Thuy-Kieu Truong, Ph.D.

Curriculum Vitae

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Present Affiliation

Position: Postdoctoral Researcher

Affiliation: Manufacturing and Metrology Laboratory, Department of Mechanical Engineering, Hanbat National University, Daejeon, South Korea.

Research and Professional Experience

2023.02–Present **Postdoctoral Researcher**, *Department of Mechanical Engineering, Hanbat National University*, Daejeon, South Korea

2021.11–2023.02 **Tenure-track Researcher**, *Ho Chi Minh City Institute of Physics, National Institute of Applied Mechanics and Informatics, Vietnam Academy of Science and Technology*, Ho Chi Minh City, Vietnam

2009.10–2021.10 **Tenure-track Researcher**, *Ho Chi Minh City Institute of Physics, Vietnam Academy of Science and Technology*, Ho Chi Minh City, Vietnam

2016.12–2016.09 **Visiting Ph.D. Student**, *Physics and Materials Science Research Unit, University of Luxembourg*, Luxembourg
Supervisor: Dr. Giusy Scalia

2016.03–2016.02 **Visiting Ph.D. Student**, *Physics and Materials Science Research Unit, University of Luxembourg*, Luxembourg
Supervisor: Dr. Giusy Scalia

Education

2014–2019 **Ph.D. in Energy Science**, *Sungkyunkwan University*, Suwon, South Korea
Degree awarded: March 2019
Thesis: "Aligned carbon nanotube sheet and yarn for liquid crystal display and smart actuators"
Supervisor: Prof. Dongseok Suh

2011–2013 **M.Sc. in Advanced Materials Science and Engineering**, *Sungkyunkwan University*, Suwon, South Korea
Degree awarded: August 2013
Thesis: "Reduced graphene oxide field-effect transistor for proton sensing"
Supervisor: Prof. Nae-Eung Lee

2005–2009 **B.Sc. in Materials Science (First-class Honours)**, *University of Science, Vietnam National University*, Ho Chi Minh City, Vietnam
Degree awarded: August 2009
Thesis: "Synthesis, characterizations, and photoluminescence studies of Mn-doped ZnS nanoparticles, the potential for applications in bio-image diagnostics"
Supervisor: Prof. Hoang Hai Tran

2002–2005 **High School**, *Thot Not High School*, Can Tho, Vietnam
Ranked first in the national high school graduation exam in Thot Not District, Can Tho.

Journal Publications

H index: 13; Time cited: 330 (Web of Science).

1. Chu Duc Thanh, Geun Tak Yuk, Chang-Min Yoon, Jeoung Han Kim, **Thuy–Kieu Truong** (co-corresponding), and Jinsung Rho (2025). *Super black coating on Al(2139)* (in preparation).
2. To Thi Tu Linh, **Thuy–Kieu Truong**, Ly Thi Trinh, Pyeongsam Ko, Kyoohee Woo, Sin Kwon, Jinsung Rho, HongSeok Youn (2025). Photocatalytic-Assisted Silver Reduction via ZnO Nanoparticles for High-Resolution, Flexible, and Etch-Free Printed Electronics. *Small*, accepted.
3. Yuk, Geun Tak, Lee, Byeong Ryong, Kim, Geon Hee, **Truong, Thuy–Kieu** (co-corresponding), and Rho, Jinsung (2025). Direct CVD Growth of Robust Carbon Nanofiber-Based Super Black Coatings on Complex-Curvature and Commercial Anodized Al (6061) for Enhanced Stray-Light Suppression in Optical Baffle Systems. *ACS Applied Engineering Materials* 3(9), 3049–3064.
4. **Truong, Thuy–Kieu**, To Thi Tu Linh, Yoon, Chang-Min, Kim, Jeoung Han, Park, Young-Durk, Youn, Hongseok, and Rho, Jinsung (2025). Highly Stretchable, Robust, and Floatable Broadband Light Absorber of Carbon Nanotubes–Ecoflex Composite on 3D Mogul-Pattern for Photothermal Conversion. *Energy Technology* 13(9), 2402169.
5. Tran, Thuy Tien Nguyen, **Truong, Thuy–Kieu**, Yu, Jianmin, Peng, Lishan, Liu, Xinghui, Nguyen, Linh Ho Thuy, Park, Sungkyun, Kawazoe, Yoshiyuki, Phan, Thang Bach, Tran, Nhu Hoa Thi, et al. (2024). Dopant-Induced Charge Redistribution on the 3D Sponge-Like Hierarchical Structure of Quaternary Metal Phosphides Nanosheet Arrays Derived from Metal–Organic Frameworks for Natural Seawater Splitting. *ACS Applied Materials & Interfaces* 16(2), 2270–2282.
6. Tran, Thuy Tien Nguyen, Le, Thi Anh, Dinh, Nguyen Thi Thu, Hai, Nguyen Duy, **Truong, Thuy–Kieu**, Yu, Jianmin, Peng, Lishan, Nguyen, Cuong Chi, and Tran, Ngoc Quang (2024). Crystalline Ru-Decorated MOF-Derived Amorphous CoMo-LDH Nanosheet Arrays as Bifunctional Catalysts for Overall Natural Seawater Electrolysis. *ACS Applied Materials & Interfaces* 16(40), 53675–53687.
7. Tran, Ngoc Quang, Vu, Nam Hoang, Yu, Jianmin, Nguyen, Khanh Vy Pham, Tran, Thuy Tien Nguyen, **Truong, Thuy–Kieu**, Peng, Lishan, and Le, Thi Anh (2024). Generating Highly Active Oxide–Phosphide Heterostructure Through Interfacial Engineering to Break the Energy Scaling Relation Toward Urea-Assisted Natural Seawater Electrolysis. *Journal of Energy Chemistry* 97, 687–699.
8. Tran, Ngoc Quang, Truong, Thuong Thuong, Tran, Thuy Tien Nguyen, **Truong, Thuy–Kieu**, Yu, Jianmin, Nguyen, Tuan Dung, Le, Thi Anh, Nguyen, Cuong Chi, Nguyen, Linh Ho Thuy, Vu, Nam Hoang, et al. (2024). Multi-Metallic Metal–Organic Framework Nanosheets with 3D Flower-Like Nanostructure-Based Natural Seawater Splitting Toward Stable Industrial-Scale Current Density. *ACS Sustainable Chemistry & Engineering* 12(2), 1038–1050.
9. Tran, Ngoc Quang, Le, Quang Manh, Tran, Thuy Tien Nguyen, **Truong, Thuy–Kieu**, Yu, Jianmin, Peng, Lishan, Le, Thi Anh, Doan, Tan Le Hoang, and Phan, Thang Bach (2024). Boosting Urea-Assisted Natural Seawater Electrolysis in 3D Leaf-Like Metal–Organic Framework Nanosheet Arrays Using Metal Node Engineering. *ACS Applied Materials & Interfaces* 16(22), 28625–28637.
10. Le, Duy Tan, Le, Thi Anh, Ngo, Hai Dang, Tran, Thuy Tien Nguyen, **Truong, Thuy–Kieu**, Le, Thu Bao Nguyen, Ha, Le Tien, Nguyen, Ngoc, and Tran, Ngoc Quang (2024). Crystalline-to-Amorphous Transformation and Charge Redistribution Induced by Anion–Cation Double Substitution on 3D $Ni(OH)_2$ Ultrathin Nanosheet Arrays Enable Urea-Assisted Energy-Saving Hydrogen Production. *ACS Sustainable Chemistry & Engineering* 12(31), 11638–11649.
11. **Truong, Thuy–Kieu**, Yuk, Geun Tak, Kim, Joong Bae, Youn, Hongseok, and Rho, Jinsung (2024). Super Black Coating on the Commercial Black Anodized Al (6061) by Direct and Scalable CVD–Growth of Carbon Nanofibers. *Advanced Materials Interfaces* 11(18), 2400032.
12. Nguyen, Chi Nghia, Tran, Thuy Tien Nguyen, **Truong, Thuy–Kieu**, Le, Thi Anh, Le, Thong Nguyen-Minh, Nguyen, Linh Ho Thuy, Nguyen, Chi Cuong, and Tran, Ngoc Quang (2023). MOF-Templated Synthesis of Three-Dimensional B-Doped NiCoP Hollow Nanorod Arrays for Highly Efficient and Stable Natural Seawater Splitting. *ACS Applied Energy Materials* 6(20), 10713–10722.
13. Phan, Le Phuc, Tran, Thuy Tien Nguyen, **Truong, Thuy–Kieu**, Yu, Jianmin, Nguyen, Hanh-Vy Tran, Phan, Thang Bach, Thi Tran, Nhu Hoa, and Tran, Ngoc Quang (2023). Highly Efficient and Stable Hydrogen Evolution from Natural Seawater by Boron-Doped Three-Dimensional Ni_2P–MoO_2 Heterostructure Microrod Arrays. *The Journal of Physical Chemistry Letters* 14(32), 7264–7273.
14. Nguyen, Ngoc Tuan, Tran, Thuy Tien Nguyen, **Truong, Thuy–Kieu**, Yu, Jianmin, Le, Thong Nguyen-Minh, Phan, Thang Bach, Doan, Tan Le Hoang, Nguyen, Linh Ho Thuy, Luong, Tin Dai, Nguyen, Thi-Hiep, et al.

(2023). Promoting High-Oxidation-State Metal Active Sites in a Hollow Ternary Metal Fluoride Nanoflake Array for Urea Electrolysis. *Inorganic Chemistry* 62(26), 10298–10306.

15. Tran, Ngoc Quang, Le, Bao Thu Nguyen, Le, Thong Nguyen-Minh, Duy, Le Thai, Phan, Thang Bach, Hong, Yeseul, **Truong, Thuy–Kieu**, Doan, Tan Le Hoang, Yu, Jianmin, and Lee, Hyoyoung (2022). Coupling Amorphous Ni Hydroxide Nanoparticles with Single-Atom Rh on Cu Nanowire Arrays for Highly Efficient Alkaline Seawater Electrolysis. *The Journal of Physical Chemistry Letters* 13(34), 8192–8199.
16. **Truong, Thuy–Kieu** (2022). Robust Joule-Heating Induced Transmittance Modulation of CNT-Sheet–Paraffin Based Smart Window. *Advances in Natural Sciences: Nanoscience and Nanotechnology* 13(1), 015001.
17. Le, Thi Suong, **Truong, Thuy–Kieu**, Huynh, Van Ngoc, Bae, Joonho, and Suh, Dongseok (2020). Synergetic Design of Enlarged Surface Area and Pseudo-Capacitance for Fiber-Shaped Supercapacitor Yarn. *Nano Energy* 67, 104198.
18. **Truong, Thuy–Kieu**, Park, Ji Hyun, Rahman, Md Asiqur, Urbanski, Martin, Kim, Eun Sung, Scalia, Giusy, and Suh, Dongseok (2019). Dynamic Operation of Liquid Crystal Cell with Inherently Nanogroove-Featured Aligned Carbon Nanotube Sheets. *Current Applied Physics* 19(2), 162–167.
19. Park, Ji Hyun, **Truong, Thuy–Kieu** (co-first), Rahman, Md Asiqur, Urbanski, Martin, Agha, Hakam, Suh, Dongseok, and Scalia, Giusy (2019). Alignment of Nematic Liquid Crystal by Carbon Nanotube Sheets on Substrates with Hexamethyldisilazane and Silicon Dioxide Co-Adjuvant Layers. *Physica Status Solidi (b)* 256(8), 1800689.
20. Rahman, Md Asiqur, Agha, Hakam, **Truong, Thuy–Kieu**, Park, Ji Hyun, Suh, Dongseok, and Scalia, Giusy (2018). Incorporation and Orientational Order of Aligned Carbon Nanotube Sheets on Polymer Films for Liquid Crystal-Aligning Transparent Electrodes. *Journal of Molecular Liquids* 267, 363–366.
21. Kim, Jeong-Gyun, Kang, Haeyong, Lee, Yourack, Park, Jeongmin, Kim, Joonggyu, **Truong, Thuy–Kieu**, Kim, Eun Sung, Yoon, Doo Hyun, Lee, Young Hee, and Suh, Dongseok (2017). Carbon-Nanotube-Templated, Sputter-Deposited, Flexible Superconducting NbN Nanowire Yarns. *Advanced Functional Materials* 27(30), 1701108.
22. Rahman, Md Asiqur, Park, Ji Hyun, **Truong, Thuy–Kieu**, and Suh, Dongseok (2017). Anisotropic Light Transmission of Aligned Carbon Nanotube Sheets Coated Substrates. *Photonics Letters of Poland* 9(1), 26–28.
23. Dang, Dang Xuan, **Truong, Thuy–Kieu** (co-first), Lim, Seong Chu, and Suh, Dongseok (2017). In Situ Multi-Dimensional Actuation Measurement Method for Tensile Actuation of Paraffin-Infiltrated Multi-Wall Carbon Nanotube Yarns. *Review of Scientific Instruments* 88(7), 075007.
24. **Truong, Thuy–Kieu**, Lee, Yourack, and Suh, Dongseok (2016). Multifunctional Characterization of Carbon Nanotube Sheets, Yarns, and Their Composites. *Current Applied Physics* 16(9), 1250–1258.
25. Suh, Dongseok, **Truong, Thuy–Kieu**, Suh, Daniel G., and Lim, Seong Chu (2016). Torsional Actuator Powered by Environmental Energy Harvesting from Diurnal Temperature Variation. *ACS Sustainable Chemistry & Engineering* 4(12), 6647–6652.
26. Kang, Haeyong, Yun, Yoojoo, Park, Jeongmin, Kim, Joonggyu, **Truong, Thuy–Kieu**, Kim, Jeong-Gyun, Park, Nahee, Yun, Hoyeol, Lee, Sang Wook, Lee, Young Hee, et al. (2015). Quantum Hall Conductance of Graphene Combined with Charge-Trap Memory Operation. *Nanotechnology* 26(34), 345202.
27. Yoon, Ok Ja, Kim, Insu, Sohn, Il Yung, **Kieu, Truong Thuy**, and Lee, Nae-Eung (2014). Toxicity of Graphene Nanoflakes Evaluated by Cell-Based Electrochemical Impedance Biosensing. *Journal of Biomedical Materials Research Part A* 102(7), 2288–2294.
28. **Truong, Thuy–Kieu**, Nguyen, T. N. T., Trung, Tran Quang, Sohn, Il Yung, Kim, Duck-Jin, Jung, Jin-Heak, and Lee, N.-E. (2014). Reduced Graphene Oxide Field-Effect Transistor with Indium Tin Oxide Extended Gate for Proton Sensing. *Current Applied Physics* 14(5), 738–743.
29. Hai, Tran Hoang, Phuc, Le Hong, Vinh, Le Khanh, Long, Bui Duc, **Truong, Thuy–Kieu**, Bich, Nguyen, Lan, Tran, Hien, Nguyen, Khoa, Le, and Tam, Nguyen (2011). Immobilising of Anti-HPV18 and *E. coli* O157:H7 Antibodies on Magnetic Silica-Coated Fe_3O_4 for Early Diagnosis of Cervical Cancer and Diarrhoea. *International Journal of Nanotechnology* 8(3–5), 383–398.

Patents

1. Rho Jinsung, More Vivek Mohan, Yuk Geun Tak, and **Truong Thuy–Kieu**. LDH–MXene Nanocomposite and Method for Preparing the Same. Korean Patent Application 10-2025-0020869, filed 18 Feb. 2025.
2. Rho Jinsung, **Truong Thuy–Kieu**, and Yuk Geun Tak. Light-absorbing Composite and Its Preparation Method. Korean Patent Application 10-2024-0050134, filed 15 Apr. 2024.

Conference Presentations

Oral Presentations

1. **Thuy–Kieu Truong** et al. (Nov. 2024). Facile Design of Robust and Flexible Light Absorber of CNT Ecoflex Composite on Mogul Structure for Photothermal Effect. 2024 Fall Conference of the Korean Society of Mechanical Engineers, Jeju International Convention Center, Korea. [CNT]
2. **Thuy–Kieu Truong** et al. (Jul. 2024). A Synergistic Approach for Broadband Optical Absorbers: Utilizing Carbon Nanostructures on Hierarchically Textured Substrates. 2024 Spring Conference of the Korean Society for Manufacturing Engineering, St. John's Hotel, Gangneung, Korea. [CNT]
3. **Thuy–Kieu Truong** et al. (Mar. 2018). Superior Electro-thermo-optical Properties of Homogeneous Liquid Crystals Aligned on Transparent Carbon Nanotube Sheet. March Meeting of the American Physical Society, Los Angeles, CA, USA. [CNT]
4. **Thuy–Kieu Truong** et al. (Oct. 2017). Aligned carbon nanotube sheets with polymer dispersed liquid crystal for the photo-electro-thermal actuator. Fall Meeting of the Korean Physical Society, Gyeongju, Korea. [CNT]
5. **Thuy–Kieu Truong** et al. (Jun. 2017). A study on a solid phase to liquid phase change effect in coupling with electromechanical actuators based on polyethylene glycol infiltrated carbon nanotube neat yarn. 2017 International Forum on Functional Materials, Jeju, Korea. [CNT]

Poster Presentations

1. **Thuy–Kieu Truong** et al. (Dec. 2024). Engineering Aluminum Alloy Substrates for CVD-Grown Carbon Nanofiber-Based Super Black Coatings. The 2nd International Symposium on Micro & Nano Manufacturing 2024, Jeju Ramada Hotel, Jeju, Korea. [CNF] [Anodized]
2. **Thuy–Kieu Truong** et al. (Jul. 2018). Multi Responsive Bilayer Actuator by Stacking Aligned-CNT-Sheets with PVA. International Conference on Science and Technology of Synthetic Metals 2018, Busan, Korea. [CNT]
3. **Thuy–Kieu Truong** et al. (Mar. 2015). Magneto-resistance of multiwall carbon nanotube Fermat yarn and coil yarn. March Meeting of the American Physical Society, San Antonio, TX, USA. [CNT]
4. **Thuy–Kieu Truong** et al. (Nov. 2015). Electromechanical actuation of paraffin infiltrated fully coiled multiwalled carbon nanotube yarns. 6th A3 Symposium on Emerging Material, Kyushu University, Japan. [CNT]
5. **Thuy–Kieu Truong** et al. (Feb. 2013). ITO Extended Gate Reduced Graphene Oxide Field Effect Transistor For Proton Sensing Application. 44th Winter Annual Conference of the Korean Vacuum Society, Phoenix Park, Pyeongchang, Korea. [rGO; FET]

Research Summary

[Postdoctoral Research – Carbon Nanostructure-Based Super-Black & Photothermal Materials]

- Developed a direct and scalable CVD process for CNF super-black coatings on commercial anodized Al(6061), achieving $> 99\%$ broadband absorption from UV to IR for optical stray-light suppression.
- Engineered catalyst-integrated anodized aluminum substrates enabling *in situ* Ni-assisted CNF growth without external catalyst deposition and ensuring conformal coating on complex and curved geometries.
- Demonstrated mechanically robust, electrically conductive, and hydrophobic super-black CNF coatings validated under ultrasonic agitation, UV exposure, adhesion testing, and antistatic measurements.
- Applied CNF super-black coatings to optical baffle systems, achieving over 10 dB reduction in stray light compared to conventional black anodization through BRDF-based simulations and experiments.
- Designed highly stretchable and floatable CNT–Ecoflex photothermal absorbers with 3D micro-cavity architectures, delivering $\sim 98\%$ UV–vis–NIR absorption and efficient light-to-heat conversion.
- Demonstrated multifunctional photothermal applications, including solar desalination, de-icing, and environmental energy harvesting, with stable performance under mechanical deformation and harsh environments.
- Orientation: Advancing scalable carbon-nanostructured optical and photothermal platforms integrating hierarchical light trapping, mechanical durability, and environmental resilience for aerospace and energy systems.

[Ph.D. Research – CNT Sheets, Yarns & Aligned CNT Forests]

- Developed macroscopic CNT assemblies (sheets, yarns) derived from vertically aligned CNT forests with high mechanical, electrical, and tunable optical properties.
- Engineered multifunctional CNT–soft-matter hybrid systems by integrating responsive polymers and liquid-crystal materials.
- Demonstrated enhanced electro–thermal–optical performance in CNT-based liquid crystal cells compared to commercial ITO electrodes.
- Applied CNT hybrid structures to intelligent actuators, artificial muscles, and soft-robotics platforms.

- Orientation: Advancing flexible, foldable, and multifunctional optoelectronic devices beyond conventional ITO-based systems.

[M.Sc. Research – Reduced Graphene Oxide FET for Proton Sensing]
- Fabricated RGO-FET devices with ITO extended-gate architecture for selective proton detection.
- Isolated sensing region from the active FET channel for improved device stability.
- Achieved ambipolar behavior with Dirac-point shifts proportional to pH (43–50 mV/pH, pH 2–12).
- Demonstrated stable operation via TTC encapsulation in electrolytic environments.
- Orientation: Platform for high-sensitivity ion sensing with tunable interfaces for diverse chemical/biological analytes.

[B.Sc. Research – Mn-Doped ZnS Nanoparticles for Bio-Imaging]
- Synthesized Mn-doped ZnS nanocrystals as low-toxicity alternatives to cadmium-based quantum dots.
- Confirmed structural and optical properties using XRD, UV–Vis, TEM, and PL spectroscopy.
- Achieved strong photoluminescence suitable for fluorescent labeling and imaging applications.
- Orientation: Development of greener luminescent nanomaterials for bio-imaging diagnostics.

Professional and Technical Skills

[CVD Growth of Carbon Nanotube/Carbon Nanofiber Arrays]
- Catalyst preparation & activation (Fe/Co/Ni thin films or nanoparticles), thermal pretreatment, particle-size control.
- Substrate engineering: Si/SiO_2, quartz, Invar, stainless steel, aluminum alloy, anodized Al; buffer layers (Al_2O_3, TiN) for catalyst stability and adhesion.
- Vertical alignment control via temperature gradients, gas-flow tuning, and catalyst–substrate wetting to form aligned CNT/CNF forests.
- CVD atmosphere optimization: controlled carbon sources (C_2H_4), carrier gases (Ar), and H_2 for growth quality.
- Growth kinetics tuning (650–900°C, gas ratios, reduction steps, and duration) to define height, density, and uniformity.
- Post-growth integration: annealing, densification, and transfer-free or composite embedding for mechanical robustness.

[Devices, Synthesis, and Characterization]
- Development, characterization, and measurement of liquid crystal devices: sandwich-cell assembly, thermo-electro-optical properties under cross-polarized microscopy, switching time measurements.
- Dry-spinning process for CNT yarn fabrication: formation of CNT yarn or coiled yarn by twist insertion into CNT sheets.
- CNT–soft-matter hybrids: aligned CNT sheets as alignment layer and transparent electrode for liquid crystal displays; CNT sheets combined with moisture-responsive layers for multi-stimuli bilayer actuators; CNT yarns infiltrated with organic phase change materials (paraffin wax, PEG) for artificial muscles.
- Field-effect transistor (MOSFET) fabrication: vacuum deposition (e-beam, thermal evaporation), ALD of high-k dielectrics (Al_2O_3, HfO_2), optical lithography, dry/wet etching.
- Proton-sensing FET measurements using Ag/AgCl reference electrode and HP4145B semiconductor analyzer.
- Chemical synthesis of nanomaterials via sol-gel, co-precipitation, and reduction methods.
- Materials characterization: Raman, XRD, FE-SEM, UV–Vis spectroscopy, TGA, mechanical (stress–strain) testing, VSM; analysis and interpretation.

[Numerical Analysis, Data & Instrument Control]
- FEM-based numerical analysis using Ansys, COMSOL Multiphysics, and FDTD tools.
- Instrument control and measurement automation using LabVIEW (core 1 & 2), basic Python, and Arduino-based microcontrollers.
- Schematic and data presentation using Origin, ImageJ, Adobe Illustrator, and 3D drawings with Blender.
- Scientific paper preparation and writing for international journals.

Languages

Vietnamese	Native Language
English	Full Professional Proficiency
Korean	Pre-intermediate

Interpersonal Skills

Efficient, organized, reliable, deep learner, well-adapted, highly motivated, open-minded, problem-solving oriented.

Teaching Experience

Spring 2023 **Teaching Assistant**, *Modern Optics*
Advanced Materials for Optical Applications (Covered photonic crystals, plasmonic SERS nanostructures, and super-black photothermal materials).

Fall 2024 **Teaching Assistant**, *Modern Optics*
Hands-on session on optically responsive bilayer films (Lab support, measurement guidance, actuation analysis).

Grants / Projects

- 2025–2028: Low-Temperature Hybrid Bonding for Advanced Semiconductor Packaging, NRF/BRL, Korea. [Researcher]
- 2025–2027: High-Damage-Threshold EUV/X-ray Coating Technology, Joint Research/NRF, Korea. [Researcher]
- 2022–2026: Proximity Sensor & Docking System for Satellite Maneuvering, ADD/CMCA, Korea. [Researcher]
- 2021: Grant for Scientific Research, Ho Chi Minh City Institute of Physics, Vietnam Academy of Science and Technology, Vietnam. [PI]
- 2021: Institutional Program for Young Researchers, Vietnam Academy of Science and Technology, Vietnam. [PI]
- 2020: Grant for Scientific Research, Ho Chi Minh City Institute of Physics, Vietnam Academy of Science and Technology, Vietnam. [PI]
- 2020: Institutional Program for Young Researchers, Vietnam Academy of Science and Technology, Vietnam. [PI]
- 2016: BK21+ Fellowship for Ph.D. Student Research Abroad. [PI]

Awards

- 2020: Institutional Award for an Excellent Researcher, Ho Chi Minh City Institute of Physics, VAST, Vietnam.
- 2009: Excellent Prize for first-class honours in B.Sc. Materials Science, University of Science, VNU-HCM.
- 2008: Odon Vallet Award for outstanding undergraduate student.
- 2008: Role Model Award for undergraduate students, Department of Materials Science, University of Science, VNU-HCM.
- 2007: Odon Vallet Award for outstanding undergraduate student.
- 2005: Best high school student, Thot Not High School, Can Tho City.

Referees

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