type Alkaline-Metal (A) Lanthanide (Ln) Silver Tellurides. <i>Crystals</i> , 2020, 10, 184.	1.0	12
2093	Two-dimensional copper (II) halide-based hybrid perovskite templated by 2-chloroethylammonium: Crystal structures, phase transitions, optical and electrical properties. <i>Journal of Solid State Chemistry</i> , 2020, 287, 121338.	1.4	18
2094	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.	2.4	7
2095	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, .	3.5	32

#	ARTICLE	IF	CITATIONS
2096	Temperature-driven nâ€“p conduction type switching without structural transition in a Cu-rich chalcogenide, NaCu <sub>5</sub> S <sub>3</sub> . Chemical Communications, 2020, 56, 4882-4885.	2.2	5
2097	Independent tuning of bright and dark meta-atoms with phase change materials on EIT metasurfaces. Nanoscale, 2020, 12, 10065-10071.	2.8	13
2098	Pressure-induced superconductivity in SnSb <sub>2</sub> Te <sub>4</sub> . Journal of Physics Condensed Matter, 2020, 32, 235901.	0.7	5
2099	Tunable optoelectronic response multifunctional materials: exploring switching and photoluminescence integrated in flexible thin films/crystals. Journal of Materials Chemistry C, 2020, 8, 7089-7095.	2.7	24
2100	Hybrid silicon/phase-change metasurfaces and nanoantennas for active nanophotonics. Journal of Physics: Conference Series, 2020, 1461, 012164.	0.3	1
2101	Synthesis and Structure of Tin and Germanium Complexes as Precursors Containing Alkoxyaminoalkoxide Ligands for Thin Film Transistors. European Journal of Inorganic Chemistry, 2020, 2020, 2074-2079.	1.0	1
2102	Dilution effect on the slow relaxation of a luminescent dysprosium Metal-Organic Framework based on 2,5-dihydroxyterephthalic acid. Inorganica Chimica Acta, 2020, 509, 119687.	1.2	6
2103	Perspective on photonic memristive neuromorphic computing. PhotonIX, 2020, 1, .	5.5	81
2104	A Chiral Thermochromic Ferroelastic with Seven Physical Channel Switches. Angewandte Chemie, 2020, 132, 9661-9665.	1.6	16
2105	A Chiral Thermochromic Ferroelastic with Seven Physical Channel Switches. Angewandte Chemie - International Edition, 2020, 59, 9574-9578.	7.2	106
2106	All-Dielectric Metasurface-Enabled Near-Infrared Switching Based on Ge <sub>2</sub> Sb <sub>2</sub> Te <sub>5</sub> Phase-Change Material. Journal of Electronic Materials, 2020, 49, 3913-3919.	1.0	6
2107	Effects of surface oxidation on the crystallization characteristics of Ge-rich Ge-Sb-Te alloys thin films. Applied Surface Science, 2020, 518, 146227.	3.1	24
2108	Modeling Electrical Switching of Nonvolatile Phase-Change Integrated Nanophotonic Structures with Graphene Heaters. ACS Applied Materials & Interfaces, 2020, 12, 21827-21836.	4.0	78
2109	Origin of short- and medium-range order in supercooled liquid Ge <sub>3</sub> Sb <sub>2</sub> Te <sub>6</sub> using <i>ab initio</i> molecular dynamics simulations. Physical Chemistry Chemical Physics, 2020, 22, 9759-9766.	1.3	4
2110	PLD-derived Ge <sub>2</sub> Sb <sub>2</sub> Te <sub>5</sub> phase-change films with extreme bending stability for flexible device applications. Applied Physics Letters, 2020, 116, .	1.5	7
2111	Phase dependence of Schottky barrier heights for Geâ€“Sbâ€“Te and related phase-change materials. Journal of Applied Physics, 2020, 127, .	1.1	7
2112	Strong and Weak 3D Topological Insulators Probed by Surface Science Methods. Physica Status Solidi (B): Basic Research, 2021, 258, 2000060.	0.7	2
2113	High-temperature dielectric switch and second harmonic generation integrated in a stimulus responsive material. Chinese Chemical Letters, 2021, 32, 539-542.	4.8	25

#	ARTICLE	IF	CITATIONS
2114	Merged Logic and Memory Fabrics for Accelerating Machine Learning Workloads. IEEE Design and Test, 2021, 38, 39-68.	1.1	10
2115	Tunable Transmission Realized with Phase Change Materials. Plasmonics, 2021, 16, 71-76.	1.8	0
2116	Acceleration of Crystallization Kinetics in Ge <sub>6</sub> Sb <sub>4</sub> Te <sub>8</sub> -Based Phase-Change Materials by Substitution of Ge by Sn. Advanced Functional Materials, 2021, 31, 2004803.	7.8	5
2117	Temperature dependent evolution of local structure in chalcogenide-based superlattices. Applied Surface Science, 2021, 536, 147959.	3.1	42
2118	Reversible structural phase transition, dielectric switches and photoluminescence based on hexathiocyanate Thulium(III) anions. Inorganica Chimica Acta, 2021, 515, 120051.	1.2	10
2119	Structure and Dynamics of Supercooled Liquid Ge <sub>2</sub> Sb <sub>2</sub> Te <sub>5</sub> from Machine-Learning-Driven Simulations. Physica Status Solidi - Rapid Research Letters, 2021, 15, 2000403.	1.2	4
2120	Multi-Level Electro-Thermal Switching of Optical Phase-Change Materials Using Graphene. Advanced Photonics Research, 2021, 2, 2000034.	1.7	75
2121	Effects of Grain Boundaries on THz Conductivity in the Crystalline States of Ge <sub>2</sub> Sb <sub>2</sub> Te <sub>5</sub> Phase-Change Materials: Correlation with DC Loss. Physica Status Solidi - Rapid Research Letters, 2021, 15, 2000411.	1.2	4
2122	Optoelectronic synaptic transistors based on upconverting nanoparticles. Journal of Materials Chemistry C, 2021, 9, 640-648.	2.7	16
2123	A survey of approaches for implementing optical neural networks. Optics and Laser Technology, 2021, 136, 106787.	2.2	33
2124	Reversible Crystal-Glass Transition in a Metal Halide Perovskite. Advanced Materials, 2021, 33, e2005868.	11.1	54
2125	The Future of Memristors: Materials Engineering and Neural Networks. Advanced Functional Materials, 2021, 31, 2006773.	7.8	187
2126	Study of reaction mechanism, structural, optical and oxygen vacancy-controlled luminescence properties of Eu-modified Sr <sub>2</sub> SnO <sub>4</sub> Ruddlesden popper oxide. Physica B: Condensed Matter, 2021, 604, 412708.	1.3	29
2127	Absence of Partial Amorphization in GeSbTe Chalcogenide Superlattices. Physica Status Solidi - Rapid Research Letters, 2021, 15, 2000457.	1.2	1
2128	Metavalent Bonding in Solids: Characteristic Representatives, Their Properties, and Design Options. Physica Status Solidi - Rapid Research Letters, 2021, 15, 2000482.	1.2	28
2129	Approaching the Glass Transition Temperature of GeTe by Crystallizing Ge <sub>15</sub> Te <sub>85</sub> . Physica Status Solidi - Rapid Research Letters, 2021, 15, 2000478.	1.2	12
2130	Overview of the Role of Alloying Modifiers on the Performance of Phase Change Memory Materials. Journal of Electronic Materials, 2021, 50, 1-24.	1.0	19
2131	Directed Self-Assembly Driven Mesoscale Lithography Using Laser-Induced and Manipulated Microbubbles: Complex Architectures and Diverse Applications. Nano Letters, 2021, 21, 10-25.	4.5	26

#	ARTICLE	IF	CITATIONS
2132	Laser Beam-Induced Transient Acoustic Waves in Graphene Oxides. <i>Physica Status Solidi (A) Applications and Materials Science</i> , 2021, 218, 2000541.	0.8	0
2133	High Contact Resistivity Enabling Low-Energy Operation in Cr <sub>2</sub> Ge <sub>2</sub> Te <sub>6</sub> -Based Phase-Change Random Access Memory. <i>Physica Status Solidi - Rapid Research Letters</i> , 2021, 15, 2000392.	1.2	6
2134	Evolution of Low-Frequency Vibrational Modes in Ultrathin GeSbTe Films. <i>Physica Status Solidi - Rapid Research Letters</i> , 2021, 15, 2000434.	1.2	2
2135	On Some Unique Specificities of Ge-Rich GeSbTe Phase-Change Material Alloys for Nonvolatile Embedded-Memory Applications. <i>Physica Status Solidi - Rapid Research Letters</i> , 2021, 15, 2000471.	1.2	11
2136	Nucleation Dynamics of Phase-Change Memory Materials: Atomic Motion and Property Evolution. <i>Physica Status Solidi - Rapid Research Letters</i> , 2021, 15, 2000441.	1.2	5
2137	Direct evidence for structural transformation and higher thermal stability of amorphous insbte phase change material. <i>Scripta Materialia</i> , 2021, 192, 73-77.	2.6	14
2138	A review of the application of 2D isotropic-anisotropic correlation NMR spectroscopy in structural studies of chalcogenide glasses. <i>Journal of Non-Crystalline Solids</i> , 2021, 561, 120500.	1.5	4
2139	Inelastic helium atom scattering from Sb <sub>2</sub> Te <sub>3</sub> (111): phonon dispersion, focusing effects and surfing. <i>Physical Chemistry Chemical Physics</i> , 2021, 23, 7806-7813.	1.3	4
2140	Germanium, antimony, tellurium, their binary and ternary alloys and the impact of nitrogen: An X-ray photoelectron study. <i>Applied Surface Science</i> , 2021, 536, 147703.	3.1	46
2141	First-Principles Study on the Crystalline Ga <sub>4</sub> Sb <sub>6</sub> Te <sub>3</sub> Phase Change Compound. <i>Physica Status Solidi - Rapid Research Letters</i> , 2021, 15, 2000382.	1.2	2
2142	High-Stability and Low-Noise Multilevel Switching in In <sub>3</sub> SbTe <sub>2</sub> Material for Phase Change Photonic Memory Applications. <i>Physica Status Solidi - Rapid Research Letters</i> , 2021, 15, 2000354.	1.2	7
2143	Edge finite element method for periodic structures using random meshes. <i>Waves in Random and Complex Media</i> , 0, , 1-19.	1.6	0
2144	Phase change materials in photonic devices. <i>Journal of Applied Physics</i> , 2021, 129, .	1.1	43
2145	Multi-Center Hyperbonding in Phase-Change Materials. <i>Physica Status Solidi - Rapid Research Letters</i> , 2021, 15, 2000516.	1.2	19
2146	Comments on the electronic transport mechanisms in the crystalline state of Ge-Sb-Te phase-change materials. <i>Physics of Complex Systems</i> , 2021, 2, 74-80.	0.2	0
2147	Study of anisotropic thermal conductivity in textured thermoelectric alloys by Raman spectroscopy. <i>RSC Advances</i> , 2021, 11, 24456-24465.	1.7	4
2148	In Situ Characterization of Transformations in Nanoscale Layered Metal Chalcogenide Materials: A Review. <i>ChemNanoMat</i> , 2021, 7, 208-222.	1.5	6
2149	Antimony thin films demonstrate programmable optical nonlinearity. <i>Science Advances</i> , 2021, 7, .	4.7	42

#	ARTICLE	IF	CITATIONS
2150	Bulk Glassy GeTe <sub>2</sub> : A Missing Member of the Tetrahedral GeX <sub>2</sub> Family and a Precursor for the Next Generation of Phase-Change Materials. Chemistry of Materials, 2021, 33, 1031-1045.	3.2	17
2151	Particle shape tunes fragility in hard polyhedron glass-formers. Soft Matter, 2021, 17, 600-610.	1.2	2
2152	Designing reversible multi-level resistance states in a half-doped manganite. Europhysics Letters, 2021, 133, 17006.	0.7	1
2153	Enhanced reliability of phase-change memory <i>via</i> modulation of local structure and chemical bonding by incorporating carbon in Ge <sub>2</sub> Sb <sub>2</sub> Te <sub>5</sub> . RSC Advances, 2021, 11, 22479-22488.	1.7	4
2154	Defect-nucleated phase transition in atomically-thin WS <sub>2</sub> . 2D Materials, 2021, 8, 025017.	2.0	5
2155	Flexible Artificial Sensory Systems Based on Neuromorphic Devices. ACS Nano, 2021, 15, 3875-3899.	7.3	135
2156	Hydrogenation of diamond nanowire surfaces for effective electrostatic charge storage. Nanoscale, 2021, 13, 7308-7321.	2.8	4
2157	First-principles thermal transport in amorphous Ge <sub>2</sub> Sb <sub>2</sub> Te <sub>5</sub> at the nanoscale. RSC Advances, 2021, 11, 10747-10752.	1.7	6
2158	Exploring the Feasibility of Using 3-D XPoint as an In-Memory Computing Accelerator. IEEE Journal on Exploratory Solid-State Computational Devices and Circuits, 2021, 7, 88-96.	1.1	1
2159	Metal-organic frameworks (MOFs) beyond crystallinity: amorphous MOFs, MOF liquids and MOF glasses. Journal of Materials Chemistry A, 2021, 9, 10562-10611.	5.2	250
2160	Dynamic Hybrid Metasurfaces. Nano Letters, 2021, 21, 1238-1245.	4.5	85
2161	Selenium-based amorphous semiconductors and their application in biomedicine. , 2021, , 25-46.		1
2162	Kinetic pathway facilitated by a phase competition to achieve a metastable electronic phase. Physical Review B, 2021, 103, .	1.1	6
2163	AlSc Alloy Doped Sb <sub>2</sub> Te as High Speed Phase-Change Material with Excellent Thermal Stability and Ultralow Density Change. ECS Journal of Solid State Science and Technology, 2021, 10, 014006.	0.9	1
2164	Dielectric switching, SHG response and Pd(II) adsorption of a multifunctional phase-transition complex. Inorganic Chemistry Frontiers, 2021, 8, 4858-4863.	3.0	16
2165	Characterizations of electronic and optical properties of Sb-based phase-change material stabilized by alloying Cr. Applied Physics Letters, 2021, 118, .	1.5	7
2166	Comparison of the phase change process in a GST-loaded silicon waveguide and MMI. Optics Express, 2021, 29, 3503.	1.7	20
2167	Terahertz probe of nonequilibrium carrier dynamics and ultrafast photocurrents in the topological insulator Sb <sub>2</sub> Te <sub>3</sub> . Applied Physics Letters, 2021, 118, .	1.5	21



#	ARTICLE	IF	CITATIONS
2168	ZnO Based Resistive Random Access Memory Device: A Prospective Multifunctional Next-Generation Memory. IEEE Access, 2021, 9, 105012-105047.	2.6	28
2169	Active tuning of electromagnetically induced transparency from chalcogenide-only metasurface. Light Advanced Manufacturing, 2021, 2, 1.	2.2	12
2170	Red/green-light emission in continuous dielectric phase transition materials: [Me <sub>3</sub> NVinyl] <sub>2</sub> [MnX <sub>4</sub> ] (X = Cl, Br). RSC Advances, 2021, 11, 2329-2336.	1.7	5
2171	Ta-Doped Sb <sub>2</sub> Te Allows Ultrafast Phase-Change Memory with Excellent High-Temperature Operation Characteristics. Nano-Micro Letters, 2021, 13, 33.	14.4	33
2173	Light-Induced Phenomena. , 2021, , 163-226.		1
2174	Unraveling the structural and bonding nature of antimony sesquichalcogenide glass for electronic and photonic applications. Journal of Materials Chemistry C, 0, , .	2.7	15
2175	A Phase-Change Mechanism of GST-SL Based Superlattices upon Sb Flipping. Materials, 2021, 14, 360.	1.3	1
2176	Volatile Ultrafast Switching at Multilevel Nonvolatile States of Phase Change Material for Active Flexible Terahertz Metadevices. Advanced Functional Materials, 2021, 31, 2100200.	7.8	53
2177	Kinematics of glass to crystal phase transformation in novel multi-component glassy Se <sup>Te</sup> Sn <sup>M</sup> (M) Tj ETQo 0 0 rgBT /Overlo	6.9	8
2178	Ag-doped As <sup>S</sup> Se chalcogenide glasses: a correlative study of structural and dielectrical properties. Journal of Materials Science: Materials in Electronics, 2021, 32, 6688-6700.	1.1	5
2179	Exploring Phase-Change Memory: From Material Systems to Device Physics. Physica Status Solidi - Rapid Research Letters, 2021, 15, 2000394.	1.2	9
2180	Chemical Modification of Phase Change Memory Materials Based on Complex Chalcogenides. Russian Journal of Inorganic Chemistry, 2021, 66, 281-287.	0.3	3
2181	Theoretical and Experimental Aspects of Current and Future Research on NbO <sub>2</sub> Thin Film Devices. Crystals, 2021, 11, 217.	1.0	6
2182	Enhanced Performance and Diffusion Robustness of Phase-Change Metasurfaces via a Hybrid Dielectric/Plasmonic Approach. Nanomaterials, 2021, 11, 525.	1.9	11
2183	Above Room Temperature Organic Dielectric Switchable and NLO Co <sup>crystal</sup> : [C <sub>4</sub> H <sub>4</sub> O <sub>4</sub> ][C <sub>8</sub> H <sub>19</sub> N]. Zeitschrift Fur Anorganische Und Allgemeine Chemie, 2021, 647, 764-769.	0.6	3
2184	Applications and Impacts of Nanoscale Thermal Transport in Electronics Packaging. Journal of Electronic Packaging, Transactions of the ASME, 2021, 143, .	1.2	38
2185	How the carbon nanotubes affect the glass transition kinetics and thermal stability of Cu <sup>Se</sup> Te <sup>In</sup> chalcogenide glasses. Journal of Thermal Analysis and Calorimetry, 2022, 147, 1053-1060.	2.0	2
2186	Ab initio molecular dynamics and materials design for embedded phase-change memory. Npj Computational Materials, 2021, 7, .	3.5	44

#	ARTICLE	IF	CITATIONS
2187	Flux periodic oscillations and phase-coherent transport in GeTe nanowire-based devices. Nature Communications, 2021, 12, 754.	5.8	6
2189	Vanishing Harmonicity and Phase Change Materials. Physica Status Solidi - Rapid Research Letters, 2021, 15, 2000536.	1.2	3
2190	Phase and grain size engineering in Ge-Sb-Te-O by alloying with La-Sr-Mn-O towards improved material properties. Materials and Design, 2021, 199, 109392.	3.3	24
2191	Phase transition dynamics in one-dimensional halide perovskite crystals. MRS Bulletin, 2021, 46, 310-316.	1.7	8
2192	Polymer Glass Formation: Role of Activation Free Energy, Configurational Entropy, and Collective Motion. Macromolecules, 2021, 54, 3001-3033.	2.2	38
2193	Structural phase transition in monolayer gold(I) telluride: From a room-temperature topological insulator to an auxetic semiconductor. Physical Review B, 2021, 103, .	1.1	10
2194	In <sub>3</sub> SbTe <sub>2</sub> as a programmable nanophotonics material platform for the infrared. Nature Communications, 2021, 12, 924.	5.8	57
2195	Chemical order relaxation in a substitutional solid alloy around the critical temperature. Physical Review B, 2021, 103, .	1.1	1
2196	Thermal stability and polymorphic transformation kinetics in $\hat{I}^2$ -MnTe films deposited via radiofrequency magnetron sputtering. Japanese Journal of Applied Physics, 2021, 60, 045504.	0.8	5
2197	Pt-Sb <sub>2</sub> Te as high speed phase-change materials with excellent thermal stability. Materials Research Express, 2021, 8, 036404.	0.8	2
2198	Improvement of Phase Change Memory Performance by Means of GeTe/Sb <sub>2</sub> Te <sub>3</sub> Superlattices. Physica Status Solidi - Rapid Research Letters, 2021, 15, 2000538.	1.2	20
2200	Single Femtosecond Laser-Pulse-Induced Superficial Amorphization and Re-Crystallization of Silicon. Materials, 2021, 14, 1651.	1.3	23
2201	Change in Structure of Amorphous Sb <sup>4</sup> Te Phase Change Materials as a Function of Stoichiometry. Physica Status Solidi - Rapid Research Letters, 2021, 15, 2100064.	1.2	10
2202	A scheme for enabling the ultimate speed of threshold switching in phase change memory devices. Scientific Reports, 2021, 11, 6111.	1.6	4
2203	Eu <sub>2</sub> CuSe <sub>3</sub> Revisited by Means of Experimental and Quantum Chemical Techniques. European Journal of Inorganic Chemistry, 2021, 2021, 1510-1517.	1.0	9
2204	Three Resistance States Achieved by Nanocrystalline Decomposition in GeGaSb Compound for Multilevel Phase Change Memory. Advanced Electronic Materials, 2021, 7, 2100164.	2.6	16
2205	Memristive Artificial Synapses for Neuromorphic Computing. Nano-Micro Letters, 2021, 13, 85.	14.4	108
2207	Cellular automata dynamics of nonlinear optical processes in a phase-change material. Applied Physics Reviews, 2021, 8, .	5.5	3

#	ARTICLE	IF	CITATIONS
2208	Study on a conductive channel of a Pt/NiO/Pt ReRAM by bias application with/without a magnetic field. Japanese Journal of Applied Physics, 2021, 60, SCCF03.	0.8	3
2209	Evidence for a thermally driven charge-density-wave transition in 1T-TaS <sub>2</sub> thin-film devices: Prospects for GHz switching speed. Applied Physics Letters, 2021, 118, .	1.5	16
2210	Target Designing Phase Transition Materials through Halogen Substitution. ChemPhysChem, 2021, 22, 752-756.	1.0	6
2211	A Simple Method to Reversibly Switch the Reflectance Spectrum of a Layered Structure Consists of an Ultra-Thin Film Phase-Change Material GST. Journal of Physics: Conference Series, 2021, 1838, 012010.	0.3	0
2212	Phase Change Metasurfaces by Continuous or Quasi-Continuous Atoms for Active Optoelectronic Integration. Materials, 2021, 14, 1272.	1.3	6
2213	High-Throughput Screening for Phase-Change Memory Materials. Advanced Functional Materials, 2021, 31, 2009803.	7.8	43
2214	Non-Volatile Reconfigurable Integrated Photonics Enabled by Broadband Low-Loss Phase Change Material. Advanced Optical Materials, 2021, 9, 2002049.	3.6	102
2217	Pressure Controls the Structure and Nonlinear Optical Properties of Piezochromic CdTeMoO <sub>6</sub> . Chemistry of Materials, 2021, 33, 2929-2936.	3.2	12
2218	The integration of diverse fluorescence performances of Sr <sub>2</sub> SnO <sub>4</sub> :xSm <sup>3+</sup> ceramics with an infinite luminescence modulation ratio. Chemical Engineering Journal, 2021, 410, 128287.	6.6	31
2219	Intrinsically low lattice thermal conductivity of monolayer hexagonal aluminum nitride (h-AlN) from first-principles: A comparative study with graphene. International Journal of Thermal Sciences, 2021, 162, 106772.	2.6	23
2220	Extensive thermal study of sulfur dopants effects on the selenium tellurium glasses. Journal of Non-Crystalline Solids, 2021, 558, 120630.	1.5	2
2221	Tunable quantum two-photon interference with reconfigurable metasurfaces using phase-change materials. Optics Express, 2021, 29, 14245.	1.7	5
2222	Synthesis, crystal structure and physical properties of a new chalcogenides Rb <sub>3</sub> Ga <sub>3</sub> Ge <sub>7</sub> S <sub>20</sub> . Journal of Solid State Chemistry, 2021, 296, 121945.	1.4	5
2223	Amorphous to Crystal Phase Change Memory Effect with Two-Fold Bandgap Difference in Semiconducting K <sub>2</sub> Bi <sub>8</sub> Se <sub>13</sub> . Journal of the American Chemical Society, 2021, 143, 6221-6228.	6.6	9
2224	Vanadium Dioxide for Dynamically Tunable Photonics. ChemNanoMat, 2021, 7, 713-727.	1.5	35
2225	Stimuli-Responsive Memristive Materials for Artificial Synapses and Neuromorphic Computing. Advanced Materials, 2021, 33, e2006469.	11.1	88
2226	On-Chip Photonic Synapses Based on Slot-Ridge Waveguides With PCMs For In-Memory Computing. IEEE Photonics Journal, 2021, 13, 1-13.	1.0	5
2227	First-principles study of the liquid and amorphous phases of Sb <sub>2</sub> Te phase change memory material. Journal of Physics Condensed Matter, 2021, 33, 165703.	0.7	2

#	ARTICLE	IF	CITATIONS
2228	Chalcogenide phase-change devices for neuromorphic photonic computing. Journal of Applied Physics, 2021, 129, .	1.1	35
2229	Preparation and Structure of the Ion-Conducting Mixed Molecular Glass $Ga_2I_{3.17}$ . Inorganic Chemistry, 2021, 60, 6319-6326.	1.9	2
2230	The changing state of porous materials. Nature Materials, 2021, 20, 1179-1187.	13.3	147
2231	Metal-semiconductor transition in the supercooled liquid phase of the $Ge_2Sb_2Te_5$ and GeTe compounds. Physical Review Materials, 2021, 5, .	2.1	1
2232	Effect of Light and Heat on Polymer-Based Resistive Random Access Memory. Physica Status Solidi - Rapid Research Letters, 2021, 15, 2100050.	1.2	1
2233	Mastering of NIL Stamps with Undercut T-Shaped Features from Single Layer to Multilayer Stamps. Nanomaterials, 2021, 11, 956.	1.9	6
2234	Electrical tuning of phase-change antennas and metasurfaces. Nature Nanotechnology, 2021, 16, 667-672.	15.6	196
2235	Thermal camouflaging metamaterials. Materials Today, 2021, 45, 120-141.	8.3	165
2236	Toward Nonvolatile Switching in Silicon Photonic Devices. Laser and Photonics Reviews, 2021, 15, 2000501.	4.4	31
2237	Phase-Change-Memory Process at the Limit: A Proposal for Utilizing Monolayer $Sb_2Te_3$ . Advanced Science, 2021, 8, 2004185.	5.6	25
2238	Rhenium doped $Sb_2Te$ phase change material with ultrahigh thermal stability and high speed. Journal of Alloys and Compounds, 2021, 863, 158583.	2.8	17
2239	Synaptic devices based neuromorphic computing applications in artificial intelligence. Materials Today Physics, 2021, 18, 100393.	2.9	110
2240	Room temperature depinning of the charge-density waves in quasi-two-dimensional 1T-TaS <sub>2</sub> devices. Applied Physics Letters, 2021, 118, .	1.5	15
2241	Numerical investigation on $Ge_2Sb_2Te_5$ -assisted reconfigurable asymmetric directional coupler-based switches. Optical Engineering, 2021, 60, .	0.5	5
2242	Ab initio prediction of semiconductivity in a novel two-dimensional $Sb_2X_3$ (X= S, Se, Te) monolayers with orthorhombic structure. Scientific Reports, 2021, 11, 10366.	1.6	44
2243	Thermally induced tuning of absorption in a $Ge_2Sb_2Te_5$ -based one-dimensional Fibonacci quasicrystal. Optics and Laser Technology, 2021, 137, 106831.	2.2	5
2244	Direct-write laser-induced self-organization and metallization beyond the focal volume in tellurite glass. Physical Review Materials, 2021, 5, .	0.9	11
2245	Ultrafast non-volatile 1x1 optical switch using phase change material $Sc_{0.2}Sb_2Te_3$ . Journal of Physics: Conference Series, 2021, 1907, 012051.	0.3	0

#	ARTICLE	IF	CITATIONS
2246	Advances in Photonic Devices Based on Optical Phase-Change Materials. <i>Molecules</i> , 2021, 26, 2813.	1.7	13
2247	Direct Visualization of the Earliest Stages of Crystallization. <i>Microscopy and Microanalysis</i> , 2021, 27, 659-665.	0.2	2
2248	Combining Switchable Phase-Change Materials and Phase-Transition Materials for Thermally Regulated Smart Mid-Infrared Modulators. <i>Advanced Optical Materials</i> , 2021, 9, 2100417.	3.6	20
2249	Memory of pressure-induced superconductivity in a phase-change alloy. <i>Physical Review B</i> , 2021, 103, .	1.1	7
2250	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.	0.7	13
2251	Temperature dependent size effects on crystal growth of nanorods revealed by molecular dynamics simulations. <i>Journal of Applied Physics</i> , 2021, 129, 194302.	1.1	0
2252	Direct laser printing color images based on the microstructure modulation of phase change material. <i>Optics and Laser Technology</i> , 2021, 138, 106895.	2.2	2
2253	Structural and optical properties of amorphous Si-Ge-Te thin films prepared by combinatorial sputtering. <i>Scientific Reports</i> , 2021, 11, 11755.	1.6	13
2254	A review on GeTe thin film-based phase-change materials. <i>Applied Nanoscience (Switzerland)</i> , 2023, 13, 95-110.	1.6	15
2256	Failure Analysis and Performance Improvement of Phase Change Memory Based on Ge <sub>2</sub> Sb <sub>2</sub> Te <sub>5</sub> . <i>IEEE Transactions on Device and Materials Reliability</i> , 2021, 21, 236-239.	1.5	3
2257	Phase-Changing in Graphite Assisted by Interface Charge Injection. <i>Nano Letters</i> , 2021, 21, 5648-5654.	4.5	12
2258	Effect of Nitrogen Doping on the Crystallization Kinetics of Ge <sub>2</sub> Sb <sub>2</sub> Te <sub>5</sub> . <i>Nanomaterials</i> , 2021, 11, 1729.	1.9	14
2259	Intermediate Phase-Change States with Improved Cycling Durability of Sb <sub>2</sub> S <sub>3</sub> by Femtosecond Multi-Pulse Laser Irradiation. <i>Advanced Functional Materials</i> , 2021, 31, 2103327.	7.8	34
2260	Unusual Force Constants Guided Distortion-Triggered Loss of Long-Range Order in Phase Change Materials. <i>Materials</i> , 2021, 14, 3514.	1.3	4
2261	A Survey on Silicon Photonics for Deep Learning. <i>ACM Journal on Emerging Technologies in Computing Systems</i> , 2021, 17, 1-57.	1.8	44
2262	Rapid Identification of Synthetic Routes to Functional Metastable Phases Using X-ray Probed Laser Anneal Mapping (XPLAM) Time-Temperature Quench Maps. <i>Chemistry of Materials</i> , 2021, 33, 4328-4336.	3.2	7
2263	Rewritable and Tunable Laser-Induced Optical Gratings in Phase-Change Material Films. <i>ACS Applied Materials &amp; Interfaces</i> , 2021, 13, 32031-32036.	4.0	16
2264	The origin of reversible phase transformation of phase change materials: Octahedral motif. <i>Nano Research</i> , 2022, 15, 765-772.	5.8	22

#	ARTICLE	IF	CITATIONS
2265	Catenary-based phase change metasurfaces for mid-infrared switchable wavefront control. Optics Express, 2021, 29, 23006.	1.7	10
2266	Exploration of the optical behavior of phase-change materials integrated in silicon photonics platforms. , 2021, , .		1
2267	Gradient-based and wavelet-based compressed sensing approaches for highly undersampled tomographic datasets. Ultramicroscopy, 2021, 225, 113289.	0.8	3
2268	A Reversible Tuning of High Absorption in Chalcogenide“Metal Stacked“Layer Structure and Its Application for Multichannel Biosensing. Advanced Photonics Research, 2021, 2, 2000152.	1.7	5
2269	Unraveling the optical contrast in Sb <sub>2</sub> Te and AgInSbTe phase-change materials. JPhys Photonics, 2021, 3, 034011.	2.2	12
2270	Exploiting novel optical thermometry near room temperature with a combination of phase-change host and luminescent Pr <sup>3+</sup> ion. Chemical Engineering Journal, 2021, 414, 128884.	6.6	17
2271	Progress in light-to-frequency conversion circuits based on low dimensional semiconductors. Nano Research, 2021, 14, 2938-2964.	5.8	4
2272	Metal chalcogenides for neuromorphic computing: emerging materials and mechanisms. Nanotechnology, 2021, 32, 372001.	1.3	16
2273	Pressure-induced structural transitions between successional superconducting phases in GeTe. Journal of Physics Condensed Matter, 2021, 33, 355403.	0.7	2
2274	Critical phenomena of the layered ferrimagnet Mn <sub>3</sub> Si <sub>2</sub> Te <sub>6</sub> following proton irradiation. Journal of Applied Physics, 2021, 130, .	1.1	8
2275	Ab initio study on the fast reversible phase transitions of Ge <sub>2</sub> Sb <sub>2</sub> Te <sub>5</sub> . Journal of Applied Physics, 2021, 130, 025106.	1.1	1
2276	Reversible Phase Transformations during In-Situ Heating of Uncapped Ge <sub>2</sub> Sb <sub>2</sub> Te <sub>5</sub> Films. Microscopy and Microanalysis, 2021, 27, 2412-2414.	0.2	0
2277	Enhancement of Spin Pumping from CoFeB to Sb <sub>2</sub> Te <sub>3</sub> Layers by Crystal Orientation Control. Physica Status Solidi - Rapid Research Letters, 2021, 15, 2100247.	1.2	4
2278	Experimental Investigation of Thermal Actuation Crosstalk in Phase-Change RF Switches Using Transient Thermoreflectance Imaging. IEEE Transactions on Electron Devices, 2021, 68, 3537-3544.	1.6	14
2279	Nonthermal Transport of Energy Driven by Photoexcited Carriers in Switchable Solid States of GeTe. Physical Review Applied, 2021, 16, .	1.5	0
2280	Investigation of Phase Transformations in Ge <sub>4</sub> Sb <sub>4</sub> Te <sub>5</sub> film using Transmission Electron Microscopy. Microscopy and Microanalysis, 2021, 27, 1240-1242.	0.2	0
2281	Third-order optical nonlinearity in Ge-Se-Te chalcogenide glasses. Optical Materials, 2021, 117, 111208.	1.7	5
2282	Electron Microscopy Study of Surface Islands in Epitaxial Ge <sub>3</sub> Sb <sub>2</sub> Te <sub>6</sub> Layer Grown on a Silicon Substrate. Crystallography Reports, 2021, 66, 687-693.	0.1	0

#	ARTICLE	IF	CITATIONS
2283	Long-Range Forces in Rock-Salt-Type Tellurides and How they Mirror the Underlying Chemical Bonding. <i>Advanced Materials</i> , 2021, 33, e2100163.	11.1	26
2284	Structure of disordered materials under ambient to extreme conditions revealed by synchrotron x-ray diffraction techniques at SPring-8—recent instrumentation and synergic collaboration with modelling and topological analyses. <i>Journal of Physics Condensed Matter</i> , 2021, 33, 383001.	0.7	33
2285	Design of an electric-driven nonvolatile low-energy-consumption phase change optical switch. <i>Nanotechnology</i> , 2021, 32, 405201.	1.3	6
2286	Unraveling the Atomic Structure of Bulk Binary Ga—Te Glasses with Surprising Nanotectonic Features for Phase-Change Memory Applications. <i>ACS Applied Materials &amp; Interfaces</i> , 2021, 13, 37363-37379.	4.0	12
2287	A Marr's Three-Level Analytical Framework for Neuromorphic Electronic Systems. <i>Advanced Intelligent Systems</i> , 2021, 3, 2100054.	3.3	3
2288	Tunable Metasurfaces: The Path to Fully Active Nanophotonics. <i>Advanced Photonics Research</i> , 2021, 2, 2000205.	1.7	57
2289	Recent Progress in Selector and Self-Rectifying Devices for Resistive Random-Access Memory Application. <i>Physica Status Solidi - Rapid Research Letters</i> , 2021, 15, 2100199.	1.2	26
2290	Investigation of transient heat transfer in multi-scale PCM composites using a semi-analytical model. <i>International Journal of Heat and Mass Transfer</i> , 2021, 175, 121389.	2.5	12
2291	Performance Assessment of Amorphous HfO <sub>2</sub> -Based RRAM Devices for Neuromorphic Applications. <i>ECS Journal of Solid State Science and Technology</i> , 2021, 10, 083002.	0.9	2
2292	Understanding the low resistivity of the amorphous phase of $\text{Cr}_{20}\text{Mn}_{40}\text{Sb}_{40}$ phase-change material: Experimental evidence for the key role of Cr clusters. <i>Physical Review Materials</i> , 2021, 5, .	0.9	4
2293	Towards low loss non-volatile phase change materials in mid index waveguides. <i>Neuromorphic Computing and Engineering</i> , 2021, 1, 014004.	2.8	24
2294	Unique prospects of phase change material $\text{Sb}_2\text{Se}_3$ for ultra-compact reconfigurable nanophotonic devices. <i>Optical Materials Express</i> , 2021, 11, 3007.	1.6	13
2295	Effect of Mo doping on phase change performance of $\text{Sb}_2\text{Te}_3$ *. <i>Chinese Physics B</i> , 2021, 30, 086801.	0.7	4
2296	Ion Beam-Mediated Defect Engineering in TiO <sub>x</sub> Thin Films for Controlled Resistive Switching Property and Application. <i>ACS Applied Electronic Materials</i> , 2021, 3, 3804-3814.	2.0	12
2297	Robust, Transparent Hybrid Thin Films of Phase-Change Material $\text{Sb}_2\text{S}_3$ Prepared by Electrophoretic Deposition. <i>ACS Applied Energy Materials</i> , 2021, 4, 9891-9901.	2.5	15
2298	Crystal growth in Ge-Sb-Se glass and its relation to viscosity and surface diffusion. <i>Journal of Non-Crystalline Solids</i> , 2021, 566, 120865.	1.5	5
2299	The potential of chemical bonding to design crystallization and vitrification kinetics. <i>Nature Communications</i> , 2021, 12, 4978.	5.8	35
2300	Observation of ultrafast amorphization dynamics in $\text{GeCu}_2\text{Te}_3$ thin films using echelon-based single-shot transient absorbance spectroscopy. <i>Applied Physics Letters</i> , 2021, 119, .	1.5	3

#	ARTICLE	IF	CITATIONS
2301	Subpicosecond Nonequilibrium States in the Amorphous Phase of GeTe Phase-Change Material Thin Films. <i>Advanced Materials</i> , 2021, 33, e2102721.	11.1	8
2302	Ultrafast Responsive and Low-Energy-Consumption Poly(3-hexylthiophene)/Perovskite Quantum Dots Composite Film-Based Photonic Synapse. <i>Advanced Functional Materials</i> , 2021, 31, 2105911.	7.8	53
2303	Brief Review of Nanosilver Sintering: Manufacturing and Reliability. <i>Journal of Electronic Materials</i> , 2021, 50, 5483-5498.	1.0	14
2304	Impacts from triple phases of a germanium-antimony-tellurium film coating on thermal emission from SiO <sub>2</sub> and boron doped Si. <i>Optical Materials Express</i> , 2021, 11, 3071.	1.6	0
2305	Intrinsic anharmonicity and thermal properties of ultralow thermal conductivity $\text{BaMnO}_3$ . <i>Physical Review Materials</i> , 2021, 5, .	0.9	1
2306	Impact of the nucleation of conducting clusters on the retention of memristors: A self-consistent phase-field computational study. <i>Journal of Applied Physics</i> , 2021, 130, .	1.1	1
2307	Structural features of chalcogenide glass SiTe: An ovonic threshold switching material. <i>APL Materials</i> , 2021, 9, .	2.2	12
2308	Gaussian Process Regression for Materials and Molecules. <i>Chemical Reviews</i> , 2021, 121, 10073-10141.	23.0	384
2309	Reconfigurable metasurface-based 1 Å– 2 waveguide switch. <i>Photonics Research</i> , 2021, 9, 2104.	3.4	15
2311	Nonlinearity in Memristors for Neuromorphic Dynamic Systems. <i>Small Science</i> , 2022, 2, 2100049.	5.8	46
2312	Terahertz Devices Using the Optical Activation of GeTe Phase Change Materials: Toward Fully Reconfigurable Functionalities. <i>ACS Photonics</i> , 2021, 8, 3272-3281.	3.2	14
2313	Crystallization of Ge <sub>2</sub> Sb <sub>2</sub> Te <sub>5</sub> under high hydrostatic pressures: Differences in nanoscale atomic ordering in as-deposited and pressure-induced amorphous phases. <i>Journal of Alloys and Compounds</i> , 2021, 874, 159980.	2.8	3
2314	Density functional simulations of decomposition pathways of Ge-rich GeSbTe alloys for phase change memories. <i>Physical Review Materials</i> , 2021, 5, .	0.9	9
2315	High-Throughput Calculations on the Decomposition Reactions of Off-Stoichiometry GeSbTe Alloys for Embedded Memories. <i>Nanomaterials</i> , 2021, 11, 2382.	1.9	12
2316	Orbital-selective electronic excitation in phase-change memory materials: a brief review. <i>Zeitschrift Fur Naturforschung - Section B Journal of Chemical Sciences</i> , 2021, .	0.3	0
2317	Fast recovery of ion-irradiation-induced defects in Ge <sub>2</sub> Sb <sub>2</sub> Te <sub>5</sub> thin films at room temperature. <i>Optical Materials Express</i> , 2021, 11, 3535.	1.6	2
2318	Bifunctional biomorphic SiC ceramics embedded molten salts for ultrafast thermal and solar energy storage. <i>Materials Today Energy</i> , 2021, 21, 100764.	2.5	10
2319	Real-Space Observation of Emergent Complexity of Phase Evolution in Micrometer-Sized IrTe <sub>2</sub> Crystals. <i>Physical Review Letters</i> , 2021, 127, 145701.	2.9	5



#	ARTICLE	IF	CITATIONS
2320	Full-color, multi-level transmittance modulators: From reflectivity/gradient absorption coupling mechanism to materials map. <i>Acta Materialia</i> , 2021, 216, 117132.	3.8	2
2321	Emerging two-dimensional tellurides. <i>Materials Today</i> , 2021, 51, 402-426.	8.3	27
2322	How to Identify Lone Pairs, Van der Waals Gaps, and Metavalent Bonding Using Charge and Pair Density Methods: From Elemental Chalcogens to Lead Chalcogenides and Phase-Change Materials. <i>Physica Status Solidi - Rapid Research Letters</i> , 2021, 15, 2000534.	1.2	19
2323	Extended endurance performance and reduced threshold voltage by doping Si in GeSe-based ovonic threshold switching selectors. <i>Thin Solid Films</i> , 2021, 734, 138837.	0.8	14
2324	Thermal engineering of electron-trapping materials for "Smart-Write-In" optical data storage. <i>Chemical Engineering Journal</i> , 2021, 420, 129788.	6.6	8
2325	Ultrafast crystallization mechanism of amorphous Ge <sub>15</sub> Sb <sub>85</sub> unraveled by pressure-driven simulations. <i>Acta Materialia</i> , 2021, 216, 117123.	3.8	13
2326	Ultra-Thin Switchable Absorbers Based on Lossy Phase-Change Materials. <i>Advanced Optical Materials</i> , 2021, 9, 2101118.	3.6	19
2327	Multilevel Switching in Phase-Change Photonic Memory Devices. <i>Physica Status Solidi - Rapid Research Letters</i> , 2021, 15, 2100291.	1.2	6
2328	Room temperature tuning of non volatile magnetoelectric memory in Al doped Sr <sub>3</sub> Co <sub>2</sub> Fe <sub>24</sub> O <sub>41</sub> . <i>Ceramics International</i> , 2021, 47, 29261-29266.	2.3	4
2329	Effect of structure architecture on optical properties of TiTe <sub>2</sub> /Sb <sub>2</sub> Te <sub>3</sub> multilayer nanofilms. <i>Journal of Alloys and Compounds</i> , 2021, 877, 160270.	2.8	2
2330	Optical phase transition of Ge <sub>2</sub> Sb <sub>2</sub> Se <sub>4</sub> Te <sub>1</sub> thin film using low absorption wavelength in the 1550Ånm window. <i>Optical Materials</i> , 2021, 120, 111450.	1.7	8
2331	<sup>125</sup> Te NMR for structural investigations in phase change materials: Optimization of experimental conditions coupled to NMR shift prediction. <i>Solid State Nuclear Magnetic Resonance</i> , 2021, 115, 101751.	1.5	1
2332	Optimum resistive switching characteristics of NiFe <sub>2</sub> O <sub>4</sub> by controlling film thickness. <i>Applied Surface Science</i> , 2021, 564, 150091.	3.1	10
2333	Point defects in disordered and stable GeSbTe phase-change materials. <i>Materials Science in Semiconductor Processing</i> , 2021, 133, 105948.	1.9	4
2334	Low resistance-drift characteristics in Cr <sub>2</sub> Ge <sub>2</sub> Te <sub>6</sub> -based phase change memory devices with a high-resistance crystalline phase. <i>Materials Science in Semiconductor Processing</i> , 2021, 133, 105961.	1.9	10
2335	Radio-frequency magnetron co-sputtered Ge-Sb-Te phase change thin films. <i>Journal of Non-Crystalline Solids</i> , 2021, 569, 121003.	1.5	1
2336	Pulsed laser deposited stoichiometric GaSb films for optoelectronic and phase change memory applications. <i>Materials Science in Semiconductor Processing</i> , 2021, 133, 105965.	1.9	8
2337	Control of ferromagnetic resonance by phase change in Si/GeSbTe/FeCoB heterostructures. <i>Journal of Magnetism and Magnetic Materials</i> , 2021, 538, 168312.	1.0	2

#	ARTICLE	IF	CITATIONS
2338	Different point defects originated from dissimilar deposition conditions in n-type Cu-doped Bi <sub>2</sub> Te <sub>3</sub> films; crystal structure and thermoelectric property depending on Te-vacancy concentration. <i>Journal of Materials Research and Technology</i> , 2021, 15, 606-613.	2.6	3
2339	Bonding nature and optical contrast of TiTe <sub>2</sub> /Sb <sub>2</sub> Te <sub>3</sub> phase-change heterostructure. <i>Materials Science in Semiconductor Processing</i> , 2021, 135, 106080.	1.9	13
2340	Recent developments concerning the sputter growth of chalcogenide-based layered phase-change materials. <i>Materials Science in Semiconductor Processing</i> , 2021, 135, 106079.	1.9	12
2341	Glass transition of the phase change material AIST and its impact on crystallization. <i>Materials Science in Semiconductor Processing</i> , 2021, 134, 105990.	1.9	10
2342	Observing the spontaneous formation of a sub-critical nucleus in a phase-change amorphous material from ab initio molecular dynamics. <i>Materials Science in Semiconductor Processing</i> , 2021, 136, 106102.	1.9	5
2343	Achieving dual-band absorption and electromagnetically induced transparency in VO <sub>2</sub> metamaterials. <i>Physica B: Condensed Matter</i> , 2022, 624, 413391.	1.3	14
2344	High performance of Er-doped Sb <sub>2</sub> Te material used in phase change memory. <i>Journal of Alloys and Compounds</i> , 2021, 889, 161701.	2.8	14
2345	Effect of swift heavy ion irradiation on structural and electrical properties of Ag-doped Ge <sub>2</sub> Sb <sub>2</sub> Te <sub>5</sub> (GST) thin films. <i>AIP Conference Proceedings</i> , 2021, , .	0.3	0
2346	Enantiomeric perovskite with a dual phase transition at high temperature. <i>Journal of Materials Chemistry C</i> , 2021, 9, 1918-1922.	2.7	16
2347	Faster SET Operation in Phase Change Memory with Initialization. <i>IEICE Transactions on Electronics</i> , 2021, E104.C, 651-655.	0.3	1
2348	TEM Studies of Segregation in a Ge <sub>40</sub> Sb <sub>40</sub> Te <sub>20</sub> Alloy During Heating. <i>Springer Proceedings in Materials</i> , 2021, , 105-114.	0.1	0
2349	A reconfigurable hyperbolic metamaterial perfect absorber. <i>Nanoscale Advances</i> , 2021, 3, 1758-1766.	2.2	23
2350	Features of the crystallization of multicomponent solutions: a dipeptide, its salt and potassium carbonate. <i>CrystEngComm</i> , 2021, 23, 6427-6441.	1.3	1
2351	Mechanism of amorphous phase stabilization in ultrathin films of monoatomic phase change material. <i>Nanoscale</i> , 2021, 13, 16146-16155.	2.8	22
2352	Bonding diversity in rock salt-type tellurides: examining the interdependence between chemical bonding and materials properties. <i>RSC Advances</i> , 2021, 11, 20679-20686.	1.7	14
2353	Effect of laser irradiation on Ag <sub>3.54</sub> In <sub>10.62</sub> Sb <sub>49.56</sub> Te <sub>36.28</sub> . <i>Materials Today: Proceedings</i> , 2021, 47, 1892-1895.	0.9	0
2354	Electrically Activated Conductivity and White Light Emission of a Hydrocarbon Nanoring-Iodine Assembly. <i>Angewandte Chemie - International Edition</i> , 2017, 56, 11196-11202.	7.2	62
2355	Development of Materials for Third Generation Optical Storage Media. , 2009, , 199-226.		12

#	ARTICLE	IF	CITATIONS
2356	Optical Memory: From 1st to 3rd Generation and its Future. , 2009, , 251-284.		4
2358	Voltage and Photo Driven Energy Storage in Graphene Based Phase Change Composite Material. Springer Proceedings in Energy, 2014, , 633-642.	0.2	1
2359	Phase-Change Memory Materials. Springer Handbooks, 2017, , 1-1.	0.3	4
2360	Electrical Transport Properties of Glass. Springer Handbooks, 2019, , 343-367.	0.3	4
2361	Photo-Induced Phase Transition in RbMnFe Prussian Blue Analog-Based Magnet. Springer Series in Optical Sciences, 2010, , 1-35.	0.5	3
2362	Optical Data Storage. , 2011, , 335-415.		2
2363	Towards silicon photonic neural networks for artificial intelligence. Science China Information Sciences, 2020, 63, 1.	2.7	27
2364	Manipulating polarization and electromagnetically induced transparency in a switchable metamaterial. Optical Materials, 2020, 105, 109972.	1.7	18
2365	Controllable crystal growth and fast reversible crystallization-to-amorphization in Sb <sub>2</sub> Te-TiO <sub>2</sub> films. Scientific Reports, 2017, 7, 46279.	1.6	5
2366	Chemical Bonding Investigations for Materials. , 2018, , 117-175.		2
2367	Uncharacteristic second order martensitic transformation in metals via epitaxial stress fields. Journal of Applied Physics, 2020, 127, 045107.	1.1	4
2368	Dielectric relaxation in the GeSb <sub>2</sub> Te <sub>4</sub> phase-change material. AIP Conference Proceedings, 2020, , .	0.3	1
2369	Application of phase-change materials in memory taxonomy. Science and Technology of Advanced Materials, 2017, 18, 406-429.	2.8	29
2370	Impact of crystallization process in multilevel optical switching in Ge <sub>2</sub> Sb <sub>2</sub> Te <sub>5</sub> and Ag <sub>5</sub> In <sub>5</sub> Sb <sub>60</sub> Te <sub>30</sub> phase-change materials. Journal Physics D: Applied Physics, 2020, 53, 495303.	1.3	7
2371	Rapid threshold switching dynamics of co-sputtered chalcogenide Ge <sub>15</sub> Te <sub>85</sub> device for selector application. Semiconductor Science and Technology, 2021, 36, 015013.	1.0	6
2372	Tunable optical metasurfaces enabled by chalcogenide phase-change materials: from the visible to the THz. Journal of Optics (United Kingdom), 2020, 22, 114001.	1.0	45
2373	First-principles study of the liquid and amorphous phases of $\ln_{0.9}\text{Te}_{0.1}$ . Physical Review Materials, 2017, 1, .	0.9	1
2374	Phase diagram of germanium telluride encapsulated in carbon nanotubes from first-principles searches. Physical Review Materials, 2017, 1, .	0.9	10

#	Article	IF	CITATIONS
2375	Atomistic insights into the nanosecond long amorphization and crystallization cycle of nanoscale $G \times e^2 S$ Correlating ultrafast calorimetry, viscosity, and structural measurements in liquid GeTe and $b \times 2$ Physical Review Materials, 2018, 2, .	0.9	15
2376	Direct observation of partial disorder and zipperlike transition in crystalline phase change materials. Physical Review Materials, 2019, 3, . Strain-induced phase selection in epitaxial $G \times e^2 S$	0.9	34
2378	Fragile-to-strong crossover in optimized In-Sb-Te phase-change supercooled liquids. Physical Review Materials, 2020, 4, . $b \times 2$	0.9	3
2379	High-pressure nuclear inelastic scattering with backscattering monochromatization. Journal of Synchrotron Radiation, 2019, 26, 1592-1599.	1.0	4
2381	Reversible switching of electromagnetically induced transparency in phase change metasurfaces. Advanced Photonics, 2020, 2, .	6.2	29
2382	Near-infrared photonic phase-change properties of transition metal ditellurides. , 2019, , .		4
2383	The "glass transition" as a topological defect driven transition in a distribution of crystals and a prediction of a universal viscosity collapse. , 2018, , 61-79.		2
2384	Bond-Selective Excitation and Following Displacement of Ge Atoms in GeTe/Sb <sub>2</sub> Te <sub>3</sub> Superlattice. Acta Physica Polonica A, 2012, 121, 336-339.	0.2	1
2385	VO <sub>2</sub> -based active tunable emittance thermochromic flexible coatings. Journal of the Optical Society of America A: Optics and Image Science, and Vision, 2020, 37, C45.	0.8	21
2386	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.	0.9	7
2387	Integrated metamaterial with functionalities of absorption and electromagnetically induced transparency. Optics Express, 2019, 27, 25196.	1.7	74
2388	Modulating trap properties by Nd <sup>3+</sup> - Eu <sup>3+</sup> co-doping in Sr <sub>2</sub> SnO <sub>4</sub> host for optical information storage. Optics Express, 2020, 28, 4249.	1.7	14
2389	Simultaneous realizations of absorber and transparent conducting metal in a single metamaterial. Optics Express, 2020, 28, 6565.	1.7	79
2390	Achieving broadband absorption and polarization conversion with a vanadium dioxide metasurface in the same terahertz frequencies. Optics Express, 2020, 28, 12487.	1.7	179
2391	Fabrication of Ge <sub>2</sub> Sb <sub>2</sub> Te <sub>5</sub> crystal micro/nanostructures through single-shot Gaussian-shape femtosecond laser pulse irradiation. Optics Express, 2020, 28, 25250.	1.7	9
2392	Artificial neural network discovery of a switchable metasurface reflector. Optics Express, 2020, 28, 24629.	1.7	24

#	ARTICLE	IF	CITATIONS
2393	Ultra-low-power nonvolatile integrated photonic switches and modulators based on nanogap-enhanced phase-change waveguides. <i>Optics Express</i> , 2020, 28, 37265.	1.7	21
2394	Theoretical design of a reconfigurable broadband integrated metamaterial terahertz device. <i>Optics Express</i> , 2020, 28, 40060.	1.7	48
2395	Infrared photodetector based on GeTe nanofilms with high performance. <i>Optics Letters</i> , 2020, 45, 1108.	1.7	12
2396	GaTe/Sb <sub>2</sub> Te <sub>3</sub> thin-films phase change characteristics. <i>Optics Letters</i> , 2020, 45, 1067.	1.7	6
2397	Near-infrared modulation by means of GeTe/SOI-based metamaterial. <i>Optics Letters</i> , 2019, 44, 1508.	1.7	8
2398	Multilevel accumulative switching processes in growth-dominated AgInSbTe phase change material. <i>Optics Letters</i> , 2019, 44, 3134.	1.7	14
2399	Simple technique for determining the refractive index of phase-change materials using near-infrared reflectometry. <i>Optical Materials Express</i> , 2020, 10, 1675.	1.6	13
2400	Performance characteristics of phase-change integrated silicon nitride photonic devices in the O and C telecommunications bands. <i>Optical Materials Express</i> , 2020, 10, 1778.	1.6	16
2401	Reconfigurable multilevel control of hybrid all-dielectric phase-change metasurfaces. <i>Optica</i> , 2020, 7, 476.	4.8	153
2402	Fast and reliable storage using a 5-bit, nonvolatile photonic memory cell. <i>Optica</i> , 2019, 6, 1.	4.8	195
2403	Super-Resolution Real Imaging in Microsphere-Assisted Microscopy. <i>PLoS ONE</i> , 2016, 11, e0165194.	1.1	52
2404	All-optical dynamic tuning of local excitonic emission of monolayer MoS <sub>2</sub> by integration with Ge <sub>2</sub> Sb <sub>2</sub> Te <sub>5</sub> . <i>Nanophotonics</i> , 2020, 9, 2351-2359.	2.9	4
2405	Tunable nanophotonics enabled by chalcogenide phase-change materials. <i>Nanophotonics</i> , 2020, 9, 1189-1241.	2.9	294
2406	Polymorphic gallium for active resonance tuning in photonic nanostructures: from bulk gallium to two-dimensional (2D) gallene. <i>Nanophotonics</i> , 2020, 9, 4233-4252.	2.9	14
2407	The Structure of the Amorphous (GeTe) <sub>1-x</sub> (Sb <sub>2</sub> Te <sub>3</sub> ) <sub>x</sub> System and Implications for its Phase-Change Properties. <i>Zeitschrift Fur Physikalische Chemie</i> , 2021, 235, 141-167.	1.4	3
2408	Photostimulated etching of germanium chalcogenide films. <i>Semiconductor Physics, Quantum Electronics and Optoelectronics</i> , 2012, 15, 345-350.	0.3	1
2409	Metal Nanowire Formation by Solid-Electrochemical Reaction and Its Device Application. <i>Journal of the Vacuum Society of Japan</i> , 2009, 52, 340-346.	0.3	1
2410	STDP and STDP variations with memristors for spiking neuromorphic learning systems. <i>Frontiers in Neuroscience</i> , 2013, 7, 2.	1.4	368

#	ARTICLE	IF	CITATIONS
2411	Mechanism of Nano-Structuring Manipulation of the Crystallization Temperature of Superlattice-like [Ge <sub>8</sub> Sb <sub>92</sub> /Ge] <sub>3</sub> Phase-Change Films. <i>Nanomaterials</i> , 2021, 11, 20.	1.9	4
2412	Outlooks for development of silicon nanoparticle memory cells. <i>Modern Electronic Materials</i> , 2019, 5, 159-164.	0.2	1
2413	Evolution of Nonvolatile Resistive Switching Memory Technologies: The Related Influence on Heterogeneous Nanoarchitectures. <i>Transactions on Electrical and Electronic Materials</i> , 2010, 11, 243-248.	1.0	13
2414	Crystal Structures of Phase-Change Recording Material, GeTe-Sb <sub>2</sub> Te <sub>3</sub> Pseudo-binary Compounds. <i>Nihon Kessho Gakkaishi</i> , 2009, 51, 292-299.	0.0	7
2415	Bonding nature of the amorphous structure studied by a combination of cutoff and electronic localization function. <i>Wuli Xuebao/Acta Physica Sinica</i> , 2016, 65, 173101.	0.2	3
2416	Fundamental circuit element and nonvolatile memory based on magnetoelectric effect. <i>Wuli Xuebao/Acta Physica Sinica</i> , 2018, 67, 127501.	0.2	3
2417	Modulation of propagating surface plasmons. <i>Wuli Xuebao/Acta Physica Sinica</i> , 2019, 68, 147302.	0.2	7
2418	Laser Annealing to Form High-Temperature Phase of FeS <sub>2</sub> . <i>Japanese Journal of Applied Physics</i> , 2012, 51, 02BP10.	0.8	6
2419	Low-Pressure CVD of GeE (E = Te, Se, S) Thin Films from Alkylgermanium Chalcogenolate Precursors and Effect of Deposition Temperature on the Thermoelectric Performance of GeTe. <i>ACS Applied Materials &amp; Interfaces</i> , 2021, 13, 47773-47783.	4.0	7
2420	Electronic, Optical, and Thermoelectric Properties of Bulk and Monolayer Germanium Tellurides. <i>Crystals</i> , 2021, 11, 1290.	1.0	5
2421	Rb <sub>3</sub> Er <sub>4</sub> Cu <sub>5</sub> Te <sub>10</sub> : exploring the frontier between polar intermetallics and Zintl phases via experimental and quantumchemical approaches. <i>European Journal of Inorganic Chemistry</i> , 0, , .	1.0	4
2422	Optical Memristive Switches. <i>Kluwer International Series in Electronic Materials: Science and Technology</i> , 2022, , 355-376.	0.3	0
2423	Ion Dynamics and Polymorphism in Cu <sub>20</sub> Te <sub>11</sub> Cl <sub>3</sub> . <i>Inorganic Chemistry</i> , 2021, 60, 15233-15241.	1.9	2
2424	High-throughput computational screening of Sb-Te binary alloys for phase-change storage applications. <i>Journal of Materials Research and Technology</i> , 2021, 15, 4243-4256.	2.6	3
2425	Far-Infrared Near-Field Optical Imaging and Kelvin Probe Force Microscopy of Laser-Crystallized and -Amorphized Phase Change Material Ge <sub>3</sub> Sb <sub>2</sub> Te <sub>6</sub> . <i>Nano Letters</i> , 2021, 21, 9012-9020.	4.5	12
2426	Volume Resistive Switching in Metallic Perovskite Oxides Driven by the Metal-Insulator Transition. <i>Kluwer International Series in Electronic Materials: Science and Technology</i> , 2022, , 289-310.	0.3	0
2427	Tunable metasurface realizing dynamic chiroptical responses in infrared band. <i>Optik</i> , 2021, 248, 168225.	1.4	1
2428	Photonic memory with nonlinear plasmonic nanotubes. <i>APL Materials</i> , 2021, 9, .	2.2	16

#	ARTICLE	IF	CITATIONS
2429	Memristive Computing Devices and Applications. Kluwer International Series in Electronic Materials: Science and Technology, 2022, , 5-32.	0.3	0
2430	Re-Writability and its Mechanism in DVD: Phase-Change Mechanism Chalcogenide Alloy between Amorphous and Crystal. The Review of Laser Engineering, 2008, 36, 349-356.	0.0	0
2431	New Trends in Non-volatile Semiconductor Memories. Studies in Computational Intelligence, 2009, , 323-333.	0.7	0
2432	Tetradymite-Type Tellurides and Related Compounds: Real-Structure Effects and Thermoelectric Properties. , 2011, , 333-340.		1
2433	Phase Change Line Memory Cell Based on Ge <sub>2</sub> Sb <sub>2</sub> Te <sub>5</sub> Fabricated Using Focused Ion Beam. Japanese Journal of Applied Physics, 2011, 50, 070211.	0.8	0
2434	Endurance Enhancement of Elevated-Confined Phase Change Random Access Memory. Japanese Journal of Applied Physics, 2012, 51, 02BD09.	0.8	0
2435	Time Resolved Investigation of Fast Phase- Change Phenomena in Rewritable Optical Recording Media. , 0, , .		0
2436	Thermal Etching Characteristics of AgInSbTe Phase Change Film. Wuli Cailiao Xuebao/Journal of Inorganic Materials, 2012, 27, 620-626.	0.6	0
2437	A Solid-State NMR Study of Coordination Transformation in Amorphous Aluminum Oxide: Implication for Crystallization of Magma Ocean. Journal of the Mineralogical Society of Korea, 2012, 25, 283-293.	0.2	0
2438	Phase-change behaviors in Ga <sub>30</sub> Sb <sub>70</sub> /Sb <sub>80</sub> Te <sub>20</sub> nanocomposite multilayer films. Wuli Xuebao/Acta Physica Sinica, 2013, 62, 036402.	0.2	0
2443	Spike-Timing-Dependent-Plasticity with Memristors. , 2014, , 211-247.		3
2444	Ultrafast Lattice Dynamics of Phase-change Materials Monitored by a Pump-pump-probe Technique. , 2014, , .		0
2446	Time-Frequency Two-Dimensional Imaging Spectroscopy Using a Reflective Echelon Mirror. The Review of Laser Engineering, 2015, 43, 208.	0.0	0
2447	Phase change properties of ZnSb-doped Ge <sub>2</sub> Sb <sub>2</sub> Te <sub>5</sub> films. Wuli Xuebao/Acta Physica Sinica, 2015, 64, 176802.	0.2	1
2448	Switching of Localized Surface Plasmon Resonance Using A Phase-Change Material and Applications to Intelligent Computing. The Review of Laser Engineering, 2015, 43, 275.	0.0	0
2449	Effect of Cu on the structure and phase-change characteristics of Sb <sub>2</sub> Te film for high-speed phase change random access memory. Wuli Xuebao/Acta Physica Sinica, 2015, 64, 156102.	0.2	1
2450	Correlated Perovskites as a New Platform for Super Broadband Tunable Photonics. , 2016, , .		0
2451	Comparison of thermal stabilities between Zr <sub>9</sub> (Ge <sub>2</sub> Sb <sub>2</sub> Te <sub>5</sub> ) <sub>91</sub> and Ge <sub>2</sub> Sb <sub>2</sub> Te <sub>5</sub> phase change films. , 2016, , .		0

#	ARTICLE	IF	CITATIONS
2452	A photo-excited carrier integrated semiconductor model to predict the non-equilibrium thermal transport in Ge <sub>2</sub> Sb <sub>2</sub> Te <sub>5</sub> thin films under the ultrafast pulsed laser. , 2017, , .		0
2454	Enhancing lifetime of phase-change memory for video processor. IEICE Electronics Express, 2017, 14, 20170402-20170402.	0.3	2
2455	Nanospectroscopy of single quantum dots with local strain control using a phase-change mask. Japanese Journal of Applied Physics, 2017, 56, 08LA02.	0.8	0
2456	On-chip phase-change photonic memory and computing. , 2017, , .		1
2458	Large (GeTe):(Sb <sub>2</sub> Te <sub>3</sub> ) ratio phase change memory thin films. , 2018, , .		0
2459	Noncontact Method of Conducting Elements "Writing" on Insulating Ge"Sb"Te Matrix Using a Laser Beam. Materials Science-Poland, 2018, 36, 217-224.	0.4	0
2460	Using phase-change materials to switch the direction of reflectionless light propagation in non-PT-symmetric structures. , 2018, , .		1
2461	The droplet formation-dissolution transition in different ensembles: Finite-size scaling from two perspectives. , 2018, 5, .		0
2462	Advances in dynamically tunable plasmonic materials and devices. Wuli Xuebao/Acta Physica Sinica, 2019, 68, 147303.	0.2	2
2463	Phase-Change Memory and Optical Data Storage. Springer Handbooks, 2019, , 1495-1520.	0.3	0
2464	Design for dynamic wavefront manipulation based on phase change materials. , 2019, , .		0
2465	Spike-Timing-Dependent-Plasticity with Memristors. , 2019, , 429-467.		2
2466	Polariton Meta-Optics with Phase-Change Materials. , 2019, , .		0
2467	Reconfigurable mid-infrared optical elements using phase change materials. , 2019, , .		1
2468	Influence of Sn dopant on the crystallization of amorphous Ge <sub>2</sub> Sb <sub>2</sub> Te <sub>5</sub> by a picosecond pulsed laser irradiation. , 2019, , .		0
2469	Local structure and optical property of GeTe@Cu composite thin film. , 2019, , .		1
2470	Application of phase change material in tunable optical filters and shutters. , 2019, , .		0
2471	GST integrated silicon photonics. , 2019, , .		2



#	ARTICLE	IF	CITATIONS
2472	Tunable beam manipulation based on phase-change metasurfaces. <i>Applied Optics</i> , 2019, 58, 7996.	0.9	4
2473	Science and Technological Understanding of Nano-ionic Resistive Memories (RRAM). <i>Nanoscience and Nanotechnology - Asia</i> , 2019, 9, 444-461.	0.3	0
2474	On the prospect of creating memory elements based on silicon nanoparticles. <i>Izvestiya Vysshikh Uchebnykh Zavedenii Materialy Elektronnoi Tekhniki = Materials of Electronics Engineering</i> , 2019, 22, 84-91.	0.1	0
2475	Nanoscale Optoelectronic Memory with Nonvolatile Phase-Change Photonics. , 2020, , .		0
2476	Effects of Ge/Sb Intermixing on the Local Structures and Optical Properties of GeTe-Sb <sub>2</sub> Te <sub>3</sub> Superlattice. <i>Minerals, Metals and Materials Series</i> , 2020, , 1777-1786.	0.3	0
2477	Phase change material integrated silicon photonics: GST and beyond. , 2020, , .		4
2478	Non-metallic electrical transport properties of a metastable <i>h</i> -Ti <sub>3</sub> O <sub>5</sub> thin film epitaxially stabilized on a pseudobrookite seed layer. <i>Applied Physics Letters</i> , 2020, 116, .	1.5	9
2479	Infrared photovoltaic detector based on p-GeTe/n-Si heterojunction. <i>Nanoscale Research Letters</i> , 2020, 15, 138.	3.1	9
2480	Composition dependence of thermo-dynamical and thermo-mechanical properties in SeTeSnGe chalcogenide glasses (ChGs). <i>EPJ Applied Physics</i> , 2020, 90, 31101.	0.3	1
2481	Sub-bandgap pulsed laser patterning of planar chalcogenide microphotonics. <i>Optical Materials Express</i> , 2020, 10, 2126.	1.6	4
2482	Hücre Başına Ađoklu Bit Media Geliřtirmek Āřin Nano Ā-lıřekli YarĀ Āletken Bir AygĀtın Sonlu Eleman Modellemesi. <i>European Journal of Science and Technology</i> , 0, , 84-91.	0.5	0
2483	Reliability Modelling and Prediction Method for Phase Change Memory Using Optimal Pulse Conditions. <i>Journal of Shanghai Jiaotong University (Science)</i> , 2020, 25, 1-9.	0.5	2
2485	Phase Evolution and Amorphous Stability upon Solid-State Reaction in Superlattice-Like Ge-Sb-Te Combinatorial Thin Films. <i>ACS Applied Electronic Materials</i> , 2020, 2, 3880-3888.	2.0	2
2486	Active Ag/Co Composite Chiral Nanohole Arrays. <i>Journal of Physical Chemistry C</i> , 2021, 125, 716-723.	1.5	11
2487	Possible two-photon absorption in the near-infrared region observed by cavity ring-down spectroscopy. <i>Optics Express</i> , 2020, 28, 39128.	1.7	2
2488	Peculiarities of the synthesis of GST films by magnetron sputtering for nonvolatile optical memory cells. <i>Journal of Physics: Conference Series</i> , 2020, 1695, 012139.	0.3	1
2489	TLC STT-MRAM aware LLC for multicore processor. <i>IEICE Electronics Express</i> , 2020, 17, 20200359-20200359.	0.3	1
2490	Electronic, optical and thermoelectric properties of a novel two-dimensional SbXY (X = Se, Te; Y = Br, I) family: <i>ab initio</i> perspective. <i>Physical Chemistry Chemical Physics</i> , 2021, 23, 25866-25876.	1.3	17

#	ARTICLE	IF	CITATIONS
2491	Viscosity and fragility of selected glass-forming chalcogenides. <i>Journal of Non-Crystalline Solids</i> , 2022, 575, 121205.	1.5	5
2492	Switching Quantum Interference with Phase-change Reconfigurable Metasurfaces. , 2020, , .		0
2493	Microstructure Modification: Generation of Crystal Defects and Phase Transformations. , 2021, , 213-272.		2
2494	Non-volatile integrated photonic memory using GST phase change material on a fully etched Si <sub>3</sub> N <sub>4</sub> /SiO <sub>2</sub> waveguide. , 2020, , .		4
2495	Microstructure Modification: Generation of Crystal Defects and Phase Transformations. , 2020, , 1-60.		2
2496	Thermal Conductivities of Geâ€“Sbâ€“Te Alloys. , 2020, , 45-69.		0
2497	A first-principles study of the switching mechanism in GeTe/InSbTe superlattices. <i>Nanoscale Advances</i> , 2020, 2, 5209-5218.	2.2	3
2498	Memristive and magnetoresistance effects of SnSe<sub>2</sub>. <i>Wuli Xuebao/Acta Physica Sinica</i> , 2020, 69, 117301.	0.2	0
2499	Effect of aging on electrical transport behavior of chalcogenide glass. <i>AIP Conference Proceedings</i> , 2020, , .	0.3	0
2501	Densities of Geâ€“Sbâ€“Te Alloys. , 2020, , 119-135.		0
2502	Hybrid silicon-phase change nanoantenna for surface plasmon polariton routing. <i>AIP Conference Proceedings</i> , 2020, , .	0.3	1
2503	Atypical phase-change alloy Ga<sub>2</sub>Te<sub>3</sub>: atomic structure, incipient nanotectonic nuclei, and multilevel writing. <i>Journal of Materials Chemistry C</i> , 2021, 9, 17019-17032.	2.7	12
2504	Temporal Resistance Drift in the Amorphous States of GST Phase Change Semiconductors: An Intrinsic Phenomenon in Nonequilibrium Systems. <i>Physica Status Solidi - Rapid Research Letters</i> , 0, , 2100472.	1.2	0
2505	Non-volatile multi-level cell storage via sequential phase transition in Sb<sub>7</sub>Te<sub>3</sub>/GeSb<sub>6</sub>Te multilayer thin film. <i>Nanotechnology</i> , 2022, 33, 075701.	1.3	6
2506	Rules of hierarchical melt and coordinate bond to design crystallization in doped phase change materials. <i>Nature Communications</i> , 2021, 12, 6473.	5.8	17
2507	In-memory computing with emerging nonvolatile memory devices. <i>Science China Information Sciences</i> , 2021, 64, 1.	2.7	31
2508	Chiral order and multiferroic domain relaxation in NaFeGe <sub>2</sub> O <sub>6</sub> . <i>Physical Review B</i> , 2021, 104, .	1.1	1
2509	Thermally Controlled Chargeâ€“Carrier Transitions in Disordered PbSbTe Chalcogenides. <i>Advanced Materials</i> , 2022, 34, e2106868.	11.1	5

#	ARTICLE	IF	CITATIONS
2510	A Study of Chalcogenide Phase-Change Materials for Next-Generation Electronic Devices. <i>Materia Japan</i> , 2020, 59, 387-392.	0.1	0
2511	Phase-change Materials in Multifunctional Reconfigurable Metasurfaces. , 2020, , .		0
2512	Phase-Change Materials For Non-Volatile Data Storage. <i>NATO Science for Peace and Security Series B: Physics and Biophysics</i> , 2009, , 413-428.	0.2	0
2513	Simple technique for determining the refractive index of phase-change materials using near-infrared reflectometry. <i>Optical Materials Express</i> , 2020, 10, 1675.	1.6	2
2514	Performance characteristics of phase-change integrated silicon nitride photonic devices in the O and C telecommunications bands. <i>Optical Materials Express</i> , 2020, 10, 1778.	1.6	2
2515	Heterodyne interferometry applied to the characterization of nonlinear integrated waveguides. <i>Optics Letters</i> , 2020, 45, 5053.	1.7	4
2516	Observation of the femtosecond laser-induced ultrafast amorphization in Ge <sub>2</sub> Sb <sub>2</sub> Te <sub>5</sub> films by dynamics spectrum. <i>Journal of Physics: Conference Series</i> , 2020, 1676, 012161.	0.3	2
2517	Phase transition dynamics in one-dimensional halide perovskite crystals. <i>MRS Bulletin</i> , 0, , 1-7.	1.7	1
2518	Nonvolatile Resistive Switching of Mn <sub>3</sub> O <sub>4</sub> Thin Films for Flexible Electronics Applications. <i>Nanoscience and Nanotechnology - Asia</i> , 2020, 10, 622-630.	0.3	1
2519	Near-infrared photonic phase-change properties of transition metal ditellurides. <i>Proceedings of SPIE</i> , 2019, 11085, .	0.8	0
2520	Non-Volatile Reconfigurable Silicon Photonics Based on Phase-Change Materials. <i>IEEE Journal of Selected Topics in Quantum Electronics</i> , 2022, 28, 1-17.	1.9	36
2521	Total Ionizing Dose (TID) of Phase Change Random Access Memory. , 2021, , .		1
2522	Tailoring the Structural and Optical Properties of Germanium Telluride Phase-Change Materials by Indium Incorporation. <i>Nanomaterials</i> , 2021, 11, 3029.	1.9	9
2523	Highly Stable and Nonflammable Hydrated Salt-Paraffin Shape-Memory Gels for Sustainable Building Technology. <i>ACS Sustainable Chemistry and Engineering</i> , 2021, 9, 15442-15450.	3.2	16
2524	Nonvolatile multilevel switching in artificial synaptic transistors based on epitaxial LiCoO <sub>2</sub> thin films. <i>Physical Review Materials</i> , 2021, 5, .	0.9	2
2525	Linear and non-linear optical dispersion parameters of Te <sub>81</sub> Ge <sub>15</sub> Bi <sub>4</sub> chalcogenide glass thin films for optoelectronic applications. <i>Physica B: Condensed Matter</i> , 2022, 626, 413556.	1.3	16
2526	Switchable Purcell enhancement of photoluminescence by GST film. <i>Journal of Physics: Conference Series</i> , 2021, 2015, 012077.	0.3	0
2527	Electrodeposition of GeSbTe-Based Resistive Switching Memory in Crossbar Arrays. <i>Journal of Physical Chemistry C</i> , 2021, 125, 26247-26255.	1.5	9

#	ARTICLE	IF	CITATIONS
2528	Switching-Modulated Phase Change Memory Realized by Si-Containing Block Copolymers. <i>Small</i> , 2021, 17, e2105078.	5.2	5
2529	Tunable ultra-broadband terahertz perfect absorber based on vanadium oxide metamaterial. <i>Optics Express</i> , 2021, 29, 41222.	1.7	29
2530	Nano-composite phase-change antimony thin film for fast and persistent memory operations. <i>Materials Today Physics</i> , 2022, 22, 100584.	2.9	6
2531	Influence of Thomson effect on amorphization in phase-change memory: dimensional analysis based on Buckingham's $\pi$ theorem for $\text{Ge}_2\text{Sb}_2\text{Te}_5$ . <i>Materials Research Express</i> , 2021, 8, 115902.	0.8	4
2532	Tailoring Crystallization Kinetics of Chalcogenides for Photonic Applications. <i>Advanced Electronic Materials</i> , 2022, 8, 2100974.	2.6	10
2533	Analysis of an electrically reconfigurable metasurface for manipulating polarization of near-infrared light. <i>Journal of the Optical Society of America B: Optical Physics</i> , 2022, 39, 145.	0.9	3
2534	Reactive molten-flux assisted syntheses of single crystals of $\text{Cs}_{19}\text{Ln}_{19}\text{Mn}_{10}\text{Te}_{48}$ (Ln = Pr and Gd) crystallizing in a new structure type. <i>CrystEngComm</i> , 2021, 23, 8418-8429.	1.3	2
2535	The Orbital Origins of Chemical Bonding in $\text{Ge}^{\sim}\text{Sb}^{\sim}\text{Te}$ Phase-Change Materials**. <i>Angewandte Chemie - International Edition</i> , 2022, 61, .	7.2	19
2536	Prediction of a Tensile Force-Induced Structural Phase Transition from $\text{Ti}_3\text{O}_5$ to $\text{Ti}_3\text{O}_5$ by Molecular Dynamic Simulations. <i>European Journal of Inorganic Chemistry</i> , 2022, 2022, e202101037.	1.0	3
2537	Large dielectric switch effects induced by an order-disorder transformation in cyclopropylamine perchlorate crystals. <i>Nanoscale</i> , 2022, 14, 675-679.	2.8	2
2539	Reflective and transmissive cross-polarization converter for terahertz wave in a switchable metamaterial. <i>Physica Scripta</i> , 2022, 97, 015501.	1.2	15
2540	Extraction of thermal and optical parameters for $\text{As}^{\sim}\text{Se}^{\sim}\text{Te}$ thin films according to phase-change pathways. <i>Materials Chemistry and Physics</i> , 2022, 277, 125620.	2.0	15
2541	Enhancement of thermal stability by calcium doping in $\text{Sb}_2\text{Te}_3$ for ultrastable phase-change memory. <i>Journal of Non-Crystalline Solids</i> , 2022, 577, 121327.	1.5	4
2542	Roles of liquid structural ordering in glass transition, crystallization, and water's anomalies. <i>Journal of Non-Crystalline Solids: X</i> , 2022, 13, 100076.	0.5	5
2543	Form-Stable phase change composites based on porous carbon derived from polyacrylonitrile hydrogel. <i>Chemical Engineering Journal</i> , 2022, 431, 134206.	6.6	34
2544	GSST phase change materials and its utilization in optoelectronic devices: A review. <i>Materials Research Bulletin</i> , 2022, 148, 111679.	2.7	31
2545	Identification of the Heating Process in Differential Scanning Calorimeter with the Use of Hammerstein Model. , 2020, , .		0
2546	Engineering multi-state transparency on demand. <i>Light Advanced Manufacturing</i> , 2021, 2, 1.	2.2	4

#	ARTICLE	IF	CITATIONS
2547	A Review on Pure and Semiconductor Functionalized Ferroelectric Polymer-Based Memory Devices. Springer Proceedings in Physics, 2021, , 217-224.	0.1	0
2548	Pressure-Driven Two-Step Second-Harmonic Generation Switching in BiOIO <sub>3</sub> . Angewandte Chemie, 0, , .	1.6	0
2549	Ultrafast and stable phase transition realized in MoTe <sub>2</sub> -based memristive devices. Materials Horizons, 2022, 9, 1036-1044.	6.4	9
2550	Pressure-Driven Two-Step Second-Harmonic Generation Switching in BiOIO <sub>3</sub> . Angewandte Chemie - International Edition, 2022, 61, .	7.2	13
2551	Optical Control of Multistage Phase Transition via Phonon Coupling in $\text{MoTe}_2$ . Physical Review Letters, 2022, 128, 015702.	2.9	29
2552	Nanoencapsulated Phase-Change Materials: Versatile and Air-Tolerant Platforms for Triplet Annihilation Upconversion. ACS Applied Materials & Interfaces, 2022, 14, 4132-4143.	4.0	9
2553	Multilevel Absorbers via the Integration of Undoped and Tungsten-Doped Multilayered Vanadium Dioxide Thin Films. ACS Applied Materials & Interfaces, 2022, 14, 1404-1412.	4.0	14
2554	Magnetic Nanostructures: Rational Design and Fabrication Strategies toward Diverse Applications. Chemical Reviews, 2022, 122, 5411-5475.	23.0	49
2555	Reconfigurable label-free shape-sieving of submicron particles in paired chalcogenide waveguides. Nanoscale, 2022, 14, 2465-2474.	2.8	6
2556	Photonic meta-switch based on phase change and catenary-enabled continuous phase regulation. Wuli Xuebao/Acta Physica Sinica, 2022, 71, 029101.	0.2	0
2557	Double-E-Triple-H-Shaped NRI-Metamaterial for Dual-Band Microwave Sensing Applications. Computers, Materials and Continua, 2022, 71, 5817-5836.	1.5	3
2558	Amorphous HfO <sub>2</sub> Te as a selector via a modified conduction mechanism by Te content control. APL Materials, 2022, 10, .	2.2	3
2559	The fourth fundamental circuit element: principle and applications. Journal Physics D: Applied Physics, 0, , .	1.3	1
2560	Periodic Relief Fabrication and Reversible Phase Transitions in Amorphous Ge <sub>2</sub> Sb <sub>2</sub> Te <sub>5</sub> Thin Films upon Multi-Pulse Femtosecond Irradiation. Micro, 2022, 2, 88-99.	0.9	8
2561	Nonvolatile Reconfigurable Electromagnetically Induced Transparency with Terahertz Chalcogenide Metasurfaces. Laser and Photonics Reviews, 2022, 16, .	4.4	22
2562	Designing Conductive-Bridge Phase-Change Memory to Enable Ultralow Programming Power. Advanced Science, 2022, 9, e2103478.	5.6	26
2563	Volatile and Nonvolatile Switching of Phase Change Material Ge <sub>2</sub> Sb <sub>2</sub> Te <sub>5</sub> Revealed by Time-Resolved Terahertz Spectroscopy. Journal of Physical Chemistry Letters, 2022, 13, 947-953.	2.1	9
2564	Phase transitions of Ge <sub>12</sub> Sb <sub>88</sub> thin films on high- and low-thermal-conductivity substrates and their potential applications in storage. Journal Physics D: Applied Physics, 2022, 55, 155302.	1.3	0

#	ARTICLE	IF	CITATIONS
2565	Bonding Nature and Optical Properties of As <sub>2</sub> Te <sub>3</sub> Phase-Change Material. <i>Physica Status Solidi - Rapid Research Letters</i> , 2022, 16, .	1.2	5
2566	Orbitale als Ausgangspunkt der Chemischen Bindung in Ge <sup>~</sup> Sb <sup>~</sup> Te <sup>~</sup> Phasenwechselmaterialien**. <i>Angewandte Chemie</i> , 0, , e202115778.	1.6	0
2567	Cyclic Solid- <sup>~</sup> State Multiple Phase Changes with Tuned Photoemission in a Gold Thiolate Coordination Polymer. <i>Angewandte Chemie</i> , 0, , .	1.6	2
2568	Unraveling Crystallization Mechanisms and Electronic Structure of Phase-Change Materials by Large-Scale Ab Initio Simulations. <i>Advanced Materials</i> , 2022, 34, e2109139.	11.1	21
2569	Cyclic Solid- <sup>~</sup> State Multiple Phase Changes with Tuned Photoemission in a Gold Thiolate Coordination Polymer. <i>Angewandte Chemie - International Edition</i> , 2022, , .	7.2	2
2570	Study of Er-Sb and Er-Te parental alloys used in phase change memory. <i>Journal of Alloys and Compounds</i> , 2022, 904, 164057.	2.8	4
2571	Outstanding phase-change behaviors of GaGeSbTe material for phase-change memory application. <i>Materials Research Bulletin</i> , 2022, 149, 111731.	2.7	14
2572	Switchable crystal- <sup>~</sup> amorphous states of NiSO <sub>4</sub> ·6H <sub>2</sub> O induced by a Reddy tube. <i>New Journal of Chemistry</i> , 2022, 46, 5091-5099.	1.4	9
2573	Origin of the concentration-dependent effects of N on the stability and electrical resistivity in polycrystalline Ge <sub>1</sub> Sb <sub>2</sub> Te <sub>4</sub> . <i>Journal of Materials Chemistry C</i> , 0, , .	2.7	1
2574	Switching to Hidden Metallic Crystal Phase in Phase-Change Materials by Photoenhanced Metavalent Bonding. <i>ACS Nano</i> , 2022, , .	7.3	2
2575	Volatile and Nonvolatile Memristive Devices for Neuromorphic Computing. <i>Advanced Electronic Materials</i> , 2022, 8, .	2.6	94
2576	Local Symmetry Breaking Suppresses Thermal Conductivity in Crystalline Solids. <i>Angewandte Chemie</i> , 2022, 134, .	1.6	4
2577	Additive manufacturing of ceramic materials for energy applications: Road map and opportunities. <i>Journal of the European Ceramic Society</i> , 2022, 42, 3049-3088.	2.8	62
2578	Local Symmetry Breaking Suppresses Thermal Conductivity in Crystalline Solids. <i>Angewandte Chemie - International Edition</i> , 2022, 61, .	7.2	16
2579	Investigation of the Crystallization Characteristics of Intermediate States in Ge <sub>2</sub> Sb <sub>2</sub> Te <sub>5</sub> Thin Films Induced by Nanosecond Multi-Pulsed Laser Irradiation. <i>Nanomaterials</i> , 2022, 12, 536.	1.9	1
2580	Thermal-triggered fire-extinguishing separators by phase change materials for high-safety lithium-ion batteries. <i>Energy Storage Materials</i> , 2022, 47, 445-452.	9.5	41
2581	Hints for a General Understanding of the Epitaxial Rules for van der Waals Epitaxy from Ge <sup>~</sup> Sb <sup>~</sup> Te Alloys. <i>Advanced Materials Interfaces</i> , 2022, 9, .	1.9	6
2582	Keep it simple and switch to pure tellurium. <i>Science</i> , 2021, 374, 1321-1322.	6.0	12

#	ARTICLE	IF	CITATIONS
2583	Nanostructured Materials and Architectures for Advanced Optoelectronic Synaptic Devices. <i>Advanced Functional Materials</i> , 2022, 32, .	7.8	45
2584	Suppressed electronic contribution in thermal conductivity of Ge <sub>2</sub> Sb <sub>2</sub> Se <sub>4</sub> Te. <i>Nature Communications</i> , 2021, 12, 7187.	5.8	23
2585	Density dependent local structures in InTe phase-change materials. <i>APL Materials</i> , 2021, 9, 121105.	2.2	3
2586	Elemental electrical switch enabling phase segregation-free operation. <i>Science</i> , 2021, 374, 1390-1394.	6.0	73
2587	Fiber End-Facet Integrated Non-Volatile Optical Switch Based On Ge <sub>2</sub> Sb <sub>2</sub> Te <sub>5</sub> . <i>Journal of Lightwave Technology</i> , 2022, 40, 3968-3973.	2.7	1
2588	First-Principles Calculation of Transport and Thermoelectric Coefficients in Liquid Ge <sub>2</sub> Sb <sub>2</sub> Te <sub>5</sub> . <i>Physica Status Solidi - Rapid Research Letters</i> , 2022, 16, .	1.2	4
2589	A review on the optical properties of some germanium based chalcogenide thin films and their applications. <i>Optical and Quantum Electronics</i> , 2022, 54, 1.	1.5	8
2590	Crystallization and Electrical Properties of Ge-Rich GeSbTe Alloys. <i>Nanomaterials</i> , 2022, 12, 631.	1.9	12
2591	Are phase change materials ideal for programmable photonics?: opinion. <i>Optical Materials Express</i> , 2022, 12, 2368.	1.6	16
2592	Internal reverse-biased pn junctions: A possible origin of the high resistance in chalcogenide superlattice for interfacial phase change memory. <i>Applied Physics Letters</i> , 2022, 120, .	1.5	1
2593	Ultra-compact photonic integrated content addressable memory using phase change materials. <i>Optical and Quantum Electronics</i> , 2022, 54, 1.	1.5	2
2594	A Non-volatile Quasi-Continuous All-Optical Fiber Programmable Platform Based on GST-Coated Microspheres. <i>ACS Photonics</i> , 2022, 9, 1180-1187.	3.2	7
2595	Numerical study of mid-infrared tunable metalenses based on Ge <sub>2</sub> Sb <sub>2</sub> Te <sub>5</sub> phase-change material. <i>Journal Physics D: Applied Physics</i> , 2022, 55, 244003.	1.3	1
2596	Variable range hopping conduction mechanisms in reduced rutile TiO <sub>2</sub> . <i>Physica Scripta</i> , 2022, 97, 045408.	1.2	1
2597	Real-time nanomechanical property modulation as a framework for tunable NEMS. <i>Nature Communications</i> , 2022, 13, 1464.	5.8	12
2598	Electrically driven reprogrammable phase-change metasurface reaching 80% efficiency. <i>Nature Communications</i> , 2022, 13, 1696.	5.8	125
2599	Interface Formation during the Growth of Phase Change Material Heterostructures Based on Ge-Rich Ge-Sb-Te Alloys. <i>Nanomaterials</i> , 2022, 12, 1007.	1.9	4
2600	Graphene microheater for phase change chalcogenides based integrated photonic components [Invited]. <i>Optical Materials Express</i> , 2022, 12, 1991.	1.6	7





#	ARTICLE	IF	CITATIONS
2621	Lead thioarsenate system $PbS_2As_2S_3$ : Glass formation, macroscopic, and electric properties. <i>Journal of the American Ceramic Society</i> , 2022, 105, 2605-2615.	1.9	0
2622	Photonic and Plasmonic Metasensors. <i>Laser and Photonics Reviews</i> , 2022, 16, .	4.4	62
2623	Low-Operating-Voltage Resistive Switching Memory Based on the Interlayer-Spacing Regulation of $MoSe_2$ . <i>Advanced Electronic Materials</i> , 2022, 8, .	2.6	8
2624	Deep machine learning unravels the structural origin of mid-gap states in chalcogenide glass for high-density memory integration. <i>Informa Mater</i> , 2022, 4, .	8.5	34
2625	Growth, Electronic and Electrical Characterization of Ge-Rich $GeSbTe$ Alloy. <i>Nanomaterials</i> , 2022, 12, 1340.	1.9	6
2626	Electronically Reconfigurable Photonic Switches Incorporating Plasmonic Structures and Phase Change Materials. <i>Advanced Science</i> , 2022, 9, e2200383.	5.6	29
2627	Molecular dynamics simulation of nanofilament breakage in neuromorphic nanoparticle networks. <i>Nanotechnology</i> , 2022, 33, 275602.	1.3	5
2628	Pressure dependent magnetic properties on bulk $CrBr_3$ single crystals. <i>Journal of Alloys and Compounds</i> , 2022, 911, 165034.	2.8	5
2629	Active volume engineered waveguide embedded nonvolatile photonic memory cell. <i>Journal of the Optical Society of America B: Optical Physics</i> , 2022, 39, 1419.	0.9	3
2630	Order-disorder structural transition in $Pr^{3+}$ -doped $Ba_3Ga_2O_6$ for rewritable and write-once-read-many optical data storage. <i>Ceramics International</i> , 2022, , .	2.3	2
2631	Anomalous liquids on a new landscape: From water to phase-change materials. <i>Journal of Non-Crystalline Solids: X</i> , 2022, , 100094.	0.5	0
2632	Improved multilevel storage capacity in $Ge_2Sb_2Te_5$ -based phase-change memory using a high-aspect-ratio lateral structure. <i>Science China Materials</i> , 2022, 65, 2818-2825.	3.5	11
2636	Electrically responsive structural transformations triggered by vapour and temperature in a series of pleochroic bis(oxalato)chromium(III) complex salts. <i>Journal of Materials Chemistry C</i> , 2022, 10, 8024-8033.	2.7	3
2637	Effect of N Dopants on the Phase Change Characteristics of $Cr_2Ge_2Te_6$ Film Revealed by Changes in Optical Properties. <i>SSRN Electronic Journal</i> , 0, , .	0.4	0
2638	Phase change memory materials and their applications. <i>Russian Chemical Reviews</i> , 2022, 91, .	2.5	9
2639	Rotational freedom thin-film solar cell using a reconfigurable nano-antenna with 4-(Dimethylamino)ethylstilbazolium Tosylate. <i>IET Optoelectronics</i> , 2022, 16, 179-187.	1.8	4
2640	Transmission Electron Microscopy Study on the Effect of Thermal and Electrical Stimuli on $Ge_2Te_3$ Based Memristor Devices. <i>Frontiers in Electronics</i> , 2022, 3, .	2.0	0
2641	Glass as a State of Matter – The “Newer” Glass Families from Organic, Metallic, Ionic to Non-silicate Oxide and Non-oxide Glasses. <i>Reviews in Mineralogy and Geochemistry</i> , 2022, 87, 1039-1088.	2.2	9

#	ARTICLE	IF	CITATIONS
2642	CO <sub>2</sub> -Induced Melting and Solvation Reconfiguration of Phase-Change Electrolyte. <i>Advanced Materials</i> , 2022, 34, e2202869.	11.1	4
2643	Interlaboratory study on Sb <sub>2</sub> S <sub>3</sub> interplay between structure, dielectric function, and amorphous-to-crystalline phase change for photonics. <i>IScience</i> , 2022, 25, 104377.	1.9	29
2644	Electrically Tunable Antiferroelectric to Paraelectric Switching in a Semiconductor. <i>Nano Letters</i> , 2022, 22, 4083-4089.	4.5	4
2646	Fragile-to-Strong Transition in Phase-Change Material Ge <sub>3</sub> Sb <sub>6</sub> Te <sub>5</sub> . <i>Advanced Functional Materials</i> , 2022, 32, .	7.8	16
2647	Reconfiguring Magnetic Infrared Resonances with the Plasmonic Phase-Change Material In <sub>3</sub> SbTe <sub>2</sub> . <i>ACS Photonics</i> , 2022, 9, 1821-1828.	3.2	11
2648	Multifunctional and Transformative Metaphotonics with Emerging Materials. <i>Chemical Reviews</i> , 2022, 122, 15414-15449.	23.0	23
2650	Tunable mid-infrared selective emitter based on inverse design metasurface for infrared stealth with thermal management. <i>Optics Express</i> , 2022, 30, 18250.	1.7	20
2651	Four-Step Spin Crossover in a New Cyano-Bridged Iron-Silver Coordination Polymer. <i>Chemistry - A European Journal</i> , 2022, 28, .	1.7	3
2652	Photonic (computational) memories: tunable nanophotonics for data storage and computing. <i>Nanophotonics</i> , 2022, 11, 3823-3854.	2.9	37
2653	Structural Assessment of Interfaces in Projected Phase-Change Memory. <i>Nanomaterials</i> , 2022, 12, 1702.	1.9	2
2655	Phase Separation in Ge-Rich GeSbTe at Different Length Scales: Melt-Quenched Bulk versus Annealed Thin Films. <i>Nanomaterials</i> , 2022, 12, 1717.	1.9	5
2656	Characterisation of physicochemical properties of ((As <sub>2</sub> Se <sub>3</sub> ) <sub>0.6</sub> (AgI) <sub>0.4</sub> ) <sub>100-x</sub> (GeTe) <sub>x</sub> chalcogenide glasses for infrared devices: effect of GeTe addition. <i>Journal of Materials Science: Materials in Electronics</i> , 0, , .	1.1	0
2657	Ga doping induced structural and optical modification in $\text{Ge}_{1-x}\text{Sb}_x\text{Te}_2$ thin films. <i>Journal of Materials Science: Materials in Electronics</i> , 0, , .	1.1	0
2658	How arsenic makes amorphous GeSe a robust chalcogenide glass for advanced memory integration. <i>Scripta Materialia</i> , 2022, 218, 114834.	2.6	17
2659	Use of Low Melting Point Metals and Alloys (T <sub>m</sub> < 420 °C) as Phase Change Materials: A Review. <i>Metals</i> , 2022, 12, 945.	1.0	9
2660	Crystallization of Ge-Rich GeSbTe Alloys: The Riddle Is Solved. <i>ACS Applied Electronic Materials</i> , 2022, 4, 2682-2688.	2.0	11
2661	Optical and optoelectronic neuromorphic devices based on emerging memory technologies. <i>Nanotechnology</i> , 2022, 33, 372001.	1.3	5
2662	Unraveling the optical bandgap and local structural change during phase transition in In <sub>3</sub> SbTe <sub>2</sub> material through UV-Vis-NIR and XPS studies. <i>Journal of Applied Physics</i> , 2022, 131, .	1.1	4

#	ARTICLE	IF	CITATIONS
2663	Nonvolatile reconfigurable dynamic Janus metasurfaces in the terahertz regime. <i>Photonics Research</i> , 2022, 10, 1731.	3.4	11
2664	The Effect of Synthesis and Heat Treatment Modes on the Local Structure of a Ge <sub>2</sub> Sb <sub>2</sub> Te <sub>5</sub> Chalcogenide Semiconductor. <i>Semiconductors</i> , 0, , .	0.2	0
2665	Tuning memristance and transport properties of TiO <sub>2</sub> by oxygen vacancy concentration. <i>Applied Physics A: Materials Science and Processing</i> , 2022, 128, .	1.1	0
2666	A Review of Capabilities and Scope for Hybrid Integration Offered by Silicon-Nitride-Based Photonic Integrated Circuits. <i>Sensors</i> , 2022, 22, 4227.	2.1	15
2667	Toward flexible memory application: high-performance phase-change magnetic material Fe:GeTe films realized <i>via</i> quasi-van der Waals epitaxy. <i>Journal of Materials Chemistry C</i> , 2022, 10, 9891-9901.	2.7	4
2668	Structural changes in As <sub>40</sub> S <sub>60</sub> i <sub>1/2</sub> xSex thin films due to annealing and irradiation: Raman spectroscopy studies. <i>Ukrainian Journal of Physical Optics</i> , 2022, 23, 133-141.	9.7	0
2669	ReWORM Memory Effect in PET-Metal Fiber-Based Electroconductive Yarn. <i>IEEE Transactions on Electron Devices</i> , 2022, 69, 4236-4240.	1.6	1
2670	Fault-tolerant Neuromorphic Computing with Functional ATPG for Post-manufacturing Re-calibration. , 2022, , .		0
2671	Pt Modified Sb <sub>2</sub> Te <sub>3</sub> Alloy Ensuring High Performance Phase Change Memory. <i>Nanomaterials</i> , 2022, 12, 1996.	1.9	2
2672	Examination of a Structural Preference in Quaternary Alkali-Metal (A) Rare-Earth (R) Copper Tellurides by Combining Experimental and Quantum-chemical Means. <i>Inorganic Chemistry</i> , 2022, 61, 9269-9282.	1.9	6
2673	Reversible crystal to amorphous transformation assisted by loss and adsorption of coordination water molecules and ionic conduction in two isomorphous decavanadate-type polyoxometalates. <i>Journal of Solid State Chemistry</i> , 2022, 314, 123309.	1.4	4
2674	Optical properties of as-deposited, annealed and laser-treated Ge <sub>2</sub> Sb <sub>2</sub> Te <sub>5</sub> thin films. <i>Optical Materials Express</i> , 2022, 12, 2927.	1.6	2
2675	Neuromorphic Photonic Memory Devices Using Ultrafast, Non-Volatile Phase-Change Materials. <i>Advanced Materials</i> , 2023, 35, .	11.1	33
2676	Recent developments in phase-change memory. , 2022, 1, .		3
2677	Exploring "No Man's Land" Arrhenius Crystallization of Thin Film Phase Change Material at 1000 K <sup>1</sup> via Nanocalorimetry. <i>Advanced Materials Interfaces</i> , 2022, 9, .	1.9	5
2678	Metal Halide Perovskite-Based Memristors for Emerging Memory Applications. <i>Journal of Physical Chemistry Letters</i> , 2022, 13, 5638-5647.	2.1	38
2679	Structural and Electrical Properties of Annealed Ge <sub>2</sub> Sb <sub>2</sub> Te <sub>5</sub> Films Grown on Flexible Polyimide. <i>Nanomaterials</i> , 2022, 12, 2001.	1.9	4
2680	Polarization-selective reconfigurability in hybridized-active-dielectric nanowires. <i>Science Advances</i> , 2022, 8, .	4.7	15

#	ARTICLE	IF	CITATIONS
2682	Precise design and preparation of two 3D organic-inorganic perovskite ferroelectrics (1,5-diazabicyclo[3.2.2]nonane)RbX <sub>3</sub> (X = Br, I). <i>Chemical Communications</i> , 2022, 58, 9254-9257.	2.2	8
2683	Light-Matter Interactions in Hybrid Material Metasurfaces. <i>Chemical Reviews</i> , 2022, 122, 15177-15203.	23.0	42
2684	Two-dimensional diamonds from sp <sup>2</sup> -to-sp <sup>3</sup> phase transitions. <i>Nature Reviews Materials</i> , 2022, 7, 814-832.	23.3	28
2685	Neuromorphic Skin Based on Emerging Artificial Synapses. <i>Advanced Materials Technologies</i> , 2022, 7, .	3.0	11
2686	Reconfigurable InP waveguide components using the Sb <sub>2</sub> S <sub>3</sub> phase change material. <i>Journal of Optics (United Kingdom)</i> , 2022, 24, 094001.	1.0	6
2687	A State of the Art Review on Sensible and Latent Heat Thermal Energy Storage Processes in Porous Media: Mesoscopic Simulation. <i>Applied Sciences (Switzerland)</i> , 2022, 12, 6995.	1.3	11
2688	Vanadium dioxide-assisted switchable multifunctional metamaterial structure. <i>Optics Express</i> , 2022, 30, 26544.	1.7	27
2689	Introducing Spontaneously Phase-Separated Heterogeneous Interfaces Enables Low Power Consumption and High Reliability for Phase Change Memory. <i>Advanced Electronic Materials</i> , 2022, 8, .	2.6	2
2690	Electrical and structural properties of binary Ga-Sb phase change memory alloys. <i>Journal of Applied Physics</i> , 2022, 132, .	1.1	3
2691	Reversible and non-volatile metal-to-insulator chemical transition in molybdenum oxide films. <i>Optical Materials Express</i> , 2022, 12, 3957.	1.6	2
2692	NSbTe heat-mode resist possessing both positive and negative lithographic characteristics. <i>Materials Letters</i> , 2022, 324, 132762.	1.3	2
2693	Physical properties-temperature dynamics of GeTe, Ge <sub>2</sub> Sb <sub>2</sub> Te <sub>5</sub> and Ge <sub>2</sub> Sb <sub>2</sub> Se <sub>4</sub> Te <sub>1</sub> phase change materials. <i>Materials Science in Semiconductor Processing</i> , 2022, 150, 106907.	1.9	11
2694	Effect of N dopants on the phase change characteristics of Cr <sub>2</sub> Ge <sub>2</sub> Te <sub>6</sub> film revealed by changes in optical properties. <i>Applied Surface Science</i> , 2022, 601, 154189.	3.1	1
2695	Phonons of Phase Change Materials. <i>Physica Status Solidi - Rapid Research Letters</i> , 0, , .	1.2	1
2696	Phase transition of Al <sub>2</sub> O <sub>3</sub> -encapsulated MoTe <sub>2</sub> via rapid thermal annealing. <i>Applied Physics Letters</i> , 2022, 121, .	1.5	4
2697	Enabling Active Nanotechnologies by Phase Transition: From Electronics, Photonics to Thermotics. <i>Chemical Reviews</i> , 2022, 122, 15450-15500.	23.0	14
2698	Phase-change materials for energy-efficient photonic memory and computing. <i>MRS Bulletin</i> , 2022, 47, 502-510.	1.7	13
2699	Fabrication and performance analysis of TiN/W superlattice electrodes for low-power phase change memory. , 2022, , .		0

#	ARTICLE	IF	CITATIONS
2700	Unveiling the Effect of Superlattice Interfaces and Intermixing on Phase Change Memory Performance. Nano Letters, 2022, 22, 6285-6291.	4.5	19
2701	An Oxygen Vacancy Memristor Ruled by Electron Correlations. Advanced Science, 2022, 9, .	5.6	5
2702	Review on the Basic Circuit Elements and Memristor Interpretation: Analysis, Technology and Applications. Journal of Low Power Electronics and Applications, 2022, 12, 44.	1.3	6
2703	Origin of the unusual property contrast in $K_2Bi_8Se_{13}$ phase-change material. Applied Physics Letters, 2022, 121, 061901.	1.5	0
2704	Advances in Emerging Photonic Memristive and Memristive-Like Devices. Advanced Science, 2022, 9, .	5.6	15
2705	Reconfigurable Size-Sorting of Micronanoparticles in Chalcogenide Waveguide Array. Advanced Photonics Research, 0, , 2200078.	1.7	1
2706	Terahertz multi-level nonvolatile optically rewritable encryption memory based on chalcogenide phase-change materials. IScience, 2022, 25, 104866.	1.9	5
2707	Evaluation of vibrational properties and local structure change during phase transition in $Ge_2Sb_2Te_5$ and $In_3SbTe_2$ phase change materials. Semiconductor Science and Technology, 0, , .	1.0	1
2708	Crystallization Kinetics in a Glass-Forming Hybrid Metal Halide Perovskite. , 2022, 4, 1840-1847.		10
2709	New insights in GeTe growth mechanisms. Journal of Alloys and Compounds, 2022, 924, 166614.	2.8	2
2710	Low-power phase-change memory cell based on a doped GeTe/InP heterostructure: a first-principles study. Journal of Computational Electronics, 0, , .	1.3	0
2711	Emerging phase change memory devices using non-oxide semiconducting glasses. Journal of Non-Crystalline Solids, 2022, 597, 121874.	1.5	13
2712	An experimental study of Ge diffusion through $Ge_2Sb_2Te_5$ . Materials Science in Semiconductor Processing, 2022, 152, 107101.	1.9	6
2713	Exploration of Scandium Doping in SbTe for Phase Change Memory Application. IEEE Transactions on Electron Devices, 2022, 69, 6106-6112.	1.6	3
2714	Dynamic Mapping of Temperature Using Phase-Change Materials. , 2022, , .		0
2715	Electron-Induced Effects in Ge-Se Films Studied by Kelvin Probe Force Microscopy. SSRN Electronic Journal, 0, , .	0.4	0
2716	Resonance behavior of embedded and freestanding microscale ferromagnets. Scientific Reports, 2022, 12, .	1.6	5
2717	Anomalous electrical conductivity change in $MoS_2$ during the transition from the amorphous to crystalline phase. Ceramics International, 2023, 49, 2619-2625.	2.3	8

#	ARTICLE	IF	CITATIONS
2718	Photoinduced Ultrafast Transition of the Local Correlated Structure in Chalcogenide Phase-Change Materials. <i>Physical Review Letters</i> , 2022, 129, .	2.9	7
2719	Nitrogen tuned crystal structure, optical band gap, localized states on amorphous and crystalline GeTe films. <i>Materials Letters</i> , 2022, , 133199.	1.3	2
2720	Understanding the Origin of Low-Energy Operation Characteristics for Cr <sub>2</sub> Ge <sub>2</sub> Te <sub>6</sub> Phase-Change Material: Enhancement of Thermal Efficiency in the High-Scaled Memory Device. <i>ACS Applied Materials &amp; Interfaces</i> , 2022, 14, 44604-44613.	4.0	6
2721	Thermal Management in Neuromorphic Materials, Devices, and Networks. <i>Advanced Materials</i> , 2023, 35, .	11.1	5
2722	Resistance Drift Convergence and Inversion in Amorphous Phase Change Materials. <i>Advanced Functional Materials</i> , 2022, 32, .	7.8	4
2723	Exciton resonances for atomically-thin optics. <i>Journal of Applied Physics</i> , 2022, 132, .	1.1	6
2724	A Superlattice Interfacial Phase Change Material with Low Power Consumption. <i>Journal of Electronic Materials</i> , 2022, 51, 6238-6243.	1.0	1
2725	In situ characterization of vacancy ordering in Ge-Sb-Te phase-change memory alloys. <i>Fundamental Research</i> , 2022, , .	1.6	4
2726	Advances in optoelectronic artificial synapses. <i>Cell Reports Physical Science</i> , 2022, 3, 101037.	2.8	11
2727	Design of projected phase-change memory mushroom cells for low-resistance drift. <i>MRS Bulletin</i> , 0, , .	1.7	2
2728	All-optically modulated nonvolatile optical switching based on a graded-index multimode fiber. <i>Optics Express</i> , 2022, 30, 36691.	1.7	2
2729	Opportunities and Challenges for Large-Scale Phase-Change Material Integrated Electro-Photonics. <i>ACS Photonics</i> , 2022, 9, 3181-3195.	3.2	23
2730	Nonvolatile chirality switching in terahertz chalcogenide metasurfaces. <i>Microsystems and Nanoengineering</i> , 2022, 8, .	3.4	4
2731	Strong and Omnidirectional Light Absorption from Ultraviolet to Near-Infrared Using GST Metasurface. <i>Laser and Photonics Reviews</i> , 2023, 17, .	4.4	13
2732	Exact solution of arrhenius equation under the square root heating model. <i>AEJ - Alexandria Engineering Journal</i> , 2023, 65, 475-479.	3.4	2
2733	Thermal smart materials with tunable thermal conductivity: Mechanisms, materials, and applications. <i>Science China: Physics, Mechanics and Astronomy</i> , 2022, 65, .	2.0	9
2734	Plasmonic hot-electron reconfigurable photodetector based on phase-change material Sb <sub>2</sub> S <sub>3</sub> . <i>Optics Express</i> , 2022, 30, 38953.	1.7	5
2735	Effect of adding CsI on properties of Ge <sub>20</sub> Sb <sub>10</sub> Se <sub>65</sub> Te <sub>5</sub> glass. <i>Infrared Physics and Technology</i> , 2022, 126, 104370.	1.3	1

#	ARTICLE	IF	CITATIONS
2736	Above room temperature dielectric switchable organic co-crystal [C <sub>4</sub> H <sub>4</sub> O <sub>4</sub> ]·n[C <sub>3</sub> H <sub>9</sub> N] with Hirshfeld surface analyses. <i>Inorganic Chemistry Communication</i> , 2022, 145, 110032.	1.8	2
2737	Vertically oriented 2D layered perovskite-based resistive random access memory (ReRAM) crossbar arrays. <i>Current Applied Physics</i> , 2022, 44, 46-54.	1.1	1
2738	New two-dimensional GeSbTe semiconductors with high photovoltaic performance for solar energy conversion. <i>Journal of Materials Chemistry C</i> , 2022, 10, 16813-16821.	2.7	2
2739	A Robust Time-Based Multi-Level Sensing Circuit for Resistive Memory. <i>IEEE Transactions on Circuits and Systems I: Regular Papers</i> , 2023, 70, 340-352.	3.5	4
2740	Realizing ultra-low thermal conductivity by strong synergy of asymmetric geometry and electronic structure in boron nitride and arsenide. <i>Rare Metals</i> , 2023, 42, 210-221.	3.6	3
2741	Roadmap on chalcogenide photonics. <i>JPhys Photonics</i> , 2023, 5, 012501.	2.2	9
2742	Architecting Optically Controlled Phase Change Memory. <i>Transactions on Architecture and Code Optimization</i> , 2022, 19, 1-26.	1.6	7
2743	Thermal properties of geopolymer composites containing microencapsulated phase change materials. , 2023, 2, .		1
2744	Photoexcitation-Induced Nonthermal Ultrafast Loss of Long-Range Order in GeTe. <i>Journal of Physical Chemistry Letters</i> , 2022, 13, 10230-10236.	2.1	1
2745	GST-Based Plasmonic Biosensor for Hemoglobin and Urine Detection. <i>Plasmonics</i> , 2022, 17, 2391-2404.	1.8	13
2746	Impact of process-induced ellipticity on the RESET process of cylindrical phase change memory devices. <i>Physica Scripta</i> , 0, .	1.2	0
2747	A chiral lead-free tin(IV)-based halide organic-inorganic semiconductor with dielectric switching and phase transition. <i>Chinese Chemical Letters</i> , 2023, 34, 107980.	4.8	20
2748	Broadband Photosensitive Medium Based on Amorphous Equichalcogenides. <i>ACS Applied Electronic Materials</i> , 2022, 4, 5397-5405.	2.0	1
2749	Viscoelastic behavior and fragility of Se-deficient chalcogenide liquids in As-P-Se system. <i>Journal of Non-Crystalline Solids: X</i> , 2022, 16, 100128.	0.5	2
2750	Theoretical study of the structural, electronic and optical properties of the t-Se <sub>1-x</sub> Te <sub>x</sub> system for x = 0.03, 0.04 and 0.08 and for these systems containing a defect in the dihedral angle. <i>Physica B: Condensed Matter</i> , 2023, 648, 414349.	1.3	0
2751	Two-stage conductivity switching of GST thin films induced by femtosecond laser radiation. <i>Optics and Laser Technology</i> , 2023, 157, 108773.	2.2	4
2752	Effect of temperature on structural, dynamical, and electronic properties of Sc <sub>2</sub> Te <sub>3</sub> from first-principles calculations. <i>RSC Advances</i> , 2022, 12, 32796-32802.	1.7	1
2753	Phase-Change Memories. <i>Springer Handbooks</i> , 2023, , 1093-1121.	0.3	0

#	ARTICLE	IF	CITATIONS
2754	Tailoring the oxygen concentration in Ge-Sb-O alloys to enable femtojoule-level phase-change memory operations. <i>Materials Futures</i> , 2022, 1, 045302.	3.1	9
2755	Nano-LED driven phase change evolution of layered chalcogenides for Raman spectroscopy investigations. <i>FlatChem</i> , 2022, 36, 100447.	2.8	4
2756	Joule heating induced non-melting phase transition and multi-level conductance in MoTe <sub>2</sub> based phase change memory. <i>Applied Physics Letters</i> , 2022, 121, .	1.5	5
2757	Exploring the subtle factors that control the structural preferences in Cu <sub>7</sub> Te <sub>4</sub> . <i>Journal of Physics Condensed Matter</i> , 0, , .	0.7	1
2758	Characterizing optical phase-change materials with spectroscopic ellipsometry and polarimetry. <i>Thin Solid Films</i> , 2022, 763, 139580.	0.8	3
2759	Impact of process-induced variability on multi-bit phase change memory devices. <i>Microelectronics Journal</i> , 2022, 130, 105638.	1.1	1
2760	Plasmon-Assisted Self-Encrypted All-Optical Memory. <i>Advanced Functional Materials</i> , 2023, 33, .	7.8	3
2761	Recent advances in doped Ge <sub>2</sub> Sb <sub>2</sub> Te <sub>5</sub> thin film based phase change memories. <i>Materials Advances</i> , 2023, 4, 747-768.	2.6	11
2762	Electron-induced effects in Ge-Se films studied by Kelvin probe force microscopy. <i>Journal of Non-Crystalline Solids</i> , 2023, 601, 121964.	1.5	1
2763	Highly tunable $\hat{\nu}^2$ -relaxation enables the tailoring of crystallization in phase-change materials. <i>Nature Communications</i> , 2022, 13, .	5.8	9
2764	Classification of properties and their relation to chemical bonding: Essential steps toward the inverse design of functional materials. <i>Science Advances</i> , 2022, 8, .	4.7	15
2765	Dielectric functions evolution and electronic bandgap manipulation by silicon doping for Sb <sub>2</sub> Te <sub>3</sub> phase change films: Temperature dependent spectroscopic ellipsometry study. <i>Journal of Applied Physics</i> , 2022, 132, 205109.	1.1	0
2766	Near-Infrared Artificial Optical Synapse Based on the P(VDF-TrFE)-Coated InAs Nanowire Field-Effect Transistor. <i>Materials</i> , 2022, 15, 8247.	1.3	1
2767	Structural and electronic properties of the Te-Si(111) surface from first principles. <i>Physical Review B</i> , 2022, 106, .	1.1	1
2768	Flexible Memristor Devices Using Hybrid Polymer/Electrodeposited GeSbTe Nanoscale Thin Films. <i>ACS Applied Nano Materials</i> , 2022, 5, 17711-17720.	2.4	9
2769	Modulation of the Phase Transition Behavior of VO <sub>2</sub> Nanofilms by the Coupling of Zr Doping and Thickness-Dependent Band Gap. <i>ACS Applied Electronic Materials</i> , 2022, 4, 6067-6075.	2.0	2
2770	Artificial Intelligence and Advanced Materials. <i>Advanced Materials</i> , 2023, 35, .	11.1	10
2771	Device-System End-to-End Design of Photonic Neuromorphic Processor Using Reinforcement Learning. <i>Laser and Photonics Reviews</i> , 2023, 17, .	4.4	3



#	ARTICLE	IF	CITATIONS
2772	Interface Defects Tuning in Polymer-Perovskite Phototransistors for Visual Synapse and Adaptation Functions. <i>Advanced Functional Materials</i> , 2023, 33, .	7.8	14
2773	Elastic Moduli: a Tool for Understanding Chemical Bonding and Thermal Transport in Thermoelectric Materials. <i>Angewandte Chemie</i> , 2023, 135, .	1.6	1
2774	Some novel perspectives of iso-conversional analysis in the study of Meyer-Neldel energy for thermally governed crystallization by using Johnson-Mehl-Avrami (JMA) theory. <i>Journal of Thermal Analysis and Calorimetry</i> , 0, , .	2.0	0
2775	Bi-induced photochromism and photo-stimulated luminescence with fast photochromic response for multi-mode dynamic anti-counterfeiting and optical information storage. <i>Chemical Engineering Journal</i> , 2023, 455, 140752.	6.6	21
2776	Phase Transition of $\text{MoTe}_2$ Controlled in van der Waals Heterostructure Nanoelectromechanical Systems. <i>Small</i> , 2023, 19, .	5.2	3
2777	Oxyonic Threshold Switch Chalcogenides: Connecting the First-Principles Electronic Structure to Selector Device Parameters. <i>ACS Applied Electronic Materials</i> , 2023, 5, 461-469.	2.0	8
2778	Revisiting the Nature of Chemical Bonding in Chalcogenides to Explain and Design their Properties. <i>Advanced Materials</i> , 2023, 35, .	11.1	32
2779	Metavalent Bonding Origins of Unusual Properties of Group IV Chalcogenides. <i>Advanced Materials</i> , 2023, 35, .	11.1	18
2780	Elastic Moduli: a Tool for Understanding Chemical Bonding and Thermal Transport in Thermoelectric Materials. <i>Angewandte Chemie - International Edition</i> , 2023, 62, .	7.2	15
2781	Ultrafast Temporal-Spatial Dynamics of Phase Transition in N-Doped $\text{Ge}_2\text{Sb}_2\text{Te}_5$ Film Induced by Femtosecond Laser Pulse Irradiation. <i>Micromachines</i> , 2022, 13, 2168.	1.4	1
2782	Design of metasurfaces with decoupled amplitude and phase response for spatial light modulation. <i>Optics Letters</i> , 2023, 48, 117.	1.7	1
2783	Structural Color of Multi-Order Fabry-Perot Resonator Based on $\text{Sc}_0.2\text{Sb}_2\text{Te}_3$ Enhanced Saturated Reflection Color. <i>Photonics</i> , 2023, 10, 70.	0.9	1
2784	Laser-driven first-order spin reorientation and Verwey phase transitions in magnetite $\text{Fe}_3\text{O}_4$ beyond the range of thermodynamic equilibrium. <i>Physical Review B</i> , 2023, 107, .	1.1	0
2785	The Nanoscale Electrical Damage Mechanism of $\text{Ge}_x\text{Sb}_y\text{Te}_z$ Phase-Change Films Discovered by Conductive Atomic Force Microscopy. <i>IEEE Electron Device Letters</i> , 2023, 44, 488-491.	2.2	0
2786	Advances in Chalcogenide Glasses (ChGs): Past, Present, and Future Applications. <i>Advances in Material Research and Technology</i> , 2023, , 153-168.	0.3	3
2787	Structure and Crystallization Kinetics of As-Deposited Films of the $\text{GeTe}$ Phase Change Compound from Atomistic Simulations. <i>Physica Status Solidi - Rapid Research Letters</i> , 2023, 17, .	1.2	4
2788	Density of amorphous sputtered $\text{Ge}_2\text{Sb}_2\text{Te}_5$ thin films. <i>AIP Advances</i> , 2023, 13, 015014.	0.6	2
2789	Elemental Redistribution During the Crystallization of $\text{Ge}_x\text{Cu}_y\text{Te}$ Thin Films for Phase-Change Memory. <i>ECS Journal of Solid State Science and Technology</i> , 2023, 12, 014003.	0.9	1

#	ARTICLE	IF	CITATIONS
2790	Enhanced surface effects and optical property modulation of Ge <sub>2</sub> Sb <sub>2</sub> Te <sub>5</sub> by pulsed laser irradiation. Optical Materials Express, 2023, 13, 566.	1.6	2
2791	Reflective-to-absorptive THz switchable bifunctionality through phase transition of vanadium dioxide in a 1D defective photonic crystal microcavity. Journal of Computational Electronics, 0, , .	1.3	0
2792	Varifocal Metalens Using Tunable and Ultralow-loss Dielectrics. Advanced Science, 2023, 10, .	5.6	13
2793	Switchable Wideband Terahertz Absorber Based on Refractory and Vanadium Dioxide Metamaterials. IEEE Photonics Journal, 2023, 15, 1-6.	1.0	2
2794	2.5D switchable metasurfaces. Optics and Laser Technology, 2023, 161, 109122.	2.2	2
2795	Optical excitation-induced ultrafast amorphization in the Y-Sb-Te alloy system: Insights from real-time time-dependent DFT with molecular dynamics calculations. Physical Review B, 2022, 106, .	1.1	4
2796	Phase-change transition of chalcogenide system Ge <sub>8</sub> Sb <sub>2</sub> xB <sub>1-x</sub> Te <sub>11</sub> through femtosecond laser pulses. , 2022, 19, 909-925.		0
2797	Cd-codoped Sb <sub>2</sub> Te <sub>3</sub> chalcogenides for reducing writing current of phase-change devices. Applied Physics Letters, 2020, 117, .	1.5	2
2798	[C <sub>5</sub> H <sub>12</sub> N] <sub>2</sub> SnBr <sub>6</sub> : a lead-free phase transition compound with switchable quadratic nonlinear optical properties. Materials Chemistry Frontiers, 2023, 7, 1599-1606.	3.2	4
2799	The Relationship between Electron Transport and Microstructure in Ge <sub>2</sub> Sb <sub>2</sub> Te <sub>5</sub> Alloy. Nanomaterials, 2023, 13, 582.	1.9	3
2800	Directional Scattering Switching from an All-Dielectric Phase Change Metasurface. Nanomaterials, 2023, 13, 496.	1.9	4
2801	Exploring the Interdependence between Electronically Unfavorable Situations and Pressure in a Chalcogenide Superconductor. Inorganics, 2023, 11, 61.	1.2	0
2802	Defects in Amorphous and Organic Semiconductors. , 2023, , 861-895.		0
2803	Rewritable Pressure-Driven <i>n</i> - <i>p</i> Conduction Switching in Marcasite-Type CrSb <sub>2</sub> . Chemistry of Materials, 2023, 35, 1449-1457.	3.2	5
2804	Interface dewetting as a source of void formation and aggregation in phase change nanoscale actuators. Applied Physics Letters, 2023, 122, .	1.5	0
2805	Glass transition, topology, and elastic models of Se-based glasses. Journal of the American Ceramic Society, 2023, 106, 3277-3302.	1.9	0
2806	Te and Ge solid-state reaction: comparison between the 2D and 3D growth of $\pm$ -GeTe. Journal of Materials Chemistry C, 2023, 11, 3306-3313.	2.7	1
2807	A Survey on Optical Phase-Change Memory: The Promise and Challenges. IEEE Access, 2023, 11, 11781-11803.	2.6	10

#	ARTICLE	IF	CITATIONS
2808	Optical phonons of GeSbTe alloys: Influence of structural disorder. Journal of Alloys and Compounds, 2023, 942, 169122.	2.8	0
2809	Continuously controlling the phase transition of In <sub>3</sub> SbTe <sub>2</sub> for tunable high quality-factors absorber. Optics and Laser Technology, 2023, 162, 109239.	2.2	3
2810	Artificial Synapses Based On Two-Dimensional Materials. , 2023, , 658-675.		0
2811	Discovery of a metastable van der Waals semiconductor <i>via</i> polymorphic crystallization of an amorphous film. Materials Horizons, 2023, 10, 2254-2261.	6.4	2
2812	Ethyl acetoacetate and acetylacetonate appended hexabromo porphyrins: synthesis, spectral, electrochemical, and femtosecond third-order nonlinear optical studies. Dalton Transactions, 2023, 52, 5523-5533.	1.6	0
2813	CMOS-compatible electro-optical SRAM cavity device based on negative differential resistance. Science Advances, 2023, 9, .	4.7	4
2814	A pressure-induced high-pressure metallic GeTe phase. Journal of Chemical Physics, 2023, 158, .	1.2	1
2815	Diffusion-assisted displacive transformation in Yttrium-doped Sb <sub>2</sub> Te <sub>3</sub> phase change materials. Acta Materialia, 2023, 249, 118809.	3.8	3
2816	Sb <sub>2</sub> Te <sub>3</sub> /TiTe <sub>2</sub> Heterostructure-Based Phase Change Memory for Fast Set Speed and Low Reset Energy. Physica Status Solidi - Rapid Research Letters, 2023, 17, .	1.2	1
2817	Understanding crystallization in undoped and nitrogen doped GeTe thin films using substrate curvature measurements. Materialia, 2023, 28, 101738.	1.3	0
2818	Effect of vacancy ordering on the grain growth of Ge <sub>2</sub> Sb <sub>2</sub> Te <sub>5</sub> film. Nanotechnology, 2023, 34, 155703.	1.3	1
2819	Pulse-to-pulse ultrafast dynamics of highly photoexcited Ge <sub>2</sub> Sb <sub>2</sub> Te <sub>5</sub> thin films. Japanese Journal of Applied Physics, 2023, 62, 022001.	0.8	2
2820	Trade-off between Multilevel Characteristics and Power Consumption of High Aspect Ratio Phase Change Memory. Physica Status Solidi - Rapid Research Letters, 0, , 2200463.	1.2	0
2821	Toward the Speed Limit of Phase Change Memory. Advanced Materials, 2023, 35, .	11.1	14
2822	Modeling Reset, Set, and Read Operations in Nanoscale Ge <sub>2</sub> Sb <sub>2</sub> Te <sub>5</sub> Phase Change Memory Devices Using Electric Field and Temperature-Dependent Material Properties. Physica Status Solidi - Rapid Research Letters, 2023, 17, .	1.2	1
2823	Low-loss strong index modulated ultra-thermally stable optical phase-change material for broadband nonvolatile photonics. Journal of Applied Physics, 2023, 133, 053101.	1.1	1
2824	In-memory computing with emerging memory devices: Status and outlook. , 2023, 1, .		14
2825	Optical band-gap evolution and local structural change in Ge <sub>2</sub> Sb <sub>2</sub> Te <sub>5</sub> phase change material. Journal of Physics: Conference Series, 2023, 2426, 012045.	0.3	0

#	ARTICLE	IF	CITATIONS
2826	Reconfigurable and Polarization-Dependent Grating Absorber for Large-Area Emissivity Control Based on the Plasmonic Phase-Change Material $\text{In}_3\text{SbTe}_2$ . <i>Advanced Optical Materials</i> , 2023, 11, .	3.6	15
2827	Phase-change materials based on amorphous equichalcogenides. <i>Scientific Reports</i> , 2023, 13, .	1.6	4
2828	Multistep Crystallization of Ge-Rich GST Unveiled by <i>In-Situ</i> synchrotron X-ray diffraction and (scanning) transmission electron microscopy. <i>Physica Status Solidi - Rapid Research Letters</i> , 2023, 17, .	1.2	1
2829	Dynamic crystallography reveals spontaneous anisotropy in cubic GeTe. <i>Nature Materials</i> , 2023, 22, 311-315.	13.3	9
2830	Unraveling Thermal Transport Correlated with Atomistic Structures in Amorphous Gallium Oxide via Machine Learning Combined with Experiments. <i>Advanced Materials</i> , 2023, 35, .	11.1	11
2831	Structural color generation: from layered thin films to optical metasurfaces. <i>Nanophotonics</i> , 2023, 12, 1019-1081.	2.9	19
2832	Study on Texture Formation of $\text{Sb}_2\text{Te}_3$ Thin Films for Phase Change Memory Applications. <i>Crystals</i> , 2023, 13, 377.	1.0	1
2833	High-Performance On-Chip Racetrack Resonator Based on GSST-Slot for In-Memory Computing. <i>Nanomaterials</i> , 2023, 13, 837.	1.9	5
2834	Research progress in architecture and application of RRAM with computing-in-memory. <i>Nanoscale Advances</i> , 2023, 5, 1559-1573.	2.2	3
2835	Parallel Integration of Nanoscale Atomic Layer Deposited $\text{Ge}_2\text{Sb}_2\text{Te}_5$ Phase-Change Memory with an Indium Gallium Zinc Oxide Thin-Film Transistor. <i>ACS Applied Electronic Materials</i> , 2023, 5, 1721-1729.	2.0	0
2836	Comparison Study Of GRA, COPRAS And MOORA For Ranking Of Phase Change Material For Cooling System. <i>Materials Today: Proceedings</i> , 2023, , .	0.9	3
2837	Nonvolatile Switchable Broadband Polarization Conversion with Wearable Terahertz Chalcogenide Metamaterials. <i>Advanced Optical Materials</i> , 2023, 11, .	3.6	12
2838	Electronic and optical band gap of $\text{GeTe-Sn}$ nanostructure. , 0, , 405-412.		0
2839	Advances in the generalized entropy theory of polymer glass formation. <i>Scientia Sinica Chimica</i> , 2023, 53, 616-627.	0.2	1
2840	Tuning of resonant mode properties of photonic crystal nanocavities using $\text{Ge}_2\text{Sb}_2\text{Te}_5$ phase-change material. <i>Indian Journal of Physics</i> , 2023, 97, 3637-3642.	0.9	1
2842	Glassy and liquid $\text{Sb}_2\text{S}_3$ : insight into the structure and dynamics of a promising functional material. <i>Journal of Materials Chemistry C</i> , 2023, 11, 4654-4673.	2.7	5
2843	Great Potential of Si-Te Ovonic Threshold Selector in Electrical Performance and Scalability. <i>Nanomaterials</i> , 2023, 13, 1114.	1.9	2
2844	Switching of electromagnetic induced transparency in terahertz metasurface. <i>Journal Physics D: Applied Physics</i> , 2023, 56, 205101.	1.3	3

#	ARTICLE	IF	CITATIONS
2845	Research Process of Carbon Dots in Memristors. <i>Advanced Electronic Materials</i> , 2023, 9, .	2.6	6
2846	Thermally insulating and fire-retardant bio-mimic structural composites with a negative Poisson's ratio for battery protection. , 2023, 5, .		4
2847	Rewritable Photonic Integrated Circuits Using Dielectric-assisted Phase-change Material Waveguides. <i>Optics Letters</i> , 0, , .	1.7	0
2848	Metavalent Bonding in Layered Phase-Change Memory Materials. <i>Advanced Science</i> , 2023, 10, .	5.6	9
2849	Atomic-thick metastable phase RhMo nanosheets for hydrogen oxidation catalysis. <i>Nature Communications</i> , 2023, 14, .	5.8	18
2850	Octahedral to tetrahedral bonding transitions in the local structure of phase change optical media $\text{Ge}_2\text{Sb}_2\text{Se}_5\text{Te}_5$ with Se doping. <i>AIP Advances</i> , 2023, 13, 045005.	0.6	0
2851	Probing Matter by Light. <i>Springer Series in Optical Sciences</i> , 2023, , 277-319.	0.5	0
2852	In situ study of the crystallization in $\text{GeTe}_{0.26}\text{Se}_{0.74}$ thick film by synchrotron X-ray diffraction. <i>Journal of Alloys and Compounds</i> , 2023, 953, 170034.	2.8	0
2853	Mode-splitting Phenomena and Enhanced Notch Depth in Microstrip Transmission Line Loaded with Two Similar Square-shaped Split Ring Resonators. , 2023, , .		2
2854	Rational Engineering of 2D Materials as Advanced Catalyst Cathodes for High-Performance Metal-Free Carbon Dioxide Batteries. <i>Small Structures</i> , 2023, 4, .	6.9	2
2855	In-Memory Computing for Machine Learning and Deep Learning. <i>IEEE Journal of the Electron Devices Society</i> , 2023, 11, 587-601.	1.2	2
2856	Enhancement of thermal stability and device performances through $\text{XTe}_2/\text{TaxSb}_2\text{Te}_3$ -based phase-change heterostructure. <i>Applied Surface Science</i> , 2023, 626, 157291.	3.1	1
2896	Recent Advances in Chalcogenide Glasses and their Applications. , 2023, , 26-45.		0
2911	Thermal properties of cubic $\text{NaSbS}_2$ : diffusion dominant thermal transport above the Debye temperature. <i>Chemical Communications</i> , 0, , .	2.2	0
2917	Multi-scale Neural Model for Tool-Narayanaswamy-Moynihan Model Parameter Extraction. <i>Lecture Notes in Networks and Systems</i> , 2023, , 24-33.	0.5	0
2924	A chiral two-dimensional perovskite-like lead-free bismuth(III) iodide hybrid with high phase transition temperature. <i>Chemical Communications</i> , 2023, 59, 10295-10298.	2.2	2
2930	In-memory computing based on phase change memory for high energy efficiency. <i>Science China Information Sciences</i> , 2023, 66, .	2.7	0
2958	Stochastic Emerging Resistive Memories for Unconventional Computing. , 2023, , 240-269.		0

#	ARTICLE	IF	CITATIONS
2959	Memory Technology: Development, Fundamentals, and Future Trends. , 2023, , 1-36.		0
2967	Analysis of Charge Distributions in Functional Transition-Metal Tellurides. Topics in Catalysis, 0, , .	1.3	0
2977	Devices and Architectures for Efficient Computing In-Memory (CIM) Design. Lecture Notes in Computer Science, 2023, , 437-450.	1.0	0
2978	Effect partial replacement of germanium by cadmium on dielectrically properties of Ge <sub>35</sub> -S <sub>65</sub> -X-CdX chalcogenide compound. AIP Conference Proceedings, 2023, , .	0.3	0
2997	A non-volatile bipolar optical fiber memory based on phase change materials. , 2023, , .		0
3004	Germanium-telluride-based thermoelectrics. , 2024, 1, 109-123.		0
3015	Emerging memory electronics for non-volatile radiofrequency switching technologies. , 2024, 1, 10-23.		0
3021	Introduction to phase change photonics. , 2024, , 1-10.		0
3023	Configuring phase-change materials for photonics. , 2024, , 67-117.		0
3024	Challenges associated with phase-change material selection. , 2024, , 233-250.		0