

CITATION REPORT

List of articles citing

Topological insulators in Bi_2Se_3 , Bi_2Te_3 and Sb_2Te_3 with a single Dirac cone on the surface

DOI: 10.1038/nphys1270

Nature Physics, 2009, 5, 438-442.

Source: <https://exaly.com/paper-pdf/46339019/citation-report.pdf>

Version: 2024-04-09

This report has been generated based on the citations recorded by exaly.com for the above article. For the latest version of this publication list, visit the link given above.

The third column is the impact factor (IF) of the journal, and the fourth column is the number of citations of the article.

#	Paper	IF	Citations
2307	A 2.95 GHz, femtosecond passive harmonic mode-locked fiber laser based on evanescent field interaction with topological insulator film. 2015 , 23, 154		
2306	A 2.95 GHz, femtosecond passive harmonic mode-locked fiber laser based on evanescent field interaction with topological insulator film. 2015 , 23, 154		
2305	A 2.95 GHz, femtosecond passive harmonic mode-locked fiber laser based on evanescent field interaction with topological insulator film. 2015 , 23, 154		
2304	Few-layer MoS ₂ -deposited microfiber as highly nonlinear photonic device for pulse shaping in a fiber laser [Invited]. 2015 , 3, A69		
2303	A 2.95 GHz, femtosecond passive harmonic mode-locked fiber laser based on evanescent field interaction with topological insulator film. 2015 , 23, 154		
2302	Finite-Size and Composition-Driven Topological Phase Transition in (Bi _{1-x} In _x) ₂ Se ₃ Thin Films.		
2301	Atom Probe Tomography Analysis of Ag Doping in 2D Layered Material (PbSe) ₅ (Bi ₂ Se ₃) ₃ .		
2300	Signatures of Topological Superconductivity in Bulk-Insulating Topological Insulator BiSbTe _{1.25} Se _{1.75} in Proximity with Superconducting NbSe ₂ .		
2299	ALMOST PERIODICITY OF INFINITE-ZONE POTENTIALS. 1982 , 18, 249-273		12
2298	Crystal Structure and Ferroelectric Properties of Si Added SrBi ₂ Ta ₂ O ₉ . 2006 , 45, 5091-5097		9
2297	Quasiparticle interference on the surface of the topological insulator Bi ₂ Te ₃ . 2009 , 80,		90
2296	A tunable topological insulator in the spin helical Dirac transport regime. 2009 , 460, 1101-5		1548
2295	Topological surface states protected from backscattering by chiral spin texture. 2009 , 460, 1106-9		805
2294	The next generation. <i>Nature Physics</i> , 2009 , 5, 378-380	16.2	349
2293	Three-dimensional topological insulators on the pyrochlore lattice. 2009 , 103, 206805		84
2292	Anomalous finite size effects on surface states in the topological insulator Bi ₂ Se ₃ . 2009 , 80,		264
2291	Majorana fermion induced resonant Andreev reflection. 2009 , 103, 237001		628

2290	Optical signature of topological insulators. 2009 , 80,	68
2289	Quintuple-layer epitaxy of thin films of topological insulator Bi ₂ Se ₃ . 2009 , 95, 053114	268
2288	Observation of time-reversal-protected single-dirac-cone topological-insulator states in Bi ₂ Te ₃ and Sb ₂ Te ₃ . 2009 , 103, 146401	769
2287	Theory of the topological anderson insulator. 2009 , 103, 196805	245
2286	Hexagonal warping effects in the surface states of the topological insulator Bi ₂ Te ₃ . 2009 , 103, 266801	537
2285	Electric field driven quantum phase transition between band insulator and topological insulator. 2009 , 95, 222110	42
2284	Experimental demonstration of topological surface states protected by time-reversal symmetry. 2009 , 103, 266803	586
2283	Spin and angle resolved photoemission on non-magnetic low-dimensional systems. 2009 , 21, 403001	107
2282	Electronic structures and surface states of the topological insulator Bi _{1-x} Sb _x . 2009 , 80,	101
2281	Surface states of topological insulators: the Dirac fermion in curved two-dimensional spaces. 2009 , 103, 196804	85
2280	Theory of quasiparticle scattering in a two-dimensional system of helical Dirac fermions: Surface band structure of a three-dimensional topological insulator. 2009 , 80,	89
2279	Detecting the Majorana fermion surface state of 3He-B through spin relaxation. 2009 , 103, 235301	127
2278	Numerical study of the topological Anderson insulator in HgTe/CdTe quantum wells. 2009 , 80,	158
2277	A Noninvasive Quantum Thermometer. 2009 , 2,	20
2276	Colloquium: Topological insulators. 2010 , 82, 3045-3067	12208
2275	Few-layer nanoplates of Bi ₂ Se ₃ and Bi ₂ Te ₃ with highly tunable chemical potential. 2010 , 10, 2245-50	370
2274	Topological insulator nanowires and nanoribbons. 2010 , 10, 329-33	263
2273	Surface state transport and ambipolar electric field effect in Bi ₂ Se ₃ nanodevices. 2010 , 10, 5032-6	247

2272	Epitaxial heterostructures of ultrathin topological insulator nanoplate and graphene. 2010 , 10, 2870-6	195
2271	Wormhole effect in a strong topological insulator. 2010 , 82,	72
2270	Interaction-induced criticality in Z(2) topological insulators. 2010 , 105, 036803	102
2269	Unconventional superconductivity on a topological insulator. 2010 , 104, 067001	353
2268	Landau quantization of topological surface states in Bi ₂ Se ₃ . 2010 , 105, 076801	327
2267	Hexagonally deformed Fermi surface of the 3D topological insulator Bi ₂ Se ₃ . 2010 , 105, 076802	207
2266	Experimental realization of a three-dimensional topological insulator phase in ternary chalcogenide TlBiSe ₂ 2010 , 105, 146801	180
2265	Quantized anomalous Hall effect in magnetic topological insulators. 2010 , 329, 61-4	1382
2264	Atomically smooth ultrathin films of topological insulator Sb ₂ Te ₃ . 2010 , 3, 874-880	91
2263	Topological Superfluid ³ HeB: Fermion Zero Modes on Interfaces and in the Vortex Core. 2010 , 161, 460-473	42
2262	Direct Physical Imaging and Chemical Probing of LiFePO ₄ for Lithium-Ion Batteries. 2010 , 20, 4219-4232	37
2261	Intrinsic topological insulator Bi ₂ Te ₃ thin films on Si and their thickness limit. 2010 , 22, 4002-7	335
2260	Similarities between normal- and super-currents in topological insulator magnetic tunnel junctions. 2010 , 470, 1949-1954	5
2259	Magneto transport on the surface of a topological insulator spin valve. 2010 , 374, 2894-2899	21
2258	Semiclassical dynamics and transport of the Dirac spin. 2010 , 150, 533-537	29
2257	Thirty years of solid state physics research at the Institute of Physics, Chinese Academy of Sciences. 2010 , 207, 2610-2620	
2256	The birth of topological insulators. 2010 , 464, 194-8	2133
2255	Quantum spin liquid emerging in two-dimensional correlated Dirac fermions. 2010 , 464, 847-51	449

2254	Transmission of topological surface states through surface barriers. 2010 , 466, 343-6	166
2253	Effect of the atomic composition of the surface on the electron surface states in topological insulators A V2 B VI3. 2010 , 91, 387-391	84
2252	Ternary thallium-based semimetal chalcogenides Tl-V-VI2 as a new class of three-dimensional topological insulators. 2010 , 91, 594-598	35
2251	On possible deep subsurface states in topological insulators: The PbBi4Te7 system. 2010 , 92, 161-165	23
2250	Aharonov-Bohm interference in topological insulator nanoribbons. 2010 , 9, 225-9	660
2249	Tunable multifunctional topological insulators in ternary Heusler compounds. 2010 , 9, 541-5	674
2248	Half-Heusler ternary compounds as new multifunctional experimental platforms for topological quantum phenomena. 2010 , 9, 546-9	531
2247	Dynamical axion field in topological magnetic insulators. <i>Nature Physics</i> , 2010 , 6, 284-288	16.2 299
2246	Crossover of the three-dimensional topological insulator Bi2Se3 to the two-dimensional limit. <i>Nature Physics</i> , 2010 , 6, 584-588	16.2 1048
2245	Two-dimensional surface state in the quantum limit of a topological insulator. <i>Nature Physics</i> , 2010 , 6, 960-964	16.2 476
2244	Analytic Theory of Edge Modes in Topological Insulators. 2010 , 79, 124709	25
2243	Fingerprint of different spin-orbit terms for spin transport in HgTe quantum wells. 2010 , 12, 065012	133
2242	Prediction of topological insulating behavior in crystalline Ge-Sb-Te. 2010 , 82,	69
2241	Tuning carrier type and density in Bi2Se3 by Ca-doping. 2010 , 97, 042112	73
2240	Surface- and edge-states in ultrathin BiSb films. 2010 , 12, 065006	11
2239	Anderson impurity in a helical metal. 2010 , 81,	40
2238	Magnetotransport of Dirac fermions on the surface of a topological insulator. 2010 , 82,	44
2237	Superconductivity on the surface of topological insulators and in two-dimensional noncentrosymmetric materials. 2010 , 81,	48

2236	Single Dirac cone with a flat band touching on line-centered-square optical lattices. 2010 , 81,	162
2235	Magnetic quantum oscillations for the surface states of topological insulator Bi ₂ Se ₃ . 2010 , 82,	30
2234	Three-dimensional Dirac-like fermions in an optical lattice. 2010 , 82,	11
2233	Andreev spectroscopy of doped HgTe quantum wells. 2010 , 82,	11
2232	Flat-lens focusing of electrons on the surface of a topological insulator. 2010 , 82,	19
2231	Helical Luttinger liquid in topological insulator nanowires. 2010 , 105, 136403	77
2230	Design principles and coupling mechanisms in the 2D quantum well topological insulator HgTe/CdTe. 2010 , 105, 176805	22
2229	Tuning the conductance of dirac fermions on the surface of a topological insulator. 2010 , 104, 046403	106
2228	Robustness of topologically protected surface states in layering of Bi ₂ Te ₃ thin films. 2010 , 105, 186801	125
2227	Topological insulator Bi ₂ Se ₃ thin films grown on double-layer graphene by molecular beam epitaxy. 2010 , 97, 143118	140
2226	Tunneling magnetoresistance on the surface of a topological insulator with periodic magnetic modulations. 2010 , 96, 172109	37
2225	Origin of the giant optical nonlinearity of Sb ₂ Te ₃ phase change materials. 2010 , 97, 261903	29
2224	Coherent heteroepitaxy of Bi ₂ Se ₃ on GaAs (111)B. 2010 , 97, 262104	116
2223	Quantum critical points of helical Fermi liquids. 2010 , 81,	20
2222	Electronic structure near an impurity and terrace on the surface of a three-dimensional topological insulator. 2010 , 81,	32
2221	Time-reversal symmetry breaking at the edge states of a three-dimensional topological band insulator. 2010 , 81,	14
2220	Spin-orbit coupling and anomalous angular-dependent magnetoresistance in the quantum transport regime of PbS. 2010 , 81,	6
2219	Angular-dependent oscillations of the magnetoresistance in Bi ₂ Se ₃ due to the three-dimensional bulk Fermi surface. 2010 , 81,	170

2218	Topological invariants for the Fermi surface of a time-reversal-invariant superconductor. 2010 , 81,	208
2217	Quasiparticle electronic structure of bismuth telluride in the GW approximation. 2010 , 82,	50
2216	Topological insulators and topological nonlinear π models. 2010 , 82,	13
2215	Chiral topological insulators, superconductors, and other competing orders in three dimensions. 2010 , 81,	110
2214	Electric-field modulation of the number of helical edge states in thin-film semiconductors. 2010 , 81,	10
2213	Topological invariant in three-dimensional band insulators with disorder. 2010 , 82,	27
2212	Bulk metals with helical surface states. 2010 , 82,	26
2211	Disordered topological quantum critical points in three-dimensional systems. 2010 , 12, 065008	10
2210	Quantum tunneling through planar pB junctions in HgTe quantum wells. 2010 , 12, 083058	29
2209	Quantum corrections in the Boltzmann conductivity of graphene and their sensitivity to the choice of formalism. 2010 , 2010, P06024	8
2208	Theoretical prediction of topological insulators in thallium-based III-V-VI 2 ternary chalcogenides. 2010 , 90, 37002	126
2207	Topological insulators and superconductors: tenfold way and dimensional hierarchy. 2010 , 12, 065010	1170
2206	Topological insulators and metal-insulator transition in the pyrochlore iridates. 2010 , 82,	207
2205	Optical characterization of Bi ₂ Se ₃ in a magnetic field: Infrared evidence for magnetoelectric coupling in a topological insulator material. 2010 , 81,	182
2204	Topological insulators and Mott physics from the Hubbard interaction. 2010 , 82,	221
2203	Half-Heusler topological insulators: A first-principles study with the Tran-Blaha modified Becke-Johnson density functional. 2010 , 82,	141
2202	Spin polarization and transport of surface states in the topological insulators Bi ₂ Se ₃ and Bi ₂ Te ₃ from first principles. 2010 , 105, 266806	381
2201	Terahertz Kerr and reflectivity measurements on the topological insulator Bi ₂ Se ₃ . 2010 , 82,	53

2200	Ultrafast carrier and phonon dynamics in Bi ₂ Se ₃ crystals. 2010 , 97, 182102	106
2199	Massive Dirac fermions and spin physics in an ultrathin film of topological insulator. 2010 , 81,	427
2198	Crystal symmetry breaking in few-quintuple Bi ₂ Te ₃ films: Applications in nanometrology of topological insulators. 2010 , 96, 153103	141
2197	Magnetic doping and kondo effect in bi(2)se(3) nanoribbons. 2010 , 10, 1076-81	109
2196	Equivalent topological invariants of topological insulators. 2010 , 12, 065007	71
2195	Electron tunneling through double magnetic barriers on the surface of a topological insulator. 2010 , 82,	55
2194	Aharonov-Bohm oscillations in disordered topological insulator nanowires. 2010 , 105, 156803	154
2193	Monopole current and unconventional Hall response on a topological insulator. 2010 , 81,	29
2192	Witten effect in a crystalline topological insulator. 2010 , 82,	84
2191	Interfacial Dirac cones from alternating topological invariant superlattice structures of Bi ₂ Se ₃ . 2010 , 105, 096403	43
2190	Spectroscopic evidence of a topological quantum phase transition in ultrathin Bi ₂ Se ₃ films. 2010 , 81,	106
2189	Topological phases and phase transitions on the square-octagon lattice. 2010 , 82,	64
2188	Is a color superconductor topological?. 2010 , 81,	30
2187	ZT enhancement in solution-grown Sb(2-x)Bi _x Te ₃ nanoplatelets. 2010 , 4, 4283-91	108
2186	Quantum impurity on the surface of a topological insulator. 2010 , 81,	47
2185	Topological Anderson insulator in three dimensions. 2010 , 105, 216601	122
2184	Two-dimensional surface charge transport in topological insulators. 2010 , 82,	136
2183	Strong surface scattering in ultrahigh-mobility Bi ₂ Se ₃ topological insulator crystals. 2010 , 81,	346

2182	Half-Heusler compounds as a new class of three-dimensional topological insulators. 2010 , 105, 096404	268
2181	Gate-voltage control of chemical potential and weak antilocalization in Bi_2Se_3 2010 , 105, 176602	514
2180	Bulk Fermi surface coexistence with Dirac surface state in Bi_2Se_3 : A comparison of photoemission and Shubnikov-de Haas measurements. 2010 , 81,	390
2179	Holographic fractional topological insulators in 2+1 and 1+1 dimensions. 2010 , 82,	14
2178	Spin and charge transport on the surface of a topological insulator. 2010 , 105, 066802	176
2177	Topological insulators for high-performance terahertz to infrared applications. 2010 , 82,	139
2176	Synthesis in ionic liquids: $[\text{Bi}_2\text{Te}_2\text{Br}][\text{AlCl}_4]$, a direct gap semiconductor with a cationic framework. 2010 , 132, 14760-2	110
2175	Massive Dirac fermion on the surface of a magnetically doped topological insulator. 2010 , 329, 659-62	913
2174	In-plane transport and enhanced thermoelectric performance in thin films of the topological insulators Bi_2Te_3 and Bi_2Se_3 2010 , 105, 166603	193
2173	Topological electronic structure in half-Heusler topological insulators. 2010 , 82,	213
2172	Model Hamiltonian for topological insulators. 2010 , 82,	563
2171	Odd-parity topological superconductors: theory and application to $\text{Cu}_x\text{Bi}_2\text{Se}_3$. 2010 , 105, 097001	550
2170	Direct evidence for the dirac-cone topological surface states in the ternary chalcogenide TlBiSe_2 2010 , 105, 136802	177
2169	Single Dirac cone topological surface state and unusual thermoelectric property of compounds from a new topological insulator family. 2010 , 105, 266401	167
2168	New family of three-dimensional topological insulators with antiperovskite structure. 2010 , 105, 216406	72
2167	Giant magneto-optical Kerr effect and universal Faraday effect in thin-film topological insulators. 2010 , 105, 057401	373
2166	Geodesic scattering by surface deformations of a topological insulator. 2010 , 82,	10
2165	Collective modes of a helical liquid. 2010 , 104, 116401	163

2164	Coexistence of the topological state and a two-dimensional electron gas on the surface of Bi(2)Se(3). 2010 , 1, 128	361
2163	Simulating and detecting the quantum spin Hall effect in the kagome optical lattice. 2010 , 82,	40
2162	Interaction-driven topological insulators on the kagome and the decorated honeycomb lattices. 2010 , 82,	124
2161	Doped Bi-Se thin films for photovoltaic applications. 2010 ,	
2160	Topological defects and gapless modes in insulators and superconductors. 2010 , 82,	464
2159	The van der Waals epitaxy of Bi ₂ Se ₃ on the vicinal Si(111) surface: an approach for preparing high-quality thin films of a topological insulator. 2010 , 12, 103038	167
2158	Spin helix of magnetic impurities in two-dimensional helical metal. 2010 , 90, 47001	31
2157	Oscillatory crossover from two-dimensional to three-dimensional topological insulators. 2010 , 81,	389
2156	Probing surface states of topological insulators: Kondo effect and Friedel oscillations in a magnetic field. 2010 , 82,	30
2155	Mott scattering at the interface between a metal and a topological insulator. 2010 , 82,	15
2154	Single-Dirac-cone topological surface states in the TlBiSe(2) class of topological semiconductors. 2010 , 105, 036404	162
2153	Interplay between superconductivity and ferromagnetism on a topological insulator. 2010 , 81,	105
2152	Superconductivity in Cu _x Bi ₂ Se ₃ and its implications for pairing in the undoped topological insulator. 2010 , 104, 057001	764
2151	Momentum-resolved Landau-level spectroscopy of Dirac surface state in Bi ₂ Se ₃ . 2010 , 82,	229
2150	Far-infrared cyclotron resonance and Faraday effect in Bi ₂ Se ₃ . 2010 , 82,	58
2149	Topological quantization in units of the fine structure constant. 2010 , 105, 166803	175
2148	Anomalous magnetoresistance of a two-dimensional ferromagnet/ferromagnet junction on the surface of a topological insulator. 2010 , 81,	168
2147	Inverse spin-galvanic effect in the interface between a topological insulator and a ferromagnet. 2010 , 104, 146802	310

2146	Impurity-induced states on the surface of three-dimensional topological insulators. 2010 , 81,	184
2145	Topological insulators on the Lieb and perovskite lattices. 2010 , 82,	158
2144	Topological insulators on the decorated honeycomb lattice. 2010 , 81,	42
2143	First-principles studies of the three-dimensional strong topological insulators Bi ₂ Te ₃ , Bi ₂ Se ₃ and Sb ₂ Te ₃ . 2010 , 12, 065013	295
2142	Velocity-modulation control of electron-wave propagation in graphene. 2010 , 81,	95
2141	Ultrathin topological insulator Bi ₂ Se ₃ nanoribbons exfoliated by atomic force microscopy. 2010 , 10, 3118-22	148
2140	Effective continuous model for surface states and thin films of three-dimensional topological insulators. 2010 , 12, 043048	252
2139	High-Pressure Routes in the Thermoelectricity or How One Can Improve a Performance of Thermoelectrics□ 2010 , 22, 635-647	109
2138	Gauge field fluctuations in three-dimensional topological Mott insulators. 2010 , 82,	37
2137	Chern number of thin films of the topological insulator Bi ₂ Se ₃ . 2010 , 82,	72
2136	Theoretical prediction of topological insulator in ternary rare earth chalcogenides. 2010 , 82,	47
2135	Doping effects of Sb and Pb in epitaxial topological insulator Bi ₂ Se ₃ thin films: An in situ angle-resolved photoemission spectroscopy study. 2010 , 97, 194102	40
2134	On nonlinear classical electrodynamics with an axionic term. 2011 , 44, 045401	8
2133	Acetic acid-confined synthesis of uniform three-dimensional (3D) bismuth telluride nanocrystals consisting of few-quintuple-layer nanoplatelets. 2011 , 47, 12131-3	10
2132	Low-frequency 1/f noise in bismuth selenide Topological Insulators. 2011 ,	
2131	Pressure-induced superconductivity in topological parent compound Bi ₂ Te ₃ . 2011 , 108, 24-8	236
2130	Ab initio electronic structure of thallium-based topological insulators. 2011 , 83,	50
2129	Optimizing Bi ₂ □Sb _x Te ₃ □□Sey solid solutions to approach the intrinsic topological insulator regime. 2011 , 84,	217

2128	Vacancy-induced bound states in topological insulators. 2011 , 84,	46
2127	Epitaxial growth of Bi ₂ Se ₃ topological insulator thin films on Si (111). 2011 , 109, 103702	118
2126	Full electrical control of charge and spin conductance through interferometry of edge states in topological insulators. 2011 , 83,	73
2125	Aharonov-Bohm oscillations in the local density of topological surface states. 2011 , 99, 243110	11
2124	Quantum Andreev effect in two-dimensional HgTe/CdTe quantum well/superconductor systems. 2011 , 83,	22
2123	Surface and edge states in topological semimetals. 2011 , 83,	30
2122	Ternary tetradymite compounds as topological insulators. 2011 , 83,	70
2121	Half-metallic surface states and topological superconductivity in NaCoO ₂ from first principles. 2011 , 84,	27
2120	Topological insulators in the quaternary chalcogenide compounds and ternary famatinite compounds. 2011 , 13, 085017	30
2119	Electron transmission through atomic steps of Bi ₂ Se ₃ and Bi ₂ Te ₃ surfaces. 2011 , 84,	25
2118	Structural defects and electronic properties of the Cu-doped topological insulator Bi ₂ Se ₃ . 2011 , 84,	62
2117	Electron-phonon scattering in topological insulators. 2011 , 83,	60
2116	Topological response theory of doped topological insulators. 2011 , 107, 206602	17
2115	Topotactic transformations of superstructures: from thin films to two-dimensional networks to nested two-dimensional networks. 2011 , 133, 8211-5	76
2114	Topological aspect and quantum magnetoresistance of Bi ₂ Ag ₂ Te. 2011 , 106, 156808	155
2113	Observation of a warped helical spin texture in Bi ₂ Se ₃ from circular dichroism angle-resolved photoemission spectroscopy. 2011 , 107, 207602	150
2112	Low-frequency current fluctuations in "graphene-like" exfoliated thin-films of bismuth selenide topological insulators. 2011 , 5, 2657-63	61
2111	Impurity effect on weak antilocalization in the topological insulator Bi ₂ Te ₃ . 2011 , 106, 166805	356

2110	Topological insulators in ternary compounds with a honeycomb lattice. 2011 , 106, 156402	77
2109	Backscattering of Dirac fermions in HgTe quantum wells with a finite gap. 2011 , 106, 076802	34
2108	Three-dimensional topological insulators in the octahedron-decorated cubic lattice. 2011 , 84,	5
2107	Rapid surface oxidation as a source of surface degradation factor for BiSe ₃ 2011 , 5, 4698-703	279
2106	Spin Hall Effect. 2011 , 222-278	7
2105	Connectivity of edge and surface states in topological insulators. 2011 , 84,	6
2104	Competition between weak localization and antilocalization in topological surface states. 2011 , 107, 076801	226
2103	Spatial fluctuations of helical Dirac fermions on the surface of topological insulators. <i>Nature Physics</i> , 2011 , 7, 939-943	16.2 259
2102	Gauge fields in spintronics. 2011 , 110, 121301	71
2101	Superlattices of Bi ₂ Se ₃ /In ₂ Se ₃ : Growth characteristics and structural properties. 2011 , 99, 023112	39
2100	Reactive chemical doping of the Bi ₂ Se ₃ topological insulator. 2011 , 107, 177602	216
2099	Edge states and the bulk-boundary correspondence in Dirac Hamiltonians. 2011 , 83,	151
2098	Substitution of bismuth in hot wall epitaxy of Bi ₂ Se ₃ on transition metals. 2011 , 26, 085031	9
2097	Magnetic order in GdBiPt studied by x-ray resonant magnetic scattering. 2011 , 84,	23
2096	Three-dimensional topological insulators in I-III-VI ₂ and II-IV-V ₂ chalcopyrite semiconductors. 2011 , 106, 016402	120
2095	Surface state charge dynamics of a high-mobility three-dimensional topological insulator. 2011 , 107, 136803	69
2094	CO oxidation facilitated by robust surface states on Au-covered topological insulators. 2011 , 107, 056804	89
2093	Two-dimensional pressure-induced electronic topological transition in Bi ₂ Te ₃ . 2011 , 83,	97

2092	Common origin of the circular-dichroism pattern in angle-resolved photoemission spectroscopy of SrTiO ₃ and Cu(x)Bi ₂ Se ₃ . 2011 , 107, 077601	31
2091	Spin and momentum filtering of electrons on the surface of a topological insulator. 2011 , 98, 162101	30
2090	Electron interaction-driven insulating ground state in Bi ₂ Se ₃ topological insulators in the two-dimensional limit. 2011 , 83,	204
2089	Robust surface electronic properties of topological insulators: Bi ₂ Te ₃ films grown by molecular beam epitaxy. 2011 , 98, 222503	46
2088	STM and MBE: one of the best combinations. 2011 , 44, 464007	6
2087	Wannier representation of Z ₂ topological insulators. 2011 , 83,	267
2086	Raman spectroscopy of few-quintuple layer topological insulator Bi ₂ Se ₃ nanoplatelets. 2011 , 11, 2407-14	338
2085	SmB ₆ : A Promising Candidate for a Topological Insulator. 2011 , 80, 123710	154
2084	Substitutional alloy of Bi and Te at high pressure. 2011 , 106, 145501	318
2083	Rashba spin-splitting control at the surface of the topological insulator Bi ₂ Se ₃ . 2011 , 107, 186405	146
2082	Interacting dirac fermions on a topological insulator in a magnetic field. 2011 , 107, 186801	8
2081	Electronic structure of bismuth telluride quasi-two-dimensional crystal: A first principles study. 2011 , 98, 083113	17
2080	Interface Physics in Complex Oxide Heterostructures. 2011 , 2, 141-165	833
2079	Circular photogalvanic effect on topological insulator surfaces: Berry-curvature-dependent response. 2011 , 83,	159
2078	Anisotropic interactions and strain-induced topological phase transition in Sb ₂ Se ₃ and Bi ₂ Se ₃ . 2011 , 84,	90
2077	Selective probing of photoinduced charge and spin dynamics in the bulk and surface of a topological insulator. 2011 , 107, 077401	100
2076	Influence of tetragonal distortion on the topological electronic structure of the half-Heusler compound LaPtBi from first principles. 2011 , 99, 071901	30
2075	Tight-binding model for topological insulators: Analysis of helical surface modes over the whole Brillouin zone. 2011 , 84,	16

2074	Helical edge modes preserved across transitions from topological insulators with indirect gaps to insulators or semimetals. 2011 , 83,	6
2073	Tl ₂ Hg ₃ Q ₄ (Q = S, Se, and Te): High-Density, Wide-Band-Gap Semiconductors. 2011 , 23, 4375-4383	46
2072	Quantum spin Hall systems and topological insulators. 2011 , 13, 105007	9
2071	Two-dimensional topological insulators and their edge states. 2011 , 302, 012019	11
2070	Direct observation of broken time-reversal symmetry on the surface of a magnetically doped topological insulator. 2011 , 106, 206805	126
2069	Linear response theory of interacting topological insulators. 2011 , 84,	29
2068	Structural and vibrational study of Bi ₂ Se ₃ under high pressure. 2011 , 84,	115
2067	Theoretical investigation of the evolution of the topological phase of Bi ₂ Se ₃ under mechanical strain. 2011 , 84,	91
2066	Surface edge state and half-quantized Hall conductance in topological insulators. 2011 , 84,	54
2065	Femtosecond laser-induced nanostructure formation in Sb ₂ Te ₃ . 2011 , 99, 121903	12
2064	Unexpected mass acquisition of Dirac fermions at the quantum phase transition of a topological insulator. <i>Nature Physics</i> , 2011 , 7, 840-844	16.2 189
2063	Lattice dynamics of Sb ₂ Te ₃ at high pressures. 2011 , 84,	81
2062	Quantum criticality between topological and band insulators in 3+1 dimensions. 2011 , 107, 196803	170
2061	Superconducting proximity effect and possible evidence for Pearl vortices in a candidate topological insulator. 2011 , 84,	115
2060	Simultaneous quantization of bulk conduction and valence states through adsorption of nonmagnetic impurities on Bi ₂ Se ₃ . 2011 , 107, 086802	125
2059	Experimental evidence of the nanoscaled topological metallic surface state of Bi ₂ Te ₃ and Sb ₂ Te ₃ films. 2011 , 95, 56002	26
2058	Disordered topological insulators: a non-commutative geometry perspective. 2011 , 44, 113001	88
2057	Metal-supported high crystalline Bi ₂ Se ₃ quintuple layers. 2011 , 22, 465602	10

2056	Ambipolar field effect in the ternary topological insulator $(\text{Bi}(x)\text{Sb}(1-x))_2\text{Te}_3$ by composition tuning. 2011 , 6, 705-9	311
2055	Electronic structure of the topological insulator Bi_2Se_3 using angle-resolved photoemission spectroscopy: evidence for a nearly full surface spin polarization. 2011 , 106, 257004	177
2054	Stability of the $\text{Bi}_2\text{Se}_3(111)$ topological state: Electron-phonon and electron-defect scattering. 2011 , 83,	93
2053	Interaction of phonons and dirac fermions on the surface of Bi_2Se_3 : a strong Kohn anomaly. 2011 , 107, 186102	82
2052	Equivalent expression of Z2 topological invariant for band insulators using the non-Abelian Berry connection. 2011 , 84,	494
2051	Bulk-boundary correspondence in three-dimensional topological insulators. 2011 , 84,	18
2050	Topological magnetic insulators with corundum structure. 2011 , 106, 126403	39
2049	Pressure-induced disordered substitution alloy in Sb_2Te_3 . 2011 , 50, 11291-3	59
2048	Dirac-cone photonic surface states in three-dimensional photonic crystal slab. 2011 , 19, 13738-49	12
2047	Growth characteristics of topological insulator Bi_2Se_3 films on different substrates. 2011 , 334, 96-102	62
2046	The Quantum Spin Hall Effect. 2011 , 2, 31-53	103
2045	Thin topological insulator film in a perpendicular magnetic field. 2011 , 83,	58
2044	Metallic surface electronic state in half-Heusler compounds RPtBi ($\text{R} = \text{Lu}, \text{Dy}, \text{Gd}$). 2011 , 83,	77
2043	Topological phases and fractional excitations of the exciton condensate in a special class of bilayer systems. 2011 , 84,	11
2042	Nonlinear optical probe of tunable surface electrons on a topological insulator. 2011 , 106, 057401	100
2041	Anisotropy effects on Rashba and topological insulator spin-polarized surface states: A unified phenomenological description. 2011 , 84,	27
2040	High-pressure vibrational and optical study of Bi_2Te_3 . 2011 , 84,	83
2039	Epitaxial growth of high mobility Bi_2Se_3 thin films on CdS . 2011 , 98, 242102	79

2038	Formation of Inert Bi ₂ Se ₃ (0001) Cleaved Surface. 2011 , 11, 5507-5514	97
2037	Competing exotic topological insulator phases in transition-metal oxides on the pyrochlore lattice with distortion. 2011 , 83,	92
2036	Band structure engineering of multinary chalcogenide topological insulators. 2011 , 83,	51
2035	Density functional study of ternary topological insulator thin films. 2011 , 83,	26
2034	Topological and magnetic phase transitions in Bi ₂ Se ₃ thin films with magnetic impurities. 2011 , 84,	23
2033	Phonons of single quintuple Bi ₂ Te ₃ and Bi ₂ Se ₃ films and bulk materials. 2011 , 83,	55
2032	Microscopic simulation of superconductor/topological insulator proximity structures. 2011 , 83,	25
2031	Helical states of topological insulator Bi ₂ Se ₃ 2011 , 11, 2088-91	47
2030	Finite size effects on the quantum spin Hall state. 2011 , 266, 012103	1
2029	Spin-charge locking and tunneling into a helical metal. 2011 , 93, 67004	36
2028	Anisotropic scattering of surface state electrons at a point defect on Bi(111). 2011 , 98, 022108	24
2027	Manipulating surface states in topological insulator nanoribbons. 2011 , 6, 216-21	352
2026	Nanoelectronics: A topological twist for transistors. 2011 , 6, 197-8	26
2025	Floquet topological insulator in semiconductor quantum wells. <i>Nature Physics</i> , 2011 , 7, 490-495	16.2 1065
2024	Ternary compounds based on binary topological insulators as an efficient way for modifying the Dirac cone. 2011 , 93, 15-20	37
2023	Three- and two-dimensional topological insulators in Pb ₂ Sb ₂ Te ₅ , Pb ₂ Bi ₂ Te ₅ , and Pb ₂ Bi ₂ Se ₅ layered compounds. 2011 , 94, 217-221	16
2022	Carrier mediated ferromagnetism on the surface of a topological insulator. 2011 , 94, 629-634	16
2021	The stability of the fractional quantum Hall effect in topological insulators. 2011 , 151, 1444-1446	3

2020	Growth and characterization of Bi ₂ Se ₃ thin films by pulsed laser deposition using alloy target. 2011 , 519, 7627-7631	34
2019	Epitaxial growth of topological insulator Bi ₂ Se ₃ film on Si(111) with atomically sharp interface. 2011 , 520, 224-229	154
2018	Band structure engineering in (Bi(1-x)Sb(x))(2)Te(3) ternary topological insulators. 2011 , 2, 574	396
2017	Majorana modes at the ends of superconductor vortices in doped topological insulators. 2011 , 107, 097001	110
2016	Helical quantum states in HgTe quantum dots with inverted band structures. 2011 , 106, 206802	87
2015	Quantum Hall effect from the topological surface states of strained bulk HgTe. 2011 , 106, 126803	376
2014	Mn induced ferromagnetism and modulated topological surface states in Bi ₂ Te ₃ . 2011 , 98, 252502	66
2013	Opportunities in chemistry and materials science for topological insulators and their nanostructures. 2011 , 3, 845-9	199
2012	Superconductivity in the topological semimetal YPtBi. 2011 , 84,	159
2011	Computing topological invariants without inversion symmetry. 2011 , 83,	324
2010	Evidence for electron-electron interaction in topological insulator thin films. 2011 , 83,	211
2009	Spin texture and magnetic anisotropy of Co impurities in Bi ₂ Se ₃ topological insulators. 2011 , 84,	45
2008	Dirac cone engineering in Bi ₂ Se ₃ thin films. 2011 , 83,	27
2007	Spin susceptibility and helical magnetic order at the edges/surfaces of topological insulators due to Fermi surface nesting. 2011 , 83,	25
2006	Tunable surface conductivity in Bi ₂ Se ₃ revealed in diffusive electron transport. 2011 , 83,	198
2005	Bulk superconducting phase with a full energy gap in the doped topological insulator Cu(x)Bi ₂ Se ₃ . 2011 , 106, 127004	260
2004	Three-Dimensional Topological Insulators. 2011 , 2, 55-78	386
2003	Transport properties of nonequilibrium systems under the application of light: Photoinduced quantum Hall insulators without Landau levels. 2011 , 84,	623

2002	Helical fluctuations in the Raman response of the topological insulator Bi ₂ Se ₃ . 2011 , 84,	37
2001	Topological insulators and superconductors. 2011 , 83, 1057-1110	8720
2000	Two-dimensional transport-induced linear magneto-resistance in topological insulator Bi ₂ Se ₃ nanoribbons. 2011 , 5, 7510-6	225
1999	Simple two-step fabrication method of Bi ₂ Te ₃ nanowires. 2011 , 6, 277	8
1998	Growth of Topological Insulator Bi ₂ Se ₃ Thin Films on SrTiO ₃ with Large Tunability in Chemical Potential. 2011 , 21, 2351-2355	108
1997	Molecular beam epitaxial growth of topological insulators. 2011 , 23, 1162-5	103
1996	Topological insulator thin films of Bi ₂ Te ₃ with controlled electronic structure. 2011 , 23, 2929-32	172
1995	Large-scale exfoliation of inorganic layered compounds in aqueous surfactant solutions. 2011 , 23, 3944-8	888
1994	Topological insulators and C*-algebras: Theory and numerical practice. 2011 , 326, 1699-1759	51
1993	Superconductivity and non-metallicity induced by doping the topological insulators Bi ₂ Se ₃ and Bi ₂ Te ₃ . 2011 , 72, 572-576	83
1992	MBE growth optimization of topological insulator Bi ₂ Te ₃ films. 2011 , 324, 115-118	75
1991	Gap closing and universal phase diagrams in topological insulators. 2011 , 43, 748-754	19
1990	In-plane magnetoresistance on the surface of topological insulator. 2011 , 43, 966-970	18
1989	Tunneling conductance on surface of topological insulator ferromagnet/insulator/(s- or d-wave) superconductor junction: Effect of magnetically-induced relativistic mass. 2011 , 43, 1867-1873	16
1988	Thermoelectric transport of perfectly conducting channels in two- and three-dimensional topological insulators. 2011 , 334, 012013	18
1987	Peculiar Linear Dispersive Bands Observed in Angle-Resolved Photoemission Spectra of TI-Based Ternary Chalcogenide TlGaTe ₂ . 2011 , 50, 05FC05	
1986	An isolated Dirac cone on the surface of ternary tetradymite-like topological insulators. 2011 , 13, 095005	31
1985	Intrinsic quasi-particle dynamics of topological metallic states. 2011 , 13, 013008	12

1984	Induced spin texture in semiconductor/topological insulator heterostructures. 2011 , 84,	24
1983	Spin connection and boundary states in a topological insulator. 2011 , 83,	29
1982	Chern-Simons orbital magnetoelectric coupling in generic insulators. 2011 , 83,	69
1981	Vortex lines in topological insulator-superconductor heterostructures. 2011 , 84,	52
1980	Instability of topological order and localization of edge states in HgTe quantum wells coupled to s-wave superconductor. 2011 , 84,	8
1979	Magnetic torque oscillations from warped helical surface states in topological insulators. 2011 , 84,	3
1978	Anisotropic surface transport in topological insulators in proximity to a helical spin density wave. 2011 , 83,	12
1977	Parity-time electromagnetic diodes in a two-dimensional nonreciprocal photonic crystal. 2011 , 83,	39
1976	Casimir interaction between topological insulators with finite surface band gap. 2011 , 84,	19
1975	Dielectric capping effects on binary and ternary topological insulator surface states. 2011 , 84,	5
1974	Quantum corrals and quantum mirages on the surface of a topological insulator. 2011 , 84,	13
1973	Projective ribbon permutation statistics: A remnant of non-Abelian braiding in higher dimensions. 2011 , 83,	46
1972	Stable nontrivial Z2 topology in ultrathin Bi (111) films: a first-principles study. 2011 , 107, 136805	253
1971	Growth of multilayers of Bi2Se3/ZnSe: Heteroepitaxial interface formation and strain. 2011 , 98, 043104	28
1970	Spatially resolved femtosecond pump-probe study of topological insulator Bi2Se3. 2011 , 83,	85
1969	Spin Berry phase in anisotropic topological insulators. 2011 , 84,	31
1968	Weak localization of bulk channels in topological insulator thin films. 2011 , 84,	153
1967	Mott physics and topological phase transition in correlated dirac fermions. 2011 , 107, 010401	143

1966	STM imaging of a bound state along a step on the surface of the topological insulator Bi ₂ Te ₃ . 2011 , 84,	32
1965	Spin polarization and charge transmission for a waveguide on surface of topological insulator. 2011 , 99, 153104	13
1964	Quantum anomalous Hall states in the p-orbital honeycomb optical lattices. 2011 , 83,	42
1963	Topology-induced phase transitions in quantum spin Hall lattices. 2011 , 83,	33
1962	Quantum Hall effect in thin films of three-dimensional topological insulators. 2011 , 84,	13
1961	High Chern number quantum anomalous Hall phases in single-layer graphene with Haldane orbital coupling. 2011 , 84,	33
1960	Spin Berry phase in the Fermi-arc states. 2011 , 84,	20
1959	Anomalous Hall response of topological insulators. 2011 , 83,	37
1958	Electrical-field induced giant magnetoresistivity in (non-magnetic) phase change films. 2011 , 99, 152105	66
1957	Thickness-dependent bulk properties and weak antilocalization effect in topological insulator Bi ₂ Se ₃ . 2011 , 84,	234
1956	Quantum spin Hall effect induced by nonmagnetic and magnetic staggered potentials. 2011 , 83,	26
1955	Topological insulator ribbon: Surface states and dynamical response. 2011 , 84,	13
1954	Warping effects in the band and angular-momentum structures of the topological insulator Bi ₂ Te ₃ . 2011 , 84,	39
1953	Giant mesoscopic spin Hall effect on the surface of topological insulator. 2011 , 106, 057205	17
1952	Symmetry-constrained reorganization of Dirac cones in topological insulators by surface modification. 2011 , 84,	9
1951	TOPOLOGICAL INSULATOR AND THE DIRAC EQUATION. 2011 , 01, 33-44	83
1950	Pressure-induced topological insulating behavior in the ternary chalcogenide Ge ₂ Sb ₂ Te ₅ . 2011 , 84,	35
1949	Scattering from surface step edges in strong topological insulators. 2011 , 83,	32

- 1948 Plasmon mass and Drude weight in strongly spin-orbit-coupled two-dimensional electron gases. **2011**, 83, 30
- 1947 Low-velocity anisotropic Dirac fermions on the side surface of topological insulators. **2011**, 84, 39
- 1946 Atomic-layer-deposited Al₂O₃ on Bi₂Te₃ for topological insulator field-effect transistors. **2011**, 99, 052108 27
- 1945 Metacinnabar (⚥HgS): a strong 3D topological insulator with highly anisotropic surface states. **2011**, 106, 236806 45
- 1944 Particle-hole symmetry and interaction effects in the Kane-Mele-Hubbard model. **2011**, 84, 130
- 1943 Candidates for topological insulators: Pb-based chalcogenide series. **2011**, 83, 50
- 1942 Electrically controllable surface magnetism on the surface of topological insulators. **2011**, 106, 097201 184
- 1941 Observations of two-dimensional quantum oscillations and ambipolar transport in the topological insulator Bi₂Se₃ achieved by Cd doping. **2011**, 84, 71
- 1940 Surface scattering via bulk continuum states in the 3D topological insulator Bi₂Se₃. **2011**, 107, 056803 91
- 1939 Spin texture on the warped Dirac-cone surface states in topological insulators. **2011**, 84, 57
- 1938 Energy spectrum and broken spin-surface locking in topological insulator quantum dots. **2011**, 83, 31
- 1937 Evidence for Dirac nodes from quantum oscillations in SrFe₂As₂. **2011**, 84, 15
- 1936 Topological insulators and fractional quantum Hall effect on the ruby lattice. **2011**, 84, 69
- 1935 Strain-driven onset of nontrivial topological insulating states in Zintl Sr₂X compounds (X=Pb, Sn). **2011**, 84, 29
- 1934 Electrochemical synthesis and superconducting phase diagram of Cu_xBi₂Se₃. **2011**, 84, 97
- 1933 Thermal expansion coefficients of Bi₂Se₃ and Sb₂Te₃ crystals from 10 K to 270 K. **2011**, 99, 261912 84
- 1932 Topological field theory and thermal responses of interacting topological superconductors. **2011**, 84, 89
- 1931 Theoretical study of x-ray absorption of three-dimensional topological insulator Bi₂Se₃. **2011**, 83,

1930	The persistent charge and spin currents in topological insulator Bi ₂ Se ₃ nanowires. 2011 , 110, 093714	12
1929	Unusual magnetoresistance in a topological insulator with a single ferromagnetic barrier. 2011 , 98, 243112	52
1928	Surface spectral function in the superconducting state of a topological insulator. 2011 , 83,	74
1927	Theory of quantum spin Hall effect detection by measurements of the polarization resistance. 2011 , 83,	2
1926	Landau level states on a topological insulator thin film. 2011 , 83,	22
1925	Widespread spin polarization effects in photoemission from topological insulators. 2011 , 84,	97
1924	Topological Superconductivity in Cu(x)Bi(2)Se(3). 2011 , 107, 217001	493
1923	Surface plasmons and topological insulators. 2011 , 83,	50
1922	Power-law decay of standing waves on the surface of topological insulators. 2011 , 84,	53
1921	Fabrication and characterization of topological insulator Bi ₂ Se ₃ nanocrystals. 2011 , 98, 141911	54
1920	Watching bismuth nanowires grow. 2011 , 98, 043102	15
1919	Thermoelectric Properties of Directionally Solidified Bi ₂ Te ₃ Alloys under High Thermal Gradient. 2011 , 197-198, 1109-1112	4
1918	Experimental Electronic Structure of the Thermoelectric Materials Bi ₂ Te ₃ and Sb ₂ Te ₃ . 2011 , 699, 103-121	
1917	GROWTH OF QUANTUM WELL FILMS OF TOPOLOGICAL INSULATOR Bi ₂ Se ₃ ON INSULATING SUBSTRATE. 2011 , 01, 21-25	36
1916	Non-magnetic impurities and in-gap bound states in topological insulators. 2011 , 13, 103016	31
1915	Gate-tuned normal and superconducting transport at the surface of a topological insulator. 2011 , 2, 575	230
1914	Femtosecond laser-induced crystallization of amorphous Sb ₂ Te ₃ film and coherent phonon spectroscopy characterization and optical injection of electron spins. 2011 , 110, 053523	12
1913	Dyon condensation in topological Mott insulators. 2012 , 14, 115030	9

1912	Adiabatic quantum pumping through surface states in 3D topological insulators. 2012 , 14, 113003	5
1911	The effect of van der Waal's gap expansions on the surface electronic structure of layered topological insulators. 2012 , 14, 113030	52
1910	Scanning tunneling microscopy of interface properties of Bi ₂ Se ₃ on FeSe. 2012 , 24, 475604	10
1909	Robust surface state of intrinsic topological insulator Bi ₂ Te ₂ Se thin films: a first-principles study. 2012 , 24, 035502	13
1908	Spin-orbit density wave induced hidden topological order in URu ₂ Si ₂ . 2012 , 2, 596	34
1907	First-Principles Estimation of Seebeck Coefficient of Bismuth Telluride and Selenide. 2012 , 51, 125601	
1906	The robustness of the quantum spin Hall effect to the thickness fluctuation in HgTe quantum wells. 2012 , 21, 117301	1
1905	Synthesis and field emission properties of topological insulator Bi ₂ Se ₃ nanoflake arrays. 2012 , 23, 305704	23
1904	Helical edge states in multiple topological mass domains. 2012 , 27, 124007	17
1903	Spin-Polarization in Magneto-Optical Conductivity of Dirac Electrons. 2012 , 81, 013704	15
1902	Wavelength-tunable picosecond soliton fiber laser with Topological Insulator: Bi ₂ Se ₃ as a mode locker. 2012 , 20, 27888-95	355
1901	Crystal structure and epitaxy of Bi ₂ Te ₃ films grown on Si. 2012 , 101, 221910	11
1900	Magnetoresistance in Ferromagnetically Coupled Three-Dimensional Topological Insulator Strips. 2012 , 48, 4250-4252	4
1899	Giant Interlayer Magnetoresistances and Strong Anisotropy in p-type Sb ₂ Te ₃ Single Crystals. 2012 , 140, 155-160	4
1898	Two-dimensional magnetotransport in Bi ₂ Te ₂ Se nanoplatelets. 2012 , 101, 023116	19
1897	High quality ultrathin Bi ₂ Se ₃ films on CaF ₂ and CaF ₂ /Si by molecular beam epitaxy with a radio frequency cracker cell. 2012 , 101, 153105	22
1896	Note: radio frequency inductance-capacitance band-stop filter circuit to perform contactless conductivity measurements in pulsed magnetic fields. 2012 , 83, 096102	2
1895	Proximity effect at superconducting Sn-Bi ₂ Se ₃ interface. 2012 , 85,	53

1894	Quantum oscillations in the topological superconductor candidate Cu(0.25)Bi ₂ Se ₃ . 2012 , 109, 226406	46
1893	Phase structure of the topological Anderson insulator. 2012 , 85,	21
1892	Quantum anomalous Hall effect in a flat band ferromagnet. 2012 , 85,	39
1891	Electrically controlled magnetization in ferromagnet-topological insulator heterostructures. 2012 , 86,	43
1890	Topological semimetal in a Bi-Bi ₂ Se ₃ infinitely adaptive superlattice phase. 2012 , 86,	53
1889	Topological limit of ultrathin quasi-free-standing Bi ₂ Te ₃ films grown on Si(111). 2012 , 85,	23
1888	Gate-voltage controlled electronic transport through a ferromagnet/normal/ferromagnet junction on the surface of a topological insulator. 2012 , 86,	21
1887	Interface metallic states between a topological insulator and a ferromagnetic insulator. 2012 , 85,	13
1886	Quantum magnetotransport properties of topological insulators under strain. 2012 , 86,	8
1885	Reflectionless transport of surface Dirac fermions on topological insulators with induced ferromagnetic domain walls. 2012 , 86,	27
1884	Charge-orbital density wave and superconductivity in the strong spin-orbit coupled IrTe ₂ :Pd. 2012 , 108, 116402	143
1883	Inducing topological order in a honeycomb lattice. 2012 , 85,	18
1882	Superconductive proximity in a topological insulator slab and excitations bound to an axial vortex. 2012 , 86,	4
1881	Quantum phase transitions in ultrathin films of three-dimensional topological insulators in the presence of an electrostatic potential and a Zeeman field. 2012 , 85,	12
1880	Green's function method for line defects and gapless modes in topological insulators: Beyond the semiclassical approach. 2012 , 85,	3
1879	Imaging topologically protected transport with quantum degenerate gases. 2012 , 85,	9
1878	Chiral orbital-angular momentum in the surface states of Bi ₂ Se ₃ . 2012 , 108, 046805	104
1877	Observation of field-induced polarization of valleys in p-type Sb ₂ Te ₃ single crystals. 2012 , 86,	11

1876	Topological insulator Bi ₂ Te ₃ films synthesized by metal organic chemical vapor deposition. 2012 , 101, 162104	64
1875	Impact of step defects on surface states of topological insulators. 2012 , 85,	17
1874	The integration of high-k dielectric on two-dimensional crystals by atomic layer deposition. 2012 , 100, 152115	111
1873	Fermi-level tuning of epitaxial Sb ₂ Te ₃ thin films on graphene by regulating intrinsic defects and substrate transfer doping. 2012 , 108, 066809	131
1872	Probing crossover from analogous weak antilocalization to localization by an Aharonov-Bohm interferometer on topological insulator surface. 2012 , 100, 133103	2
1871	Scattering theory of topological insulators and superconductors. 2012 , 85,	101
1870	Topological superfluid transition induced by a periodically driven optical lattice. 2012 , 86,	28
1869	Stationary phase approximation approach to the quasiparticle interference on the surface of a strong topological insulator. 2012 , 85,	30
1868	Rotational isotropy breaking as proof for spin-polarized Cooper pairs in the topological superconductor Cu _x Bi ₂ Se ₃ . 2012 , 86,	33
1867	Visualizing Landau levels of Dirac electrons in a one-dimensional potential. 2012 , 109, 166407	26
1866	Topological-metal to band-insulator transition in (Bi(1-x)In(x)) ₂ Se ₃ thin films. 2012 , 109, 186403	158
1865	Topological phase transition in the interaction of surface Dirac fermions in heterostructures. 2012 , 109, 146601	28
1864	Interplay of bulk and edge states in transport of two-dimensional topological insulators. 2012 , 85,	9
1863	Theory of multiple magnetic scattering for quasiparticles on a gapless topological insulator surface. 2012 , 85,	4
1862	Weak localization bulk state in a topological insulator Bi ₂ Te ₃ film. 2012 , 86,	45
1861	Global phase diagram of two-dimensional Dirac fermions in random potentials. 2012 , 85,	10
1860	Fragility of surface states and robustness of topological order in Bi ₂ Se ₃ against oxidation. 2012 , 108, 096404	39
1859	Diffusion at the surface of topological insulators. 2012 , 14, 103027	27

1858	Universality of modulation length and time exponents. 2012 , 86, 041132	8
1857	Robustness of helical edge states in topological insulators. 2012 , 85,	17
1856	Topological character and magnetism of the Dirac state in Mn-doped Bi ₂ Te ₃ . 2012 , 109, 076801	105
1855	Models of three-dimensional fractional topological insulators. 2012 , 86,	26
1854	Gate control of surface transport in MBE-grown topological insulator (Bi _{1-x} Sb _x) ₂ Te ₃ thin films. 2012 , 86,	23
1853	Strong correlations at topological insulator surfaces and the breakdown of the bulk-boundary correspondence. 2012 , 86,	5
1852	Surface states on a topologically nontrivial semimetal: The case of Sb(110). 2012 , 85,	22
1851	STM imaging of impurity resonances on Bi ₂ Se ₃ . 2012 , 108, 206402	82
1850	Critical surface band gap of repulsive Casimir interaction between three-dimensional topological insulators at finite temperature. 2012 , 85,	14
1849	Tunable quantum spin Hall effect in double quantum wells. 2012 , 85,	29
1848	Stability of Sb-Te layered structures: First-principles study. 2012 , 85,	11
1847	Topological phases in layered pyrochlore oxide thin films along the [111] direction. 2012 , 86,	45
1846	Optical properties of Bi ₂ Te ₂ Se at ambient and high pressures. 2012 , 86,	74
1845	Trapping of three-dimensional electrons and transition to two-dimensional transport in the three-dimensional topological insulator Bi ₂ Se ₃ under high pressure. 2012 , 85,	27
1844	Surface electronic structure of Bi ₂ Te ₃ (111) studied by high-resolution photoelectron spectroscopy using synchrotron radiation. 2012 , 85,	8
1843	Landau quantization and the thickness limit of topological insulator thin films of Sb ₂ Te ₃ . 2012 , 108, 016401	171
1842	Topological phase transition and unexpected mass acquisition of Dirac fermion in TlBi(S _{1-x} Se _x) ₂ . 2012 , 101, 182101	5
1841	Ab initio studying of topological insulator Bi ₂ Se ₃ under the stress. 2012 , 394, 012022	2

1840	Robustness of topological order and formation of quantum well states in topological insulators exposed to ambient environment. 2012 , 109, 3694-8	139
1839	Surface plasmon on topological insulator/dielectric interface enhanced ZnO ultraviolet photoluminescence. 2012 , 2, 022105	12
1838	Growth and characterization of Bi ₂ Se ₃ crystals by chemical vapor transport. 2012 , 2, 022148	7
1837	Electron Transport at the Interface Between a Ferromagnetic Insulator and a Topological Insulator. 2012 , 48, 3398-3401	2
1836	Two-dimensional universal conductance fluctuations and the electron-phonon interaction of surface states in Bi ₂ Te ₂ Se microflakes. 2012 , 2, 595	61
1835	Growth and surface potential characterization of Bi ₂ Te ₃ nanoplates. 2012 , 2, 012114	23
1834	The fractional quantum Hall effect of tachyons in a topological insulator junction. 2012 , 100, 67008	3
1833	Anisotropic magnetoresistance in topological insulator Bi _{1.5} Sb _{0.5} Te _{1.8} Se _{1.2} /CoFe heterostructures. 2012 , 2, 042171	8
1832	Ambipolar charge injection and transport of few-layer topological insulator Bi ₂ Te ₃ and Bi ₂ Se ₃ nanoplates. 2012 , 111, 114312	24
1831	Spin current generator based on topological insulator coupled to ferromagnetic insulators. 2012 , 2, 032162	4
1830	Topological insulator Nanotubes 2012 , 400, 042021	2
1829	Quantum Hall and other topological states. 317-352	
1828	Electronic structure and linear magnetoresistance of the gapless topological insulator PtLuSb. 2012 , 100, 252109	37
1827	Topological field theory and the discovery of topological materials. 2012 , T146, 014022	4
1826	Thermoelectric transport in Bi ₂ Te ₃ /Sb ₂ Te ₃ superlattices. 2012 , 86,	49
1825	Ultra-short pulse generation by a topological insulator based saturable absorber. 2012 , 101, 211106	469
1824	High Curie temperature Bi(1.85)Mn(0.15)Te ₃ nanoplates. 2012 , 134, 18920-3	29
1823	Berry phase and the phase of the Shubnikov-de Haas oscillations in three-dimensional topological insulators. 2012 , 85,	34

1822	First-principles investigations of the atomic, electronic, and thermoelectric properties of equilibrium and strained Bi ₂ Se ₃ and Bi ₂ Te ₃ including van der Waals interactions. 2012 , 86,	111
1821	Polarization-driven topological insulator transition in a GaN/InN/GaN quantum well. 2012 , 109, 186803	124
1820	Catalyst-free growth of millimeter-long topological insulator Bi ₂ Se ₃ nanoribbons and the observation of the Berry phase. 2012 , 12, 6164-9	44
1819	Identification of magnetic dopants on the surfaces of topological insulators: Experiment and theory for Fe on Bi ₂ Te ₃ (111). 2012 , 85,	47
1818	Two- and three-dimensional topological insulators with isotropic and parity-breaking Landau levels. 2012 , 85,	38
1817	Impurity scattering in the bulk of topological insulators. 2012 , 85,	11
1816	Isotropic Landau levels of Dirac fermions in high dimensions. 2012 , 85,	19
1815	Dependence of topological Anderson insulator on the type of disorder. 2012 , 85,	48
1814	Ultrafast optical excitation of a persistent surface-state population in the topological insulator Bi ₂ Se ₃ . 2012 , 108, 117403	256
1813	Electronic structure of Fe and Co magnetic adatoms on Bi ₂ Te ₃ surfaces. 2012 , 86,	34
1812	Strain tuning of topological band order in cubic semiconductors. 2012 , 85,	41
1811	Gate-tuned differentiation of surface-conducting states in Bi _{1.5} Sb _{0.5} Te _{1.7} Se _{1.3} topological-insulator thin crystals. 2012 , 86,	75
1810	Finite-size energy gap in weak and strong topological insulators. 2012 , 86,	36
1809	Bi ₂ Se ₃ /CdS/TiO ₂ hybrid photoelectrode and its band-edge levels. 2012 , 545, 105-110	9
1808	Quantum capacitance in topological insulators. 2012 , 2, 669	20
1807	Landau-level spectroscopy of relativistic fermions with low Fermi velocity in the Bi ₂ Te ₃ three-dimensional topological insulator. 2012 , 109, 247604	21
1806	Topological insulating in GeTe/Sb ₂ Te ₃ phase-change superlattice. 2012 , 109, 096802	117
1805	Ultrafast-laser Modification of Thermoelectric Sb ₂ Te ₃ Thin Films. 2012 , 1456, 1	

1804	Atomically thick bismuth selenide freestanding single layers achieving enhanced thermoelectric energy harvesting. 2012 , 134, 20294-7	244
1803	Surface conduction of topological Dirac electrons in bulk insulating Bi ₂ Se ₃ . <i>Nature Physics</i> , 2012 , 8, 459-463	301
1802	Fabrication and characterization of the gapless half-Heusler YPtSb thin films. 2012 , 112, 103910	12
1801	Bulk quantum correlations and doping-induced nonmetallicity in the Bi ₂ Se ₃ topological insulator. 2012 , 85,	10
1800	Tunable Kondo-Mott physics in bulk Bi ₂ Te ₂ Se topological insulator. 2012 , 85,	12
1799	Lattice dynamics in Bi ₂ Te ₃ and Sb ₂ Te ₃ : Te and Sb density of phonon states. 2012 , 86,	96
1798	Spin texture and circular dichroism in photoelectron spectroscopy from the topological insulator Bi ₂ Te ₃ : first-principles photoemission calculations. 2012 , 109, 036803	33
1797	Controlling the carriers of topological insulators by bulk and surface doping. 2012 , 27, 124002	36
1796	Magnetoresistive effect of a topological-insulator waveguide in the presence of a magnetic field. 2012 , 101, 262403	7
1795	Two-dimensional electronic transport on the surface of three-dimensional topological insulators. 2012 , 86,	30
1794	Micro-Raman spectroscopy of mechanically exfoliated few-quintuple layers of Bi ₂ Te ₃ , Bi ₂ Se ₃ , and Sb ₂ Te ₃ materials. 2012 , 111, 054305	218
1793	Spin injection into a metal from a topological insulator. 2012 , 86,	19
1792	Manipulation of topological states and the bulk band gap using natural heterostructures of a topological insulator. 2012 , 109, 236804	72
1791	Stabilization of Majorana modes in magnetic vortices in the superconducting phase of topological insulators using topologically trivial bands. 2012 , 109, 237009	19
1790	Realization of tunable Dirac cone and insulating bulk states in topological insulators (Bi(1-x)Sb(x))(2)Te(3). 2012 , 2, 976	20
1789	Quantum transport in topological insulator hybrid structures: A combination of topological insulator and superconductor. 2012 , 55, 2226-2236	9
1788	A reconsideration of the thermodynamics of phase-change switching. 2012 , 249, 1932-1938	14
1787	Crossover between weak antilocalization and weak localization in a magnetically doped topological insulator. 2012 , 108, 036805	253

1786	Optical properties and electronic band structure of topological insulators on A2 5B36 compound based. 2012 ,	
1785	Bi(111) thin film with insulating interior but metallic surfaces. 2012 , 109, 166805	83
1784	Exciton condensation in thin-film topological insulator. 2012 , 97, 66008	6
1783	Tunneling behavior of bismuth telluride nanoplates in electrical transport. 2012 , 546, 125-128	2
1782	Spiral growth without dislocations: molecular beam epitaxy of the topological insulator Bi2Se3 on epitaxial graphene/SiC(0001). 2012 , 108, 115501	81
1781	Enhanced thermoelectric properties of Bi2(Te1-xSex)3-based compounds as n-type legs for low-temperature power generation. 2012 , 22, 20943	122
1780	Topological-insulator-based non-volatile memory cells: A quantum device simulation. 2012 ,	1
1779	Spatial distribution of spin polarization in a channel on the surface of a topological insulator. 2012 , 24, 185301	3
1778	Weak antilocalization in Bi2(Se(x)Te(1-x))3 nanoribbons and nanoplates. 2012 , 12, 1107-11	154
1777	Structural and electrical properties of epitaxial Bi2Se3 thin films grown by hybrid physical-chemical vapor deposition. 2012 , 100, 162110	36
1776	Fractional quantum-Hall liquid spontaneously generated by strongly correlated t(2g) electrons. 2012 , 108, 126405	63
1775	Ferromagnetism in thin-film Cr-doped topological insulator Bi2Se3. 2012 , 100, 082404	133
1774	Quasiparticle states and quantum interference induced by magnetic impurities on a two-dimensional topological superconductor. 2012 , 24, 145502	4
1773	Quantum anomalous Hall effect with tunable Chern number in magnetic topological insulator film. 2012 , 85,	93
1772	A note on the topological insulator phase in non-Hermitian quantum systems. 2012 , 24, 145302	17
1771	Transversal propagation of helical edge states in quantum spin Hall systems. 2012 , 98, 17004	12
1770	Actinide topological insulator materials with strong interaction. 2012 , 335, 1464-6	76
1769	Unoccupied topological states on bismuth chalcogenides. 2012 , 86,	54

1768	\$\text{MoS}_2\$ Nanoribbon Transistors: Transition From Depletion Mode to Enhancement Mode by Channel-Width Trimming. 2012 , 33, 1273-1275	87
1767	Magnetoexcitons and optical absorption of bilayer-structured topological insulators. 2012 , 100, 161602	4
1766	Field-effect mobility enhanced by tuning the Fermi level into the band gap of Bi ₂ Se ₃ . 2012 , 85,	19
1765	Ultrahigh mobility and nonsaturating magnetoresistance in Heusler topological insulators. 2012 , 86,	37
1764	Surface lattice vibration and electron-phonon interaction in topological insulator Bi ₂ Te ₃ (111) films from first principles. 2012 , 100, 17001	20
1763	Electronic structure and transport on the surface of topological insulator attached to an electromagnetic superlattice. 2012 , 407, 3664-3670	3
1762	Scanning tunneling microscopy of two-dimensional semiconductors: Spin properties and disorder. 2012 , 44, 1795-1814	21
1761	Extracting the near surface stoichiometry of BiFe _{0.5} Mn _{0.5} O ₃ thin films; a finite element maximum entropy approach. 2012 , 606, 1771-1776	3
1760	Epitaxial thin films of topological insulator Bi ₂ Te ₃ with two-dimensional weak anti-localization effect grown by pulsed laser deposition. 2012 , 520, 6459-6462	40
1759	Spin polarization of photoelectrons from topological insulators. 2012 , 109, 097601	82
1758	Spin Lattice Relaxation in Bismuth Chalcogenides. 2012 , 116, 17300-17305	32
1757	Surface states of topological insulators. 2012 , 86,	113
1756	Native defects in second-generation topological insulators: Effect of spin-orbit interaction on Bi ₂ Se ₃ . 2012 , 86,	97
1755	Bulk topological invariants in noninteracting point group symmetric insulators. 2012 , 86,	245
1754	Optimizing the Majorana character of SQUIDs with topologically nontrivial barriers. 2012 , 86,	17
1753	Proximity-induced high-temperature superconductivity in the topological insulators Bi ₂ Se ₃ and Bi ₂ Te ₃ . 2012 , 3, 1056	132
1752	Prediction of weak topological insulators in layered semiconductors. 2012 , 109, 116406	74
1751	Thickness-independent transport channels in topological insulator Bi ₂ (Se ₃) thin films. 2012 , 109, 116804	265

1750	Topological insulator phase in halide perovskite structures. 2012 , 86,	78
1749	Anomalous quantum diffusion and the topological metal. 2012 , 86,	2
1748	Robust topological surface states in Sb ₂ Te ₃ layers as seen from the weak antilocalization effect. 2012 , 86,	60
1747	Highly tunable electron transport in epitaxial topological insulator (Bi _{1-x} Sb _x) ₂ Te ₃ thin films. 2012 , 101, 123111	68
1746	Magnetically doped semiconducting topological insulators. 2012 , 112, 063912	69
1745	Electron-hole pairing in a topological insulator thin film. 2012 , 86,	41
1744	Electrical modulation of the edge channel transport in topological insulators coupled to ferromagnetic leads. 2012 , 112, 063710	6
1743	Theoretical and experimental study of second harmonic generation from the surface of the topological insulator Bi ₂ Se ₃ . 2012 , 86,	60
1742	Ultrafast surface carrier dynamics in the topological insulator Bi ₂ Te ₃ . 2012 , 12, 3532-6	165
1741	Strong single-ion anisotropy and anisotropic interactions of magnetic adatoms induced by topological surface states. 2012 , 85,	19
1740	Maximally localized Wannier functions: Theory and applications. 2012 , 84, 1419-1475	1475
1739	Spin-plasmons in topological insulator. 2012 , 324, 3610-3612	15
1738	Thickness dependent surface microstructure evolution of bismuth thin film prepared by molecular beam deposition method. 2012 , 12, 1518-1522	10
1737	First-principles calculation of topological invariants within the FP-LAPW formalism. 2012 , 183, 1849-1859	41
1736	Impurity Effects on Superconductivity on Surfaces of Topological Insulators. 2012 , 81, 084707	6
1735	Single Dirac cone on the Cs-covered topological insulator surface Sb ₂ Te ₃ (0001). 2012 , 86,	27
1734	Effect of electron-electron interaction on surface transport in the Bi ₂ Te ₃ family of three-dimensional topological insulators. 2012 , 85,	25
1733	High pressure transport properties of the topological insulator Bi ₂ Se ₃ . 2012 , 24, 035602	46

1732	Intrinsic electron-phonon resistivity of Bi ₂ Se ₃ in the topological regime. 2012 , 109, 166801	61
1731	Topological surface states with persistent high spin polarization across the Dirac point in Bi ₂ Te ₂ Se and Bi ₂ Se ₂ Te. 2012 , 109, 166802	77
1730	Natural sulfur-containing minerals as topological insulators with a wide band gap. 2012 , 96, 322-325	19
1729	Bound states induced by a ferromagnetic delta-layer inserted into a three-dimensional topological insulator. 2012 , 96, 445-451	7
1728	Effects of the electron-electron interaction on the surface of three-dimensional topological insulators. 2012 , 96, 480-485	3
1727	Electronic structure of three-dimensional topological insulators: thickness dependence and warping effect. 2012 , 85, 1	1
1726	Collective excitations on a surface of topological insulator. 2012 , 7, 163	39
1725	Enhanced thermoelectric performance in three-dimensional superlattice of topological insulator thin films. 2012 , 7, 570	24
1724	Nonlinear response of topological insulators in the terahertz regime. 2012 ,	
1723	Spherical topological insulator. 2012 , 86,	41
1722	Three-dimensional models of topological insulators: engineering of Dirac cones and robustness of the spin texture. 2012 , 109, 266805	19
1721	Topological materials. 2012 , 75, 096501	264
1720	Topological electronic structure and Weyl semimetal in the TlBiSe ₂ class of semiconductors. 2012 , 86,	118
1719	Modulation of external electric field on surface states of topological insulator Bi ₂ Se ₃ thin films. 2012 , 101, 223109	11
1718	Terahertz photon mixing effect in graphene and topological insulator. 2012 ,	
1717	Topological insulator nanostructures for near-infrared transparent flexible electrodes. 2012 , 4, 281-6	270
1716	Control over topological insulator photocurrents with light polarization. 2011 , 7, 96-100	375
1715	Exchange field-induced topological phase transition in ultrathin films of three-dimension topological insulators. 2012 , 100, 27005	1

1714	Structure and magnetic properties of Cu-doped Bi ₂ Te ₃ and Sb ₂ Te ₃ single crystals. 2012 , 61, 1675-1678	6
1713	Photoemission spectroscopy of magnetic and nonmagnetic impurities on the surface of the Bi ₂ Se ₃ topological insulator. 2012 , 108, 117601	164
1712	Quasiparticle interference on the surface of Bi ₂ Se ₃ induced by cobalt adatom in the absence of ferromagnetic ordering. 2012 , 85,	54
1711	Magneto-resistance up to 60 Tesla in topological insulator Bi ₂ Te ₃ thin films. 2012 , 101, 202403	76
1710	Optical conductivity of bismuth-based topological insulators. 2012 , 86,	74
1709	Shockley model description of surface states in topological insulators. 2012 , 86,	86
1708	Temperature dependence of Raman-active optical phonons in Bi ₂ Se ₃ and Sb ₂ Te ₃ . 2012 , 100, 071907	74
1707	Phonon spectrum and bonding properties of Bi ₂ Se ₃ : Role of strong spin-orbit interaction. 2012 , 100, 082109	32
1706	Topological States and adiabatic pumping in quasicrystals. 2012 , 109, 106402	530
1705	Bi ₂ Te _{1.6} S _{1.4} : A topological insulator in the tetradymite family. 2012 , 85,	36
1704	Probing two topological surface bands of Sb ₂ Te ₃ by spin-polarized photoemission spectroscopy. 2012 , 86,	73
1703	Tailoring magnetic doping in the topological insulator Bi ₂ Se ₃ . 2012 , 109, 266405	124
1702	Weak antilocalization and conductance fluctuation in a submicrometer-sized wire of epitaxial Bi ₂ Se ₃ . 2012 , 85,	71
1701	Three-dimensional topological insulators: A review on host materials. 2012 , 55, 2199-2212	26
1700	Emergent quantum confinement at topological insulator surfaces. 2012 , 3, 1159	199
1699	Introduction. 2012 , 1-11	1
1698	Three-Dimensional Topological Insulators. 2012 , 113-139	
1697	Revelation of topological surface states in Bi ₂ Se ₃ thin films by in situ Al passivation. 2012 , 6, 295-302	85

- 1696 The comprehensive phase evolution for Bi₂Te₃ topological compound as function of pressure. **2012**, 111, 112630 39
- 1695 A high-sensitive and fast-fabricated glucose biosensor based on Prussian blue/topological insulator Bi₂Se₃ hybrid film. **2012**, 38, 289-94 30
- 1694 Fermi level shift in topological insulator/Silicon heterostructures. **2012**, 152, 2027-2030 7
- 1693 Single Crystal Growth and Transport Properties of Cu-doped Topological Insulator Bi₂Se₃. **2012**, 36, 638-643 10
- 1692 Transport properties of topological insulator Bi₂Se₃ thin films in tilted magnetic fields. **2012**, 46, 236-240 6
- 1691 Large spin-orbit splitting of surface states in ultrathin Au (111) films. **2012**, 377, 129-132 4
- 1690 Ultrafast photodoping and effective Fermi-Dirac distribution of the Dirac particles in Bi₂Se₃. **2012**, 86, 86, 81
- 1689 Local photocurrent generation in thin films of the topological insulator Bi₂Se₃. **2012**, 101, 251110 25
- 1688 Atom-specific spin mapping and buried topological states in a homologous series of topological insulators. **2012**, 3, 635 168
- 1687 Photomixing in topological insulator HgTe/CdTe quantum wells in terahertz regime. **2012**, 101, 211109 11
- 1686 Weak anti-localization and quantum oscillations of surface states in topological insulator Bi₂Se₃. **2012**, 2, 726 145
- 1685 Synthesis and characterization of few-layer Sb₂Te₃ nanoplates with electrostatic properties. **2012**, 2, 10694 17
- 1684 Majorana fermions and exotic surface Andreev bound states in topological superconductors: application to Cu(x)Bi₂Se₃. **2012**, 108, 107005 129
- 1683 Temperature-induced spin density wave in a magnetically doped topological insulator Bi₂Se₃. **2012**, 86, 86, 11
- 1682 Multifractal nature of the surface local density of states in three-dimensional topological insulators with magnetic and nonmagnetic disorder. **2012**, 85, 23
- 1681 Observation of infrared-active modes in Raman scattering from topological insulator nanoplates. **2012**, 23, 455703 32
- 1680 Channel length scaling of MoS₂ MOSFETs. **2012**, 6, 8563-9 594
- 1679 Determinations of the high-pressure crystal structures of Sb₂Te₃. **2012**, 24, 475403 33

1678	A Numerical Study of the Superconducting Proximity Effect in Topological Surface States. 2012 , 391, 012149	4
1677	Preparation and Transport Properties of Bi ₂ O ₂ Se Single Crystals. 2012 , 41, 2317-2321	37
1676	Anomalous anisotropic magnetoresistance in topological insulator films. 2012 , 5, 739-746	59
1675	Ferromagnetism and manipulation of topological surface states in Bi ₂ Se ₃ family by 2p light elements. 2012 , 100, 252410	8
1674	Bulk intergrowth of a topological insulator with a room-temperature ferromagnet. 2012 , 85,	26
1673	The electronic structure of clean and adsorbate-covered Bi ₂ Se ₃ : an angle-resolved photoemission study. 2012 , 27, 124001	42
1672	Complex spin texture in the pure and Mn-doped topological insulator Bi ₂ Te ₃ . 2012 , 108, 206801	75
1671	Magnetoplasmon spectrum of two-dimensional helical metals. 2012 , 14, 013047	
1670	Introduction to Topological Insulators. 2012 , 01, 31-36	2
1669	Electron interaction and localization in ultrathin topological insulator films. 2012 , 55, 2213-2225	3
1668	Topological insulator-graphene junction for spin transport. 2012 , 101, 243102	2
1667	Tunable photogalvanic effect on topological insulator surfaces via proximity interactions. 2012 , 86,	21
1666	Quantum capacitance in topological insulators under strain in a tilted magnetic field. 2012 , 101, 231609	1
1665	Spin and charge structure of the surface states in topological insulators. 2012 , 86,	44
1664	Experimental realization of superconducting quantum interference devices with topological insulator junctions. 2012 , 100, 072602	54
1663	Experimental evidence on the Altshuler-Aronov-Spivak interference of the topological surface states in the exfoliated Bi ₂ Te ₃ nanoflakes. 2012 , 100, 083107	18
1662	Gate-controlled linear magnetoresistance in thin Bi ₂ Se ₃ sheets. 2012 , 100, 212402	65
1661	Surface relaxation of topological insulators: Influence on the electronic structure. 2012 , 85,	39

1660	A-geometrical approach to topological insulators with edge dislocations. 2012 , 14, 063025	4
1659	Epitaxial growth of Bi ₂ Se ₃ layers on InP substrates by hot wall epitaxy. 2012 , 27, 035015	17
1658	Ripple-modulated electronic structure of a 3D topological insulator. 2012 , 3, 1158	27
1657	Superluminal tachyon-like excitations of Dirac fermions in a topological insulator junction. 2012 , 100, 17002	11
1656	Strain-induced topological insulating behavior in ternary chalcogenide Ge ₂ Sb ₂ Te ₅ . 2012 , 97, 27003	15
1655	Quick, controlled synthesis of ultrathin Bi ₂ Se ₃ nanodiscs and nanosheets. 2012 , 134, 2872-5	133
1654	Structures and properties of the ternary thallium chalcogenides Tl ₂ MQ ₃ (M = Zr, Hf; Q = S, Se). 2012 , 41, 9646-50	8
1653	Vibrations in binary and ternary topological insulators: First-principles calculations and Raman spectroscopy measurements. 2012 , 86,	68
1652	Large-scale production of ultrathin topological insulator bismuth telluride nanosheets by a hydrothermal intercalation and exfoliation route. 2012 , 22, 4921	137
1651	Exotic topological insulator states and topological phase transitions in Sb ₂ Se ₃ -Bi ₂ Se ₃ heterostructures. 2012 , 6, 2345-52	51
1650	Magnetic instability on the surface of topological insulators. 2012 , 85,	24
1649	Comparative Study of the Microstructure of Bi ₂ Se ₃ Thin Films Grown on Si(111) and InP(111) Substrates. 2012 , 12, 1913-1918	63
1648	Topological quantum phase transitions driven by external electric fields in Sb ₂ Te ₃ thin films. 2012 , 109, 671-4	59
1647	Transport in three-dimensional topological insulators: Theory and experiment. 2012 , 44, 860-884	110
1646	Quantized Hall effect and Shubnikov-de Haas oscillations in highly doped Bi ₂ Se ₃ : evidence for layered transport of bulk carriers. 2012 , 108, 216803	132
1645	Measurement of an exceptionally weak electron-phonon coupling on the surface of the topological insulator Bi ₂ Se ₃ using angle-resolved photoemission spectroscopy. 2012 , 108, 187001	123
1644	Josephson supercurrent through a topological insulator surface state. 2012 , 11, 417-21	241
1643	Topological insulators in filled skutterudites. 2012 , 85,	53

1642	Controlled synthesis of topological insulator nanoplate arrays on mica. 2012 , 134, 6132-5	152
1641	Computational design of axion insulators based on 5d spinel compounds. 2012 , 108, 146601	101
1640	Electron-phonon coupling on the surface of the topological insulator Bi ₂ Se ₃ determined from surface-phonon dispersion measurements. 2012 , 108, 185501	110
1639	Single crystalline HgAg ₂ Te nanowire as a new topological insulator. 2012 , 12, 4194-9	63
1638	Effect of magnetic field on electron transport in HgTe/CdTe quantum wells: Numerical analysis. 2012 , 85,	45
1637	Double-layer graphene and topological insulator thin-film plasmons. 2012 , 85,	84
1636	Thickness dependence oscillations of transport properties in thin films of a topological insulator Bi ₉ Sb ₉ . 2012 , 101, 023108	4
1635	Emergence of non-centrosymmetric topological insulating phase in BiTeI under pressure. 2012 , 3, 679	178
1634	Electron-phonon scattering in topological insulator thin films. 2012 , 85,	58
1633	Surface-dominated conduction in a 6 nm thick Bi ₂ Se ₃ thin film. 2012 , 12, 1486-90	146
1632	Three-dimensional topological insulator in a magnetic field: chiral side surface states and quantized Hall conductance. 2012 , 24, 015004	21
1631	Quasiparticle effects in the bulk and surface-state bands of Bi ₂ Se ₃ and Bi ₂ Te ₃ topological insulators. 2012 , 85,	101
1630	Linear magnetoresistance on the topological surface. 2012 , 86,	52
1629	Weak localization and antilocalization in topological insulator thin films with coherent bulk-surface coupling. 2012 , 86,	122
1628	Spin conduction in anisotropic three-dimensional topological insulators. 2012 , 85,	9
1627	Ultra-low carrier concentration and surface-dominant transport in antimony-doped Bi ₂ Se ₃ topological insulator nanoribbons. 2012 , 3, 757	175
1626	High-density chemical intercalation of zero-valent copper into Bi ₂ Se ₃ nanoribbons. 2012 , 134, 7584-7	122
1625	Surface magnetic ordering in topological insulators with bulk magnetic dopants. 2012 , 85,	80

1624	Angle-Resolved Photoemission Studies of Quantum Materials. 2012 , 3, 129-167	59
1623	Effect of atomic impurities on the helical surface states of the topological insulator Bi ₂ Te ₃ . 2012 , 24, 175001	11
1622	Gate-controlled surface conduction in Na-doped Bi ₂ Te ₃ topological insulator nanoplates. 2012 , 12, 1170-5	119
1621	Dirac semimetal and topological phase transitions in A ₃ Bi (A=Na, K, Rb). 2012 , 85,	1244
1620	Topological and electronic transitions in a Sb(111) nanofilm: The interplay between quantum confinement and surface effect. 2012 , 85,	146
1619	Controlling bulk conductivity in topological insulators: key role of anti-site defects. 2012 , 24, 2154-8	227
1618	Topological Insulators from a Chemist's Perspective. 2012 , 124, 7333-7337	21
1617	Topological insulators from a chemist's perspective. 2012 , 51, 7221-5	78
1616	Transparent conducting materials: Flexibility with a metallic skin. 2012 , 4, 252-3	3
1615	Interplay between topological insulators and superconductors. 2012 , 85,	41
1614	Topological p-n junction. 2012 , 85,	73
1613	Band inversion mechanism in topological insulators: A guideline for materials design. 2012 , 85,	59
1612	Junction between surfaces of two topological insulators. 2012 , 85,	30
1611	Topological quantum phase transition in 5d transition metal oxide Na ₂ IrO ₃ . 2012 , 108, 106401	83
1610	Tolerance of topological surface states towards magnetic moments: Fe on Bi ₂ Se ₃ . 2012 , 108, 256810	161
1609	Spin-orbit-induced photoelectron spin polarization in angle-resolved photoemission from both atomic and condensed matter targets. 2012 , 24, 173001	85
1608	Topological phase transition in layered GaS and GaSe. 2012 , 108, 266805	88
1607	The coexistence of superconductivity and topological order in the Bi ₂ Se ₃ thin films. 2012 , 336, 52-5	371

1606	Two-dimensional transport and screening in topological insulator surface states. 2012 , 85,	48
1605	Topological insulator nanostructures: Materials synthesis, Raman spectroscopy, and transport properties. 2012 , 7, 208-217	17
1604	Spatial and energy distribution of topological edge states in single Bi(111) bilayer. 2012 , 109, 016801	246
1603	Intrinsic ultrathin topological insulators grown via molecular beam epitaxy characterized by in-situ angle resolved photoemission spectroscopy. 2012 , 101, 013118	27
1602	Invited paper: Composition-dependent electrical properties of ternary Ag _x Sb _{1-x} Te thin films synthesized by cationic exchange reaction. 2012 , 8, 219-224	1
1601	Electron transport properties of three-dimensional topological insulators. 2012 , 7, 165-174	25
1600	Tuning the Fermi level in Bi ₂ Se ₃ bulk materials and transport devices. 2012 , 7, 160-164	6
1599	Studies on the electronic structures of three-dimensional topological insulators by angle resolved photoemission spectroscopy. 2012 , 7, 175-192	29
1598	Superconductivity of topological matters induced via pressure. 2012 , 7, 193-199	27
1597	Quantum phase transition of cold atoms trapped in optical lattices. 2012 , 7, 223-234	6
1596	Preparation and characterization of TiO ₂ nanobelts deposited with Bi ₂ Se ₃ nanoplates. 2012 , 83, 108-111	5
1595	Electronic structure, optical properties and Compton profiles of Bi ₂ S ₃ and Bi ₂ Se ₃ . 2012 , 14, 241-249	48
1594	Raman signatures of pressure induced electronic topological and structural transitions in Bi ₂ Te ₃ . 2012 , 152, 284-287	24
1593	Colossal anisotropy in diluted magnetic topological insulators. 2012 , 152, 403-406	17
1592	Observation of Fermi-energy dependent unitary impurity resonances in a strong topological insulator Bi ₂ Se ₃ with scanning tunneling spectroscopy. 2012 , 152, 747-751	34
1591	Momentum and spin filtering of electrons on the surface of a topological insulator. 2012 , 152, 933-937	3
1590	Photogalvanic in ultrathin film of topological insulator. 2012 , 44, 895-899	14
1589	Robust topological surface state against direct surface contamination. 2012 , 44, 891-894	17

1588	Scanning tunneling microscopy studies of topological insulators. 2012 , 44, 912-916	10
1587	Half quantum spin Hall effect on the surface of weak topological insulators. 2012 , 44, 906-911	43
1586	Topological insulators and quantum spin liquids. 2012 , 44, 845-859	23
1585	Finite size effects of the surface states in a lattice model of topological insulator. 2012 , 44, 885-890	13
1584	Preface. 2012 , 44, 843-844	
1583	Effects of surface modification on the properties of topological surface states in Bi ₂ Se ₃ . 2012 , 376, 768-772	5
1582	MoS_2 Dual-Gate MOSFET With Atomic-Layer-Deposited Al_2O_3 as Top-Gate Dielectric. 2012 , 33, 546-548	351
1581	Spin-related tunneling through a nanostructured electric-magnetic barrier on the surface of a topological insulator. 2012 , 7, 90	9
1580	Magnetoresistance switch effect of a Sn-doped Bi ₂ Te ₃ topological insulator. 2012 , 24, 132-6	41
1579	Transport Properties of Topological Insulator-Based Ferromagnet/f-Wave Superconductor Junction. 2013 , 26, 3355-3362	4
1578	Large magnetoresistance in high mobility topological insulator Bi ₂ Se ₃ . 2013 , 103, 033106	59
1577	Topological quantum well resonances in metal overlayers. 2013 , 87,	5
1576	Tuning the temperature domain of phonon drag in thin films by the choice of substrate. 2013 , 111, 046803	16
1575	Optical conductivities and signatures of topological insulators with hexagonal warping. 2013 , 88,	23
1574	Hot wall epitaxy of Sb ₂ Te ₃ layers: coherent hetero-epitaxy on InAs(1 1 1) and Sb substitution in Cu-mediated growth. 2013 , 28, 025012	4
1573	Band structure tunability in MoS ₂ under interlayer compression: A DFT and GW study. 2013 , 87,	38
1572	Scanning tunneling microscopy of gate tunable topological insulator Bi ₂ Se ₃ thin films. 2013 , 87,	27
1571	Growth, Structure, and Electronic Properties of Epitaxial Bismuth Telluride Topological Insulator Films on BaF ₂ (111) Substrates. 2013 , 13, 3365-3373	60

1570	Low-temperature transport properties of Tl-doped Bi ₂ Te ₃ single crystals. 2013 , 88,	38
1569	Novel family of chiral-based topological insulators: elemental tellurium under strain. 2013 , 110, 176401	102
1568	Spin-orbital texture in topological insulators. 2013 , 111, 066801	101
1567	First-principles study of native point defects in Bi ₂ Se ₃ . 2013 , 3, 052105	56
1566	Mapping the orbital wavefunction of the surface states in three-dimensional topological insulators. <i>Nature Physics</i> , 2013 , 9, 499-504	16.2 92
1565	In situ Raman spectroscopy of topological insulator Bi ₂ Te ₃ films with varying thickness. 2013 , 6, 688-692	46
1564	Morphological evolution and structural characterization of bismuth telluride (Bi ₂ Te ₃) nanostructures. 2013 , 46, 285301	16
1563	Parallel field magnetoresistance in topological insulator thin films. 2013 , 88,	50
1562	Appearance and disappearance of edge states in topological insulators. 2013 , 86, 1	
1561	Effects on the non-relativistic dynamics of a charged particle interacting with a Chern-Simons potential. 2013 , 86, 1	7
1560	Quantum Hall effect in multilayered massless Dirac fermion systems with tilted cones. 2013 , 88,	38
1559	Origin of coherent phonons in Bi ₂ Te ₃ excited by ultrafast laser pulses. 2013 , 88,	26
1558	Emerging weak localization effects on a topological insulator/insulating ferromagnet (Bi ₂ Se ₃ -EuS) interface. 2013 , 88,	105
1557	Origin of Rashba splitting in the quantized subbands at the Bi ₂ Se ₃ surface. 2013 , 88,	16
1556	Cancellation of quantum anomalies and bosonization of three-dimensional time-reversal symmetric topological insulators. 2013 , 88,	10
1555	Topological insulators with commensurate antiferromagnetism. 2013 , 88,	68
1554	Proposed detection of time-reversal symmetry in topological surface states. 2013 , 88,	
1553	Transport properties of topological insulators films and nanowires. 2013 , 22, 067302	8

1552	Topological edge states and electronic structures of a 2D topological insulator: Single-bilayer Bi (111). 2013 , 22, 067304	11
1551	Many-body effects and possible superconductivity in the two-dimensional metallic surface states of three-dimensional topological insulators. 2013 , 88,	41
1550	Quantum magnetotransport properties of ultrathin topological insulator films. 2013 , 113, 043720	13
1549	Symmetry predicted transitions in 3D topological insulators. 2013 , 163, 11-14	5
1548	Theoretical study of influencing factors on the dispersion of bulk band-gap edges and the surface states in topological insulators Bi ₂ Te ₃ and Bi ₂ Se ₃ . 2013 , 116, 1006-1017	9
1547	Structural, electrical, and thermoelectrical properties of (Bi _{1-x} Sb _x) ₂ Se ₃ alloys prepared by a conventional melting technique. 2013 , 116, 166-172	18
1546	Interface-induced states at the boundary between a 3D topological insulator and a normal insulator. 2013 , 97, 258-264	15
1545	Photogalvanic effects in topological insulators. 2013 , 97, 82-86	21
1544	Efficient step-mediated intercalation of silver atoms deposited on the Bi ₂ Se ₃ surface. 2013 , 96, 714-718	16
1543	Pressure-induced structural transitions and metallization in Ag ₂ Te. 2013 , 88,	18
1542	Nanostructured Inorganic/Organic Hybrid Semiconductor Materials. 2013 , 375-415	2
1541	Thickness-dependent bulk electronic properties in Bi ₂ Se ₃ thin films revealed by infrared spectroscopy. 2013 , 88,	42
1540	Carrier dependent ferromagnetism in chromium doped topological insulator . 2013 , 377, 1925-1929	13
1539	Electronic topological transition and semiconductor-to-metal conversion of Bi ₂ Te ₃ under high pressure. 2013 , 103, 052102	35
1538	Quantum magnetotransport for the surface states of three-dimensional topological insulators in the presence of a Zeeman field. 2013 , 102, 37001	2
1537	Evolution of topological surface states in antimony ultra-thin films. 2013 , 3, 2010	32
1536	Thickness-induced violation of de Haas-van Alphen effect through exact analytical solutions at a one-electron and a one-composite fermion level. 2013 , 86, 1	1
1535	Time resolved ultrafast ARPES for the study of topological insulators: The case of Bi ₂ Te ₃ . 2013 , 222, 1271-1275	18

1534	Quantum anomalous Hall effect with higher plateaus. 2013 , 111, 136801	95
1533	Surface Debye temperature and vibrational dynamics of Antimony(111) from helium atom scattering measurements. 2013 , 617, 225-228	15
1532	Thermoelectric characterization of bismuth telluride nanowires, synthesized via catalytic growth and post-annealing. 2013 , 25, 239-44	73
1531	Enhanced thermoelectric properties and layered structure of Sb ₂ Te ₃ films induced by special (00l) crystal plane. 2013 , 584, 159-164	13
1530	Robust p-type behavior in polycrystalline, ball-milled, magnesium-doped Bi ₂ Se ₃ . 2013 , 173, 5-8	11
1529	Spin Hall Effects in Metals. 2013 , 49, 5172-5193	715
1528	Superconductivity in copper intercalated topological compound Cu _x Bi ₂ Te ₃ induced via high pressure. 2013 , 493, 75-76	7
1527	Discovery of a single topological Dirac fermion in the strong inversion asymmetric compound BiTeCl. <i>Nature Physics</i> , 2013 , 9, 704-708	16.2 59
1526	Quantum transport in magnetic topological insulator thin films. 2013 , 111, 146802	47
1525	Large-gap quantum spin Hall insulators in tin films. 2013 , 111, 136804	952
1524	Optical Properties and Electronic Band Structure of Topological Insulators (on A ₅ B ₆ Compound Based). 2013 , 448, 29-41	5
1523	Odd-frequency superconducting pairing in multiband superconductors. 2013 , 88,	68
1522	Engineering topological surface states: HgS, HgSe, and HgTe. 2013 , 111, 146803	23
1521	Topological insulator Bi ₂ Se ₃ (111) surface doped with transition metals: An ab initio investigation. 2013 , 88,	46
1520	Observation of huge surface hole mobility in the topological insulator Bi(0.91)Sb(0.09) (111). 2013 , 111, 176801	13
1519	Enhanced Thermoelectric Properties and Superlattice Structure of a Bi ₂ Te ₃ /ZrB ₂ Film Prepared by Ion-Beam-Assisted Deposition. 2013 , 117, 20415-20420	17
1518	Photocurrent response of topological insulator surface states. 2013 , 88,	57
1517	Ordered growth of topological insulator Bi ₂ Se ₃ thin films on dielectric amorphous SiO ₂ by MBE. 2013 , 5, 10618-22	51

1516	Graphene-based topological insulator with an intrinsic bulk band gap above room temperature. 2013 , 13, 6251-5	102
1515	Topological surface transport properties of single-crystalline SnTe nanowire. 2013 , 13, 5344-9	102
1514	Stability, electronic, and magnetic properties of the magnetically doped topological insulators Bi ₂ Se ₃ , Bi ₂ Te ₃ , and Sb ₂ Te ₃ . 2013 , 88,	100
1513	Local strain and anharmonicity in the bonding of Bi ₂ Se ₃ /Te ₃ topological insulators. 2013 , 88,	9
1512	Controlled growth of atomically thin In ₂ Se ₃ flakes by van der Waals epitaxy. 2013 , 135, 13274-7	156
1511	Bound-states and polarized charged zero modes in three-dimensional topological insulators induced by a magnetic vortex. 2013 , 86, 1	4
1510	From magnetically doped topological insulator to the quantum anomalous Hall effect. 2013 , 22, 067305	28
1509	Models and Materials for Topological Insulators. 2013 , 6, 59-89	2
1508	New Materials. 2013 , 237-262	
1507	Direct observation of band bending in the topological insulator Bi ₂ Se ₃ . 2013 , 88,	30
1506	Electrochemical tuning of vertically aligned MoS ₂ nanofilms and its application in improving hydrogen evolution reaction. 2013 , 110, 19701-6	747
1505	Conductivity oscillation of surface state of three-dimensional topological insulators induced by a linearly polarized terahertz field. 2013 , 25, 425603	2
1504	High-Pressure Phase Transitions and Structures of Topological Insulator BiTeI. 2013 , 117, 25677-25683	43
1503	Topological phase transition and two-dimensional topological insulators in Ge-based thin films. 2013 , 88,	15
1502	Topological insulator nanostructures and devices. 2013 , 22, 096104	12
1501	Two-dimensional chalcogenide nanoplates as tunable metamaterials via chemical intercalation. 2013 , 13, 5913-8	60
1500	Spin injection from topological insulator tunnel-coupled to metallic leads. 2013 , 98, 285-288	2
1499	Elemental topological insulator with tunable Fermi level: strained Hg on InSb(001). 2013 , 111, 157205	110

1498	Topological Surface States: A New Type of 2D Electron Systems. 2013 , 143-174	2
1497	Theory of Three-Dimensional Topological Insulators. 2013 , 35-57	3
1496	Topological Band Theory and the Z2 Invariant. 2013 , 6, 3-34	19
1495	Visualizing Topological Surface States and their Novel Properties using Scanning Tunneling Microscopy and Spectroscopy. 2013 , 175-198	3
1494	Transport Experiments on Three-Dimensional Topological Insulators. 2013 , 6, 199-233	1
1493	Suppression of conductance in a topological insulator nanostep junction. 2013 , 87,	13
1492	Preferential scattering by interfacial charged defects for enhanced thermoelectric performance in few-layered n-type Bi ₂ Te ₃ . 2013 , 3, 3212	83
1491	Topological insulators with SU(2) Landau levels. 2013 , 111, 186803	27
1490	Design principles for HgTe based topological insulator devices. 2013 , 114, 043702	22
1489	Spin-orbit coupling in quasiparticle studies of topological insulators. 2013 , 88,	39
1488	GW quasiparticle band structures of stibnite, antimonelite, bismuthinite, and guanajuatite. 2013 , 87,	142
1487	Evidence for topological band inversion of the phase change material Ge ₂ Sb ₂ Te ₅ . 2013 , 103, 243109	26
1486	Electronic and crystalline structures of zero band-gap LuPdBi thin films grown epitaxially on MgO(100). 2013 , 102, 172401	10
1485	Abundant topological states in silicene with transition metal adatoms. 2013 , 88,	50
1484	Two-dimensional weak anti-localization in Bi ₂ Te ₃ thin film grown on Si(111)-(7 × 7) surface by molecular beam epitaxy. 2013 , 102, 163118	57
1483	Review of 3D topological insulator thin-film growth by molecular beam epitaxy and potential applications. 2013 , 7, 50-63	125
1482	GW study of topological insulators Bi ₂ Se ₃ , Bi ₂ Te ₃ , and Sb ₂ Te ₃ : Beyond the perturbative one-shot approach. 2013 , 88,	69
1481	Electronic transport properties of topological insulator films and low dimensional superconductors. 2013 , 8, 491-508	11

1480	Surface reactivity enhancement on a Pd/Bi ₂ Te ₃ heterostructure through robust topological surface states. 2013 , 3, 2497	14
1479	Structural and electronic properties of highly doped topological insulator Bi ₂ Se ₃ crystals. 2013 , 7, 133-135	34
1478	A large-energy-gap oxide topological insulator based on the superconductor BaBiO ₃ . <i>Nature Physics</i> , 2013 , 9, 709-711	16.2 121
1477	Three-dimensional Dirac semimetal and quantum transport in Cd ₃ As ₂ . 2013 , 88,	1094
1476	Elastic scattering of surface states on three-dimensional topological insulators. 2013 , 22, 067301	5
1475	Dielectric properties of Bi doped Sb ₂ Te ₃ thin films studied by terahertz time-domain spectroscopy. 2013 ,	
1474	Thermal conductivity measurement of individual Bi ₂ Se ₃ nano-ribbon by self-heating three-□ method. 2013 , 102, 043104	28
1473	Spiral growth of topological insulator Sb ₂ Te ₃ nanoplates. 2013 , 102, 013105	28
1472	Tunable topological surface and realization of insulating massive Dirac fermion state in Bi ₂ Te ₂ Se with co-substitution. 2013 , 1, 114-120	3
1471	Resonant tunneling in a topological insulator superlattice. 2013 , 114, 093703	4
1470	High performance topological insulator nanowire field-effect transistors. 2013 ,	0
1469	Self-Assembled Topological Insulator: Bi ₂ Se ₃ Membrane as a Passive Q-Switcher in an Erbium-Doped Fiber Laser. 2013 , 31, 2857-2863	132
1468	Topological phase transitions in (Bi _{1-x} In _x) ₂ Se ₃ and (Bi _{1-x} Sb _x) ₂ Se ₃ . 2013 , 88,	38
1467	Topological insulators from the perspective of first-principles calculations. 2013 , 7, 72-81	58
1466	Low-temperature surface conduction in the Kondo insulator SmB ₆ . 2013 , 88,	264
1465	Structural, elastic, and electronic properties of topological insulators: Sb ₂ Te ₃ and Bi ₂ Te ₃ . 2013 ,	3
1464	High performance multilayer MoS ₂ transistors with scandium contacts. 2013 , 13, 100-5	1744
1463	The space group classification of topological band-insulators. <i>Nature Physics</i> , 2013 , 9, 98-102	16.2 342

1462	Photonic topological insulators. 2013 , 12, 233-9	1045
1461	Graphene-like two-dimensional materials. 2013 , 113, 3766-98	3191
1460	NMR probe of metallic states in nanoscale topological insulators. 2013 , 110, 026602	40
1459	Inelastic electron tunneling spectroscopy for topological insulators. 2013 , 110, 026802	19
1458	Facile synthesis and thermoelectric properties of self-assembled Bi ₂ Te ₃ one-dimensional nanorod bundles. 2013 , 19, 2889-94	26
1457	Topological spin-polarized electron layer above the surface of Ca-terminated Bi ₂ Se ₃ . 2013 , 87,	8
1456	Vortex lattices in the superconducting phases of doped topological insulators and heterostructures. 2013 , 87,	24
1455	Molecular beam epitaxial growth and exotic electronic structure of topological insulators. 2013 , 579-589	1
1454	Tunneling spectroscopy of chiral states in ultra-thin topological insulators. 2013 , 113, 063707	6
1453	Influence of the GeSb sublattice atomic composition on the topological electronic properties of Ge ₂ Sb ₂ Te ₅ . 2013 , 267, 169-172	12
1452	Efficient iterative method for solving the Dirac-Kohn-Sham density functional theory. 2013 , 245, 205-217	4
1451	Growth of single-crystalline bismuth antimony telluride nanoplates on the surface of nanoparticle thin films. 2013 , 372, 199-204	19
1450	Synthesis and dielectric relaxation behavior of metallic Bi ₂ Te ₃ nanotubes. 2013 , 108, 25-28	5
1449	Plutonium hexaboride is a correlated topological insulator. 2013 , 111, 176404	59
1448	Rocksalt SnS and SnSe: Native topological crystalline insulators. 2013 , 88,	79
1447	Quasiparticle band gap in the topological insulator Bi ₂ Te ₃ . 2013 , 88,	32
1446	Quantum anomalous Hall effect and tunable topological states in 3d transition metals doped silicene. 2013 , 3, 2908	137
1445	Separation of top and bottom surface conduction in Bi ₂ Te ₃ thin films. 2013 , 24, 015705	40

1444	Tapered BiTe nanowires synthesis by galvanic displacement reaction of compositionally modulated NiFe nanowires. 2013 , 90, 582-588	7
1443	Study on the electrochemical catalytic properties of the topological insulator Bi ₂ Se ₃ . 2013 , 46, 171-4	17
1442	Coherent optical phonons in a Bi ₂ Se ₃ single crystal measured via transient anisotropic reflectivity. 2013 , 157, 58-61	20
1441	Enhanced field-emission behavior of layered MoS ₂ sheets. 2013 , 9, 2730-4	173
1440	Spin-polarization limit in Bi ₂ Te ₃ Dirac cone studied by angle- and spin-resolved photoemission experiments and ab initio calculations. 2013 , 87,	33
1439	Topological states ruled by stacking faults in Bi ₂ Se ₃ and Bi ₂ Te ₃ . 2013 , 113, 023705	19
1438	Electronic structure, surface morphology, and topologically protected surface states of Sb ₂ Te ₃ thin films grown on Si(111). 2013 , 113, 053706	39
1437	Electronic structure of SnSb ₂ Te ₄ and PbSb ₂ Te ₄ topological insulators. 2013 , 267, 1-3	24
1436	Electron transport in a ferromagnetic/normal/ferromagnetic tunnel junction based on the surface of a topological insulator. 2013 , 86, 1	5
1435	Gapless interface states at the junction between two topological insulators. 2013 , 87,	8
1434	Andreev bound states and current-phase relations in three-dimensional topological insulators. 2013 , 87,	41
1433	Ambipolar surface conduction in ternary topological insulator Bi ₂ (Te _{1-x} Se _x) nanoribbons. 2013 , 7, 2126-31	34
1432	Topological phase diagrams of bulk and monolayer TiS _{2-x} Tex. 2013 , 110, 077202	38
1431	Correlated topological insulators with mixed valence. 2013 , 110, 096401	245
1430	Photoelectron spin-flipping and texture manipulation in a topological insulator. <i>Nature Physics</i> , 2013 , 9, 293-298	16.2 152
1429	A natural topological insulator. 2013 , 13, 1179-84	31
1428	Circular dichroism in angle-resolved photoemission spectroscopy of topological insulators. 2013 , 7, 64-71	42
1427	Anisotropic topological surface states on high-index Bi ₂ Se ₃ films. 2013 , 25, 1557-62	39

1426	Thermoelectric transport in thin films of three-dimensional topological insulators. 2013 , 87,	7
1425	Nanoscale magnetic imaging of a single electron spin under ambient conditions. <i>Nature Physics</i> , 2013 , 9, 215-219	16.2 264
1424	Prediction of topological insulating behavior in inverse Heusler compounds from first principles. 2013 , 70, 145-149	15
1423	Organic topological insulators in organometallic lattices. 2013 , 4, 1471	195
1422	Strain-induced topological insulator phase transition in HgSe. 2013 , 87,	30
1421	Massive Dirac surface states in topological insulator/magnetic insulator heterostructures. 2013 , 87,	115
1420	Sharp Raman anomalies and broken adiabaticity at a pressure induced transition from band to topological insulator in Sb ₂ Se ₃ . 2013 , 110, 107401	83
1419	Ambipolar field effect in Sb-doped Bi ₂ Se ₃ nanoplates by solvothermal synthesis. 2013 , 13, 632-6	50
1418	Progress, challenges, and opportunities in two-dimensional materials beyond graphene. 2013 , 7, 2898-926	3414
1417	Quantum interference and Aharonov-Bohm oscillations in topological insulators. 2013 , 76, 056501	113
1416	Bismuth-based candidates for topological insulators: Chemistry beyond Bi ₂ Te ₃ . 2013 , 7, 39-49	31
1415	Synthesis and quantum transport properties of Bi ₂ Se ₃ topological insulator nanostructures. 2013 , 3, 1264	88
1414	Gas doping on the topological insulator Bi ₂ Se ₃ surface. 2013 , 110, 016403	26
1413	Proximity effects in a topological-insulator/Mott-insulator heterostructure. 2013 , 87,	8
1412	Realization of insulating massive Dirac fermion state in Bi ₂ Te ₃ by co-substitution of magnetic and non-magnetic elements. 2013 , 102, 092402	3
1411	Quantum simulation of topological insulator based spin transfer torque device. 2013 , 102, 073106	11
1410	Recent developments and future directions in the growth of nanostructures by van der Waals epitaxy. 2013 , 5, 3570-88	122
1409	Creation of helical Dirac fermions by interfacing two gapped systems of ordinary fermions. 2013 , 4, 1384	71

1408	Topologically protected quantum transport in locally exfoliated bismuth at room temperature. 2013 , 110, 176802	85
1407	Topological crystalline insulators in transition metal oxides. 2013 , 110, 156403	80
1406	Thermoelectric transport and Hall measurements of low defect Sb ₂ Te ₃ thin films grown by atomic layer deposition. 2013 , 28, 035010	62
1405	Bulk and surface electronic structure of SnBi ₄ Te ₇ topological insulator. 2013 , 267, 146-149	9
1404	Charging Dirac states at antiphase domain boundaries in the three-dimensional topological insulator Bi ₂ Se ₃ . 2013 , 110, 186804	21
1403	Graphene-analogous low-dimensional materials. 2013 , 58, 1244-1315	600
1402	Shubnikov de Haas quantum oscillation of the surface states in the metallic Bismuth Telluride sheets. 2013 , 67, 1	3
1401	2D ultrathin nanosheets of Co-Al layered double hydroxides prepared in l-asparagine solution: enhanced peroxidase-like activity and colorimetric detection of glucose. 2013 , 1, 2268-2274	104
1400	Thin films of magnetically doped topological insulator with carrier-independent long-range ferromagnetic order. 2013 , 25, 1065-70	201
1399	Chiral gauge field and axial anomaly in a Weyl semimetal. 2013 , 87,	239
1398	Topological insulators and thermoelectric materials. 2013 , 7, 91-100	127
1397	Magnetic Heusler Compounds. 2013 , 1-75	17
1396	Metal-insulator transition in variably doped (Bi(1-x)Sb(x)) ₂ Se ₃ nanosheets. 2013 , 5, 4337-43	27
1395	Tuning the free electron concentration in Sr-doped Bi ₂ Se ₃ . 2013 , 74, 746-750	6
1394	Strain-induced topological insulator phase and effective magnetic interactions in Li ₂ IrO ₃ . 2013 , 87,	29
1393	Nuclear magnetic resonance as a probe of electronic states of Bi ₂ Se ₃ . 2013 , 87,	27
1392	Quantum impurity in the bulk of a topological insulator. 2013 , 87,	13
1391	Crystal Growth and Real Structure Effects of the First Weak 3D Stacked Topological Insulator Bi ₁₄ Rh ₃ I ₉ . 2013 , 25, 2359-2364	27

1390	Formation and properties of selenium double-helices inside double-wall carbon nanotubes: experiment and theory. 2013 , 7, 5607-13	43
1389	Liquid-phase syntheses and material properties of two-dimensional nanocrystals of rare earth-selenium compound containing planar Se layers: RESe ₂ nanosheets and RE ₄ O ₄ Se ₃ nanoplates. 2013 , 135, 8363-71	50
1388	Layer-by-layer entangled spin-orbital texture of the topological surface state in Bi ₂ Se ₃ . 2013 , 110, 216401	96
1387	The electronic structure of spintronic materials as seen by spin-polarized angle-resolved photoemission. 2013 , 189, 137-145	2
1386	Direct atom-by-atom chemical identification of nanostructures and defects of topological insulators. 2013 , 13, 2851-6	48
1385	Stretch-induced stiffness enhancement of graphene grown by chemical vapor deposition. 2013 , 7, 1171-7	60
1384	Magnetically robust topological edge states and flat bands. 2013 , 87,	14
1383	Crystal structure and chemistry of topological insulators. 2013 , 1, 3176	164
1382	Topological Insulators in Graphyne. 2013 , 59, 489-493	2
1381	Superconductivity in topological insulator Sb ₂ Te ₃ induced by pressure. 2013 , 3, 2016	113
1380	The helical surface states of the S-covered topological insulator Sb ₂ Te ₃ (0001). 2013 , 25, 265005	1
1379	Topology-driven magnetic quantum phase transition in topological insulators. 2013 , 339, 1582-6	173
1378	Experimental observation of the quantum anomalous Hall effect in a magnetic topological insulator. 2013 , 340, 167-70	2044
1377	Engineering three-dimensional topological insulators in Rashba-type spin-orbit coupled heterostructures. 2013 , 4, 1972	32
1376	Topological Insulator Bi ₂ Se ₃ Nanowire High Performance Field-Effect Transistors. 2013 , 3,	61
1375	Topological oxide insulator in cubic perovskite structure. 2013 , 3, 1651	39
1374	Spin-dependent surface barrier from very-low-energy electron diffraction fine structures: A feasibility study. 2013 , 87,	6
1373	Stabilization of the quantum spin Hall effect by designed removal of time-reversal symmetry of edge states. 2013 , 110, 266802	32

1372	High-pressure phase transitions, amorphization, and crystallization behaviors in Bi ₂ Se ₃ . 2013 , 25, 125602	44
1371	Stabilization of 9/10-Fold Structure in Bismuth Selenide at High Pressures. 2013 , 117, 10045-10050	38
1370	Coherent topological transport on the surface of Bi ₂ Se ₃ . 2013 , 4, 2040	95
1369	Few-layered CoHPO ₄ · 3H ₂ O ultrathin nanosheets for high performance of electrode materials for supercapacitors. 2013 , 5, 5752-7	89
1368	MoSe ₂ and WSe ₂ nanofilms with vertically aligned molecular layers on curved and rough surfaces. 2013 , 13, 3426-33	579
1367	MAGNETORESISTANCE IN TOPOLOGICAL INSULATOR MnxBi _{2-x} Se ₃ CRYSTALS. 2013 , 27, 1362036	2
1366	Persistent coherence and spin polarization of topological surface states on topological insulators. 2013 , 88,	16
1365	Evidence for a direct band gap in the topological insulator Bi ₂ Se ₃ from theory and experiment. 2013 , 87,	96
1364	Entanglement spectrum classification of C _n -invariant noninteracting topological insulators in two dimensions. 2013 , 87,	53
1363	Surface state magnetization and chiral edge states on topological insulators. 2013 , 110, 046404	125
1362	Doping nature of Cu in epitaxial topological insulator Bi ₂ Te ₃ thin films. 2013 , 617, 156-161	2
1361	Protection of the surface states in topological insulators: Berry phase perspective. 2013 , 87,	6
1360	Tuning the vertical location of helical surface states in topological insulator heterostructures via dual-proximity effects. 2013 , 3, 1233	34
1359	Topological dangling bonds with large spin splitting and enhanced spin polarization on the surfaces of Bi ₂ Se ₃ . 2013 , 13, 1915-9	32
1358	Anomalous electron trajectory in topological insulators. 2013 , 87,	28
1357	Dual evidence of surface Dirac states in thin cylindrical topological insulator Bi ₂ Te ₃ nanowires. 2013 , 3, 1212	69
1356	Transport and STM studies of hyperbolic surface states of topological insulators. 2013 , 87,	6
1355	Aharonov-Bohm oscillations and weak antilocalization in topological insulator Sb ₂ Te ₃ nanowires. 2013 , 102, 223110	46

1354	New topological surface state in layered topological insulators: Unoccupied dirac cone. 2013 , 96, 780-784	12
1353	Imbert-Bedorov shifts of a Gaussian beam reflected from anisotropic topological insulators. 2013 , 287, 154-161	7
1352	The lattice distortion-induced topological insulating phase in bulk HgTe from first-principles. 2013 , 153, 31-34	4
1351	Perpendicular magnetic anisotropy with enhanced orbital moments of Fe adatoms on a topological surface of Bi ₂ Se ₃ . 2013 , 25, 232201	9
1350	Linear magnetoresistance in topological insulator thin films: Quantum phase coherence effects at high temperatures. 2013 , 102, 012102	112
1349	Topological insulators with unexpectedly HgTe-like band inversion in hexagonal wurtzite-type binary compounds. 2013 , 103, 57012	7
1348	Thermal transport in lattice-constrained 2D hybrid graphene heterostructures. 2013 , 25, 445007	11
1347	Direct optical coupling to an unoccupied dirac surface state in the topological insulator Bi ₂ Se ₃ . 2013 , 111, 136802	120
1346	Anomalous currents on closed surfaces: extended proximity, partial quantization and qubits. 2013 , 25, 045003	
1345	High-performance Bi ₂ (Te ₃)-based topological insulator film magnetic field detector. 2013 , 5, 11503-8	17
1344	Giant corrugations in Bi ₂ Se ₃ layers grown on high-index InP substrates. 2013 , 87,	15
1343	Atomic scale structure and chemistry of Bi ₂ Te ₃ /GaAs interfaces grown by metallorganic van der Waals epitaxy. 2013 , 102, 081601	21
1342	Topological insulator nanostructures. 2013 , 7, 15-25	58
1341	Magnetic proximity effect at the three-dimensional topological insulator/magnetic insulator interface. 2013 , 88,	122
1340	New quantum matters: Build up versus high pressure tuning. 2013 , 56, 2337-2350	6
1339	Carrier-mediated magnetism in transition metal doped Bi ₂ Se ₃ topological insulator. 2013 , 25, 445003	5
1338	Two novel nonlinear optical carbonates in the deep-ultraviolet region: KBeCO ₃ F and RbAlCO ₃ F ₂ . 2013 , 3, 1366	69
1337	Transport across a junction of topological insulators and a superconductor. 2013 , 87,	13

1336	Helium atom scattering investigation of the Sb(111) surface. 2013 , 25, 395002	4
1335	Kondo screening by the surface modes of a strong topological insulator. 2013 , 88,	11
1334	Evidence of reduced surface electron-phonon scattering in the conduction band of Bi ₂ Se ₃ by nonequilibrium ARPES. 2013 , 88,	42
1333	Magnetotransport and induced superconductivity in Bi based three-dimensional topological insulators. 2013 , 7, 26-38	42
1332	Microstructural characterization of Bi ₂ Te ₃ thin films prepared by hot wall epitaxy. 2013 ,	
1331	Electrical and Thermoelectrical Transport Properties of Dirac Fermions through a Quantum Dot. 2013 , 82, 083703	7
1330	High performance Bi ₂ Se ₃ nanowire field-effect transistors. 2013 ,	
1329	Anomalous electron collimation in HgTe quantum wells with inverted band structure. 2013 , 25, 075801	1
1328	Electron Correlation Induced Spontaneous Symmetry Breaking and Weyl Semimetal Phase in a Strongly Spin-Orbit Coupled System. 2013 , 82, 033702	20
1327	Surface spectral function of momentum-dependent pairing potentials in a topological insulator: application to Cu _x Bi ₂ Se ₃ . 2013 , 25, 215702	3
1326	Strong light-matter interaction in systems described by a modified Dirac equation. 2013 , 25, 305801	8
1325	Charge and spin fractionalization in strongly correlated topological insulators. 2013 , 25, 025602	6
1324	1.06 μ m Q-switched ytterbium-doped fiber laser using few-layer topological insulator Bi ₂ Se ₃ as a saturable absorber. 2013 , 21, 29516-22	278
1323	Growth and band alignment of Bi ₂ Se ₃ topological insulator on H-terminated Si(111) van der Waals surface. 2013 , 102, 074106	31
1322	Single domain Bi ₂ Se ₃ films grown on InP(111)A by molecular-beam epitaxy. 2013 , 102, 151604	42
1321	Electronic structure and nonsaturating magnetoresistance of superconducting Heusler topological insulators. 2013 , 113, 17E142	13
1320	The ageing effect in topological insulators: evolution of the surface electronic structure of Bi ₂ Se ₃ upon K adsorption. 2013 , 15, 113031	39
1319	Topological phase transitions with and without energy gap closing. 2013 , 15, 083042	7

1318	Quantum corrections crossover and ferromagnetism in magnetic topological insulators. 2013 , 3, 2391	37
1317	Dirac-cone-like surface state in W(110): dispersion, spin texture and photoemission from first principles. 2013 , 15, 033019	25
1316	Topological Insulators. 2013 , 123-139	5
1315	Research on Topological Insulating Materials Induced by Uniaxial Strains with Properties of Insulating Materials. 2013 , 675, 180-183	
1314	The Lattice Distortion-Induced Topological Insulating Material. 2013 , 676, 13-16	
1313	Three Dirac points on the (110) surface of the topological insulator Bi _{1-x} Sb _x . 2013 , 15, 103011	12
1312	Precessing anisotropic Dirac cone and Landau subbands along a nodal spiral. 2013 , 15, 053032	8
1311	Co atoms on Bi ₂ Se ₃ revealing a coverage dependent spin reorientation transition. 2013 , 15, 113026	16
1310	Quasiparticle dynamics in reshaped helical Dirac cone of topological insulators. 2013 , 110, 2758-62	80
1309	2 GHz passively harmonic mode-locked fiber laser by a microfiber-based topological insulator saturable absorber. 2013 , 38, 5212-5	347
1308	Anomalous Thermoelectric Transport and Giant Nernst Effect in Multilayered Massless Dirac Fermion System. 2013 , 82, 073601	17
1307	Third order nonlinear optical property of Bi ₂ Se ₃ . 2013 , 21, 2072-82	231
1306	Topological Insulators on the Ruby Lattice with Rashba Spin-Orbit Coupling. 2013 , 60, 129-135	2
1305	Temperature-Induced Plasma Frequency Shift in Bi ₂ Te ₃ and Cu _x Bi ₂ Se ₃ . 2013 , 30, 127801	4
1304	In situ monitoring of resistivity and carrier concentration during molecular beam epitaxy of topological insulator Bi ₂ Se ₃ . 2013 ,	2
1303	Molecular-beam epitaxy of topological insulator Bi ₂ Se ₃ (111) and (221) thin films. 2013 , 22, 068101	16
1302	Fractional quantum Hall effect of topological surface states under a strong tilted magnetic field. 2013 , 103, 27001	2
1301	Theoretical studies of single magnetic impurities on the surface of semiconductors and topological insulators. 2013 , 1564, 1	

1300	Topological phase transition and Dirac fermion transfer in Bi ₂ Se ₃ films. 2013 , 101, 27004	11
1299	Surface Oxidation Properties in a Topological Insulator Bi ₂ Te ₃ Film. 2013 , 30, 106801	16
1298	Confined states and spin polarization on a topological insulator thin film modulated by an electric potential. 2013 , 22, 077310	5
1297	The effect of the warping term on the fractional quantum Hall states in topological insulators. 2013 , 2013,	
1296	Signatures of a pressure-induced topological quantum phase transition in BiTeI. 2013 , 111, 155701	114
1295	Driven electronic states at the surface of a topological insulator. 2013 , 88,	64
1294	Unoccupied electronic band structure of the semi-metallic Bi(111) surface probed with two-photon photoemission. 2013 , 87,	10
1293	Surface states and local spin susceptibility in doped three-dimensional topological insulators with odd-parity superconducting pairing symmetry. 2013 , 87,	14
1292	Strong coupling expansion in a correlated three-dimensional topological insulator. 2013 , 87,	10
1291	Spin-helical transport in normal and superconducting topological insulators. 2013 , 250, 215-232	64
1290	Observing electronic structures on ex-situ grown topological insulator thin films. 2013 , 7, 130-132	10
1289	Phonon-induced topological transitions and crossovers in Dirac materials. 2013 , 110, 046402	57
1288	Evolution of the Fermi surface of a doped topological insulator with carrier concentration. 2013 , 88,	79
1287	Experimental verification of the surface termination in the topological insulator TlBiSe ₂ using core-level photoelectron spectroscopy and scanning tunneling microscopy. 2013 , 88,	19
1286	Models of superconducting Cu:Bi ₂ Se ₃ : Single- versus two-band description. 2013 , 87,	32
1285	Lattice distortion effects on topological phases in (LaNiO ₃) ₂ /(LaAlO ₃) _N heterostructures grown along the [111] direction. 2013 , 88,	41
1284	Two-step growth of high quality Bi ₂ Te ₃ thin films on Al ₂ O ₃ (0001) by molecular beam epitaxy. 2013 , 102, 171906	67
1283	Plasmons dispersion and nonvertical interband transitions in single crystal Bi ₂ Se ₃ investigated by electron energy-loss spectroscopy. 2013 , 87,	25

1282	Proximity-induced unconventional superconductivity in topological insulators. 2013 , 87,	77
1281	Torsional anomalies, Hall viscosity, and bulk-boundary correspondence in topological states. 2013 , 88,	98
1280	Interplay of topological surface and bulk electronic states in Bi ₂ Se ₃ . 2013 , 87,	8
1279	Fermi level tuning of topological insulator Bi ₂ (SexTe _{1-x}) ₃ nanoplates. 2013 , 113, 024306	12
1278	Series of topological phase transitions in TiTe ₂ under strain. 2013 , 88,	22
1277	Surface termination of cleaved Bi ₂ Se ₃ investigated by low energy ion scattering. 2013 , 110, 156101	46
1276	Helium-surface interaction potential of Sb(111) from scattering experiments and close-coupling calculations. 2013 , 88,	15
1275	A computational study of the thermoelectric performance of ultrathin Bi ₂ Te ₃ films. 2013 , 102, 093103	61
1274	Conductance modulation in topological insulator Bi ₂ Se ₃ thin films with ionic liquid gating. 2013 , 103, 213114	28
1273	Electric field effects in ultrathin HfZrNBr nano-crystals. 2013 , 103, 043107	2
1272	Separating the bulk and surface n- to p-type transition in the topological insulator GeBi _{4-x} SbxTe ₇ . 2013 , 88,	25
1271	Charge conservation protected topological phases. 2013 , 87,	5
1270	Electron-phonon interaction on the surface of a three-dimensional topological insulator. 2013 , 88,	24
1269	Plasmon modes in magnetically doped single-layer and multilayer helical metals. 2013 , 87,	6
1268	Anisotropic quantum spin Hall effect, spin-orbital textures, and the Mott transition. 2013 , 88,	15
1267	Robustness of gapless interface states in a junction of two topological insulators. 2013 , 88,	6
1266	Molecular beam epitaxy of high structural quality Bi ₂ Se ₃ on lattice matched InP(111) substrates. 2013 , 102, 041914	73
1265	High-pressure studies of topological insulators Bi ₂ Se ₃ , Bi ₂ Te ₃ , and Sb ₂ Te ₃ . 2013 , 250, 669-676	61

1264	Cherenkov sound on a surface of a topological insulator. 2013 , 88,	6
1263	Topological Anderson insulator induced by inter-cell hopping disorder. 2013 , 114, 183710	9
1262	Substrate-independent catalyst-free synthesis of high-purity Bi ₂ Se ₃ nanostructures. 2013 , 102, 193108	11
1261	Robust topological insulator conduction under strong boundary disorder. 2013 , 88,	11
1260	Two-dimensional compressibility of surface states on three-dimensional topological insulators. 2013 , 87,	5
1259	Anomalous behavior in the phonon dispersion of the (001) surface of Bi ₂ Te ₃ determined from helium atom-surface scattering measurements. 2013 , 88,	31
1258	Topological insulator as an optical modulator for pulsed solid-state lasers. 2013 , 7, L77-L83	185
1257	Topological Insulator Materials. 2013 , 82, 102001	1072
1256	Tuning of magnetic and transport properties in Bi ₂ Te ₃ by divalent Fe doping. 2013 , 87,	21
1255	Termination-dependent topological surface states of the natural superlattice phase Bi ₄ Se ₃ . 2013 , 88,	47
1254	Topological Floquet spectrum in three dimensions via a two-photon resonance. 2013 , 87,	112
1253	Calculation of divergent photon absorption in ultrathin films of a topological insulator. 2013 , 88,	22
1252	Identifying magnetic anisotropy of the topological surface state of Cr(0.05)Sb(1.95)Te(3) with spin-polarized STM. 2013 , 111, 176802	30
1251	Molecular beam epitaxial growth of Bi ₂ Te ₃ and Sb ₂ Te ₃ topological insulators on GaAs (111) substrates: a potential route to fabricate topological insulator p-n junction. 2013 , 3, 072112	56
1250	Electric-field tuning of the surface band structure of topological insulator Sb ₂ Te ₃ thin films. 2013 , 111, 056803	51
1249	Surface structure of Bi ₂ Se ₃ (111) determined by low-energy electron diffraction and surface x-ray diffraction. 2013 , 88,	36
1248	Hot-carrier transport and spin relaxation on the surface of topological insulator. 2013 , 87,	17
1247	Direct observation of decoupled Dirac states at the interface between topological and normal insulators. 2013 , 88,	23

1246	Absence of zero-energy surface bound states in $\text{Cu}_x\text{Bi}_2\text{Se}_3$ studied via Andreev reflection spectroscopy. 2013 , 88,	52
1245	Topological phase transitions with non-Abelian gauge potentials on square lattices. 2013 , 88,	3
1244	Different topological insulating behavior in HgTe and GaS-II under uniaxial tension. 2013 , 88,	4
1243	Carrier density dependence of the magnetic properties in iron-doped Bi_2Se_3 topological insulator. 2013 , 113, 043926	21
1242	Electrostatic field effects on three-dimensional topological insulators. 2013 , 22, 097202	12
1241	Electron scattering by a steplike defect in topological insulator nanofilms. 2013 , 87,	2
1240	Transport properties in a Sb-Te binary topological-insulator system. 2013 , 25, 345801	14
1239	Superconductivity of the topological insulator Bi_2Se_3 at high pressure. 2013 , 25, 362204	54
1238	Magneto-Optical Faraday and Kerr Effects in Topological Insulators Bi_2Te_3 and Bi_2Se_3 . 2013 , 52, 103001	3
1237	Evidence of the two surface states of $(\text{Bi}_{0.53}\text{Sb}_{0.47})_2\text{Te}_3$ films grown by van der Waals epitaxy. 2013 , 3, 3406	34
1236	Engineering a topological phase transition in PbSe via strain. 2013 , 15, 073008	23
1235	Electron-phonon coupling in the two-dimensional electron gas on Bi_2Se_3 . 2013 , 7, 136-138	6
1234	Sb_2Te_3 under pressure. 2013 , 3, 2665	78
1233	Topological surface states of Bi_2Se_3 coexisting with Se vacancies. 2013 , 7, 148-150	24
1232	ON EXOTIC SPHERE FIBRATIONS, TOPOLOGICAL PHASES, AND EDGE STATES IN PHYSICAL SYSTEMS. 2013 , 27, 1350107	9
1231	Spin Chern numbers and time-reversal-symmetry-broken quantum spin Hall effect. 2013 , 22, 067201	13
1230	Bulk Electronic State of Superconducting Topological Insulator. 2013 , 82, 044704	41
1229	Poster: Spin-Related Phenomena. 2013 , 589-632	

1228	Phase separation and bulk p-n transition in single crystals of Bi ₂ Te ₃ topological insulator. 2013 , 25, 889-93	39
1227	A solution synthetic route toward Bi ₂ Se ₃ layered nanostructures with tunable thickness via weakening precursor reactivity. 2013 , 210, 1909-1913	5
1226	Selective-area van der Waals epitaxy of topological insulator grid nanostructures for broadband transparent flexible electrodes. 2013 , 25, 5959-64	35
1225	Multilayered structure and enhanced thermoelectric properties of Bi _{1.5} Sb _{0.5} Te ₃ film with preferential growth. 2013 , 210, 2611-2616	9
1224	Enhanced contribution of surface state and modification of magnetoresistance in Fe _x Bi ₂ Se ₃ topological insulator crystals. 2013 , 113, 043923	19
1223	Microstructural characterisation of Bi ₂ Se ₃ thin films. 2013 , 471, 012043	2
1222	Tunable Dirac fermion dynamics in topological insulators. 2013 , 3, 2411	78
1221	Resolving Ambiguities at the Bi ₂ Te ₃ /GaAs Interface with Atomic Resolution EDS. 2013 , 19, 1140-1141	1
1220	Structural, optical and photoacoustic study of milled and melted Bi ₂ Se ₃ . 2014 , 1076, 737-742	4
1219	Ab initio study of topological surface states of strained HgTe. 2014 , 107, 57006	18
1218	Electron states scattering off line edges on the surface of topological insulator. 2014 , 23, 107304	3
1217	Interlayer vibrational modes in few-quintuple-layer Bi ₂ Te ₃ and Bi ₂ Se ₃ two-dimensional crystals: Raman spectroscopy and first-principles studies. 2014 , 90,	68
1216	Defect-induced negative magnetoresistance and surface state robustness in the topological insulator BiSbTeSe ₂ . 2014 , 90,	28
1215	Topological effects on the magnetoconductivity in topological insulators. 2014 , 90,	10
1214	Topological insulator to Dirac semimetal transition driven by sign change of spin-orbit coupling in thallium nitride. 2014 , 90,	35
1213	Efficient algorithm to compute the Berry conductivity. 2014 , 16, 073016	3
1212	Interplay between Mn-acceptor state and Dirac surface states in Mn-doped Bi ₂ Se ₃ topological insulator. 2014 , 90,	6
1211	DIRAC-CONE PHOTONIC SURFACE STATES IN THREE-DIMENSIONAL PHOTONIC CRYSTAL SLAB. 2014 , 28, 1441009	

1210	Weyl Semimetal in the Strong Coulomb Interaction Limit. 2014 , 83, 094710	28
1209	Ferromagnetism on a paramagnetic host background in cobalt-doped Bi ₂ Se ₃ topological insulator. 2014 , 23, 076104	6
1208	DEFECT PHYSICS AND INTRINSIC p-TYPE CONDUCTIVITY IN TOPOLOGICAL INSULATOR AuTeS ₂ . 2014 , 28, 1450008	1
1207	Synthesis of SmB ₆ films by Mg-assisted solid state reaction. 2014 , 29, 075016	3
1206	Experimental and theoretical identification of a high-pressure polymorph of Ga ₂ S ₃ with Bi ₂ Te ₃ -type structure. 2014 , 116, 193507	5
1205	Disorder effect on the quantum Hall effect in thin films of three-dimensional topological insulators. 2014 , 87, 1	
1204	Manipulating topological phase transition by strain. 2014 , 70, 118-22	25
1203	THE CHARACTERIZATION OF TOPOLOGICAL PROPERTIES IN QUANTUM MONTE CARLO SIMULATIONS OF THE KANE-MELE-UBBARD MODEL. 2014 , 28, 1430001	25
1202	Quantum spin Hall insulators and quantum valley Hall insulators of BiX/SbX (X=H, F, Cl and Br) monolayers with a record bulk band gap. 2014 , 6, e147-e147	216
1201	Persistent ferromagnetism and topological phase transition at the interface of a superconductor and a topological insulator. 2014 , 113, 266806	11
1200	Unexpected room-temperature ferromagnetism in nanostructured Bi ₂ Te ₃ . 2014 , 53, 729-33	31
1199	Sr _{0.9} K _{0.1} Zn _{1.8} Mn _{0.2} As ₂ : A ferromagnetic semiconductor with colossal magnetoresistance. 2014 , 107, 67007	8
1198	A comparative study of the He/Bb(111) interaction potential from close-coupling calculations and helium atom scattering experiments. 2014 , 630, 208-215	8
1197	Exceptional behavior of d-like surface resonances on W(110): the one-step model in its density matrix formulation. 2014 , 16, 015005	44
1196	Appearance of flat surface bands in three-dimensional topological insulators in a ferromagnetic exchange field. 2014 , 16, 033019	8
1195	Turning a band insulator into an exotic superconductor. 2014 , 5, 4144	49
1194	Probing the wavefunction of the surface states in Bi ₂ Se ₃ topological insulator: a realistic tight-binding approach. 2014 , 16, 063022	23
1193	Topological Defects in Topological Insulators and Bound States at Topological Superconductor Vortices. 2014 , 7, 1652-1686	6

1192	Effect of Strong Coulomb Interaction in a Three-Dimensional Topological Insulator. 2014 ,	
1191	High-quality II-VI films grown on amorphous substrates using tunable tetradymite templates. 2014 , 105, 221606	3
1190	In-gap collective mode spectrum of the topological Kondo insulator SmB ₆ . 2014 , 90,	19
1189	Transforming a surface state of a topological insulator by a Bi capping layer. 2014 , 90,	9
1188	Mode-locking in Er-doped fiber laser based on mechanically exfoliated Sb ₂ Te ₃ saturable absorber. 2014 , 4, 1	188
1187	Topological insulator Sb ₂ Te ₃ as an optical media for the generation of ring-shaped beams. 2014 , 4, 2016	11
1186	High-repetition-rate Q-switched fiber laser with high quality topological insulator Bi ₂ Se ₃ film. 2014 , 22, 11508-15	113
1185	Mode-locked ytterbium-doped fiber laser based on topological insulator: Bi ₂ Se ₃ 2014 , 22, 24055-61	66
1184	Passively Q-switched 156 nm all-fiberized laser based on evanescent field interaction with bulk-structured bismuth telluride topological insulator. 2014 , 31, 2157	35
1183	Two-dimensional fermionic Hong-Ou-Mandel interference with massless Dirac fermions. 2014 , 90,	12
1182	Chemical-potential-dependent gap opening at the Dirac surface states of Bi ₂ Se ₃ induced by aggregated substitutional Cr atoms. 2014 , 112, 056801	84
1181	Magnetoelectric effect in topological insulator films beyond the linear response regime. 2014 , 90,	12
1180	Electronic structure and morphology of epitaxial Bi ₂ Te ₂ Se topological insulator films. 2014 , 116, 193708	13
1179	Tunable line node semimetals. 2014 , 90,	101
1178	Honeycomb lattice with multiorbital structure: Topological and quantum anomalous Hall insulators with large gaps. 2014 , 90,	81
1177	Giant topological magnetoelectric and optical Hall effects for a topological insulator as a defect in photonic crystals. 2014 , 90,	2
1176	Long-range interaction induced phases in Weyl semimetals. 2014 , 89,	20
1175	The family of topological phases in condensed matter 2014 , 1, 49-59	5

1174	Electronic states of wires and slabs of topological insulators: Quantum Hall effects and edge transport. 2014 , 89,	29
1173	Absence of helical surface states in bulk semimetals with broken inversion symmetry. 2014 , 89,	4
1172	Van der Waals epitaxial growth of topological insulator $\text{Bi}_2\text{Sb}_x\text{Te}_3$ by Se ultrathin nanoplate on electrically insulating fluorophlogopite mica. 2014 , 105, 063104	15
1171	Large magnetothermopower and Fermi surface reconstruction in $\text{Sb}_2\text{Te}_2\text{Se}$. 2014 , 89,	18
1170	Dimensional evolution between one- and two-dimensional topological phases. 2014 , 90,	13
1169	Spin-orbit spillage as a measure of band inversion in insulators. 2014 , 90,	15
1168	Optical properties of magnetically doped ultrathin topological insulator slabs. 2014 , 90,	21
1167	Atomic relaxations at the (0001) surface of Bi_2Se_3 single crystals and ultrathin films. 2014 , 90,	32
1166	Tunnel junction of helical edge states: Determining and controlling spin-preserving and spin-flipping processes through transconductance. 2014 , 89,	21
1165	Stacking-dependent energetics and electronic structure of ultrathin polymorphic V_2V_3 topological insulator nanofilms. 2014 , 90,	8
1164	Quantum critical point in the superconducting transition on the surface of a topological insulator. 2014 , 90,	11
1163	Electrical, magnetic, and magneto-electrical properties in quasi-two-dimensional $\text{K}_{0.58}\text{RhO}_2$ single crystals doped with rare-earth elements. 2014 , 105, 062408	4
1162	Strong spin-orbit coupling and Zeeman spin splitting in angle dependent magnetoresistance of Bi_2Te_3 . 2014 , 104, 223111	23
1161	Tetradymites as Natural Hyperbolic Materials for the Near-Infrared to Visible. 2014 , 1, 1285-1289	95
1160	Theory of bulk-surface coupling in topological insulator films. 2014 , 90,	27
1159	Strain engineering of Dirac cones in graphyne. 2014 , 104, 213107	41
1158	Thermoelectric properties of topological insulator Bi_2Te_3 , Sb_2Te_3 , and Bi_2Se_3 thin film quantum wells. 2014 , 105, 123117	62
1157	Paramagnetic Cu-doped Bi_2Te_3 nanoplates. 2014 , 104, 053105	19

1156	Quantum phenomena in transport measurements of topological insulator nanostructures (Review Article). 2014 , 40, 280-285	3
1155	Topological tuning in three-dimensional dirac semimetals. 2014 , 113, 256403	45
1154	Probing the thermoelectric transport properties of n-type Bi ₂ Te ₃ close to the limit of constitutional undercooling. 2014 , 23, 117202	9
1153	Enhancement of Initial Growth of ZnO Films on Layer-Structured Bi ₂ Te ₃ by Atomic Layer Deposition. 2014 , 26, 6448-6453	12
1152	Dirac fermions and superconductivity in the homologous structures (Ag _x Pb _{1-x} Se) ₅ (Bi ₂ Se ₃) _{3m} (m=1,2). 2014 , 90,	27
1151	Resonant Faraday and Kerr effects due to in-gap states on the surface of a topological insulator. 2014 , 90,	6
1150	Longer-range lattice anisotropy strongly competing with spin-orbit interactions in pyrochlore iridates. 2014 , 89,	51
1149	Stable Single-Longitudinal-Mode Fiber Ring Laser Using Topological Insulator-Based Saturable Absorber. 2014 , 32, 4438-4444	15
1148	A new strategy for realizing the conversion of "homo-hetero-homo" heteroepitaxial growth in Bi(2)Te(3) and the thermoelectric performance. 2014 , 20, 5657-64	7
1147	Ab initio transport across bismuth selenide surface barriers. 2014 , 90,	12
1146	Distinguishing bulk and surface electron-phonon coupling in the topological insulator Bi(2)Se(3) using time-resolved photoemission spectroscopy. 2014 , 113, 157401	80
1145	Semiconductor-to-metal transition of Bi ₂ Se ₃ under high pressure. 2014 , 105, 062102	14
1144	Stability of multinode Dirac semimetals against strong long-range correlations. 2014 , 90,	20
1143	MOCVD synthesis of compositionally tuned topological insulator nanowires. 2014 , 8, 991-996	9
1142	Characterizing weak topological properties: Berry phase point of view. 2014 , 90,	14
1141	Strain induced Z ₂ topological insulating state of α -As ₂ Te ₃ . 2014 , 105, 062105	30
1140	Pressure variation of Rashba spin splitting toward topological transition in the polar semiconductor BiTeI. 2014 , 90,	27
1139	Effect of surface defects and few-atomic steps on the local density of states of the atomically-clean surface of Bi ₂ Se ₃ topological insulator. 2014 , 100, 398-402	9

1138	Local magnetism and spin correlations in the geometrically frustrated cluster magnet LiZn ₂ Mo ₃ O ₈ . 2014 , 89,	33
1137	Charge transport in two dimensions limited by strong short-range scatterers: Going beyond parabolic dispersion and Born approximation. 2014 , 89,	3
1136	Surface theory of a family of topological Kondo insulators. 2014 , 90,	44
1135	Experimental study of the valence band of Bi ₂ Se ₃ . 2014 , 90,	11
1134	Ab-initio calculations and structural studies of (SiTe) ₂ (Sb ₂ Te ₃) _n (n: 1, 2, 4 and 6) phase-change superlattice films. 2014 , 8, 302-306	27
1133	Complex band structure of topologically protected edge states. 2014 , 90,	22
1132	Dirac-fermion-induced parity mixing in superconducting topological insulators. 2014 , 90,	44
1131	Interplay between electronic topology and crystal symmetry: Dislocation-line modes in topological band insulators. 2014 , 90,	60
1130	Topological crystalline insulator Pb _x Sn _{1-x} Te thin films on SrTiO ₃ (001) with tunable Fermi levels. 2014 , 2, 056106	13
1129	Optical transmission enhancement through chemically tuned two-dimensional bismuth chalcogenide nanoplates. 2014 , 5, 5670	79
1128	Structure and composition of bismuth telluride topological insulators grown by molecular beam epitaxy. 2014 , 47, 1889-1900	31
1127	Coexisting Bi and Se surface terminations of cleaved Bi ₂ Se ₃ single crystals. 2014 , 32, 04E103	24
1126	Ferroelectric Order Control of the Dirac-Semimetal Phase in GeTe-Sb ₂ Te ₃ Superlattices. 2014 , 1, 1300027	133
1125	Enhanced thermoelectric power in ultrathin topological insulators with magnetic doping. 2014 , 116, 093708	9
1124	Superconductivity in textured Bi clusters/Bi ₂ Te ₃ films. 2014 , 2, 096105	7
1123	Engineered near-perfect backscattering on the surface of a topological insulator with nonmagnetic impurities. 2014 , 90,	14
1122	Anomalous nuclear magnetic resonance spectra in Bi ₂ Se ₃ nanowires. 2014 , 90,	8
1121	Molecular beam epitaxial growth of Bi ₂ Se ₃ nanowires and nanoflakes. 2014 , 105, 133109	6

1120	Fully gapped s-wave-like superconducting state and electronic structure in Ir _{0.95} Pd _{0.05} Te ₂ single crystals with strong spin-orbital coupling. 2014 , 89,	14
1119	168 fs pulse generation from graphene-chitosan mode-locked fiber laser. 2014 , 4, 1981	25
1118	Spin-spin interaction in the bulk of topological insulators. 2014 , 89,	5
1117	Topological phase transition and quantum spin Hall state in TlBiS ₂ . 2014 , 116, 033704	8
1116	High-field charge transport on the surface of Bi ₂ Se ₃ . 2014 , 90,	2
1115	Screw-dislocation-driven bidirectional spiral growth of Bi ₂ Se ₃ nanoribbons. 2014 , 53, 6425-9	85
1114	Comparison of Au and TiO ₂ based catalysts for the synthesis of chalcogenide nanowires. 2014 , 104, 253103	8
1113	Local structures around 3d metal dopants in topological insulator Bi ₂ Se ₃ studied by EXAFS measurements. 2014 , 90,	16
1112	Correlation between Bulk Thermodynamic Measurements and the Low-Temperature-Resistance Plateau in SmB ₆ . 2014 , 4,	50
1111	Thickness and growth-condition dependence of in-situ mobility and carrier density of epitaxial thin-film Bi ₂ Se ₃ . 2014 , 105, 173506	16
1110	Intrinsic Rashba-like splitting in asymmetric Bi ₂ Te ₃ /Sb ₂ Te ₃ heterogeneous topological insulator films. 2014 , 105, 082401	3
1109	Intrinsic and extrinsic effects on the electrostatic field at the surface of Bi ₂ Se ₃ . 2014 , 116, 043519	3
1108	Tunneling between a topological superconductor and a Luttinger liquid. 2014 , 89,	5
1107	Effect of magnetic field on a magnetic topological insulator film with structural inversion asymmetry. 2014 , 89,	9
1106	A new class of topological insulators from I-III-IV half-Heusler compounds with strong band inversion strength. 2014 , 115, 083704	4
1105	Topological phase transition driven by a spatially periodic potential. 2014 , 90,	3
1104	Giant Rashba spin splitting in Bi ₂ Se ₃ /Ti. 2014 , 8, 849-852	3
1103	Resolving the Dirac cone on the surface of Bi ₂ Te ₃ topological insulator nanowires by field-effect measurements. 2014 , 104, 243115	27

1102	Spin-orbit coupling and weak antilocalization in the thermoelectric material Bi_2Se_3 2014 , 26, 095801	7
1101	Excitation of topological insulator plasmons by two-dimensional periodic structure. 2014 ,	
1100	Bi_2Te_3 Sb_2Te_3 series studied by resistivity and thermopower. 2014 , 107, 57008	25
1099	Metalorganic chemical vapor deposition of Bi_2Se_3 thin films for topological insulator applications. 2014 ,	
1098	Growth of Bi_2Se_3 Films by Chemical Bath Deposition at Room Temperature. 2014 , 1630, 1	
1097	Gate-tuned Josephson effect on the surface of a topological insulator. 2014 , 9, 515	8
1096	Ordered horizontal Sb_2Te_3 nanowires induced by femtosecond lasers. 2014 , 105, 201904	0
1095	Chalcogenide phase-change thin films used as grayscale photolithography materials. 2014 , 22, 4973-84	44
1094	^{121}Sb and ^{125}Te nuclear inelastic scattering in Sb_2Te_3 under high pressure. 2014 , 29, 124001	5
1093	Broadband optical and microwave nonlinear response in topological insulator. 2014 , 4, 587	170
1092	Comparative analysis of electronic properties of tin, gallium, and bismuth chalcogenide-filled single-walled carbon nanotubes. 2014 , 49, 8402-8411	7
1091	Thermodynamic Re-modeling of the Sb-Te System Using Associate and Ionic Models. 2014 , 43, 4082-4089	6
1090	Introduction to the Topological Insulators and State of the Art. 2014 , 1-46	
1089	Core hole effect on topological band order in cubic semiconductors: A first-principles study. 2014 , 106, 27008	1
1088	Aspects of the Fractional Quantum Hall Effect in Graphene. 2014 , 251-300	1
1087	Transport through quantum wells and superlattices on topological insulator surfaces. 2014 , 26, 185007	5
1086	Topological insulators. 2014 , 39, 843-846	9
1085	The quantum anomalous Hall effect in a topological insulator thin film: The role of magnetic disorder. 2014 , 105, 57004	8

1084	Semimetal Na ₃ Bi Thin Film Grown on Double-Layer Graphene by Molecular Beam Epitaxy. 2014 , 31, 116802	5
1083	The influence of a Te-depleted surface on the thermoelectric transport properties of Bi ₂ Te ₃ nanowires. 2014 , 25, 365401	10
1082	The effect of electric potential on Landau levels for topological insulator surface states. 2014 , 445, 81-87	1
1081	Indium and bismuth interdiffusion and its influence on the mobility in In ₂ Se ₃ /Bi ₂ Se ₃ . 2014 , 556, 322-324	15
1080	Pressure and temperature dependence of Raman spectra and their anharmonic effects in Bi ₂ Se ₃ single crystal. 2014 , 433, 72-78	11
1079	Improvement of thermoelectric properties induced by uniquely ordered lattice field in Bi ₂ Se _{0.5} Te _{2.5} pillar array. 2014 , 215, 219-224	12
1078	Josephson effect in Al/Bi ₂ Se ₃ /Al coplanar hybrid devices. 2014 , 503, 162-165	7
1077	Topological insulating characteristic in half-Heusler compounds composed of light elements. 2014 , 378, 1662-1666	19
1076	A comparative DFT study on electronic, thermodynamic and optical properties of telluride compounds. 2014 , 88, 156-162	4
1075	Time-dependent electron transport in HgTe/CdTe quantum wells. 2014 , 378, 966-969	1
1074	Topological insulator based spin valve devices: Evidence for spin polarized transport of spin-momentum-locked topological surface states. 2014 , 191, 1-5	51
1073	Topological states in Bi ₂ Se ₃ surfaces created by cleavage within a quintuple layer: Analysis in terms of the Shockley criterion. 2014 , 89,	13
1072	One-dimensional topological insulator: A model for studying finite-size effects in topological insulator thin films. 2014 , 89,	12
1071	Intrinsic optical conductivity of modified Dirac fermion systems. 2014 , 89,	32
1070	Orbital-selective spin texture and its manipulation in a topological insulator. 2014 , 5, 3382	68
1069	Tuning Dirac states by strain in the topological insulator Bi ₂ Se ₃ . <i>Nature Physics</i> , 2014 , 10, 294-299	16.2 174
1068	Photoelectron spin-polarization control in the topological insulator Bi ₂ Se ₃ . 2014 , 112, 076802	74
1067	Spin texture of Bi ₂ Se ₃ thin films in the quantum tunneling limit. 2014 , 112, 057601	56

1066	Dual topological character of chalcogenides: theory for Bi ₂ Te ₃ . 2014 , 112, 016802	47
1065	Infrared- and Raman-spectroscopy measurements of a transition in the crystal structure and a closing of the energy gap of BiTeI under pressure. 2014 , 112, 047402	61
1064	Evidence for topologically protected surface states and a superconducting phase in [Tl ₄](Tl(1-x)Sn(x))Te ₃ using photoemission, specific heat, and magnetization measurements, and density functional theory. 2014 , 112, 017002	27
1063	Topological surface state in the Kondo insulator samarium hexaboride. 2014 , 13, 466-70	240
1062	Synthesis of single-crystalline topological insulator Bi ₂ Se ₃ nanomaterials with various morphologies. 2014 , 16, 1	7
1061	The preparation process and feature of the topological insulator Bi ₂ Te ₃ . 2014 , 22, 59-63	2
1060	Nonlocal transport properties of topological insulator F/I/SC/I/F junction with perpendicular magnetization. 2014 , 87, 1	5
1059	Engineering near-surface electron states in three-dimensional topological insulators. 2014 , 98, 603-608	10
1058	Electrical detection of charge-current-induced spin polarization due to spin-momentum locking in Bi ₂ Se ₃ . 2014 , 9, 218-24	309
1057	Thin-film topological insulator-ferromagnet heterostructures for terahertz detection. 2014 , 104, 061116	9
1056	Nanomechanical and Charge Transport Properties of Two-Dimensional Atomic Sheets. 2014 , 1, 1300089	28
1055	Low-temperature ferromagnetic properties in Co-doped Ag ₂ Se nanoparticles. 2014 , 104, 012106	2
1054	Homologous series of layered structures in binary and ternary Bi-Sb-Te-Se systems: Ab initio study. 2014 , 89,	5
1053	Unexpected Room-Temperature Ferromagnetism in Nanostructured Bi ₂ Te ₃ . 2014 , 126, 748-752	13
1052	Understanding Bulk Defects in Topological Insulators from Nuclear-Spin Interactions. 2014 , 24, 1519-1528	33
1051	Dirac Fermions in Solids: From High-T _c Cuprates and Graphene to Topological Insulators and Weyl Semimetals. 2014 , 5, 83-112	398
1050	Energetics and diffusion of gold in bismuth telluride-based thermoelectric compounds. 2014 , 115, 063705	16
1049	Three dimensional topological insulators of Cu _x Au _{1-x} InTe ₂ alloys. 2014 , 593, 235-241	4

1048	Singular robust room-temperature spin response from topological Dirac fermions. 2014 , 13, 580-5	29
1047	Metabolizable Bi ₂ Se ₃ Nanoplates: Biodistribution, Toxicity, and Uses for Cancer Radiation Therapy and Imaging. 2014 , 24, 1718-1729	200
1046	Transport discovery of emerging robust helical surface States in Z ₂ = 0 systems. 2014 , 112, 176601	19
1045	Screw-Dislocation-Driven Bidirectional Spiral Growth of Bi ₂ Se ₃ Nanoplates. 2014 , 126, 6543-6547	29
1044	Magnetically confined states and transport property on the surface of a topological insulator. 2014 , 347, 32-44	4
1043	Observation of quantum-tunnelling-modulated spin texture in ultrathin topological insulator Bi ₂ Se ₃ films. 2014 , 5, 3841	99
1042	Quantum anomalous Hall effect. 2014 , 1, 38-48	72
1041	Ambipolar surface state thermoelectric power of topological insulator Bi ₂ Se ₃ . 2014 , 14, 1701-6	45
1040	Suppressing Twin Formation in Bi ₂ Se ₃ Thin Films. 2014 , 1, 1400134	48
1039	Melt growth of bulk Bi ₂ Te ₃ crystals with a natural p-n junction. 2014 , 16, 581-584	43
1038	Growth of topological crystalline insulator SnTe thin films on Si(111) substrate by molecular beam epitaxy. 2014 , 621, 104-108	26
1037	Thermoelectricity and superconductivity in pure and doped Bi ₂ Te ₃ with Se. 2014 , 433, 157-164	27
1036	Microstructural and vibrational properties of PVT grown Sb ₂ Te ₃ crystals. 2014 , 177, 16-19	59
1035	Cr adsorption induced magnetism in Bi ₂ Se ₃ film by proximity effects. 2014 , 55, 9-12	8
1034	The changing colors of a quantum-confined topological insulator. 2014 , 8, 1222-30	29
1033	Graphene plasmonics for terahertz to mid-infrared applications. 2014 , 8, 1086-101	909
1032	Tuning a Schottky barrier in a photoexcited topological insulator with transient Dirac cone electron-hole asymmetry. 2014 , 5, 3003	85
1031	Pressure-induced topological quantum phase transition in Sb ₂ Se ₃ . 2014 , 89,	37

1030	Topological crystalline Kondo insulator in mixed valence ytterbium borides. 2014 , 112, 016403	123
1029	Size-controlled synthesis and transport properties of Sb ₂ Te ₃ nanoplates. 2014 , 4, 2427-2432	12
1028	Microwave synthesis of microstructured and nanostructured metal chalcogenides from elemental precursors in phosphonium ionic liquids. 2014 , 136, 15465-8	37
1027	Nontrivial Z ₂ topology in bismuth-based III-V compounds. 2014 , 90,	29
1026	Signature of the topological surface state in the thermoelectric properties of Bi ₂ Te ₃ . 2014 , 89,	17
1025	Weak topological insulators induced by the interlayer coupling: A first-principles study of stacked Bi ₂ Tel. 2014 , 89,	43
1024	Study of band inversion in the Pb _x Sn _{1-x} Te class of topological crystalline insulators using x-ray absorption spectroscopy. 2014 , 26, 475502	8
1023	Skyrmion spin texture in ferromagnetic semiconductor/superconductor heterostructures. 2014 , 89,	9
1022	Mode-locking of Er-doped fiber laser using a multilayer MoS ₂ thin film as a saturable absorber in both anomalous and normal dispersion regimes. 2014 , 22, 23732-42	122
1021	Ultrafast erbium-doped fiber laser mode-locked by a CVD-grown molybdenum disulfide (MoS ₂) saturable absorber. 2014 , 22, 17341-8	240
1020	Effects of Cs-doping on morphological, optical and electrical properties of Bi ₂ Te ₃ nanostructures. 2014 , 136, 337-340	14
1019	Observations of a metal-insulator transition and strong surface states in Bi _{2-x} Sb _x Se ₃ thin films. 2014 , 26, 7110-5	34
1018	Tunneling Magnetoresistance Devices Based on Topological Insulators: Ferromagnet/Insulator/Topological-Insulator Junctions Employing Bi ₂ Se ₃ . 2014 , 2,	15
1017	Systematic investigation on topological properties of layered GaS and GaSe under strain. 2014 , 141, 084701	22
1016	Catalyst-free growth of Bi ₂ Te ₃ nanostructures by molecular beam epitaxy. 2014 , 105, 153114	5
1015	Stable Q-Switched Erbium-Doped Fiber Laser Based on Topological Insulator Covered Microfiber. 2014 , 26, 987-990	38
1014	Te-seeded growth of few-quintuple layer Bi ₂ Te ₃ nanoplates. 2014 , 7, 1243-1253	19
1013	Edge and interfacial states in a two-dimensional topological insulator: Bi(111) bilayer on Bi ₂ Te ₂ Se. 2014 , 89,	69

1012	Solution processable colloidal nanoplates as building blocks for high-performance electronic thin films on flexible substrates. 2014 , 14, 6547-53	60
1011	Effective Fermi level tuning of Bi ₂ Se ₃ by introducing CdBi/CaBi dopant. 2014 , 4, 10499	1
1010	Robust 2D topological insulators in van der Waals heterostructures. 2014 , 8, 10448-54	74
1009	Soliton compression of the erbium-doped fiber laser weakly started mode-locking by nanoscale p-type Bi ₂ Te ₃ topological insulator particles. 2014 , 11, 055107	114
1008	Bulk band structure of Bi ₂ Te ₃ . 2014 , 90,	46
1007	Observation of Distinct Bulk and Surface Chemical Environments in a Topological Insulator under Magnetic Doping. 2014 , 118, 12333-12339	27
1006	Electron and Hole Injection via Charge Transfer at the Topological Insulator Bi ₂ Sb ₂ Te ₃ /Se/Di-Organic Molecule Interface. 2014 , 118, 3533-3538	11
1005	Magnetic proximity effect and spin-orbital texture at the Bi ₂ Se ₃ /EuS interface. 2014 , 90,	32
1004	Crystal Shape Engineering of Topological Crystalline Insulator SnTe Microcrystals and Nanowires with Huge Thermal Activation Energy Gap. 2014 , 14, 2502-2509	41
1003	Generation of Q-switched pulse by Bi ₂ Se ₃ topological insulator in Yb:KGW laser. 2014 , 11, 115806	21
1002	Nanosecond Q-Switched Erbium-Doped Fiber Laser With Wide Pulse-Repetition-Rate Range Based on Topological Insulator. 2014 , 50, 393-396	29
1001	Prediction of a Dirac state in monolayer TiB ₂ . 2014 , 90,	103
1000	All-optical sensing of a single-molecule electron spin. 2014 , 14, 6443-8	63
999	Warping effect-induced optical absorbance increment of topological insulator films for THz photodetectors with high signal-to-noise ratio. 2014 , 6, 3513-7	11
998	Defect-related ferromagnetism in ultrathin metal-free g-C ₃ N ₄ nanosheets. 2014 , 6, 2577-81	141
997	Selective adsorption of bismuth telluride nanoplatelets through electrostatic attraction. 2014 , 16, 11297-302	5
996	Topological-Insulator Passively Q-Switched Double-Clad Fiber Laser at 2 μ m Wavelength. 2014 , 20, 1-8	65
995	Field electron emission of layered Bi ₂ Se ₃ nanosheets with atom-thick sharp edges. 2014 , 6, 8306-10	26

994	Effect of Bi bilayers on the topological states of Bi ₂ Se ₃ : A first-principles study. 2014 , 90,	29
993	Large Energy, Wavelength Widely Tunable, Topological Insulator Q-Switched Erbium-Doped Fiber Laser. 2014 , 20, 315-322	171
992	Intrinsic conduction through topological surface states of insulating Bi ₂ Te ₃ epitaxial thin films. 2014 , 111, 14979-84	73
991	Electrical tuning of transport properties of topological insulator ultrathin films. 2014 , 6, 3127-37	15
990	Opening a band gap without breaking lattice symmetry: a new route toward robust graphene-based nanoelectronics. 2014 , 6, 7474-9	11
989	Photoresponse properties of ultrathin Bi ₂ Se ₃ nanosheets synthesized by hydrothermal intercalation and exfoliation route. 2014 , 316, 341-347	54
988	Molecular Doping Control at a Topological Insulator Surface: F ₄ -TCNQ on Bi ₂ Se ₃ . 2014 , 118, 14860-14865	10
987	Anderson impurity in the bulk of topological insulators. 2014 , 89,	5
986	Electrical detection of spin-polarized surface states conduction in (Bi _{0.53} Sb _{0.47}) ₂ Te ₃ topological insulator. 2014 , 14, 5423-9	134
985	Investigations on structural, optical and thermoelectric parameters of spray deposited bismuth selenide thin films with different substrate temperature. 2014 , 148, 230-235	11
984	Kane-Mele Hubbard model on a zigzag ribbon: Stability of the topological edge states and quantum phase transitions. 2014 , 90,	6
983	Tuning the Dirac point position in Bi ₂ (Se ₃) ₂ (0001) via surface carbon doping. 2014 , 113, 116802	40
982	GROWTH AND MICROSTRUCTURES OF ULTRATHIN Bi ₂ Te ₃ NANOPLATES BY MODIFIED HOT WALL EPITAXY. 2014 , 09, 1450056	4
981	Anisotropic Electrical Properties from Vapor-Solid-Solid Grown Bi ₂ Se ₃ Nanoribbons and Nanowires. 2014 , 118, 20620-20626	23
980	Proximity-induced topological state in graphene. 2014 , 90,	17
979	Role of acoustic phonons in Bi ₂ Se ₃ topological insulator slabs: A quantum transport investigation. 2014 , 89,	10
978	Half-Heusler topological insulators. 2014 , 39, 859-866	52
977	Breaking time reversal symmetry in topological insulators. 2014 , 39, 867-872	21

976	Exploration and prediction of topological electronic materials based on first-principles calculations. 2014 , 39, 849-858	65
975	Topological insulator nanostructures. 2014 , 39, 873-879	5
974	Atomic layer-by-layer thermoelectric conversion in topological insulator bismuth/antimony tellurides. 2014 , 14, 4030-5	39
973	Fermi-level pinning, charge transfer, and relaxation of spin-momentum locking at metal contacts to topological insulators. 2014 , 90,	34
972	Air-stable electron depletion of Bi(2)Se(3) using molybdenum trioxide into the topological regime. 2014 , 8, 6400-6	23
971	Surfactant-thermal syntheses, structures, and magnetic properties of Mn-Ge-sulfides/selenides. 2014 , 53, 10248-56	39
970	High-pressure studies of Bi ₂ S ₃ . 2014 , 118, 1713-20	57
969	Charge Induction and Polarization on the Surface of a Topological Insulator Due to an Emergent Gauge Field. 2014 , 83, 034704	1
968	Quintuple layer Bi ₂ Se ₃ thin films directly grown on insulating SiO ₂ using molecular beam epitaxy. 2014 , 316, 42-45	13
967	Optimization of In ₂ Se ₃ /Si(111) Heteroepitaxy To Enable Bi ₂ Se ₃ /In ₂ Se ₃ Bilayer Growth. 2014 , 14, 4617-4623	5
966	Dirac materials. 2014 , 63, 1-76	589
965	Bulk effects on topological conduction in three-dimensional topological insulators. 2014 , 90,	5
964	Q-switched mode-locked erbium-doped fiber laser based on topological insulator Bi(2)Se(3) deposited fiber taper. 2014 , 53, 5117-22	38
963	Giant spin-orbit splitting in ultrathin Ir(111) film. 2014 , 378, 2640-2643	1
962	Room-temperature high-frequency transport of dirac fermions in epitaxially grown Sb ₂ Te ₃ - and Bi ₂ Te ₃ -based topological insulators. 2014 , 113, 096601	83
961	Colloidal beading: sonication-induced stringing of selenium particles. 2014 , 30, 7313-8	13
960	Topological phases in a three-dimensional topological insulator with a time-reversal invariant external field. 2014 , 89, 105801	4
959	Coherent single-spin source based on topological insulators. 2014 , 90,	10

958	Condensed matter realization of the axial magnetic effect. 2014 , 89,	94
957	Transition-Metal Pentatelluride ZrTe ₅ and HfTe ₅ : A Paradigm for Large-Gap Quantum Spin Hall Insulators. 2014 , 4,	196
956	Two-dimensional time-reversal-invariant topological superconductivity in a doped quantum spin-Hall insulator. 2014 , 90,	104
955	Stability and Surface Reconstruction of Topological Insulator Bi ₂ Se ₃ on Exposure to Atmosphere. 2014 , 118, 20413-20419	52
954	Weyl Semimetal Phase in Solid-Solution Narrow-Gap Semiconductors. 2014 , 83, 063709	25
953	Persistent non-equilibrium interface dipoles at quasi-2D organic/inorganic semiconductor interfaces: The effect of gap states. 2014 , 630, 136-143	10
952	Effects of Intrinsic Defects and Substrate Transfer Doping on the Electronic Structure of Sb ₂ Te ₃ Thin Films on Graphene. 2014 , 83, 034713	2
951	Electrical and magnetic transport properties of Co-doped Bi ₂ Se ₃ topological insulator crystals. 2014 , 28, 1450108	7
950	Proximity effect in graphene-topological-insulator heterostructures. 2014 , 112, 096802	83
949	Phase transition of bismuth telluride thin films grown by MBE. 2014 , 7, 045503	17
948	Effect of a spin-active interface on proximity-induced superconductivity in topological insulators. 2014 , 89,	14
947	A computational investigation of topological insulator Bi ₂ Se ₃ film. 2014 , 9, 760-767	4
946	Three-Dimensional Topological Insulators: The Case of Inverse Heusler Compound Lu ₂ FePb. 2014 , 926-930, 440-443	
945	Temperature dependent Raman scattering studies of three dimensional topological insulators Bi ₂ Se ₃ . 2014 , 115, 173506	35
944	Surface plasmon polaritons in topological insulators. 2014 , 89,	15
943	Low-temperature Raman fingerprints for few-quintuple layer topological insulator Bi ₂ Se ₃ films epitaxied on GaAs. 2014 , 25, 245701	25
942	Emergence of supersymmetry on the surface of three-dimensional topological insulators. 2014 , 16, 013044	71
941	Sub-130 fs mode-locked Er-doped fiber laser based on topological insulator. 2014 , 22, 13244-9	137

940	Connecting electron and phonon spectroscopy data to consistently determine quasiparticle-phonon coupling on the surface of topological insulators. 2014 , 89,	16
939	Enhanced quasiparticle dynamics of quantum well states: The giant Rashba system BiTeI and topological insulators. 2014 , 89,	11
938	Thermoelectric properties of an ultra-thin topological insulator. 2014 , 26, 165303	4
937	Evidence of Distributed Robust Surface Current Flow in 3D Topological Insulators. 2014 , 4,	7
936	Topological Insulator Simultaneously Q-Switched Dual-Wavelength $\text{Nd}:\text{Lu}_2\text{O}_3$ Laser. 2014 , 6, 1-7	24
935	Magnetoresistance through a ferromagnet/superconductor/ferromagnet junction on the surface of a topological insulator. 2014 , 7, 023001	5
934	Josephson effect in normal and ferromagnetic topological-insulator junctions: Planar, step, and edge geometries. 2014 , 90,	10
933	Internal chiral spin structure of topological-insulator/metal superlattices. 2014 , 106, 37008	
932	A quantum dot in topological insulator nanofilm. 2014 , 26, 115302	4
931	Magnetometry with nitrogen-vacancy defects in diamond. 2014 , 77, 056503	615
930	Magnetic and transport signatures of Rashba spin-orbit coupling on the ferromagnetic Kondo lattice model in two dimensions. 2014 , 90,	5
929	One-dimensional topological edge states of bismuth bilayers. <i>Nature Physics</i> , 2014 , 10, 664-669	16.2 238
928	Electronic structure for a topological insulator with a smoothly varying step on surface. 2014 , 454, 67-71	
927	Structure Evolutions and Metallic Transitions in In_2Se_3 Under High Pressure. 2014 , 118, 5445-5452	20
926	Effects of van der Waals interactions and quasiparticle corrections on the electronic and transport properties of Bi_2Te_3 . 2014 , 90,	47
925	Probing the electronic properties of individual MnPc molecules coupled to topological states. 2014 , 14, 5092-6	30
924	Bulk signatures of pressure-induced band inversion and topological phase transitions in $\text{Pb}_{1-x}\text{Sn}_x\text{Se}$. 2014 , 113, 096401	24
923	Josephson supercurrent in a topological insulator without a bulk shunt. 2014 , 27, 104001	18

922	Effect of Fermi surface evolution on superconducting gap in superconducting topological insulator. 2014 , 27, 104002	15
921	Effective manipulation of Andreev bound states, zero mode Majorana fermion and Josephson current in a superconductor-normal-superconductor junction on the surface of a topological insulator. 2014 , 378, 3131-3135	3
920	Thin film three-dimensional topological insulator metal-oxide-semiconductor field-effect-transistors: A candidate for sub-10 nm devices. 2014 , 116, 084508	1
919	Dephasing effect on backscattering of helical surface states in 3D topological insulators. 2014 , 113, 046805	17
918	Floquet Weyl semimetal induced by off-resonant light. 2014 , 105, 17004	83
917	Topological spin texture in a quantum anomalous Hall insulator. 2014 , 113, 136403	43
916	Reorganization of a topological surface state: Theory for Bi ₂ Te ₃ (111) covered by noble metals. 2014 , 90,	2
915	Gapless MoS ₂ allotrope possessing both massless Dirac and heavy fermions. 2014 , 89,	92
914	Surface Band Tuning of Bi ₂ Te ₃ Topological Insulator Thin Films by Gas Adsorption. 2014 , 43, 3105-3109	3
913	Group theory analysis of phonons in two-dimensional transition metal dichalcogenides. 2014 , 90,	130
912	Noncentrosymmetric superconductor with a bulk three-dimensional Dirac cone gapped by strong spin-orbit coupling. 2014 , 89,	109
911	Spin-orbit density wave: a new phase of matter applicable to the hidden order state of URu ₂ Si ₂ . 2014 , 94, 3838-3862	3
910	Local and nonlocal Fraunhofer-like pattern from an edge-stepped topological surface Josephson current distribution. 2014 , 14, 5029-34	19
909	Mechanical, electronic, and optical properties of BiS ₂ and BiSe ₂ compounds: first principle investigations. 2014 , 20, 2180	50
908	The role of spin-orbit coupling in topologically protected interface states in Dirac materials. 2014 , 16, 065012	9
907	Ferromagnetism and topological surface states of manganese doped Bi ₂ Te ₃ : insights from density-functional calculations. 2014 , 140, 124704	15
906	Robustness of topological superconductivity in proximity-coupled topological insulator nanoribbons. 2014 , 90,	7
905	Thermoelectric properties and violation of the Wiedemann-Franz law in Bi ₂ (1-x)Cu _x Se ₃ (x = 0.1). 2014 , 64, 695-700	4

904	Fingerprints of Inelastic Transport at the Surface of the Topological Insulator Bi ₂ Se ₃ : Role of Electron-Phonon Coupling. 2014 , 112,	51
903	Harmonically mode-locked Er-doped fiber laser based on a Sb ₂ Te ₃ topological insulator saturable absorber. 2014 , 11, 055102	105
902	Tuning the crystal structure and electronic states of Ag ₂ Se: Structural transitions and metallization under pressure. 2014 , 89,	19
901	Controlling electron propagation on a topological insulator surface via proximity interactions. 2014 , 89,	12
900	The electronic structure of the antimony chalcogenide series: Prospects for optoelectronic applications. 2014 , 213, 116-125	68
899	Optical evidence of surface state suppression in Bi-based topological insulators. 2014 , 89,	49
898	Giant Faraday effect due to Pauli exclusion principle in 3D topological insulators. 2014 , 26, 082201	3
897	In-doped Bi ₂ Se ₃ hierarchical nanostructures as anode materials for Li-ion batteries. 2014 , 2, 7109	52
896	Deposition of topological insulator Sb ₂ Te ₃ films by an MOCVD process. 2014 , 2, 8215	35
895	Synthesis of SnTe nanoplates with {100} and {111} surfaces. 2014 , 14, 4183-8	66
894	Pressure-induced structural changes and insulator-metal transition in layered bismuth triiodide, BiI ₃ : a combined experimental and theoretical study. 2014 , 26, 275502	11
893	Proximity induced high-temperature magnetic order in topological insulator--ferrimagnetic insulator heterostructure. 2014 , 14, 3459-65	156
892	Two-Dimensional Tunnel Transistors Based on $\text{Bi}_{2}\text{Se}_{3}$ Thin Film. 2014 , 35, 129-131	23
891	Molecular Beam Epitaxial Growth and Properties of Bi ₂ Se ₃ Topological Insulator Layers on Different Substrate Surfaces. 2014 , 43, 909-913	19
890	Dynamics of electron wave packets in topological insulators. 2014 , 99, 104-108	5
889	Infrared spectroscopy of Bi ₂ Te ₂ Se. 2014 , 99, 187-190	5
888	High-pressure thermoelectric characteristics of Bi ₂ Te ₃ semiconductor with different charge carrier densities. 2014 , 99, 283-285	8
887	Vapour-liquid-solid growth of ternary Bi ₂ Se ₂ Te nanowires. 2014 , 9, 127	14

886	Broadband mid-infrared luminescence of Bi ₂ Se ₃ and doped crystals. 2014 , 24, 035701	2
885	Relaxation dynamics of photoexcited charge carriers at the Bi(111) surface. 2014 , 89,	4
884	Universal transport properties of three-dimensional topological insulator nanowires. 2014 , 89,	17
883	Tunneling spectrum of a pinned vortex with a robust Majorana state. 2014 , 89,	25
882	Current-Induced Spin Torque on Magnetization Textures Coupled to the Topological Surface States of Three-Dimensional Topological Insulators. 2014 , 83, 064710	10
881	Quasi-Classical Theory of Tunneling Spectroscopy in Superconducting Topological Insulator. 2014 , 83, 064705	19
880	Topological crystalline insulator nanostructures. 2014 , 6, 14133-40	29
879	Quantum phase transitions and topological proximity effects in graphene nanoribbon heterostructures. 2014 , 6, 3259-67	8
878	Surface States of Bi ₂ Se ₃ Nanowires in the Presence of Perpendicular Magnetic Fields. 2014 , 31, 067304	3
877	Tunable interaction-induced localization of surface electrons in antidot nanostructured Bi ₂ Te ₃ thin films. 2014 , 8, 9616-21	24
876	Magnetotransport properties of Sb ₂ Te ₃ nanoflake. 2014 , 452, 108-112	8
875	Transferring MBE-grown topological insulator films to arbitrary substrates and metal-insulator transition via Dirac gap. 2014 , 14, 1343-8	27
874	Effects of surface-bulk hybridization in three-dimensional topological metals. 2014 , 89,	10
873	Topological surface state enhanced photothermoelectric effect in Bi ₂ Se ₃ nanoribbons. 2014 , 14, 4389-94	69
872	Controlling the nanostructure of bismuth telluride by selective chemical vapour deposition from a single source precursor. 2014 , 2, 4865	31
871	Pressure effects on the vibrational properties of Bi ₂ O ₃ : an experimental and theoretical study. 2014 , 26, 225401	17
870	Z ₂ phase diagram of three-dimensional disordered topological insulators via a scattering matrix approach. 2014 , 89,	25
869	Ultrafast electron dynamics in the topological insulator Bi ₂ Se ₃ studied by time-resolved photoemission spectroscopy. 2014 , 195, 249-257	48

868	Improvement of Bismuth Telluride electrodeposited films by the addition of Sodium Lignosulfonate. 2014 , 123, 117-126	39
867	First principles investigation of the structure and electronic properties of Cu ₂ Te. 2014 , 81, 163-169	26
866	Bi-rich grow topological insulator Bi ₂ Se ₃ nanodomains structures. 2014 , 66, 33-38	6
865	Thermal evaporation growth of topological insulator Bi ₂ Se ₃ thin films. 2014 , 123, 87-89	22
864	LaBiTe ₃ : An unusual thermoelectric material. 2014 , 08, 805-808	10
863	Magnetic exchange interaction in topological insulators. 2014 , 89,	12
862	Tunable THz surface plasmon polariton based on a topological insulator/layered superconductor hybrid structure. 2014 , 89,	3
861	One-dimensional fermions with neither Luttinger-liquid nor Fermi-liquid behavior. 2014 , 112, 106403	11
860	Surface reconstruction-induced coincidence lattice formation between two-dimensionally bonded materials and a three-dimensionally bonded substrate. 2014 , 14, 3534-8	66
859	Nanoscale Transition Metal Dichalcogenides: Structures, Properties, and Applications. 2014 , 39, 319-367	106
858	Observation of surface Dirac cone in high-quality ultrathin epitaxial Bi ₂ Se ₃ topological insulator on AlN(0001) dielectric. 2014 , 8, 6614-9	33
857	Solution-based synthesis of anisotropic metal chalcogenide nanocrystals and their applications. 2014 , 2, 6222-6248	53
856	Magnetization switching through giant spin-orbit torque in a magnetically doped topological insulator heterostructure. 2014 , 13, 699-704	616
855	Persistent topological surface state at the interface of Bi ₂ Se ₃ film grown on patterned graphene. 2014 , 8, 1154-60	30
854	One-dimensional helical transport in topological insulator nanowire interferometers. 2014 , 14, 2815-21	103
853	Weak topological insulators in PbTe/SnTe superlattices. 2014 , 89,	37
852	Confining Dirac electrons on a topological insulator surface using potentials and a magnetic field. 2014 , 89,	9
851	Anisotropic spin-singlet pairings in Cu _x Bi ₂ Se ₃ and Bi ₂ Te ₃ . 2014 , 89,	14

850	Nonmagnetic impurity effects in a three-dimensional topological superconductor: From p- to s-wave behaviors. 2014 , 89,	20
849	Enhanced thermoelectric performance and anomalous seebeck effects in topological insulators. 2014 , 112, 226801	249
848	From Topological Quantum Field Theory to Topological Materials. 2014 , 509-566	1
847	Engineering of Bi ₂ Se ₃ nanowires by laser cutting. 2014 , 66, 10401	3
846	Plasmonics in Topological Insulators. 2014 , 4, 13	22
845	Angle resolved photoemission study of GeBi ₂ Te ₄ . 2014 ,	2
844	Transport properties of Dirac ferromagnet. 2014 , 90,	8
843	Robustness against non-magnetic impurities in topological superconductors. 2014 , 568, 022030	
842	Faraday effect due to Pauli exclusion principle in 3D topological insulator nanostructures. 2014 ,	
841	Unusual Superconducting transition in Topological Insulators. 2014 , 568, 022027	
840	Effect of order parameter on the magnetotransport properties of half-Heusler LaPtBi. 2015 , 54, 093002	3
839	Density-functional theory guided advances in phase-change materials and memories. 2015 , 40, 856-869	52
838	Nuclear magnetic resonance study of a Bi ₂ Te ₃ topological insulator. 2015 , 57, 1741-1745	9
837	L-band femtosecond fibre laser based on Bi ₂ Se ₃ topological insulator. 2015 , 12, 105103	24
836	Yb-doped passively mode-locked fiber laser with Bi ₂ Te ₃ -deposited. 2015 , 24, 124204	7
835	Gate Tunable In- and Out-of-Plane SpinOrbit Coupling and Spin-Splitting Anisotropy at LaAlO ₃ /SrTiO ₃ (110) Interface. 2015 , 1, 1500114	24
834	Self-organized van der Waals epitaxy of layered chalcogenide structures. 2015 , 252, 2151-2158	54
833	First-Principles Study of Topological InsulatorsA ₂ B ₃ (A= Bi and Sb, andB= O, S, Se, and Te). 2015 ,	1

832	Infrared reflection and attenuated total reflection spectra in the Bi ₂ Se ₃ topological insulator. 2015 , 102, 226-229	2
831	Negative differential resistance and characteristic nonlinear electromagnetic response of a Topological Insulator. 2015 , 5, 18008	19
830	Tuning the Chern number and Berry curvature with spin-orbit coupling and magnetic textures. 2015 , 91,	2
829	Electromagnetic Green's function for layered topological insulators. 2015 , 92,	14
828	Modification and Control of Topological Insulator Surface States Using Surface Disorder. 2015 , 3,	22
827	Interaction-induced quantum anomalous Hall phase in (111) bilayer of LaCoO ₃ . 2015 , 91,	40
826	Two distinct topological phases in the mixed-valence compound YbB ₆ and its differences from SmB ₆ . 2015 , 91,	13
825	Magnetic order on a topological insulator surface with warping and proximity-induced superconductivity. 2015 , 91,	12
824	Infrared probe of the bulk insulating response in Bi ₂ (Sb _x Te _{3-x}) ₂ Se _y topological insulator alloys. 2015 , 91,	14
823	One-dimensional spin texture of Bi(441): Quantum spin Hall properties without a topological insulator. 2015 , 91,	9
822	Valley-polarized quantum anomalous Hall phases and tunable topological phase transitions in half-hydrogenated Bi honeycomb monolayers. 2015 , 91,	36
821	Spin texture and mirror Chern number in Hg-based chalcogenides. 2015 , 91,	9
820	SmO thin films: A flexible route to correlated flat bands with nontrivial topology. 2015 , 91,	8
819	Time-reversal invariant SU(2) Hofstadter problem in three-dimensional lattices. 2015 , 91,	6
818	Quantum thermal Hall effect of Majorana fermions on the surface of superconducting topological insulators. 2015 , 91,	5
817	Topologically protected Dirac cones in compressed bulk black phosphorus. 2015 , 91,	74
816	Probing surface states exposed by crystal terminations at arbitrary orientations of three-dimensional topological insulators. 2015 , 91,	4
815	Engineering the topological surface states in the (Sb ₂)mSb ₂ Te ₃ (m=0B) superlattice series. 2015 , 91,	17

814	Atomic and electronic structure of bismuth-bilayer-terminated Bi ₂ Se ₃ (0001) prepared by atomic hydrogen etching. 2015 , 91,	23
813	Search and design of nonmagnetic centrosymmetric layered crystals with large local spin polarization. 2015 , 91,	35
812	Two-dimensional inversion-asymmetric topological insulators in functionalized III-Bi bilayers. 2015 , 91,	51
811	Quasiparticle spectrum and plasmonic excitations in the topological insulator Sb ₂ Te ₃ . 2015 , 91,	39
810	Sublattice effect on topological surface states in complex (SnTe) _{n>1} (Bi ₂ Te ₃) _{m=1} compounds. 2015 , 91,	10
809	Homotopy theory of strong and weak topological insulators. 2015 , 91,	26
808	Electronic and spin structure of a family of Sn-based ternary topological insulators. 2015 , 92,	19
807	Recent Progress on Metal-Based Nanomaterials: Fabrications, Optical Properties, and Applications in Ultrafast Photonics. 2107363	6
806	Structural and superconducting analysis of topologically non-trivial alloy of Sn _{1-x} Sb _x (x=0.4, 0.5, 0.6). 2021 , 156, 110136	1
805	Recent advances in the electrochemistry of layered post-transition metal chalcogenide nanomaterials for hydrogen evolution reaction. 2021 , 60, 451-479	18
804	Structural, optical, and physical properties investigations of Bi ₂ Te ₃ topological insulator nanocomposites exposure to 60Co γ rays. 2021 , 271, 115246	3
803	Superconducting Long-Range Proximity Effect through the Atomically Flat Interface of a BiTe Topological Insulator. 2021 , 12, 9068-9075	3
802	An study of topological and transport properties of YAuPb. 2021 , 33,	0
801	Electron-phonon superconductivity in C-doped topological nodal-line semimetal ZrPt: a muon spin rotation and relaxation (μ SR) study. 2021 , 34,	1
800	Raman Spectroscopy and In Situ XRD Probing of the Thermal Decomposition of Sb ₂ Se ₃ Thin Films. 2021 , 125, 19858-19865	3
799	Exfoliated Bi ₂ Te ₃ nanoparticle suspensions and films: morphological and nonlinear optical characterization. 2021 ,	2
798	Quasiparticle interference in doped topological insulators with nematic superconductivity. 2021 , 133, 114800	0
797	Surface density of states on semi-infinite topological photonic and acoustic crystals. 2021 , 104,	

- 796 Versatile electronic states in epitaxial thin films of (Sn-Pb-In)Te: From topological crystalline insulator and polar semimetal to superconductor. **2021**, 5, 0
- 795 Interface-Dominated Topological Transport in Nanograined Bulk Bi Te. **2021**, 17, e2103281 2
- 794 Higher-order topological superconductors based on weak topological insulators. **2021**, 104, 0
- 793 Band ordering and surface states of SnTe and PbTe. **2021**, 616, 413120
- 792 Reconstructed conventional bulk-boundary correspondence in the non-Hermitian s-wave nodal-ring superconductor. **2021**, 104,
- 791 Electron-magnon coupling and quasiparticle lifetimes on the surface of a topological insulator. **2021**, 104, 0
- 790 Orbital dynamics in 2D topological and Chern insulators. 0
- 789 Lifting the Spin-Momentum Locking in Ultra-Thin Topological Insulator Films. 2100083 2
- 788 Large gap two-dimensional topological insulators with prominent Rashba effect in ethynyl functionalized III-Bi Buckled-Honeycomb monolayers. **2021**, 158, 107026
- 787 Exploring sodium storage mechanism of topological insulator Bi₂Te₃ nanosheets encapsulated in conductive polymer. **2021**, 41, 255-263 10
- 786 Van der Waals heterostructures based on three-dimensional topological insulators. **2021**, 25, 100939
- 785 Doping-controlled surface conduction in topological insulators with warping effects. **2021**, 536, 168135 1
- 784 Quantized Goos-H nchen shifts on the surface of hybridized topological insulator thin films. **2021**, 134, 114819 6
- 783 Femtosecond laser direct inscribed 45  tilted fiber grating for a net-normal-dispersion mode-locked Er-doped fiber laser. **2021**, 143, 107358 0
- 782 Experimental demonstration of harmonic mode-locking in Sb₂Se₃-based thulium-doped fiber laser. **2021**, 143, 107286 6
- 781 Ab-initio electronic structure simulations of transition metal doped Bi₂Se₃ topological insulator. **2021**, 159, 107033 0
- 780 Pressure induced topological and structural transitions in iron and sulphur doped Sb₂Te₃. **2021**, 302, 130401 0
- 779 Reversible proton co-intercalation boosting zinc-ion adsorption and migration abilities in bismuth selenide nanoplates for advanced aqueous batteries. **2021**, 42, 34-41 4

- 778 Band tuning and channel reconfiguration of sound waves in coding topological metamaterials. **2021**, 184, 108348
- 777 A topological photonic crystal with ultra wide dual bandwidth. **2021**, 5, 100127
- 776 Epitaxial fabrication of topological Bi-Sb alloy films by surface alloying of Sb nanofilms. **2021**, 714, 121921 2
- 775 A brief review of Bi₂Se₃ based topological insulator: From fundamentals to applications. **2021**, 888, 161492 4
- 774 Dispersion of the surface phonons in semiconductor/topological insulator Si/BiTe heterostructure studied by high resolution Brillouin spectroscopy. **2021**, 117, 106526 0
- 773 119th harmonic mode-locking in the fiber laser based on a novel saturable absorber thin film obtained by the sol-gel method. **2022**, 145, 107542 2
- 772 Giant and tunable Rashba spin splitting in MoS₂/Bi₂Te₃ heterostructures. **2022**, 135, 114944 1
- 771 Electron-phonon coupling in the magnetic Weyl semimetal ZrCo₂Sn. **2021**, 103, 1
- 770 Single-surface conduction in a highly bulk-resistive topological insulator Sn_{0.02}Bi_{1.08}Sb_{0.9}Te₂S using the Corbino geometry. **2021**, 118, 033102
- 769 Magnetically Tunable Goos-Hanchen Shifts in Topological Quantum Materials. **2021**, 1
- 768 Materials Screening for Disorder-Controlled Chalcogenide Crystals for Phase-Change Memory Applications. **2021**, 33, e2006221 13
- 767 The bulk-corner correspondence of time-reversal symmetric insulators. **2021**, 6, 8
- 766 Quantum Transport in Topological Matters under Magnetic Fields. **2021**, 70, 1-30 0
- 765 Large Bandgap Topological Insulator in Oxide APoO₃ (A = Be, Mg, Ca, Sr, Ba, and Ra) Perovskite: An Ab Initio Study. **2021**, 11, 1143 0
- 764 Change of GeTe/Sb₂Te₃ Thin-Film Memory Elements Resistance RON Under External Pressure. **2021**, 427-433
- 763 Topological insulators and applications. **2021**, 81-138
- 762 Nesting-like band gap in bismuth sulfide Bi₂S₃. 2
- 761 Crystalline Sb₂Te₃: Side Surfaces and Disappearance of Dirac Cones. **2021**, 15, 2000418 2

760	Persistence of the Topological Surface States in Bi ₂ Se ₃ against Ag Intercalation at Room Temperature. 2021 , 125, 1784-1792	0
759	Strain-induced surface modalities in pnictogen chalcogenide topological insulators. 2021 , 129, 015304	1
758	Fully spin-polarized Weyl fermions and in/out-of-plane quantum anomalous Hall effects in a two-dimensional d ferromagnet. 2021 , 13, 5901-5909	8
757	Design and tailoring of two-dimensional Schottky, PN and tunnelling junctions for electronics and optoelectronics. 2021 , 13, 6713-6751	13
756	Electronic Structure of Exfoliated MoS ₂ . 2014 , 37-51	3
755	Synchrotron-Radiation Studies of Topological Insulators. 2013 , 211-238	1
754	Properties of Amorphous Chalcogenides. 2012 , 35-47	3
753	Spintronics of Topological Insulators. 2016 , 431-462	5
752	Crystal Growth and Characterization of Possible New Magnetic Topological Insulators FeBi ₂ Te ₄ . 2020 , 33, 2251-2256	4
751	Highly stable nanostructured Bi ₂ Se ₃ anode material for all solid-state lithium-ion batteries. 2020 , 838, 155403	12
750	Influence of crystal orientation and surface termination on the growth of BiSb thin films on GaAs substrates. 2019 , 511, 99-105	4
749	STM/STS Study of the Sb (111) Surface. 2015 , 71, 323-326	3
748	Optical intersubband properties of a core-shell semiconductor/topological insulator quantum dot described by Electrodynamics. 2020 , 123, 114202	1
747	Topological carbon materials: A new perspective. 2020 , 868, 1-32	14
746	Crystalline Bi ₂ Se ₃ topological insulator films prepared by dc magnetron sputtering. 2020 , 177, 109366	6
745	Electronic Structure: Basic Theory and Practical Methods. 2020 ,	38
744	Van der Waals epitaxy between the highly lattice mismatched Cu-doped FeSe and Bi ₂ Te ₃ . 2017 , 9, e402-e402	16
743	On the topological immunity of corner states in two-dimensional crystalline insulators. 2020 , 5,	10

742	2D van der Waals heterostructures: processing, optical properties and applications in ultrafast photonics. 2020 , 7, 2903-2921	18
741	Chemical assembly and electrical characteristics of surface-rich topological insulator Bi ₂ Se ₃ nanoplates and nanoribbons. 2012 , 101, 143103	8
740	Thermal conductivity of Bi ₂ (SexTe _{1-x}) ₃ alloy films grown by molecular beam epitaxy. 2017 , 5, 066101	4
739	Colossal variations in the thermopower and n ρ conductivity switching in topological tellurides under pressure. 2020 , 128, 245902	1
738	Temperature and excitation wavelength dependence of circular and linear photogalvanic effect in a three dimensional topological insulator BiSe. 2019 , 31, 415702	9
737	Electronic properties of BiSe dopped by 3d transition metal (Mn, Fe, Co, or Ni) ions. 2021 , 33, 065501	2
736	Importance of van der Waals interactions for ab initio studies of topological insulators. 2020 ,	3
735	Raman spectrum of layered tilkerodeite (PdHgSe) topological insulator: the palladium analogue of jacutingaite (PtHgSe). 2021 , 33, 065401	2
734	Indirect exchange interaction between magnetic impurities in one-dimensional gapped helical states. 2020 , 33, 085801	2
733	High-performance mid-infrared photodetection based on BiSe maze and free-standing nanoplates. 2021 , 32, 105705	5
732	Weyl fermions in ferromagnetic high-temperature phase of K ₂ Cr ₈ O ₁₆ . 2020 , 22, 073062	0
731	Bi ₂ Se ₃ , Bi ₂ Te ₃ quantum dots-sensitized rutile TiO ₂ nanorod arrays for enhanced solar photoelectrocatalysis in azo dye degradation. 2021 , 3, 014003	5
730	Non-Hermiticity and topological invariants of magnon Bogoliubov-de Gennes systems. 2020 , 2020,	11
729	Disorder-induced phase transition in Dirac systems beyond the linear approximation. 2020 , 101,	5
728	Influence of point defects on the electronic and topological properties of monolayer WTe ₂ . 2020 , 102,	5
727	Fragile topology based helical edge states in two-dimensional moon-shaped photonic crystals. 2020 , 102,	7
726	Robustness of persistent currents in two-dimensional Dirac systems with disorder. 2017 , 96,	8
725	Prediction of nontrivial band topology and superconductivity in Mg ₂ Pb. 2017 , 1,	7

724	Topological origin of the type-II Dirac fermions in PtSe ₂ . 2017 , 1,	30
723	Spatially modulated magnetic structure of EuS due to the tetragonal domain structure of SrTiO ₃ . 2017 , 1,	1
722	Frustrated spin one on a diamond lattice in NiRh ₂ O ₄ . 2018 , 2,	16
721	Dynamic surface electronic reconstruction as symmetry-protected topological orders in topological insulator Bi ₂ Se ₃ . 2018 , 2,	8
720	Nonsymmorphic cubic Dirac point and crossed nodal rings across the ferroelectric phase transition in LiOsO ₃ . 2018 , 2,	24
719	Structural disorder of natural Bi ₂ Se ₃ superlattices grown by molecular beam epitaxy. 2018 , 2,	7
718	Multiple topological electronic phases in superconductor MoC. 2018 , 2,	6
717	Enhancement of the superconducting transition temperature by Re doping in Weyl semimetal MoTe ₂ . 2018 , 2,	16
716	Universal superconductivity phase diagram for pressurized tetradymite topological insulators. 2018 , 2,	5
715	Second-neighbor electron hopping and pressure induced topological quantum phase transition in insulating cubic perovskites. 2018 , 2,	8
714	Discovering two-dimensional topological insulators from high-throughput computations. 2019 , 3,	38
713	Spin dynamics of 3d and 4d impurities embedded in prototypical topological insulators. 2019 , 3,	1
712	Topological and superconducting properties in YD ₃ (D=In, Sn, Tl, Pb). 2019 , 3,	8
711	Phonon mode calculations and Raman spectroscopy of the bulk-insulating topological insulator BiSbTeSe ₂ . 2019 , 3,	7
710	Composition-dependent structural transition in epitaxial Bi _{1-x} Sb _x thin films on Si(111). 2019 , 3,	3
709	Large-scale interlayer rotations and Te grain boundaries in (Bi,Sb) ₂ Te ₃ thin films. 2020 , 4,	8
708	Direct observation of large strain through van der Waals gaps on epitaxial Bi ₂ Te ₃ /graphite: Pseudomorphic relaxation and the role of Bi ₂ layers on the Bi ₂ Te ₃ topological insulator series. 2020 , 4,	2
707	Photon energy and polarization-dependent electronic structure of Cr-doped Bi ₂ Se ₃ . 2020 , 4,	3

706	Pb-doped p-type Bi ₂ Se ₃ thin films via interfacial engineering. 2020 , 4,	3
705	Topological properties of SnSe/EuS and SnTe/CaTe interfaces. 2020 , 4,	5
704	Artificial intelligence for high-throughput discovery of topological insulators: The example of alloyed tetradymites. 2020 , 4,	13
703	Magnetic-field-induced topological phase transition in Fe-doped (Bi,Sb) ₂ Se ₃ heterostructures. 2020 , 4,	3
702	Intrinsic spin Hall effect in topological insulators: A first-principles study. 2020 , 4,	3
701	Plasmon coupling in topological insulator multilayers. 2020 , 4,	6
700	Fermi level dependent spin pumping from a magnetic insulator into a topological insulator. 2019 , 1,	21
699	Nonlocal annihilation of Weyl fermions in correlated systems. 2020 , 2,	4
698	Anomalous in-gap edge states in two-dimensional pseudospin-1 Dirac insulators. 2020 , 2,	1
697	Gapped Dirac cones and spin texture in thin film topological insulator. 2020 , 2,	2
696	Second-order topological insulator under strong magnetic field: Landau levels, Zeeman effect, and magnetotransport. 2020 , 2,	2
695	Fragile topology in line-graph lattices with two, three, or four gapped flat bands. 2020 , 2,	8
694	Determination of the Terahertz Dielectric Function of the Topological Insulator Bi ₂ Se ₃ . 2020 ,	1
693	Topological edge states of distorted photonic Kagome lattices. 2017 ,	1
692	Phase-coherent transport in topological insulator nanocolumns and nanoribbons. 2018 ,	1
691	Thermoelectric properties of half Heusler topological semi-metal LiAuTe. 2020 , 132, 67003	2
690	Influence of Chemical Composition of Liquid Phase and Growth Process on Physical Properties of Bi ₂ Se ₃ , Bi ₂ Te ₃ and Bi ₂ Te ₂ Se Compounds. 2011 , 120, 950-953	12
689	Various large-energy soliton operations within an Er-doped fiber laser with bismuth selenide as a saturable absorber. 2018 , 57, 8811-8818	15

688	Theory and numerical aspects of fundamental light-matter interactions. 2020 , 37, A207	3
687	Reversal in optical nonlinearities of BiSe nanosheets dispersion influenced by resonance absorption. 2019 , 27, 21741-21749	1
686	Output energy enhancement in a mode-locked Er-doped fiber laser using CVD-BiSe as a saturable absorber. 2019 , 27, 24670-24681	30
685	Saturable absorption characteristics of BiSe in a 2 μ m Q-switching bulk laser. 2020 , 28, 5639-5647	10
684	Graphene-tuned EIT-like effect in photonic multilayers for actively controlled light absorption of topological insulators. 2020 , 28, 31893-31903	11
683	SnSSe as a saturable absorber for an ultrafast laser with superior stability. 2020 , 45, 419	46
682	Are graphene-BiTe van der Waals heterostructure-based saturable absorbers promising for solid-state Q-switched lasers?. 2019 , 44, 1072-1075	8
681	Terahertz generation measurements of multilayered GeTe-SbTe phase change materials. 2019 , 44, 1355-1358	6
680	Optical properties of (Bi _{1-x} In _x) ₂ Se ₃ thin films. 2018 , 8, 2570	10
679	Layered WSe ₂ Q-Switched Tm/Ho composite laser in a resonance-enhanced hybrid cavity. 2020 , 3, 542	1
678	Manipulating light radiation from a topological perspective. 2020 , 8, B25	10
677	Ultrafast fiber lasers mode-locked by two-dimensional materials: review and prospect. 2020 , 8, 78	173
676	Recent progress on applications of 2D material-decorated microfiber photonic devices in pulse shaping and all-optical signal processing. 2020 , 9, 2641-2671	6
675	Recent progress of pulsed fiber lasers based on transition-metal dichalcogenides and black phosphorus saturable absorbers. 2020 , 9, 2215-2231	22
674	Visible-wavelength pulsed lasers with low-dimensional saturable absorbers. 2020 , 9, 2273-2294	8
673	Recent advances in mode-locked fiber lasers based on two-dimensional materials. 2020 , 9, 2315-2340	17
672	Light-field and spin-orbit-driven currents in van der Waals materials. 2020 , 9, 2693-2708	5
671	Black phosphorus (BP)-graphene guided-wave surface plasmon resonance (GWSPR) biosensor. 2020 , 9, 4265-4272	6

670	Carbon nanotube mode-locked fiber lasers: recent progress and perspectives. 2020 , 10, 749-775	14
669	Characterization of edge states in perturbed honeycomb structures. 2019 , 1, 385-445	8
668	Conditions for fully gapped topological superconductivity in topological insulator nanowires. 2019 , 6,	7
667	Three-Dimensional Topological States of Phonons with Tunable Pseudospin Physics. 2019 , 2019, 5173580	9
666	The Thermoelectric Properties of -Type Bismuth Telluride: Bismuth Selenide Alloys BiTe Se. 2020 , 2020, 4361703	33
665	Investigation of Temperature Dependence Thermoelectric Figure of Merit (ZT) in Low-dimensional Bi ₂ Te ₃ . 2012 , 12, 863-869	2
664	Topological quantum phase transition in strongly correlated Kondo insulators in 1D. 2016 , 8,	3
663	Single-Layer MoS ₂ Field Effect Transistor with Epitaxially Grown SrTiO ₃ Gate Dielectric on Nb-doped SrTiO ₃ Substrate. 2013 , 34, 2563-2564	8
662	Phase transition of ultrathin Bi ₂ Se ₃ film sandwiched between ferromagnetic insulators. 2013 , 62, 037202	2
661	Proximity-effect-induced superconductivity by granular Pb film on the surface of Bi ₂ Te ₃ topological insulator. 2013 , 62, 167401	5
660	The band inversion and topological insulating state of Heusler alloys:X ₂ RuPb (X=Lu, Y). 2014 , 63, 023101	4
659	Universal conductance fluctuations of topological insulators. 2015 , 64, 097202	2
658	First-principles study on the uniaxial pressure induced topological quantum phase transitions of Ge ₂ X ₂ Te ₅ (X =Sb, Bi) thin films. 2015 , 64, 107301	1
657	Topological properties of artificial bandgap materials. 2017 , 66, 224203	2
656	Ultrafast pulse lasers based on two-dimensinal nanomaterials. 2019 , 68, 188101	9
655	Topological properties of graphene moirésuperlattice systems and recent optical studies. 2019 , 68, 220303	4
654	Research progress and device applications of multifunctional materials based on two-dimensional film/ferroelectrics heterostructures. 2020 , 69, 017301	9
653	Polarization-dependent nonlinear optical response in GeSe ₂ . 2020 , 69, 184212	1

- 652 DFT-based Engineering of Dirac Surface States in Topological-insulator Multilayers. **2020**, 89, 094701 2
- 651 First-Principles Estimation of Seebeck Coefficient of Bismuth Telluride and Selenide. **2012**, 51, 125601 1
- 650 Topological insulator bismuth selenide grown on black phosphorus for sensitive broadband photodetection. **2021**, 9, 15150-15157 1
- 649 Electronic structures of topological quantum materials studied by ARPES. **2021**, 108, 1-42 0
- 648 Photosensitive Elements Based on Two-Dimensional Bismuth Telluride: Obtaining and Current-Voltage Characteristics. **2021**, 66, 1092-1095 1
- 647 Large Spin-to-Charge Conversion at Room Temperature in Extended Epitaxial Sb₂Te₃ Topological Insulator Chemically Grown on Silicon. 2109361 9
- 646 Interplay of topological electrons and magnons in the Kagome magnet CoCu₃(OH)₆Cl₂. **2021**, 23, 113007 0
- 645 Ultrafast Carrier-Lattice Interactions and Interlayer Modulations of BiSe by X-ray Free-Electron Laser Diffraction. **2021**, 21, 8554-8562 2
- 644 Quantum interference and imaging using intense laser fields. **2021**, 75, 1 1
- 643 Torque field and skyrmion motion by spin transfer torque in a quasi-2D interface in presence of strong spin-orbit interaction. **2021**, 130, 133903 1
- 642 Planar Hall effect in the quasi-one-dimensional topological superconductor TaSe₃. **2021**, 104, 2
- 641 Topological hybrid semimetal phases and anomalous Hall effects in a three dimensional magnetic topological insulator. **2021**, 34, 0
- 640 2D BiSe materials for optoelectronics. **2021**, 24, 103291 3
- 639 Structural and Morphological Modifications Induced by Fe Ion Implantation in Sb₂Te₃ Thin Films. **2021**, 399, 2100079 1
- 638 Anomalous temperature dependence of the effective mass in p-type Bi₂Te₃. **2021**, 104, 1
- 637 Additive manufacturing of channeled acoustic topological insulators. **2021**, 150, 2461 1
- 636 Topological Anderson Insulator in Cation-Disordered CuZnSnS. **2021**, 11, 1
- 635 Majorana bound states in topological insulators without a vortex. **2021**, 104, 6

- 634 Experimental Realization and Phase Engineering of a Two-Dimensional SnSb Binary Honeycomb Lattice. **2021**, 15, 16335-16343 0
- 633 Self-regulated growth of candidate topological superconducting parkerite by molecular beam epitaxy. **2021**, 9, 101110 0
- 632 Coulomb Instabilities of a Three-Dimensional Higher-Order Topological Insulator. **2021**, 127, 176601 1
- 631 Magnetic Topological Insulator Heterostructures: A Review. **2021**, e2102427 3
- 630 Hierarchy of higher-order topological superconductors in three dimensions. **2021**, 104, 0
- 629 All-Optical Probe of Three-Dimensional Topological Insulators Based on High-Harmonic Generation by Circularly Polarized Laser Fields. **2021**, 21, 8970-8978 8
- 628 Giant Third-Harmonic Optical Generation from Topological Insulator Heterostructures. **2021**, 21, 8872-8879 0
- 627 Topological Insulators: Introduction. **2011**, 32, 174-181
- 626 First-principles study on the electronic structures of diadochic compounds $\text{Bi}_2\text{Te}_{3-x}\text{Se}_x$ ($x \leq 3$). **2011**, 60, 037104 1
- 625 Peculiar Linear Dispersive Bands Observed in Angle-Resolved Photoemission Spectra of TI-Based Ternary Chalcogenide TlGaTe_2 . **2011**, 50, 05FC05 1
- 624 Investigation on regulating the topological electronic structure of the half-Heusler compound LaPtBi . **2012**, 61, 123101 4
- 623 Er-doped fiber laser mode-locked by mechanically exfoliated Sb_2Te_3 saturable absorber. **2013**,
- 622 Vapor Phase Deposition Synthesis of Bismuth-Based Topological Insulator Nanoplates and Their Electrostatic Properties. **2013**, 281-304
- 621 Angle Resolved Photoelectron Spectroscopy in the $h\nu$ Region of ~ 15 to 200 eV. **2014**, 117-153
- 620 Results and Analysis. **2014**, 91-119
- 619 Growth of micro-devices of topological insulator thin films by molecular beam epitaxy on substrates pre-patterned with photolithography. **2014**, 63, 027303 1
- 618 Stacking effects in topological insulator Bi_2Se_3 : a first-principles study. **2014**, 63, 187303
- 617 Dielectric nanosecond-pulse waveguide laser passively modulated by a topological insulator saturable absorber. **2014**,

- 616 Band inversion in half Heusler-type $\text{Na}_{1-x}\text{Cs}_x\text{AlGe}$ ($0 < x < 1$). **2014**, 63, 053103 1
- 615 Comparison of sensitive nonlinear saturable absorption of topological insulator Bi_2Te_3 powder and nanosheets. **2014**,
- 614 Study of Interface Phenomena in a Topological-Insulator/Mott-Insulator Heterostructure. **2014**,
- 613 Optical and Thermal Properties of the System $\text{Bi}_2(\text{Se}_{1-x}\text{Te}_x)_3$. **2015**, 339-344
- 612 Recent experimental progress in low-dimensional superconductors. **2015**, 64, 217405 1
- 611 Topological Invariant and Topological Phases. **2015**, 5-34 O
- 610 Spintronics of Topological Insulators. **2015**, 1-25
- 609 Spintronics of Topological Insulators. **2015**, 1-26
- 608 Electronic Surface States. **2015**, 253-335 O
- 607 Noninvasive Metallic State. **2015**,
- 606 Electron Transfer and Charge Storage in Thin Films of Nanoparticles. **2016**, 869-939
- 605 Unconventional Superconductivity and Majorana Fermions in Topological Insulators. **2015**, 123-154
- 604 Photonic Topological Dynamics induced by Curved Surfaces. **2016**,
- 603 Chapter 6: Structural, Electronic, and Optical Properties of Lead Halide Perovskites. **2016**, 177-201
- 602 Exchange Interaction in Semiconductors and Metals. **2016**, 97-120
- 601 Quantum oscillations in three-dimensional topological insulators. **2017**, 187, 411-429 2
- 600 Terahertz surface polaritons. **2017**, 66, 148705
- 599 Introduction. **2017**, 1-31

- 598 Electron properties of topological insulators. The structure of edge states and photogalvanic effects. **2018**, 188,
- 597 Research progress of topological quantum states in iron-based superconductor. **2018**, 67, 207101 3
- 596 THz carrier dynamics and magnetotransport study of topological surface states in thin film Bi₂Se₃. **2018**,
- 595 Photogalvanic Effect in Topological Insulator Surface States Investigated by Time-resolved Two Photon Photoemission Spectroscopy. **2018**, 61, 302-308
- 594 Thermoelectrics: Material Candidates and Structures I Chalcogenides and Silicon-Germanium Alloys. **2019**, 69-89
- 593 Conductive BiSb topological insulator with colossal spin Hall effect for ultra-low power spin-orbit-torque switching. **2018**,
- 592 Topological-physics pioneer Shoucheng Zhang dies.
- 591 Search for Majorana zero mode in the magnetic vortex of artificial topological superconductor. **2019**, 68, 137401 2
- 590 Spectroscopic studies of plasmons in topological materials. **2019**, 68, 227801
- 589 Topological Insulating States in Atom-Thin Layers.
- 588 Ultrafast charge and spin dynamics on topological insulators. **2019**, 68, 227202 1
- 587 Sb₂Se₃(100) : A strongly anisotropic surface. **2019**, 3, 1
- 586 Transport Property of Topological Insulator/Superconductor Interface. **2020**, 81-91
- 585 Natural Topological Insulator Heterostructures. **2020**, 449-470
- 584 The SnSSe SA with high modulation depth for passively Q-switched fiber laser. **2020**, 9, 2549-2555 6
- 583 Anomalous Hall effect in Cu doped BiTe topological insulator. **2020**, 32, 305602 3
- 582 Acoustic plasmonics of Au grating/Bi₂Se₃ thin film/sapphire hybrid structures. **2020**, 29, 067801
- 581 Preparation of two-dimensional atomic crystal nanofilm of bismuth selenide of a large area. **2020**, 38-45

580	Signature of pseudodiffusive transport in mesoscopic topological insulators. 2020 , 2,	1
579	Modulation of Dirac electrons in epitaxial Bi ₂ Se ₃ ultrathin films on van der Waals ferromagnet Cr ₂ Si ₂ Te ₆ . 2020 , 4,	1
578	Chemical vapor deposition synthesized monolayer MoS ₂ for Q-switching pulse generation in the 2 μm spectral region. 2020 , 10, 2321	1
577	Materials for interconnects. 2021 , 46, 959	9
576	Structural and Weak Antilocalization analysis of Topological single-crystal SnSb ₂ Te ₄ . 2021 , 162553	1
575	Phonon Magnetic Moment from Electronic Topological Magnetization. 2021 , 127, 186403	2
574	Discovery of segmented Fermi surface induced by Cooper pair momentum. 2021 , 374, 1381-1385	4
573	Optimization of the Growth of the Van der Waals Materials Bi ₂ Se ₃ and (Bi _{0.5} In _{0.5}) ₂ Se ₃ by Molecular Beam Epitaxy.	3
572	Topological materials discovery from crystal symmetry.	10
571	The realization of quantum anomalous Hall effect in two dimensional electron gas. 2021 , 33, 105701	0
570	Local electronic and magnetic properties of the doped topological insulators Bi ₂ Se ₃ :Ca and Bi ₂ Te ₃ :Mn investigated using ion-implanted ⁸ Li NMR. 2020 , 102,	3
569	Two-Band Models. 2021 , 9-70	
568	Ultrafast Dynamics of Photocurrents in Surface States of Three-Dimensional Topological Insulators. 2021 , 258, 2000521	1
567	Introduction. 2021 , 1-7	
566	The impact of metallic contacts on spin-polarized photocurrents in topological insulator Bi ₂ Se ₃ nanowires. 2020 , 117, 262401	2
565	Anomalous de-phasing of quantum coherence phenomenon in superconductor/topological insulator (NbN/Bi _{1.95} Sb _{0.05} Se ₃) heterostructure. 2022 , 625, 413467	0
564	Structural, electronic and topological properties of NaCaBi and KBaBi compounds. 2022 , 161, 110416	0
563	Absence of localized edge modes in spite of a non-trivial Zak phase in BiCu ₂ PO ₆ . 2019 , 1,	2

562 Pnictogene: Elemente der fünften Hauptgruppe. **2020**, 1-68

561 Influence of carrier concentration and mobility tuned magneto resistance of Bi_{1-x}Sb_x nanocrystals. **2020**,

560 Preparation of Sb₂Te₃/Bi₂Te₃ Thin Films by Magnetron Sputtering. **2020**, 113-184

559 Introduction. **2020**, 1-24

558 Superconductivity in topological materials. **2020**, 69, 020301

0

557 Spintronic Phenomena in Magnetic/Nonmagnetic Topological Insulator Heterostructures. **2020**, 47-80

556 Ultrafast carrier dynamics in the candidate magnetic Weyl semimetal EuCd₂As₂. **2020**,

555 Angle resolved photoemission spectroscopy study on electronic band structure of topological insulator Bi₂Se₃ in the presence of magnetic impurities. **2020**,

554 Two-dimensional material as a saturable absorber for mid-infrared ultrafast fiber laser. **2020**, 69, 188101

3

553 Effects of topological band structure on thermoelectric transport of bismuthene. **2021**, 104,

1

552 Template-assisted electrosynthesis of thick stoichiometric thermoelectric Bi₂Se₃ micropillars. **2021**, 403, 139557

551 Near-field radiative heat transfer between topological insulators via surface plasmon polaritons. **2021**, 24, 103408

1

550 Spin-Charge Conversion in Fe/Au/Sb₂Te₃ Heterostructures as Probed By Spin Pumping Ferromagnetic Resonance. 2101244

4

549 Influence of defects on antidoping behavior in SmNiO₃. **2021**, 104,

1

548 Thermally Controlled Charge-Carrier Transitions in Disordered PbSbTe Chalcogenides. **2021**, e2106868

2

547 Nonlinear Ballistic Response of Quantum Spin Hall Edge States. **2021**, 127, 206801

0

546 Light-induced emergent phenomena in 2D materials and topological materials.

15

545 A Green's function approach to topological insulator junctions with magnetic and superconducting regions. **2020**, 32, 485302

- 544 Inducing anisotropies in Dirac fermions by periodic driving. **2020**, 32, 495501 1
- 543 Evolution to an anisotropic band structure caused by Sn doping in BiSnTe single crystals. **2020**, 129, 110906 1
- 542 Vapor growth of Bi₂Se₃ and Bi₂O₂Se crystals on mica. **2020**, 129, 110906 0
- 541 Prediction of tetragonal monolayer CuN with a quantum spin Hall state. **2020**, 124, 114225 1
- 540 Screening potential topological insulators in half-Heusler compounds via compressed-sensing. **2021**, 33, 26401-26406 1
- 539 Bulk band structure of SbTe determined by angle-resolved photoemission spectroscopy. **2021**, 23, 19264-19273 2
- 538 Coherent control of interlayer vibrations in BiSe van der Waals thin-films. **2021**, 13, 126456 0
- 537 Pyroelectric effect mediated infrared photoresponse in BiTe/Pb(MgNb)O-PbTiO₃ optothermal ferroelectric field-effect transistors. **2021**, 11, 1283 0
- 536 Study of the effect of Mn:Bi ratio in the growth of MnBi₂Te₄ bulk crystals. **2022**, 579, 126456 2
- 535 Synthetic Three-Dimensional Zr₂ Topological Insulator in an Elastic Metacrystal. **2021**, 127, 214302 2
- 534 Impact of domain disorder on optoelectronic properties of layered semimetal MoTe₂. **2021**, 122, 111786 0
- 533 Optimized thermoelectric performance in thin (Bi₂Se₃)_{1-x}(Bi₂Te₃)_x alloyed films. **2021**, 898, 162888 2
- 532 Combined Experimental and Theoretical Studies: Lattice-Dynamical Studies at High Pressures with the Help of Ab Initio Calculations. **2021**, 11, 1283 2
- 531 Integration of topological insulator nanogap with atomic single layer for boosting photoluminescence. **2021**, 122, 111786 0
- 530 Investigations of proximity-induced superconductivity in the topological insulator BiTe by microRaman spectroscopy. **2021**, 11, 22980 0
- 529 Experimental and Simulation Research on the Preparation of Carbon Nano-Materials by Chemical Vapor Deposition. **2021**, 14, 22980 1
- 528 Seebeck and Nernst effects in topological insulator: The case of strained HgTe. **2021**, 627, 413521 1
- 527 Superconductivity induced by Ag intercalation in Dirac semimetal Bi₂Se₃. **2021**, 110989 1

- 526 A Majorana perspective on understanding and identifying axion insulators. **2021**, 4, 156 0
- 525 Dissolution Behaviors of Minerals in TelluriumBismuth Ore During OxidicAcidic Leaching. **2021**, 7, 1790 0
- 524 Ferromagnetic Resonance of a [GeTe/Sb₂Te₃]₆/Py Superlattice. **2021**, 7, 156
- 523 Magneto-transport evidence for strong topological insulator phase in ZrTe. **2021**, 12, 6758 2
- 522 Excellent HER and OER Catalyzing Performance of Se-Vacancies in Defects-Engineered PtSe₂: From Simulation to Experiment. 2102359 5
- 521 Materials and possible mechanisms of extremely large magnetoresistance: A review. **2021**, 104, 1
- 520 Quasinodal lines in rhombohedral magnetic materials. **2021**, 104, 104 0
- 519 Degenerate topological line surface phonons in quasi-1D double helix crystal SnIP. **2021**, 7, 4
- 518 Orbital contributions in the element-resolved valence electronic structure of Bi₂Se₃. **2021**, 104, 104 0
- 517 Tuning of fermi level in antimony telluride thin films by low-energy Fe¹⁶Bon implantation. **2021**, 127, 1 9
- 516 High Curie Temperature and Intrinsic Ferromagnetic Half-Metallicity in MnX (X = S, Se, Te) Nanosheets. **2021**, 11790-11794 2
- 515 Six- or four-fold band degeneration in CoAs, RhAs and RhSb topological semimetals. **2021**, 23, 25944-25950 1
- 514 Material Preparation and Thin Film Growth. **2021**, 1153-1202
- 513 Introduction. **2021**, 1-24
- 512 Ultrafast dynamics of helical Dirac fermions in the topological insulators. **2022**, 7, 104 0
- 511 Weyl Point and Nontrivial Surface States in a Helical Topological Material. **2022**, 8, 104 0
- 510 Unconventional Materials: the mismatch between electronic charge centers and atomic positions. **2022**, 104, 4
- 509 Topological phase transition associated with structural phase transition in ternary half Heusler compound LiAuBi.. **2022**, 104, 104 0

- 508 Sensitivity of the electronic and topological properties of tetradymites upon atomic mutations. **2022**, 203, 111168
- 507 Unveiling the origin of two distinct routes of interlayer charge transfer doping in Bi₂Te₃/MoS₂/SiO₂ heterostructure. **2022**, 579, 152208 0
- 506 Optical properties of InAs, InSb and InAs_xSb_{1-x} (x=0.25, 0.5, 0.75) alloys under strain. **2022**, 30, e00610 0
- 505 Effect of Fe on Bi₂Te₃: Structure, magnetic properties, and XPS valence band. **2022**, 899, 163297 2
- 504 Pressure-induced superconductivity and structural transitions in topological insulator SnBi₂Te₄. **2022**, 900, 163371 0
- 503 Optical and Electrical Properties Topological Materials. **2021**, 363-461
- 502 Secondary Emission in Bi₂Se₃. **2022**, 95-148
- 501 Weak Localization and Weak Anti-Localization in Ultra Thin Sb₂Te₃ Nanoplates. **2021**, 56, 359-365 2
- 500 New Pressure-Induced Phase Transitions in Bismuthinite. **2021**, 114, 470-474 1
- 499 Topology, Symmetry, and Band Theory of Materials. **2022**, 7-49
- 498 Epitaxial Growth of BiSe Infrared Transparent Conductive Film and Heterojunction Diode by Molecular Beam Epitaxy.. **2022**, 10, 847972
- 497 Infrared spectroscopic study of topological material BaMnSb₂. **2022**,
- 496 Gate-Tunable Transport in Quasi-One-Dimensional Bi₂Se₃ Field Effect Transistors.. **2022**, 2
- 495 Spectroscopic signature of surface states and bunching of bulk subbands in topological insulator (Bi_{0.4}Sb_{0.6})₂Te₃ thin films. **2022**, 105,
- 494 Novel nanomaterials based saturable absorbers for passive mode locked fiber laser at 1.5 μ m.. **2022**, 4
- 493 Controllable chiral Majorana modes by noncollinear magnetic configuration in a topological Josephson junction. **2022**, 24, 013034
- 492 Tuning valley degeneracy with band inversion. **2022**, 10, 1588-1595 0
- 491 Revisiting the physical origin and nature of surface states in inverted-band semiconductors. **2022**, 105,

490	Bi ₁₂ Rh ₃ Cu ₂ I ₅ : A 3D Weak Topological Insulator with Monolayer Spacers and Independent Transport Channels. 2100447	
489	Engineering of the Topological Surface States and Topological Dangling Bond States in the (0001) Surface of Bi ₂ Se ₃ via Structural Distortion. 2100516	
488	Band theoretical approaches to topological physics in strongly-correlated f-electron Kondo systems.. 2022 ,	0
487	Thickness-Driven Quantum Anomalous Hall Phase Transition in Magnetic Topological Insulator Thin Films.. 2022 ,	2
486	Exploration of the role of disorder and the behaviour of the surface state in the three-dimensional topological insulator Bi ₂ Se ₃ . 2022 , 45, 1	2
485	Direct observation of the spin-orbit coupling effect in magnetic Weyl semimetal Co ₃ Sn ₂ S ₂ . 2022 , 7,	1
484	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. 2022 , 120, 033103	1
483	Topological Luttinger semimetallic phase accompanied with surface states realized in silicon. 2022 , 105,	
482	Ta ₂ NiSe ₅ : A candidate topological excitonic insulator with multiple band inversions. 2022 , 105,	0
481	Multiple One-Way Edge Modes in Sonic Crystals With Large Chern Numbers. 2022 , 10,	0
480	Spin-orbit-driven ferromagnetism at half moiré filling in magic-angle twisted bilayer graphene.. 2022 , 375, eabh2889	7
479	Local manifestations of thickness-dependent topology and edge states in the topological magnet MnBi ₂ Te ₄ . 2022 , 105,	2
478	Progress of hidden spin polarization in inversion-symmetric crystals. 2022 , 65, 1	0
477	Quantum transport and potential of topological states for thermoelectricity in Bi ₂ Te ₃ thin films.. 2022 ,	3
476	A comprehensive review on Bi ₂ Te ₃ -based thin films: Thermoelectrics and beyond. 2022 , 1, 88-115	17
475	Structural Amorphization-Induced Topological Order.. 2022 , 128, 056401	1
474	Recent advance of emerging low-dimensional materials for vector soliton generation in fiber lasers. 2022 , 23, 100622	5
473	In situ fabrication of Bi ₂ Se ₃ /g-C ₃ N ₄ S-scheme photocatalyst with improved photocatalytic activity. 2022 , 43, 370-378	4

472	Progress, Advantages, and Challenges of Topological Material Catalysts. 2100106	4
471	Fragile topological band in the checkerboard antiferromagnetic monolayer FeSe. 2022 , 8,	1
470	High sensitivity and fast response infrared detector fabricated with the Bi ₂ Se ₃ -PbSe heterojunction. 2022 , 584, 152578	1
469	First-principles investigations of structural, electronic and thermoelectric properties of Sb/Bi ₂ Se ₃ van der Waals heterostructure. 2022 , 142, 106472	3
468	Bi ₄ Br ₄ -based saturable absorber with robustness at high power for ultrafast photonic device. 2022 , 120, 053108	3
467	Tailoring Bi ₂ Te ₃ edge with semiconductor and metal properties under electron beam irradiation. 1	1
466	Detection and Control of the Effective Magnetic Field in a Ca-Doped Bi ₂ Se ₃ Topological Insulator. 2101075	
465	2D Heterostructures for Ubiquitous Electronics and Optoelectronics: Principles, Opportunities, and Challenges.. 2022 ,	28
464	Phase transitions in intrinsic magnetic topological insulator with high-frequency pumping.. 2022 ,	0
463	Nonlinear Quantum Electrodynamics in Dirac Materials.. 2022 , 128, 066402	1
462	In Situ Atomistic Insight into Magnetic Metal Diffusion across Bi _{0.5} Sb _{1.5} Te ₃ Quintuple Layers. 2102161	
461	Ultrafast Spin-Charge Conversion at SnBi ₂ Te ₄ /Co Topological Insulator Interfaces Probed by Terahertz Emission Spectroscopy. 2102061	4
460	Trigonal multivalent polonium monolayers with intrinsic quantum spin Hall effects.. 2022 , 12, 2129	0
459	Few-layer bismuth selenide cathode for low-temperature quasi-solid-state aqueous zinc metal batteries.. 2022 , 13, 752	2
458	Bismuth Selenide Nanostructured Clusters as Optical Coherence Tomography Contrast Agents: Beyond Gold-Based Particles.. 2022 , 9, 559-566	1
457	Superlinear Photogalvanic Effects in (Bi _{0.3} Sb _{0.7}) ₂ (Te _{0.1} Se _{0.9}) ₃ : Probing Three-Dimensional Topological Insulator Surface States at Room Temperature. 2021 , 16,	1
456	Effect of Electron and Hole Doping on the Transport Characteristics of Chalcogenide Systems. 2021 , 63, 754-757	
455	Bi ₂ Se ₃ /Bi ₂ Te ₃ . 116-124	

- 454 A first-principles investigation of pressure induced topological phase transitions in half-Heusler AgSrBi. 0
- 453 Persistence of symmetry-protected Dirac points at the surface of the topological crystalline insulator SnTe upon impurity doping.. **2022**,
- 452 Pressure dependence of superconductivity in alkali-Bi compounds KBi and RbBi.. **2022**, 1
- 451 Topological Insulator Plasmonics and Enhanced Light-Matter Interactions. **2022**, 89-116
- 450 Magnetic anisotropy and ferroelectric-driven magnetic phase transition in monolayer CrGeTe.. **2022**, 2
- 449 Pressure-induced phase transitions, amorphization and alloying in SbS.. **2022**, 3
- 448 Thermoelectric Transport Properties of N-Type Layered Homologous (Bi₂)M(Bi₂Se₃)_N Compounds.
- 447 Designing light-element materials with large effective spin-orbit coupling.. **2022**, 13, 919 3
- 446 Magnetotransport Studies of Encapsulated Topological Insulator BiSe Nanoribbons.. **2022**, 12, 0
- 445 Rotating Majorana zero modes in a disk geometry. **2022**, 105, 0
- 444 Large-area fabrication of 2D layered topological semimetal films and emerging applications. **2022**, 7, 2
- 443 Visualization of ferromagnetic domains in vanadium-doped topological insulator thin films and heterostructures. 1
- 442 A Universally EDTA-Assisted Synthesis of Polytypic Bismuth Telluride Nanoplates with a Size-Dependent Enhancement of Tumor Radiosensitivity and Metabolism In Vivo.. **2022**, 3
- 441 ????Sb₂Te₃?????????????????. **2022**, 0
- 440 Electronic Quantum Materials Simulated with Artificial Model Lattices. 1
- 439 Filling the gap between topological insulator nanomaterials and triboelectric nanogenerators.. **2022**, 13, 938 7
- 438 Ultrahigh efficient spin orbit torque magnetization switching in fully sputtered topological insulator and ferromagnet multilayers.. **2022**, 12, 2998 5
- 437 Visualizing Line Defects in non-van der Waals BiOSe Using Raman Spectroscopy.. **2022**, 1

- 436 Hydrostatic pressure-induced magnetic and topological phase transitions in the MnBi₂Te₄ family of materials. **2022**, 105, 0
- 435 Structural, Electronic and Thermoelectric Properties of Bi₂Se₃ Thin Films Deposited by RF Magnetron Sputtering. **2022**, 51, 2500-2509 2
- 434 Nonsymmorphic symmetry-protected band crossings in a square-net metal PtPb₄. **2022**, 7, 1
- 433 Recent Advances in Weyl Semimetal (MnBi₂ Se₄) and Axion Insulator (MnBi₂ Te₄). **2022**, 239-260
- 432 Electronic reconstruction at the polar (111)-oriented oxide interface. **2022**, 10, 031115 0
- 431 Topological properties of Sb(111) surface: A first-principles study. **2022**, 31, 047105
- 430 Improvement of thermoelectric performance in Sb₂Te₃/Te composites. **2022**, 6, 0
- 429 Relativistic collapse of Landau levels of Kane fermions in crossed electric and magnetic fields. **2022**, 105, 0
- 428 Electronic and topological properties of Bi(110) ultrathin films grown on a Cu(111) substrate. **2022**, 105, 0
- 427 Superconductor-Insulator Transition in Ultra-Thin Sb₂Te₃ Nanoplates. **2022**, 57, 81-86
- 426 Planar Hall effect and large anisotropic magnetoresistance in a topological superconductor candidate Cu_{0.05}PdTe₂. **2022**, 12, 035008
- 425 Influence of Doping on the Topological Surface States of Crystalline BiSe Topological Insulators.. **2022**, 15, 1
- 424 Magnetotransport and ARPES studies of the topological insulators SbTe and BiTe grown by MOCVD on large-area Si substrates.. **2022**, 12, 3891 1
- 423 Berry-Phase Switch in Electrostatically Confined Topological Surface States.. **2022**, 128, 126402 1
- 422 Inherited topological superconductivity in two-dimensional Dirac semimetals. **2022**, 105, 1
- 421 Features and applications of the energy shift of the topological surface state. **2022**, 105, 0
- 420 Spin-polarized topological phases in a ferromagnetic Bi₂Te₃/MnBi₂Te₄ bilayer tuned by electric and magnetic fields. **2022**, 105,
- 419 Measurement of the electronic structure of a type-II topological Dirac semimetal candidate VA13 using angle-resolved photoelectron spectroscopy. 1

- 418 Systematic generation of the cascade of anomalous dynamical first- and higher-order modes in Floquet topological insulators. **2022**, 105, 0
- 417 Topological superconductivity on the honeycomb lattice: Effect of normal state topology. **2022**, 105,
- 416 Investigation on the structural and magnetic properties of MxBi_2Te_3 (M = Gd, Fe, Cr) ($x = 0, 1$) using colloidal hot-injection method. **2022**, 45, 1
- 415 Direct Deposition of $(\text{Bi}_x\text{Sb}_{1-x})_2\text{Te}_3$ Nanosheets on Si/SiO₂ Substrates by Chemical Vapor Transport. **2022**, 22, 2354-2363
- 414 Topological Materials for Functional Optoelectronic Devices. 2110655 0
- 413 Laser induced spin injection to $[\text{GeTe}/\text{Sb}_2\text{Te}_3]$ superlattice through a TbFeCo film. **2022**, 12, 035328
- 412 Ultrafast photonics applications of emerging 2D-Xenes beyond graphene. **2022**, 11, 1261-1284 5
- 411 Experimental and first-principles studies of superconductivity in topological nodal line semimetal SnTaS_2 . 0
- 410 Shear modulus anomaly of multi-component superconductor: the case of $\text{Mx Bi}_2\text{Se}_3$. **2022**, 2164, 012019
- 409 Fermi energy level shift of p-type AgBiSe_2 single crystal featuring semiconductor-to-metal transition at cryogenics. 0
- 408 Anomalous Thermoelectric Performance in Asymmetric Dirac Semimetal BaAgBi . **2022**, 2291-2298 3
- 407 Surface states in noncentrosymmetric superconductor BiPd . **2022**, 2164, 012062
- 406 Toward Ferromagnetic Semimetal Ground State with multiple Weyl Nodes in van der Waals Crystal MnSb_4Te_7 . 1
- 405 Robust behavior and spin-texture stability of the topological surface state in Bi_2Se_3 upon deposition of gold. **2022**, 7, 2
- 404 The physics of terahertz negative photoconductivity in low-dimensional materials. **2022**, 23, 100631 3
- 403 Enhancement of Casimir Friction between Graphene-Covered Topological Insulator.. **2022**, 12, 0
- 402 One-to-One Correspondence between n-Type SnTe Thermoelectric and Topological Phase Transition. 1
- 401 Comparative study on the influence of transparent glass substrates for antimony telluride thin films via structural and optical properties. **2022**, 100449

400 Quantum oscillations and stacked quantum Hall effect in HfTe5. **2022**, 120, 141903

399 Ultrafast dynamics of Dirac surface and bulk photocarriers in topological-insulator bismuth telluride nanocrystals using terahertz spectroscopy. **2022**, 105,

○

398 Ultrasensitive Self-Powered Deep-Ultraviolet Photodetector Based on In Situ Epitaxial Ga_{0.7}Bi_{0.3}Se₂ Heterojunction. **2022**, 69, 1894-1899

1

397 Unprotected quadratic band crossing points and quantum anomalous Hall effect in FeB₂ monolayer. **2022**, 65, 1

○

396 Lamellae preparation for atomic-resolution STEM imaging from ion-beam-sensitive topological insulator crystals. **2022**, 40, 033203

395 Statistical modeling of epitaxial thin films of an intrinsic antiferromagnetic topological insulator. **2022**, 750, 139183

394 Mobility-enhanced thermoelectric performance in textured nanograin Bi₂Se₃, effect on scattering and surface-like transport. **2022**, 24, 100669

1

393 d_{0d} half-Heusler compounds as a potential class of three-dimensional Chern insulators. **2022**, 280, 115710

○

392 Enhancement of thermoelectric performance of Bi_{0.5}Sb_{1.5}Te₃ alloy by inclusion of LaVO₃ Mott insulator. **2022**, 437, 135460

391 RKKY interaction of magnetic impurities in nodal-line semimetals. **2022**, 553, 169164

390 The Charge Transport Mechanism in a New Magnetic Topological Insulator MnBi_{0.5}Sb_{1.5}Te₄. **2021**, 63, 1120-1125

○

389 Conserved laws and dynamical structure of axions coupled to photons. **2021**, 36,

○

388 Engineering of topological phases in driven thin topological insulators: Structure inversion asymmetry effect. **2021**, 104,

○

387 Half-Metallic Ferromagnets, Spin Gapless Semiconductors, and Topological Semimetals Based on Heusler Alloys: Theory and Experiment. **2021**, 122, 1133-1157

○

386 Amorphous Bi₂Se₃ structural, electronic, and topological nature from first principles. **2021**, 104,

1

385 Pressure-densified new rhombohedral phase of EuSn₂As₂. **2021**, 104,

1

384 Electronic and Thermoelectric Properties of Transition-Metal Dichalcogenides. **2021**, 125, 27084-27097

4

383 Electrical transport properties of cerium doped Bi₂Te₃ thin films grown by molecular beam epitaxy. **2021**, 42, 122902

382	High figure of merit fiber optic surface plasmon resonance sensor with topological insulator (BSTS). 2022 , 54, 1	0
381	Ellipsometric Studies of the Optical Properties of Bi ₂ Se ₃ and Bi ₂ Se ₃ <Cu> Single Crystals. 2021 , 55, 985-988	1
380	Persistence of Monoclinic Crystal Structure in 3D Second-Order Topological Insulator Candidate 1T'-MoTe Thin Flake Without Structural Phase Transition.. 2021 , e2101532	1
379	Graphene with Rashba spin-orbit interaction and coupling to a magnetic layer: Electron states localized at the domain wall. 2021 , 104,	0
378	Lifshitz transition in dirty doped topological insulator with nematic superconductivity. 2021 , 104,	0
377	Shadow surface states in topological Kondo insulators. 2021 , 23, 123042	0
376	Topological Properties in Strained Monolayer Antimony Iodide. 2021 , 38, 117301	0
375	Quantum anomalous Hall state with Chern number C=2 in wurtzite quantum wells. 2021 , 104,	0
374	2D layered black arsenic-phosphorus materials: Synthesis, properties, and device applications. 2022 , 15, 3737-3752	3
373	Development of a versatile micro-focused angle-resolved photoemission spectroscopy system with Kirkpatrick-Baez mirror optics.. 2022 , 93, 033906	6
372	Bulk and surface electronic structure of Bi ₄ Te ₃ from GW calculations and photoemission experiments. 2022 , 6,	1
371	1.15 W Passively Q-Switched Operation Of Tm:YAlO ₃ Laser with MoS ₂ -Based Saturable Absorber. 2022 , 43, 209	
370	From atomic semimetal to topological nontrivial insulator. 2022 , 105,	1
369	Angle dependent field-driven reorientation transitions in uniaxial antiferromagnet MnBi ₂ Te ₄ single crystal. 2022 , 120, 163102	0
368	Quasi-one-dimensional topological material Bi ₄ X ₄ (X=Br,I). 2022 , 7,	0
367	Berry phase in quantum oscillations of topological materials. 2022 , 7,	0
366	Rational Design of Heteroanionic Two-Dimensional Materials with Emerging Topological, Magnetic, and Dielectric Properties.. 2022 , 3594-3601	4
365	Metallization and proximity superconductivity in topological insulator nanowires. 2022 , 105,	1

- 364 Passively Mode-locked Erbium-Doped Fiber Laser based on Nanodiamond Saturable Absorber. 1
- 363 Thermopower and magnetotransport properties of Bi_{100Sb} topological insulator thin films prepared by flash evaporation. **2022**, 167, 110734 0
- 362 Review of recent progress, challenges, and prospects of 2D materials-based short wavelength infrared photodetectors.. 0
- 361 Drastic enhancement of magnetic critical temperature and amorphization in topological magnet EuSn₂P₂ under pressure. **2022**, 7, 1
- 360 WannierTools and its recent developments.
- 359 Modification of transition radiation by three-dimensional topological insulators. **2022**, 105, 0
- 358 Predicting the lattice thermal conductivity of alloyed compounds from the perspective of configurational entropy. **2022**, 8, 0
- 357 Data_Sheet_1.docx. **2020**,
- 356 Pressure-Induced Superconductivity in HgTe Single-Crystal Film.. **2022**, e2200590 0
- 355 Introduction. **2022**, 1-19
- 354 Super high-performance 7-atomic-layer thermoelectric materials ZrGe₂N₄. 0
- 353 Superconductivity in Bi-based Bi₂PdPt.
- 352 Backgrounds. **2022**, 3-19
- 351 Quantum Anomalous Hall Effect in Magnetic Topological Insulator. **2022**, 181-208
- 350 Accurate band gaps from exchange potentials designed from cusplless hydrogen density-based exchange hole model. 0
- 349 Robust dual topological insulator phase in NaZnBi. **2022**, 14, 0
- 348 High Chern number phase in topological insulator multilayer structures: a Dirac cone model study.
- 347 Theory of topological superconductivity in doped IV-VI semiconductors. **2022**, 105,

- 346 Particle-hole asymmetry and quantum confinement effects on the magneto-optical response of topological insulator thin-films. **2022**, 131, 164305
- 345 Temperature induced electrical transport in n-Bi₂Te₃/p-InAs thermoelectric heterojunctions. **2022**, 57, 8767-8778
- 344 Research and application of topological insulators. **2022**,
- 343 Magneto-optical spin Hall effect of light in topological insulators. **2022**, 108115 1
- 342 Topological surface currents accessed through reversible hydrogenation of the three-dimensional bulk.. **2022**, 13, 2308 0
- 341 Phonon-induced rotation of the electronic nematic director in superconducting Bi₂Se₃. **2022**, 105, 0
- 340 Synthesis of Weyl Semi-Metal Co₃Sn₂S₂ by Hydrothermal Method and Its Physical Properties. **2022**, 12, 830
- 339 Nonequilibrium electron and lattice dynamics of Sb₂Te₃ under pressure. **2022**, 105,
- 338 Benchmarking Noise and Dephasing in Emerging Electrical Materials for Quantum Technologies.. **2022**, e2109671 1
- 337 Role of Shift Vector in High-Harmonic Generation from Noncentrosymmetric Topological Insulators under Strong Laser Fields. **2022**, 12, 3
- 336 Magnetotransport and Berry phase tuning in Gd-doped Bi₂Se₃ topological insulator single crystals. **2022**, 6, 0
- 335 Emergence of topological and trivial interface states in VSe₂ films coupled to Bi₂Se₃. **2022**, 105,
- 334 Quantum Anomalous Hall Effect from Inverted Charge Transfer Gap. **2022**, 12, 0
- 333 Coexistence of pressure-induced superconductivity and topological surface states in elementary substance Sb. **2022**, 6,
- 332 Magneto-optical absorption properties of topological insulator thin films.. **2022**, 1
- 331 Emergent optical plasmons at the surface of a doped three-dimensional topological insulator. **2022**, 105, 0
- 330 Observation of nontrivial topological electronic structure of orthorhombic SnSe. **2022**, 6,
- 329 Advances and Prospects in Topological Nanoparticle Photonics. 2

328 BAND INVERSION IN Bi₂Se₃ FROM FAT BAND ANALYSIS. **2022**, 126719

327 Nonlinear Hall effect in topological insulator Bi₂Te₃ with hexagonal warping. **2022**, 131, 184401

0

326 Topological Co₃Sn₂S₂ magnetic Weyl semimetal: From fundamental understanding to diverse fields of study. **2022**, 8, 100072

2

325 Raman and optical absorption spectra of oriented Se₈ and Se₁₂ rings formed in zeolites: Dependence on the Se loading density. **2022**, 338, 111954

1

324 Novel Emerging Materials: Introduction and Evolution. **2022**, 3-36

323 Electronic Structure of Magnetic Topological Insulators Mn(Bi_{1-x}Sb_x)₂Te₄ with Various Concentration of Sb Atoms. **2022**, 115, 286-291

1

322 Contribution of both bulk and surface states on photothermoelectric transport in epitaxial Bi₂Se₃ thin films. **2022**, 12, 055021

321 Bi₂Se₃ Topological Insulator Thin Films for Various Device Applications. **2022**, 143-172

320 Angular momentum invoked band inversions in mirror symmetry protected topological states. **2022**, 105,

319 Revisiting the van der Waals Epitaxy in the Case of (Bi_{0.4}Sb_{0.6})₂Te₃ Thin Films on Dissimilar Substrates. **2022**, 12, 1790

1

318 Lattice dynamics of Bi_{1.9}Dy_{0.1}Te₃ topological insulator. **2022**, 414050

0

317 Strain Tunable Quantum Spin Hall Insulating Phase in Halogen Decorated Double-Layer Stanene.

316 Recent advances in topological quantum anode materials for metal-ion batteries. **2022**, 540, 231655

1

315 Emergent plasmonic excitations in Mexican-hat and bell-shaped bands of hybridized Dirac electrons in graphene/topological insulator heterostructures. **2022**, 105,

314 Temperature dependence of nanoscale friction on topological insulator Bi₂Se₃ surfaces.

313 Selective mode excitations and spontaneous emission engineering in quantum emitter-photonic structure coupled systems. **2022**, 30, 21103

312 Doubled quantum spin Hall effect with high-spin Chern number in α -antimonene and α -bismuthene. **2022**, 105,

0

311 An Efficient Dopant for Introducing Magnetism into Topological Insulator Bi₂Se₃. **2022**, 15, 3864

- 310 Observation of dimension-crossover of a tunable 1D Dirac fermion in topological semimetal NbSixTe2. **2022**, 7, 0
- 309 Topological Kerr effect in the graphene family materials. 1
- 308 Dirac-cone-like electronic states on nematic antiferromagnetic FeSe and FeTe.
- 307 Spin-orbit coupling induced ultrahigh-harmonic generation from magnetic dynamics. **2022**, 105, 0
- 306 Anomalous Response in the Orbital Magnetic Susceptibility of 2D Topological Systems.
- 305 Self-assembly of magnetic Co atoms on stanene. **2022**, 6,
- 304 Majorana zero modes in iron-based superconductors. **2022**, 5, 1734-1759 0
- 303 Ab-initio study of topological phase tuning in Half-Heusler YPdBi compound. **2022**, 640, 414056
- 302 Nonlinear optical properties of MXene and applications in broadband ultrafast photonics. **2022**, 918, 165580 1
- 301 Magnetotransport in Weyl Semimetal with and Without Disorder and the Effect of Tilted Magnetic Field.
- 300 Performance of Topological Insulator ($\text{Sb}_{\text{2}}\text{Te}_{\text{3}}$)-Based Vertical Stacking Photodetector on n-Si Substrate. **2022**, 1-7 2
- 299 Twisted nodal wires and three-dimensional quantum spin Hall effect in distorted square-net compounds. **2022**, 105, 1
- 298 Entropy stabilization of two-dimensional transition metal dichalcogenide alloys: A density functional theory study. **2022**, 131, 234302 0
- 297 Signature of weak-antilocalization in sputtered topological insulator Bi₂Se₃ thin films with varying thickness. **2022**, 12, 0
- 296 New Type of Anticommutative Dynamical Magnetoelectric Response. **2022**, 128,
- 295 Emergent and Tunable Topological Surface States in Complementary Sb/Bi₂Te₃ and Bi₂Te₃/Sb Thin-Film Heterostructures. 1
- 294 Electronic Band Structures of the Possible Topological Insulator Pb₂BiBrO₆ and Pb₂SeTeO₆ Double Perovskite: An Ab Initio Study. **2022**, 12, 5913
- 293 An Efficient Hydrometallurgical Process for Extracting Tellurium From Copper Telluride Slag.

- 292 Thickness dependent optical properties of sputtered Bi₂Se₃ films on mica. **2022**,
- 291 Nontrivial band topology coupled thermoelectrics in VSe₂/MoSe₂ van der Waals magnetic Weyl semimetal. **2022**, 34, 335801 1
- 290 Systematic field electron emission investigations of vapour phase grown Sb₂Te₃ nanosheets. 0
- 289 Discriminant indicator with generalized rotational symmetry. **2022**, 105,
- 288 Yu-Shiba-Rusinov States in a Superconductor with Topological Z₂ Bands. **2022**, 128, 0
- 287 Self-Induced Phase Locking of Terahertz Frequency Combs in a Phase-Sensitive Hyperspectral Near-Field Nanoscope. 2200410 5
- 286 Perspective on plexciton based on transition metal dichalcogenides. **2022**, 120, 240501 7
- 285 The role of morphology on the emergence of topologically trivial surface states and selection rules in topological-insulator nano-particles. **2022**, 39, 105712
- 284 Ab-initio insights into the elastic, bonding, phonon, optoelectronic and thermophysical properties of SnTaS₂. **2022**, 131, 106947 1
- 283 Low-temperature thermal expansion of the topological material candidates PtBi_2 and PtSb_2 . **2022**, 641, 414102
- 282 Evidence of topological surface states in dysprosium monpnictides compounds. **2022**, 283, 115774 0
- 281 The electronic structure and elastic properties of NbSiSb and NbGeSb: A first-principles study. **2022**, 446, 128277
- 280 Topological physics of Xenon. **2022**, 295-318
- 279 Study on the relationship between carrier mobility and nonlinear optical characteristics of Sb₂Te₃-Bi₂Te₃ lateral heterostructure materials and its applications in fiber lasers. 0
- 278 Pressure engineering of intertwined phase transitions in lanthanide monpnictide NdSb. **2022**, 65,
- 277 Excitation of Hybrid Waveguide-Bloch Surface States with Bi₂Se₃ Plasmonic Material in the Near-Infrared Range. **2022**, 13, 1020
- 276 A Newly Developed Dispersive Interaction Approach, DFT-D3, to the Three-Dimensional Topological Host Material Sb₂Te₃. 1065, 195-202
- 275 Synthesis and Properties of Bismuth Selenide Based Nanolaminates for Application in Thermoelectrics. 2200385 1

- 274 Chemical synthesis and materials discovery. **2022**, 1, 514-520 1
- 273 Topological nodal surface semimetal states in Sr_5X_3 compounds ($\text{X}=\text{As}, \text{Sb}, \dots$). **2022**, 105, 1
- 272 Controlling the hybridization gap and transport in a thin-film topological insulator: Effect of strain, and electric and magnetic field. **2022**, 106,
- 271 Angle-resolved photoemission spectroscopy. **2022**, 2, 3
- 270 Third-order topological insulators with wallpaper fermions in Tl_4PbTe_3 and Tl_4SnTe_3 . **2022**, 8, 0
- 269 Evolution of surface states of antiferromagnetic topological insulator MnBi_2Te_4 with tuning the surface magnetization. 1
- 268 Nonlinear Hybrid Surface-Defect States in Defective Bi_2Se_3 . 1
- 267 Alloying-engineered high-performance broadband polarized $\text{Bi}_{1.3}\text{In}_{0.7}\text{Se}_3$ photodetector with ultrafast response. 3
- 266 Ultrafast interfacial carrier dynamics and persistent topological surface states of Bi_2Se_3 in heterojunctions with VSe_2 . **2022**, 5, 0
- 265 Energy-Saving Pathways for Thermoelectric Nanomaterial Synthesis: Hydrothermal/Solvothermal, Microwave-Assisted, Solution-Based, and Powder Processing. 2106052 10
- 264 Structural and Electrical Characterizations of BiSb Topological Insulator Layers Epitaxially Integrated on GaAs . 0
- 263 Carrier Injection Observed by Interface-Enhanced Raman Scattering from Topological Insulators on Gold Substrates. 0
- 262 First-principles calculations of the surface states of doped and alloyed topological materials via band unfolding method. **2022**, 213, 111656 0
- 261 Challenges and strategies to optimize the figure of merit: Keeping eyes on thermoelectric metamaterials. **2022**, 150, 106944 1
- 260 Spin-Orbit Torque (SOT) Materials and Devices. **2022**, 113-138
- 259 Crystal structure and magnetic properties in semiconducting $\text{Eu}_3\text{In}_x\text{Sn}_y\text{As}_3$ with Eu-Eu dimers. **2022**, 132, 043902
- 258 Axion insulator states in a topological insulator proximitized to magnetic insulators: A tight-binding characterization. **2022**, 6,
- 257 Thickness and defect dependent electronic, optical and thermoelectric features of WTe_2 . **2022**, 12, 0

256 Transformation during In Situ Heating of Bismuth Antimony Telluride Nanoplates. **2022**, 28, 2284-2286

255 Topological Surface State Annihilation and Creation in SnTe/Crx(BiSb)₂₋₃Te₃ Heterostructures. **2022**, 22, 5735-5741

1

254 From classical to quantum regime of topological surface states via defect engineering.

0

253 Correlation between changeover from weak antilocalization (WAL) to weak localization (WL) and positive to negative magnetoresistance in S-doped Bi_{1.5}Sb_{0.5}Te_{1.3}Se_{1.7}. **2022**, 121, 032403

1

252 Mid-infrared complex permittivity in Bi₂-Sb Te₃-Se thin films synthesized using a combinatorial method. **2022**, 757, 139406

251 Influence of biaxial strain on the electronic and thermoelectric properties of Sb₂Te₃ monolayer. **2022**, 156, 111979

1

250 Unoccupied topological surface state in MnBi₂Te₄. **2022**, 106,

0

249 Magnetic band representations, Fu-Kane-like symmetry indicators, and magnetic topological materials. **2022**, 106,

0

248 Correlated disorder induced anomalous transport in magnetically doped topological insulators. **2022**, 106,

0

247 Advances in Bismuth-Based Topological Quantum Materials by Scanning Tunnelling Microscopy.

0

246 Strong Anharmonicity-Induced Low Thermal conductivity and High n-type Mobility in Topological Insulator Bi_{1.1}Sb_{0.9}Te₂S.

245 Transport Theory of Half-Quantized Hall Conductance in a Semimagnetic Topological Insulator. **2022**, 129,

0

244 Probing Edge State Conductance in Ultra-Thin Topological Insulator Films. 2200043

243 Two-Dimensional Topological States. **2022**, 81-122

242 Topological properties of CsCl type superconducting materials. **2022**, 128385

0

241 Strong Anharmonicity-Induced Low Thermal conductivity and High n-type Mobility in Topological Insulator Bi_{1.1}Sb_{0.9}Te₂S.

0

240 Recent progress in clean-surface formation of topological Kondo insulators and topological surface states observed there. **2022**, 4, 033003

239 Voltage-driven exchange resonance achieving 100% mechanical efficiency. **2022**, 106,

- 238 Pressure induced topological and topological crystalline insulators. **2022**, 34, 423001 0
- 237 Probing topological phase transitions using high-harmonic generation. **2022**, 16, 620-624 2
- 236 Theory of superconductivity mediated by topological phonons. **2022**, 106, 0
- 235 Topological Insulator Bi₂Te₃: The Effect of Doping with Elements from the VIII B Column of the Periodic Table. 0
- 234 Evolution of Weyl nodes in Ni-doped thallium niobate pyrochlore Tl₂NiNb₂O₇. **2022**, 65, 0
- 233 Fully linear band crossings at high symmetry points in layers: classification and role of spin-orbit coupling and time reversal. **2022**, 55, 325202 0
- 232 Delicate topology protected by rotation symmetry: Crystalline Hopf insulators and beyond. **2022**, 106, 0
- 231 Magic angle conditions for twisted three-dimensional topological insulators. **2022**, 106, 0
- 230 Full superconducting gap in the candidate topological superconductor In_{1-x}PbxTe for x=0. **2022**, 106, 0
- 229 High curie temperature, large magnetocrystalline anisotropy energy and piezoelectricity in 2D tetrahedral VXCl (X = Te, Se, S) & VMSe₂ (M = Al, Ga, In). **2022**, 37, 095028 0
- 228 In vivo toxicity and antibacterial assessment of Bi₂Se₃/GO/PVA nanocomposite synthesized via hydrothermal route. **2022**, 290, 126535 0
- 227 High power passively mode-locked laser with Sb₂Te₃ deposited tapered fiber in Er/Yb doped fiber laser. **2022**, 73, 103013 0
- 226 Topological insulators photodetectors: Preparation, advances and application challenges. **2022**, 33, 104190 1
- 225 Fast-Response Photodetector Based on Hybrid Bi₂Te₃/PbS Colloidal Quantum Dots. **2022**, 12, 3212 0
- 224 DFT-1/2 method applied to 3D topological insulators. 0
- 223 Electrical Observation of Soft-magnetic Skyrmions in the Sandwich Structure Including Topological Insulator with Self-assembled Ferromagnetic Atomic Layers. **2022**, 65, 405-410 0
- 222 Emerging phase change memory devices using non-oxide semiconducting glasses. **2022**, 597, 121874 0
- 221 Review on recent development on thermoelectric functions of PEDOT:PSS based systems. **2022**, 152, 107041 1

220	Thermoelectric transport properties of n-type layered homologous (Bi ₂) _m (Bi ₂ Se ₃) _n compounds. 2022 , 928, 167206	0
219	Helicity- and Azimuthal-Dependent Topological Photocurrents in Bi ₂ Se ₃ using THz Spectroscopy. 2022 ,	1
218	Composition and strain tunable type-II lateral MoSi ₂ N ₄ /WSi ₂ N ₄ heterostructures for photocatalytic applications.	0
217	A theoretical study of the Pnma and R3 m phases of Sb ₂ S ₃ , Bi ₂ S ₃ , and Sb ₂ Se ₃ .	1
216	Coexistence of Giant Rashba Spin Splitting and Quantum Spin Hall Effect in H-Pb-F.	0
215	Recent advances in designing thermoelectric materials. 2022 , 10, 12524-12555	4
214	In situ preparation of Bi ₂ O ₂ Se/MoO ₃ thin-film heterojunction array flexible photodetectors.	0
213	Intense infrared lasers for strong-field science.	3
212	Effects of Crystalline Disorder on Interfacial and Magnetic Properties of Sputtered Topological Insulator/Ferromagnet Heterostructures. 2022 , 4, 4288-4297	2
211	Self-Induced Dirac Boundary State and Digitization in a Nonlinear Resonator Chain. 2022 , 129,	0
210	Fabrication and growth mechanism of one-dimensional Heusler alloy nanostructures with different morphologies on anodic aluminum oxide template by magnetron sputtering. 2022 , 16,	0
209	Spontaneous Seed Formation during Electrodeposition Drives Epitaxial Growth of Metastable Bismuth Selenide Microcrystals.	1
208	Dirac fermions with plaquette interactions. II. SU(4) phase diagram with Gross-Neveu criticality and quantum spin liquid. 2022 , 106,	0
207	Progress and prospects in the quantum anomalous Hall effect. 2022 , 10, 090903	0
206	SpinOrbit Torques Based on Topological Materials.	0
205	Disorder-induced topological phase transition in HgCdTe crystals. 2022 , 106,	0
204	Spinor GW /Bethe-Salpeter calculations in BerkeleyGW: Implementation, symmetries, benchmarking, and performance. 2022 , 106,	1
203	Observation of anisotropic Dirac cones in the topological material Ti ₂ Te ₂ P. 2022 , 106,	0

202	Nanometric Moiré Stripes on the Surface of Bi ₂ Se ₃ Topological Insulator. 2022 , 16, 13860-13868	0
201	Heusler Alloys: Past, Properties, New Alloys, And Prospects. 2022 , 101017	4
200	Quasinodal spheres and the spin Hall effect: The case of YH ₃ and CaTe. 2022 , 106,	0
199	Integration and Applications of Nanomaterials for Ultrafast Photonics. 2200386	3
198	¹²⁵ Te NMR study of the bulk of topological insulators Bi ₂ Te ₃ and Sb ₂ Te ₃ .	0
197	Controlled vapor phase epitaxial growth of high quality Bi ₂ Se ₃ thin films and their photoresponse studies. 2022 , 20, 4624-4629	0
196	Healing Se Vacancies in Bi ₂ Se ₃ by Ambient Gases. 2022 , 126, 16877-16884	0
195	Large-gap quantum anomalous Hall states induced by functionalizing buckled Bi-III monolayer/ Al ₂ O ₃ . 2022 , 106,	0
194	Enhanced and stable spin Hall conductivity in a disordered time-reversal and inversion symmetry broken topological insulator thin film. 2022 , 12,	0
193	Quantum coherent transport and electron-electron interaction in BiSbTe ₃ single crystals. 2022 , 104537	0
192	Toward acceleration sensing based on topological gyroscopic metamaterials. 2022 , 106,	0
191	Observation of robust zero-energy state and enhanced superconducting gap in a trilayer heterostructure of MnTe/Bi ₂ Te ₃ /Fe(Te, Se). 2022 , 8,	1
190	Correlation-corrected band topology and topological surface states in iron-based superconductors. 2022 , 106,	0
189	Inverse proximity effect in a topological-insulator-superconductor hybrid system. 2022 , 106,	0
188	Ultrafast formation of quantized interlayer vibrations in Bi ₂ Se ₃ by photoinduced strain waves. 2022 , 30, 35988	0
187	Emergent topological states via digital (001) oxide superlattices. 2022 , 8,	0
186	Role of the edges in a quasicrystalline Haldane model. 2022 , 106,	0
185	Frontier and Hot Topics of Pulsed Fiber Lasers via CiteSpace Scientometric Analysis: Passively Mode-Locked Fiber Lasers with Real Saturable Absorbers Based on Two-Dimensional Materials. 2022 , 15, 6761	4

- 184 Near-Field Plasmons Imaging and Energy Analysis on Bi₂Te₃ Film. 2200155 o
- 183 Raman tensor studies on defective non-van der Waals Bi₂O₂Se. **2022**, 12, 105105 o
- 182 Experimental Realization of Spin-Polarized States on Mg₃Bi₂ Surface. 2200250 o
- 181 Large Exchange Coupling Between Localized Spins and Topological Bands in Magnetic Topological Insulator MnBi₂Te₄. 2202841 1
- 180 Thickness-dependent electronic band structure in MBE-grown hexagonal InTe films. **2022**, 106, o
- 179 Disorder driven variations in magnetoresistance and planar Hall effect in Bi₂Te₃ thin films. **2022**, 761, 139520 1
- 178 Investigation of RF sputtered, n-Bi₂Se₃ heterojunction on p-Si for enhanced NIR optoelectronic applications. **2022**, 248, 112028 o
- 177 The zoology of two-dimensional van der Waals materials. **2022**, o
- 176 Electronic and thermoelectric properties of semiconducting Bi₂SSe₂ and Bi₂S₂Se monolayers with high optical absorption. o
- 175 Chemical bonding principles in magnetic topological quantum materials. **2022**, o
- 174 Self-powered broadband photodetector based on MoS₂/Sb₂Te₃ heterojunctions: a promising approach for highly sensitive detection. **2022**, 1
- 173 Electronic Band Structure and Surface States in Dirac Semimetal LaAgSb₂. **2022**, 15, 7168 o
- 172 Crossover from Ising- to Rashba-type superconductivity in epitaxial Bi₂Se₃/monolayer NbSe₂ heterostructures. o
- 171 Comprehensive Insight into p-Type Bi₂Te₃-Based Thermoelectrics near Room Temperature. o
- 170 Structural Defects and Ferromagnetic Signature of V-Doped Sb₂Te₃ Thin Films Grown on SrTiO₃(001) Produced by RF-Magnetron Sputtering. o
- 169 Quantum pumping through the surface states of a topological insulator. **2022**, 106, o
- 168 Advances in Flexible Organic Photodetectors: Materials and Applications. **2022**, 12, 3775 o
- 167 Spontaneous Ferromagnetism Induced Topological Transition in EuB₆. **2022**, 129, 1

- 166 Quantum spin Hall effect from multiscale band inversion in twisted bilayer $\text{Bi}_2(\text{Te}_{1-x}\text{Se}_x)_3$. **2022**, 4, 10
- 165 Two-dimensional obstructed atomic insulators with fractional corner charge in the MA_2Z_4 family. **2022**, 106, 10
- 164 In-Situ Chemical Thinning and Surface Doping of Layered Bi_2Se_3 . **2022**, 12, 3725 1
- 163 Fabrication, characterization and optical properties of Au-decorated Bi_2Se_3 nanoplatelets. **2022**, 12, 10
- 162 Observation of unconventional proximity induced superconducting effects in Bi_2Se_3 flakes. **2022**, 97, 115812 0
- 161 Topologically-Enhanced Thermoelectric Properties in Bi_2Te_3 -Based Compounds: Effects of Grain Size and Misorientation. 1
- 160 Enhanced Thermoelectric Performance of Nanostructured Nickel-Doped Ag_2Te . 0
- 159 Two-dimensional Dirac plasmon-polaritons in graphene, 3D topological insulator and hybrid systems. **2022**, 11, 0
- 158 Pressure-induced topological and structural phase transitions in natural van der Waals heterostructures from the $(\text{SnTe})_m(\text{Bi}_2\text{Te}_3)_n$. **2022**, 106, 0
- 157 Electronic structures and stability investigation of large band gap topological insulators MTl_4Te_3 ($\text{M} = \text{Cd}, \text{Hg}$). **2022**, 6, 0
- 156 Experimental observation of enhanced reverse saturable absorption in Bi_2Se_3 nanoplates doped PMMA thin film. **2022**, 9, 115001 0
- 155 Abundance of Second Order Topology in C_3 Symmetric Two-dimensional Insulators. 0
- 154 Unconventional optical selection rules in ZrTe_5 under an in-plane magnetic field. **2022**, 106, 0
- 153 Enhancing the Photoelectrochemical Performance of TiO_2 through Decorating a Topological Insulator Bi_2Te_3 Film and Non-Noble Plasmonic Cu Nanoparticles. 1
- 152 Q-switched and mode-locked fiber laser based on organic metal 8-hydroxyquinoline chelate as saturable absorber at $1.5\text{ }\mu\text{m}$. **2022**, 127, 104388 0
- 151 Plasmonic Hot Carrier Injection from Single Gold Nanoparticles into Topological Insulator Bi_2Se_3 Nanoribbons.. 0
- 150 Prediction of ferromagnetic Weyl semimetal and antiferromagnetic topological insulator phases in MnHg_2Te_3 . **2022**, 121, 203102 0
- 149 Symmetry-protected topological corner modes in a periodically driven interacting spin lattice. **2022**, 106, 0

- 148 Topologically protected surface states in TaPdTe5. **2022**, 1, 0
- 147 Two-atom-thin topological crystalline insulators lacking out of plane inversion symmetry. 0
- 146 Evidence for nitrogen binding to surface defects for topological insulator Bi2Se3. **2022**, 115012 0
- 145 Tunable interface states between Floquet-Weyl semimetals. **2022**, 106, 0
- 144 Engineering a Phase-Robust Topological Router in a Dimerized Superconducting-Circuit Lattice with Long-Range Hopping and Chiral Symmetry. **2022**, 18, 0
- 143 Quantum Transport and Magnetism of Dirac Electrons in Solids. **2022**, 129, 0
- 142 Light-induced vacuum micromotors based on an antimony telluride microplate. **2022**, 1, 0
- 141 Cloning the Dirac cones of bilayer graphene to the zone center by selenium adsorption. **2022**, 6, 0
- 140 Structural and optical properties of sputtered Bi2Se3 thin films on sapphire (0001), quartz and GaN/sapphire (0001). 0
- 139 Photonic Weyl semimetals in pseudochiral metamaterials. **2022**, 12, 0
- 138 Electronic properties and storage capability of two-dimensional nitridosilicate MnSi2N4 from first-principles. **2022**, 12, 115127 0
- 137 Role of spin currents on electron-electron interaction in the quantum spin Hall phase. **2022**, 106, 1
- 136 Anisotropic spin-to-charge conversion in bismuth. **2022**, 106, 0
- 135 Two -dimensional semimetal AlSb monolayer with multiple nodal-loops and extraordinary transport properties under uniaxial strain. 0
- 134 Topological insulator Bi2Se3 based electrochemical aptasensors for the application of sensitive detection of interferon- γ 1
- 133 Single crystal growth of topological semimetals and magnetic topological materials. **2023**, 0 0
- 132 Optical study of oriented double-Se8-ring clusters and luminescent Se2²⁻ anions in LTA at extremely high selenium loading density. **2023**, 348, 112395 0
- 131 Growth of ultrathin Bi2Se3 films by molecular beam epitaxy. **2023**, 41, 012202 0

- 130 Experimental and theoretical study of As_2Te_3 under hydrostatic pressure. 0
- 129 Topological properties and strain effects of binary monoclinic superconductors RhX_2 ($\text{X}=\text{Sb}, \text{Bi}$). **2023**, 650, 414569 0
- 128 Single crystalline BiOCl nanosheets with oxygen vacancies for ultrafast mode-locking operation. **2023**, 159, 108945 1
- 127 Magnetotransport in Weyl semimetal with and without disorder and the effect of tilted magnetic field. **2023**, 148, 115601 0
- 126 Sb_2S_3 thin films: From first principles to in situ crystalline thin film growth by ultrasonic spray pyrolysis. **2023**, 156, 107269 0
- 125 Solution-processed 2D materials on paper substrates for photodetection and photomechanical applications. **2022**, 10, 18326-18335 0
- 124 Theory of Nematic Superconductivity in Doped Topological Insulators (Brief Review). **2022**, 116, 522-536 0
- 123 Topology and Symmetry in Quantum Materials. 2201058 0
- 122 Topology-insensitive axion mass in magnetic topological insulators. **2022**, 106, 0
- 121 Axion insulators protected by C_2T symmetry, their K -theory invariants, and material realizations. **2022**, 106, 0
- 120 ??????????????. **2022**, 0
- 119 Effect of carbon co-doping on magnetic properties of transition and rare-earth metal-doped bismuth telluride. **2022**, 45, 0
- 118 Theoretical and experimental investigations on Mn doped Bi_2Se_3 topological insulator. **2022**, 6, 0
- 117 Sensitivity Enhanced Plasmonic Biosensor Using Bi_2Se_3 -Graphene Heterostructures: A Theoretical Analysis. **2022**, 12, 4078 2
- 116 Synthesis, Evolution of Morphology, Transport Properties for Bi_2Te_3 Nanoplates. **2022**, 12, 1668 1
- 115 Wire construction of class DIII topological crystalline superconductors in two dimensions. **2022**, 106, 0
- 114 Self-Powered Photodetector Based on $\text{MoS}_2/\text{Sb}_2\text{Te}_3$ Heterojunction. **2022**, 0
- 113 Surface plasmons in anisotropic 3D gapped topological insulators. **2023**, 35, 085001 0

- 112 Possible quantization and half-quantization in the anomalous Hall effect caused by in-plane magnetic field. **2022**, 106, ○
- 111 Investigation of Raman depolarization ratio in topological insulator Bi₂Se₃ epitaxial films. ○
- 110 Electronic Conduction Channels Engineered in Topological Insulator Sputtered Thin Films. **2022**, 4, 5789-5798 ○
- 109 Structural Characterization of Defects in the Topological Insulator Bi₂Se₃ at the Picometer Scale. ○
- 108 The 2D Semiconductor Library. **2022**, 1-31 ○
- 107 Photonic topological phases in Tellegen metamaterials. **2022**, 30, 47004 ○
- 106 Magnetic interactions of 4f electrons in the topological insulator chalcogenide Bi₂Se₃. **2022**, 106, ○
- 105 Coexistence of giant Rashba spin splitting and quantum spin Hall effect in H-Pb-F. ○
- 104 Magnetic correlations in the magnetic topological insulator (Cr,Sb)₂Te₃. **2022**, 106, ○
- 103 Anomalous temperature dependence of multiple Andreev reflections in a topological insulator Josephson junction. **2023**, 36, 024002 ○
- 102 Topological phase transitions without symmetry indication in NaZnSb_{1-x}Bi_x. **2022**, 12, ○
- 101 Electric field tuning of the optical absorbance of topological insulator thin films. **2022**, 106, ○
- 100 Bi₂O₂Se: A rising star for semiconductor devices. **2022**, 5, 4274-4314 ○
- 99 Pressure-Induced Electronic Topological Transition and Superconductivity in Topological Insulator Bi₂Te_{2.1}Se_{0.9}. **2022**, 13, 11521-11527 2
- 98 Self-regulating plasma-assisted growth of epitaxial BaBiO₃ thin-film on SrTiO₃-buffered Si(001) substrate. **2022**, 132, 225304 ○
- 97 Analytical solutions of topological surface states in a series of lattice models. **2022**, 106, ○
- 96 Evidence of Pressure-induced Multiple Electronic Topological Transitions in BiSe. **2022**, 100956 ○
- 95 Three-Dimensional-Topological-Insulator Tunnel Diodes. **2022**, 18, ○

- 94 Phase evolution for oxidizing bismuth selenide. **2023**, 35, 075401 o
- 93 Exploring strong and weak topological states on isostructural substitutions in TlBiSe₂. **2022**, 12, o
- 92 Theory for all-optical responses in topological materials: The velocity gauge picture. **2022**, 106, o
- 91 A review of angle-resolved photoemission spectroscopy study on topological magnetic material family of MnBi₂Te₄. o
- 90 Electromagnetic shielding induced by topological surface states. **2023**, 138, o
- 89 Universal topological marker. **2023**, 107, o
- 88 Giant and tunable Rashba spin splitting and Quantum Spin Hall Effect in H-Pb-Cl. **2023**, 0 o
- 87 Anisotropic angle-dependent Andreev reflection at the ferromagnet/superconductor junction on the surface of topological insulators. o
- 86 The Influence of Graphene and Its Substrate on the Electrodeposition of Metals. 370-378 o
- 85 Large spin Hall conductivity and excellent hydrogen evolution reaction activity in unconventional PtTe 1.75 monolayer. o
- 84 Sign reversal of planar Hall effect with temperature in La-doped Sr₂IrO₄ films. **2023**, 122, 022402 o
- 83 Semiconductor-metal transition in Bi₂Se₃ caused by impurity doping. **2023**, 13, o
- 82 Pnictogene: Elemente der fünften Hauptgruppe. **2023**, 1-69 o
- 81 Single crystal growth of topological semimetals and magnetic topological materials. **2023**, 72, 038101 o
- 80 Observation of spin-momentum locked surface states in amorphous Bi₂Se₃. 1
- 79 Obstructed insulators and flat bands in topological phase-change materials. **2023**, 107, 1
- 78 Influence of local symmetry on lattice dynamics coupled to topological surface states. **2023**, 107, o
- 77 Topological surface state of Bi₂Se₃ modified by physisorption of n-alkane. o

- 76 Influence on electrical properties of pristine bulk Bi₂Se₃ compound by substitutional doping of In. **2023**, 34, ○
- 75 Topological properties of half Heusler compounds: Tuned by the spin-orbit coupling and p-d hybridization. **2023**, 460, 128612 ○
- 74 Competing Vortex Topologies in Iron-Based Superconductors. **2022**, 129, ○
- 73 High-throughput first-principle prediction of collinear magnetic topological materials. **2022**, 8, ○
- 72 Plasmon Resonances in 1D Nanowire Arrays and 3D Nanowire Networks of Topological Insulators and Metals. **2023**, 13, 154 ○
- 71 Multiple surface resonance electronic spin states in the strong topological metal ZrTe₂P. **2022**, 106, ○
- 70 Application of smart materials in biosensors for cancer diagnosis. **2023**, 119-147 ○
- 69 Pressure-induced superconductivity in the weak topological insulator BiSe. **2023**, 107, ○
- 68 Colloquium : Quantum anomalous Hall effect. **2023**, 95, 3
- 67 Synthesis, crystal structure, DFT, and photovoltaic studies of BaCeCuS₃. ○
- 66 Environmental Doping-Induced Degradation of the Quantum Anomalous Hall Insulators. **2023**, 23, 1093-1099 ○
- 65 Evolution of optical phonon modes and thermoelectric properties in doped Bi₂Te₃ : A temperature-dependent Raman spectroscopy study. **2023**, 7, ○
- 64 Inter-quintuple layer coupling and topological phase transitions in the chalcogenide topological insulators. **2023**, 5, 015001 ○
- 63 Topological states of thermoelectric Yb-filled skutterudites. **2023**, 107, ○
- 62 Magnetic field effects and excitonic selection rules in monolayer palladium diselenide as a large-gap quantum spin Hall insulator. **2023**, 107, ○
- 61 Quantum transport in topological semimetals under magnetic fields (III). **2023**, 18, ○
- 60 Field electron emission behavior of pristine and Au nanoparticles decorated Sb₂Te₃-rGO heterostructure emitters. **2023**, 619, 156752 ○
- 59 Anisotropic magnetoresistance and quantum oscillation in Sb₂Te₃ single crystal synthesized by a Te-flux method. **2023**, 947, 169671 ○

- 58 Topological thermoelectrics: New opportunities and challenges. **2023**, 30, 101488 o
- 57 Recent advancements review in zinc oxide and titanium dioxide saturable absorber for ultrafast pulsed fiber laser. **2023**, 170855 o
- 56 Influence of magnetic (Fe) and non-magnetic (In) doping on structural, magnetic, and weak anti-localization properties of Bi₂Te₃ topological insulator. **2023**, 98, 035802 o
- 55 Room-Temperature Ammonia Detection Using Layered Bi₂Se₃/Bi₂O₃: A Next-Generation Sensor. **2023**, 5, 948-956 1
- 54 Topological nature of large bulk band gap materials Sr₃Bi₂ and Ca₃Bi₂. **2023**, 98, 035813 o
- 53 Direct observation of cation diffusion driven surface reconstruction at van der Waals gaps. **2023**, 14, o
- 52 Odd-frequency pairs and anomalous proximity effect in nematic and chiral states of superconducting topological insulators. **2023**, 107, o
- 51 Enhanced pseudo-atomic layer deposition of antimony telluride thin films by co-injecting NH₃ gas with both precursors. **2023**, 11, 3726-3735 o
- 50 Topological insulator phases in polycrystalline Bi₂Te₃ thin films. **2023**, 13, 025045 o
- 49 Robust and Fragile Majorana Bound States in Proximitized Topological Insulator Nanoribbons. **2023**, 13, 723 o
- 48 Phonon dynamics of (Bi_{1-x}Sb_x)₂Te₃ topological insulators by Raman spectroscopy. **2023**, 655, 414754 o
- 47 Observation of carrier dynamics in MoS₂ thin layer by femtosecond transient absorption microscopy. **2023**, 62, SG1029 o
- 46 Layer-dependent zero-line modes in antiferromagnetic topological insulators. **2023**, 107, o
- 45 Silica Coated Bi₂Se₃ Topological Insulator Nanoparticles: An Alternative Route to Retain Their Optical Properties and Make Them Biocompatible. **2023**, 13, 809 o
- 44 Charge Makes a Difference: Molecular Ionic Bismuth Compounds. o
- 43 Charge Makes a Difference: Molecular Ionic Bismuth Compounds. o
- 42 Intrinsic magnetic topological materials. **2023**, 18, o
- 41 Noncollinear twisted RKKY interaction on the optically driven SnTe(001) surface. **2023**, 107, o

- 40 Two-dimensional rectangular bismuth bilayer: A novel dual topological insulator. **2023**, 18, ☐
- 39 Topological Nodal Surface and Quadratic Dirac Semimetal States and van Hove Singularities in ScH₃ and LuH₃ Superconductors. **2023**, 8, 9607-9613 ☐
- 38 Orbital design of Berry curvature: pinch points and giant dipoles induced by crystal fields. **2023**, 8, ☐
- 37 Crystallinity Control of the Topological-Insulator Surface Bi₈₅Sb₁₅(012) via Interfacial Engineering for Enhanced Spin-Orbit Torque. **2023**, 19, ☐
- 36 Field-controlled quantum anomalous Hall effect in electron-doped CrSiTe₃ monolayer. **2023**, 7, 1 ☐
- 35 Multiple-site Ag doping in Bi₂Se₃: Compositional crossover from substitution to intercalation as revealed by photoelectron diffraction and X. **2023**, 264, 147295 ☐
- 34 Exciton condensation in strongly correlated quantum spin Hall insulators. **2023**, 107, ☐
- 33 Systematic study for two-dimensional Z₂ topological phase transitions at high-symmetry points in all layer groups. **2023**, 107, ☐
- 32 SPADExp: A photoemission angular distribution simulator directly linked to first-principles calculations. **2023**, 264, 147297 ☐
- 31 Side-surface-mediated hybridization in axion insulators. **2023**, 107, ☐
- 30 Topological insulator Bi₂Se₃ for highly sensitive, selective and anti-humidity gas sensors. **2023**, 26, 106387 ☐
- 29 The effect of Fe-doping on structural, elemental, magnetic, and weak anti-localization properties of Bi₂Se₃ topological insulator. **2023**, 129, ☐
- 28 Magnetic topological transistor exploiting layer-selective transport. **2023**, 5, ☐
- 27 Thickness-tuned magnetotransport properties of topological semimetal trigonal PtBi₂. **2023**, 122, 113101 ☐
- 26 Theoretical Study of Pressure-Induced Phase Transitions in Sb₂S₃, Bi₂S₃, and Sb₂Se₃. **2023**, 13, 498 ☐
- 25 Designing spin and orbital sources of Berry curvature at oxide interfaces. ☐
- 24 Quantum oscillations and three-dimensional quantum Hall effect in ZrTe₅. **2023**, 107, ☐
- 23 Integration of Self-Passivated Topological Electrodes for Advanced 2D Optoelectronic Devices. 2201571 ☐

- 22 Topological Insulator Metamaterials. ○
- 21 Dyadic Green's function for a topological insulator stratified sphere. **2023**, 98, 055504 ○
- 20 Topological insulators. **2022**, ○
- 19 Light-induced switch based on edge modes in irradiated thin topological insulators. **2023**, 98, 055917 ○
- 18 Symmetry-engineered nodal lines and hourglass fermions in patterned two-dimensional electron gas. **2023**, 107, ○
- 17 Top-down patterning of topological surface and edge states using a focused ion beam. **2023**, 14, ○
- 16 Half-quantized Hall effect at the parity-invariant Fermi surface. **2023**, 107, ○
- 15 Antiferromagnetic topological insulating state in Tb_{0.02}Bi_{1.08}Sb_{0.9}Te₂S single crystals. **2023**, 107, ○
- 14 Fabrication and Applications of Heterostructure Materials for Broadband Ultrafast Photonics. ○
- 13 Floquet engineering of magnetism in topological insulator thin films. **2023**, 5, 024002 ○
- 12 Time-resolved ARPES with tunable 12–1.6 eV XUV at 400 kHz repetition rate. **2023**, 94, 043905 ○
- 11 Dirac fermion approach and its application to design high Chern numbers in magnetic topological insulator multilayers. **2023**, 107, ○
- 10 Distinguishing high-harmonic generation from surface and bulk states in topological insulator Bi₂Se₃. **2023**, 21, 043801 ○
- 9 Spin-Orbit-Coupling-Induced Topological Transition and Anomalously Strong Intervalley Scattering in Two-Dimensional Bismuth Allotropes with Enhanced Thermoelectric Performances. **2023**, 15, 19545-19559 ○
- 8 Molecular Beam Epitaxy of Twin-Free Bi₂Se₃ and Sb₂Te₃ on In₂Se₃/InP(111)B Virtual Substrates. **2023**, 13, 677 ○
- 7 Single-particle properties of topological Wannier excitons in bismuth chalcogenide nanosheets. **2023**, 13, ○
- 6 New insights into band inversion and topological phase of TiNI monolayer. ○
- 5 Topological surface states in the Kondo insulator YbB₁₂ revealed via planar tunneling spectroscopy. **2023**, 107, ○

- 4 Multiple Magnetic Topological Phases in the van der Waals Crystal $\text{Mn}(\text{Bi,Sb})_4\text{Se}_7$. 3913-3919 o
- 3 Topological-insulator nanocylinders. **2023**, 6, o
- 2 Unconventional Charge-Two Weyl Phonons in High-Symmetry Lines. o
- 1 Band inversion-driven warping and high valley degeneracy. **2023**, 4, 101392 o