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Quantum spin Hall effect and topological phase transition in HgTe quantum wells

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2214	ALMOST PERIODICITY OF INFINITE-ZONE POTENTIALS. 1982 , 18, 249-273		12
2213	Physics. A new spin on the insulating state. <i>Science</i> , 2006 , 314, 1692-3	33.3	60
2212	Crystal Structure and Ferroelectric Properties of Si Added SrBi2Ta2O9. 2006 , 45, 5091-5097		9
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2210	Topological insulators beyond the Brillouin zone via Chern parity. 2007 , 76,		84
2209	Quantum criticality and minimal conductivity in graphene with long-range disorder. 2007 , 98, 256801		130
2208	Optical control of topological quantum transport in semiconductors. 2007 , 99, 047401		48
2207	Quantum spin hall insulator state in HgTe quantum wells. <i>Science</i> , 2007 , 318, 766-70	33.3	4215
2206	Tuning phase transition between quantum spin Hall and ordinary insulating phases. 2007, 76,		100
2205	Competing fracture in kinetically controlled transfer printing. 2007, 23, 12555-60		233
2204	Phase transition between the quantum spin Hall and insulator phases in 3D: emergence of a topological gapless phase. 2007 , 9, 356-356		847
2203	Localization in a quantum spin Hall system. 2007 , 98, 076802		99
2202	Charge and spin transport at the quantum Hall edge of graphene. 2007 , 143, 77-85		62
2201	Physics. A new state of quantum matter. <i>Science</i> , 2007 , 318, 758-9	33.3	37
2200	Topological insulators with inversion symmetry. 2007 , 76,		2785

(2008-2008)

2199 Manipulating atomic states via optical orbital angular-momentum. 2008 , 3, 113-125	7
2198 Classification of topological insulators and superconductors in three spatial dimensions. 2008 , 78,	2083
Quantum spin Hall effect shows up in a quantum well insulator, just as predicted. 2008 , 61, 19-23	27
Superconducting proximity effect and majorana fermions at the surface of a topological insulator. 2008 , 100, 096407	3198
Topological field theory of time-reversal invariant insulators. 2008 , 78,	2263
2194 A topological Dirac insulator in a quantum spin Hall phase. 2008 , 452, 970-4	2552
2193 Fractional charge and quantized current in the quantum spin Hall state. 2008 , 4, 273-276	163
2192 How spin splits the electron. 2008 , 4, 270-271	2
2191 Fits and starts. 2008 , 4, 271-272	
2190 The path to agreement. 2008 , 4, 349-349	
2190 The path to agreement. 2008 , 4, 349-349 2189 An insulator with a twist. 2008 , 4, 348-349	47
	47 473
2189 An insulator with a twist. 2008 , 4, 348-349	
2189 An insulator with a twist. 2008 , 4, 348-349 2188 Topological Mott insulators. 2008 , 100, 156401	473
2189 An insulator with a twist. 2008, 4, 348-349 2188 Topological Mott insulators. 2008, 100, 156401 2187 Quantum anomalous hall effect in Hg1-yMnyTe quantum wells. 2008, 101, 146802	473 487
2189 An insulator with a twist. 2008, 4, 348-349 2188 Topological Mott insulators. 2008, 100, 156401 2187 Quantum anomalous hall effect in Hg1-yMnyTe quantum wells. 2008, 101, 146802 2186 Spin-charge separation in the quantum spin Hall state. 2008, 101, 086802	473 487 74
2189 An insulator with a twist. 2008, 4, 348-349 2188 Topological Mott insulators. 2008, 100, 156401 2187 Quantum anomalous hall effect in Hg1-yMnyTe quantum wells. 2008, 101, 146802 2186 Spin-charge separation in the quantum spin Hall state. 2008, 101, 086802 2185 Anderson transitions. 2008, 80, 1355-1417	473 487 74 1076

2181 A Noninvasive Quantum Thermometer. 2008 , 1,	61
2180 Quantum spin Hall effect in inverted type-II semiconductors. 2008 , 100, 236601	546
2179 The Quantum Spin Hall Effect: Theory and Experiment. 2008 , 77, 031007	592
2178 Spin Currents in Semiconductors, Metals, and Insulators. 2008 , 77, 031010	36
2177 Resonant Charge Current in a Rashba Ring Induced by Spin-Dependent Potential. 2008 , 50, 1453-1456	1
Exact result for the Green function of a two-dimensional interacting electron gas with spin brbit interaction in a perpendicular magnetic field. 2008 , 20, 335211	
Excited states of 8Be populated via thep(7Li,4He)4He andp(7Li,4He*)4He resonant reactions. 2008 , 35, 125108	1
Doping-dependent phase diagram of LaOMAs (M=V C u) and electron-type superconductivity near ferromagnetic instability. 2008 , 82, 67002	206
2173 Gauge symmetry breaking and topological quantization for the Pauli Hamiltonian. 2008, 83, 47005	18
2172 Giant intrinsic spin and orbital hall effects in Sr2MO4 (M=Ru, Rh, Mo). 2008 , 100, 096601	62
Four-step evolution of spin Hall conductance: Tight-binding electrons with Rashba coupling in a magnetic field. 2008 , 78,	4
Renormalization group studies on four-fermion interaction instabilities on algebraic spin liquids. 217 0 2008 , 78,	23
2169 Spin-charge separated solitons in a topological band insulator. 2008 , 101, 086801	86
2168 Orbital analogue of the quantum anomalous Hall effect in p-band systems. 2008 , 101, 186807	134
2167 Fractionalized quantum spin Hall effect. 2008 , 78,	46
2166 Direct evidence of spin-polarized band structure of Sb(111) surface. 2008 , 93, 252107	20
2165 Superfluid transition in a chiron gas. 2008 , 88, 1227-1233	1
2164 Coupled two-component atomic gas in an optical lattice. 2008 , 78,	7

(2009-2008)

2163	in two dimensions. 2008 , 78,	37
2162	Universal phase diagrams for the quantum spin Hall systems. 2008 , 78,	100
2161	Semiclassical theory of diffusive-ballistic crossover and the persistent spin helix. 2008, 78,	10
2160	Intrinsic spin hall effect induced by quantum phase transition in HgCdTe quantum wells. 2008 , 100, 056602	82
2159	Universal quantized spin-Hall conductance fluctuation in graphene. 2008, 101, 016804	26
2158	Helical edge and surface states in HgTe quantum wells and bulk insulators. 2008, 77,	153
2157	Properties of a class of topological phase transitions. 2008 , 78,	11
2156	Energy Gap and Averaged Inversion Symmetry of Tight-Binding Electrons on Generalized Honeycomb Lattice. 2008 , 77, 074707	5
2155	Hall Effect and Orbital Diamagnetism in Zerogap State of Molecular Conductor ₹(BEDT-TTF)2I3. 2008 , 77, 064718	82
2154	Hall effect and orbital magnetism of Dirac electrons with spin-orbit interactions. 2008 , 132, 012004	
2153	Energy gap of tight-binding electrons on generalized honeycomb lattice. 2008, 132, 012005	5
2152	Quasiparticle interference on the surface of the topological insulator Bi2Te3. 2009, 80,	90
2151	Quantum oscillations in a topological insulator Bi1⊠Sbx. 2009 , 80,	150
2150	Ematrix generalization of the Kitaev model. 2009 , 79,	39
2149	Hole dynamics in a two-dimensional spin-orbit coupled electron system: Theoretical and experimental study of the Au(111) surface state. 2009 , 80,	46
2148	In-plane noncollinear exchange coupling mediated by helical edge states in quantum spin Hall systems. 2009 , 80,	22
2147	Switching of electrical current by spin precession in the first Landau level of an inverted-gap semiconductor. 2009 , 80,	14
2146	Lattice model of a three-dimensional topological singlet superconductor with time-reversal symmetry. 2009 , 102, 196804	52

2145	Fidelity in topological quantum phases of matter. 2009 , 79,	31
2144	Tunneling between edge states in a quantum spin Hall system. 2009 , 102, 096806	86
2143	Topological insulator: a new quantized spin Hall resistance robust to dephasing. 2009, 103, 036803	72
2142	Giant orbital Hall effect in transition metals: origin of large spin and anomalous Hall effects. 2009 , 102, 016601	85
2141	Topological phonon modes and their role in dynamic instability of microtubules. 2009 , 103, 248101	218
2140	Spin-orbit effects in a graphene bipolar pn junction. 2009 , 87, 47005	38
2139	Dorokhov-Mello-Pereyra-Kumar equation for the edge transport of a quantum spin Hall insulator. 2009 , 79,	8
2138	Nondegenerate metallic States on Bi(114): a one-dimensional topological metal. 2009 , 102, 096802	58
2137	Critical behavior of a point contact in a quantum spin Hall insulator. 2009 , 79,	109
2136	Robustness of the spin-Chern number. 2009 , 80,	181
2135	Theory of topological spin current in noncentrosymmetric superconductors. 2009 , 79,	177
2134	Weak localization properties of the doped Z2 topological insulator. 2009 , 80,	36
2133	Fractional spin Hall effect in atomic Bose gases. 2009 , 79,	12
2132	Effects of disorder in three-dimensional Z2 quantum spin Hall systems. 2009 , 79,	67
2131	Kondo effect in the helical edge liquid of the quantum spin Hall state. 2009 , 102, 256803	190
2130	Classical spins in topological insulators. 2009 , 80,	7
2129	Intrinsic spin Hall Effect in the s-wave superconducting state: analysis of the Rashba model. 2009 , 102, 086602	17
2128	Giant spin rotation in the junction between a normal metal and a quantum spin Hall system. 2009 , 102, 166801	61

2127	Corner junction as a probe of helical edge states. 2009 , 102, 076602	110
2126	SPIN HALL EFFECTS IN HgTe QUANTUM WELL STRUCTURES. 2009 , 23, 2551-2555	2
2125	Theoretical study of the zero-gap organic conductor E(BEDT-TTF)I. 2009 , 10, 024309	57
2124	Manifestation of helical edge states as zero bias magneto-tunneling-conductance peaks in noncentrosymmetric superconductors. 2009 , 21, 375702	3
2123	Topological quantization of ensemble averages. 2009 , 42, 065207	6
2122	Measuring spin polarization vectors in angle-resolved photoemission spectroscopy. 2009 , 11, 125008	42
2121	Pairing state at an interface of Sr2RuO4: parity-mixing, restored time-reversal symmetry and topological superconductivity. 2009 , 11, 055070	33
2120	An edge index for the quantum spin-Hall effect. 2009 , 42, 082001	12
2119	Spin-Hall effect and spin-Coulomb drag in doped semiconductors. 2009 , 21, 253202	28
2118	Topological Aspects in an Interacting Mixture of a Charged and a Neutral Superfluid in Neutron Stars. 2009 , 26, 079701	
2117	Observation of unidirectional backscattering-immune topological electromagnetic states. 2009 , 461, 772-5	1535
2116	Topological surface states protected from backscattering by chiral spin texture. 2009 , 460, 1106-9	805
2115	One-dimensional topologically protected modes in topological insulators with lattice dislocations. 2009 , 5, 298-303	276
2114	Topological insulators in Bi2Se3, Bi2Te3 and Sb2Te3 with a single Dirac cone on the surface. 2009 , 5, 438-442	4411
2113	Electronic properties close to Dirac cone in two-dimensional organic conductor E(BEDT-TTF)2I3. 2009 , 67, 139-148	54
2112	Manipulation of the Majorana fermion, Andreev reflection, and Josephson current on topological insulators. 2009 , 103, 107002	386
2111	Observation of unconventional quantum spin textures in topological insulators. <i>Science</i> , 2009 , 323, 919-33.3	963
2110	Magnetic impurities on the surface of a topological insulator. 2009 , 102, 156603	459

2109	Nonlocal transport in the quantum spin Hall state. <i>Science</i> , 2009 , 325, 294-7	33.3	665
2108	Spin Hall effect in IV-VI semiconductors. 2009 , 85, 67004		5
2107	Topological winding properties of spin edge states in the Kane-Mele graphene model. 2009 , 80,		20
2106	Three-dimensional topological insulators on the pyrochlore lattice. 2009 , 103, 206805		84
2105	Superconductivity and quantum oscillations in crystalline Bi nanowire. 2009 , 9, 3196-202		71
2104	Anomalous finite size effects on surface states in the topological insulator Bi2Se3. 2009, 80,		264
2103	Topological Anderson insulator. 2009 , 102, 136806		307
2102	Edge states in graphene: from gapped flat-band to gapless chiral modes. 2009 , 102, 096801		253
2101	Coherent oscillations and giant edge magnetoresistance in singly connected topological insulators. 2009 , 80,		30
2100	Optical signature of topological insulators. 2009 , 80,		68
2099	Spin Hall effect on the kagome lattice with Rashba spin-orbit interaction. 2009 , 79,		21
2098	Topological phases of noncentrosymmetric superconductors: Edge states, Majorana fermions, and non-Abelian statistics. 2009 , 79,		438
2097	Theory of the topological anderson insulator. 2009 , 103, 196805		245
2096	Electric field driven quantum phase transition between band insulator and topological insulator. 2009 , 95, 222110		42
2095	Experimental demonstration of topological surface states protected by time-reversal symmetry. 2009 , 103, 266803		586
2094	Magnetoelectric polarizability and axion electrodynamics in crystalline insulators. 2009 , 102, 146805		616
2093	Two interacting helical edge modes in quantum spin Hall systems. 2009 , 103, 166403		37
2092	Electronic structures and surface states of the topological insulator Bi1⊠Sbx. 2009 , 80,		101

(2010-2009)

2091	Optical manipulation of edge-state transport in HgTe quantum wells in the quantum Hall regime. 2009 , 79,		31
2090	Physics. Fast electrons tie quantum knots. <i>Science</i> , 2009 , 323, 888-90	33.3	15
2089	Inducing a magnetic monopole with topological surface States. <i>Science</i> , 2009 , 323, 1184-7	33.3	708
2088	Detecting the Majorana fermion surface state of 3He-B through spin relaxation. 2009 , 103, 235301		127
2087	Quantum spin Hall effect in a transition metal oxide Na2IrO3. 2009 , 102, 256403		399
2086	Tight-binding modeling and low-energy behavior of the semi-Dirac point. 2009 , 103, 016402		126
2085	Two-dimensional electron systems in HgTe quantum wells. 2009 , 35, 6-14		24
2084	Topological insulators and nematic phases from spontaneous symmetry breaking in 2D fermi systems with a quadratic band crossing. 2009 , 103, 046811		295
2083	Time-reversal-invariant topological superconductors and superfluids in two and three dimensions. 2009 , 102, 187001		531
2082	Experimental realization of a three-dimensional topological insulator, Bi2Te3. <i>Science</i> , 2009 , 325, 178-8	3133.3	2650
2082	Experimental realization of a three-dimensional topological insulator, Bi2Te3. <i>Science</i> , 2009 , 325, 178-8. Josephson current and noise at a superconductor/quantum-spin-Hall-insulator/superconductor junction. 2009 , 79,	3133.3	2650 681
2081	Josephson current and noise at a superconductor/quantum-spin-Hall-insulator/superconductor	3133.3	
2081	Josephson current and noise at a superconductor/quantum-spin-Hall-insulator/superconductor junction. 2009 , 79,	3133.3	681
2081 2080 2079	Josephson current and noise at a superconductor/quantum-spin-Hall-insulator/superconductor junction. 2009 , 79, Topological insulators in three dimensions from spontaneous symmetry breaking. 2009 , 79,	3133.3	681
2081 2080 2079	Josephson current and noise at a superconductor/quantum-spin-Hall-insulator/superconductor junction. 2009 , 79, Topological insulators in three dimensions from spontaneous symmetry breaking. 2009 , 79, Quantum interference in macroscopic crystals of nonmetallic Bi2Se3. 2009 , 103, 246601	33.3	681 120 306
2081 2080 2079 2078	Josephson current and noise at a superconductor/quantum-spin-Hall-insulator/superconductor junction. 2009, 79, Topological insulators in three dimensions from spontaneous symmetry breaking. 2009, 79, Quantum interference in macroscopic crystals of nonmetallic Bi2Se3. 2009, 103, 246601 Numerical study of the topological Anderson insulator in HgTe/CdTe quantum wells. 2009, 80,		681 120 306 158
2081 2080 2079 2078	Josephson current and noise at a superconductor/quantum-spin-Hall-insulator/superconductor junction. 2009, 79, Topological insulators in three dimensions from spontaneous symmetry breaking. 2009, 79, Quantum interference in macroscopic crystals of nonmetallic Bi2Se3. 2009, 103, 246601 Numerical study of the topological Anderson insulator in HgTe/CdTe quantum wells. 2009, 80, Physics. Edge-state physics without magnetic fields. <i>Science</i> , 2009, 325, 278-9		681 120 306 158 83

2073	Quenching through Dirac and semi-Dirac points in optical lattices: Kibble-Zurek scaling for anisotropic quantum critical systems. 2010 , 89, 67001	31
2072	Trapped Phonons Improve Photon Detection. 2010 , 3,	9
2071	A Noninvasive Quantum Thermometer. 2010 , 3,	2
2070	Signatures of topology in ballistic bulk transport of HgTe quantum wells. 2010 ,	
2069	Numerical study of localization in quantum spin hall state of HgTe/CdTe system. 2010 , 75, 527-530	1
2068	Quantum oscillations and hall anomaly of surface states in the topological insulator Bi2Te3. <i>Science</i> , 2010 , 329, 821-4	691
2067	Spintronics. 2010 , 1, 71-88	394
2066	Colloquium: Topological insulators. 2010 , 82, 3045-3067	12208
2065	Electron tunneling through a planar single barrier in HgTe quantum wells with inverted band structures. 2010 , 81,	17
2064	Majorana fermion chain at the quantum spin Hall edge. 2010 , 82,	44
2063	Few-layer nanoplates of Bi 2 Se 3 and Bi 2 Te 3 with highly tunable chemical potential. 2010 , 10, 2245-50	370
2062	Exploring topological phases with quantum walks. 2010 , 82,	308
2061	Anomalous Hall effect. 2010 , 82, 1539-1592	2357
2060	Exfoliation and characterization of bismuth telluride atomic quintuples and quasi-two-dimensional crystals. 2010 , 10, 1209-18	371
2059	Interaction-induced criticality in Z(2) topological insulators. 2010 , 105, 036803	102
2058	Unconventional superconductivity on a topological insulator. 2010 , 104, 067001	353
2057	Hexagonally deformed Fermi surface of the 3D topological insulator Bi2Se3. 2010 , 105, 076802	207
2056	Spin currents and spin superfluidity. 2010 , 59, 181-255	166

2055	Quantized anomalous Hall effect in magnetic topological insulators. <i>Science</i> , 2010 , 329, 61-4 33.3	1382
2054	Magnetic gap effect on the tunneling conductance in a topological insulator ferromagnet/superconductor junction. 2010 , 374, 3561-3566	19
2053	Intrinsic topological insulator Bi2Te3 thin films on Si and their thickness limit. 2010 , 22, 4002-7	335
2052	Topological spin and charge transport in normal metal/noncentrosymmetric superconductor junction under magnetic fields. 2010 , 470, 1489-1491	1
2051	Similarities between normal- and super-currents in topological insulator magnetic tunnel junctions. 2010 , 470, 1949-1954	5
2050	Magneto transport on the surface of a topological insulator spin valve. 2010 , 374, 2894-2899	21
2049	Topological insulators and superconductors from D-brane. 2010 , 693, 175-179	20
2048	Weak localization properties of graphene with intrinsic and Rashba spin-orbit couplings. 2010 , 3, 1249-1254	O
2047	Semiclassical dynamics and transport of the Dirac spin. 2010 , 150, 533-537	29
2046	The birth of topological insulators. 2010 , 464, 194-8	2133
<u>'</u>	The birth of topological insulators. 2010 , 464, 194-8 Transmission of topological surface states through surface barriers. 2010 , 466, 343-6	2133 166
2045		
2045	Transmission of topological surface states through surface barriers. 2010 , 466, 343-6	166
2045	Transmission of topological surface states through surface barriers. 2010 , 466, 343-6 Weak antilocalization in HgTe quantum wells near a topological transition. 2010 , 91, 347-350 Ternary thallium-based semimetal chalcogenides Tl-V-VI2 as a new class of three-dimensional	166
2045 2044 2043	Transmission of topological surface states through surface barriers. 2010 , 466, 343-6 Weak antilocalization in HgTe quantum wells near a topological transition. 2010 , 91, 347-350 Ternary thallium-based semimetal chalcogenides Tl-V-VI2 as a new class of three-dimensional topological insulators. 2010 , 91, 594-598	166 22 35
2045 2044 2043 2042 2041	Transmission of topological surface states through surface barriers. 2010, 466, 343-6 Weak antilocalization in HgTe quantum wells near a topological transition. 2010, 91, 347-350 Ternary thallium-based semimetal chalcogenides Tl-V-VI2 as a new class of three-dimensional topological insulators. 2010, 91, 594-598 Spin splitting in HgTe/CdHgTe (013) quantum well heterostructures. 2010, 92, 63-66	166 22 35 20
2045 2044 2043 2042 2041	Transmission of topological surface states through surface barriers. 2010, 466, 343-6 Weak antilocalization in HgTe quantum wells near a topological transition. 2010, 91, 347-350 Ternary thallium-based semimetal chalcogenides Tl-V-VI2 as a new class of three-dimensional topological insulators. 2010, 91, 594-598 Spin splitting in HgTe/CdHgTe (013) quantum well heterostructures. 2010, 92, 63-66 Topological insulators: Star material. 2010, 466, 310-1	166 22 35 20 18

2037 Topological insulators: A romance with many dimensions. 2010 , 5, 477-9	37
2036 Mott physics and band topology in materials with strong spinBrbit interaction. 2010 , 6, 376-381	757
Crossover of the three-dimensional topological insulator Bi2Se3 to the two-dimensional limit. 201 6, 584-588	0 , 1048
Spin-polarized surface bands of a three-dimensional topological insulator studied by high-resolution spin- and angle-resolved photoemission spectroscopy. 2010 , 12, 065011	10
2033 Analytic Theory of Edge Modes in Topological Insulators. 2010 , 79, 124709	25
2032 Fingerprint of different spinBrbit terms for spin transport in HgTe quantum wells. 2010 , 12, 06501	2 133
2031 Prediction of topological insulating behavior in crystalline Ge-Sb-Te. 2010 , 82,	69
2030 Surface- and edge-states in ultrathin BiBb films. 2010 , 12, 065006	11
Dirac quantization and fractional magnetoelectric effect in interacting topological insulators. 2010 82,	0 , 3
Quantum valley Hall effect in proximity-induced superconducting graphene: An experimental window for deconfined quantum criticality. 2010 , 81,	27
2027 Effects of interactions on the topological classification of free fermion systems. 2010 , 81,	352
2026 Interaction effects and quantum phase transitions in topological insulators. 2010 , 82,	102
2025 Topological quantum phase transition in an S=2 spin chain. 2010 , 81,	18
2024 Coulomb drag between helical edge states. 2010 , 82,	20
2023 Three-dimensional topological phases in a layered honeycomb spin-orbital model. 2010 , 81,	14
2022 Magnetotransport of Dirac fermions on the surface of a topological insulator. 2010 , 82,	44
2021 Edge accumulation and currents of moment in two-dimensional topological insulators. 2010 , 82,	19
Superconductivity on the surface of topological insulators and in two-dimensional noncentrosymmetric materials. 2010 , 81,	48

2019 Magnetic quantum oscillations for the surface states of topological insulator Bi2Se3. 2010 , 82,	30
2018 Quantum anomalous Hall effect with cold atoms trapped in a square lattice. 2010 , 81,	96
2017 Andreev spectroscopy of doped HgTe quantum wells. 2010 , 82,	11
Andreev spectroscopy and surface density of states for a three-dimensional time-reversal-invariant topological superconductor. 2010 , 82,	40
Ballistic quantum spin Hall state and enhanced edge backscattering in strong magnetic fields. 2010 , 104, 166803	63
2014 CT-invariant quantum spin Hall effect in ferromagnetic graphene. 2010 , 104, 066805	49
2013 Spin Aharonov-Bohm effect and topological spin transistor. 2010 , 82,	48
2012 Confinement-induced berry phase and helicity-dependent photocurrents. 2010 , 105, 026805	105
Design principles and coupling mechanisms in the 2D quantum well topological insulator HgTe/CdTe. 2010 , 105, 176805	22
2010 Tuning the conductance of dirac fermions on the surface of a topological insulator. 2010 , 104, 046403	106
Tunneling magnetoresistance on the surface of a topological insulator with periodic magnetic modulations. 2010 , 96, 172109	37
2008 Searching for topological density-wave insulators in multiorbital square-lattice systems. 2010 , 82,	10
2007 Probing the helical edge states of a topological insulator by Cooper-pair injection. 2010 , 82,	54
2006 Finite conductivity in mesoscopic Hall bars of inverted InAs/GaSb quantum wells. 2010 , 81,	52
Spin-orbit coupling and anomalous angular-dependent magnetoresistance in the quantum transport regime of PbS. 2010 , 81,	6
Direct mapping of the spin-filtered surface bands of a three-dimensional quantum spin Hall insulator. 2010 , 81,	141
Universality of Anderson transition in two-dimensional systems of symplectic symmetry class. 2010 , 81,	5
2002 Topological invariants for the Fermi surface of a time-reversal-invariant superconductor. 2010 , 81,	208

2001	Gate-controlled one-dimensional channel on the surface of a 3D topological insulator. 2010 , 104, 246806	22
2 000	Quantum dot in a two-dimensional topological insulator: The two-channel Kondo fixed point. 2010 , 81,	34
1999	Topological insulators and topological nonlinear [models. 2010 , 82,	13
1998	Edge dynamics in a quantum spin Hall state: effects from Rashba spin-orbit interaction. 2010 , 104, 256804	112
1997	Microwave-driven ferromagnetEopological-insulator heterostructures: The prospect for giant spin battery effect and quantized charge pump devices. 2010 , 82,	45
1996	Chiral topological insulators, superconductors, and other competing orders in three dimensions. 2010 , 81,	110
1995	Inverse quantum spin Hall effect generated by spin pumping from precessing magnetization into a graphene-based two-dimensional topological insulator. 2010 , 81,	19
1994	Majorana fermions manifested as interface states in semiconductor hybrid structures. 2010 , 82,	12
1993	Spin current in topologically trivial and nontrivial noncentrosymmetric superconductors. 2010, 82,	30
1992	Current modulator based on topological insulator with sliding magnetic superlattice. 2010 , 81,	1
1991	Electric-field modulation of the number of helical edge states in thin-film semiconductors. 2010 , 81,	10
1990	Momentum space metric, nonlocal operator, and topological insulators. 2010 , 82,	21
1989	Topological invariant in three-dimensional band insulators with disorder. 2010 , 82,	27
1988	Bulk metals with helical surface states. 2010 , 82,	26
1987	Dynamical delocalization of Majorana edge states by sweeping across a quantum critical point. 2010 , 12, 055014	46
1986	Ferromagnetism in the Hubbard model with topological/non-topological flat bands. 2010 , 91, 57007	55
1985	Quantum Spin-Hall Effect in a Quantum Wire. 2010 , 79, 104709	5
1984	Characterization of three-dimensional topological insulators by two-dimensional invariants. 2010 , 12, 065009	15

1983 Topological phase transitions in the non-Abelian honeycomb lattice. 2010 , 12, 033041	63
The mathbb $\{Z\}_{\{2\}}$ network model for the quantum spin Hall effect: two-dimensional Dirac fermions, topological quantum numbers and corner multifractality. 2010 , 12, 065005	22
Large thermoelectric figure of merit for three-dimensional topological Anderson insulators via line dislocation engineering. 2010 , 97, 073108	47
Direct observation of spin-polarized surface states in the parent compound of a topological insulator using spin- and angle-resolved photoemission spectroscopy in a Mott-polarimetry mode. 2010 , 12, 125001	26
1979 Quantum tunneling through planar pB junctions in HgTe quantum wells. 2010 , 12, 083058	29
Theoretical prediction of topological insulators in thallium-based III-V-VI 2 ternary chalcogenides. 2010 , 90, 37002	126
1977 Topological insulators and superconductors: tenfold way and dimensional hierarchy. 2010 , 12, 065010	1170
1976 Topological insulators and metal-insulator transition in the pyrochlore iridates. 2010 , 82,	207
1975 Topological insulators and Mott physics from the Hubbard interaction. 2010 , 82,	221
1974 Terahertz Kerr and reflectivity measurements on the topological insulator Bi2Se3. 2010 , 82,	53
1973 Massive Dirac fermions and spin physics in an ultrathin film of topological insulator. 2010 , 81,	427
Zigzag edge modes in a Z2 topological insulator: Reentrance and completely flat spectrum. 2010 , 82,	34
Crystal symmetry breaking in few-quintuple Bi2Te3 films: Applications in nanometrology of topological insulators. 2010 , 96, 153103	141
Symmetry-protected mathbb{Z}_2 -quantization and quaternionic Berry connection with Kramers degeneracy. 2010 , 12, 065004	30
1969 Topological characterization of periodically driven quantum systems. 2010 , 82,	700
Topological characterization of periodically driven quantum systems. 2010 , 82, 1968 Interaction-driven instabilities of a Dirac semimetal. 2010 , 81,	700
	,

1965	Electron tunneling through double magnetic barriers on the surface of a topological insulator. 2010 , 82,	55
1964	Second-order nonlinear optical effects of spin currents. 2010 , 104, 256601	33
1963	Topological insulating phases in monolayer and bilayer graphene: An effective action approach. 2010 , 82,	23
1962	Monopole current and unconventional Hall response on a topological insulator. 2010 , 81,	29
1961	Quantum emulation of a spin system with topologically protected ground states using superconducting quantum circuits. 2010 , 81,	64
1960	Spectroscopic evidence of a topological quantum phase transition in ultrathin Bi2Se3 films. 2010 , 81,	106
1959	Topological phases and phase transitions on the square-octagon lattice. 2010 , 82,	64
1958	Is a color superconductor topological?. 2010 , 81,	30
1957	Topological Anderson insulator in three dimensions. 2010 , 105, 216601	122
1956	Two-dimensional surface charge transport in topological insulators. 2010 , 82,	136
1955	Fractional topological insulators in three dimensions. 2010 , 105, 246809	139
1954	Half-Heusler compounds as a new class of three-dimensional topological insulators. 2010 , 105, 096404	268
1953	Entanglement spectrum of topological insulators and superconductors. 2010 , 104, 130502	220
1952	Entanglement spectrum of a disordered topological Chern insulator. 2010 , 105, 115501	140
1951	Electron teleportation via Majorana bound states in a mesoscopic superconductor. 2010 , 104, 056402	281
1950	Holographic fractional topological insulators in 2+1 and 1+1 dimensions. 2010 , 82,	14
1949	Spin and charge transport on the surface of a topological insulator. 2010 , 105, 066802	176
1948	Topological insulators for high-performance terahertz to infrared applications. 2010 , 82,	139

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1947	The quantum spin Hall effect and topological insulators. 2010 , 63, 33-38	939
1946	Massive Dirac fermion on the surface of a magnetically doped topological insulator. <i>Science</i> , 2010 , 329, 659-62	913
1945	Topological electronic structure in half-Heusler topological insulators. 2010 , 82,	213
1944	Marginality of bulk-edge correspondence for single-valley Hamiltonians. 2010 , 82,	51
1943	Model Hamiltonian for topological insulators. 2010 , 82,	563
1942	Direct evidence for the dirac-cone topological surface states in the ternary chalcogenide TlBiSe[] 2010 , 105, 136802	177
1941	Single Dirac cone topological surface state and unusual thermoelectric property of compounds from a new topological insulator family. 2010 , 105, 266401	167
1940	Zero-gap materials for future spintronics, electronics and optics. 2010 , 2, 31-38	145
1939	New family of three-dimensional topological insulators with antiperovskite structure. 2010 , 105, 216406	7 ²
1938	Chiral topological excitonic insulator in semiconductor quantum wells. 2010 , 82,	9
1937	Topological insulators and superconductors from string theory. 2010 , 82,	16
1936	Collective modes of a helical liquid. 2010 , 104, 116401	163
1935	Spontaneous symmetry breaking in a two-dimensional kagome lattice. 2010 , 82,	37
1934	Simulating and detecting the quantum spin Hall effect in the kagome optical lattice. 2010 , 82,	40
1933	Interaction-driven topological insulators on the kagome and the decorated honeycomb lattices. 2010 , 82,	124
1932	Crossed Andreev reflection on a topological insulator. 2010 , 108, 103904	9
1931	Proposed nonmagnetic Stern-Gerlach experiment using electron diffraction. 2010 , 105, 217205	5
1930	Topological defects and gapless modes in insulators and superconductors. 2010 , 82,	464

1929	Disordered topological insulators via C * -algebras. 2010 , 92, 67004	99
1928	Oscillatory crossover from two-dimensional to three-dimensional topological insulators. 2010 , 81,	389
1927	Negative-band-gap quantum dots: Gap collapse, intrinsic surface states, excitonic response, and excitonic insulator phase. 2010 , 82,	23
1926	Single-Dirac-cone topological surface states in the TlBiSe(2) class of topological semiconductors. 2010 , 105, 036404	162
1925	Interplay between superconductivity and ferromagnetism on a topological insulator. 2010 , 81,	105
1924	Structure and oscillatory multilayer relaxation of the bismuth (100) surface. 2010 , 12, 063016	5
1923	Superconductivity in CuxBi2Se3 and its implications for pairing in the undoped topological insulator. 2010 , 104, 057001	764
1922	Momentum-resolved Landau-level spectroscopy of Dirac surface state in Bi2Se3. 2010 , 82,	229
1921	Anomalous magnetoresistance of a two-dimensional ferromagnet/ferromagnet junction on the surface of a topological insulator. 2010 , 81,	168
1920	Topological insulators on the Lieb and perovskite lattices. 2010 , 82,	158
1920 1919	Topological insulators on the Lieb and perovskite lattices. 2010 , 82, Topological insulators on the decorated honeycomb lattice. 2010 , 81,	158 42
1919	Topological insulators on the decorated honeycomb lattice. 2010 , 81, First-principles studies of the three-dimensional strong topological insulators Bi2Te3, Bi2Se3and	42
1919 1918	Topological insulators on the decorated honeycomb lattice. 2010 , 81, First-principles studies of the three-dimensional strong topological insulators Bi2Te3, Bi2Se3and Sb2Te3. 2010 , 12, 065013 Ultrathin topological insulator Bi2Se3 nanoribbons exfoliated by atomic force microscopy. 2010 ,	4 ² 295
1919 1918 1917	Topological insulators on the decorated honeycomb lattice. 2010, 81, First-principles studies of the three-dimensional strong topological insulators Bi2Te3, Bi2Se3and Sb2Te3. 2010, 12, 065013 Ultrathin topological insulator Bi2Se3 nanoribbons exfoliated by atomic force microscopy. 2010, 10, 3118-22 Effective continuous model for surface states and thin films of three-dimensional topological	4 ² 295 148
1919 1918 1917 1916	Topological insulators on the decorated honeycomb lattice. 2010, 81, First-principles studies of the three-dimensional strong topological insulators Bi2Te3, Bi2Se3and Sb2Te3. 2010, 12, 065013 Ultrathin topological insulator Bi2Se3 nanoribbons exfoliated by atomic force microscopy. 2010, 10, 3118-22 Effective continuous model for surface states and thin films of three-dimensional topological insulators. 2010, 12, 043048 Growth of Topological Insulator Bi2Te3 Ultrathin Films on Si(111) Investigated by Low-Energy Electron Microscopy. 2010, 10, 4491-4493	42 295 148 252
1919 1918 1917 1916 1915	Topological insulators on the decorated honeycomb lattice. 2010, 81, First-principles studies of the three-dimensional strong topological insulators Bi2Te3, Bi2Se3and Sb2Te3. 2010, 12, 065013 Ultrathin topological insulator Bi2Se3 nanoribbons exfoliated by atomic force microscopy. 2010, 10, 3118-22 Effective continuous model for surface states and thin films of three-dimensional topological insulators. 2010, 12, 043048 Growth of Topological Insulator Bi2Te3 Ultrathin Films on Si(111) Investigated by Low-Energy Electron Microscopy. 2010, 10, 4491-4493	42 295 148 252 35

(2011-2010)

1911	Realistic time-reversal invariant topological insulators with neutral atoms. 2010 , 105, 255302	249
1910	Gauge field fluctuations in three-dimensional topological Mott insulators. 2010 , 82,	37
1909	Chern number of thin films of the topological insulator Bi2Se3. 2010 , 82,	72
1908	Spontaneous persistent currents in a quantum spin Hall insulator. 2010 , 82,	53
1907	Theoretical prediction of topological insulator in ternary rare earth chalcogenides. 2010, 82,	47
1906	Doping effects of Sb and Pb in epitaxial topological insulator Bi2Se3 thin films: An in situ angle-resolved photoemission spectroscopy study. 2010 , 97, 194102	40
1905	Topological phases of one-dimensional fermions: An entanglement point of view. 2011 , 83,	341
1904	Low-frequency 1/f noise in bismuth selenide Topological Insulators. 2011 ,	
1903	Valley Spin Sum Rule for Dirac Fermions: Topological Argument. 2011 , 80, 043704	1
1902	Pressure-induced superconductivity in topological parent compound Bi2Te3. 2011 , 108, 24-8	236
1901	Vacancy-induced bound states in topological insulators. 2011 , 84,	46
1900	Epitaxial growth of Bi2Se3 topological insulator thin films on Si (111). 2011 , 109, 103702	118
1899	Full electrical control of charge and spin conductance through interferometry of edge states in topological insulators. 2011 , 83,	73
1898	Electrically controlled pumping of spin currents in topological insulators. 2011 , 84,	47
1897	Aharonov-Bohm oscillations in the local density of topological surface states. 2011 , 99, 243110	11
1896	Quantum Andreev effect in two-dimensional HgTe/CdTe quantum well/superconductor systems. 2011 , 83,	22
1895	Liquid-gated ambipolar transport in ultrathin films of a topological insulator Bi2Te3. 2011 , 11, 2601-5	71
1894	Topological Insulators from Spontaneous Symmetry Breaking Induced by Electron Correlation on Pyrochlore Lattices. 2011 , 80, 044708	57

1893	Surface and edge states in topological semimetals. 2011 , 83,	30
1892	Skyrmion quantum numbers and quantized pumping in two-dimensional topological chiral magnets. 2011 , 84,	4
1891	Topological phases for fermionic cold atoms on the Lieb lattice. 2011 , 83,	141
1890	Topological insulators in the quaternary chalcogenide compounds and ternary famatinite compounds. 2011 , 13, 085017	30
1889	Topological aspect and quantum magnetoresistance of ∰ag2Te. 2011 , 106, 156808	155
1888	Three-dimensional phase diagram of disordered HgTe/CdTe quantum spin-Hall wells. 2011, 83,	56
1887	Low-frequency current fluctuations in "graphene-like" exfoliated thin-films of bismuth selenide topological insulators. 2011 , 5, 2657-63	61
1886	Topological Anderson insulator phenomena. 2011 , 84,	53
1885	Weak antilocalization in HgTe quantum wells and topological surface states: Massive versus massless Dirac fermions. 2011 , 84,	77
1884	Topological insulators in ternary compounds with a honeycomb lattice. 2011 , 106, 156402	77
1883	Backscattering of Dirac fermions in HgTe quantum wells with a finite gap. 2011 , 106, 076802	34
1882	Three-dimensional topological insulators in the octahedron-decorated cubic lattice. 2011 , 84,	5
1881	Correlated topological insulators and the fractional magnetoelectric effect. 2011 , 83,	114
1880	Spin Hall Effect. 2011 , 222-278	7
1879	Connectivity of edge and surface states in topological insulators. 2011 , 84,	6
1878	Topological insulators on a Mobius strip. 2011 , 84,	9
1877	Gauge fields in spintronics. 2011 , 110, 121301	71
1876	Quantized Spin Transport in Magnetically-Disordered Quantum Spin Hall Systems. 2011 , 80, 124712	10

1875	Edge states and the bulk-boundary correspondence in Dirac Hamiltonians. 2011 , 83,	151
1874	Three-dimensional topological insulators in I-III-VI2 and II-IV-V2 chalcopyrite semiconductors. 2011 , 106, 016402	120
1873	Surface state charge dynamics of a high-mobility three-dimensional topological insulator. 2011 , 107, 136803	69
1872	Evidence for helical edge modes in inverted InAs/GaSb quantum wells. 2011 , 107, 136603	696
1871	Weak field magnetoresistance of narrow-gap semiconductor InSb. 2011 , 109, 063703	5
1870	Electrical switching of the edge channel transport in HgTe quantum wells with an inverted band structure. 2011 , 83,	59
1869	Spin and momentum filtering of electrons on the surface of a topological insulator. 2011 , 98, 162101	30
1868	Electron interaction-driven insulating ground state in Bi2Se3 topological insulators in the two-dimensional limit. 2011 , 83,	204
1867	Magnetoelectronics at Edges in Semiconductor Structures: Helical Aharonov-Casher Edge States. 2011 , 131, 36-46	4
1866	Tunneling transport of electrons on the surface of a topological insulator attached with a spiral multiferroic oxide. 2011 , 98, 022107	13
1865	STM and MBE: one of the best combinations. 2011 , 44, 464007	6
1864	Wannier representation of Z2 topological insulators. 2011 , 83,	267
1863	SmB6: A Promising Candidate for a Topological Insulator. 2011 , 80, 123710	154
1862	Rashba spin-splitting control at the surface of the topological insulator Bi2Se3. 2011 , 107, 186405	146
1861	Anomalous galvanomagnetism, cyclotron resonance, and microwave spectroscopy of topological insulators. 2011 , 84,	24
1860	Anisotropic interactions and strain-induced topological phase transition in Sb2Se3 and Bi2Se3. 2011 , 84,	90
1859	Parallel magnetic field driven quantum phase transition in a thin topological insulator film. 2011 , 83,	58
1858	Influence of tetragonal distortion on the topological electronic structure of the half-Heusler compound LaPtBi from first principles. 2011 , 99, 071901	30

1857	Tight-binding model for topological insulators: Analysis of helical surface modes over the whole Brillouin zone. 2011 , 84,	16
1856	Helical edge modes preserved across transitions from topological insulators with indirect gaps to insulators or semimetals. 2011 , 83,	6
1855	Antiferromagnet topological insulators with AB2C Heusler structure. 2011 , 83,	21
1854	Transport in disordered two-dimensional topological insulators. 2011 , 84,	96
1853	Applications: Nanoelectronics and Nanomagnetics. 2011 , 375-415	2
1852	Graphene in Transistor Technology. 2011 , 393-395, 123-126	
1851	Sondheimer oscillation as a signature of surface Dirac fermions. 2011 , 84,	13
1850	Quantum spin Hall systems and topological insulators. 2011 , 13, 105007	9
1849	Two-dimensional topological insulators and their edge states. 2011 , 302, 012019	11
1848	Synthesis of Ultrathin Silicon Nanosheets by Using Graphene Oxide as Template. 2011 , 23, 5293-5295	151
1847	Theoretical investigation of the evolution of the topological phase of Bi2Se3 under mechanical strain. 2011 , 84,	91
1846	Evolution of surface states in Bi1\(\text{B}\)Sbx alloys across the topological phase transition. 2011 , 83,	30
1845	Quantum spin Hall effect in graphene nanoribbons: Effect of edge geometry. 2011 , 84,	8
1844	Unexpected mass acquisition of Dirac fermions at the quantum phase transition of a topological insulator. 2011 , 7, 840-844	189
1843	Resonant nonlocal Andreev reflection in a narrow quantum spin Hall system. 2011 , 84,	22
1842	The quantum spin Hall effect. 2011 , 109, 102409	20
1841	Zak phase and the existence of edge states in graphene. 2011 , 84,	281
1840	Disordered topological insulators: a non-commutative geometry perspective. 2011 , 44, 113001	88

(2011-2011)

1839	Generic wave-function description of fractional quantum anomalous Hall states and fractional topological insulators. 2011 , 107, 126803	147
1838	Ambipolar field effect in the ternary topological insulator (Bi(x)Sb(1-x))2Te3 by composition tuning. 2011 , 6, 705-9	311
1837	Exactly soluble models for fractional topological insulators in two and three dimensions. 2011 , 84,	51
1836	Stability of the Bi2Se3(111) topological state: Electron-phonon and electron-defect scattering. 2011 , 83,	93
1835	Low-energy effective Hamiltonian involving spin-orbit coupling in silicene and two-dimensional germanium and tin. 2011 , 84,	938
1834	Localized edge states in two-dimensional topological insulators: Ultrathin Bi films. 2011 , 83,	258
1833	Inversion-symmetric topological insulators. 2011 , 83,	319
1832	Quantum spin Hall effect in 2D topological insulators. 2011 ,	1
1831	Equivalent expression of Z2 topological invariant for band insulators using the non-Abelian Berry connection. 2011 , 84,	494
1830	Bound states and persistent currents in topological insulator rings. 2011 , 83,	49
1829	Topological magnetic insulators with corundum structure. 2011 , 106, 126403	39
1828	Fine structure of zero-mode Landau levels in HgTe/HgxCd1⊠Te quantum wells. 2011 , 83,	48
1827	Weyl semimetal in a topological insulator multilayer. 2011 , 107, 127205	1500
1826	Engineering a Robust Quantum Spin Hall State in Graphene via Adatom Deposition. 2011, 1,	244
1825	Interface engineering of quantum Hall effects in digital transition metal oxide heterostructures. 2011 , 2, 596	344
1824	The Quantum Spin Hall Effect. 2011 , 2, 31-53	103
1823	Thin topological insulator film in a perpendicular magnetic field. 2011 , 83,	58
1822	Metallic surface electronic state in half-Heusler compounds RPtBi (R= Lu, Dy, Gd). 2011 , 83,	77

1821	Topological phases and fractional excitations of the exciton condensate in a special class of bilayer systems. 2011 , 84,	11
1820	Topological nodal semimetals. 2011 , 84,	1022
1819	Epitaxial growth of high mobility Bi2Se3 thin films on CdS. 2011 , 98, 242102	79
1818	Quantum spin Hall effect in silicene and two-dimensional germanium. 2011 , 107, 076802	1666
1817	Competing exotic topological insulator phases in transition-metal oxides on the pyrochlore lattice with distortion. 2011 , 83,	92
1816	Complete classification of one-dimensional gapped quantum phases in interacting spin systems. 2011 , 84,	238
1815	Topology by dissipation in atomic quantum wires. 2011 , 7, 971-977	287
1814	Band structure engineering of multinary chalcogenide topological insulators. 2011 , 83,	51
1813	Size effects on transport properties in topological Anderson insulators. 2011 , 84,	16
1812	Phonons of single quintuple Bi2Te3 and Bi2Se3 films and bulk materials. 2011 , 83,	55
1811	Cyclotron resonance and interband optical transitions in HgTe/CdTe(0 1 3) quantum well heterostructures. 2011 , 26, 125011	37
1810	Helical states of topological insulator BiBell 2011 , 11, 2088-91	47
1809	Classification of Topological Insulators and Superconductors. 2011 , 32, 209-215	1
1808	Finite size effects on the quantum spin Hall state. 2011 , 266, 012103	1
1807	Spin-charge locking and tunneling into a helical metal. 2011 , 93, 67004	36
1806	Renormalization group aspects of graphene. 2011 , 369, 2625-42	25
1805	Zero-Gap State in Organic Conductor E(BEDT-TTF)2NH4Hg(SCN)4. 2011 , 80, 074712	8
1804	Magnetic Response in Quantized Spin Hall Phase of Correlated Electrons. 2011 , 80, 044707	7

1803 Majorana Fermions and Z2 Vortices on a Square Lattice. 2011 , 80, 123708	2
1802 Edge States in the Three-Quarter Filled System, E(BEDT-TTF)2I3. 2011 , 80, 054707	10
1801 Manipulating surface states in topological insulator nanoribbons. 2011 , 6, 216-21	352
1800 Topological origin of subgap conductance in insulating bilayer graphene. 2011 , 7, 38-42	94
1799 Single valley Dirac fermions in zero-gap HgTe quantum wells. 2011 , 7, 418-422	201
1798 Floquet topological insulator in semiconductor quantum wells. 2011 , 7, 490-495	1065
Three- and two-dimensional topological insulators in Pb2Sb2Te5, Pb2Bi2Te5, and Pb2Bi2Se5 layered compounds. 2011 , 94, 217-221	16
1796 Spin-orbit-coupled Bose-Einstein condensates. 2011 , 471, 83-6	1396
1795 Flat edge modes of graphene and of Z2 topological insulator. 2011 , 6, 358	7
1794 Simple rules for the understanding of Heusler compounds. 2011 , 39, 1-50	1341
Helical quantum states in HgTe quantum dots with inverted band structures. 2011 , 106, 206802	87
1792 Quantum Hall effect from the topological surface states of strained bulk HgTe. 2011 , 106, 126803	376
Opportunities in chemistry and materials science for topological insulators and their nanostructures. 2011 , 3, 845-9	199
Surface density of states and topological edge states in noncentrosymmetric superconductors. 2011 , 83,	101
1789 Computing topological invariants without inversion symmetry. 2011 , 83,	324
Spin susceptibility and helical magnetic order at the edges/surfaces of topological insulators due to Fermi surface nesting. 2011 , 83,	25
1787 Three-Dimensional Topological Insulators. 2011 , 2, 55-78	386
1786 Charge and spin topological insulators. 2011 , 56, 848-857	3

1785	Topological insulators and superconductors. 2011 , 83, 1057-1110	8720
1784	Trace index and spectral flow in the entanglement spectrum of topological insulators. 2011 , 84,	51
1783	Holographic fermionic fixed points in d=3. 2011 , 2011, 1	17
1782	Tunable polarization of spin polarized current by magnetic field. 2011 , 11, 568-572	1
1781	Spin dynamics under local gauge fields in chiral spinBrbit coupling systems. 2011 , 326, 207-215	21
1780	Topological insulators and C*-algebras: Theory and numerical practice. 2011 , 326, 1699-1759	51
1779	Topological BF field theory description of topological insulators. 2011 , 326, 1515-1535	114
1778	Superconductivity and non-metallicity induced by doping the topological insulators Bi2Se3 and Bi2Te3. 2011 , 72, 572-576	83
1777	Gap closing and universal phase diagrams in topological insulators. 2011 , 43, 748-754	19
1776	In-plane magnetoresistance on the surface of topological insulator. 2011 , 43, 966-970	18
1775	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
1774	Topological transition by dielectric control of exciton wavefunction in thin nanotube structure. 2011 , 151, 663-666	
1773	Band topology and the quantum spin Hall effect in bilayer graphene. 2011 , 151, 1075-1083	68
1772	Z Q topological invariants for Polyacetylene, Kagome and Pyrochlore lattices. 2011 , 95, 20003	46
1771	Thermoelectric transport of perfectly conducting channels in two- and three-dimensional topological insulators. 2011 , 334, 012013	18
1770	Persistence of surface states despite impurities in the surface of topological insulators. 2011 , 96, 47002	9
1769	An isolated Dirac cone on the surface of ternary tetradymite-like topological insulators. 2011 , 13, 095005	31
1768	Photoabsorption spectra and the X-ray edge problem in graphene. 2011 , 94, 67002	4

(2011-2011)

1767	Instability of topological order and localization of edge states in HgTe quantum wells coupled to s-wave superconductor. 2011 , 84,	8
1766	Casimir interaction between topological insulators with finite surface band gap. 2011, 84,	19
1765	Quantum corrals and quantum mirages on the surface of a topological insulator. 2011, 84,	13
1764	Two-dimensional topological insulator state and topological phase transition in bilayer graphene. 2011 , 107, 256801	132
1763	Projective ribbon permutation statistics: A remnant of non-Abelian braiding in higher dimensions. 2011 , 83,	46
1762	Stable nontrivial Z2 topology in ultrathin Bi (111) films: a first-principles study. 2011 , 107, 136805	253
1761	Two distinct ballistic processes in graphene at the Dirac point. 2011 , 84,	9
1760	Helical Dirac-Majorana interferometer in a superconductor/topological insulator sandwich structure. 2011 , 83,	32
1759	Weak localization of bulk channels in topological insulator thin films. 2011 , 84,	153
1758	Fractional Chern Insulator. 2011 , 1,	299
1758 1757	Fractional Chern Insulator. 2011, 1, Straining topological insulators as a way to detect Majorana fermions. 2011, 84,	299 7
1757		
1757	Straining topological insulators as a way to detect Majorana fermions. 2011 , 84,	7
1757 1756	Straining topological insulators as a way to detect Majorana fermions. 2011 , 84, Spin-polarized scanning-tunneling probe for helical Luttinger liquids. 2011 , 106, 236403	7
1757 1756 1755	Straining topological insulators as a way to detect Majorana fermions. 2011 , 84, Spin-polarized scanning-tunneling probe for helical Luttinger liquids. 2011 , 106, 236403 GW calculations including spin-orbit coupling: Application to Hg chalcogenides. 2011 , 84,	7 33 82
1757 1756 1755	Straining topological insulators as a way to detect Majorana fermions. 2011, 84, Spin-polarized scanning-tunneling probe for helical Luttinger liquids. 2011, 106, 236403 GW calculations including spin-orbit coupling: Application to Hg chalcogenides. 2011, 84, Quasiparticle band structures of HgS, HgSe, and HgTe. 2011, 84,	7 33 82 70
1757 1756 1755 1754 1753	Straining topological insulators as a way to detect Majorana fermions. 2011, 84, Spin-polarized scanning-tunneling probe for helical Luttinger liquids. 2011, 106, 236403 GW calculations including spin-orbit coupling: Application to Hg chalcogenides. 2011, 84, Quasiparticle band structures of HgS, HgSe, and HgTe. 2011, 84, Interfacial charge and spin transport in Z2 topological insulators. 2011, 83, Abelian and non-Abelian anyons in integer quantum anomalous Hall effect and topological phase	7 33 82 70 19

1749	Electrical manipulation and measurement of spin properties of quantum spin Hall edge states. 2011 , 106, 076803	28
1748	Quantum anomalous Hall states in the p-orbital honeycomb optical lattices. 2011 , 83,	42
1747	Topology-induced phase transitions in quantum spin Hall lattices. 2011 , 83,	33
1746	Transition between ordinary and topological insulator regimes in two-dimensional resonant magnetotransport. 2011 , 83,	19
1745	Passage from spin-polarized surface states to unpolarized quantum well states in topologically nontrivial Sb films. 2011 , 107, 036802	57
1744	Edge states and topological phases in non-Hermitian systems. 2011 , 84,	271
1743	Quantum Hall effect in thin films of three-dimensional topological insulators. 2011 , 84,	13
1742	Signature of the Schwinger pair creation rate via radiation generated in graphene by a strong electric current. 2011 , 84,	16
1741	Weak localization in mesoscopic hole transport: berry phases and classical correlations. 2011 , 106, 146801	7
1740	High Chern number quantum anomalous Hall phases in single-layer graphene with Haldane orbital coupling. 2011 , 84,	33
1739	Switching spin and charge between edge states in topological insulator constrictions. 2011 , 107, 086803	93
1738	Effect of transverse electric field on helical edge states in a quantum spin-Hall system. 2011 , 99, 222111	20
1737	Quantum spin Hall effect induced by nonmagnetic and magnetic staggered potentials. 2011, 83,	26
1736	Topological insulator ribbon: Surface states and dynamical response. 2011 , 84,	13
1735	Dephasing of spin and charge interference in helical Luttinger liquids. 2011 , 83,	21
1734	Manifestly gauge-independent formulations of the Z2 invariants. 2011 , 83,	24
1733	Narrowing of topological bands due to electronic orbital degrees of freedom. 2011 , 107, 116401	34
1732	Giant mesoscopic spin Hall effect on the surface of topological insulator. 2011 , 106, 057205	17

(2011-2011)

1731	Symmetry-constrained reorganization of Dirac cones in topological insulators by surface modification. 2011 , 84,	9
1730	Charge-spin duality in nonequilibrium transport of helical liquids. 2011 , 83,	47
1729	TOPOLOGICAL INSULATOR AND THE DIRAC EQUATION. 2011 , 01, 33-44	83
1728	Spin Hall effect at interfaces between HgTe/CdTe quantum wells and metals. 2011 , 84,	11
1727	Theory of edge states in a quantum anomalous Hall insulator/spin-singlet s-wave superconductor hybrid system. 2011 , 83,	14
1726	Pressure-induced topological insulating behavior in the ternary chalcogenide Ge2Sb2Te5. 2011 , 84,	35
1725	Kondo effect in the presence of Rashba spin-orbit interaction. 2011 , 84,	30
1724	Plasmon mass and Drude weight in strongly spin-orbit-coupled two-dimensional electron gases. 2011 , 83,	30
1723	Exact solutions for a type of electron pairing model with spin-orbit interactions and Zeeman coupling. 2011 , 107, 026405	24
1722	Particle-hole symmetry and interaction effects in the Kane-Mele-Hubbard model. 2011 , 84,	130
1722 1721		130 50
, i		
1721	Candidates for topological insulators: Pb-based chalcogenide series. 2011 , 83, Absence of intrinsic spin splitting in one-dimensional quantum wires of tetrahedral	50
1721 1720	Candidates for topological insulators: Pb-based chalcogenide series. 2011, 83, Absence of intrinsic spin splitting in one-dimensional quantum wires of tetrahedral semiconductors. 2011, 84, Spin-polarized STM spectra of Dirac electrons on the surface of a topological insulator. 2011, 84,	50
1721 1720 1719	Candidates for topological insulators: Pb-based chalcogenide series. 2011, 83, Absence of intrinsic spin splitting in one-dimensional quantum wires of tetrahedral semiconductors. 2011, 84, Spin-polarized STM spectra of Dirac electrons on the surface of a topological insulator. 2011, 84,	50 15 12
1721 1720 1719 1718	Candidates for topological insulators: Pb-based chalcogenide series. 2011, 83, Absence of intrinsic spin splitting in one-dimensional quantum wires of tetrahedral semiconductors. 2011, 84, Spin-polarized STM spectra of Dirac electrons on the surface of a topological insulator. 2011, 84, Electrically controllable surface magnetism on the surface of topological insulators. 2011, 106, 097201	50 15 12 184
1721 1720 1719 1718	Candidates for topological insulators: Pb-based chalcogenide series. 2011, 83, Absence of intrinsic spin splitting in one-dimensional quantum wires of tetrahedral semiconductors. 2011, 84, Spin-polarized STM spectra of Dirac electrons on the surface of a topological insulator. 2011, 84, Electrically controllable surface magnetism on the surface of topological insulators. 2011, 106, 097201 Surface scattering via bulk continuum states in the 3D topological insulator Bi2Se3. 2011, 107, 056803	50 15 12 184 91

Spin-related magnetoresistance oscillations in the inversion layer on bulk p-Hg1\(\mathbb{U}\)CdxTe. **2011**, 109, 113717

Equality of bulk wave functions and edge correlations in some topological superconductors: a spacetime derivation. 2011 , 107, 106803	12
1711 Topological insulators and fractional quantum Hall effect on the ruby lattice. 2011 , 84,	69
$_{1710}$ Self-consistent superconducting proximity effect at the quantum spin Hall edge. 2011 , 83,	31
Strain-driven onset of nontrivial topological insulating states in Zintl Sr2X compounds (X=Pb, Sn). 2011 , 84,	29
Model characterization of gapless edge modes of topological insulators using intermediate Brillouin-zone functions. 2011 , 107, 036601	60
1707 Fractional topological liquids with time-reversal symmetry and their lattice realization. 2011 , 84,	124
1706 Absence of topological insulator phases in non-Hermitian PT-symmetric Hamiltonians. 2011 , 84,	152
1705 Time-reversal symmetric hierarchy of fractional incompressible liquids. 2011 , 84,	42
Topological field theory and thermal responses of interacting topological superconductors. 2011 , 84,	89
1703 The persistent charge and spin currents in topological insulator Bi2Se3 nanowires. 2011 , 110, 093714	12
1702 Instabilities of quadratic band crossing points. 2011 , 84,	32
1701 Surface spectral function in the superconducting state of a topological insulator. 2011 , 83,	74
1700 Topological phonon modes in filamentary structures. 2011 , 83, 021913	28
1699 Topology of Andreev bound states with flat dispersion. 2011 , 83,	220
Theory of quantum spin Hall effect detection by measurements of the polarization resistance. 2011 , 83,	2
1697 Time-reversal-symmetry-broken quantum spin Hall effect. 2011 , 107, 066602	174
1696 Dynamics of the spin Hall effect in topological insulators and graphene. 2011 , 83,	21

1695	Topological Superconductivity in Cu(x)Bi(2)Se(3). 2011 , 107, 217001	493
1694	Quantized anomalous Hall insulator in a nanopatterned two-dimensional electron gas. 2011 , 84,	23
1693	Effects of interaction on quantum spin Hall insulators. 2011 , 107, 166806	42
1692	Chiral topological phases and fractional domain wall excitations in one-dimensional chains and wires. 2011 , 107, 166804	23
1691	Quantized pumping and topology of the phase diagram for a system of interacting bosons. 2011 , 106, 110405	30
1690	Controlled coupling of spin-resolved quantum Hall edge states. 2011 , 107, 236804	40
1689	Conductance and noise signatures of Majorana backscattering. 2011 , 83,	82
1688	Detection of Majorana edge states in topological superconductors through non-Fermi-liquid effects induced in an interacting quantum dot. 2011 , 83,	20
1687	Determining topological order from a local ground-state correlation function. 2011 , 83,	24
1686	The effect of disorder on the valley-dependent transport in zigzag graphene nanoribbons. 2011 , 109, 123718	8
1685	Robust one-dimensional wires in lattice mismatched bilayer graphene. 2011 , 98, 251902	13
1684	Josephson Hall current in a noncentrosymmetric superconductor/ferromagnet/superconductor junction. 2011 , 110, 113717	2
1683	GROWTH OF QUANTUM WELL FILMS OF TOPOLOGICAL INSULATOR Bi2Se3 ON INSULATING SUBSTRATE. 2011 , 01, 21-25	36
1682	Low-Frequency Noise in G raphene-Like E xfoliated Thin Films of Topological Insulators. 2011 , 1344, 1	
1681	Disorder-Induced Multiple Transition Involving Z2 Topological Insulator. 2011 , 80, 053703	47
1680	TOPOLOGICAL QUANTUM PHASE TRANSITION BETWEEN QUANTUM SPIN HALL STATE AND QUANTUM ANOMALOUS HALL STATE. 2011 , 25, 2323-2340	5
1679	UNIVERSAL SPIN-HALL CONDUCTANCE FLUCTUATIONS IN TWO-DIMENSIONAL MESOSCOPIC SYSTEMS. 2011 , 25, 359-376	7
1678	RESONANT SPIN POLARIZATION IN A TWO-DIMENSIONAL HOLE GAS. 2011 , 25, 1259-1270	

1677 Classification of Topological Insulators with Time-Reversal and Inversion Symmetry. 2011 , 55, 904-912	4
1676 Non-magnetic impurities and in-gap bound states in topological insulators. 2011 , 13, 103016	31
Gate-tuned normal and superconducting transport at the surface of a topological insulator. 2011 , 2, 575	230
$_{1674}$ Holographic classification of topological insulators and its eightfold periodicity. 2012 , 45, 435203	4
1673 Topological phase separation in trapped ultracold fermionic gases. 2012 , 45, 065301	1
1672 Non-Abelian BF theory for 2 + 1 dimensional topological states of matter. 2012 , 14, 013060	24
1671 A semi-classical analysis of Dirac fermions in 2+1 dimensions. 2012 , 45, 185307	1
1670 Spin-orbit density wave induced hidden topological order in URu2Si2. 2012 , 2, 596	34
Quantum Transport in Disordered Systems Under Magnetic Fields: A Study Based on Operator Algebras. 2012 ,	15
Density-functional theory investigation of energy gaps and optical properties of Hg 1 $\!$ K Cd x Te and In 1 $\!$ Ga x As. 2012 , 21, 017101	18
1667 Topological edge states in the spin 1 bilinear-biquadratic model. 2012 , 24, 446001	3
The robustness of the quantum spin Hall effect to the thickness fluctuation in HgTe quantum wells. 2012 , 21, 117301	1
Optically engineering the topological properties in a two-dimensional square lattice. 2012 , 99, 47007	10
1664 Helical edge states in multiple topological mass domains. 2012 , 27, 124007	17
Design exploration of ultra-low power non-volatile memory based on topological insulator. 2012 ,	3
Backscattering from width variations in quasi-one-dimensional strips of topological insulators. 2012 , 24, 435301	8
1661 Engineering holographic graphene. 2012 ,	11
1660 Impurity-induced bound states in superconductors with topological order. 2012 , 24, 455701	2

ractional charge and statistics in the fractional quantum spin Hall effect. **2012**, 24, 165503

Giant Interlayer Magnetoresistances and Strong Anisotropy in p-type Sb2Te3 Single Crystals. 2012 , 140, 155-160	4
1657 Magnetospectroscopy of 2D HgTe based topological insulators. 2012 ,	
Fabrication of samples for scanning probe experiments on quantum spin Hall effect in HgTe quantum wells. 2012 , 112, 103713	7
Signature of phase transitions in the disordered quantum spin Hall state from the entanglement spectrum. 2012 , 86,	13
1654 Phase structure of the topological Anderson insulator. 2012 , 85,	21
1653 Correlation effects in two-dimensional topological insulators. 2012 , 85,	44
1652 Quantum anomalous Hall effect in a flat band ferromagnet. 2012 , 85,	39
Effect of strong disorder in a three-dimensional topological insulator: Phase diagram and maps of the Z2 invariant. 2012 , 85,	24
1650 Synchronous and asynchronous Mott transitions in topological insulator ribbons. 2012 , 85,	10
Carriers dependence of the magnetic properties in magnetic topological insulator Sb1.95\BixCr0.05Te3. 2012 , 101, 072406	20
Topologically protected extended states in disordered quantum spin-Hall systems without time-reversal symmetry. 2012 , 85,	16
1647 Metal E opological insulator transition in the quantum kicked rotator with Z2 symmetry. 2012 , 85,	13
Gate-voltage controlled electronic transport through a ferromagnet/normal/ferromagnet junction on the surface of a topological insulator. 2012 , 86,	21
1645 Interacting topological phases and modular invariance. 2012 , 85,	136
1644 Quantum magnetotransport properties of topological insulators under strain. 2012 , 86,	8
Topological Hubbard model and its high-temperature quantum Hall effect. 2012 , 108, 046806	26
Topological phase transitions driven by next-nearest-neighbor hopping in two-dimensional lattices. 2012 , 86,	54

1641	Magnetic-field-induced Fabry-PEot resonances in helical edge states. 2012 , 86,	20
1640	Fractional spin Josephson effect and electrically controlled magnetization in quantum spin Hall edges. 2012 , 86,	19
1639	Unusual magnetic phases in the strong interaction limit of two-dimensional topological band insulators in transition metal oxides. 2012 , 86,	30
1638	Green's function method for line defects and gapless modes in topological insulators: Beyond the semiclassical approach. 2012 , 85,	3
1637	Peculiarities of dynamics of Dirac fermions associated with zero-mass lines. 2012 , 86,	24
1636	Fluctuation-induced topological quantum phase transitions in quantum spin-Hall and anomalous-Hall insulators. 2012 , 86,	54
1635	Zener tunneling isospin Hall effect in HgTe quantum wells and graphene multilayers. 2012, 85,	5
1634	Observation of field-induced polarization of valleys in p-type Sb2Te3 single crystals. 2012 , 86,	11
1633	Emergent many-body translational symmetries of Abelian and non-Abelian fractionally filled topological insulators. 2012 , 85,	100
1632	Stability of Majorana fermions in proximity-coupled topological insulator nanowires. 2012, 86,	55
1631	Helical edge states coupled to a spin bath: Current-induced magnetization. 2012, 86,	35
1630	Phase diagram for a topological Kondo insulating system. 2012 , 85,	35
1629	Signature of interaction in dc transport of ac-gated quantum spin Hall edge states. 2012, 85,	19
1628	Effects of the edge states on conductance and thermopower for the bilayer graphene nanoribbons. 2012 , 112, 053701	5
1627	Spin-polarized edge modes and snake states in HgTe/CdTe quantum wells under an antisymmetric magnetic field. 2012 , 86,	13
1626	Phonon-induced backscattering in helical edge states. 2012 , 108, 086602	92
1625	Probing crossover from analogous weak antilocalization to localization by an Aharonov-Bohm interferometer on topological insulator surface. 2012 , 100, 133103	2
1624	Scattering theory of topological insulators and superconductors. 2012 , 85,	101

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1623	coupling. 2012 , 86,	35
1622	Spin-orbit-coupling-induced half-skyrmion excitations in rotating and rapidly quenched spin-1 Bose-Einstein condensates. 2012 , 86,	49
1621	Crystallized half-skyrmions and inverted half-skyrmions in the condensation of spin-1 Bose gases with spin-orbit coupling. 2012 , 86,	59
1620	Optical effects of spin currents in semiconductors. 2012 , 86,	3
1619	Rotational isotropy breaking as proof for spin-polarized Cooper pairs in the topological superconductor CuxBi2Se3. 2012 , 86,	33
1618	Nonlocal conductance reveals helical superconductors. 2012 , 85,	12
1617	Conductance fluctuations induced by bulk state in quasi-one-dimensional strips of topological insulator. 2012 , 85,	21
1616	SU(3) spin-orbit coupling in systems of ultracold atoms. 2012 , 109, 235308	42
1615	Finite-frequency noise in a quantum point contact between helical edge states. 2012, 86,	14
1614	Andreev reflection of helical edge modes in InAs/GaSb quantum spin Hall insulator. 2012 , 109, 186603	127
1613	Nonequilibrium noise correlations in a point contact of helical edge states. 2012 , 86,	13
1612	Topology, delocalization via average symmetry and the symplectic Anderson transition. 2012 , 109, 246605	108
1611	Topological system with a twisting edge band: A position-dependent Hall resistance. 2012, 85,	1
1610	Topological phase transition in the interaction of surface Dirac fermions in heterostructures. 2012 , 109, 146601	28
1609	Interplay of bulk and edge states in transport of two-dimensional topological insulators. 2012, 85,	9
1608	Topological phases of Bi(111) bilayer in an external exchange field. 2012 , 86,	37
1607	Theory and classification of interacting integer topological phases in two dimensions: A Chern-Simons approach. 2012 , 86,	321
1606	Exchange-field-modulated 0-ltransition and chiral edge supercurrents in a superconductor/ferromagnetic topological insulator/superconductor junction. 2012, 85,	2

1605	Edge states for topological insulators in two dimensions and their Luttinger-like liquids. 2012, 86,	7
1604	Edge superconducting correlation in the attractive-U Kane-Mele-Hubbard model. 2012 , 86,	6
1603	Effect of an in-plane electric field on the magnetotransport in a helical metal. 2012 , 86,	2
1602	Robustness of helical edge states in topological insulators. 2012 , 85,	17
1601	Models of three-dimensional fractional topological insulators. 2012 , 86,	26
1600	Designer quantum spin Hall phase transition in molecular graphene. 2012 , 86,	23
1599	Electrical switching and interferometry of massive Dirac particles in topological insulator constrictions. 2012 , 86,	41
1598	Signatures of Rashba spin-orbit interaction in the superconducting proximity effect in helical Luttinger liquids. 2012 , 85,	26
1597	Kondo lattice on the edge of a two-dimensional topological insulator. 2012 , 85,	34
1596	Gate controlled spin-density wave and chiral FFLO superconducting phases in interacting helical liquids. 2012 , 86,	6
1595	High-field Shubnikov⊞e Haas oscillations in the topological insulator Bi2Te2Se. 2012 , 86,	149
1594	Superconducting proximity effect on the edge of fractional topological insulators. 2012, 86,	149
1593	Tunneling between helical edge states through extended contacts. 2012 , 85,	51
1592	Tunable quantum spin Hall effect in double quantum wells. 2012 , 85,	29
1591	Spin filtering and spin separating effects in U-shaped topological insulator devices. 2012 , 112, 073707	9
1590	Transport through a quantum spin Hall quantum dot. 2012 , 86,	34
1589	Correlation effects on a topological insulator at finite temperatures. 2012 , 85,	66
1588	Geometrical and topological aspects of graphene and related materials. 2012 , 45, 383001	46

1587	Topological phase transition and unexpected mass acquisition of Dirac fermion in TlBi(S1⊠Sex)2. 2012 , 101, 182101	5
1586	Quantum spin Hall effect in a square-lattice model under a uniform magnetic field. 2012 , 21, 077303	4
1585	Marginal topological properties of graphene: a comparison with topological insulators. 2012 , T146, 014021	14
1584	Electron Transport at the Interface Between a Ferromagnetic Insulator and a Topological Insulator. 2012 , 48, 3398-3401	2
1583	Charge transport and shot noise on the surface of a topological insulator with a magnetic modulation. 2012 , 21, 047203	6
1582	Giant and anisotropic magnetoresistances in p-type Bi-doped Sb 2 Te 3 bulk single crystals. 2012 , 100, 17014	18
1581	Bulk-Edge Correspondence for Chern Topological Phases: A Viewpoint from a Generalized Index Theorem. 2012 , 81, 114602	37
1580	Spin current generator based on topological insulator coupled to ferromagnetic insulators. 2012 , 2, 032162	4
1579	Z2Topological Anderson Insulator. 2012 , 400, 042070	2
1578	Quantum Hall and other topological states. 317-352	
1577	Electronic structure and linear magnetoresistance of the gapless topological insulator PtLuSb. 2012 , 100, 252109	37
1576	Topological field theory and the discovery of topological materials. 2012 , T146, 014022	4
1575	Andreev Bound-states of vortices and surfaces in topological superconductors. 2012 , 393, 012017	1
1574	Nonequilibrium transport through a gate-controlled barrier on the quantum spin Hall edge. 2012 , 109, 216602	18
1573	Symmetry and Topology in Superconductors D dd-Frequency Pairing and Edge States 2012 , 81, 011013	347
1572	Criticalities and Phase Transitions in the Polarization Switching of Vertical-Cavity Surface-Emitting Lasers. 2012 , 24, 2262-2264	O
1571	Polarization-driven topological insulator transition in a GaN/InN/GaN quantum well. 2012, 109, 186803	124
1570	Excitonic phases from Weyl semimetals. 2012 , 109, 196403	85

1569	Landau levels in a topological insulator. 2012 , 85,	4
1568	Two- and three-dimensional topological insulators with isotropic and parity-breaking Landau levels. 2012 , 85,	38
1567	Isotropic Landau levels of Dirac fermions in high dimensions. 2012 , 85,	19
1566	Time-reversal-invariant Hofstadter-Hubbard model with ultracold fermions. 2012 , 109, 205303	65
1565	Dependence of topological Anderson insulator on the type of disorder. 2012 , 85,	48
1564	Electronic structure of Fe and Co magnetic adatoms on Bi2Te3 surfaces. 2012 , 86,	34
1563	Strain tuning of topological band order in cubic semiconductors. 2012 , 85,	41
1562	Giant topological insulator gap in graphene with 5d adatoms. 2012 , 109, 266801	162
1561	Flat bands with higher Chern number in pyrochlore slabs. 2012 , 86,	74
1560	Experimental signatures of three-dimensional fractional topological insulators. 2012 , 86,	9
1559	Magnetic-field-induced localization in 2D topological insulators. 2012 , 109, 246803	37
1558	Direct observation of unconventional topological spin structure in coupled magnetic discs. 2012 , 108, 067205	52
1557	Quantum capacitance in topological insulators. 2012 , 2, 669	20
1556	Fabrication and characterization of the gapless half-Heusler YPtSb thin films. 2012 , 112, 103910	12
1555	D-algebra structure of topological insulators. 2012 , 86,	22
1554	Bloch-Zener oscillations in graphene and topological insulators. 2012 , 85,	25
1553	Noncommutative Kubo formula: Applications to transport in disordered topological insulators with and without magnetic fields. 2012 , 86,	15
1552	Micro-Raman spectroscopy of mechanically exfoliated few-quintuple layers of Bi2Te3, Bi2Se3, and Sb2Te3 materials. 2012 , 111, 054305	218

1551	Spin injection into a metal from a topological insulator. 2012 , 86,	19
1550	Nano-optical imaging and spectroscopy of order, phases, and domains in complex solids. 2012 , 61, 745-842	167
1549	Realization of tunable Dirac cone and insulating bulk states in topological insulators (Bi(1-x)Sb(x))(2)Te(3). 2012 , 2, 976	20
1548	Aspects of Spintronics. 2012 , 247-266	1
1547	Quantum transport in topological insulator hybrid structures combination of topological insulator and superconductor. 2012 , 55, 2226-2236	9
1546	Ultrashort optical pulse in a thin film of a topological insulator. 2012 , 33, 227-230	
1545	Inelastic electron backscattering in a generic helical edge channel. 2012 , 108, 156402	155
1544	Connection of edge states to bulk topological invariance in a quantum spin Hall state. 2012 , 108, 196806	36
1543	Electronic structure of InAs/GaSb core-shell nanowires. 2012 , 86,	27
1542	Smooth gauge for topological insulators. 2012 , 85,	62
1541	Phase diagram of the strongly correlated Kane-Mele-Hubbard model. 2012 , 85,	23
1540	EXPLANATION OF COMPOSITE FERMION STRUCTURE IN FRACTIONAL QUANTUM HALL SYSTEMS. 2012 , 26, 1230011	4
1539	Spatial distribution of spin polarization in a channel on the surface of a topological insulator. 2012 , 24, 185301	3
1538	Multi-Weyl topological semimetals stabilized by point group symmetry. 2012 , 108, 266802	366
1537	Disorder-induced quantum phase transitions in three-dimensional topological insulators and superconductors. 2012 , 85,	38
1536	Fractional quantum-Hall liquid spontaneously generated by strongly correlated t(2g) electrons. 2012 , 108, 126405	63
1535	Tight-binding calculations of the optical properties of HgTe nanocrystals. 2012, 86,	41
1534	Noncommutative geometry for three-dimensional topological insulators. 2012 , 86,	40

1533	Quasiparticle states and quantum interference induced by magnetic impurities on a two-dimensional topological superconductor. 2012 , 24, 145502		4
1532	Strongly correlated topological superconductors and topological phase transitions via Green's function. 2012 , 86,		35
1531	Quantum anomalous Hall effect with tunable Chern number in magnetic topological insulator film. 2012 , 85,		93
1530	A note on the topological insulator phase in non-Hermitian quantum systems. 2012 , 24, 145302		17
1529	Andreev reflection in two-dimensional topological insulators with either conserved or broken time-reversal symmetry. 2012 , 86,		13
1528	Magnetic ordering phenomena of interacting quantum spin Hall models. 2012, 86,		55
1527	Transversal propagation of helical edge states in quantum spin Hall systems. 2012 , 98, 17004		12
1526	Actinide topological insulator materials with strong interaction. <i>Science</i> , 2012 , 335, 1464-6	3.3	76
1525	Universal probes of two-dimensional topological insulators: dislocation and Iflux. 2012 , 108, 106403		72
1524	Photoinduced spin Chern number change in a two-dimensional quantum spin Hall insulator with broken spin rotational symmetry. 2012 , 85,		6
1523	Fate of topological-insulator surface states under strong disorder. 2012 , 85,		58
1522	Time-reversal invariant realization of the Weyl semimetal phase. 2012, 85,		294
1521	Single and multiparticle scattering in helical liquid with an impurity. 2012 , 85,		65
1520	Surface lattice vibration and electron-phonon interaction in topological insulator Bi 2 Te 3 (111) films from first principles. 2012 , 100, 17001		20
1519	Electronic structure and transport on the surface of topological insulator attached to an electromagnetic superlattice. 2012 , 407, 3664-3670		3
1518	Tunneling conductance in topological insulator ferromagnet/p-wave superconductor junctions. 2012 , 152, 1655-1659		7
1517	Native defects in second-generation topological insulators: Effect of spin-orbit interaction on Bi2Se3. 2012 , 86,		97
1516	Bulk topological invariants in noninteracting point group symmetric insulators. 2012 , 86,		245

1515	Optimizing the Majorana character of SQUIDs with topologically nontrivial barriers. 2012, 86,	17
1514	Proximity-induced high-temperature superconductivity in the topological insulators Bißeland Bille (12012, 3, 1056	132
1513	Prediction of weak topological insulators in layered semiconductors. 2012 , 109, 116406	74
1512	Unwinding of a one-dimensional topological superconductor. 2012 , 86,	4
1511	Topological insulator phase in halide perovskite structures. 2012 , 86,	78
1510	Chiral interconnects based on topological insulators. 2012 ,	25
1509	Renormalization group approach for the scattering off a single Rashba impurity in a helical liquid. 2012 , 86,	65
1508	Symmetries and weak localization and antilocalization of Dirac fermions in HgTe quantum wells. 2012 , 86,	20
1507	Mechanisms of infrared photoluminescence in HgTe/HgCdTe superlattice. 2012 , 112, 063512	31
1506	Magnetically doped semiconducting topological insulators. 2012 , 112, 063912	69
1505	Electrical modulation of the edge channel transport in topological insulators coupled to ferromagnetic leads. 2012 , 112, 063710	6
1504	Dirac-fermion-mediated ferromagnetism in a topological insulator. 2012 , 8, 729-733	262
1503	Electrical control of the Kondo effect in a helical edge liquid. 2012 , 86,	25
1502	Reversible tuning of the surface state in a pseudobinary Bi2(Te-Se)3 topological insulator. 2012, 86,	8
1501	First-principles calculation of topological invariants within the FP-LAPW formalism. 2012, 183, 1849-1859	41
1500	Topological insulator magnetic tunnel junctions: quantum Hall effect and fractional charge via folding. 2012 , 109, 176803	16
1499	Interaction-enhanced magnetically ordered insulating state at the edge of a two-dimensional topological insulator. 2012 , 86,	11
1498	Natural sulfur-containing minerals as topological insulators with a wide band gap. 2012 , 96, 322-325	19

Effects of the electron-electron interaction on the surface of three-dimensional topological insulators. 2012 , 96, 480-485	3
1496 Extremely short optical pulse in a thin-film topological insulator with a hexagonal lattice. 2012 , 54,	1625-1627
Electron transport with tunable ferromagnetic barriers on the surface of topological insulators. 2012 , 85, 1	11
1494 Interfacial charge current in a magnetised/normal graphene junction. 2012 , 85, 1	3
1493 Symmetry-protected quantum phase transition in topological insulators. 2012 , 85, 1	1
1492 Integer quantum Hall effect on an interface with disclinations. 2012 , 85, 1	6
1491 Cyclotron resonance in HgTe/CdTe-based heterostructures in high magnetic fields. 2012 , 7, 534	39
Three-dimensional models of topological insulators: engineering of Dirac cones and robustness of the spin texture. 2012 , 109, 266805	19
1489 Topological materials. 2012 , 75, 096501	264
Topological electronic structure and Weyl semimetal in the TlBiSe2 class of semiconductors. 2012 , 86,	118
1487 Topological insulator nanostructures for near-infrared transparent flexible electrodes. 2012 , 4, 287	1-6 270
Magnetospectroscopy of two-dimensional HgTe-based topological insulators around the critical thickness. 2012 , 86,	79
1485 Topological phases in a two-dimensional lattice: Magnetic field versus spin-orbit coupling. 2012 , 86	5, 56
$_{1484}$ Large insulating gap in topological insulators induced by negative spin-orbit splitting. 2012 , 86,	19
Photoemission spectroscopy of magnetic and nonmagnetic impurities on the surface of the Bi2Se3 topological insulator. 2012 , 108, 117601	164
Magnetic dead layer at the interface between a Co film and the topological insulator Bi2Se3. 2012 , 86,	31
1481 Shockley model description of surface states in topological insulators. 2012 , 86,	86
1480 Experimental realization of a topological crystalline insulator in SnTe. 2012 , 8, 800-803	661

1479 Bi2Te1.6S1.4: A topological insulator in the tetradymite family. 2012 , 85,	36
Probing two topological surface bands of Sb2Te3 by spin-polarized photoemission spectroscopy. 2012 , 86,	73
Weak antilocalization and conductance fluctuation in a submicrometer-sized wire of epitaxial Bi2Se3. 2012 , 85,	71
1476 Thermodynamic and stoichiometric stability of the Cd-terminated CdTe (111) surface. 2012 , 85,	7
Three-dimensional topological insulators: A review on host materials. 2012 , 55, 2199-2212	26
1474 Theory of Electronic Transport in Nanostructures. 2012 , 41-69	
1473 Topological semimetal in a fermionic optical lattice. 2012 , 8, 67-70	144
1472 Introduction. 2012, 1-11	1
1471 Quantum Spin Hall Effect. 2012 , 85-112	
1470 Impurities and Defects in Topological Insulators. 2012 , 141-158	
1469 Topological Anderson Insulator. 2012 , 191-201	
1468 Revelation of topological surface states in Bi2Se3 thin films by in situ Al passivation. 2012 , 6, 295-302	85
The comprehensive phase evolution for Bi2Te3 topological compound as function of pressure. 2012 , 111, 112630	39
1466 Interaction-induced topological insulator states in strained graphene. 2012 , 109, 066802	41
A high-sensitive and fast-fabricated glucose biosensor based on Prussian blue/topological insulator Bi2Se3 hybrid film. 2012 , 38, 289-94	30
1464 Robust level coincidences in the subband structure of quasi-2D systems. 2012 , 152, 2096-2099	23
1463 Local photocurrent generation in thin films of the topological insulator Bi2Se3. 2012 , 101, 251110	25
1462 Optically engineering the topological properties of a spin Hall insulator. 2012 , 108, 056602	145

1461 Photomixing in topological insulator HgTe/CdTe quantum wells in terahertz regime. 2012 , 101, 211	109 11
1460 Dynamical band-engineering of spin-polarized edge-states in normal insulators. 2012 , 100, 203106	2
Weak anti-localization and quantum oscillations of surface states in topological insulator BiBeIIe. 2012 , 2, 726	145
Topological insulators in magnetic fields: quantum Hall effect and edge channels with a nonquantized \pm no	89
1457 Electron entanglement detected by quantum spin Hall systems. 2012 , 109, 036802	26
1456 Fractional topological phase in one-dimensional flat bands with nontrivial topology. 2012 , 86,	33
1455 Gauge-fixed Wannier wave functions for fractional topological insulators. 2012 , 86,	54
1454 Disorder dependence of helical edge states in HgTe/CdTe quantum wells. 2012 , 14, 043028	13
1453 Simple tuning of carrier type in topological insulator Bi2Se3 by Mn doping. 2012 , 101, 152103	44
The electronic structure of clean and adsorbate-covered Bi2Se3: an angle-resolved photoemission study. 2012 , 27, 124001	42
1451 Magnetoplasmon spectrum of two-dimensional helical metals. 2012 , 14, 013047	
1450 Introduction to Topological Insulators. 2012 , 01, 31-36	2
Probing the band topology of mercury telluride through weak localization and antilocalization. 2012 , 27, 124006	11
$_{1448}$ Weak antilocalization in HgTe quantum wells with inverted energy spectra. 2012 , 85,	21
1447 Quantum capacitance in topological insulators under strain in a tilted magnetic field. 2012 , 101, 23	1609 1
1446 Zoology of fractional Chern insulators. 2012 , 85,	107
Experimental realization of superconducting quantum interference devices with topological insulator junctions. 2012 , 100, 072602	54
Experimental evidence on the Altshuler-Aronov-Spivak interference of the topological surface states in the exfoliated Bi2Te3 nanoflakes. 2012 , 100, 083107	18

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1443	Geometrical engineering of a two-band Chern insulator in two dimensions with arbitrary topological index. 2012 , 85,	52
1442	Room temperature giant and linear magnetoresistance in topological insulator Bi2Te3 nanosheets. 2012 , 108, 266806	201
1441	Topological Weyl semi-metal from a lattice model. 2012 , 97, 67004	84
1440	Quantum percolation in quantum spin Hall antidot systems. 2012 , 100, 17013	14
1439	Continuum theory of edge states of topological insulators: variational principle and boundary conditions. 2012 , 24, 355001	17
1438	Spin-dependent thermoelectric transport in HgTe/CdTe quantum wells. 2012 , 86,	29
1437	Quick, controlled synthesis of ultrathin Bi2Se3 nanodiscs and nanosheets. 2012 , 134, 2872-5	133
1436	. 2012 , 116, 12977-12981	47
1435	Spin-polarized current induced by a local exchange field in a silicene nanoribbon. 2012 , 14, 083039	52
1434	Graphene-Based Heterojunction between Two Topological Insulators. 2012 , 2,	21
1433	Exotic topological insulator states and topological phase transitions in Sb2Se3-Bi2Se3 heterostructures. 2012 , 6, 2345-52	51
1432	Impurity states in the quantum spin Hall phase in graphene. 2012 , 86,	14
1431	Evidence for Dirac fermions in a honeycomb lattice based on silicon. 2012 , 109, 056804	577
1430	Spin interference of holes in silicon nanosandwiches. 2012 , 46, 75-86	11
1429	Quantum spin Hall insulators with interactions and lattice anisotropy. 2012 , 85,	113
1428	Topological quantum phase transitions driven by external electric fields in SbIIelthin films. 2012 , 109, 671-4	59
1427	Transport in three-dimensional topological insulators: Theory and experiment. 2012 , 44, 860-884	110
1426	Chiral symmetry breaking in graphene. 2012 , T146, 014016	44

1425 From fractional Chern insulators to a fractional quantum spin hall effect. 2012 , 85, 1	50
1424 Spintronics and pseudospintronics in graphene and topological insulators. 2012 , 11, 409-16	760
1423 Josephson supercurrent through a topological insulator surface state. 2012 , 11, 417-21	241
1422 Topological insulators in filled skutterudites. 2012 , 85,	53
1421 Computational design of axion insulators based on 5d spinel compounds. 2012 , 108, 146601	101
1420 Evidence of silicene in honeycomb structures of silicon on Ag(111). 2012 , 12, 3507-11	1055
Effect of magnetic field on electron transport in HgTe/CdTe quantum wells: Numerical analysis. 2012, 85,	45
1418 Reentrant topological phases in Mn-doped HgTe quantum wells. 2012 , 85,	21
1417 Emergence of non-centrosymmetric topological insulating phase in BiTeI under pressure. 2012 , 3, 679	178
Nonlocal transport near charge neutrality point in a two-dimensional electron-hole system. 2012 , 108, 226804	31
1415 Conformal field theory approach to Fermi liquids and other highly entangled states. 2012 , 86,	28
Effective Hamiltonian, energy spectrum, and phase transition induced by in-plane magnetic field in symmetric HgTe quantum wells. 2012 , 85,	48
1413 Spin polarization of the quantum spin Hall edge states. 2012 , 8, 485-490	213
1412 Left up right down. 2012 , 8, 448-449	1
Interference effects of helical current: Geometry-dependent spin polarization of transmitted electrons. 2012 , 85,	5
1410 Surface magnetic ordering in topological insulators with bulk magnetic dopants. 2012 , 85,	80
1409 Angle-Resolved Photoemission Studies of Quantum Materials. 2012 , 3, 129-167	59
Halogenated two-dimensional germanium: candidate materials for being of Quantum Spin Hall state. 2012 , 22, 12587	74

Gate-controlled surface conduction in Na-doped Bi2Te3 topological insulator nanoplates. 2012 , 12, 1170-5	119
Topological and electronic transitions in a Sb(111) nanofilm: The interplay between quantum confinement and surface effect. 2012 , 85,	146
1405 New directions in the pursuit of Majorana fermions in solid state systems. 2012 , 75, 076501	1790
1404 Magnetic properties of HgTe quantum wells. 2012 , 86,	34
Topological Insulators from a Chemist® Perspective. 2012 , 124, 7333-7337	21
1402 Topological insulators from a chemist's perspective. 2012 , 51, 7221-5	78
1401 Localization and mobility gap in the topological Anderson insulator. 2012 , 85,	38
1400 Band inversion mechanism in topological insulators: A guideline for materials design. 2012 , 85,	59
1399 Junction between surfaces of two topological insulators. 2012 , 85,	30
1398 Topological quantum phase transition in 5d transition metal oxide Na2IrO3. 2012 , 108, 106401	83
Topological phase transition in layered GaS and GaSe. 2012 , 108, 266805	88
The coexistence of superconductivity and topological order in the BiBelthin films. <i>Science</i> , 2012 , 336, 52-5	371
1395 Dissipationless phonon Hall viscosity. 2012 , 85,	29
1394 Spatial and energy distribution of topological edge states in single Bi(111) bilayer. 2012 , 109, 016801	246
1393 Tunable thermopower in a graphene-based topological insulator. 2012 , 85,	25
1392 Electron transport properties of three-dimensional topological insulators. 2012 , 7, 165-174	25
Studies on the electronic structures of three-dimensional topological insulators by angle resolved photoemission spectroscopy. 2012 , 7, 175-192	29
1390 Quantum spin Hall effect in inverted InAs/GaSb quantum wells. 2012 , 7, 200-207	28

1389	Superconductivity of topological matters induced via pressure. 2012 , 7, 193-199	27
1388	Quantum phase transition of cold atoms trapped in optical lattices. 2012 , 7, 223-234	6
1387	Topological insulator: Both two- and three-dimensional. 2012 , 7, 148-149	1
1386	Cyclotron resonance of Dirac ferions in HgTe quantum wells. 2012 , 94, 816-819	28
1385	Effective field theory of a topological insulator and the FoldyWouthuysen transformation. 2012 , 327, 935-951	3
1384	Colossal anisotropy in diluted magnetic topological insulators. 2012 , 152, 403-406	17
1383	A rigorous proof for non-existence of edge state in the semi-infinite armchair edged graphene. 2012 , 407, 724-728	5
1382	Quantum oscillations in a topological insulator Bi2Te2Se with large bulk resistivity (). 2012 , 44, 917-920	142
1381	Photogalvanic in ultrathin film of topological insulator. 2012 , 44, 895-899	14
1380	Scanning tunneling microscopy studies of topological insulators. 2012 , 44, 912-916	10
1379	Half quantum spin Hall effect on the surface of weak topological insulators. 2012 , 44, 906-911	43
1378	Topological insulators and quantum spin liquids. 2012 , 44, 845-859	23
1377	Two-dimensional topological insulators in quantizing magnetic fields. 2012 , 44, 900-905	8
1376	Finite size effects of the surface states in a lattice model of topological insulator. 2012 , 44, 885-890	13
1375	Preface. 2012 , 44, 843-844	
1374	Effects of surface modification on the properties of topological surface states in Bi2Se3. 2012 , 376, 768-772	5
1373	Ab initio study of 2DEG at the surface of topological insulator Bi2Te3. 2012 , 95, 213-218	21
1372	Local topological phase transitions in periodic condensed matter systems. 2012 , 85, 1	1

Spin-related tunneling through a nanostructured electric-magnetic barrier on the surface of a topological insulator. 2012 , 7, 90	9
Transport Properties of Topological Insulator-Based Ferromagnet/f-Wave Superconductor Junction. 2013 , 26, 3355-3362	4
1369 Coupled spin and pseudomagnetic field in graphene nanoribbons. 2013 , 88,	10
Phase structure of two-dimensional topological insulators by lattice strong-coupling expansion. 2013 , 87,	11
1367 Interaction and disorder effects in three-dimensional topological insulator thin films. 2013 , 88,	19
EDGE MAGNETISM AND QUANTUM SPIN HALL EFFECT IN ZIGZAG GRAPHENE NANORIBBON. 2013 , 27, 1362011	2
1365 Giant photocurrents in a Dirac fermion system at cyclotron resonance. 2013 , 87,	55
1364 Optical conductivities and signatures of topological insulators with hexagonal warping. 2013 , 88,	23
1363 Electron microscopy: watching the rise and fall of a dislocation. 2013 , 8, 542	
1362 Topological insulators: plasmons at the surface. 2013 , 8, 541-2	12
Topological insulators: plasmons at the surface. 2013 , 8, 541-2 1361 Z2 fractionalized Chern/topological insulators in an exactly soluble correlated model. 2013 , 88,	12 8
1361 Z2 fractionalized Chern/topological insulators in an exactly soluble correlated model. 2013 , 88,	8
 Z2 fractionalized Chern/topological insulators in an exactly soluble correlated model. 2013, 88, The Kondo effect in three-dimensional topological insulators. 2013, 25, 286001 	8
 Z2 fractionalized Chern/topological insulators in an exactly soluble correlated model. 2013, 88, The Kondo effect in three-dimensional topological insulators. 2013, 25, 286001 Topological signatures in the electronic structure of graphene spirals. 2013, 3, 1632 	3 30
 Z2 fractionalized Chern/topological insulators in an exactly soluble correlated model. 2013, 88, The Kondo effect in three-dimensional topological insulators. 2013, 25, 286001 Topological signatures in the electronic structure of graphene spirals. 2013, 3, 1632 Transport through quantum spin Hall insulator/metal junctions in graphene ribbons. 2013, 12, 63-75 	8 3 30 13
 7361 Z2 fractionalized Chern/topological insulators in an exactly soluble correlated model. 2013, 88, 1360 The Kondo effect in three-dimensional topological insulators. 2013, 25, 286001 1359 Topological signatures in the electronic structure of graphene spirals. 2013, 3, 1632 1358 Transport through quantum spin Hall insulator/metal junctions in graphene ribbons. 2013, 12, 63-75 1357 First-principles study of native point defects in Bi2Se3. 2013, 3, 052105 	8 3 30 13 56

1353	Topological phase transition induced by spin-orbit coupling in bilayer graphene. 2013 , 25, 335503	10
1352	Spin-based effects and transport properties of a spin-orbit-coupled hexagonal optical lattice. 2013 , 88,	7
1351	Nonequilibrium transport of helical Luttinger liquids through a quantum dot. 2013, 88,	7
1350	Topological insulators with commensurate antiferromagnetism. 2013, 88,	68
1349	Quantum spin/valley Hall effect and topological insulator phase transitions in silicene. 2013 , 102, 162412	107
1348	Transport properties of topological insulators films and nanowires. 2013 , 22, 067302	8
1347	Topological edge states and electronic structures of a 2D topological insulator: Single-bilayer Bi (111). 2013 , 22, 067304	11
1346	Anomalous Edge States and the Bulk-Edge Correspondence for Periodically Driven Two-Dimensional Systems. 2013 , 3,	494
1345	Quantum magnetotransport properties of ultrathin topological insulator films. 2013 , 113, 043720	13
1344	Quantum Hall effect in gapped graphene heterojunctions. 2013 , 88,	13
1343	Photogalvanic effects in topological insulators. 2013 , 97, 82-86	21
1342	Nanostructured Inorganic@rganic Hybrid Semiconductor Materials. 2013 , 375-415	2
1341	Thickness-dependent bulk electronic properties in Bi2Se3 thin films revealed by infrared spectroscopy. 2013 , 88,	42
1340	Highly efficient visual detection of trace copper(II) and protein by the quantum photoelectric effect. 2013 , 85, 8735-40	27
1339	Weyl fermions and the anomalous Hall effect in metallic ferromagnets. 2013, 88,	75
1338	Quantum magnetotransport for the surface states of three-dimensional topological insulators in the presence of a Zeeman field. 2013 , 102, 37001	2
1337	D3-D7 holographic dual of a perturbed 3D CFT. 2013 , 88,	6
1336	Evolution of topological surface states in antimony ultra-thin films. 2013 , 3, 2010	32

1335	Surface lattice dynamics and electron-phonon interaction in ultrathin Bi(111) film. 2013, 25, 175004	8
1334	In-plane magnetization-induced quantum anomalous Hall effect. 2013 , 111, 086802	61
1333	Interface transport properties in ion-gated nano-sheets. 2013 , 222, 1185-1201	9
1332	Ac Josephson effect in topological Josephson junctions. 2013 , 14, 840-856	40
1331	Quantum anomalous Hall effect with higher plateaus. 2013 , 111, 136801	95
1330	Spin textures of strongly correlated spin Hall quantum dots. 2013 , 7, 1059-1063	19
1329	Quasiparticle interference on the surface of the topological crystalline insulator Pb1\(\mathbb{B}\)SnxSe. 2013 , 88,	35
1328	Spin Hall Effects in Metals. 2013 , 49, 5172-5193	715
1327	Superconductivity in copper intercalated topological compound CuxBi2Te3 induced via high pressure. 2013 , 493, 75-76	7
1326	Large-gap quantum spin Hall insulators in tin films. 2013 , 111, 136804	952
1325	Manipulating surface-related ferromagnetism in modulation-doped topological insulators. 2013 , 13, 4587-93	66
1324	Engineering topological surface states: HgS, HgSe, and HgTe. 2013 , 111, 146803	23
1323	Interface-induced topological insulator transition in GaAs/Ge/GaAs quantum wells. 2013, 111, 156402	99
1322	Topological insulator Bi2Se3(111) surface doped with transition metals: An ab initio investigation. 2013 , 88,	46
1321	Spatial delocalization and perfect tunneling of matter waves: electron perfect lens. 2013, 110, 213902	21
1320	Proposal for the detection and braiding of Majorana fermions in a quantum spin Hall insulator. 2013 , 87,	51
1319	Interplay between different magnetisms in Cr-doped topological insulators. 2013 , 7, 9205-12	94
1318	Ab initio study of Z2 topological phases in perovskite (111) (SrTiO3)7/(SrIrO3)2 and (KTaO3)7/(KPtO3)2 multilayers. 2013 , 88,	34

1317	Meron ground state of Rashba spin-orbit-coupled dipolar bosons. 2013 , 111, 185303	62
1316	Weak localization and Berry flux in topological crystalline insulators with a quadratic surface spectrum. 2013 , 88,	4
1315	Photocurrent response of topological insulator surface states. 2013 , 88,	57
1314	Non-Fermi-liquid and topological states with strong spin-orbit coupling. 2013 , 111, 206401	157
1313	Graphene-based topological insulator with an intrinsic bulk band gap above room temperature. 2013 , 13, 6251-5	102
1312	Interaction effects on almost flat surface bands in topological insulators. 2013, 88,	6
1311	Photonic spin Hall effect in topological insulators. 2013 , 88,	58
1310	From magnetically doped topological insulator to the quantum anomalous Hall effect. 2013 , 22, 067305	28
1309	The Science of Clays. 2013,	18
1308	Charge d-wave topological insulator. 2013 , 117, 718-727	1
1307	Models and Materials for Topological Insulators. 2013 , 6, 59-89	2
1306	New Materials. 2013 , 237-262	
1305	Impurity influence in quantum spin Hall transport. 2013 , 88,	10
1304	Electronic structure of topological insulators with MM?X half-Heusler compounds using density functional theory. 2013 , 546, 436-438	9
1303	TOPOLOGICAL FLAT BAND MODELS AND FRACTIONAL CHERN INSULATORS. 2013 , 27, 1330017	234
1302	Self-localized states in photonic topological insulators. 2013 , 111, 243905	154
1301	Topological phase transition and two-dimensional topological insulators in Ge-based thin films. 2013 , 88,	15
1300	Topological phase transitions in Sb(111) films driven by external strain and electric field. 2013 , 104, 57011	12

1299	Topological insulator nanostructures and devices. 2013 , 22, 096104	12
1298	An introduction to topological insulators. 2013 , 14, 779-815	94
1297	In-plane magnetic textures at the surface of topological insulators. 2013 , 104, 17001	4
1296	Elemental topological insulator with tunable Fermi level: strained 🖺 n on InSb(001). 2013 , 111, 157205	110
1295	MBE Growth of Thin Hexagonal Films Bi2Te3, Bi2Se3, and Their Alloys on Cubic GaAs (001) Substrates. 2013 , 263-279	O
1294	Topological Surface States: A New Type of 2D Electron Systems. 2013 , 143-174	2
1293	Quantum Spin Hall State in HgTe. 2013 , 6, 125-142	
1292	Field-Theory Foundations of Topological Insulators. 2013 , 6, 91-122	2
1291	Topological Band Theory and the Z2 Invariant. 2013 , 6, 3-34	19
1290	Visualizing Topological Surface States and their Novel Properties using Scanning Tunneling Microscopy and Spectroscopy. 2013 , 175-198	3
1289	Topological insulators with SU(2) Landau levels. 2013 , 111, 186803	27
1288	Design principles for HgTe based topological insulator devices. 2013 , 114, 043702	22
1287	Algebraic and geometric mean density of states in topological Anderson insulators. 2013, 88,	12
1286	Synthesis, thermogravimetry, optical features and X-ray structural characterization of a new HgIIe dinuclear cluster compound obtained using an ultrasonic bath. 2013 , 724, 135-138	12
1285	Topological phases in gated bilayer graphene: Effects of Rashba spin-orbit coupling and exchange field. 2013 , 87,	33
1284	Electronic and crystalline structures of zero band-gap LuPdBi thin films grown epitaxially on MgO(100). 2013 , 102, 172401	10
1283	Review of 3D topological insulator thin-film growth by molecular beam epitaxy and potential applications. 2013 , 7, 50-63	125
1282	Two-dimensional semimetal in wide HgTe quantum wells: Charge-carrier energy spectrum and magnetotransport. 2013 , 47, 1562-1566	3

Detection of topological symmetry in the one-dimensional Affleck-Kennedy-Lieb-Tasaki model of integer spin with ultracold spinor atoms in optical lattices. **2013**, 56, 2128-2133

1280	A large-energy-gap oxide topological insulator based on the superconductor BaBiO3. 2013 , 9, 709-711	121
1279	Suppression of bulk conductivity in InAs/GaSb broken gap composite quantum wells. 2013, 103, 112102	26
1278	Surface and vortex bound states in topological superconductors. 2013 , 494, 17-19	1
1277	Group theoretical and topological analysis of the quantum spin Hall effect in silicene. 2013 , 15, 085030	38
1276	Topological phase transition without gap closing. 2013 , 3, 2790	66
1275	Floquet topological insulators. 2013 , 7, 101-108	285
1274	Wave-vector filtering effect of the electric-magnetic barrier in HgTe quantum wells. 2013 , 22, 037304	
1273	Control of spin in a La(Mn,Zn)AsO alloy by carrier doping. 2013 , 1, 7197	16
1272	The Effect of Spin-Orbit Coupling on the Electronic Structures and Half-Metallicity of Heusler Compounds: V2ReZ (Z=Al, Ga, ln). 2013 , 683, 211-217	
1271	Non-orthogonal tight-binding model for tellurium and selenium. 2013 , 93, 3216-3230	10
1270	Interference of topologically protected edge states in silicene nanoribbons. 2013, 88,	59
1269	Resonant tunneling in a topological insulator superlattice. 2013 , 114, 093703	4
1268	NUMERICAL STUDY OF TRANSPORT PROPERTIES IN TOPOLOGICAL INSULATOR QUANTUM DOTS UNDER MAGNETIC FIELD. 2013 , 27, 1350104	5
1267	High performance topological insulator nanowire field-effect transistors. 2013,	О
1266	A time-reversal invariant topological phase at the surface of a 3D topological insulator. 2013 , 2013, P09016	121
1265	Bifurcation of the edge-state width in a two-dimensional topological insulator. 2013 , 88,	6
1264	Topological insulators from the perspective of first-principles calculations. 2013 , 7, 72-81	58

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1263	Low-temperature surface conduction in the Kondo insulator SmB6. 2013 , 88,	264
1262	Surface states in negative-band-gap semiconductor films: Intrinsic or topological?. 2013 , 410, 147-156	8
1261	The space group classification of topological band-insulators. 2013 , 9, 98-102	342
1260	Photonic topological insulators. 2013 , 12, 233-9	1045
1259	Graphene-like two-dimensional materials. 2013 , 113, 3766-98	3191
1258	Exact results for the Kondo screening cloud of two helical liquids. 2013 , 110, 016602	24
1257	Modulated Floquet topological insulators. 2013 , 110, 016802	111
1256	Topological spin-polarized electron layer above the surface of Ca-terminated Bi2Se3. 2013 , 87,	8
1255	Persistence of phase boundaries between a topological and trivial Z2 insulator. 2013 , 87,	1
1254	Vortex lattices in the superconducting phases of doped topological insulators and heterostructures. 2013 , 87,	24
1253	Spin texture on the Fermi surface of tensile-strained HgTe. 2013 , 87,	42
1252	Devices with electrically tunable topological insulating phases. 2013 , 102, 063503	29
1251	Quantum hall effect in n-p-n and n-2D topological insulator-n junctions. 2013 , 110, 076805	15
1250	Absence of nonlocal resistance in microstructures of PbTe quantum wells. 2013 , 250, 37-47	9
1249	Introduction to Dirac materials and topological insulators. 2013 , 14, 760-778	51
1248	Quantum spin Hall effect in a disordered hexagonal SixGe1\(\textbf{\textit{B}}\) alloy. 2013 , 88,	21
1247	Plutonium hexaboride is a correlated topological insulator. 2013 , 111, 176404	59
1246	Influence of bulk inversion asymmetry on the magneto-optical spectrum of a HgTe topological insulator. 2013 , 88,	10

1245 Correlation-driven phase transition in a Chern insulator. 2013 , 88,	8
Quantum anomalous Hall effect and tunable topological states in 3d transition metals doped silicene. 2013 , 3, 2908	137
1243 Bulk-Edge Correspondence for Two-Dimensional Topological Insulators. 2013 , 324, 851-895	116
1242 Separation of top and bottom surface conduction in Bi2Te3 thin films. 2013 , 24, 015705	40
1241 Band gap tuning in HgTe through uniaxial strains. 2013 , 166, 1-5	3
Electromagnetic and thermal responses in topological matter: Topological terms, quantum anomalies and D-branes. 2013 , 14, 871-883	15
Quantum spin Hall effect induced by electric field in silicene. 2013 , 102, 043113	51
Interaction- and filling-induced quantum anomalous Hall effect in ultracold neutral Bose-Fermi mixtures on a hexagonal lattice. 2013 , 87,	4
Electron transport in a ferromagnetic/normal/ferromagnetic tunnel junction based on the surface of a topological insulator. 2013 , 86, 1	5
1236 Quantum spin liquid in interacting Kane-Mele model with staggered on-site potential. 2013 , 86, 1	3
1235 Topological protection of bound states against the hybridization. 2013 , 4, 1524	34
1234 Electron transport in a HgTe quantum spin Hall bar with periodic electric modulations. 2013 , 161, 34	-37 1
1233 Correlation effects in two-dimensional topological insulators. 2013 , 25, 143201	129
1232 Gapless interface states at the junction between two topological insulators. 2013 , 87,	8
Pairing instabilities in topological insulator quantum wells. 2013 , 87,	3
Generating and controlling spin-polarized currents induced by a quantum spin Hall antidot. 2013 , 87,	32
Topological phase diagrams of bulk and monolayer TiS2-x Tex. 2013 , 110, 077202	38
1228 Stacked topological insulator built from bismuth-based graphene sheet analogues. 2013 , 12, 422-5	144

1227	Correlated topological insulators with mixed valence. 2013 , 110, 096401	245
1226	Topological phase transition in bulk materials described by the coherent potential approximation technique. 2013 , 7, 82-89	8
1225	Kondo effect on the surface of three-dimensional topological insulators: Signatures in scanning tunneling spectroscopy. 2013 , 87,	36
1224	Prediction of topological insulating behavior in inverse Heusler compounds from first principles. 2013 , 70, 145-149	15
1223	Organic topological insulators in organometallic lattices. 2013 , 4, 1471	195
1222	Measuring the Chern number with quantum oscillations. 2013 , 87,	7
1221	Evidence for a spin phase transition at charge neutrality in bilayer graphene. 2013 , 9, 154-158	115
1220	Massive Dirac surface states in topological insulator/magnetic insulator heterostructures. 2013, 87,	115
1219	Distant-neighbor hopping in graphene and Haldane models. 2013 , 87,	32
1218	Disordered topological metals. 2013 , 87,	8
1217	Bismuth-based candidates for topological insulators: Chemistry beyond Bi2Te3. 2013 , 7, 39-49	31
1217 1216		
,	Bismuth-based candidates for topological insulators: Chemistry beyond Bi2Te3. 2013 , 7, 39-49 Zero-energy states bound to a magnetic Flux vortex in a two-dimensional topological insulator.	31
1216	Bismuth-based candidates for topological insulators: Chemistry beyond Bi2Te3. 2013 , 7, 39-49 Zero-energy states bound to a magnetic Eflux vortex in a two-dimensional topological insulator. 2013 , 867, 977-991	31
1216	Bismuth-based candidates for topological insulators: Chemistry beyond Bi2Te3. 2013 , 7, 39-49 Zero-energy states bound to a magnetic Eflux vortex in a two-dimensional topological insulator. 2013 , 867, 977-991 Proximity effects in a topological-insulator/Mott-insulator heterostructure. 2013 , 87,	31 14 8
1216 1215 1214	Bismuth-based candidates for topological insulators: Chemistry beyond Bi2Te3. 2013, 7, 39-49 Zero-energy states bound to a magnetic Eflux vortex in a two-dimensional topological insulator. 2013, 867, 977-991 Proximity effects in a topological-insulator/Mott-insulator heterostructure. 2013, 87, Tunable topological electronic structures in Sb(111) bilayers: A first-principles study. 2013, 102, 022424	31 14 8
1216 1215 1214 1213	Bismuth-based candidates for topological insulators: Chemistry beyond Bi2Te3. 2013, 7, 39-49 Zero-energy states bound to a magnetic Eflux vortex in a two-dimensional topological insulator. 2013, 867, 977-991 Proximity effects in a topological-insulator/Mott-insulator heterostructure. 2013, 87, Tunable topological electronic structures in Sb(111) bilayers: A first-principles study. 2013, 102, 022424 Staggered Spin-Orbit Order: A New Paradigm of Broken Symmetry Phase of Matter. 2013, 26, 1673-1677	31 14 8

1209	Bulk and surface electronic structure of SnBi4Te7 topological insulator. 2013 , 267, 146-149	9
1208	Fractional topological insulators of Cooper pairs induced by the proximity effect. 2013 , 110, 176804	10
1207	Interplay of Superconductivity and Topological Order in HgTe Quantum Wells. 2013, 26, 2881-2883	1
1206	Topological insulators and thermoelectric materials. 2013 , 7, 91-100	127
1205	Spin-orbit interactions in a helical Luttinger liquid with a Kondo impurity. 2013 , 87,	15
1204	Magnetic Heusler Compounds. 2013 , 1-75	17
1203	Imaging currents in HgTe quantum wells in the quantum spin Hall regime. 2013, 12, 787-91	195
1202	Prediction of a two-dimensional organic topological insulator. 2013 , 13, 2842-5	233
1201	Mesoscopic fluctuations of conductance of a helical edge contaminated by magnetic impurities. 2013 , 110, 206803	36
1200	Geometry-induced quantum dots on surfaces with Gaussian bumps. 2013 , 86, 1	6
1199	Topological insulating states in laterally patterned ordinary semiconductors. 2013 , 110, 186601	34
1198	Crystal Growth and Real Structure Effects of the First Weak 3D Stacked Topological Insulator Bi14Rh3I9. 2013 , 25, 2359-2364	27
1197	Backscattering between helical edge states via dynamic nuclear polarization. 2013 , 87,	32
1196	High-dimensional topological insulators with quaternionic analytic Landau levels. 2013 , 110, 216802	31
1195	Helical edge resistance introduced by charge puddles. 2013 , 110, 216402	151
1194	Layer-by-layer entangled spin-orbital texture of the topological surface state in Bi2Se3. 2013 , 110, 216401	96
1193	Antiferromagnetic topological insulator state in the correlated Bernevig-Hughes-Zhang model. 2013 , 87,	19
1192	Proposal for an all-electrical detection of crossed Andreev reflection in topological insulators. 2013 , 110, 226802	37

1191	Criticality of the metalEopological insulator transition driven by disorder. 2013, 87,	24
1190	Magnetically robust topological edge states and flat bands. 2013, 87,	14
1189	Crystal structure and chemistry of topological insulators. 2013 , 1, 3176	164
1188	Topological Insulators in EGraphyne. 2013 , 59, 489-493	2
1187	Edge channel transport in the InAs/GaSb topological insulating phase. 2013 , 87,	100
1186	Plasma oscillations of edge Dirac fermions. 2013 , 97, 404-407	1
1185	Robustness of two-dimensional topological insulator states in bilayer bismuth against strain and electrical field. 2013 , 87,	80
1184	Superconductivity in topological insulator Sb2Te3 induced by pressure. 2013 , 3, 2016	113
1183	One-dimensional weak antilocalization in single-crystal Bi2Te3 nanowires. 2013 , 3, 1564	54
1182	Engineering three-dimensional topological insulators in Rashba-type spin-orbit coupled heterostructures. 2013 , 4, 1972	32
1181	Topological Insulator Bi2Se3 Nanowire High Performance Field-Effect Transistors. 2013, 3,	61
1180	Valley polarized quantum Hall effect and topological insulator phase transitions in silicene. 2013 , 3, 1075	139
1179	Effective theory of fractional topological insulators in two spatial dimensions. 2013, 87,	6
1178	AC/DC spin and valley Hall effects in silicene and germanene. 2013 , 87,	71
1177	Topological superconductivity without proximity effect. 2013 , 87,	10
1176	Collective modes of spin-orbit-coupled Fermi gases in the repulsive regime. 2013 , 87,	14
1175	Chiral spin-wave edge modes in dipolar magnetic thin films. 2013 , 87,	109
1174	Superconductivity in the noncentrosymmetric half-Heusler compound LuPtBi: A candidate for topological superconductivity. 2013 , 87,	109

1173	Stabilization of the quantum spin Hall effect by designed removal of time-reversal symmetry of edge states. 2013 , 110, 266802	32
1172	Topological edge States in the one-dimensional superlattice Bose-Hubbard model. 2013 , 110, 260405	97
1171	Entanglement spectrum classification of Cn-invariant noninteracting topological insulators in two dimensions. 2013 , 87,	53
1170	Tuning the vertical location of helical surface states in topological insulator heterostructures via dual-proximity effects. 2013 , 3, 1233	34
1169	Anomalous electron trajectory in topological insulators. 2013 , 87,	28
1168	Dual evidence of surface Dirac states in thin cylindrical topological insulator Billelhanowires. 2013 , 3, 1212	69
1167	The spin Hall effect in a quantum gas. 2013 , 498, 201-4	143
1166	Transport and STM studies of hyperbolic surface states of topological insulators. 2013, 87,	6
1165	Spin-pumping and inelastic electron tunneling spectroscopy in topological insulators. 2013, 87,	6
1164	Fluctuation-driven topological Hund insulators. 2013 , 87,	50
1163	Competing topological phases in few-layer graphene. 2013 , 12, 175-187	1
1162	Z2 peak of noise correlations in a quantum spin Hall insulator. 2013 , 110, 246601	21
1161	Adiabatic transformation as a search tool for new topological insulators: Distorted ternary Li2AgSb-class semiconductors and related compounds. 2013 , 87,	16
1160	Nonlocal edge state transport in topological insulators. 2013 , 88,	10
1159	Corner states of topological fullerenes. 2013 , 88,	18
1158	Anisotropic conductivity and weak localization in HgTe quantum wells with a normal energy spectrum. 2013 , 88,	4
1157	Topological insulators with unexpectedly HgTe-like band inversion in hexagonal wurtzite-type binary compounds. 2013 , 103, 57012	7
1156	Quench dynamics of edge states in 2-D topological insulator ribbons. 2013 , 86, 1	39

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1155	Lattice dynamics and electron-phonon interaction in Bi/Bi 2 Te 3 (111) heteroepitaxial film. 2013 , 104, 57003	4
1154	Role of marginality in quantum fidelity and Loschmidt echo: Dirac points in 2-D. 2013 , 102, 46001	6
1153	Anomalous currents on closed surfaces: extended proximity, partial quantization and qubits. 2013 , 25, 045003	
1152	Plasmons in single- and double-component helical liquids: Application to two-dimensional topological insulators. 2013 , 87,	6
1151	Topological insulator nanostructures. 2013 , 7, 15-25	58
1150	New quantum matters: Build up versus high pressure tuning. 2013 , 56, 2337-2350	6
1149	Transport across a junction of topological insulators and a superconductor. 2013, 87,	13
1148	Interaction-driven transition between topological states in a Kondo insulator. 2013, 88,	39
1147	Electronic Structures and Topological Properties of Bi(111) Ultrathin Films. 2013, 82, 094712	15
1146	Nontrivial topological electronic structures in a single Bi(111) bilayer on different substrates: A first-principles study. 2013 , 88,	73
1145	Two-dimensional semimetal in a wide HgTe quantum well: Magnetotransport and energy spectrum. 2013 , 88,	33
1144	High performance Bi2Se3 nanowire field-effect transistors. 2013 ,	
1143	Anomalous electron collimation in HgTe quantum wells with inverted band structure. 2013 , 25, 075801	1
1142	Charge and spin fractionalization in strongly correlated topological insulators. 2013 , 25, 025602	6
1141	Photon dressed electronic states in topological insulators: tunneling and conductance. 2013 , 25, 135502	23
1140	Optical absorption and emission of 🖺 nanocrystals from first principles. 2013, 24, 405702	10
1139	Vanishing of interband light absorption in a persistent spin helix state. 2013 , 3, 2828	17
1138	Three-terminal semiconductor junction thermoelectric devices: improving performance. 2013 , 15, 075021	30

1137 Topologica	al phase transitions with and without energy gap closing. 2013 , 15, 083042	7
	al Pumping of Spin-Polarized Currents through Helical Edge States Due to Dynamically Mass Gap. 2013 , 82, 024708	3
1135 Topologica	al Insulators. 2013 , 123-139	5
1134 Parity dep	endent Josephson current through a helical Luttinger liquid. 2013 , 15, 085025	8
1133 Quench dy	rnamics of topological maximally entangled states. 2013 , 25, 285601	10
1132 Surface ha	ll effect and nonlocal transport in SmBDevidence for surface conduction. 2013 , 3, 3150	224
1131 Quasiparti	cle dynamics in reshaped helical Dirac cone of topological insulators. 2013 , 110, 2758-62	80
1130 Topologica	al Insulators on the Ruby Lattice with Rashba Spin-Orbit Coupling. 2013 , 60, 129-135	2
1129 Dynamical	probing of a topological phase of bosons in one dimension. 2013 , 46, 085303	5
1128 Coupling-n	natrix approach to the Chern number calculation in disordered systems. 2013 , 22, 117312	29
1127 Cyclotron	resonance in HgCdTe-based heterostructures in strong magnetic fields. 2013 , 461, 012038	1
1126 Chiral Majo	orana edge states in HgTe quantum wells. 2013 , 15, 085008	17
	states and spin polarization on a topological insulator thin film modulated by an electric 2013 , 22, 077310	5
The effect ¹¹²⁴ , 2013,	of the warping term on the fractional quantum Hall states in topological insulators. 2013	
1123 Signatures	of a pressure-induced topological quantum phase transition in BiTeI. 2013 , 111, 155701	114
1122 Quantum (criticality at the Chern-to-normal insulator transition. 2013 , 87,	17
1121 Gate-Defir	ned Wires in HgTe Quantum Wells: From Majorana Fermions to Spintronics. 2013 , 3,	9
1120 Spatially R	esolved Study of Backscattering in the Quantum Spin Hall State. 2013 , 3,	62

Spin-helical transport in normal and superconducting topological insulators. 2013 , 250, 215-232	64
Quasiparticle Berry curvature and Chern numbers in spin-orbit-coupled bosonic Mott insulators. 2013 , 88,	10
Observing electronic structures on ex-situ grown topological insulator thin films. 2013 , 7, 130-132	10
1116 Anomaly induced chiral magnetic current in a Weyl semimetal: Chiral electronics. 2013 , 88,	42
Electrical switching of quantum tunneling through p-n junction in a quantum spin Hall bar. 2013 , 113, 053708	1
1114 Manipulating topological edge spins in a one-dimensional optical lattice. 2013 , 110, 076401	82
Nonlocal resistance and its fluctuations in microstructures of band-inverted HgTe/(Hg,Cd)Te quantum wells. 2013 , 88,	40
1112 Emission of time-bin entangled particles into helical edge states. 2013 , 88,	35
1111 Wave functions of bosonic symmetry protected topological phases. 2013 , 87,	67
1110 Field theory of nematicity in the spontaneous quantum anomalous Hall effect. 2013 , 88,	16
Spin-wave excitations and electron spin resonance in symmetric and asymmetric narrow-gap quantum wells. 2013 , 87,	14
1108 Topological classification with additional symmetries from Clifford algebras. 2013 , 88,	194
Zero modes around vacancies in topological insulators and topological superconductors on the honeycomb lattice with particle-hole symmetry. 2013 , 87,	19
Torsional anomalies, Hall viscosity, and bulk-boundary correspondence in topological states. 2013 , 88,	98
Dirac cone with helical spin polarization in ultrathin 🖺 n (001) films. 2013, 111, 216401	76
1104 Topological transport in spin-orbit coupled bosonic Mott insulators. 2013 , 110, 115301	13
1103 Electrically tunable two-channel Kondo fixed points in helical liquids. 2013, 88,	3

1101	Large spin splitting in the conduction band of transition metal dichalcogenide monolayers. 2013 , 88,	254
1100	Extrinsic anomalous Hall conductivity of a topologically nontrivial conduction band. 2013, 88,	10
1099	Symmetry-protected topological phases and orbifolds: Generalized Laughlin's argument. 2013, 88,	53
1098	Transition from insulating to metallic phase induced by in-plane magnetic field in HgTe quantum wells. 2013 , 88,	18
1097	Series of topological phase transitions in TiTe2 under strain. 2013 , 88,	22
1096	Transport via double constrictions in integer and fractional topological insulators. 2013, 88,	10
1095	Gate voltage induced topological phase transition in hexagonal boron-nitride bilayers. 2013, 102, 023104	9
1094	Fractional Chern insulators beyond Laughlin states. 2013 , 87,	40
1093	Charge conservation protected topological phases. 2013, 87,	5
1092	Point contacts and localization in generic helical liquids. 2013, 88,	12
	Point contacts and localization in generic helical liquids. 2013, 88, Plasmon modes in magnetically doped single-layer and multilayer helical metals. 2013, 87,	12
	Plasmon modes in magnetically doped single-layer and multilayer helical metals. 2013 , 87,	
1091	Plasmon modes in magnetically doped single-layer and multilayer helical metals. 2013 , 87, Fundamental differences between quantum spin Hall edge states at zigzag and armchair	6
1091	Plasmon modes in magnetically doped single-layer and multilayer helical metals. 2013, 87, Fundamental differences between quantum spin Hall edge states at zigzag and armchair terminations of honeycomb and ruby nets. 2013, 111, 146801	6
1091 1090 1089	Plasmon modes in magnetically doped single-layer and multilayer helical metals. 2013, 87, Fundamental differences between quantum spin Hall edge states at zigzag and armchair terminations of honeycomb and ruby nets. 2013, 111, 146801 Anisotropic quantum spin Hall effect, spin-orbital textures, and the Mott transition. 2013, 88, Three-dimensional symmetry-protected topological phase close to antiferromagnetic NBI order.	6 16 15
1091 1090 1089	Plasmon modes in magnetically doped single-layer and multilayer helical metals. 2013, 87, Fundamental differences between quantum spin Hall edge states at zigzag and armchair terminations of honeycomb and ruby nets. 2013, 111, 146801 Anisotropic quantum spin Hall effect, spin-orbital textures, and the Mott transition. 2013, 88, Three-dimensional symmetry-protected topological phase close to antiferromagnetic NBI order. 2013, 87, Phonon structure in dispersion curves and density of states of massive Dirac fermions. 2013, 88,	6 16 15 32
1091 1090 1089 1088	Plasmon modes in magnetically doped single-layer and multilayer helical metals. 2013, 87, Fundamental differences between quantum spin Hall edge states at zigzag and armchair terminations of honeycomb and ruby nets. 2013, 111, 146801 Anisotropic quantum spin Hall effect, spin-orbital textures, and the Mott transition. 2013, 88, Three-dimensional symmetry-protected topological phase close to antiferromagnetic NBI order. 2013, 87, Phonon structure in dispersion curves and density of states of massive Dirac fermions. 2013, 88, Topological phase transition in a generalized Kane-Mele-Hubbard model: A combined quantum	6 16 15 32 15

1083	Topological Anderson insulator induced by inter-cell hopping disorder. 2013 , 114, 183710	9
1082	Controlling edge state transport in a HgTe topological insulator by superlattice effect. 2013 , 87,	8
1081	Robust topological insulator conduction under strong boundary disorder. 2013, 88,	11
1080	Linear magnetoresistance in HgTe quantum wells. 2013 , 87,	32
1079	Helical edge states induced by lateral spin-orbit coupling. 2013 , 87,	1
1078	Topological chiral magnonic edge mode in a magnonic crystal. 2013 , 87,	220
1077	Generation and manipulation of localized modes in Floquet topological insulators. 2013, 88,	19
1076	Topological insulator as an optical modulator for pulsed solid-state lasers. 2013 , 7, L77-L83	185
1075	Topological Insulator Materials. 2013 , 82, 102001	1072
1074	Thermal coherence properties of topological insulator slabs in time-reversal symmetry breaking fields. 2013 , 87,	5
1073	Classification of topological insulators and superconductors in the presence of reflection symmetry. 2013 , 88,	235
1072	Merging of Dirac points and Floquet topological transitions in ac-driven graphene. 2013, 88,	127
1071	Hexagonal warping on optical conductivity of surface states in topological insulator Bi2Te3. 2013 , 87,	35
1070	Topological phase in a two-dimensional metallic heavy-fermion system. 2013 , 87,	11
1069	Spin current pumping in helical Luttinger liquids. 2013 , 87,	23
1068	Topological antiferromagnetic phase in a correlated Bernevig-Hughes-Zhang model. 2013 , 87,	42
1067	Surface-induced order parameter distortion in superfluid [He-B measured by nonlinear NMR. 2013 , 111, 235304	27
1066	Proposal for an on-demand source of polarized electrons into the edges of a topological insulator. 2013 , 88,	38

1065 Anisotropic Dirac electronic structures of AMnBi2 (A=Sr,Ca). 2013 , 87,	75
1064 Transport phenomena in helical edge state interferometers: A Green's function approach. 2013	, 88, 20
Absence of zero-energy surface bound states in CuxBi2Se3 studied via Andreev reflection spectroscopy. 2013 , 88,	52
$_{1062}$ Topological quantum phase transition in Kane-Mele-Kondo lattice model. 2013 , 88,	5
Charge instabilities and topological phases in the extended Hubbard model on the honeycomb lattice with enlarged unit cell. 2013 , 87,	59
Short-range entangled bosonic states with chiral edge modes and T duality of heterotic strings. 2013 , 88,	19
1059 Topological phase transitions with non-Abelian gauge potentials on square lattices. 2013 , 88,	3
Vortex states and Majorana fermions in spin-orbit coupled semiconductor-superconductor hybrostructures. 2013 , 88,	id ₂₆
1057 Hyperfine interactions in two-dimensional HgTe topological insulators. 2013 , 88,	25
1056 Energy loss rate of a charged particle in HgTe/(HgTe, CdTe) quantum wells. 2013 , 103, 192107	3
Three-band model for quantum Hall and spin Hall effects. 2013 , 87,	12
Carrier density dependence of the magnetic properties in iron-doped Bi2Se3 topological insulate 2013, 113, 043926	COF. 21
Electron scattering by a steplike defect in topological insulator nanofilms. 2013 , 87,	2
Coulomb blockade microscopy of spin-density oscillations and fractional charge in quantum spir Hall dots. 2013 , 87,	n ₂₈
1051 Anisotropy of spin relaxation and transverse transport in metals. 2013 , 25, 163201	12
1050 Spin- and Angle-Resolved Photoemission of Strongly SpinDrbit Coupled Systems. 2013 , 82, 0210	002 45
Superconductivity of the topological insulator Bi2Se3 at high pressure. 2013 , 25, 362204	54
TOPOLOGICAL QUANTUM PHASE TRANSITIONS IN TWO-DIMENSIONAL HEXAGONAL LATTICE BILAYERS. 2013 , 03, 1330006	4

1047	Electrically tunable topological state in [111] perovskite materials with an antiferromagnetic exchange field. 2013 , 15, 063031	52
1046	Evidence of the two surface states of (Bi0.53Sb0.47)2Te3 films grown by van der Waals epitaxy. 2013 , 3, 3406	34
1045	Correlated topological phases and exotic magnetism with ultracold fermions. 2013 , 46, 134004	23
1044	Proximity effects in topological insulator heterostructures. 2013 , 22, 097306	13
1043	ON EXOTIC SPHERE FIBRATIONS, TOPOLOGICAL PHASES, AND EDGE STATES IN PHYSICAL SYSTEMS. 2013 , 27, 1350107	9
1042	Spin Chern numbers and time-reversal-symmetry-broken quantum spin Hall effect. 2013 , 22, 067201	13
1041	Topological insulator in the presence of spatially correlated disorder. 2013 , 88,	20
1040	Poster: Spin-Related Phenomena. 2013 , 589-632	
1039	Towards an Electronic Interferometer based on Spin-Resolved Quantum Hall Edge States. 2013 , 456, 012019	3
1038	Fabrication and characterization of semiconducting half-Heusler YPtSb thin films. 2013, 7, 145-147	4
1037	Tunable Dirac fermion dynamics in topological insulators. 2013 , 3, 2411	78
1036	Symmetry Protected Weak Topological Phases in a Superlattice. 2013 , 82, 073708	12
1035	Vriational-Cluster-Approximation Study of the Antiferromagnetic Topological Insulator States. 2014 ,	
1034	A Possible Massless Dirac Electron in Molecular Two-Orbital Model. 2014 ,	
1033	Inhomogeneity Effects in Topological Superconductors. 2014,	2
1032	Strain driven topological phase transitions in atomically thin films of group IV and V elements in the honeycomb structures. 2014 , 16, 105018	48
1031	Ab initio study of topological surface states of strained HgTe. 2014 , 107, 57006	18
1030	Electron states scattering off line edges on the surface of topological insulator. 2014 , 23, 107304	3

Topological phase insulators. 2014 , 9	es in iridium oxide superlattices: Quantized anomalous charge or valley Hall 90,	24
Defect-induced ne insulator BiSbTeSe	egative magnetoresistance and surface state robustness in the topological e2. 2014 , 90,	28
1027 Dynamical compet	tition between quantum Hall and quantum spin Hall effects. 2014 , 90,	13
1026 Efficient algorithm	n to compute the Berry conductivity. 2014 , 16, 073016	3
1025 Rashba coupling a	and magnetic order in correlated helical liquids. 2014 , 90,	10
1024 Interaction and sp	oinBrbit effects on a kagome lattice at 1/3 filling. 2014 , 23, 077101	2
	bewegung in the BernevigHughesIhang model in the quantum spin Haller pulse. 2014 , 23, 037306	
	ubic Dresselhaus spinBrbit coupling on the decay time of persistent spin helix ductor two-dimensional electron gases. 2014 , 23, 027201	2
1021 Efficiency of elect	crical manipulation in two-dimensional topological insulators. 2014 , 23, 077302	1
Neutral edge mod ¹⁰²⁰ magnetic field. 20	des in a superconductorEopological-insulator hybrid structure in a perpendicular 114, 108, 17009	1
	on helical edge states in HgTe quantum wells with the spinBrbit coupling due ture-inversion asymmetries. 2014 , 23, 037304	3
Nonlinear optical r insulators. 2014 , 9	response induced by non-Abelian Berry curvature in time-reversal-invariant 90,	22
1017 Manipulation of Po	ersistent Spin Helix States by Weak External Magnetic Fields. 2014 , 61, 385-390	1
Dynamic conductiv 2014, 105, 202110	vity of the bulk states of n-type HgTe/CdTe quantum well topological insulator.)	4
1015 Quantum spin Hall	ll states in graphene interacting with WS2 or WSe2. 2014 , 105, 233112	57
	ZATION OF TOPOLOGICAL PROPERTIES IN QUANTUM MONTE CARLO THE KANEMELEHUBBARD MODEL. 2014 , 28, 1430001	25
	ll insulators and quantum valley Hall insulators of BiX/SbX (X=H, F, Cl and Br) a record bulk band gap. 2014 , 6, e147-e147	216
Entanglement spe ¹⁰¹² 90,	ectrum as a probe for the topology of a spin-orbit-coupled superconductor. 2014,	15

1011 Fragility of the fractional quantum spin Hall effect in quantum gases. 2014 , 16, 025006	9
1010 Realization of fractional Chern insulators in the thin-torus limit with ultracold bosons. 2014 , 90), 45
Topological metallic phases in spinBrbit coupled bilayer systems. 2014 , 16, 123015	14
Appearance of flat surface bands in three-dimensional topological insulators in a ferromagneti exchange field. 2014 , 16, 033019	ic 8
Using topological insulator proximity to generate perfectly conducting channels in materials without topological protection. 2014 , 16, 113058	11
Probing the wavefunction of the surface states in Bi2Se3topological insulator: a realistic tight-binding approach. 2014 , 16, 063022	23
1005 Topological insulating phase in commonly used semiconductors. 2014 , 1, 34-35	2
Sensitive saturable absorption response of large-size topological insulator and application in low-threshold solid-state pulsed laser. 2014 ,	
1003 Dissipative Floquet topological systems. 2014 , 90,	119
Landau levels and spin splitting in the two-dimensional electron gas of a HgTe quantum well no the critical width for the topological phase transition. 2014 , 90,	ear 10
1001 Time reversal symmetry broken fractional topological phases at zero magnetic field. 2014 , 90,	23
1000 CPT theorem and classification of topological insulators and superconductors. 2014 , 90,	32
Passively Q-switched 156 In all-fiberized laser based on evanescent field interaction with bulk-structured bismuth telluride topological insulator. 2014 , 31, 2157	35
Prediction of robust two-dimensional topological insulators based on Ge/Si nanotechnology. 2 90,	014 , 3
Pairing symmetry, phase diagram, and edge modes in the topological Fulde-Ferrell-Larkin-Ovchinnikov phase. 2014 , 89,	17
996 Dirac-Screening Stabilized Surface-State Transport in a Topological Insulator. 2014 , 4,	24
Prediction of near-room-temperature quantum anomalous Hall effect on honeycomb materials 2014 , 113, 256401	5. 200
Honeycomb lattice with multiorbital structure: Topological and quantum anomalous Hall insula with large gaps. 2014 , 90,	ators 81

993	Engineering anomalous quantum Hall plateaus and antichiral states with ac fields. 2014, 89,	64
992	First-principles study of HgTe/CdTe heterostructures under perturbations preserving time-reversal symmetry. 2014 , 90,	9
991	Dynamics of tunneling into nonequilibrium edge states. 2014 , 90,	19
990	Search for localized Wannier functions of topological band structures via compressed sensing. 2014 , 90,	13
989	Short-ranged interaction effects on Z2 topological phase transitions. 2014 , 90,	5
988	The family of topological phases in condensed matter 2014, 1, 49-59	5
987	Absence of helical surface states in bulk semimetals with broken inversion symmetry. 2014 , 89,	4
986	Large magnetothermopower and Fermi surface reconstruction in Sb2Te2Se. 2014 , 89,	18
985	Dimensional evolution between one- and two-dimensional topological phases. 2014 , 90,	13
984	Magnetic ac control of the spin textures in a helical Luttinger liquid. 2014 , 89,	14
983	Measuring Berry curvature with quantum Monte Carlo. 2014 , 89,	7
982	Spin-orbit spillage as a measure of band inversion in insulators. 2014 , 90,	15
981	Adiabatic photo-steering theory in topological insulators. 2014 , 15, 064403	3
980	Electron-hole entanglement in a quantum spin Hall insulator. 2014 , 89,	3
979	Zeeman-field-induced nontrivial topology in a spin-orbit-coupled superconductor. 2014 , 90,	7
978	Localized in-gap states and quantum spin Hall effect in Si-doped InAs/GaSb quantum wells. 2014 , 89,	6
977	Tunnel junction of helical edge states: Determining and controlling spin-preserving and spin-flipping processes through transconductance. 2014 , 89,	21
976	Stacking-dependent energetics and electronic structure of ultrathin polymorphic V2VI3 topological insulator nanofilms. 2014 , 90,	8

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975	Topological properties of the mesoscopic graphene plaquette: Quantum spin Hall effect due to spin imbalance. 2014 , 89,	7
974	Fractional quantum spin Hall effect in flat-band checkerboard lattice model. 2014 , 90,	9
973	Unconventional pairing and electronic dimerization instabilities in the doped Kitaev-Heisenberg model. 2014 , 90,	25
972	Controllable fully spin-polarized transport in a ferromagnetically doped topological insulator junction. 2014 , 115, 154310	3
971	Strong spin-orbit coupling and Zeeman spin splitting in angle dependent magnetoresistance of Bi2Te3. 2014 , 104, 223111	23
970	Electronic states, pseudo-spin, and transport in the zinc-blende quantum wells and wires with vanishing band gap. 2014 , 104, 132107	3
969	Transport on the surface of a topological insulator. 2014 , 116, 063713	5
968	Quantum phenomena in transport measurements of topological insulator nanostructures (Review Article). 2014 , 40, 280-285	3
967	Inductance due to spin current. 2014 , 115, 113901	1
966	Quantum spin Hall and Z2 metallic states in an organic material. 2014 , 90,	59
965	Quantum oscillations in Rashba semiconductor BiTeCl. 2014 , 90,	6
964	Strain tuning of Dirac states at the SnTe (001) surface. 2014 , 90,	12
963	Dynamical response of dissipative helical edge states. 2014 , 90,	4
962	Resonant Faraday and Kerr effects due to in-gap states on the surface of a topological insulator. 2014 , 90,	6
961	Longer-range lattice anisotropy strongly competing with spin-orbit interactions in pyrochlore iridates. 2014 , 89,	51
960	Direct proportionality between the Kondo cloud and current cross correlations in helical liquids. 2014 , 89,	9
959	Absorption of surface acoustic waves by topological insulator thin films. 2014 , 105, 063503	5
958	Observation of well-defined quasiparticles at a wide energy range in a quasi-two-dimensional	

957	Disorder-induced subgap states and Majorana zero-energy edge modes in two-dimensional topological insulator-superconductor hybrid structures. 2014 , 90,	5
956	Electronic structure of the quantum spin Hall parent compound CdTe and related topological issues. 2014 , 90,	11
955	Single fermion manipulation via superconducting phase differences in multiterminal Josephson junctions. 2014 , 90,	48
954	Triangle anomaly in Weyl semimetals. 2014 , 89,	114
953	Influence of dielectric environment on the role of spinBrbit interaction for image potentials. 2014 , 251, 593-600	1
952	Characterizing weak topological properties: Berry phase point of view. 2014 , 90,	14
951	Unconventional proximity-induced superconductivity in bilayer systems. 2014, 90,	29
950	Nonlocal spin-entangled Andreev reflection, fractional charge, and current-phase relations in topological bilayer-exciton-condensate junctions. 2014 , 90,	5
949	Spin susceptibility of two-dimensional electron system in HgTe surface quantum well. 2014 , 105, 062404	
948	Random Rashba spin-orbit coupling at the quantum spin Hall edge. 2014 , 89,	31
948	Random Rashba spin-orbit coupling at the quantum spin Hall edge. 2014 , 89, Pressure variation of Rashba spin splitting toward topological transition in the polar semiconductor BiTel. 2014 , 90,	31 27
	Pressure variation of Rashba spin splitting toward topological transition in the polar semiconductor	
947	Pressure variation of Rashba spin splitting toward topological transition in the polar semiconductor BiTel. 2014 , 90,	27
947	Pressure variation of Rashba spin splitting toward topological transition in the polar semiconductor BiTel. 2014 , 90, Stability of surface states of weak Z2 topological insulators and superconductors. 2014 , 89,	27
947 946 945	Pressure variation of Rashba spin splitting toward topological transition in the polar semiconductor BiTel. 2014 , 90, Stability of surface states of weak Z2 topological insulators and superconductors. 2014 , 89, Stable two-dimensional dumbbell stanene: A quantum spin Hall insulator. 2014 , 90,	27 24 135
947946945944	Pressure variation of Rashba spin splitting toward topological transition in the polar semiconductor BiTel. 2014, 90, Stability of surface states of weak Z2 topological insulators and superconductors. 2014, 89, Stable two-dimensional dumbbell stanene: A quantum spin Hall insulator. 2014, 90, Selective coherent spin transportation in a spin-orbit-coupled bosonic junction. 2014, 90, Perfect electrical switching of edge channel transport in HgTe quantum wells controlled by gate	27 24 135
947946945944943	Pressure variation of Rashba spin splitting toward topological transition in the polar semiconductor BiTel. 2014, 90, Stability of surface states of weak Z2 topological insulators and superconductors. 2014, 89, Stable two-dimensional dumbbell stanene: A quantum spin Hall insulator. 2014, 90, Selective coherent spin transportation in a spin-orbit-coupled bosonic junction. 2014, 90, Perfect electrical switching of edge channel transport in HgTe quantum wells controlled by gate voltage. 2014, 116, 064511	27 24 135 2

939	Effects of disorder on electron tunneling through helical edge states. 2014 , 90,	4
938	Interaction effects on topological phase transitions via numerically exact quantum Monte Carlo calculations. 2014 , 89,	33
937	Detection of entanglement by helical Luttinger liquids. 2014 , 90,	3
936	Complex band structure of topologically protected edge states. 2014 , 90,	22
935	Z2 fractional topological insulators in two dimensions. 2014 , 90,	23
934	Electronic Hong-Ou-Mandel interferometry in two-dimensional topological insulators. 2014 , 89,	29
933	Wilson-loop characterization of inversion-symmetric topological insulators. 2014, 89,	188
932	Strong coupling expansion of the extended Hubbard model with spin-orbit coupling. 2014 , 89,	14
931	Topological transition and edge states in HgTe quantum wells from first principles. 2014 , 89,	13
930	Non-commutative geometry in higher dimensional quantum hall effect as A-class topological insulator. 2014 , 62, 869-874	
929	The effects of chemical bonding on the topological property of half- Heusler compounds: First principle calculation. 2014 , 1, 8-13	1
928	Growth and properties of HgTe quantum wells 🛭 topic review. 2014 , 251, 1125-1132	4
927	Buried topological edge state associated with interface between topological band insulator and Mott insulator. 2014 , 90,	4
926	Classification of reflection-symmetry-protected topological semimetals and nodal superconductors. 2014 , 90,	200
925	Structural versus electronic distortions in IrTe2 with broken symmetry. 2014 , 90,	9
924	Surface plasmon polaritons in a topological insulator embedded in an optical cavity. 2014 , 104, 111603	7
923	Thermoelectric properties of two-dimensional topological insulators doped with nonmagnetic impurities. 2014 , 116, 013706	4
922	Resistance of helical edges formed in a semiconductor heterostructure. 2014 , 90,	83

921	Non-magnetic defects in the bulk of two-dimensional topological insulators. 2014 , 8, 853-856	7
920	Screening properties and plasmons of Hg(Cd)Te quantum wells. 2014 , 90,	8
919	Engineered near-perfect backscattering on the surface of a topological insulator with nonmagnetic impurities. 2014 , 90,	14
918	Vortices and vortex states in Rashba spin-orbit-coupled condensates. 2014 , 90,	6
917	Topological Phases in the Single-Layer FeSe. 2014 , 4,	49
916	Molecular beam epitaxial growth of Bi2Se3 nanowires and nanoflakes. 2014 , 105, 133109	6
915	Fully gapped s-wave-like superconducting state and electronic structure in Ir0.95Pd0.05Te2 single crystals with strong spin-orbital coupling. 2014 , 89,	14
914	Classification of spin liquids on the square lattice with strong spin-orbit coupling. 2014 , 90,	16
913	Renormalization group study of interaction-driven quantum anomalous Hall and quantum spin Hall phases in quadratic band crossing systems. 2014 , 89,	36
912	Spin-orbit coupling in Bose-Einstein condensate and degenerate Fermi gases. 2014 , 9, 598-612	5
911	Kondo screening of spin-charge separated fluxons by a helical liquid. 2014 , 89,	1
910	Magnetic structure of GdBiPt: A candidate antiferromagnetic topological insulator. 2014 , 90,	49
909	Topological phase transition and quantum spin Hall state in TlBiS2. 2014 , 116, 033704	8
908	Bulk transport through superconducting hybrid structures in HgTe quantum wells. 2014 , 90,	O
907	Finite-size effects in the quantum anomalous Hall system. 2014 , 89,	7
906	Multiple quantum phases in graphene with enhanced spin-orbit coupling: from the quantum spin Hall regime to the spin Hall effect and a robust metallic state. 2014 , 113, 246603	36
905	Momentum-space dynamics of Dirac quasiparticles in correlated random potentials: Interplay between dynamical and Berry phases. 2014 , 89,	2
904	Three-dimensional Dirac electrons on a cubic lattice with noncoplanar multiple-Q order. 2014 , 89,	22

903	Torsion, parity-odd response, and anomalies in topological states. 2014 , 90,	48
902	Nonlocal transport in a hybrid two-dimensional topological insulator. 2014 , 89,	4
901	Evolution of magnetic structure driven by synthetic spin-orbit coupling in a two-component Bose-Hubbard model. 2014 , 90,	16
900	Bulk-defect correspondence in particle-hole symmetric insulators and semimetals. 2014 , 89,	14
899	Phases of correlated spinless fermions on the honeycomb lattice. 2014 , 89,	64
898	Scaling behavior of the insulator-to-plateau transition in a topological band model. 2014 , 89,	9
897	The topological insulator in a fractal space. 2014 , 104, 233106	9
896	Unveiling a crystalline topological insulator in a Weyl semimetal with time-reversal symmetry. 2014 , 90,	3
895	Effect of magnetic field on a magnetic topological insulator film with structural inversion asymmetry. 2014 , 89,	9
894	A new class of topological insulators from I-III-IV half-Heusler compounds with strong band inversion strength. 2014 , 115, 083704	4
893	Universal Nonequilibrium Signatures of Majorana Zero Modes in Quench Dynamics. 2014, 4,	21
892	Topological phases in triangular lattices of Ru adsorbed on graphene: Ab initio calculations. 2014 , 89,	23
891	Boltzmann equation approach to anomalous transport in a Weyl metal. 2014 , 89,	68
890	Topological phase transition driven by a spatially periodic potential. 2014 , 90,	3
889	Zero-momentum coupling induced transitions of ground states in Rashba spinBrbit coupled BoseEinstein condensates. 2014 , 47, 115302	4
888	Topological phases, topological flat bands, and topological excitations in a one-dimensional dimerized lattice with spin-orbit coupling. 2014 , 107, 47007	12
887	The effect of dephasing on edge state transport through p-n junctions in HgTe/CdTe quantum wells. 2014 , 26, 085301	2
886	Excitation of bond-alternating spin-1/2 Heisenberg chains by tunnelling electrons. 2014 , 26, 394005	1

885	Dynamical signature of the edge state in the 1D Aubry Andr Imodel. 2014 , 47, 085501	1
884	Weak Electron-Phonon Coupling and Unusual Electron Scattering of Topological Surface States in Sb(111) by Laser-Based Angle-Resolved Photoemission Spectroscopy. 2014 , 31, 067305	4
883	The common effects of surface and internal bonds on the electronic structure of Bi2Te3 nano-films by first-principles calculation. 2014 , 1, 025043	1
882	COLD WATER VAPOR IN THE BARNARD 5 MOLECULAR CLOUD. 2014 , 788, L32	8
881	Gate-tuned Josephson effect on the surface of a topological insulator. 2014 , 9, 515	8
880	A femtosecond pulse erbium fiber laser incorporating a saturable absorber based on bulk-structured Bi2Te3 topological insulator. 2014 , 22, 6165-73	194
879	Entanglement spectrum and entanglement Hamiltonian of a Chern insulator with open boundaries. 2014 , 2014, P10030	12
878	Comparative analysis of electronic properties of tin, gallium, and bismuth chalcogenide-filled single-walled carbon nanotubes. 2014 , 49, 8402-8411	7
877	Signatures of the Berry curvature in the frequency dependent interlayer magnetoresistance in tilted magnetic fields. 2014 , 26, 085801	2
876	Core hole effect on topological band order in cubic semiconductors: A first-principles study. 2014 , 106, 27008	1
875	Entanglement spectrum of topological Weyl semimetal. 2014 , 107, 40007	1
874	Topological mid-gap states of Chern insulator with flux-superlattice. 2014 , 105, 47002	3
873	Correlation functions for the detection of Wigner molecules in a one-channel Luttinger liquid quantum dot. 2014 , 107, 47010	17
872	Graphene: Topological Properties, Chiral Symmetry and Their Manipulation. 2014 , 213-250	2
871	Hydrogenated ultra-thin tin films predicted as two-dimensional topological insulators. 2014 , 16, 115008	49
870	Topological insulators. 2014 , 39, 843-846	9
869	Two-dimensional electron gas in monolayer InN quantum wells. 2014 , 105, 213503	18
868	Manipulation of edge states in microwave artificial graphene. 2014 , 16, 113023	38

867	The effect of electric potential on Landau levels for topological insulator surface states. 2014 , 445, 81-87	1
866	Electrical and proximity-magnetic effects induced quantum Goos曲后chen shift on the surface of topological insulator. 2014 , 354, 355-358	4
865	Topological insulating characteristic in half-Heusler compounds composed of light elements. 2014 , 378, 1662-1666	19
864	A dispersion and norm preserving finite difference scheme with transparent boundary conditions for the Dirac equation in(1+1)D. 2014 , 256, 728-747	31
863	Time-dependent electron transport in HgTe/CdTe quantum wells. 2014, 378, 966-969	1
862	Fractional helical liquids in quantum wires. 2014 , 89,	92
861	Disorder and magnetic-field-induced breakdown of helical edge conduction in an inverted electron-hole bilayer. 2014 , 89,	21
860	Edge physics of the quantum spin Hall insulator from a quantum dot excited by optical absorption. 2014 , 112, 146804	8
859	Spintronics and spincaloritronics in topological insulators. 2014 , 55, 1-8	39
858	Spin texture of Bi2Se3 thin films in the quantum tunneling limit. 2014 , 112, 057601	56
857	Hanbury Brown and Twiss correlations of Cooper pairs in helical liquids. 2014 , 89,	2
856	Magnetostatic wave analog of integer quantum Hall state in patterned magnetic films. 2014 , 89,	16
855	Non-Abelian gauge fields in photonic cavities and photonic superfluids. 2014 , 112, 066402	36
854	The preparation process and feature of the topological insulator Bi2Te3. 2014 , 22, 59-63	2
853	Topological response in ferromagnets. 2014 , 89,	17
852	Interaction-induced anomalous quantum Hall state on the honeycomb lattice. 2014 , 89,	43
851	Topological domain walls and quantum valley Hall effects in silicene. 2014 , 89,	44
850	Measuring Z2 topological invariants in optical lattices using interferometry. 2014 , 89,	37

849	Effects of short-ranged interactions on the Kane-Mele model without discrete particle-hole symmetry. 2014 , 89,	8
848	Three dimensional topological insulators of CuxAu1⊠inTe2 alloys. 2014 , 593, 235-241	4
847	Study of Gd-doped Bi2Te3 thin films: Molecular beam epitaxy growth and magnetic properties. 2014 , 115, 023904	40
846	Few-cycle optical pulses in a thin film of a topological insulator. 2014 , 329, 151-153	1
845	Interplay of exciton condensation and the quantum spin hall effect in InAs/GaSb bilayers. 2014 , 112, 176403	53
844	Transport discovery of emerging robust helical surface States in Z2 = 0 systems. 2014 , 112, 176601	19
843	Study of Superfluid (^3)He Under Nanoscale Confinement. 2014 , 175, 667-680	13
842	Magnetically confined states and transport property on the surface of a topological insulator. 2014 , 347, 32-44	4
841	Spin-orbit-induced circulating currents in a semiconductor nanostructure. 2014 , 112, 187201	17
840	Quantum anomalous Hall effect. 2014 , 1, 38-48	72
840	Quantum Spin Hall and Quantum Anomalous Hall States Realized in Junction Quantum Wells. 2014, 112,	7 ² 36
	Quantum Spin Hall and Quantum Anomalous Hall States Realized in Junction Quantum Wells. 2014 ,	·
839	Quantum Spin Hall and Quantum Anomalous Hall States Realized in Junction Quantum Wells. 2014 , 112, Prediction of large-gap two-dimensional topological insulators consisting of bilayers of group III	36
839	Quantum Spin Hall and Quantum Anomalous Hall States Realized in Junction Quantum Wells. 2014, 112, Prediction of large-gap two-dimensional topological insulators consisting of bilayers of group III elements with Bi. 2014, 14, 2505-8	36 153
839 838 837	Quantum Spin Hall and Quantum Anomalous Hall States Realized in Junction Quantum Wells. 2014, 112, Prediction of large-gap two-dimensional topological insulators consisting of bilayers of group III elements with Bi. 2014, 14, 2505-8 Giant magnetoresistance and perfect spin filter in silicene, germanene, and stanene. 2014, 89,	36 153 182
839 838 837 836	Quantum Spin Hall and Quantum Anomalous Hall States Realized in Junction Quantum Wells. 2014, 112, Prediction of large-gap two-dimensional topological insulators consisting of bilayers of group III elements with Bi. 2014, 14, 2505-8 Giant magnetoresistance and perfect spin filter in silicene, germanene, and stanene. 2014, 89, Line defects in three-dimensional symmetry-protected topological phases. 2014, 89, Probing the topological phase transition via density oscillations in silicene and germanene. 2014,	36 153 182
8 ₃₉ 8 ₃₈ 8 ₃₇ 8 ₃₆ 8 ₃₅	Quantum Spin Hall and Quantum Anomalous Hall States Realized in Junction Quantum Wells. 2014, 112, Prediction of large-gap two-dimensional topological insulators consisting of bilayers of group III elements with Bi. 2014, 14, 2505-8 Giant magnetoresistance and perfect spin filter in silicene, germanene, and stanene. 2014, 89, Line defects in three-dimensional symmetry-protected topological phases. 2014, 89, Probing the topological phase transition via density oscillations in silicene and germanene. 2014, 89,	36 153 182 14 46

831	Observation of three-dimensional massless Kane fermions in a zinc-blende crystal. 2014 , 10, 233-238	143
830	Observation of edge transport in the disordered regime of topologically insulating InAs/GaSb quantum wells. 2014 , 112, 026602	122
829	Nonlinear optical rectification in a two-dimensional system. 2014 , 60, 1-3	2
828	Anomalous Hall response in two-dimensional topological insulators due to the Stark effect. 2014 , 89,	
827	Imprints of spin-orbit density wave in the hidden-order state of URu2Si2. 2014, 89,	14
826	Pressure-induced topological quantum phase transition in Sb2Se3. 2014 , 89,	37
825	Topological crystalline Kondo insulator in mixed valence ytterbium borides. 2014 , 112, 016403	123
824	Wire deconstructionism of two-dimensional topological phases. 2014 , 90,	88
823	Room-temperature enantioselective C-H iodination via kinetic resolution. <i>Science</i> , 2014 , 346, 451-5 33.3	164
822	Nontrivial Z2 topology in bismuth-based III-V compounds. 2014 , 90,	29
0	Caia bassafas bassus and algebris sussent in balical adap atatas in susatura ania Hall devises 2014	
821	Spin-transfer torque and electric current in helical edge states in quantum spin Hall devices. 2014 , 90,	17
820		17 172
	90,	
820	90, Surface Impedance and Bulk Band Geometric Phases in One-Dimensional Systems. 2014, 4, Half-integer quantum Hall effect of disordered Dirac fermions at a topological insulator surface.	172
820 819	90, Surface Impedance and Bulk Band Geometric Phases in One-Dimensional Systems. 2014, 4, Half-integer quantum Hall effect of disordered Dirac fermions at a topological insulator surface. 2014, 90,	172 26
820 819 818	Surface Impedance and Bulk Band Geometric Phases in One-Dimensional Systems. 2014, 4, Half-integer quantum Hall effect of disordered Dirac fermions at a topological insulator surface. 2014, 90, Robustness of quantum spin Hall effect in an external magnetic field. 2014, 90, Weak topological insulators induced by the interlayer coupling: A first-principles study of stacked	172 26 24
820 819 818 817	Surface Impedance and Bulk Band Geometric Phases in One-Dimensional Systems. 2014, 4, Half-integer quantum Hall effect of disordered Dirac fermions at a topological insulator surface. 2014, 90, Robustness of quantum spin Hall effect in an external magnetic field. 2014, 90, Weak topological insulators induced by the interlayer coupling: A first-principles study of stacked Bi2Tel. 2014, 89,	172 26 24 43

813	Revealing topological superconductivity in extended quantum spin Hall Josephson junctions. 2014 , 113, 197001	39
812	Fate of Majorana fermions and Chern numbers after a quantum quench. 2014 , 90, 032138	49
811	Observations of a metal-insulator transition and strong surface states in Bi2-x SbxSe3 thin films. 2014 , 26, 7110-5	34
810	Tunneling Magnetoresistance Devices Based on Topological Insulators: Ferromagnet[hsulator][opological-Insulator Junctions Employing Bi2Se3. 2014 , 2,	15
809	Solid state theory. Quantum spin Hall effect in two-dimensional transition metal dichalcogenides. <i>Science</i> , 2014 , 346, 1344-7	1150
808	Topological & surface states versus film thickness and strain. 2014 , 90,	23
807	Proximity-induced superconductivity in Weyl semimetals. 2014 , 90,	33
806	NV-center-based digital quantum simulation of a quantum phase transition in topological insulators. 2014 , 89,	9
805	The effects of surface bond relaxation on electronic structure of Sb2Te3 nano-films by first-principles calculation. 2014 , 4, 107115	3
804	Floquet engineering of long-range p-wave superconductivity. 2014 , 90,	50
803	Exactly solvable model of topological insulator realized on spin-(tfrac{1}{2}) lattice. 2014 , 87, 1	5
802	Edge and interfacial states in a two-dimensional topological insulator: Bi(111) bilayer on Bi2Te2Se. 2014 , 89,	69
801	Determining bound states in a semiconductor device with contacts using a nonlinear eigenvalue solver. 2014 , 13, 753-762	3
800	Observation of topological transitions in interacting quantum circuits. 2014 , 515, 241-4	120
799	Spontaneous emission of a two-level system near the interface of topological insulators. 2014 , 105, 64001	7
798	Edge state modulation of bilayer Bi nanoribbons by atom adsorption. 2014 , 16, 17206-12	16
797	Effective Fermi level tuning of Bi2Se3 by introducing CdBi/CaBi dopant. 2014 , 4, 10499	1
796	Robust 2D topological insulators in van der Waals heterostructures. 2014 , 8, 10448-54	74

(2014-2014)

795	Low-energy effective Hamiltonian for giant-gap quantum spin Hall insulators in honeycomb X-hydride/halide (X=N B i) monolayers. 2014 , 90,	102
794	Topological states in normal and superconducting p -wave chains. 2014 , 378, 3340-3347	12
793	Kane-Mele-Hubbard model on the Eflux honeycomb lattice. 2014 , 90,	9
792	Quantum oscillations of photocurrents in HgTe quantum wells with Dirac and parabolic dispersions. 2014 , 90,	19
791	Time resolved photoluminescence spectroscopy of narrow gap Hg1⊠CdxTe/CdyHg1ŪTe quantum well heterostructures. 2014 , 105, 022102	23
790	Large Energy, Wavelength Widely Tunable, Topological Insulator Q-Switched Erbium-Doped Fiber Laser. 2014 , 20, 315-322	171
789	Intrinsic conduction through topological surface states of insulating Bi2Te3 epitaxial thin films. 2014 , 111, 14979-84	73
788	Rashba spin-orbit coupling in the Kane-Mele-Hubbard model. 2014 , 90,	55
787	Valence bond phases in S = 1/2 Kane-Mele-Heisenberg model. 2014 , 26, 456004	1
786	Transport in two-dimensional disordered semimetals. 2014 , 113, 186801	19
7 ⁸ 5	Observation of topological structures in photonic quantum walks. 2014 , 112, 120502	7
784	Chiral d-wave superconductivity on the honeycomb lattice close to the Mott state. 2014 , 90,	26
783	Electrical detection of spin-polarized surface states conduction in (Bi(0.53)Sb(0.47))2Te3 topological insulator. 2014 , 14, 5423-9	134
782	Phonon-induced topological insulation. 2014 , 89,	34
781	Nonlinear spin-thermoelectric transport in two-dimensional topological insulators. 2014 , 90,	25
780	Hole transport and valence-band dispersion law in a HgTe quantum well with a normal energy spectrum. 2014 , 89,	14
779	Dissipationless spin current between two coupled ferromagnets. 2014 , 89,	19
778	Kane-Mele Hubbard model on a zigzag ribbon: Stability of the topological edge states and quantum phase transitions. 2014 , 90,	6

777	Quantum spin Hall effect in strip of stripes model. 2014 , 90,	52
776	Spin-orbit and impurity scattering in an integrable electron model: Exact results for dynamic correlations. 2014 , 89,	2
775	Half-Heusler topological insulators. 2014 , 39, 859-866	52
774	Exploration and prediction of topological electronic materials based on first-principles calculations. 2014 , 39, 849-858	65
773	Topological insulator nanostructures. 2014 , 39, 873-879	5
772	Fermi-level pinning, charge transfer, and relaxation of spin-momentum locking at metal contacts to topological insulators. 2014 , 90,	34
771	Interaction effects in nonequilibrium transport properties of a four-terminal topological corner junction. 2014 , 90,	4
770	Optimization of In2Se3/Si(111) Heteroepitaxy To Enable Bi2Se3/In2Se3 Bilayer Growth. 2014 , 14, 4617-4623	5
769	Strongly interacting Dirac liquid on the surface of a topological Kondo insulator. 2014 , 90,	17
768	Topological crystalline insulators and Dirac octets in antiperovskites. 2014 , 90,	121
768 767	Topological crystalline insulators and Dirac octets in antiperovskites. 2014 , 90, Structure factor of interacting one-dimensional helical systems. 2014 , 89,	121 5
767	Structure factor of interacting one-dimensional helical systems. 2014 , 89,	5
767 766	Structure factor of interacting one-dimensional helical systems. 2014 , 89, Quantum interference in HgTe structures. 2014 , 251, 1786-1800	5
767 766 765	Structure factor of interacting one-dimensional helical systems. 2014, 89, Quantum interference in HgTe structures. 2014, 251, 1786-1800 Giant nonlinearity in zero-gap semiconductor superlattices. 2014, 89,	5 6 7
767 766 765 764	Structure factor of interacting one-dimensional helical systems. 2014, 89, Quantum interference in HgTe structures. 2014, 251, 1786-1800 Giant nonlinearity in zero-gap semiconductor superlattices. 2014, 89, Measuring a topological transition in an artificial spin-1/2 system. 2014, 113, 050402	5 6 7 85
767 766 765 764 763	Structure factor of interacting one-dimensional helical systems. 2014, 89, Quantum interference in HgTe structures. 2014, 251, 1786-1800 Giant nonlinearity in zero-gap semiconductor superlattices. 2014, 89, Measuring a topological transition in an artificial spin-1/2 system. 2014, 113, 050402 Dirac materials. 2014, 63, 1-76	5 6 7 85 589

759	Coherent single-spin source based on topological insulators. 2014 , 90,	10
75 ⁸	Transition-Metal Pentatelluride ZrTe5 and HfTe5: A Paradigm for Large-Gap Quantum Spin Hall Insulators. 2014 , 4,	196
757	Two-dimensional time-reversal-invariant topological superconductivity in a doped quantum spin-Hall insulator. 2014 , 90,	104
756	Edge states of a three-dimensional topological insulator. 2014 , 26, 315009	10
755	Field-Angle-Dependent Low-Energy Excitations around a Vortex in the Superconducting Topological Insulator CuxBi2Se3. 2014 , 83, 063705	10
754	Topological indices for open and thermal systems via Uhlmann's phase. 2014 , 113, 076407	53
753	Floquet Topological Insulator in the BHZ Model with the Polarized Optical Field. 2014, 31, 030503	3
752	Spin-Polarized Majorana Bound States inside a Vortex Core in Topological Superconductors. 2014 , 83, 064703	20
751	Quasiclassical Treatment and Odd-Parity/Triplet Correspondence in Topological Superconductors. 2014 , 83, 053705	13
75°	Trajectory of the anomalous Hall effect towards the quantized state in a ferromagnetic topological insulator. 2014 , 10, 731-736	391
749	Effects of Intrinsic Defects and Substrate Transfer Doping on the Electronic Structure of Sb2Te3 Thin Films on Graphene. 2014 , 83, 034713	2
748	Higher dimensional quantum Hall effect as A-class topological insulator. 2014 , 886, 952-1002	25
747	Temperature dependence of the resistance of a two-dimensional topological insulator in a HgTe quantum well. 2014 , 89,	53
746	Electrically tunable conductance and edge modes in topological crystalline insulator thin films: minimal tight-binding model analysis. 2014 , 16, 065015	34
745	A computational investigation of topological insulator Bi2Se3 film. 2014 , 9, 760-767	4
744	Topological insulators with arbitrarily tunable entanglement. 2014 , 89,	6
743	All-fiberized, passively Q-switched 1.06th laser using a bulk-structured Bi2Te3topological insulator. 2014 , 16, 085203	30
742	Surface plasmon polaritons in topological insulators. 2014 , 89,	15

741	Tunable polarization in a beam splitter based on two-dimensional topological insulators. 2014 , 89,	3
740	Emergence of supersymmetry on the surface of three-dimensional topological insulators. 2014 , 16, 013044	71
739	Thermoelectric properties of an ultra-thin topological insulator. 2014 , 26, 165303	4
738	OPTICAL RESONATOR ANALOG OF A PHOTONIC TOPOLOGICAL INSULATOR: A FINITE-DIFFERENCE TIME-DOMAIN STUDY. 2014 , 28, 1441007	8
737	Topological Invariants and Ground-State Wave functions of Topological Insulators on a Torus. 2014 , 4,	18
736	Topological Insulator Simultaneously Q-Switched Dual-Wavelength \$ hbox{Nd}:hbox{Lu}_{2}hbox{O}_{3}\$ Laser. 2014 , 6, 1-7	24
735	Magnetoresistance through a ferromagnet/superconductor/ferromagnet junction on the surface of a topological insulator. 2014 , 7, 023001	5
734	Josephson effect in normal and ferromagnetic topological-insulator junctions: Planar, step, and edge geometries. 2014 , 90,	10
733	Internal chiral spin structure of topological-insulator/metal superlattices. 2014, 106, 37008	
732	Self-consistent k[p calculations for gated thin layers of three-dimensional topological insulators. 2014 , 89,	9
731	Plasmonics in Dirac systems: from graphene to topological insulators. 2014 , 26, 123201	159
730	Conductivity of a generic helical liquid. 2014 , 90,	75
729	One-dimensional topological edge states of bismuth bilayers. 2014 , 10, 664-669	238
728	Electronic structure for a topological insulator with a smoothly varying step on surface. 2014 , 454, 67-71	
727	Topological bands in one-dimensional periodic potentials. 2014 , 454, 93-97	5
726	Effective manipulation of Andreev bound states, zero mode Majorana fermion and Josephson current in a superconductorflormalfluperconductor junction on the surface of a topological insulator. 2014 , 378, 3131-3135	3
725	Detecting topological currents in graphene superlattices. <i>Science</i> , 2014 , 346, 448-51 33.3	481
724	Floquet Weyl semimetal induced by off-resonant light. 2014 , 105, 17004	83

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723	Current enhancement through a time-dependent constriction in fractional topological insulators. 2014 , 90,	7
722	Cancelation of confinement effect by spin-orbit coupling in narrow strips of two-dimensional topological insulators. 2014 , 90,	8
721	Epitaxial growth of large-gap quantum spin Hall insulator on semiconductor surface. 2014 , 111, 14378-81	171
720	Quantum anomalous Hall effect in magnetically doped InAs/GaSb quantum wells. 2014, 113, 147201	50
719	Quantum spin Hall effect on germanene nanorod embedded in completely hydrogenated germanene. 2014 , 89,	46
718	Scale-invariant quantum anomalous Hall effect in magnetic topological insulators beyond the two-dimensional limit. 2014 , 113, 137201	348
717	Global phase diagram of two-component Bose gases in antiparallel magnetic fields. 2014, 90,	12
716	Unusual spin-orbit control in AlInAs/GaInAs triple wells triggered by band crossing and anticrossing. 2021 , 104,	Ο
715	Magnetoelectric torque and edge currents caused by spin-orbit coupling. 2021 , 104,	О
714	Discovery of Superconductivity in Mercury Cadmium Telluride.	
713	Topological materials discovery from crystal symmetry.	10
712	Adiabatic topological pumping in a semiconductor nanowire. 2021 , 130, 174301	O
711	Many-body topological and skin states without open boundaries. 2021 , 104,	3
710	Floquet Topological Phase Transitions in Lieb Lattice with Intrinsic Spin-Orbit Coupling. 2020 , 10, 24-37	O
709	Fractionalized spin excitations in the ferromagnetic edge state of graphene: Signature of the ferromagnetic Luttinger liquid. 2020 , 102,	0
708	Temperature-dependent angle-resolved photoemission spectroscopy study of the Ce 4f states in a possible topological Kondo insulator CeRhAs. 2020 , 102,	
707	Tunable topological edge transport in acoustic meta-atoms. 2020 , 128, 234903	1
706	Introduction. 2021 , 1-7	

705	Structural, electronic and topological properties of NaCaBi and KBaBi compounds. 2022, 161, 110416	О
704	PT-symmetric topological edge-gain effect. 2020 ,	
703	Introduction. 2020 , 1-11	
702	Magnetotransport properties and stress control of HgCdTe thin film. 2020 , 69, 057301	
701	Introduction. 2020 , 1-24	
700	Superconductivity in topological materials. 2020 , 69, 020301	O
699	Topological phase transition based on structure reversal of two-dimensional photonic crystals and construction of topological edge states. 2020 , 69, 184101	4
698	Charged Particle in a Flat Box with Static Electromagnetic Field and Landau Levels. 2020 , 11, 1731-1742	2
697	Angle resolved photoemission spectroscopy study on electronic band structure of topological insulator Bi2Se3 in the presence of magnetic impurities. 2020 ,	
696	Effective spin-orbit models using correlated first-principles wave functions. 2020 , 2,	1
695	Artificial oxide heterostructures with non-trivial topology. 2020 , 33, 085601	
694	Evolution of Berry curvature and reentrant quantum anomalous Hall effect in an intrinsic magnetic topological insulator. 2021 , 64, 1	2
693	Tunable Topological Surface States of Three-Dimensional Acoustic Crystals. 9,	1
692	Non-Hermitian Weyl Semimetals: Non-Hermitian Skin Effect and non-Bloch Bulk-Boundary Correspondence.	2
691	Effects of topological band structure on thermoelectric transport of bismuthene. 2021 , 104,	1
690	Hard-wall edge confinement in two-dimensional topological insulators and the energy of the Dirac point. 2021 , 104,	
689	Reconstruction of Bloch wavefunctions of holes in a semiconductor. 2021 , 599, 57-61	1
688	Ferromagnetic proximity effect on the thermodynamic properties of topological crystalline insulator SnTe (001) and related thin films. 2020 , 535, 110779	

687	First-principles investigation of two-dimensional topological insulators BiX (X=H, F, O). 2020 , 35, 085033	1
686	The competition between the intrinsic and Rashba spin-orbit coupling and effects of correlations on Rashba SOC-driven transitions in the Kane-Mele model. 2020 , 32, 505601	Ο
685	Peacock.jl: Photonic crystals in Julia. 2020 , 5, 2678	O
684	Resonant laser excitation and time-domain imaging of chiral topological polariton edge states. 2020 , 2,	3
683	Urbach tail and nonuniformity probe of HgCdTe thin films and quantum well heterostructures grown by molecular beam epitaxy. 2020 , 60,	3
682	Effects of the Electron E lectron Interaction in the Magneto-Absorption Spectra of HgTe/CdHgTe Quantum Wells with an Inverted Band Structure. 2020 , 112, 508-512	O
681	Perfect modulation between fully spin-polarized spin-singlet and -triplet Andreev entanglements in a narrow quantum spin Hall system. 2020 , 132, 37001	O
680	Non-Trivial Transport Interface in a Hybrid Topological Material With Hexagonal Lattice Arrangement. 2020 , 8,	O
679	Prediction of tetragonal monolayer CuN with a quantum spin Hall state. 2020 , 124, 114225	
678	Transport Properties of Two-Dimensional Topological Insulators and Excitonic Condensates. 2020 , 56, 545-552	
677	Screening potential topological insulators in half-Heusler compounds via compressed-sensing. 2021 , 33,	1
676	Topological electronic states and thermoelectric transport at phase boundaries in single-layer WSe: an effective Hamiltonian theory. 2021 , 33,	
675	Higher-order topological insulators on porous network models. 2021 , 104,	
674	Fundamentals of Spin Dynamics in Two-Dimensional Materials. 2022 , 13-44	
673	Towards a topological quantum chemistry description of correlated systems: The case of the Hubbard diamond chain. 2021 , 104,	0
672	Synthetic Three-Dimensional ZZ_{2} Topological Insulator in an Elastic Metacrystal. 2021 , 127, 214302	2
671	Single-particle excitations and metal-insulator transition of ultracold Fermi atoms in one-dimensional optical lattice with spin-orbit coupling.	О
670	Acoustic higher-order topology derived from first-order with built-in Zeeman-like fields. 2021 ,	1

669	Massive and Topological Surface States in Tensile-Strained HgTe. 2021, 21, 9869-9874	1
668	Determination of the Spin Axis in Quantum Spin Hall Insulator Candidate Monolayer WTe2. 2021 , 11,	2
667	Emerging nonlinear Hall effect in Kane-Mele two-dimensional topological insulators. 2021, 104,	О
666	Room-temperature non-Dirac quantum anomalous Hall states, half semiconductors, and strain-tuned half metals in monolayer zirconium trihalide. 2021 , 104,	o
665	Electron transport probing the electrically tunable topological phase transition in a Dirac semimetal. 2021 , 104,	
664	Integration of topological insulator nanogap with atomic single layer for boosting photoluminescence. 2021 , 122, 111786	О
663	Information constraint in open quantum systems. 2021 , 104,	0
662	Robust Quantum Oscillation of Dirac Fermions in a Single-Defect Resonant Transistor. 2021 ,	О
661	Dynamic impurities in two-dimensional topological-insulator edge states. 2021 , 104,	
660	Electric field induced edge-state oscillations in InAs/GaSb quantum wells. 2021 , 104,	
660 659	Electric field induced edge-state oscillations in InAs/GaSb quantum wells. 2021 , 104, Microwave impedance microscopy and its application to quantum materials.	4
		4
659	Microwave impedance microscopy and its application to quantum materials.	1
659 658	Microwave impedance microscopy and its application to quantum materials. Ferromagnetic Resonance of a [GeTe/Sb2Te3]6/Py Superlattice. 2021, 7, 156	
659 658 657	Microwave impedance microscopy and its application to quantum materials. Ferromagnetic Resonance of a [GeTe/Sb2Te3]6/Py Superlattice. 2021, 7, 156 The topological counterparts of non-Hermitian SSH models.	1
659 658 657	Microwave impedance microscopy and its application to quantum materials. Ferromagnetic Resonance of a [GeTe/Sb2Te3]6/Py Superlattice. 2021, 7, 156 The topological counterparts of non-Hermitian SSH models. 3D quantum Hall effects and nonlinear Hall effect. 2021, 6, Observation of Dislocation-Induced Topological Modes in a Three-Dimensional Acoustic	1 0
659 658 657 656	Microwave impedance microscopy and its application to quantum materials. Ferromagnetic Resonance of a [GeTe/Sb2Te3]6/Py Superlattice. 2021, 7, 156 The topological counterparts of non-Hermitian SSH models. 3D quantum Hall effects and nonlinear Hall effect. 2021, 6, Observation of Dislocation-Induced Topological Modes in a Three-Dimensional Acoustic Topological Insulator. 2021, 127, 214301	1 0

651	Charge transport spectra in superconductor-InAs/GaSb-superconductor heterostructures. 2021, 33,	
650	Toward Peltier-cooled mid-infrared HgCdTe lasers: Analyzing the temperature quenching of stimulated emission at ~6 th wavelength from HgCdTe quantum wells. 2021 , 130, 214302	1
649	Material Preparation and Thin Film Growth. 2021 , 1153-1202	
648	Weyl Point and Nontrivial Surface States in a Helical Topological Material. 2022, 8,	
647	All-Optical Modulation Technology Based on 2D Layered Materials 2022, 13,	2
646	Spin-polarized voltage probes for helical edge state: A model study. 2022 , 139, 115125	O
645	Floquet band engineering and topological phase transitions in 1TI transition metal dichalcogenides.	О
644	Photoinduced quantum anomalous Hall states in the topological Anderson insulator. 2022, 105,	1
643	Unconventional Materials: the mismatch between electronic charge centers and atomic positions. 2022 ,	4
642	Topological phase transition associated with structural phase transition in ternary half Heusler compound LiAuBi 2022 ,	
641	On the effective models of spinBrbit coupling in a two-dimensional electron gas. 2022 , 437, 168710	
640	Optical properties of InAs, InSb and InAsxSb1☑ (x=0.25, 0.5, 0.75) alloys under strain. 2022 , 30, e00610	Ο
639	A g-SiC6 monolayer and its analogs: A new class of tunable Dirac cone materials and novel quantum spin Hall insulators. 2022 , 578, 151986	О
638	Effect of Fe on Bi2Te3: Structure, magnetic properties, and XPS valence band. 2022 , 899, 163297	2
637	Topological Dirac states in asymmetric Pb1\(\text{NSnxTe quantum wells. 2022, 138, 115061}	
636	Pressure-induced superconductivity and structural transitions in topological insulator SnBi2Te4. 2022 , 900, 163371	О
635	Topological phase transition in cavity optomechanical system with periodical modulation.	O
634	Large-N Chern insulators: Lattice field theory and quantum simulation approaches to correlation effects in the quantum anomalous Hall effect. 2022 , 439, 168763	1

633	Helical conducting edge states in narrow-gap semiconductors without band inversion. 2022, 105,	0
632	Topology, Symmetry, and Band Theory of Materials. 2022 , 7-49	
631	Tunable elective length of fractional Josephson junctions 2022,	
630	Competition of first-order and second-order topology on the honeycomb lattice. 2022 , 105,	0
629	Topological quantum critical points in strong coupling limits: Global symmetries and strongly interacting Majorana fermions. 2022 , 105,	0
628	Spectroscopic signature of surface states and bunching of bulk subbands in topological insulator (Bi0.4Sb0.6)2Te3 thin films. 2022 , 105,	
627	Topological Phononic Logic 2022 , 128, 015501	3
626	Weyl points in multiterminal hybrid superconductor-semiconductor nanowire devices. 2022 , 105,	О
625	Topological properties of MXenes. 2022 , 171-199	O
624	Universality of optical absorptance quantization in two-dimensional group-IV, III-V, II-VI, and IV-VI semiconductors. 2022 , 105,	O
623	Fractional hinge and corner charges in various crystal shapes with cubic symmetry. 2022, 105,	0
622	Large-Gap Quantum Spin Hall State and Temperature-Induced Lifshitz Transition in BiBr 2022,	3
621	Revisiting the physical origin and nature of surface states in inverted-band semiconductors. 2022 , 105,	
620	Spin-Polarized Fractional Corner Charges and Their Photonic Realization 2022 , 128, 026801	2
619	Non-trivial impurity and field effects in topological Kondo insulator SmB6. 2022,	
618	Spin-Orbit Stable Dirac Nodal Line in Monolayer B6O.	
617	Dual-band all-dielectric chiral photonic crystal. 2022 , 55, 165303	1
616	Topological Quantum Critical Points in the Extended Bose-Hubbard Model 2022 , 128, 043402	О

615	Controlling the real-time dynamics of a spin coupled to the helical edge states of the Kane-Mele model. 2022 , 105,	0
614	Non-Hermitian topology in rock-paper-scissors games 2022 , 12, 560	1
613	Ta2NiSe5: A candidate topological excitonic insulator with multiple band inversions. 2022, 105,	О
612	Multiple One-Way Edge Modes in Sonic Crystals With Large Chern Numbers. 2022 , 10,	O
611	In-Plane Magnetization-Induced Corner States in Bismuthene. 2022 , 39, 017302	Ο
610	Topological edge states at singular points in non-Hermitian plasmonic systems.	1
609	Signatures of nontopological patches on the surface of topological insulators. 2022 , 105,	O
608	Quantum transport and potential of topological states for thermoelectricity in Bi2Te3 thin films 2022 ,	3
607	Mimicking Multiorbital Systems with SU(N) Atoms: Hund∃ Physics and Beyond. 2022 , 7, 18	Ο
606	Perfect flat band with chirality and charge ordering out of strong spin-orbit interaction 2022 , 13, 579	О
605	Protection of edge transport in quantum spin hall samples:spin-symmetry based general approach and examples.	Ο
604	Structural Amorphization-Induced Topological Order 2022 , 128, 056401	1
603	Progress, Advantages, and Challenges of Topological Material Catalysts. 2100106	4
602	Fragile topological band in the checkerboard antiferromagnetic monolayer FeSe. 2022, 8,	1
601	Effective mass of bound electron pairs in two-dimensional materials with a gapped band spectrum. 2022 , 429, 127956	0
600	Intrinsic spin Hall conductivity plateau in topological semimetals with triply degenerate points. 2022 , 629, 413626	
599	Optimizing topological switching in confined 2D-Xene nanoribbons via finite-size effects. 2022 , 9, 011411	1
598	Investigation on crystal structure, electrical and magnetic properties of CeAl(Si1-xGex). 2022 , 308, 122877	

597	Theoretical investigation of the HgTe topological edge states with a Fe impurity. 2022, 630, 413673	
596	In-plane electric and exchange fields engineered corner state bismuthene quantum dots. 2022 , 630, 413641	1
595	Analytical calculation of scattering from spin impurity and entanglement generation for edge states of KaneMele model. 2022 , 139, 115127	0
594	Nonlinear compact localized modes in flux-dressed octagonal-diamond lattice.	
593	Detection and Control of the Effective Magnetic Field in a Ca-Doped Bi 2 Se 3 Topological Insulator. 2101075	
592	Robustness of spin-polarized edge states in a two-dimensional topological semimetal without inversion symmetry. 2022 , 105,	
591	Phase transitions in intrinsic magnetic topological insulator with high-frequency pumping 2022,	Ο
590	Topological nature of higher-order hinge states revealed by spin transport. 2022 ,	Ο
589	Observation and control of pseudospin switching in a finite-width topological photonic crystal 2022 , 30, 5731-5738	О
588	Multigap topology and non-Abelian braiding of phonons from first principles. 2022 , 105,	1
587	Trigonal multivalent polonium monolayers with intrinsic quantum spin Hall effects 2022 , 12, 2129	0
586	Electrically modulated Josephson junction of light-dressed topological insulators. 2022 , 105,	
585	Topological classifications of quadratic bosonic excitations in closed and open systems with examples 2022 ,	
584	Edge state in AB-stacked bilayer graphene and its correspondence with the Su-Schrieffer-Heeger ladder. 2021 , 104,	1
583	Non-Hermitian Total-Loss High-Order Topological Insulator Based on 1d Su-Schrieffer-Heeger (Ssh).	
582	Effects of Bi₂Te₃(111) and Al₂0₃(0001) substrates on Electronic and topological properties of Bi(111) bilayer. 2022 ,	
581	Research progress on two-dimensional quantum spin Hall insulator in monolayer 1T'-WTe2. 2022,	
580	Machine Learning Assisted Predictions of Multi-Component Phase Diagrams and Fine Boundary Information.	

562

105,

Topological Insulator Plasmonics and Enhanced Light-Matter Interactions. 2022, 89-116 579 578 Dynamic bulk-boundary correspondence for anomalous Floquet topology. 2022, 105, Designing light-element materials with large effective spin-orbit coupling.. 2022, 13, 919 577 3 576 Dynamic Friedel oscillations on the surface of a topological insulator. 2022, 105, Progress in Topological Mechanics. 2022, 12, 1987 Ο 575 Quantum phase transitions and a disorder-based filter in a Floquet system. 2022, 105, 574 Large-area fabrication of 2D layered topological semimetal films and emerging applications. 2022, 2 573 7, Floquet vortex states induced by light carrying an orbital angular momentum. 2022, 105, 572 Engineering topological phases in triple HgTe/CdTe quantum wells.. 2022, 12, 2617 \circ 571 Proxy ensemble geometric phase and proxy index of time-reversal invariant topological insulators 570 at finite temperatures. 2022, 105, Electronic Quantum Materials Simulated with Artificial Model Lattices. 569 1 Ultrahigh efficient spin orbit torque magnetization switching in fully sputtered topological 568 insulator and ferromagnet multilayers.. 2022, 12, 2998 567 Topology in Photonic Discrete-Time Quantum Walks: A Comprehensive Review. Three-dimensional Dirac semimetal metamaterial enabled by negative couplings. 2022, 24, 033025 566 565 Spin-resolved spectroscopy of helical Andreev bound states. 2022, 4, \circ Controllable synthesis and tunable properties of topological material 564 WTe<sub&gt;2&lt;/sub&gt;. 2022, 52, 266821 Symmetry-allowed nonlinear orbital response across the topological phase transition in 563 O centrosymmetric materials. 2022, 105, Phase space crystal vibrations: Chiral edge states with preserved time-reversal symmetry. 2022,

561	Topological superconductivity induced by magnetic texture crystals. 2022, 4,	1
560	Topological properties of Sb(111) surface: A first-principles study. 2022 , 31, 047105	
559	Antiferromagnetic insulators with tunable magnon-polaron Chern numbers induced by in-plane optical phonons. 2022 , 105,	1
558	Coexisting valley and pseudo-spin topological edge states in photonic topological insulators made of distorted Kekullattices. 2022 , 10, 999	O
557	Robust Nonequilibrium Edge Currents with and without Band Topology 2022, 128, 120403	0
556	Electronic cloaking of confied states in phosphorene junctions 2022,	O
555	Effect of position-dependent effective mass on donor impurity- and exciton-related electronic and optical properties of 2D Gaussian quantum dots. 2022 , 137, 1	1
554	Progress and prospects in magnetic topological materials 2022 , 603, 41-51	9
553	Topological Phase Transitions and Evolution of Boundary States Induced by Zeeman Fields in Second-Order Topological Insulators. 2022 , 10,	0
552	Counterintuitive gate dependence of weak antilocalization in bilayer graphene/WSe2 heterostructures. 2022 , 105,	O
551	In-plane magnetic field induced density wave states near quantum spin Hall phase transitions. 2022 , 105,	0
550	Spin-polarized topological phases in a ferromagnetic Bi2Te3/MnBi2Te4 bilayer tuned by electric and magnetic fields. 2022 , 105,	
549	Experimental Realization of Two-Dimensional Weak Topological Insulators 2022,	0
548	Tuning the Bandgap of Topological Edge States by Inclined-Electric Field. 2200022	Ο
547	Hermitian chiral boundary states in non-Hermitian topological insulators. 2022, 105,	1
546	Systematic generation of the cascade of anomalous dynamical first- and higher-order modes in Floquet topological insulators. 2022 , 105,	Ο
545	Engineering rainbow trapping and releasing in valley photonic crystal with electro-optical material. 2022 , 39, 1241	O
544	Current Carrying States in the Disordered Quantum Anomalous Hall Effect.	

543	Photonic topological insulators in bianisotropic metamaterials 2022 , 30, 9944-9958	О
542	Laser induced spin injection to [GeTe/Sb2Te3] superlattice through a TbFeCo film. 2022 , 12, 035328	
541	Design of High-Temperature Syntheses on the Example of the Heavy-Atom Cluster Compound Sn[PtBi6I12].	
540	Emergence of Floquet edge states in the coupled Su-Schrieffer-Heeger model 2022,	O
539	First principle based investigation of topological insulating phase in half-Heusler family NaYO (Y = Ag, Au, and Cu) 2022 ,	0
538	Searching for Band-Dispersive and Defect-Tolerant Semiconductors from Element Substitution in Topological Materials 2022 ,	0
537	Extended topological valley-locked surface acoustic waves 2022, 13, 1324	4
536	Emergence of a Two-Dimensional Topological Dirac Semimetal Phase in a Phthalocyanine-Based Covalent Organic Framework.	2
535	Spontaneous spin polarization at the edge of the chiral superconducting states in a spin Hall metal. 2022 , 2164, 012016	
534	Investigation of Three Topological Edge States in Honeycomb Lattices Based on Graphene Plasmonic Crystal.	
533	Coherent control of spin tunneling in a driven spin-orbit coupled bosonic triple well.	
532	Anomalous flux periodicity in proximitised quantum spin Hall constrictions.	1
531	Magnetotransport properties of the Quantum Spin Hall and Quantum Hall states in an inverted HgTe/CdTe quantum well 2022 ,	
530	Rashba Spin Splitting in HgCdTe Quantum Wells with Inverted and Normal Band Structures 2022 , 12,	O
529	Topological properties and optical conductivities tuned by spin-orbit coupling and strain in kagome lattices. 2022 , 35, 105360	О
528	Spin-polarized charge transport through a single barrier in HgTe/CdTe heterostructure interface. 2022 , 114772	O
527	Theoretical investigation of structural, topological, mechanical and thermal behavior of SrPtS and BaPtS Heusler alloys.	0
526	Larger hybridization bandgaps and topological phase transitions in the Sb-based topological insulator superlattices. 2022 , 207221	O

Multi-orbital topolectrical circuit for topological quantum states. **2022**, 6, 021001

524	Unprotected quadratic band crossing points and quantum anomalous Hall effect in FeB2 monolayer. 2022 , 65, 1	0
523	Best Practices for First-Principles Simulations of Epitaxial Inorganic Interfaces 2022,	2
522	Lamellae preparation for atomic-resolution STEM imaging from ion-beam-sensitive topological insulator crystals. 2022 , 40, 033203	
521	Growth and photo-response of (110) oriented BaBiO3 films on SrTiO3 (001) substrates. 2022, 749, 139167	
520	doll half-Heusler compounds as a potential class of three-dimensional Chern insulators. 2022 , 280, 115710	O
519	Topological edge modes and localization transition in quasiperiodic graphene multilayer arrays. 2022 , 152, 107957	О
518	Manufacturing heterojunction based on 2D materials for artificial neural network construction. 2021 ,	
517	Experimental observation of edge-dependent quantum pseudospin Hall effect. 2021, 104,	1
516	Half-Metallic Ferromagnets, Spin Gapless Semiconductors, and Topological Semimetals Based on Heusler Alloys: Theory and Experiment. 2021 , 122, 1133-1157	O
515	Epitaxial Growth of Ultraflat Bismuthene with Large Topological Band Inversion Enabled by Substrate-Orbital-Filtering Effect 2021 ,	2
514	Edge Transport and Self-Assembly of Passive Objects in a Chiral Active Fluid*. 2021, 38, 128701	O
513	Local versus nonlocal correlation effects in interacting quantum spin Hall insulators. 2021, 104,	O
512	Observation of Unidirectional Solitonlike Edge States in Nonlinear Floquet Topological Insulators. 2021 , 11,	6
511	Large Gap Two-Dimensional Topological Insulators with the Significant Rashba Effect in Ethynyl and Methyl Functionalized PbSn Monolayers 2021 , 12, 12202-12209	О
510	High figure of merit fiber optic surface plasmon resonance sensor with topological insulator (BSTS). 2022 , 54, 1	О
509	Splitting of the Spectrum of Fermionic Excitations in a Topological Insulator by Charge Fluctuations. 2021 , 114, 751-756	О
508	Pressure-induced superconductivity and structure phase transition in Pt2HgSe3. 2021 , 6,	2

507	Z2 topological invariants for mixed states of fermions in time-reversal invariant band structures. 2021 , 104,	0
506	Random-Gate-Voltage Induced Al E shulerAronovBpivak Effect in Topological Edge States. 2021 , 38, 110302	Ο
505	Plasmonic excitation for a tunable transmitter without magnetic field immune to backscattering. 2021 , 104,	0
504	Tunneling in the Brillouin zone: Theory of backscattering in valley Hall edge channels. 2021 , 104,	O
503	Geometry effects in topologically confined bilayer graphene loops. 2022, 24, 013001	O
502	Persistence of Monoclinic Crystal Structure in 3D Second-Order Topological Insulator Candidate 1T'-MoTe Thin Flake Without Structural Phase Transition 2021 , e2101532	1
501	Magnetic correlation between two local spins in a quantum spin Hall insulator. 2021, 104,	O
500	Realization of the Kane-Mele model in XN4 -embedded graphene (X=Pt, 1r, R. 2021 , 104,	Ο
499	From atomic semimetal to topological nontrivial insulator. 2022 , 105,	1
498	Topological insulators on the square-hexagon lattice driven by next-nearest-neighbor hopping 2022 ,	1
497	Switching and tunning of the topological edge states from two-dimensional photonic crystal with liquid crystal medium. 2022 , 115240	О
496	Metallization and proximity superconductivity in topological insulator nanowires. 2022, 105,	1
495	Domain Formation Driven by the Entropy of Topological Edge Modes 2022 , 128, 156801	0
494	Topological magnon modes on honeycomb lattice with coupling textures 2022 , 12, 6257	0
493	Phase driven topological states in correlated Haldane model on a honeycomb lattice 2022,	
492	Raman response and shear viscosity in the non-Fermi liquid phase of Luttinger semimetals 2022,	1
491	Pressure-Induced Superconductivity in HgTe Single-Crystal Film 2022 , e2200590	О
490	Magnetoactive Acoustic Topological Transistors 2022 , e2201204	O

489	Hermitian Systems and Non-Hermitian Systems. 2022 , 7-27	
488	Quantum Spin Hall effect in tilted penta silicene and its isoelectronic substitutions.	1
487	Stacking-Dependent Topological Phases in Quasi-1D Bismuth Halides. 2022 , 77-120	
486	Introduction. 2022 , 1-19	
485	Backgrounds. 2022 , 3-19	
484	Topological study of a Bogoliubovile Gennes system of pseudo-spin- 1/2 bosons with conserved magnetization in a honeycomb lattice. 2022 , 105,	1
483	Antiferromagnetic second-order topological insulator with fractional mass-kink. 2022, 8,	1
482	A Short Review of All-Dielectric Topological Photonic Crystals. 2022 , 10,	1
481	Hilbert Space Structure of the Low Energy Sector of U(N) Quantum Hall Ferromagnets and Their Classical Limit. 2022 , 14, 872	
480	Crystalline Weyl semimetal phase in Quantum Spin Hall systems under magnetic fields. 2022 , 5,	
479	Polariton condensates for classical and quantum computing.	1
478	Observation of fractional spin textures in a Heusler material 2022 , 13, 2348	O
477	Particlefiole asymmetry and quantum confinement effects on the magneto-optical response of topological insulator thin-films. 2022 , 131, 164305	
476	Quantum Hall Effect and Geometric Phase Factor in Strong Magnetic Fields. 2022, 61, 1	
475	Universal topological quench dynamics for Z2 topological phases. 2022 ,	O
474	Research and application of topological insulators. 2022,	
473	Synthesis of Weyl Semi-Metal Co3Sn2S2 by Hydrothermal Method and Its Physical Properties. 2022 , 12, 830	
472	Microcavity Exciton-Polariton Quantum Spin Fluids. 2100137	O

471	The Dirac paradox in 1+1 dimensions and its realization with spin-orbit coupled nanowires.	0
470	Higher Chern Number States in Curved Periodic Nanowires 2022,	
469	Benchmarking Noise and Dephasing in Emerging Electrical Materials for Quantum Technologies 2022 , e2109671	1
468	Role of Shift Vector in High-Harmonic Generation from Noncentrosymmetric Topological Insulators under Strong Laser Fields. 2022 , 12,	3
467	Twist-resilient and robust ferroelectric quantum spin Hall insulators driven by van der Waals interactions. 2022 , 6,	О
466	Elastic valley Hall phases in bilayer phononic crystal. 2022 , 120, 191702	
465	Topological Space-Time Crystal 2022 , 128, 186802	О
464	Boosting the Quantum State of a Cavity with Floquet Driving 2022 , 128, 183602	O
463	Quantum Anomalous Hall Effect from Inverted Charge Transfer Gap. 2022 , 12,	0
462	Detecting and braiding higher-order Majorana corner states through their spin degree of freedom. 2022 , 105,	O
461	Topological states in superlattices of HgTe class of materials for engineering three-dimensional flat bands. 2022 , 4,	О
460	Magneto-optical absorption properties of topological insulator thin films 2022,	1
459	Embedded topological semimetals. 2022 , 105,	1
458	Topological Co3Sn2S2 magnetic Weyl semimetal: From fundamental understanding to diverse fields of study. 2022 , 8, 100072	2
457	Switchable quantum anomalous and spin Hall effects in honeycomb magnet EuCd2As2.	1
456	Parity-Dependent Quantum Phase Transition in the Quantum Ising Chain in a Transverse Field. 2022 , 14, 996	O
455	Quantum Diffusion in the Lowest Landau Level of Disordered Graphene. 2022, 12, 1675	О
454	Band gap of two-dimensional topological insulator with a double quantum well structure.	

453	Counterpropagating topological and quantum Hall edge channels 2022, 13, 2682		O
452	Ta4SiTe4 : A possible one-dimensional topological insulator. 2022 , 105,		O
451	Coexistence of Robust Edge States and Superconductivity in Few-Layer Stanene. 2022, 128,		1
450	Tunable topological edge states and rainbow trapping in two dimensional magnetoelastic phononic crystal plates based on an external magnetostatic field. 2022 , 107360		O
449	Broadband subwavelength tunable valley edge states induced by fluid filling acoustic metastructure.		O
448	All topological bands of all nonmagnetic stoichiometric materials <i>Science</i> , 2022 , 376, eabg9094	33.3	8
447	Bi2Se3 Topological Insulator Thin Films for Various Device Applications. 2022 , 143-172		
446	Angular momentum invoked band inversions in mirror symmetry protected topological states. 2022 , 105,		
445	Non-Abelian operation through scattering between chiral Dirac edge modes. 2022, 105,		
444	Strain Tunable Quantum Spin Hall Insulating Phase in Halogen Decorated Double-Layer Stanene.		
443	Surface-Driven Evolution of the Anomalous Hall Effect in Magnetic Topological Insulator MnBi 2 Te 4 Thin Films. 2202234		1
442	Interaction-induced quantum spin Hall insulator in the organic Dirac electron system (BEDT-TSeF)2I3. 2022 , 105,		1
441	First-Principles Study of the Optical Properties of TMDC/Graphene Heterostructures. 2022, 9, 387		O
440	Doubled quantum spin Hall effect with high-spin Chern number in \blacksquare antimonene and \blacksquare -bismuthene. 2022 , 105,		О
439	Magnetic competition with different spin chiralities in kagome magnets. 2022 , 2269, 012006		
438	Competition of quantum anomalous Hall states and charge density wave in a correlated topological model.		
437	Non-invasive and non-destructive characterization of MBE-grown CdZnTe/CdTe superlattice-based dislocation filtering layers. 2022 , 131, 205304		0

418

Self-assembly of magnetic Co atoms on stanene. 2022, 6, 435 Far-field radiation of biased monolayer PbBil. 2022, 128238 434 Multiple topological transitions and topological edge states of triple-site honeycomb lattice 433 photonic crystals. 2022, 115348 Majorana zero modes in iron-based superconductors. 2022, 5, 1734-1759 432 Quantum spin Hall effect in two-dimensional transition-metal chalcogenides MX5 (M = Zr, Hf and X 431 0 = S, Se, Te). **2022**, 143, 115325 Ab-initio study of topological phase tuning in Half-Heusler YPdBi compound. 2022, 640, 414056 430 Topological properties of one-dimensional non-Hermite electromagnetic medium system. 2022, 47, 03033 429 Ab initio investigation of electronic structure and optical properties of IrSn4. 2022, 12, 17882-17888 428 Higher-order topological phases on fractal lattices. 2022, 105, \circ 427 Quantum Spin Hall Phases in Graphene and the Atomically Thin Transition Metal Dichalcogenide 426 Family. 2100096 Twisted nodal wires and three-dimensional quantum spin Hall effect in distorted square-net 1 425 compounds. 2022, 105, Exceptional mode topological surface laser. 2022, 105, 424 Carbon nanotube resonator enhancement of Majorana fermions induced slow light in a hybrid 423 semiconductor/superconductor device. Quantum phases of spin-orbital-angular-momentum Doupled bosonic gases in optical lattices. 2022 422 , 105, Phase degree of freedom and topology in multiple- Q spin textures. 2022, 105, 421 1 420 Generalized Wilson loop method for nonlinear light-matter interaction. 2022, 7, Quantum oscillations of magnetoresistance in HgCdTe/HgTe/HgCdTe heterostructures with 419 inverted band spectrum.

Quantum Transport of Dirac Fermions in HgTe Gapless Quantum Wells. 2022, 12, 2047

The role of morphology on the emergence of topologically trivial surface states and selection rules 399 in topological-insulator nano-particles. 2022, 39, 105712 Low-temperature thermal expansion of the topological material candidates PtBi2 and . 2022, 398 641, 414102 Evidence of topological surface states in dypresium monopnictides compounds. 2022, 283, 115774 397 \circ Topological physics of Xenes. 2022, 295-318 396 Photonic spin Hall effect: fundamentals and emergent applications. 2022, 1, 220007-220007 395 12 Stanene and Plumbene. 2022, 49-72 394 Enhancement of thermoelectric power factor in monolayer PbBil: Staggered exchange field effect. 393 O Mesoscale Quantum-Confined Semiconductor Nanoplatelets through Seeded Growth. 2022, 34, 6048-6056 392 Vanishing of the quantum spin Hall phase in a semi-Dirac Kane-Mele model. 2022, 105, \circ 391 Pressure engineering of intertwined phase transitions in lanthanide monopnictide NdSb. 2022, 65, 390 Unsupervised learning of interacting topological and symmetry-breaking phase transitions. 2022, 389 105, 388 Topological classification and diagnosis in magnetically ordered electronic materials. 2022, 105, 387 Magnus Hall effect in three-dimensional topological semimetals. 2022, 137, 1 Chemical synthesis and materials discovery. 2022, 1, 514-520 386 Third-order topological insulators with wallpaper fermions in Tl4PbTe3 and Tl4SnTe3. 2022, 8, 385 \circ Evolution of surface states of antiferromagnetic topological insulator MnBi2Te4 with tuning the 384 surface magnetization. The Progress of the Quantum Hall Effect. 5, 21-28 383 Manipulating polariton condensates by Rashba-Dresselhaus coupling at room temperature. 2022, 382 13,

381	Nonlinear Hybrid Surface-Defect States in Defective Bi2Se3.	1
380	Optical refraction and absorption spectra in perturbed monolayer PbBil. 2022 , 132, 014302	Ο
379	Polarization-Induced Phase Transitions in Ultra-Thin InGaN-Based Double Quantum Wells. 2022 , 12, 2418	0
378	Structural and Electrical Characterizations of BiSb Topological Insulator Layers Epitaxially Integrated on GaAs.	Ο
377	Topological quantum materials for energy conversion and storage.	3
376	Linear and nonlinear thermoelectric transport in a quantum spin Hall insulators coupled with a nanomagnet. 2022 , 12,	
375	Universal tripartite entanglement signature of ungappable edge states. 2022, 106,	0
374	Universal transparency and asymmetric spin splitting near the Dirac point in HgTe quantum wells. 2022 , 106,	
373	Moir uperlattice structures in a rotating two-component Bose instein condensates. 2022, 39, 105780	
372	Characterization of helical states in semiconductor quantum wells using quantum information quantities. 2022 , 144, 115406	
371	Klein-Like Tunneling of Sound via Negative Index Metamaterials. 2022, 18,	2
370	Structural, electronic and topological properties of 3D TmBi compound. 2022 , 137,	Ο
369	Band Structure Near the Dirac Point in HgTe Quantum Wells with Critical Thickness. 2022 , 12, 2492	
368	Photonic Z2 Topological Anderson Insulators. 2022 , 129,	Ο
367	Chiral detection of Majorana bound states at the edge of a quantum spin Hall insulator. 2022, 106,	
366	From classical to quantum regime of topological surface states via defect engineering.	О
365	Formation of bound states from the edge states of 2D topological insulator by macroscopic magnetic barriers.	
364	Chiral hinge transport in disordered non-Hermitian second-order topological insulators. 2022, 106,	

 $363 \qquad \text{Multiband acoustic topological metamaterials with valley-switchable higher-order corner states}.$

362	Unoccupied topological surface state in MnBi2Te4. 2022, 106,	O
361	The Promise of Soft Matter Enabled Quantum Materials. 2203908	
360	Signature of parity anomaly in the measurement of optical Hall conductivity in quantum anomalous Hall systems. 2022 , 106,	
359	Magnetic band representations, Fu-Kane-like symmetry indicators, and magnetic topological materials. 2022 , 106,	0
358	Theoretical Understanding of Polar Topological Phase Transitions in Functional Oxide Heterostructures: A Review. 2200486	O
357	Correlated disorder induced anomalous transport in magnetically doped topological insulators. 2022 , 106,	О
356	Bridging the gap between topological non-Hermitian physics and open quantum systems. 2022 , 106,	O
355	Uhlmann holonomy against Lindblad dynamics of topological systems at finite temperatures. 2022 , 106,	0
354	Tunable Topological Phase Transition in Two-Dimensional Ternary Transition Metal Halides TiXI (X = P and As). 9,	
353	Advances in Bismuth-Based Topological Quantum Materials by Scanning Tunnelling Microscopy.	О
352	Time-reversal invariant topological gapped phases in bilayer Dirac materials. 2022, 106,	
351	Floquet-Weyl semimetals generated by an optically resonant interband transition. 2022, 106,	О
350	Quantum topological phase transitions in skyrmion crystals. 2022 , 4,	O
349	Computationally accelerated discovery of functional and structural Heusler materials.	1
348	Effects of the Vertices on the Topological Bound States in a Quasicrystalline Topological Insulator. 2022 , 14, 1736	
347	Sub- to super-Poissonian crossover of current noise in helical edge states coupled to a spin impurity in a magnetic field. 2022 , 106,	
346	Artificial Graphene Nanoribbons: A Test Bed for Topology and Low-Dimensional Dirac Physics.	O

Signatures of topological phase transitions in higher Landau levels of HgTe/CdTe quantum wells from an information theory perspective. **2022**, 128057

344	Two-Dimensional Topological States. 2022 , 81-122	
343	Topological properties of CsCl type superconducting materials. 2022, 128385	O
342	Tunable topological interface states and resonance states of surface waves based on the shape memory alloy.	
341	Topological flat bands in a kagome lattice multiorbital system. 2022 , 5,	2
340	Pressure induced topological and topological crystalline insulators. 2022 , 34, 423001	O
339	Multi-band acoustic topological insulator. 2022 , 100793	О
338	Free-Fermionic Topological Quantum Sensors. 2022 , 129,	O
337	Topological acoustics.	2
336	Transport through quantum anomalous Hall bilayers with lattice mismatch. 2022 , 24, 083029	O
335	Transformation of energy spectrum and wave functions on the way from a 2D-to-3D topological insulator in HgTe quantum wells. 2022 , 106,	
334	Nonlinear optical properties of tin telluride topological crystalline insulator at a telecommunication wavelength. 2022 , 925, 166643	O
333	Effect of magnetic impurity scattering on transport in topological insulators. 2022, 106,	О
332	Pressure-driven tunable properties of the small-gap chalcopyrite topological quantum material ZnGeSb2 : A first-principles study. 2022 , 106,	O
331	Machine learning assisted predictions of multi-component phase diagrams and fine boundary information. 2022 , 240, 118341	1
330	Acoustic edge mode in spiral-based metamaterials at subwavelength scale. 2022 , 42, 106008	O
329	Topological states in MoS2 and WS2 monolayers with stacking faults induced period line defects: First-principles calculations. 2022 , 451, 128398	O
328	Electron tunneling through HgTe/CdTe quantum wells with all-electrical superlattice structures. 2022 , 646, 414344	O

327	Carrier Transport in Low-Dimensional Semiconductors. 2022 , 1-51	О
326	Comparative study on epitaxial growth of stanene and bismuthene on InSb(111) substrate. 2022 , 71, 186401	O
325	Machine Learning Detection of Quantum Many-Body Localization Phase Transition. 2022,	О
324	A large-gap quantum spin Hall state in exfoliated Na3Bi-like two-dimensional materials. 2022 , 10, 113	29-11337 ₀
323	Quantum spin Hall effect. 2022 ,	0
322	Valley topological States in double-surface periodic elastic phonon crystal plates. 2022 , 0	O
321	Spin-Valley Polarized Edge States in Quasi-One-Dimensional Asymmetric Kagome Lattice.	O
320	Possibility of regulating valley-contrasting physics and topological properties by ferroelectricity in functionalized arsenene. 2022 , 24, 23910-23918	O
319	Quasi-bound states and resonant skew scattering in two-dimensional materials with a Mexican-hat dispersion. 2023 , 145, 115492	0
318	Local invariants identify topology in metals and gapless systems. 2022, 106,	2
317	Introduction and Analysis of Typical Quantum Hall Effect. 2022 , 2, 56-59	Ο
316	Quantum oscillations of the j=3/2 Fermi surface in the topological semimetal YPtBi. 2022 , 4,	O
315	Z2 Dirac points with topologically protected multihelicoid surface states. 2022, 4,	Ο
314	Self-Induced Dirac Boundary State and Digitization in a Nonlinear Resonator Chain. 2022, 129,	O
313	Flavour-selective localization in interacting lattice fermions. 2022 , 18, 1201-1205	1
312	Fabrication and growth mechanism of one-dimensional Heusler alloy nanostructures with different morphologies on anodic aluminum oxide template by magnetron sputtering. 2022 , 16,	O
311	Position-dependent mass with modulated velocity in 1-D heterostructures. 2022 , 97, 105306	О
310	Measuring Quantum Geometric Tensor of Non-Abelian System in Superconducting Circuits. 2022 , 39, 100202	2

309	Efficient and improved prediction of the band offsets at semiconductor heterojunctions from meta-GGA density functionals: A benchmark study. 2022 , 157, 124108	О
308	Progress and prospects in the quantum anomalous Hall effect. 2022 , 10, 090903	О
307	Robust Acoustic Waveguide Transport in Heterostructures Based on Acoustic Topological Insulators. 2022 , 18,	О
306	Disorder-induced topological phase transition in HgCdTe crystals. 2022 , 106,	О
305	Nontrivial gapless electronic states at the stacking faults of weak topological insulators. 2022, 106,	О
304	Critical topology and pressure-induced superconductivity in the van der Waals compound AuTe2Br. 2022 , 7,	О
303	Control of coupling between micromechanical topological waveguides. 2022, 107755	О
302	Projected topological branes. 2022 , 5,	О
301	Tunable large spin Nernst effect in a two-dimensional magnetic bilayer. 2022, 106,	0
300	Spinor GW /Bethe-Salpeter calculations in BerkeleyGW: Implementation, symmetries, benchmarking, and performance. 2022 , 106,	1
299	Topological states in a dimerized square-octagon lattice with staggered magnetic fluxes. 2022, 106,	0
298	Heusler Alloys: Past, Properties, New Alloys, And Prospects. 2022 , 101017	4
297	Robustness of helical edge states under edge reconstruction.	0
296	Quasinodal spheres and the spin Hall effect: The case of YH3 and CaTe. 2022 , 106,	О
295	Photonic topological insulator induced by a dislocation in three dimensions. 2022 , 609, 931-935	1
294	Strain-induced two-dimensional topological insulators in monolayer1T'-RuO2.	О
293	High Stability and Inoxidizability of Monolayer Topological Insulator ZrTe5. 2022 , 126, 16069-16074	0
292	Healing Se Vacancies in Bi2Se3 by Ambient Gases. 2022 , 126, 16877-16884	O

291	Sequential Measurements, Topological Quantum Field Theories, and Topological Quantum Neural Networks. 2200104	Ο
290	Topological sound in two dimensions.	Ο
289	Time-resolved measurement of ambipolar edge magnetoplasmon transport in InAs/InGaSb composite quantum wells. 2022 , 4,	O
288	Topological materials for full-vector elastic waves.	O
287	Exploring topological phase transition and Weyl physics in five dimensions with electric circuits. 2022 , 4,	0
286	Large-gap quantum anomalous Hall states induced by functionalizing buckled Bi-III monolayer/Al2O3. 2022 , 106,	Ο
285	Helical Luttinger Liquid on the Edge of a Two-Dimensional Topological Antiferromagnet. 2022 , 22, 7606-7614	O
284	Topological Lifshitz transition and one-dimensional Weyl mode in HfTe5.	O
283	Toward acceleration sensing based on topological gyroscopic metamaterials. 2022 , 106,	O
282	Temperature-dependent band modification and energy dependence of the electron-phonon interaction in the topological surface state on Bi2Te3. 2022 , 106,	O
281	Proximity-magnetized quantum spin Hall insulator: monolayer 1 TIWTe2/Cr2Ge2Te6. 2022, 13,	Ο
280	Correlation-corrected band topology and topological surface states in iron-based superconductors. 2022 , 106,	O
279	Contact Effects on Thermoelectric Properties of Textured Graphene Nanoribbons. 2022, 12, 3357	О
278	Emergent topological states via digital (001) oxide superlattices. 2022 , 8,	О
277	Role of the edges in a quasicrystalline Haldane model. 2022 , 106,	O
276	Time-reversal symmetry broken quantum spin Hall phase in the van der Waals heterostructure ZrTe5/Cr2Ge2Te6. 2022 , 24, 093029	O
275	Topological nonlinear optics with spin-orbit coupled Bose-Einstein condensate in cavity. 2022, 8,	О
274	Magneto-optical isolation and topological edge states at singular points in plasmonic structures. 2022 ,	О

273	Near-Field Plasmons Imaging and Energy Analysis on Bi 2 Te 3 Film. 2200155	0
272	Weak quantization of noninteracting topological Anderson insulator. 2022 , 106,	O
271	Type-II quantum spin Hall efect in two-dimensional metals.	0
270	Topological zero-dimensional defect and flux states in three-dimensional insulators. 2022 , 13,	O
269	Universal properties of boundary and interface charges in multichannel one-dimensional continuum models. 2022 , 106,	0
268	Experimental Realization of Spin-Polarized States on Mg 3 Bi 2 Surface. 2200250	O
267	Large Exchange Coupling Between Localized Spins and Topological Bands in Magnetic Topological Insulator MnBi 2 Te 4. 2202841	1
266	Simultaneous confinement of acoustic phonons and near infrared photons in GaAs/AlAs multilayers by band inversion. 2022 ,	O
265	Direct Tuning of Large-Gap Quantum Spin Hall Effect in Mono-Transition Metal Carbide MXenes.	0
264	Metal chalcogenide materials: Synthesis, structure and properties. 2022,	O
263	Controlling Sound Wave Propagation in Topological Crystalline Insulators and Rainbow-Trapping. 2022 , 18,	1
262	Effect of C3v symmetry breaking on the noncentrosymmetric quantum spin Hall insulating phase and optical characteristics of monolayer PbBil. 2022 , 106,	O
261	Cryogenic Temperature Growth of Sn Thin Films on Ferromagnetic Co(0001). 2201452	0
260	Multiplicative topological phases. 2022 , 5,	O
260 259	Multiplicative topological phases. 2022, 5, Synthesis and electromagnetic transport of large-area 2D WTe2 thin film. 2022, 43, 102002	2
259	Synthesis and electromagnetic transport of large-area 2D WTe2 thin film. 2022 , 43, 102002 Electron pairs bound by the spinBrbit interaction in 2D gated Rashba materials with two-band	2

255	Electrical control of spin-polarized topological currents in monolayer WTe2. 2022, 106,	О
254	Correlated Chern insulators in two-dimensional Raman lattices: A cold-atom regularization of strongly coupled four-Fermi field theories. 2022 , 4,	O
253	Tuning the many-body interactions in a helical Luttinger liquid. 2022, 13,	О
252	Circular polarization immunity of the cyclotron resonance photoconductivity in two-dimensional electron systems. 2022 , 106,	O
251	Topology and applications of 2D Dirac and semi-Dirac materials. 2022,	O
250	Two-dimensional obstructed atomic insulators with fractional corner charge in the MA2Z4 family. 2022 , 106,	O
249	Intense high-frequency laser-field control of spin-orbit coupling in GaInAs/AlInAs quantum wells: A laser dressing effect. 2022 , 106,	1
248	TM2B3 monolayers: Intrinsic anti-ferromagnetism and Dirac nodal line semimetal. 2022 , 121, 183103	О
247	Realization of the Quantum Spin Hall Effect Using Tunable Acoustic Metamaterials. 2022, 18,	О
246	Topological phase transitions and Berry-phase hysteresis in exchange-coupled nanomagnets. 2022 , 106,	O
245	Flat-band ferromagnetism in a correlated topological insulator on a honeycomb lattice. 2022 , 106,	0
244	Characterization of two-dimensional cellular elastic topological insulators based on regular-hexagon carriers.	О
243	Multiple Dirac points including potential spin-orbit Dirac points in nonsymmorphic HfGe0.92Te. 2023 , 66,	0
242	Spin Hall Effect of Light: From Fundamentals To Recent Advancements. 2200046	4
241	Spin-polarization of topological crystalline and normal insulator Pb1\(\mathbb{B}\)SnxSe (111) epilayers probed by pho. 2022 , 155434	0
240	Non-Hermitian higher-order topological superconductors in two dimensions: Statics and dynamics. 2022 , 106,	O
239	Real-space many-body marker for correlated Z2 topological insulators. 2022 , 106,	O
238	Floquet states and optical conductivity of an irradiated two-dimensional topological insulator. 2022 , 106,	O

237	Band inversion induced large-gap quantum spin Hall states in III-Bi-monolayer/ SiO2. 2022 , 106,	0
236	Second-order topological corner states in zigzag graphene nanoflake with different types of edge magnetic configurations. 2022 , 106,	O
235	Two-dimensional Dirac plasmon-polaritons in graphene, 3D topological insulator and hybrid systems. 2022 , 11,	O
234	Stimulated emission in 24B1 fh range and «Reststrahlen» waveguide in HgCdTe structures grown on GaAs. 2022 , 121, 182103	O
233	Interaction bulk-boundary relation and its applications towards symmetry breaking and beyond. 2022 , 106,	0
232	Investigation of gamma ray, electron, and neutron interaction parameters of some topological insulating materials. 1-17	O
231	Electronic structures and stability investigation of large band gap topological insulators MTl4Te3 ($M = Cd$, Hg). 2022 , 6,	0
230	Topological Properties of the 2D 2-Band System with Generalized W-Shaped Band Inversion. 2022 , 4, 476-485	O
229	Structure, synthesis, and properties of single-metal-atom chains. 2022, 101124	0
228	Robust Second-Order Topological Insulators with Giant Valley Polarization in Two-Dimensional Honeycomb Ferromagnets.	O
227	Nonlinear Landauer formula: Nonlinear response theory of disordered and topological materials. 2022 , 106,	0
226	Abundance of Second Order Topology in C3 Symmetric Two-dimensional Insulators.	O
225	Electronic Polarization in Non-Bloch Band Theory. 2022 , 91,	O
224	Mexican-hat dispersions and high carrier mobility of \mathbb{D} SnX (X = O, S, Se, Te) single-layers: A first-principles investigation.	1
223	Ultrafast chirality: the road to efficient chiral measurements.	1
222	Plasmonic Hot Carrier Injection from Single Gold Nanoparticles into Topological Insulator Bi2Se3 Nanoribbons	O
221	Thermal transport of helical Majorana edge modes in a superconducting antiferromagnetic quantum spin Hall insulator. 2023 , 146, 115555	0
220	LASER GENERATION OF CdxHg1日e/CdyHg1日e QUANTUM WELL HETEROSTRUCTURE WITH MICRODISK RESONATORS AT A WAVELENGTH OF 4.1日.1日. 2022 , 89, 632-637	O

219	Link between Zitterbewegung and topological phase transitions. 2022 , 106,	О
218	Symmetry-protected topological corner modes in a periodically driven interacting spin lattice. 2022 , 106,	O
217	Direct Observation of the Topological Surface State in the Topological Superconductor 2M-WS2.	О
216	Topologically protected surface states in TaPdTe5. 2022 , 1,	O
215	Two-atom-thin topological crystalline insulators lacking out of plane inversion symmetry.	O
214	Second-order topological insulator in van der Waals heterostructures of CoBr2/Pt2HgSe3/CoBr2. 2022 , 106,	О
213	Switching between topological edge states in plasmonic systems using phase-change materials.	1
212	Tunable interface states between Floquet-Weyl semimetals. 2022 , 106,	O
211	Spin-valley polarized edge states in quasi-one-dimensional asymmetric kagome lattice. 10,	O
210	Antiferromagnetic Chern insulator in centrosymmetric systems. 2022 , 106,	O
209	Engineering a Phase-Robust Topological Router in a Dimerized Superconducting-Circuit Lattice with Long-Range Hopping and Chiral Symmetry. 2022 , 18,	O
208	Topological properties of subsystem-symmetry-protected edge states in an extended quasi-one-dimensional dimerized lattice. 2022 , 106,	O
207	Quasiparticle excitations in a one-dimensional interacting topological insulator: Application for dopant-based quantum simulation. 2022 , 106,	O
206	Topological hinge modes in Dirac semimetals. 2023 , 18,	Ο
205	Band Structures and Electronic Properties of Edge-Functionalized Germanene Nanoribbons. 2022 , 155706	O
204	Laser Generation at Wavelengths 4.1B.1 fb of CdxHg1NTe/CdyHg1NTe Quantum-Well Heterostructures with Microdisk Resonators. 2022 , 89, 844-848	O
203	Hydrostatic deformation potentials of narrow-gap HgCdTe. 2022 , 106,	O
202	Photonic Weyl semimetals in pseudochiral metamaterials. 2022 , 12,	0

201	Enhanced SpinDrbit Coupling in a Correlated Metal. 2022, 91,	О
200	NonNolatile Spintronic Device and Circuit. 2017 , 31-79	О
199	Role of spin currents on electron-electron interaction in the quantum spin Hall phase. 2022, 106,	1
198	Topological Nanostructures with Preferred Helicity from Self-Assembly of Block Copolymers via Homochiral Evolution.	О
197	Fredholm Homotopies for Strongly-Disordered 2D Insulators.	1
196	Nonadiabatic Shifting of a Topological Interface in an Electroacoustic Su-Schrieffer-Heeger Lattice. 2022 , 18,	О
195	Intrinsic Second-Order Topological Insulator in Two-Dimensional Covalent Organic Frameworks. 10905-10911	0
194	Topological Anderson insulator via disorder-recovered average symmetry. 2022 , 106,	О
193	Single crystal growth of topological semimetals and magnetic topological materials. 2023, 0	0
192	Manipulation for one-way large-area helical waveguide states in topological heterostructure. 2023 , 135, 113320	О
191	Non-Hermitian total-loss high-order topological insulator based on 1D SuBchriefferHeeger (SSH). 2023 , 650, 414570	0
190	Topological properties and strain effects of binary monoclinic superconductors RhX2 (X=Sb,Bi). 2023 , 650, 414569	О
189	Scattering in quantum wires and junctions of quantum wires with edge states of quantum spin Hall insulators. 2023 , 360, 115034	0
188	Broadband and controllable topological interface state of longitudinal wave in pillared phononic crystal beams. 2023 , 650, 414555	O
187	Occupancy of lattice positions probed by X-ray photoelectron diffraction: A case study of tetradymite topological insulators. 2023 , 36, 102516	0
186	Half-Heusler d0-d gapless semiconductors as strong Z2 topological insulators. 2023 , 295, 127119	O
185	Observation of different edge current states localization scenarios in a HgTe based two-dimensional topological insulator. 2023 , 147, 115605	0
184	Visible to near-infrared broadband photodetector employing thin film topological insulator heterojunction (p-TlBiSe2/n-Si) diode. 2023 , 612, 155813	O

183	Realization of a piezoelectric quantum spin Hall phase with a large band gap in MBiH (M = Ga and In) monolayers. 2022 , 10, 25683-25691	Ο
182	Towards complete band structure of microscopic MoS2 flakes. 2022 , 273, 01006	O
181	Origin of Structure Inversion Asymmetry in Double HgTe Quantum Wells. 2022 , 116, 547-555	О
180	Collective Spin Modes in Fermi Liquids with SpinDrbit Coupling. 2022, 135, 549-574	Ο
179	Splitting of Dirac Cones in HgTe Quantum Wells: Effects of Crystallographic Orientation, Interface-, Bulk-, and Structure-Inversion Asymmetry. 2022 , 135, 540-548	0
178	Spin-Dependent Electron Electron Interaction in Rashba Materials. 2022, 135, 531-539	O
177	Bulk-edge correspondence for Floquet topological phases in honeycomb nanoribbon.	О
176	Amorphous Kane-Mele model in disordered hyperuniform two-dimensional networks. 2022, 106,	O
175	Topology and Symmetry in Quantum Materials. 2201058	О
174	???????????. 2022,	Ο
174	Presented with the antiferromagnetic topological state in a multiferroic heterobilayer. 2022 , 106,	0
	Electric-field switching of the antiferromagnetic topological state in a multiferroic heterobilayer.	
173	Electric-field switching of the antiferromagnetic topological state in a multiferroic heterobilayer. 2022 , 106,	0
173	Electric-field switching of the antiferromagnetic topological state in a multiferroic heterobilayer. 2022 , 106, Synthesis, Evolution of Morphology, Transport Properties for Bi2Te3 Nanoplates. 2022 , 12, 1668 Wire construction of class DIII topological crystalline superconductors in two dimensions. 2022 ,	0
173 172 171	Electric-field switching of the antiferromagnetic topological state in a multiferroic heterobilayer. 2022, 106, Synthesis, Evolution of Morphology, Transport Properties for Bi2Te3 Nanoplates. 2022, 12, 1668 Wire construction of class DIII topological crystalline superconductors in two dimensions. 2022, 106, Strain-tuned topological phase transition and unconventional Zeeman effect in ZrTe5	0 1
173 172 171 170	Electric-field switching of the antiferromagnetic topological state in a multiferroic heterobilayer. 2022, 106, Synthesis, Evolution of Morphology, Transport Properties for Bi2Te3 Nanoplates. 2022, 12, 1668 Wire construction of class DIII topological crystalline superconductors in two dimensions. 2022, 106, Strain-tuned topological phase transition and unconventional Zeeman effect in ZrTe5 microcrystals. 2022, 3,	0 1
173 172 171 170 169	Electric-field switching of the antiferromagnetic topological state in a multiferroic heterobilayer. 2022, 106, Synthesis, Evolution of Morphology, Transport Properties for Bi2Te3 Nanoplates. 2022, 12, 1668 Wire construction of class DIII topological crystalline superconductors in two dimensions. 2022, 106, Strain-tuned topological phase transition and unconventional Zeeman effect in ZrTe5 microcrystals. 2022, 3, Surface plasmons in anisotropic 3D gapped topological insulators. 2023, 35, 085001 Edge States and Strain-Driven Topological Phase Transitions in Quantum Dots in Topological	0 1 0

165	Multiband topological states in the Penrose-triangle photonic crystals. 2023, 48, 101	3
164	Electric field-assisted patterning of few-layer MoTe2 by scanning probe lithography.	0
163	Topological kagome magnets and superconductors. 2022 , 612, 647-657	О
162	Bulk-interface correspondence from quantum distance in flat band systems. 2022 , 5,	O
161	Photonic topological phases in Tellegen metamaterials. 2022 , 30, 47004	О
160	Topological Photonic States in Waveguide Arrays. 2200053	O
159	Magnetic interactions of 4f electrons in the topological insulator chalcogenide Bi2Se3. 2022, 106,	О
158	Long-range permeation of wave function and superficial surface state due to strong quantum size effects in topological Bi/BiSb heterojunctions. 2022 , 106,	O
157	Interplay of quantum spin Hall effect and spontaneous time-reversal symmetry breaking in electron-hole bilayers. I. Transport properties. 2022 , 106,	1
156	Magnetic correlations in the magnetic topological insulator (Cr,Sb)2Te3. 2022 , 106,	O
155	Polarity-Driven Directional [0001] Electron Transfer on Nonpolar ZnO (101 0) Crystal Plane.	0
154	Analytical solutions of topological surface states in a series of lattice models. 2022 , 106,	О
153	Topologically protected dynamics in three-dimensional nonlinear antisymmetric Lotka-Volterra systems. 2022 , 106,	0
152	The model for non-Abelian field topology for the multilayer fractional quantum anomalous Hall device. 10,	O
151	Spin-momentum locking from topological quantum chemistry: Applications to multifold fermions. 2022 , 106,	O
150	Engineering Floquet topological phases using elliptically polarized light. 2022, 106,	O
149	Polarization analysis by means of individual soft x-ray absorption spectra of rare earths. 2022 , 106,	О
148	Topological metasurface: From passive toward active and beyond.	1

147	Observation of 🕰 Modes in an Acoustic Floquet System. 2022 , 129,	0
146	Theory for all-optical responses in topological materials: The velocity gauge picture. 2022 , 106,	O
145	Special issue on Spintronics, Editor∄ note. 2022 , 115057	О
144	Interplay of quantum spin Hall effect and spontaneous time-reversal symmetry breaking in electron-hole bilayers. II. Zero-field topological superconductivity. 2022 , 106,	O
143	The Principle, Progress and State-of-Art Applications of Spin Hall Effect. 2022 , 2386, 012064	О
142	Tunneling dynamics of spin-orbit coupled BECs in a one-dimensional accelerating optical lattice.	0
141	Quantum anomalous layer Hall effect in the topological magnet MnBi2Te4. 2022, 106,	0
140	Light-induced phase crossovers in a quantum spin Hall system. 2022 , 106,	О
139	Majorana nanowires for topological quantum computation. 2022 , 132, 231101	0
138	Proximity-induced zero-energy states indistinguishable from topological edge states. 2023, 107,	О
137	Electromagnetic shielding induced by topological surface states. 2023 , 138,	О
136	Universal topological marker. 2023 , 107,	O
135	Quantized fields induced topological features in Harper-Hofstadter model. 2023, 33,	0
134	Spinful Topological Phases in Acoustic Crystals with Projective PT Symmetry. 2023, 130,	О
133	Giant and tunable Rashba spin splitting and Quantum Spin Hall Effect in H-Pb-Cl. 2023, 0	0
132	Terahertz cyclotron emission from two-dimensional Dirac fermions.	0
131	Imaging an Acoustic Topological Edge Mode on a Patterned Substrate with Microwave Impedance Microscopy. 2023 , 19,	1
130	Topological laser with higher-order corner states in the 2-dimensional Su-Schrieffer-Heeger model. 2023 , 31, 3427	О

129	Anisotropic angle-dependent Andreev reflection at the ferromagnet/superconductor junction on the surface of topological insulators.	O
128	Ferroelectric higher-order topological insulator in two dimensions. 2023 , 107,	O
127	Remote control of spin polarization of topological corner states. 2023, 107,	O
126	Reentrant quantum spin Hall effect in the presence of an exchange field. 2023, 107,	O
125	Single crystal growth of topological semimetals and magnetic topological materials. 2023, 72, 038101	O
124	Higher-order topological phases emerging from Su-Schrieffer-Heeger stacking. 2023, 107,	O
123	Influence of Dirac cone warping and tilting on the Friedel oscillations in a topological insulator. 2023 , 107,	О
122	Electric-dipole spin resonance and spin orbit coupling effects in odd-integer quantum Hall edge channels. 2023 , 107,	O
121	Long-lived Andreev states as evidence for protected hinge modes in a bismuth nanoring Josephson junction.	O
120	Detection of Surface States in Quantum Materials ZrTe2 and TmB4 by Scanning Tunneling Microscopy. 2023 , 8, 9	O
119	Unsupervised Data-Driven Classification of Topological Gapped Systems with Symmetries. 2023 , 130,	O
118	Realization of Qi-Wu-Zhang model in spin-orbit-coupled ultracold fermions. 2023, 5,	O
117	Energy dynamics, heat production and heatWork conversion with qubits: towards the development of quantum machines.	O
116	Lindblad master equation approach to the topological phase transition in the disordered Su-Schrieffer-Heeger model. 2023 , 107,	O
115	Chiral fermions on lattice axion strings. 2023 , 107,	0
114	Polarization jumps by breaking symmetries of two-dimensional Weyl semimetals. 2023, 107,	O
113	Inner skin effects on non-Hermitian topological fractals. 2023 , 6,	0
112	The small slope approximation method applied to a two dimensional dielectric-topological insulator material rough interface. 2023 , 67, 633-641	O

111	An ab-initio study to investigate the structural, mechanical, electrical, optical and thermal properties of the AZrO3 (A= Mg, Ca, Sr, Ba, Sn, Cu) compounds. 2023 , 34, 105339	О
110	High-throughput first-principle prediction of collinear magnetic topological materials. 2022, 8,	Ο
109	Switchable large-gap quantum spin Hall state in the two-dimensional MSi2Z4 class of materials. 2022 , 106,	1
108	Multiple surface resonance electronic spin states in the strong topological metal Zr2Te2P. 2022 , 106,	Ο
107	Identifying Majorana bound states at quantum spin Hall edges using a metallic probe. 2022, 106,	0
106	Hedgehog orbital texture in p -type tellurium and the antisymmetric nonreciprocal Hall response. 2023 , 7,	O
105	Two-Dimensional Topological Insulator State in Cadmium Arsenide Thin Films. 2023, 130,	1
104	Carrier Transport in Low-Dimensional Semiconductors. 2023 , 1113-1163	Ο
103	Quantum Fluctuation of the Quantum Geometric Tensor and Its Manifestation as Intrinsic Hall Signatures in Time-Reversal Invariant Systems. 2023 , 130,	Ο
102	Anomalous Hall conductivity and quantum friction. 2023, 107,	О
101	The noncommutative quantum Hall effect with anomalous magnetic moment in three different relativistic scenarios. 2023 , 55,	0
100	Effects of the Spatial Extension of the Edge Channels on the Interference Pattern of a Helical Josephson Junction. 2023 , 13, 569	O
99	Evolution of the edge states and corner states in a multilayer honeycomb valley-Hall topological metamaterial. 2023 , 107,	0
98	Multiple Magnetic Phases and Anomalous Hall Effect in Sb1.9Fe0.1Te2.85S0.15 Topological Insulators. 2023 , 127, 2508-2517	O
97	Topogivity: A Machine-Learned Chemical Rule for Discovering Topological Materials. 2023 , 23, 772-778	Ο
96	Colloquium : Quantum anomalous Hall effect. 2023 , 95,	3
95	Quantum Spin Hall States in 2D Monolayer WTe2/MoTe2 Lateral Heterojunctions for Topological Quantum Computation. 2023 , 6, 2020-2026	0
94	Inter-quintuple layer coupling and topological phase transitions in the chalcogenide topological insulators. 2023 , 5, 015001	O

93	Quantum spin Hall insulator on the honeycomb lattice induced by ferromagnetic exchange interaction. 2023 , 655, 414748	О
92	Realization and Current-Driven Dynamics of Fractional Hopfions and Their Ensembles in a Helimagnet FeGe.	Ο
91	Interband Electron Transitions Energy in Multiple HgCdTe Quantum Wells at Room Temperature. 2023 , 10, 430	0
90	Fixed points on band structures of non-Hermitian models: Extended states in the bandgap and ideal superluminal tunneling. 2023 , 107,	O
89	Magnetic field effects and excitonic selection rules in monolayer palladium diselenide as a large-gap quantum spin Hall insulator. 2023 , 107,	0
88	Induced superconductivity in the two-dimensional topological insulator phase of cadmium arsenide. 2023 , 11, 041117	O
87	SpinBrbit interactions in plasmonic crystals probed by site-selective cathodoluminescence spectroscopy. 2023 ,	0
86	Controllable subwavelength topological rainbow trapping in water-filling acoustic metamaterials. 2023 , 207, 109366	O
85	Using optical systems to simulate topological systems in momentum space and measure their topological numbers. 2023 , 15, 100145	0
84	Numerical and experimental investigation of second-order mechanical topological insulators. 2023 , 174, 105251	O
83	Topological thermoelectrics: New opportunities and challenges. 2023 , 30, 101488	0
82	Symmetry and Topology. 2022 , 1-70	O
81	Unprotected edge modes in quantum spin Hall insulator candidate materials. 2023, 107,	1
80	Optical and Optoelectronic Properties of Bi2Te3, Sb2Te3, and Bi0.5Sb1.5Te3 Flakes. 2023 , 61, 107-114	O
79	Floquet topological phases on a honeycomb lattice using elliptically polarized light. 2023, 10, 024002	0
78	Topological contribution to magnetism in the Kane-Mele model: An explicit wave-function approach. 2023 , 107,	O
77	Optical absorption measurement of spin Berry curvature and spin Chern marker. 2023 , 35, 155601	0
76	Tunneling-induced fractal transmission in valley Hall waveguides. 2023 , 107,	O

75	Square-Root Higher-Order Topology in Rectangular-Lattice Acoustic Metamaterials. 2023, 19,	O
74	Sublattice-enriched tunability of bound states in second-order topological insulators and superconductors. 2023 , 107,	O
73	Stably protected gapless edge states without Wannier obstruction. 2023, 107,	О
72	Universal intrinsic higher-rank spin tensor Hall effect. 2023 , 107,	Ο
71	Anisotropic topological surface states in thin-film monoclinic Ag2Se. 2023 , 32, 101013	O
70	Observation of Weyl and Dirac fermions at smooth topological Volkov-Pankratov heterojunctions. 2023 , 107,	O
69	Valley Hall effect and kink states in topolectrical circuits. 2023, 5,	O
68	Topology of three-dimensional Dirac semimetals and quantum spin Hall systems without gapless edge modes. 2023 , 5,	O
67	Topological phases and non-Hermitian topology in photonic artificial microstructures. 2023,	O
66	First-principles studies of electronic properties in a Pt2CdSe3/Pt2HgSe3 Kane-Mele heterobilayer. 2023 , 107,	Ο
65	One-dimensional noninteracting topological insulators with chiral symmetry. 2023, 107,	О
64	Ideal acoustic quantum spin Hall phase in a multi-topology platform. 2023 , 14,	O
63	Layer-dependent zero-line modes in antiferromagnetic topological insulators. 2023, 107,	О
62	Effects of Charge Dopants in Quantum Spin Hall Materials. 2023, 130,	O
61	Quantitative theory of backscattering in topological HgTe and (Hg,Mn)Te quantum wells: Acceptor states, Kondo effect, precessional dephasing, and bound magnetic polaron. 2023 , 107,	0
60	Morse theory study on the evolution of nodal lines in PT -symmetric nodal-line semimetals. 2023 , 107,	Ο
59	Higher-Order Topological Insulator on a Martini Lattice and Its Square Root Descendant. 2023 , 92,	O
58	Predicted novel Janus I-Ge2 XY (X/Y= S, Se, Te) monolayers with Mexican-hat dispersions and high carrier mobilities. 2023 , 56, 135302	O

57	Controllable Floquet edge modes in a multifrequency driving system. 2023, 107,	0
56	Realization of a three-dimensional quantum Hall effect in a Zeeman-induced second-order topological insulator on a torus. 2023 , 107,	O
55	Intrinsic magnetic topological materials. 2023 , 18,	0
54	Topological skyrmion phases of matter. 2023 , 35, 184001	O
53	Topological Nodal Surface and Quadratic Dirac Semimetal States and van Hove Singularities in ScH3 and LuH3 Superconductors. 2023 , 8, 9607-9613	О
52	Engineering axion insulator and other topological phases in superlattices without inversion symmetry. 2023 , 107,	O
51	Electronic Structure of the Weak Topological Insulator Candidate Zintl Ba3Cd2Sb4. 2023, 40, 047101	O
50	Interacting with Futuristic Topological Quantum Materials: A Potential Candidate for Spintronics Devices. 2023 , 9, 73	O
49	Topological Mott insulator at quarter filling in the interacting Haldane model. 2023, 5,	О
48	Valley transport via dual-band elastic topological edge states in local-resonant phononic crystal plate. 2023 , 133, 095110	O
47	Exciton condensation in strongly correlated quantum spin Hall insulators. 2023, 107,	О
46	Higher-order topological insulators in hyperbolic lattices. 2023 , 107,	0
45	Frequency-selective valley edge routing of elastic wave in topological phononic crystals with different symmetries. 2023 , 35, 205701	0
44	Electrically detected single-spin resonance with quantum spin Hall edge states. 2023, 107,	0
43	Systematic study for two-dimensional Z2 topological phase transitions at high-symmetry points in all layer groups. 2023 , 107,	О
42	Amorphous topological matter: Theory and experiment. 2023 , 142, 16001	O
41	Active topological phase transitions in high-order elastic topological insulators driven by pneumatic methods and liquid metals. 2023 , 133, 104504	О
40	Topological band inversion in HgTe(001): Surface and bulk signatures from photoemission. 2023 , 107,	0

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39	Electronic Spectrum Features under the Transition from Axion Insulator Phase to Quantum Anomalous Hall Effect Phase in an Intrinsic Antiferromagnetic Topological Insulator Thin Film. 2023 , 117, 147-156	О
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36	RKKY interactions mediated by topological states in transition metal doped bismuthene. 2023 , 133, 115105	О
35	Tailoring the phase transition from topological superconductor to trivial superconductor induced by magnetic textures of a spin chain on a p -wave superconductor. 2023 , 107,	0
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33	Topological Insulator Metamaterials.	0
32	Dyadic Green function for a topological insulator stratified sphere. 2023 , 98, 055504	О
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21	Topological invariant and domain connectivity in moir[materials. 2023, 107,	0
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19	Interaction-induced metal to topological insulator transition. 2023, 107,	0
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5	Multiple Magnetic Topological Phases in the van der Waals Crystal Mn(Bi,Sb)4Se7. 3913-3919	O
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CITATION REPORT

The effects of spinBrbit coupling on optical properties of electronic Lieb lattice in the presence of magnetic field. 2023, 115172

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