Alexander Kolobov

List of Publications by Year
in descending order

261	9,127	53794	49909
papers	citations	45 h-index	87 g-index

272	272	272	5462
all docs	docs citations	times ranked	citing authors

#	Article	IF	Citations
1	The formation of a one-dimensional van der Waals selenium crystal from the three-dimensional amorphous phase: A spectroscopic signature of van der Waals bonding. Applied Physics Letters, 2022, 120, 033103.	3.3	2
2	Improved Ordering of Quasi-Two-Dimensional MoS₂ via an Amorphous-to-Crystal Transition Initiated from Amorphous Sulfur-Rich MoS_{2+x}. Crystal Growth and Design, 2022, 22, 3072-3079.	3.0	7
3	Electric Fields and Interfacial Phaseâ€Change Memory Structures. Physica Status Solidi - Rapid Research Letters, 2021, 15, 2000412.	2.4	3
4	Chalcogenide Materials Engineering for Phaseâ€Change Memory and Future Electronics Applications: From Sbâ€“Te to Biâ€“Te. Physica Status Solidi - Rapid Research Letters, 2021, 15, 2000414.	2.4	7
5	Effect of doping of molybdenum on the optical properties of glasses of the Asâ€”S system. Physics of Complex Systems, 2021, 2, 115-121.	0.2	2
6	Dimensional transformation of chemical bonding during crystallization in a layered chalcogenide material. Scientific Reports, 2021, 11, 4782.	3.3	16
7	Dielectric relaxation in amorphous and crystalline Sb2Te3 thin films. Journal of Materials Science: Materials in Electronics, 2021, 32, 14072-14078.	2.2	5
8	On the ultimate resolution of As2S3-based inorganic resists. Journal of Non-Crystalline Solids, 2021, 563, 120816.	3.1	3
9	Understanding the low resistivity of the amorphous phase of <mml:math xmlns:mml="http://www.w3.org/1998/Math/MathML"><mml:mrow><mml:msub><mml:mi>Cr</mml:mi><mml:mn>2</mml:mn></mml:msub></mml:mrow></mml:math> phase-change material: Experimental evidence for the key role of Cr clusters. Physical Review Materials, 2021, 5, .	2.4	4
10	Evolution of the local structure surrounding nitrogen atoms upon the amorphous to crystalline phase transition in nitrogen-doped Cr2Ge2Te6 phase-change material. Applied Surface Science, 2021, 556, 149760.	6.1	4
11	Polymorphism of CdTe in the Fewâ€Monolayer Limit. Physica Status Solidi - Rapid Research Letters, 2021, 15, 2100358.	2.4	3
12	Amorphous-to-Crystal Transition in Quasi-Two-Dimensional MoS₂: Implications for 2D Electronic Devices. ACS Applied Nano Materials, 2021, 4, 8834-8844.	5.0	22
13	Recent developments concerning the sputter growth of chalcogenide-based layered phase-change materials. Materials Science in Semiconductor Processing, 2021, 135, 106079.	4.0	12
14	Phase-Change Alloys: Structural Aspects. , 2021, , 323-339.		0
15	Crystalline Sb 2 Te 3 : Side Surfaces and Disappearance of Dirac Cones. Physica Status Solidi - Rapid Research Letters, 2021, 15, 2000418.	2.4	2
16	Crystal Growth in Amorphous Selenium Thin Filmsâ€Reviewed and Revisited: Direct Comparison of Microscopic and Calorimetric Measurements. Crystal Growth and Design, 2021, 21, 7087-7097.	3.0	9
17	Dielectric Relaxation and Charge Transfer in Amorphous MoS₂ Thin Films. Physica Status Solidi (B): Basic Research, 2020, 257, 2000114.	1.5	5
18	The importance of contacts in Cu2GeTe3 phase change memory devices. Journal of Applied Physics, 2020, 128, .	2.5	11

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19	Effects of electric and magnetic fields on the resistive switching operation of iPCM. Applied Physics Letters, 2020, 116, 201903.	3.3	1
20	Structural Metastability in Chalcogenide Semiconductors: The Role of Chemical Bonding. Physica Status Solidi (B): Basic Research, 2020, 257, 2000138.	1.5	3
21	Structural and Dielectric Study of Thin Amorphous Layers of the Geâ€“Sbâ€“Te System Prepared by RF Magnetron Sputtering. Semiconductors, 2020, 54, 201-204.	0.5	0
22	Ultrafast dynamics of the low frequency shear phonon in 1Tâ€²-MoTe2. Applied Physics Letters, 2020, 116, .	3.3	21
23	High-quality sputter-grown layered chalcogenide films for phase change memory applications and beyond. Journal Physics D: Applied Physics, 2020, 53, 284002.	2.8	23
24	Dielectric relaxation in the GeSb2Te4 phase-change material. AIP Conference Proceedings, 2020, , .	0.4	1
25	Direct observation of amorphous to crystalline phase transitions in Geâ€“Sbâ€“Te thin films by grazing incidence X-ray diffraction method. Journal of Materials Science: Materials in Electronics, 2020, 31, 10196-10206.	2.2	4
26	Photon energy dependence of Kerr rotation in GeTe/Sb₂Te₃ chalcogenide superlattices. Journal of Physics Condensed Matter, 2019, 31, 415502.	1.8	2
27	Cr-Triggered Local Structural Change in Cr₂Ge₂Te₆ Phase Change Material. ACS Applied Materials & Interfaces, 2019, 11, 43320-43329.	8.0	26
28	Remote epitaxy using graphene enables growth of stress-free GaN. Nanotechnology, 2019, 30, 505603.	2.6	38
29	Switching of the Optical Properties of Ge2Sb2Te5 Phase Change Material in the Terahertz Frequency Region. , 2019, , .		0
30	Terahertz spectroscopic characterization of Ge₂Sb₂Te₅ phase change materials for photonics applications. Journal of Materials Chemistry C, 2019, 7, 8209-8215.	5.5	38
31	Transient Fano Resonance in topological insulators observed by coherent phonon spectroscopy. EPJ Web of Conferences, 2019, 205, 04021.	0.3	0
32	Highâ€Speed Bipolar Switching of Sputtered Geâ€“Te/Sbâ€“Te Superlattice iPCM with Enhanced Cyclability. Physica Status Solidi - Rapid Research Letters, 2019, 13, 1900105.	2.4	14
33	Systematic materials design for phase-change memory with small density changes for high-endurance non-volatile memory applications. Applied Physics Express, 2019, 12, 051008.	2.4	7
34	Chalcogenide van der Waals superlattices: a case example of interfacial phase-change memory. Pure and Applied Chemistry, 2019, 91, 1777-1786.	1.9	5
35	Origin of resistivity contrast in interfacial phase-change memory: The crucial role of Ge/Sb intermixing. Applied Physics Letters, 2019, 114, .	3.3	37
36	Investigation of the oxidation process in GeTe-based phase change alloy using Ge K-edge XANES spectroscopy. Pure and Applied Chemistry, 2019, 91, 1769-1775.	1.9	2

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37	Terahertz generation measurements of multilayered GeTeâ€“Sb₂Te₃ phase change materials. Optics Letters, 2019, 44, 1355.	3.3	8
38	Resistive switching characteristics of interfacial phase-change memory at elevated temperature. Japanese Journal of Applied Physics, 2018, 57, 04FE06.	1.5	7
39	Coherent Dirac plasmons in topological insulators. Physical Review B, 2018, 97, .	3.2	11
40	Understanding the fast phase-change mechanism of tetrahedrally bonded <mml:math xmlns:mml="http://www.w3.org/1998/Math/MathML"><mml:mrow><mml:msub><mml:mi>Cu</mml:mi><mml:mn>2</mml:mn></mml:: Comprehensive analyses of electronic structure and transport phenomena. Physical Review B, 2018, 97, .	3.2	11
41	A cascading nonlinear magneto-optical effect in topological insulators. Scientific Reports, 2018, 8, 3908.	3.3	10
42	(Invited) Sputter Growth of Chalcogenide Superlattice Films for Future Phase Change Memory Applications. ECS Transactions, 2018, 86, 49-54.	0.5	5
43	Zener Tunneling Breakdown in Phase-Change Materials Revealed by Intense Terahertz Pulses. Physical Review Letters, 2018, 121, 165702.	7.8	17
44	Reconfiguration of van der Waals Gaps as the Key to Switching in GeTe/Sb2Te3 Superlattices. MRS Advances, 2018, 3, 3413-3418.	0.9	2
45	Allâ€Optical Detection of Periodic Structure of Chalcogenide Superlattice Using Coherent Folded Acoustic Phonons. Physica Status Solidi - Rapid Research Letters, 2018, 12, 1800246.	2.4	0
46	Topological Phase Buried in a Chalcogenide Superlattice Monitored by Helicity-Dependent Kerr Measurement. ACS Applied Materials & Interfaces, 2018, 10, 26781-26786.	8.0	4
47	(Invited) Sputter Growth of Chalcogenide Superlattice Films for Future Phase Change Memory Application. ECS Meeting Abstracts, 2018, , .	0.0	1
48	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.	5.5	5
49	Atomic Reconfiguration of van der Waals Gaps as the Key to Switching in GeTe/Sb₂Te₃ Superlattices. ACS Omega, 2017, 2, 6223-6232.	3.5	58
50	Enhancement of coherent phonon amplitude in phase-change materials by near-infrared laser irradiation. Applied Physics Letters, 2017, 111, .	3.3	4
51	Compositional tuning in sputter-grown highly-oriented Biâ€“Te films and their optical and electronic structures. Nanoscale, 2017, 9, 15115-15121.	5.6	19
52	A Magnetoresistance Induced by a Nonzero Berry Phase in GeTe/Sb 2 Te 3 Chalcogenide Superlattices. Advanced Functional Materials, 2017, 27, 1702243.	14.9	24
53	Electronic Structure of Transition-Metal Based Cu₂GeTe₃ Phase Change Material: Revealing the Key Role of Cu d Electrons. Chemistry of Materials, 2017, 29, 7440-7449.	6.7	24
54	Local structure of the crystalline and amorphous states of<mml:math xmlns:mml="http://www.w3.org/1998/Math/MathML"><mml:mrow><mml:msub><mml:mi>Ga</mml:mi><mml:mn>2</mml:mn></mml:mr alloy without resonant bonding: A combined x-ray absorption andab initiostudy. Physical Review B, 2017, 95, .	3.2	14

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55	Pressure-Induced Phase Transitions in GeTe-Rich Geâ€“Sbâ€“Te Alloys across the Rhombohedral-to-Cubic Transitions. Inorganic Chemistry, 2017, 56, 7687-7693.	4.0	3
56	Manipulating the Bulk Band Structure of Artificially Constructed van der Waals Chalcogenide Heterostructures. ACS Applied Materials & Interfaces, 2017, 9, 23918-23925.	8.0	17
57	Phase-Change Memory Materials. Springer Handbooks, 2017, , 1-1.	0.6	4
58	Insights into the physics and chemistry of chalcogenides obtained from x-ray absorption spectroscopy. Semiconductor Science and Technology, 2017, 32, 123003.	2.0	10
59	Strain engineering of atomic and electronic structures of few-monolayer-thick GaN. Physical Review Materials, 2017, 1, .	2.4	18
60	Instability and Spontaneous Reconstruction of Few-Monolayer Thick GaN Graphitic Structures. Nano Letters, 2016, 16, 4849-4856.	9.1	51
61	A two-step process for growth of highly oriented Sb2Te3 using sputtering. AIP Advances, 2016, 6, .	1.3	47
62	Electronic excitation-induced semiconductor-to-metal transition in monolayer<mml:math xmlns:mml="http://www.w3.org/1998/Math/MathML"><mml:msub><mml:mi>MoTe</mml:mi><mml:mn>2</mml:mn></mml:msub></m Physical Review B, 2016, 94, .	3.2	48
63	Magnetism in 2D TMDC. Springer Series in Materials Science, 2016, , 365-388.	0.6	0
64	Spin-Valley Coupling. Springer Series in Materials Science, 2016, , 389-420.	0.6	1
65	TMDC Heterostructures. Springer Series in Materials Science, 2016, , 447-471.	0.6	0
66	Emerging Applications of 2D TMDCs. Springer Series in Materials Science, 2016, , 473-512.	0.6	3
67	The Neverending Story. Springer Series in Materials Science, 2016, , 513-527.	0.6	0
68	Chemistry of Chalcogenides and Transition Metals. Springer Series in Materials Science, 2016, , 7-27.	0.6	1
69	From 3D to 2D: Fabrication Methods. Springer Series in Materials Science, 2016, , 79-107.	0.6	2
70	Luminescence of 2D TMDC. Springer Series in Materials Science, 2016, , 295-320.	0.6	0
71	Excitons. Springer Series in Materials Science, 2016, , 321-363.	0.6	3
72	Bulk TMDCs: Review of Structure and Properties. Springer Series in Materials Science, 2016, , 29-77.	0.6	5

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73	Structure and Physico-Chemical Properties of Single Layer and Few-Layer TMDCs. Springer Series in Materials Science, 2016, , 109-163.	0.6	0
74	Electronic Band Structure of 2D TMDCs. Springer Series in Materials Science, 2016, , 165-226.	0.6	1
75	Raman Scattering of 2D TMDCs. Springer Series in Materials Science, 2016, , 227-294.	0.6	4
76	Two-Dimensional Transition-Metal Dichalcogenides. Springer Series in Materials Science, 2016, , .	0.6	126
77	Anisotropic lattice response induced by a linearly-polarized femtosecond optical pulse excitation in interfacial phase change memory material. Scientific Reports, 2016, 6, 19758.	3.3	9
78	Sub-nanometre resolution of atomic motion during electronic excitation in phase-change materials. Scientific Reports, 2016, 6, 20633.	3.3	29
79	Selfâ€organized van der Waals epitaxy of layered chalcogenide structures. Physica Status Solidi (B): Basic Research, 2015, 252, 2151-2158.	1.5	61
80	Understanding Phase-Change Memory Alloys from a Chemical Perspective. Scientific Reports, 2015, 5, 13698.	3.3	47
81	Anomalous Phase Change in [(GeTe)2/(Sb2Te3)]20 Superlattice Observed by Coherent Phonon Spectroscopy. Springer Proceedings in Physics, 2015, , 199-201.	0.2	2
82	Coherent gigahertz phonons in Ge2Sb2Te5phase-change materials. Journal of Physics Condensed Matter, 2015, 27, 485402.	1.8	1
83	Giant multiferroic effects in topological GeTe-Sb₂Te₃superlattices. Science and Technology of Advanced Materials, 2015, 16, 014402.	6.1	73
84	Laser-driven switching dynamics in phase change materials investigated by time-resolved X-ray absorption spectroscopy. Phase Transitions, 2015, 88, 82-89.	1.3	3
85	Femtosecond structural transformation of phase-change materials far from equilibrium monitored by coherent phonons. Nature Communications, 2015, 6, 8367.	12.8	62
86	Local structure of epitaxial GeTe and Ge₂Sb₂Te₅ films grown on InAs and Si substrates with (100) and (111) orientations: An x-ray absorption near-edge structure study. Journal of Applied Physics, 2015, 117, 125308.	2.5	9
87	Anomalous phase change process in [(GeTe)2/(Sb2Te3)]20 superlattice observed by coherent phonon spectroscopy. , 2014, , .		0
88	Coherent phonon study of (GeTe)l(Sb2Te3)m interfacial phase change memory materials. Applied Physics Letters, 2014, 105, 151902.	3.3	14
89	Ge L3-edge x-ray absorption near-edge structure study of structural changes accompanying conductivity drift in the amorphous phase of Ge2Sb2Te5. Journal of Applied Physics, 2014, 115, .	2.5	34
90	Picosecond strain dynamics in<mml:math xmlns:mml="http://www.w3.org/1998/Math/MathML"><mml:mrow><mml:msub><mml:mi>Ge</mml:mi><mml:mn>2</mml:mn></mml:msub></mml:mrow></mml:math> by time-resolved x-ray diffraction. Physical Review B, 2014, 90, .	3.2	19

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91	Abâ€initio calculations and structural studies of (SiTe) 2 (Sb 2 Te 3) n (n : 1, 2, 4 and 6) phaseâ€change superlattice films. Physica Status Solidi - Rapid Research Letters, 2014, 8, 302-306.	2.4	29
92	Athermal amorphization of crystallized chalcogenide glasses and phase-change alloys. Physica Status Solidi (B): Basic Research, 2014, 251, 1297-1308.	1.5	15
93	Ferroelectric Order Control of the Diracâ€Semimetal Phase in GeTeâ€Sb₂Te₃ Superlattices. Advanced Materials Interfaces, 2014, 1, 1300027.	3.7	155
94	Doping of ZnO nanowires using phosphorus diffusion from a spin-on doped glass source. Journal of Applied Physics, 2014, 115, 194302.	2.5	2
95	Study of band inversion in the Pb_xSn_{1â^'x}Te class of topological crystalline insulators using x-ray absorption spectroscopy. Journal of Physics Condensed Matter, 2014, 26, 475502.	1.8	11
96	Ferroelectric switching in epitaxial GeTe films. APL Materials, 2014, 2, .	5.1	67
97	Amorphous and Nanostructured Chalcogenides. Physica Status Solidi (B): Basic Research, 2014, 251, 1295-1296.	1.5	0
98	Excitation-Assisted Disordering of GeTe and Related Solids with Resonant Bonding. Journal of Physical Chemistry C, 2014, 118, 10248-10253.	3.1	27
99	Local structure of the SnTe topological crystalline insulator: Rhombohedral distortions emerging from the rocksalt phase. Physical Review B, 2014, 90, .	3.2	21
100	Mirror-symmetric Magneto-optical Kerr Rotation using Visible Light in [(GeTe)2(Sb2Te3)1]n Topological Superlattices. Scientific Reports, 2014, 4, 5727.	3.3	57
101	Reversible Laser-Induced Transformations in Chalcogenide- and Silicate-Based Optical Materials. Springer Series in Materials Science, 2014, , 223-246.	0.6	0
102	Ultrafast Lattice Dynamics of Phase-change Materials Monitored by a Pump-pump-probe Technique. , 2014, , .		0
103	Local instability of<mml:math xmlns:mml="http://www.w3.org/1998/Math/MathML" display="inline"><mml:mi>p</mml:mi></mml:math>-type bonding makes amorphous GeTe a lone-pair semiconductor. Physical Review B, 2013, 87, .	3.2	35
104	Vacancy-mediated three-center four-electron bonds in GeTe-Sb<mml:math xmlns:mml="http://www.w3.org/1998/Math/MathML" display="inline"><mml:msub><mml:mrow /><mml:mn>2</mml:mn></mml:msub></mml:math>Te<mml:math xmlns:mml="http://www.w3.org/1998/Math/MathML" display="inline"><mml:msub><mml:mrow /><mml:mn>3</mml:mn></mml:msub></mml:math>phase-change memory alloys. Physical Review B, 2013, 87, .	3.2	76
105	Nanometer Resolution XANES Imaging of in situ switched individual PC-RAM devices. Materials Research Society Symposia Proceedings, 2013, 1563, 1.	0.1	1
106	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.	3.3	28
107	Ultrafast optical manipulation of atomic motion in multilayer Ge-Sb-Te phase change materials. EPJ Web of Conferences, 2013, 41, 03007.	0.3	2
108	Nanometer Resolution XANES Imaging of Individual PC-RAM Devices. Materials Research Society Symposia Proceedings, 2012, 1431, 26.	0.1	0

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109	Polarization dependent optical control of atomic arrangement in multilayer Ge-Sb-Te phase change materials. Applied Physics Letters, 2012, 101, 232101.	3.3	15
110	Enhanced crystallization of GeTe from an Sb2Te3 template. Applied Physics Letters, 2012, 100, .	3.3	56
111	Local structure of nitrogen in N-doped amorphous and crystalline GeTe. Applied Physics Letters, 2012, 100, .	3.3	25
112	Recrystallization of an amorphized epitaxial phase-change alloy: A phoenix arising from the ashes. Applied Physics Letters, 2012, 101, 061903.	3.3	18
113	A reconsideration of the thermodynamics of phaseâ€change switching. Physica Status Solidi (B): Basic Research, 2012, 249, 1932-1938.	1.5	15
114	Epitaxial phaseâ€change materials. Physica Status Solidi - Rapid Research Letters, 2012, 6, 415-417.	2.4	29
115	Structure of the Amorphous Phase. Springer Series in Materials Science, 2012, , 181-215.	0.6	0
116	pâ€Type conductivity of GeTe: The role of loneâ€pair electrons. Physica Status Solidi (B): Basic Research, 2012, 249, 1902-1906.	1.5	14
117	Disorder in order: A study of local and global order in Geâ€rich Geï£¿Sbï£¿Te alloys. Physica Status Solidi (B): Basic Research, 2012, 249, 1919-1924.	1.5	5
118	Crystalline GeTe-based phase-change alloys: Disorder in order. Physical Review B, 2012, 86, .	3.2	28
119	Athermal component of amorphisation in phase-change alloys and chalcogenide glasses. Journal of Non-Crystalline Solids, 2012, 358, 2398-2401.	3.1	7
120	Methods of Structure Analysis. Springer Series in Materials Science, 2012, , 49-63.	0.6	0
121	Memory Devices. Springer Series in Materials Science, 2012, , 251-276.	0.6	1
122	Photo-Induced Anisotropy. Springer Series in Materials Science, 2012, , 103-121.	0.6	0
123	Photo-Induced Phenomena in Chalcogenide-Metal Structures. Springer Series in Materials Science, 2012, , 133-145.	0.6	0
124	Structure of the Crystalline Phase. Springer Series in Materials Science, 2012, , 149-179.	0.6	3
125	Pressure-Induced Transformations. Springer Series in Materials Science, 2012, , 217-230.	0.6	0
126	Mechanism of the Phase-Change Process. Springer Series in Materials Science, 2012, , 231-247.	0.6	0

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127	Chalcogenides. Springer Series in Materials Science, 2012, , .	0.6	65
128	Amorphous phase of GeTeâ€based phaseâ€change memory alloys: Polyvalency of Geï£¿Te bonding and polyamorphism. Physica Status Solidi (A) Applications and Materials Science, 2012, 209, 1031-1035.	1.8	5
129	Comment on â€œNew Structural Picture of the<mml:math xmlns:mml="http://www.w3.org/1998/Math/MathML" display="inline"><mml:msub><mml:mi>Ge</mml:mi><mml:mn>2</mml:mn></mml:msub><mml:msub><mml:mi>Sb</mml:mi><mml:mn>2</mml:mn></mml:msub><mml:msub><mml:mi>Te</mml:mi><mml:mn>5</mml:mn></mml:msub></mml:math> Alloyâ€• Physical Review Letters, 2012, 108, 239603; author reply 239602.	7.8	6
130	Fundamentals of Amorphous Semiconductors. Springer Series in Materials Science, 2012, , 3-34.	0.6	1
131	Properties of Amorphous Chalcogenides. Springer Series in Materials Science, 2012, , 35-47.	0.6	4
132	Bond-Selective Excitation and Following Displacement of Ge Atoms in GeTe/Sb2Te3Superlattice. Acta Physica Polonica A, 2012, 121, 336-339.	0.5	1
133	Interfacial phase-change memory. Nature Nanotechnology, 2011, 6, 501-505.	31.5	630
134	Distortion-triggered loss of long-range order in solids with bonding energy hierarchy. Nature Chemistry, 2011, 3, 311-316.	13.6	178
135	The order-disorder transition in GeTe: Views from different length-scales. Applied Physics Letters, 2011, 99, .	3.3	63
136	Effect of doping on global and local order in crystalline GeTe. Applied Physics Letters, 2011, 98, .	3.3	20
137	Local atomic order of crystalline Ge<mml:math xmlns:mml="http://www.w3.org/1998/Math/MathML" display="inline"><mml:msub><mml:mrow /><mml:mn>8</mml:mn></mml:msub></mml:math>Sb<mml:math xmlns:mml="http://www.w3.org/1998/Math/MathML" display="inline"><mml:msub><mml:mrow /><mml:mn>2</mml:mn></mml:msub></mml:math>Te<mml:math xmlns:mml="http://www.w3.org/1998/Math/MathML" display="inline"><mml:msub><mml:mrow />	3.2	18
138	Electrical-field induced giant magnetoresistivity in (non-magnetic) phase change films. Applied Physics Letters, 2011, 99, 152105.	3.3	74
139	Intrinsic complexity of the melt-quenched amorphous Ge<mml:math xmlns:mml="http://www.w3.org/1998/Math/MathML" display="inline"><mml:mrow><mml:msub><mml:mrow /><mml:mrow><mml:mn>2</mml:mn></mml:mrow></mml:msub></mml:mrow></mml:math>Sb<mml:math xmlns:mml="http://www.w3.org/1998/Math/MathML" display="inline"><mml:mrow><mml:msub><mml:mrow />	3.2	109
140	Pressure-induced structural transitions in phase-change materials based on Ge-free Sb-Te alloys. Physical Review B, 2011, 83, .	3.2	13
141	Optically Induced Sub-Wavelength Transient Apertures in Sb-Te Based Films. Materials Research Society Symposia Proceedings, 2011, 1338, 32001.	0.1	1
142	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
143	Amorphous InSb: Longer bonds yet higher density. Journal of Applied Physics, 2010, 108, 023506.	2.5	13
144	Non-melting super-resolution near-field apertures in Sbâ€“Te alloys. Applied Physics Letters, 2010, 97, 161906.	3.3	33

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145	Photoassisted amorphization of the phase-change memory alloy<mml:math xmlns:mml="http://www.w3.org/1998/Math/MathML" display="inline"><mml:mrow><mml:msub><mml:mrow><mml:mtext>Ge</mml:mtext></mml:mrow><mml:mn>2</mml:mn></mml:msu Physical Review B, 2010, 82, .	3.2	80
146	Toward the Ultimate Limit of Phase Change in Ge₂Sb₂Te₅. Nano Letters, 2010, 10, 414-419.	9.1	226
147	Phase transition in crystalline GeTe: Pitfalls of averaging effects. Physical Review B, 2010, 82, .	3.2	95
148	Liquid Ge2Sb2Te5 studied by extended x-ray absorption. Applied Physics Letters, 2009, 95, .	3.3	27
149	What is the Origin of Activation Energy in Phase-Change Film?. Japanese Journal of Applied Physics, 2009, 48, 03A053.	1.5	48
150	Local structure of amorphous Geï£¿Sbï£¿Te alloys: Ge umbrella flip vs. DFT simulations. Physica Status Solidi (B): Basic Research, 2009, 246, 1826-1830.	1.5	12
151	Initial Structure Memory of Pressure-Induced Changes in the Phase-Change Memory Alloy<mml:math xmlns:mml="http://www.w3.org/1998/Math/MathML" display="inline"><mml:msub><mml:mi>Ge</mml:mi><mml:mn>2</mml:mn></mml:msub><mml:msub><mml:mi>Sb</mml:mi><mml:mi Physical Review Letters, 2009, 103, 115502.	7.8	51
152	Around the phase-change cycle. Nature Materials, 2008, 7, 351-353.	27.5	28
153	Role of Ge Switch in Phase Transition: Approach using Atomically Controlled GeTe/Sb₂Te₃ Superlattice. Japanese Journal of Applied Physics, 2008, 47, 5763.	1.5	68
154	Large Optical Transitions in Rewritable Digital Versatile Discs: An Interlayer Atomic Zipper in a SbTe Alloy. Materials Research Society Symposia Proceedings, 2008, 1072, 1.	0.1	0
155	Temperature independence of pressure-induced amorphization of the phase-change memory alloy Ge2Sb2Te5. Applied Physics Letters, 2008, 93, .	3.3	32
156	X-Ray Fluorescence Holographic Study on a Single-Crystal Thin Film of a Rewritable Optical Media. AIP Conference Proceedings, 2007, , .	0.4	0
157	Sub-Nanosecond Time-Resolved Structural Measurements of the Phase-Change Alloy Ge2Sb2Te5. Japanese Journal of Applied Physics, 2007, 46, 3711-3714.	1.5	13
158	Growth of embedded Ge nanocrystals on different substrates. Journal of Applied Physics, 2007, 101, 104318.	2.5	2
159	A possible mechanism of ultrafast amorphization in phase-change memory alloys: an ion slingshot from the crystalline to amorphous position. Journal of Physics Condensed Matter, 2007, 19, 455209.	1.8	20
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