



Mati Horprathum received his B. Ed. in Science-Physics in 2003 from Srinakarinwirot University and his M.S. and Ph.D. in Physics from King Mongkut's University of Technology Thonburi, Thailand in 2006 and 2009, respectively. Since 2006, he began his career with National Electronics and Computer Technology Center (NECTEC), Thailand. From 2006 to 2011, he worked with Photonic Technology Laboratory and was responsible for research in optical thin-film coatings, characterizations, vacuum coating systems based on physical vapor deposition, and coordination with other research groups in Thailand. In 2011, he received a postdoctoral fellowship supported by Japan National Project "the Funding Program for Next Generation World-Leading Researcher." During the postdoctoral position, he worked at Laboratory of Atomic Scale Materials Processing, Institute of Scientific and Industrial Research (ISIR), Osaka University, Japan in the "Green Innovation Science" project, and was responsible for developments of growth and alignment of uniform oxide nanowires and developments of nanostructures by top-down and bottom-up techniques. Since 2013, he has been a researcher at Optical Thin-Film Laboratory, NECTEC, Thailand. His current works involve thin-film and nanostructure areas, i.e., glancing-angle deposition, nano-microelectronics mechanic devices, surface-enhanced Raman spectroscopy (SERS), fabrications and characterizations of nanostructures, optoelectronic devices, electrochromic thin films, spectroscopic ellipsometry, vacuum designs, and thin-film characterizations. Through his career, his major interests are to utilize the optical thin-film and nanostructure technologies towards local industrial manufactures, as well as medical and environmental applications in Thailand. He also enjoys giving lectures in the optical thin-film and nanotechnology to undergraduate and graduate students, and engineers working on optical industries in Thailand. He has authored and co-author more than 50 refereed journals, 100 proceedings, and has been a regular reviewer for 10 journals. He also holds 2 Thai patents, and 9 Thai patent applications. In addition, he has also organized 5 international conferences and events in surface sciences, thin-film coatings, nanotechnology and sensors. In 2016, he was awarded the ICO/ICTP Gallieno Denardo Award for "his valuable contributions in the development of optical thin film technology for innovative surface functionality as well as for his commitment in diffusion of optical thin film research in Thailand" from the International Commission for Optics (ICO), USA and the Abdus Salam International Center for Theoretical Physics (ICTP), Italy.

## Selected Publications

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