

NANO KOREA 2020

July 1~3, KINTEX, Korea

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EDUCATION

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|--|------|------------------------|-------------|
| University of Alabama at Birmingham | Ph.D | Physics | 2002 |
| University of Alabama at Birmingham | MS | Physics | 1997 |
| University of Illinois at Urbana-Champaign | BS | Physics | 1992 |
| University of Illinois at Urbana-Champaign | BSEE | Electrical Engineering | 1992 |

PROFESSIONAL ACTIVITIES

- Professor, School of Mechanical Engineering, Kyungpook National University, Republic of Korea, October 2009 to present.
- Technical Expert, International Standard Organization (ISO) TC229 Nanotechnology, 2009 to present
- Project Leader, ISO TC229 JWG2 PG18, ISO/IEC TR19733 Nanotechnologies- Matrix of properties and measurement techniques for graphene and related 2D materials, 2014 to 2019
- Technical Expert, International Electrotechnical Commission (IEC) TC113 Nanotechnology for electrotechnical products and systems, 2009 to present
- Nanotechnology National Expert Committee, Korean Agency for Technology & Standards (KATS), Ministry of Trade, Industry & Energy of Korea, and a Korean National Delegate to ISO TC229 and IEC TC113, 2008 to present
- Senior Research Scientist, Advanced Photonics Research Institute, Gwangju Institute of Science and Technology, Republic of Korea, April 2003 to September 2009.
- Senior Researcher, Electronics and Telecommunications Research Institute, Republic of Korea, October 2002 to March 2003.
- Postdoctoral Research Associate, Department of Physics, University of Alabama at Birmingham, USA, August 2002 to October 2002

AWARD AND HONORS

- BEST Poster Session Paper Award, International Conference of Manufacturing Technology Engineers (ICMTE2014), Korean Society of Manufacturing Technology Engineers (2015)
- Best Poster Award in Optics and Quantum Electronics, Korean Physical Society 2003 Fall Meeting (2003)

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- NASA GSRP Fellow (1997 –2000)
- Excellent Achievement Award, Department of Physics, University of Alabama at Birmingham (1999)

MAIN SCIENTIFIC PUBLICATION

- Development of ISO/IEC TR19733 Nanotechnologies- Matrix of properties and measurement techniques for graphene and related 2D materials, 2019
- Luqman ALI, Seokjae BANG, Yong Joon LEE, and **Clare Chisu BYEON**, *Ion-intercalation assisted Solvothermal Synthesis and Optical Characterization of MoS₂ Quantum Dots*, J. of Kor. Phys. Soc. **74** (2), 191 ~ 195 (2019).
- Seung Sik Ham, **Clare C. Byeon**, and Ho Lee, *Surface characteristics of alkaline earth boro-aluminosilicate glass following single picosecond laser pulse exposure at different focal positions*, Optics and Laser Technology **113**, 437 ~ 446 (2019)
- **Clare Chisu BYEON**, *Synthesis and Characterization of Rb₃Sb₂Br₉ Perovskite Quantum Dots*, New Physics: Sae Mulli **69** (2), 149 ~ 153 (2019).
- Luqman ALI, Janghyun CHO, **Clare Chisu BYEON**, Jin Dong SONG, Hyun-Jun JO, and Jong Su KIM, *Optical Characterization of a 20 Layer AlGaAs/GaAs Multiple Quantum Wells*, J. of Kor. Phys. Soc. **73** (5), 632-637 (2018)
- S. B. Choi, **C. C. Byeon**, D. J. Park, M. S. Jeong, *Polarization-selective Alignment of a Carbon Nanotube Film by Using Femtosecond Laser Ablation*, J. of Kor. Phys. Soc. **68** (2), 210-214 (2016)

RESEARCH INTERESTS

- Spectroscopy & Optical Characterization of Nanomaterials, Nanostructures & Nanodevices
- Light-Matter Interaction and Ultrafast Phenomena
- Nonlinear Optics, Nanophotonics, Plasmonics
- Photonics for Industrial Applications
- Optical Materials and Devices: Sensors, LEDs, Photovoltaics, Optical switching, Optical memory, etc..