

# 2012 物理年會暨成果發表會論文壁報獎得主名單

★ 恭喜以下得獎人～\*

## 01 奈米科學

### 優勝

論文編號	姓名	題目
E01.00026	王聖博	Surface Plasmon-Enhanced Chemical Sensing in Single Gold-Silica Hybrid Nanowire
E01.00074	Jan-Chi Yang	Electronic Transport on Nano Scale Quasi-90 Degree Domain Walls in Multiferroic BiFeO3
E01.00109	李明洋	Effects of disorder induced scattering in chemical vapor deposited Graphene
E01.00054	王乙仲	FABRICATION OF Cu(In,Ga)Se2 NANOTIP ARRAYS SOLAR CELL BY ION-BEAM SPUTTERING

### 佳作

論文編號	姓名	題目
E01.00005	李國豪	TUNABLE EMISSION AND STRONG FLUORESCENCE OF GOLD NANOCCLUSERS SYNTHESIZED BY INTENSE X-RAYS
E01.00004	王宣懿	METASTABLE WURTZITE PHASE ZnSe NANOPARTICLES INDUCED BY FEMTOSECOND LASER ABLATION
E01.00084	楊宗翰	INVESTIGATING SPIN POLARIZATION OF A METAL-ORGANIC HYBRID SYSTEM
E01.00071	陳思穎	Influence of Catalytic Effect on Transport Behaviors of InAs NWs For High Performance Nanoscale Transistors
E01.00100	蔡令緯	LUMINESCENT NANODIAMOND FOR PROBING PROTOZOA PROCESSES IN VITRO AND IN VIVO
E01.00111	莊敏強	Local anodic oxidation of graphene on selectively doped patterned silicon template
E01.00041	蕭子綱	Strain Modulation of Thermoelectric Properties and Thermal Conductivity Studies on Si(1-x)Ge(x) Nanowires
E01.00050	蕭至廷	Fabrication of three dimensional split ring resonators
E01.00023	黃馨瑩	Excitonic recombination dynamics in ZnO nanodots synthesized by sol-gel method
E01.00064	傅惠君	Ultrahigh sensitivity ZnO nanosensor with Schottky nanojunction
E01.00069	林佩儀	Geometry dependence of exciton in quantum dots of GaAs

E01.00117	顏文群	UNTRA-FAST AND LARGER SACLE SYNTHESIS OF GRAPHENE BY MICROWAVE PROCESS
E01.00037	黃國倫	SYNTHESIS OF CARBON COATED MIXED-PHASE TiO <sub>2</sub> NANOWIRES

## 02 半導體

### 優勝

論文編號	姓名	題目
E02.00024	吳祥祿	Ultrafast dynamics of InSb studied by pump-probe Spectroscopy
E02.00081	鄭鈞之	ELECTRON TEMPERATURE OF BALLISTIC CURRENT
E02.00032	林世明	CONTROLLABLE HIGH RESISTANCE STATE OF ZNO-BASED RESISTIVE CHANGE MEMORY USING WO <sub>x</sub> INTERLAYER

### 佳作

論文編號	姓名	題目
E02.00021	吳仁凱	Fabrication and characterization of ZnO/CuO type II heterostructure nanorod arrays by electroplating deposition method
E02.00014	Ya-hsin Tseng	Growth and characterization of CuInZnSe thin films grown by molecular beam epitaxy
E02.00062	黃承德	Raman-scattering studies of Ho <sup>3+</sup> and Gd <sup>3+</sup> implanted GaN thin films
E02.00076	劉東閔	CARRIER DYNAMICS IN INN NANOROD ARRAYS
E02.00034	林光儀	Photoreflectance Study of InN Films with In and N Polarities
E02.00047	紀昭好	ELECTRIC FIELD EFFECT ON In <sub>0.1</sub> Ga <sub>0.9</sub> N p-i-n SOLAR CELL FOR ELECTRIC FIELD

## 03 磁學與磁性材料

### 優勝

論文編號	姓名	題目
J03.00056	張惠菁	Improving the magnetic order of cobalt layer deposited on pentacene film
J03.00004	王孝祖	Multiferroic CoFe <sub>2</sub> O <sub>4</sub> -PbTiO <sub>3</sub> hetero-structures investigated by

### 佳作

論文編號	姓名	題目
J03.00031	洪宏宜	DETECTION OF INVERSE SPIN HALL EFFECT IN PY FILM
J03.00038	巫啓男	STUDY ON STRONTIUM RUTHENATE THIN FILMS: GROWTH, STRUCTURE
J03.00028	簡永順	Study on strained CoFe <sub>2</sub> O <sub>4</sub> /SrRuO <sub>3</sub> epitaxial Films by Raman spectroscopy

#### 佳作

論文編號	姓名	題目
J03.00065	黃郁宸	MAGNETIZATION REVERSAL IN THE HUNDRED NANOMETER SCALED PERMALLOY NANOTUBES ARRAY
J03.00015	陳奕融	Small size effect on GdMn <sub>2</sub> O <sub>5</sub> nanorods

## 04 超導與強關聯電子系統

#### 優勝

論文編號	姓名	題目
J04.00058	鍾道翔	Observation of the partition noise of the phase particle tunneling in small size Josephson junction
J04.00040	陳學儒	FEMTOSECOND LASER-INDUCED CRYSTALLIZATION OF AMORPHOUS BI <sub>2</sub> SE <sub>3</sub> FILM AND OPTICAL PUMP-PROBE SPECTROSCOPY

#### 佳作

論文編號	姓名	題目
J04.00014	何率菩	SPIN GLASS BEHAVIOR IN Pr <sub>2</sub> CuGe <sub>3</sub> AND Nd <sub>2</sub> CuGe <sub>3</sub>
J04.00039	陳慶原	PRESSURE DEPENDENT ANOMALOUS PHASE TRANSITION IN TERNARY SUPERCONDUCTOR Bi <sub>2</sub> Rh <sub>3</sub> Se <sub>2</sub>
J04.00060	蘇于宗	PROPERTIES OF ION DAMAGED JOSEPHSON JUNCTION FABRICATED BY FOCUSE ION BEAM
J04.00006	王函雋	ULTRAFast DYNAMICS OF TOPOLOGICAL INSULATOR BI <sub>2</sub> SE <sub>3</sub> STUDIED BY OPTICAL PUMP MID-IR PROBE

## 05 光學光電

### 優勝

論文編號	姓名	題目
E05.00035	Hsuan Lee (李炫)	INVESTIGATION ON BULK CHIROPTICAL EFFECT OF BIOLOGICAL SPECIMEN WITH SHG-CD
E05.00010	Le Dac Tuyen	PHOTONIC BAND GAP DEPENDENCE ON SURFACE ENHANCED RAMAN SCATTERING OF GOLD NANOPARTICLE AND GOLD NANOROD
E05.00067	郭安立	Digital Holographic Microscopy
E05.00095	葛士瑋	NOVEL CONTROL OF LASER-BEAM SHAPE USING AXIALLY SYMMETRIC LIQUID CRYSTAL CELLS

### 佳作

論文編號	姓名	題目
E05.00033	李信賢	LONG-DISTANCE FLUORESCENCE LIFETIME IMAGING THROUGH STIMULATED EMISSION
E05.00048	林嘉德	All-optically switchable dye-doped blue phase liquid crystal laser
E05.00021	古新安	Terahertz Pulse Generation from Te-doped GaSe crystals
E05.00024	吳宗翰	OPTICALLY ADDRESSABLE, ERASABLE AND REWRITABLE LIQUID CRYSTAL DISPLAY IN AZO CHIRAL-DOPE CHOLESTERIC LIQUID CRYSTALS
E05.00065	許芳文	利用外腔回授波長可調二極體雷射光源及影像分析技術量測雙折射光纖的光學特性
E05.00111	蔡涵睿	Molecular Dynamics Revealed by Time-Resolved Fluorescence Polarization Microscopy
E05.00088	黃信維	PLASMONIC HOTSPOTS OF LASER-TREATED SILVER OXIDE THIN FILM
E05.00076	陳建興	Enhancing refractive index sensitivity of fiber-optic particle plasmon resonance sensor based on spatial light modulation technology

## 06 表面物理/掃描探針顯微術

### 優勝

論文編號	姓名	題目
E06.00035	謝嫻慧	Leakage Mechanism of Self-assemble BiFeO <sub>3</sub> -CoFe <sub>2</sub> O <sub>4</sub> Nanostructure

佳作		
論文編號	姓名	題目
E06.00031	劉承翰	COMPARISON OF GROWTH MECHANISM AT DIFFERENT TEMPERATURES FOR THE THIN FILMS OF COBALT ON PLATINUM(111) BY STM
E06.00024	汪郁宜	STUDY OF CYCLOTRIMERIZATION OF PROPANAL ON GOLD(110) SURFACE BY SCANNING TUNNELING MICROSCOPY

## 07 生物物理/軟物質

優勝		
論文編號	姓名	題目
J07.00027	陳廷楷	Magnetic and metal binding structural analysis of Mn, Zn-metallothionein-green fluorescence fusion protein
佳作		
論文編號	姓名	題目
J07.00041	劉耀文	CANCER CELL DESTRUCTION BY PHOTOTHERMAL THERAPY OF GOLD NANORODS
J07.00017	侯姿清	STRUCTURAL STUDY OF POLYCAPROLACTONE(PCL) THIN
J07.00021	徐詩雅	Silicon Nanowires Field-Effect Transistors Biosensor

## 08 統計物理/計算物理/非線性動力學

佳作		
論文編號	姓名	題目
J08.00010	蕭義霖	Hard sphere dynamics in asymmetric magnetic field system

## 09 量子資訊與量子計算

佳作		
論文編號	姓名	題目
J09.00002	李佳杰	CAPTURE COLD ATOMS IN A HOLLOW-CORE PHOTONIC-CRYSTAL FIBER FOR SINGLE-PHOTON EXPERIMENTS

## 10 中高能物理

優勝

論文編號	姓名	題目
J10.00005	Chang Yenyun	calibration of UBAT(UFFO burst alert & trigger telescope) analogue components

佳作

論文編號	姓名	題目
J10.00002	Hsieh Chia-Yu	A PROTOTYPE RPC FOR LEPS2 AT SPRING-8

## 11 天文/重力/宇宙學

優勝

論文編號	姓名	題目
J11.00003	林明儀	The Properties of AGN in Ultraluminous infrared galaxy since $z \sim 3$

佳作

論文編號	姓名	題目
J11.00013	王喬萱	ENTROPIC GRAVITY UNDER GENERALIZED UNCERTAINTY PRINCIPLE
J11.00005	陳振予	The ellipticity of elliptical galaxies with redshift $< 0.1$ in different surface density field
J11.00033	鄭懷傑	PRELIMINARY FLEXURAL MODELING OF IAPETUS' EQUATORIAL RIDGE
J11.00041	王品方	To identify the lowest mass members in the Paresepe (M44) by the Pan-STARRS

## 12 加速器物理

佳作

論文編號	姓名	題目
J12.00003	郭政穎	DESIGN AND MEASUREMENT OF PULSED MAGNETS FOR THE TAIWAN PHOTON SOURCE

## 13 電漿/一般物理

### 優勝

論文編號	姓名	題目
J13.00017	蔡雅怡	OBSERVATION OF SELF-EXCITED DUST ACOUSTIC WAVE TURBULENCE

### 佳作

論文編號	姓名	題目
J13.00009	陳東楷	Investigation of shock wave – spherical hot gas interaction and its evolution

## 14 原子/分子

### 優勝

論文編號	姓名	題目
J14.00041	陳炫辰	MID-IR SATURATION ABSORPTION SPECTROSCOPY OF H <sub>3</sub> <sup>+</sup> MOLECULAR ION

### 佳作

論文編號	姓名	題目
J14.00008	Liao Sheng-Lun	FAST-KICK-OFF MONOTONICALLY CONVERGENT ALGORITHM FOR SEARCHING OPTIMAL CONTROL FIELDS
J14.00009	Tsai Bing Ru	THEORETICAL STUDY OF PHASE-DEPENDENT DOUBLE-LAMBDA ELECTROMAGNETICALLY INDUCED TRANSPARENCY
J14.00032	黃耀欽	FREQUENCY STABILIZATION OF A RED DIODE LASER AND HIGH-PRECISION MEASUREMENT OF HYPERFINE INTERVALS OF LITHIUM D1 LINES

## 15 物理教學與演示教學

### 佳作

論文編號	姓名	題目
J15.00012	陳翰諄	在家作物裡實驗之可行性--以自製空氣軌道為例