

SESSION B:	
SPECTROSCOPY OF CONDENSED MATTER AND NANO – MATERIALS	
<i>November 28, 2012 (Wednesday)</i>	

Chairperson: Dr. Lam Quang Vinh (VNU Ho Chi Minh)
Dr. Vu Phi Tuyen (IMS, VAST, Vietnam)

(B-13)
08:30 - 08:55

**INVESTIGATION OF ANATASE TiO₂ PROPERTIES USING
GENERALIZED GRADIENT APPROXIMATION**

(Invited talk)

**Duong Quoc Van, Nguyen Minh Thuy, Bui Thanh Liem and Nguyen
Huy Viet**

Hanoi National University of Education, Hanoi

(B-14)
08:55 - 09:20

**OPTICAL PROPERTIES OF QUANTUM DOT ZnS:Mn AND THE
ROLE OF IMPURITY CONCENTRATION**

(Invited talk)

**Nguyen Ngoc Phuong, Nguyen Phuong Binh, Nguyen Manh Tuan and
Nguyen Thanh Hoang**

Ho Chi Minh City Institute of Physics,

(B-15)
09:20 - 09:35

**THE EFFECTS OF METHANE PRECURSOR CONCENTRATION
ON STRUCTURAL AND OPTICAL CHARACTERIZATIONS OF
AMORPHOUS SILICON CARBIDE FILMS DEPOSITED BY
PLASMA ENHANCED CHEMICAL VAPOR DEPOSITION
(PECVD)**

**Ngo Quang Khai, Nguyen Do Minh Quan, Pham Hoai Phuong, Pham
Kien Trung, Tran Quang Trung**

Ho Chi Minh City University of Science - VNU HCMC

(B-16)
09:35 - 09:50

**PREPARATION OF HIGHLY VISIBLE-LIGHT EFFICIENT N-
DOPED TiO₂ PHOTOCATALYST FOR INACTIVATION
BACTERIA BY HYDROLYSIS METHOD**

**Do Minh Thanh, Nguyen Thi Thuy Hang, Nguyen Cao Khang, Nguyen
Thi Khanh Hoa, Pham Thi Van, Duong Van Lam and Nguyen Van
Minh**

Hanoi National University of Education, Hanoi

(B-17)
09:50 - 10:05

**STRUCTURAL AND OPTICAL PROPERTIES OF ZnWO₄:Er³⁺
CRYSTALS**

Nguyen Manh Hung, Du Thi Xuan Thao and Nguyen Van Minh

University of Mining – Geology, Hanoi.

(B-18)
10:05 - 10:20

PHOTOCATALYTIC ACTIVITY ENHANCING FOR TiO₂ THIN FILM UNDER VISIBLE LIGHT BY CO-DOPED NITROGEN AND CHROMIUM

Phung Nguyen Thai Hang, Duong Ai Phuong and Le Vu Tuan Hung
Ho Chi Minh City University of Science - VNU HCMC

(B-19)
10:20 - 10:35

ROOM TEMPERATURE FERROMAGNETISM IN CO-DOPED PbBTiO₃ LOW TEMPERATURE SOL-GEL MATERIALS

Le Thi Mai Oanh and Nguyen Van Minh
Hanoi National University of Education

10:35 – 10:45

Coffee Break

Chairperson: Prof. Dr. Vu Thi Kim Lien (Thai Nguyen Uni. Edu.)
Dr. Nghiem Thi Ha Lien (IOP, VAST)

(B-20)
10:35 - 11:00

OPTICAL PROPERTIES OF Dy³⁺ DOPED K₂GdF₅ HOST

(Invited talk)

Phan Van Do, Vu Phi Tuyen, N. M. Khaidukov, Vu Xuan Quang, Nguyen Trong Thanh

Water resources University, Ha Noi

(B-21)
11:00 - 11:25

PHOTOSTABILITY OF CdSe QUANTUM DOTS DISPERSED IN AQUEOUS SOLUTION

(Invited talk)

Chu Viet Ha, Tran Anh Duc, Tran Quang Huy, Le Tien Ha and Vu Thi Kim Lien

Thai Nguyen University of Education, Thai Nguyen, Vietnam

(B-22)
12:15- 11:40

RESISTANCE SWITCHING BEHAVIOR IN AMORPHOUS TiO₂ THIN FILMS

Kim Ngoc Pham, Trung Do Nguyen, Thi Kieu Hanh Ta, Duy Phong Pham, Van Hieu Le, Bach Thang Phan

Ho Chi Minh City University of Science - VNU HCMC

(B-23)
11:40- 11:55

ULTRASONIC REPEATED SPRAY PYROLYSIS OF CuInS₂ FILMS: ABSORBER LAYERS FOR SOLAR CELLS

Nguyen Duc Hieu, Tran Thanh Thai, Luu Thi Lan Anh, Doan Minh Thuy, Vo Thi Thanh Tuyen, Vu Thi Bich and Vo Thach Son

Quy Nhon University, Binh Dinh

(B-24)
11:55- 12:10 **STUDY STRUCTURAL, OPTICAL AND MAGNETIC
PROPERTIES OF Sm-DOPED BiFeO₃ MULTIFERROICS
PREPARED BY SOL - GEL METHOD**

Dao Viet Thang, Nguyen Van Minh and Du Thi Xuan Thao
University of Mining – Geology, Hanoi.

(B-25)
12:10 -12:25 **EFFECT OF WET-CHEMICAL PROCESSING OF SILICON
SUBSTRATE TO CHARACTERISTIC OF A-SI:H/C-SI
HETEROJUNCTION SOLAR CELLS**

Pham Kien Trung, Pham Hoai Phuong and Tran Quang Trung
Ho Chi Minh City University of Science - VNU HCMC

12:25-13:30 **Lunch Buffer**

Chairperson: Prof. Dr. Tran quang Trung (VNU HoChiMinh)
Prof. Dr. Pham Van Ben (VNU Hanoi)

(B-26)
13:30 – 13:55 **LATEST DEVELOPMENT IN RAMAN SPECTROSCOPY FOR THE
CHARACTERIZATION OF NANO- STRUCTURED MATERIALS**

(Invited talk)

Shifeng Liu, Jing Shen, Ramdane Benferhat, Renata Lewandowska
HORIBA Jobin Yvon S.A.S France

(B-27)
13:55 – 14:20 **TECHNOLOGY AND OPTICAL PROPERTIES OF QDs CdSe FOR
APLYCATION IN SOLAR CELLS**

(Invited talk)

**Tung Ha Thanh, Quang Vinh Lam, Thai Hoang Nguyen, Thanh Dat
Huynh**

Ho Chi Minh City University of Science - VNU HCMC

(B-28)
14:20 – 14:35 **STUDYING AND MANUFACTURE TCO/Cu/TCO MULTILAYER
TRANSPARENT CONDUCTIVE FILMS BY DC MAGNETRON
SPUTTERING**

**Tran Hoang Cao Son, Pham Van Thinh, Vu Thi Hanh Thu, Le Tran,
Nguyen Nang Dinh**

Ho Chi Minh City University of Science - VNU HCMC

(B-29)
14:35 – 14:50 **PbS QUANTUM DOTS SENSITIZED TiO₂ ELECTRODES FOR
PHOTOVOLTAIC CELLS ,Tung T. HA, Nhi T. T. NGUYEN**

Vinh. Q. LAM, Cuong C. HUYNH, Hoang T. NGUYEN, Dat T. HUYNH
Ho Chi Minh City University of Science - VNU HCMC

(B-30)
14:50 – 15:05

**FIRST PRINCIPLE STUDIES OF THE ELECTRONIC STRUCTURE
AND OPTICAL PROPERTIES OF AWO₄ GROUP MATERIALS (A=Fe,
Mn, Ni, Cu)**

Pham Van Hai, Nguyen Van Long and Luc Huy Hoang

Hanoi National University of Education, Hanoi, Vietnam

(B-31)
15:05 – 15:20

**SYNTHESIS AND CHARACTERIZATION OF NANOSTRUCTURED
MAGNETIC BEADS - QUANTUM DOTS CdSe/CdS-Fe₃O₄ FOR SOME
SPECIFIC APPLICATIONS**

**Nguyen Ngoc Phuong, Nguyen Dong Thao, Nguyen Manh Tuan, Nguyen
Thanh Hoang, Nguyen Le Hoai Phuong**

Ho Chi Minh City Institute of Physics, VAST

(B-32)
15:20 – 15:35

**STUDY DEPOSITION OF THIN FILM TiO₂ BY PULSED
MAGNETRON SPUTTERING**

Thanh Hop Nguyen, Hong Tuan Pham

National Center for Technology Progress- NACENTECH.

15:35 – 15:50

Coffee Break

15:50 – 17:30

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