\* Large-area ultrathin films of reduced graphene oxide as a transparent and flexible electronic material

1. Graphene oxide as a chemically tunable platform for optical applications

2. Synthesis of graphene-based nanosheets via chemical reduction of exfoliated graphite oxide

### 3. The chemistry of graphene oxide

### 4. Improved synthesis of graphene oxide

### 5. Electronic transport properties of individual chemically reduced graphene oxide sheets

### 6. Atomic and electronic structure of graphene-oxide

7. Chemically derived graphene oxide: towards large‐area thin‐film electronics and optoelectronics

8. A review of chemical vapour deposition of graphene on copper

\* The chemistry of two-dimensional layered transition metal dichalcogenide nanosheets

1. Photoluminescence from chemically exfoliated MoS2

2. Liquid exfoliation of layered materials

3. Enhanced catalytic activity in strained chemically exfoliated WS2 nanosheets for hydrogen evolution

4. Thin films of fullerene-like MoS2 nanoparticles with ultra-low friction and wear

5. Conducting MoS2 nanosheets as catalysts for hydrogen evolution reaction

6. Metallic 1T phase MoS2 nanosheets as supercapacitor electrode materials

7. Coherent atomic and electronic heterostructures of single-layer MoS2

### 8. One‐pot Synthesis of CdS Nanocrystals Hybridized with Single‐Layer Transition‐Metal Dichalcogenide Nanosheets for Efficient Photocatalytic Hydrogen Evolution

\* Coal mine ventilation air methane combustion in a catalytic reverse flow reactor: Influence of emission humidity

1. Support and water effects on palladium based methane combustion catalysts

2. Combustion of methane over palladium catalyst in the presence of inorganic compounds: inhibition and deactivation phenomena

3. Experimental and kinetic study of methane combustion with water over copper catalyst at low-temperature

4. Low-concentration methane combustion over a Cu/γ-Al2O3 catalyst: effects of water

5. Deactivation of Pd Catalysts by Water during Low Temperature Methane Oxidation Relevant to Natural Gas Vehicle Converters

6. Effect of periodic lean/rich switch on methane conversion over a Ce–Zr promoted Pd-Rh/Al2O3 catalyst in the exhausts of natural gas vehicles

7. Hydrothermal Aging-Induced Changes in Washcoats of Commercial Three-Way Catalysts

8. Methane Catalytic Combustion over Hierarchical Pd@CeO2/Si-Al2O3: Effect of the Presence of Water

\* Relationships between the solution and solid-state properties of solution-cast low-k silica thin films

1. Crystallinity control of zeolite nanoparticles for the preparation of mesoporous low-k films through a fast hydrothermal process

2. On-Wafer Crystallization of Ultralow-κ Pure Silica Zeolite Films

3. SiOCH thin films deposited by chemical vapor deposition: From low-κ to chemical and biochemical sensors

4. Ultralow- k Dielectric With Nanotubes Assisted Vertically Aligned Cylindrical Pores

5. Facile synthesis of nanoscale high porosity IR-MOFs for low-k dielectrics thin films

6. Mechanical Stability of Porous Low-k Dielectrics

7. Intrinsic low dielectric behaviour of a highly thermally stable Sr-based metal–organic framework for interlayer dielectric materials

8. Metal–Organic Framework Materials with Ultrahigh Surface Areas: Is the Sky the Limit?

\* Mathematical modelling of metabolism

### 1. Mathematical models of metabolic pathways

### 2. Metabolic modeling of microbial strains in silico

### 3. Metabolic Flux Balancing: Basic Concepts, Scientiﬁc and Practical Use

### 4. Advances in flux balance analysis

### 5. The effects of alternate optimal solutions in constraint-based genome-scale metabolic models

### 6. Stoichiometric flux balance models quantitatively predict growth and metabolic by-product secretion in wild-type Escherichia coli W3110.

### 7. Theory for the systemic definition of metabolic pathways and their use in interpreting metabolic function from a pathway-oriented perspective

### 8. A general definition of metabolic pathways useful for systematic organization and analysis of complex metabolic networks

\* Faster r-cnn: Towards real-time object detection with region proposal networks

1. Faster R-CNN: Towards Real-Time Object Detection with Region Proposal Networks

2. You only look once: Unified, real-time object detection

3. Rich feature hierarchies for accurate object detection and semantic segmentation

4. Spatial pyramid pooling in deep convolutional networks for visual recognition.

5. Deep residual learning for image recognition

6. SSD: Single shot multibox detector

7. Selective search for object recognition

8. Spatial pyramid pooling in deep convolutional networks for visual recognition

\* Magnetic nanomaterials for hyperthermia-based therapy and controlled drug delivery

1. Magnetic fluid hyperthermia: focus on superparamagnetic iron oxide nanoparticles

2. Heating efficiency in magnetic nanoparticle hyperthermia

3. Exchange-coupled magnetic nanoparticles for efficient heat induction

4. Magnetic particle hyperthermia: nanoparticle magnetism and materials development for

cancer therapy

5. Theranostic magnetic nanoparticles

6. Magnetic nanoparticle-based therapeutic agents for thermo-chemotherapy treatment of cancer

7. Clinical applications of magnetic nanoparticles for hyperthermia

8. Water-soluble iron oxide nanocubes with high values of specific absorption rate for cancer cell hyperthermia treatment