

## Curriculum Vitae

### Current address

School of Physics  
Suranaree University of Technology  
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### Education

- **Stanford University**, Stanford, CA, USA  
Research Advisor: Prof. Z.-X Shen, zxshen@stanford.edu  
Ph.D. in Physics, 2009  
M.Sc. in Physics, 2007  
- **University of California, Santa Barbara (UCSB)**, CA, USA (Highest honors)  
Research Advisor: Prof. Guenter Ahlers, guenter@physics.ucsb.edu  
B.Sc. in Physics, 2002

### Work experience

Oct 2015 – Present      Head of School of Physics, Suranaree University of Technology, Thailand  
Feb 2010 – Present      Faculty member, School of Physics, Suranaree University of Technology, Thailand  
Mar 2009 - Sept 2010    Postdoctoral Researcher, Developing Laser-based Angle-resolved photoemission spectroscopy  
Supervisor: Prof. Felix Baumberger, Felix.Baumberger@unige.ch (now at University of Geneva)  
Jan 2009 - Jan 2010    Researcher, Synchrotron Light Research Institute, Nakhon Ratchasima, Thailand

### Research interest

Synchrotron Radiation (SR) can produce very bright light at various wavelengths, usually from infrared up to X-ray. Due to this brightness and the wavelength tunability, SR can have a wide range of applications, including many research fields (e.g. physics, material science, biology, chemistry, environmental study and engineering). Realizing much use of SR techniques, our group have much interest in exploiting SR techniques available at the Thai institute (Synchrotron Light Research Institute, SLRI) and the laboratories in abroad (e.g. ALS and SSRL) to various research topics. Our current research interests are on

- 1) transition-metal oxides/ dichalcogenides
- 2) carbon-based materials
- 3) physical phenomena at low temperature

### Awards

2015: - 2015 TRF-OHEC-Scopus Research Award (Physical Science) from Thailand Research Fund, Office of Higher Education Commissions and Elsevier  
2015: - Outstanding Research Award from National Research Council of Thailand  
2014: - SUT Outstanding Young Researcher Award, from Suranaree University of Technology  
2013: - TWAS Prize for Young Scientists in Thailand, in Physics, from NRCT, The World Academy of Science/UNESCO  
2012: - Thailand Young Scientist Award from the Foundation for the Promotion of Science and Technology under the Patronage of His Majesty the King  
2009: - Outstanding PhD Thesis Award by National Research Council of Thailand, Thailand

- 2008: - Thai Scholar Innovation Program award by Office of Educational Affairs, USA
- 2002: - Graduated with the Outstanding Senior Award and highest academic honors, UCSB
- 2001: - Summer 2001 Research Internships in Science and Engineering award (RISE), UCSB
- 2000: - CCS Summer Undergraduate Research Fellowships award (SURF), UCSB
- 1999: - 1st place local winner at UCSB and 17th place nationwide on 1999 BAUPC.
- 1997: - DPST Scholarship for study in the field of Physics through Ph. D. in the U.S.
- A Thai representative for 28th International Physics Olympiad (IPhO), Sudbury, Canada.

### Publication summary

Total number of publications	45 (in journals with impact factor)
Combined Impact factors	398
Combined Impact factors after graduation	258
Total citations (ISI Database)	1848
<i>h</i> -index (ISI)	19

### Selected publications

- Riley JM, **Meevasana W**, Bawden L, Asakawa M, Takayama T, Eknapakul T, Kim TK, Hoesch M, Mo SK, Takagi H, Sasagawa T, Bahramy MS, King PDC. Negative electronic compressibility and tunable spin splitting in WSe<sub>2</sub>. *Nature Nanotechnology*, 10; 1043-1047 (2015). (impact factor 34.048)
- Eknapakul T., King P.D.C., Asakawa M., Buaphet P., He R.-H., Mo S.-K., Takagi H., Shen K.M., Baumberger F., Sasagawa T., Jungthawan S., **Meevasana W.**, Electronic Structure of a Quasi-Freestanding MoS<sub>2</sub> Monolayer, *Nano Letters*, 14; 1312 (2014). (Impact factor = 12.94)
- King P. D. C., Walker S. M., Tamai A., de la Torre A., Eknapakul T., Buaphet P., Mo S. -K., **Meevasana W.**, Bahramy M. S., Baumberger F., Quasiparticle dynamics and spin-orbital texture of the SrTiO<sub>3</sub> two-dimensional electron gas, *Nature Communications*, 5; 3414 (2014) (Impact factor = 10.742)
- Masingboon C., Eknapakul T., Suwanwong S., Buaphet P., Nakajima H., Mo, S.-K., Thongbai, P., King P.D.C., Maensiri, S. , **Meevasana W.**, Anomalous change in dielectric constant of CaCu<sub>3</sub>Ti<sub>4</sub>O<sub>12</sub> under violet-to-ultraviolet irradiation, *Applied Physics Letters*, 102; 202903 (2013). (Impact factor = 3.515, cited 3 times)
- King P.D.C., He R.H., Eknapakul T., Buaphet P., Mo S.-K., Kaneko Y., Harashima S., Hikita Y., Bahramy M.S., Bell C., Hussain Z., Tokura Y., Shen Z.-X., Hwang H.Y., Baumberger F., **Meevasana W.**, Subband structure of a two-dimensional electron gas formed at the polar surface of the strong spin-orbit perovskite KTaO<sub>3</sub>, *Physical Review Letters*, 108; 11762 (2012). (Impact factor = 7.728, cited 47 times)
- **Meevasana W.**, King P.D.C., He R.H., Mo S.-K., Hashimoto M., Tamai A., Songsiririthigul P., Baumberger F., Shen Z.-X., Creation and control of a two-dimensional electron liquid at the bare SrTiO<sub>3</sub> surface, *Nature Materials* , 10 ; 114 (2011). (Impact factor = 36.425, cited 150 times)
- He R.-H., Hashimoto M., Karapetyan H., Koralek J.D., Hinton J.P., Testaud J.P., Nathan V., Yoshida Y., Yao H., Tanaka K., **Meevasana W.**, Moore R.G., Lu D.H., Mo S.-K., Ishikado M., Eisaki H., Hussain Z., Devereaux T.P., Kivelson S.A., Orenstein J., Kapitulnik A., Shen Z.-X. , From a single-band metal to a high-temperature superconductor via two thermal phase transitions, *Science* , 331 ; 1579 (2011). (Impact factor = 31.477, cited 15 times)
- **Meevasana W.**, Zhou X.J., Moritz B., Chen C.-C., He R.H., Fujimori S.-I., Lu D.H., Mo S.-K., Moore R.G., Baumberger F., Devereaux T.P., Van Der Marel D., Nagaosa N., Zaanen J., Shen Z.-X., Strong energy-momentum dispersion of phonon-dressed carriers in the lightly doped band insulator SrTiO<sub>3</sub>, *New Journal of Physics* , 12 ; 23004 (2010). (Impact factor = 3.673, cited 16 times)
- **Meevasana W.**, Supruangnet R., Nakajima H., Topon O., Amornkitbamrung V., Songsiririthigul P. , Electron affinity study of adamantane on Si(1 1 1) , *Applied Surface Science* , 256 ; 934 (2009). (Impact factor = 2.538, cited 4 times)
- Yang W.L., Fabbri J.D., Willey T.M., Lee J.R.I., Dahl J.E., Carlson R.M.K., Schreiner P.R., Fokin A.A., Tkachenko B.A., Fokina N.A., **Meevasana W.**, Mannella N., Tanaka K., Zhou X.J., Van Buuren T., Kelly M.A., Hussain Z., Melosh N.A., Shen Z.-X., Monochromatic electron photoemission from diamondoid monolayers, *Science*, 316; 1460 (2007). (Impact factor = 31.477, cited 111 times)