

## PERSONAL DATA



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**Web of Science ID** : [GAX-6360-2022](https://www.webofscience.com/wos/authorid/detail.aspx?authorid=GAX-6360-2022)

## PUBLICATIONS SUMMARY

11

International Journal

23

International Proceedings

6

Books

1

Chapters

Total Publications: 41

## EDUCATION

<b>Ph.D. Degree</b>	Doctor of Philosophy (Electrical Engineering), Heriot-Watt University, Edinburgh, United Kingdom
<b>Master Degree</b>	Master of Engineering (Electrical Engineering), King Mongkut's Institute of Technology North Bangkok, Thailand
<b>Bachelor Degree</b>	Bachelor of Engineering (Electrical Engineering), Rajamangala Institute of Technology, Thailand

## RESEARCH INTERESTS

*Computational Electromagnetics**Cyber-Physical Systems**Embedded, IoT, Connected, Wireless Systems**Metamaterial-Antenna-Absorber-Based Sensor Devices*

## RESEARCH PROJECTS

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- 1) "MultiWaveS" The European Commission under the FP7 Project
- 2) "The VHF Band and Smart Meters" GB1412827.6 filed
- 3) "The Asymmetric Resonance for Sensing Applications" PSU Support Grants

## TEACHING

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977-352 Cyber-Physical Systems  
977-342 Intelligent Connected Objects  
977-114 Digital and Logic Design  
977-103 Physics for Engineers  
240-441 Multicore Programming and Architecture  
242-341 Embedded Systems Design  
242-441 Advantage Computer Architecture and Organization  
240-303 Ethical, Legal and Social Issues  
240-631 Computer Arithmetic  
242-480/240-480 Principle of Robotics  
242-401 Computer Engineering Project I  
242-402 Computer Engineering Project II  
240-308 Computer Engineering Project Preparation

## OTHERS

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### Research participants:

- 1) The European Commission under the FP7 8 project "MultiWaveS"
- 2) Patent: VHF band and smart meters GB1412827.6 filed, Jul. 18, 2014

## INTERNATIONAL JOURNAL ARTICLES

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Tanatorn Tantipiriyakul and **Komsan Kanjanasit** "Chessboard-Coding Metasurface Antennas with Binary Defects for Anomalous Radiation: Novel and Continuous Development" *Journal of Current Science and Technology*, published in vol.15, no.4, Article 135, 2025

🔗 <https://ph04.tci-thaijo.org/index.php/JCST/article/view/9366>

📅 10/2025

Terapass Jariyanorawiss, **Komsan Kanjanasit**, Wachira Chongburee, and Nattapon Sornsungnoen, "SAR Analysis in an Anatomical Head Model Using CFL-Optimized Yee Cells and an Accurate Dipole Model at 700 MHz for 5G Mobile Radiation," *IEEE Access*, Vol.13, pp.82718-82731, 2025 doi: 10.1109/ACCESS.2025.3568603.

🔗 <https://ieeexplore.ieee.org/document/10994431>

📅 5/2025

Chakadkit Thaenchaikun and **Komsan Kanjanasit**. "A Comparative Study of OSPF Metrics in Routing Algorithms for Dynamic Path Selection in Network Security", *ASEAN J. Sci. Tech. Report*. 2025, 28(2), e256556.

<https://doi.org/10.55164/ajstr.v28i2.256556>.

🔗 <https://ph02.tci-thaijo.org/index.php/tsujournal/article/view/256556>

📅 4/2025

Noppon Lertchuwongsa and **Komsan Kanjanasit**, "A Novel Trans-Dataset Ensemble Architecture for Sign Language Recognition," *Journal of Advances in Information Technology*, Vol. 15, No. 12, pp. 1315-1328, 2024.

🔗

[https://www.jait.us/show-247-1610-1.html?fbclid=IwY2xjawHPa0hleHRuA2FlbQlxMAABHYTDqYSDvTHaBcAWJVwDIQbdtPEAznC3xoV4sYvrAKvvdEexpfZeyDUR8w\\_aem\\_vzTNaa\\_EBLI9s4UarWfjrw](https://www.jait.us/show-247-1610-1.html?fbclid=IwY2xjawHPa0hleHRuA2FlbQlxMAABHYTDqYSDvTHaBcAWJVwDIQbdtPEAznC3xoV4sYvrAKvvdEexpfZeyDUR8w_aem_vzTNaa_EBLI9s4UarWfjrw)

📅 12/2024

**Komsan Kanjanasit**, Tanatorn Tantipiriyakul and Changhai Wang, "Thin Film Resonant Metasurface Absorbers Using Patch-Based Arrays on Liquid Crystal Polymer Substrates for Centimeter-Wave Applications," *Heliyon*, 9, e353399, doi: <https://doi.org/10.1016/j.heliyon.2024.e353399>.

🔗 [https://www.cell.com/heliyon/fulltext/S2405-8440\(24\)11430-2](https://www.cell.com/heliyon/fulltext/S2405-8440(24)11430-2)

📅 8/2024

Tanatorn Tantipiriyakul and **Komsan Kanjanasit**, "Design and Simulation of Chessboard Coding Wave Artifacts," *Journal of Information Science and Technology (JIST)*, vol. 13, no. 2 pp. 62–68, Dec, 2023

🔗 <https://ph02.tci-thaijo.org/index.php/JIST/article/view/251563/170055>

📅 12/2023

**Komsan Kanjanasit**, Pracha Osklang, Terapass Jariyanorawiss, Akkarat Boonpoonga, and Chuwong Phongcharoenpanich, "Artificial Magnetic Conductor as Planar Antenna for 5G Evolution," *Computers, Materials & Continua*, vol. 74, no. 1 pp. 503–522, Jan, 2023

🔗 <https://www.techscience.com/cmcc/v74n1/498555?fbclid=IwAR1PonohQBPLBkD4FTLBLEz-az8rLYa6JqKRMSjCQR3QRUGb4UG9qCgOuxk>

📅 1/2023

Terapass Jariyanorawiss, **Komsan Kanjanasit** and Wachira Chongburee, "Creation of Rigorous Human Head Model from MRI Images with Reports on SAR Caused by 2.6 GHz 5G Mobile Handset Radiation," *The ECTI Transactions on Electrical Engineering, Electronics, and Communications*, Vol. 20, No.3, pp.461-470, Oct, 2022

🔗 <https://ph02.tci-thaijo.org/index.php/ECTI-EEC/article/view/247522/167981>

📅 10/2022

**Komsan Kanjanasit** and Changhai Wang, "A Wideband Resonant Cavity Antenna Assembled Using a Micromachined CPW Fed Patch Source and a Two-Layer Metamaterial Superstrate," *IEEE Transactions on Components, Packaging and Manufacturing Technology*, Vol.9, No.6, pp.1142-1150, Jun,2019 (Impact Factor 1.66 ; ISI )

🔗 <https://ieeexplore.ieee.org/document/8470978>

📅 6/2019

Irina Vendik, Alexander Rusakov, **Komsan Kanjanasit**, Jiasheng Hong, Dmitry Filonov, " Ultra-Wideband (UWB) Planar Antenna with Single-, Dual-, and Triple-Band Notched Characteristic Based on Electric Ring Resonator," *IEEE Antennas and Wireless Propagation Letters*, Vol. 16, pp.1597-1600, Jun, 2017 (Impact Factor 2.533 ; ISI )

🔗 <https://ieeexplore.ieee.org/document/7817843/>

📅 6/2017

**Komsan Kanjanasit** and Changhai Wang, "Fano Resonance in a Metamaterial Consisting of Two Identical Arrays of Square Metallic Patch Elements Separated by a Dielectric spacer," *Applied Physics Letters*, Vol. 102, p. 251108, 2013 (Impact Factor 3.515 ; ISI )

🔗 <https://aip.scitation.org/doi/10.1063/1.4812189>

📅 6/2013

Metrics on a Routing Protocol," 2025 22nd International Conference on Electrical Engineering/Electronics, Computer, Telecommunications and Information Technology (ECTI-CON), Bangkok, Thailand, 2025, pp. 1-6, doi: 10.1109/ECTI-CON64996.2025.11100445.

🔗 <https://ieeexplore.ieee.org/document/11100445>

📅 5/2025

T. Tantipiriyakul and K. Kanjanasit, "A Binary Hexagon Stripe Metamaterial Antenna," *2024 21st International Conference on Electrical Engineering/Electronics, Computer, Telecommunications and Information Technology (ECTI-CON)*, Khon Kaen, Thailand, 2024, pp. 1-4, doi: 10.1109/ECTI-CON60892.2024.10594859.

🔗 <https://ieeexplore.ieee.org/document/10594859>

📅 5/2024

T. Tantipiriyakul and K. Kanjanasit, "A Binary Metamaterial for Planar Antennas," The 7th International Conference on Information Technology (InCIT 2023), Mae Fah Luang University, Chiang Rai, Thailand, 15th-17th November 2023.

📅 11/2023

K. Kanjanasit and T. Jariyanorawiss, "A Broadband Resonant Cavity Antenna Using Tapered Two-Identical-Layer Metamaterial," Proceedings of The 19th International Conference on Electrical Engineering/Electronics, Computer, Telecommunications and Information Technology (ECTI-CON 2022), Hua-Hin, Thailand, 24-27 MAY. 2022, pp. 1-4

🔗 <https://ieeexplore.ieee.org/document/9795591>

📅 5/2022

K. Kanjanasit, T. Jariyanorawiss and P. Osklang, "High-Directivity Planar Antenna Based on AMC Metamaterials," The 2021 ECTI Workshop on Biomedical Electricals-Electronics and Communications Engineering (BEC 2021), Thailand, 10 DEC 2021

📅 12/2021

T. Jariyanorawiss, K. Kanjanasit and W. Chongburee, "Computational Modeling of Human Head for 700 MHz Test with 5G Smart Phone," The 2021 ECTI Workshop on Biomedical Electricals-Electronics and Communications Engineering (BEC 2021), Thailand, 10 DEC 2021

📅 12/2021

K. Kanjanasit, I. B. Vendik, and A. Rusakov, "A Double Band-Notched UWB Antenna Based on Complementary ERR-Defected Ground," The 26th International Symposium on Antennas and Propagation, ISAP 2021, Taipei, Taiwan, 19-22 OCT 2021

🔗 <https://ieeexplore.ieee.org/document/9614570>

📅 10/2021

Y. Keaomanee, T. Kliangsuwan, K. Kanjanasit, "A Study of Lightweight Dynamic Algorithm of Power Management System for Small Satellite Applications," Innovation Aviation & Aerospace Industry - International Conference 2021 (IAAI-2021), Princess Sirindhorn AstroPark, Chiang Mai, Thailand, 28th-30th June 2021

🔗 <https://sciforum.net/paper/view/10592>

📅 6/2021

K. Kanjanasit, S. Sanesaowarod and N. Homsup, "EIT-Like Effect in Metamaterials Based on Two-Layer Arrays for High-Gain Antennas," Proceedings of The 17th International Conference on Electrical Engineering/Electronics, Computer, Telecommunications and Information Technology (ECTI-CON 2020), Phuket, Thailand, 24-26 JUN. 2020, pp. 304-307

🔗 <https://ieeexplore.ieee.org/document/9158277>

📅 6/2020

K. Kanjanasit, S. Sanesaowarod and N. Homsup, "A High-Gain Antenna Based on Ultrathin Planar-Feed Air-Filled Resonant Cavity," Proceedings of The 2020 International Electrical Engineering Congress (IEECON2020), Chiang Mai, Thailand, 4-6 MAR. 2020, pp. 1-4

🔗 <https://ieeexplore.ieee.org/document/9077430>

📅 3/2020

K. Kanjanasit and C. H. Wang, "A Finite-Size Superstrate Based on Identical Patch Arrays for Broadband

Resonant Cavity Antennas,” Proceedings of The 2019 International Electrical Engineering Congress (iEECON2019), Hua Hin, Thailand, 6–8 MAR. 2019, pp.cm51-cm54

🔗 <https://ieeexplore.ieee.org/document/8938925>

📅 3/2019

**K. Kanjanasit** and C. H. Wang, “Study of Multiband Resonant Absorbers Based on Modified Electric LC Resonators,” Proceedings of The 15th International Conference on Electrical Engineering/Electronics, Computer, Telecommunications and Information Technology (ECTI-CON 2018), Chiangrai, Thailand, 18–21 JUL. 2018, pp.210-213

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📅 7/2018

**K. Kanjanasit** and C. H. Wang, “A Broadband Resonant Cavity Antenna Using a Metamaterial Based on Double-Side Identical Arrays,” 2017 IEEE Conference on Antenna Measurements and Applications (CAMA), Tsukuba, Ibaraki, Japan, 4–6 DEC. 2017, pp.51-54

🔗 <https://ieeexplore.ieee.org/document/8273475/>

📅 12/2017

A. Rusakov, I. B. Vendik, **K. Kanjanasit**, “Tri-Mode Electric Ring Resonator and Adjustable UWB Triple Band-Notched Antenna,” 2017 IEEE Conference of Russian Young Researchers in Electrical and Electronic Engineering (ElConRus), St. Petersburg, Russia, 1–3 FEB 2017, pp.317-321

🔗 <https://ieeexplore.ieee.org/document/7910555/>

📅 2/2017

**K. Kanjanasit** and C. H. Wang, “A High Performance Micromachined CPW Fed Aperture Coupled Compact Patch Antenna Using a Double-Tuned Impedance Matching Method,” The 2016 International Symposium on Intelligent Signal Processing and Communication Systems (ISPACS 2016), Phuket, Thailand, 24-27 OCT. 2016, pp.134-137

🔗 <https://ieeexplore.ieee.org/document/7824736/>

📅 10/2016

**K. Kanjanasit**, C. H. Wang, P. Record, “A Wideband Resonant Cavity Antenna Based on Fano Resonance Effect in a Two-layer Patch Array Superstrate,” The 7th International Conference on Metamaterials, Photonic Crystals and Plasmonics (META'16), Torremolinos (Málaga), Spain, 25–28 JUL 2016, pp.1219-1225

🔗 <http://metaconferences.org/ocs/index.php/META16/index/pages/view/proceedings>

📅 7/2016

A. Rusakov, I. B. Vendik, **K. Kanjanasit**, J. Hong, D. Filonov, “Ultra-Wideband Antenna with Single- and Dual-Band Notched Characteristics Based on Electric Ring Resonator,” Proceedings of Days on Diffraction 2016, St. Petersburg, Russia, 27 Jun.–1 JUL 2016, pp.350-355

📅 6/2016

P. Record and **K. Kanjanasit**, “A Compact VHF Antenna for Smart Meters,” Progress In Electromagnetics Research Symposium Proceedings (PIERS) Proceedings, Prague, 6-9 JUL 2015, pp.1607-1612

📅 7/2015

I. B. Vendik, A. Rusakov, and **K. Kanjanasit**, “Printed UWB Antennas with Notched Bands,” Microwave Microelectronics 2015, St. Petersburg, Russia (2015), pp. 304-308

📅 1/2015

**K. Kanjanasit** and C. H. Wang, “A High Directivity Broadband Aperture Coupled Patch Antenna Using a Metamaterial Based Superstrate,” Antennas and Propagation Conference (LAPC), 2012 Loughborough, UK, 12-13 Nov. (2012)

🔗 <https://ieeexplore.ieee.org/document/6403004/>

📅 11/2012

S. Theerawisitpong; **K. Kanjanasit**, A Compact Modified-Meander Resonator for Microwave Bandpass Filter with Harmonic-Suppression, 2006 7th International Symposium on Antennas, Propagation & EM Theory, 26-29 Oct., Guilin, China

🔗 <https://ieeexplore.ieee.org/document/4168373>

K. Kanjanasit, V. Vivek, and N. Homsub, "Novel Design of a Wideband Improved U-slot on Rectangular Patch Using Additional Loading Slots" the 2nd International ECTI conferences, May, Thailand, (2005)

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5/2005

K. Kanjanasit, D. Worasawate, N. Homsub, and V. Vivek, "Bandwidth Improvement Technique for a U-slotted Rectangular Patch Antenna Using Coupled Slots" Proceedings of The 43rd Kasetsart University Annual Conference, Thailand, (2005)

<http://www.lib.ku.ac.th/kuconf/kc4311021.pdf>

1/2005

## BOOKS

K. Kanjanasit, *Verilog HDL and FPGA: A Practical Approach to Digital and Logic Design*, 1st ed. Phuket, Thailand: College of Computing, Prince of Songkla University, 2025. [Online]. Available:

<https://github.com/komsan-k/verilog-fpga-ebook>

9/2025

คมสันต์ กาญจนสิทธิ์ (2567) ตอนที่ 8.2 เทคโนโลยีสื่อสารไร้สายยุคที่ 6 หน่วยที่ 8 เทคโนโลยีสื่อสารไร้สายยุคที่ 5 และ 6 เอกสารการสอนชุดวิชา รหัส 99313 การสื่อสารไร้สายและเครือข่าย (Wireless Communication and Networking) ฉบับปรับปรุงครั้งที่ 1 พ.ศ. 2567 สาขาวิชาวิทยาศาสตร์และเทคโนโลยี มหาวิทยาลัยสุโขทัยธรรมาธิราช จำนวน 59 หน้า สำนักพิมพ์มหาวิทยาลัยสุโขทัยธรรมาธิราช พิมพ์ครั้งที่ 1

10/2024

คมสันต์ กาญจนสิทธิ์ (2567) หน่วยที่ 9 โพรโทคอลการเคลื่อนที่และโมบายล์ไอพี เอกสารการสอนชุดวิชา รหัส 99313 การสื่อสารไร้สายและเครือข่าย (Wireless Communication and Networking) ฉบับปรับปรุงครั้งที่ 1 พ.ศ. 2567 สาขาวิชาวิทยาศาสตร์และเทคโนโลยี มหาวิทยาลัยสุโขทัยธรรมาธิราช จำนวน 66 หน้า สำนักพิมพ์มหาวิทยาลัยสุโขทัยธรรมาธิราช พิมพ์ครั้งที่ 1

10/2024

คมสันต์ กาญจนสิทธิ์ (2566) หน่วยที่ 1 หลักการของระบบไซเบอร์กายภาพ ประมวลสาระชุดวิชา รหัส 99714 ระบบไซเบอร์กายภาพและการประยุกต์ (Cyber-Physical System and Applications) สาขาวิชาวิทยาศาสตร์และเทคโนโลยี มหาวิทยาลัยสุโขทัยธรรมาธิราช จำนวน 59 หน้า สำนักพิมพ์มหาวิทยาลัยสุโขทัยธรรมาธิราช พิมพ์ครั้งที่ 1

10/2023

คมสันต์ กาญจนสิทธิ์ (2566) หน่วยที่ 2 สถาปัตยกรรมและโมเดลระบบไซเบอร์กายภาพ ประมวลสาระชุดวิชา รหัส 99714 ระบบไซเบอร์กายภาพและการประยุกต์ (Cyber-Physical System and Applications) สาขาวิชาวิทยาศาสตร์และเทคโนโลยี มหาวิทยาลัยสุโขทัยธรรมาธิราช จำนวน 55 หน้า สำนักพิมพ์มหาวิทยาลัยสุโขทัยธรรมาธิราช พิมพ์ครั้งที่ 1

10/2023

คมสันต์ กาญจนสิทธิ์ (2567) ตอนที่ 7.2 เทคโนโลยีของอินเทอร์เน็ตของสรรพสิ่ง หน่วยที่ 7 เทคโนโลยีอินเทอร์เน็ตของสรรพสิ่ง เอกสารการสอนชุดวิชา รหัส 99410 การจัดการและการออกแบบระบบโทรคมนาคม (Telecommunication System Design and Management) ฉบับปรับปรุงครั้งที่ 1 พ.ศ. 2566 สาขาวิชาวิทยาศาสตร์และเทคโนโลยี มหาวิทยาลัยสุโขทัยธรรมาธิราช จำนวน 59 หน้า สำนักพิมพ์มหาวิทยาลัยสุโขทัยธรรมาธิราช พิมพ์ครั้งที่ 1

4/2023

## CHAPTERS

Irina B. Vendik, Alexander S. Rusakov, and Komsan Kanjanasit, "Study of Ultra-wideband Antenna with Multi-notch Band Loaded with a Multimode Electric Ring Resonator and a Complementary Resonance Structure," Book Chapter 15 : Newest Updates in Physical Science Research (International Book), 2021. <https://stm.bookpi.org/NUPSR-V11/article/view/3897>

7/2021

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