



FACULTY INFORMATION SHEET

JACQUE LYNN F. GABAYNO

ACADEMIC INFORMATION

Bachelor's Degree	Bachelor of Science in Applied Physics	Date	April 2002
Institution	University of the Philippines - Diliman	Citation	
Master's Degree	Master of Science in Physics	Date	April 2005
Institution	University of the Philippines- Diliman	Citation	
Thesis	Generation of Supercontinuum via Femtosecond Pulse Propagation in a Highly Nonlinear Photonic Crystal Fiber		
Doctorate Degree	Doctor of Philosophy in Physics	Date	November 2010
Institution	University of the Philippines, Diliman	Citation	
Dissertation	Amplification of UV (290 nm) femtosecond pulse by a side-pumped micropulling-down-method Ce:LiCAF crystal in a prismatic mirror configuration		

PROFESSIONAL ELIGIBILITY

Title of Licensure Examination	Month / Year Taken
Civil Service Career Professional	April 2002

PROFESSIONAL EXPERIENCE

Inclusive Dates	Rank/Position (Company)
July 2012 - present	Faculty Member, Mapua Institute of Technology, Intramuros
Sept 2013 – July 2015	Postdoctoral Research Associate, Chung Yuan Christian University, Taiwan
April 2011 – Feb 2012	Senior Test and Development Engineer, Integrated Microelectronics Inc, Laguna
Dec 2008 – October 2009	Visiting Researcher, Institute of Laser Engineering, Osaka University, Japan
2005, 2010	University Research Associate, National Institute of Physics, University of the Philippines, Diliman
2002-2004, 2006-2008, 2010	Instructor, National Institute of Physics, University of the Philippines, Diliman

ISI RESEARCH PUBLICATIONS (Standard Bibliographic Format)

- Hao Zhao, Ming Chang, Jacque Lynn Gabayno, Xiaojun Liu, and Wei Siou Lin, "Automated Electrical Measurements of Single ZnO Nanowire with Cu and Au Electrodes Under Axial Strain", *Science of Advanced Materials* **7** (2), 287–294 (2015)
- J. L. Gabayno, D. Liu, M. Chang and Y. Lin, "Controlled manipulation of Fe₃O₄ nanoparticles in an oscillating magnetic field for fast ablation of microchannel occlusions", *Nanoscale*, 2015, DOI: 10.1039/C4NR06143H
- Po-Cheng Chen, Ming Chang, Jacque Lynn Gabayno, Xiangning Wang, and Xiaojun Liu. "High resolution topography utilizing a line scan stereo vision technique", *Microsystem Technologies*, 21(9), 2015 doi 10.1007/s00542-015-2675-4
- Ming CHANG, Jacque Lynn GABAYNO, Ming-Yi CHANG, Yu-Hao LIN, and Ke-Wei Huang, "Magnetic Field-Driven Manipulation System and Its Applications in Micromixing and Microablation", 3rd International Conference on Recent Trends in Materials and Mechanical Engineering (ICRTMME 2015), January 15-16, 2015, Auckland, New Zealand
- Ming Chang, Jacque Lynn F Gabayno, Ke-wei Huang, "Mixing Efficiency Enhancing in Micromixer by Controlled Magnetic Stirring of Fe₃O₄ Nanomaterial", 2015 International Conference on Materials Research and Engineering (ICMRE2015), January 30-31, 2015 Shanghai, China
- M. Chang, J.L. Gabayno, Y.-H. Lin and D.-W. Liu, "Motion Control of Fe₃O₄ Nanomaterial and Its Application in Thrombus Removal", 38th International MATADOR Conference on Advanced Manufacturing (MATADOR2015), March 28-30, 2015, Huwei, Taiwan
- J. L. Gabayno, M. Chang, P. Chen, C.A. Lin. "High resolution optical inspection for fast detection and classification of surface defects", 7th International Symposium on Precisions Mechanical Measurements (ISPM2015), 8-12 August 2015, Xiamen, China
- Design and implementation of shape memory alloy-actuated nanotweezers Hao Zhao, Ming Chang, Xiaojun Liu, Jacque Lynn Gabayno, and Hsieh Tsun Chen, "Design and implementation of shape memory alloy-actuated nanotweezers for nanoassembly", *J. Micromech. Microeng.* **24**, 095012 (2014)

- M. Chang, Y. C. Chou, P. T. Lin, and J. L. Gabayno, “Fast and High-Resolution Optical Inspection System for In-Line Detection and Labeling of Surface Defects” CMC: Computers, Materials & Continua, Vol. 42, No. 2, pp. 125-140, 2014
- Da-Wei Liu, Jacque Lynn Gabayno, Ming Chang. “The motion control of Fe₃O₄ nanomaterial and its applications in nanomedicine”, 4th Annual Meeting of the American Society for Nanomedicine. 2014 March 28–30, Maryland, USA (see Abstract on Brief Report, J Neuroimmune Pharmacol p. 31)
- Ming Chang, Yu-Cheng Chou, Po-Ting Lin, Jacque Lynn F. Gabayno, “Full-field In-line Detection of Surface Profiles and Defects” International Conference on Computational & Experimental Engineering and Sciences 2014, (ICCES2014), June 12-17, 2014, Changwon, Korea
- Bo-Cheng Chen, Ming Chang, Jacque Gabayno*, Ming-Fu Chen, “High resolution opto-mechanical module for high speed surface defect inspection of touch panel glass”, The 18th International Conference on Mechatronics Technology (ICMT2014), Oct. 21-24, 2014, Taipei, Taiwan, R.O.C. (*Presenter)
- Po-Cheng Chen, Ming Chang*, Wei-Chung Lai, Jacque Lynn Gabayno, “– Bond Line Thickness and Die Tilt Inspection in Die Bonding Process”, 17th Symposium of Non-Destructive Inspection Techniques (NDT2014), 30-31 October 2014, Taichung, Taiwan
- Ke-Wei Huang, Jacque Lynn F Gabayno, Ming Chang, and Ming-Yi Chang Efficient mixing in microfluidic channel by controlled magnetic stirring of Fe₃O₄ microrods The 22th Conference on Automation Technology (CAT2014), 14-15 November, 2014, National Formosa University, Huwei, Yunlin, Taiwan

SCIENTIFIC, PROFESSIONAL and HONOR SOCIETIES

Position	Society	Inclusive Dates

HONORS AND AWARDS

Date	Award	Organizer

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