

Name	VU Thi Hanh Thu		
Position	Associate Professor, Department of Applied Physics		
Academic Career		<i>Institution</i>	<i>Year</i>
	Doctoral degree	University of Science, VNUHCM	2009
	Master degree	University of Science, VNUHCM	2005
	Undergraduate/bachelor degree	Ho Chi Minh City University of Education	2001
Employment	<i>Position</i>	<i>Employer</i>	<i>Period</i>
	Lecturer	Faculty of Physics - Engineering Physics	2001-Present
Research and development projects over the past 5 years	<i>Name of project or research focus</i>	<i>Body funding</i>	<i>Role/ Period</i>
	Synthesizing and researching the combination of SrTiO ₃ /g-C ₃ N ₄ /Pt type II heterostructure materials to improve durability and performance in the photo-water splitting reaction to generate H ₂	NAFOSTED 103.03 -2021.153	Principal investigator 2023-2025
	Research and synthesis Fe ₃ O ₄ /TiO ₂ /M sensors that use Raman spectroscopy to identify pesticides	VNU, VL2022-18-01	Principal investigator 2022-2024
	Investigation and synthesis of novel combinations of nanomaterials Surface modification of Cr ₂ O ₃ (Cr ₂ O ₃ -Ir:TiO ₂ , Cr ₂ O ₃ -Ir:SrTiO ₃) and Ir doped-TiO ₂ and SrTiO ₃ for high-performance H ₂ photogeneration	NAFOSTED, 103.99-2018.364	Principal investigator 2019-2021
Industry collaborations over	<i>Project titles</i>	<i>Partners</i>	

the past 5 years	None	None	
Patents and proprietary rights	<i>Title</i>	<i>Year</i>	
	None	None	
Important publications over the last 5 years	<i>Selected recent publications from a total of approx.:</i> 1.Trang TN, Bao NT, Doanh TT, Thu VT . Multifunctional engineering on the ultrasensitive driven-dual plasmonic heterogenous dimer system of 1D semiconductor for accurate SERS sensitivity and quantitation. Journal of Science: Advanced Materials and Devices. 2024 Mar 1;9(1):100670. 2.Trang TN, Bao NT, Vinh LQ, Thu VT . Centrifuge tube-based SERS Sensor on Heterogenous Dimers of Plasmonic Coupling as a Microreactor for Ultrasensitive SERS Sensing Pesticide Residues in Environmental Water. Sensors and Actuators A: Physical. 2024 Feb 16:115173. 3.Trang TN, Trinh NT, Bao NT, Thu VT . Hotspot-type silver-polymers grafted nanocellulose paper with analyte enrichment as flexible plasmonic sensors for highly sensitive SERS sensing. Journal of Science: Advanced Materials and Devices. 2023 Sep 1;8(3):100597 4.Trang TN, Doanh TT, Trinh NT, Thu VT . Self-assembly of Ag photosensitized SrTiO3 3D binary architectures for highly efficient visible light-driven dyeing wastewater splitting. Journal of Alloys and Compounds. 2022 Sep 25;916:165323. 5.Trang TN, Doanh TT, Vinh LQ, Thu VT . A hybrid Ag/TiO2 nanoarray-based in situ charge transfer toward multi-functional active-platform. Ceramics International. 2021 Oct 1;47(19):27524-34.		
	<i>Organization</i>	<i>Role</i>	<i>Period</i>
Activities in specialist bodies over the last 5 years	Vietnam Physics Association	Member	2002 - now
Website	https://phys.hcmus.edu.vn/		