Curriculum Vitae of Suwit Kiravittaya

Contact:

Room 509, the 5th Floor of Boonrod Binson Building

Department of Electrical Engineering,

Faculty of Engineering, Chulalongkorn University,

254 Phayathai Road, Pathumwan,

Bangkok 10330

THAILAND

Tel. (office): +66-(0)2-218-6519

Tel. (mobile): +66-(0)86-930-9339

E-mail: Suwit.Ki@chula.ac.th

Personal Data

Birth year: 1976

Hometown: Bangkok, THAILAND

Current Research Interests

- Electrical Engineering Technology for Agricultural Resources
- Applied Electronics in Agricultural Systems (Sensors, Embedded Systems, and Internet of Things)
- Agricultural and Environmental Modeling
- Photonic Devices: Lasers, LEDs, Photodetectors, and Solar Cells

Education and Work Experience

Jun 1994 - May 1998	Bachelor of Electrical Engineering (Second class honor) Chulalongkorn University, Bangkok, Thailand
Jun 1998 - May 2003	Doctoral of Electrical Engineering Chulalongkorn University, Bangkok, Thailand
Jun 2003 - Dec 2008	Post-doctoral fellow Max-Planck-Institute for Solid State Research, Stuttgart, Germany
Jan2009 - Oct 2011	Scientific Staff Member and Head of Research Group: Strained Nanomembranes for Optical, Electronic, and Fluidic Systems (SNOEFS) Institute for Integrative Nanosciences, IFW Dresden, Dresden, Germany
Jan 2012 – Oct 2020	Lecturer, Assistant and Associate Professor in Electrical Engineering Department of Electrical and Computer Engineering, Faculty of Engineering, Naresuan University, Phitsanulok, Thailand
Nov 2020 – Jun 2023	Lecturer and Associate Professor in Electrical Engineering Semiconductor Device Research Laboratory (SDRL), Department of Electrical Engineering, Faculty of Engineering, Chulalongkorn University, Bangkok, Thailand
Jul 2023 – Present	Associate Professor in Electrical Engineering Head of Electrical Engineering Technology for Agricultural Resources (EETAR) Laboratory, Department of Electrical Engineering, Faculty of Engineering, Chulalongkorn University, Bangkok, Thailand

Scholarships and Awards

1998 – 2003	Royal Golden Jubilee (RGJ) Scholarship, Thailand Research Fund (TRF)
2000 – 2002	DAAD-RGJ Scholarship
2014	Outstanding Researcher, Naresuan University
2015	Outstanding Royal Golden Jubilee (RGJ) Alumni, The Thailand Research Fund
Jun - Jul 2017	Fudan Fellow, Fudan University
2017	Outstanding Reviewer Award, Semiconductor Science and Technology (IOP)
2019	Outstanding Reviewer Award, Nanotechnology (IOP)

Publication

International Journals

130. Jiayuan Huang, Chunyu You, Binmin Wu, Yunqi Wang, Ziyu Zhang, Xinyu Zhang, Chang Liu, Ningge Huang, Zhi Zheng, Tingqi Wu, Suwit Kiravittaya, Yongfeng Mei, and Gaoshan Huang
Enhanced photothermoelectric conversion in self-rolled tellurium photodetector with geometry-induced energy localization
Light: Science & Applications 13, 153 (2024)

129. Kukkong Kaewkorakot, Chanon Traiwan, Thitipat Weeplian, Pimsiri Tiyayon, Khemissara Thanatthirapich, Wanwisa Pansak, and Suwit Kiravittaya
Smart Mushroom Cultivation House: Engineering Development and Data Analysis
Engineering Journal 28, 11-20 (2024)

128. Ziyu Zhang, Binmin Wu, Yang Wang, Tianjun Cai, Mingze Ma, Chunyu You, Chang Liu, Guobang Jiang, Yuhang Hu, Xing Li, Xiang-Zhong Chen, Enming Song, Jizhai Cui, Gaoshan Huang, Suwit Kiravittaya and Yongfeng Mei
Multilevel design and construction in nanomembrane rolling for three-dimensional angle-sensitive photodetection
Nature Communications 15, 3066 (2024)

127. Samagorn Boonnum, Suwit Kiravittaya, Supachok Thainoi, Songphol Kanjanachuchai and Somsak Panyakeow
Competitive Relaxation Mechanisms in Strained Epitaxial InGaSb on GaSb Substrate
Journal of Physics: Conference Series 2602, 012005 (2023)

126. Zon, Supachok Thainoi, Suwit Kiravittaya, Songphol Kanjanachuchai, Somchai Ratanathammaphan, Somsak Panyakeow
Growth evolution and polarization-dependent photoluminescence of lateral InSb/CdTe nanowires
Journal of Crystal Growth 621, 127366 (2023)

125. Karma Wangdi, Nuttapon Khongdee, Suphannika Intanon, Ukrit Samaksaman, Wolfram Spreer, Suwit Kiravittaya, and Wanwisa Pansak

Characterization of Rice Husk Biochar and Its Particle Size Effects on Soil Properties in Sandy Loam Soil
GMSARN International Journal 17, 389-395 (2023)

124. Zon, Supachok Thainoi, Suwit Kiravittaya, Noppadon Nuntawong, Suwat Sopitpan, Songphol Kanjanachuchai, Somchai Ratanathammaphan, Somsak Panyakeow
Direct growth of InSb nanowires on CdTe (001) substrates by molecular beam epitaxy
Materials Science and Engineering B 285, 115958 (2022)

123. Unchittha Prasatsap and Suwit Kiravittaya
Numerical simulations of single whispering-gallery mode enhancement in hollow cylindrical optical microcavity
Songklanakarin Journal of Science and Technology 44, 157-161 (2022)

122. Unchittha Prasatsap, Suwit Kiravittaya, Sasipohn Prasertpalichat, Nutthaphat Thornyanadacha, Zon, Supachok Thainoi, SomsakPanyakeow
Light-induced circuit parameter variation in self-assembled quantum-dot photovoltaic cell
Materials Today: Proceedings 47, 3425-3429 (2021)

121. Zon, Supachok Thainoi, Suwit Kiravittaya, Aniwat Tandaechanurat, Noppadon Nuntawong, Suwat Sopitpan, Songphol Kanjanachuchai, Somchai Ratanathammaphan, Somsak Panyakeow
Growth-related photoluminescence properties of InSb/GaAs self-assembled quantum dots grown on (001) Ge substrates
Materials Science and Engineering B 271, 115309 (2021)

120. Rungsiman Kulpetjira, Jeeraphun Kulpetjira, and Suwit Kiravittaya
Development of novel wind turbines hybridized between permanent magnet disks and additional motor/generator for extending operating range and enhancing conversion efficiency
Engineering Journal 25, 23-31 (2021)

119. Zon, Thanadul Korkerdsantisuk, Alangsan Sangpho, Supachok Thainoi, Unchittha Prasatsap, Suwit Kiravittaya, Nutthaphat Thornyanadacha, Aniwat Tandaechanurat, Noppadon Nuntawong, Suwat Sopitpan, Visittapong Yordsri, Chanchana Thanachayanont, Songphol Kanjanachuchai, Somchai Ratanathammaphan and Somsak Panyakeow

Investigation of hybrid InSb and GaSb quantum nanostructures
Microelectronic Engineering 237, 111494 (2021)

118. Achinee Polsawat, Suwit Kiravittaya, Pirat Khunkitti, Apirat Siritaratiwat
Scratch and surface roughness detection on magnetic disk by using red and blue light reflection approach
International Journal of Engineering Research & Technology (IJERT) 9, 567-576 (2020)

117. Matasit Chikumpa, Zon, Supachok Thainoi, Suwit Kiravittaya, Aniwat Tandaechanurat, Noppadon Nuntawong, Suwat Sopitpan, Visittapong Yordsri, Chanchana Thanachayanont, Songphol Kanjanachuchai, Somchai Ratanathammaphan and Somsak Panyakeow
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Materials Research Express 7, 105007 (2020)

116. Unchittha Prasatsap, Suwit Kiravittaya, Thanaphat Rakpaises, Nanthaphop Sridumrongsak, Aniwat Tandaechanurat, Visittapong Yordsri, Chanchana Thanachayanont, Chanyanuch Chevintulak, Supachok Thainoi, and Somsak Panyakeow
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Materials Today: Proceedings 23, 767-776 (2020)

115. K. Rongrueangkul, P. Srisinsuphya, S. Thainoi, S. Kiravittaya, N. Nuntawong, N. Thornyanadacha, S. Sopitpan, V. Yordsri, C. Thanachayanont, S. Kanjanachuchai, S. Ratanathammaphan, A. Tandaechanurat, and S. Panyakeow
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114. Zon, Supachok Thainoi, Suwit Kiravittaya, Aniwat Tandaechanurat, Songphol Kanjanachuchai, Somchai Ratanathammaphan, Somsak Panyakeow, Yasutomo Ota, Satoshi Iwamoto, and Yasuhiko Arakawa
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Journal of Applied Physics 126, 084301 (2019)

113. Yang Wang, Shilong Li, Suwit Kiravittaya, Xiang Wu, Kaibo Wu, Xing Li, YongFeng Mei

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Optics Communications 446, 128-133 (2019)

112. Pisey Heng, Unchittha Prasatsap, Suwit Kiravittaya and Jirawadee Polprasert
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GMSARN International Journal 13, 81-85 (2019)

111. P. Srisinsuphya, K. Rongrueangkul, R. Khanchaitham, S. Thainoi, S. Kiravittaya, N. Nuntawong, S. Sopitpan, V. Yordsri, C. Thanachayanont, S. Kanjanachuchai, S. Ratanathammaphan, A. Tandaechanurat, and S. Panyakeow
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Journal of Crystal Growth 514, 36 (2019)

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Noppadon Nuntawong, Suwat Sopitpan, Visittapong Yordsri, Chanchana Thanachayanont, Songphol Kanjanachuchai, Somchai Ratanathammaphan, Somsak Panyakeow, Yasutomo Ota, Satoshi Iwamoto, and Yasuhiko Arakawa
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physica status solidi (a) 216, 1800498 (2019)

105. S. Sriphan, N. Vittayakorn, S. Kiravittaya, and T. Bongkarn
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104. Ziao Tian, Shilong Li, Suwit Kiravittaya, Borui Xu, S. Tang, Honglou Zhen, Wei Lu and YongFeng Mei
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103. Bour Khem, Wanwisa Pansak, Nuttapon Khongdee, Sittichai Choosumrong, and Suwit Kiravittaya
Evaluating maize height on sloped area by unmanned aerial vehicle
GMSARN International Journal 12, 189-193 (2018)

102. Phisut Narabadeesuphakorn, Supachok Thainoi, Aniwat Tandaechanurat, Suwit Kiravittaya, Noppadon Nuntawong, Suwat Sopitopan, Visittapong Yordsri, Chanchana Thanachayanont, Songphol Kanjanachuchai, Somchai Ratanathammaphan, and Somsak Panyakeow
Twin InSb/GaAs quantum nano-stripes: Growth optimization and related properties
Journal of Crystal Growth 487, 40 (2018)

101. Unchittha Prasatsap, Suwit Kiravittaya, and Jirawadee Polprasert
Operation of stand-alone lighting system powered by energy storage device
GMSARN International Journal 11, 90-93 (2017)

100. Unchittha Prasatsap, Suwit Kiravittaya, Jirawadee Polprasert
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99. Supachok Thainoi, Suwit Kiravittaya, Thanavorn Poempool, Zon, Noppadon Nuntawong, Suwat Sopitpan, Songphol Kanjanachuchai, Somchai Ratanathammaphan and Somsak Panyakeow
Molecular beam epitaxy growth of InSb/GaAs quantum nanostructures
Journal of Crystal Growth 477, 30 (2017)

98. Yangfu Fang, Shilong Li, Suwit Kiravittaya and Yongfeng Mei
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97. Phisut Narabadeesuphakorn, Jirayu Supasil, Supachok Thainoi, Aniwat Tandaechanurat, Suwit Kiravittaya, Noppadon Nuntawong, Suwat Sopitopan, Songphol Kanjanachuchai, Somchai Ratanathammaphan, and Somsak Panyakeow
Growth Control of Twin InSb/GaAs Nano-Stripes by Molecular Beam Epitaxy
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96. Supachok Thainoi, Suwit Kiravittaya, Thanavorn Poempool, Zon, Suwat Sopitpan, Songphol Kanjanachuchai, Somchai Ratanathammaphan and Somsak Panyakeow
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Journal of Crystal Growth 468, 737 (2017)

95. Zon, Thanavorn Poempool, Suwit Kiravittaya, Suwat Sopitpan, Supachok Thainoi, Songphol Kanjanachuchai, Somchai Ratanathammaphan and Somsak Panyakeow
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94. Saichon Sriphan, Suwit Kiravittaya, Pinit Kidkhunthod, and Theerachai Bongkarn
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92. Saimon Filipe Covre da Silva, Thayná Mardegan, Sidnei Ramis de Araújo, Carlos Alberto Ospina Ramirez, Suwit Kiravittaya, Odilon D. D. Couto Jr, Fernando Iikawa and Christoph Deneke
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Nanoscale Research Letters 12, 61 (2017)

91. Yingwu Lan, Shilong Li, Zhongyi Cai, Yongfeng Mei, Suwit Kiravittaya
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Optics Communications 386, 72-76 (2017)

90. Suwit Kiravittaya, Kamonchanok Khoklang, Supachok Thainoi, Somsak Panyakeow, and Somchai Ratanathammaphan
In-mole-fraction of InGaAs Insertion Layers Effects on the Structural and Optical Properties of GaSb Quantum Dots Grown on (001) GaAs Substrate
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89. Thai-Chien Bui, Suwit Kiravittaya, Keattisak Sripimanwat and Nam-Hoang Nguyen
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International Journal of Optics 2016, 8969514 (2016)

88. Zon, Thanavorn Poempool, Suwit Kiravittaya, Noppadon Nuntawong, Suwat Sopitpan, Supachok Thainoi, Songphol Kanjanachuchai, Somchai Ratanathammaphan and Somsak Panyakeow
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Electronic Materials Letters 12, 517-523 (2016)

87. Thanavorn Poempool, Zon, Suwit Kiravittaya, Suwat Sopitpan, Supachok Thainoi, Songphol Kanjanachuchai, Somchai Ratanathammaphan and Somsak Panyakeow
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MRS Advances 1, 1677-1682 (2016)

86. Zon, Thanavorn Poempool, Suwit Kiravittaya, Suwat Sopitpan, Supachok Thainoi, Songphol Kanjanachuchai, Somchai Ratanathammaphan and Somsak Panyakeow
Investigation of GaSb/GaAs Quantum Dots Formation on Ge (001) Substrate and Effect of Anti-Phase Domains
MRS Advances 1, 1729-1734 (2016)

85. A. Thongtha, S. Kiravittaya, A. Laowanidwatana, and T. Bongkarn
Phase formation, microstructure and electrical properties of $(Bi_{0.5}Na_{0.5})TiO_3$-$(Bi_{0.5}K_{0.5})TiO_3$-$BaTiO_3$ systems fabricated using the combustion technique
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Journal of Crystal Growth 425, 291-294 (2015)

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Advanced Materials Research 1103, 129-135 (2015)

82. P. Cendula, A. Malachias, Ch. Deneke, S. Kiravittaya, and O. G. Schmidt
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