

smart windows

18:00	Preparation of reusable Ag-decorated graphene oxide and its application for the decarboxylative coupling reactions	∨	Y.7.14	☆
18:00	Graphene and rGO complex based flexible supercapacitor on PET film	∨	Y.7.15	☆
18:00	Aquaporin inspired water purification membrane based on functionalized graphene oxide membranes	∨	Y.7.16	☆
18:00	Atomic and electronic structure of graphene-gold hybrid nanomaterials	∨	Y.7.17	☆
18:00	Transport, thermoelectric and heat storage properties of reduced graphene oxide – based nanocomposites	∨	Y.7.18	☆
18:00	Bosonic Dirac Materials in two dimensions	∨	Y.7.19	☆
18:00	Supercapacitors based on OG, polymers and electron donor dopants	∨	Y.7.20	☆
18:00	Fabrication of graphene film on ZnO nanowires arrays and their Applications	∨	Y.7.21	☆
18:00	Oxidation effect in thin Hafnium Disulfide (HfS ₂)	∨	Y.7.22	☆
18:00	Modeling of Novel Graphene Oxide Nanocarriers with Thiazolic Payload	∨	Y.7.23	☆
18:00	Optical transmittance of fringes produced by laser in reduced graphene oxide films.	∧	Y.7.24	☆

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Resume : Graphene oxide (GO) contains oxygen bearing functionalities. The removal of these groups producing reduced-GO (rGO) that shows substantial optical, electrical and chemical changes with respect to original GO. In recent years GO and rGO have shown several promising applicability in energy storage, water purification, sensing and biomedicine. Microstructuration of these materials enhance their properties and make possible their use in supercapacitors or in platforms for cell alignment. Laser interferometry has been widely used to induce periodic surface modification of thin films; spatially located heating occurs in the maxima of interference and the thin film is selectively transformed in those regions. In this work, GO was prepared by using a modified Hummers and Offeman method and thermal treatment was used to produce rGO films (thickness 9.61 ± 1.17 nm) on circular glass coverslips. We

then use laser interferometry to produce a pattern of fringed channels with topography and a period of 9.4 microns on this rGO. Width and topography of these channels are controlled by the number of laser pulses. Optical transmittance (T) of the fringes was analyzed by a customized hyperspectral microscope. It is seen that, similar to non-irradiated rGO regions, T increases slightly as wavelength increase in regions corresponding to laser interference minima (i.e., non-transformed ones). Detailed analysis of the hyperspectral cube by using a principal component analysis method reveals UV-Visible absorption peaks located in the edge of the channels. These peaks can be related to chemical products used in the fabrication of the rGO films.

18:00	Macroscopically homogeneous twisted graphene doped by nitrogen	∨	Y.7.25	☆
18:00	Different strategies for synthesis of graphene-on-diamond	∨	Y.7.26	☆
18:00	Thin Layers Graphene production at an interface metal/transparent substrate by carbon implantation	∨	Y.7.27	☆
18:00	CVD Graphene : Recrystallization and Strain Relaxation	∨	Y.7.28	☆
18:00	Layer-by-layer Assembled PS/rGO/Fe ₃ O ₄ Hybrid Composites and Their Application for Removal Arsenic	∨	Y.7.29	☆
18:00	Graphene directly grown on steel substrates: tribological properties	∨	Y.7.30	☆
18:00	Decoration of graphene nanoplatelets with Nb ₂ O ₅ deposited by radio frequency sputtering	∨	Y.7.31	☆
18:00	Temperature evolution of phonons in few-layer black phosphorus	∨	Y.7.32	☆
18:00	Production and characterization of graphene and nanocomposite graphene Oxide with Polyurethane on steel stainless	∨	Y.7.33	☆
18:00	Group 14 element based noncentrosymmetric quantum spin Hall insulators with large bulk gap	∨	Y.7.34	☆
18:00	Systematic Characterization of MoS ₂ CVD Growth on Transferred and As-grown Graphene	∨	Y.7.35	☆
18:00	New modeling for thermionic currents in ideal reverse-biased Graphene/n-Si Schottky Barriers, in a modified Landauer formalism	∨	Y.7.36	☆
18:00	High polarization sensitive Bi ₂ Te ₃ topological insulator for actively manipulation of operation states in Er-doped fiber laser	∨	Y.7.37	☆
18:00	Simulation of graphene on metal substrates: Moiré-	∨	Y.7.38	☆