

第十二屆海峽兩岸奈米科學與技術研討會

The 12th Cross-Strait Workshop on Nanoscience and Nanotechnology

台北，2016年3月22至25日

Taipei, March 22-25, 2016

會議議程 Program

3月22日(星期二)，March 22，中央研究院學術活動中心一樓

17:00-18:00	Registration
18:00-20:00	Welcoming Reception

3月23日(星期三)上午，March 23，學術活動中心二樓第一會議室

08:30-09:10	Registration (中央研究院學術活動中心 1F)
09:10-12:20	Opening Session (Chair: 李定國)
09:10-09:25	Opening Remarks 李定國，中央研究院物理研究所，Taiwan
09:25-10:05	Functionalization of Self-Assembled Chiral Nanostructures via Supramolecular Gelation 刘鸣华，国家纳米科学中心，China
10:05-10:45	The Impact of Nanotechnology in Developing Novel Materials for Energy Applications 吳茂昆，中央研究院物理研究所，Taiwan
10:45-11:00	Break
11:00-11:40	The Rising of Graphdiyne-Based Two Dimensional Carbon Materials 李玉良，中国科学院化学研究所，China
11:40-12:20	Design and Processing of Gradient Nanomaterials 吕坚，香港城市大學，Hong Kong
12:20-12:30	Group Photo
12:30-13:30	Lunch

3月23日(星期三)下午, March 23, 學術活動中心二樓第二、三、四會議室

13:30-15:30	Session 1A: Applications of Nanoscience and Nanotechnology: Biological and Biomedical-I (Chair: 庞代文, China) 第二會議室	Session 1B: Characterization, Manipulation, and Standardization of Nanomaterials and Nanostructures-I (Chair: 张晓宏, China) 第三會議室	Session 1C: Applications of Nanoscience and Nanotechnology: Optoelectronics and Electronics-I (Chair: 許千樹, Taiwan) 第四會議室
13:30-13:50	Integrated Nanotechnology in Translational Medicine 謝達斌, 成功大學口腔醫學研究所, Taiwan	Intercalated 2D Layered Transition Metal Chalcogens: Synthesis, Characterization and Applications 宋礼, 中国科学技术大学, China	InGaN/GaN Micro-Disk Phosphor-Free White LED 羅奕凱, 中山大學, Taiwan
13:50-14:10	Nanotechnology for Immunotherapy 刘庄, 苏州大学, China	In situ Tuning and Probing the Electrical Properties of Multiwall Carbon Nanotubes 張嘉升, 中央研究院物理研究所, Taiwan	Design of Semiconductor Nanowires for Electronics, Sensors and Energy-Harvesting 何頌賢, 香港城市大學, Hong Kong
14:10-14:30	Autophagy Activation by Several Types of Nanoparticles 徐善慧, 臺灣大學高分子研究所, Taiwan	Lighting up the Raman Signal of Molecules in the Vicinity of Graphene Related Materials 张锦, 北京大学, China	Photoelectrochemical Application of ZnO Nanostructures 张跃, 北京科技大学, China
14:30-14:50	Engineering Biointerface with Controlled Cell Adhesion towards Cancer Diagnostics 王树涛, 中科院理化技术研究所, China	Graphene Reduction Dynamics 溫偉源, 中央大學物理系, Taiwan	Nanosize-Induced Metastable Phases and Their Evolution in the Case of Microelectronic Interconnects 宋振銘, 中興大學材料科學與工程學系, Taiwan
14:50-15:10	Functional Nanoparticles for Tumor Imaging 高明远, 中国科学院化学研究所, China	Fabrication and Characterization of Vertical Metallic Nano-wires by Thermally Assisted Photoreduction Process on Titanium Dioxide 陳引幹, 成功大學材料科學及工程學系, Taiwan	Nonvolatile Transistor Memory Devices Based on Nanostructured Polymeric Materials 陳文章, 臺灣大學化工系, Taiwan
15:10-15:30	SiO ₂ Based Nanoparticle Drug Carrier for Cancer Therapeutics 李泉, 香港中文大學, Hong Kong	Nanotechnology Small is Different, and Anisotropy Matters 吴晓春, 国家纳米科学中心, China	Imaging Interfacial Water Molecules with an Angstrom Resolution by Using THz Ultrasonics 孫啟光, 臺灣大學分子影像中心, Taiwan

15:30-15:50	Break		
15:50-17:30	Session 2A: Applications of Nanoscience and Nanotechnology: Biological and Biomedical-II (Chair: 李泉, Hong Kong) 第二會議室	Session 2B: Characterization, Manipulation, and Standardization of Nanomaterials and Nanostructures-II (Chair: 張嘉升, Taiwan) 第三會議室	Session 2C: Functionalization, Assembling, and Integration of Nanomaterials-I (Chair: 顾宁, China) 第四會議室
15:50-16:10	Dual-Faced Nano-Mushrooms for Multi-Functional Cell Diagnosis 曾繁根, 清華大學工程與系統科學系, Taiwan	Exploiting Lanthanide Luminescence in Core-Shell Nanoparticles 王鋒, 香港城市大学, Hong Kong	Nanonetworks from Chiral Block Copolymer Templates and Their Applications 何榮銘, 清華大學化工系, Taiwan
16:10-16:30	Quantum Dots: From Live-cell Synthesis to Quasi-bio Synthesis 庞代文, 武汉大学, China	Wetting and Instability Studies of Polymer Nanomaterials 陳俊太, 交通大學應用化學系, Taiwan	Bioinspired Functional Hydrogels Embedded with Semiconducting Nanosheets 刘明杰, 北京航空航天大学, China
16:30-16:50	Nanoplasmonic Biosensors and Surface-Enhanced Spectroscopic Nanoprobes 周禮君, 中正大學, Taiwan	Tuning Interfacial Adhesion and Its Impact on Reinforcing Mechanisms for Monolayer Graphene-Polymer Nanocomposites 张忠, 国家纳米科学中心, China	Synthesis and Self-Assembly of Rod-Coil Block Copolymer 林唯芳, 臺灣大學材料學系, Taiwan
16:50-17:10	Nanomaterials and Nanotechnologies for Efficient Drug Delivery 陳獻峰, University of Bradford, Hong Kong	What can Be Learned from Electrical-transport Studies of Single Nanowires: A Few Examples 林志忠, 交通大學物理所, Taiwan	Patterning of Organic Single-Crystal Nanostructures 张晓宏, 苏州大学, China
17:10-17:30	Frontiers in Nano Tissue Engineering and Molecular Imaging 賴文福, 臺北醫學大學雙和醫院醫研部, Taiwan	—	Inorganic Nanoparticle-Metal Organic Framework Core-Shell Nanostructures: A Novel Multifunctional Platform 唐智勇, 国家纳米科学中心, China
17:30-18:30	Poster Session (第二會議室) (歡迎所有老師前往給予年輕學者指導)		
18:30	Dinner		

Poster Session (Chair: 張嘉升, Taiwan, 3月23日 17:30-18:30, 第二會議室)

Mesoporous Au/CeO ₂ Photocatalyst with Plasmonic Hot Electron-Enabled Visible-Light Activity 賈恒磊, 香港中文大學, Hong Kong
α -Cr ₂ O ₃ Nanocondensates with Special Grain Boundaries 鄭聿遠, 中山大學, Taiwan
Self-Referencing Fiber Optic Particle Plasmon Resonance Sensing System: Principle and Applications 陳建興, 中正大學, Taiwan
Dual Delivery by Mesoporous Silica Nanoparticles of siRNA and Plasmid DNA to Differentiate Induced Pluripotent Stem Cells into Dopaminergic Neurons 張仁瑄, 臺灣大學, Taiwan
High Performance Transparent Transistor Memory Devices Using Nano-Floating Gate of Polymer/ZnO Nanocomposites 石健忠, 臺灣大學, Taiwan
Modification of Thin Films to Control Light Extraction 陳柏勸, 元智大學光電工程學系, Taiwan
Self-Assembling Bubble Carriers for Oral Protein Delivery 莊爾元, 清華大學化工系, Taiwan
Flexible Transparent Electrodes Based on Electrospinning of 2-D Silver Nanofiber Networks 陳宏道, 成功大學材料科學及工程學系, Taiwan
Light Erase Characteristics of Zinc-Tin Oxide Thin Film Transistor Charge Trapping Memory 李政廷, 成功大學材料科學及工程學系, Taiwan
Fabrication of Micro Dots with Silver Nano Pastes of High Concentration Using Piezoelectric Dispensing Technique 彭文志, 成功大學材料科學及工程學系, Taiwan
Experimental Study of Micro Droplet of Highly Loaded Nano Silver Ink Printed on Hard Substrates 陳信豪, 成功大學材料科學及工程學系, Taiwan
Optimization of Gold Nanoparticle Photoluminescence 賴聖豐, 中研院物理所, Taiwan
Gold Nanoparticles as Multimodality Imaging Agents for Brain Gliomas 吳恭和, 中研院物理所, Taiwan
Morphology-Controllable Free-Standing Templated Synthesis of Graphene 溫哲睿, 臺灣大學化學系, Taiwan
Defects Engineer of Graphene Processed by Electron Beam Irradiation 黃家宏, 財團法人金屬工業研究發展中心, Taiwan
Preparation of Carbon Supported Pt-Nanoparticles from Chelating Agent Assisted Microwave synthesis 黃家宏, 財團法人金屬工業研究發展中心, Taiwan
Photocatalytic Hydrogen Evolution Efficiency of Si up to 13% by Employing the Cascading Energy Band Structure and Novel Electrode Design. 傅惠君, KAUST, Taiwan
Flexible Paper Photosensors Based on 2D BN Nanosheets 林群賀, KAUST, Taiwan

3月24日(星期四)上午, March 24, 學術活動中心二樓第二、三、四會議室

	Session 3A: Applications of Nanoscience and Nanotechnology: Energy, Environment & Catalyst-I (Chair: 魏飞, China) 第二會議室	Session 3B: Applications of Nanoscience and Nanotechnology: Biological and Biomedical-III (Chair: 王春儒, China) 第三會議室	Session 3C: Functionalization, Assembling, and Integration of Nanomaterials-II (Chair: 林唯芳, Taiwan) 第四會議室
09:00-10:40	奈米加工促进太阳能利用 杨世和, 香港科技大学, Hong Kong	Au-LSPR Immunoassay Biochips for Parkinson Biomarker Detection at Nano-gram Level 林寬鋸, 中興大學, Taiwan	Investigation of the Molecule-Chiroplasmon Interaction 黄陟峰, 香港浸会大学, Hong Kong
09:20-09:40	Three Dimensional Graphene/Pt Nanoparticle Composites as Freestanding Anode for Enhancing Performance of Microbial Fuel Cells 刘绍琴, 哈尔滨工业大学, China	Carbon/Polymer Dots for Cancer Theranostics 汪鹏飞, 中国科学院理化技术研究所, China	Multifunctional Oriented Magnetic Hydrogel Based on Field-Assisted Assembly of Nanomaterials 顾宁, 东南大学, China
09:40-10:00	Ultrananocrystalline Diamond and Graphene Assisted Electrodes for Long-Cycling Life Lithium Ion Battery 曾永華, 成功大學, Taiwan	The Next Generation Biochip: Meeting Unmet Needs in Molecular Diagnosis through Polysilicon Nanowire Field Effect Transistor 楊裕雄, 交通大學, Taiwan	Immobilization of Enzymes in Mesoporous Silica – Surface Functionalization and Activity Studies 林天送, 臺灣大學化學系, Taiwan
10:00-10:20	Multi-shelled V2O5 Hollow Microspheres Synthesized through Anions-Adsorption for High-Rate Lithium-Ion Batteries 王丹, 中国科学院过程工程研究所, China	Bioeffects of Biocompatible Single-walled Carbon Nanotubes 梁兴杰, 国家纳米科学中心, China	The Frame Guided Assembly 刘冬生, 清华大学, China
10:20-10:40	Nano-Materials for Hydrogen Storage and Rechargeable Batteries 张瑜, 北京航空航天大学, China	Multifunctional Memprocessor Device Development by DNA Guided Ni Ion Chain 張家靖, 交通大學, Taiwan	Macroscopic Nanoparticle Assemblies: Integration, Functionalization and Applications 俞书宏, 中国科学技术大学, China
10:40-11:00	Break		

11:00-12:40	Session 4A: Applications of Nanoscience and Nanotechnology: Energy, Environment & Catalyst-II (Chair: 羅奕凱, Taiwan) 第二會議室	Session 4B: Applications of Nanoscience and Nanotechnology: Biological and Biomedical-IV (Chair:謝達斌, Taiwan) 第三會議室	Session 4C: Fabrication and Mass Production of Nanomaterials and Nanostructures-I (Chair: 俞书宏, China) 第四會議室
11:00-11:20	High Performance Ternary Organic Solar Cells 魏志祥, 国家纳米科学中心, China	Human Pluripotent Stem Cell Culture on Biomaterials Having Nanobrush Segments 樋口亜紺, 中央大學化材系, Taiwan	Synthesis and Applications of Novel Two-Dimensional Nanomaterials 張華, School of Materials Science and Engineering, Nanyang Technological University, China
11:20-11:40	Using Carbon Nanomaterials to Enhance Lubrication Mechanism: A Journal from Research to Industrial Applications 鄭友仁, 中正大學機械工程學系, Taiwan	A Highly Efficient and Tumor Vascular-Targeting Therapeutic Technique with Size-Expansable Gadofullerene Nanocrystals 王春儒, 中科院化学所, China	Multilayered Optical Devices: Novel Designs and Electrochemical Fabrication 李揚揚, 香港城市大學, Hong Kong
11:40-12:00	Graphenal Polymers: A New Class of Composite without Interface 智林杰, 国家纳米科学中心, China	Effects of PEGylation on Nanoparticle-Cell Interfaces 馬蘊華, 長庚大學, Taiwan	Sub-1nm Ultrathin Nanocrystals 王训, 清华大学化学系, China
12:00-12:20	Tailoring Broadband Radiative Properties of Glass with Silver Nano-pillars for Saving Energy 陳玉彬, 成功大學機械系, Taiwan	Surface Plasmon Resonance Behaviors of Gold Nanoring and Their Biomedical Applications 楊志忠, 臺灣大學, Taiwan	Periodic Growth of Nanowires via the Vapor-Liquid-Solid Mechanism 李振聲, 香港城市大學, Hong Kong
12:20-12:40	High-Efficiency Particulate Air Filters Based on Carbon Nanotubes 魏飞, 清华大学, China	——	——
12:40-13:40	Lunch		

3 月 24 日(星期四)下午，March 24，學術活動中心二樓第二、三、四會議室

13:40-15:20	Session 5A: Applications of Nanoscience and Nanotechnology: Energy, Environment & Catalyst-III (Chair: 鄭友仁, Taiwan) 第二會議室	Session 5B: Applications of Nanoscience and Nanotechnology: Optoelectronics and Electronics-II (Chair: 嚴鋒, Hong Kong) 第三會議室	Session 5C: Fabrication and Mass Production of Nanomaterials and Nanostructures-II (Chair: 李揚揚, Hong Kong) 第四會議室
13:40-14:00	Cobalt Nickel Sulfides-Based Nanostructures in Energy Storage Applications 張文軍, 香港城市大學, Hong Kong	High-performance Optoelectronic Devices Using Nanostructures and Nanomaterials 范智勇, 香港科技大学, Hong Kong	Multifunctional Carbon Nanotube Fibers 李清文, 中科院苏州纳米所, China
14:00-14:20	Sensing in the Shortwave Infrared Using Carbon Nanotubes 彭练矛, 北京大学, China	Germanium Quantum Dots for Functional Sensing Devices 李佩雯, 交通大學電子工程學系, Taiwan	Plasmonic Metal Nanocrystals 王建方, 香港中文大學, Hong Kong
14:20-14:40	Crosslinkable Fullerene Derivatives for Thermally Stable Polymer and Perovskite Solar Cells 許千樹, 交通大學應用化學系, Taiwan	Fabrication and Applications of Optoelectronic Nanostructured Materials & Devices 杜祖亮, 河南大学, China	Construction and Application of Biomimetic Asymmetric Nanochannel Membranes 闻利平, 中国科学院理化技术研究所, China
14:40-15:00	Core-Shell Nanostructure/Carbon Composite Electrodes for Supercapacitors 闫小琴, 北京科技大学, China	Room Temperature Operated Surface Plasmon Polariton Nanolasers 盧廷昌, 交通大學光電系, Taiwan	Fabrication and Characterization of Nanostructured Magnetic Tunnel Junctions 吳仲卿, 彰化師範大學物理系, Taiwan
15:00-15:20	Advanced Unconventional Supercapacitors based on Nanocarbon Materials 牛志强, 南开大学, China	Photon Managements by Employing Nanostructures for Optoelectronic Devices 何志浩, KAUST, Taiwan	———
15:20-15:40	Break		

15:40-16:40	Session 6A: Applications of Nanoscience and Nanotechnology: Energy, Environment & Catalyst-IV (Chair: 彭练矛, China) 第二會議室	Session 6B: Applications of Nanoscience and Nanotechnology: Optoelectronics and Electronics-III (Chair: 张跃, China) 第三會議室	Session 6C: Theoretical Modeling, Computation and Simulation in the Above Areas (Chair: 吳玉書, Taiwan) 第四會議室
15:40-16:00	Nanostructured Hybrid Materials for Lithium-Based Batteries 侯仰龙, 北京大学工学院材料科学与工程系, China	Advanced Electronic Device & Industry-Academic Cooperation 張鼎張, 中山大學物理系, Taiwan	VOI-based Valleytronics 吳玉書, 清華大學, Taiwan
16:00-16:20	Polyaniline Grafted on High Conductivity CNT-Embedded Carbon Nanofiber for High Performance of Supercapacitors 陳志勇, 成功大學化工系, Taiwan	Photovoltaic Devices with Advanced Nanotechnology 嚴鋒, 香港理工大學, Hong Kong	Quantum Mechanical Simulation of Open Electronic Systems: from Molecular Devices to Photovoltaic Devices 陳冠華, 香港大學, Hong Kong
16:20-16:40	Nanoporous Materials for Adsorption and Catalysis 宋卫国, 中国科学院化学研究所, China	Low Power Transistors Using Ge Channel 劉致為, 臺灣大學電機系, Taiwan	Computation Aided Design in Optoelectronic Materials 江志強, 臺灣科技大學化工系, Taiwan
16:40-17:00	從學術活動中心移動至物理研究所		

3月24日(星期四)下午, March 24, 物理研究所一樓演講廳

17:00-18:40	Closing Session (Chair: 張嘉升)
17:00-17:40	Forum: 討論兩岸奈米科技未來可能合作形式
17:40	Closing Remarks 刘鸣华, 国家纳米科学中心, China 張文軍, 香港城市大學, Hong Kong 李定國, 中央研究院物理研究所, Taiwan
19:00	Dinner (寒舍樂廚)

3月25日(星期五), March 25

09:00-12:00	參訪
12:00-13:30	Lunch
13:30-18:30	參訪
18:30	Dinner