# **Curriculum Vitae**

# MD. ABDULLA-AL-MAMUN, PhD

(ARPChem Researcher at Tokyo University and JSPS Fellow)

**Assistant Professor** 

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# **ARPChem Researcher:**

♣ The Japan Technological Research Association of Artificial Photosynthetic Chemical Process (ARPChem) Researcher from August 2013 to March 2015. The University of Tokyo, School of Engineering, Department of Chemical System Engineering, Tokyo, Japan. Kazunari DOMEN Lab.

# Fellowship:

♣ Japan Society for the Promotion of Science (JSPS) Fellowship-May 2010-May 2012. Graduate School of Science and Engineering, Kagoshima University, Japan

# **Scholarship and Membership:**

- ➤ (MONBUKAGAKUSHO: MEXT)-2004 Scholarship- October 2004-March 2010
- > Bangladesh Government Ministry of Education Scholarship- July-1995-June 1999
- Research Assistances (RA), Kagoshima University- April 2007-March 2010
- > Member- The Chemical Society of Japan, Membership number: 2081870800
- ➤ Member- Bangladesh JSPS Alumni Association, Life member :BJSPSAA 164
- Member- Leather Engineers & Technologist's Society (LETSB,B), Bangladesh
- > Member-Japanese universities alumni association Bangladesh
- > Member- Dhaka University Registered Graduate, Life Member

### **Education:**

❖ Ph.D. (2010)	Chemistry and Biosciences	Kagoshima University, Japan
Conferred		
❖ M. Sc. (2007)	Chemistry and Bioscience	Kagoshima University, Japan
Grade: A - Excellent		
❖ B. Sc. (1999)	Leather Engineering and Technology	University of Dhaka, Bangladesh
First Class		

# **Employment History:**

- 9/2017-to date Assistant Professor, Institute of Leather Engineering and Technology, University of Dhaka, Dhaka-1000, Bangladesh.
- 9/2015-7/2017 Assistant Professor, Department of Leather Engineering, Khulna University of Engineering and Technology (KUET), Khulna, Bangladesh.

- \* 8/2013-3/2015 ARPChem Researcher, Department of Chemical System Engineering, School of Engineering, The University of Tokyo, Tokyo, Japan.
- 4 6/2012-8/2013 Assistant Professor, Department of Leather Engineering, Khulna University of Engineering and Technology (KUET), Khulna, Bangladesh.
- 5/2010-5/2012 Postdoctoral Research Associate, Department of Chemistry and Bioscience, Faculty of Science and Engineering, Kagoshima University, Japan
- 07/1999-4/2004 Leather Chemist, Pragati Leather Complex, 55/1 Hazaribagh, Dhaka-1209, Bangladesh

### **Research Experiences and Interests:**

- > Synthesis of advanced photoactive nano materials (semiconductor, metal oxides/nitrides/oxynitrides and metal chalcogenides for energy, environmental and biomedical applications).
- > Synthesis of metal/oxide capped/ion-doped catalysts (Sol-Gel, organometalic complex, ultrasonic, microwave, laser-assisted synthesis, Impregnation).
- Fabrication, characterization and construction nano/micro particle building blocks by self-assembly.
- > Catalysts characterization by UV, PL, XRD, SEM, HR-TEM, AFM, XPS, EDAX, XRF FT-IR, FT-Raman, DSC, TGA, HPLC, Gas Chromatography and Surface area measurements techniques etc.
- > Electrochemical and Photoelectrochemical applications of visible light responsible photocatalysts.
- ➤ Thin film fabrication of catalysts on ITO, FTO glass using laser ablation, electrochemical deposition, carbon tape/plastic sheet assist particles transfer and squeegee method.
- Construction of photoelectrochemical cell/tandem-type solar cell based on visible light photocatalysts for hydrogen and oxygen production.
- > Identification of new green catalyst form natural resources for catalytic applications.
- > Photochemical and photocatalytic abetments of pollutants using various methods.
- Organic polymer, organo fluoro compound synthesis.
- Photocatalytic, photothermal and magnetic field applied cancer cell killing in vitro.

## **Skills in Analytical Chemistry**

- > Method development for analysis of pollutants present in wastewater using GC, HPLC, GC-MS
- > Solid phase micro extraction method for analysis of trace impurities
- > Troubleshooting and maintenance of instruments
- > Analysis of unknown pollutants by using gas chromatography with mass spectrometer
- > Statistical data analysis using various methods
- Method development for analysis of VOC pollutants
- > Derivative preparation for analysis using suitable methods
- Experience in sample collections and storage

# Special skills

- > Sound basic knowledge in Biomedical, Environmental and analytical Chemistry and related studies
- > Strong knowledge in data interpretation using various analytical methods
- > Computer operations (Microsoft office) and Special software skill in Chem draw, Kaleida Graph etc
- > Ability to work and interact with various interdisplenray research field

# General supervisory skills

- Supervised and trained undergraduates and postgraduates students in various instrumental operation and methodology in the lab as well as in the class room (both chemistry and environmental engineering graduates)
- Worked as a lab assistant/teaching assistant in Kagoshima University to help students and professors in the lab and class.
- Responsible for various analytical standard solution, reagents preparation for various experimental work
- > Taught lab procedures, moral ethics, material safety data of chemicals to graduates

#### Research supervisory skills

 Supervised and trained 30 graduate (KUET and DU), 8 postgraduates (included one commonwealth scholar from Kenya) scholar students on laboratory at Dhaka University, Bangladesh.

- Supervised and trained 6 graduate, 2 postgraduates and 1 Phd scholar students on laboratory at Kagoshima University, Japan.
- Functioned as a Group head of our research lab at Kagoshima University. Responsible for good maintenance of research laboratory at Kagoshima University.
- Functioned as a Group head of our project-research lab at Tokyo University. Responsible for good maintenance of research laboratory at Tokyo University.

Representative Publications: Published over 50+ articles in refereed journals and books

### Personal Details:

Date of birth:	1st October, 1978	
Marital status:	Married with two children of age 10 and 6 yrs	
Permanent Address:	Vill Sayedpur, P.O Dattapara-3706, Upazila-Lakshmipur, District-Lakshmipur,	
	Bangladesh	
Present Address:	Lily-8, Leather Institute Staff Quarter, University of Dhaka, 44-50 Hazaribagh,	
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### **Research Grants:**

- 1) Obtained 100,000 BDT from the University Grants Commission of Bangladesh for a research project on the "A low-cost comprehensive hybrid treatment of tannery effluent for vegetative seed germination" (from 07/2016 06/2017) (Completed).
- 2) Obtained 900,000 Japanese yen from Japan Society for the Promotion of Science during JSPS's postdoctoral research in Japan (2010-2012) which is highly competitive (Completed).
- Received 88,000 BDT from the University Grants Commission of Bangladesh for research on "Development the Vegetable Tanning Techniques by the Indigenous Bovine Fat and Notholithocarpus densiflorus extract" (Completed) (from 07/2019 – 06/2020).
- 4) Received a prestigious grant 18,00,000.00 BDT from The Ministry of Education for Advance Research Grant Title of "Nanotechnology for high performance smart leather production system" (On going)
- 5) Awarded a prestigious UNESCO-TWAS grant USD 14,300.00 from The World Academy of Sciences (TWAS) Title of "Vermicomposting and Biodegradation of Leather-industries Solidwaste for Valuable Organic Fertilizer" (On going)
- 6) Received 2,95,000 BDT from the University Grants Commission of Bangladesh for research on "Recycle and Reuse of Chromium from Tannery Waste Chrome-liquor using Solar Evaporation Process (Ongoing).

# **List of publications:**

# **Book Chapter:**

1) Mohammad Shariful Islam, **Mohammad Abdulla-Al-Mamun**, Alam Khan and Mitsugu Todo (2020). *Excellency of Hydroxyapatite Composite Scaffolds for Bone Tissue Engineering* (pp. 1-17). IntechOpen: Biomaterials, DOI:http://dx.doi.org/10.5772/intechopen.92900

### a) Selected Articles in Referred Journals

- **1) Md. Abdulla-Al-Mamun**, Banya Rani Goush, Potential of Functionalized-Rice-Husk Ash for Purification of Tannery-yard Liming Effluent, *Journal of Scientific Research*, 11(3) (2019) 373-381.
- 2) Md. Abdulla-Al-Mamun, Rakibul Hasan, Md. Rubel Ahmed, Adhir Chandra Paul, and Rajon Kumar Raha, Prevention of fungal growth on leather shoes efficacy of Neem leaves (Azadirachta indica) and Mahogany Fruits-bark (Swietenia mahagoni), Bangladesh Journal of Scientific and Industrial Research (BJSIR), 54(3), (2019), 257-262.
- 3) Md. Shariful Islam, A. M. Zahidur Rahman, M. H. Sharif, Alam Khan, Md. Abdulla-Al-Mamun, Mitsugu Todo, Effects of compressive ratio and sintering temperature on mechanical properties of biocompatible collagen/hydroxyapatite composite scaffolds fabricated for bone tissue engineering, *Journal of Asian Ceramic Societies*, 7(2) (2019) 183-198.
- **4) Md. Abdulla-Al-Mamun**, Mohammad Mizanur Rahman, Sayed Md. Shamsuddin, Dual cocatalysts induced photocurrent enhancement of LaTiO<sub>2</sub>N photoanode, *Materials Letters*, 245 (**2019**) 147–150.
- **5) Md. Abdulla-Al-Mamun**, Adhir Chandra Paul, Rajan Kumar Raha, Tasmin Wazeda Binty, Cost-Effective Different Ladies Jewelry from Leather Products Wastages, *International Journal of Engineering Research & Technology*, 8(2) (**2019**) 154-158.
- **6) Md. Abdulla-Al-Mamun**, Electron Beam Ni-layer Deposited LaTiO<sub>2</sub>N Photoanodes for the Enhanced Photoelectrochemical Performance of Water Oxidation, *iEEE*, **(2017)**, pp. 1-7, DOI: 10.1109/EICT.2017.8275128.
- 7) Adhir Chandra Paul, **Md. Abdulla-Al-Mamun**, Sujit Kumar Ray, Md. Ashraful Islam, Cost-effective Design Development of Medicated Footwear for Diabetic Patients, *International Journal of Engineering Research & Technology*, 4(8) (2015) 637-641.
- 8) Md. Abdulla-Al-Mamun, Yoshihumi Kusumoto, Tohfatul Zannat, Yuji Horie and Hirotaka Manaka, Au-Ultrathin Functionalized Core-Shell (Fe<sub>3</sub>O<sub>4</sub>@Au) Monodispersed Nanocubes for Combination of Magnetic/Plasmonic Photothermal Cancer Cell Killing, *RSC Advances*, 3(21) (2013) 7816-7827.
- 9) Md. Abdulla-Al-Mamun, Yoshihumi Kusumoto, Gazi Jahirul Islam, A Comparative Performance Study of Plasmon-induced Charge Separation of Au@TiO2, Au@Fe2O3, and Au@ZnO Photocell Thin-films, *Journal of Scientific Research*, 5(2) (2013) 245-254.
- **10)** Seiji Akiyama, Mamiko Nakabayashi, Naoya Shibata, Tsutomu Minegishi, Yusuke Asakura, **Md. Abdulla-Al-Mamun**, Takashi Hisatomi, Hiroshi Nishiyama, Masao Katayama, TaroYamada, and Kazunari Domen, Highly Efficient Water Oxidation Photoanode Made of Surface Modified LaTiO<sub>2</sub>N Particles, *Small*, 12(39) (**2016**) 5468-5476.
- **11) Md. Abdulla-Al-Mamun**, Yoshihumi Kusumoto, Md. Shariful Islam, Enhanced Phototocatalytic Activity of Ag @ Fe-doped TiO<sub>2</sub> Composite Nanoclusters against Human Epithelial Carcinoma Cells, *Journal of Materials Chemistry*, 22 (**2012**) 5460-5469.
- **12) Md. Abdulla-Al-Mamun**, Yoshihumi Kusumoto, Md. Shariful Islam, A new, simple hydrothermal synthesis of magnetic nano-octahedrons-Application to hyperthermia cancer cell killing, *Canadian Journal of Chemistry*, 90 (8) (**2012**) 660-665.
- **13)** Md. Shariful Islam, Yoshihumi Kusumoto, **Md. Abdulla-Al-Mamun** and Hirotaka Manaka, Synthesis, Characterization and Application of Dumbbell-Shaped Magnetic (Fe<sub>3</sub>O<sub>4</sub> and γ-Fe<sub>2</sub>O<sub>3</sub>) Nanoparticles against HeLa (Cancer) Cells, *Current Nanoscience*, 8 (6) (**2012**) 811-818.
- **14)** Md. Shariful Islama, Yoshihumi Kusumoto, **Md. Abdulla-Al-Mamun**, Yuji Horie and Hirotaka Manaka, Enhancement of cumulative photoirradiated and AC magnetic-field induced cancer (HeLa) cell killing efficacy of mixed α and γ-Fe<sub>2</sub>O<sub>3</sub> magnetic nanoparticles, *New Journal of Chemistry*, 36 (**2012**) 1201-1209.
- 15) Md. Shariful Islam, Yoshihumi Kusumoto, Junichi Kurawaki, Md. Abdulla-Al-Mamun and Hirotaka Manaka, A comparative study on heat dissipation, morphological and magnetic properties of hyperthermia suitable nanoparticles prepared by co-precipitation and hydrothermal method, *Bulletin of Materials Science*, 35(7) (2012) 1047-1053.
- **16)** Md. Shariful Islam, Junichi Kurawaki, Yoshihumi Kusumoto, **Md. Abdulla-Al-Mamun**, and Md. Zobayer Bin Mukhlish, Hydrothermal Novel Synthesis of Neck-structured Hyperthermia-suitable Magnetic (Fe<sub>3</sub>O<sub>4</sub>, γ-Fe<sub>2</sub>O<sub>3</sub> and α-Fe<sub>2</sub>O<sub>3</sub>) Nanoparticles, *Journal of Scientific Research*, 4(1) (**2012**) 99-107.

- **17) Md. Abdulla-Al-Mamun**, Yoshihumi Kusumoto, Tohfatul Zannat, Md. Shariful Islam, Synergistic Enhanced Photocatalytic and Photothermal Cytotoxic Activity of Au@TiO2 Nanopellets against Human Epithelial Carcinoma (HeLa) Cells, *Physical Chemistry Chemical Physics*, **13** (**2011**)21026–21034.
- **18)** Md. Shariful Islam, Yoshihumi Kusumoto, **Md. Abdulla-Al-Mamun** and Yuji Horie, Enhanced Cancer Cell (HeLa) Killing Efficacy of Mixed Alpha and Gamma Iron Oxide Supermagnetic Nanoparticles Under Combined AC (Alternating Current) Magnetic-Field and Photoexcitation, IIUM Engineering Journal, 12(4) (**2011**)67–72.
- **19)** Md. Shariful Islam, Yoshihumi Kusumoto, **Md. Abdulla-Al-Mamun** and Yuji Horie, Photocatalytic and AC Magnetic-field Induced Enhanced Cytotoxicity of Fe<sub>3</sub>O<sub>4</sub>@TiO<sub>2</sub> Core-shell Nanocomposites against HeLa Cells, *Catalysis Communications*, 16 (**2011**)39–44.
- 20) Md. Abdulla-Al-Mamun, Yoshihumi Kusumoto, Tohfatul Zannat, and Md. Shariful Islam, Synergistic Cell-Killing by Photocatalytic and Plasmonic Photothermal Effects of Ag@TiO<sub>2</sub> Core-Shell Composite Nanoclusters against Human Epithelial Carcinoma (HeLa) Cells, Applied Catalysis A: General, 398 (1-2) (2011)134–142.
- 21) Md. Shariful Islam, Yoshihumi Kusumoto, and Md. Abdulla-Al-Mamun, Cytotoxicity and Cancer (HeLa) Cell Killing Efficacy of Aqueous Garlic (Allium sativum) Extract, Journal of Scientific Research, 3(2) (2011) 375-382.
- **22)** Md. Shariful Islam, Yoshihumi Kusumoto, **Md. Abdulla-Al-Mamun**, Novel rose-type magnetic (Fe<sub>3</sub>O<sub>4</sub>, γ-Fe<sub>2</sub>O<sub>3</sub> and α-Fe<sub>2</sub>O<sub>3</sub>) nanoplates synthesized by simple hydrothermal decomposition, *Materials Letters*, 66 (**2011**) 165-167.
- **23)** Md. Shariful Islam, Yoshihumi Kusumoto, **Md. Abdulla-Al-Mamun**, Yuji Horie, Synergistic Cell-killing by Magnetic and Photoirradiation effects of Neck-structured α- Fe<sub>2</sub>O<sub>3</sub> against Cancer (HeLa) Cells, *Chemistry Letters*, 40(7) (**2011**)773–775.
- 24) M. Muruganandham, R. Amutha, Evelina Repo, Mika Sillanpaa, Yoshihumi Kusumoto, Md. Abdulla-Al-Mamun, Controlled Mesoporous self-assembly of ZnS microsphere for photocatalytic degradation of Methyl Orange dye, *Journal of Photochemistry and Photobiology A: Chemistry*, 216 (2010) 133–141.
- **25) Md. Abdulla-Al-Mamun**, Yoshihumi Kusumoto, Bashir Ahmmad, Md. Shariful Islam, Photocatalytic Cancer Cell-killing (HeLa) Enhanced with Cu-TiO<sub>2</sub> Nanocomposite, *Topics in Catalysis*, 53(7-10) (**2010**) 571-577.
- **26)** Bashir Ahmmad, Yoshihumi Kusumoto, **Md. Abdulla-Al-Mamun**, A new type of solid state solar cell based on Fe<sub>2</sub>O<sub>3</sub>, SiC and crystal growth inhibitors, *Journal of Scientific Research*, 2(1) (**2010**), 1-8.
- **27)** Shouichi Somekawa, Yoshihumi Kusumoto, **Md. Abdulla-Al-Mamun**, Bashir Ahmmad, Fabrication, Ndoping mechanism and evaluation of N-doped TiO<sub>2</sub> thin films based on laser ablation method, *Journal of Scientific Research*, 2(1) (**2010**), 17-23.
- **28) Md. Abdulla-Al-Mamun**, Yoshihumi Kusumoto, Aki Mihata, Md. Shariful Islam, Bashir Ahmmad, Plasmon-induced Photothermal Cell-killing Effect of Gold Colloidal Nanoparticles on Epithelial Carcinoma Cells, *Photochemical and Photobiological Sciences*, 8(8) (**2009**) 1125-1129.
- **29) Md. Abdulla-Al-Mamun**, Yoshihumi Kusumoto, Manickavachagam Muruganandham, Simple New Synthesis of Copper Nanoparticles in Water/acetonitrile Mixed Solvent and their Characterization, *Materials Letters*, 63(23) (**2009**) 2007-2009.
- 30) Md. Abdulla-Al-Mamun, Yoshihumi Kusumoto, New Simple Synthesize of Cu-TiO<sub>2</sub> Nanocomposite: Highly Enhancing of Photo Catalytic Cell-killing Observation on Epithelia Carcinoma (HeLa) cell, Chemistry Letters, 38(8) (2009) 826-827.
- **31) Md. Abdulla-Al-Mamun**, Yoshihumi Kusumoto, Md. Shariful Islam, and Hailong Yang, Enhanced Photocatalytic Cytotoxic Activity of Au@TiO<sub>2</sub> Nanopellets against Human Epithelial Carcinoma (HeLa) Cells, *Chemistry Letters*, 38(10) (**2009**) 950-952.
- **32) Md. Abdulla-Al-Mamun**, Yoshihumi Kusumoto, and Md. Shariful Islam, Cytotoxic Evaluation of Ag@TiO<sub>2</sub> Core-shell Composite Nanocluster against Cancer Cells, *Chemistry Letters*, 38(10) (**2009**) 980-981.
- **33)** Manickavachagam Muruganandham, Yoshihumi Kusumoto, Okamoto Chiyo, Muruganandham Amutha, **Md. Abdulla-Al-Mamun**, Bashir Ahmmad, Mineralizer-Assisted Shape-Controlled Synthesis, Characterization and Photocatalytic Evaluation of CdS Microcrystals, *The Journal of Physical Chemistry C*, 113(45) (**2009**) 19506–19517.
- **34)** Shouichi Somekawa, Yoshihumi Kusumoto, **Md. Abdulla-Al-Mamun,** Manickavachagam Muruganandham, Yuji Horie, Wet-type Fe<sub>2</sub>O<sub>3</sub> solar cells based on Fe<sub>2</sub>O<sub>3</sub> films prepared by laser

- ablation: drastic temperature effect, Electrochemistry Communications, 11(11) (2009) 2150-2152.
- **35)** Bashir Ahmmad, Yoshihumi Kusumoto, **Md. Abdulla-Al-Mamun**, Aki Mihata, Hailong Yang, Effect of Single Walled Carbon Nanotube as Counter Electrode on Laser-deposited Fe<sub>2</sub>O<sub>3</sub> and TiO<sub>2</sub> Films Solar Cells, *Journal of Scientific Research*, 1(3)(**2009**), 430-437.
- **36) Md. Abdulla-Al-Mamun**, Hailong Yang and Yoshihumi Kusumoto, Enhancement of Photocatalytic Cancer Cell-Killing Activity by Using Ag@TiO<sub>2</sub> Core-Shell Composite Nanoclusters, *NSTI-Nanotech*, 2 (**2009**), 11-14.
- 37) Miyuki Ikeda, Yoshihumi Kusumoto, Hailong Yang, Shouichi Somekawa, Hayato Uenjyo, Md. Abdulla-Al-Mamun, Yuji Horie, Photocatalytic hydrogen production enhanced by laser ablation in water-methanol mixture containing titanium (IV) oxide and graphite silica, Catalysis Communications, 9 (2008) 1329–1333.

## b) Other Publications (in Proceedings)

- **38) Md. Abdulla-Al-Mamun**, Rakibul Hasan, Md. Rubel Ahmed, Rajon Kumar Raha, ALTERNATIVE NATURAL-SOURCES FUNGICIDE FOR PREVENTING THE FUNGAL GROWTH ON LEATHER SHOE: EXTRACTED FROM NEEM (AZADIRACHTA INDICA) LEAVES AND MAHAGONY (SWIETENIA MAHAGONY) FRUITS BARK, *Proceedings of the International Conference on Mechanical Engineering and Renewable Energy 2017 (ICMERE2017*), CUET, Chittagong, Bangladesh, December, 18<sup>th</sup> -20<sup>th</sup>, (**2017**), pp. ICMERE2017-PI-304.
- **39) Md. Abdulla-Al-Mamun**, Kazunari Domen, Electron Beam Ni-layer Deposited LaTiO₂N Photoanodes for the Enhanced Photoelectrochemical Performance of Water Oxidation, *Proceeding of The 3<sup>rd</sup> International Conference on Electrical Information and Communication Technology (EICT)*, KUET, Khulna, Bangladesh, December 7<sup>th</sup> -9<sup>th</sup> , (**2017**), pp. 1-7,
- **40)** R.K. Raha, D. Bhowmik, S.C. Sekhar, and **M. Abdulla-Al-Mamun**, OXIDATIVE TREATMENT BY HYDROGEN PEROXIDE FOR THE REMOVAL OF COD AND SULPHIDE FROM TANNERY LIMING WASTEWATER, *Proceeding of The 3<sup>rd</sup> International Conference on Advances in Civil Engineering*, CUET, Chittagong, Bangladesh, December 21<sup>st</sup> -23<sup>rd</sup>, (**2016**), pp. 122-127.
- **41)** Md. Shariful Islam, Yoshihumi Kusumoto, **Md. Abdulla-Al-Mamun**, Yuji Horie, AC Magnetic-Field Induced and Photoexcited Cancer Cell (Hela) Killing Efficacy of Mixed α and γ-Fe<sub>2</sub>O<sub>3</sub> Superparamagnetic Nanoparticles, *Proceedings of the 2nd International Conference on Biotechnology Engineering*, Kuala Lumpur, Malaysia, May 17-19, **(2011)**, pp. 557-559.
- **42) Md. Abdulla-Al-Mamun**, Yoshihumi Kusumoto, Aki Mihata, Bashir Ahmmad and M. Muruganandham, Photothermal and Photocatalytic Cell-killing Effect of Au Colloidal Nanoparticles and Au-capped TiO<sub>2</sub> Nanocomposite Photocatalysts on HeLa cell, *Proceedings of the International Conference on Materials for Advance Technologies (ICMAT 2009)*, Suntec City, Singapore, 28 June-3<sup>rd</sup> July (**2009**), pp.14.
- **43) Md. Abdulla-Al-Mamun**, Yoshihumi Kusumoto, Hailong Yang and Md. Shariful Islam, A Novel Synthesis of Cu / TiO<sub>2</sub> Photocatalyst for Photocatalytic Cancer (HeLa) Cell Killing, *Proceedings of The 12th Japan-Korea Symposium on Catalysis*, Akita, Japan, October 14-16, **(2009)** pp. 80.
- **44)** Hailong Yang, Yoshihumi Kusumoto, **Md. Abdulla-Al-Mamun**, Miyuki Ikeda, and Bashir Ahmmad, Effect of Laser Ablation on TiO<sub>2</sub> / Graphite Silica System for Photocatalytic Hydrogen Production from Water-Alcohol Mixture, *Proceedings of The 12th Japan-Korea Symposium on Catalysis*, Akita, Japan, October 14-16, (**2009**) pp. 164.
- **45)** Shouichi Somekawa, Yoshihumi Kusumoto, **Md. Abdulla-Al-Mamun**, Makoto Nakashima and Yuji Horie, Effect of Thermal treatment of Fe<sub>2</sub>O<sub>3</sub>/FTO Films on Performance of Wet-type Fe<sub>2</sub>O<sub>3</sub> Solar Cells, *Proceedings of the 6<sup>th</sup> International Symposium on Transparent Oxide Thin Films Electronics and Optics (TOEO-6)*, April 15-17, (**2009**) pp.15p-P034-1~3.
- **46)** Bashir Ahmmad, Yoshihumi Kusumoto and **Md. Abdulla-Al-Mamun**, One Step Synthesis of Hallow Sphere C-doped TiO<sub>2</sub> Submicrostructures, *Proceedings of the 6<sup>th</sup> International Symposium on Transparent Oxide Thin Films Electronics and Optics (TOEO-6)*, April 15-17, (**2009**) pp. 15p-P042-1~4.
- **47)** Shouichi Somekawa, Yoshihumi Kusumoto, **Md. Abdulla-Al-Mamun** and Yuji Horie, N-doping Process and Evaluation of N-doped TiO<sub>2</sub> thin films prepared by laser ablation method, *Proceedings of the 6<sup>th</sup> International Symposium on Transparent Oxide Thin Films Electronics and Optics (TOEO-6), April 15-17, (2009) pp. 16p-P094-1~3.*

- **48)** Bashir Ahmmad, Yasuhiro Kitamura, Yoshihumi Kusumoto and **Md. Abdulla-Al-Mamun**, Solid State Solar Cells Based on Fe<sub>2</sub>O<sub>3</sub> and SiC: Effect of Crystal Growth Inhibitor, *Proceedings of the 6<sup>th</sup> International Symposium on Transparent Oxide Thin Films Electronics and Optics (TOEO-6), April 15-17, (2009) pp. 16p-P125-1~4.*
- **49)** Bashir Ahmmad, Hailong Yang, **Md. Abdulla Al-Mamun**, Yoshihumi Kusumoto, Tandem Cell for Photocatalytic Hydrogen Production: Material Design, *proceeding of the 2008 Korea-Japan Symposium on Frontier Photoscience*, Jeju, Korea, September 25-28,(**2008**) pp.116-117.
- 50) Hailong Yang, Yoshihumi Kusumoto, Miyuki Ikeda, Hayato Uenjyo, Md. Abdulla-Al-Mamun, Shouichi Somekawa and Bashir Ahmmad, Enhancement effect of laser ablation in liquid on hydrogen production using titanium(IV) oxide and graphite silica, *Proceedings of the ISES Solar World Congress* 2007, Beijing, China, September 18-21, (2007) 2790-2794.
- **51)** H.Yang, **M. Abdulla-Al-Mamun**, M. Ikeda, Y. Horie and Y. Kusumoto, Preparation and Application of Nanoparticles by Laser Ablation in Liquid Environment, *Proceeding of The 365<sup>th</sup> Topical Meeting of The Laser Society of Japan*, Iwasaki Hotel, Ibusuki, Japan, September 14<sup>th</sup>, (**2007**) 31-36.

#### **REFERERS**

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