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#	Paper	IF	Citations
2009	Valley-contrasting physics in graphene: magnetic moment and topological transport. 2007 , 99, 236809		1273
2008	Aharonov-Bohm effect and broken valley degeneracy in graphene rings. 2007, 76,		215
2007	Elastic scattering theory and transport in graphene. 2007 , 76,		194
2006	AC CONDUCTIVITY OF GRAPHENE: FROM TIGHT-BINDING MODEL TO 2 + 1-DIMENSIONAL QUANTUM ELECTRODYNAMICS. 2007 , 21, 4611-4658		305
2005	Graphene: mind the gap. <i>Nature Materials</i> , 2007 , 6, 720-1	27	378
2004	Erratum: Substrate-induced bandgap opening in epitaxial graphene <i>Nature Materials</i> , 2007 , 6, 916-916	5 27	70
2003	Raman spectroscopy and imaging of graphene. 2008 , 1, 273-291		989
2002	Density functional study of graphene overlayers on SiC. 2008 , 245, 1425-1435		37
2001	Epitaxial graphene: a new material. 2008, 245, 1436-1446		150
2000	Departure from the conical dispersion in epitaxial graphene. 2008 , 40, 2642-2647		32
1999	Quasiparticle properties of graphene in the presence of disorder. 2008, 147, 172-177		18
1998	Spatial modulation of the Dirac gap in epitaxial graphene. 2008 , 602, L127-L130		37
1997	Near-edge x-ray absorption fine-structure investigation of graphene. 2008, 101, 066806		175
1996	Atomic hole doping of graphene. 2008 , 8, 4603-7		362
1995	Raman spectra of epitaxial graphene on SiC and of epitaxial graphene transferred to SiO2. 2008 , 8, 432	20-5	356
1994	Supercritical Coulomb impurities in gapped graphene. 2008 , 78,		83
1993	A topological Dirac insulator in a quantum spin Hall phase. 2008 , 452, 970-4		2552

(2008-2008)

Origin of the energy bandgap in epitaxial graphene. <i>Nature Materials</i> , 2008 , 7, 258-9; author reply 259-60-7	152
1991 Origin of the energy bandgap in epitaxial graphene. <i>Nature Materials</i> , 2008 , 7, 259-260 27	159
Giant phonon-induced conductance in scanning tunnelling spectroscopy of gate-tunable graphene. 2008 , 4, 627-630	353
1989 Dirac charge dynamics in graphene by infrared spectroscopy. 2008 , 4, 532-535	983
1988 . 2008 , 55, 2078-2085	350
Raman Mapping Investigation of Graphene on Transparent Flexible Substrate: The Strain Effect. 2008 , 112, 12602-12605	226
1986 Graphene-substrate interaction on 6H-SiC(0001[]): A scanning tunneling microscopy study. 2008, 78,	91
1985 Chemical origin of a graphene moir[bverlayer on Ru(0001). 2008, 10, 3530-4	220
Atomic and electronic structure of few-layer graphene on SiC(0001) studied with scanning tunneling microscopy and spectroscopy. 2008 , 77,	314
1983 Electronic and magnetic properties of quasifreestanding graphene on Ni. 2008 , 101, 157601	557
1982 Edge states, mass and spin gaps, and quantum Hall effect in graphene. 2008 , 77,	42
Edge-functionalized and substitutionally doped graphene nanoribbons: Electronic and spin properties. 2008 , 77,	461
1980 Plasmons and the spectral function of graphene. 2008 , 77,	235
1979 Electrical observation of subband formation in graphene nanoribbons. 2008 , 78,	182
1978 The growth and morphology of epitaxial multilayer graphene. 2008 , 20, 323202	536
1977 Measurement of ultrafast carrier dynamics in epitaxial graphene. 2008 , 92, 042116	585
The two-dimensional phase of boron nitride: Few-atomic-layer sheets and suspended membranes. 2008 , 92, 133107	781
1975 Electronic properties of bilayer and multilayer graphene. 2008 , 78,	235

1974	Quasi-transverse electromagnetic modes supported by a graphene parallel-plate waveguide. 2008 , 104, 084314	314
1973	Physical models for electron transport in graphene nanoribbons and their junctions. 2008,	
1972	Electronic structure of graphene and doping effect on SiO2. 2008, 78,	118
1971	Gate-variable optical transitions in graphene. 2008 , 320, 206-9	1215
1970	Chemical doping-induced gap opening and spin polarization in graphene. 2008, 77,	121
1969	Characterization of graphene through anisotropy of constant-energy maps in angle-resolved photoemission. 2008 , 77,	125
1968	Self-doping effects in epitaxially grown graphene. 2008 , 93, 243119	30
1967	Precise in situ thickness analysis of epitaxial graphene layers on SiC(0001) using low-energy electron diffraction and angle resolved ultraviolet photoelectron spectroscopy. 2008 , 93, 033106	93
1966	Raman spectroscopy of epitaxial graphene on a SiC substrate. 2008 , 77,	429
1965	Edge states in quantum Hall effect in graphene (Review Article). 2008, 34, 778-789	15
1964	Band structure engineering of graphene by strain: First-principles calculations. 2008, 78,	452
1963	Origin of anomalous electronic structures of epitaxial graphene on silicon carbide. 2008, 100, 176802	314
1962	Valley-dependent optoelectronics from inversion symmetry breaking. 2008, 77,	615
1961	The effects of electronic field on the atomic structure of the graphene/岳iO(2) interface. 2008 , 19, 275710	20
1960	Raman Studies of Monolayer Graphene: The Substrate Effect. 2008 , 112, 10637-10640	567
1959	Measurement of the optical absorption spectra of epitaxial graphene from terahertz to visible. 2008 , 93, 131905	383
1958	State selective electron transport through electronic surface states of 6H-SiC(0001)-3B. 2008, 77,	17
1957	Density waves and cooper pairing on the honeycomb lattice. 2008 , 100, 146404	208

(2008-2008)

1956	Dirac-point engineering and topological phase transitions in honeycomb optical lattices. 2008 , 10, 103027	149
1955	Energy gaps, magnetism, and electric-field effects in bilayer graphene nanoribbons. 2008, 78,	122
1954	Metal to insulator transition in epitaxial graphene induced by molecular doping. 2008, 101, 086402	228
1953	Strong covalent bonding between two graphene layers. 2008 , 77,	126
1952	Colloquium: Andreev reflection and Klein tunneling in graphene. 2008, 80, 1337-1354	961
1951	Solution-gated epitaxial graphene as pH sensor. 2008 , 130, 14392-3	602
1950	Symmetry breaking induced bandgap in epitaxial graphene layers on SiC. 2008, 8, 4464-8	140
1949	First-principles calculation of the effect of stress on the chemical activity of graphene. 2008 , 93, 171915	45
1948	Ab initio GW many-body effects in graphene. 2008 , 101, 226405	216
1947	Evidence of structural strain in epitaxial graphene layers on 6H-SiC(0001). 2008, 101, 156801	255
1946	Uniaxial strain on graphene: Raman spectroscopy study and band-gap opening. 2008, 2, 2301-5	1231
1945	Performance Benchmarking for Graphene Nanoribbon, Carbon Nanotube, and Cu Interconnects. 2008 ,	42
1944	Rotational disorder in few-layer graphene films on 6HBiC(00011): A scanning tunneling microscopy study. 2008 , 77,	167
1943	Electric transport and magnetic properties in multilayer graphene. 2008, 77,	77
1942	Simulation of single and multi-layer graphene field-effect devices. 2008,	
1941	Dominance of Broken Bonds and Unpaired Nonbonding Electrons in the Band Gap Expansion and Edge States Generation in Graphene Nanoribbons. 2008 , 112, 18927-18934	51
1940	Asymmetric Spin Gap Opening of Graphene on Cubic Boron Nitride (111) Substrate. 2008 , 112, 12683-12686	21
1939	Comparative Study of Carbon and BN Nanographenes: Ground Electronic States and Energy Gap Engineering. 2008 , 112, 12677-12682	63

1938	Tight-binding description of patterned graphene. 2008 , 23, 075026	10
1937	Tuning the gap in bilayer graphene using chemical functionalization: Density functional calculations. 2008 , 78,	167
1936	Measurement of Ultrafast Carrier Dynamics in Epitaxial Graphene. 2008, 1081, 1	3
1935	Double-gap superconducting proximity effect in armchair carbon nanotubes. 2008, 77,	11
1934	Van Hove singularity and apparent anisotropy in the electron-phonon interaction in graphene. 2008 , 77,	46
1933	Ebonding contribution of a strong Eacceptor molecule: Surface chemical bond of SO2 on Ni(100). 2008 , 78,	4
1932	Interface structure of epitaxial graphene grown on 4H-SiC(0001). 2008 , 78,	85
1931	Disorder beneath epitaxial graphene on SiC(0001): An x-ray absorption study. 2008 , 78,	18
1930	Effect of atomic-scale defects on the low-energy electronic structure of graphene: Perturbation theory and local-density-functional calculations. 2008 , 77,	41
1929	Probing epitaxial growth of graphene on silicon carbide by metal decoration. 2008 , 92, 104102	56
1928	Effect of electron-electron interaction on the Fermi surface topology of doped graphene. 2008, 77,	39
1927	High-resolution nanofabrication using a highly focused electron beam. 2008 , 104, 024312	22
1926	Kohn anomaly and interplay of electron-electron and electron-phonon interactions in epitaxial graphene. 2008 , 78,	57
1925	Spectroscopic signatures of massless gap opening in graphene. 2008 , 78,	22
1924	Doping of graphene: Density functional calculations of charge transfer between GaAs and carbon nanostructures. 2008 , 78,	17
1923	Domain walls in gapped graphene. 2008 , 101, 087204	162
1922	Polarization charge distribution in gapped graphene: Perturbation theory and exact diagonalization analysis. 2008 , 78,	69
1921	Structural and electronic properties of bilayer epitaxial graphene. 2008 , 26, 938-943	24

(2009-2008)

1920	Topology and electron scattering properties of the electronic interfaces in epitaxial graphene probed by resonant tunneling spectroscopy. 2008 , 78,	17
1919	Quasiparticle chirality in epitaxial graphene probed at the nanometer scale. 2008 , 101, 206802	125
1918	Energy Gap and Averaged Inversion Symmetry of Tight-Binding Electrons on Generalized Honeycomb Lattice. 2008 , 77, 074707	5
1917	Thickness Determination of Graphene Layers Formed on SiC Using Low-Energy Electron Microscopy. 2008 , 6, 107-110	41
1916	Catalyst-Free Growth of Networked Nanographite on Si and SiO2 Substrates by Photoemission-Assisted Plasma-Enhanced Chemical Vapor Deposition. 2009 , 7, 882-890	35
1915	Graphene on the C-terminated SiC (0001[) surface: An ab initio study. 2009 , 79,	54
1914	Bias voltage induced n- to p-type transition in epitaxial bilayer graphene on SiC. 2009 , 80,	14
1913	Electronic structure in gapped graphene with a Coulomb potential. 2009 , 79,	23
1912	1/N expansion in correlated graphene. 2009 , 80,	14
1911	Atomic and electronic structure of monolayer graphene on 6H-SiC(0001[)(3B): A scanning tunneling microscopy study. 2009 , 80,	26
1910	Critical exponents of the semimetal-insulator transition in graphene: A Monte Carlo study. 2009 , 79,	71
1909	Initial growth process of carbon nanowalls synthesized by radical injection plasma-enhanced chemical vapor deposition. 2009 , 106, 094302	92
1908	Stacking of polycyclic aromatic hydrocarbons as prototype for graphene multilayers, studied using density functional theory augmented with a dispersion term. 2009 , 131, 194702	41
1907	Rabi oscillations in Landau-quantized graphene. 2009 , 102, 036803	25
1906	Instability of two-dimensional graphene: Breaking sp2 bonds with soft x rays. 2009 , 80,	38
1905	Vertex renormalization in dc conductivity of doped chiral graphene. 2009 , 79,	20
1904	Effective doping of single-layer graphene from underlying SiO2 substrates. 2009, 79,	160
1903	Three-fold diffraction symmetry in epitaxial graphene and the SiC substrate. 2009 , 80,	13

1902 Weak localization properties of the doped Z2 topological insulator. 2009 , 80,	36
1901 Angle-resolved photoemission spectra of graphene from first-principles calculations. 2009 , 9, 4234-9	93
1900 Hartman effect and spin precession in graphene. 2009 , 80,	18
$_{ m 1899}$ Ground-state properties of gapped graphene using the random phase approximation. 2009 , 79,	41
1898 Gapped state of a carbon monolayer in periodic magnetic and electric fields. 2009 , 80,	48
1897 Temperature-dependent Drude transport in a two-dimensional electron gas. 2009 , 79,	5
Si clusters on reconstructed SiC (0001) revealed by surface extended x-ray absorption fine structure. 2009 , 95, 144102	6
1895 Graphitization process of SiC(0001) studied by electron energy loss spectroscopy. 2009 , 94, 112106	29
1894 Magnetically confined states of Dirac electrons in a graphene-based quantum annulus. 2009 , 88, 17011	9
1893 GROWTH MODE OF GRAPHENE LAYERS DEPOSITED ON SIO2 SUBSTRATE. 2009 , 23, 3643-3648	
Effect of strain on geometric and electronic structures of graphene on a Ru(0001) surface. 2009 , 18, 3008-3013	17
Effect of Uniaxial Strain on the Electrical and Magnetic Property of a One-Dimensional Bimetallic Sandwich Molecular Wire (FeCpVCp)[12009, 113, 21422-21427	15
1890 Reactivity of periodically rippled graphene grown on Ru(0001). 2009 , 21, 134002	35
1889 Massive Dirac fermions in single-layer graphene. 2009 , 21, 075303	90
1888 Substrate coupling effect to transport in nanographene ribbon. 2009 , 21, 235302	1
$_{ m 1887}$ Observation of quantum-Hall effect in gated epitaxial graphene grown on SiC (0001). 2009 , 95, 172105	107
1886 Compact Physics-Based Circuit Models for Graphene Nanoribbon Interconnects. 2009 , 56, 1822-1833	168
Evolution of Electrical, Chemical, and Structural Properties of Transparent and Conducting Chemically Derived Graphene Thin Films. 2009 , 19, 2577-2583	1451

[2009-2009]

1884	Broadband Nonlinear Optical Response of Graphene Dispersions. 2009 , 21, 2430-2435	428
1883	Large-Scale Fabrication of Boron Nitride Nanosheets and Their Utilization in Polymeric Composites with Improved Thermal and Mechanical Properties. 2009 , 21, 2889-2893	1282
1882	Bound electron states in the monolayer gapped graphene with the short-range impurities. 2009 , 373, 525-528	7
1881	Tunneling conductance in a gapped graphene-based superconducting structure: Case of massive Dirac electrons. 2009 , 373, 3477-3482	16
1880	Applications of carbon materials in photovoltaic solar cells. 2009 , 93, 1461-1470	269
1879	Direct observation of a widely tunable bandgap in bilayer graphene. 2009 , 459, 820-3	2751
1878	Room-temperature molecular-resolution characterization of self-assembled organic monolayers on epitaxial graphene. 2009 , 1, 206-11	373
1877	Substrate-induced array of quantum dots in a single-walled carbon nanotube. 2009 , 4, 567-70	18
1876	Superlattice based on graphene on a strip substrate. 2009 , 90, 469-474	56
1875	Graphene on metal surfaces. 2009 , 603, 1841-1852	826
1874	Massive Dirac fermion transport in a gapped graphene-based magnetic tunnel junction. 2009 , 41, 1475-1478	13
1873	Surface transfer doping of semiconductors. 2009 , 84, 279-321	240
1872	Experimental studies of the electronic structure of graphene. 2009 , 84, 380-413	59
1871	Transitional structures of the interface between graphene and 6HBiC (0001). 2009 , 468, 52-56	91
1870	Epitaxial graphene: the material for graphene electronics. 2009 , 3, A91-A94	39
1869	Surface potentials and layer charge distributions in few-layer graphene films. 2009 , 9, 7-11	230
1868	Symmetry of standing waves generated by a point defect in epitaxial graphene. 2009 , 69, 351-355	44
1867	Graphene: status and prospects. 2009 , 324, 1530-4	10415

1866	Raman spectroscopy of ripple formation in suspended graphene. 2009 , 9, 4172-6	98
1865	The electronic properties of graphene. 2009 , 81, 109-162	17608
1864	Quasiparticle transformation during a metal-insulator transition in graphene. 2009 , 103, 056404	187
1863	Tuning the electronic structure of graphene by molecular charge transfer: a computational study. 2009 , 4, 855-60	162
1862	Tuning the electronic structure of graphene by an organic molecule. 2009 , 113, 2-5	207
1861	Broadband electromagnetic response and ultrafast dynamics of few-layer epitaxial graphene. 2009 , 94, 172102	177
1860	Mutual rectification of alternating currents induced by electromagnetic waves in graphene. 2009 , 51, 2157-2160	13
1859	Conductance of a disordered graphene superlattice. 2009 , 79,	72
1858	Current Status of Graphene Transistors. 2009 , 156-158, 499-509	38
1857	Anderson transition in disordered graphene. 2009 , 87, 37002	28
1856	Dirac cones and minigaps for graphene on Ir(111). 2009 , 102, 056808	457
1855	First direct observation of a nearly ideal graphene band structure. 2009 , 103, 226803	358
1854	Comparison of epitaxial graphene on Si-face and C-face 4H SiC formed by ultrahigh vacuum and RF furnace production. 2009 , 9, 2605-9	125
1853	Dependence of electronic properties of epitaxial few-layer graphene on the number of layers investigated by photoelectron emission microscopy. 2009 , 79,	218
1852	Modifications in graphene electron states due to a deposited lattice of Au nanoparticles: Density functional calculations. 2009 , 80,	17
1851	Is graphene in vacuum an insulator?. 2009 , 102, 026802	247
1850	The formation of atomic nanoclusters on graphene sheets. 2009 , 20, 135602	79
1849	Ultrafast terahertz studies of dirac fermion dynamics in graphene. 2009,	1

(2009-2009)

1848	Synthesis of N-doped graphene by chemical vapor deposition and its electrical properties. 2009 , 9, 1752-8	2513
1847	Bandgap engineering of graphene: A density functional theory study. 2009 , 95, 252104	107
1846	Band-selective filter in a zigzag graphene nanoribbon. 2009 , 102, 066803	107
1845	First-principles study of electron linewidths in graphene. 2009 , 102, 076803	65
1844	Spin-dependent transport in armchair graphene nanoribbon structures with edge roughness effects. 2009 , 193, 012100	4
1843	Optical response and excitons in gapped graphene. 2009 , 79,	65
1842	Preparation of graphene dispersions and graphene-polymer composites in organic media. 2009 , 19, 3591	276
1841	Bound states and magnetic field induced valley splitting in gate-tunable graphene quantum dots. 2009 , 79,	144
1840	Effect of electron-electron interactions on the Klein paradox in graphene-based double-barrier structures. 2009 , 80,	26
1839	Bandgap Engineering of Bilayer Graphene for Field-Effect Transistor Channels. 2009 , 48, 091605	14
1838	Electronic properties of zigzag graphene nanoribbons on Si(001). 2009 , 95, 023107	26
1837	Dynamic polarization of graphene by moving external charges: Random phase approximation. 2009 , 80,	39
1836	Theoretical Evaluation of Channel Structure in Graphene Field-Effect Transistors. 2009, 48, 041202	12
1835	Integrated complementary graphene inverter. 2009 , 94, 223312	126
1834	Electronic structure and band-gap modulation of graphene via substrate surface chemistry. 2009 , 94, 032101	139
1833	Patterning graphene at the nanometer scale via hydrogen desorption. 2009 , 9, 4343-7	157
1832	Berry-phase-mediated topological thermoelectric transport in gapped single and bilayer graphene. 2009 , 79,	31
1831	Exposure of epitaxial graphene on SiC(0001) to atomic hydrogen. 2009 , 9, 1462-6	131

1830	Stacking domains of epitaxial few-layer graphene on SiC(0001). 2009 , 80,	74
1829	Logic gates with a single graphene transistor. 2009 , 94, 073305	196
1828	Epitaxial graphene on SiC(0001) and [Formula: see text]: from surface reconstructions to carbon electronics. 2009 , 21, 134016	125
1827	Character of electronic states in graphene antidot lattices: Flat bands and spatial localization. 2009 , 80,	81
1826	Light-induced valley currents and magnetization in graphene rings. 2009, 80,	22
1825	Perspectives of graphene nanoelectronics: probing technological options with modeling. 2009,	20
1824	Valley polarization due to trigonal warping on tunneling electrons in graphene. 2009 , 21, 045301	63
1823	The effect of sublattice symmetry breaking on the electronic properties of doped graphene. 2009 , 11, 095023	22
1822	Dirac electrons in graphene-based quantum wires and quantum dots. 2009 , 21, 344202	32
1821	Dynamical polarization, screening, and plasmons in gapped graphene. 2009 , 21, 025506	143
1820	Electronic property of Na-doped epitaxial graphenes on SiC. 2009 , 94, 153108	18
	Electronic property of Na-doped epitaxial graphenes on SiC. 2009 , 94, 153108 Electronic structure of few-layer epitaxial graphene on Ru(0001). 2009 , 9, 2654-60	203
1819	Electronic structure of few-layer epitaxial graphene on Ru(0001). 2009 , 9, 2654-60 Energy gap opening in submonolayer lithium on graphene: Local density functional and	203
1819 1818	Electronic structure of few-layer epitaxial graphene on Ru(0001). 2009 , 9, 2654-60 Energy gap opening in submonolayer lithium on graphene: Local density functional and tight-binding calculations. 2009 , 79, Magnetoelectric effect in graphene nanoribbons on substrates via electric bias control of exchange splitting. 2009 , 103, 187204	203
1819 1818 1817	Electronic structure of few-layer epitaxial graphene on Ru(0001). 2009, 9, 2654-60 Energy gap opening in submonolayer lithium on graphene: Local density functional and tight-binding calculations. 2009, 79, Magnetoelectric effect in graphene nanoribbons on substrates via electric bias control of exchange splitting. 2009, 103, 187204	2035864
1819 1818 1817 1816	Electronic structure of few-layer epitaxial graphene on Ru(0001). 2009, 9, 2654-60 Energy gap opening in submonolayer lithium on graphene: Local density functional and tight-binding calculations. 2009, 79, Magnetoelectric effect in graphene nanoribbons on substrates via electric bias control of exchange splitting. 2009, 103, 187204 Graphene on Pt(111): Growth and substrate interaction. 2009, 80, Low-temperature exfoliated graphenes: vacuum-promoted exfoliation and electrochemical energy storage. 2009, 3, 3730-6	2035864510

(2010-2009)

1812	Spin Control Without Magnetic Fields. 2009 , 2,	35
1811	Masses in graphenelike two-dimensional electronic systems: Topological defects in order parameters and their fractional exchange statistics. 2009 , 80,	139
1810	Observation of diode-like characteristics in planar-type structures of graphite flakes. 2009 , 150, 022039	2
1809	Anomalous valley magnetic moment of graphene. 2010 , 89, 37002	5
1808	Anti-localization of graphene under the substrate electric field. 2010 , 89, 17009	11
1807	Vertical absorption edge and temperature dependent resistivity in semihydrogenated graphene. 2010 , 96, 023107	9
1806	In situTransmission Electron Microscopy Observation of the Graphitization of Silicon Carbide Nanowires Induced by Joule Heating. 2010 , 3, 055001	6
1805	Electronic properties of epitaxial graphene. 2010 , 7, 383	12
1804	Spin Control Without Magnetic Fields. 2010 , 3,	5
1803	Graphene metrology and devices. 2010 , 101, 175-181	1
1802	General View of Graphenes. 2010 , 53, 61-65	
1801	Influence of a magnetic field on the mutual rectification of alternating currents induced by electromagnetic waves in graphene. 2010 , 52, 800-804	11
1800	Boundary states in graphene heterojunctions. 2010 , 52, 1763-1767	12
1799	Effect of the mutual rectification of two electromagnetic waves with perpendicular polarization planes in a superlattice based on graphene. 2010 , 74, 1679-1681	11
1798	Mutual rectification of alternating currents in graphene. 2010 , 18, 284-288	2
1797	Effect of Holstein phonons on the optical conductivity of gapped graphene. 2010 , 73, 247-252	6
1796	Edge states of epitaxially grown graphene on 4H-SiC(0001) studied by scanning tunneling microscopy. 2010 , 75, 31-35	14
1795	Boundaries of subcritical Coulomb impurity region in gapped graphene. 2010 , 74, 535-541	13

1794	Effect of gap opening on the quasiparticle properties of doped graphene sheets. 2010, 74, 479-485	3
1793	Electronic structures for armchair-edge graphene nanoribbons under a small uniaxial strain. 2010 , 76, 463-467	21
1792	Properties of graphene: a theoretical perspective. 2010 , 59, 261-482	827
1791	Synthesis of Graphene and Its Applications: A Review. 2010 , 35, 52-71	1196
1790	Induced fermionic current in toroidally compactified spacetimes with applications to cylindrical and toroidal nanotubes. 2010 , 82,	45
1789	Berry phase effects on electronic properties. 2010 , 82, 1959-2007	2374
1788	The chemistry of graphene. 2010 , 20, 2277	1222
1787	Observation of carrier-density-dependent many-body effects in graphene via tunneling spectroscopy. 2010 , 104, 036805	96
1786	Spectroscopic measurement of interlayer screening in multilayer epitaxial graphene. 2010 , 104, 136802	93
1785	Buckled graphene: A model study based on density functional theory. 2010 , 498, 157-161	6
1784	Theory of large tunneling magnetoresistance in a gapped graphene-based ferromagnetic superconductor F/(FS) junction. 2010 , 470, 415-420	2
1783	Epitaxial graphene top-gate FETs on silicon substrates. 2010 , 54, 1071-1075	13
1782	Binding graphene sheets together using silicon: graphene/silicon superlattice. 2010 , 5, 805-8	23
1781	CurrentVoltage Characteristics of Graphane p-n Junctions. 2010 , 57, 209-214	27
1780	Electron Transport in Graphene From a Diffusion-Drift Perspective. 2010 , 57, 681-689	45
1779	. 2010 , 57, 1936-1941	19
1778	Composites of molecular-anchored graphene and nanotubes with multitubular structure: a new type of carbon electrode. 2010 , 3, 261-5	18
1777	Electrochemical synthesis of CdSe quantum-dot arrays on a graphene basal plane using mesoporous silica thin-film templates. 2010 , 22, 515-8	123

(2010-2010)

1776 Graphene and graphene oxide: synthesis, properties, and applications. 2010 , 22, 3906-24	7620
Electric current induced reduction of graphene oxide and its application as gap electrodes in organic photoswitching devices. 2010 , 22, 5008-12	81
1774 Switching effect in a gapped graphene d-wave superconductor structure. 2010 , 405, 1383-1387	16
1773 Klein tunneling of massive Dirac fermions in single-layer graphene. 2010 , 405, 1433-1436	31
Perfect switching of the spin polarization in a ferromagnetic gapless graphene/superconducting gapped graphene junction. 2010 , 470, 31-36	8
Tunneling conductance in gapped graphene-based normal metallhsulator uperconductor junctions: Case of massive Dirac electrons. 2010 , 470, 1981-1985	4
1770 Formation process of graphene on SiC (0 0 0 1). 2010 , 42, 691-694	104
1769 Uniaxial strain on gapped graphene. 2010 , 42, 2109-2114	9
1768 Magneto transport on the surface of a topological insulator spin valve. 2010 , 374, 2894-2899	21
1767 PseudospinBrbital coupling for pseudospintronic device in graphene. 2010 , 322, 2390-2394	3
1766 Semiclassical dynamics and transport of the Dirac spin. 2010 , 150, 533-537	29
1765 Effect of a gap opening on the conductance of graphene superlattices. 2010 , 150, 655-659	16
1764 Signatures of epitaxial graphene grown on Si-terminated 6H-SiC (0 0 0 1). 2010 , 604, 84-88	19
1763 Production, properties and potential of graphene. 2010 , 48, 2127-2150	1240
1762 The carbon new age. 2010 , 13, 12-17	58
Monolithic self-sustaining nanographene sheet grown using plasma-enhanced chemical vapor deposition. 2010 , 207, 139-143	22
1760 Tunable bandgap in graphene by the controlled adsorption of water molecules. 2010 , 6, 2535-8	240
1759 Fracture and fatigue in graphene nanocomposites. 2010 , 6, 179-83	696

1758	Graphene transistors. 2010 , 5, 487-96	4190
1757	Integration of Carbon Nanotubes in Microelectronics. 2010,	
1756	Combined effect of magnetic and electric fields on Landau level spectrum and magneto-optical absorption in bilayer graphene. 2010 , 92, 57008	10
1755	Bandstructure manipulation of epitaxial graphene on SiC(0001) by molecular doping and hydrogen intercalation. 2010 , 1246, 1	
1754	Engineered carbon nanotubes and graphene for nano-electronics and nanomechanics. 2010,	1
1753	Band Structures of Metal-Oxide Capped Graphene: A First Principles Study. 2010 , 27, 077201	7
1752	Incomplete screening by epitaxial graphene on the Si face of 6HBiC(0001). 2010 , 97, 113104	14
1751	Potential energy landscape for hot electrons in periodically nanostructured graphene. 2010 , 105, 036804	76
1750	Resonant photoluminescent charging of epitaxial graphene. 2010 , 96, 151913	8
1749	Quantum valley Hall effect in proximity-induced superconducting graphene: An experimental window for deconfined quantum criticality. 2010 , 81,	27
1748	Quantum oscillations and quantum Hall effect in epitaxial graphene. 2010 , 81,	155
1747	Gap opening in topological-defect lattices in graphene. 2010 , 81,	21
1746	Shape, width, and replicas of Ibands of single-layer graphene grown on Si-terminated vicinal SiC(0001). 2010 , 82,	17
1745	Femtosecond pump-probe studies of reduced graphene oxide thin films. 2010 , 96, 173106	53
1744	Peierls-type instability and tunable band gap in functionalized graphene. 2010 , 105, 086802	47
1743	Ellipsometry of graphene on a substrate. 2010 , 107, 033525	9
1742	Quasifreestanding multilayer graphene films on the carbon face of SiC. 2010 , 81,	32
1741	Quantum transport of Dirac fermions in graphene field effect transistors. 2010 ,	2

(2010-2010)

1740	Absence of a metallic phase in charge-neutral graphene with a random gap. 2010 , 81,	34
1739	Anisotropy induced localization of pseudo-relativistic spin states in graphene double quantum wire structures. 2010 , 21, 365401	1
1738	Spectral and optical properties of doped graphene with charged impurities in the self-consistent Born approximation. 2010 , 82,	12
1737	Phonon-induced gaps in graphene and graphite observed by angle-resolved photoemission. 2010 , 105, 136804	33
1736	Two-dimensional graphene superlattice made with partial hydrogenation. 2010 , 96, 193115	44
1735	Tuning the magnetic and electronic properties of bilayer graphene nanoribbons on Si(001) by bias voltage. 2010 , 81,	27
1734	First-principles study of preferential sites of hydrogen incorporated in epitaxial graphene on 6H-SiC(0001). 2010 , 81,	40
1733	Quantum transport of Dirac fermions in graphene nanostructures. 2010 ,	
1732	Density Functional Simulations of Physisorbed and Chemisorbed Single Graphene Layers on 4H-SiC (0001), (000-1) and 4H-SiC:H Surface. 2010 , 645-648, 619-622	1
1731	Band-Bending at the GrapheneBiC Interfaces: Effect of the Substrate. 2010 , 49, 01AH05	9
1730	Extraction of Drain Current and Effective Mobility in Epitaxial Graphene Channel Field-Effect Transistors on SiC Layer Grown on Silicon Substrates. 2010 , 49, 04DF17	14
1729	The interaction of quasi-particles in graphene with chemical dopants. 2010 , 12, 125014	9
1728	Interface structure of graphene on SiC: anab initioand STM approach. 2010, 43, 374008	19
1727	Ultrafast Terahertz Dynamics and Broadband Optical Conductivity of Few-Layer Epitaxial Graphene. 2010 ,	
1726	Optical Properties of Evolutionary Grown Layers of Carbon Nanowalls Analyzed by Spectroscopic Ellipsometry. 2010 , 49, 060220	13
1725	Electronic transmission through p-n and n-p-n junctions of graphene. 2010 , 22, 245503	17
1724	Mechanically robust tri-wing graphene nanoribbons with tunable electronic and magnetic properties. 2010 , 10, 494-8	65
1723	Epitaxial graphene on SiC(0001): more than just honeycombs. 2010 , 105, 085502	117

1722	Graphene synthesis on cubic SiC/Si wafers. perspectives for mass production of graphene-based electronic devices. 2010 , 10, 992-5	164
1721	Structural and electronic properties of epitaxial graphene on SiC(0 0 0 1): a review of growth, characterization, transfer doping and hydrogen intercalation. 2010 , 43, 374009	371
1720	Thermodynamic properties of a weakly modulated graphene monolayer in a magnetic field. 2010 , 22, 025503	7
1719	Multifunctional porous graphene for nanoelectronics and hydrogen storage: new properties revealed by first principle calculations. 2010 , 132, 2876-7	277
1718	Wafer scale homogeneous bilayer graphene films by chemical vapor deposition. 2010 , 10, 4702-7	376
1717	Towards optimisation of epitaxially grown graphene based sensors for highly sensitive gas detection. 2010 ,	1
1716	Quantum anomalous Hall effect in graphene from Rashba and exchange effects. 2010 , 82,	461
1715	Epitaxial few-layer graphene: towards single crystal growth. 2010 , 43, 374005	96
1714	A universal exponential factor in the dimensional crossover from graphene to graphite. 2010 , 108, 124311	1
1713	Epitaxial graphene electronic structure and transport. 2010 , 43, 374007	104
1713 1712	Epitaxial graphene electronic structure and transport. 2010 , 43, 374007 Interaction-driven instabilities of a Dirac semimetal. 2010 , 81,	104
1712		
1712	Interaction-driven instabilities of a Dirac semimetal. 2010 , 81,	105
1712 1711	Interaction-driven instabilities of a Dirac semimetal. 2010 , 81, Silicon nitride gate dielectrics and band gap engineering in graphene layers. 2010 , 10, 3572-6 Electron-electron interactions in decoupled graphene layers. 2010 , 82,	105
1712 1711 1710	Interaction-driven instabilities of a Dirac semimetal. 2010, 81, Silicon nitride gate dielectrics and band gap engineering in graphene layers. 2010, 10, 3572-6 Electron-electron interactions in decoupled graphene layers. 2010, 82, Light non-metallic atom (B, N, O and F)-doped graphene: a first-principles study. 2010, 21, 505202	105 121 53
1712 1711 1710 1709	Interaction-driven instabilities of a Dirac semimetal. 2010 , 81, Silicon nitride gate dielectrics and band gap engineering in graphene layers. 2010 , 10, 3572-6 Electron-electron interactions in decoupled graphene layers. 2010 , 82, Light non-metallic atom (B, N, O and F)-doped graphene: a first-principles study. 2010 , 21, 505202 Graphene/Substrate Charge Transfer Characterized by Inverse Photoelectron Spectroscopy. 2010 ,	105 121 53 184
1712 1711 1710 1709 1708	Interaction-driven instabilities of a Dirac semimetal. 2010, 81, Silicon nitride gate dielectrics and band gap engineering in graphene layers. 2010, 10, 3572-6 Electron-electron interactions in decoupled graphene layers. 2010, 82, Light non-metallic atom (B, N, O and F)-doped graphene: a first-principles study. 2010, 21, 505202 Graphene/Substrate Charge Transfer Characterized by Inverse Photoelectron Spectroscopy. 2010, 114, 21618-21624	105 121 53 184 58

(2010-2010)

1704 Dirac electronic states in graphene systems: optical spectroscopy studies. 2010 , 25, 063001	148
Topological insulating phases in monolayer and bilayer graphene: An effective action approach. 2010 , 82,	23
Graphene field-effect transistors with high on/off current ratio and large transport band gap at room temperature. 2010 , 10, 715-8	1034
1701 Electronic decoupling of an epitaxial graphene monolayer by gold intercalation. 2010 , 81,	184
1700 Selective formation of ABC-stacked graphene layers on SiC(0001). 2010 , 81,	91
1699 Thickness-dependent morphologies of gold on n-layer graphenes. 2010 , 132, 944-6	159
1698 Band structure and gaps of triangular graphene superlattices. 2010 , 368, 5391-402	49
1697 Electron spectrum of epitaxial graphene monolayers. 2010 , 82,	32
Chiral gap and collective excitations in monolayer graphene from strong coupling expansion of lattice gauge theory. 2010 , 82,	31
1695 Electronic transport in dual-gated bilayer graphene at large displacement fields. 2010 , 105, 166601	161
Dislocations and torsion in graphene and related systems. 2010 , 828, 625-637	58
1693 Density functional study of the Au-intercalated graphene/Ni(111) surface. 2010 , 82,	55
1692 Highly anisotropic Dirac cones in epitaxial graphene modulated by an island superlattice. 2010 , 105, 246803	109
1691 Self-healable graphene polymer composites. 2010 , 20, 3508	143
1690 Symmetry-induced band-gap opening in graphene superlattices. 2010 , 81,	87
1689 Raman Spectroscopic Characterization of Graphene. 2010 , 45, 369-407	170
1688 Selective adsorption and electronic interaction of F16CuPc on epitaxial graphene. 2010 , 82,	36
$_{f 1687}$ Charge neutrality and band-gap tuning of epitaxial graphene on SiC by molecular doping. 2010 , 81,	362

1686	Interface structure and mechanics between graphene and metal substrates: a first-principles study. 2010 , 22, 485301	169
1685	Bandgap opening in oxygen plasma-treated graphene. 2010 , 21, 435203	253
1684	Controllable N-doping of graphene. 2010 , 10, 4975-80	726
1683	Laser-synthesized epitaxial graphene. 2010 , 4, 7524-30	67
1682	Transmission electron microscopy investigations of epitaxial graphene on C-terminated 4HBiC. 2010 , 108, 013518	33
1681	Graphene and its one-dimensional patterns: from basic properties towards applications. 2010 , 1, 033001	3
1680	Size-selective nanoparticle growth on few-layer graphene films. 2010, 10, 777-81	129
1679	Functionalizing Single- and Multi-layer Graphene with Br and Br2. 2010 , 114, 14939-14945	38
1678	Anomalous orbital magnetism in Dirac-electron systems: Role of pseudospin paramagnetism. 2010 , 81,	149
1677	Carbon Nanowalls. 2010,	68
1676	Physics of Carbon Nanowalls. 2010 , 31-47	2
1675	Spin-split electronic states in graphene: Effects due to lattice deformation, Rashba effect, and adatoms by first principles. 2010 , 82,	97
1674	Graphene based quantum dots. 2010 , 22, 302001	29
1673	First-principles study of the doping effects in bilayer graphene. 2010 , 12, 033046	24
1672	Surface property change of graphene using nitrogen ion. 2010 , 22, 045005	13
1671	The conduction gap in double gate bilayer graphene structures. 2010 , 22, 115304	9
1670	Quantum dots and spin qubits in graphene. 2010 , 21, 302001	122
1669	Chemical Doping of Epitaxial Graphene by Organic Free Radicals. 2010 , 1, 505-509	63

(2011-2010)

1668	Epitaxial graphene on 3C-SiC(111) pseudosubstrate: Structural and electronic properties. 2010, 82,	50
1667	Friction force on slow charges moving over supported graphene. 2010 , 21, 134017	23
1666	Epitaxial Graphenes on Silicon Carbide. 2010 , 35, 296-305	164
1665	Magneto-transport properties of gapped graphene. 2010 , 21, 145703	14
1664	Conductance of graphene-based double-barrier nanostructures. 2010 , 22, 505504	1
1663	Conductance anisotropy in epitaxial graphene sheets generated by substrate interactions. 2010 , 10, 1559-62	92
1662	Epitaxial graphene on 4H-SiC by pulsed electron irradiation. 2010 , 46, 4917-9	13
1661	Dynamic observation of layer-by-layer growth and removal of graphene on Ru(0001). 2010 , 12, 5053-7	49
1660	The formation of an energy gap in graphene on ruthenium by controlling the interface. 2010 , 12, 033014	150
1659	Lattice gauge theory model for graphene. 2010 , 82,	26
1658	Model of tunneling transistors based on graphene on SiC. 2010 , 96, 133508	25
1657	Quasiclassical cyclotron resonance of Dirac fermions in highly doped graphene. 2010 , 82,	63
1656	Graphene quantum dots formed by a spatial modulation of the Dirac gap. 2010 , 97, 243106	37
1655	Growth dynamics and kinetics of monolayer and multilayer graphene on a 6H-SiC(0001) substrate. 2010 , 12, 13522-33	38
1654	First-principles study of electronic and magnetic properties of transition metal adsorbed h-BNC2 sheets. 2011 , 13, 21593-9	10
1653	Tight binding description on the band gap opening of pyrene-dispersed graphene. 2011 , 13, 1515-20	31
1652	Control of epitaxy of graphene by crystallographic orientation of a Si substrate toward device applications. 2011 , 21, 17242	33
1651	Large area and structured epitaxial graphene produced by confinement controlled sublimation of silicon carbide. 2011 , 108, 16900-5	341

1650	Strain-tunable band gap of hydrogenated bilayer graphene. 2011 , 13, 063047	15
1649	Fermionic condensate and Casimir densities in the presence of compact dimensions with applications to nanotubes. 2011 , 83,	37
1648	Characterization and nanopatterning of organically functionalized graphene with ultrahigh vacuum scanning tunneling microscopy. 2011 , 36, 532-542	12
1647	Dynamical current-current susceptibility of gapped graphene. 2011 , 83,	32
1646	Band gap opening by two-dimensional manifestation of peierls instability in graphene. 2011 , 5, 2964-9	53
1645	Wavepacket scattering of Dirac and Schrdinger particles on potential and magnetic barriers. 2011 , 23, 275801	31
1644	Single-side-hydrogenated graphene: Density functional theory predictions. 2011 , 84,	71
1643	Adatoms in graphene as a source of current polarization: Role of the local magnetic moment. 2011 , 84,	25
1642	Ultrafast electron-optical phonon scattering and quasiparticle lifetime in CVD-grown graphene. 2011 , 5, 3278-83	57
1641	Mechanism of thermal conductivity reduction in few-layer graphene. 2011 , 110, 044317	112
1641 1640	Mechanism of thermal conductivity reduction in few-layer graphene. 2011, 110, 044317 Large-area homogeneous quasifree standing epitaxial graphene on SiC(0001): Electronic and structural characterization. 2011, 84,	95
1640	Large-area homogeneous quasifree standing epitaxial graphene on SiC(0001): Electronic and	
1640	Large-area homogeneous quasifree standing epitaxial graphene on SiC(0001): Electronic and structural characterization. 2011 , 84,	95
1640 1639	Large-area homogeneous quasifree standing epitaxial graphene on SiC(0001): Electronic and structural characterization. 2011 , 84, Graphene on I-Si3N4: An ideal system for graphene-based electronics. 2011 , 1, 032111	95
1640 1639 1638	Large-area homogeneous quasifree standing epitaxial graphene on SiC(0001): Electronic and structural characterization. 2011, 84, Graphene on ESi3N4: An ideal system for graphene-based electronics. 2011, 1, 032111 Inducing electronic changes in graphene through silicon (100) substrate modification. 2011, 11, 2735-42 Lithium Intercalation Induced Decoupling of Epitaxial Graphene on SiC(0001): Electronic Property	95 19 50
1640 1639 1638	Large-area homogeneous quasifree standing epitaxial graphene on SiC(0001): Electronic and structural characterization. 2011, 84, Graphene on II-Si3N4: An ideal system for graphene-based electronics. 2011, 1, 032111 Inducing electronic changes in graphene through silicon (100) substrate modification. 2011, 11, 2735-42 Lithium Intercalation Induced Decoupling of Epitaxial Graphene on SiC(0001): Electronic Property and Dynamic Process. 2011, 115, 23992-23997	95 19 50 27
1640 1639 1638 1637	Large-area homogeneous quasifree standing epitaxial graphene on SiC(0001): Electronic and structural characterization. 2011, 84, Graphene on I-Si3N4: An ideal system for graphene-based electronics. 2011, 1, 032111 Inducing electronic changes in graphene through silicon (100) substrate modification. 2011, 11, 2735-42 Lithium Intercalation Induced Decoupling of Epitaxial Graphene on SiC(0001): Electronic Property and Dynamic Process. 2011, 115, 23992-23997 Gaps tunable by electrostatic gates in strained graphene. 2011, 83, Catalyst-Free Direct Growth of Triangular Nano-Graphene on All Substrates. 2011, 115, 14488-14493	95 19 50 27 107

1632	Graphene Spin-Valve Device Grown Epitaxially on the Ni(111) Substrate: A First Principles Study. 2011 , 115, 6019-6023	40
1631	The 2010 Nobel Prize in physicsground-breaking experiments on graphene. 2011 , 44, 473001	41
1630	Graphene on Ni(111): Coexistence of Different Surface Structures. 2011 , 2, 759-764	139
1629	Aqueous only route toward graphene from graphite oxide. 2011 , 5, 1253-8	232
1628	Two-color nonlinear optical response of graphene with broken AB-symmetry. 2011,	
1627	Graphene pn Junction: Electronic Transport and Devices. 2011 , 467-508	1
1626	Nanomaterials for Alternative Energy. 2011 , 199-246	
1625	Buckling of a single-layered graphene sheet on an initially strained InGaAs thin plate. 2011 , 22, 305705	11
1624	Properties of photochlorinated graphene. 2011 ,	
1623	Graphene adhesion on mica: Role of surface morphology. 2011 , 83,	49
	Graphene adhesion on mica: Role of surface morphology. 2011, 83, Clar sextet analysis of triangular, rectangular, and honeycomb graphene antidot lattices. 2011, 5, 523-9	49 88
1622		
1622	Clar sextet analysis of triangular, rectangular, and honeycomb graphene antidot lattices. 2011 , 5, 523-9 First-Principles Study of the Heterobilayers. 2011 , 115, 20237-20241 Semiconducting electronic property of graphene adsorbed on (0001) surfaces of SiO2. 2011 , 106, 106801	88
1622	Clar sextet analysis of triangular, rectangular, and honeycomb graphene antidot lattices. 2011 , 5, 523-9 First-Principles Study of the Heterobilayers. 2011 , 115, 20237-20241	88
1622 1621 1620	Clar sextet analysis of triangular, rectangular, and honeycomb graphene antidot lattices. 2011, 5, 523-9 First-Principles Study of the [email'protected]2 Heterobilayers. 2011, 115, 20237-20241 Semiconducting electronic property of graphene adsorbed on (0001) surfaces of SiO2. 2011, 106, 106801 Valley-contrastive selection rules of a nonlinear optical transition in graphene with an energy gap. 2011, 83, MnC+-bonded reduced graphene oxide with strong radiative recombination in broad visible range caused by resonant energy transfer. 2011, 11, 3951-6	88 112 159
1622 1621 1620 1619	Clar sextet analysis of triangular, rectangular, and honeycomb graphene antidot lattices. 2011, 5, 523-9 First-Principles Study of the [email'protected]2 Heterobilayers. 2011, 115, 20237-20241 Semiconducting electronic property of graphene adsorbed on (0001) surfaces of SiO2. 2011, 106, 106801 Valley-contrastive selection rules of a nonlinear optical transition in graphene with an energy gap. 2011, 83, Mn©+-bonded reduced graphene oxide with strong radiative recombination in broad visible range	88 112 159 7
1622 1621 1620 1619	Clar sextet analysis of triangular, rectangular, and honeycomb graphene antidot lattices. 2011, 5, 523-9 First-Principles Study of the 2 Heterobilayers. 2011, 115, 20237-20241 Semiconducting electronic property of graphene adsorbed on (0001) surfaces of SiO2. 2011, 106, 106801 Valley-contrastive selection rules of a nonlinear optical transition in graphene with an energy gap. 2011, 83, Mn[+-bonded reduced graphene oxide with strong radiative recombination in broad visible range caused by resonant energy transfer. 2011, 11, 3951-6 Tunable Electronic and Magnetic Properties in BxNyCz Nanohybrids: Effect of Domain Segregation.	88 112 159 7 77

1614	Fluorographene: a wide bandgap semiconductor with ultraviolet luminescence. 2011 , 5, 1042-6	350
1613	Band Gap Tuning of Hydrogenated Graphene: H Coverage and Configuration Dependence. 2011 , 115, 3236-3242	139
1612	Interplay between geometrical structure and electronic properties in rippled free-standing graphene. 2011 , 83,	32
1611	Underneath the fascinations of carbon nanotubes and graphene nanoribbons. 2011 , 4, 627	69
1610	Structural and Electronic Properties of Hybrid Fluorographene@raphene Nanoribbons: Insight from First-Principles Calculations. 2011 , 115, 16644-16651	42
1609	Formation of hydrogenated graphene nanoripples by strain engineering and directed surface self-assembly. 2011 , 83,	58
1608	Upright standing graphene formation on substrates. 2011 , 133, 16072-9	39
1607	Carrier control of graphene driven by the proximity effect of functionalized self-assembled monolayers. 2011 , 11, 3669-75	74
1606	Dirac gap-induced graphene quantum dot in an electrostatic potential. 2011 , 83,	40
1605	Giant effect of negative differential conductance in graphene nanoribbon p-n hetero-junctions. 2011 , 99, 042105	27
1604	Large peak-to-valley ratio of negative-differential-conductance in graphene p-n junctions. 2011 , 109, 093706	21
1603	Electric transport through circular graphene quantum dots: Presence of disorder. 2011 , 84,	21
1602	Field modulation of the electronic structure of trilayer graphene. 2011 , 98, 263107	31
1601	Resonant tunneling structures based on epitaxial graphene on SiC. 2011 , 26, 125012	19
1600	Density functional investigation of rhombohedral stacks of graphene: Topological surface states, nonlinear dielectric response, and bulk limit. 2011 , 84,	36
1599	Fourier-transform scanning tunnelling spectroscopy: the possibility to obtain constant-energy maps and band dispersion using a local measurement. 2011 , 44, 464010	58
1598	First-principles study of strain-induced modulation of energy gaps of graphene/BN and BN bilayers. 2011 , 83,	104
1597	Graphene quantum dots for valley-based quantum computing: A feasibility study. 2011 , 84,	42

1596 Strain induced shift of Dirac points and the pseudo-magnetic field in graphene. 2011 , 23, 505502	7
1595 Plasma excitations of dressed Dirac electrons in graphene layers. 2011 , 109, 113721	16
Berry-curvature-mediated valley-Hall and charge-Hall effects in graphene via strain engineering. 2011 , 84,	9
Angle-Resolved Photoemission Spectroscopy of Graphene, Graphite, and Related Compounds. 2011 , 383-409	3
Dynamical polarization of graphene in a magnetic field. 2011 , 83,	49
1591 Growth of bilayer graphene on insulating substrates. 2011 , 5, 8187-92	243
1590 Graphene Composites. 2011 ,	4
Transformation from AA to AB-Stacked Bilayer Graphene on \oplus iO 2 under an Electric Field. 2011 , 28, 087303	4
1588 Multi-layer graphene grid and nanowire fabrication and printing. 2011 ,	
Tuning the magnetic behavior and transport property of graphene by introducing dopant and defect: A first-principles study. 2011 , 972, 63-67	7
1586 Zero-mode anomalies of massless Dirac electron in graphene. 2011 , 109, 102401	
	18
Quasiparticle energies and excitonic effects of the two-dimensional carbon allotrope graphdiyne: Theory and experiment. 2011 , 84,	18 246
Quasiparticle energies and excitonic effects of the two-dimensional carbon allotrope graphdiyne: Theory and experiment. 2011 , 84, Chiral orbital current and anomalous magnetic moment in gapped graphene. 2011 , 84,	
Theory and experiment. 2011 , 84,	246
Theory and experiment. 2011 , 84, 1584 Chiral orbital current and anomalous magnetic moment in gapped graphene. 2011 , 84,	246 17
Theory and experiment. 2011 , 84, 1584 Chiral orbital current and anomalous magnetic moment in gapped graphene. 2011 , 84, 1583 Opening an electrical band gap of bilayer graphene with molecular doping. 2011 , 5, 7517-24 Graphene on the carbon face of SiC: Electronic structure modification by hydrogen intercalation.	246 17 191
Theory and experiment. 2011 , 84, 1584 Chiral orbital current and anomalous magnetic moment in gapped graphene. 2011 , 84, 1583 Opening an electrical band gap of bilayer graphene with molecular doping. 2011 , 5, 7517-24 Graphene on the carbon face of SiC: Electronic structure modification by hydrogen intercalation. 2011 , 83,	246 17 191

1578	Electronic and optical properties of a circular graphene quantum dot in a magnetic field: Influence of the boundary conditions. 2011 , 84,	75
1577	Graphene epitaxy by chemical vapor deposition on SiC. 2011 , 11, 1786-91	257
1576	Engineering quantum anomalous/valley Hall states in graphene via metal-atom adsorption: An ab-initio study. 2011 , 84,	188
1575	Epitaxial Graphene on SiC(0001). 2011 , 135-159	O
1574	Quantum Computation with Graphene Nanostructure. 2011,	
1573	Single-Particle States and Elementary Excitations in Graphene Bi-Wires: Minding the Substrate. 2011 ,	
1572	Epitaxial Graphene on SiC(0001): More Than Just Honeycombs. 2011 ,	1
1571	Thermal Conductivity Reduction in Few-Layer Graphene. 2011 ,	
1570	The effects of electron-phonon interactions on bandgaps. 2011 , 286, 012032	1
1569	Tailoring the thermal Casimir force with graphene. 2011 , 96, 14006	33
1568	Orbital magnetism of Dirac systems. 2011 , 334, 012005	O
1567	Self-assembly and electron-beam-induced direct etching of suspended graphene nanostructures. 2011 , 110, 064308	19
1566	Spin-polarized tunneling in a ferromagnetic graphene junction: Interplay between the exchange interaction and the orbital effect of the magnetic field. 2011 , 44, 327-332	2
1565	Electronic structure tuning and band gap opening of graphene by hole/electron codoping. 2011 , 375, 3890-3894	55
1564	Massive Dirac electron tunneling through a time-periodic potential in single layer graphene. 2011 , 375, 4065-4069	8
1563	Tunable bandgap opening in the proposed structure of silicon-doped graphene. 2011 , 6, 582	41
1562	Fabrication and Characterization of an Epitaxial Graphene Nanoribbon-Based Field-Effect Transistor. 2011 , 58, 1594-1596	23
1561	. 2011 , 58, 3300-3306	18

1560	The possibility of cyclotron echo generation in graphene on a SiC substrate. 2011 , 19, 287-289	1
1559	Density functional calculations of Lithium-doped few-layer ABA-stacked graphene supported on Pt and Si-terminated SiC surfaces. 2011 , 515, 263-268	4
1558	Adsorption structure and doping effect of azidotrimethyltin on graphene. 2011 , 11, 1307-1310	О
1557	Tailoring Electronic Properties of Graphene by Lacking with Aromatic Molecules. 2011, 2, 2897-2905	210
1556	The Electronic Properties of Adsorbates on Graphene. 2011 , 93-134	2
1555	Liquid-phase exfoliation, functionalization and applications of graphene. 2011 , 3, 2118-26	241
1554	Electronic properties of the partially hydrogenated armchair carbon nanotubes. 2011, 84,	16
1553	Chemical doping of graphene. 2011 , 21, 3335-3345	1227
1552	Ultrafast Relaxation Dynamics in Graphene Oxide: Evidence of Electron Trapping. 2011 , 115, 19110-19116	81
1551	Electronic states in epitaxial graphene fabricated on silicon carbide. 2011 , 45, 1070-1076	17
1550	Effect of the charge dragging in a graphene-based superlattice under a constant electric field. 2011 , 75, 1582-1584	0
1549	Goos-Hāchen-like shifts for Dirac fermions in monolayer graphene barrier. 2011 , 79, 203-208	46
1548	Electronic transport in two-dimensional graphene. 2011 , 83, 407-470	2416
1547	Band gap in graphene induced by vacuum fluctuations. 2011 , 84,	32
1546	Bi- and trilayer graphene solutions. 2011 , 6, 439-45	304
1545	Josephson Current in a Gapped Graphene Superconductor/Barrier/Superconductor Junction: Case of Massive Electrons. 2011 , 165, 15-26	6
1544	Dispersion of graphene oxide and its flame retardancy effect on epoxy nanocomposites. 2011 , 29, 368-376	43
1543	Magnetic catalysis and quantum Hall ferromagnetism in weakly coupled graphene. 2011 , 2011, 1	13

1542	A first-principles study on the electromechanical effect of graphene nanoribbon. 2011 , 182, 99-102	16
1541	Epitaxially grown graphene based gas sensors for ultra sensitive NO2 detection. 2011 , 155, 451-455	261
1540	First-principles study of half-metallicity in semi-hydrogenated BC3, BC5, BC7, and B-doped graphone sheets. 2011 , 6, 190	20
1539	Substrate induced bandgap in multilayer epitaxial graphene on the 4H-SiC (\$000{bar {1}}\$) surface. 2011 , 248, 1690-1695	6
1538	Scanning tunneling microscopy and spectroscopy of graphene on insulating substrates. 2011 , 248, 2423-2434	29
1537	Simple preparation of high-quality graphene flakes without oxidation using potassium salts. 2011 , 7, 864-8	65
1536	Graphene: Piecing it together. 2011 , 23, 4471-90	115
1535	Lithium Storage Characteristics in Nano-Graphene Platelets. 2011 , 117-127	2
1534	Facile synthesis of wide-bandgap fluorinated graphene semiconductors. 2011 , 17, 8896-903	112
1533	Field-induced recovery of massless Dirac fermions in epitaxial graphene on SiC. 2011 , 49, 2300-2305	9
1532	New synthesis method for the growth of epitaxial graphene. 2011 , 184, 100-106	58
1531	Formation of self-organized graphene honeycomb films on substrates. 2011 , 49, 3424-3429	16
1530	Chiral symmetry breaking in monolayer graphene by strong coupling expansion of compact and non-compact U(1) lattice gauge theories. 2011 , 326, 1408-1424	22
1529	Graphene based materials: Past, present and future. 2011 , 56, 1178-1271	2607
1528	Singular orbital magnetism of graphene. 2011 , 151, 1054-1060	18
1527	Transport properties of high-quality epitaxial graphene on 6H-SiC(0001). 2011 , 151, 1061-1064	18
1526	Adsorption and desorption of fullerene on graphene/SiC(0001). 2011 , 605, 649-653	3
1525	Terahertz ellipsometry and terahertz optical-Hall effect. 2011 , 519, 2593-2600	37

1524 Impact of Site-Potential Asymmetry on Electron Transport in Graphene. **2011**, 50, 090205

Graphene/Graphite-Coated SiC Nanowires Grown by Metal®rganic Chemical Vapor Deposition in One Step. 2011 , 50, 018001	1
Raman spectra of graphene exfoliated on insulating crystalline substrates. 2011 , 13, 063018	19
1521 Pseudospin polarized quantum transport in monolayer graphene. 2011 , 83,	31
Energetics and electronic structure of graphene adsorbed on HfO2(111): Density functional theory calculations. 2011 , 83,	60
1519 System-level analysis of graphene klein tunneling device. 2011 ,	1
1518 Doping of graphene exfoliated on SrTiO3. 2011 , 22, 265703	26
Magneto-optics of bilayer inclusions in multilayered epitaxial graphene on the carbon face of SiC. 2011 , 83,	32
1516 Spin-polarized and valley helical edge modes in graphene nanoribbons. 2011 , 84,	43
1515 Ising instability of a Holstein phonon mode in graphene. 2011 , 84,	6
Visualizing electronic chirality and Berry phases in graphene systems using photoemission with circularly polarized light. 2011 , 107, 166803	136
1513 Characteristics of level-spacing statistics in chaotic graphene billiards. 2011 , 21, 013102	28
1512 Tunable graphene band gaps from superstrate-mediated interactions. 2011 , 84,	16
Effect of sublattice asymmetry and spin-orbit interaction on out-of-plane spin polarization of photoelectrons. 2011 , 83,	14
1510 Direct measurement of quantum phases in graphene via photoemission spectroscopy. 2011 , 84,	64
Formation mechanism of graphene layers on SiC (0001 $\!^{\circ}$) in a high-pressure argon atmosphere. 2011 , 84,	41
1508 Controlling the self-doping of epitaxial graphene on SiC via Ar ion treatment. 2011 , 84,	19
In-plane orientation effects on the electronic structure, stability, and Raman scattering of monolayer graphene on Ir(111). 2011 , 83,	133

1506	Role of covalent and metallic intercalation on the electronic properties of epitaxial graphene on SiC(0001). 2011 , 84,	43
1505	Enlargement of band gap in graphene superlattices by using heterostructures. 2011 , 110, 026106	4
1504	Direct graphene growth on MgO(111) by physical vapor deposition: interfacial chemistry and band gap formation. 2011 ,	6
1503	Direct graphene growth on MgO: origin of the band gap. 2011 , 23, 072204	38
1502	Electron tunneling in single layer graphene with an energy gap. 2011 , 20, 027201	16
1501	Modeling of epitaxial graphene functionalization. 2011 , 22, 055708	26
1500	Symmetry breaking and gap opening in two-dimensional hexagonal lattices. 2011 , 13, 013026	29
1499	Gap opening and tuning in single-layer graphene with combined electric and magnetic field modulation. 2011 , 20, 047302	17
1498	Transport Properties of Graphene with Nanoscale Lateral Resolution. 2011, 247-285	8
1497	Valley symmetry breaking and gap tuning in graphene by spin doping. 2011 , 13, 035023	15
1496	Density Functional Study of Graphene Overlayers on SiC. 2011 , 473-492	
1495	THE GRAPHENE-SIC SUBSTRATE INTERACTION ENHANCED NEAR-INFRARED ABSORPTION. 2011 , 25, 1393-1399	
1494	Reactive Ion Etching of Carbon Nanowalls. 2011 , 50, 075101	6
1493	Electronic structures of an epitaxial graphene monolayer on SiC(0001) after gold intercalation: a first-principles study. 2011 , 22, 275704	17
1492	SemiconductorMetal Transition and Band-Gap Tuning in Quasi-Free-Standing Epitaxial Bilayer Graphene on SiC. 2011 , 80, 024705	16
1491	Structure and stability of the interface between graphene and 6H-SiC(0 0 0 🗓) (3 🖺): an STM andab initiostudy. 2012 , 45, 154003	14
1490	Optimizing long-range order, band gap, and group velocities for graphene on close-packed metal surfaces. 2012 , 24, 314203	5
1489	Absence of dynamical gap generation in suspended graphene. 2012 , 14, 043036	34

1488 Electron honon coupling and intrinsic bandgap in highly-screened graphene. 2012 , 14, 095006	6 34
$_{1487}$ Landau level shift under the influence of short-range impurities in gapless graphene. 2012 , 45	i, 305002 1
Energy Band Gap Modification of Graphene Deposited on a Multilayer Hexagonal Boron Nitrid Substrate. 2012 , 1407, 45	le
1485 SEMICONDUCTING GRAPHENE. 2012 , 02, 1230009	5
Tailoring the Electronic Structure of Epitaxial Graphene on SiC(0001): Transfer Doping and Hydrogen Intercalation. 2012 , 39-49	1
Conductance Properties of Multilayered Silver-Mean and Period-Doubling Graphene Structure 2012 , 1479, 117-123	2 5.
Transmission properties of multilayered Period Doubling and Silver-Mean graphene structures 2012 , 1371, 143	s.
$_{1481}$ Probing near Dirac point electron-phonon interaction in graphene. 2012 , 2, 1713	9
1480 Excitonic resonances as fingerprint of strong Coulomb coupling in graphene. 2012 , 29, A86	10
1479 Effect of Coulomb interactions on the physical observables of graphene. 2012 , T146, 014015	18
Terahertz imaging of inhomogeneous electrodynamics in single-layer graphene embedded in dielectrics. 2012 , 101, 091109	15
The influence of substrate morphology on thickness uniformity and unintentional doping of epitaxial graphene on SiC. 2012 , 100, 241607	43
1476 Exciton type 2 in graphene bilayer. 2012 ,	
1475 Uniaxial deformation of graphene Dirac cone on a vicinal SiC substrate. 2012 , 85,	15
Effect of in-situ oxygen on the electronic properties of graphene grown by carbon molecular be epitaxy. 2012 , 100, 133107	beam 3
1473 Inducing topological order in a honeycomb lattice. 2012 , 85,	18
Dirac donor states controlled by magnetic field in gapless and gapped graphene. 2012 , 85,	18
Time dependence of the position momentum and position velocity uncertainties in gapped graphene. 2012 , 85,	2

1470 Electron localization in epitaxial graphene on Ru(0001) determined by moirfcorrugation. 2012 , 85,		31
Formation of nitrogen-vacancy complexes during plasma-assisted nitrogen doping of epitaxial graphene on SiC(0001). 2012 , 100, 233119		11
Role of structure of C-terminated 4H-SiC(0001[]) surface in growth of graphene layers: Transmission electron microscopy and density functional theory studies. 2012 , 85,		31
$_{1467}$ Semimetal-antiferromagnetic insulator transition in graphene induced by biaxial strain. 2012 , 86,		16
1466 Atomic-scale transport in epitaxial graphene. <i>Nature Materials</i> , 2011 , 11, 114-9	27	149
Carbon rehybridization at the graphene/SiC(0001) interface: Effect on stability and atomic-scale corrugation. 2012 , 85,		29
1464 Spin versus charge-density-wave order in graphenelike systems. 2012 , 86,		12
1463 Substrate-induced chiral states in graphene. 2012 , 86,		35
1462 SUBSTRATE MODULATED GRAPHENE QUANTUM DOTS. 2012 , 26, 1250162		
$_{1461}$ Geometrical and topological aspects of graphene and related materials. 2012 , 45, 383001		46
1460 Effective Hamiltonian of strained graphene. 2012 , 24, 205302		25
1459 Transmission of Dirac Electrons Through Graphene Multilayers with Gaussian Profile. 2012 , 1371, 129	9	
1458 Direct Graphene Growth on Oxides: Interfacial Interactions and Band Gap Formation. 2012 , 45, 49-61		7
1457 Hysteresis of In Situ CCVD Grown Graphene Transistors. 2012 , 15, K31		8
1456 Experimental Review of Graphene. 2012 , 2012, 1-56		303
Tuning electronic and magnetic properties of zigzag graphene nanoribbons by large-scale bending. 2012, 100, 263115		11
1454 Fluorinated monovacancies in graphene: Even-odd effect. 2012 , 100, 37003		12
Low energy electron microscopy and photoemission electron microscopy investigation of graphene. 2012 , 24, 314209		14

1452	Graphene carbon nanostructures for nanoelectronics. 2012 , 198-242	1
1451	Quantum-Hall plateauplateau transition in top-gated epitaxial graphene grown on SiC (0001). 2012 , 111, 013716	13
1450	Diamagnetism of Graphene with Gap in Nonuniform Magnetic Field. 2012 , 81, 024702	12
1449	Synthesis of fluorinated graphene with tunable degree of fluorination. 2012 , 50, 5403-5410	242
1448	Engineering the electronic structure of epitaxial graphene by transfer doping and atomic intercalation. 2012 , 37, 1177-1186	36
1447	Graphene investigated by synchrotron radiation. 2012 , 37, 1203-1213	5
1446	Multilayer silicene nanoribbons. 2012 , 12, 5500-3	138
1445	Two-Dimensional Superlattice: Modulation of Band Gaps in Graphene-Based Monolayer Carbon Superlattices. 2012 , 3, 3373-3378	52
1444	Collective excitations and the nature of Mott transition in undoped gapped graphene. 2012 , 24, 305601	4
1443	Strain-controlled electron switch in graphene. 2012 , 101, 253507	18
1442	Semiconducting graphene nanomeshes. 2012 , 85,	7
1441	Spin-dependent transport properties through gapless graphene-based ferromagnet and gapped graphene-based superconductor junction. 2012 , 112, 013901	10
1440	Electronic structure and quantum transport properties of trilayers formed from graphene and boron nitride. 2012 , 4, 5490-8	52
1439	Strain Effect on the Electronic Properties of Single Layer and Bilayer Graphene. 2012 , 116, 8271-8277	102
1438	Physisorption to chemisorption transition of NO2 on graphene induced by the interplay of SiO2 substrate and van der Waals forces: A first principles study. 2012 , 405, 161-166	18
1437	Controlled growth of carbon nanotube-graphene hybrid materials for flexible and transparent conductors and electron field emitters. 2012 , 4, 632-8	97
1436	Robust optical emission polarization in MoS2 monolayers through selective valley excitation. 2012 , 86,	330
1435	Electronic structure of superlattices of graphene and hexagonal boron nitride. 2012 , 22, 919-922	85

1434	Charge dynamics and electronic structures of monolayer graphene with molecular doping. 2012 , 101, 111907	7
1433	Fermionic Casimir densities in a conical space with a circular boundary and magnetic flux. 2012, 85,	18
1432	Growth and electronic transport properties of epitaxial graphene on SiC. 2012 , 45, 154008	36
1431	Anomalous growth of thermoelectric power in gapped graphene. 2012 , 86,	37
1430	BOUND STATES AND KLEIN PARADOX OF GRAPHENE SYSTEMS IN CONFINING POTENTIALS. 2012 , 26, 1250108	
1429	Structural stabilities and electronic properties of planar C4 carbon sheet and nanoribbons. 2012 , 14, 11107-11	41
1428	Exploring the electronic properties of relaxed bilayer nitrogen-graphene alloy using density functional theory. 2012 ,	
1427	Enhanced optical conductance in graphene superlattice due to anisotropic band dispersion. 2012 , 45, 395303	13
1426	Planar Dirac electrons in magnetic quantum dots. 2012 , 24, 215303	3
1425	Tunable band gaps and p-type transport properties of boron-doped graphenes by controllable ion doping using reactive microwave plasma. 2012 , 6, 1970-8	206
1424	Silicon-CMOS compatible in-situ CCVD grown graphene transistors with ultra-high on/off-current ratio. 2012 , 44, 1132-1135	11
1423	Valley-dependent tunneling in a monolayer gapped graphene without strain. 2012 , 44, 1617-1622	5
1422	Energy loss spectroscopy of epitaxial versus free-standing multilayer graphene. 2012 , 44, 1874-1884	6
1421	Density functional theory studies of interactions of graphene with its environment: Substrate, gate dielectric and edge effects. 2012 , 152, 1497-1502	7
1420	Anomalous scaling behaviour of cobalt cluster size distributions on graphite, epitaxial graphene and carbon-rich (6日8日)R30°. 2012 , 606, 1586-1593	9
1419	Enhanced Andreev reflection in gapped graphene. 2012 , 86,	14
1418	Band Gap Tuning of Graphene by Adsorption of Aromatic Molecules. 2012 , 116, 13788-13794	73

(2012-2012)

1416	Tunable electronic transport characteristics through an AA-stacked bilayer graphene with magnetoelectric barriers. 2012 , 112, 053714	8
1415	Electronic and transport gaps of graphene opened by grain boundaries. 2012 , 112, 053713	29
1414	Atomic nitrogen chemisorption on graphene with extended line defects. 2012 , 22, 21167	12
1413	Tuning the band gaps and work functions via topology and carbon concentration: a first-principles investigation of C(x)(BN)(y) compounds. 2012 , 14, 4391-7	18
1412	Spatial variation of the number of graphene layers formed on the scratched 6HBiC(0 0 0 1) surface. 2012 , 258, 4672-4677	5
1411	Ab initio studies of electronic and optical properties of graphene and graphene B N interface. 2012 , 258, 8338-8342	26
1410	First principle study of the interaction and charge transfer between graphene and organic molecules. 2012 , 56, 79-84	62
1409	Valley filtering in graphene with a Dirac gap. 2012 , 85,	57
1408	Valley filtering in gapped graphene modulated by an antisymmetric magnetic field and an electric barrier. 2012 , 4, 6527-31	12
1407	Graphene: an emerging electronic material. 2012 , 24, 5782-825	603
• •	Graphene: an emerging electronic material. 2012, 24, 5782-825 Dielectric function of graphene based quantum dot under the uniaxial stress. 2012, 85, 1	603
1406		
1406	Dielectric function of graphene based quantum dot under the uniaxial stress. 2012 , 85, 1 Topological phase transition and electrically tunable diamagnetism in silicene. 2012 , 85, 1	2
1406 1405	Dielectric function of graphene based quantum dot under the uniaxial stress. 2012 , 85, 1 Topological phase transition and electrically tunable diamagnetism in silicene. 2012 , 85, 1	2 45
1406 1405 1404	Dielectric function of graphene based quantum dot under the uniaxial stress. 2012 , 85, 1 Topological phase transition and electrically tunable diamagnetism in silicene. 2012 , 85, 1 Effects of spatial dispersion on the Casimir force between graphene sheets. 2012 , 85, 1	2 45 26
1406 1405 1404 1403	Dielectric function of graphene based quantum dot under the uniaxial stress. 2012, 85, 1 Topological phase transition and electrically tunable diamagnetism in silicene. 2012, 85, 1 Effects of spatial dispersion on the Casimir force between graphene sheets. 2012, 85, 1 Gap modification of atomically thin boron nitride by phonon mediated interactions. 2012, 7, 303 Theoretical Evaluation of Ballistic Electron Transport in Field-Effect Transistors with	2 45 26 5
1406 1405 1404 1403 1402	Dielectric function of graphene based quantum dot under the uniaxial stress. 2012, 85, 1 Topological phase transition and electrically tunable diamagnetism in silicene. 2012, 85, 1 Effects of spatial dispersion on the Casimir force between graphene sheets. 2012, 85, 1 Gap modification of atomically thin boron nitride by phonon mediated interactions. 2012, 7, 303 Theoretical Evaluation of Ballistic Electron Transport in Field-Effect Transistors with Semiconducting Graphene Channels. 2012, 51, 055103	2 45 26 5

1398	Graphyne: Hexagonal network of carbon with versatile Dirac cones. 2012 , 86,	248
1397	Enabling graphene-based technologies: Toward wafer-scale production of epitaxial graphene. 2012 , 37, 1149-1157	40
1396	Mapping the Berry curvature from semiclassical dynamics in optical lattices. 2012 , 85,	131
1395	Diffusion on edges of insulating graphene with intravalley and intervalley scattering. 2012, 86,	5
1394	Low temperature plasma-mediated synthesis of graphene nanosheets for supercapacitor electrodes. 2012 , 22, 6061	51
1393	Influence of orbital hybridization on the atomic and electronic structures in hydrogenated monolayer graphene. 2012 , 60, 816-820	1
1392	Functionalization of graphene: covalent and non-covalent approaches, derivatives and applications. 2012 , 112, 6156-214	3041
1391	Enhanced Lithiation of Doped 6H Silicon Carbide (0001) via High Temperature Vacuum Growth of Epitaxial Graphene. 2012 , 116, 20949-20957	30
1390	Electrically controllable energy gaps in graphene quantum dots. 2012 , 100, 163109	21
1389	Graphene Transistors. 2012 , 51-91	3
1388	Graphene Growth by CVD Methods. 2012 , 167-203	7
1387	Resonant tunneling through double barrier graphene systems: A comparative study of Klein and non-Klein tunneling structures. 2012 , 112, 073711	28
1386	Covalent chemistry in graphene electronics. 2012 , 15, 276-285	50
1385	Graphitization of boron predeposited 6H-SiC(0001) surface. 2012 , 261, 868-872	1
1384	Tunable band gap in half-fluorinated bilayer graphene under biaxial strains. 2012 , 65, 165-169	7
1383	Electronic and Magnetic Properties of Graphene/Fluorographene Superlattices. 2012, 116, 18278-18283	24
1382	Valley-based field-effect transistors in graphene. 2012 , 86,	26
1381	Hybrid graphene and graphitic carbon nitride nanocomposite: gap opening, electron-hole puddle, interfacial charge transfer, and enhanced visible light response. 2012 , 134, 4393-7	490

1380	Klein Paradox of Two-Dimensional Dirac Electrons in Circular Well Potential. 2012 , 58, 205-208	5
1379	Nonlinear optical response in gapped graphene. 2012 , 24, 205802	34
1378	Merging Dirac points and topological phase transitions in the tight-binding model on the generalized honeycomb lattice. 2012 , 86,	15
1377	Polarons in highly doped atomically thin graphitic materials. 2012 , 86,	8
1376	Fermi velocity engineering in graphene by substrate modification. 2012 , 2,	269
1375	Extend the omnidirectional electronic gap of Thue-Morse aperiodic gapped graphene superlattices. 2012 , 101, 252104	18
1374	Inelastic carrier lifetime in bilayer graphene. 2012 , 100, 032106	4
1373	Large band gap opening between graphene Dirac cones induced by Na adsorption onto an Ir superlattice. 2012 , 6, 199-204	63
1372	Tunable and sizable band gap of single-layer graphene sandwiched between hexagonal boron nitride. 2012 , 4, e6-e6	140
1371	Silicon layer intercalation of centimeter-scale, epitaxially grown monolayer graphene on Ru(0001). 2012 , 100, 093101	90
1370	Facile Formation of Graphene Pℕ Junctions Using Self-Assembled Monolayers. 2012 , 116, 19095-19103	31
1369	Why the Band Gap of Graphene Is Tunable on Hexagonal Boron Nitride. 2012 , 116, 3142-3146	88
1368	Porous graphene: Properties, preparation, and potential applications. 2012 , 57, 2948-2955	77
1367	Graphene-based ambipolar electronics for radio frequency applications. 2012 , 57, 2956-2970	18
1366	Monolayer graphene growth using additional etching process in atmospheric pressure chemical vapor deposition. 2012 , 50, 5203-5209	42
1365	Transition in the equilibrium distribution function of relativistic particles. 2012 , 2, 611	13
1364	One-step graphene coating of heteroepitaxial GaN films. 2012 , 23, 435603	28
1363	Electronic Properties of Graphene Altered by Substrate Surface Chemistry and Externally Applied Electric Field. 2012 , 116, 6259-6267	26

1362	Effect of SiO2 substrate on the irradiation-assisted manipulation of supported graphene: a molecular dynamics study. 2012 , 23, 285703	42
1361	Ordered Semiconducting Nitrogen-Graphene Alloys. 2012 , 2,	41
1360	Symmetry of atomistic structure for armchair-edge graphene nanoribbons under uniaxial strain. 2012 , 100, 153112	12
1359	Peierls Instability and Spin Orderings of Ultranarrow Graphene Nanoribbons in Graphane. 2012 , 116, 13795-13799	5
1358	Tracing Ultrafast Separation and Coalescence of Carrier Distributions in Graphene with Time-Resolved Photoemission. 2012 , 3, 64-68	40
1357	Graphene-based qubits in quantum communications. 2012 , 86,	24
1356	Electronic structure of epitaxial graphene grown on the C-face of SiC and its relation to the structure. 2012 , 14, 125007	17
1355	Influence of the Magnetic Field on the Graphene Conductivity. 2012 , 03, 994-1001	10
1354	Hybrid graphene/organic semiconductor field-effect transistors. 2012, 101, 033309	28
1353	Interfacial Properties of Silicon Nitride Grown on Epitaxial Graphene on 6H-SiC Substrate. 2012 , 116, 22315-22318	10
1352	The AharonovBohm©oulomb problem in a graphene ring. 2012, 45, 055301	2
1351	Electronic structures of an epitaxial graphene monolayer on SiC(0001) after metal intercalation (metal = Al, Ag, Au, Pt, and Pd): A first-principles study. 2012 , 100, 063115	26
1350	Electric-field-induced spin depolarization in graphene quantum dots. 2012, 86,	25
1349	Gap opening in the zeroth Landau level in gapped graphene: pseudo-Zeeman splitting in an angular magnetic field. 2012 , 24, 135005	7
1348	Relativistic Double Barrier Problem with Three Transmission Resonance Regions. 2012 , 2012, 1-13	4
1347	Evaluation and modeling of the mechanical properties of graphite nanoplatelets based rubber nanocomposites for pressure sensing applications. 2012 , 23, 161-165	60
1346	Tuning electron transport in graphene-based field-effect devices using block co-polymers. 2012 , 8, 1073-80	21
1345	Transverse current rectification in a graphene-based superlattice. 2012 , 46, 109-116	28

1344 Magnetoconductivity of band-gap graphene. 2012 , 54, 202-209	6
1343 Biological and chemical sensors based on graphene materials. 2012 , 41, 2283-307	1384
1342 Effect of graphene/4H-SiC(0 0 0 1) interface on electrostatic properties in graphene. 2012 , 44, 993-996	1
1341 Interplay between sublattice and spin symmetry breaking in graphene. 2012 , 85,	25
1340 Silicene: compelling experimental evidence for graphenelike two-dimensional silicon. 2012 , 108, 15550	1 2789
Graphene sublattice symmetry and isospin determined by circular dichroism in angle-resolved photoemission spectroscopy. 2012 , 12, 3900-4	35
1338 Electron-Electron Interactions in Graphene: Current Status and Perspectives. 2012 , 84, 1067-1125	833
Graphene nanomesh-based devices exhibiting a strong negative differential conductance effect. 2012 , 23, 065201	30
1336 Self-adaptive electronic contact between graphene and semiconductors. 2012 , 100, 122108	42
1335 Effect of oxygen adsorption on the local properties of epitaxial graphene on SiC (0001). 2012 , 86,	46
1334 Landau level splitting due to graphene superlattices. 2012 , 85,	11
1333 Graphene on Ru(0001): Evidence for two graphene band structures. 2012 , 85,	16
1332 Valley-selective circular dichroism of monolayer molybdenum disulphide. 2012 , 3, 887	1702
1331 Angle-Resolved Photoemission Studies of Quantum Materials. 2012 , 3, 129-167	59
1330 Local electronic properties of corrugated silicene phases. 2012 , 24, 5088-93	258
Tuning of n- and p-type reduced graphene oxide transistors with the same molecular backbone. 2012, 18, 5155-9	22
1328 Industrial graphene metrology. 2012 , 4, 3807-19	19
1327 Graphene and its derivatives: switching ON and OFF. 2012 , 41, 4688-707	219

1326	Near room-temperature synthesis of transfer-free graphene films. 2012 , 3, 645	179
1325	Giant Goos-Hāchen shift in graphene double-barrier structures. 2012 , 100, 253116	49
1324	Experimental evidence for epitaxial silicene on diboride thin films. 2012, 108, 245501	1307
1323	Terahertz Photon Mixing Effect in Gapped Graphene. 2012 , 33, 816-824	5
1322	Effect of Virtual Andreev Reflection on Tunneling in Normal/Superconductor Graphene Junction. 2012 , 25, 405-411	5
1321	Quadratic Dispersion and Damping Processes of Plasmon in Monolayer Graphene on Pt(111). 2012 , 7, 369-376	32
1320	Femtosecond energy relaxation in suspended graphene: phonon-assisted spreading of quasiparticle distribution. 2012 , 107, 131-136	10
1319	A simple method to synthesize graphene at 633 K by dechlorination of hexachlorobenzene on Cu foils. 2012 , 50, 306-310	28
1318	The role of microwave absorption on formation of graphene from graphite oxide. 2012 , 50, 3267-3273	212
1317	Nano-graphene/polyimide composites with extremely high rubbery plateau modulus. 2012 , 50, 1823-1832	50
1316	The production of large bilayer hexagonal graphene domains by a two-step growth process of	29
	segregation and surface-catalytic chemical vapor deposition. 2012 , 50, 2703-2709	
1315	segregation and surface-catalytic chemical vapor deposition. 2012 , 50, 2703-2709 Charge carrier density in Li-intercalated graphene. 2012 , 534, 29-33	33
1315		
	Charge carrier density in Li-intercalated graphene. 2012 , 534, 29-33	33
1314	Charge carrier density in Li-intercalated graphene. 2012 , 534, 29-33 Towards new graphene materials: Doped graphene sheets and nanoribbons. 2012 , 78, 209-218	33 168
1314	Charge carrier density in Li-intercalated graphene. 2012 , 534, 29-33 Towards new graphene materials: Doped graphene sheets and nanoribbons. 2012 , 78, 209-218 Electronic substrate-mediated interactions. 2012 , 67, 19-81	3316865
1314 1313 1312	Charge carrier density in Li-intercalated graphene. 2012, 534, 29-33 Towards new graphene materials: Doped graphene sheets and nanoribbons. 2012, 78, 209-218 Electronic substrate-mediated interactions. 2012, 67, 19-81 Clar sextets in square graphene antidot lattices. 2012, 44, 967-970 Graphene Nanoribbon Spin Interconnects for Nonlocal Spin-Torque Circuits: Comparison of	33168656

1308	Density functional theory calculations on graphene/BiO2(0001) interface. 2012 , 7, 158	13
1307	Prediction of a new two-dimensional metallic carbon allotrope. 2013 , 15, 2024-30	89
1306	Is graphene on copper doped?. 2013 , 7, 643-646	25
1305	Low dimensional nanocarbons Ethemistry and energy/electron transfer reactions. 2013, 4, 4335	93
1304	Magnetic-like field inducing negative Dirac mass in graphene on hexagonal boron nitride. 2013, 52, 70-76	3
1303	Two-Dimensional Materials from Data Filtering and Ab Initio Calculations. 2013 , 3,	141
1302	Applications of Nanomaterials in Sensors and Diagnostics. 2013,	24
1301	Thermoelectric imaging of structural disorder in epitaxial graphene. <i>Nature Materials</i> , 2013 , 12, 913-8 27	44
1300	Topological phase transition in a graphene system with a coexistence of Coulomb interaction, staggered potential, and intrinsic spin-orbit coupling. 2013 , 88,	9
1299	Plasmons and screening in a monolayer of MoS2. 2013 , 88,	87
1298	Bandgap opening by patterning graphene. 2013 , 3, 2289	127
1297	Bandgap engineering of graphene by corrugation on lattice-mismatched MgO (111). 2013 , 1, 1595	22
1296	The effect of out-of-plane strain on the electronic properties of zigzag graphene nanoribbons. 2013 ,	Ο
1295	Direct exfoliation of graphite using a non-ionic polymer surfactant for fabrication of transparent and conductive graphene films. 2013 , 1, 1870	57
1294	Mutual rectification of alternating currents in graphene in the field of two electromagnetic waves. 2013 , 21, 56-61	3
1293	Variational calculations on the energy levels of graphene quantum antidots. 2013 , 86, 1	5
1292	A disorder induced field effect transistor in bilayer and trilayer graphene. 2013 , 25, 105303	2
1291	Magnetic-field-controlled vacuum charge in graphene quantum dots with a mass gap. 2013 , 88,	8

1290	Electrical linear control of the electronic structure of graphene quantum dots. 2013, 113, 234304	9
1289	Substrate and buffer layer effect on the structural and optical properties of graphene oxide thin films. 2013 , 3, 5926	39
1288	On the specific features of the density of states of epitaxial graphene formed on metal and semiconductor substrates. 2013 , 47, 95-104	43
1287	Theoretical assessment of graphene-metal contacts. 2013 , 138, 244701	53
1286	Berry curvature effects in the Bloch oscillations of a quantum particle under a strong (synthetic) magnetic field. 2013 , 103, 10001	11
1285	Bandgap tuning of mono- and bilayer graphene doped with group IV elements. 2013 , 113, 183701	30
1284	Quantum Hall effect in gapped graphene heterojunctions. 2013 , 88,	13
1283	Tunable doping and band gap of graphene on functionalized hexagonal boron nitride with hydrogen and fluorine. 2013 , 15, 5067-77	65
1282	Controlled and Selective Area Growth of Monolayer Graphene on 4H-SiC Substrate by Electron-Beam-Assisted Rapid Heating. 2013 , 117, 19195-19202	17
1281	Point defect-induced transport bandgap widening in the downscaled armchair graphene nanoribbon device. 2013 , 64, 416-423	19
1280	First-principles study of Bi and Sb intercalated graphene on SiC(0001) substrate. 2013 , 616, 149-154	19
1279	Relativistic electron transport through an oscillating barrier: Wave-packet generation and Fano-type resonances. 2013 , 88,	12
1278	One-qubit quantum gates in a circular graphene quantum dot: genetic algorithm approach. 2013, 8, 242	3
1277	Spin polarization study of graphene on the Ni(111) surface by density functional theory calculations with a semiempirical long-range dispersion correction. 2013 , 114, 143713	12
1276	Electronic structure and quasiparticle bandgap of silicene structures. 2013 , 102, 133106	68
1275	Reduced graphene oxide based Schottky diode on flex substrate for microwave circuit applications. 2013 ,	6
1274	Growth and Structural Properties of Pb Islands on Epitaxial Graphene on Ru(0001). 2013 , 117, 22652-22655	13
1273	Manipulation of resonant tunneling by substrate-induced inhomogeneous energy band gaps in graphene with square superlattice potentials. 2013 , 377, 2895-2900	8

1272 SiC2 siligraphene and nanotubes: novel donor materials in excitonic solar cells. 2013 , 13,	5431-6 166
$_{ m 1271}$ Mobility enhancement and temperature dependence in top-gated single-layer MoS2. 20 °	13 , 88, 89
1270 Direct transfer of graphene onto flexible substrates. 2013 , 110, 17762-7	148
1269 Supercritical instability in graphene with two charged impurities. 2013 , 88,	18
Structure and electronic properties of Au intercalated hexagonal-boron-nitride/graphen 2013 , 49, 111-116	e bilayer. 8
$_{f 1267}$ Opening and reversible control of a wide energy gap in uniform monolayer graphene. 20)13 , 3, 2725 22
1266 Stability of graphitic-like zinc oxide layers under carriers doping: a first-principles study.	2013 , 5, 12111-4 9
In situ high-resolution X-ray photoelectron spectroscopy F undamental insights in surfac reactions. 2013 , 68, 446-487	re 70
HFO(2) on MoS(2) by atomic layer deposition: adsorption mechanisms and thickness scala 2013 , 7, 10354-61	ability. 194
$_{1263}$ Many-body enhancement of the tunable gap in biased bilayer graphene. 2013 , 103, 1631	03 1
Density functional study of structural defects in h-BNC2 sheets. 2013 , 25, 025304	2
Density functional study of structural defects in h-BNC2 sheets. 2013 , 25, 025304 On the Role of Vapor Trapping for Chemical Vapor Deposition (CVD) Grown Graphene ov 2013 , 25, 4861-4866	
On the Role of Vapor Trapping for Chemical Vapor Deposition (CVD) Grown Graphene ov	ver Copper.
On the Role of Vapor Trapping for Chemical Vapor Deposition (CVD) Grown Graphene ov 2013, 25, 4861-4866 Structural, electronic, and optical properties of hybrid silicene and graphene nanocompo	ver Copper. 52 osite. 2013 , 79
On the Role of Vapor Trapping for Chemical Vapor Deposition (CVD) Grown Graphene ov 2013, 25, 4861-4866 Structural, electronic, and optical properties of hybrid silicene and graphene nanocomposition (CVD) Grown Graphene ov 2013, 25, 4861-4866 Graphene quantum dots from a facile sono-Fenton reaction and its hybrid with a polythic	ver Copper. 52 posite. 2013 , 79 ophene 79
On the Role of Vapor Trapping for Chemical Vapor Deposition (CVD) Grown Graphene of 2013, 25, 4861-4866 Structural, electronic, and optical properties of hybrid silicene and graphene nanocomposition (Structural, electronic, and optical properties of hybrid silicene and graphene nanocomposition (Structural, electronic, and optical properties of hybrid silicene and graphene nanocomposition (Structural, electronic, and optical properties of hybrid silicene and graphene nanocomposition (Structural, electronic, and optical properties of hybrid silicene and graphene nanocomposition (Structural, electronic, and optical properties of hybrid silicene and graphene nanocomposition (Structural, electronic, and optical properties of hybrid silicene and graphene nanocomposition (Structural, electronic, and optical properties of hybrid silicene and graphene nanocomposition (Structural, electronic, and optical properties of hybrid silicene and graphene nanocomposition (Structural, electronic, and optical properties of hybrid silicene and graphene nanocomposition (Structural, electronic, and optical properties of hybrid silicene and graphene nanocomposition (Structural, electronic, and optical properties of hybrid silicene and graphene nanocomposition (Structural, electronic, and optical properties of hybrid silicene and graphene nanocomposition (Structural, electronic, and optical properties of hybrid silicene and graphene nanocomposition (Structural, electronic, and optical properties of hybrid silicene and graphene nanocomposition (Structural, electronic, and optical properties of hybrid silicene and graphene nanocomposition (Structural, electronic, and optical properties of hybrid silicene and graphene nanocomposition (Structural, electronic, and optical properties of hybrid silicene and graphene (Structural, electronic, and electronic, and electronic, and electronic electronic, and electronic	ver Copper. 52 Disite. 2013, 79 Ophene 79
On the Role of Vapor Trapping for Chemical Vapor Deposition (CVD) Grown Graphene of 2013, 25, 4861-4866 Structural, electronic, and optical properties of hybrid silicene and graphene nanocomposition (Structural, electronic, and optical properties of hybrid silicene and graphene nanocomposition (Structural, electronic, and optical properties of hybrid silicene and graphene nanocomposition (Structural, electronic, and optical properties of hybrid silicene and graphene nanocomposition (Structural, electronic, and optical properties of hybrid silicene and graphene nanocomposition (Structural, electronic, and optical properties of hybrid silicene and graphene nanocomposition (Structural, electronic, and optical properties of hybrid silicene and graphene nanocomposition (Structural, electronic, and optical properties of hybrid silicene and graphene nanocomposition (Structural, electronic, and optical properties of hybrid silicene and graphene nanocomposition (Structural, electronic, and optical properties of hybrid silicene and graphene nanocomposition (Structural, electronic, and optical properties of hybrid silicene and graphene nanocomposition (Structural, electronic, and optical properties of hybrid silicene and graphene nanocomposition (Structural, electronic, and optical properties of hybrid silicene and graphene nanocomposition (Structural, electronic, and optical properties of hybrid silicene and graphene nanocomposition (Structural, electronic, and optical properties of hybrid silicene and graphene nanocomposition (Structural, electronic, and optical properties of hybrid silicene and graphene nanocomposition (Structural, electronic, and optical properties of hybrid silicene and graphene nanocomposition (Structural, electronic, and electronic, and optical properties of hybrid silicene and graphene nanocomposition (Structural, electronic, and electronic, and electronic, and electronic, and electronic (Structural, electronic, and electronic, and electronic (Structural, electronic, electronic, electronic, elect	ver Copper. 52 Disite. 2013, 79 Ophene 79 tube vein 64

1254	Electronic-structure modification of graphene on Ni(111) surface by the intercalation of a noble metal. 2013 , 87,	22
1253	Three-dimensional metallic boron nitride. 2013 , 135, 18216-21	113
1252	Energy spectrum of the graphene-based Fibonacci superlattice. 2013 , 55, 2596-2601	8
1251	Fine tuning of graphene-metal adhesion by surface alloying. 2013 , 3, 2430	33
1250	Absorption of electromagnetic waves by graphene. 2013 , 21, 207-213	4
1249	Electronic structure of graphene on a reconstructed Pt(100) surface: Hydrogen adsorption, doping, and band gaps. 2013 , 88,	15
1248	Large nonlinear optical rectification in atomic hexagonal layers with broken space inversion symmetry. 2013 , 15, 105204	6
1247	Plasmons in graphene: Recent progress and applications. 2013 , 74, 351-376	262
1246	A quantum statistical model for graphene FETs on SiC. 2013 , 250, 1857-1863	
1245	Controllable modulation of the electronic properties of graphene and silicene by interface engineering and pressure. 2013 , 1, 4869	28
1244	Graphene based field effect transistors: Efforts made towards flexible electronics. 2013, 89, 177-188	68
1243	Universal rule on chirality-dependent bandgaps in graphene antidot lattices. 2013, 9, 1405-10	33
1242	Electronic properties of graphene on the C-decorated Si(111) surface: An ab initio study. 2013 , 13, 1512-1519	2
1241	Graphene-based semiconductor nanostructures. 2013 , 56, 105-122	39
1240	Recent trends in silicon carbide (SiC) and graphene-based gas sensors. 2013 , 117-158	4
1239	Fabrication and characterization of fully flattened carbon nanotubes: a new graphene nanoribbon analogue. 2013 , 3, 1617	34
1238	Intercalation of metals and silicon at the interface of epitaxial graphene and its substrates. 2013 , 22, 096803	10
1237	Sub-picometer structural information of graphene hidden in a 50 pm resolved image. 2013 , 5, 8874-8	

(2013-2013)

1236	Spin Transport in Bilayer Graphene Armchair Nanoribbon: A Monte Carlo Simulation Study. 2013 , 60, 3734-3740	2
1235	Applications of Graphene. 2013 , 333-437	6
1234	Transmission electron microscope as an ultimate tool for nanomaterial property studies. 2013 , 62, 157-75	7
1233	Charge dragged by the solitary electromagnetic wave in the graphene superlattice. 2013 , 48, 96-100	4
1232	Graphene-related nanomaterials: tuning properties by functionalization. 2013 , 5, 4541-83	524
1231	The edges of graphene. 2013 , 5, 2556-69	83
1230	Semiconducting graphene: converting graphene from semimetal to semiconductor. 2013 , 5, 1353-68	122
1229	The solitary electromagnetic waves in the graphene superlattice. 2013 , 408, 188-192	24
1228	Magnetism of an adatom on bilayer graphene and its control: A first-principles perspective. 2013 , 88,	18
1227	High spin-Chern insulators with magnetic order. 2013 , 3, 3435	9
1226	Minimal single-particle Hamiltonian for charge carriers in epitaxial graphene on 4H-SiC(0001): Broken-symmetry states at Dirac points. 2013 , 175-176, 83-89	4
1225	Opening a large band gap for graphene by covalent addition. 2013 , 555, 1-6	15
1224	Demonstration of magnetic confinement in graphene with Fano-type resonances. 2013 , 62, 275-283	3
1223	High-quality graphene on SiC(0001[) formed through an epitaxial TiC layer. 2013 , 87,	15
1222	Gated silicene as a tunable source of nearly 100% spin-polarized electrons. 2013, 4, 1500	368
1221	A review of carbon nanotube- and graphene-based flexible thin-film transistors. 2013 , 9, 1188-205	237
1220	Methane as an effective hydrogen source for single-layer graphene synthesis on Cu foil by plasma enhanced chemical vapor deposition. 2013 , 5, 1221-6	84
1219	Specific features of electric charge screening in few-layer graphene films. 2013 , 25, 045302	2

1218	An Effective Approach to Achieve a Spin Gapless Semiconductor Half-Metal Metal Transition in Zigzag Graphene Nanoribbons: Attaching A Floating Induced Dipole Field via Interactions. 2013 , 23, 1507-1518	33
1217	Velocity renormalization and anomalous quasiparticle dispersion in extrinsic graphene. 2013, 87,	25
1216	Big Bandgap in Highly Reduced Graphene Oxides. 2013 , 117, 6049-6054	47
1215	Strain-induced band-gap engineering of graphene monoxide and its effect on graphene. 2013 , 87,	19
1214	Photoemission spectra of massless Dirac fermions on the verge of exciton condensation. 2013 , 87,	9
1213	Effect of topological defects and Coulomb charge on the low energy quantum dynamics of gapped graphene. 2013 , 46, 055303	9
1212	Electronic and optical properties of fluorinated graphene: A many-body perturbation theory study. 2013 , 87,	57
1211	Origin of the n-type and p-type conductivity of MoS2 monolayers on a SiO2 substrate. 2013 , 87,	235
121 0	Graphene-Based Nanomaterials: Synthesis, Properties, and Optical and Optoelectronic Applications. 2013 , 23, 1984-1997	212
1209	Graphene-Based Chemical and Biosensors. 2013 , 103-141	9
	Graphene-Based Chemical and Biosensors. 2013, 103-141 Coupling of two Dirac particles. 2013, 87,	9
1208		
1208	Coupling of two Dirac particles. 2013 , 87,	28
1208 1207 1206	Coupling of two Dirac particles. 2013, 87, Charge-carrier screening in single-layer graphene. 2013, 110, 146802 Physical origin of satellites in photoemission of doped graphene: an ab initio GW plus cumulant	28
1208 1207 1206	Coupling of two Dirac particles. 2013, 87, Charge-carrier screening in single-layer graphene. 2013, 110, 146802 Physical origin of satellites in photoemission of doped graphene: an ab initio GW plus cumulant study. 2013, 110, 146801 Symmetry breaking in graphene layers on SiC-substrate®n ab-initio study. 2013, 50, 102-107 BAND GAP OPENING EFFECT ON THE TRANSPORT PROPERTIES OF BILAYER GRAPHENE	28 47 82
1208 1207 1206	Coupling of two Dirac particles. 2013, 87, Charge-carrier screening in single-layer graphene. 2013, 110, 146802 Physical origin of satellites in photoemission of doped graphene: an ab initio GW plus cumulant study. 2013, 110, 146801 Symmetry breaking in graphene layers on SiC-substrate®n ab-initio study. 2013, 50, 102-107 BAND GAP OPENING EFFECT ON THE TRANSPORT PROPERTIES OF BILAYER GRAPHENE	28 47 82 3
1208 1207 1206 1205	Coupling of two Dirac particles. 2013, 87, Charge-carrier screening in single-layer graphene. 2013, 110, 146802 Physical origin of satellites in photoemission of doped graphene: an ab initio GW plus cumulant study. 2013, 110, 146801 Symmetry breaking in graphene layers on SiC-substratell ab-initio study. 2013, 50, 102-107 BAND GAP OPENING EFFECT ON THE TRANSPORT PROPERTIES OF BILAYER GRAPHENE SUPERLATTICE. 2013, 27, 1350024 Conductive Scanning Probe Characterization and Nanopatterning of Electronic and Energy	28 47 82 3 8

1200	Effect of surface morphology on friction of graphene on various substrates. 2013 , 5, 3063-9	124
1199	Evidence of atomically resolved 6B buffer layer with long-range order and short-range disorder during formation of graphene on 6H-SiC by thermal decomposition. 2013 , 102, 171910	15
1198	Evidence of Dirac fermions in multilayer silicene. 2013 , 102, 163106	160
1197	The Interaction of Light and Graphene: Basics, Devices, and Applications. 2013 , 101, 1717-1731	77
1196	Resonant manifestations of chiral excitons in Faraday and Kerr effects in a topological insulator film. 2013 , 87,	23
1195	Bandgap Opening of Bilayer Graphene by Dual Doping from Organic Molecule and Substrate. 2013 , 117, 12873-12881	66
1194	On the differing sensitivity to chemical gating of single and double layer epitaxial graphene explored using scanning Kelvin probe microscopy. 2013 , 7, 4647-56	34
1193	Electronic and optical properties of graphene and graphitic ZnO nanocomposite structures. 2013 , 138, 124706	82
1192	Theoretical characterization of X-ray absorption, emission, and photoelectron spectra of nitrogen doped along graphene edges. 2013 , 117, 579-89	33
1191	Synthesis and photoresponse of large GaSe atomic layers. 2013 , 13, 2777-81	319
1190	Regulating infrared photoresponses in reduced graphene oxide phototransistors by defect and atomic structure control. 2013 , 7, 6310-20	89
1189	Multiscale Modeling for Graphene-Based Nanoscale Transistors. 2013 , 101, 1653-1669	106
1188	Clean-lifting transfer of large-area residual-free graphene films. 2013 , 25, 4521-6	139
1187	Quantum transport of pseudospin-polarized Dirac fermions in gapped graphene nanostructures. 2013 , 12, 134-144	6
1186	From Aromatic Precursors to the Graphene Plane. 2013 , 127-167	
1185	Sub-10 nm gate length graphene transistors: operating at terahertz frequencies with current saturation. 2013 , 3, 1314	83
1184	Conductivity of the graphene in the transversal magnetic field: Relaxation time approximation with Monte-Carlo method. 2013 , 53, 124-129	10
1183	Chemical vapor deposition and characterization of aligned and incommensurate graphene/hexagonal boron nitride heterostack on Cu(111). 2013 , 13, 2668-75	98

1182	Adiabatic quantum pumping in graphene with magnetic barriers. 2013, 86, 1	14
1181	Optical Faraday rotation with graphene. 2013 , 113, 17B529	10
1180	Introduction. 2013 , 1-8	
1179	Angle-Resolved Photoemission Spectroscopy. 2013 , 23-38	
1178	First-principles study of edge-modified armchair graphene nanoribbons. 2013 , 113, 183715	31
1177	Capsule-embedded reduced graphene oxide: synthesis, mechanism and electrical properties. 2013 , 1, 958-966	18
1176	Advances in silicon carbide science and technology at the micro- and nanoscales. 2013 , 31, 050805	91
1175	Engineering electronic properties of graphene by coupling with Si-rich, two-dimensional islands. 2013 , 7, 301-7	25
1174	Thermally induced spin transport in two-dimensional ferromagnetic gapped graphene. 2013, 101, 57008	4
1173	Transformation of the electrical characteristics of graphene field-effect transistors with fluoropolymer. 2013 , 5, 16-20	34
1172	Optical second-harmonic generation from two-dimensional hexagonal crystals with broken space inversion symmetry. 2013 , 25, 195302	18
1171	The quasiparticle band dispersion in epitaxial multilayer silicene. 2013 , 25, 382202	43
1170	Transient charge and energy balance in graphene induced by ultrafast photoexcitation. 2013 , 25, 314201	6
1169	Tunneling magnetoresistance tuned by a vertical electric field in an AA-stacked graphene bilayer with double magnetic barriers. 2013 , 114, 233701	6
1168	Small scale rotational disorder observed in epitaxial graphene on SiC(0001). 2013 , 15, 023019	7
1167	Anomalous Nernst effect in strained graphene coupled to a substrate inducing a time-reversal symmetry breaking. 2013 , 15, 073028	4
1166	Graphene-based semiconductor nanostructures. 2013 , 183, 113-132	15
1165	Modulation of Dirac points and band-gaps in graphene via periodic fullerene adsorption. 2013 , 3, 052126	12

1164	Visualization of a Maze-Like Reconstruction of Graphene on a Copper Surface at the Atomic Scale. 2013 , 30, 056802	2
1163	Simulating analogue holography in flexible Dirac metals. 2013 , 104, 47002	10
1162	Significant photoelectrical response of epitaxial graphene grown on Si-terminated 6H-SiC. 2013 , 22, 076804	2
1161	Quantum critical behavior in three dimensional lattice Gross-Neveu models. 2013, 88,	46
1160	Optimizing electronic structure and quantum transport at the graphene-Si(111) interface: an ab initio density-functional study. 2013 , 110, 176805	22
1159	Fermionic current from topology and boundaries with applications to higher-dimensional models and nanophysics. 2013 , 87,	21
1158	First-principles study of graphene adsorbed on WS2 monolayer. 2013 , 114, 183709	21
1157	Gap-modulated doping effects on indirect exchange interaction between magnetic impurities in graphene. 2013 , 113, 123702	14
1156	Buffer layer induced band gap and surface low energy optical phonon scattering in epitaxial graphene on SiC(0001). 2013 , 102, 013107	20
1155	Electric charge and potential distribution in twisted multilayer graphene. 2013, 113, 233705	
1154	Exploring electronic structure of one-atom thick polycrystalline graphene films: a nano angle resolved photoemission study. 2013 , 3, 2439	67
1153	Enlarged band gap and electron switch in graphene-based step-barrier structure. 2013 , 103, 192102	1
1152	Electronic properties of Mn-decorated silicene on hexagonal boron nitride. 2013, 88,	60
1151	Sorting the modes contributing to guidance in strain-induced graphene waveguides. 2013 , 15, 023015	4
1150	Gapped Energy Spectra around the Dirac Node at the Surface of a Three-Dimensional Topological Insulator in the Presence of the Time-Reversal Symmetry. 2013 , 82, 064704	1
1149	Chiral Domain-Wall States in a Quadratic Hamiltonian. 2013 , 82, 124005	1
1148	Topology, cosmic strings and quantum dynamics 🖟 case study with graphene. 2013 , 442, 012017	3
1147	Dense arrays of highly aligned graphene nanoribbons produced by substrate-controlled metal-assisted etching of graphene. 2013 , 25, 6562-8	31

1146	Large anisotropic magnetoresistance in graphene-based junctions. 2013 , 7, 997-1000	4
1145	Magnetic field induced rearrangement of the vacuum charge in a graphene quantum dot with a mass gap. 2013 , 456, 012026	2
1144	Effect of the Local Strain Distribution on the Electronic Conductivity of Carbon Nanotubes. 2013 , 7, 231-238	
1143	Relativistic Fermion on a Ring: Energy Spectrum and Persistent Current. 2013 , 2013, 1-8	6
1142	Core level binding energies of functionalized and defective graphene. 2014 , 5, 121-32	57
1141	Sublattice asymmetry of impurity doping in graphene: A review. 2014 , 5, 1210-7	21
1140	Dynamical processes of low-energy carbon ion collision with the graphene supported by diamond. 2014 , 67, 30402	1
1139	. 2014,	1
1138	The optical phonon resonance scattering with spin-conserving and spin-flip processes between Landau levels in graphene. 2014 , 26, 395302	2
1137	Electronic structure and aromaticity of large-scale hexagonal graphene nanoflakes. 2014 , 141, 214704	38
1136	Effect of biaxial strain on structural and electronic properties of graphene / boron nitride hetero bi-layer structure. 2014 ,	1
1135	Mechanical and thermal stability of graphene and graphene-based materials. 2014, 57, 970-989	79
1134	Electronic Transport and Optical Properties of Graphene. 2014 , 1-16	
1133	Nonlinear transmission of an intense terahertz field through monolayer graphene. 2014 , 4, 117118	20
1132	Strain-enhanced superconductivity in Li-doped graphene. 2014 , 108, 67005	32
1131	Electronic structures of defects and magnetic impurities in MoS2 monolayers. 2014 , 9, 2413	65
1130	Excellent epitaxial graphene layers grown simply on SiC substrates and their characterisation. 2014 , 50, 98-100	
1129	Elastic Wave Band Structures and Defect States in a Periodically Corrugated Piezoelectric Plate. 2014 , 81,	14

1128	Propagation of Dirac electrons in Cantor graphene multilayers. 2014,	2
1127	Optoelectronic properties of graphene silicon nano-texture. 2014 ,	
1126	Symmetry-dependent band gap opening in graphene induced by g-C3N4 substrates. 2014 , 4, 64577-64582	7
1125	Combined effect of stacking and magnetic field on plasmon excitations in bilayer graphene. 2014 , 89,	7
1124	Transfer matrix theory of monolayer graphene/bilayer graphene heterostructure superlattice. 2014 , 116, 164317	10
1123	Pure valley current generation in graphene with a Dirac gap by quantum pumping. 2014 , 7, 125102	12
1122	Structures and electronic properties of oxidized graphene from first-principles study. 2014 , 105, 37005	7
1121	Effects of a modular two-step ozone-water and annealing process on silicon carbide graphene. 2014 , 105, 081602	2
1120	Scanning tunneling spectroscopy of single-wall carbon nanotubes on a polymerized gold substrate. 2014 , 89,	4
1119	Ytterbium-driven strong enhancement of electron-phonon coupling in graphene. 2014 , 90,	15
1118	Direct Synthesis of Graphene with Tunable Work Function on Insulators via In Situ Boron Doping by Nickel-Assisted Growth. 2014 , 118, 25089-25096	17
1117	Determination of the adhesion energy of graphene on SiC(0001) via measurement of pleat defects. 2014 , 105, 193109	11
1116	Field emission characteristics from graphene on hexagonal boron nitride. 2014 , 104, 221603	19
1115	Many body effect induced energy gap in an optically pumped graphene system. 2014 , 115, 113704	
1114	Wigner localization in a graphene quantum dot with a mass gap. 2014 , 90,	11
1113	DFT and TB study of the geometry of hydrogen adsorbed on graphynes. 2014 , 26, 385301	2
1112	Controllable spin-charge transport in strained graphene nanoribbon devices. 2014 , 116, 113705	10
1111	Enhancement of gaps in thin graphitic films for heterostructure formation. 2014 , 89,	5

1110	Bias free gap creation in bilayer graphene. 2014 , 26, 225601	2
1109	Electronic band structure and photoemission spectra of graphene on silicon substrate. 2014,	
1108	Electronic Properties of Monolayer and Multilayer Graphene. 2014 , 173-211	1
1107	Tuning electronic and magnetic properties of partially hydrogenated graphene by biaxial tensile strain: a computational study. 2014 , 9, 491	1
1106	Electronic properties of zero-layer graphene on 6H-SiC(0001) substrate decoupled by silicon intercalation. 2014 , 46, 1273-1277	5
1105	Bandgap Expansion: Photon Emission and Absorption. 2014 , 345-370	1
1104	High-resolution x-ray analysis of graphene grown on 4H-SiC ((000bar 1)) at low pressures. 2014 , 29, 439-446	1
1103	Graphene-Based Materials for Solar Cell Applications. 2014 , 4, 1300574	325
1102	Effect of boron and nitrogen doping with native point defects on the vibrational properties of graphene. 2014 , 94, 35-43	16
1101	Coherent non-linear optical response in SU(2) symmetry broken single and bilayer graphene. 2014 , 436, 140-148	14
1100	Ballistic transport properties in pristine/doped/pristine graphene junctions. 2014 , 72, 325-335	4
1099	All-graphene field-effect transistor based on lateral tunnelling. 2014 , 47, 094002	2
1098	Carbon Nanomaterials: A Review. 2014 , 709-769	26
1097	Will a graphitic-like ZnO single-layer be an ideal substrate for graphene?. 2014 , 4, 17478	13
1096	Kondo effect of a cobalt adatom on a zigzag graphene nanoribbon. 2014 , 89,	13
1095	Band structure engineering of CdSe nanosheet by strain: A first-principles study. 2014 , 595-596, 91-96	3
1094	Charge density and conductivity of disordered Berry-Mondragon graphene nanoribbons. 2014 , 87, 1	11
1093	Graphene quasi-energy spectrum under high-frequency electromagnetic radiation. 2014 , 22, 25-30	2

The influence of the zigzag and armchair leads on quantum transport through the graphene base quantum rings. 2014 , 13, 224-229	d 1
Exciton swapping in a twisted graphene bilayer as a solid-state realization of a two-brane model. 2014 , 87, 1	4
1090 Band-gap tuning of monolayer graphene by oxygen adsorption. 2014 , 73, 141-145	26
$_{ m 1089}$ Impurity spectra of graphene under electric and magnetic fields. 2014 , 89,	13
1088 Band gap tunning in BN-doped graphene systems with high carrier mobility. 2014 , 104, 073116	65
1087 Molecular self-assembly on graphene. 2014 , 10, 1038-49	171
Direct-write complementary graphene field effect transistors and junctions via near-field electrospinning. 2014 , 10, 1920-5	18
Role of edge geometry and magnetic interaction in opening bandgap of low-dimensional grapher 2014 , 15, 958-65	ne. 6
Charge transport mechanisms of graphene/semiconductor Schottky barriers: A theoretical and experimental study. 2014 , 115, 013701	52
1083 Nanomechanical and Charge Transport Properties of Two-Dimensional Atomic Sheets. 2014 , 1, 13	300089 28
1082 Magnetic polaron formation in graphene-based single-electron transistor. 2014 , 251, 864-870	3
Electronic and structural properties of graphene-based metal-semiconducting heterostructures engineered by silicon intercalation. 2014 , 76, 27-39	19
1080 Transmission spectrum of electrons through a Thue-Morse graphene superlattice. 2014 , 40, 251-2	254 7
1079 Enhanced solar light absorption of graphene by interaction with anisole. 2014 , 77, 76-79	1
Stress generation and tailoring of electronic properties of expanded graphite by click chemistry. 2014 , 6, 7244-53	13
1077 Cohesive-energy-resolved bandgap of nanoscale graphene derivatives. 2014 , 15, 2563-8	1
1076 Electrically dependent bandgaps in graphene on hexagonal boron nitride. 2014 , 104, 133108	9
1075 Effect of hydrogen dimers on the electronic structure of graphene. 2014 , 378, 68-72	4

1074 Coupling of plasmon and dipolar modes in a monolayer of MoS2. 2014 , 28, 1450099	3
Vibrational Excitations and Low Energy Electronic Structure of Epoxide-decorated Graphene. 2014 , 5, 212-219	24
1072 Spin negative differential resistance in edge doped zigzag graphene nanoribbons. 2014 , 68, 406-412	43
1071 Effective bandgap engineering in wrinkled germanane via tiny electric field. 2014 , 2, 1125-1130	31
The electronic structure of a graphene quantum dot: electric field-induced evolution in two subspaces. 2014 , 4, 12287-12292	8
Room temperature reduction of multilayer graphene oxide film on a copper substrate: Penetration and participation of copper phase in redox reactions. 2014 , 69, 563-570	21
Evolution of the electronic band structure and efficient photo-detection in atomic layers of InSe. 2014 , 8, 1263-72	436
1067 Goos⊞Echen like shifts in graphene double barriers. 2014 , 58, 30-37	15
Quasi-Free-Standing Graphene Monolayer on a Ni Crystal through Spontaneous Na Intercalation. 2014 , 4,	10
1065 Massless Dirac cones in graphene: Experiments and theory. 2014 , 526, 387-394	7
1065 Massless Dirac cones in graphene: Experiments and theory. 2014 , 526, 387-394 1064 Electric control of tunneling energy in graphene double dots. 2014 , 89,	<i>7 5</i>
1064 Electric control of tunneling energy in graphene double dots. 2014 , 89,	5
Electric control of tunneling energy in graphene double dots. 2014 , 89, 1063 Sublattice-induced symmetry breaking and band-gap formation in graphene. 2014 , 1, 563-571	5 38
Electric control of tunneling energy in graphene double dots. 2014 , 89, Sublattice-induced symmetry breaking and band-gap formation in graphene. 2014 , 1, 563-571 Gap openings in graphene regarding interfacial interaction from substrates. 2014 , 16, 5600-4	5 38 3
Electric control of tunneling energy in graphene double dots. 2014 , 89, Sublattice-induced symmetry breaking and band-gap formation in graphene. 2014 , 1, 563-571 Gap openings in graphene regarding interfacial interaction from substrates. 2014 , 16, 5600-4 Preparation of Graphene with Large Area. 2014 , 39-76 Tuning the nonlinear optical absorption of reduced graphene oxide by chemical reduction. 2014 ,	5 38 3
1064 Electric control of tunneling energy in graphene double dots. 2014, 89, 1063 Sublattice-induced symmetry breaking and band-gap formation in graphene. 2014, 1, 563-571 1062 Gap openings in graphene regarding interfacial interaction from substrates. 2014, 16, 5600-4 1061 Preparation of Graphene with Large Area. 2014, 39-76 Tuning the nonlinear optical absorption of reduced graphene oxide by chemical reduction. 2014, 22, 19375-85 Electronic and dielectric properties of silicene functionalized with monomers, dimers and trimers of	5 38 3 2 58

(2014-2014)

1056	graphene-based nanoelectronics. 2014 , 6, 7474-9	11
1055	Investigation of the novel attributes of a double-gate graphene nanoribbon FET with AlN high-[] dielectrics. 2014 , 75, 613-620	14
1054	Nonmonotonic spin relaxation and decoherence in graphene quantum dots with spin-orbit interactions. 2014 , 89,	12
1053	Josephson Btate induced by valley polarization. 2014 , 89,	14
1052	Influence of graphene-substrate interactions on configurations of organic molecules on graphene: Pentacene/epitaxial graphene/SiC. 2014 , 105, 071606	7
1051	The correlation of epitaxial graphene properties and morphology of SiC (0001). 2014 , 115, 043527	10
1050	Efficient Spin Injection into Graphene through a Tunnel Barrier: Overcoming the Spin-Conductance Mismatch. 2014 , 2,	33
1049	Graphene field-effect transistor and its application for electronic sensing. 2014 , 10, 4042-65	112
1048	Confocal Raman Microscopy and AFM Study of the Interface Between the Photosensitive Polymer Layer and Multilayer Graphene. 2014 , 12, S98-S105	8
1047	Optical second-harmonic generation induced by electric current in graphene on Si and SiC substrates. 2014 , 89,	53
1046	Tunable band gaps in graphene/GaN van der Waals heterostructures. 2014 , 26, 295304	15
1045	Molecular adsorption on graphene. 2014 , 26, 443001	122
1044	Magnetic restrictions of atomic collapse in gapped graphene. 2014 , 90,	8
1043	Sub-eV ion deposition utilizing soft-landing ion mobility for controlled ion, ion cluster, and charged nanoparticle deposition. 2014 , 370, 66-74	5
1042	What's Next for Low-Dimensional Materials?. 2014 , 2, 1-9	13
1041	Colloquium: Graphene spectroscopy. 2014 , 86, 959-994	184
1040	Band gaps in incommensurable graphene on hexagonal boron nitride. 2014 , 89,	81
1039	Dirac materials. 2014 , 63, 1-76	589

1038	Two-gap superconductivity in heavily n-doped graphene: Ab initio Migdal-Eliashberg theory. 2014 , 90,	51
1037	Magneto-tunable one-dimensional graphene-based photonic crystal. 2014 , 115, 153101	11
1036	Analytical study of the energy levels in bilayer graphene quantum dots. 2014 , 78, 392-400	29
1035	Interfacial adhesion between graphene and silicon dioxide by density functional theory with van der Waals corrections. 2014 , 47, 255301	88
1034	Epitaxial graphene on SiC: from carrier density engineering to quasi-free standing graphene by atomic intercalation. 2014 , 47, 094013	42
1033	Angle-dependent van Hove singularities and their breakdown in twisted graphene bilayers. 2014 , 90,	40
1032	The search for the most stable structures of silicon-carbon monolayer compounds. 2014 , 6, 11685-91	61
1031	Tunable electronic properties induced by a defect-substrate in graphene/BC3 heterobilayers. 2014 , 16, 22861-6	26
1030	Intrinsic spinBrbit effect in substrateBraphene Corbino devices. 2014 , 251, 1451-1455	4
1029	High-sensitivity photodetectors based on multilayer GaTe flakes. 2014 , 8, 752-60	257
	High-sensitivity photodetectors based on multilayer GaTe flakes. 2014 , 8, 752-60 Synthesis of Homogenous Bilayer Graphene on Industrial Cu Foil. 2014 , 31, 067202	² 57
1028		
1028	Synthesis of Homogenous Bilayer Graphene on Industrial Cu Foil. 2014 , 31, 067202	7
1028 1027 1026	Synthesis of Homogenous Bilayer Graphene on Industrial Cu Foil. 2014 , 31, 067202 Zener Tunneling in Polymer Nanocomposites with Carbonaceous Fillers. 2014 , 377-406	7
1028 1027 1026	Synthesis of Homogenous Bilayer Graphene on Industrial Cu Foil. 2014 , 31, 067202 Zener Tunneling in Polymer Nanocomposites with Carbonaceous Fillers. 2014 , 377-406 Electronic properties of bilayer and trilayer graphyne in the presence of electric field. 2014 , 25, 853-858	7 2 13
1028 1027 1026	Synthesis of Homogenous Bilayer Graphene on Industrial Cu Foil. 2014, 31, 067202 Zener Tunneling in Polymer Nanocomposites with Carbonaceous Fillers. 2014, 377-406 Electronic properties of bilayer and trilayer graphyne in the presence of electric field. 2014, 25, 853-858 The role of the Rashba coupling in spin-current of monolayer gapped graphene. 2014, 87, 1 Mechanical and Electronic Properties of Econjugated Metal Bis(dithiolene) Complex Sheets. 2014,	7 2 13 6
1028 1027 1026 1025	Synthesis of Homogenous Bilayer Graphene on Industrial Cu Foil. 2014, 31, 067202 Zener Tunneling in Polymer Nanocomposites with Carbonaceous Fillers. 2014, 377-406 Electronic properties of bilayer and trilayer graphyne in the presence of electric field. 2014, 25, 853-858 The role of the Rashba coupling in spin-current of monolayer gapped graphene. 2014, 87, 1 Mechanical and Electronic Properties of Econjugated Metal Bis(dithiolene) Complex Sheets. 2014, 26, 2967-2974 Geometry and edge effects on the energy levels of graphene quantum rings: A comparison	7 2 13 6 25

1020 Manifesting pseudo-spin polarization of graphene with field emission image. 2014 , 115, 053701	5
1019 Band gap engineering for graphene by using Na+ ions. 2014 , 105, 081605	8
1018 Exploring the morphological and electronic properties of silicene superstructures. 2014 , 291, 109-112	27
1017 Electronic properties of MoS 2 sandwiched between graphene monolayers. 2014 , 106, 47003	11
1016 Zone-boundary phonon induced mini band gap formation in graphene. 2014 , 177, 80-83	18
Heterostructural bilayers of graphene and molybdenum disulfide: Configuration types, band opening and enhanced light response. 2014 , 68, 56-65	7
Enlargement of omnidirectional electronic gap in the graphene superlattice heterostructures with Gaussian profile potential voltages. 2014 , 378, 1413-1416	5
1013 Bilayer graphene with long-range scatterers: Diamagnetism and weak-field Hall effect. 2014 , 58, 6-15	12
1012 Effective mass and band gap of strained graphene. 2014 , 14, S136-S139	15
1011 The linewidth of infrared light transitions between the Landau levels in graphene. 2014 , 378, 65-67	4
Interlayer-exciton mediated three-hole-Auger-decay in the 🛭 band of highly oriented pyrolytic graphite. 2014 , 56, 441-446	5
1009 Can graphynes turn into graphene at room temperature?. 2014 , 73, 283-290	22
1008 Cu-Ni nanoparticle-decorated graphene based photodetector. 2014 , 6, 8192-8	21
Graphene-to-substrate energy transfer through out-of-plane longitudinal acoustic phonons. 2014 , 14, 1317-23	22
Electrostatic and substrate-based monolayer graphene superlattices: Energy minibands and its relation with the characteristics of the conductance curves. 2014 , 73, 98-112	19
First-principles study of the stability of graphene and adsorption of halogen atoms (F, Cl and Br) on hydrogen passivated graphene. 2014 , 28, 1450141	13
Band-gap manipulations of monolayer graphene by phenyl radical adsorptions: a density functional theory study. 2014 , 15, 2610-7	
1003 An electronic structure perspective of graphene interfaces. 2014 , 6, 3444-66	60

1002	Graphene and 2D Layer Devices for More Moore and More-than-Moore Applications. 2014, 97-116	3
1001	Image potential states in monolayer, bilayer, and trilayer epitaxial graphene studied with time- and angle-resolved two-photon photoemission spectroscopy. 2014 , 89,	16
1000	Towards single-gate field effect transistor utilizing dual-doped bilayer graphene. 2014 , 77, 431-441	13
999	Optical properties of nitrogen-doped graphene thin films probed by spectroscopic ellipsometry. 2014 , 571, 675-679	14
998	Extraction and scattering analyses of 2D and bulk carriers in epitaxial graphene-on-SiC structure. 2014 , 63, 87-92	5
997	Bound states in disclinated graphene with Coulomb impurities in the presence of a uniform magnetic field. 2014 , 378, 2317-2324	13
996	Point defects in twisted bilayer graphene: A density functional theory study. 2014 , 89,	18
995	Photoinduced topological phase transition in epitaxial graphene. 2014 , 89,	44
994	Spin-polarized bandgap of graphene induced by alternative chemisorption with MgO (111) substrate. 2014 , 77, 208-214	9
993	Pseudomagnetoresistance in superconducting graphene pseudospin valve. 2014 , 499, 45-49	
993 992	Pseudomagnetoresistance in superconducting graphene pseudospin valve. 2014 , 499, 45-49 Work Function Engineering of Graphene. 2014 , 4, 267-300	183
		183
992	Work Function Engineering of Graphene. 2014 , 4, 267-300	183
992	Work Function Engineering of Graphene. 2014 , 4, 267-300 Spin disorder scattering in a ferromagnetic insulator-on-graphene structure. 2014 , 251, 407-414 Single-pass kelvin force microscopy and dC/dZ imaging: applications for graphene-related	183 2
992 991 990	Work Function Engineering of Graphene. 2014 , 4, 267-300 Spin disorder scattering in a ferromagnetic insulator-on-graphene structure. 2014 , 251, 407-414 Single-pass kelvin force microscopy and dC/dZ imaging: applications for graphene-related nanomaterials. 2014 , 483, 012002 - Recent Trends in Carbon Nanotubes/Graphene Functionalization for Gas/Vapor Sensing: A Review.	2
992 991 990 989	Work Function Engineering of Graphene. 2014, 4, 267-300 Spin disorder scattering in a ferromagnetic insulator-on-graphene structure. 2014, 251, 407-414 Single-pass kelvin force microscopy and dC/dZ imaging: applications for graphene-related nanomaterials. 2014, 483, 012002 - Recent Trends in Carbon Nanotubes/Graphene Functionalization for Gas/Vapor Sensing: A Review. 2015, 894-923 Landau quantization in graphene monolayer, Bernal bilayer, and Bernal trilayer on graphite surface.	2
992 991 990 989 988	Work Function Engineering of Graphene. 2014, 4, 267-300 Spin disorder scattering in a ferromagnetic insulator-on-graphene structure. 2014, 251, 407-414 Single-pass kelvin force microscopy and dC/dZ imaging: applications for graphene-related nanomaterials. 2014, 483, 012002 - Recent Trends in Carbon Nanotubes/Graphene Functionalization for Gas/Vapor Sensing: A Review. 2015, 894-923 Landau quantization in graphene monolayer, Bernal bilayer, and Bernal trilayer on graphite surface. 2015, 91, Band-gap engineering with a twist: Formation of intercalant superlattices in twisted graphene	4 45

(2015-2015)

984	Optimal traps in graphene. 2015 , 92,	26
983	Numerical study of the optical nonlinearity of doped and gapped graphene: From weak to strong field excitation. 2015 , 92,	37
982	Anomalous thermomagnetic effects in an epitaxial and irradiated graphene monolayer. 2015, 92,	18
981	Rigid unit modes in splp2 hybridized carbon systems: Origin of negative thermal expansion. 2015 , 92,	12
980	Interfacial Charge States in Graphene on SiC Studied by Noncontact Scanning Nonlinear Dielectric Potentiometry. 2015 , 114, 226103	25
979	Accessing Phonon Polaritons in Hyperbolic Crystals by Angle-Resolved Photoemission Spectroscopy. 2015 , 115, 087401	21
978	Chiral phonons at high-symmetry points in monolayer hexagonal lattices. 2015 , 115, 115502	114
977	All-Optical Reconstruction of Crystal Band Structure. 2015 , 115, 193603	242
976	Spin Control Without Magnetic Fields. 2015 , 8,	1
975	Perfect valley filter in a topological domain wall. 2015 , 92,	42
715	· · · · · · · · · · · · · · · · · · ·	
974	Atomic resolution imaging of the two-component Dirac-Landau levels in a gapped graphene monolayer. 2015 , 92,	23
	Atomic resolution imaging of the two-component Dirac-Landau levels in a gapped graphene	
974	Atomic resolution imaging of the two-component Dirac-Landau levels in a gapped graphene monolayer. 2015 , 92, Collapsed armchair single-walled carbon nanotubes as an analog of closed-edged bilayer graphene	23
974 973	Atomic resolution imaging of the two-component Dirac-Landau levels in a gapped graphene monolayer. 2015, 92, Collapsed armchair single-walled carbon nanotubes as an analog of closed-edged bilayer graphene nanoribbons. 2015, 92, Single Layer Bismuth Iodide: Computational Exploration of Structural, Electrical, Mechanical and	23 15
974 973 972	Atomic resolution imaging of the two-component Dirac-Landau levels in a gapped graphene monolayer. 2015, 92, Collapsed armchair single-walled carbon nanotubes as an analog of closed-edged bilayer graphene nanoribbons. 2015, 92, Single Layer Bismuth Iodide: Computational Exploration of Structural, Electrical, Mechanical and Optical Properties. 2015, 5, 17558 Tunable Valley Polarization and Valley Orbital Magnetic Moment Hall Effect in Honeycomb Systems	23 15 53
974 973 972 971	Atomic resolution imaging of the two-component Dirac-Landau levels in a gapped graphene monolayer. 2015, 92, Collapsed armchair single-walled carbon nanotubes as an analog of closed-edged bilayer graphene nanoribbons. 2015, 92, Single Layer Bismuth Iodide: Computational Exploration of Structural, Electrical, Mechanical and Optical Properties. 2015, 5, 17558 Tunable Valley Polarization and Valley Orbital Magnetic Moment Hall Effect in Honeycomb Systems with Broken Inversion Symmetry. 2015, 5, 13906	23155314
974 973 972 971 970	Atomic resolution imaging of the two-component Dirac-Landau levels in a gapped graphene monolayer. 2015, 92, Collapsed armchair single-walled carbon nanotubes as an analog of closed-edged bilayer graphene nanoribbons. 2015, 92, Single Layer Bismuth Iodide: Computational Exploration of Structural, Electrical, Mechanical and Optical Properties. 2015, 5, 17558 Tunable Valley Polarization and Valley Orbital Magnetic Moment Hall Effect in Honeycomb Systems with Broken Inversion Symmetry. 2015, 5, 13906 Engineering the interlayer exchange coupling in magnetic trilayers. 2015, 5, 16844	2315531412
974 973 972 971 970	Atomic resolution imaging of the two-component Dirac-Landau levels in a gapped graphene monolayer. 2015, 92, Collapsed armchair single-walled carbon nanotubes as an analog of closed-edged bilayer graphene nanoribbons. 2015, 92, Single Layer Bismuth Iodide: Computational Exploration of Structural, Electrical, Mechanical and Optical Properties. 2015, 5, 17558 Tunable Valley Polarization and Valley Orbital Magnetic Moment Hall Effect in Honeycomb Systems with Broken Inversion Symmetry. 2015, 5, 13906 Engineering the interlayer exchange coupling in magnetic trilayers. 2015, 5, 16844 Growth and Features of Epitaxial Graphene on SiC. 2015, 84, 121014	 23 15 53 14 12 17

966	Characterization of electronic structure of periodically strained graphene. 2015, 107, 183507	4
965	Conductivity and higher current density harmonics of a gap graphene modification in the presence of constant and alternating electric fields. 2015 , 79, 1443-1447	3
964	Coulomb problem for a \$ Z>Z_{rm cr}\$ nucleus. 2015 , 58, 785-791	28
963	Orbital-dependent Electron-Hole Interaction in Graphene and Associated Multi-Layer Structures. 2015 , 5, 17337	5
962	Scaling behavior in the transmission coefficient for a self-affine multi-barrier system using graphene. 2015 , 111, 57006	7
961	Transport, magnetic and vibrational properties of chemically exfoliated few-layer graphene. 2015 , 252, 2438-2443	4
960	On the Energy Gaps Induced by a Semiconducting Substrate in the Graphene Density of States. 2015 , 9, 234	1
959	X-ray photoelectron spectroscopy of graphitic carbon nanomaterials doped with heteroatoms. 2015 , 6, 177-92	243
958	Coexistence of metallic and insulating-like states in graphene. 2015 , 5, 8974	3
957	Under pressure: Control of strain, phonons and bandgap opening in rippled graphene. 2015 , 91, 266-274	47
956	Bandgap scaling in bilayer graphene antidot lattices. 2015 , 27, 225502	1
955	Quantum Chemical Molecular Dynamics Studies of Bilayer Graphene Growth on a Ni(111) Surface. 2015 , 119, 12643-12650	11
954	Epitaxial growth of a single-crystal hybridized boron nitride and graphene layer on a wide-band gap semiconductor. 2015 , 137, 6897-905	43
953	Broad family of carbon nanoallotropes: classification, chemistry, and applications of fullerenes, carbon dots, nanotubes, graphene, nanodiamonds, and combined superstructures. 2015 , 115, 4744-822	1137
952	Effect of edge chemistry doping on the transport and optical properties for asymmetric armchair-edge graphene nanoribbons under a uniaxial strain. 2015 , 120, 657-662	
951	Anomalous spectral features of a neutral bilayer graphene. 2015 , 5, 10025	6
950	Demonstration of distinct semiconducting transport characteristics of monolayer graphene functionalized via plasma activation of substrate surfaces. 2015 , 93, 353-360	5
949	First principles study of the electronic properties of a Ni3(2,3,6,7,10,11-hexaaminotriphenylene)2 monolayer under biaxial strain. 2015 , 5, 55186-55190	14

948	Electron confinement induced by diluted hydrogen-like ad-atoms in graphene ribbons. 2015 , 17, 24707-15	6
947	Single-layer graphene doping through molecular interaction: field-effect transistor and atomic force microscopy investigations. 2015 , 1, 52-58	10
946	Spotting 2D atomic layers on aluminum nitride thin films. 2015 , 26, 425202	6
945	Theory of Valley Hall Conductivity in Graphene with Gap. 2015 , 84, 114705	31
944	Nanoscale imaging of freestanding nitrogen doped single layer graphene. 2015 , 7, 2289-94	17
943	Model study of the effect of Coulomb interaction on band gap of graphene-on-substrates. 2015 , 461, 49-56	25
942	Nanostructuring graphene for controlled and reproducible functionalization. 2015 , 7, 1566-85	95
941	Atomic structure of epitaxial graphene sidewall nanoribbons: flat graphene, miniribbons, and the confinement gap. 2015 , 15, 182-9	51
940	Spin-polarization spectra in a gapped graphene superlattice. 2015 , 57, 419-423	
939	Influence of Fermi velocity engineering on electronic and optical properties of graphene superlattices. 2015 , 379, 974-978	2
938	Self-crack-filled graphene films by metallic nanoparticles for high-performance graphene heterojunction solar cells. 2015 , 27, 1724-9	58
937	Fundamental of Graphene. 2015 , 1-48	5
936	Investigation of NO 2 adsorption on reduced graphene oxide. 2015 , 622, 86-91	10
935	Controlled Synthesis of Nitrogen-Doped Graphene from a Heteroatom Polymer and Its Mechanism of Formation. 2015 , 27, 716-725	24
934	Correlation between micrometer-scale ripple alignment and atomic-scale crystallographic orientation of monolayer graphene. 2014 , 4, 7263	17
933	Aerosol synthesis and application of folded graphene-based materials. 2015 , 29, 1530003	
932	Observation of a giant two-dimensional band-piezoelectric effect on biaxial-strained graphene. 2015 , 7, e154-e154	46
931	Graphene for nanoelectronics. 2015 , 54, 040102	26

930	Self-organized metal-semiconductor epitaxial graphene layer on off-axis 4H-SiC(0001). 2015 , 8, 1026-1037	21
929	Structural and Electronic Properties of Zigzag Graphene Nanoribbons on Si(001) Substrates. 2015 , 32, 027101	
928	Anisotropic optical conductivity and electronfiole asymmetry in doped monolayer graphene in the presence of the Rashba coupling. 2015 , 70, 28-34	4
927	Exotic Properties of Carbon Nanomatter. 2015 ,	8
926	Nanopatterned graphene on a polymer substrate by a direct peel-off technique. 2015 , 7, 5938-43	17
925	First-principles prediction on silicene-based heterobilayers as a promising candidate for FET. 2015 , 156, 89-94	9
924	Band-gap tuning of graphene by Be doping and Be, B co-doping: a DFT study. 2015 , 5, 55762-55773	58
923	Structure Prediction of Atoms Adsorbed on Two-Dimensional Layer Materials: Method and Applications. 2015 , 119, 20111-20118	28
922	Edge reconstruction in armchair phosphorene nanoribbons revealed by discontinuous Galerkin density functional theory. 2015 , 17, 31397-404	34
921	Semiconducting Graphene on Silicon from First-Principles Calculations. 2015 , 9, 8562-8	20
920	Large-Area Semiconducting Graphene Nanomesh Tailored by Interferometric Lithography. 2015 , 5, 11463	22
919	Quasi one dimensional Dirac electrons on the surface of RuBn[]2014, 4, 5168	20
918	Perfect GMR effect in gapped graphene-based ferromagnetic Dormal Berromagnetic junctions. 2015 , 24, 047305	2
917	Electronic Properties of Halogen-Adsorbed Graphene. 2015 , 119, 17271-17277	38
916	Magnetoabsorption of elliptically polarized electromagnetic radiation by graphene: The relaxation-time approximation and Monte Carlo method. 2015 , 57, 1244-1248	
915	Modification of graphene oxide for applying as mid-infrared photodetector. 2015 , 120, 637-643	15
914	Re-print of Bub-eV Ion Deposition Utilizing Soft-Landing Ion Mobility for Controlled Ion, Ion Cluster, and Charged Nanoparticle Deposition 2015 , 377, 214-221	2
913	Scalable Transfer of Suspended Two-Dimensional Single Crystals. 2015 , 15, 5089-97	33

(2015-2015)

912	Effect of weak disorder on delocalization properties of gapped graphene superlattices. 2015, 74, 1-9	5
911	Versatile Single-Layer Sodium Phosphidostannate(II): Strain-Tunable Electronic Structure, Excellent Mechanical Flexibility, and an Ideal Gap for Photovoltaics. 2015 , 6, 2682-7	48
910	Covalent modification of graphene and graphite using diazonium chemistry: tunable grafting and nanomanipulation. 2015 , 9, 5520-35	221
909	The Split-Operator Technique for the Study of Spinorial Wavepacket Dynamics. 2015 , 17, 850-866	21
908	Nonlocal and Local Electrochemical Effects of Doping Impurities on the Reactivity of Graphene. 2015 , 119, 10513-10519	5
907	Loss of Linear Band Dispersion and Trigonal Structure in Silicene on Ir(111). 2015 , 6, 1065-70	19
906	Materials for Flexible, Stretchable Electronics: Graphene and 2D Materials. 2015, 45, 63-84	266
905	Graphyne on metallic surfaces: A density functional theory study. 2015 , 91,	14
904	Optoelectronic properties of graphene on silicon substrate: effect of defects in graphene. 2015,	
903	Spectral characteristics of the sum-frequency generation from atomically thin hexagonal crystals lacking center-of-inversion symmetry. 2015 , 17, 065502	4
902	Computational chemistry for graphene-based energy applications: progress and challenges. 2015 , 7, 6883-908	49
901	From two-dimensional to one-dimensional structures: SiC nano-whiskers derived from graphene via a catalyst-free carbothermal reaction. 2015 , 5, 5946-5950	14
900	Coulomb problem for graphene with the gapped electron spectrum. 2015 , 101, 264-270	13
899	Tunable Schottky contacts in hybrid graphenephosphorene nanocomposites. 2015 , 3, 4756-4761	104
898	Ab initio strain engineering of graphene: opening bandgaps up to 1 eV. 2015 , 5, 43810-43814	33
897	Shape dependent magnetic and optical properties in silicene nanodisks: A first principles study. 2015 , 83, 32-39	13
896	First-principles prediction of graphene/SnO2 heterostructure as a promising candidate for FET. 2015 , 5, 35377-35383	5
895	N-Doped Zigzag Graphene Nanoribbons on Si(001): a First-Principles Calculation. 2015 , 32, 077102	1

894	Fibonacci quasiregular graphene-based superlattices: Quasiperiodicity and its effects on the transmission, transport and electronic structure properties. 2015 , 478, 99-107	10
893	Strain filter with gate control in a gapped graphene junction. 2015 , 85, 716-721	7
892	Raman and morphology visualization in epitaxial graphene on 4H-SiC by Nitrogen or Argon ion irradiation. 2015 , 365, 260-263	6
891	Three-wave collinear difference-frequency mixing and terahertz coherent emission from gapped graphene. 2015 , 479, 143-148	7
890	Graphene-based nanoprobes for molecular diagnostics. 2015 , 140, 6439-51	7
889	Electronic structure of a graphene superlattice with massive Dirac fermions. 2015 , 117, 084303	16
888	Energy gap induced by the surface optical polaron in graphene on polar substrates. 2015 , 106, 101601	26
887	Spin splitting of Dirac fermions in graphene on Ni intercalated with alloy of Bi and Au. 2015 , 93, 984-996	20
886	Enhanced magnetic response and metallicity in AB stacked bilayer graphene via Cr-doping. 2015 , 649, 1300-1305	13
885	Electronic structure and ultrafast charge transfer dynamics of phosphorous doped graphene layers on a copper substrate: a combined spectroscopic study. 2015 , 5, 74189-74197	17
884	Topological Bloch bands in graphene superlattices. 2015 , 112, 10879-83	61
883	Particle-holelike symmetry and valley degeneracy splitting in graphene dot and antidot. 2015 , 111, 38002	1
882	Superlattice effects in graphene on SiC(0001) and Ir(111) probed by ARPES. 2015, 210, 85-94	10
881	Electric Field Tunable Band Gap in Bi-Axially Strained Graphene/Hexagonal Boron Nitride Super-Lattice. 2015 , 66, 1-10	1
880	Theoretical investigation on two-dimensional non-traditional carbon materials employing three-membered ring and four-membered ring as building blocks. 2015 , 95, 1033-1038	18
879	A promising way to open an energy gap in bilayer graphene. 2015 , 7, 17096-101	9
878	Substrate interactions with suspended and supported monolayer MoS2: Angle-resolved photoemission spectroscopy. 2015 , 91,	50
877	Band gap engineering in finite elongated graphene nanoribbon heterojunctions: Tight-binding model. 2015 , 5, 087121	5

876	Defect-induced Fermi level pinning and suppression of ambipolar behaviour in graphene. 2015 , 93, 325-334	8
875	Grain size control in the fabrication of large single-crystal bilayer graphene structures. 2015 , 7, 2391-9	17
874	A valley beam splitter of massive Dirac electrons. 2015 , 5, 8371-8376	11
873	Stacking registry determination of graphene grown on the SiC(0001) by photoelectron holography. 2015 , 635, 1-4	9
872	Band structure engineering of monolayer MoS2: a charge compensated codoping strategy. 2015 , 5, 7944-795	2 2 4
871	Controlling the energy gap of graphene by Fermi velocity engineering. 2015 , 379, 179-182	37
870	First principles study of van der Waals heterobilayers. 2015 , 2, 1-10	28
869	Indirect band gap in graphene from modulation of the Fermi velocity. 2015 , 201, 82-87	17
868	Au doping effect on chemically-exfoliated graphene and graphene grown via chemical vapor deposition. 2015 , 82, 96-102	19
867	About the linewidth of cyclotron resonance in band-gap graphene. 2015 , 65, 13-16	
866	Temperature dependent screened electronic transport in gapped graphene. 2015 , 252, 282-288	16
865	Tunneling of Dirac fermions in a magnetic-induced gapped topological insulator-based (F/I/F) junction. 2015 , 89, 55-60	3
864	Graphene quantum dots mediated charge transfer of CdSe nanocrystals for enhancing photoelectrochemical hydrogen production. 2015 , 164, 271-278	124
863	Local atomic configuration of graphene, buffer layer, and precursor layer on SiC(0001) by photoelectron diffraction. 2015 , 632, 98-102	7
862	Science and technology roadmap for graphene, related two-dimensional crystals, and hybrid systems. 2015 , 7, 4598-810	2015
861	Oscillations in a Two-Dimensional Gas of Massless Dirac Fermions. 2015 , 54, 85-91	1
860	SiC Biosensing and Electrochemical Sensing: State of the Art and Perspectives. 2016 , 143-177	0
859	Dirac Cones in Graphene, Interlayer Interaction in Layered Materials, and the Band Gap in MoS2. 2016 , 6, 143	23

858	Theoretical Study of Graphene on SiC(11-20) a-Face. 2016 , 14, 113-120	1
857	Graphene: The Missing Piece for Cancer Diagnosis?. 2016 , 16,	35
856	Topological states in two-dimensional hexagon lattice bilayers. 2016 , 380, 3389-3393	2
855	Tunable Graphene-GaSe Dual Heterojunction Device. 2016 , 28, 1845-52	76
854	A Theoretical Study on the Design, Structure, and Electronic Properties of Novel Forms of Graphynes. 2016 , 120, 15153-15161	45
853	Band gap engineering for single-layer graphene by using slow Li(+) ions. 2016 , 27, 31LT03	9
852	Graphene oxide nanocomposites for potential wearable solar cells A review. 2016, 31, 1633-1647	6
851	Synthesis of Semiconductor Nanocrystals, Focusing on Nontoxic and Earth-Abundant Materials. 2016 , 116, 10731-819	365
850	Monolayer MoS2 Dendrites on a Symmetry-Disparate SrTiO3 (001) Substrate: Formation Mechanism and Interface Interaction. 2016 , 26, 3299-3305	44
849	Conduction band population in graphene in ultrashort strong laser field: Case of massive Dirac particles. 2016 , 30, 1650122	4
848	Reversible Activated Transport to Hopping Conduction Transition in Graphene Layers: Molecular Adsorption Induced Defect States. 2016 , 163, B539-B542	О
847	Magnetic effects in sulfur-decorated graphene. 2016 , 6, 21460	11
846	Direct observation of electrically induced Pauli paramagnetism in single-layer graphene using ESR spectroscopy. 2016 , 6, 34966	10
845	Electronic structure modulation of graphene edges by chemical functionalization. 2016 , 9, 115102	13
844	Epitaxial graphene on SiC formed by the surface structure control technique. 2016 , 55, 06GF03	13
843	Characterization and physical modeling of MOS capacitors in epitaxial graphene monolayers and bilayers on 6H-SiC. 2016 , 6, 085010	6
842	Electron-state tuning of multilayer graphene by defects. 2016 , 55, 06GF06	2
841	Performance of large area graphene FET considering the effect of strain. 2016 ,	

(2016-2016)

840	Modification of thermal and electronic properties of bilayer graphene by using slow Na ions. 2016 , 27, 485704	3
839	Modification of electronic properties of graphene by using low-energy K+ ions. 2016 , 108, 181605	3
838	Invited Article: High resolution angle resolved photoemission with tabletop 11 eV laser. 2016 , 87, 011301	32
837	Cerium-induced changes in the Eband of graphene. 2016 , 6, 114219-114223	4
836	Controlling resonant tunneling in graphene via Fermi velocity engineering. 2016, 119, 244301	18
835	Symmetry induced semimetal-semiconductor transition in doped graphene. 2016 , 6, 19115	19
834	Synthesis of sub-millimeter Bi-/multi-layer graphene by designing a sandwiched structure using copper foils. 2016 , 109, 123107	2
833	Direct evidence of interaction-induced Dirac cones in a monolayer silicene/Ag(111) system. 2016 , 113, 14656-14661	52
832	Pressure effect on the spin-dependent electronic structure of Au intercalated h-BN/graphene/h-BN. 2016 , 28, 505004	
831	Angle-dependent bandgap engineering in gated graphene superlattices. 2016 , 6, 035309	10
830	Valley and spin resonant tunneling current in ferromagnetic/nonmagnetic/ferromagnetic silicene junction. 2016 , 6, 025307	9
829	Probing electronBlectron interactions in multilayer epitaxial graphene grown on SiC using temperature-dependent Hall slope. 2016 , 236, 41-44	1
828	Optical modulators with 2D layered materials. 2016 , 10, 227-238	910
827	Two-dimensional B-C-O alloys: a promising class of 2D materials for electronic devices. 2016 , 8, 8910-8	17
826	Catalysis with two-dimensional materials and their heterostructures. 2016 , 11, 218-30	1433
825	Device applications of epitaxial graphene on silicon carbide. 2016 , 128, 186-197	24
824	Electronic properties of porous graphene, Egraphyne, graphene-like, and graphyne-like BN sheets. 2016 , 94, 305-309	8
823	Density-functional study on the structural and magnetic properties of N-doped graphene oxide. 2016 , 102, 39-50	12

822	Spin transport in graphene superlattice under strain. 2016 , 414, 19-24	18
821	Graphene on a metal surface with an h-BN buffer layer: gap opening and N-doping. 2016 , 68, 833-838	
820	Graphene Tunable Transparency to Tunneling Electrons: A Direct Tool To Measure the Local Coupling. 2016 , 10, 5131-44	19
819	SELF-SIMILAR CHARGE TRANSMISSION IN GAPPED GRAPHENE. 2016 , 24, 1630002	11
818	Band Gap Opening of Graphene by Forming Heterojunctions with the 2D Carbonitrides Nitrogenated Holey Graphene, g-C3N4, and g-CN: Electric Field Effect. 2016 , 120, 11299-11305	29
817	The electronic structure of graphene tuned by hexagonal boron nitrogen layers: Semimetal Bemiconductor transition. 2016 , 30, 1650191	4
816	Effect of the graphene derived from thermal reduction within matrix on the performance of graphene/poly (methyl methacrylate) composites. 2016 , 120, 215-221	5
815	The hybridizations of cobalt 3d bands with the electron band structure of the graphene/cobalt interface on a tungsten substrate. 2016 , 69, 573-577	1
814	Effects of outgassing on graphene synthesis by plasma treatment. 2016 , 108, 351-355	4
813	Optical properties of gapped graphene structure in the presence of electron-phonon interaction: A full band approach. 2016 , 100, 474-482	1
812	Pure spin current and perfect valley filter by designed separation of the chiral states in two-dimensional honeycomb lattices. 2016 , 94,	13
811	Electronic Structure of Graphene-Based Materials and Their Carrier Transport Properties. 2016 , 419-440	
810	Modulating the Electronic Properties of Monolayer Graphene Using a Periodic Quasi-One-Dimensional Potential Generated by Hex-Reconstructed Au(001). 2016 , 10, 7550-7	16
809	Topologically trivial and nontrivial edge bands in graphene induced by irradiation. 2016 , 380, 2836-2841	5
808	Graphene transverse electric surface plasmon detection using nonreciprocity modal discrimination. 2016 , 94,	16
807	Half-metallic Dirac cone in zigzag graphene nanoribbons on graphene. 2016 , 94,	16
806	Tunable electronic and magnetic properties of two-dimensional materials and their one-dimensional derivatives. 2016 , 6, 324-350	49
805	Self-Organized Criticality, Percolation, and Electrical Instability in Graphene Analogs. 2016 , 209-220	

804 Thermal and Thermoelectric Transport in Graphene. **2016**, 253-272

803	Thermoelectric Effects in Graphene. 2016, 273-292	
802	Electrical and Thermal Conductivity of Indium@raphene and Copper@raphene Composites. 2016, 639-652	
801	Electronic Properties of Carbon Nanotubes and Their Applications in Electrochemical Sensors and Biosensors. 2016 , 653-664	
800	Epitaxial Graphene: Progress on Synthesis and Device Integration. 2016 , 37-52	
799	Noble-metal intercalation process leading to a protected adatom in a graphene hollow site. 2016 , 94,	10
798	Effects of strain and electric field on electronic structures and Schottky barrier in graphene and SnS hybrid heterostructures. 2016 , 109, 737-746	85
797	Edge or interface effect on bandgap openings in graphene nanostructures: A thermodynamic approach. 2016 , 326, 1-33	15
796	Specific Molecular Interaction and Recognition at Single-Walled Carbon Nanotube Surfaces. 2016 , 32, 12323-12331	7
795	UV irradiation induced reversible graphene band gap behaviors. 2016 , 4, 8459-8465	8
794	Strain-Gradient Modulated Exciton Emission in Bent ZnO Wires Probed by Cathodoluminescence. 2016 , 10, 11469-11474	9
793	CNTs and Graphene-Based Diodes for Microwave and Millimeter-Wave Circuits on Flexible Substrates. 2016 , 6, 1766-1775	21
792	Exploring the stability and electronic structure of beryllium and sulphur co-doped graphene: a first principles study. 2016 , 6, 88392-88402	17
791	Step-induced faceting and related electronic effects for graphene on Ir(332). 2016 , 110, 267-277	11
790	Insulator-quantum Hall transitionin monolayer epitaxial graphene. 2016 , 6, 71977-71982	11
789	Valley-dependent spin-orbit torques in two-dimensional hexagonal crystals. 2016 , 93,	12
788	Controlling adatom magnetism on bilayer graphene by external field. 2016 , 93,	7
787	Magnetic field dependence of energy levels in biased bilayer graphene quantum dots. 2016 , 93,	17

786	Spin-dependent Klein tunneling in polariton graphene with photonic spin-orbit interaction. 2016 , 93,	7
785	Moir[miniband features in the angle-resolved photoemission spectra of graphene/hBN heterostructures. 2016 , 93,	15
784	Resonant tunneling and the quasiparticle lifetime in graphene/boron nitride/graphene heterostructures. 2016 , 93,	14
783	Tunable electronic band structures and zero-energy modes of heterosubstrate-induced graphene superlattices. 2016 , 93,	11
782	Spatially resolving unconventional interface Landau quantization in a graphene monolayer-bilayer planar junction. 2016 , 93,	13
781	Tuning electronic properties of graphene heterostructures by amorphous-to-crystalline phase transitions. 2016 , 93,	4
780	Proposal for realizing the quantum spin Hall phase in a gapped graphene bilayer. 2016, 93,	10
779	Formulation of the relativistic quantum Hall effect and parity anomaly. 2016 , 93,	8
778	Evidencing the need for high spatial resolution in angle-resolved photoemission experiments. 2016 , 93,	4
777	Low-dimensional approach to pair production in an oscillating electric field: Application to bandgap graphene layers. 2016 , 93,	14
776	Enhancement of electron-phonon coupling in Cs-overlayered intercalated bilayer graphene. 2016 , 28, 204001	4
775	Stacking nature and band gap opening of graphene: Perspective for optoelectronic applications. 2016 , 246, 54-58	9
774	Geometric, magnetic and electronic properties of folded graphene nanoribbons. 2016 , 6, 64852-64860	8
773	Bound states of Dirac fermions in monolayer gapped graphene in the presence of local perturbations. 2016 , 25, 068105	18
77²	Tuning Surface Properties of Low Dimensional Materials via Strain Engineering. 2016 , 12, 4028-47	38
771	Structure and electronic properties of bilayer graphene functionalized with half-sandwiched transition metal-cyclopentadienyl complexes. 2016 , 18, 22390-8	3
770	Role of C-N Configurations in the Photoluminescence of Graphene Quantum Dots Synthesized by a Hydrothermal Route. 2016 , 6, 21042	171
769	CMOS Scaling. 2016, 15-40	

 $768\,$ $\,$ 2-D Materials and Devices. 2016, 191-246 $\,$

767	Stacking sequence and interlayer coupling in few-layer graphene revealed by in situ imaging. 2016 , 7, 13256	66
766	Designing Quantum Spin-Orbital Liquids in Artificial Mott Insulators. 2016 , 6, 31737	5
765	Substrate-induced bandgap in the spectrum of an epitaxial graphene layer. 2016 , 61, 1591-1594	1
764	Effects of strain on shot noise properties in graphene superlattices. 2016 , 89, 1	4
763	Electronic properties of mutually embedded h-BN and graphene: A first principles study. 2016 , 666, 33-37	9
762	Band narrowing and Mott localization in isotropically superstrained graphene. 2016 , 94,	4
761	Selectively enhanced photocurrent generation in twisted bilayer graphene with van Hove singularity. 2016 , 7, 10699	88
760	Enhanced superconductivity in atomically thin TaS2. 2016 , 7, 11043	200
759	Spontaneous and strong multi-layer graphene n-doping on soda-lime glass and its application in graphene-semiconductor junctions. 2016 , 6, 21070	18
758	Electronic confinement in graphene quantum rings due to substrate-induced mass radial kink. 2016 , 28, 505501	4
757	Energy levels of ABC-stacked trilayer graphene quantum dots with infinite-mass boundary conditions. 2016 , 94,	8
756	Graphene-multiferroic interfaces for spintronics applications. 2016 , 6, 31346	21
755	Graphene in Photocatalysis: A Review. 2016 , 12, 6640-6696	605
754	Theory of dielectric loss in Graphene-on-substrate: A tight- binding model study. 2016 , 149, 012191	
753	First-principles study on bottom-up fabrication process of atomically precise graphene nanoribbons. 2016 , 55, 06GF05	2
752	Finite temperature fermion condensate, charge and current densities in a ((2+1))-dimensional conical space. 2016 , 76, 1	6
751	Many-body dispersion interactions for periodic systems based on maximally localized Wannier functions: Application to graphene/water systems. 2016 , 253, 308-313	7

750	Nanoscale plasmonic phenomena in CVD-grown MoS(2) monolayer revealed by ultra-broadband synchrotron radiation based nano-FTIR spectroscopy and near-field microscopy. 2016 , 24, 1154-64	24
749	Transition Metal and Vacancy Defect Complexes in Phosphorene: A Spintronic Perspective. 2016 , 120, 14991-15000	49
748	Effective particlefiole symmetry breaking, quasi-bond state engineering and optical absorption in graphene based gated dotfing nanostructures. 2016 , 6, 51845-51855	
747	NMR parameters in gapped graphene systems. 2016 , 89, 1	5
746	Fundamentals of Electronic Modification of Graphene by Si and H. 2016 , 353-370	
745	In situ chemical vapor deposition of graphene and hexagonal boron nitride heterostructures. 2016 , 16, 1175-1191	28
744	Tuning the electronic structure of graphene through nitrogen doping: experiment and theory. 2016 , 6, 56721-56727	18
743	Bandgap engineering of single layer graphene by randomly distributed nanoparticles. 2016 , 27, 7454-7459	2
742	Graphene homojunction: closed-edge bilayer graphene by pseudospin interaction. 2016 , 8, 9102-6	3
741	Two-dimensional layered nanomaterials for gas-sensing applications. 2016 , 3, 433-451	248
74 ¹	Two-dimensional layered nanomaterials for gas-sensing applications. 2016 , 3, 433-451 DFT calculations on atom-specific electronic properties of G/SiC(0001). 2016 , 647, 39-44	248
740	DFT calculations on atom-specific electronic properties of G/SiC(0001). 2016 , 647, 39-44	8
74° 739	DFT calculations on atom-specific electronic properties of G/SiC(0001). 2016 , 647, 39-44 Nearly perfect valley filter in silicene. 2016 , 28, 055301	8
74° 739 738	DFT calculations on atom-specific electronic properties of G/SiC(0001). 2016 , 647, 39-44 Nearly perfect valley filter in silicene. 2016 , 28, 055301 Graphene Functionalization for Biosensor Applications. 2016 , 85-141 Structure and electronic properties of C2N/graphene predicted by first-principles calculations.	8 11 24
74° 739 738 737	DFT calculations on atom-specific electronic properties of G/SiC(0001). 2016, 647, 39-44 Nearly perfect valley filter in silicene. 2016, 28, 055301 Graphene Functionalization for Biosensor Applications. 2016, 85-141 Structure and electronic properties of C2N/graphene predicted by first-principles calculations. 2016, 6, 28484-28488	8 11 24 45
74° 739 738 737 736	DFT calculations on atom-specific electronic properties of G/SiC(0001). 2016, 647, 39-44 Nearly perfect valley filter in silicene. 2016, 28, 055301 Graphene Functionalization for Biosensor Applications. 2016, 85-141 Structure and electronic properties of C2N/graphene predicted by first-principles calculations. 2016, 6, 28484-28488 The Synthesis, Properties, and Applications of Heteroatom-Doped Graphenes. 2016, 103-133 Phosphorus doped graphene by inductively coupled plasma and triphenylphosphine treatments.	8 11 24 45 3

732	mono-layer graphene. 2016 , 407, 396-405	22
731	Armchair-edged nanoribbon as a bottleneck to electronic total transmission through a topologically nontrivial graphene nanojunction. 2016 , 28, 085501	2
730	Friedel oscillations in graphene-based systems probed by Scanning Tunneling Microscopy. 2016 , 17, 294-301	7
729	TE resonances in graphene-dielectric structures. 2016 , 18, 034001	5
728	Exciton-polariton in graphene nano-ribbon embedded In semiconductor microcavity. 2016 , 485, 45-52	2
727	Self-similar transmission properties of aperiodic Cantor potentials in gapped graphene. 2016 , 89, 1	11
726	Band modification of graphene by using slow Cs+ ions. 2016 , 6, 9106-9111	5
725	SiC7 siligraphene: a novel donor material with extraordinary sunlight absorption. 2016 , 8, 6994-9	54
724	Configuration- and concentration-dependent electronic properties of hydrogenated graphene. 2016 , 103, 84-93	14
723	Noble metal chain adsorption on graphene sheet. 2016 , 647, 96-102	7
722	Lifshitz transition and modulation of electronic and transport properties of bilayer graphene by sliding and applied normal compressive strain. 2016 , 99, 432-438	12
721	Strain engineering of graphene: a review. 2016 , 8, 3207-17	327
720	Mechanism of boron and nitrogen in situ doping during graphene chemical vapor deposition growth. 2016 , 98, 633-637	15
719	Gate-tunable graphene quantum dot and Dirac oscillator. 2016 , 380, 773-778	12
718	Quantized phenomena in graphene nanoripples. 2016 , 96, 1175-1180	4
717	Certain doping concentrations caused half-metallic graphene. 2017 , 21, 111-117	18
716	Critical charge in gapped graphene: The role of screening of the interaction potential by Ebrbitals. 2017 , 31, 1750068	
715	Substrate induced changes in atomically thin 2-dimensional semiconductors: Fundamentals, engineering, and applications. 2017 , 4, 011301	76

714	Tuning the electronic properties by magnetic fields in zigzag-edge graphyne nanoribbons with symmetric and asymmetric edge hydrogenations. 2017 , 43, 175-181	5
713	Insights into the Oxidation Mechanism of sp-sp Hybrid Carbon Materials: Preparation of a Water-Soluble 2D Porous Conductive Network and Detectable Molecule Separation. 2017 , 33, 913-919	31
712	Charge and spin dynamics driven by ultrashort extreme broadband pulses: A theory perspective. 2017 , 672, 1-82	21
711	Defected graphene nano-platelets for enhanced hydrophilic nature and visible light-induced photoelectrochemical performances. 2017 , 104, 233-242	27
710	Tunable Structural, Electronic, and Optical Properties of Layered Two-Dimensional C2N and MoS2 van der Waals Heterostructure as Photovoltaic Material. 2017 , 121, 3654-3660	166
709	Magneto-thermodynamic properties of gapped graphene-like structures. 2017 , 91, 659-664	2
708	Fermi-level pinning of bilayer graphene with defects under an external electric field. 2017, 110, 011601	6
707	Spontaneous formation of graphene on diamond (111) driven by B-doping induced surface reconstruction. 2017 , 115, 388-393	11
706	Magnetic modification of GaSe monolayer by absorption of single Fe atom. 2017 , 7, 4285-4290	7
705	A Review of Thermal Transport in Low-Dimensional Materials Under External Perturbation: Effect of Strain, Substrate, and Clustering. 2017 , 21, 201-236	27
704	Metallic atomically-thin layered silicon epitaxially grown on silicene/ZrB 2. 2017 , 4, 021015	7
703	2D Materials for Optical Modulation: Challenges and Opportunities. 2017 , 29, 1606128	256
702	Ultrabroadband MoS Photodetector with Spectral Response from 445 to 2717 nm. 2017 , 29, 1605972	166
701	Coulomb Problem for Graphene with Supercritical Impurity. 2017 , 788, 012044	
700	Induced inhomogeneity in graphene work function due to graphene - TiO2/Ag/glass substrate interaction. 2017 , 628, 43-49	6
699	2-D Graphene and White Graphene. 2017 , 387-410	
698	The effects of gap parameter and spin polarization on electronic Hartree and correlation energies of doped graphene nanoribbon. 2017 , 104, 483-497	1
697	A review for compact model of graphene field-effect transistors. 2017 , 26, 036804	15

(2017-2017)

696	Epitaxial NiPd (111) Alloy Substrates with Continuously Tunable Lattice Constants for 2D Materials Growth. 2017 , 9, 11266-11271	19
695	Compelling experimental evidence of a Dirac cone in the electronic structure of a 2D Silicon layer. 2017 , 7, 44400	35
694	Electron-phonon interactions from first principles. 2017 , 89,	538
693	Femtosecond Pulse Generation with Voltage-Controlled Graphene Saturable Absorbers. 2017, 389-433	2
692	Band gap opening of bilayer graphene by graphene oxide support doping. 2017 , 7, 9862-9871	24
691	High-order harmonic generation from gapped graphene: Perturbative response and transition to nonperturbative regime. 2017 , 95,	35
690	Chemical Modification of Graphene Oxide by Nitrogenation: An X-ray Absorption and Emission Spectroscopy Study. 2017 , 7, 42235	34
689	QM/MD Simulations on Graphene Hydrogenation/Deuteration: CxH/D Formation Mechanism and Isotope Effect. 2017 , 121, 8480-8489	2
688	Tunable negative differential resistance in planar graphene superlattice resonant tunneling diode. 2017 , 121, 144506	15
687	Piezoresistive Effect in Plasma-Doping of Graphene Sheet for High-Performance Flexible Pressure Sensing Application. 2017 , 9, 15192-15201	23
686	Tunable excitons in gated graphene systems. 2017,	
685	Electronic Transport in Oxidized Zigzag Graphene Nanoribbons. 2017 , 2, 97-101	1
684	Doping of graphene induced by boron/silicon substrate. 2017 , 28, 215701	9
683	Stable configurations of graphene on silicon. 2017 , 414, 25-33	7
682	Surface potential distribution of multilayer graphene using Kelvin probe and electric-field force microscopies. 2017 , 508, 115-123	5
681	Indirect exchange interaction between magnetic impurities in a gapped graphene structure. 2017 , 7, 035320	2
680	Graphene based nanosensor for aqueous phase detection of nitroaromatics. 2017 , 7, 25519-25527	11
679	Coulomb excitations of monolayer germanene. 2017 , 7, 40600	12

678	Theoretical exploration on the electronic and magnetic properties of (FeCp)n $\mathbb{I}(n = 1, 2)$ ligand-functionalized graphene. 2017 , 7, 18068-18074	2
677	Substrate Doping Effect and Unusually Large Angle van Hove Singularity Evolution in Twisted Biand Multilayer Graphene. 2017 , 29, 1606741	29
676	Structural Studies of Hydrographenes. 2017 , 50, 1351-1358	4
675	Landau quantization of Dirac fermions in graphene and its multilayers. 2017, 12, 1	35
674	Band gap opening in graphene: a short theoretical study. 2017 , 7, 81-89	36
673	Graphene on cubic-SiC. 2017 , 89, 1-30	22
672	Nonlinear properties of gated graphene in a strong electromagnetic field. 2017 , 80, 307-314	2
671	Robust low-bias negative differential resistance in graphene superlattices. 2017 , 50, 255102	13
670	Creation of quasi-Dirac points in the Floquet band structure of bilayer graphene. 2017 , 29, 215503	2
669	Valley filtering in graphene due to substrate-induced mass potential. 2017 , 29, 215502	11
668	Development of FRET biosensor based on aptamer/functionalized graphene for ultrasensitive detection of bisphenol A and discrimination from analogs. 2017 , 10, 131-140	14
667	Feature-rich electronic properties of aluminum-adsorbed graphenes. 2017 , 120, 209-218	8
666	A Model Study of Substrate Effect on the Neutron-Scattering Spectra of Ferromagnetic Ordered Graphene. 2017 , 30, 3503-3507	1
665	Stretchable electronic devices using graphene and its hybrid nanostructures. 2017 , 3, 71-91	26
664	Computational Study of MoS/HfO Defective Interfaces for Nanometer-Scale Electronics. 2017 , 2, 2827-2834	11
663	Ab-initio study of ReCN in the bulk and as a new two dimensional material. 2017 , 7, 2799	2
662	Prospective Life Cycle Assessment of Epitaxial Graphene Production at Different Manufacturing Scales and Maturity. 2017 , 21, 1153-1164	29
661	Competing Gap Opening Mechanisms of Monolayer Graphene and Graphene Nanoribbons on Strong Topological Insulators. 2017 , 17, 4013-4018	28

660	Energy levels of an ideal quantum ring in AA-stacked bilayer graphene. 2017 , 4, 055603	2
659	Electronic and optical properties of strained graphene and other strained 2D materials: a review. 2017 , 80, 096501	252
658	The Way towards Ultrafast Growth of Single-Crystal Graphene on Copper. 2017 , 4, 1700087	32
657	Surface potential of nanodiamonds investigated by KPFM. 2017 , 273-300	2
656	The role of contact resistance in graphene field-effect devices. 2017 , 92, 143-175	130
655	Mutual influence of uniaxial tensile strain and point defect pattern on electronic states in graphene. 2017 , 90, 1	15
654	A theoretical model study on interplay between Coulomb potential and lattice energy in graphene-on-substrate. 2017 , 06, 1750011	1
653	Coulomb impurity effects on the zero-Landau level splitting of graphene on polar substrates. 2017 , 104, 178-185	4
652	Spectral Gaps of Dirac Operators Describing Graphene Quantum Dots. 2017 , 20, 1	18
651	Role of embedded 3d transition metal atoms on the electronic and magnetic properties of defective bilayer graphene. 2017 , 118, 376-383	14
650	Self-similar conductance patterns in graphene Cantor-like structures. 2017 , 7, 617	16
649	Observation of variable hybridized-band gaps in Eu-intercalated graphene. 2017 , 28, 205201	11
648	Phosphorene: An emerging 2D material. 2017 , 32, 2839-2847	26
647	Graphene, hexagonal boron nitride, and their heterostructures: properties and applications. 2017 , 7, 16801-16822	340
646	Spin-orbit band gaps and destruction of Dirac cones. 2017 , 662, 1-5	10
645	Intrinsic point defects in buckled and puckered arsenene: a first-principles study. 2017 , 19, 9862-9871	36
644	Energy-Dependent Chirality Effects in Quasifree-Standing Graphene. 2017, 118, 116401	11
643	Rapid Synthesis of Sub-5 nm Sized Cubic Boron Nitride Nanocrystals with High-Piezoelectric Behavior via Electrochemical Shock. 2017 , 17, 355-361	14

642	Tunneling transport in d-wave superconductor-silicene junction. 2017 , 102, 202-211	6
641	Energy gap of extended states in SiC-doped graphene nanoribbon: Ab initio calculations. 2017 , 400, 1-5	3
640	Dual-channel current valve in a three terminal zigzag graphene nanoribbon junction. 2017, 29, 055304	1
639	Effect of hydrogen passivation on the decoupling of graphene on SiC(0001) substrate: First-principles calculations. 2017 , 7, 8461	4
638	Gap states and edge properties of rectangular graphene quantum dot in staggered potential. 2017 , 71, 283-288	1
637	Optical excitation of valley and spin currents of chiral edge states in graphene with Rashba spin-orbital coupling. 2017 , 96,	7
636	Quasiparticle energy bands and Fermi surfaces of monolayer NbSe2. 2017, 96,	9
635	Insights from first principles graphene/g-C2N bilayer: gap opening, enhanced visible light response and electrical field tuning band structure. 2017 , 123, 1	15
634	Topological end states and Zak phase of rectangular armchair ribbon. 2017 , 385, 688-694	2
633	Phosphorene field-effect transistors using high-k gate dielectrics of epitaxial SrTiO3 layers grown on Nb-doped SrTiO3 substrates. 2017 , 71, 409-412	O
632	Two-Dimensional Graphene-Gold Interfaces Serve as Robust Templates for Dielectric Capacitors. 2017 , 9, 34213-34220	20
631	Enhancement of band gap and evolution of in-gap states in hydrogen-adsorbed monolayer graphene on SiC(0001). 2017 , 124, 584-587	8
630	Stark effect and polarizability of graphene quantum dots. 2017 , 96,	5
629	Uniqueness of the Fock quantization of Dirac fields in 2+1 dimensions. 2017 , 96,	3
628	Spontaneous doping on high quality talc-graphene-hBN van der Waals heterostructures. 2017 , 4, 031008	13
627	One-Transistor-One-Transistor (1T1T) Optoelectronic Nonvolatile MoS Memory Cell with Nondestructive Read-Out. 2017 , 9, 26357-26362	9
626	Performance Evaluation and Design Considerations of Electrically Activated Drain Extension Tunneling GNRFET: A Quantum Simulation Study. 2017 , 46, 6508-6517	6
625	Graphene quantum dot with a Coulomb impurity: Subcritical and supercritical regime. 2017, 95,	12

624	Electrical properties and applications of graphene, hexagonal boron nitride (h-BN), and graphene/h-BN heterostructures. 2017 , 2, 6-34	188
623	Physical Properties of Nanomaterials: Graphene. 2017 , 109-150	
622	Dielectric properties of graphene on transition metal dichalcogenide substrate. 2017 , 254, 1600827	
621	Sublattice site dependence of local electronic states in superstructures of CO built on a Cu(111) surface. 2017 , 96,	O
620	Impurity effects and bandgap closing in massive Dirac systems. 2017 , 96,	8
619	Controlled Growth of Graphene Crystals by Chemical Vapor Deposition: From Solid Metals to Liquid Metals. 238-256	1
618	Formation of a quasi-free-standing graphene with a band gap at the dirac point by Pb atoms intercalation under graphene on Re(0001). 2017 , 125, 762-767	9
617	Photoelectric and Electrochemical Performance of Al-Doped ZnO Thin Films Hydrothermally Grown on Graphene-Coated Polyethylene Terephthalate Bilayer Flexible Substrates. 2017 , 121, 28148-28157	21
616	Fano resonances in bilayer graphene superlattices. 2017 , 7, 16708	7
615	Modulating the electronic and magnetic properties of graphene. 2017 , 7, 51546-51580	39
615 614	Modulating the electronic and magnetic properties of graphene. 2017, 7, 51546-51580 Application of an Au/B-ZnO/PET©R flexible composite structure in photocatalysts and supercapacitor electrodes. 2017, 7, 52442-52448	39
	Application of an Au/B-ZnO/PET©R flexible composite structure in photocatalysts and	
614	Application of an Au/B-ZnO/PET©R flexible composite structure in photocatalysts and supercapacitor electrodes. 2017, 7, 52442-52448 Quantum oscillation of conductance and negative tunneling magnetoresistance in	
614	Application of an Au/B-ZnO/PET©R flexible composite structure in photocatalysts and supercapacitor electrodes. 2017, 7, 52442-52448 Quantum oscillation of conductance and negative tunneling magnetoresistance in velocity-modulated graphene spin-valve device. 2017, 901, 012033	2
614 613 612	Application of an Au/B-ZnO/PET©R flexible composite structure in photocatalysts and supercapacitor electrodes. 2017, 7, 52442-52448 Quantum oscillation of conductance and negative tunneling magnetoresistance in velocity-modulated graphene spin-valve device. 2017, 901, 012033 Carrier injection in nonbonding ©states of N-doped graphene by an external electric field. 2017, 56, 075101	1
614 613 612	Application of an Au/B-ZnO/PET©R flexible composite structure in photocatalysts and supercapacitor electrodes. 2017, 7, 52442-52448 Quantum oscillation of conductance and negative tunneling magnetoresistance in velocity-modulated graphene spin-valve device. 2017, 901, 012033 Carrier injection in nonbonding Btates of N-doped graphene by an external electric field. 2017, 56, 075101 Effects of moir[lattice structure on electronic properties of graphene. 2017, 96, Spectral analysis of nonequilibrium molecular dynamics: Spectral phonon temperature and local	1 6
614 613 612 611	Application of an Au/B-ZnO/PETGR flexible composite structure in photocatalysts and supercapacitor electrodes. 2017, 7, 52442-52448 Quantum oscillation of conductance and negative tunneling magnetoresistance in velocity-modulated graphene spin-valve device. 2017, 901, 012033 Carrier injection in nonbonding Batates of N-doped graphene by an external electric field. 2017, 56, 075101 Effects of moir lattice structure on electronic properties of graphene. 2017, 96, Spectral analysis of nonequilibrium molecular dynamics: Spectral phonon temperature and local nonequilibrium in thin films and across interfaces. 2017, 95, Spin-degenerate regimes for single quantum dots in transition metal dichalcogenide monolayers.	2 1 6 52

606	Enhanced Photocatalytic Activity of WS Film by Laser Drilling to Produce Porous WS/WO Heterostructure. 2017 , 7, 3125	25
605	Excitonic mass gap in uniaxially strained graphene. 2017 , 95,	12
604	Structural Evolution of Flower Defects and Effects on the Electronic Structures of Epitaxial Graphene. 2017 , 121, 15282-15287	9
603	Floquet-Bloch shifts in two-band semiconductors interacting with light. 2017 , 95,	13
602	Nonlinear optical conductivity of a generic two-band system with application to doped and gapped graphene. 2017 , 95,	8
601	Fully reconfigurable terahertz devices enabled by T-shaped graphene two-parallel-sheet. 2017 , 381, 392-398	
600	A comparative computational study on the BN ring doped nanographenes. 2017, 396, 740-745	33
599	Nanoelectronics Based on Fluorinated Graphene. 2017 , 393-411	
598	Spin susceptibility of disordered gapped graphene systems. 2017 , 86, 154-157	3
597	Tunable magneto-optical effects in hole-doped group-IIIA metal-monochalcogenide monolayers. 2017 , 4, 015017	35
596	Effect of energy band gap in graphene on negative refraction through the veselago lens and electron conductance. 2017 , 100, 83-91	9
595	Geometric structures of Al nanoparticles adsorbed on graphene under an external electric field. 2017 , 56, 125101	1
594	Effect of charged metal nanoparticles on carrier injection in graphene by an external electric field. 2017 , 10, 025101	4
593	Effect of thick barrier in a gapped graphene Josephson junction. 2017 , 901, 012034	1
592	Coulomb Problem for Z > Zcr in Doped Graphene. 2017 , 125, 1144-1162	4
591	Fully scalable one-pot method for the production of phosphonic graphene derivatives. 2017 , 8, 1094-1103	9
590	Single-Parameter Quantum Pumping in Graphene Nanoribbons with Staggered Sublattice Potential. 2017 , 34, 057201	
589	Graphene-Based Materials for Biosensors: A Review. 2017 , 17,	249

588	Electronic structure of bilayer graphene with defects under an external electric field. 2017, 56, 06GE01	1
587	A Ray of Hope for Future Technology: Phosphorene. 2017 , 10, 1-17	
586	Nanolayer Analysis by Photoelectron Spectroscopy. 2017 , 285-333	
585	The Scattering of Massive Holes by Supercritical Impurity. 2017 , 941, 012048	
584	Effect of uniaxial stress on the electrochemical properties of graphene with point defects. 2018 , 442, 185-188	7
583	Tuning the electronic and optical properties of hexagonal boron-nitride nanosheet by inserting graphene quantum dots. 2018 , 32, 1850084	2
582	Multilayer graphene growth on polar dielectric substrates using chemical vapour deposition. 2018 , 442, 720-725	6
581	Valley Hall Conductivity in Graphene: Effects of Higher-Order Scattering. 2018 , 87, 044702	3
580	Utilizing Interlayer Excitons in Bilayer WS for Increased Photovoltaic Response in Ultrathin Graphene Vertical Cross-Bar Photodetecting Tunneling Transistors. 2018 , 12, 4669-4677	25
579	Electronic band structure of Two-Dimensional WS2/Graphene van der Waals Heterostructures. 2018 , 97,	46
578	Substrate effects on transport properties of a biased AA-stacked bilayer graphene. 2018 , 26, 135-140	3
577	Electrostatic properties of graphene edges for electron emission under an external electric field. 2018 , 112, 163105	2
576	Effect of ferromagnetic exchange field on band gap and spin polarisation of graphene on a TMD substrate. 2018 , 90, 1	3
575	Effect of Temperature and Doping on Plasmon Excitations for an Encapsulated Double-Layer Graphene Heterostructure. 2018 , 255, 1700342	1
574	The organic-2D transition metal dichalcogenide heterointerface. 2018 , 47, 3241-3264	113
573	Optical absorption in planar graphene superlattice: The role of structural parameters. 2018 , 116, 95-104	3
57 ²	Dirac cone in two dimensional bilayer graphene by intercalation with V, Nb, and Ta transition metals. 2018 , 148, 064707	16
571	Electronic structure of grapheneland BNBupported phosphorene. 2018, 534, 63-67	31

570	Beyond van der Waals Interaction: The Case of MoSe Epitaxially Grown on Few-Layer Graphene. 2018 , 12, 2319-2331	29
569	h-BN-layer-induced chiral decomposition in the electronic properties of multilayer graphene. 2018 , 30, 055501	3
568	Electron Pair Repulsion Responsible for the Peculiar Edge Effects and Surface Chemistry of Black Phosphorus. 2018 , 9, 947-953	12
567	Raman spectroscopy of graphene-based materials and its applications in related devices. 2018 , 47, 1822-1873	814
566	Alkali (Li, K and Na) and alkali-earth (Be, Ca and Mg) adatoms on SiC single layer. 2018, 435, 338-345	14
565	Monolayer Boron Nitride Substrate Interactions with Graphene Under In-Plane and Perpendicular Strains: A First-Principles Study. 2018 , 47, 2209-2214	3
564	Synthesis and mechanical exfoliation of imine-linked two-dimensional conjugated polymers. 2018 , 6, 722-725	14
563	Adhesion Energies of 2D Graphene and MoS2 to Silicon and Metal Substrates. 2018 , 215, 1700512	24
562	Schottky barrier tuning of the graphene/SnS2 van der Waals heterostructures through electric field. 2018 , 271, 56-61	16
561	A new coupling mechanism between two graphene electron waveguides for ultrafast switching. 2018 , 33, 035014	7
560	Tuning the Electronic and Optical Properties of Two-Dimensional Graphene-like (hbox {C}_2hbox {N}) Nanosheet by Strain Engineering. 2018 , 47, 4594-4603	11
559	Superlubricity Enabled by Pressure-Induced Friction Collapse. 2018 , 9, 2554-2559	48
558	Graphene transport mediated by micropatterned substrates. 2018 , 112, 173504	8
557	Semiclassical theory of Landau levels and magnetic breakdown in topological metals. 2018, 97,	21
556	Modulation of Kekulladatom ordering due to strain in graphene. 2018 , 97,	6
555	Optical properties of uniaxially strained graphene on transition metal dichalcogenide substrate. 2018 , 32, 1850164	1
554	Study of non-extensive entropy of bound polaron in monolayer graphene. 2018 , 92, 979-984	12
553	Spotting the differences in two-dimensional materials - the Raman scattering perspective. 2018 , 47, 3217-3240	051

(2018-2018)

552	intercalation. 2018 , 97,	2
551	Single- to Few-Layered, Graphene-Based Separation Membranes. 2018 , 9, 17-39	19
550	Nonlinear magneto-optic effects in doped graphene and in gapped graphene: A perturbative treatment. 2018 , 97,	6
549	Self-similar transmission patterns induced by magnetic field effects in graphene. 2018 , 101, 22-28	4
548	Dynamical and Static Spin Susceptibilities of Doped Gapped Graphene Nanoribbon Due to Local Electronic Interaction. 2018 , 13, 845-856	1
547	Low Dose Photoelectron Spectroscopy at BESSY II: Electronic structure of matter in its native state. 2018 , 224, 68-78	20
546	Advanced interface modelling of n-Si/HNO3 doped graphene solar cells to identify pathways to high efficiency. 2018 , 434, 102-111	6
545	Thermoelectric transport properties in graphene connected molecular junctions. 2018 , 96, 1-5	8
544	Theoretical Tight-Binding Study of Electronic Band Dispersion in Ferromagnetically Ordered Graphene-on-Substrate. 2018 , 17, 1760030	
543	First principle study on the electronic properties and Schottky contact of graphene adsorbed on MoS2 monolayer under applied out-plane strain. 2018 , 668, 23-28	31
542	Roll-to-Roll Production of Layer-Controlled Molybdenum Disulfide: A Platform for 2D Semiconductor-Based Industrial Applications. 2018 , 30, 1705270	46
541	Synthesis, characterization of graphene oxide wrapped silicon carbide for excellent mechanical and damping performance for aerospace application. 2018 , 740, 436-445	25
540	Dynamical Strain-Induced Charge Pumping in Monolayer Graphene. 2018 , 12, 1700284	
539	Spin susceptibility as a test of unitary limit in disordered graphene systems. 2018 , 97, 409-413	1
538	Tight-Binding Theoretical Study of the Tunneling Conductance in Ferromagnetically Ordered Graphene-on-Substrate. 2018 , 31, 2519-2528	
537	Dynamical spin dependent susceptibility of graphene like structure. 2018 , 531, 139-143	
536	Enhancement of the Metallic Behavior of Graphene due to Coulomb Interaction in the Paramagnetic Limit: A Tight-Binding Study. 2018 , 17, 1760031	
535	Semiconducting behavior of substitutionally doped bilayer graphene. 2018 , 530, 90-94	13

534	Topological phase and chiral edge states of bilayer graphene with staggered sublattice potentials and Hubbard interaction. 2018 , 2, 095004	2
533	Graphene Based Waveguides. 2018,	1
532	First-principles investigation of adsorption behaviors of small molecules on penta-graphene. 2018 , 13, 264	39
531	Valley controlled spin-transfer torque in ferromagnetic graphene junctions. 2018 , 20, 103021	5
530	Electronic transport and Klein tunneling in gapped AA-stacked bilayer graphene. 2018, 124, 204303	10
529	Antenna coupled graphene-FET as ultra-sensitive room temperature broadband THz detector. 2018 , 8, 125122	4
528	Ionization of Impurities by Constant and Alternating Electric Fields in a Gap Graphene Modification. 2018 , 82, 1399-1402	3
527	Laser-Based Texturing of Graphene to Locally Tune Electrical Potential and Surface Chemistry. 2018 , 3, 17000-17009	6
526	A DFT study on the electronic and magnetic properties of triangular graphene antidot lattices. 2018 , 91, 1	5
525	Floquet topological transition by unpolarized light. 2018 , 98,	6
524	Novel Two-Dimensional Semiconductor SnP3 with High Carrier Mobility, Good Light Absorption, and Strong Interlayer Quantum Confinement. 2018 , 122, 24359-24367	30
523	Coulomb effects in the absorbance spectra of two-dimensional Dirac materials. 2018 , 98,	4
522	WITHDRAWN: Principles of thermoelectric transport on nanoscale. 2018 , 419	
521	Electrical dipole on gapped graphene: Bound states and atomic collapse. 2018 , 98,	5
520	Linear and nonlinear optical and spin-optical response of gapped and proximitized graphene. 2018 , 98,	5
519	Theoretical study of modified electron band dispersion and density of states due to high frequency phonons in graphene-on-substrates. 2018 , 07, 1850024	
518	Quantum ring in gapped graphene layer with wedge disclination in the presence of a uniform magnetic field. 2018 , 133, 1	21
517	Bandgap and pseudohelicity effects over conductance in gapped graphene junctures. 2018 , 30, 265304	O

(2018-2018)

516	Wetting transparency of supported graphene is regulated by polarities of liquids and substrates. 2018 , 454, 249-255	15
515	Field-induced structural control of COx molecules adsorbed on graphene. 2018 , 123, 174302	O
514	Nonlinear optical effects of opening a gap in graphene. 2018 , 97,	3
513	Transfer of wafer-scale graphene onto arbitrary substrates: steps towards the reuse and recycling of the catalyst. 2018 , 5, 042001	6
512	Vertical Graphene for Biosensors. 2018 , 37-56	1
511	Printed Electronics Based on Inorganic Semiconductors: From Processes and Materials to Devices. 2018 , 30, e1707600	106
510	Deep and fast free-space electro-absorption modulation in a mobility-independent graphene-loaded Bragg resonator. 2018 , 113, 011102	8
509	Potential of Graphene for Miniature Sensors and Conducting Devices for Biomedical Applications. 2018 ,	
508	Optoelectronics Based Dynamic Advancement of Graphene: Characteristics and Applications. 2018 , 8, 171	5
507	Synthesis, properties, and optoelectronic applications of two-dimensional MoS and MoS-based heterostructures. 2018 , 47, 6101-6127	189
506	Synthesis of tellurium nanosheet for use in matrix assisted laser desorption/ionization time-of-flight mass spectrometry of small molecules. 2018 , 185, 368	16
505	Electronic band structure of carbon honeycombs. 2018 , 5, 72-77	3
504	Resolving Deep Quantum-Well States in Atomically Thin 2H-MoTe Flakes by Nanospot Angle-Resolved Photoemission Spectroscopy. 2018 , 18, 4664-4668	7
503	Auger recombination in Dirac materials: A tangle of many-body effects. 2018 , 97,	35
502	Electron scattering in gapped graphene quantum dots. 2018 , 123, 28002	5
501	Fabricating Quasi-Free-Standing Graphene on a SiC(0001) Surface by Steerable Intercalation of Iron. 2018 , 122, 21484-21492	15
500	Photoinduced Dynamical Band Gap in Graphene: The Effects of Electron P honon and Spin D rbit Interaction. 2018 , 255, 1800163	16
499	Progress in piezotronic and piezo-phototronic effect of 2D materials. 2018 , 5, 042003	41

498	Reversible sulfuric acid doping of graphene probed by in-situ multi-wavelength Raman spectroscopy. 2018 , 138, 257-263	5
497	Robust band gaps in the graphene/oxide heterostructure: SnO/graphene/SnO. 2018 , 20, 17983-17989	14
496	Ballistic transport in graphene Y-junctions in transverse electric field. 2018 , 29, 355202	4
495	High-Performance Low-Voltage-Driven Phototransistors through CsPbBr3\(\bar{Q}\)D Crystal van der Waals Heterojunctions. 2018 , 6, 1800152	30
494	Bacterial toxicity of exfoliated black phosphorus nanosheets. 2018 , 161, 507-514	49
493	Theoretical Model Study of Interplay of Coulomb Interaction and Electron-Phonon Interaction in the Thermal Properties of Monolayer Graphene. 2019 , 32, 219-228	
492	Straintronics in graphene: Extra large electronic band gap induced by tensile and shear strains. 2019 , 126, 054302	27
491	Bandgap-tunable phosphorus-doped monolayer graphene with enhanced visible-light photocatalytic H2-production activity. 2019 , 7, 10613-10622	23
490	Topologically protected wave packets and quantum rings in silicene. 2019 , 100,	2
489	Ab-initio calculations of strain induced relaxed shape armchair graphene nanoribbon. 2019 , 114, 113648	5
488	Substrate-induced half-metallic property in epitaxial silicene. 2019 , 126, 57006	1
487	Interband transitions in narrow-gap carbon nanotubes and graphene nanoribbons. 2019 , 99-117	1
486	Electronic Structure of a Semiconducting Imine-Covalent Organic Framework. 2019 , 14, 4645-4650	4
485	Transfer-Free Synthesis of Lateral Graphene⊞exagonal Boron Nitride Heterostructures from Chemically Converted Epitaxial Graphene. 2019 , 6, 1900419	7
484	Valley-contrasting orbital magnetic moment induced negative magnetoresistance. 2019, 100,	3
483	Controlling the interferometers of zero-line modes in graphene by pseudomagnetic field. 2019 , 52, 405302	
482	Valley controlled Andreev reflection and valley-switch effect in graphene-based superconducting hybrid structures. 2019 , 31, 485701	4
481	Giant effective charges and piezoelectricity in gapped graphene. 2019 , 6, 045015	16

480	Superflexible C68-graphyne as a promising anode material for lithium-ion batteries. 2019, 7, 17357-17365	14
479	Defects and strain engineering the electronic structure and magnetic properties of monolayer WSe2 for 2D spintronic device. 2019 , 497, 143788	10
478	First-principles studies of graphene antidot lattices on monolayer h-BN substrate. 2019 , 383, 125944	0
477	Tailoring commensurability of hBN/graphene heterostructures using substrate morphology and epitaxial growth conditions. 2019 , 37, 051503	4
476	Photoelectrochemical response of Ag-graphene heterostructures: insight into the localized surface plasmon enhanced photocurrent generation process. 2019 , 30, 495203	5
475	Top-down bottom-up graphene synthesis. 2019 , 3, 042003	12
474	Andreev reflections modulated by the breaking of space-inversion symmetry in graphene-typed materials. 2019 , 21, 083017	0
473	. 2019 , 18, 55-61	4
472	Tuning the electronic structure and magnetic coupling in armchair B2S nanoribbons using strain and staggered sublattice potential. 2019 , 21, e00424	3
471	Unraveling the electromagnetic structure of the epitaxial graphene buffer layer. 2019 , 31, 435001	4
470	Features and Prospects for Epitaxial Graphene on SiC. 2019 , 153-199	1
469	Tuning the supercritical effective charge in gapless graphene via Fermi velocity modifying through the mechanical stretching. 2019 , 100, 107566	2
468	Atomic mechanism of strong interactions at the graphene/sapphire interface. 2019 , 10, 5013	13
467	2D Ca Sn S Chalcogenide Perovskite: A Graphene-Like Semiconductor with Direct Bandgap 0.5 eV and Ultrahigh Carrier Mobility 6.7 🛘 0 cm V s. 2019 , 31, e1905643	14
466	The Impact of Uniaxial Strain and Defect Pattern on Magnetoelectronic and Transport Properties of Graphene. 2019 , 451-502	1
465	Atomic Structure and Electronic Properties of Few-Layer Graphene on SiC(001). 2019, 117-151	1
464	Nanoporous Graphene Nanoribbons: Robust Spin-Semiconducting Property and Perfect Spin Seebeck Effects. 2019 , 123, 29126-29132	4
463	Microwave second-harmonic generation due to mobile carriers in doped graphene lacking center-of-inversion symmetry. 2019 , 126, 054301	7

Critical Sublattice Symmetry Breaking: A Universal Criterion for Dirac Cone Splitting. 2019, 123, 23082-23088 o 462 Two-dimensional GaTe monolayer as a potential gas sensor for SO2 and NO2 with discriminate 461 29 optical properties. **2019**, 135, 106245 Hall viscosity and nonlocal conductivity of gapped graphene. 2019, 100, 460 2 Graphene at Fifteen. 2019, 13, 10872-10878 459 50 Effect of TiO2 nanoparticles on electrical properties of chemical vapor deposition grown single 458 11 layer graphene. 2019, 256, 116155 Bandgap engineering in aperiodic Thue-Morse graphene superlattices. 2019, 9, 015130 457 2 Simulating dynamically assisted production of Dirac pairs in gapped graphene monolayers. 2019, 456 7 99, New 2D Structural Materials: Carbon-Gallium Nitride (CC-GaN) and Boron-Gallium Nitride (BN-GaN) 455 Heterostructures-Materials Design Through Density Functional Theory. 2019, 4, 1722-1728 Observation of intercalation-driven zone folding in quasi-free-standing graphene energy bands. 5 454 2019, 99, CF4/H2 Plasma Cleaning of Graphene Regenerates Electronic Properties of the Pristine Material. 453 10 2019, 2, 1356-1366 Towards topological quasifreestanding stanene via substrate engineering. 2019, 99, 452 14 Direct visualization of the 3D structure of silicon impurities in graphene. 2019, 114, 053102 451 Floquet states of valley-polarized metal with one-way spin or charge transport in zigzag 450 4 nanoribbons. 2019, 99, Valley polarization and ferroelectricity in a two-dimensional GaAsC monolayer. 2019, 21, 3954-3959 6 449 Controlling the Conductivity of Graphene by Using Transverse Static and Alternating Electric Fields. 448 2 2019, 83, 12-15 Perfect valley and spin polarizations in a superlattice of ferromagnetic gapped graphene with spin-orbit coupling. 2019, 488, 165329 Electronic and magnetic properties of graphene densely decorated with 3 d metallic adatoms The 446 effect of structure privilege and spinBrbit interaction. 2019, 1, 015006 The electronic and transport properties of Li-doped graphene nanoribbons: An ab-initio approach. **2019**, 93, 1

Graphene bandgap induced by ferroelectric Pca2 HfO substrates: a first-principles study. 2019, 21, 15001-150060 444 Engineering Zero-Dimensional Quantum Confinement in Transition-Metal Dichalcogenide 443 19 Heterostructures. 2019, 13, 8303-8311 First-principle calculations of structural, electronic, optical and thermodynamical properties of 442 15 fluorinated graphene. **2019**, 246, 127-135 Non-conventional graphene superlattices as electron band-pass filters. 2019, 9, 8759 6 441 Kapitza thermal resistance characterization of epitaxial grapheneBiC(0001) interface. 2019, 114, 221601 440 4 Temperature Effect on the First Excited State Energy and Average Phonon Number of Bound 439 Magnetopolarons in Monolayer Graphene. 2019, 48, 4997-5002 438 Transmission across a bilayer graphene region. 2019, 99, 1 Highly Water-Stable Dye@Ln-MOFs for Sensitive and Selective Detection toward Antibiotics in 437 97 Water. 2019, 11, 21201-21210 Optimizing the thermoelectric performance of Egraphyne nanoribbons via introducing disordered 436 4 surface fluctuation. 2019, 298, 113646 Electrochemical Sensors and Biosensors Based on Graphene Functionalized with Metal Oxide 435 93 Nanostructures for Healthcare Applications. 2019, 4, 5322-5337 Miniaturization of CMOS. 2019, 10, 434 49 Pressure induced compression of flatbands in twisted bilayer graphene. 2019, 1, 015001 433 34 Ab Initio Study of the Electronic, Vibrational, and Mechanical Properties of the Magnesium Diboride 432 4 Monolayer. 2019, 4, 37 Tailoring electrical conductivity of two dimensional nanomaterials using plasma for edge 431 electronics: A mini review. 2019, 13, 427-443 Perfect negative differential resistance, spin-filter and spin-rectification transport behaviors in 430 23 zigzag-edged Egraphyne nanoribbon-based magnetic devices. 2019, 485, 136-141 Large bandgap of pressurized trilayer graphene. **2019**, 116, 9186-9190 429 32 Selected transport, vibrational, and mechanical properties of low-dimensional systems under strain. 428 5 2019, 125, 154301 Band engineering of B 2 H 2 nanoribbons. 2019, 28, 046803 427

426	Effect of epitaxial graphene morphology on adsorption of ambient species. 2019, 486, 239-248	10
425	Resonant optical second harmonic generation in graphene-based heterostructures. 2019 , 99,	22
424	To the Theory of Electronic States of an Epitaxial Graphene Bilayer. 2019 , 61, 488-492	
423	Advance in Close-Edged Graphene Nanoribbon: Property Investigation and Structure Fabrication. 2019 , 15, e1804473	16
422	Quality improvement of fast-synthesized graphene films by rapid thermal chemical vapor deposition for mass production. 2019 , 242, 63-68	12
421	Valley current and spin-valley filter in topological domain wall. 2019 , 125, 123904	8
420	Electronic structure, carrier mobility and strain modulation of CH (SiH, GeH) nanoribbons. 2019 , 31, 165502	6
419	Asymmetric 3D Elastic-Plastic Strain-Modulated Electron Energy Structure in Monolayer Graphene by Laser Shocking. 2019 , 31, e1900597	13
418	Intricate modulation of interlayer coupling at the graphene oxide/MoSe2 interface: Application in time-dependent optics and device transport. 2019 , 99,	10
417	Effects of electron-phonon coupling and magnetic field on electrical conductivity of monolayer graphene. 2019 , 481, 183-188	5
416	Light-Induced Tunable n-Doping of Ag-Embedded GO/RGO Sheets in Polymer Matrix. 2019 , 123, 10557-10563	3 4
415	Zero-Energy Vortices in Dirac Materials. 2019 , 256, 1800584	9
414	Compositional Tuning of Electrical and Optical Properties of PLD-Generated Thin Films of 2D Borocarbonitrides (BN)1☑(C)x. 2019 , 1, 569-576	5
413	Valley selecting current partition at zero-line mode of quantum anomalous Hall topologies. 2019 , 52, 135301	4
412	Andreev reflection and 0- Itransition in graphene-based antiferromagnetic superconducting junctions. 2019 , 125, 37001	3
411	Recent Advances in Graphene Homogeneous pl Junction for Optoelectronics. 2019 , 4, 1900007	11
410	Optical absorption in Thue-Morse and Fibonacci planar graphene superlattices: Theoretical report. 2019 , 564, 10-16	6
409	Electron Confinement Effects in Silver Films Embedded between Graphene and Metallic Substrates. 2019 , 123, 9764-9769	2

408	Valley-dependent Lorentz force and Aharonov-Bohm phase in strained graphene pl junction. 2019 , 99,	6
407	Graphene: Free electron scattering within an inverted honeycomb lattice. 2019, 99,	5
406	Optical properties of chemical vapor deposition-grown PtSe 2 characterized by spectroscopic ellipsometry. 2019 , 6, 035011	38
405	Qualitative analysis of scanning gate microscopy on epitaxial graphene. 2019 , 6, 025023	2
404	Electric and thermoelectric properties of graphene bilayers with extrinsic impurities under applied electric field. 2019 , 561, 9-15	3
403	Recent Developments in Controlled Vapor-Phase Growth of 2D Group 6 Transition Metal Dichalcogenides. 2019 , 31, e1804939	64
402	Bioelectronics and Interfaces Using Monolayer Graphene. 2019 , 6, 31-59	32
401	The impact of hexagonal boron nitride encapsulation on the structural and vibrational properties of few layer black phosphorus. 2019 , 30, 195201	13
400	The tight-binding model study of the role of electron occupancy on the ferromagnetic gap in graphene-on-substrate. 2019 , 8, 44	
399	Spectroscopic photoemission and low-energy electron microscopy studies of the surface and electronic structure of two-dimensional materials. 2019 , 4, 1688187	4
398	Direct determination of mode-projected electron-phonon coupling in the time domain. 2019 , 366, 1231-1236	41
397	Tunable Photoresponse by Gate Modulation in Bilayer Graphene Nanoribbon Devices. 2019 , 10, 7719-7724	7
396	Room temperature strain-induced Landau levels in graphene on a wafer-scale platform. 2019 , 5, eaaw5593	23
395	Common surface structures of graphene and Au(111): The effect of rotational angle on adsorption and electronic properties. 2019 , 151, 214701	5
394	Polaritonic contribution to the Casimir energy between two graphene layers. 2019, 100,	1
393	Tribology of two-dimensional materials: From mechanisms to modulating strategies. 2019 , 26, 67-86	129
392	Opening a band gap in graphene by CL bond alternation: a tight binding approach. 2019, 6, 045605	4
391	Equi-biaxial compressive strain in graphene: Grfleisen parameter and buckling ridges. 2019, 6, 015026	12

390	Quasiparticle electronic structure of honeycomb C 3 N: from monolayer to bulk. 2019 , 6, 015018	8
389	1D metallic edge states of oxygen-terminated zigzag graphene edges. 2019 , 6, 025038	5
388	Broadband Optical-Fiber-Compatible Photodetector Based on a Graphene-MoS2-WS2 Heterostructure with a Synergetic Photogenerating Mechanism. 2019 , 5, 1800562	41
387	Chiral phonons in two-dimensional materials. 2019 , 6, 012002	17
386	Strain-induced band gap tuning in Egraphyne on its boron nitride analog substrate. 2019 , 92, 1	4
385	Femtosecond Electron Dynamics in Graphene Nanoribbons [A Nonequilibrium Green Functions Approach Within an Extended Hubbard Model. 2019 , 256, 1800498	10
384	Magneto-electronic specific heat of germanene nanoribbons. 2019 , 106, 31-39	2
383	Dynamical quasiparticle properties of gapped monolayer graphene in the presence of Holstein phonons. 2019 , 287, 83-90	
382	Spin E lip Relaxation Between the Landau Levels in Gapped Graphene. 2019 , 194, 224-234	
381	Spin orbit coupling induced band gap in gemanene modulated by external field. 2019 , 6, 025031	1
380	Raman spectroscopy of CVD graphene during transfer process from copper to SiO2/Si substrates. 2019 , 6, 015601	8
379	SYNTHESES OF LARGE-SIZED SINGLE CRYSTAL GRAPHENE: A REVIEW OF RECENT DEVELOPMENTS. 2019 , 26, 1830007	3
378	First Principle Study of Doped Graphene for FET Applications. 2019 , 11, 277-286	5
377	Dirac Fermion and Plasmon Dynamics in Graphene and 3D Topological Insulators. 2020 , 8, 1801334	8
376	Recent advances in earth-abundant photocatalyst materials for solar H2 production. 2020 , 31, 11-28	34
375	Tuning electronic properties of epitaxial multilayer-graphene/4HBiC(0001) by Joule heating decomposition in hydrogen. 2020 , 137, 109224	2
374	An ultraviolet photoelectron spectroscopy study on bandgap broadening of epitaxial graphene on SiC with surface doping. 2020 , 157, 340-349	4
373	Gate-tunabe gap of heated monolayer graphene on substrates. 2020 , 576, 411736	4

(2020-2020)

372	Self-Powered Photodetectors Based on 2D Materials. 2020 , 8, 1900765	105
371	SiGe/AsSb bilayer heterostructures: structural characteristics and tunable electronic properties. 2020 , 31, 035701	2
370	Tuning the Electronic Properties of Atomically Precise Graphene Nanoribbons by Bottom-Up Fabrication. 2020 , 6, 493-515	7
369	Electronic Structure Calculations: The Density Functional Theory (DFT). 2020 , 354-372	
368	Introduction to Carbon-Based Nanostructures. 2020 , 1-10	
367	The New Family of Two-Dimensional Materials and van der Waals Heterostructures. 2020 , 70-91	
366	Quantum Transport: General Concepts. 2020 , 92-119	
365	Klein Tunneling and Ballistic Transport in Graphene and Related Materials. 2020 , 120-144	
364	Quantum Transport in Disordered Graphene-Based Materials. 2020 , 145-209	
363	Hairy BTZ black hole and its analogue model in graphene. 2020 , 413, 168064	3
362	Asymptotic behavior of the energetics and electronic structures of graphene with pyridinic defects. 2020 , 739, 136966	1
361	Recent advances of novel ultrathin two-dimensional silicon carbides from a theoretical perspective. 2020 , 12, 4269-4282	17
360	Preface to the Second Edition. 2020 , xi-xii	
359	Preface to the First Edition. 2020 , xiii-xvi	
358	Electronic Properties of Carbon-Based Nanostructures. 2020 , 11-69	
357	Quantum Hall Effects in Graphene. 2020 , 210-236	
356	Spin-Related Phenomena. 2020 , 237-277	
355	Ab Initio and Multiscale Quantum Transport in Graphene-Based Materials. 2020 , 293-353	

354 Electronic Structure Calculations: The Many-Body Perturbation Theory (MBPT). **2020**, 373-378

353	Green Functions and Ab Initio Quantum Transport in the Landauer Betiker Formalism. 2020, 379-400	
352	Recursion Methods for Computing the Density of States (DOS) and Wavepacket Dynamics. 2020 , 401-412	
351	Tuning electronic and optical properties of free-standing Sn2Bi monolayer stabilized by hydrogenation. 2020 , 127, 014302	18
350	Graphene/WSeTe van der Waals heterostructure: Controllable electronic properties and Schottky barrier via interlayer coupling and electric field. 2020 , 507, 145036	92
349	Direct/Dual electronic thermal conductivity on graphene: Gate-potential and ripples. 2020 , 577, 411828	
348	Magnetic Spin Susceptibility of Graphene in Ferromagnetic State: A Tight-Binding Model Study. 2020 , 10, 2050004	
347	Polarization conversion and phase modulation of terahertz electromagnetic waves via graphene-dielectric structure. 2020 , 95, 015503	2
346	Semiconductor nanoheterostructures for photoconversion applications. 2020 , 53, 143001	79
345	Mid-Infrared Photonics Using 2D Materials: Status and Challenges. 2020 , 14, 1900098	68
344	Armchair Graphene Nanoribbon Gate-Controllable RTD With Boron Nitride Barriers. 2020, 67, 5209-5215	3
343	Tuning the electronic structure and thermodynamic properties of hybrid graphene-hexagonal boron nitride monolayer. 2020 , 24, 100194	3
342	Charge Transport Mechanism in Chevron-Graphene Nanoribbons. 2020 , 124, 22392-22398	3
341	Dynamical Floquet spectrum of KekulEdistorted graphene under normal incidence of electromagnetic radiation. 2020 , 102,	Ο
340	Enhancing Fe2O3(0 0 0 1) surfaces reactivity through lattice-strain control. 2020 , 534, 147605	2
339	Tunable electronic properties and Schottky barrier in a graphene/WSe heterostructure under out-of-plane strain and an electric field. 2020 , 22, 23699-23706	9
338	Role of Substrate in Transition Metal Dichalcogenides Superconductivity. 2020 , 33, 3009-3013	1
337	Electronic structure and band alignment of Blue Phosphorene/Janus ZrSSe heterostructure: A first principles study. 2020 , 124, 114369	1

336	Collective excitations in gapped graphene-GaAs double-layer structures. 2020 , 314-315, 113942	3
335	Raman Spectroscopy Imaging of Exceptional Electronic Properties in Epitaxial Graphene Grown on SiC. 2020 , 10,	О
334	Microwave (2ഀ █) frequency mixing by mobile carriers in electron-doped and gapped graphene. 2020 , 128, 094303	2
333	(mathcal{N}) -extended D = 4 supergravity, unconventional SUSY and graphene. 2020 , 2020, 1	13
332	Stacking-dependent electronic properties of aluminene based multilayer van der Waals heterostructures. 2020 , 185, 109952	0
331	Controlling of the Dirac band states of Pb-deposited graphene by using work function difference. 2020 , 10, 085314	2
330	Remarkable Band-Gap Renormalization via Dimensionality of the Layered Material C3B. 2020 , 14,	3
329	Electronic and Transport Properties of Epitaxial Graphene on SiC and 3C-SiC/Si: A Review. 2020 , 10, 4350	4
328	Synthetic Tailoring of Graphene Nanostructures with Zigzag-Edged Topologies: Progress and Perspectives. 2020 , 59, 23386-23401	39
327	Maßeschneiderte Synthese von Graphennanostrukturen mit Zickzack-Rfidern. 2020 , 132, 23591-23607	15
326	Light-induced interaction between graphene and magnetic film in a cavity. 2020 , 384, 126513	
325	Quantum dots in AA-stacked bilayer graphene. 2020 , 102,	2
324	Tuning magnetic properties of penta-graphene bilayers through doping with boron, nitrogen, and oxygen. 2020 , 10, 16748	4
323	Rotated angular modulated electronic and optical properties of bilayer phosphorene: A first-principles study. 2020 , 117, 163102	6
322	A Review on Graphene-Based Light Emitting Functional Devices. 2020 , 25,	7
321	The critical transition of Coulomb impurities in gapped graphene. 2020 , 2020, 1	1
320	Energy-Efficient Tunneling Field-Effect Transistors for Low-Power Device Applications: Challenges and Opportunities. 2020 , 12, 47127-47163	19

318	Modulating the electro-optical properties of doped C3N monolayers and graphene bilayers via mechanical strain and pressure. 2020 , 44, 15785-15792	24
317	Substrate-induced strain in 2D layered GaSe materials grown by molecular beam epitaxy. 2020 , 10, 12972	9
316	Magnus Nernst and thermal Hall effect. 2020 , 102,	3
315	Flat-band ferromagnetism in twisted bilayer graphene. 2020 , 102,	1
314	On the Impact of Substrate Uniform Mechanical Tension on the Graphene Electronic Structure. 2020 , 13,	O
313	The Effects of Next-to-Nearest Neighbor Hopping Amplitude on Electrical Properties of Graphene Like Nanotube Structure. 2020 , 9, 051002	3
312	Dirac fermions in asymmetric graphene in electromagnetic field. 2020 , 52, 1	
311	Band dispersion of graphene with structural defects. 2020 , 101,	5
310	Electronic spectrum of bilayer graphene with broken P-symmetry of both intra- and inter-layers. 2020 , 123, 114192	O
309	Adjustable electronic and optical properties of BlueP/MoS van der Waals heterostructure by external strain: a first-principles study. 2020 , 31, 375706	3
308	Optical, optoelectronic, and photoelectric properties in moir uperlattices of twist bilayer graphene. 2020 , 14, 100238	8
307	PyARPES: An analysis framework for multimodal angle-resolved photoemission spectroscopies. 2020 , 11, 100472	3
306	Structural and local electronic properties of clean and Li-intercalated graphene on SiC(0001). 2020 , 699, 121638	5
305	Collapse of the vacuum in hexagonal graphene quantum dots: A comparative study between tight-binding and mean-field Hubbard models. 2020 , 101,	5
304	First-principles study of the band structure and optical spectra of germanium carbide under mechanical strain. 2020 , 242, 146969	4
303	Optical Absorption and Tsallis Entropy of Polaron in Monolayer Graphene. 2020 , 200, 173-186	4
302	Modulating electronic structure of graphene overlayers through electrochemical intercalation. 2020 , 522, 146359	1
301	Hybridization versus sublattice symmetry breaking in the band gap opening in graphene on Ni(111): A first-principles study. 2020 , 700, 121651	1

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300	Enhancement of electron transport and band gap opening in graphene induced by adsorbates. 2020 , 101,	1
299	Dimensionality-Driven Photoproduction of Massive Dirac Pairs near Threshold in Gapped Graphene Monolayers. 2020 , 124, 110403	7
298	Electrical properties and applications. 2020 , 173-249	1
297	Dirac Magnons in a Honeycomb Lattice Quantum XY Magnet CoTiO3. 2020 , 10,	18
296	Graphene bandgap induced by ferroelectric HfO doped with Zr (HfZrO). 2020 , 31, 275202	5
295	Local Probes of Graphene Lattice Dynamics. 2020 , 4, 1900817	4
294	The influence by substrate morphology on the Rashba band splitting in graphene. 2020, 17, 103065	1
293	Impact of covalent functionalization by diazonium chemistry on the electronic properties of graphene on SiC. 2020 , 12, 9032-9037	12
292	Interplay between effects of barrier tilting and scatterers within a barrier on tunneling transport of Dirac electrons in graphene. 2020 , 101,	5
291	Analytical Approach to Study Sensing Properties of Graphene Based Gas Sensor. 2020 , 20,	8
290	Inkjet-Printed Molybdenum Disulfide and Nitrogen-Doped Graphene Active Layer High On/Off Ratio Transistors. 2020 , 25,	12
289	Scanning nonlinear dielectric potentiometry for measurement of the potential induced by atomic dipole moments. 2020 , 113-140	
288	Floquet pump-probe spectra in asymmetric graphene. 2020,	
287	Millimeter wave difference-frequency mixing by mobile carriers in gated monolayer graphene with broken centrosymmetry. 2020 , 53, 375101	1
286	Structural and magnetic properties of a defective graphene buffer layer grown on SiC(0001): a DFT study. 2020 , 22, 16096-16106	6
285	Optical properties of graphene quantum dots: the role of chiral symmetry. 2020, 7, 025041	2
284	Atomic force microscopy phase imaging of epitaxial graphene films. 2020 , 3, 024005	4
283	The Effect of Substituting an X (B, N, O, and F) Atom on the Structural, Magnetic and Optical Properties of Graphene Sheets. 2020 , 49, 3225-3233	2

282	Perfect valley filter controlled by Fermi velocity modulation in graphene. 2020 , 160, 353-360	9
281	Analytical Prediction of Highly Sensitive CNT-FET-Based Sensor Performance for Detection of Gas Molecules. 2020 , 8, 12655-12661	6
280	Nearly pure spin-valley sideband tunneling in silicene: Effect of interplay of time periodic potential barrier and spin-valley-dependent Dirac mass. 2020 , 118, 113950	3
279	Plasmon modes in double-layer gapped graphene at zero temperature. 2020 , 384, 126221	9
278	Quantum Transport beyond DC. 2020, 278-292	
277	Index. 2020 , 457-462	
276	Ultrafast strong-field absorption in gapped graphene. 2020 , 101,	1
275	Microwave third-harmonic generation due to mobile carriers in doped graphene: Effect of band-gap opening and carrier scattering. 2020 , 120, 114108	4
274	Growth, morphology and electronic properties of epitaxial graphene on vicinal Ir(332) surface. 2020 , 31, 285601	3
273	Effects of charged impurity scattering and substrate on the magneto-optical absorption properties in gapped monolayer graphene. 2020 , 121, 114149	
272	Monolayer-gap modulated topological phases in twisted bilayer graphene. 2020 , 101,	1
271	Recent insights into the robustness of two-dimensional black phosphorous in optoelectronic applications. 2020 , 43, 100354	14
270	Heterostructures of Graphene and Topological Insulators Bi2Se3, Bi2Te3, and Sb2Te3. 2021 , 258, 2000081	9
269	The Strain and Electric Field Effects on the Electronic and Optical Properties of Armchair MoSSe/WSSe Superlattice Nanoribbon: A First-Principles Study. 2021 , 258, 2000361	2
268	A novel high-performance methane sensor based on Ti-Decorated 2D Egraphyne: A dispersion-corrected DFT insight. 2021 , 257, 123808	10
267	Temperature-dependent rheological behavior of nanofluids rich in carbon-based nanoparticles. 2021 , 325, 114659	4
266	Ambipolar 2D Semiconductors and Emerging Device Applications 2021 , 5, e2000837	12
265	Effects of external mechanical or magnetic fields and defects on electronic and transport properties of graphene. 2021 , 35, 523-529	3

264	Notes on useful materials and synthesis through various chemical solution techniques. 2021 , 29-78	1
263	Interband Light Absorption in a Superlattice Consisting of Alternating Segments of Single and Double Layers of Graphene. 2021 , 85, 29-34	
262	Frequency-tunable terahertz graphene laser enabled by pseudomagnetic fields in strain-engineered graphene. 2021 , 29, 1892-1902	1
261	In vitro comparison of physical, chemical, and mechanical properties of graphene nanoplatelet added Angelus mineral trioxide aggregate to pure Angelus mineral trioxide aggregate and calcium hydroxide. 2021 , 84, 929-942	1
260	Enhanced second-order Stark effect in twisted bilayer graphene quantum dots. 2021 , 14, 3935	0
259	Exchange-correlation effects and layer-thickness affect plasmon modes in gapped graphene-GaAs double-layer systems. 2021 , 94, 1	Ο
258	Bandgap evolution in nanographene assemblies. 2021 , 23, 11501-11506	1
257	Transmission Characteristics of Electrons in Graphene Incident on Cantor-like Potential. 2021 , 90, 014002	Ο
256	Dirac cone manipulation via bismuth and oxygen intercalation underneath graphene on Re(0001). 2021 ,	
255	Electronic and optical properties of silicene on GaAs(111) with hydrogen intercalation: a first-principles study 2021 , 11, 16040-16050	1
254	Ordered boron phosphorus codoped graphene realizing widely tunable quasi Dirac-cone gap. 2021 , 9, 4316-4321	1
253	Different Types and Intense Classification of 2D Materials. 2021 , 11-28	
252	Janus 2D titanium nitride halide TiNXY (X, Y = F, Cl, or Br, and X \square Y) monolayers with giant out-of-plane piezoelectricity and high carrier mobility. 2021 , 23, 3637-3645	7
251	Atomically Thin van der Waals Semiconductors Theoretical Perspective. 2021, 15, 2000482	2
250	Engineering symmetry breaking in 2D layered materials. 2021 , 3, 193-206	45
249	First-principles study of structure, electronic, and magnetic properties of C sites vacancy defects in water adsorbed graphene/MoS van der Waals heterostructures. 2021 , 27, 82	5
248	Tunable and sizeable band gaps in strained SiC3/hBN vdW heterostructures: A potential replacement for graphene in future nanoelectronics. 2021 , 188, 110233	2
247	Controllable Thin-Film Approaches for Doping and Alloying Transition Metal Dichalcogenides Monolayers. 2021 , 8, 2004249	15

246	Large twisting angles in bilayer graphene moir[quantum dot structures. 2021, 103,	2
245	Strain-induced semiconductor to metal transition in MA2Z4 bilayers (M=Ti,Cr,Mo; A=Si; Z=N,P). 2021 , 103,	30
244	Proposal of graphene band-gap enhancement via heterostructure of graphene with boron nitride in vertical stacking scheme. 2021 ,	0
243	Intrinsic Hall conductivities induced by the orbital magnetic moment. 2021 , 103,	O
242	Temperature-Dependent Optical Properties of Graphene on Si and SiO2/Si Substrates. 2021 , 11, 358	1
241	Effects of La and Ce doping on electronic structure and optical properties of janus MoSSe monolayer. 2021 , 151, 106841	1
240	Optical absorption in bilayer graphene superlattices. 2021 , 20, 1248-1259	
239	Elucidating the electronic and magnetic properties of epitaxial graphene grown on SiC with a defective buffer layer. 2021 , 56, 11386-11401	1
238	Full diagnostics and optimization of time resolution for time- and angle-resolved photoemission spectroscopy. 2021 , 92, 033904	4
237	Transition metal dichalcogenide monolayers in an ultrashort optical pulse: Femtosecond currents and anisotropic electron dynamics. 2021 , 103,	1
236	Pseudo-Edelstein effect in disordered silicene. 2021 , 33,	
235	Graphene on a hexagonal lattice substrate with on-site Hubbard interaction. 2021 , 328, 114250	O
234	Practical Route for the Low-Temperature Growth of Large-Area Bilayer Graphene on Polycrystalline Nickel by Cold-Wall Chemical Vapor Deposition. 2021 , 6, 12143-12154	3
233	Dirac fermion metagratings in graphene. 2021 , 5,	2
232	Effect of interfacial bonding on dislocation strengthening in graphene nanosheet reinforced iron composite: A molecular dynamics study. 2021 , 191, 110309	3
231	Robust wavefront dislocations of Friedel oscillations in gapped graphene. 2021 , 103,	O
230	Beyond Color: The New Carbon Ink. 2021 , 33, e2005890	6
229	Angle-resolved photoemission studies of quantum materials. 2021 , 93,	45

228	Orbital Hall effect as an alternative to valley Hall effect in gapped graphene. 2021, 103,	7
227	Electronic spectrum of Kekul[patterned graphene considering second neighbor-interactions. 2021 , 33,	1
226	Hydrogen-Mediated CVD Epitaxy of Graphene on SiC: Implications for Microelectronic Applications. 2021 , 4, 4462-4473	1
225	Angle-resolved photoemission spectroscopy studies of electron-electron interactions in graphene. 2021 ,	O
224	Highly sensitive and selective detection of melamine in dairy products by turn-on fluorescence of ultrathin graphitic carbon nitride nanosheets. 2021 , 36, 1885-1890	1
223	Theory of nonlinear microwave absorption in an electron-doped and gapped graphene monolayer. 2021 , 129, 114663	Ο
222	Intact Vertical 3D 0 D 0 D Carbon-Based p 1 Junctions for Use in High-Performance Photodetectors. 2021 , 9, 2100387	5
221	Structural, electronic and magnetic properties of S sites vacancy defects graphene/MoS2 van der Waals heterostructures: First-principles study. 2021 , 10, 2150009	3
220	Magnetizations and de Haas-van Alphen oscillations in massive Dirac fermions. 2021, 103,	О
219	Theory of angle-resolved photoemission spectroscopy in graphene-based moir uperlattices. 2021 , 103,	Ο
218	Topological metal phases in irradiated graphene sandwiched by asymmetric ferromagnets. 2021 , 104,	О
217	Modulation of interfacial charge dynamics of semiconductor heterostructures for advanced photocatalytic applications. 2021 , 438, 213876	33
216	Valley-Polarized Plasmonic Edge Mode Visualized in the Near-Infrared Spectral Range. 2021 , 21, 6556-6562	3
215	Energy spectra of graphene quantum dots induced between Landau levels. 2021, 104,	O
214	Analysis of Doorway States in a Graphene Structure. 2021 , 258, 2100065	
213	Unveiling quasiparticle dynamics of topological insulators through Bayesian modelling. 2021, 4,	2
212	Fabricating Methods and Materials for Nanogap Electrodes. 2021 , 57-187	О
211	Magnetic generation of normal pseudo-spin polarization in disordered graphene. 2021 , 11, 14954	

2 10	Friedel oscillations in graphene gapped by breaking P and T symmetries: Topological and geometrical signatures of electronic structure. 2021 , 104,	О
209	A Simplified Method for Patterning Graphene on Dielectric Layers. 2021 , 13, 37510-37516	
208	Interface construction for charge transportation of ZnO/graphene multilayer films. 2021, 14, 2150027	
207	Anomalous ultrafast all-optical Hall effect in gapped graphene. 2021 ,	2
206	The first-principles study on the halogen-doped graphene/MoS2 heterojunction. 2021 , 334-335, 114366	1
205	Strain-driven modulation of the electronic, optical and thermoelectric properties of 🛭 antimonene monolayer: A hybrid functional study. 2021 , 131, 105878	1
204	Temperature effect of tunable zero Landau Level splitting energy of monolayer graphene on substrates. 2021 , 156, 106956	
203	The effect of Cl- and N-doped MoS2 and WS2 coated on epitaxial graphene in gas-sensing applications. 2021 , 25, 101200	4
202	Increasing stability of MoS2 nanoribbons by edge engineering. 2021 , 548, 111241	3
201	ZnO/Ag/graphene transparent conductive oxide film with ultrathin Ag layer. 2021 , 39, 052208	О
200	Charge transfer between the epitaxial monolayer WSe2 films and graphene substrates. 2021 , 119, 111602	
199	Coherent-scatterer enhancement and Klein-tunneling suppression by potential barriers in gapped graphene with chirality-time-reversal symmetry. 2021 , 33,	О
198	Band-gap formation and morphing in ∰3 superlattices. 2021 , 104,	1
197	Adjustable electro-optical properties of novel graphene-like SiC2 via strain engineering. 2021 , 559, 149956	16
196	Thermoelectricity in massive-massless complex graphene structures. 2021 , 157, 107004	1
195	Frank-van der Merwe growth in bilayer graphene. 2021 ,	7
194	Thermodynamic Properties of Transition Metal Dichalcogenide Superconductors on a Substrate. 2021 , 34, 2781	
193	Highly sensitive broadband binary photoresponse in gateless epitaxial graphene on 4HBiC. 2021 , 184, 72-81	1

(2020-2021)

192	Experimental evidence of plasmarons and effective fine structure constant in electron-doped graphene/h-BN heterostructure. 2021 , 6,	0
191	Coulomb bound states and atomic collapse in tilted Dirac materials. 2021 , 134, 114841	1
190	Substrate effects on electrical parameters of Dirac fermions in graphene. 2021 , 133, 105936	
189	Electronic Properties of Graphene Nanoribbons With Defects. 2021 , 20, 151-160	4
188	Ultrafast currents in two dimensional hexagonal semiconductors. 2021,	
187	Nanoelectronic Devices Enriching Moore∃ Law. 2021 , 67-156	1
186	Energy Spectra of the Fibonacci Superlattice Based on the Gapped Graphene. 2015 , 43-49	1
185	Hard X-ray Angle-Resolved Photoelectron Spectroscopy (HARPES). 2016 , 141-157	2
184	Graphene. 2017 , 1-1	7
183	Solitary Waves on Graphene Superlattices. 2018 , 85-110	2
182	The Effect of Atomic-Scale Defects on Graphene Electronic Structure. 2012 , 137-145	1
182	The Effect of Atomic-Scale Defects on Graphene Electronic Structure. 2012 , 137-145 On the Electron-Phonon Interactions in Graphene. 2013 , 77-87	2
181	On the Electron-Phonon Interactions in Graphene. 2013 , 77-87	2
181 180	On the Electron-Phonon Interactions in Graphene. 2013, 77-87 Graphene: Beyond the Massless Dirack Fermion Approach. 2015, 21-31	1
181 180 179	On the Electron-Phonon Interactions in Graphene. 2013, 77-87 Graphene: Beyond the Massless Dirac Fermion Approach. 2015, 21-31 Relativistic topological molecular descriptors of metal trihalides. 2020, 1217, 128368	1 16
181 180 179 178	On the Electron-Phonon Interactions in Graphene. 2013, 77-87 Graphene: Beyond the Massless Dirac® Fermion Approach. 2015, 21-31 Relativistic topological molecular descriptors of metal trihalides. 2020, 1217, 128368 Effects of Fermi velocity engineering in magnetic graphene superlattices. 2020, 123, 114171	1 16 3

174	Effect of pore-size disorder on the electronic properties of semiconducting graphene nanomeshes. 2020 , 31, 485710	1
173	Electrical valley filtering in transition metal dichalcogenides. 2018, 2,	9
172	Surface plasmon polariton graphene midinfrared photodetector with multifrequency resonance. 2018 , 12, 1	2
171	Characteristics of graphene/4H-SiC/graphene photodetector based on hydrogenated multilayer-graphene electrode. 2019 , 13, 1	1
170	Thermoelectric Properties of Graphene Like Nanotube Structure Due to Next-to-nearest Neighbor Hopping Amplitude. 2020 , 9, 051009	1
169	Graphene Epitaxially Grown on Vicinal 4H-SiC(0001) Substrates. 2009 , 7, 29-34	3
168	Isotope Effect on Hydrogen Desorption from a Graphene Flake by Ab Initio Electron-Ion Dynamics Simulation. 2011 , 9, 1-5	3
167	Photoemission Electron Spectroscopy IV: Angle-resolved photoemission spectroscopy. 2010 , 17, 64-86	1
166	加加 2008 , 178, 757	5
165	Mechanical and thermal stability of graphene and graphene-based materials. 2014 , 184, 1045-1065	7
164	Coulomb problem for a Z>Zcr. 2015 , 185, 845-852	3
163	Doping Graphene by Chemical Treatments Using Acid and Basic Substances. 2015 , 03, 17-21	3
162	Phonon angular momentum and chiral phonons. 2018 , 67, 076302	2
161	Graphene/Graphite-Coated SiC Nanowires Grown by Metal © rganic Chemical Vapor Deposition in One Step. 2011 , 50, 018001	2
160	Polymer Material as a Gate Dielectric for Graphene Field-Effect-Transistor Applications. 2011 , 50, 070107	5
159	Reactive Ion Etching of Carbon Nanowalls. 2011 , 50, 075101	1
158	Impact of Site-Potential Asymmetry on Electron Transport in Graphene. 2011 , 50, 090205	1
157	Theoretical Evaluation of Ballistic Electron Transport in Field-Effect Transistors with Semiconducting Graphene Channels. 2012 , 51, 055103	7

Enhanced photoresponse of a MoS monolayer using an AAO template.. **2021**, 11, 34410-34415

155	Fundamentals of Electron Transport. 2021 , 41-70	
154	Graphdiyne: from Preparation to Biomedical Applications. 2021 , 37, 1-19	1
153	Effective modulation of ohmic contact and carrier concentration in a graphene- MgX (X=S,Se) van der Waals heterojunction with tunable band-gap opening via strain and electric field. 2021 , 104,	3
152	Disorders in graphene: types, effects and control techniques review. 1	0
151	Interface Structures of Graphene-on-SiC Produced by the SiC Surface Decomposition Method. 2009 , 51, 313-319	O
150	Ultrafast THz Response of Few-Layer Epitaxial Graphene. 2010 ,	
149	Fabrication of Carbon Nanowalls Using Radical Injection Plasma Enhanced CVD. 2010 , 49-80	
148	Basic electronic properties of graphenes. 2010 , 2010, 104-109	1
147	Analysis of Number of Layers in Epitaxial Few-Layer Graphene Grown on SiC towards Single-Crystal Graphene Substrate. 2010 , 53, 101-108	
146	Photovoltaic effect of a-C: Fe/AlOx /Si based heterostructures. 2011 , 60, 037807	2
145	Pseudomagnetic Moment in Graphene in Time-Dependent Electric Field. 2011 , 119, 424-427	
144	Epitaxial Graphene: A New Material. 453-472	
143	Performance Prediction of Complementary Field-Effect Transistor Circuits Using Graphene with Band Gap Induced by Site-Potential Asymmetry. 2011 , 50, 115101	1
142	Enhancing photovoltaic effect of Co2-C98/Al2O3/Si heterostructures by Al2O3. 2012 , 61, 147303	1
141	Anomalous thermoelectric and thermomagnetic properties of graphene. 2012 , 182, 1229-1234	3
140	. 2012 , 02, 1-5	
139	Next Nearest Neighbors Effects on Berry Curvature of Graphene. 2012 , 122, 180-183	

138	Recent progress in preparation of material and device of two-dimensional MoS2. 2013 , 62, 056801	4
137	References. 313-326	
136	Graphene. 2013 , 1-30	
135	Electronic Structure of Graphene and Related Materials Studied by ARPES. 2014 , 57, 416-422	O
134	The valley degree of freedom of an electron. 2015 , 64, 187301	2
133	Collective Excitations in Monolayer Graphene on Metals: Phonons and Plasmons. 2015 , 33-66	
132	Reflection of Slow Electrons from Graphene on (110)Mo. 2016 , 37, 1183-1201	
131	Modification of spin electronic properties of Fen/GaSe monolayer adsorption system. 2017 , 66, 166301	
130	Introduction. 2018 , 1-18	
129	Two-dimensional graphene electronics: current status and prospects. 2018 , 188, 1249-1287	1
128	Structure and band structure of epitaxial graphene on hexagonal silicon carbide. 2018, 689-715	
127	Electronic structure and spin/valley transport properties of monolayer MoS2 under the irradiation of the off-resonant circularly polarized light. 2018 , 67, 107101	
126	Electronic structure studies of C (carbon). 2018 , 426-432	
125	Robust excitonfolariton Rabi splitting in graphene nano ribbons: the means of two-coupled semiconductor microcavities. 2018 , 57, 1	1
124	Characterization of a graphene-based terahertz hot-electron bolometer. 2018,	
123	Electronic and Thermoelectric Properties of Graphene on 4H-SiC (0001) Nanofacets Functionalized with F4-TCNQ. 2020 , 49, 6872-6880	
122	Transport through vertical graphene contacts under intense laser fields. 2020 , 2,	1
121	Band gap variation in bi, tri and few-layered 2D graphene/hBN heterostructures. 2022 , 341, 114553	1

120	Graphene. 2020 , 1171-1198	О
119	Bilayer Graphene Nanoribbon Tunnel FET for Low-Power Nanoscale IC Design. 2020 , 83-100	О
118	Carbon Allotropes. 2020 , 143-162	
117	Electric and thermal spin transfer torques across ferromagnetic/normal/ferromagnetic graphene junctions. 2020 , 22, 093021	1
116	Gap opening in graphene nanoribbons by application of simple shear strain and in-plane electric field. 2021 , 33, 065503	1
115	Effects of Field-Effect and Schottky Heterostructure on p-Type Graphene-Based Gas Sensor Modified by n-Type In2O3 and Phenylenediamine. 2022 , 578, 152025	1
114	A thermodynamic probe of the topological phase transition in epitaxial graphene based Floquet topological insulator. 2021 , 130, 205105	
113	Epitaxial Growth of Uniform Single-Layer and Bilayer Graphene with Assistance of Nitrogen Plasma 2021 , 11,	О
112	Quantum transmission through the n-p-n heterojunction of massive 8-borophene. 2021 , 34,	
111	Emergence of New van Hove Singularities in the Charge Density Wave State of a Topological Kagome Metal RbV_{3}Sb_{5} 2021 , 127, 236401	8
110	Preparation and Annealing of Two-Dimensional MoSe2 Continuous Films by Chemical Vapor Deposition. 2021 , 11, 1234-1243	
109	Graphene-based nano-devices: high spin Seebeck and pure spin photogalvanic effects. 2021 , 23, 26476-26481	O
108	Half-Negative Poisson's Ratio in Graphene+ With Intrinsic Dirac Cone: A Competitor to Graphene?.	
107	The Moderating Role of Social Distancing in Mobile Commerce Adoption 2022 , 52, 101116	2
106	Phonon-assisted Interfacial Charge Transfer Excitons in Graphene/h-BN van der Waals Heterostructures. 2022 , 76, 110-120	1
105	Fano factor in self-similar multibarrier structure based on graphene monolayer. 2022 , 131, 024303	1
104	Theoretical study of anisotropy and ultra-low thermal conductance of porous graphene nanoribbons. 2022 , 71, 027803	O
103	Introduction. 2022 , 1-21	

102	Synthetic chiral molecular nanographenes: the key figure of the racemization barrier 2022,	9
101	Surface functionalization of few-layer graphene on I-SiC(001) by Neutral Red dye. 2022 , 585, 152542	O
100	Tailoring the Nonlinear Optical Response of Some Graphene Derivatives by Ultraviolet (UV) Irradiation 2022 , 12,	1
99	Interband chiral phonon transfer in a magnetic field. 2022 , 105,	O
98	Graphene on Chromia: A System for Beyond-Room-Temperature Spintronics 2022 , e2105023	1
97	A review of defect engineering in two-dimensional materials for electrocatalytic hydrogen evolution reaction. 2022 , 43, 636-678	9
96	Thermoelectric effects in self-similar multibarrier structure based on monolayer graphene.	
95	Quantum sensing of thermoelectric power in low-dimensional materials. 2021 , e2106871	O
94	Fermionic Chern insulator from twisted light with linear polarization. 2022, 105,	0
93	Strain-Modulated Graphene Heterostructure as a Valleytronic Current Switch. 2022, 17,	O
92	Edge state in AB-stacked bilayer graphene and its correspondence with the Su-Schrieffer-Heeger ladder. 2021 , 104,	1
91	Graphene: A Multifunctional Nanomaterial with Versatile Applications. 2021 , 2021, 1-8	3
90	Novel hybrid monolayers SiGeSn: first principles study of structural, electronic, optical, and electron transport properties with NH sensing application 2022 ,	O
89	???????????. 2022,	1
88	Multiphoton absorption and Rabi oscillations in armchair graphene nanoribbons. 2022, 105,	
87	Cluster- and energy-separated extreme states in a synthesized superatomic solid. 2022, 105,	
86	Half-negative Poisson∄ ratio in graphene+ with intrinsic Dirac nodal loop. 2022 , 3, 100790	1
85	Asymmetric Joule heating effect on a monolayer MoS2 device measured by a thermal imaging microscope. 2022 , 80, 619-627	

84	Spintronic phase transition of graphene/BN/graphene van de Waals heterostructures. 2022, 35, 105344	1
83	Control of valley polarization in gapped graphene by linearly polarized ultrashort optical pulse. 2022 , 140, 115145	
82	Experimental evidence of a mixed amorphous-crystalline graphene/SiC interface due to oxygen-intercalation. 2022 , 30, 101906	
81	2D Janus and non-Janus diamanes with an in-plane negative Poisson's ratio for energy applications. 2022 , 14, 100225	1
80	Electronic transport properties and quantum localization effects monitored by selective functionalization in Bernal bilayer graphene. 2021 , 104,	O
79	Observation of high-order moirleffect and multiple Dirac fermions replicas in graphene-SiC heterostructures. 2021 , 104,	1
78	Geometric wavefront dislocations of RKKY interaction in graphene. 2021, 104,	
77	Flexoelectric control of physical properties by atomic force microscopy. 2021 , 8, 041327	7
76	Tunable structural and electronic properties of C4XY (X $\#$ Y = H, Cl and F) monolayers by functionalization, electric field and strain engineering.	
75	Observation of mid-gap states emerging in the O-terminated interface of Cr2O3/graphene: A combined study of ab initio prediction and photoemission analysis. 2022 , 153416	O
74	Anomalies at the Dirac Point in Graphene and Its Hole-Doped Compositions 2022, 128, 166401	O
73	From ground to excited electronic state dynamics of electron and ion irradiated graphene nanomaterials. 2022 , 87-107	
72	Valley transport driven by dynamic lattice distortion. 2022 , 105,	1
71	Novel atomic-scale graphene metamaterials with broadband electromagnetic wave absorption and ultra-high elastic modulus. 2022 , 196, 146-153	O
70	Highly anisotropic microwave third-harmonic generation due to mobile carriers in a graphene superlattice. 2022 , 142, 115278	
69	First-principles calculations of electrical conductivities of edge-modified graphene nanoribbons: Strain effect. 2022 , 142, 115267	
68	Tuning gap in corrugated graphene with spin dependence. 2022 , 115227	О
67	Electric-Field-Tunable Bandgaps in the Inverse-Designed Nanoporous Graphene/Graphene Heterobilayers. 2200252	

66	Diamond (111) surface reconstruction and epitaxial graphene interface. 2022, 105,	1
65	Insights into controllable electronic properties of 2D type-II Twin-Graphene/g-CN43 and type-I Twin-Graphene/hBN vertical heterojunctions via external electric field and strain engineering. 2022 , 128216	
64	Highly Sensitive Band Alignment of the Graphene/MoSi2N4 Heterojunction via an External Electric Field.	2
63	Analytic solution to pseudo-Landau levels in strongly bent graphene nanoribbons. 2022, 4,	O
62	Spectroscopic evidence for electron correlations in epitaxial bilayer graphene with interface-reconstructed superlattice potentials.	
61	Band gap modulation of penta-BCN through different ways. 2022 , 126, 109114	
60	Bandgap engineering in massive-massless graphene superlattices. 2022 , 640, 414052	0
59	Band gap formation of 2D materialin graphene: Future prospect and challenges. 2022 , 100474	1
58	Electric field induced spin resolved graphene p-n junctions on magnetic Janus VSeTe monolayer.	O
57	Electronic structure and interface contact of two-dimensional van der Waals boron phosphide/Ga2SSe heterostructures. 2022 , 12, 19115-19121	
56	Ubiquitous defect-induced density wave instability in monolayer graphene. 2022, 8,	3
55	Angle-resolved photoemission spectroscopy. 2022 , 2,	3
54	Scaling transformations among electron transmission curves for golden self-affine multibarrier structures based on graphene. 2022 , 115420	
53	Anomalous valley Hall effect and Nernst effect in strain engineered graphene. 2022 , 55, 375302	
52	Fermions in graphene with magnetic field and time-oscillating potential. 2022, 447, 128288	О
51	Tuning bandgap and energy stability of Organic-Inorganic halide perovskites through surface engineering. 2022 , 213, 111649	Ο
50	Interaction of graphene with Aun clusters: A first-principles study.	O
49	Transport Spectroscopy of Ultraclean Tunable Band Gaps in Bilayer Graphene. 2200510	1

48	Prospects of Application and Global Significance of Graphene. 2022, 23, 268-295	O
47	Functionalization of Quasi-Two-Dimensional Materials: Chemical and Strain-Induced Modifications. 2022 , 23, 147-238	Ο
46	RPA Plasmons in Graphene Nanoribbons: Influence of a VO2 Substrate. 2022 , 12, 2861	1
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