# CITATION REPORT List of articles citing

Roll-to-roll production of 30-inch graphene films for transparent electrodes

DOI: 10.1038/nnano.2010.132 Nature Nanotechnology, 2010, 5, 574-8.

Source: https://exaly.com/paper-pdf/48516213/citation-report.pdf

Version: 2024-04-25

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

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

#	Paper	IF	Citations
2245	Surface plasmon resonance for characterization of large-area atomic-layer graphene film. <b>2016</b> , 3, 151		
2244	Metallic Nanoislands on Graphene as Highly Sensitive Transducers of Mechanical, Biological, and Optical Signals.		
2243	Strongly Adhesive Silver Nanowire Ink Makes Delamination-Free Transparent Conductive Films Possible.		
2242	Self-Terminating Confinement Approach for Large-Area Uniform Monolayer Graphene Directly over Si/SiOx by Chemical Vapor Deposition.		
2241	Wrinkle-Free Single-Crystal Graphene Wafer Grown on Strain-Engineered Substrates.		
2240	Morphology and Electronic Properties of Electrochemically Exfoliated Graphene.		
2239	Epitaxy of GaN Nanowires on Graphene.		
2238	Wet Transfer of Inkjet Printed Graphene for Microsupercapacitors on Arbitrary Substrates.		
2237	All Polymer Solution Processed Electrochromic Devices: A Future without Indium Tin Oxide?.		
2236	A vertical profile of turbulence in the Atlantic air mass measured by balloon-borne radiosondes. <b>1974</b> , 79, 4545-4549		13
2235	Colloquium: The transport properties of graphene: An introduction. <b>2010</b> , 82, 2673-2700		772
2234	Electronic and magnetic properties of the grapheneferromagnet interface. <b>2010</b> , 12, 125004		167
2233	Controlled Synthesis of Monolayer Graphene Toward Transparent Flexible Conductive Film Application. <b>2010</b> , 5, 1768-1773		31
2232	Scalable Synthesis of Graphene on Patterned Ni and Transfer. <b>2010</b> , 57, 3472-3476		25
2231	Low-Swing Signaling on Monolithically Integrated Global Graphene Interconnects. <b>2010</b> , 57, 3418-3425		17
2230	A radical polymer as a two-dimensional organic half metal. <b>2010</b> , 16, 12141-6		22
2229	Ein Konzept und seine Umsetzung: Graphen gestern, heute und morgen. <b>2010</b> , 122, 9524-9532		53

## (2010-2010)

2228	From conception to realization: an historial account of graphene and some perspectives for its future. <b>2010</b> , 49, 9336-44		621
2227	Efficient bulk-heterojunction photovoltaic cells with transparent multi-layer graphene electrodes. <b>2010</b> , 11, 1864-1869		106
2226	Growth and properties of chemically modified graphene. <b>2010</b> , 247, 2915-2919		14
2225	Graphene: Across the border. <b>2010</b> , 9, 792-3		46
2224	The era of carbon allotropes. <b>2010</b> , 9, 868-71		735
2223	Nanomaterials: Graphene rolls off the press. <i>Nature Nanotechnology</i> , <b>2010</b> , 5, 559-60	.8.7	19
2222	Nanopores: Graphene opens up to DNA. <i>Nature Nanotechnology</i> , <b>2010</b> , 5, 697-8	.8.7	102
2221	Graphene photonics and optoelectronics. <b>2010</b> , 4, 611-622		5678
2220	Celebrating graphene. <b>2010</b> , 4, 731-731		2
2219	Graphene: Rolling on to commercial success. <b>2010</b> , 2, 130-130		
2218	Investigation of high frequency performance limit of graphene field effect transistors. <b>2010</b> , 97, 173106		16
2217	Tunneling characteristics of graphene. <b>2010</b> , 97, 252102		13
2216	Magnetic properties in graphene-graphane superlattices. <b>2010</b> , 97, 133102		18
2215	High-performance flexible graphene field effect transistors with ion gel gate dielectrics. <b>2010</b> , 10, 3464-6	;	350
2214	Doped graphene electrodes for organic solar cells. <b>2010</b> , 21, 505204		216
2213	Graphene versus carbon nanotubes for chemical sensor and fuel cell applications. <b>2010</b> , 135, 2790-7		138
2212	pH-Responsive chitosan-mediated graphene dispersions. <b>2010</b> , 26, 16771-4		168
2211	Large area CVD monolayer graphene for nanoelectronics: Device performance and analysis. 2010,		

2210	Epitaxial chemical vapor deposition growth of single-layer graphene over cobalt film crystallized on sapphire. <b>2010</b> , 4, 7407-14	247
2209	Efficient growth of high-quality graphene films on Cu foils by ambient pressure chemical vapor deposition. <b>2010</b> , 97, 183109	155
2208	Oxidant-induced dopamine polymerization for multifunctional coatings. <b>2010</b> , 1, 1430	548
2207	Imaging ellipsometry of graphene. <b>2010</b> , 97, 231901	85
2206	Efficient preparation of large-area graphene oxide sheets for transparent conductive films. <b>2010</b> , 4, 5245-52	775
2205	Tuning of a graphene-electrode work function to enhance the efficiency of organic bulk heterojunction photovoltaic cells with an inverted structure. <b>2010</b> , 97, 213301	87
2204	Scanning tunneling microscopy, spectroscopy, and nanolithography of epitaxial graphene chemically modified with aryl moieties. <b>2010</b> , 132, 15399-403	132
2203	Layer-by-layer transfer of multiple, large area sheets of graphene grown in multilayer stacks on a single SiC wafer. <b>2010</b> , 4, 5591-8	60
2202	Graphene for Microwaves. <b>2010</b> , 11, 81-86	74
2201	Electrospun metal nanofiber webs as high-performance transparent electrode. <b>2010</b> , 10, 4242-8	610
2200	Toward high throughput interconvertible graphane-to-graphene growth and patterning. <b>2010</b> , 4, 6146-52	100
2199	Geometry, mechanics, and electronics of singular structures and wrinkles in graphene. <b>2010</b> , 105, 156603	152
2198	Comparison of Graphene Growth on Single-Crystalline and Polycrystalline Ni by Chemical Vapor Deposition. <b>2010</b> , 1, 3101-3107	285
2197	Optical properties of strained graphene. <b>2010</b> , 92, 67001	99
2196	Controlling energy gap of bilayer graphene by strain. <b>2010</b> , 10, 3486-9	152
2195	Flexible, transparent single-walled carbon nanotube transistors with graphene electrodes. <b>2010</b> , 21, 425201	62
2194	Graphene as ion sensitive film for ionic liquids. <b>2010</b> ,	
2193	Graphene growth on epitaxial Ru thin films on sapphire. <b>2010</b> , 97, 213101	85

2192	Direct patterning on reduced graphene oxide nanosheets using femtosecond laser pulses. <b>2011</b> , 13, 085601	14
2191	Continuity of graphene on polycrystalline copper. <b>2011</b> , 11, 251-6	162
2190	Modified RCA clean transfer of graphene and all-carbon electronic devices fabrication. 2011,	
2189	Aligned Rectangular Few-Layer Graphene Domains on Copper Surfaces. <b>2011</b> , 23, 4543-4547	47
2188	Fe adatoms on graphene/Ru(0001): Adsorption site and local electronic properties. 2011, 84,	29
2187	Interlayer interaction and relative vibrations of bilayer graphene. <b>2011</b> , 13, 5687-95	125
2186	Enhanced Current Drivability of CVD Graphene Interconnect in Oxygen-Deficient Environment. <b>2011</b> , 32, 1591-1593	19
2185	Outstanding flexibility of organic memory devices with transparent graphene top electrodes. <b>2011</b> ,	
2184	Solution processable nanocarbon platform for polymer solar cells. <b>2011</b> , 4, 3521	43
2183	Breakdown Current Density of CVD-Grown Multilayer Graphene Interconnects. <b>2011</b> , 32, 557-559	56
2182	Boron nitride substrates for high mobility chemical vapor deposited graphene. <b>2011</b> , 98, 242105	305
2181	Layer Number Determination and Thickness-Dependent Properties of Graphene Grown on SiC. <b>2011</b> , 10, 1196-1201	10
2180	Chemical vapor deposition-grown graphene: the thinnest solid lubricant. <b>2011</b> , 5, 5107-14	388
2179	Surface-directed molecular assembly of pentacene on monolayer graphene for high-performance organic transistors. <b>2011</b> , 133, 4447-54	287
2178	110 GHz measurement of large-area graphene integrated in low-loss microwave structures. <b>2011</b> , 99, 153504	76
2177	High-Performance Transparent Conductors from Networks of Gold Nanowires. <b>2011</b> , 2, 3058-3062	71
2176	Conductance through multilayer graphene films. <b>2011</b> , 11, 3629-33	20
2175	In situ electronic characterization of graphene nanoconstrictions fabricated in a transmission electron microscope. <b>2011</b> , 11, 5184-8	53

2174	Theoretical Design of Nanomaterials and Nanodevices: Nanolensing, Supermagnetoresistance, and Ultrafast DNA Sequencing. <b>2011</b> , 115, 16247-16257	18
2173	One-step molybdate ion assisted electrochemical synthesis of #MoO3-decorated graphene sheets and its potential applications. <b>2011</b> , 21, 15009	44
2172	High-performance transparent conductive films using rheologically derived reduced graphene oxide. <b>2011</b> , 5, 870-8	78
2171	Enhanced logic performance with semiconducting bilayer graphene channels. <b>2011</b> , 5, 500-6	36
2170	Chemical Strain-Relaxation of Single-Walled Carbon Nanotubes on Plastic Substrates for Enhanced Conductivity. <b>2011</b> , 115, 22251-22256	6
2169	Top-gated chemical vapor deposition grown graphene transistors with current saturation. <b>2011</b> , 11, 2555-9	79
2168	Large-area homogeneous quasifree standing epitaxial graphene on SiC(0001): Electronic and structural characterization. <b>2011</b> , 84,	95
2167	Transparent electrode with a nanostructured coating. <b>2011</b> , 5, 2082-9	18
2166	Single- and Double-Layer Graphenes as Ultrabarriers for Fluorescent Polymer Films. <b>2011</b> , 115, 23057-23061	18
2165	Flexible organic memory devices with multilayer graphene electrodes. <b>2011</b> , 5, 5995-6000	119
	Flexible organic memory devices with multilayer graphene electrodes. <b>2011</b> , 5, 5995-6000  Suppression of inhomogeneous segregation in graphene growth on epitaxial metal films. <b>2011</b> , 11, 2628-33	119 47
2164	Suppression of inhomogeneous segregation in graphene growth on epitaxial metal films. <b>2011</b> , 11, 2628-33  Roll-to-roll anodization and etching of aluminum foils for high-throughput surface nanotexturing.	47
2164 2163	Suppression of inhomogeneous segregation in graphene growth on epitaxial metal films. <b>2011</b> , 11, 2628-33  Roll-to-roll anodization and etching of aluminum foils for high-throughput surface nanotexturing. <b>2011</b> , 11, 3425-30  The possibility of chemically inert, graphene-based all-carbon electronic devices with 0.8 eV gap.	47
2164 2163 2162 2161	Suppression of inhomogeneous segregation in graphene growth on epitaxial metal films. <b>2011</b> , 11, 2628-33  Roll-to-roll anodization and etching of aluminum foils for high-throughput surface nanotexturing. <b>2011</b> , 11, 3425-30  The possibility of chemically inert, graphene-based all-carbon electronic devices with 0.8 eV gap. <b>2011</b> , 5, 3475-82  Graphene-polymer hybrid nanostructure-based bioenergy storage device for real-time control of	47 49 42
2164 2163 2162 2161	Suppression of inhomogeneous segregation in graphene growth on epitaxial metal films. <b>2011</b> , 11, 2628-33  Roll-to-roll anodization and etching of aluminum foils for high-throughput surface nanotexturing. <b>2011</b> , 11, 3425-30  The possibility of chemically inert, graphene-based all-carbon electronic devices with 0.8 eV gap. <b>2011</b> , 5, 3475-82  Graphene-polymer hybrid nanostructure-based bioenergy storage device for real-time control of biological motor activity. <b>2011</b> , 5, 8656-64	47 49 42
2164 2163 2162 2161 2160	Suppression of inhomogeneous segregation in graphene growth on epitaxial metal films. 2011, 11, 2628-33  Roll-to-roll anodization and etching of aluminum foils for high-throughput surface nanotexturing. 2011, 11, 3425-30  The possibility of chemically inert, graphene-based all-carbon electronic devices with 0.8 eV gap. 2011, 5, 3475-82  Graphene-polymer hybrid nanostructure-based bioenergy storage device for real-time control of biological motor activity. 2011, 5, 8656-64  Graphene growth using a solid carbon feedstock and hydrogen. 2011, 5, 7656-61	47 49 42 19 84

2156	Nonlinear coherent Thomson scattering from relativistic electron sheets as a means to produce isolated ultrabright attosecond x-ray pulses. <b>2011</b> , 14,	22
2155	Fast growth of graphene patterns by laser direct writing. <b>2011</b> , 98, 123109	94
2154	Domain (grain) boundaries and evidence of "twinlike" structures in chemically vapor deposited grown graphene. <b>2011</b> , 5, 2433-9	156
2153	Gap Opening of Graphene by Dual FeCl3-Acceptor and K-Donor Doping. <b>2011</b> , 2, 2577-2581	95
2152	High-throughput large-area automated identification and quality control of graphene and few-layer graphene films. <b>2011</b> , 5, 914-22	59
2151	Formation of bilayer bernal graphene: layer-by-layer epitaxy via chemical vapor deposition. <b>2011</b> , 11, 1106-10	320
2150	Prospects for nanowire-doped polycrystalline graphene films for ultratransparent, highly conductive electrodes. <b>2011</b> , 11, 5020-5	126
2149	Graphene Spin-Valve Device Grown Epitaxially on the Ni(111) Substrate: A First Principles Study. <b>2011</b> , 115, 6019-6023	40
2148	Graphene nanopatterns with crystallographic orientation control for nanoelectronic applications. <b>2011</b> , 20, 1212-1217	9
2147	The 2010 Nobel Prize in physicsground-breaking experiments on graphene. <b>2011</b> , 44, 473001	41
2146	On the mechanisms of precipitation of graphene on nickel thin films. <b>2011</b> , 96, 46003	135
2145	Hexagonal single crystal domains of few-layer graphene on copper foils. <b>2011</b> , 11, 1182-9	256
2144	Graphene gate electrode for MOS structure-based electronic devices. <b>2011</b> , 11, 5383-6	55
2143	Graphene: Its Fundamentals to Future Applications. <b>2011</b> , 59, 2702-2708	56
2142	Defect-like structures of graphene on copper foils for strain relief investigated by high-resolution scanning tunneling microscopy. <b>2011</b> , 5, 4014-22	165
2141	Synthesis and characterization of large-area graphene and graphite films on commercial Cu-Ni alloy foils. <b>2011</b> , 11, 3519-25	270
2140	Atomistic simulations of the implantation of low-energy boron and nitrogen ions into graphene. <b>2011</b> , 83,	114
2139	Intrinsic response time of graphene photodetectors. <b>2011</b> , 11, 2804-8	196

2138	Tight-binding study of the magneto-optical properties of gapped graphene. 2011, 84,	22
2137	Enhanced photovoltaic properties in graphene/polycrystalline BiFeO3/Pt heterojunction structure. <b>2011</b> , 99, 132904	91
2136	Integration of high quality top-gated graphene field effect devices on 150 mm substrate. <b>2011</b> ,	2
2135	Electrochemical delamination of CVD-grown graphene film: toward the recyclable use of copper catalyst. <b>2011</b> , 5, 9927-33	451
2134	Controllable healing of defects and nitrogen doping of graphene by CO and NO molecules. <b>2011</b> , 83,	62
2133	Band-gap transition induced by interlayer van der Waals interaction in MoS2. <b>2011</b> , 84,	293
2132	A review of chemical vapour deposition of graphene on copper. <b>2011</b> , 21, 3324-3334	1106
2131	. <b>2011</b> , 32, 1349-1351	22
2130	Comprehension of Nanocomposites. <b>2011</b> , 777-819	2
2129	Graphene: fabrication methods and thermophysical properties. <b>2011</b> , 181, 233	31
2129	Graphene: fabrication methods and thermophysical properties. <b>2011</b> , 181, 233  Highly selective adsorption of Hg2+ by a polypyrrole-reduced graphene oxide composite. <b>2011</b> , 47, 3942-4	509
2128	Highly selective adsorption of Hg2+ by a polypyrrole-reduced graphene oxide composite. <b>2011</b> , 47, 3942-4  Single terrace growth of graphene on a metal surface. <b>2011</b> , 11, 1895-900	509
2128	Highly selective adsorption of Hg2+ by a polypyrrole-reduced graphene oxide composite. <b>2011</b> , 47, 3942-4  Single terrace growth of graphene on a metal surface. <b>2011</b> , 11, 1895-900  Graphene: preparation and structural perfection. <b>2011</b> , 21, 3280-3294	509
2128 2127 2126	Highly selective adsorption of Hg2+ by a polypyrrole-reduced graphene oxide composite. 2011, 47, 3942-4  Single terrace growth of graphene on a metal surface. 2011, 11, 1895-900  Graphene: preparation and structural perfection. 2011, 21, 3280-3294  Growth mechanism of hexagonal-shape graphene flakes with zigzag edges. 2011, 5, 9154-60	509 63 114
2128 2127 2126 2125	Highly selective adsorption of Hg2+ by a polypyrrole-reduced graphene oxide composite. <b>2011</b> , 47, 3942-4  Single terrace growth of graphene on a metal surface. <b>2011</b> , 11, 1895-900  Graphene: preparation and structural perfection. <b>2011</b> , 21, 3280-3294  Growth mechanism of hexagonal-shape graphene flakes with zigzag edges. <b>2011</b> , 5, 9154-60	509 63 114
2128 2127 2126 2125 2124	Highly selective adsorption of Hg2+ by a polypyrrole-reduced graphene oxide composite. 2011, 47, 3942-4  Single terrace growth of graphene on a metal surface. 2011, 11, 1895-900  Graphene: preparation and structural perfection. 2011, 21, 3280-3294  Growth mechanism of hexagonal-shape graphene flakes with zigzag edges. 2011, 5, 9154-60  Oxygen-aided synthesis of polycrystalline graphene on silicon dioxide substrates. 2011, 133, 17548-51	509 63 114

2120	Transparent conductors from carbon nanotubes LBL-assembled with polymer dopant with 🗉 electron transfer. <b>2011</b> , 133, 7450-60	78
2119	Electronic structure of graphene on single-crystal copper substrates. <b>2011</b> , 84,	134
2118	Graphene: The long and winding road. <b>2011</b> , 10, 566-7	14
2117	A green approach to the synthesis of reduced graphene oxide nanosheets under UV irradiation. <b>2011</b> , 22, 215601	196
2116	Polymer brushes on graphene. <b>2011</b> , 133, 10490-8	129
2115	Large-area uniform graphene-like thin films grown by chemical vapor deposition directly on silicon nitride. <b>2011</b> , 98, 252107	72
2114	Iodine doping in solid precursor-based CVD growth graphene film. <b>2011</b> , 21, 15209	94
2113	Controlled growth of semiconducting nanowire, nanowall, and hybrid nanostructures on graphene for piezoelectric nanogenerators. <b>2011</b> , 5, 4197-204	159
2112	Stretchable graphene transistors with printed dielectrics and gate electrodes. <b>2011</b> , 11, 4642-6	326
2111	Flame synthesis of few-layered graphene/graphite films. <b>2011</b> , 47, 3520-2	60
2110	Conversion of self-assembled monolayers into nanocrystalline graphene: structure and electric transport. <b>2011</b> , 5, 3896-904	83
2109	Small hysteresis nanocarbon-based integrated circuits on flexible and transparent plastic substrate. <b>2011</b> , 11, 1344-50	134
2108	In situ characterization of alloy catalysts for low-temperature graphene growth. 2011, 11, 4154-60	237
2107	Universal segregation growth approach to wafer-size graphene from non-noble metals. <b>2011</b> , 11, 297-303	216
2106	An amphiphilic pyrene sheet for selective functionalization of graphene. <b>2011</b> , 47, 8259-61	120
2105	Graphene veils and sandwiches. <b>2011</b> , 11, 3290-4	49
2104	Fluorographene: a wide bandgap semiconductor with ultraviolet luminescence. <b>2011</b> , 5, 1042-6	350
2103	Atomic-scale investigation of graphene grown on Cu foil and the effects of thermal annealing. <b>2011</b> , 5, 3607-13	125

Rational design of a binary metal alloy for chemical vapour deposition growth of uniform single-layer graphene. <b>2011</b> , 2, 522	201
2101 Continuous roll-to-roll growth of graphene films by chemical vapor deposition. <b>2011</b> , 98, 133106	82
2100 Graphene based Schottky junction solar cells on patterned silicon-pillar-array substrate. <b>2011</b> , 99, 233505	68
2099 Synthesis, assembly and applications of semiconductor nanomembranes. <b>2011</b> , 477, 45-53	526
2098 Graphene based new energy materials. <b>2011</b> , 4, 1113	1637
The effects of thionyl chloride on the properties of graphene and graphenedarbon nanotube composites. <b>2011</b> , 21, 3391	58
2096 Graphene growth and stability at nickel surfaces. <b>2011</b> , 13, 025001	96
Highly Ordered Monolayer, Multilayer, and Hybrid Films of Graphene Oxide Obtained by the Bubble Deposition Method. <b>2011</b> , 115, 14678-14681	28
2094 Stretchable, elastic materials and devices for solar energy conversion. <b>2011</b> , 4, 3314	322
Large-scale graphene transistors with enhanced performance and reliability based on interface engineering by phenylsilane self-assembled monolayers. <b>2011</b> , 11, 523-8	88
2092 Toward clean and crackless transfer of graphene. <b>2011</b> , 5, 9144-53	588
Controllable growth of shaped graphene domains by atmospheric pressure chemical vapour deposition. <b>2011</b> , 3, 4946	33
2090 Wafer-scale graphene/ferroelectric hybrid devices for low-voltage electronics. <b>2011</b> , 93, 17002	67
2089 Carbon-based layer-by-layer nanostructures: from films to hollow capsules. <b>2011</b> , 3, 4515-31	78
Molecular absorption and photodesorption in pristine and functionalized large-area graphene layers. <b>2011</b> , 22, 355701	30
2087 Graphene in Transistor Technology. <b>2011</b> , 393-395, 123-126	
2086 Inorganic nanostructures grown on graphene layers. <b>2011</b> , 3, 3522-33	72
2085 Graphene buffered galvanic synthesis of graphenethetal hybrids. <b>2011</b> , 21, 13241	21

2084	Quantum Hall effect on centimeter scale chemical vapor deposited graphene films. <b>2011</b> , 99, 232110	31
2083	Theoretical Study of the Electron Transport in Graphene with Vacancy and Residual Oxygen Defects after High-Temperature Reduction. <b>2011</b> , 115, 9719-9725	26
2082	Flexible graphene-based electroluminescent devices. <b>2011</b> , 5, 7149-54	114
2081	Grain boundary mapping in polycrystalline graphene. <b>2011</b> , 5, 2142-6	522
2080	Metal nanogrids, nanowires, and nanofibers for transparent electrodes. <b>2011</b> , 36, 760-765	399
2079	Nanostructured Materials for Engineering Applications. 2011,	19
2078	Large-scale preparation of highly conductive three dimensional graphene and its applications in CdTe solar cells. <b>2011</b> , 21, 17366	84
2077	Direct growth of nanographene on glass and postdeposition size control. <b>2011</b> , 98, 183106	17
2076	Effect of oxygen plasma etching on graphene studied using Raman spectroscopy and electronic transport measurements. <b>2011</b> , 13, 025008	163
2075	High Throughput Preparation of Large Area Transparent Electrodes Using Non-Functionalized Graphene Nanoribbons. <b>2011</b> , 23, 935-939	19
2074	Nanotechnology Research Directions for Societal Needs in 2020. <b>2011</b> ,	151
2073	Structural and electronic properties of the graphene/Al/Ni(111) intercalation system. <b>2011</b> , 13, 113028	95
2072	Raman spectroscopy of the internal strain of a graphene layer grown on copper tuned by chemical vapor deposition. <b>2011</b> , 84,	47
2071	Cutting and controlled modification of graphene with ion beams. <b>2011</b> , 22, 175306	119
2070	Transparent electrode requirements for thin film solar cell modules. <b>2011</b> , 4, 131-134	125
2069	Toward wafer scale fabrication of graphene based spin valve devices. <b>2011</b> , 11, 2363-8	189
2068	Production of extended single-layer graphene. <b>2011</b> , 5, 1522-8	90
2067	Ethanol-assisted graphene oxide-based thin film formation at pentane-water interface. <b>2011</b> , 27, 9174-81	66

2066 Marked adsorption irreversibility of graphitic nanoribbons for CO2 and H2O. <b>2011</b> , 133	3, 14880-3 55
Enhanced infrared light harvesting of inorganic nanocrystal photovoltaic and photode graphene electrode. <b>2011</b> , 98, 263509	tector on 19
Synthesis and characterization of self-organized multilayered graphenellarbon nanotu films. <b>2011</b> , 21, 7289	ıbe hybrid 49
Direct formation of graphene-metal hybrid on dielectric surfaces by metal-induced cry <b>2063 2011</b> ,	rstallization.
2062 On the physisorption of water on graphene: a CCSD(T) study. <b>2011</b> , 13, 12041-7	152
Transparent conductive films consisting of ultralarge graphene sheets produced by Langmuir-Blodgett assembly. <b>2011</b> , 5, 6039-51	351
Fast and direct measurements of the electrical properties of graphene using micro for probes. <b>2011</b> , 22, 445702	ur-point 30
Stretchable, transparent graphene interconnects for arrays of microscale inorganic lig diodes on rubber substrates. <b>2011</b> , 11, 3881-6	ht emitting 281
Directly drawing self-assembled, porous, and monolithic graphene fiber from chemical deposition grown graphene film and its electrochemical properties. <b>2011</b> , 27, 12164-7	
2057 Atomic-scale characterization of graphene grown on copper (100) single crystals. <b>2011</b>	<b>1</b> , 133, 12536-43 136
2056 Graphenes Converted from Polymers. <b>2011</b> , 2, 493-497	140
Large-area graphene films by simple solution casting of edge-selectively functionalized <b>2055 2011</b> , 5, 4974-80	d graphite. 85
2054 Graphene Composites. <b>2011</b> ,	4
$_{2053}$ Selective n-type doping of graphene by photo-patterned gold nanoparticles. <b>2011</b> , 5, 3	3639-44 <i>77</i>
2052 Controlled van der Waals heteroepitaxy of InAs nanowires on carbon honeycomb lattic	ces. <b>2011</b> , 5, 7576-84 60
$_{ m 2051}$ Graphene fixed-end beam arrays based on mechanical exfoliation. <b>2011</b> , 98, 253105	41
2050 Multi-layer graphene grid and nanowire fabrication and printing. <b>2011</b> ,	
2049 Rational design of hybrid graphene films for high-performance transparent electrodes	s. <b>2011</b> , 5, 6472-9 265

2048	Revealing the grain structure of graphene grown by chemical vapor deposition. <b>2011</b> , 99, 023104	66
2047	A role for graphene in silicon-based semiconductor devices. <b>2011</b> , 479, 338-44	556
2046	Imaging local electronic corrugations and doped regions in graphene. <b>2011</b> , 2, 372	102
2045	Origin of enhanced stem cell growth and differentiation on graphene and graphene oxide. <b>2011</b> , 5, 7334-41	802
2044	Protein corona-mediated mitigation of cytotoxicity of graphene oxide. <b>2011</b> , 5, 3693-700	724
2043	Hydrothermally grown ZnO nanostructures on few-layer graphene sheets. <b>2011</b> , 22, 245603	71
2042	Graphene-based bimorph microactuators. <b>2011</b> , 11, 977-81	147
2041	Graphene flash memory. <b>2011</b> , 5, 7812-7	204
2040	Work-Function Engineering of Graphene Electrodes by Self-Assembled Monolayers for High-Performance Organic Field-Effect Transistors. <b>2011</b> , 2, 841-5	224
2039	Low-temperature growth of graphene by chemical vapor deposition using solid and liquid carbon sources. <b>2011</b> , 5, 3385-90	304
2038	Terahertz imaging and spectroscopy of large-area single-layer graphene. <b>2011</b> , 19, 141-6	90
2037	Thickness determination of graphene on metal substrate by reflection spectroscopy. <b>2011</b> , 19, 17226-31	21
2036	Single-layer graphene cathodes for organic photovoltaics. <b>2011</b> , 98, 123303	53
2035	A simple and scalable graphene patterning method and its application in CdSe nanobelt/graphene Schottky junction solar cells. <b>2011</b> , 3, 1477-81	68
2034	Raman spectroscopy of lithographically patterned graphene nanoribbons. <b>2011</b> , 5, 4123-30	134
2033	Field effect in chemical vapour deposited graphene incorporating a polymeric gate dielectric. <b>2011</b> , 161, 2249-2252	6
2032	High yield production of graphene and its improved property in detecting heavy metal ions. <b>2011</b> , 26, 31-35	69
2031	The graphene-gold interface and its implications for nanoelectronics. <b>2011</b> , 11, 3833-7	90

2030	Atomically thin surface cloak using graphene monolayers. <b>2011</b> , 5, 5855-63	525
2029	Computer Aided Nanomaterials Design Eself-assembly, Nanooptics, Molecular Electronics/Spintronics, and Fast DNA Sequencing. <b>2011</b> , 319-346	
2028	Topographic and electronic contrast of the graphene moir[bn Ir(111) probed by scanning tunneling microscopy and noncontact atomic force microscopy. <b>2011</b> , 83,	43
2027	Graphene transistors are insensitive to pH changes in solution. <b>2011</b> , 11, 3597-600	128
2026	Transparent gold nanowire electrodes. <b>2011</b> ,	
2025	Growth of single crystal graphene arrays by locally controlling nucleation on polycrystalline Cu using chemical vapor deposition. <b>2011</b> , 23, 4898-903	154
2024	Skin-like pressure and strain sensors based on transparent elastic films of carbon nanotubes.  Nature Nanotechnology, <b>2011</b> , 6, 788-92	7 2451
2023	Harvesting energy from water flow over graphene. <b>2011</b> , 11, 3123-7	166
2022	Epitaxial Graphene on Metals. <b>2011</b> , 189-234	4
2021	Influence of polymeric residue on the thermal conductivity of suspended bilayer graphene. <b>2011</b> , 11, 1195-200	217
2020	Oriented 2D covalent organic framework thin films on single-layer graphene. <b>2011</b> , 332, 228-31	824
2019	Top laminated graphene electrode in a semitransparent polymer solar cell by simultaneous thermal annealing/releasing method. <b>2011</b> , 5, 6564-70	172
2018	High-performance graphene-based transparent flexible heaters. <b>2011</b> , 11, 5154-8	396
2017	Graphene epitaxy by chemical vapor deposition on SiC. <b>2011</b> , 11, 1786-91	257
2016	Epitaxial Graphene on SiC(0001). <b>2011</b> , 135-159	O
2015	Softened elastic response and unzipping in chemical vapor deposition graphene membranes. <b>2011</b> , 11, 2259-63	278
2014	Graphene Carrier Transport Theory. <b>2011</b> , 357-394	2
2013	Edge-functionalized graphene-like platelets as a co-curing agent and a nanoscale additive to epoxy resin. <b>2011</b> , 21, 7337	76

2012	Structural Analysis and Direct Imaging of Rotational Stacking Faults in Few-Layer Graphene Synthesized from Solid Botanical Precursor. <b>2011</b> , 50, 070106	3
2011	Atomic Layer Deposition of High-k Oxides on Graphene. <b>2011</b> ,	3
2010	Graphene Transistors. <b>2011</b> ,	3
2009	Method for Fabricating Arrays of Graphene Nanoribbons. <b>2011</b> , 1362, 1	
2008	Recent progress in transparent conducting materials by use of metallic grids on metaloxides. <b>2011</b> , 1323, 17	5
2007	43.1: Invited Paper: Trends and Materials in Touch Sensing. <b>2011</b> , 42, 617-620	10
2006	Covalent bulk functionalization of graphene. <b>2011</b> , 3, 279-86	525
2005	It's still all about graphene. <b>2011</b> , 10, 1	48
2004	Three-dimensional flexible and conductive interconnected graphene networks grown by chemical vapour deposition. <b>2011</b> , 10, 424-8	3105
2003	Control and characterization of individual grains and grain boundaries in graphene grown by chemical vapour deposition. <b>2011</b> , 10, 443-9	1216
2002	Low-temperature fabrication of high-performance metal oxide thin-film electronics via combustion processing. <b>2011</b> , 10, 382-8	957
2001	Broadband graphene polarizer. <b>2011</b> , 5, 411-415	806
2000	Grains and grain boundaries in single-layer graphene atomic patchwork quilts. <b>2011</b> , 469, 389-92	1573
1999	A graphene-based broadband optical modulator. <b>2011</b> , 474, 64-7	2385
1998	Technology ready use of single layer graphene as a transparent electrode for hybrid photovoltaic devices. <b>2011</b> , 44, 521-524	34
1997	Electron transport and excitations in graphene. <b>2011</b> , 3, 352-362	3
1996	Graphene-Driven Revolutions in ICT and Beyond. <b>2011</b> , 7, 30-33	9
1995	Coupled fluorescein isothiocyanate on graphene oxide. <b>2011</b> , 65, 751-753	5

1994	Femtosecond laser induced micropatterning of graphene film. <b>2011</b> , 65, 1569-1572	58
1993	Radio-Frequency Transistors Using Chemical-Vapor-Deposited Monolayer Graphene: Performance, Doping, and Transport Effects. <b>2011</b> , 58, 2847-2853	20
1992	Reliable processing of graphene using metal etchmasks. <b>2011</b> , 6, 390	30
1991	Highly transparent and conductive thin films fabricated with nano-silver/double-walled carbon nanotube composites. <b>2011</b> , 364, 1-9	34
1990	Work function modulation of AuCl4Imolecule adsorbed on graphene: A first-principles simulation. <b>2011</b> , 516, 88-91	3
1989	Flame synthesis of graphene films in open environments. <b>2011</b> , 49, 5064-5070	79
1988	The formation of a carbon nanotubegraphene oxide coreshell structure and its possible applications. <b>2011</b> , 49, 5071-5078	118
1987	Graphene-based counter electrode for dye-sensitized solar cells. <b>2011</b> , 49, 5382-5388	368
1986	A graphene nanoribbon network and its biosensing application. <b>2011</b> , 3, 5156-60	7 <sup>2</sup>
1985	Graphene Sensors. <b>2011</b> , 11, 3161-3170	290
	Graphene Sensors. <b>2011</b> , 11, 3161-3170  Structural defects in graphene. <b>2011</b> , 5, 26-41	290 2388
1984		
1984	Structural defects in graphene. <b>2011</b> , 5, 26-41  Nanostructured materials for water desalination. <b>2011</b> , 22, 292001	2388
1984 1983	Structural defects in graphene. <b>2011</b> , 5, 26-41  Nanostructured materials for water desalination. <b>2011</b> , 22, 292001	2388 465
1984 1983 1982	Structural defects in graphene. <b>2011</b> , 5, 26-41  Nanostructured materials for water desalination. <b>2011</b> , 22, 292001  High-quality thin graphene films from fast electrochemical exfoliation. <b>2011</b> , 5, 2332-9  Graphene for controlled and accelerated osteogenic differentiation of human mesenchymal stem	2388 465 765
1984 1983 1982	Structural defects in graphene. 2011, 5, 26-41  Nanostructured materials for water desalination. 2011, 22, 292001  High-quality thin graphene films from fast electrochemical exfoliation. 2011, 5, 2332-9  Graphene for controlled and accelerated osteogenic differentiation of human mesenchymal stem cells. 2011, 5, 4670-8	2388 465 765 724
1984 1983 1982 1981	Structural defects in graphene. 2011, 5, 26-41  Nanostructured materials for water desalination. 2011, 22, 292001  High-quality thin graphene films from fast electrochemical exfoliation. 2011, 5, 2332-9  Graphene for controlled and accelerated osteogenic differentiation of human mesenchymal stem cells. 2011, 5, 4670-8  Toward the growth of an aligned single-layer MoS2 film. 2011, 27, 11650-3  Solution processing of transparent conductors: from flask to film. 2011, 40, 5406-41	<ul><li>2388</li><li>465</li><li>765</li><li>724</li><li>79</li></ul>

1976 Graphene CVD growth on copper and nickel: role of hydrogen in kinetics and structure. <b>2011</b> , 13, 2	20836-43 324
1975 Graphene filled polymer nanocomposites. <b>2011</b> , 21, 3301-3310	596
1974 Liquid-phase exfoliation, functionalization and applications of graphene. <b>2011</b> , 3, 2118-26	241
1973 Thermally stable intermolecular proton bonds in polyaromatic aldehyde crystals. <b>2011</b> , 6, 2055-61	5
1972 Nanotube and Graphene Polymer Composites for Photonics and Optoelectronics. <b>2011</b> , 279-354	5
1971 Modulation of specific heat in graphene by uniaxial strain. <b>2011</b> , 84, 385-390	21
1970 Towards hybrid superlattices in graphene. <b>2011</b> , 2, 559	130
Controlled Growth of Multilayer, Few-Layer, and Single-Layer Graphene on Metal Substrates. <b>201</b> ° 115, 5232-5238	<b>1</b> ,
1968 Direct imaging of graphene edges: atomic structure and electronic scattering. <b>2011</b> , 11, 3663-8	82
1967 Role of hydrogen in chemical vapor deposition growth of large single-crystal graphene. <b>2011</b> , 5, 60	<b>069-76</b> 700
1966 Materials science. Local peeling of graphene. <b>2011</b> , 331, 1146-7	10
1965 Plasmon resonance enhanced multicolour photodetection by graphene. <b>2011</b> , 2, 579	546
Toward practical gas sensing with highly reduced graphene oxide: a new signal processing method to circumvent run-to-run and device-to-device variations. <b>2011</b> , 5, 1154-64	d 312
1963 Nanopatterning of fluorinated graphene by electron beam irradiation. <b>2011</b> , 11, 3912-6	159
1962 Electrochromic Materials. <b>2011</b> , 41, 241-268	422
1961 New directions in science and technology: two-dimensional crystals. <b>2011</b> , 74, 082501	185
Metallic few-layered VS2 ultrathin nanosheets: high two-dimensional conductivity for in-plane supercapacitors. <b>2011</b> , 133, 17832-8	886
1959 Zigzag graphene nanoribbon edge reconstruction with Stone-Wales defects. <b>2011</b> , 84,	60

1958	A highly practical route for large-area, single layer graphene from liquid carbon sources such as benzene and methanol. <b>2011</b> , 21, 16057	40
1957	Graphene Chemistry: Synthesis and Manipulation. <b>2011</b> , 2, 2425-2432	220
1956	Graphene-based hybrid materials and devices for biosensing. <b>2011</b> , 63, 1352-60	230
1955	Agglomeration effects of thin metal catalyst on graphene film synthesized by chemical vapor deposition. <b>2011</b> , 7, 261-264	15
1954	Sodium citrate: A universal reducing agent for reduction / decoration of graphene oxide with au nanoparticles. <b>2011</b> , 4, 599-611	137
1953	Graphene-CdSe nanobelt solar cells with tunable configurations. <b>2011</b> , 4, 891-900	56
1952	Fabrication of silver nanowire transparent electrodes at room temperature. <b>2011</b> , 4, 1215-1222	399
1951	Multiscale investigation of graphene layers on 6H-SiC(000-1). <b>2011</b> , 6, 171	13
1950	CVD growth and processing of graphene for electronic applications. <b>2011</b> , 248, 2604-2608	23
1949	Arrays of silicon micro/nanostructures formed in suspended configurations for deterministic assembly using flat and roller-type stamps. <b>2011</b> , 7, 484-91	51
1948	Spray deposition of highly transparent, low-resistance networks of silver nanowires over large areas. <b>2011</b> , 7, 2621-8	254
1947	Bottom-up preparation of porous metal-oxide ultrathin sheets with adjustable composition/phases and their applications. <b>2011</b> , 7, 3458-64	51
1946	Large-Scale Synthesis of Bi-layer Graphene in Strongly Coupled Stacking Order. <b>2011</b> , 21, 911-917	85
1945	Amplifying Charge-Transfer Characteristics of Graphene for Triiodide Reduction in Dye-Sensitized Solar Cells. <b>2011</b> , 21, 3729-3736	167
1944	Triangular Graphene Grain Growth on Cube-Textured Cu Substrates. <b>2011</b> , 21, 3868-3874	27
1943	Enhanced charge injection in pentacene field-effect transistors with graphene electrodes. <b>2011</b> , 23, 100-5	112
1942	Emerging transparent electrodes based on thin films of carbon nanotubes, graphene, and metallic nanostructures. <b>2011</b> , 23, 1482-513	1737
1941	Interface engineering of layer-by-layer stacked graphene anodes for high-performance organic solar cells. <b>2011</b> , 23, 1514-8	437

1940	Transparent flexible organic transistors based on monolayer graphene electrodes on plastic. <b>2011</b> , 23, 1752-6	175
1939	Reduced graphene oxide electrodes for large area organic electronics. <b>2011</b> , 23, 1558-62	83
1938	Ultra-transparent, flexible single-walled carbon nanotube non-volatile memory device with an oxygen-decorated graphene electrode. <b>2011</b> , 23, 1889-93	109
1937	The potential of perylene bisimide derivatives for the solubilization of carbon nanotubes and graphene. <b>2011</b> , 23, 2588-601	90
1936	Graphene as transparent electrode material for organic electronics. <b>2011</b> , 23, 2779-95	612
1935	Single-walled carbon nanotube aerogel-based elastic conductors. <b>2011</b> , 23, 2865-9	189
1934	Ordered zigzag stripes of polymer gel/metal nanoparticle composites for highly stretchable conductive electrodes. <b>2011</b> , 23, 2946-50	137
1933	Transparent conductive graphene films synthesized by ambient pressure chemical vapor deposition used as the front electrode of CdTe solar cells. <b>2011</b> , 23, 3202-6	123
1932	Low-power flexible organic light-emitting diode display device. <b>2011</b> , 23, 3511-6	294
1931	Nanoscale semiconductor "X" on substrate "Y"processes, devices, and applications. <b>2011</b> , 23, 3115-27	39
1930	Control of graphene field-effect transistors by interfacial hydrophobic self-assembled monolayers. <b>2011</b> , 23, 3460-4	119
1929	Enhanced differentiation of human neural stem cells into neurons on graphene. <b>2011</b> , 23, H263-7	542
1928	Silver nanowire-polymer composite electrodes for efficient polymer solar cells. <b>2011</b> , 23, 4453-7	288
1927	Site-specific transfer-printing of individual graphene microscale patterns to arbitrary surfaces. <b>2011</b> , 23, 3938-43	50
1926	The synthesis and coating of long, thin copper nanowires to make flexible, transparent conducting films on plastic substrates. <b>2011</b> , 23, 4798-803	432
1925	Flexible inorganic nanostructure light-emitting diodes fabricated on graphene films. <b>2011</b> , 23, 4614-9	186
1924	Transfer-free growth of few-layer graphene by self-assembled monolayers. <b>2011</b> , 23, 4392-7	75
1923	A versatile nanopatterning technique based on controlled undercutting and liftoff. <b>2011</b> , 23, 5039-44	11

1922	Graphene Based Materials: Enhancing Solar Energy Harvesting. <b>2011</b> , 1, 448-452	136
1921	Carbon Nanomaterials for Dye-Sensitized Solar Cell Applications: A Bright Future. <b>2011</b> , 1, 472-485	169
1920	Graphene and Related Materials in Electrochemical Sensing. <b>2011</b> , 23, 803-826	225
1919	Growth of Few-Layer Graphene on a Thin Cobalt Film on a Si/SiO2 Substrate. <b>2011</b> , 17, 9-14	35
1918	Amplified electrochemiluminescence of quantum dots by electrochemically reduced graphene oxide for nanobiosensing of acetylcholine. <b>2011</b> , 26, 4552-8	80
1917	Improved electrical and optical characteristics of transparent graphene thin films produced by acid and doping treatments. <b>2011</b> , 49, 2905-2916	74
1916	Radial followed by longitudinal unzipping of multiwalled carbon nanotubes. <b>2011</b> , 49, 3865-3872	28
1915	Solvothermal synthesis of homogeneous graphene dispersion with high concentration. <b>2011</b> , 49, 3920-3927	109
1914	Strain enhanced defect reactivity at grain boundaries in polycrystalline graphene. <b>2011</b> , 49, 3983-3988	69
1913	Synthesis of high-quality monolayer and bilayer graphene on copper using chemical vapor deposition. <b>2011</b> , 49, 4122-4130	247
1912	Chemical vapor deposition synthesis of graphene on copper with methanol, ethanol, and propanol precursors. <b>2011</b> , 49, 4204-4210	268
1911	Ultrafast modulation of optical transitions in monolayer and multilayer graphene. <b>2011</b> , 49, 4781-4785	24
1910	Interfacial electronic structures between fullerene and multilayer graphene for n-type organic semiconducting devices. <b>2011</b> , 49, 4936-4939	13
1909	The control of neural cell-to-cell interactions through non-contact electrical field stimulation using graphene electrodes. <b>2011</b> , 32, 19-27	173
1908	The production of oxygenated polycrystalline graphene by one-step ethanol-chemical vapor deposition. <b>2011</b> , 49, 3789-3795	33
1907	Graphene supercapacitor electrodes fabricated by inkjet printing and thermal reduction of graphene oxide. <b>2011</b> , 13, 355-358	330
1906	An in situ oxidation route to fabricate graphene nanoplateEnetal oxide composites. <b>2011</b> , 184, 1393-1399	22
1905	Fabrication of the metal nano pattern on plastic substrate using roll nanoimprint. <b>2011</b> , 88, 2149-2153	16

1904	Tuneable electronic properties in graphene. <b>2011</b> , 6, 42-60	233
1903	Monolayer graphene from a green solid precursor. <b>2011</b> , 43, 1490-1493	32
1902	Graphene based materials: Past, present and future. <b>2011</b> , 56, 1178-1271	2607
1901	Influence of copper crystal surface on the CVD growth of large area monolayer graphene. <b>2011</b> , 151, 509-513	175
1900	Electronic properties of grains and grain boundaries in graphene grown by chemical vapor deposition. <b>2011</b> , 151, 1100-1104	107
1899	Low friction and rotational dynamics of crystalline flakes in solid lubrication. <b>2011</b> , 95, 66002	29
1898	Ultra-thin membranes for sensor applications. <b>2011</b> , 330-354	4
1897	Step driven competitive epitaxial and self-limited growth of graphene on copper surface. <b>2011</b> , 1, 032145	19
1896	Chemistry: The trials of new carbon. <b>2011</b> , 469, 14-6	164
1895	Growth of graphene layers for thin films. <b>2011</b> , 211-227	
1894	Fabrication of a seamless roll mold using inorganic electron beam resist with postexposure bake. <b>2011</b> , 29, 06FC06	3
1893	Imaging charge density fluctuations in graphene using Coulomb blockade spectroscopy. <b>2011</b> , 83,	40
1892	Giant surface charge density of graphene resolved from scanning tunneling microscopy and first-principles theory. <b>2011</b> , 84,	19
1891	Doped graphene nanohole arrays for flexible transparent conductors. <b>2011</b> , 99, 023111	33
1890	Transparent interconnections formed by rapid single-step fabrication of graphene patterns. <b>2011</b> , 99, 053103	24
1889	Raman study on the interlayer interactions and the band structure of bilayer graphene synthesized by alcohol chemical vapor deposition. <b>2011</b> , 99, 151916	13
1888	Organic thin-film transistors with electron-beam cured and flash vacuum deposited polymeric gate dielectric. <b>2011</b> , 29, 052401	11
1887	High quality, transferrable graphene grown on single crystal Cu(111) thin films on basal-plane sapphire. <b>2011</b> , 98, 113117	103

1886	Graphene nanogap for gate-tunable quantum-coherent single-molecule electronics. <b>2011</b> , 84,	24
1885	Solution-processed transparent electrodes. <b>2011</b> , 36, 749-755	98
1884	Effective work function lowering of multilayer graphene films by subnanometer thick AlOx overlayers. <b>2011</b> , 98, 013505	27
1883	Fabrication and performance of graphene nanoelectromechanical systems. <b>2011</b> , 29, 050801	44
1882	Grids on TCOs for higly transparent materials with a resistivity below 1 Ohm/sq. 2011,	2
1881	A study of graphene films synthesized on nickel substrates: existence and origin of small-base-area peaks. <b>2011</b> , 22, 045706	24
1880	Unintentional doping induced splitting of G peak in bilayer graphene. <b>2011</b> , 99, 233110	13
1879	Impact of Plasma-Assisted Atomic-Layer-Deposited Gate Dielectric on Graphene Transistors. <b>2011</b> , 32, 473-475	33
1878	Commensurate-incommensurate phase transition in bilayer graphene. <b>2011</b> , 84,	63
1877	Prediction of quantization of magnetic flux in double-layer exciton superfluids. <b>2011</b> , 83,	7
1876	Multilayer epitaxial graphene formed by pyrolysis of polycrystalline silicon-carbide grown on c-plane sapphire substrates. <b>2011</b> , 98, 132108	13
1875	Polymer solar cells with gold nanoclusters decorated multi-layer graphene as transparent electrode. <b>2011</b> , 99, 223302	40
1874	Graphitized carbon on GaAs(100) substrates. <b>2011</b> , 98, 073113	3
1873	Correlation between structure and electrical transport in ion-irradiated graphene grown on Cu foils. <b>2011</b> , 98, 032102	47
1872	Graphene Growth from a Spin-Coated Polymer without a Reactive Gas. <b>2011</b> , 4, 065102	16
1871	Large Area Graphene on Polymer Films for Transparent and Flexible Field Emission Device. <b>2011</b> , 1283, 1	
1870	Progress in Oxide-Based Electrochromics: Towards Roll-to-Roll Manufacturing. <b>2011</b> , 1315, 1	1
1869	Transport properties of graphene with one-dimensional charge defects. <b>2011</b> , 94, 28003	45

1868 Laser direct writing of graphene patterns. 2011, 1365, 1

1867 Oxide-Based Electrochromics: Advances in Materials and Devices. <b>2011</b> , 1328, 20101	3
1866 CVD-Grown Graphene Solution-gated Field Effect Transistors for pH Sensing. <b>2011</b> , 1283, 1	2
Photo-electrical Effect of Pristine and Functionalized Graphene Grown by Chemical Vapor Deposition. <b>2011</b> , 1362, 1	
An investigation into graphene exfoliation and potential graphene application in MEMS devices. <b>2011</b> ,	
1863 Transparent active skin. <b>2011</b> ,	1
1862 Reviews of Science for Science Librarians: Graphene. <b>2011</b> , 30, 132-142	1
1861 A graphene-based microelectrode for recording neural signals. <b>2011</b> ,	6
1860 Transparent lithium-ion batteries. <b>2011</b> , 108, 13013-8	208
Printing of sub-20 nm wide graphene ribbon arrays using nanoimprinted graphite stamps and electrostatic force assisted bonding. <b>2011</b> , 22, 445301	18
HIGH FREQUENCY GRAPHENE TRANSISTORS USING LARGE-AREA CVD GRAPHENE AND ADVANCED DIELECTRICS. <b>2011</b> , 20, 669-677	1
Triplet states of zigzag edged hexagonal graphene molecules C(6m**2)H(6m) (m = 1, 2, 3,, 10) and carbon based magnetism. <b>2011</b> , 134, 124706	12
Communication: Stable carbon nanoarches in the initial stages of epitaxial growth of graphene on Cu(111). <b>2011</b> , 134, 171105	72
1855 Synthesis of Graphene Films on Copper Substrates by CVD of Different Precursors. <b>2012</b> , 109-118	O
Optimizing long-range order, band gap, and group velocities for graphene on close-packed metal surfaces. <b>2012</b> , 24, 314203	5
Growth Mechanism of a Hybrid Structure Consisting of a Graphite Layer on Top of Vertical Carbon Nanotubes. <b>2012</b> , 2012, 1-10	7
1852 Encyclopedia of Nanotechnology. <b>2012</b> , 2459-2459	
1851 Chromogenic Windows. <b>2012</b> , 77, 108-117	3

1850 Electrical Characterization of the Graphene-SiC Heterojunction. **2012**, 717-720, 641-644

1849 Graphene plasmons and retardation: Strong light-matter coupling. <b>2012</b> , 99, 27006	19
High-throughput creation of micropatterned PDMS surfaces using microscale dual roller casting. <b>2012</b> , 22, 115013	
$_{ m 1847}$ Reduced graphene oxide based flexible organic charge trap memory devices. <b>2012</b> , 101, 233308	44
1846 Graphene-based polymer waveguide polarizer. <b>2012</b> , 20, 3556-62	100
1845 Growth of CVD graphene on copper by rapid thermal processing. <b>2012</b> , 1451, 27-32	1
1844 Graphene-contact electrically driven microdisk lasers. <b>2012</b> , 3, 1123	29
Light-trapping design of graphene transparent electrodes for efficient thin-film silicon solar cells. <b>2012</b> , 51, 6245-51	5
High-precision thickness regulation of graphene layers with low energy helium plasma implantation. <b>2012</b> , 23, 375303	3
$_{1841}$ GraXe, graphene and xenon for neutrinoless double beta decay searches. <b>2012</b> , 2012, 037-037	4
1840 Gate tunable graphene-silicon Ohmic/Schottky contacts. <b>2012</b> , 101, 223113	37
1839 Effects of semiconductor processing chemicals on conductivity of graphene. <b>2012</b> , 30, 040602	6
Substrate-assisted nucleation of ultra-thin dielectric layers on graphene by atomic layer deposition. <b>2012</b> , 100, 173113	71
Shifting of surface plasmon resonance due to electromagnetic coupling between graphene and Au nanoparticles. <b>2012</b> , 20, 19690-6	36
Organic photovoltaic devices with low resistance multilayer graphene transparent electrodes. <b>2012</b> , 30, 050604	22
Effect of the polarity of carbon-fluorine bonds on the work function of plasma-fluorinated epitaxial graphene. <b>2012</b> , 101, 111602	25
Reduced electron back-injection in Al2O3/AlOx/Al2O3/graphene charge-trap memory devices. <b>2012</b> , 101, 243109	11
1833 Multilayered graphene anode for blue phosphorescent organic light emitting diodes. <b>2012</b> , 100, 133	304 54

### (2012-2012)

1832	Noncatalytic chemical vapor deposition of graphene on high-temperature substrates for transparent electrodes. <b>2012</b> , 100, 022102	61
1831	Homogeneous pinhole free 1 nm Al2O3 tunnel barriers on graphene. <b>2012</b> , 101, 203104	23
1830	Theory of the suspended graphene varactor. <b>2012</b> , 101, 153102	11
1829	Self-passivation of transparent single-walled carbon nanotube films on plastic substrates by microwave-induced rapid nanowelding. <b>2012</b> , 100, 163120	18
1828	Effect of charge-transfer complex on the energy level alignment between graphene and organic molecules. <b>2012</b> , 100, 183102	5
1827	Argon-assisted growth of epitaxial graphene on Cu(111). <b>2012</b> , 86,	41
1826	Graphene nano-, micro- and macro-photonics. 2012,	
1825	Flexible, transparent dielectric capacitors with nanostructured electrodes. <b>2012</b> , 101, 103106	33
1824	Ferromagnetism in a graphene nanoribbon with grain boundary defects. 2012, 86,	14
1823	First-principles analysis of photocurrent in graphene PN junctions. <b>2012</b> , 85,	67
1822	Time dependence of the position momentum and position velocity uncertainties in gapped graphene. <b>2012</b> , 85,	2
1821	Probing the experimental phonon dispersion of graphene using 12C and 13C isotopes. <b>2012</b> , 86,	24
1820	. 2012,	
1819	Electron localization in epitaxial graphene on Ru(0001) determined by moir[corrugation. 2012, 85,	31
1818	Organic nonvolatile memory devices with charge trapping multilayer graphene film. <b>2012</b> , 23, 105202	67
1817	Intraband conductivity response in graphene observed using ultrafast infrared-pump visible-probe spectroscopy. <b>2012</b> , 86,	32
1816	ZnO nanorod array based optoelectronic device with graphene as transparent electrode. 2012,	
1815	Investigation of the improved performance in a graphene/polycrystalline BiFeO3/Pt photovoltaic heterojunction: Experiment, modeling, and application. <b>2012</b> , 112, 054103	20

1814	Contactless impedance measurement of large-area high-quality graphene. 2012,	4
1813	Impact of post-growth thermal annealing and environmental exposure on the unintentional doping of CVD graphene films. <b>2012</b> , 30, 041213	36
1812	Graphene growth on a Pt(111) substrate by surface segregation and precipitation. <b>2012</b> , 23, 055704	29
1811	Large-area CVD graphene as transparent electrode for efficient organic solar cells. 2012,	2
1810	Bioinspired design of functionalised graphene. <b>2012</b> , 38, 695-703	14
1809	Graphene electrodes for organic metal-free light-emitting devices. <b>2012</b> , T146, 014023	12
1808	Design of tunable biperiodic graphene metasurfaces. <b>2012</b> , 86,	247
1807	Exploiting carbon flatland. <b>2011</b> , 11, 2-5	20
1806	Controllable Synthesis of High-Quality Graphene Using Inductively-Coupled Plasma Chemical Vapor Deposition. <b>2012</b> , 159, K93-K96	50
1805	Epitaxial growth of graphene on transition metal surfaces: chemical vapor deposition versus liquid phase deposition. <b>2012</b> , 24, 314204	30
1804	Tm-doped fiber laser mode-locked by graphene-polymer composite. <b>2012</b> , 20, 25077-84	233
1803	Graphene for future electronics. <b>2012</b> , T146, 014025	28
1802	Layer-by-layer assembled transparent conductive graphene films for solar cells application. <b>2012</b> , 1451, 75-81	
1801	Dry-Transfer of Aligned Multiwalled Carbon Nanotubes for Flexible Transparent Thin Films. <b>2012</b> , 2012, 1-8	13
1800	Large-scale Solution Processable Graphene-based Thin Film Devices. <b>2012</b> , 1407, 218	4
1799	Tailoring nanostructured catalysts for electrochemical energy conversion systems. <b>2012</b> , 1, 427-453	10
1798	Layer-by-Layer Assembled Transparent Conductive Graphene Films for Silicon Thin-Film Solar Cells. <b>2012</b> , 51, 11PF01	4
1797	Low-voltage graphene transistors based on self-assembled monolayer nanodielectrics. <b>2012</b> , 1451, 179-184	

1796	Experimental Review of Graphene. <b>2012</b> , 2012, 1-56	303
1795	Chemically modified multilayer graphene with metal interlayer as an efficient current spreading electrode for InGaN/GaN blue light-emitting diodes. <b>2012</b> , 45, 145101	32
1794	Low energy electron microscopy and photoemission electron microscopy investigation of graphene. <b>2012</b> , 24, 314209	14
1793	Low-Temperature Graphene Growth Originating at Crystalline Facets of Catalytic Metal. <b>2012</b> , 5, 025101	16
1792	Electronic transport anisotropy of buckling graphene under uniaxial compressive strain: Ab initio study. <b>2012</b> , 100, 052111	5
1791	Late news [breaker page]. 2012,	
1790	Communication: angle-resolved thermal dissociative sticking of CH4 on Pt(111): further indication that rotation is a spectator to the gas-surface reaction dynamics. <b>2012</b> , 136, 061101	10
1789	Effect of e-beam irradiation on graphene layer grown by chemical vapor deposition. <b>2012</b> , 111, 084307	33
1788	Molecular interactions on epitaxial graphene. <b>2012</b> , T146, 014007	7
1787	Graphene in plastic packages: A low cost construction method for resistive chemical sensors. <b>2012</b> , 1407, 157	1
1786	Different Characterization Techniques to Evaluate Graphene and Its Properties. <b>2012</b> , 95-138	1
1785	Towards transfer-free fabrication of graphene NEMS grown by chemical vapour deposition. <b>2012</b> , 7, 749	6
1784	Photonic Applications of Carbon Nanotube and Graphene. <b>2012</b> ,	1
1783	Patterning of graphene. <b>2012</b> , 4, 4883-99	93
1782	Seed concentration control of metal nanowire diameter. <b>2012</b> , 12, 5552-8	31
1781	Perspectives of applied graphene: Polymer solar cells. <b>2012</b> , 37, 1805-1828	127
1780	Graphene-based materials for energy applications. <b>2012</b> , 37, 1265-1272	113
1779	Defects and doping and their role in functionalizing graphene. <b>2012</b> , 37, 1187-1194	56

1778	Effect of domain boundaries on the Raman spectra of mechanically strained graphene. <b>2012</b> , 6, 10229-38	65
1777	Work-Function Decrease of Graphene Sheet Using Alkali Metal Carbonates. <b>2012</b> , 116, 26586-26591	80
1776	Domain formation on oxidized graphene. <b>2012</b> , 86,	33
1775	Defects and localization in chemically-derived graphene. <b>2012</b> , 86,	32
1774	Enhanced absorption of graphene with one-dimensional photonic crystal. <b>2012</b> , 101, 052104	163
1773	Tunable Doping in Graphene by Light-Switchable Molecules. <b>2012</b> , 116, 26102-26105	15
1772	Science and Engineering Beyond Moore's Law. <b>2012</b> , 100, 1720-1749	160
1771	Three-Dimensional Writing of Highly Stretchable Organic Nanowires <b>2012</b> , 1, 375-379	36
1770	Electronics and optoelectronics of two-dimensional transition metal dichalcogenides. <i>Nature Nanotechnology</i> , <b>2012</b> , 7, 699-712	10871
1769	Large-Area Synthesis of Graphene on Palladium and Their Raman Spectroscopy. <b>2012</b> , 116, 16412-16420	33
1768	Graphene-GaAs/AlxGa1⊠As heterostructure dual-function field-effect transistor. <b>2012</b> , 101, 202104	16
1767	Synthesis of transfer-free graphene on an insulating substrate using a solid phase reaction. <b>2012</b> , 4, 7791-6	19
1766	Graphene oxide as a monoatomic blocking layer. <b>2012</b> , 6, 8022-9	16
1765	Graphene-based Schottky junction solar cells. <b>2012</b> , 22, 24224	69
1764	Synthesis of a MnO2graphene foam hybrid with controlled MnO2 particle shape and its use as a supercapacitor electrode. <b>2012</b> , 50, 4865-4870	184
1763	Graphene for energy conversion and storage in fuel cells and supercapacitors. <b>2012</b> , 1, 534-551	548
1762	Hybrid Semiconductor Nanostructures with Graphene Layers. <b>2012</b> , 167-195	3
1761	Production: Beyond sticky tape. <b>2012</b> , 483, S32-3	48

1760 Material history: Learning from silicon. <b>2012</b> , 483, S43-4	26
1759 Growth and electronic structure of nitrogen-doped graphene on Ni(111). <b>2012</b> , 86,	73
1758 Resonant plasmonic effects in periodic graphene antidot arrays. <b>2012</b> , 101, 151119	120
1757 Synthesis of graphene by surface wave plasma chemical vapor deposition from camphor. <b>2012</b> , 209, 2510-25	13 <sub>14</sub>
1756 Electronic Transport in Graphene. <b>2012</b> , 17-49	
1755 Monolithic graphene transistor biointerface. <b>2012</b> , 2012, 5678	
Assembly of suspended graphene on carbon nanotube scaffolds with improved functionalities. <b>2012</b> , 5, 783-795	9
Facile synthesis of few-layer graphene with a controllable thickness using rapid thermal annealing. <b>2012</b> , 4, 1777-82	25
Quasi-periodic nanoripples in graphene grown by chemical vapor deposition and its impact on charge transport. <b>2012</b> , 6, 1158-64	111
1751 Graphene antidot lattice waveguides. <b>2012</b> , 86,	39
1750 Scattering by linear defects in graphene: A continuum approach. <b>2012</b> , 86,	19
1749 Encyclopedia of Nanotechnology. <b>2012</b> , 2429-2429	
1748 Synthesis of multilayer graphene balls by carbon segregation from nickel nanoparticles. <b>2012</b> , 6, 6803-11	145
Graphene as transparent conducting electrodes in organic photovoltaics: studies in graphene morphology, hole transporting layers, and counter electrodes. <b>2012</b> , 12, 133-40	269
1746 Insulating behavior of an amorphous graphene membrane. <b>2012</b> , 86,	30
1745 Large-area Bernal-stacked bi-, tri-, and tetralayer graphene. <b>2012</b> , 6, 9790-6	147
Temperature-dependent electrical properties of graphene inkjet-printed on flexible materials. <b>2012</b> , 28, 13467-72	170
Top illuminated inverted organic ultraviolet photosensors with single layer graphene electrodes.  2012, 101, 033302	8

1742	Optical Power Limiting in Fluorinated Graphene Oxide: An Insight into the Nonlinear Optical Properties. <b>2012</b> , 116, 25955-25961	101
1741	Modulation-doped growth of mosaic graphene with single-crystalline p-n junctions for efficient photocurrent generation. <b>2012</b> , 3, 1280	87
1740	Graphene cantilever beams for nano switches. <b>2012</b> , 101, 093111	39
1739	Synthesis of graphene-based nanomaterials and their application in energy-related and environmental-related areas. <b>2012</b> , 2, 9286	203
1738	Fabrication and Electrochemical Characterization of Single and Multi-Layer Graphene Anodes for Lithium-Ion Batteries. <b>2012</b> , 159, A752-A761	36
1737	Cutting forces related with lattice orientations of graphene using an atomic force microscopy based nanorobot. <b>2012</b> , 101, 213101	19
1736	Advances in the chemical modification of epitaxial graphene. <b>2012</b> , 45, 154009	93
1735	Extreme sensitivity of graphene photoconductivity to environmental gases. <b>2012</b> , 3, 1228	94
1734	Layer-by-layer graphene/TCNQ stacked films as conducting anodes for organic solar cells. <b>2012</b> , 6, 5031-9	187
1733	Past achievements and future challenges in the development of optically transparent electrodes. <b>2012</b> , 6, 809-817	1440
1733 1732		1440
1732	2012, 6, 809-817  Solution-gated graphene field effect transistors integrated in microfluidic systems and used for	
1732	2012, 6, 809-817  Solution-gated graphene field effect transistors integrated in microfluidic systems and used for flow velocity detection. 2012, 12, 1404-9	101
1732 1731	2012, 6, 809-817  Solution-gated graphene field effect transistors integrated in microfluidic systems and used for flow velocity detection. 2012, 12, 1404-9  A graphene field-effect capacitor sensor in electrolyte. 2012, 101, 154106	101
1732 1731 1730	Solution-gated graphene field effect transistors integrated in microfluidic systems and used for flow velocity detection. 2012, 12, 1404-9  A graphene field-effect capacitor sensor in electrolyte. 2012, 101, 154106  Catalytic Growth of Graphene: Toward Large-Area Single-Crystalline Graphene. 2012, 3, 2228-36  Highly transparent and conductive films of densely aligned ultrathin Au nanowire monolayers. 2012	101 22 120
1732 1731 1730 1729	2012, 6, 809-817  Solution-gated graphene field effect transistors integrated in microfluidic systems and used for flow velocity detection. 2012, 12, 1404-9  A graphene field-effect capacitor sensor in electrolyte. 2012, 101, 154106  Catalytic Growth of Graphene: Toward Large-Area Single-Crystalline Graphene. 2012, 3, 2228-36  Highly transparent and conductive films of densely aligned ultrathin Au nanowire monolayers. 2012, 12, 6066-70  Graphene decoration with metal nanoparticles: towards easy integration for sensing applications.	101 22 120 96
1732 1731 1730 1729 1728	2012, 6, 809-817  Solution-gated graphene field effect transistors integrated in microfluidic systems and used for flow velocity detection. 2012, 12, 1404-9  A graphene field-effect capacitor sensor in electrolyte. 2012, 101, 154106  Catalytic Growth of Graphene: Toward Large-Area Single-Crystalline Graphene. 2012, 3, 2228-36  Highly transparent and conductive films of densely aligned ultrathin Au nanowire monolayers. 2012, 12, 6066-70  Graphene decoration with metal nanoparticles: towards easy integration for sensing applications. 2012, 4, 438-40  Progress of graphene growth on copper by chemical vapor deposition: Growth behavior and	101 22 120 96 149

1724	Graphene field-effect transistors as room-temperature terahertz detectors. <b>2012</b> , 11, 865-71	725
1723	Toward the synthesis of wafer-scale single-crystal graphene on copper foils. <b>2012</b> , 6, 9110-7	488
1722	High quality 2D crystals made by anodic bonding: a general technique for layered materials. <b>2012</b> , 23, 505709	36
1721	Observations of Early Stage Graphene Growth on Copper. <b>2012</b> , 15, K1	28
1720	Interfacial coupling in rotational monolayer and bilayer graphene on Ru(0001) from first principles. <b>2012</b> , 4, 4687-93	18
1719	Non-Invasive High-Throughput Metrology of Functionalized Graphene Sheets. <b>2012</b> , 22, 4519-4525	12
1718	Encapsulating graphene by ultra-thin alumina for reducing process contaminations. <b>2012</b> , 249, 2526-2529	2
1717	Enhanced optical absorbance of CVD-graphene monolayer by combination with photonic crystal slab. <b>2012</b> , 249, 2530-2533	10
1716	KCl-assisted, chemically reduced graphene oxide for high-performance supercapacitor electrodes. <b>2012</b> , 16, 3635-3641	7
1715	Simulations of thermal conductance across tilt grain boundaries in graphene. <b>2012</b> , 28, 1528-1531	6
1714	Study of optical and electrical properties of ZnO/Cu/ZnO multilayers deposited on flexible substrate. <b>2012</b> , 525, 162-166	15
1713	Single-step formation of a graphene-metal hybrid transparent and electrically conductive film. <b>2012</b> , 23, 115301	6
1712	Controlled growth of carbon nanotube-graphene hybrid materials for flexible and transparent conductors and electron field emitters. <b>2012</b> , 4, 632-8	97
1711	Large-scale graphene micropatterns via self-assembly-mediated process for flexible device application. <b>2012</b> , 12, 743-8	63
1710	Fabrication of defrost films using graphenes grown by chemical vapor deposition. 2012, 12, S113-S117	21
1709	Stretchable electronics: materials, architectures and integrations. <b>2012</b> , 45, 103001	119
1708	Preparation, characterization and fundamental studies on graphenes by liquid-phase processing of graphite. <b>2012</b> , 536, S450-S455	14
1707	Fabrication of roll mold using electron-beam direct writing and metal lift-off process. <b>2012</b> , 97, 113-116	10

1706 Dynamic spin injection into chemical vapor deposited graphene. <b>2012</b> , 101, 162407	37
1705 Growth and electronic transport properties of epitaxial graphene on SiC. <b>2012</b> , 45, 154008	36
1704 Graphene Based Transparent Conductive Electrode. <b>2012</b> , 468-471, 1823-1826	0
Flexible and Transparent Memory: Non-Volatile Memory Based on Graphene Channel Transistor for Flexible and Transparent Electronics Applications. <b>2012</b> ,	1
ZnSe nanoribbon/Si nanowire pli heterojunction arrays and their photovoltaic application with graphene transparent electrodes. <b>2012</b> , 22, 22873	26
Atomic-scale study of scattering and electronic properties of CVD graphene grain boundaries. <b>2012</b> ,	1
Effective solvothermal deoxidization of graphene oxide using solid sulphur as a reducing agent. <b>2012</b> , 22, 14385	36
1699 Transparent and flexible graphene charge-trap memory. <b>2012</b> , 6, 7879-84	103
1698 Laser-assisted nanofabrication of carbon nanostructures. <b>2012</b> , 24, 042007	14
Ultrafast optical nonlinearity of multi-layered graphene synthesized by the interface growth process. <b>2012</b> , 23, 225706	10
1696 . <b>2012</b> ,	
1695 Knitted graphene-nanoribbon sheet: a mechanically robust structure. <b>2012</b> , 4, 785-91	16
Gate-controlled nonlinear conductivity of Dirac fermion in graphene field-effect transistors measured by terahertz time-domain spectroscopy. <b>2012</b> , 12, 551-5	142
1693 Analysis of an Ultrathin Graphite-Based Compact Heat Exchanger. <b>2012</b> , 33, 947-956	9
1692 High-quality GaN films grown on chemical vapor-deposited graphene films. <b>2012</b> , 4, e24-e24	85
1691 Tuning charge and spin excitations in zigzag edge nanographene ribbons. <b>2012</b> , 2, 519	42
1690 Arrays of vertically aligned tubular-structured graphene for flexible field emitters. <b>2012</b> , 22, 11277	17
Printable ultrathin substrates formed on a concavellonvex underlayer for highly flexible membrane-type electrode stickers. <b>2012</b> , 8, 7598	4

1688 Characterization of strain fields in graphene films. 2012,

Direct growth of nanographene films by surface wave plasma chemical vapor deposition and their application in photovoltaic devices. <b>2012</b> , 2, 3225	41
1686 Large-scale patterning by the roll-based evaporation-induced self-assembly. <b>2012</b> , 22, 22844	17
$_{1685}$ Three-dimensional nano-foam of few-layer graphene grown by CVD for DSSC. <b>2012</b> , 14, 7938-43	98
1684 . <b>2012</b> ,	3
Electron transparent graphene windows for environmental scanning electron microscopy in liquids and dense gases. <b>2012</b> , 23, 505704	43
High-density pattern transfer via roll-to-roll ultraviolet nanoimprint lithography using replica mold. <b>2012</b> , 30, 06FB07	11
Direct growth and patterning of multilayer graphene onto a targeted substrate without an external carbon source. <b>2012</b> , 4, 3663-6	17
1680 Graphene arrested in laponite-water colloidal glass. <b>2012</b> , 28, 4009-15	29
Local Growth of Graphene by Ion Implantation of Carbon in a Nickel Thin Film followed by Rapid  Thermal Annealing. <b>2012</b> , 159, G89-G92	18
Out-of-plane growth of CNTs on graphene for supercapacitor applications. <b>2012</b> , 23, 015301	123
Origin of the relatively low transport mobility of graphene grown through chemical vapor deposition. <b>2012</b> , 2, 337	148
Synthesis and characterization of hexagonal boron nitride film as a dielectric layer for graphene devices. <b>2012</b> , 6, 8583-90	388
1675 Photon-Assisted CVD Growth of Graphene Using Metal Adatoms As Catalysts. <b>2012</b> , 116, 18263-18269	3
Controlled nucleation and growth of graphene: Competitive growth and etching in hydrogen diluted methane. <b>2012</b> ,	1
Deciphering the uncertainties in life cycle energy and environmental analysis of organic photovoltaics. <b>2012</b> , 5, 9163	85
1672 Controllable gallium melt-assisted interfacial graphene growth on silicon carbide. <b>2012</b> , 24, 34-38	7
1671 Electronic transport and Raman scattering in size-controlled nanoperforated graphene. <b>2012</b> , 6, 9846-54	43

1670	On-surface formation of metal nanowire transparent top electrodes on CdSe nanowire array-based photoconductive devices. <b>2012</b> , 4, 3157-62	19
1669	Reduction of graphene damages during the fabrication of InGaN/GaN light emitting diodes with graphene electrodes. <b>2012</b> , 23, 425302	8
1668	Microlitre scale solution processing for controlled, rapid fabrication of chemically derived graphene thin films. <b>2012</b> , 22, 3606	46
1667	Tunable band gaps and p-type transport properties of boron-doped graphenes by controllable ion doping using reactive microwave plasma. <b>2012</b> , 6, 1970-8	206
1666	Scanning tunneling microscopy study of graphene on Au(111): Growth mechanisms and substrate interactions. <b>2012</b> , 85,	80
1665	Nanocomposites of reduced graphene oxide nanosheets and conducting polymer for stretchable transparent conducting electrodes. <b>2012</b> , 22, 23759	79
1664	Horizontally aligned ZnO nanowire transistors using patterned graphene thin films. <b>2012</b> , 100, 063112	17
1663	Graphene Growth from Spin-Coated Polymers without a Gas. <b>2012</b> , 51, 06FD01	
1662	Electronic noses for VOCs detection based on the nanoparticles hybridized graphene composites. <b>2012</b> ,	3
1661	Electrochemical Integration of Graphene with Light-Absorbing Copper-Based Thin Films. <b>2012</b> , 116, 1200-120	43
1661 1660	Direct growth of few-layer graphene films on SiO2 substrates and their photovoltaic applications	43 154
1660	Direct growth of few-layer graphene films on SiO2 substrates and their photovoltaic applications.	154
1660 1659	Direct growth of few-layer graphene films on SiO2 substrates and their photovoltaic applications. <b>2012</b> , 22, 411-416	154
1660 1659 1658	Direct growth of few-layer graphene films on SiO2 substrates and their photovoltaic applications. <b>2012</b> , 22, 411-416  The Role of Stable and Mobile Carbon Adspecies in Copper-Promoted Graphene Growth. <b>2012</b> , 116, 5802-580	154 964
1660 1659 1658	Direct growth of few-layer graphene films on SiO2 substrates and their photovoltaic applications. <b>2012</b> , 22, 411-416  The Role of Stable and Mobile Carbon Adspecies in Copper-Promoted Graphene Growth. <b>2012</b> , 116, 5802-580  Graphitic Carbon Growth on MgO(100) by Molecular Beam Epitaxy. <b>2012</b> , 116, 7380-7385	154 964 22
1660 1659 1658 1657	Direct growth of few-layer graphene films on SiO2 substrates and their photovoltaic applications. <b>2012</b> , 22, 411-416  The Role of Stable and Mobile Carbon Adspecies in Copper-Promoted Graphene Growth. <b>2012</b> , 116, 5802-580  Graphitic Carbon Growth on MgO(100) by Molecular Beam Epitaxy. <b>2012</b> , 116, 7380-7385  Transparent nanostructured electrode by centrifuge coating. <b>2012</b> ,  Nanoparticle-Assisted, Catalytic Etching of Carbon Surfaces as a Method to Manufacture	154 964 22
1660 1659 1658 1657	Direct growth of few-layer graphene films on SiO2 substrates and their photovoltaic applications.  2012, 22, 411-416  The Role of Stable and Mobile Carbon Adspecies in Copper-Promoted Graphene Growth. 2012, 116, 5802-580  Graphitic Carbon Growth on MgO(100) by Molecular Beam Epitaxy. 2012, 116, 7380-7385  Transparent nanostructured electrode by centrifuge coating. 2012,  Nanoparticle-Assisted, Catalytic Etching of Carbon Surfaces as a Method to Manufacture Nanogrooves. 2012, 116, 13693-13698  Templating Highly Crystalline Organic Semiconductors Using Atomic Membranes of Graphene at	154 964 22 1

1652	Nematic-Like Alignment in SWNT Thin Films from Aqueous Colloidal Suspensions. <b>2012</b> , 51, 10232-10237	22
1651	Low resistive transparent and flexible ZnO/Ag/ZnO/Ag/WO3 electrode for organic light-emitting diodes. <b>2012</b> , 13, 1654-1659	53
1650	Graphene for energy harvesting/storage devices and printed electronics. 2012, 10, 1-8	98
1649	Large-area graphene synthesis and its application to interface-engineered field effect transistors. <b>2012</b> , 152, 1350-1358	26
1648	Preservation of the Pt(100) surface reconstruction after growth of a continuous layer of graphene. <b>2012</b> , 606, 464-469	18
1647	Scalable synthesis of graphene on single crystal Ir(111) films. <b>2012</b> , 606, 1475-1480	28
1646	Effects of ambient conditions on the quality of graphene synthesized by chemical vapor deposition. <b>2012</b> , 86, 1867-1870	18
1645	Graphene for impedimetric biosensing. <b>2012</b> , 37, 12-21	125
1644	Integrated circuits based on bilayer MoSIL ransistors. <b>2012</b> , 12, 4674-80	1350
1643	Nanoscale investigation of charge transport at the grain boundaries and wrinkles in graphene film. <b>2012</b> , 23, 285705	26
1642	High-yield chemical vapor deposition growth of high-quality large-area AB-stacked bilayer graphene. <b>2012</b> , 6, 8241-9	215
1641	Radio frequency signal detection by ballistic transport in Y-shaped graphene nanoribbons. <b>2012</b> , 101, 013502	12
1640	Transport in nanoribbon interconnects obtained from graphene grown by chemical vapor deposition. <b>2012</b> , 12, 4424-30	87
1639	Optically Transparent and Flexible Graphene Reciprocal and Nonreciprocal Microwave Planar Components. <b>2012</b> , 22, 360-362	16
1638	Graphene on metal surfaces and its hydrogen adsorption: A meta-GGA functional study. <b>2012</b> , 86,	56
1637	Towards ubiquitous RF electronics based on graphene. <b>2012</b> ,	3
1636	Continuous mechanical exfoliation of graphene sheets via three-roll mill. <b>2012</b> , 22, 19625	99
1635	Low Partial Pressure Chemical Vapor Deposition of Graphene on Copper. <b>2012</b> , 11, 255-260	49

1634	Wetting transparency of graphene. <b>2012</b> , 11, 217-22	831
1633	Extremely efficient flexible organic light-emitting diodes with modified graphene anode. <b>2012</b> , 6, 105-110	1141
1632	Optical separation of mechanical strain from charge doping in graphene. <b>2012</b> , 3, 1024	638
1631	Chemical vapor deposition-derived graphene with electrical performance of exfoliated graphene. <b>2012</b> , 12, 2751-6	321
1630	Hydrogenation and fluorination of graphene models: analysis via the average local ionization energy. <b>2012</b> , 116, 8644-52	43
1629	Raman Spectroscopy as a Tool to Address Individual Graphene Layers in Few-Layer Graphene. <b>2012</b> , 116, 19046-19050	36
1628	3D graphene-cobalt oxide electrode for high-performance supercapacitor and enzymeless glucose detection. <b>2012</b> , 6, 3206-13	1371
1627	Coplanar-gate transparent graphene transistors and inverters on plastic. <b>2012</b> , 6, 8646-51	104
1626	Materials chemistry: carbon origami. <b>2012</b> , 486, 327-8	3
1625	Graphene conductance uniformity mapping. <b>2012</b> , 12, 5074-81	112
1625 1624	Graphene conductance uniformity mapping. 2012, 12, 5074-81  An aqueous solution process and subsequent UV treatment for highly transparent conductive ZnO films. 2012, 22, 20706	112 29
	An aqueous solution process and subsequent UV treatment for highly transparent conductive ZnO	
1624	An aqueous solution process and subsequent UV treatment for highly transparent conductive ZnO films. <b>2012</b> , 22, 20706  Effect of HNO3 functionalization on large scale graphene for enhanced tri-iodide reduction in	29
1624	An aqueous solution process and subsequent UV treatment for highly transparent conductive ZnO films. 2012, 22, 20706  Effect of HNO3 functionalization on large scale graphene for enhanced tri-iodide reduction in dye-sensitized solar cells. 2012, 22, 20490	29 92
1624 1623 1622	An aqueous solution process and subsequent UV treatment for highly transparent conductive ZnO films. 2012, 22, 20706  Effect of HNO3 functionalization on large scale graphene for enhanced tri-iodide reduction in dye-sensitized solar cells. 2012, 22, 20490  Transfer-free electrical insulation of epitaxial graphene from its metal substrate. 2012, 12, 4503-7	29 92 105 496
1624 1623 1622	An aqueous solution process and subsequent UV treatment for highly transparent conductive ZnO films. 2012, 22, 20706  Effect of HNO3 functionalization on large scale graphene for enhanced tri-iodide reduction in dye-sensitized solar cells. 2012, 22, 20490  Transfer-free electrical insulation of epitaxial graphene from its metal substrate. 2012, 12, 4503-7  Edge-carboxylated graphene nanosheets via ball milling. 2012, 109, 5588-93	29 92 105 496
1624 1623 1622 1621	An aqueous solution process and subsequent UV treatment for highly transparent conductive ZnO films. 2012, 22, 20706  Effect of HNO3 functionalization on large scale graphene for enhanced tri-iodide reduction in dye-sensitized solar cells. 2012, 22, 20490  Transfer-free electrical insulation of epitaxial graphene from its metal substrate. 2012, 12, 4503-7  Edge-carboxylated graphene nanosheets via ball milling. 2012, 109, 5588-93  Thermal Oxidation and Unwrinkling of Chemical Vapor Deposition-Grown Graphene. 2012, 116, 20600-20606  UV induced formation of transparent AuAg nanowire mesh film for repairable OLED devices. 2012,	29 92 105 496

1616 Spectrally wide-band terahertz wave modulator based on optically tuned graphene. <b>2012</b> , 6, 9118-24	195
Self-assembly and photopolymerization of sub-2 nm one-dimensional organic nanostructures on graphene. <b>2012</b> , 134, 16759-64	58
1614 Graphene hyperlens for terahertz radiation. <b>2012</b> , 86,	74
Very long Ag nanowire synthesis and its application in a highly transparent, conductive and flexible metal electrode touch panel. <b>2012</b> , 4, 6408-14	581
1612 Highly transparent nonvolatile resistive memory devices from silicon oxide and graphene. <b>2012</b> , 3, 1101	146
$_{1611}$ All graphene-based thin film transistors on flexible plastic substrates. <b>2012</b> , 12, 3472-6	198
1610 A facile route to recover intrinsic graphene over large scale. <b>2012</b> , 6, 7781-8	68
1609 Kinetic control of catalytic CVD for high-quality graphene at low temperatures. <b>2012</b> , 6, 9996-10003	141
1608 A roadmap for graphene. <b>2012</b> , 490, 192-200	6640
1607 Graphene transfer: key for applications. <b>2012</b> , 4, 5527-37	252
	352
1606 On the nucleation of graphene by chemical vapor deposition. <b>2012</b> , 36, 73-77	14
On the nucleation of graphene by chemical vapor deposition. <b>2012</b> , 36, 73-77  Optical and structural properties of ZnO nanorods grown on graphene oxide and reduced graphene oxide film by hydrothermal method. <b>2012</b> , 258, 3109-3114	
Optical and structural properties of ZnO nanorods grown on graphene oxide and reduced graphene	14
Optical and structural properties of ZnO nanorods grown on graphene oxide and reduced graphene oxide film by hydrothermal method. <b>2012</b> , 258, 3109-3114  A facile and efficient approach to decoration of graphene nanosheets with gold nanoparticles.	14 57
Optical and structural properties of ZnO nanorods grown on graphene oxide and reduced graphene oxide film by hydrothermal method. <b>2012</b> , 258, 3109-3114  A facile and efficient approach to decoration of graphene nanosheets with gold nanoparticles. <b>2012</b> , 258, 5348-5353  Ga-doped ZnO films deposited with varying sputtering powers and substrate temperatures by	14 57 39
Optical and structural properties of ZnO nanorods grown on graphene oxide and reduced graphene oxide film by hydrothermal method. 2012, 258, 3109-3114  A facile and efficient approach to decoration of graphene nanosheets with gold nanoparticles. 2012, 258, 5348-5353  Ga-doped ZnO films deposited with varying sputtering powers and substrate temperatures by pulsed DC magnetron sputtering and their property improvement potentials. 2012, 258, 6537-6544  Controllable electrochemical synthesis of ZnO nanorod arrays on flexible ITO/PET substrate and	14 57 39 25
Optical and structural properties of ZnO nanorods grown on graphene oxide and reduced graphene oxide film by hydrothermal method. 2012, 258, 3109-3114  A facile and efficient approach to decoration of graphene nanosheets with gold nanoparticles. 2012, 258, 5348-5353  Ga-doped ZnO films deposited with varying sputtering powers and substrate temperatures by pulsed DC magnetron sputtering and their property improvement potentials. 2012, 258, 6537-6544  Controllable electrochemical synthesis of ZnO nanorod arrays on flexible ITO/PET substrate and their structural and optical properties. 2012, 259, 99-104	14 57 39 25 29

1598	Metal-to-Multilayer-Graphene Contact Part I: Contact Resistance Modeling. 2012, 59, 2444-2452	56
1597	Graphene-Supported High-Resolution TEM and STEM Imaging of Silicon Nanocrystals and their Capping Ligands. <b>2012</b> , 116, 22463-22468	64
1596	Transfer printing techniques for materials assembly and micro/nanodevice fabrication. 2012, 24, 5284-318	572
1595	Graphene: an emerging electronic material. <b>2012</b> , 24, 5782-825	603
1594	Graphene-based electrodes. <b>2012</b> , 24, 5979-6004	756
1593	Thermoacoustic sound generation from monolayer graphene for transparent and flexible sound sources. <b>2012</b> , 24, 6342-7	111
1592	New routes to graphene, graphene oxide and their related applications. <b>2012</b> , 24, 4924-55	282
1591	All-solution-processed flexible thin film piezoelectric nanogenerator. <b>2012</b> , 24, 6022-7	118
1590	Centimeter-sized dried foam films of graphene: preparation, mechanical and electronic properties. <b>2012</b> , 24, 6229-33	35
1589	Modular construction and deconstruction of organic solar cells. <b>2012</b> , 58, 3280-3288	6
1588	Copper-alloyed ZnS as a p-type transparent conducting material. <b>2012</b> , 209, 2101-2107	62
1587	High-throughput arrays for rapid characterization of solution-processable transparent conducting electrodes. <b>2012</b> , 8, 3746-51	7
1586	Junction investigation of graphene/silicon Schottky diodes. <b>2012</b> , 7, 302	67
1585	Low-temperature synthesis of multilayer graphene/amorphous carbon hybrid films and their potential application in solar cells. <b>2012</b> , 7, 453	39
1584	Flexible, transparent electrodes using carbon nanotubes. <b>2012</b> , 7, 571	32
1583	Investigation of electronic properties of graphene/Si field-effect transistor. <b>2012</b> , 7, 677	10
1582	Growth structure and work function of bilayer graphene on Pd(111). <b>2012</b> , 85,	35
1581	Mechanism of non-metal catalytic growth of graphene on silicon. <b>2012</b> , 100, 231604	38

1580	Direct exfoliation of graphite with a porphyrincreating functionalizable nanographene hybrids. <b>2012</b> , 48, 8745-7	51
1579	NANOPOROUS MEMBRANE FOR BIOSENSING APPLICATIONS. <b>2012</b> , 02, 1230003	9
1578	Direct Chemical Vapor Deposition of Large-Area Carbon Thin Films on Gallium Nitride for Transparent Electrodes: A First Attempt. <b>2012</b> , 25, 494-501	20
1577	Transparent, Conductive, and Flexible Multiwalled Carbon Nanotube/Graphene Hybrid Electrodes with Two Three-Dimensional Microstructures. <b>2012</b> , 116, 4970-4978	97
1576	Multiple-bilayered RGOporphyrin films: from preparation to application in photoelectrochemical cells. <b>2012</b> , 22, 18879	40
1575	Topological insulator nanostructures for near-infrared transparent flexible electrodes. <b>2012</b> , 4, 281-6	270
1574	Reversibly light-modulated dirac point of graphene functionalized with spiropyran. <b>2012</b> , 6, 9207-13	72
1573	Graphene and Its Synthesis. <b>2012</b> , 415-438	5
1572	Graphenes in Supramolecular Gels and in Biological Systems. <b>2012</b> , 339-372	1
1571	Roll-to-Roll Graphene Synthesis by Using Microwave Plasma Chemical Vapor Deposition at Low Temperature. <b>2012</b> , 1401, 20	1
1570	Ultrafast hot-carrier-dominated photocurrent in graphene. <i>Nature Nanotechnology</i> , <b>2012</b> , 7, 114-8 28.7	312
1569	Graphene on metallic surfaces: problems and perspectives. <b>2012</b> , 14, 13502-14	144
1568	Low temperature plasma-mediated synthesis of graphene nanosheets for supercapacitor electrodes. <b>2012</b> , 22, 6061	51
1567	Pump-Probe Spectroscopy at Terahertz Frequencies. <b>2012</b> , 251-271	1
1566	Evaluation of solution-processable carbon-based electrodes for all-carbon solar cells. <b>2012</b> , 6, 10384-95	142
1565	Functionalization of graphene: covalent and non-covalent approaches, derivatives and applications. <b>2012</b> , 112, 6156-214	3041
1564	Electronic properties of graphene: a perspective from scanning tunneling microscopy and magnetotransport. <b>2012</b> , 75, 056501	180
1563	Carbon Nanomaterials: From Therapeutics to Regenerative Medicine. <b>2012</b> , 02,	3

1562 Encyclopedia of Nanotechnology. **2012**, 2437-2437

1561	The application of highly doped single-layer graphene as the top electrodes of semitransparent organic solar cells. <b>2012</b> , 6, 810-8	270
1560	CVD growth of large area and uniform graphene on tilted copper foil for high performance flexible transparent conductive film. <b>2012</b> , 22, 18283	58
1559	Facile conversion of a cellulose acetate laminate film to graphene by a lamination process and post-annealing. <b>2012</b> , 22, 20026	15
1558	Water desalination: Graphene cleans up water. <i>Nature Nanotechnology</i> , <b>2012</b> , 7, 552-4 28.7	185
1557	. 2012,	3
1556	A facile method to observe graphene growth on copper foil. <b>2012</b> , 23, 475705	30
1555	Graphene Growth by CVD Methods. <b>2012</b> , 167-203	7
1554	Improved electrical conductivity of graphene films integrated with metal nanowires. 2012, 12, 5679-83	263
1553	Kinetics of low-pressure, low-temperature graphene growth: toward single-layer, single-crystalline structure. <b>2012</b> , 6, 10276-86	50
1552	Graphene and Carbon Nanotube Applications in Mobile Devices. <b>2012</b> , 59, 2876-2887	12
1551	Thermal stability of multilayer graphene films synthesized by chemical vapor deposition and stained by metallic impurities. <b>2012</b> , 23, 075702	45
1550	Hot phonon dynamics in graphene. <b>2012</b> , 12, 5495-9	49
1549	Electrical transport in suspended and double gated trilayer graphene. <b>2012</b> , 100, 013114	32
1548	Elastic fields and moduli in defected graphene. <b>2012</b> , 24, 104020	35
1547	Transfer-free fabrication of suspended graphene grown by chemical vapor deposition. 2012,	3
1546	CNT/conducting polymer composite conductors impart high flexibility to textile electroluminescent devices. <b>2012</b> , 22, 1598-1605	41
1545	Nano-branched transparent conducting oxides: beyond the brittleness limit for flexible electrode applications. <b>2012</b> , 4, 6831-4	30

1544	Graphene Thickness Control via Gas-Phase Dynamics in Chemical Vapor Deposition. <b>2012</b> , 116, 10557-10562	59
1543	Near-field microwave scanning probe imaging of conductivity inhomogeneities in CVD graphene. <b>2012</b> , 23, 385706	40
1542	Graphene for Stretchable Electronics. <b>2012</b> , 41-80	2
1541	Facile synthesis of Ag interlayer doped graphene by chemical vapor deposition using polystyrene as solid carbon source. <b>2012</b> , 4, 2041-7	66
1540	Production and processing of graphene and 2d crystals. <b>2012</b> , 15, 564-589	745
1539	Highly conductive PEDOT:PSS electrode by simple film treatment with methanol for ITO-free polymer solar cells. <b>2012</b> , 5, 9662	589
1538	Intercalation of Transition Metals into Stacked Benzene Rings: A Model Study of the Intercalation of Transition Metals into Bilayered Graphene. <b>2012</b> , 8, 99-105	34
1537	. <b>2012</b> , 33, 1610-1612	9
1536	Graphene-based flexible and stretchable thin film transistors. <b>2012</b> , 4, 4870-82	125
1535	Facile method for the preparation of water dispersible graphene using sulfonated poly(ether-ether-ketone) and its application as energy storage materials. <b>2012</b> , 28, 9825-33	76
1534	The Parameter Space of Graphene Chemical Vapor Deposition on Polycrystalline Cu. <b>2012</b> , 116, 22492-22501	137
1533	Graphene for radio frequency electronics. <b>2012</b> , 15, 328-338	88
1532	Chitosan-Modified Graphene Electrodes for DNA Mutation Analysis. <b>2012</b> , 686, 69-72	39
1531	Structural transformations in chemically modified graphene. <b>2012</b> , 152, 1990-1998	8
1530	Macroporous foam of reduced graphene oxides prepared by lyophilization. <b>2012</b> , 47, 4335-4339	16
1529	Graphene-based multilayers: Critical evaluation of materials assembly techniques. <b>2012</b> , 7, 430-447	112
1528	Mechanical exfoliation of epitaxial graphene on Ir(111) enabled by Br2 intercalation. 2012, 24, 314208	11
1527	Graphene Electronics for RF Applications. <b>2012</b> , 13, 114-125	27

1526	Domain Structure and Boundary in Single-Layer Graphene Grown on Cu(111) and Cu(100) Films. <b>2012</b> , 3, 219-226	186
1525	Electrophoretic deposition of high quality transparent conductive graphene films on insulating glass substrates. <b>2012</b> , 352, 012003	11
1524	Synthesis of conducting transparent few-layer graphene directly on glass at 450 °C. <b>2012</b> , 23, 265603	17
1523	Encyclopedia of Nanotechnology. <b>2012</b> , 2420-2420	
1522	Decoupling of CVD graphene by controlled oxidation of recrystallized Cu. <b>2012</b> , 2, 3008	69
1521	Ordered ZnO nanorods-based heterojunction light-emitting diodes with graphene current spreading layer. <b>2012</b> , 101, 121104	28
1520	Organic-free suspension of large-area graphene. <b>2012</b> , 101, 033104	8
1519	Selective graphene formation on copper twin crystals. <b>2012</b> , 134, 12492-8	56
1518	Effects of ultra-violet laser irradiation on graphene. <b>2012</b> , 97, 144-146	12
1517	Graphene growth on metal surfaces. <b>2012</b> , 37, 1158-1165	74
1516	Electrical characterization of graphene synthesized by chemical vapor deposition using Ni substrate. <b>2012</b> , 23, 015701	16
1515	A facile synthetic route for well defined multilayer films of graphene and PEDOTvia an electrochemical method. <b>2012</b> , 22, 1899-1903	40
1514	Graphene on Rh(111): Scanning tunneling and atomic force microscopies studies. 2012, 100, 241606	88
1513	Monolayer graphene growth on Ni(111) by low temperature chemical vapor deposition. <b>2012</b> , 100, 021601	150
1512	Direct visualization of large-area graphene domains and boundaries by optical birefringency.  Nature Nanotechnology, <b>2011</b> , 7, 29-34	202
1511	Sub-ppt gas detection with pristine graphene. <b>2012</b> , 101, 053119	132
1510	Electrowetting on dielectric experiments using graphene. <b>2012</b> , 23, 375501	21
1509	Electron-electron interaction in the magnetoresistance of graphene. <b>2012</b> , 108, 106601	69

1508	Thinning segregated graphene layers on high carbon solubility substrates of rhodium foils by tuning the quenching process. <b>2012</b> , 6, 10581-9	57
1507	Encyclopedia of Nanotechnology. <b>2012</b> , 2639-2648	
1506	Synthesis of large-area graphene on molybdenum foils by chemical vapor deposition. <b>2012</b> , 50, 5226-5231	38
1505	Chemistry and physics of a single atomic layer: strategies and challenges for functionalization of graphene and graphene-based materials. <b>2012</b> , 41, 97-114	432
1504	Breakdown in the wetting transparency of graphene. <b>2012</b> , 109, 176101	268
1503	Electron transport properties of carbon nanotubegraphene contacts. <b>2012</b> , 101, 153501	34
1502	Encyclopedia of Nanotechnology. <b>2012</b> , 2583-2591	
1501	Extraordinary epitaxial alignment of graphene islands on Au(111). <b>2012</b> , 14, 053008	67
1500	Site-specific stamping of graphene micro-patterns over large areas using flexible stamps. <b>2012</b> , 23, 235603	2
1499	Nanostructured arrays of stacked graphene sheets. <b>2012</b> , 23, 415302	7
1498	SOLUTION PROCESSED GRAPHENE THIN FILMS AND THEIR APPLICATIONS IN ORGANIC SOLAR CELLS. <b>2012</b> , 26, 1242004	7
1497	A high performance PZT ribbon-based nanogenerator using graphene transparent electrodes. <b>2012</b> , 5, 8970	142
1496	Layered Structures of Interfacial Water and Their Effects on Raman Spectra in Graphene-on-Sapphire Systems. <b>2012</b> , 116, 10084-10089	46
1495	Macroscopic Single-Domain Graphene Growth on Polycrystalline Nickel Surface. <b>2012</b> , 5, 035501	18
1494	Graphene as a Highly Efficient Template for Growing One-Dimensional RuO2 Nanostructures. <b>2012</b> , 12, 3829-3833	7
1493	MoleculeBubstrate Coupling between Metal Phthalocyanines and Epitaxial Graphene Grown on Ru(0001) and Pt(111). <b>2012</b> , 116, 14052-14056	68
1492	Synthesis of graphene and derivatives. <b>2012</b> , 2, 105-127	3
1491	Encyclopedia of Nanotechnology. <b>2012</b> , 2471-2487	2

1490	Epitaxial growth of Btacked perfluoropentacene on graphene-coated quartz. 2012, 6, 10874-83	96
1489	Twinning and twisting of tri- and bilayer graphene. <b>2012</b> , 12, 1609-15	194
1488	Enhancing gas induced charge doping in graphene field effect transistors by non-covalent functionalization with polyethyleneimine. <b>2012</b> , 100, 113106	7
1487	Chemical vapor deposition of graphene on copper at reduced temperatures. 2012,	2
1486	Laser-induced etching of few-layer graphene synthesized by Rapid-Chemical Vapour Deposition on Cu thin films. <b>2012</b> , 1, 52	8
1485	Graphene-based ambipolar electronics for radio frequency applications. <b>2012</b> , 57, 2956-2970	18
1484	Unique synthesis of graphene-based materials for clean energy and biological sensing applications. <b>2012</b> , 57, 3000-3009	18
1483	Wafer-scale graphene on 2 inch SiC with uniform structural and electrical characteristics. <b>2012</b> , 57, 3022-3025	7
1482	Two-dimensional crystals-based heterostructures: materials with tailored properties. <b>2012</b> , T146, 014006	226
1481	Impurities in graphenes and carbon nanotubes and their influence on the redox properties. <b>2012</b> , 3, 3347	101
1480	Monolayer graphene growth using additional etching process in atmospheric pressure chemical vapor deposition. <b>2012</b> , 50, 5203-5209	42
1479	Nanorobotic transfer and characterization of graphene flakes. <b>2012</b> ,	3
1478	Liquid phase growth of graphene on silicon carbide. <b>2012</b> , 50, 5076-5084	14
1477	Carbon nanotube and graphene for photonic and optoelectronic applications. 2012,	
1476	Realization of transparent and flexible capacitors using reliable graphene electrodes. 2012, 2, 5214	8
1475	Graphene induced tunability of the surface plasmon resonance. <b>2012</b> , 100, 061116	84
1474	Improved graphene growth and fluorination on Cu with clean transfer to surfaces. 2012,	2
1473	Effect of uni-axial strain on THz/far-infrared response of graphene. <b>2012</b> , 100, 041910	7

1472	Multivariable passive RFID vapor sensors: roll-to-roll fabrication on a flexible substrate. <b>2012</b> , 137, 2777-81	40
1471	Homogeneous bilayer graphene film based flexible transparent conductor. <b>2012</b> , 4, 639-44	43
1470	Direct measurement of adhesion energy of monolayer graphene as-grown on copper and its application to renewable transfer process. <b>2012</b> , 12, 1448-52	301
1469	Electronic Properties of Transparent Conductive Films of PEDOT:PSS on Stretchable Substrates. <b>2012</b> , 24, 373-382	422
1468	Low temperature growth of graphene film by microwave assisted surface wave plasma CVD for transparent electrode application. <b>2012</b> , 2, 2815	68
1467	Water-gated charge doping of graphene induced by mica substrates. <b>2012</b> , 12, 648-54	146
1466	Size-selected epitaxial nanoislands underneath graphene moir on Rh(111). 2012, 6, 151-8	97
1465	Multi-scale graphene patterns on arbitrary substrates via laser-assisted transfer-printing process. <b>2012</b> , 101, 043110	20
1464	Light-driven reversible modulation of doping in graphene. <b>2012</b> , 12, 182-7	167
1463	Excitation of surface electromagnetic waves in a graphene-based Bragg grating. <b>2012</b> , 2, 737	85
1462	Molecular Dynamics Simulations of Ion-Bombarded Graphene. <b>2012</b> , 116, 4044-4049	42
1461	Photochemical oxidation of CVD-grown single layer graphene. <b>2012</b> , 23, 355703	48
1460	Novel characteristics of a line source radiation on top of a grounded slab covered with a graphene sheet. <b>2012</b> ,	1
1459	Enhanced electrochemical expansion of graphite for in situ electrochemical functionalization. <b>2012</b> , 134, 17896-9	138
1458	Layer number and stacking sequence imaging of few-layer graphene by transmission electron microscopy. <b>2012</b> , 12, 4635-41	51
1457	Highly selective CO2 capture on N-doped carbon produced by chemical activation of polypyrrole functionalized graphene sheets. <b>2012</b> , 48, 735-7	297
1456	Transparent electrodes fabricated via the self-assembly of silver nanowires using a bubble template. <b>2012</b> , 28, 9298-302	79
1455	Work-function-tuned multilayer graphene as current spreading electrode in blue light-emitting diodes. <b>2012</b> , 100, 023502	44

1454	Removal of Cu(II) and fulvic acid by graphene oxide nanosheets decorated with Fe3O4 nanoparticles. <b>2012</b> , 4, 4991-5000	430
1453	Direct optical characterization of graphene growth and domains on growth substrates. <b>2012</b> , 2, 707	120
1452	Cleaning graphene using atomic force microscope. <b>2012</b> , 111, 064904	51
1451	Towards industrial applications of graphene electrodes. <b>2012</b> , T146, 014024	117
1450	Encyclopedia of Nanotechnology. <b>2012</b> , 2451-2451	
1449	Adsorption Behaviors of Graphene and Graphene-related Materials. <b>2012</b> , 435-467	1
1448	Mechanical and environmental stability of polymer thin-film-coated graphene. <b>2012</b> , 6, 2096-103	57
1447	Electroactive and biocompatible hydroxyl- functionalized graphene by ball milling. <b>2012</b> , 22, 8367	82
1446	Multifunctional graphene woven fabrics. <b>2012</b> , 2, 395	139
1445	Self-aligned fabrication of graphene RF transistors with T-shaped gate. <b>2012</b> , 6, 3371-6	54
	Self-aligned fabrication of graphene RF transistors with T-shaped gate. <b>2012</b> , 6, 3371-6  A computational study of graphene silicon contact. <b>2012</b> , 112, 104502	<ul><li>54</li><li>7</li></ul>
1444	A computational study of graphene silicon contact. <b>2012</b> , 112, 104502	
1444	A computational study of graphene silicon contact. <b>2012</b> , 112, 104502  The facile transferral of graphene onto interdigitated electrodes for sensing applications. <b>2012</b> ,	7
1444 1443 1442	A computational study of graphene silicon contact. <b>2012</b> , 112, 104502  The facile transferral of graphene onto interdigitated electrodes for sensing applications. <b>2012</b> ,  COMPUTATIONAL SIMULATIONS OF NANOSTRUCTURED SOLAR CELLS. <b>2012</b> , 02, 1230007  Step-templated CVD growth of aligned graphene nanoribbons supported by a single-layer	7
1444 1443 1442	A computational study of graphene silicon contact. <b>2012</b> , 112, 104502  The facile transferral of graphene onto interdigitated electrodes for sensing applications. <b>2012</b> ,  COMPUTATIONAL SIMULATIONS OF NANOSTRUCTURED SOLAR CELLS. <b>2012</b> , 02, 1230007  Step-templated CVD growth of aligned graphene nanoribbons supported by a single-layer graphene film. <b>2012</b> , 4, 5178-82	7 3 19
1444 1443 1442 1441 1440	A computational study of graphene silicon contact. 2012, 112, 104502  The facile transferral of graphene onto interdigitated electrodes for sensing applications. 2012,  COMPUTATIONAL SIMULATIONS OF NANOSTRUCTURED SOLAR CELLS. 2012, 02, 1230007  Step-templated CVD growth of aligned graphene nanoribbons supported by a single-layer graphene film. 2012, 4, 5178-82  Tunable shrink induced graphene composites for chemical sensors and microfluidics. 2012,	7 3 19

1436	Carbon Based Materials on SiC for Advanced Biomedical Applications. <b>2012</b> , 431-458	5
1435	Solvothermal Synthesis of Nitrogen-Containing Graphene for Electrochemical Oxygen Reduction in Acid Media. <b>2012</b> , 10, 29-32	15
1434	High open-circuit voltage of graphene-based photovoltaic cells modulated by layer-by-layer transfer. <b>2012</b> , 44, 744-748	1
1433	Domain structures of single layer graphene imaged with conductive probe atomic force microscopy. <b>2012</b> , 44, 768-771	16
1432	Flexible field emission from thermally welded chemically doped graphene thin films. 2012, 8, 272-80	28
1431	Electrical probing of submicroliter liquid using graphene strip transistors built on a nanopipette. <b>2012</b> , 8, 43-6	31
1430	Transparente leitfflige Elektroden. <b>2012</b> , 24, 24-31	1
1429	Carbon nanomaterials for advanced energy conversion and storage. <b>2012</b> , 8, 1130-66	1149
1428	Growth, characterization, and properties of nanographene. <b>2012</b> , 8, 1429-35	77
1427	High-efficiency and room-temperature reduction of graphene oxide: a facile green approach towards flexible graphene films. <b>2012</b> , 8, 1180-4, 1124	35
1426	The removal of single layers from multi-layer graphene by low-energy electron stimulation. <b>2012</b> , 8, 1066-72	8
1425	Large-area vapor-phase growth and characterization of MoS(2) atomic layers on a SiO(2) substrate. <b>2012</b> , 8, 966-71	1394
1424	Real-time microscopy of graphene growth on epitaxial metal films: role of template thickness and strain. <b>2012</b> , 8, 2250-7	19
1423	Hybrid graphene-quantum dot phototransistors with ultrahigh gain. <i>Nature Nanotechnology</i> , <b>2012</b> , 7, 363-8	1588
1422	Microcavity-integrated graphene photodetector. <b>2012</b> , 12, 2773-7	623
1421	Graphene-ferroelectric hybrid structure for flexible transparent electrodes. <b>2012</b> , 6, 3935-42	156
1420	Flexible transparent PES/silver nanowires/PET sandwich-structured film for high-efficiency electromagnetic interference shielding. <b>2012</b> , 28, 7101-6	214
1419	Vertical conduction mechanism of the epitaxial graphene/n-type 4H-SiC heterojunction at cryogenic temperatures. <b>2012</b> , 100, 193506	12

1418	Graphene barristor, a triode device with a gate-controlled Schottky barrier. <b>2012</b> , 336, 1140-3	748
1417	Non-oxide boost. <b>2012</b> , 6, 72-73	14
1416	Nanoelectromechanical contact switches. <i>Nature Nanotechnology</i> , <b>2012</b> , 7, 283-95	7 288
1415	Metal-graphene-metal sandwich contacts for enhanced interface bonding and work function control. <b>2012</b> , 6, 5381-7	99
1414	The shear mode of multilayer graphene. <b>2012</b> , 11, 294-300	482
1413	Inkjet-printed graphene electronics. <b>2012</b> , 6, 2992-3006	864
1412	Graphene photonics, plasmonics, and broadband optoelectronic devices. <b>2012</b> , 6, 3677-94	1468
1411	The electrochemistry of CVD graphene: progress and prospects. <b>2012</b> , 14, 8264-81	121
1410	Nitrogen and boron doped monolayer graphene by chemical vapor deposition using polystyrene, urea and boric acid. <b>2012</b> , 36, 1385	165
1409	Forming nanomaterials as layered functional structures toward materials nanoarchitectonics. <b>2012</b> , 4, e17-e17	305
1408	Polarized light microscopy of chemical-vapor-deposition-grown graphene on copper. <b>2012</b> , 100, 213103	7
1407	Ultra-low resistance ohmic contacts in graphene field effect transistors. <b>2012</b> , 100, 203512	106
1406	Graphene transistor as a probe for streaming potential. <b>2012</b> , 12, 2931-5	41
1405	Schottky solar cells based on graphene nanoribbon/multiple silicon nanowires junctions. <b>2012</b> , 100, 193103	59
1404	van der Waals epitaxy of InAs nanowires vertically aligned on single-layer graphene. <b>2012</b> , 12, 1431-6	97
1403	Colors of graphene and graphene-oxide multilayers on various substrates. <b>2012</b> , 23, 025708	39
1402	Low-temperature chemical vapor deposition growth of graphene from toluene on electropolished copper foils. <b>2012</b> , 6, 2471-6	211
1401	Structural correlations in heterogeneous electron transfer at monolayer and multilayer graphene electrodes. <b>2012</b> , 134, 7258-61	141

1400 Study of Graphene Growth Mechanism on Nickel Thin Films. **2012**, 1-7

1399	Graphene: corrosion-inhibiting coating. <b>2012</b> , 6, 1102-8	900
1398	Novel highly conductive and transparent graphene-based conductors. <b>2012</b> , 24, 2844-9	248
1397	Tunable infrared plasmonic devices using graphene/insulator stacks. <i>Nature Nanotechnology</i> , <b>2012</b> , 7, 330-4	935
1396	A theoretical analysis of the surface dependent binding, peeling and folding of graphene on single crystal copper. <b>2012</b> , 50, 3055-3063	43
1395	Graphitization of Graphene Oxide with Ethanol during Thermal Reduction. 2012, 116, 9969-9979	50
1394	. <b>2012</b> , 100, 1486-1517	649
1393	Regenerative oscillation and four-wave mixing in graphene optoelectronics. <b>2012</b> , 6, 554-559	418
1392	Graphene-based transparent flexible electrodes for polymer solar cells. <b>2012</b> , 22, 24254	90
1391	Transparent Conducting and Chromogenic Oxide Films as Solar Energy Materials. <b>2012</b> , 221-238	
1390	Plasmons and near-field amplification in double-layer graphene. <b>2012</b> , 85,	89
1389	Organic solar cells with graphene electrodes and vapor printed poly(3,4-ethylenedioxythiophene) as the hole transporting layers. <b>2012</b> , 6, 6370-7	69
1388	Structure and electronic transport in graphene wrinkles. <b>2012</b> , 12, 3431-6	463
1387	Ultrafast room temperature wiping-rubbing fabrication of graphene nanosheets as flexible transparent conductive films with high surface stability. <b>2012</b> , 101, 023119	14
1386	Raman Imaging in Semiconductor Physics: Applications to Microelectronic Materials and Devices. <b>2012</b> , 39-83	4
1385	Dangling bonds and magnetism of grain boundaries in graphene. <b>2012</b> , 85,	51
1384	The application of graphene as electrodes in electrical and optical devices. <b>2012</b> , 23, 112001	265
1383	Atomic and electronic structure of graphene/Sn-Ni(111) and graphene/Sn-Cu(111) surface alloy interfaces. <b>2012</b> , 101, 051602	17

1382	Giant optical response from grapheneplasmonic system. <b>2012</b> , 6, 6244-9	69
1381	Towards Rationally Designed Graphene-Based Materials and Devices. <b>2012</b> , 213, 1091-1100	19
1380	The Fabrication, Properties, and Uses of Graphene/Polymer Composites. <b>2012</b> , 213, 1060-1077	454
1379	Flexible gigahertz transistors derived from solution-based single-layer graphene. <b>2012</b> , 12, 1184-8	117
1378	Efficient transfer of large-area graphene films onto rigid substrates by hot pressing. <b>2012</b> , 6, 5360-5	143
1377	Graphene-based electronic sensors. <b>2012</b> , 3, 1764	582
1376	Flexible molecular-scale electronic devices. <i>Nature Nanotechnology</i> , <b>2012</b> , 7, 438-42	' 144
1375	Self-encapsulated doping of n-type graphene transistors with extended air stability. <b>2012</b> , 6, 6215-21	65
1374	Solar cells with one-day energy payback for the factories of the future. <b>2012</b> , 5, 5117-5132	416
1373	Control of thickness uniformity and grain size in graphene films for transparent conductive electrodes. <b>2012</b> , 23, 035603	90
1372	Nanostructured hybrid transparent conductive films with antibacterial properties. <b>2012</b> , 6, 5157-63	120
1371	Layer-Controlled and Wafer-Scale Synthesis of Uniform and High-Quality Graphene Films on a Polycrystalline Nickel Catalyst. <b>2012</b> , 22, 3153-3159	80
1370	Increased Work Function in Few-Layer Graphene Sheets via Metal Chloride Doping. <b>2012</b> , 22, 4724-4731	212
1369	Hole and electron extraction layers based on graphene oxide derivatives for high-performance bulk heterojunction solar cells. <b>2012</b> , 24, 2228-33	256
1368	Rod-coating: towards large-area fabrication of uniform reduced graphene oxide films for flexible touch screens. <b>2012</b> , 24, 2874-8	244
1367	Binary and ternary atomic layers built from carbon, boron, and nitrogen. <b>2012</b> , 24, 4878-95	197
1366	Comparing the Fundamental Physics and Device Performance of Transparent, Conductive Nanostructured Networks with Conventional Transparent Conducting Oxides. <b>2012</b> , 2, 353-360	121
1365	Facile Synthesis of Nitrogen-Doped Graphene via Pyrolysis of Graphene Oxide and Urea, and its Electrocatalytic Activity toward the Oxygen-Reduction Reaction. <b>2012</b> , 2, 884-888	725

1364	Die chemische Synthese von Nanographen, Graphen-Nanob dern und Graphen-Schichten. <b>2012</b> , 124, 7758-7773	130
1363	From nanographene and graphene nanoribbons to graphene sheets: chemical synthesis. <b>2012</b> , 51, 7640-54	614
1362	Friedel-Crafts acylation on graphene. <b>2012</b> , 7, 1009-12	44
1361	Graphene sheet orientation of parent material exhibits dramatic influence on graphene properties. <b>2012</b> , 7, 2367-72	23
1360	On the mechanisms of Ni-catalysed graphene chemical vapour deposition. <b>2012</b> , 13, 2544-9	81
1359	Flexible and platinum-free dye-sensitized solar cells with conducting-polymer-coated graphene counter electrodes. <b>2012</b> , 5, 379-82	126
1358	On the configuration of supercapacitors for maximizing electrochemical performance. <b>2012</b> , 5, 818-41	359
1357	Transformation of Round-shaped Graphene Disks into Hexagonal Domains in CVD. <b>2012</b> , 18, 185-190	1
1356	Industrial graphene metrology. <b>2012</b> , 4, 3807-19	19
1355	Metal-Free Growth of Nanographene on Silicon Oxides for Transparent Conducting Applications. <b>2012</b> , 22, 2123-2128	142
1354	Controllable chemical vapor deposition of large area uniform nanocrystalline graphene directly on silicon dioxide. <b>2012</b> , 111, 044103	46
1353	Chemistry, physics and biology of graphene-based nanomaterials: new horizons for sensing, imaging and medicine. <b>2012</b> , 22, 14313	105
1352	Near room-temperature synthesis of transfer-free graphene films. <b>2012</b> , 3, 645	179
1351	Repeated growth and bubbling transfer of graphene with millimetre-size single-crystal grains using platinum. <b>2012</b> , 3, 699	884
1350	High-quality uniform dry transfer of graphene to polymers. <b>2012</b> , 12, 102-7	112
1349	Synthesis of monolithic graphene-graphite integrated electronics. <b>2011</b> , 11, 120-5	192
1348	Uniform hexagonal graphene flakes and films grown on liquid copper surface. <b>2012</b> , 109, 7992-6	351
1347	Tailoring electrical transport across grain boundaries in polycrystalline graphene. <b>2012</b> , 336, 1143-6	469

1346	Interfacing nanocarbons with organic and inorganic semiconductors: from nanocrystals/quantum dots to extended tetrathiafulvalenes. <b>2012</b> , 28, 11662-75	15
1345	VLS Growth of III-V Semiconductor Nanowires on Graphene Layers. <b>2012</b> , 1439, 45-50	5
1344	Atomic and electronic structure of simple metal/graphene and complex metal/graphene/metal interfaces. <b>2012</b> , 85,	61
1343	Strong and stable doping of carbon nanotubes and graphene by MoOx for transparent electrodes. <b>2012</b> , 12, 3574-80	135
1342	Substrate considerations for graphene synthesis on thin copper films. <b>2012</b> , 23, 135601	29
1341	High-Contrast Imaging of Graphene via Time-Domain Terahertz Spectroscopy. <b>2012</b> , 33, 839-845	6
1340	Terahertz Properties of Graphene. <b>2012</b> , 33, 797-815	59
1339	Electrical conductivity and optical properties of thin carbon films grown from ethanol vapor. <b>2012</b> , 48, 34-39	8
1338	The effect of growth parameters on the intrinsic properties of large-area single layer graphene grown by chemical vapor deposition on Cu. <b>2012</b> , 50, 134-141	77
1337	Epitaxial growth of large-area single-layer graphene over Cu(1 1 1)/sapphire by atmospheric pressure CVD. <b>2012</b> , 50, 57-65	218
1336	Atomic layer etching of graphene for full graphene device fabrication. <b>2012</b> , 50, 429-435	74
1335	Synthesis of high-quality graphene films on nickel foils by rapid thermal chemical vapor deposition. <b>2012</b> , 50, 551-556	94
1334	Photo-thermal chemical vapor deposition growth of graphene. <b>2012</b> , 50, 668-673	37
1333	Graphene etching controlled by atomic structures on the substrate surface. <b>2012</b> , 50, 674-679	16
1332	Effects of defects and non-coordinating molecular overlayers on the work function of graphene and energy-level alignment with organic molecules. <b>2012</b> , 50, 851-856	15
1331	Synthesis and analysis of thin conducting pyrolytic carbon films. <b>2012</b> , 50, 1216-1226	99
1330	The reduction of graphene oxide. <b>2012</b> , 50, 3210-3228	3551
1329	Few-layer graphene synthesis on a dielectric substrate. <b>2012</b> , 50, 1503-1509	30

1328	Influence of Cu metal on the domain structure and carrier mobility in single-layer graphene. <b>2012</b> , 50, 2189-2196	78
1327	A roll-to-roll microwave plasma chemical vapor deposition process for the production of 294mm width graphene films at low temperature. <b>2012</b> , 50, 2615-2619	136
1326	The production of large bilayer hexagonal graphene domains by a two-step growth process of segregation and surface-catalytic chemical vapor deposition. <b>2012</b> , 50, 2703-2709	29
1325	The mechanical responses of tilted and non-tilted grain boundaries in graphene. <b>2012</b> , 50, 3708-3716	71
1324	A simple method to synthesize continuous large area nitrogen-doped graphene. <b>2012</b> , 50, 4476-4482	126
1323	The formation of graphenelitania hybrid films and their resistance change under ultraviolet irradiation. <b>2012</b> , 50, 4518-4523	14
1322	Barriers to motion and rotation of graphene layers based on measurements of shear mode frequencies. <b>2012</b> , 536, 82-86	36
1321	Structural evolution and growth mechanism of graphene domains on copper foil by ambient pressure chemical vapor deposition. <b>2012</b> , 536, 123-128	23
1320	Interaction between graphene and nickel(111) surfaces with commensurate and incommensurate orientational relationships. <b>2012</b> , 538, 112-117	19
1319	Molecular level dispersion of graphene in polymer matrices using colloidal polymer and graphene. <b>2012</b> , 366, 44-50	43
1318	Single-layer CVD-grown graphene decorated with metal nanoparticles as a promising biosensing platform. <b>2012</b> , 33, 56-9	55
1317	Graphene: synthesis and applications. <b>2012</b> , 15, 86-97	663
1316	Multi-layer graphene treated by O2 plasma for transparent conductive electrode applications. <b>2012</b> , 73, 187-189	11
1315	AFM diagnostics of graphene-based quantum Hall devices. <b>2012</b> , 43, 479-86	16
1314	Chemical vapor deposition of boron- and nitrogen-containing graphene thin films. 2012, 177, 233-238	23
1313	Oxide electrochromics: An introduction to devices and materials. <b>2012</b> , 99, 1-13	329
1312	Environmental and economic assessment of ITO-free electrodes for organic solar cells. <b>2012</b> , 97, 14-21	229
1311	Multilayer graphene films as transparent electrodes for organic photovoltaic devices. <b>2012</b> , 96, 281-285	109

1310	Polymer- and carbon-based electrodes for polymer solar cells: Toward low-cost, continuous fabrication over large area. <b>2012</b> , 100, 97-114	114
1309	The surface science of graphene: Metal interfaces, CVD synthesis, nanoribbons, chemical modifications, and defects. <b>2012</b> , 67, 83-115	660
1308	Outcoupling efficiency of organic light emitting diodes employing graphene as the anode. <b>2012</b> , 13, 1081-108	<b>35</b> 18
1307	Ultrafast lasers mode-locked by nanotubes and graphene. <b>2012</b> , 44, 1082-1091	177
1306	Mechanical deformation and fracture mode of polycrystalline graphene: Atomistic simulations. <b>2012</b> , 376, 1942-1947	25
1305	Mechanical systems in the quantum regime. <b>2012</b> , 511, 273-335	331
1304	Zero-dimensional, one-dimensional, two-dimensional and three-dimensional nanostructured materials for advanced electrochemical energy devices. <b>2012</b> , 57, 724-803	704
1303	Chemical functionalization of graphene and its applications. <b>2012</b> , 57, 1061-1105	1351
1302	GrapheneDNA hybrid materials: Assembly, applications, and prospects. <b>2012</b> , 37, 515-529	123
1301	Gyrotropy and Nonreciprocity of Graphene for Microwave Applications. <b>2012</b> , 60, 901-914	147
1300	Fabrication and electrical characteristics of graphene-based charge-trap memory devices. <b>2012</b> , 61, 108-112	7
1299	Investigation of products of thermal methane conversion in hydrocarbon mixtures by mass spectrometry. <b>2012</b> , 21, 131-135	
1298	Composites of graphene and other nanocarbons with organogelators assembled through supramolecular interactions. <b>2012</b> , 18, 2890-901	51
1297	Photocatalytic synthesis of pure and water-dispersible graphene monosheets. <b>2012</b> , 18, 2762-7	27
1296	Role of hydrocarbon radicals CH(x) ( $x=1, 2, 3$ ) in graphene growth: a theoretical perspective. <b>2012</b> , 13, 774-9	13
1295	Highly Conductive and Transparent PEDOT:PSS Films with a Fluorosurfactant for Stretchable and Flexible Transparent Electrodes. <b>2012</b> , 22, 421-428	889
1294	Non-Covalent Functionalization of Graphene Using Self-Assembly of Alkane-Amines. <b>2012</b> , 22, 717-725	57
1293	Autonomously Controlled Homogenous Growth of Wafer-Sized High-Quality Graphene via a Smart Janus Substrate. <b>2012</b> , 22, 1033-1039	39

1292	Integrating water-soluble graphene into porphyrin nanohybrids. <b>2012</b> , 24, 800-5	43
1291	Plasmonic graphene transparent conductors. <b>2012</b> , 24, OP71-6	31
1290	On the electronic properties of two-dimensional honeycomb GaInN and GaAlN alloys: a molecular analysis. <b>2012</b> , 18, 591-6	7
1289	Recent progress and challenges in graphene nanoribbon synthesis. <b>2013</b> , 14, 47-54	180
1288	Ultra-compliant liquid metal electrodes with in-plane self-healing capability for dielectric elastomer actuators. <b>2013</b> , 103, 064101	42
1287	Low damage-transfer of graphene using epoxy bonding. <b>2013</b> , 9, 517-521	9
1286	Stretchable and self-healing polymers and devices for electronic skin. <b>2013</b> , 38, 1961-1977	450
1285	Efficient and bright organic light-emitting diodes on single-layer graphene electrodes. <b>2013</b> , 4, 2294	192
1284	Physical Properties of Graphene Nanoribbons: Insights from First-Principles Studies. <b>2013</b> , 51-77	1
1283	Thinning of large-area graphene film from multilayer to bilayer with a low-power CO2 laser. <b>2013</b> , 24, 275302	22
1282	Microwave-Induced in situ synthesis of Zn2GeO4/N-doped graphene nanocomposites and their lithium-storage properties. <b>2013</b> , 19, 6027-33	79
1281	First-principles study of carbon atoms adsorbed on MgO(100) related to graphene growth. <b>2013</b> , 13, 327-330	22
1280	Prospects for graphene-nanoparticle-based hybrid sensors. <b>2013</b> , 15, 12785-99	132
1279	Direct synthesis of graphene on SiO2 substrates by chemical vapor deposition. <b>2013</b> , 15, 1840	60
1278	Investigation of non-segregation graphene growth on Ni via isotope-labeled alcohol catalytic chemical vapor deposition. <b>2013</b> , 5, 6530-7	16
1277	Probing voltage drop variations in graphene with photoelectron spectroscopy. <b>2013</b> , 85, 4172-7	13
1276	Graphene-ferroelectric hybrid devices for multi-valued memory system. <b>2013</b> , 103, 022903	17
1275	Electrical control of kinesin-microtubule motility using a transparent functionalized-graphene substrate. <b>2013</b> , 24, 195102	12

1274	'Inorganics-in-organics': recent developments and outlook for 4G polymer solar cells. <b>2013</b> , 5, 8411-27	132
1273	High-performance polymer light emitting diodes with interface-engineered graphene anodes. <b>2013</b> , 14, 2324-2330	28
1272	Role of dopants in long-range charge carrier transport for p-type and n-type graphene transparent conducting thin films. <b>2013</b> , 7, 7251-61	69
1271	Highly electrocatalytic hybrid silver nanowire-graphene counter electrode for Co3+/2+ redox mediator based dye-sensitized solar cells. <b>2013</b> , 177, 77-81	8
1270	Transferable Graphene Oxide by Stamping Nanotechnology: Electron-Transport Layer for Efficient Bulk-Heterojunction Solar Cells. <b>2013</b> , 125, 2946-2952	6
1269	High-efficiency graphene/Si nanoarray Schottky junction solar cells via surface modification and graphene doping. <b>2013</b> , 1, 6593	107
1268	Effect of molecular weight of additives on the conductivity of PEDOT:PSS and efficiency for ITO-free organic solar cells. <b>2013</b> , 1, 9907	183
1267	Silicon nanowires for Li-based battery anodes: a review. <b>2013</b> , 1, 9566	262
1266	Application of NIL in Solar Cell. <b>2013</b> , 217-249	
1265	Copper-vapor-assisted chemical vapor deposition for high-quality and metal-free single-layer graphene on amorphous SiO2 substrate. <b>2013</b> , 7, 6575-82	133
		133
	graphene on amorphous SiO2 substrate. <b>2013</b> , 7, 6575-82	
1264	yan der Waals heterostructures. 2013, 499, 419-25  Annealing Effects after Nitrogen Ion Casting on Monolayer and Multilayer Graphene. 2013, 117, 2129-2134	6627
1264	yan der Waals heterostructures. 2013, 499, 419-25  Annealing Effects after Nitrogen Ion Casting on Monolayer and Multilayer Graphene. 2013, 117, 2129-2134	6627
1264 1263 1262	yan der Waals heterostructures. 2013, 499, 419-25  Annealing Effects after Nitrogen Ion Casting on Monolayer and Multilayer Graphene. 2013, 117, 2129-2134  Graphene as anode electrode for colloidal quantum dots based light emitting diodes. 2013, 103, 043124  Electronic properties of a graphene device with peptide adsorption: insight from simulation. 2013,	6627
1264 1263 1262	Van der Waals heterostructures. 2013, 499, 419-25  Annealing Effects after Nitrogen Ion Casting on Monolayer and Multilayer Graphene. 2013, 117, 2129-2134  Graphene as anode electrode for colloidal quantum dots based light emitting diodes. 2013, 103, 043124  Electronic properties of a graphene device with peptide adsorption: insight from simulation. 2013, 5, 7470-7	6627 31 10 56
1264 1263 1262 1261 1260	Van der Waals heterostructures. 2013, 499, 419-25  Annealing Effects after Nitrogen Ion Casting on Monolayer and Multilayer Graphene. 2013, 117, 2129-2134  Graphene as anode electrode for colloidal quantum dots based light emitting diodes. 2013, 103, 043124  Electronic properties of a graphene device with peptide adsorption: insight from simulation. 2013, 5, 7470-7  Application of solvent modified PEDOT:PSS to graphene electrodes in organic solar cells. 2013, 5, 8934-9  Electrodeposition of graphene layers doped with Br?nsted acids. 2013, 48, 6891-6896	6627 31 10 56

1256	Scrolling graphene into nanofluidic channels. <b>2013</b> , 13, 2874-8	51
1255	Grain boundaries in graphene grown by chemical vapor deposition. <b>2013</b> , 15, 035024	103
1254	Direct measurement of Dirac point energy at the graphene/oxide interface. 2013, 13, 131-6	56
1253	Application of carbon nano-materials in desalination processes. <b>2013</b> , 51, 627-636	20
1252	Applications of Nanomaterials in Sensors and Diagnostics. 2013,	24
1251	Ultra-fast synthesis of graphene by melt spinning. <b>2013</b> , 61, 299-304	2
1250	Scalable synthesis of Fe3O4 nanoparticles anchored on graphene as a high-performance anode for lithium ion batteries. <b>2013</b> , 201, 330-337	38
1249	Electronic states of disordered grain boundaries in graphene prepared by chemical vapor deposition. <b>2013</b> , 64, 178-186	33
1248	Band Gaps of a Two-Dimensional Periodic Graphenelike Structure. <b>2013</b> , 135,	4
1247	Rotated domains in chemical vapor deposition-grown monolayer graphene on Cu(111): an angle-resolved photoemission study. <b>2013</b> , 5, 8210-4	30
1246	Fabrication of Metallic Nanomesh: Pt Nano-Mesh as a Proof of Concept for Stretchable and Transparent Electrodes. <b>2013</b> , 25, 3535-3538	73
1245	Interfacial properties of bilayer and trilayer graphene on metal substrates. <b>2013</b> , 3, 2081	77
1244	Carbon-rich nanostructures: the conversion of acetylenes into materials. <b>2013</b> , 26, 742-749	59
1243	Synthesis of graphene films by rapid heating and quenching at ambient pressures and their electrochemical characterization. <b>2013</b> , 5, 546-52	19
1242	Transfer matrix method for optics in graphene layers. <b>2013</b> , 25, 215301	227
1241	Third harmonic generation in graphene and few-layer graphite films. <b>2013</b> , 87,	202
1240	Thiol functionalized reduced graphene oxide as a base material for novel graphene-nanoparticle hybrid composites. <b>2013</b> , 231, 146-154	69
1239	Nanoscale morphology of graphene on different substrates. <b>2013</b> ,	

1238	Spin Pumping in Permalloy/Graphene and Permalloy/Graphite Interfaces. <b>2013</b> , 49, 3147-3150	9
1237	Conductive thin films of pristine graphene by solvent interface trapping. <b>2013</b> , 7, 7062-6	155
1236	Nonequilibrium dynamics of photoexcited electrons in graphene: Collinear scattering, Auger processes, and the impact of screening. <b>2013</b> , 88,	128
1235	Highly stable and flexible silver nanowire-graphene hybrid transparent conducting electrodes for emerging optoelectronic devices. <b>2013</b> , 5, 7750-5	179
1234	Graphene-carbon nanotube hybrid transparent conductive films. 2013,	2
1233	Direct exfoliation of graphite using a non-ionic polymer surfactant for fabrication of transparent and conductive graphene films. <b>2013</b> , 1, 1870	57
1232	Balancing light absorptivity and carrier conductivity of graphene quantum dots for high-efficiency bulk heterojunction solar cells. <b>2013</b> , 7, 7207-12	152
1231	Noncovalent Functionalization of Graphene by Molecular and Polymeric Adsorbates. <b>2013</b> , 4, 2649-2657	84
1230	New Materials for Transparent Electrodes. <b>2013</b> , 139-174	
1229	Laser-assisted formation of transparent nanostructured carbon films with periodic morphology in a constant electric field. <b>2013</b> , 8, 29-35	
1228	Direct growth of aligned graphitic nanoribbons from a DNA template by chemical vapour deposition. <b>2013</b> , 4, 2402	45
1227	Clean transfer of graphene on Pt foils mediated by a carbon monoxide intercalation process. <b>2013</b> , 6, 671-678	33
1226	Site-Selective Epitaxy of Graphene on Si Wafers. <b>2013</b> , 101, 1557-1566	13
1225	Fully Transparent Resistive Memory Employing Graphene Electrodes for Eliminating Undesired Surface Effects. <b>2013</b> , 101, 1732-1739	56
1224	Market Uptake Potential of Graphene as a Disruptive Material. <b>2013</b> , 101, 1793-1800	12
1223	Single-step formation of graphene on dielectric surfaces. <b>2013</b> , 25, 630-4	68
1222	Embedded graphene for large-area silicon-based devices. <b>2013</b> , 103, 073102	19
1221	Transparent and ultra-bendable all-solid-state supercapacitors without percolation problems. <b>2013</b> , 4, 1663	54

1220	Scalable graphene field-effect sensors for specific protein detection. <b>2013</b> , 24, 355502	47
1219	In situ observations of the atomistic mechanisms of Ni catalyzed low temperature graphene growth. <b>2013</b> , 7, 7901-12	139
1218	Synthesis and electronic structure of nitrogen-doped graphene. <b>2013</b> , 55, 1325-1332	20
1217	Flame synthesis of carbon nanotubes and few-layer graphene on metal-oxide spinel powders. <b>2013</b> , 63, 478-486	31
1216	The structural and electrical evolution of chemical vapor deposition grown graphene by electron beam irradiation induced disorder. <b>2013</b> , 59, 366-371	34
1215	Biologically inspired graphene-chlorophyll phototransistors with high gain. <b>2013</b> , 63, 23-29	83
1214	Advances in semiconductor nanowire growth on graphene. <b>2013</b> , 7, 713-726	47
1213	Graphene Transistors for Bioelectronics. <b>2013</b> , 101, 1780-1792	94
1212	Graphene electrodes transfer-printed with a surface energy-mediated wet PDMS stamp: impact of Au doped-graphene for high performance soluble oxide thin-film transistors. <b>2013</b> , 1, 5632	13
1211	One-step electrodeposition synthesis of silver-nanoparticle-decorated graphene on indium-tin-oxide for enzymeless hydrogen peroxide detection. <b>2013</b> , 62, 405-412	109
1210	Enhanced photoluminescence from zinc oxide by plasmonic resonance of reduced graphene oxide. <b>2013</b> , 114, 074903	17
1209	Nonvolatile functional molecular liquids. <b>2013</b> , 49, 9373-82	51
1208	Graphene synthesis via magnetic inductive heating of copper substrates. <b>2013</b> , 7, 7495-9	62
1207	Surface-plasmon resonance-wavelength control of graphene surfaces containing metal nanoparticles. <b>2013</b> , 63, 5-9	2
1206	Graphene Nucleation Density on Copper: Fundamental Role of Background Pressure. <b>2013</b> , 117, 18919-18926	162
1205	Transferable self-welding silver nanowire network as high performance transparent flexible electrode. <b>2013</b> , 24, 335202	100
1204	Copper nanowires as fully transparent conductive electrodes. <b>2013</b> , 3, 2323	276
1203	Atomistic processes of grain boundary motion and annihilation in graphene. <b>2013</b> , 25, 155301	6

1202	Ferromagnetism in ABC-stacked trilayer graphene. <b>2013</b> , 87,	24
1201	Topological electric current from time-dependent elastic deformations in graphene. 2013, 88,	31
1200	Highly conductive and transparent Ag honeycomb mesh fabricated using a monolayer of polystyrene spheres. <b>2013</b> , 24, 235205	36
1199	Reduced graphene oxide-based hydrogels for the efficient capture of dye pollutants from aqueous solutions. <b>2013</b> , 56, 173-182	349
1198	Collecting the Electrons on n-Doped Fullerene C60 Transparent Conductors for All-Vacuum-Deposited Small-Molecule Organic Solar Cells. <b>2013</b> , 3, 1551-1556	14
1197	Surface Impedance Measurement of Resistive Coatings at Microwave Frequencies. <b>2013</b> , 62, 432-437	19
1196	pH sensing properties of graphene solution-gated field-effect transistors. <b>2013</b> , 114, 084505	76
1195	Chemical Vapor Deposition of Carbon Nanotubes on Monolayer Graphene Substrates: Reduced Etching via Suppressed Catalytic Hydrogenation Using C2H4. <b>2013</b> , 25, 3874-3879	35
1194	Synthesis of millimeter-size hexagon-shaped graphene single crystals on resolidified copper. <b>2013</b> , 7, 8924-31	152
1193	Graphene for energy solutions and its industrialization. <b>2013</b> , 5, 10108-26	71
1193 1192	Graphene for energy solutions and its industrialization. <b>2013</b> , 5, 10108-26  Large-scale and low cost synthesis of graphene as high capacity anode materials for lithium-ion batteries. <b>2013</b> , 64, 158-169	7 <sup>1</sup>
1192	Large-scale and low cost synthesis of graphene as high capacity anode materials for lithium-ion	
1192	Large-scale and low cost synthesis of graphene as high capacity anode materials for lithium-ion batteries. <b>2013</b> , 64, 158-169	33
1192	Large-scale and low cost synthesis of graphene as high capacity anode materials for lithium-ion batteries. 2013, 64, 158-169  A graphene-based large area surface-conduction electron emission display. 2013, 56, 255-263  Electrochemical investigation of chemical vapour deposition monolayer and bilayer graphene on	33
1192 1191 1190	Large-scale and low cost synthesis of graphene as high capacity anode materials for lithium-ion batteries. 2013, 64, 158-169  A graphene-based large area surface-conduction electron emission display. 2013, 56, 255-263  Electrochemical investigation of chemical vapour deposition monolayer and bilayer graphene on the microscale. 2013, 110, 9-15  Effect of graphene nanoplatelets (GNPs) addition on strength and ductility of magnesium-titanium	33 37 29
1192 1191 1190 1189	Large-scale and low cost synthesis of graphene as high capacity anode materials for lithium-ion batteries. 2013, 64, 158-169  A graphene-based large area surface-conduction electron emission display. 2013, 56, 255-263  Electrochemical investigation of chemical vapour deposition monolayer and bilayer graphene on the microscale. 2013, 110, 9-15  Effect of graphene nanoplatelets (GNPs) addition on strength and ductility of magnesium-titanium alloys. 2013, 1, 242-248  Resistance and transparency tunable Ag-inserted transparent InZnO films for capacitive touch	33 37 29 114
1192 1191 1190 1189 1188	Large-scale and low cost synthesis of graphene as high capacity anode materials for lithium-ion batteries. 2013, 64, 158-169  A graphene-based large area surface-conduction electron emission display. 2013, 56, 255-263  Electrochemical investigation of chemical vapour deposition monolayer and bilayer graphene on the microscale. 2013, 110, 9-15  Effect of graphene nanoplatelets (GNPs) addition on strength and ductility of magnesium-titanium alloys. 2013, 1, 242-248  Resistance and transparency tunable Ag-inserted transparent InZnO films for capacitive touch screen panels. 2013, 548, 641-645	33 37 29 114 29

1184	High-performance flexible solid-state supercapacitors based on MnO2-decorated nanocarbon electrodes. <b>2013</b> , 3, 20613	32
1183	Mechanical Decoupling of Graphene from Ru(0001) by Interfacial Reaction with Oxygen. <b>2013</b> , 117, 6320-6324	36
1182	Synthesis and Electrochromic Characterization of Vanadium Pentoxide/Graphene Nanocomposite Films. <b>2013</b> , 160, H587-H590	22
1181	Transferable graphene oxide by stamping nanotechnology: electron-transport layer for efficient bulk-heterojunction solar cells. <b>2013</b> , 52, 2874-80	105
1180	Graphene and Carbon Nanotube-based Electrochemical Biosensors for Environmental Monitoring. <b>2013</b> , 87-128	3
1179	Evaluation of the interlayer interactions of few layers of graphene. <b>2013</b> , 557, 114-117	13
1178	Temperature dependence of graphene growth on a stepped iridium surface. <b>2013</b> , 56, 193-200	12
1177	Electrical characterization of graphene films synthesized by low-temperature microwave plasma chemical vapor deposition. <b>2013</b> , 103, 153106	18
1176	Large-scale production of high-quality reduced graphene oxide. 2013, 233, 297-304	44
1175	Clean and efficient transfer of CVD-grown graphene by electrochemical etching of metal substrate. <b>2013</b> , 688, 243-248	28
1174	Controlling subnanometer gaps in plasmonic dimers using graphene. <b>2013</b> , 13, 5033-8	179
1173	Improving the binding characteristics of tripodal compounds on single layer graphene. 2013, 7, 7193-9	31
1172	In situ study of hydrogenation of graphene and new phases of localization between metal-insulator transitions. <b>2013</b> , 13, 5098-105	25
1171	Electronic transport through ordered and disordered graphene grain boundaries. 2013, 64, 101-110	27
1170	Electronic structure of boron nitride sheets doped with carbon from first-principles calculations. <b>2013</b> , 87,	129
1169	Absence of edge states near the 120? corners of zigzag graphene nanoribbons. <b>2013</b> , 87,	13
1168	Visible Diffraction from Graphene and Its Application in Holograms. <b>2013</b> , 1, 869-874	15
1167	Fabrication of silver nanowire transparent electrodes using electrohydrodynamic spray deposition for flexible organic solar cells. <b>2013</b> , 1, 14286	77

1166	Hybrid transparent conductive film on flexible glass formed by hot-pressing graphene on a silver nanowire mesh. <b>2013</b> , 5, 11756-61		66
1165	Highly efficient gate-tunable photocurrent generation in vertical heterostructures of layered materials. <i>Nature Nanotechnology</i> , <b>2013</b> , 8, 952-8	7	866
1164	Direct transfer of graphene onto flexible substrates. <b>2013</b> , 110, 17762-7		148
1163	h-BN monolayer on the Ni(111) surface: a potential catalyst for oxidation. <b>2013</b> , 5, 10404-8		37
1162	The role of surface oxygen in the growth of large single-crystal graphene on copper. <b>2013</b> , 342, 720-3		868
1161	Preservation of Antibody Selectivity on Graphene by Conjugation to a Tripod Monolayer. <b>2013</b> , 125, 3259-3	267	<b>2</b> 10
1160	Laser-induced direct graphene patterning and simultaneous transferring method for graphene sensor platform. <b>2013</b> , 9, 4269-75		43
1159	Graphene mechanical oscillators with tunable frequency. <i>Nature Nanotechnology</i> , <b>2013</b> , <b>8</b> , 923-7 28.	7	196
1158	Growth Mechanism and Influences from Kinetic Factors on Carbon Materials with Cu and Silica Substrates during Atmospheric Pressure Chemical Vapor Deposition. <b>2013</b> , 117, 25175-25184		7
1157	Epitaxial Growth and Electronic Properties of Large Hexagonal Graphene Domains on Cu(111) Thin Film. <b>2013</b> , 6, 075101		65
1156	A nitrogen-doped graphene film prepared by chemical vapor deposition of a methanol mist containing methylated melamine resin. <b>2013</b> , 113, 645-650		6
1155	Nanoimprint Lithography: An Enabling Process for Nanofabrication. 2013,		17
1154	The application of single-layer graphene modified with solution-processed TiOx and PEDOT:PSS as a transparent conductive anode in organic light-emitting diodes. <b>2013</b> , 14, 3348-3354		37
1153	Enhancement of organic solar cell efficiency by patterning the PEDOT:PSS hole transport layer using nanoimprint lithography. <b>2013</b> , 14, 3180-3185		21
1152	Lattice-oriented catalytic growth of graphene nanoribbons on heteroepitaxial nickel films. 2013, 7, 10825-3	33	27
1151	Stability analysis of a back-gate graphene transistor in air environment. <b>2013</b> , 34, 084004		5
1150	Quantum resistance metrology using graphene. <b>2013</b> , 76, 104501		57
1149	Enhanced photoresponse in curled graphene ribbons. <b>2013</b> , 5, 12206-11		7

## (2013-2013)

1148	A hierarchically structured graphene foam and its potential as a large-scale strain-gauge sensor. <b>2013</b> , 5, 12171-7	158
1147	Graphene as a high impedance surface for ultra-wideband electromagnetic waves. <b>2013</b> , 114, 184308	17
1146	Continuous and high-throughput nanopatterning methodologies based on mechanical deformation. <b>2013</b> , 1, 7681	24
1145	Synthesis of nano zerovalent iron nanoparticlesgraphene composite for the treatment of lead contaminated water. <b>2013</b> , 130, 429-35	109
1144	The effect of copper pre-cleaning on graphene synthesis. <b>2013</b> , 24, 365602	102
1143	Fully Solution-Based Fabrication of Flexible Light-Emitting Device at Ambient Conditions. <b>2013</b> , 117, 16632-16639	54
1142	Formation of graphene on SiC by chemical vapor deposition with liquid sources. <b>2013</b> , 231, 189-192	9
1141	Field-effect transistors based on two-dimensional materials for logic applications. <b>2013</b> , 22, 098505	20
1140	Direct growth of graphene film on germanium substrate. <b>2013</b> , 3, 2465	157
1139	Optical diode action from axially asymmetric nonlinearity in an all-carbon solid-state device. <b>2013</b> , 13, 5771-6	55
1138	Reduced graphene oxide with a highly restored Econjugated structure for inkjet printing and its use in all-carbon transistors. <b>2013</b> , 6, 842-852	56
1137	Strong plasmon reflection at nanometer-size gaps in monolayer graphene on SiC. <b>2013</b> , 13, 6210-5	85
1136	Introduction to graphene electronics la new era of digital transistors and devices. 2013, 54, 233-251	42
1135	Development of an ultra-thin film comprised of a graphene membrane and carbon nanotube vein support. <b>2013</b> , 4, 2920	64
1134	Region-selective self-assembly of functionalized carbon allotropes from solution. <b>2013</b> , 7, 11427-34	20
1133	Flexible transparent conductive materials based on silver nanowire networks: a review. <b>2013</b> , 24, 452001	533
1132	Kinetic study of graphene growth: Temperature perspective on growth rate and film thickness by chemical vapor deposition. <b>2013</b> , 580, 62-66	38
1131	Scalable and direct growth of graphene micro ribbons on dielectric substrates. <b>2013</b> , 3, 1348	29

1130	Preparation and electrical conductivity of novel vanadate borate glass system containing graphene oxide. <b>2013</b> , 376, 117-125	23
1129	The mechanism of caesium intercalation of graphene. <b>2013</b> , 4, 2772	165
1128	Synthesis, Characterization and Functionalization of Carbon Nanotubes and Graphene: A Glimpse of Their Application. <b>2013</b> , 1-34	1
1127	Influence of gas composition on the formation of graphene domain synthesized from camphor. <b>2013</b> , 93, 258-262	30
1126	Fabrication of graphene films with high transparent conducting characteristics. 2013, 8, 440	20
1125	Graphene bioelectronics. <b>2013</b> , 3, 201-208	15
1124	Single-layer graphene oxide films on a silicon surface. <b>2013</b> , 58, 1614-1618	17
1123	Graphene IProperties and Characterization. <b>2013</b> , 39-82	5
1122	Highly bendable, conductive, and transparent film by an enhanced adhesion of silver nanowires. <b>2013</b> , 5, 9155-60	88
1121	Isolation of high quality graphene from Ru by solution phase intercalation. <b>2013</b> , 103, 121602	19
1120	Experimental observation of a suspended single layer graphene film on Cu foil grown via chemical vapor deposition method. <b>2013</b> , 250, 1874-1877	8
1119	CMOS-compatible graphene photodetector covering all optical communication bands. <b>2013</b> , 7, 892-896	531
1118	Towards the perfect graphene membrane? Improvement and limits during formation of high quality graphene grown on Cu-foils. <b>2013</b> , 64, 377-390	39
1117	Self-powered flexible printed circuit board with integrated triboelectric generator. <b>2013</b> , 2, 1101-1106	99
1116	Observing graphene grow: catalyst-graphene interactions during scalable graphene growth on polycrystalline copper. <b>2013</b> , 13, 4769-78	198
1115	High-density three-dimension graphene macroscopic objects for high-capacity removal of heavy metal ions. <b>2013</b> , 3, 2125	115
1114	Formation of uniformly sized gold nanoparticles over graphene by MeV electron beam irradiation for transparent conducting films. <b>2013</b> , 102, 223116	10
1113	Influence of Cu substrate topography on the growth morphology of chemical vapour deposited graphene. <b>2013</b> , 65, 7-12	12

1112	Photoelectrochemical Properties of Graphene and Its Derivatives. <b>2013</b> , 3, 325-356	88
1111	Rapid large-area multiphoton microscopy for characterization of graphene. <b>2013</b> , 7, 8441-6	69
1110	Catalytic, conductive, and transparent platinum nanofiber webs for FTO-free dye-sensitized solar cells. <b>2013</b> , 5, 3176-81	45
1109	Wetting translucency of graphene. <b>2013</b> , 12, 866-9	198
1108	Origin of new broad Raman D and G peaks in annealed graphene. <b>2013</b> , 3, 2700	118
1107	Performance enhancement of metal nanowire transparent conducting electrodes by mesoscale metal wires. <b>2013</b> , 4, 2522	244
1106	Impact of Local Curvature and Structural Defects on Graphene 160 Fullerene Fusion Reaction Barriers. <b>2013</b> , 117, 19664-19671	15
1105	Graphene based field effect transistors: Efforts made towards flexible electronics. <b>2013</b> , 89, 177-188	68
1104	Integrating simulations and experiments to predict sheet resistance and optical transmittance in nanowire films for transparent conductors. <b>2013</b> , 7, 7654-63	281
1103	Graphene-based semiconductor nanostructures. <b>2013</b> , 56, 105-122	39
1102	Effects of N doping and NH2 grafting on the mechanical and wrinkling properties of graphene sheets. <b>2013</b> , 3, 923-929	12
1101	2D Graphene Oxide Nanosheets as an Adhesive Over-Coating Layer for Flexible Transparent Conductive Electrodes. <b>2013</b> , 3,	176
1100	Structural Determination of Thermally and Hydrazine Treated Graphene Oxide Using Electron Spectroscopic Analysis. <b>2013</b> , 117, 21312-21319	19
1099	Three-Dimensional Graphene Nano-Networks with High Quality and Mass Production Capability via Precursor-Assisted Chemical Vapor Deposition. <b>2013</b> , 3,	115
1098	Atomically thin two-dimensional materials for functional electrodes of electrochemical devices. <b>2013</b> , 19, 825-865	30
1098	Atomically thin two-dimensional materials for functional electrodes of electrochemical devices.	30
	Atomically thin two-dimensional materials for functional electrodes of electrochemical devices.  2013, 19, 825-865  Low Temperature Graphene Synthesis from Poly(methyl methacrylate) Using Microwave Plasma Treatment. 2013, 6, 115102	

Switchable glazing technology for eco-efficient construction. <b>2013</b> , 236-269	5
Time variant layer control in atmospheric pressure chemical vapor deposition based growth of graphene. <b>2013</b> ,	
Graphene shell on silica nanowires toward a nanostructured electrode with controlled morphologous 2013, 103, 013101	ogy. 5
Fabrication and characterization of fully flattened carbon nanotubes: a new graphene nanoribb analogue. <b>2013</b> , 3, 1617	on 34
Multiple Transfer Used on Repairing Transparent and Electric Film Based on CVD - Grown Graphene. <b>2013</b> , 774-776, 634-639	
1089 Synthesis of carbon nanotubes and graphene for photonic applications. <b>2013</b> , 26-56	
1088 Highly sensitive stretchable transparent piezoelectric nanogenerators. <b>2013</b> , 6, 169-175	179
Hydrogen-free PECVD growth of few-layer graphene on an ultra-thin nickel film at the threshold dissolution temperature. <b>2013</b> , 1, 3862	d 60
Nanogap based graphene coated AFM tips with high spatial resolution, conductivity and durabil <b>2013</b> , 5, 10816-23	lity. 14
$_{1085}$ Graphene mobility enhancement by organosilane interface engineering. <b>2013</b> , 102, 183107	12
Doping suppression and mobility enhancement of graphene transistors fabricated using an adhesion promoting dry transfer process. <b>2013</b> , 103, 243504	13
1083 Nanoelectromechanical microwave switch based on graphene. <b>2013</b> ,	5
Laser directed lithography of asymmetric graphene ribbons on a polydimethylsiloxane trench structure. <b>2013</b> , 15, 6825-30	6
Self-organizing properties of triethylsilylethynyl-anthradithiophene on monolayer graphene electrodes in solution-processed transistors. <b>2013</b> , 5, 11094-101	24
Stability investigation of graphene oxideBilver nanoparticles composites in natural reservoir water. <b>2013</b> , 3, 25331	9
1079 Investigation of carbon-silicon schottky diodes and their use as chemical sensors. <b>2013</b> ,	4
1078 Wafer-scale synthesis and transfer of monolayer graphene. <b>2013</b> ,	1
1077 Carbon nanotube solar cells. <b>2013</b> , 241-269	8

1076	Transfer-free synthesis of multilayer graphene using a single-step process in an evaporator and formation confirmation by laser mode-locking. <b>2013</b> , 24, 365603	10
1075	On the growth mode of two-lobed curvilinear graphene domains at atmospheric pressure. <b>2013</b> , 3, 2571	7
1074	Reststrahl band-assisted photocurrents in epitaxial graphene layers. <b>2013</b> , 88,	14
1073	Fabrication of highly transparent ultrathin films based on reduced graphene oxide. 2013,	
1072	Using optical anisotropy as a quality factor to rapidly characterize structural qualities of large-area graphene films. <b>2013</b> , 85, 1605-14	8
1071	Production of a 100-m-long high-quality graphene transparent conductive film by roll-to-roll chemical vapor deposition and transfer process. <b>2013</b> , 102, 023112	336
1070	Growth of a two-dimensional dielectric monolayer on quasi-freestanding graphene. <i>Nature Nanotechnology</i> , <b>2013</b> , 8, 41-5	78
1069	Transparent Conducting Oxides: Electronic Structure <b>P</b> roperty Relationship from Photoelectron Spectroscopy with in situ Sample Preparation. <b>2013</b> , 96, 331-345	100
1068	Aromatic Excimers: Ab Initio and TD-DFT Study. <b>2013</b> , 9, 847-56	45
1067	The oxidation mechanism of highly ordered pyrolytic graphite in a nitric acid/sulfuric acid mixture. <b>2013</b> , 52, 493-498	46
1066	Chemical vapor deposition derived flexible graphene paper and its application as high performance anodes for lithium rechargeable batteries. <b>2013</b> , 1, 408-414	70
1065	Applications of Graphene. 2013, 333-437	6
1064	Demonstration of a Subthreshold FPGA Using Monolithically Integrated Graphene Interconnects. <b>2013</b> , 60, 383-390	14
1063	Characterisation Techniques. <b>2013</b> , 229-332	5
1062	Investigations on the use of graphite electrodes using a Hull-type growth cell for the electrochemically-assisted protein crystallization. <b>2013</b> , 13, 590-598	9
1061	Graphene growth by molecular beam epitaxy. <b>2013</b> , 547-557	
1060	Graphene-like two-dimensional materials. <b>2013</b> , 113, 3766-98	3191
1059	Growth of adlayer graphene on Cu studied by carbon isotope labeling. <b>2013</b> , 13, 486-90	214

1058	Methods for Obtaining Graphene. <b>2013</b> , 129-228	11
1057	Graphene and its derivatives for cell biotechnology. <b>2013</b> , 138, 72-86	40
1056	Functionalisation of graphene surfaces with downstream plasma treatments. <b>2013</b> , 54, 283-290	65
1055	Flexible Organic Photovoltaic Cells with In Situ Nonthermal Photoreduction of Spin-Coated Graphene Oxide Electrodes. <b>2013</b> , 23, 2742-2749	148
1054	Fabrication of flexible, all-reduced graphene oxide non-volatile memory devices. 2013, 25, 233-8	186
1053	Frame assisted H2O electrolysis induced H2 bubbling transfer of large area graphene grown by chemical vapor deposition on Cu. <b>2013</b> , 102, 022101	91
1052	Graphene film growth on polycrystalline metals. <b>2013</b> , 46, 23-30	117
1051	Fabrication, optimization, and use of graphene field effect sensors. <b>2013</b> , 85, 509-21	84
1050	Synthesis of a CdSe-graphene hybrid composed of CdSe quantum dot arrays directly grown on CVD-graphene and its ultrafast carrier dynamics. <b>2013</b> , 5, 1483-8	29
1049	Graphene cathode-based ZnO nanowire hybrid solar cells. <b>2013</b> , 13, 233-9	179
1048	A novel flexible capacitive touch pad based on graphene oxide film. <b>2013</b> , 5, 890-4	27
1047	Graphene field-effect transistors with gigahertz-frequency power gain on flexible substrates. <b>2013</b> , 13, 121-5	109
1046	Synthesis and characterization of plasmon resonant gold nanoparticles and graphene for photovoltaics. <b>2013</b> , 178, 559-567	20
1045	Vertical field-effect transistor based on graphene-WS2 heterostructures for flexible and transparent electronics. <i>Nature Nanotechnology</i> , <b>2013</b> , 8, 100-3	7 1342
1044	Semiconducting graphene: converting graphene from semimetal to semiconductor. <b>2013</b> , 5, 1353-68	122
1043	Graphene-based transparent strain sensor. <b>2013</b> , 51, 236-242	595
1042	Prospects for hydrogen storage in graphene. <b>2013</b> , 15, 80-9	362
1041	Carbon nanomaterials for electronics, optoelectronics, photovoltaics, and sensing. <b>2013</b> , 42, 2824-60	941

10	040	Graphene/semiconductor heterojunction solar cells with modulated antireflection and graphene work function. <b>2013</b> , 6, 108-115	134
10	039	Mussel-inspired functionalization of graphene for synthesizing Ag-polydopamine-graphene nanosheets as antibacterial materials. <b>2013</b> , 5, 118-23	177
10	038	Polycrystallinity and stacking in CVD graphene. <b>2013</b> , 46, 2286-96	48
10	937	Fabrication of graphene-carbon nanotubes composite-based flexible transparent conductive films and their improved durability on repetitive strain. <b>2013</b> , 110, 29-34	4
10	036	Coating graphene oxide sheets with luminescent rare-earth complexes. <b>2013</b> , 48, 805-811	31
10	035	On chemical bonding and electronic structure of graphenethetal contacts. <b>2013</b> , 4, 494-502	57
10	934	Highly flexible and transparent multilayer MoS2 transistors with graphene electrodes. <b>2013</b> , 9, 3295-300	154
10	033	Dimension-tailored functional graphene structures for energy conversion and storage. <b>2013</b> , 5, 3112-26	86
10	032	Electrochemistry at CVD Grown Multilayer Graphene Transferred onto Flexible Substrates. <b>2013</b> , 117, 2053-2058	48
10	031	Al-TiOlcomposite-modified single-layer graphene as an efficient transparent cathode for organic solar cells. <b>2013</b> , 7, 1740-7	80
10	030	A review of fabrication and applications of carbon nanotube film-based flexible electronics. <b>2013</b> , 5, 1727-52	893
10	029	Electronic hybridization of large-area stacked graphene films. <b>2013</b> , 7, 637-44	72
10	028	Graphene/polymer composites for energy applications. <b>2013</b> , 51, 231-253	199
10	027	Transparent, dip-coated silver nanowire electrodes for small molecule organic solar cells. <b>2013</b> , 14, 143-148	75
10	026	Enhancement of integrity of graphene transferred by interface energy modulation. 2013, 65, 165-174	6
10	025	Vertical and Longitudinal Multilayer Graphene Growth Using Novel Heat-Beam-Assisted Chemical Vapor Deposition. <b>2013</b> , 6, 115101	1
10	024	Review of CVD Synthesis of Graphene. <b>2013</b> , 19, 297-322	352
10	023	Nanoscale assembly into extended and continuous structures and hybrid materials. <b>2013</b> , 5, e43-e43	18

1022	. <b>2013</b> ,	7
1021	Ultra-violet laser processing of graphene on SiO2/Si. <b>2013</b> , 110, 358-360	9
1020	Mono- and few-layer nanocrystalline graphene grown on Al2O3(0 0 0 1) by molecular beam epitaxy. <b>2013</b> , 56, 339-350	51
1019	Optical analysis of organic photovoltaic cells incorporating graphene as a transparent electrode. <b>2013</b> , 14, 1496-1503	11
1018	Highly doped fullerene C60 thin films as transparent stand alone top electrode for organic solar cells. <b>2013</b> , 118, 165-170	9
1017	Transparent PMMA-based nanocomposite using electrospun graphene-incorporated PA-6 nanofibers as the reinforcement. <b>2013</b> , 89, 134-141	45
1016	Growth of controlled thickness graphene by ion implantation for field-effect transistor. <b>2013</b> , 107, 170-173	11
1015	One-pot hydrothermal synthesis and characterization of FeS2 (pyrite)/graphene nanocomposite. <b>2013</b> , 218, 276-284	55
1014	An important atomic process in the CVD growth of graphene: Sinking and up-floating of carbon atom on copper surface. <b>2013</b> , 284, 207-213	18
1013	Effect of repetitive strain on the electrical durability of graphene-based, flexible, transparent, conductive films. <b>2013</b> , 62, 263-268	1
1012	. <b>2013</b> , 117, 4800-4807	22
1011	2 th solid-state laser mode-locked by single-layer graphene. <b>2013</b> , 102, 013113	101
1010	Graphene synthesis: relationship to applications. <b>2013</b> , 5, 38-51	533
1009	Electronic and transport properties of unbalanced sublattice N-doping in graphene. <b>2013</b> , 13, 1446-50	96
1008	Increased mobility for layer-by-layer transferred chemical vapor deposited graphene/boron-nitride thin films. <b>2013</b> , 102, 103115	19
1007	Metal-graphene-metal photodetectors. 2013,	5
1006	Reduced graphene oxide nanoribbon networks: a novel approach towards scalable fabrication of transparent conductive films. <b>2013</b> , 9, 820-4	26
1005	No Graphene Etching in Purified Hydrogen. <b>2013</b> , 4, 1100-3	70

10	004	Large area coating of graphene at low temperature using a roll-to-roll microwave plasma chemical vapor deposition. <b>2013</b> , 532, 89-93	43
10	003	Biomedical applications of graphene and graphene oxide. <b>2013</b> , 46, 2211-24	1179
10	002	High-quality and efficient transfer of large-area graphene films onto different substrates. <b>2013</b> , 56, 271-278	125
10	001	Nonvolatile memory cells based on MoS2/graphene heterostructures. <b>2013</b> , 7, 3246-52	762
10	000	The chemistry of two-dimensional layered transition metal dichalcogenide nanosheets. <b>2013</b> , 5, 263-75	6689
9:	99	Design of vanadium oxide structures with controllable electrical properties for energy applications. <b>2013</b> , 42, 5157-83	335
9:	98	Dynamics of single Fe atoms in graphene vacancies. <b>2013</b> , 13, 1468-75	207
9!	97	A review of carbon nanotube- and graphene-based flexible thin-film transistors. <b>2013</b> , 9, 1188-205	237
99	96	Methane as an effective hydrogen source for single-layer graphene synthesis on Cu foil by plasma enhanced chemical vapor deposition. <b>2013</b> , 5, 1221-6	84
9!	95	Tuning graphene morphology by substrate towards wrinkle-free devices: Experiment and simulation. <b>2013</b> , 113, 104301	46
99	94	Structural and charge transport characteristics of graphene layers obtained from CVD thin film and bulk graphite materials. <b>2013</b> , 52, 49-55	9
9:	93	Hydrogen-incorporated TiS2 ultrathin nanosheets with ultrahigh conductivity for stamp-transferrable electrodes. <b>2013</b> , 135, 5144-51	228
9:	92	Not a molecule, not a polymer, not a substratelthe many faces of graphene as a chemical platform. <b>2013</b> , 49, 2848-57	39
9:	91	Synthesis of patched or stacked graphene and hBN flakes: a route to hybrid structure discovery. <b>2013</b> , 13, 933-41	162
9:	90	Graphene Films for Flexible Organic and Energy Storage Devices. <b>2013</b> , 4, 831-41	62
98	89	pH sensing characteristics and biosensing application of solution-gated reduced graphene oxide field-effect transistors. <b>2013</b> , 45, 70-6	79
98	88	Transparent, flexible conducting graphene hybrid films with a subpercolating network of silver nanowires. <b>2013</b> , 1, 2970	84
98	87	Growth direction manipulation of few-layer graphene in the vertical plane with parallel arrangement. <b>2013</b> , 56, 103-108	21

986	Resistivity and thermopower of graphene made by chemical vapor deposition technique. <b>2013</b> , 113, 076101	42
985	Enhanced optical response of hybridized VO//graphene films. <b>2013</b> , 5, 2632-6	29
984	Tri-layer graphene films produced by mechanochemical exfoliation of graphite. <b>2013</b> , 57, 410-415	42
983	Flexible transparent electrodes made of electrochemically exfoliated graphene sheets from low-cost graphite pieces. <b>2013</b> , 34, 315-319	48
982	Graphene and its derivatives for the development of solar cells, photoelectrochemical, and photocatalytic applications. <b>2013</b> , 6, 1362	324
981	Ion doping of graphene for high-efficiency heterojunction solar cells. <b>2013</b> , 5, 1945-8	119
980	Transferred wrinkled Al2O3 for highly stretchable and transparent graphene-carbon nanotube transistors. <b>2013</b> , 12, 403-9	273
979	Dual capacitive-inductive nature of periodic graphene patches: Transmission characteristics at low-terahertz frequencies. <b>2013</b> , 87,	82
978	Procedure of removing polymer residues and its influences on electronic and structural characteristics of graphene. <b>2013</b> , 102, 091602	73
977	Graphene at the Atomic-Scale: Synthesis, Characterization, and Modification. <b>2013</b> , 23, 2554-2564	27
977 976	Graphene at the Atomic-Scale: Synthesis, Characterization, and Modification. <b>2013</b> , 23, 2554-2564  Probing the dielectric response of graphene via dual-band plasmonic nanoresonators. <b>2013</b> , 15, 5395-9	27 10
976	Probing the dielectric response of graphene via dual-band plasmonic nanoresonators. <b>2013</b> , 15, 5395-9	10
976 975	Probing the dielectric response of graphene via dual-band plasmonic nanoresonators. <b>2013</b> , 15, 5395-9  Graphene-Based Polymer Composites and Their Applications. <b>2013</b> , 52, 319-331  Environmental applications using graphene composites: water remediation and gas adsorption.	10
976 975 974	Probing the dielectric response of graphene via dual-band plasmonic nanoresonators. <b>2013</b> , 15, 5395-9  Graphene-Based Polymer Composites and Their Applications. <b>2013</b> , 52, 319-331  Environmental applications using graphene composites: water remediation and gas adsorption. <b>2013</b> , 5, 3149-71	10 412 407
976 975 974 973	Probing the dielectric response of graphene via dual-band plasmonic nanoresonators. 2013, 15, 5395-9  Graphene-Based Polymer Composites and Their Applications. 2013, 52, 319-331  Environmental applications using graphene composites: water remediation and gas adsorption. 2013, 5, 3149-71  Influence of synthesis conditions on properties of green-reduced graphene oxide. 2013, 15, 1	10 412 407 28
<ul><li>976</li><li>975</li><li>974</li><li>973</li><li>972</li></ul>	Probing the dielectric response of graphene via dual-band plasmonic nanoresonators. 2013, 15, 5395-9  Graphene-Based Polymer Composites and Their Applications. 2013, 52, 319-331  Environmental applications using graphene composites: water remediation and gas adsorption. 2013, 5, 3149-71  Influence of synthesis conditions on properties of green-reduced graphene oxide. 2013, 15, 1  Two-dimensional semiconductors: recent progress and future perspectives. 2013, 1, 2952  Self-organized graphene nanosheets with corrugated, ordered tip structures for high-performance	10 412 407 28 287

## (2013-2013)

968	organic electronics. <b>2013</b> , 7, 3598-606	440
967	Intercalation of Li at the Graphene/Cu Interface. <b>2013</b> , 117, 9259-9265	16
966	Transparent and conductive reduced graphene oxide/silver nanoparticles multilayer film obtained by electrical self-assembly process with graphene oxide sheets and silver colloid. <b>2013</b> , 3, 3391	43
965	Flexible and transparent graphene-based loudspeakers. <b>2013</b> , 102, 151902	67
964	Improved synthesis of graphene flakes from the multiple electrochemical exfoliation of graphite rod. <b>2013</b> , 2, 377-386	174
963	Ultrathin two-dimensional MnO2/graphene hybrid nanostructures for high-performance, flexible planar supercapacitors. <b>2013</b> , 13, 2151-7	751
962	Bioinspired wafer-scale production of highly stretchable carbon films for transparent conductive electrodes. <b>2013</b> , 52, 5535-8	108
961	Graphene-Based Nanomaterials: Synthesis, Properties, and Optical and Optoelectronic Applications. <b>2013</b> , 23, 1984-1997	212
960	Tuning the Dirac point in CVD-grown graphene through solution processed n-type doping with 2-(2-methoxyphenyl)-1,3-dimethyl-2,3-dihydro-1H-benzoimidazole. <b>2013</b> , 13, 1890-7	120
959	Hydrogen-excluded graphene synthesis via atmospheric pressure chemical vapor deposition. <b>2013</b> , 59, 439-447	42
959 958		42 11
	59, 439-447  Crystallographic orientation of early domains in CVD graphene studied by Raman spectroscopy.	
958	59, 439-447  Crystallographic orientation of early domains in CVD graphene studied by Raman spectroscopy.  2013, 568-569, 146-150	11
958 957	Crystallographic orientation of early domains in CVD graphene studied by Raman spectroscopy.  2013, 568-569, 146-150  Scaling properties of charge transport in polycrystalline graphene. 2013, 13, 1730-5  Rapid identification of stacking orientation in isotopically labeled chemical-vapor grown bilayer	11
<ul><li>958</li><li>957</li><li>956</li></ul>	Crystallographic orientation of early domains in CVD graphene studied by Raman spectroscopy.  2013, 568-569, 146-150  Scaling properties of charge transport in polycrystalline graphene. 2013, 13, 1730-5  Rapid identification of stacking orientation in isotopically labeled chemical-vapor grown bilayer graphene by Raman spectroscopy. 2013, 13, 1541-8	108
<ul><li>958</li><li>957</li><li>956</li><li>955</li></ul>	Crystallographic orientation of early domains in CVD graphene studied by Raman spectroscopy.  2013, 568-569, 146-150  Scaling properties of charge transport in polycrystalline graphene. 2013, 13, 1730-5  Rapid identification of stacking orientation in isotopically labeled chemical-vapor grown bilayer graphene by Raman spectroscopy. 2013, 13, 1541-8  Uniformly Interconnected Silver-Nanowire Networks for Transparent Film Heaters. 2013, 23, 1250-1255	11 108 131 356
<ul><li>958</li><li>957</li><li>956</li><li>955</li><li>954</li></ul>	Crystallographic orientation of early domains in CVD graphene studied by Raman spectroscopy. 2013, 568-569, 146-150  Scaling properties of charge transport in polycrystalline graphene. 2013, 13, 1730-5  Rapid identification of stacking orientation in isotopically labeled chemical-vapor grown bilayer graphene by Raman spectroscopy. 2013, 13, 1541-8  Uniformly Interconnected Silver-Nanowire Networks for Transparent Film Heaters. 2013, 23, 1250-1255  Enhanced efficiency of graphene/silicon heterojunction solar cells by molecular doping. 2013, 1, 5736  Highly conductive and stretchable polymer composites based on graphene/MWCNT network. 2013,	11 108 131 356

950	Broadband light-trapping enhancement in an ultrathin film a-Si absorber using whispering gallery modes and guided wave modes with dielectric surface-textured structures. <b>2013</b> , 25, 2617-23	54
949	Anomalous Behaviors of Graphene Transparent Conductors in GrapheneBilicon Heterojunction Solar Cells. <b>2013</b> , 3, 1029-1034	90
948	Graphene-Based Chemical and Biosensors. <b>2013</b> , 103-141	9
947	The electronic properties of bilayer graphene. <b>2013</b> , 76, 056503	585
946	Graphene Domains Synthesized on Electroplated Copper by Chemical Vapor Deposition. 2013, 30, 028102	3
945	Efficient welding of silver nanowire networks without post-processing. <b>2013</b> , 9, 2887-94	183
944	Graphene transparent electrodes grown by rapid chemical vapor deposition with ultrathin indium tin oxide contact layers for GaN light emitting diodes. <b>2013</b> , 102, 162102	34
943	Thin Ni film on graphene current spreading layer for GaN-based blue and ultra-violet light-emitting diodes. <b>2013</b> , 102, 151115	22
942	The chemistry of pristine graphene. <b>2013</b> , 49, 3721-35	190
941	Manipulating the electronic and chemical properties of graphene via molecular functionalization. <b>2013</b> , 88, 132-159	138
940	Graphene-based electrodes for electrochemical energy storage. <b>2013</b> , 6, 1388	631
939	Carbon clusters near the step of Rh surface: implication for the initial stage of graphene nucleation. <b>2013</b> , 67, 1	5
938	Tuning the electrical and optical properties of graphene by ozone treatment for patterning monolithic transparent electrodes. <b>2013</b> , 7, 4233-41	76
937	Millimeter-size single-crystal graphene by suppressing evaporative loss of Cu during low pressure chemical vapor deposition. <b>2013</b> , 25, 2062-5	246
936	Hard corona composition and cellular toxicities of the graphene sheets. <b>2013</b> , 109, 212-8	61
935	A general method for transferring graphene onto soft surfaces. <i>Nature Nanotechnology</i> , <b>2013</b> , <b>8</b> , 356-62 <sub>2</sub> 8. <sub>7</sub>	215
934	Laser flash synthesis of graphene and its inorganic analogues: An innovative breakthrough with immense promise. <b>2013</b> , 3, 11987	66
933	Microscopy of Graphene Growth, Processing, and Properties. <b>2013</b> , 23, 2617-2634	32

932	Package-free flexible organic solar cells with graphene top electrodes. <b>2013</b> , 25, 4296-301	229
931	Co-Percolating Graphene-Wrapped Silver Nanowire Network for High Performance, Highly Stable, Transparent Conducting Electrodes. <b>2013</b> , 23, 5150-5158	197
930	Large scale atmospheric pressure chemical vapor deposition of graphene. <b>2013</b> , 54, 58-67	212
929	Ambient fabrication of large-area graphene films via a synchronous reduction and assembly strategy. <b>2013</b> , 25, 2957-62	162
928	Graphene based piezoresistive pressure sensor. <b>2013</b> , 102, 161904	206
927	Solution processed zinc oxide nanopyramid/silver nanowire transparent network films with highly tunable light scattering properties. <b>2013</b> , 5, 4400-3	30
926	Low-temperature graphene synthesis using microwave plasma CVD. <b>2013</b> , 46, 063001	76
925	Synthesis and electronic properties of chemically functionalized graphene on metal surfaces. <b>2013</b> , 25, 043001	7
924	Mesoscale Scanning Electron and Tunneling Microscopy Study of the Surface Morphology of Thermally Annealed Copper Foils for Graphene Growth. <b>2013</b> , 25, 1643-1648	17
923	Large-scale production of nanographene sheets with a controlled mesoporous architecture as high-performance electrochemical electrode materials. <b>2013</b> , 6, 1084-90	46
922	Electromechanical properties of graphene transparent conducting films for flexible electronics. <b>2013</b> , 13, 1331-1334	23
921	Effect of anions in Au complexes on doping and degradation of graphene. <b>2013</b> , 1, 2463	48
920	Organic/Polymeric Field-Effect Transistors. <b>2013</b> , 95-170	3
919	Covalently Bonded Chitosan on Graphene Oxide via Redox Reaction. <b>2013</b> , 6, 911-926	71
918	Large-scale quantification of CVD graphene surface coverage. <b>2013</b> , 5, 2379-87	45
917	Flexible graphene woven fabrics for touch sensing. <b>2013</b> , 102, 163117	39
916	Controlled charge trapping by molybdenum disulphide and graphene in ultrathin heterostructured memory devices. <b>2013</b> , 4, 1624	504
915	Three step fabrication of graphene at low temperature by remote plasma enhanced chemical vapor deposition. <b>2013</b> , 3, 9544	10

914	Broadband high photoresponse from pure monolayer graphene photodetector. <b>2013</b> , 4, 1811	556
913	Strong light-matter interactions in heterostructures of atomically thin films. <b>2013</b> , 340, 1311-4	1850
912	Graphene photo detector with integrated waveguide biochemical sensors. <b>2013</b> , 187, 319-322	4
911	Langmuir <b>B</b> lodgett assembly of sulphonated graphene nanosheets into single- and multi-layered thin films. <b>2013</b> , 568-569, 101-105	13
910	STM imaging, spectroscopy and manipulation of a self-assembled PTCDI monolayer on epitaxial graphene. <b>2013</b> , 15, 4939-46	22
909	Direct Synthesis of Graphene Meshes and Semipermanent Electrical Doping. <b>2013</b> , 4, 2099-2104	28
908	Dual origin of defect magnetism in graphene and its reversible switching by molecular doping. <b>2013</b> , 4, 2010	189
907	Graphene nanoelectrodes: fabrication and size-dependent electrochemistry. <b>2013</b> , 135, 10073-80	80
906	Adhesive contact between a graphene sheet and a nano-scale corrugated surface. 2013, 46, 205303	8
905	Metal-semiconductor-metal photodetectors based on graphene/p-type silicon Schottky junctions. <b>2013</b> , 102, 013110	168
904	Two-Dimensional Nanocrystals: Structure, Properties and Applications. 2013, 38, 1289-1304	6
903	Graphene Field-Effect Transistors Based on BoronNitride Dielectrics. 2013, 101, 1609-1619	114
902	ID Curves of graphene nanoribbons under uniaxial compressive and tensile strain. 2013, 559, 82-87	10
901	Large-Area 2-D Electronics: Materials, Technology, and Devices. <b>2013</b> , 101, 1638-1652	39
900	Atomistic modelling of CVD synthesis of carbon nanotubes and graphene. <b>2013</b> , 5, 6662-76	75
899	Laser direct synthesis of graphene on quartz. <b>2013</b> , 53, 374-379	48
898	Single-layer graphene sheets as counter electrodes for fiber-shaped polymer solar cells. <b>2013</b> , 3, 13720	30
897	A transparent electrode based on a metal nanotrough network. <i>Nature Nanotechnology</i> , <b>2013</b> , 8, 421-5 28.7	749

896	Antireflection properties of graphene layers on planar and textured silicon surfaces. 2013, 24, 165402	28
895	Highly defective graphene: A key prototype of two-dimensional Anderson insulators. <b>2013</b> , 6, 326-334	43
894	The nonlinear optical properties of coupling and decoupling graphene layers. 2013, 3, 042123	56
893	Direct PECVD growth of vertically erected graphene walls on dielectric substrates as excellent multifunctional electrodes. <b>2013</b> , 1, 770-775	120
892	Monitoring oxygen movement by Raman spectroscopy of resistive random access memory with a graphene-inserted electrode. <b>2013</b> , 13, 651-7	106
891	Scalable, printable, surfactant-free graphene ink directly from graphite. <b>2013</b> , 24, 205304	52
890	The effect of thermal annealing of graphene under ammonia atmosphere on its electrical properties and contact to p-GaN. <b>2013</b> , 546, 246-249	9
889	Novel Carbon-Based Nanomaterials. <b>2013</b> , 61-87	5
888	Ohmic contact formation between metal and AlGaN/GaN heterostructure via graphene insertion. <b>2013</b> , 102, 153501	23
887	Growth intermediates for CVD graphene on Cu(111): carbon clusters and defective graphene. <b>2013</b> , 135, 8409-14	109
886	UV protection of reduced graphene oxide films by TiO2 nanoparticle incorporation. 2013, 5, 3638-42	32
885	Microstructural defects in GaN thin films grown on chemically vapor-deposited graphene layers. <b>2013</b> , 102, 051908	23
884	SYNTHETIC GRAPHENE GROWN BY CHEMICAL VAPOR DEPOSITION ON COPPER FOILS. <b>2013</b> , 27, 1341002	26
883	Transparent conducting film composed of graphene and silver nanowire stacked layers. 2013, 175, 42-46	35
882	Self-regulating homogenous growth of high-quality graphene on Co-Cu composite substrate for layer control. <b>2013</b> , 5, 5847-53	23
881	Optical probing of the electronic interaction between graphene and hexagonal boron nitride. <b>2013</b> , 7, 1533-41	48
880	High-performance, transparent, and stretchable electrodes using graphene-metal nanowire hybrid structures. <b>2013</b> , 13, 2814-21	552
879	Gigahertz integrated graphene ring oscillators. <b>2013</b> , 7, 5588-94	58

878	Efficient inkjet printing of graphene. <b>2013</b> , 25, 3985-92	375
877	One-step synthesis of graphene via catalyst-free gas-phase hydrocarbon detonation. <b>2013</b> , 24, 245602	38
876	. <b>2013</b> , 101, 1536-1556	38
875	Graphene Transparent Conductive Electrodes for Highly Efficient Silicon Nanostructures-Based Hybrid Heterojunction Solar Cells. <b>2013</b> , 117, 11968-11976	85
874	Nanocarbons for the development of advanced catalysts. <b>2013</b> , 113, 5782-816	1005
873	Edge-selectively functionalized graphene nanoplatelets. <b>2013</b> , 13, 224-38	30
872	Effect of charged line defects on conductivity in graphene: Numerical Kubo and analytical Boltzmann approaches. <b>2013</b> , 87,	31
871	Self-deployable current sources fabricated from edible materials. <b>2013</b> , 1, 3781-3788	91
870	Electrochemically Driven Covalent Functionalization of Graphene from Fluorinated Aryl Iodonium Salts. <b>2013</b> , 117, 12038-12044	54
869	One-step reduction, characterization and magnetic behaviour of exfoliated graphene oxide. <b>2013</b> , 31, 59-64	6
868	Fabrication of transparent, flexible conducing graphene thin films via soft transfer printing method. <b>2013</b> , 276, 437-446	23
867	A brief review of graphenethetal oxide composites synthesis and applications in photocatalysis. <b>2013</b> , 1, 21-39	118
866	Fabrication of high-aspect-ratio pattern via high throughput roll-to-roll ultraviolet nanoimprint lithography. <b>2013</b> , 112, 273-277	42
865	Enhancement of protein detection performance in field-effect transistors with polymer residue-free graphene channel. <b>2013</b> , 62, 312-321	15
864	Chemical vapor deposition of mesoporous graphene nanoballs for supercapacitor. 2013, 7, 6047-55	268
863	Simple technique for spatially separated nanofibers/nanobeads by multinozzle electrospinning toward white-light emission. <b>2013</b> , 5, 6038-44	27
862	Back-gate tuning of Schottky barrier height in graphene/zinc-oxide photodiodes. <b>2013</b> , 102, 242114	31
861	Review of graphene-based strain sensors. <b>2013</b> , 22, 057701	130

860	Bioinspired prospects of graphene: from biosensing to energy. <b>2013</b> , 1, 3521-3534	24
859	Highly Stretchable, Sparse, Metallized Nanofiber Webs as Thin, Transferrable Transparent Conductors. <b>2013</b> , 3, 1332-1337	64
858	Clean-lifting transfer of large-area residual-free graphene films. 2013, 25, 4521-6	139
857	Chemical vapour deposition growth of large single crystals of monolayer and bilayer graphene. <b>2013</b> , 4, 2096	422
856	Molecular self-assembly on graphene on SiO2 and h-BN substrates. <b>2013</b> , 13, 3199-204	106
855	Low temperature crystallization of diamond-like carbon films to graphene. <b>2013</b> , 280, 512-517	4
854	Electrochromics for Energy-Efficient Buildings: Nanofeatures, Thin Films, and Devices. <b>2013</b> , 593-617	2
853	Hexagonal graphene onion rings. <b>2013</b> , 135, 10755-62	28
852	Graphenelbnic liquid electrolytes for dye sensitised solar cells. <b>2013</b> , 1, 8379	40
851	Salt-assisted direct exfoliation of graphite into high-quality, large-size, few-layer graphene sheets. <b>2013</b> , 5, 7202-8	77
850	Coherent and broadband enhanced optical absorption in graphene. 2013, 7, 4810-7	163
849	A transparent and stretchable graphene-based actuator for tactile display. <b>2013</b> , 24, 145501	58
848	Terahertz and optical study of monolayer graphene processed by plasma oxidation. 2013, 102, 131901	23
847	The impact of edges and dopants on the work function of graphene nanostructures: The way to high electronic emission from pure carbon medium. <b>2013</b> , 102, 183112	38
846	Synthesis of boron-doped graphene monolayers using the sole solid feedstock by chemical vapor deposition. <b>2013</b> , 9, 1316-20	157
845	Graphene-P(VDF-TrFE) multilayer film for flexible applications. <b>2013</b> , 7, 3130-8	194
844	Surface passivation and band engineering: a way toward high efficiency grapheneplanar Si solar cells. <b>2013</b> , 1, 8567	108
843	Electrochemically controlled growth of silver nanocrystals on graphene thin film and applications for efficient nonenzymatic H2O2 biosensor. <b>2013</b> , 89, 222-228	81

842	Controlling the orientation, edge geometry, and thickness of chemical vapor deposition graphene. <b>2013</b> , 7, 1351-9	159
841	Chemical vapor deposition and characterization of aligned and incommensurate graphene/hexagonal boron nitride heterostack on Cu(111). <b>2013</b> , 13, 2668-75	98
840	Self-Limiting Chemical Vapor Deposition Growth of Monolayer Graphene from Ethanol. 2013, 117, 10755-107	<b>63</b> 9
839	Fast benchtop visualization of graphene grain boundaries using adhesive properties of defects. <b>2013</b> , 49, 5474-6	17
838	Freestanding graphene paper decorated with 2D-assembly of Au@Pt nanoparticles as flexible biosensors to monitor live cell secretion of nitric oxide. <b>2013</b> , 49, 71-8	100
837	Photoinduced Electron Transfer Between Pyridine Coated Cadmium Selenide Quantum Dots and Single Sheet Graphene. <b>2013</b> , 23, 5199-5211	54
836	Epitaxial GaN microdisk lasers grown on graphene microdots. <b>2013</b> , 13, 2782-5	68
835	Inkjet printing and vapor phase polymerization: patterned conductive PEDOT for electronic applications. <b>2013</b> , 1, 3353	50
834	Alternative plasmonic materials: beyond gold and silver. <b>2013</b> , 25, 3264-94	1395
833	Thermodynamic and structural insights into nanocomposites engineering by comparing two materials assembly techniques for graphene. <b>2013</b> , 7, 4818-29	113
832	Graphenes prepared from multi-walled carbon nanotubes and stacked graphene nanofibers for detection of 2,4,6-trinitrotoluene (TNT) in seawater. <b>2013</b> , 138, 1700-4	27
831	Ellipsometry at the Nanoscale. <b>2013</b> ,	64
830	Room-Temperature Nanosoldering of a Very Long Metal Nanowire Network by Conducting-Polymer-Assisted Joining for a Flexible Touch-Panel Application. <b>2013</b> , 23, 4171-4176	394
829	Transparent Graphene Electrodes for Highly Efficient IIII Multijunction Concentrator Solar Cells. <b>2013</b> , 1, 283-286	
828	Bioinspired Wafer-Scale Production of Highly Stretchable Carbon Films for Transparent Conductive Electrodes. <b>2013</b> , 125, 5645-5648	37
827	Flexible thermochromic window based on hybridized VO2/graphene. <b>2013</b> , 7, 5769-76	123
826	Low-temperature synthesis of graphene on Fe2O3 using inductively coupled plasma chemical vapor deposition. <b>2013</b> , 92, 437-439	14
825	Pyrolyzed carbon film diodes. <b>2013</b> , 5, 10673-81	5

## (2013-2013)

824	Interaction of Rh with Rh nanoparticles encapsulated by ordered ultrathin TiO(1+x) film on TiO2(110) surface. <b>2013</b> , 29, 15868-77	9
823	Bacteria Repellent Properties of Trichlorosilane Self-Assembled Graphene. <b>2013</b> , 6, 127003	2
822	Work-Function Engineering of Graphene Anode by Bis(trifluoromethanesulfonyl)amide Doping for Efficient Polymer Light-Emitting Diodes. <b>2013</b> , 23, 5049-5055	82
821	Influence of Chemisorbed Oxygen on the Growth of Graphene on Cu(100) by Chemical Vapor Deposition. <b>2013</b> , 117, 23919-23927	31
820	Ultrathin polymer films for transparent electrode applications prepared by controlled nucleation. <b>2013</b> , 5, 11654-60	40
819	25th anniversary article: The evolution of electronic skin (e-skin): a brief history, design considerations, and recent progress. <b>2013</b> , 25, 5997-6038	1622
818	Buckling induced delamination of graphene composites through hybrid molecular modeling. <b>2013</b> , 102, 031902	14
817	Direct graphene synthesis on SiO2/Si substrate by ion implantation. <b>2013</b> , 102, 193102	29
816	Nanomaterials applied in medicine, cultural heritage and chemical sensor technology. <b>2013</b> , 10, 508	5
815	Graphene Based Nanogenerator for Energy Harvesting. <b>2013</b> , 52, 06GA02	24
814	Experimental confirmation of suspended few-layered graphene on a Cu substrate grown via the CVD method and correlated with the electrical performance on a PET substrate. <b>2013</b> , 46, 345301	4
813	Spontaneous intercalation of long-chain alkyl ammonium into edge-selectively oxidized graphite to efficiently produce high-quality graphene. <b>2013</b> , 3, 2636	35
812	Tunable Interface Properties between Pentacene and Graphene on the SiC Substrate. <b>2013</b> , 117, 3969-3975	18
811	Nanowire templated semihollow bicontinuous graphene scrolls: designed construction, mechanism, and enhanced energy storage performance. <b>2013</b> , 135, 18176-82	168
810	Graphene-based plasmonic switches at near infrared frequencies. <b>2013</b> , 21, 15490-504	237
809	The selective transfer of patterned graphene. <b>2013</b> , 3, 3216	17
808	Engineering electronic properties of graphene by coupling with Si-rich, two-dimensional islands. <b>2013</b> , 7, 301-7	25
807	Rapid Selective Etching of PMMA Residues from Transferred Graphene by Carbon Dioxide. <b>2013</b> , 117, 23000-23008	69

806	Controlled Synthesis of Surface-Clean Monolayer Graphene. <b>2013</b> , 562-565, 85-90	2
805	Stable platinum nanoclusters on genomic DNA-graphene oxide with a high oxygen reduction reaction activity. <b>2013</b> , 4, 2221	156
804	Quantum confinement effects in transferrable silicon nanomembranes and their applications on unusual substrates. <b>2013</b> , 13, 5600-7	41
803	Fabrication and characterization of graphene derived from SiC. <b>2013</b> , 56, 2386-2394	4
802	Self-Assembly of Polar Phthalocyanine Molecules on Graphene Grown by Chemical Vapor Deposition. <b>2013</b> , 117, 21849-21855	38
801	Optically transparent and flexible graphene planar microwave structures. 2013,	O
800	Self-assembly of graphene on carbon nanotube surfaces. <b>2013</b> , 3, 2353	21
799	Electronic structure and imaging contrast of graphene moir[bn metals. 2013, 3, 1072	80
79 <sup>8</sup>	The Emerging Applications of Graphene Oxide and Graphene in Tissue Engineering. 2013, 279-299	4
797	Nonlinear control of absorption in one-dimensional photonic crystal with graphene-based defect. <b>2013</b> , 38, 3550-3	76
796	Centrifuge Coating for Low-Waste Solution Processing of Transparent Nanostructured Electrodes. <b>2013</b> , 12, 874-878	
795	Tuning the transport gap of functionalized graphene via electron beam irradiation. <b>2013</b> , 15, 033024	23
794	Gate-tunable nearly total absorption in graphene with resonant metal back reflector. 2013, 104, 57002	14
793	Dimensional dependence of phonon transport in freestanding atomic layer systems. <b>2013</b> , 5, 11870-5	5
79 <sup>2</sup>	Graphene as a Target for Polymer Synthesis. <b>2013</b> , 61-92	11
791	The study of the effects of cooling conditions on high quality graphene growth by the APCVD method. <b>2013</b> , 5, 5524-9	23
79°	Growth and oxidation of graphene on Rh(111). <b>2013</b> , 15, 19625-31	52
789	. <b>2013</b> , 101, 1620-1637	75

788	Graphene and its application in fuel cell catalysis: a review. <b>2013</b> , 8, 218-233	58
787	Liquid exfoliation of defect-free graphene. <b>2013</b> , 46, 14-22	720
786	. 2013,	1
785	Integration of graphene into thin film transistors. <b>2013</b> , 28, 175-180	5
784	Direct electron beam patterning of sub-5nm monolayer graphene interconnects. 2013,	3
783	Deterministic growth of AgTCNQ and CuTCNQ nanowires on large-area reduced graphene oxide films for flexible optoelectronics. <b>2013</b> , 24, 465202	12
782	Wavelength Tunable Graphene Modelocked VECSEL. 2013,	1
781	Solution processed graphene for photonics and optoelectronics. 2013,	1
780	Carbon Nanotubes and Graphene. <b>2013</b> , 76-127	
779	Identification of a strong contamination source for graphene in vacuum systems. <b>2013</b> , 24, 405201	7
778	Broadband photoresponse and rectification of novel graphene oxide/n-Si heterojunctions. <b>2013</b> , 21, 26034-43	36
777	Non-reciprocal magnetoplasmon graphene coupler. <b>2013</b> , 21, 11248-56	34
776	Graphene/liquid crystal based terahertz phase shifters. <b>2013</b> , 21, 21395-402	68
775	High-quality Si3N4 circuits as a platform for graphene-based nanophotonic devices. <b>2013</b> , 21, 31678-89	36
774	Fast convergent Fourier modal method for the analysis of periodic arrays of graphene ribbons. <b>2013</b> , 38, 3009-12	25
773	Communication: Substrate induced dehydrogenation: transformation of octa-ethyl-porphyrin into tetra-benzo-porphyrin. <b>2013</b> , 138, 211102	16
772	GaN nanorod light emitting diodes with suspended graphene transparent electrodes grown by rapid chemical vapor deposition. <b>2013</b> , 103, 222105	12
771	Near-field microwave microscopy of high-lbxides grown on graphene with an organic seeding layer. <b>2013</b> , 103, 243105	11

770	Progress in Imidazolium Ionic Liquids Assisted Fabrication of Carbon Nanotube and Graphene Polymer Composites. <b>2013</b> , 5, 847-872	72
769	Flexible, Transparent, and Conductive Film Based on Random Networks of Ag Nanowires. <b>2013</b> , 2013, 1-6	6
768	Time-resolved spectroscopy on epitaxial graphene in the infrared spectral range: relaxation dynamics and saturation behavior. <b>2013</b> , 25, 054202	46
767	MeV Electron-Beam Induced Clusterization of Platinum Chloride on Graphene for Transparent Conductive Electrodes. <b>2013</b> , 677, 25-30	1
766	Theoretical description of X-ray absorption spectroscopy of the graphene-metal interfaces. <b>2013</b> , 138, 154706	31
765	A Model Dielectric Function for Graphene from the Infrared to the Ultraviolet. <b>2013</b> , 1505, 1	
764	Conversion of multilayer graphene into continuous ultrathin sp[]-bonded carbon films on metal surfaces. <b>2013</b> , 3, 3276	66
763	Graphene-based semiconductor nanostructures. <b>2013</b> , 183, 113-132	15
762	Characterization of local charge distribution of polyethylene terephthalate film and influence as a graphene substrate. <b>2013</b> , 103, 033107	6
761	Dependence of Field-Effect Mobility of Graphene Grown by Thermal Chemical Vapor Deposition on Its Grain Size. <b>2013</b> , 52, 110106	7
760	Prospects of graphene electrodes in photovoltaics. 2013,	6
759	Spectroscopic Analysis of Graphitization and Grain Orientation of Carbon Films Grown by Photoemission-Assisted Plasma-Enhanced Chemical Vapor Deposition. <b>2013</b> , 52, 065503	1
758	Significant photoelectrical response of epitaxial graphene grown on Si-terminated 6H-SiC. <b>2013</b> , 22, 076804	2
757	Controllable Synthesis of Single-Crystal Monolayer Graphene on Copper Foils by Low-Pressure Chemical Vapor Deposition. <b>2013</b> , 562-565, 79-84	
756	All-carbon-based field effect transistors fabricated by aerosol jet printing on flexible substrates. <b>2013</b> , 23, 065027	27
755	Facile synthesis of graphene on dielectric surfaces using a two-temperature reactor CVD system. <b>2013</b> , 24, 395603	20
754	Switchable Glazing Technology: Electrochromic Fenestration for Energy-Efficient Buildings. <b>2013</b> , 583-613	3
753	Synthesis and Biomedical Applications of Graphene: Present and Future Trends. 2013,	14

752	Fabrication of ATO/Graphene Multi-layered Transparent Conducting Thin Films. 2013, 419, 012032	1
751	Quantum Hall effect in fractal graphene: growth and properties of graphlocons. <b>2013</b> , 24, 325601	15
750	Uniformly Distributed Graphene Domain Grows on Standing Copper via Low-Pressure Chemical Vapor Deposition. <b>2013</b> , 2013, 1-5	1
749	High frequency performance limits of nanointerconnects based on CVD-grown graphene films transferred on SiO2-substrate. <b>2013</b> ,	1
748	Low pressure chemical vapor deposition synthesis of hexagonal boron nitride on polycrystalline metal foils. <b>2013</b> , 250, 2727-2731	17
747	Effective contact model for geometry-independent conductance calculations in graphene. <b>2013</b> , 88,	5
746	Key growth parameters affecting the domain structure of chemical vapor deposition (CVD)-grown graphene on nickel. <b>2013</b> , 3, 22909	12
745	Functionalized graphene-based nanocomposites for smart optoelectronic applications. <b>2021</b> , 10, 605-635	7
744	Synthesis of graphene and other two-dimensional materials. <b>2021</b> , 1-79	2
743	Two-Dimensional (2D) Materials for Next-Generation Nanoelectronics and Optoelectronics: Advances and Trends. <b>2021</b> , 65-96	
742	Angled-stencil lithography based metal mesh/Ti3C2Tx MXene hybrid transparent electrodes for low-power and high-performance wearable thermotherapy.	3
741	Graphene transparent electrodes. <b>2021</b> , 487-516	
740	Engineering electrodes and metal halide perovskite materials for flexible/stretchable perovskite solar cells and light-emitting diodes. <b>2021</b> , 14, 2009-2035	16
739	Development and performance of a sealed liquid xenon time projection chamber. <b>2021</b> , 16, P01018-P01018	2
738	Graphene Coating as an Effective Barrier to Prevent Bacteria-Mediated Dissolution of Gold. <b>2021</b> , 11, 147	0
737	Ultra-smooth and robust graphene-based hybrid anode for high-performance flexible organic light-emitting diodes. <b>2021</b> , 9, 2106-2114	2
736	Graphene: The magic material. <b>2021</b> , 517-549	1
735	Bending Analysis of Polymer-Based Flexible Antennas for Wearable, General IoT Applications: A Review. <b>2021</b> , 13,	16

734	Quantum Dot/Graphene Heterostructure Nanohybrid Photodetectors. <b>2021</b> , 215-248	2
733	Nano/micro-structured magnetism. <b>2021</b> , 1-55	
732	Forming an Optically Transparent Graphene Film via the Transformation of C60 Molecules. 1016, 1549-1554	
731	Graphene, an epoch-making material in RFID technology: a detailed overview.	1
730	Graphene Composite Membrane for Water Desalination. 2021, 227-240	
729	Nanostructured Conductors for Flexible Electronics. 395-412	1
728	Large-Area Graphene and Carbon Nanosheets for Organic Electronics: Synthesis and Growth Mechanism. 81-120	3
727	Synthesis and Characterization of Graphene. 85-131	9
726	Graphene for Energy Solutions and its Printable Applications. 191-236	1
725	Graphene: Synthesis, Properties and Application. 139-193	1
724	Doping and Design of Flexible Transparent Electrodes for High-Performance Flexible Organic Solar Cells: Recent Advances and Perspectives. <b>2021</b> , 31, 2009399	20
723	Ice-Templated, Large-Area Silver Nanowire Pattern for Flexible Transparent Electrode. <b>2021</b> , 31, 2010155	39
722	Graphene Conformal-Coated Ceramics in Arbitrary Shape Targeting Smart Widgets. 2017, 4, 1700467	3
721	High-Performance Flexible Bioelectrocatalysis Bioassay System Based on a Triphase Interface. <b>2020</b> , 7, 1902172	5
720	Recent advances in the Van der Waals epitaxy growth of III-V semiconductor nanowires on graphene. <b>2021</b> , 2, 688-711	2
719	Flexible MetalAir Batteries: Progress, Challenges, and Perspectives. <b>2018</b> , 2, 1700231	118
718	Conducting Materials for Printed Electronics. <b>2014</b> , 49-74	3
717	Improvement of Electrical Conductivity and Transparency. <b>2015</b> , 123-178	1

716	MXenes for Transparent Conductive Electrodes and Transparent Energy Storage Devices. 2019, 481-501	1
715	Characteristics of Graphene/Reduced Graphene Oxide. <b>2020</b> , 155-177	24
714	Laser Interactions for the Synthesis and In Situ Diagnostics of Nanomaterials. <b>2014</b> , 143-173	2
713	Introduction. <b>2015</b> , 1-9	1
712	Methods and Concepts. <b>2015</b> , 9-25	1
711	Graphene. <b>2017</b> , 1-1	7
710	From Point to Line Defects in Two-Dimensional Transition Metal Dichalcogenides: Insights from Transmission Electron Microscopy and First-Principles Calculations. <b>2017</b> , 71-85	1
709	Encyclopedia of Nanotechnology. <b>2015</b> , 1-11	1
708	Electrochemical Exfoliation Synthesis of Graphene. <b>2017</b> , 39-50	6
707	Graphene/Metal Nanowire Hybrid Transparent Conductive Films. 2017, 121-142	2
706	Introduction to Transparent Conductors. <b>2020</b> , 1-8	1
705	Graphene-Based Biopolymer and Nano Composites: Fabrication, Characterization, and Applications. <b>2021</b> , 41-60	1
704	Silver nanoparticledecorated PANI/reduced graphene oxide for sensing of hydrazine in water and inhibition studies on microorganism. <b>2020</b> , 26, 3123-3133	6
703	Microscale surface potential gradient disturbances observed in bilayer graphene. <b>2020</b> , 510, 145504	1
702	Origin of nonlinear current-voltage curves for suspended zigzag edge graphene nanoribbons. <b>2020</b> , 165, 476-483	6
701	Recent progress in aqueous based flexible energy storage devices. <b>2020</b> , 30, 260-286	43
700	Ultra-high Photovoltage (2.45 V) Forming in Graphene Heterojunction via Quasi-Fermi Level Splitting Enhanced Effect. <b>2020</b> , 23, 100818	23
699	Scalable CVD synthesis of three-dimensional graphene from cast catalyst. <b>2020</b> , 254, 114510	10

698	Ethylcellulose/Ag nanowire composites as multifunctional patchable transparent electrodes. <b>2020</b> , 394, 125898	7
697	Introduction to Graphene-Based Nanomaterials: From Electronic Structure to Quantum Transport. <b>2020</b> ,	10
696	Integration Techniques for Micro/Nanostructure-based Large-Area Electronics. 2018,	12
695	Spatial Confinement Approach Using Ni to Modulate Local Carbon Supply for the Growth of Uniform Transfer-Free Graphene Monolayers. <b>2020</b> , 124, 23094-23105	6
694	Hybrid GaAsSb/GaAs Heterostructure CoreBhell Nanowire/Graphene and Photodetector Applications. <b>2020</b> , 2, 3109-3120	5
693	Transparent and Stretchable Graphene Electrode by Intercalation Doping for Epidermal Electrophysiology. <b>2020</b> , 12, 56361-56371	11
692	Solvent-Free Synthesis of the Polymer Electrolyte via Photo-Controlled Radical Polymerization: Toward Ultrafast In-Built Fabrication of Solid-State Batteries under Visible Light. <b>2021</b> , 13, 8426-8434	6
691	Greatly Improved Methane Dehydrogenation via Ni Adsorbed Cu(100) Surface. <b>2013</b> , 117, 14796-14803	23
690	CHAPTER 1:Fabrication Techniques of Graphene Nanostructures. <b>2014</b> , 1-30	7
689	Graphene-based reversible metal electrodeposition for dynamic infrared modulation. <b>2020</b> , 8, 8538-8545	12
688	Recent progress in integrated functional electrochromic energy storage devices. <b>2020</b> , 8, 15507-15525	28
687	Nanoscale phase change memory with graphene ribbon electrodes. <b>2015</b> , 107, 123508	31
686	Thermally driven hydrogen interaction with single-layer graphene on SiO2/Si substrates quantified by isotopic labeling. <b>2020</b> , 128, 225702	1
685	Transfer-Free Graphene Growth on Dielectric Substrates: A Review of the Growth Mechanism. <b>2019</b> , 44, 157-209	14
684	Development and applications of transparent conductive nanocellulose paper. <b>2017</b> , 18, 620-633	51
683	Semiconducting phase in borophene: role of defect and strain. <b>2017</b> , 50, 405103	12
682	Confocal laser scanning microscopy as a real-time quality-assessment tool for industrial graphene synthesis. <b>2020</b> , 7, 045014	2
681	Large-area growth of MoS2 at temperatures compatible with integrating back-end-of-line functionality. <b>2021</b> , 8, 025008	4

680	Twistons in graphene nanoribbons on a substrate. <b>2020</b> , 102,	3
679	Probing the structural transition from buffer layer to quasifreestanding monolayer graphene by Raman spectroscopy. <b>2019</b> , 99,	6
678	Measuring the local mobility of graphene on semiconductors. <b>2018</b> , 2,	1
677	Ambient-pressure CVD of graphene on low-index Ni surfaces using methane: A combined experimental and first-principles study. <b>2018</b> , 2,	10
676	Large graphene-induced shift of surface-plasmon resonances of gold films: Effective-medium theory for atomically thin materials. <b>2020</b> , 2,	2
675	844-fs mode-locked fiber laser by carboxyl-functionalized graphene oxide. <b>2017</b> , 56, 1	4
674	Graphene for thermoelectronic solar energy conversion. 2017,	3
673	Multilayer Engineering of Polyaniline and Reduced Graphene Oxide Thin Films on a Plastic Substrate for Flexible Optoelectronic Applications Using NIR. <b>2020</b> , 93, 1561-1570	2
672	An Improved Rosin Transfer Process for the Reduction of Residue Particles for Graphene. <b>2020</b> , 15, 85	3
671	Synthesis of Graphene. <b>2014</b> , 21-64	4
671 670	Synthesis of Graphene. 2014, 21-64  Graphene-based materials in the infrared and terahertz detector families: a tutorial. 2019, 11, 314	32
670	Graphene-based materials in the infrared and terahertz detector families: a tutorial. <b>2019</b> , 11, 314  Demonstration of a New Technique for the Transfer Printing of Graphene on Photonic Devices.	32
670 669	Graphene-based materials in the infrared and terahertz detector families: a tutorial. <b>2019</b> , 11, 314  Demonstration of a New Technique for the Transfer Printing of Graphene on Photonic Devices. <b>2017</b> ,	32
670 669 668	Graphene-based materials in the infrared and terahertz detector families: a tutorial. <b>2019</b> , 11, 314  Demonstration of a New Technique for the Transfer Printing of Graphene on Photonic Devices. <b>2017</b> ,  Broadband graphene/hexagonal boron nitride modulators based on a Si3N4 waveguide. <b>2020</b> , 37, 709  Correlation Between THz AC and Micro-Four-Point-Probe DC Conductivity Mapping of Graphene	32 3
670 669 668	Graphene-based materials in the infrared and terahertz detector families: a tutorial. 2019, 11, 314  Demonstration of a New Technique for the Transfer Printing of Graphene on Photonic Devices. 2017,  Broadband graphene/hexagonal boron nitride modulators based on a Si3N4 waveguide. 2020, 37, 709  Correlation Between THz AC and Micro-Four-Point-Probe DC Conductivity Mapping of Graphene Sheets. 2012,  Observation of the Relativistic Response of an Electron-Hole Plasma in Graphene on Femtosecond	32 3 1
670 669 668 667	Graphene-based materials in the infrared and terahertz detector families: a tutorial. 2019, 11, 314  Demonstration of a New Technique for the Transfer Printing of Graphene on Photonic Devices. 2017,  Broadband graphene/hexagonal boron nitride modulators based on a Si3N4 waveguide. 2020, 37, 709  Correlation Between THz AC and Micro-Four-Point-Probe DC Conductivity Mapping of Graphene Sheets. 2012,  Observation of the Relativistic Response of an Electron-Hole Plasma in Graphene on Femtosecond Timescales. 2011,	32 3 1 1

662	Temperature compensated fiber optic anemometer based on graphene-coated elliptical core micro-fiber Bragg grating. <b>2019</b> , 27, 34011-34021	9
661	Multifunctional and tunable trigate graphene metamaterial with "Lakes of Wada" topology. <b>2020</b> , 28, 24772-24788	2
660	Real-time fiber-optic anemometer based on a laser-heated few-layer graphene in an aligned graded-index fiber. <b>2017</b> , 42, 2703-2706	11
659	Numerical and experimental investigation of highly flexible, transparent, and conductive WO3/Ag/PEI/CuSCN multilayered electrodes. <b>2020</b> , 10, 3257	1
658	Ultraviolet absorption band engineering of graphene by integrated plasmonic structures. <b>2018</b> , 8, 3295	16
657	Dynamically tunable infrared grating based on graphene-enabled phase switching of a split ring resonator [Invited]. <b>2019</b> , 9, 56	4
656	Characterizations of a graphene-polyimide hybrid electro-optical liquid crystal device. <b>2019</b> , 2, 83	8
655	Experimental demonstration of an electrically tunable broadband coherent perfect absorber based on a grapheneBlectrolyteBraphene sandwich structure. <b>2019</b> , 7, 868	40
654	Materials and Characteristics of Emerging Transparent Electrodes. <b>2014</b> , 25, 242-248	3
653	Graphene-based Flexible and Stretchable Bioelectronics in Health Care Systems. <b>2016</b> , 3,	2
652	Ortogonal dizinler kullanarak kimyasal buhar litlime ylitemi ile blillen grafenin ana etkiler analizi. <b>2018</b> , 2018,	0
651	Controlling the Properties of Graphene using CVD Method: Pristine and N-doped Graphene. <b>2015</b> , 1, 169-174	2
650	Potential Applications of Carbon Nanotubes and Graphene: Marking the Direction of Scientific Research.	1
649	Optimization of ZnO/Ag/ZnO Transparent Conductive Electrodes Fabricated by Magnetron Sputtering. <b>2019</b> , 57, 91-96	9
648	Emerging Devices Based on Two-Dimensional Monolayer Materials for Energy Harvesting. <b>2019</b> , 2019, 7367828	20
647	Highly Flexible Touch Screen Panel Fabricated with Silver Nanowire Crossing Electrodes and Transparent Bridges. <b>2015</b> , 19, 508-513	11
646	Homogenization of hexagonal lattices. <b>2013</b> , 8, 541-572	8
645	Direct Growth of Graphene at Low Temperature for Future Device Applications. <b>2018</b> , 55, 203-223	6

## (2013-2019)

644	No Tilt Angle Dependence of Grain Boundary on Mechanical Strength of Chemically Deposited Graphene Film. <b>2019</b> , 56, 506-512	1
643	Band Gap Effects in a Two-Dimensional Regular Polygonal Graphene-Like Structure. <b>2014</b> , 03, 10-21	3
642	Transmission of Terahertz Acoustic Waves through Graphene-Semiconductor Layered Structures. <b>2014</b> , 03, 60-70	1
641	The Dissimilarities between Graphene and Frame-Like Structures. <b>2016</b> , 05, 55-72	1
640	Modeling and Simulation of Graphene Based Polymer Nanocomposites: Advances in the Last Decade. <b>2016</b> , 05, 96-142	33
639	Doping Graphene by Chemical Treatments Using Acid and Basic Substances. <b>2015</b> , 03, 17-21	3
638	Multilayer Graphene Synthesized by CVD Using Liquid Hexane as the Carbon Precursor. <b>2011</b> , 01, 157-160	11
637	Characterization of Hot Electron Transistors Using Graphene at Base. <b>2016</b> , 29, 147-151	1
636	Size and Density of Graphene Domains Grown with Different Annealing Times. 2013, 34, 3312-3316	7
635	Singular Sheet Etching of Graphene with Oxygen Plasma. <b>2014</b> , 6, 116	2
634	Synthesis and applications of graphene electrodes. <b>2012</b> , 13, 1-16	32
633	Graphene field-effect transistor for radio-frequency applications : review. <b>2012</b> , 13, 17-22	8
632	Raman spectroscopy study on the reactions of UV-generated oxygen atoms with single-layer graphene on SiO2/Si substrates. <b>2012</b> , 13, 34-38	4
631	Control of size and physical properties of graphene oxide by changing the oxidation temperature. <b>2012</b> , 13, 39-43	45
630	Identifying and quantitating defects on chemical vapor deposition grown graphene layers by selected electrochemical deposition of Au nanoparticles. <b>2012</b> , 13, 56-59	1
629	Comprehensive review on synthesis and adsorption behaviors of graphene-based materials. <b>2012</b> , 13, 73-87	34
628	Parametric Study of Methanol Chemical Vapor Deposition Growth for Graphene. 2012, 13, 205-211	12
627	Graphene growth from polymers. <b>2013</b> , 14, 145-151	3

626	Overlook of current chemical vapor deposition-grown large single-crystal graphene domains. <b>2014</b> , 15, 151-161	2
625	Fabrication of Graphene p-n Junction Field Effect Transistors on Patterned Self-Assembled Monolayers/Substrate. <b>2015</b> , 24, 53-59	3
624	Toward Charge Neutralization of CVD Graphene. <b>2015</b> , 24, 268-272	2
623	Synthesis of graphene nano-sheet without catalysts and substrates using fullerene and spark plasma sintering process. <b>2013</b> , 23, 27-30	9
622	High-Yield Etching-Free Transfer of Graphene: A Fracture Mechanics Approach. <b>2014</b> , 21, 59-64	4
621	Graphene production technology and processing technology. <b>2013</b> , 2013, 60-66	9
620	Intercalation and its mechanism of high quality large area graphene on metal substrate. <b>2017</b> , 66, 216803	3
619	Research status and development graphene devices using silicon as the subtrate. <b>2017</b> , 66, 218102	3
618	Structural Analysis and Direct Imaging of Rotational Stacking Faults in Few-Layer Graphene Synthesized from Solid Botanical Precursor. <b>2011</b> , 50, 070106	1
617	High Frequency Performance of Graphene Transistors Grown by Chemical Vapor Deposition for Mixed Signal Applications. <b>2011</b> , 50, 070114	8
616	Immunosensors Based on Graphene Field-Effect Transistors Fabricated Using Antigen-Binding Fragment. <b>2012</b> , 51, 06FD08	24
615	Process Optimization for Synthesis of High-Quality Graphene Films by Low-Pressure Chemical Vapor Deposition. <b>2012</b> , 51, 06FD21	5
614	In-situObservation of Surface Graphitization of Gallium Droplet and Concentration of Carbon in Liquid Gallium. <b>2012</b> , 51, 06FD28	12
613	Layer-by-Layer Assembled Transparent Conductive Graphene Films for Silicon Thin-Film Solar Cells. <b>2012</b> , 51, 11PF01	7
612	Roll-to-roll Continuous Manufacturing System for Carbon-Nanotube- / Silver-Nanowire-Based Large-Area Transparent Conductive Film. <b>2015</b> , 32, 673-680	2
611	Dark-field Transmission Electron Microscopy Imaging Technique to Visualize the Local Structure of Two-dimensional Material; Graphene. <b>2015</b> , 45, 23-31	2
610	Understanding the Growth Kinetics of Graphene on Cu and Fe2O3 Using Inductively-Coupled Plasma Chemical Vapor Deposition. <b>2017</b> , 47, 13-18	1
609	Large-scale and clean preparation of low-defect few-layered graphene from commercial graphite via hydroxyl radical exfoliation in an acidic medium.	

608	Low-cost materials for organic solar cells. <b>2021</b> , 9, 15395-15406	11
607	New Results on Diffusion in Graphene Nanostructures for Sensoristics. 33, 61-72	
606	Thermal Characterization of Multi-Layer Graphene Heat Spreader by Pt/Cu/Ti Micro-Coil. 2021, 218, 2100301	0
605	Graphene Transfer: A Physical Perspective. <b>2021</b> , 11,	1
604	Illuminating Seizures: Combined Optical and Electrophysiological Recording Techniques Provide Novel Insights Into Seizure Dynamics <b>2022</b> , 22, 78-80	
603	Graphene-Based Electrode Materials for Neural Activity Detection. <b>2021</b> , 14,	2
602	Large-Scale Syntheses of 2-D Materials: Flash Joule Heating and Other Methods. <b>2021</b> , e2106970	11
601	Impact of graphite impurities on the structure and optical properties of the sodium borate oxide glass. <b>2021</b> , 32, 27553	3
600	A decade of R2R graphene manufacturing. <i>Nature Nanotechnology</i> , <b>2021</b> , 16, 1050 28.7	2
599	Force uniformity control for large-area roll-to-roll process. <b>2021</b> , 92, 103906	О
598	Structures, Mechanics, and Electronics of Borophanes. <b>2021</b> , 125, 22917-22928	1
597	Flexible and Transparent Silver Nanowires Integrated with a Graphene Layer-Doping PEDOT:PSS Film for Detection of Hydrogen Sulfide. <b>2021</b> , 3, 4579-4586	3
596	2D materials inks toward smart flexible electronics. <b>2021</b> , 50, 116-116	14
595	Synthesis of Single-Crystal Graphene on Copper Foils Using a Low-Nucleation-Density Region in a Quartz Boat. <b>2021</b> , 12,	
594	Uniform Pressing Mechanism in Large-Area Roll-to-Roll Nanoimprint Lithography Process. <b>2021</b> , 11, 9571	0
593	Fabrication and characterization of graphene-based de-icing heater. 2021,	1
592	Ultra-Wideband Transparent Conductive Electrode for Electrochromic Synergistic Solar and Radiative Heat Management. 3906-3915	11
591	Nano-Physical Characterization of Chemical Vapor Deposition-Grown Monolayer Graphene for High Performance Electrode: Raman, Surface-Enhanced Raman Spectroscopy, and Electrostatic Force Microscopy Studies. <b>2021</b> , 11,	1

590	Toward the commercialization of chemical vapor deposition graphene films. 2021, 8, 041306	2
589	Effect of graphite exfoliation routes on the properties of exfoliated graphene and its photocatalytic applications. <b>2021</b> , 9, 106506	2
588	Toward clean and crackless polymer-assisted transfer of CVD-grown graphene and its recent advances in GFET-based biosensors. <b>2021</b> , 22, 100578	0
5 <sup>8</sup> 7	Optoeletronic and Ferroeletric Applications. <b>2011</b> , 41-55	
586	Synthesis, Processing, and Manufacturing of Components, Devices, and Systems. <b>2011</b> , 109-158	1
585	Dreams placed in graphene. <b>2011</b> , 2011, 3-5	
584	Morphological and Structural Characterization of Graphene Grown by Thermal Decomposition of 4H-SiC (0001) and by C Segregation on Ni. <b>2012</b> , 99-107	
583	Engineering of Graphite Bilayer Edges by Catalyst-Assisted Growth of Curved Graphene Structures. <b>2012</b> , 209-213	
582	Photonic and Optoelectronic Applications of Carbon Nanotube and Graphene. 2012,	
581	Synthesis of Graphene Using Thermal Chemical Vapor Deposition and Application as a Grid Membrane for Transmission Electron Microscope Observation. <b>2012</b> , 22, 130-135	
580	High-k gate oxides integration of graphene based infrared detector. <b>2012</b> , 31, 118-121	О
579	Graphene Growth from Spin-Coated Polymers without a Gas. <b>2012</b> , 51, 06FD01	1
578	Rapid Expansion of Nanotechnology: New Ways of Observing the Infinitesimal and the Discovery of Carbonaceous Nanomaterials with Unusual Properties, The. 13-48	
577	Process in preparation of metal-catalyzed graphene. <b>2013</b> , 62, 028201	5
576	Electronic Structure and Properties of Graphen Nanoribbons: Zigzag and Armchair Edges. 2013, 81-90	
575	Structural and Optical Characterizations of VO2Film on Graphene/Sapphire Substrate by Post-annealing after Sputtering. <b>2013</b> , 22, 98-104	
574	References. 313-326	

Graphene. 2013, 1-46 572 Graphene. **2013**, 1-30 571 The study of thermal properties of graphene/Cu foam hybrid structures. 2013, 23, 235-240 570 Graphenellwo-Dimensional Crystal. 2014, 3-27 569 568 Quasi-static finite element calculation of interaction between graphene and nanoprobe. 2014, 63, 154601 Epitaxial growth of graphene on silicon carbide (SiC). 2014, 177-198 567 566 Alternative Electrodes for OSC. 2014, 177-213 The pre-treatment of copper for graphene synthesis. 2014, 63, 176801 565 5 Introduction. 2014, 1-9 564 Encyclopedia of Polymeric Nanomaterials. 2014, 1-10 563 CHAPTER 12:Other Applications. 2014, 268-291 562 Applications in Other Fields. 2014, 347-408 561 Fabrication of graphene patterns directly on SiO2/Si substrates using laser-induced chemical vapor 560 deposition. 2014, Process parameters of large single crystal graphene prepared by chemical vapor deposition. 2014, 559 63, 248103 558 Synthesis of large arealsingle layer/crystalline graphene. 2014, 9, 167-171 1 Movement of graphene grain boundary and its interaction with defects during graphene growth. 557 2014, 9, 273-278 Technology of Flexible Transparent Conductive Electrode for Flexible Electronic Devices. 2014, 21, 1-11 556 2 Poly(Ethylene-Co-Vinyl Acetate) Composites in Nanoscale: Research Methodology and 555 Developments. **2014**, 39-78

554	The Versatile Roles of Graphene in Organic Photovoltaic Device Technology. <b>2015</b> , 223-251	1
553	Fabrication of Ag Grid Patterned PET Substrates by Thermal Roll-Imprinting for Flexible Organic Solar Cells. <b>2014</b> , 31, 993-998	1
552	Conclusions and Perspectives. <b>2015</b> , 205-213	
551	Introduction. <b>2015</b> , 1-26	
550	Silver Nanowires. <b>2015</b> , 1-14	
549	Graphene Laser Irradiation CVD Growth. <b>2015</b> , 21-27	
548	Recent Trends in Development of Ag Nanowire-based Transparent Electrodes for Flexible Stretchable Electronics. <b>2015</b> , 22, 7-14	Ο
547	Electrochemical Sensing and Biosensing Platforms Using Graphene and Graphene-Based Nanocomposites. 325-360	
546	A Detailed Review on Behavior of Ethylene-Vinyl Acetate Copolymer Nanocomposite Materials. <b>2015</b> , 89-123	
545	The Functionalization of Graphene and Its Assembled Macrostructures. 19-44	
544	Monolithic Graphene@raphite Integrated Electronics. 523-538	
543	Four-Wave Mixing and Carrier Nonlinearities in GrapheneBilicon Photonic Crystal Cavities. 215-232	
542	Catalyst-Free and Large-Area Deposition of Graphitic Carbon Films on Glass Substrates by Pyrolysis of Camphor. <b>2015</b> , 25, 341-346	
541	References. 257-276	
540	High-Performance Polymer Solar Cells Containing Carbon Nanomaterials. 163-189	
539	Introduction. 2016, 1-4	
538	Quantum Dot and Heterojunction Solar Cells Containing Carbon Nanomaterials. 237-266	
537	Synthesis of Nanocomposite Membranes. <b>2015</b> , 84-103	

536	Density Functional Based Tight Binding (DFTB) Study on the Thermal Evolution of Amorphous Carbon. <b>2016</b> , 05, 51-54	2
535	Encyclopedia of Nanotechnology. <b>2016</b> , 4027-4037	1
534	Feasibility of Fabricating Large-Area Inorganic Crystalline Semiconductor Devices. 2016, 249-275	
533	Otrzymywanie grafenu <b>2016</b> ,	
532	Silver Nanowires. <b>2016</b> , 1187-1203	
531	Development of AgNW/Reduced Graphene Oxide Hybrid Transparent Electrode with Long-Term Stability Using Plasma Reduction. <b>2016</b> , 49, 87-91	
530	pH Sensitive Graphene Field-Effect Transistor(FET). <b>2016</b> , 53, 117-122	
529	Optical properties of graphene film growing on a thin copper layer. <b>2016</b> , 19, 57-61	
528	Evaluation for Adhesion Characteristics of UV-curable Bump Shape Stamp for Transfer Process. <b>2016</b> , 32, 75-81	
527	Experimental study on interfacial mechanical behavior of single-layer monocrystalline graphene on a stretchable substrate. <b>2017</b> , 66, 166801	2
526	Research progress of graphene radio frequency devices. <b>2017</b> , 66, 218502	
525	Characterization of Nanocarbons: From Graphene to Graphene Nanoribbons (GNRs) and Quantum Dots (GQDs). <b>2017</b> , 315-338	
524	Preparation, structure configuration, physical properties and applications of borophene and two-dimensional alkaline-earth metal boride nanomaterials. <b>2017</b> , 66, 217702	2
523	Facile Synthesis of Large Surface Area Graphene and Its Applications. <b>2017</b> , 159-175	
522	Oxide Semiconductors (ZnO, TiO2, Fe2O3, WO3, etc.) as Photocatalysts for Water Splitting. <b>2017</b> , 161-222	1
521	Introduction. <b>2018</b> , 1-18	
520	Introduction. <b>2018</b> , 1-22	
519	Nanocarbon Materials in Catalysis. 25-63	

518	Two-dimensional graphene electronics: current status and prospects. <b>2018</b> , 188, 1249-1287	1
517	A Recent Progress in Nanocarbon Research and Development. <b>2017</b> , 30, 2-5	
516	Review of fabrication methods, physical properties, and applications of twisted bilayer graphene. <b>2018</b> , 67, 246802	2
515	Application of Isotopic Materials Science in Bulk and Low-Dimensional Structures. <b>2018</b> , 139-278	
514	Study on the Application of Grapheme in the Field of Anti-Corrosive Coatings. 2018, 08, 21-26	
513	Conducting Polymer Composite-Based Sensors for Flexible Electronics. <b>2018</b> , 1-32	
512	Graphene Preparation Methods Traceability, Research Progress and Development Status. <b>2018</b> , 08, 202-221	
511	Laser interference lithography on non-planar surface for roll-to-roll process. 2018,	
510	Robust excitonBolariton Rabi splitting in graphene nano ribbons: the means of two-coupled semiconductor microcavities. <b>2018</b> , 57, 1	1
509	Synthesis of Graphene Using Polystyrene and the Effect of Boron Oxide on the Synthesis of Graphene. <b>2018</b> , 28, 279-285	
508	Application of Reduced Graphene Oxide (rGO) for Stability of Perovskite Solar Cells. 2019, 203-229	
507	Clean transfer of chemical vapor deposition graphene film. <b>2019</b> , 68, 096801	3
506	Graphene-Based Transparent Photodetector Array for Multiplane Imaging. 2019,	1
505	Effect of Graphene Nanosheets Reinforcement on the Mechanical Properties of Rubber Seed Oil Based Polyurethane Nanocomposites. <b>2019</b> , 139-153	
504	Conducting Polymer Composite-Based Sensors for Flexible Electronics. <b>2019</b> , 1311-1341	1
503	First-principles study on structural stability of graphene oxide and catalytic activity of nitric acid. <b>2019</b> , 68, 247302	1
502	Graphene Functionalizations on Copper by Spectroscopic Techniques. <b>2019</b> , 313-333	
501	Molecular docking analysis of netropsin and novobiocin with the viral protein targets HABD, MTD and RCD. <b>2019</b> , 15, 233-239	

483

32,095607

Application of phase change material in tunable optical filters and shutters. 2019, 500 Graphene Growth with Solid Precursor-Polyethylene. **2019**, 29, 304-310 499 Gradual evolution of cell cycle regulation by cyclin-dependent kinases during the transition to 498 animal multicellularity. Synthesis of mono/ few layered MoS2 thin films and graphene: MoS2 van der Waal 497 heterostructures using pulsed laser deposition. 2019, Tunable low-threshold bistable Goos-Hüchen shift and Imbert-Fedorov shift using long-range 496 1 graphene surface plasmons within the terahertz region. 2019, 58, 9376-9383 Graphene-Based Materials for Flexible Supercapacitors. 2020, 297-326 495 Electromagnetically induced holographic imaging using monolayer graphene. 2020, 28, 1970-1986 494 4 Graphene. **2020**, 71, 189-189 493 Geometrical optimization for silver nanowire mesh as a flexible transparent conductive electrode. 492 **2020**, 59, 3073-3080 Investigation of Reflection and Wettability Properties of Graphene Coated Silver Surface by 491 Chemical Vapor Deposition Method. 2020, 10, 141-148 Computational methods towards increased efficiency design of graphene membranes for gas 490 separation and water desalination. 2019, Experimental Techniques for Layered Materials. 2020, 283-302 489 488 Biosensing Platforms Based on Graphene Field Effect Transistors. 2020, 63, 358-363 Self-activated Graphene Gas Sensors: A Mini Review. 2020, 29, 220-226 Chip-Scalable, Room-Temperature, Zero-Bias, Graphene-Based Terahertz Detectors with 486 3 Nanosecond Response Time. 2021, One-Step Formation of Reduced Graphene Oxide from Insulating Polymers Induced by Laser 485 Writing Method. **2021**, 11, 1308 Various Graphene, MoS( {{2}}) Devices and Room Temperature Operations. 2020, 229-236 484

The effect of catalytic copper pretreatments on CVD graphene growth at different stages. 2021,

482	Potassium reduced graphite functionalization: Architectural aesthetics and electrical excellence. <b>2022</b> , 186, 75-82	
481	Top gate engineering of field-effect transistors based on wafer-scale two-dimensional semiconductors. <b>2022</b> , 106, 243-248	3
480	Catalytic Degradation of Phenols by Recyclable CVD Graphene Films. <b>2020</b> , 15-27	
479	Sensing Materials: Carbon Materials. <b>2021</b> ,	
478	Corrugated graphene exposes the limits of a widely used ab initio van der Waals DFT functional. <b>2019</b> , 3,	1
477	Nanotechnology Applications and Synthesis of Graphene as Nanomaterial for Nanoelectronics. <b>2020</b> , 251-269	O
476	Switching Operation with Graphene-on-MoS(_2) Heterostructures. <b>2020</b> , 157-170	
475	CHAPTER 12:Ambipolar Inorganic Two-dimensional Materials for Solar Cells. <b>2020</b> , 256-297	
474	Introduction. <b>2020</b> , 1-23	
473	Graphene for the Potential Renewable Energy Applications. <b>2020</b> , 439-450	2
473 472	Graphene for the Potential Renewable Energy Applications. <b>2020</b> , 439-450  Introduction. <b>2020</b> , 1-26	2
		2 O
472	Introduction. <b>2020</b> , 1-26  Electronic properties of 2D and 1D carbon allotropes based on a triphenylene structural unit. <b>2021</b> ,	
47 <sup>2</sup> 47 <sup>1</sup>	Introduction. 2020, 1-26  Electronic properties of 2D and 1D carbon allotropes based on a triphenylene structural unit. 2021, 23, 25114-25125  Promising Graphene-Based Nanomaterials and Their Biomedical Applications and Potential Risks: A	O
47 <sup>2</sup> 47 <sup>1</sup> 47 <sup>0</sup>	Introduction. 2020, 1-26  Electronic properties of 2D and 1D carbon allotropes based on a triphenylene structural unit. 2021, 23, 25114-25125  Promising Graphene-Based Nanomaterials and Their Biomedical Applications and Potential Risks: A Comprehensive Review. 2021,	0
47 <sup>2</sup> 47 <sup>1</sup> 47 <sup>0</sup> 469	Introduction. 2020, 1-26  Electronic properties of 2D and 1D carbon allotropes based on a triphenylene structural unit. 2021, 23, 25114-25125  Promising Graphene-Based Nanomaterials and Their Biomedical Applications and Potential Risks: A Comprehensive Review. 2021,  Scalably Nanomanufactured Atomically Thin Materials-Based Wearable Health Sensors. 2100120  Gradual Edge Contact between Mo and MoS Formed by Graphene-Masked Sulfurization for	0 12 3
472 471 470 469 468	Introduction. 2020, 1-26  Electronic properties of 2D and 1D carbon allotropes based on a triphenylene structural unit. 2021, 23, 25114-25125  Promising Graphene-Based Nanomaterials and Their Biomedical Applications and Potential Risks: A Comprehensive Review. 2021,  Scalably Nanomanufactured Atomically Thin Materials-Based Wearable Health Sensors. 2100120  Gradual Edge Contact between Mo and MoS Formed by Graphene-Masked Sulfurization for High-Performance Field-Effect Transistors. 2021, 13, 54536-54542	O 12 3

464	Selective Pick-and-Place of Thin Film by Robotic Micromanipulation. 1362-1374	
463	Selection on Surfactant in Polishing Slurry for Chemical Mechanical Polishing 304 Stainless Steel. 866, 125-134	
462	Flexible and transparent silver nanowire structures for multifunctional electrical and optical biointerfacing.	1
461	Fabrication of field-effect transistors with transfer-free nanostructured carbon as the semiconducting channel material. <b>2020</b> , 31, 485203	1
460	Nanoscale structural and electrical properties of graphene grown on AlGaN by catalyst-free chemical vapor deposition. <b>2021</b> , 32, 015705	0
459	Scrolled Production of Large-Scale Continuous Graphene on Copper Foils*. <b>2020</b> , 37, 108101	3
458	Graphene field effect transistor scaling for ultra-low-noise sensors. <b>2021</b> , 32, 045502	2
457	Selection of Abrasive for Chemical Mechanical Polishing of the 304 Stainless Steel. <b>2020</b> , 1681, 012011	
456	Graphene Nanocomposite for Biomedical Applications. <b>2021</b> , 1-15	
455	Hydrogen Sensing of Graphene-based Chemoresistive Gas Sensor Enabled by Surface Decoration. <b>2020</b> , 29, 382-387	3
454	Synthesis of Large-Scale Transition Metal Dichalcogenides for Their Commercialization. <b>2020</b> , 29, 133-142	1
453	Position Dependent Resistance and Doping Condition on a Graphene Flake. <b>2020</b> , 29, 180-182	1
452	Roadblocks faced by graphene in replacing graphite in large-scale applications. 2020, 1,	1
45 <sup>1</sup>	Highly-defective graphene as a metal-free catalyst for chemical vapor deposition growth of graphene glass. <b>2022</b> , 187, 272-279	2
450	Strong anti-stacking structure formation in graphene materials obtained by chemical liquid deposition. <b>2022</b> , 187, 280-289	
449	Synthesis, characterization, properties and applications of two-dimensional magnetic materials. <b>2022</b> , 42, 101338	8
448	The heparinase-linked differential time method allows detection of heparin potency in whole blood with high sensitivity and dynamic range. <b>2021</b> , 198, 113856	
447	A Novel Touch Interface with Ultrahigh Optical Transmittance Based on Electrical Impedance Tomography for Interactive Displays. 2101133	

Investigation on graphene growth by roll-to-roll chemical vapor deposition. 1

445	Selective-Area, Water-Free Atomic Layer Deposition of Metal Oxides on Graphene Defects.	O
444	Surface Engineering of Substrates for Chemical Vapor Deposition Growth of Graphene and Applications in Electronic and Spintronic Devices.	2
443	Drift Suppression of Solution-Gated Graphene Field-Effect Transistors by Cation Doping for Sensing Platforms. <b>2021</b> , 21,	1
442	Recent advances of the graphite exfoliation processes and structural modification of graphene: a review. <b>2021</b> , 23, 1	0
441	Direct growth of wafer-scale highly oriented graphene on sapphire. <b>2021</b> , 7, eabk0115	5
440	Ultra-high Molecular Weight Polyethylene Lamellar-thin Framework on Square Meter Scale. <b>2021</b> , e2107941	1
439	Prediction of the molecular-level critical shear rates for the liquid exfoliation of graphene layers. <b>2021</b> , 130, 215105	
438	Depth Gradient Reduced Graphene Oxide Layer via Intense Pulsed Light Annealing Process for the Flexible Resistive Random Access Memory Device. 2101018	0
437	Recent progress of transparent conductive electrodes in the construction of efficient flexible organic solar cells.	1
436	Growth of Two-Dimensional Materials at the Wafer Scale. <b>2021</b> , e2108258	9
435	Degradation of tetracycline over carbon nanosheet: high efficiency, mechanism and biotoxicity assessment. <b>2021</b> , 8, 3762-3773	2
434	Theoretical study of optical and electronic properties of silicether/graphether heterostructure. <b>2021</b> , 70, 123102	
433	Synthesis of Large Area Graphitic Carbon Nitride Nanosheet by Chemical Vapor Deposition.	
432	Consumer Nanoproducts Based on Graphene and Graphene-Based Nanocomposite. <b>2021</b> , 1-22	
431	Flexible and Stretchable Micro-LED Display. <b>2021</b> , 141-160	
430	Surface Coating and Doping of Single-Crystal LiNi 0.5Co 0.2Mn 0.3O 2 for Enhanced High-Voltage Electrochemical Performances Via Chemical Vapor Deposition.	
429	Diffusion-enhanced preferential growth of m-oriented GaN micro-domains on directly grown graphene with a large domain size on Ti/SiO2/Si(001). <b>2022</b> , 30, 103113	O

428	Copper(II)-Bis-Cyclen Intercalated Graphene Oxide as an Efficient Two-Dimensional Nanocomposite Material for Copper-Catalyzed Azide-Alkyne Cycloaddition Reaction <b>2021</b> , 9, 754734	О
427	Two-Dimensional Stacked Composites of Self-Assembled Alkane Layers and Graphene for Transparent Gas Barrier Films with Low Permeability <b>2022</b> ,	1
426	Turbostratic stacked graphene-based high-responsivity mid-wavelength infrared detector using an enhanced photogating effect. <b>2022</b> , 12, 458	1
425	Controlling physical properties of bilayer graphene by stacking orientation caused by interaction between B and N dopant atoms. <b>2022</b> , 276, 115554	O
424	Establishment of a steroid binding assay for membrane progesterone receptor alpha (PAQR7) by using graphene quantum dots (GQDs) <b>2022</b> , 592, 1-6	1
423	The performance and durability of high-temperature proton exchange membrane fuel cells enhanced by single-layer graphene. <b>2022</b> , 93, 106829	3
422	Synthesis of large area graphitic carbon nitride nanosheet by chemical vapor deposition. <b>2022</b> , 900, 163310	0
421	Evaluation of Cu/Graphene Integration Schemes for Its Application on CMOS BEOL Interconnect. <b>2020</b> ,	
420	Continuous orientated growth of scaled single-crystal 2D monolayer films. <b>2021</b> , 3, 6545-6567	0
419	Design and Analysis of the Magnetic Circuit and Vibration of LMLP for Mass Transfer. 2021,	0
418	Dye random laser enhanced by graphene-based Au nanoparticles. <b>2022</b> , 71, 034206	О
417	Smart electronic material GRAPHENE and its utilization as a photo-sensitive switchable device. <b>2022</b> , 103-114	
416	Multilayer polymeric nanocomposite thin film heater and electromagnetic interference shield. <b>2022</b> , 435, 134598	О
415	Development of surface plasmon polariton-based nanolasers. <b>2022</b> , 131, 011101	
414	Effects of hybrid surfactants on the quality and yield of graphene using a novel electrochemical-mechanical exfoliation process. 1	
413	Additive-Assisted Growth of Scaled and Quality 2D Materials <b>2022</b> , e2107241	4
412	Organic Solvent Permeation through Negatively Charged Graphene Oxide Membranes. <b>2022</b> , 10, 1499-1508	2
411	Residue-Free Suspended Graphene Transferred by Perforated Template <b>2021</b> ,	1

410	Transparent ultrathin Ag nanomesh electrode fabricated by nanosphere lithography for organic light-emitting devices. <b>2022</b> , 120, 051106	1
409	Semitransparent organic solar cells: from molecular design to structureperformance relationships. <b>2021</b> , 10, 13-43	3
408	High-performance transparent conductive film by using ultra-thin metal grids. 2022, 37, 035016	
407	Transparent heaters based on CVD grown few-layer graphene. <b>2022</b> , 33, 3586	
406	A comprehensive review: Super hydrophobic graphene nanocomposite coatings for underwater and wet applications to enhance corrosion resistance. <b>2022</b> , 31, 100326	1
405	Laser-induced graphene (LIG)-driven medical sensors for health monitoring and diseases diagnosis <b>2022</b> , 189, 54	9
404	Steady-state stability improvement of reduced graphene oxide thermo behavior via polymer film encapsulation. <b>2022</b> , 121, 108792	1
403	Temperature Dependence of Interfacial Bonding and Configuration Transition in Graphene/Hexagonal Boron Nitride Containing Grain Boundaries and Functional Groups <b>2022</b> , 23,	2
402	Doping and Transfer of High Mobility Graphene Bilayers for Room Temperature Mid-Wave Infrared Photodetectors.	
401	Design and synthesis of ultrathin graphene: Fundamental applications in transparent electrodes and supercapacitors. <b>2022</b> , 115-140	
400	Graphene as a Piezoresistive Material in Strain Sensing Applications 2022, 13,	3
399	Trending 2D Nanomaterial Composites in Detection and Sensing of Biological Contaminants. <b>2022</b> , 173-196	
398	Sustainable ITO films with reduced indium content deposited by AACVD. 2022, 10, 579-589	0
397	Transfer Printing of Perovskite Whispering Gallery Mode Laser Cavities by Thermal Release Tape <b>2022</b> , 17, 8	1
396	Theoretical design of SnS-graphene heterojunctions with vacancy and impurity defects for multi-purpose photoelectric devices <b>2021</b> ,	0
395	Advances in flexible organic field-effect transistors and their applications for flexible electronics. <b>2022</b> , 6,	32
394	Intrinsic-trap-regulating growth of clean graphene on high-entropy alloy substrate. 1	0
393	Detecting the non-magnetism and magnetism switching of point defects in graphene at the atomic scale. <b>2022</b> , 152652	O

392	Spiral growth of adlayer graphene <b>2022</b> , e2107587	3
391	High Mobility Graphene on EVA/PET <b>2022</b> , 12,	1
390	The fabrication and physical properties of two-dimensional van der Waals heterostructures. 2022,	О
389	Near-Infrared Reflection Modulation Through Electrical Tuning of Hybrid Graphene Metasurfaces. 2102135	3
388	Hierarchical Silver Network Transparent Conducting Electrodes for Thin-Film Solar Cells.	1
387	Ultrasensitive N-Channel Graphene Gas Sensors by Nondestructive Molecular Doping 2022,	4
386	Unusual graphite fluoride hydrolysis toward unconventional graphene oxide for high-performance supercapacitors and Li-ion batteries. <b>2022</b> , 434, 134639	1
385	Nonlinear difference imaging to image local conductivity of single-layer graphene using electrical impedance tomography. <b>2022</b> , 1-1	1
384	Foldable Batteries: From Materials to Devices.	1
383	Highly Sensitive Graphene Ammonia Sensor Enhanced by Concentrated Nitric Acid Treatment. <b>2022</b> , 152689	O
382	2D Heterostructures for Ubiquitous Electronics and Optoelectronics: Principles, Opportunities, and Challenges <b>2022</b> ,	28
381	Graphene-based materials: analysis through calorimetric techniques. 1	1
380	Modelling of ionized and non-ionized carbon nanotubes used as selective nano-platforms for water desalination. 1	
379	Effect of MWCNTs additive on preservation stability of rGO powder. 2022, 33, 6766	
378	Molten liquid metal motion assisted preparation of suspended graphene arrays. 2022, 314, 131874	
377	Design and analysis of highly sensitive prism based surface plasmon resonance optical salinity sensor. <b>2022</b> , 7, 100217	1
376	Sweat-Based Glucose Sensor Based on a Graphene/Au Composite Electrode. <b>2022</b> , 14, 55-61	
375	Defects in graphene-based heterostructures: topological and geometrical effects <b>2022</b> , 12, 6772-6782	2

Realization of electronic grade graphene and h-BN. **2022**, 119-157

373	Ultrathin Super-Barrier Film Via 100 % Surface Coating Coverage of Self-Assembled Graphene Oxide Sheets.	
372	Electrode materials for stretchable triboelectric nanogenerator in wearable electronics <b>2022</b> , 12, 1054	I5-1057 <b>ő</b>
371	Nonvolatile MOX RRAM assisted by graphene and 2D materials. <b>2022</b> , 399-443	
370	Graphene and Its Nanocomposites Derivatives: Synthesis, Properties, and Their Applications in Water Treatment, Gas Sensor, and Solar Cell Fields. <b>2022</b> , 95-128	0
369	Progress in Research on electromechanical graphene resonant sensors. 2022,	
368	Nanomaterials-based disposable electrochemical devices for point-of-care diagnosis. <b>2022</b> , 53-80	
367	Graphene/Copper Nanoparticles as Thermal Interface Materials. <b>2022</b> , 5, 3450-3457	O
366	Advances in Flexible Metallic Transparent Electrodes 2022, e2106006	7
365	Graphene and g-C3N4-Based Gas Sensors. <b>2022</b> , 2022, 1-20	O
364	Oxygen Vacancy Transition in HfO x -Based Flexible, Robust, and Synaptic Bi-Layer Memristor for Neuromorphic and Wearable Applications. 2101208	6
363	Inhomogeneous strain and doping of transferred CVD-grown graphene. 2022, 41, 1727-1734	1
362	Enhanced Photogating Effect in Graphene Photodetectors Potential Fluctuation Engineering <b>2022</b>	7
361	Engineering Top Gate Stack for Wafer-Scale Integrated Circuit Fabrication Based on Two-Dimensional Semiconductors <b>2022</b> ,	1
360	Growth and Characterization of Graphene Layers on Different Kinds of Copper Surfaces <b>2022</b> , 27,	0
359	Study of the polishing slurry dispersant for chemical mechanical polishing of 304 stainless steel.	
358	Effect of ball milling speed on the quality of Al2O3 stripped graphene in a wet milling medium. <b>2022</b> ,	0
357	Langmuir-Blodgett Graphene-Based Films for Algal Biophotovoltaic Fuel Cells <b>2022</b> , 12,	1

Fabrication and Characterization of Micrometer Scale Graphene Structures for Large-Scale Ultra-Thin Electronics. **2022**, 11, 752

355	2D Materials for Wearable Energy Harvesting. 2101623	1
354	Strain-Induced Alignment of Printed Silver Nanowires for Stretchable Electrodes.	1
353	Ultrafast Growth of Highly Conductive Graphene Films by a Single Subsecond Pulse of Microwave <b>2022</b> ,	O
352	Using Scalable Graphene via Press-and-Peel: A Robust and Storable Tape 2022,	O
351	Graphene plasmonic spatial light modulator for reconfigurable diffractive optical neural networks <b>2022</b> , 30, 12712-12721	O
350	Chemical vapor deposition-grown nitrogen-doped graphenell synthesis, characterization and applications. <b>2022</b> , 6,	2
349	Graphene as a Transparent Conductive Electrode in GaN-Based LEDs 2022, 15,	1
348	Liquid Metal as a New Reaction Medium. <b>2022</b> , 153-215	
347	Polymer Composites with Graphene and Its Derivatives as Functional Materials of the Future. 1	1
346	Farming-Inspired Continuous Fabrication of Grating Flexible Transparent Film with Anisotropic Conductivity. 2101638	O
345	2D Ultrawide Bandgap Semiconductors: Odyssey and Challenges <b>2022</b> , e2101348	2
344	Electrical and Structural Properties of CVD-Graphene Oxidized Using KMnO4/H2SO4 Solution. <b>2022</b> , 12, 439	
343	Graphene-Based Microwave Circuits: A Review <b>2021</b> , e2108473	4
342	Large-Area and Clean Graphene Transfer on Gold-Nanopyramid-Structured Substrates: Implications for Surface-Enhanced Raman Scattering Detection. <b>2022</b> , 5, 3878-3888	O
341	Constructing van der Waals heterostructures by dry-transfer assembly for novel optoelectronic device <b>2022</b> ,	O
340	A Dynamic System Model for Roll-to-Roll Dry Transfer of Two-Dimensional Materials and Printed Electronics. <b>2022</b> ,	O
339	Current Progress and Scalable Approach toward the Synthesis of 2D Metal@rganic Frameworks. 2102560	1

338	Patterning of graphene using wet etching with hypochlorite and UV light 2022, 12, 4541	О
337	Ultrathin Membranes for Separations: A New Era Driven by Advanced Nanotechnology <b>2022</b> , e2108457	1
336	Recent advances in aluminium matrix composites reinforced with graphene-based nanomaterial: A critical review. <b>2022</b> , 100948	2
335	Simultaneous Enhancement in Visible Transparency and Electrical Conductivity via the Physicochemical Alterations of Ultrathin-Silver-Film-Based Transparent Electrodes <b>2022</b> ,	O
334	Recent Progress in Carbon Electrodes for Efficient and Cost-Benign Perovskite Optoelectronics. 1	О
333	Surface Coating and doping of Single-Crystal LiNi0.5Co0.2Mn0.3O2 for enhanced High-Voltage Electrochemical Performances via Chemical Vapor Deposition. <b>2022</b> , 116286	
332	Foldable and highly flexible transparent conductive electrode based on PDMS/ Ag NWs/PEDOT: PSS. <b>2022</b> , 126, 112175	1
331	Polyphenylene sulfide scaffold based flexible supercapacitor electrode with competitive areal capacitance and flame-retardant behavior. <b>2022</b> , 174, 105216	1
330	Compression-torsion coupling behaviours in double-helix nanofibers assembled from negatively curved nanographenes. <b>2022</b> , 209, 111367	
329	Recent advances in membrane-enabled water desalination by 2D frameworks: Graphene and beyond. <b>2022</b> , 531, 115684	9
328	Graphene compared to fluorine-doped tin oxide as transparent conductor in ZnO dye-sensitized solar cells. <b>2022</b> , 10, 107551	1
327	A facile and efficient nitrite electrochemical sensor based on N, O co-doped porous graphene film. <b>2022</b> , 178, 107361	1
326	Delineating charge and capacitance transduction in system-integrated graphene-based BioFETs used as aptasensors for malaria detection <b>2022</b> , 208, 114219	1
325	Figure of merit and sensitivity enhancement of biosensor LSPR in investigated for visible and near infrared. <b>2022</b> , 50, 101016	1
324	Iridescent coating of graphene oxide on various substrates <b>2022</b> , 617, 604-610	1
323	Ultrathin Super-barrier film via 100 % surface coating coverage of Self-assembled graphene oxide sheets. <b>2022</b> , 440, 135913	O
322	Effects of the Heating-up Atmosphere on the Nucleation of Graphene on Copper Foils. <b>2021</b> , 221, 33-40	
321	Phase-Controllable Synthesis of Ultrathin Molybdenum Nitride Crystals Via Atomic Substitution of MoS2. <b>2022</b> , 34, 351-357	3

Design And Force Analysis of The Chip Transfer Platform for Mass Transfer. **2021**,

319	Dual-channel charge transfer doping of graphene by sulfuric acid. <b>2022</b> , 43, 40-43	1
318	A new strategy for the efficient exfoliation of graphite into graphene. <b>2021</b> , 36, 1179-1186	2
317	Anomalous Optoelectric Properties of an Ultrathin Ruthenium Film with a Surface Oxide Layer for Flexible Transparent Conducting Electrodes. <b>2022</b> , 32, 2109330	O
316	Stretchable Systems. <b>2021</b> ,	4
315	Monolayer CVD Graphene Barrier Enhances the Stability of Planar pl Organic Inorganic Metal Halide Perovskite Solar Cells. <b>2022</b> , 5, 52-60	O
314	Functionalized 2 D Nanomaterials for Miniaturized Analytical Devices. <b>2022</b> , 153-179	
313	Towards Repeatable, Scalable Graphene Integrated Micro-Nano Electromechanical Systems (MEMS/NEMS) <b>2021</b> , 13,	O
312	Graphene nanostructures for input-output bioelectronics <b>2021</b> , 2, 041304	1
311	Effects of laser processing parameters on properties of laser-induced graphene by irradiating CO2 laser on polyimide. <b>2022</b> , 65, 41	1
310	References. <b>2021</b> , 317-358	
309	Wafer-Scale Graphene Anodes Replace Indium Tin Oxide in Organic Light-Emitting Diodes. <b>2022</b> , 10, 2101675	1
308	The influence of the surface density of oriented nickel networks on the conducting electrode optical transparency. <b>2021</b> , 2086, 012028	О
307	Optical Harmonic Generation in 2D Materials. <b>2022</b> , 32, 2105259	7
306	Effect of Nitrogen Doping on Structural and Optical Properties of TiO 2 Nanoparticles. <b>2021</b> , 400, 2100071	О
305	Recent advances in controlled chemical vapor deposition growth of bilayer 2D single crystals.	2
304	Fabrication and prospective applications of graphene oxide-modified nanocomposites for wastewater remediation <b>2022</b> , 12, 11750-11768	5
303	Graphene in automotive parts. <b>2022</b> , 623-651	0

302	Two-Dimensional Field-Effect Transistor Sensors: The Road toward Commercialization 2022,	9
301	Facile Gold-Nanoparticle Boosted Graphene Sensor Fabrication Enhanced Biochemical Signal Detection <b>2022</b> , 12,	1
300	Observation of Domain-Selective Defect Effects from a CVD-grown Graphene Monolayer Sandwiched at Individual Nanoparticle-on-Mirror Plasmonic Junctions.	
299	Experimental Validation of High Precision Web Handling for a Two-Actuator-Based Roll-to-Roll System <b>2022</b> , 22,	
298	Wireless graphene-based thermal patch for obtaining temperature distribution and performing thermography <b>2022</b> , 8, eabm6693	4
297	Fundamentals of Chemical Vapor Deposition of Atomic Layer Materials. <b>2022</b> , 65, 169-176	
296	Facile Synthesis of Amino Acids-derived Fe/N-codoped Reduced Graphene Oxide for Enhanced ORR Electrocatalyst. <b>2022</b> , 116326	0
295	First Progress for Plasma-based Transition Metal Dichalcogenides Synthesis: A Stable 1T phase and Promising Applications.	1
294	Shielding Effectiveness of Ideal Monolayer Graphene in Cylindrical Configurations With the Method of Auxiliary Sources. <b>2022</b> , 1-1	1
293	Consumer Applications of Graphene and Its Composites. <b>2022</b> , 471-500	O
293 292	Consumer Applications of Graphene and Its Composites. <b>2022</b> , 471-500  Miniaturized Electrochemical (Bio)sensing Devices Going Wearable. <b>2022</b> , 51-90	O
		0
292	Miniaturized Electrochemical (Bio)sensing Devices Going Wearable. <b>2022</b> , 51-90	0
292 291	Miniaturized Electrochemical (Bio)sensing Devices Going Wearable. 2022, 51-90  Applications of 'Graphene and Graphene-Based Nanocomposite for 'Consumer Nanoproducts. 2022, 501-522	
292 291 290	Miniaturized Electrochemical (Bio)sensing Devices Going Wearable. 2022, 51-90  Applications of 'Graphene and Graphene-Based Nanocomposite for 'Consumer Nanoproducts. 2022, 501-522  Lateral layered semiconductor multijunctions for novel electronic devices 2022,	
292 291 290 289	Miniaturized Electrochemical (Bio)sensing Devices Going Wearable. 2022, 51-90  Applications of Graphene and Graphene-Based Nanocomposite for Consumer Nanoproducts. 2022, 501-522  Lateral layered semiconductor multijunctions for novel electronic devices 2022,  Graphene echnology and integration with semiconductor electronics. 2022, 1-40	
292 291 290 289 288	Miniaturized Electrochemical (Bio)sensing Devices Going Wearable. 2022, 51-90  Applications of Graphene and Graphene-Based Nanocomposite for Consumer Nanoproducts. 2022, 501-522  Lateral layered semiconductor multijunctions for novel electronic devices 2022,  Graphene echnology and integration with semiconductor electronics. 2022, 1-40  Enhanced performance of supercapacitors based on rotationally stacked CVD graphene. 2022, 131, 164302  Direct Plasma-Enhanced-Chemical-Vapor-Deposition Syntheses of Vertically Oriented Graphene	0

284	A Review of the Synthesis, Properties, and Applications of 2D Materials. 2200031	9
283	A Glimpse on the plethora of applications of prodigious material MXene. <b>2022</b> , e00439	Ο
282	Preparation and application of graphene-based wearable sensors.	4
281	Estimation of electrode contact impedance and conductivity of single-layer graphene using electrical impedance tomography.	Ο
280	The kinetics of crack propagation in CVD graphene film. <b>2022</b> , 126, 109056	
279	Toward batch synthesis of high-quality graphene by cold-wall chemical vapor deposition approach. 1	Ο
278	Graphene Membranes for Multi-Dimensional Electron Microscopy Imaging: Preparation, Application and Prospect. 2202502	2
277	Low-Temperature CVD-Grown Graphene Thin Films as Transparent Electrode for Organic Photovoltaics. <b>2022</b> , 12, 681	1
276	A graphene pH sensor fabrication process for a nanotechnology laboratory course.	
275	Highly Crystalline Graphene as the Atomic 2D Blanket of a Perovskite Absorber for Enhanced Photovoltaic Performance <b>2022</b> ,	
274	Super Material Borophene: Next Generation of Graphene. <b>2022</b> , 34, 1313-1332	
273	Carbon Nanocomposite-Based SCs as Wearable Energy Storage. <b>2022</b> , 451-483	1
272	Circuit Level Memory Technologies and Applications based on 2D Materials. 2202371	1
271	HiPIMS Obtained Carbon Nano-coatings on Copper Foil and Their Thermal Conductivity. <b>2022</b> , 128565	Ο
270	Preparation of carbon nanoparticles from activated carbon by aqueous counter collision. 2022, 68,	О
269	A DFT study of electronic and thermoelectric properties of arsenic doped graphene. 2022,	
268	Nondestructive visualization of graphene on Pt with methylene blue surface modification.	О
267	Ultra-narrow-band absorption enhancement of monolayer graphene based on surface lattice resonance modes.	

266	Controllable synthesis of silver nanowires via an organic cation-mediated polyol method and their application as transparent electrode for touch screen.	1
265	A novel strategy of fabricated flexible ITO electrode by liquid metal ultra-thin oxide film. 2022,	О
264	Effective hole conductivity in nitrogen-doped CVD-graphene by singlet oxygen treatment under photoactivation conditions. <b>2022</b> , 12,	2
263	Functional optical design of thickness-optimized transparent conductive dielectric-metal-dielectric plasmonic structure. <b>2022</b> , 12,	О
262	The interfacial adhesion of contacting pairs in van der Waals materials. 2022, 153739	
261	Methods of Chemical Synthesis in the Synthesis of Nanomaterial and Nanoparticles by the Chemical Deposition Method: A Review.	3
260	Enclosed Cells for Extending Soft X-ray Spectroscopies to Atmospheric Pressures and Above. 175-218	1
259	Nanofiber Composite Electrodes for Flexible Transparent Supercapacitors. <b>2022</b> , 1-25	
258	Large-scale Graphene Production and Transfer for Industrial Applications. 2022, 02, 15-25	О
257	UV Laser-Induced Graphene Electrode for Supercapacitor and Electrochemical Sensing Applications. <b>2022</b> , 327-338	
256	Effect of Surface Charge Characteristics of Ferroelectric LiNbO3 on Wettability of Ionic Liquids. <b>2022</b> , 12, 2085	
255	Transparent Conducting Films Based on Carbon Nanotubes: Rational Design toward the Theoretical Limit. 2201673	3
254	Synchronously promoted mechanical and biotribological properties of carbon fiber composites by constructing Si3N4 nanowires@pyrolytic carbon intertwined network. <b>2022</b> ,	1
253	Graphene-integrated waveguides: Properties, preparation, and applications.	O
252	Semitransparent Perovskites for Solar Cells and Smart Windows. <b>2022</b> , 349-377	
251	Exploring Interface Through Synchrotron Radiation Characterization Techniques: A Graphene Case. 2202469	0
250	Sequential Growth of Vertical Transition-Metal Dichalcogenide Heterostructures on Rollable Aluminum Foil.	О
249	The Effect of Solvent Mixing Ratios on the Exfoliation of 2D NiTe2 Thin Films for Transparent Electrodes.	

248	Structural Integrity Preserving and Residue-Free Transfer of Large-Area Wrinkled Graphene onto Polymeric Substrates.	1
247	Two-dimensional materials prospects for non-volatile spintronic memories. 2022, 606, 663-673	10
246	High-Quality N-Doped Graphene with Controllable Nitrogen Bonding Configurations Derived from Ionic Liquids.	
245	Vertical Schottky ultraviolet photodetector based on graphene and top <b>d</b> own fabricated GaN nanorod arrays. <b>2022</b> , 43, 062804	O
244	Advances in Flexible Optoelectronics Based on Chemical Vapor Deposition-Grown Graphene. 2203115	1
243	Life cycle assessment of organic solar cells and perovskite solar cells with graphene transparent electrodes. <b>2022</b> ,	2
242	Laminar Flow-Assisted Metal Etching for the Preparation of High-Quality Transfer-Free Graphene.	
241	Superconducting Proximity Effect in d -Wave Cuprate/Graphene Heterostructures. 2100559	Ο
240	Exploring the Role of Carbon-Based Nanomaterials in Microalgae for the Sustainable Production of Bioactive Compounds and Beyond.	0
239	Effect of precursor gas inlet position relative to hot wire cells in HWC-IP-PECVD systems for low-temperature graphene growth. 1-7	
238	Band gap formation of 2D materialin graphene: Future prospect and challenges. 2022, 100474	1
237	2D Material and Perovskite Heterostructure for Optoelectronic Applications. <b>2022</b> , 12, 2100	4
236	High Thermal Conductivity 2D Materials: From Theory and Engineering to Applications. 2200409	О
235	Preparation of Highly Stable and Electrochemically Active Three-dimensional Interconnected Graphene Frameworks from Jute Sticks.	Ο
234	Strain Optimization of Tensioned Web through Computational Fluid Dynamics in the Roll-to-Roll Drying Process. <b>2022</b> , 14, 2515	1
233	Nanolayered CoCrFeNi/Graphene Composites with High Strength and Crack Resistance. <b>2022</b> , 12, 2113	Ο
232	Induced electrical polarization and conductivity homogenization via internal architectural regulation in PC/PVDF/MWCNTs/PEDOT:PSS transparent conductive films. <b>2022</b> , 254, 125088	
231	Recent advances on graphene: Synthesis, properties and applications. <b>2022</b> , 160, 107051	4

230	Phase control and lateral heterostructures of MoTe2 epitaxially grown on graphene/Ir(111).	O
229	Embedded Pseudo Graphene Nanoribbons Oriented Via Ge(110) Surface Reconstruction.	
228	Flexible 1.3 th photodetector fabricated with InN nanowires and graphene on overhead projector transparency sheet.	
227	Mass transfer, detection and repair technologies in micro-LED displays. <b>2022</b> , 65, 2128-2153	O
226	Perovskite solar cells for building integrated photovoltaics glazing applications. 2022,	5
225	Ultra-Thin Graphene Foam Based Flexible Piezoresistive Pressure Sensors for Robotics. 922, 79-86	
224	Electronic and magnetic properties of tripentaphene nanoribbons. 2022, 6,	O
223	Practical Graphene Technologies for Electrochemical Energy Storage. 2204272	2
222	Why is graphene an extraordinary material? A review based on a decade of research. 2022, 16,	0
221	Field Emission from Graphene Layers. <b>2023</b> , 213-220	1
221	Field Emission from Graphene Layers. 2023, 213-220  Direct Laser Writing of Poly(furfuryl Alcohol)/Graphene Oxide Electrodes for Electrochemical Determination of Ascorbic Acid.	1
	Direct Laser Writing of Poly(furfuryl Alcohol)/Graphene Oxide Electrodes for Electrochemical	1
220	Direct Laser Writing of Poly(furfuryl Alcohol)/Graphene Oxide Electrodes for Electrochemical Determination of Ascorbic Acid.	,
220	Direct Laser Writing of Poly(furfuryl Alcohol)/Graphene Oxide Electrodes for Electrochemical Determination of Ascorbic Acid.  Doping of Graphene Films: Open the way to Applications in Electronics and Optoelectronics. 2203179  Laser Processing of Flexible In-Plane Micro-supercapacitors: Progresses in Advanced Manufacturing	4
220 219 218	Direct Laser Writing of Poly(furfuryl Alcohol)/Graphene Oxide Electrodes for Electrochemical Determination of Ascorbic Acid.  Doping of Graphene Films: Open the way to Applications in Electronics and Optoelectronics. 2203179  Laser Processing of Flexible In-Plane Micro-supercapacitors: Progresses in Advanced Manufacturing of Nanostructured Electrodes.	4
220 219 218	Direct Laser Writing of Poly(furfuryl Alcohol)/Graphene Oxide Electrodes for Electrochemical Determination of Ascorbic Acid.  Doping of Graphene Films: Open the way to Applications in Electronics and Optoelectronics. 2203179  Laser Processing of Flexible In-Plane Micro-supercapacitors: Progresses in Advanced Manufacturing of Nanostructured Electrodes.  Optical Study of Few-Layer Graphene Treated by Oxygen Plasma. 2200197  A System of Rapidly Detecting Escherichia Coli in Food Based on a Nanoprobe and Improved ATP	4 4
220 219 218 217 216	Direct Laser Writing of Poly(furfuryl Alcohol)/Graphene Oxide Electrodes for Electrochemical Determination of Ascorbic Acid.  Doping of Graphene Films: Open the way to Applications in Electronics and Optoelectronics. 2203179  Laser Processing of Flexible In-Plane Micro-supercapacitors: Progresses in Advanced Manufacturing of Nanostructured Electrodes.  Optical Study of Few-Layer Graphene Treated by Oxygen Plasma. 2200197  A System of Rapidly Detecting Escherichia Coli in Food Based on a Nanoprobe and Improved ATP Bioluminescence Technology. 2022, 12, 2417	4 1 0

212	A review on the alternative of indium tin oxide coated glass substrate in flexible and bendable organic optoelectronic device.	1
211	The non-volatile electrostatic doping effect in MoTe2 field-effect transistors controlled by hexagonal boron nitride and a metal gate. <b>2022</b> , 12,	O
210	Morphological Changes in Cu Film Patterns Used in the Catalytic Chemical Vapor Deposition of Graphene. <b>2022</b> ,	
209	Angstrofluidics: Walking to the Limit. <b>2022</b> , 52, 189-218	3
208	Multiscale modeling assessment of the interfacial properties and critical aspect ratio of structurally defected graphene in polymer nanocomposites for defect engineering. <b>2022</b> , 96, 104728	О
207	Beyond CMOS. <b>2021</b> ,	O
206	Interfacial Chemical Vapor Deposition of Wrinkle-Free Bilayer Graphene on Dielectric Substrates. <b>2022</b> , 154367	
205	Modeling of Cylindrical Configurations Coated by Monolayer Graphene with a Modified Method of Auxiliary Sources. <b>2022</b> ,	
204	Graphite and Graphene Nanoplatelets (GNP) Filled Polymer Matrix Nanocomposites. 2022, 1-45	
203	Chemical Vapor Deposition Synthesis of Graphene on Copper Foils.	
202	Kimyasal Buhar Biriktirme Yfitemi ile Farkl <del>i</del> Kal <del>li</del> llarda Grafen B <b>JHI</b> mesi.	
201	Catalytic Effects of Electrodes and Electrolytes in Metal-Sulfur Batteries: Progress and Prospective. 2204636	Ο
200	Technological breakthroughs in chip fabrication, transfer, and color conversion for high performance micro-LED display. 2204947	0
199	High uniformity and stability of graphene transparent conducting electrodes by dual-side doping. <b>2022</b> , 154569	
198	Understanding interfacial energy structures in organic solar cells using photoelectron spectroscopy: A review. <b>2022</b> , 132, 050701	O
197	2D materials and van der Waals heterojunctions for neuromorphic computing.	0
196	Transformation of carbon dioxide, a greenhouse gas, into useful components and reducing global warming: A comprehensive review.	1
195	Overview and Outlook on Graphene and Carbon Nanotubes in Perovskite Photovoltaics from Single-Junction to Tandem Applications. 2204594	1

194	A method to estimate adhesion energy of as-grown graphene in a roll-to-roll dry transfer process. <b>2022</b> ,	
193	High Performance and Flexible Electrodeposited Silver Mesh Transparent Conducting Electrodes Based on a Self-Cracking Template.	
192	Emerging Iontronic Sensing: Materials, Mechanisms, and Applications. <b>2022</b> , 2022, 1-35	О
191	Short duration growth of high-quality multi-layered graphene by temperature-controlled rapid heating chemical vapor deposition.	
190	Zinc oxide nanoparticles: an excellent biomaterial for bioengineering applications.	1
189	Soft and Stretchable Liquid MetalElastomer Composite for Wearable Electronics. <b>2022</b> , 14, 38196-38204	1
188	From Materials to Devices: Graphene toward Practical Applications. 2200671	3
187	Cost-Effective Fabrication of Uniformly Aligned Silver Nanowire Microgrid-Based Transparent Electrodes with Higher than 99% Transmittance.	O
186	A Green Approach for High Oxidation Resistance, Flexible Transparent Conductive Films Based on Reduced Graphene Oxide and Copper Nanowires. <b>2022</b> , 17,	
185	Recent Advances in Laser-Induced Graphene: Mechanism, Fabrication, Properties, and Applications in Flexible Electronics. 2205158	4
184	Selective laser ablation preparation of Ag grid transparent electrodes with fractal-combined structures and optimization of fractal grid pitch. <b>2022</b> , 156, 108597	
183	Applications of graphene-based composites in the anode of lithium-ion batteries. 4,	O
182	Wearable and flexible electrodes in nanogenerators for energy harvesting, tactile sensors, and electronic textiles: novel materials, recent advances, and future perspectives. <b>2022</b> , 100233	2
181	Green and efficient production of functionalized graphene to achieve soybean meal-based adhesive enhancement. <b>2022</b> , 376, 134068	O
180	Graphene oxide: A mini-review on the versatility and challenges as a membrane material for solvent-based separation. <b>2022</b> , 12, 100392	1
179	Highly stable self-passivated MoO3-doped graphene film with nonvolatile MoO layer. <b>2022</b> , 33, 104432	O
178	Design and simulation of a subwavelength 4-to-2 graphene-based plasmonic priority encoder. <b>2023</b> , 157, 108680	1
177	Multifunctional materials and nanocomposite sensors for civil infrastructure monitoring. <b>2022</b> , 497-553	O

176	OrganicIhorganic Nanohybrids in Flexible Electronic Devices. <b>2022</b> , 385-404	0
175	Improving the conductivity of graphite-based films by rapid laser annealing.	О
174	Monolayer and bilayer graphene. <b>2022</b> ,	0
173	Perovskite-transition metal dichalcogenides heterostructures: recent advances and future perspectives. <b>2022</b> , 1, 220006-220006	2
172	The carbon chain growth during the onset of CVD graphene formation on □Al2O3 is promoted by unsaturated CH2 ends. <b>2022</b> , 24, 23357-23366	O
171	From molecules in solution to molecules on surfaces lusing supramolecular dyads to form functional self-assembled networks on graphene. <b>2022</b> , 10, 13981-13988	Ο
170	Growth of turbostratic stacked graphene using waste ferric chloride solution as a feedstock. <b>2022</b> , 12, 25048-25053	1
169	Using Single-Crystal Graphene to Form Arrays of Nanocapsules Enabling the Observation of Light Elements in Liquid Cell Transmission Electron Microscopy. <b>2022</b> , 22, 7423-7431	Ο
168	Optical conductivity measurement of chemically-doped graphene via terahertz time-domain spectroscopy. <b>2022</b> ,	0
167	Synthesis of Graphene and Related Materials by Microwave-Excited Surface Wave Plasma CVD Methods. <b>2022</b> , 2, 160-184	Ο
166	Overview of the Recent Advancements in Graphene-Based H2S Sensors. <b>2022</b> , 5, 12300-12319	O
165	Fabrication of multi-layer graphene by repeated transfer. <b>2022</b> , 12, 095110	Ο
164	Towards ballistic transport CVD graphene by controlled removal of polymer residues. 2022, 33, 495704	O
163	Chemical vapor deposition: a potential tool for wafer scale growth of two-dimensional layered materials. <b>2022</b> , 55, 473001	1
162	Resistive Switching Crossbar Arrays Based on Layered Materials. 2205402	2
161	A Review of Various Attempts on Multi-Functional Encapsulation Technologies for the Reliability of OLEDs. <b>2022</b> , 13, 1478	O
160	Integrated wafer-scale ultra-flat graphene by gradient surface energy modulation. 2022, 13,	1
159	Insight into Cellulose Nanosizing for Advanced Electrochemical Energy Storage and Conversion: A Review. <b>2022</b> , 5,	O

158	Stable Dispersion of Graphene in Water, Promoted by High-Yield, Scalable Exfoliation of Graphite in Natural Aqueous Extracts: The Role of Hydrophobic Organic Molecules. <b>2022</b> , 10, 12552-12558	O
157	Carbon Nanodots Assisted Surface Engineering of GaN Photoanodes for Efficient and Stable Photoelectrochemical Water Oxidation. 2200198	O
156	Gas Separation Membranes with Atom-Thick Nanopores: The Potential of Nanoporous Single-Layer Graphene.	O
155	Epitaxy of III-nitrides on two-dimensional materials and its applications.	O
154	Rational Molecular Design Enables Efficient Blue TADFIDLEDs with Flexible Graphene Substrate. 2207324	Ο
153	Graphene Surface Plasmon Resonance Based All-Optical Modulator at Terahertz Frequency. <b>2023</b> , 879-889	O
152	From Triboelectric Nanogenerator to Multifunctional Triboelectric Sensors: A Chemical Perspective toward the Interface Optimization and Device Integration. 2107222	3
151	Graphene-Induced Performance Enhancement of Batteries, Touch Screens, Transparent Memory, and Integrated Circuits: A Critical Review on a Decade of Developments. <b>2022</b> , 12, 3146	1
150	PECVD of Vertical Graphene: Local Plasma or Nonlocal Plasma?.	Ο
149	Multifunctional-high resolution imaging plate based on hydrophilic graphene for digital pathology. <b>2022</b> , 33, 505101	O
148	Experimental and numerical investigation of the influence of nozzle design on the industrial convection drying of thin films. <b>2022</b> , 40, 2685-2695	1
147	The zoology of two-dimensional van der Waals materials. <b>2022</b> ,	O
146	Effect of Na-ion intercalation on the thermal conductivity of carbon honeycomb nanostructure. <b>2022</b> , 24, 25537-25546	Ο
145	Recent major advances and challenges in the emerging Graphene based nanomaterials in electrocatalytic Fuel Cell technology.	O
144	Synthesis of graphene nanomesh with symmetrical fractal patterns via hydrogen-free chemical vapor deposition.	Ο
143	Improving the Sensing Properties of Graphene MEMS Pressure Sensor by Low-Temperature Annealing in Atmosphere. <b>2022</b> , 22, 8082	O
142	A New Type Of Graphene Based Bone Scaffold In Tissue Engineering. <b>2022</b> , 10, 1890-1909	O
141	Microplotter Printing of Hierarchically Organized Planar NiCo2O4 Nanostructures. <b>2022</b> , 67, 1848-1854	3

140	Encapsulation of locally welded silver nanowire with water-free ALD-SbOx for flexible thin-film transistors. <b>2022</b> , 121, 163504	О
139	Short-Wave Infrared Photodetectors and Imaging Sensors Based on Lead Chalcogenide Colloidal Quantum Dots. 2201577	1
138	Graphene Properties, Synthesis and Applications: A Review.	О
137	Recent development of graphene-based composite for multifunctional applications: energy, environmental and biomedical sciences. 1-69	1
136	Graphene as the ultra-transparent conductive layer in developing the nanotechnology-based flexible smart touchscreens. <b>2022</b> , 111899	0
135	Reconfigurable graphene antenna with one third covered surface area.	Ο
134	Nb and Ni Nanoparticles Anchored on N-Doped Carbon Nanofiber Membrane as Self-Supporting Anode for High-Rate Lithium-Ion Batteries. <b>2022</b> , 12, 3724	Ο
133	Strongly enhanced THz generation enabled by a graphene hot-carrier fast lane. 2022, 13,	1
132	Graphene-Based Membranes for Water Desalination: A Literature Review and Content Analysis. <b>2022</b> , 14, 4246	1
131	Graphene and Its Derivatives: Synthesis and Application in the Electrochemical Detection of Analytes in Sweat. <b>2022</b> , 12, 910	5
130	Theory-Driven Spectral Control of Bis-EDOT Arylene Radical Cation Chromophores.	О
129	Engineering of Nanocellulose Thin Films for Triboelectric Nanogenerator Development. <b>2023</b> , 335-366	O
128	Graphene-Based Metal©rganic Framework Hybrids for Applications in Catalysis, Environmental, and Energy Technologies.	5
127	Recent Development of Multifunctional Nanocomposites Based on Bacterial Nanocellulose. 2023, 75-105	Ο
126	A Review of Scalable Hexagonal Boron Nitride ( h -BN) Synthesis for Present and Future Applications. 2207374	2
125	Recent advances in chemical vapour deposition techniques for graphene-based nanoarchitectures: From synthesis to contemporary applications. <b>2023</b> , 475, 214910	2
124	Embedded pseudo graphene nanoribbons oriented via Ge(110) surface reconstruction. 2023, 146, 115531	0
123	A review on carbon materials production from plastic wastes. <b>2023</b> , 453, 139725	Ο

122	Cascading electron transfer and photophysics in a donor-Eacceptor graphene nanoconjugate.	O
121	Enhanced Synaptic Features of ZnO/TaOx Bilayer Invisible Memristor for Brain-Inspired Computing. <b>2022</b> , 1-1	O
120	Optically-Transparent Metasurface Radome for RCS-Reduction and Gain-Enhancement of Multifunctional Antennas. <b>2022</b> , 1-1	0
119	Flexible and stretchable transparent conductive graphene-based electrodes for emerging wearable electronics. <b>2023</b> , 202, 495-527	1
118	Graphene Incorporated Electrospun Nanofiber for Electrochemical Sensing and Biomedical Applications: A Critical Review. <b>2022</b> , 22, 8661	4
117	Transfer-Free CVD Growth of High-Quality Wafer-Scale Graphene at 300 °C for Device Mass Fabrication.	0
116	Emerging Two-Dimensional Metal Oxides: From Synthesis to Device Integration. 2207774	0
115	Promising Supercapacitive and Photocatalytic Performances of TiO2 Nanotubes Loaded with Graphene: Insight on the Quantitaive Chatacterisation by EIS.	O
114	Transport of Water Contaminated with Various Ions Through Nanoporous Graphene: A Molecular Dynamics Simulation.	1
113	Mesoporous graphene-based hybrid nanostructures for capacitive energy storage and photocatalytic applications. 1-11	1
112	Smart electronics based on 2D materials for wireless healthcare monitoring. <b>2022</b> , 9, 041308	0
111	Progress, challenges, and opportunities of two-dimensional layered materials based electrochemical sensors and biosensors. <b>2022</b> , 26, 101235	O
110	Carbonous-Based Optoelectronic Devices. <b>2023</b> , 101-125	0
109	Display Based on Carbon-Enhanced Materials. <b>2023</b> , 209-242	O
108	Laser etching of 2D materials with single-layer precision up to ten layers. <b>2022</b> , 34, 042051	0
107	Functionalized MXene Nanosheets and Al-Doped ZnO Nanoparticles for Flexible Transparent Electrodes.	1
106	Recent Advances of Polyaniline-based Micro-Supercapacitors.	0
105	Stretchable conductors for stretchable field-effect transistors and functional circuits.	O

104	Designing nanoscale organic interconnects via sp2/sp3 fluorine functionalized armchair graphene nanoribbons. <b>2023</b> , 288, 116153	0
103	Two-dimensional nanomaterials: A critical review of recent progress, properties, applications, and future directions. <b>2023</b> , 165, 107362	1
102	Next generation 2D materials for anodes in battery applications. <b>2023</b> , 556, 232256	0
101	Progress and roadmap for graphene films in electromagnetic interference shielding. <b>2023</b> , 2, 11-38	O
100	Recent Advances in Touch Sensors for Flexible Displays. <b>2022</b> , 1-11	О
99	Optimized Optical/Electrical/Mechanical Properties of Ultrathin Metal Films for Flexible Transparent Conductor Applications-Invited.	Ο
98	In Situ Growth Dynamics of Uniform Bilayer Graphene with Different Twisted Angles Following Layer-by-Layer Mode. <b>2022</b> , 13, 11201-11207	О
97	Amorphous Carbon Films for Electronic Applications. 2204912	1
96	Two-dimensional layered materials and heterostructures for flexible electronics. <b>2022</b> , 5, 4116-4132	1
95	RGB-Color Textile-Based Flexible and Transparent OLEDs Considering Aesthetics. 2202114	O
94	Destructive-Treatment-Free Rapid Polymer-Assisted Metal Deposition for Versatile Electronic Textiles. <b>2022</b> , 14, 56193-56202	2
93	Etchant-based chemical doping of large-area graphene and the optical characterization via terahertz time-domain spectroscopy.	O
92	Two-dimensional Materials in the Display Industry: Status and Prospects. 2205520	0
91	CO2-promoted transfer-free growth of conformal graphene.	O
90	A comprehensive review on ultrathin, multi-functionalized, and smart graphene and graphene-based composite protective coatings. <b>2022</b> , 110939	1
89	Stress distribution of the nonwoven fabric package during winding. 004051752211422	Ο
88	A Study on the Dynamic Tunning Range of CVD Graphene at Microwave Frequency: Determination, Prediction and Application. <b>2022</b> , 12, 4424	0
87	Electronic properties and tunability in graphene/3D-InP mixed-dimensional van der Waals heterostructure. <b>2023</b> , 18,	O

86	A review of the synthesis, properties, and applications of 2D transition metal dichalcogenides and their heterostructures. <b>2023</b> , 127332	Ο
85	2D Zinc Oxide ြSynthesis, Methodologies, Reaction Mechanism, and Applications. 2206063	1
84	Graphene Layer Morphology and Oxidation Behavior Induced by Step Bunches Created on Copper Substrate.	0
83	Responsivity enhancement in PtSi photodetector with graphene by photogating effect.	О
82	Epitaxial growth of 1D GaN-based heterostructures on various substrates for photonic and energy applications.	0
81	On the Road to the Frontiers of Lithium-ion Batteries: A Review and Outlook of Graphene Anodes. 2210734	0
80	MoS 2 Passivated Multilayer Graphene Membranes for Li-Ion Extraction From Seawater. 2207020	0
79	Emerging MoS2 Wafer-Scale Technique for Integrated Circuits. <b>2023</b> , 15,	2
78	Ultraclean and Facile Patterning of CVD Graphene by a UV-Light-Assisted Dry Transfer Method.	0
77	Bidirectional photoresponse of graphdiyne/graphene heterojunction detector for optical logic gates. <b>2023</b> , 122, 033501	0
76	Graphene oxide for photonics, electronics and optoelectronics.	4
75	Synthesis and mechanical properties of graphene nanoparticles reinforced with aluminium alloy matrix composites.	0
74	Web Wrinkle Defects due to Temperature Profile in Roll-to-Roll Manufacturing Systems. 2023, 15, 457	0
73	Scale-up fabrication of two-dimensional material membranes: challenges and opportunities. <b>2023</b> , 39, 100892	O
72	Remarkably enhanced piezoelectric and ferroelectric characteristics of Er:ZnO upon graphene addition for wearable self-powered piezoelectric sensors. <b>2023</b> , 161, 112149	1
71	Graphene-Isolated Satellite Nanostructure Enhanced Raman Spectroscopy Reveals the Critical Role of Different Intermediates on the Oxygen Reduction Reaction. <b>2023</b> , 13, 849-855	O
70	A brief review of low-temperature graphene growth via chemical vapor deposition. <b>2022</b> , 25, 396-411	0
69	Scalable synthesis of 2D materials. <b>2023</b> , 1-54	O

68	Highly Transparent and Mechanically Robust Energy-harvestable Piezocomposite with Embedded 1D P(VDF-TrFE) Nanofibers and Single-walled Carbon Nanotubes. 2213374	O
67	Growth and Transfer of Graphene for Silicon Optoelectronics. <b>2023</b> , 21-45	O
66	Electronic and electromechanical properties of vertical and lateral 2D heterostructures. 2023, 51-71	О
65	Membranes Coated with Graphene-Based Materials: A Review. <b>2023</b> , 13, 127	О
64	Substrate engineering for wafer-scale two-dimensional material growth: strategies, mechanisms, and perspectives.	0
63	2D materials for flexible electronics. <b>2023</b> , 169-206	O
62	Highly Stretchable Graphene Scrolls Transistors for Self-Powered Tribotronic Non-Mechanosensation Application. <b>2023</b> , 13, 528	0
61	Synthesis and applications of carbon-polymer composites and nanocomposite functional materials. <b>2023</b> , 71-105	О
60	The influence of temperature on the quality of graphene obtained through chemical vapour deposition. <b>2023</b> ,	0
59	Stability and Elasticity of Quasi-Hexagonal Fullerene Monolayer from First-Principles Study. <b>2023</b> , 13, 224	1
58	Graphene-Based Touch Sensors. <b>2023</b> , 54-70	О
57	Scalable preparation of high-quality graphene by electrochemical exfoliation: effect of hydrogen peroxide addition. <b>2023</b> , 46,	O
56	Doping of Laser-Induced Graphene and Its Applications.	0
55	SiC/graphene reinforced aluminum metal matrix composites prepared by powder metallurgy: A review. <b>2023</b> , 91, 10-43	1
54	Mechanical Properties of Graphene Networks under Compression: A Molecular Dynamics Simulation. <b>2023</b> , 24, 6691	О
53	Molecular properties of PTCDA on graphene grown on a rectangular symmetry substrate. <b>2023</b> , 620, 156777	O
52	Dramatic increase in SWIR detection for GeSn strip detector with graphene hybrid structure. <b>2023</b> , 945, 169287	0
51	Synthesis of transparent electrospun composite nanofiber membranes by asymmetric solvent evaporation process. <b>2023</b> , 666, 131264	O

50	Magnetoresistance and spin-dependent Seebeck effects in phthalocyanine-based molecular junctions with borophene electrodes. <b>2023</b> , 151, 115731	О
49	Characteristics of oxidized graphene using KMnO4/H2SO4 solution. 2023,	O
48	Graphene and Graphene Based Nanocomposites for Bio-Medical and Bio-safety Applications. <b>2023</b> , 8,	0
47	High Performance Graphene 1 60 Bismuth Telluride 1 60 Graphene Nanometer Thin Film Phototransistor with Adjustable Positive and Negative Responses. <b>2023</b> , 10,	O
46	Adsorption and decomposition steps on Cu(111) of liquid aromatic hydrocarbon precursors for low-temperature CVD of graphene: A DFT study. <b>2023</b> , 206, 142-149	O
45	Capillary instability in screen-printed micropatterns. <b>2023</b> , 19, 1907-1912	O
44	Conductive MoO3 <b>B</b> EDOT:PSS Composite Layer in MoO3/Au/MoO3 <b>B</b> EDOT:PSS Multilayer Electrode in ITO-Free Organic Solar Cells. <b>2023</b> , 11, 594	O
43	Hybrid graphene electrode for the diagnosis and treatment of epilepsy in free-moving animal models. <b>2023</b> , 15,	O
42	Graphene-enabled metasurface with independent amplitude and frequency controls in orthogonal polarization channels. <b>2023</b> , 206, 260-267	0
41	Peel tests for quantifying adhesion and toughness: A review. <b>2023</b> , 101086	O
40	A Highly Transparent Self-Powered Touch Sensor Based on Hierarchical (Micro-Nano) Cu Grid on Polyethylene Terephthalate Composite Electrodes for Smart Wear.	0
39	Fabrication of metal/oxide/fluorographene/oxide/silicon capacitors and their charge trapping properties. <b>2023</b> , 62, SG1035	0
38	2-nm-Thick Indium Oxide Featuring High Mobility. <b>2023</b> , 10, 2202036	0
37	Sensor to Electronics Applications of Graphene Oxide through AZO Grafting. <b>2023</b> , 13, 846	O
36	Large Area Millisecond Preparation of High-Quality, Few-Layer Graphene Films on Arbitrary Substrates via Xenon Flash Lamp Photothermal Pyrolysis and Their Application for High-Performance Micro-supercapacitors. <b>2023</b> , 15, 13495-13507	O
35	Determination of the effect of hydrogen peroxide on the structure of graphene produced by electrochemical method. <b>2023</b> , 27, 1203-1211	O
34	A contactless single-step process for simultaneous nanoscale patterning and cleaning of large-area graphene. <b>2023</b> , 10, 025017	0
33	Selective Blocking of Graphene Defects Using Polyvinyl Alcohol through Hydrophilicity Difference. <b>2023</b> , 16, 2001	O

32	Efficient strategies to produce Graphene and functionalized graphene materials: A review. <b>2023</b> , 14, 100386	O
31	Sequentially Coated Wavy Nanowire Composite Transparent Electrode for Stretchable Solar Cells. <b>2023</b> , 15, 13656-13667	O
30	Graphite Pellicle: Physical Shield for Next-Generation EUV Lithography Technology. 2023, 10,	0
29	Using combustion synthesis to convert emissions into useful solid materials. <b>2023</b> , 599-630	O
28	One-step fabrication of highly stable, durable, adhesion enhanced, flexible, transparent conducting films based on silver nanowires and neutralized PEDOT:PSS. <b>2023</b> , 4, 1769-1776	O
27	Chemically Welding Silver Nanowires toward Transferable and Flexible Transparent Electrodes in Heaters and Double-Sided Perovskite Solar Cells. <b>2023</b> , 15, 13307-13318	O
26	Thickness-Controlled Growth of Multilayer Graphene on Ni(111) Using an Approximate Equilibrium Segregation Method for Applications in Spintronic Devices. <b>2023</b> , 6, 4236-4242	O
25	Formation of Large-Area Twisted Bilayer Graphene on Ni(111) Film via Ambient Pressure Chemical Vapor Deposition. <b>2023</b> , 5, 1592-1599	O
24	Strategies to break the trade-off between infrared transparency and conductivity. 2023, 136, 101112	O
23	Multilayer Three-Dimensional Woven Silver Nanowire Networks for Absorption-Dominated Electromagnetic Interference Shielding. <b>2023</b> , 10,	O
22	Soft Electronics for Health Monitoring Assisted by Machine Learning. 2023, 15,	1
21	Advances in transparent polymer nanocomposites and their applications: A comprehensive review. <b>2022</b> , 61, 937-974	1
20	Structural, optical and Electrochromic properties of rare earth material (CeO 2 )/ Transitional metal oxide (WO 3 ) thin film composite structure for Electrochromic applications.	O
19	Chemical gradients on graphene via direct mechanochemical cleavage of atoms from chemically functionalized graphene surfaces. <b>2023</b> , 5, 2271-2279	O
18	Surface Morphological Growth Characteristics of Laser-Induced Graphene with UV Pulsed Laser and Sensor Applications. <b>2023</b> , 5, 1261-1270	O
17	Enhanced adhesion and corrosion resistance of reduced graphene oxide coated-steel with iron oxide nanoparticles. <b>2023</b> , 624, 157121	O
16	Skin-Interfaced Wearable Sweat Sensors for Precision Medicine.	O
15	Recent approach in producing transparent conductive films (TCFs).	O

14	A review on the electrochemical behavior of graphenell ransition metal oxide nanocomposites for energy storage applications. <b>2023</b> , 58, 6124-6150	О
13	Graphene oxide as an anti-corrosion coating on carbon steel: effect of surface structure and wettability of steel. 1-15	O
12	Facile preparation of conductive carbon-based membranes on dielectric substrates. 11,	O
11	Significant Enhanced Mechanical Properties of Suspended Graphene Film by Stacking Multilayer CVD Graphene Films. <b>2023</b> , 14, 745	O
10	High-Throughput Growth of Hexagonal Boron Nitride Film Using Porous-Structure Isolation Layer. <b>2023</b> , 11, 45-51	0
9	Growth and applications of two-dimensional single crystals. <b>2023</b> , 10, 032001	O
8	Recent Advances of Capacitive Sensors: Materials, Microstructure Designs, Applications, and Opportunities.	О
7	Reduced graphene oxide synthesis by dry planetary ball milling followed by arc plasma treatment of high pure graphite. <b>2023</b> ,	O
6	Machine learning method for determining chemical vapor deposition conditions for large-area graphene growth.	O
5	Micro-nano dual-scale embedded graphene/Ag architectures for flexible low-voltage-driven transparent electrothermal films.	O
4	Rational and key strategies toward enhancing the performance of graphene/silicon solar cells.	O
3	Grain Size Engineering of CVD-Grown Large-Area Graphene Films.	O
2	Joint Intercalation of Ultrathin Fe and Co Films under a Graphene Buffer Layer on a SiC(0001) Single Crystal. <b>2023</b> , 117, 363-369	O
1	Laser-scribed graphene for sensors: preparation, modification, applications, and future prospects. <b>2023</b> , 4, 1	O