

SENER UYSAL

Research Areas

Microwave Integrated Circuits (MICs), Antennas, RFID, RFIC, EMC, EMI, Wireless Communications, Wireless Sensors, Security, Solar Energy, Wearable Electronics and Biomedical Applications of Microwaves

Short Biography

Prof. Uysal received his Ph.D. degree in microwaves from King's College London, University of London, London, U.K., in 1990. He was appointed as a Post-Doctoral Research Fellow in the same university, where he worked on microwave and millimeter-wave techniques involving passive circuits and microstrip antennas. He is the inventor of bandpass type microstrip directional couplers and filters. In 1992, he joined the Electrical Engineering Department, National University of Singapore (NUS), Singapore, as an Assistant Professor and, in 1995, was promoted to an Associate Professor. During his tenure at NUS, he continued his research work on MICs and wideband antennas. He was also actively collaborated with the Science Faculty on works involving High Temperature Superconductors. In February 2000 he joined EMU as an Associated Professor. In March 2004, he was appointed as Director of Advanced Technologies Research and Development Institute and promoted to full Professorship in April 2004. He has published over 80 technical papers in international symposia and journals, and has authored Nonuniform Line Microstrip Directional Couplers and Filters (Norwood, MA: Artech House, 1993). He worked on several research projects as a principal investigator and core member. He has supervised over 20 MS and PhD students, and over 250 Final Year Project students.

His current research interests are mainly in the areas of security, solar power, wireless communications, biomedical applications of MICs, personalized health systems, multi-beam antennas and wireless sensor networks.

His works have received over 1000 citations to date.

Prof. Uysal was appointed as an expert evaluator for EU Commission PASR- FP7 in June 2007, PEOPLE Marie Curie Actions IEF, IOF and IIF from Oct.2009-2013 and H2020 Excellence Science in Marie Skolodowska Curie Actions from Oct. 2014 – to date.

**EASTERN MEDITERRANEAN UNIVERSITY
ELECTRICAL & ELECTRONIC ENGINEERING DEPARTMENT**

PERSONAL INFORMATION

Name & Title	ŞENER UYSAL, Professor
Address	Eastern Mediterranean University Electrical & Electronics Engineering Dept. Famagusta, via Mersin 10 Turkey
Telephone	+90 392 630 2772
Mobile	0533 863 8989
Fax	+90 392 6301657
E-mail & URL	Sener.uysal@emu.edu.tr http://faraday.ee.emu.edu.tr/suysal/
Nationality	Cypriot
Date of birth	25/08/1959

WORK EXPERIENCE

- Dates (from – to) April 04 – Present
 - Name and address of employer Eastern Mediterranean University
Electrical & Electronics Engineering Dept.
Famagusta, Mersin 10 Turkey
 - Type of business or sector Education
 - Occupation or position held Professor
 - Main activities and responsibilities
 - Teaching several undergraduate and graduate courses
 - Supervising undergraduate final year projects and graduate M. Sc. and PhD. Theses.
-
- Dates (from – to) March 04 – Sept. 10
 - Name and address of employer Eastern Mediterranean University
Electrical & Electronics Engineering Dpt.
Famagusta Mersin 10 Turkey
 - Type of business or sector Education
 - Occupation or position held Director of Advanced Technologies Research & Development Institute
 - Main activities and responsibilities
-
- Dates (from – to) February 00 – March 04
 - Name and address of employer Eastern Mediterranean University
Electrical & Electronics Engineering Dpt.
Famagusta Mersin 10 Turkey
 - Type of business or sector Education

- Name and address of employer
Derwent Publications Ltd. London, UK
- Type of business or sector
Publications
- Occupation or position held
Freelance Patents Abstractor
 - Main activities and responsibilities

- Dates (from – to)
August 89 – August 92
- Name and address of employer
King's College London, University of London
- Type of business or sector
Education
- Occupation or position held
Postdoctoral Research Fellow
 - Worked on projects in wideband microwave and millimeter wave techniques
 - Demonstrated the first ultrawideband microstrip quadrature directional coupler.
 - Invented the bandpass type coupler with up to almost 0 dB coupling.
 - Developed the first codirectional nonuniform 0 dB coupler. (funded by MoD UK)

- Dates (from – to)
February 90 – March 90
- Name and address of employer
King's College London, University of London
- Type of business or sector
Education
- Occupation or position held

- Main activities and responsibilities
 - Dates (from – to)
 - Name and address of employer
 - Type of business or sector
 - Occupation or position held
 - Main activities and responsibilities
- M.Sc. Teaching on Microwaves
- January 89 – August 89
King's College London, University of London
- Education
- Simulation of Cross Field Devices (Magnetrons) using MAGIC PIC Code (Funded by USAF USA)
-
- Dates (from – to)
 - Name and address of employer
 - Type of business or sector
 - Occupation or position held
 - Main activities and responsibilities
- January 86 – January 89
King's College London, University of London
- Education
- Supervising lab. Experiments on High Frequency Engineering and EM Waves.
 - Marking papers.
-
- Dates (from – to)
 - Name and address of employer
 - Type of business or sector
 - Occupation or position held
- October 85 – January 86
Eastern Mediterranean University
Famagusta Mersin 10 Turkey
- Education
Assistant Lecturer

- Main activities and responsibilities

EDUCATION AND TRAINING

- Dates (from – to) January 86 – January 90
- Name and type of organization providing education and training King's College London, University of London
- Principal subjects/occupational skills covered
- Title of qualification awarded PhD. In Microwave Engineering

- Dates (from – to) September 84 – September 85
- Name and type of organization providing education and training King's College London, University of London
- Principal subjects/occupational skills covered
- Title of qualification awarded M.Sc. in Electronics

- Dates (from – to) 1979 – 1984
- Name and type of organization providing education and training Eastern Mediterranean University
Famagusta Mersin 10 Turkey

- Principal subjects/occupational skills covered
- Title of qualification awarded B.Eng. In Electrical Engineering with High Honors, CGPA: 3.68
- Dates (from – to) 1971 – 1978
- Name and type of organization providing education and training Turk Maarif College
- Principal subjects/occupational skills covered
- Title of qualification awarded Diploma

**PERSONAL SKILLS
AND COMPETENCES**

*Acquired in the course of life
and career but not necessarily
covered by formal certificates
and diplomas.*

MOTHER TONGUE

TURKISH

OTHER LANGUAGES

- Reading skills
- Writing skills
- Verbal skills

English
Excellent
Excellent
Excellent

ORGANIZATIONAL SKILLS
AND COMPETENCES

*Coordination and
administration of people,
projects and budgets..*

- **Eastern Mediterranean University**
 - *Administrative Duties*
 - Laboratory Committee – Chairman
 - Assessment and Evaluation Committee – Member
 - Final Year Projects Committee – Member
 - ABET Committee – Member
 - Resources Committee – Member
 - Acting Dean – May 2004 – August 2005
 - Director ATRDI – March 2004 – Sept. 2010
- **National University of Singapore**
 - *Administrative Duties*

- Library Committee – Chairman
- SAR Technical Committee – Member
- Publicity & Public relations Committee – Member
- Safety & hazardous Materials Committee – Member
- Faculty Safety & Hazardous Materials Committee – Member
- Industrial Training Committee – Member
- **Ministry of Defense (MINDEF)**
 - *10 projects ranging from S\$5000 to S\$15000 – funded by Singapore*
 - *Multi-Disciplinary Research (MDR) with the Science Faculty on High Temperature Superconductor circuits – funded by Defense Science Organization (DSO) \$200,000*
- **Research projects funded by Faculty Academic Research please see TABLE 1.**

RESEARCH & DEVELOPMENT
ACTIVITIES

- **Eastern Mediterranean University**
 1. Microwave Integrated Circuits (MICs)
 - Microwave Control Circuits
 - Microstrip couplers, filters and antennas
 - Multilayer microstrip circuits
 2. High-speed Interconnects for Gigabit Circuits
 - CPW, microstrip, CB-CPW, multilayer microstrip
 3. Antennas
 - Wireless Internet
 - Radio Frequency Identification (RFID)
 - Non-metallic
 4. Solar Energy
 5. Wireless Sensor Networks
- **National University of Singapore**
- **Established the first MIC Lab in NUS – used by postgraduate and final year project students**
 1. Microwave Integrated Circuits (MICs)
 - Phased Array Transmit/receive Module
 - Microwave Control Circuits
 - Microstrip couplers, filters and antennas
 - Multilayer microstrip circuits
 - Conductor-backed CPW filters and couplers and interconnects
 2. Superconductive MICs (Joint with Physics Dpt.)
 - Filter Banks
 - Narrowband filters
 3. High-speed Interconnects for Gigabit Circuits

- CPW, microstrip, CB-CPW, multilayer microstrip.

RECOGNITION FOR RESEARCH

- **Expert Evaluator for EU Commission in PASR-FP7 - June 2007**
- **Expert Evaluator for EU Commission in FP7 – PEOPLE – IEF, IOF, IIF – Oct. 2009, Oct. 2010, Oct. 2011, Oct. 2012, Oct. 2013**
- **Reviewer**
 1. IEE Proceedings Part H: Microwaves, Antennas and Propagation.
 2. IEE Electronics Letters.
 3. IEEE Microwaves and Guided waves Letters.
 4. IEEE Circuits and Systems.
 5. PIER Journals.
 6. International Conferences
- **External Assessor**
 1. Master's Degree, 1997-99, Chinese University of Hong Kong.
 2. Doctoral Thesis, 1999-2000, University of Pretoria, South Africa.
 3. Master's Degree, since 2002, Swinburne University (Sarawak Campus), Malaysia.
 4. Jury member in promotional committees for Assoc Prof and full Prof positions.
- **Conference Organization**
 1. Publications Chairman for the 1996 International Conference on Communications (ICCS '96)
 2. Publicity Chairman for the Asia Pacific Microwave Conference '99 (APMC '99)
- **Industrial Consultancy**

- May 1993 Microwave Integrated Circuits (MICs) – Singapore

OTHER SKILLS
AND COMPETENCES
*Competences not mentioned
above.*

READING (FOLLOWING) MAJOR ACTIVITIES IN SCIENCE AND TECHNOLOGY IN PRINTED MEDIA AND INTERNET MAINLY IN THE AREAS OF WIRELESS COMMUNICATIONS, BIOMEDICAL APPLICATIONS, SENSOR NETWORKS, AND SOLAR ENERGY.

TABLE 1. Research Projects undertaken by A/Prof Sener Uysal during his appointment with NUS (Sept 1992 – Dec. 1999)

Project No.	Project Title	Principal Investigator	Internal Collaborators Staff Name & Dept	External Collaborator Name & Company
RP3930620	Phase array transmit/receive module	Uysal, Sener	Kooi Pang Shyan, Leong Mook Seng & Yeo Tat Soon	
RP3940655	Microwave control circuits (MCCS)	Uysal, Sener	Leong Mook Seng, Kooi Pang Shyan & Yeo Tat Soon	
RP3960603	Novel planar components and sub-systems for microwave integrated circuit (MIC) applications	Yeo Swee Ping	Kooi Pang Shyan, Leong Mook Seng, Yeo Tat Soon, Uysal Sener & Eccleston, Kimberley Wallace	Prof R Jansen (Germany), Prof T. Yoneyama (Japan), Prof Bialkowski (Australia)
RP3972661	Design of conductor-backed coplanar waveguide components	Uysal, Sener	Leong Mook Seng	
RP3950697	Study of wireless indoor communication channels	Farhang-Boroujeni, Behrouz	Uysal Sener, Ng Chun Sum & Chua Kee Chaing	

Postgraduate Thesis Supervised or under Supervision (EMU since 2010):

Title	Level	Date if Submitted
1. Mustafa Konca - Multibeam Patch Antenna Design	MS	S10
2. Reza Makvandi - Microcontroller-based Implementation of Parsekey+	MS	S10

- | | | | |
|-----|--|------|-----|
| 3. | Mostafa Arbabi Monfared – Localization of Wireless Sensor Networks based on soft computing approaches | MS | S11 |
| 4. | Pouya Belourchi - Intelligent Decision Making Architecture in Remote Wireless Communication | MS | S11 |
| 5. | Hossein Feiz - Power Load Optimization for Wireless Communications at Remote Areas | M.S. | F12 |
| 6. | Kian Jazayeri - Network architecture protocol for remote controlling and management of solar panels | MS | F12 |
| 7. | Fazel Farazandeh - Energy-aware routing techniques in wireless sensor networks | MS | F12 |
| 8. | Shiva Mirshahi - Integration of Radio Frequency Identification and Wireless Sensor Networks | MS | S12 |
| 9. | Huseyin Asik - Economically and Functionally Sound Cellular Mobile Communications System Design Consideration for Minimizing Health Concerns | MS | S13 |
| 10. | Pooya Ferdosipour - Wavelet Based Face Recognition Technique in Presence of Illumination Variation | MS | F15 |
| 11. | Sayed Mayed Hussain – Wideband patch antenna design using FEKO | MS | F16 |

- | | | |
|---|-----|-----|
| 12. Umar Ali – Application of water filling algorithm in communications | MS | S16 |
| 13. Moein Jezayeri - Adaptive Solar Panel | PhD | - |
| 14. Mehdi Taassori - Optimized Algorithms (Methodologies) to Improve Energy Consumption in Network on Chips | PhD | F15 |
| 15. Pouya Bolourchi - Information extraction of high resolution Synthetic Aperture Radar (SAR) images | PhD | S17 |
| 16. Kian Jazayeri - Artificial Neural Network Based Comprehensive Fault Detection of Solar Systems | PhD | F17 |
| 17. Huseyin Asik - Modelling of Electromagnetic Pollution for Wireless Energy Harvesting | PhD | - |

Courses taught in the last two academic years

Academic Year	Semester	Course code and title	Credit	Number of students
2017-2018	Fall	EENG342 ELECTRONICS II	4	32
		EENG341 ELECTRONICS I	4	54
		EENG232 ELECTROMAGNETICS I	4	47
	Spring	EENG232 ELECTROMAGNETICS I	4	49
		EENG342 ELECTRONICS II	4	36
2016-2017	Fall	EENG342 ELECTRONICS II	4	27
		EENG232 ELECTROMAGNETICS I	4	54
		EENG341 ELECTRONICS I	4	52

	Spring	EENG341 ELECTRONICS I	4	55
		EENG342 ELECTRONICS II	4	40

List of Publications

BOOK

1. Uysal, S, *Nonuniform Line Microstrip Directional Couplers and Filters*. Norwood (MA): Artech House, 228 pp., United States, October 1993.

REFEREED JOURNAL PAPERS

1. Uysal, S and A H Aghvami, "An improved wideband -3 dB nonuniform directional coupler," *Electronics Letters*, Vol.25, no.8, pp.541-542, United Kingdom, April 1989.
2. Uysal, S and A H Aghvami, "Synthesis design and construction of ultrawideband nonuniform quadrature directional couplers in inhomogeneous media," *IEEE Transactions on Microwave Theory and Techniques*, Vol.37, no.6, pp.969-976, United States, June 1989.
3. Uysal, S and J Watkins, "Novel microstrip multi-function directional couplers and filters for microwave and millimeter wave applications," *IEEE Transactions on Microwave Theory and Techniques*, Vol.39, no.6, pp.977-985, United States, June 1991.
4. Moazzam, M R, S Uysal and A H Aghvami, "Improved performance parallel coupled filters," *Microwave Journal*, no.11, pp.127-135, United States, November 1991.
5. Uysal, S, C W Turner and J Watkins, "Nonuniform transmission line co-directional couplers for hybrid MIMIC and superconductive applications," *IEEE Transactions on Microwave Theory and Techniques*, Vol.42, no.3, pp.407-414, United States, March 1994.
6. Uysal, S, K S Ang and P S Kooi, "Coplanar waveguide active bandpass filter," *Electronics Letters*, Vol.30, no.19, pp.1605-1606, United Kingdom, September 1994.
7. Uysal, S, "Microstrip loop directional filter," *Electronics Letters*, Vol.33, no.5, pp.375-376, United Kingdom, February, 1997.
8. Uysal, S, "Coplanar waveguide edge-coupled bandpass filters with finite ground planes," *Electronics Letters*, Vol.33, no.6, pp.475-476, United Kingdom, February 1997.
9. Krishnan, S, S Uysal and K W Eccleston, "CPW bandpass filters using end-coupled quarter-wavelength resonators," *Microwave and Optical Technology Letters*, Vol.15, no.1, pp.29-33, United States, May 1997.
10. Krishnan, S, S Uysal and K W Eccleston, "Build high performance CPW filters using bond wires," *Microwaves and RF*, Vol.36, no.6, pp.89-92, United States, June 1997.

11. Koh, L C and S Uysal, "Coplanar waveguide microwave loop filter," *Microwave and Optical Technology Letters*, Vol.16, no.1, pp.4-7, United States, September 1997.
12. Loi, K W, S Uysal and M S Leong, "Design of a wideband microstrip bowtie patch antenna," *IEE Proceedings. H, Microwaves, Antennas and Propagation*, Vol.145, no.2, pp.137-140, United Kingdom, April 1998.
13. Bin, Z and S Uysal, "An accurate design technique for microstrip edge-end-coupled filters," *Microwave and Optical Technology Letters*, Vol.18, no.4, pp. 278-280, United States, July 1998.
14. Uysal, S, M S Leong and C H Ng, "Bowtie patch antennas and simple arrays for wireless indoor communications," *IEEE Transactions on Microwave Theory and Techniques*, Vol.47, No.6, pp. 738-745, United States, May 1999.
15. Tan, K W and S Uysal, "Analysis and design of conductor-backed asymmetric coplanar waveguide lines using conformal mapping techniques and their application to end-coupled filters," *IEICE Transactions on Electronics*, Vol.E82-C, No.7, pp. 1098-1103, Japan, July 1999.
16. Lim, C and S Uysal, "Design of a broadband directional coupler using microstrip-like multilayer technology," *Microwave and Optical Technology Letters*, 23, no.4, pp.273-274, 1999.
17. Uysal S and L Lee, "Ku-band double-sided suspended substrate microstrip coupled-line bandpass filter," *IEE Electronics Letters*, 35, no.13, pp.1088-1089, 1999.
18. Wu, C H and S Uysal, "A new systematic and efficient method of analysis for conductor-backed coplanar waveguide directional couplers," *IEEE Transactions on Microwave Theory and Techniques*, Vol.47, No.7, pp. 1127-1131, United States, August 1999.
19. Lee, W F, X S Rao, C K Ong and S Uysal, "Performance evaluation of a microwave superconductor filter in a dc magnetic field," *Microwave and Optical Technology Letters*, Vol.22, No.3, pp. 192-194, United States, Aug. 1999.
20. Uysal, S, "Four-element antenna-array beam-forming network," *Microwave and Optical Technology Letters*, Vol.23, no.4, pp.207-209, United States, Nov. 1999.
21. Taassori, Mehdi, Meysam Taassori, Sadegh Niroomand, Bela Vizvari, Sener Uysal, Abdollah Hadi Vencheh, "OPAIC: An Optimization Technique to Improve Energy Consumption and Performance in Application Specific Network on Chips", *MEASUREMENT*, Vol.74, Issue:99999, pp.208-220, Oct. 2015.
22. Taassori, Mehdi, Meysam Taassori, S Uysal, "MFLP: a Low Power Encoding for on Chip Networks", Springer Science. pp.191-210, United States, Jan. 2106.
23. Taassori, Mehdi, Sadegh Niroomand, Sener Uysal, Abdollah Hadi Vencheh, Bela Vizvari, "Fuzzy-based Mapping Algorithms to Design Network-on-Chips", *Journal of Intelligent and Fuzzy Systems*, Vol.31, no.1, pp.17-43, 2016.
24. Mehdi Taassori, Sadegh Niroomand, Sener Uysal, Béla Vizvári, Abdollah Hadi-Vencheh, Optimization approaches for core mapping on Networks on Chip, *IETE Journal of research*, DOI: 10.1080/03772063.2017.1355754.
25. Mehdi Taassori, Sener Uysal, An Effective Criterion for Low Power Encoding in Networks on Chip, *Electronics World*, vol. 123, no. 1974, pp. 38-40, 2017.

26. Moein Jazayeri, Kian Jazayeri, Sener Uysal, "Adaptive photovoltaic array reconfiguration based on real cloud patterns to mitigate effects of non-uniform spatial irradiance profiles", Elsevier Solar Energy Journal, vol. 155, 2017
27. Moein Jazayeri, Kian Jazayeri, Sener Uysal, "Generation of spatially dispersed irradiance time-series based on real cloud patterns", Elsevier Solar Energy Journal, 2017.
28. Kian Jazayeri, Moein Jazayeri, Sener Uysal, "Artificial neural network-based all-sky power estimation and fault detection in photovoltaic modules," Journal of Photonics for Energy, vol. 7, no. 2, 2017.
29. Bolourchi, P., Demirel, H., & Uysal, S. (2017). Target recognition in SAR images using radial Chebyshev moments. *Signal, Image and Video Processing*, 11(6), 1033-1040.

REFEREED CONFERENCE PAPERS

1. Uysal, S and A H Aghvami, "Synthesis and design of wideband symmetrical nonuniform directional couplers for MIC applications," In IEEE MTT-S International Microwave Symposium, compiled by IEEE, pp. 587-590. New York, United States: IEEE, May 1988.
2. Uysal, S, A H Aghvami and S A Mohamed, "Microstrip channelling filters using -3 dB directional couplers," In IEE Colloquium, compiled by IEE, pp. 12/1-12/4. IEE Colloquium. London, United Kingdom: IEE, May 1989.
3. Uysal, S, A H Aghvami and S A Mohamed, "Microstrip quadruplexer using -3 dB hybrids," In 19th European Microwave Conference Proceedings, pp. 905-910. London, United Kingdom: EuMC'89-IEE, September 1989.
4. Uysal, S and J Watkins, "Novel microstrip low-pass/high-pass directional couplers/filters," In IEEE Southeastcon '90. pp. 889-893, New Orleans, United States: IEEE, April 1990.
5. Watkins, J and S Uysal, "Novel microstrip directional band-pass/band-stop couplers and filters," In IEEE MTT-S International Microwave Symposium, pp. 411-414. Dallas, United States: IEEE, May 1990.

6. Watkins, J and S Uysal, "Experimental investigation of broadband microstrip antennas," In RADAR-90, IEEE International Radar Conference, pp. 496-500. Washington DC, United States: IEEE, May 1990.
7. Uysal, S and J Watkins, "Microstrip matched filters for space applications," In ESA/ESTEC Workshop. Noordwijk, The Netherlands: ESA/ESTEC, June 1990.
8. Uysal, S and J Watkins, "0 dB band-pass coupler," In 20th European Microwave Conference Proceedings, pp. 1163-1168. Budapest, Hungary: EuMC'90-IEE, September 1990.
9. Uysal, S and J Watkins, "Microstrip matched filters for transmit/receive MIC antenna applications," In IEEE AP-S International Symposium, pp. 226-229. London, Ontario, Canada: IEEE, June 1991.
10. Uysal, S and J Watkins, "An alternative analysis for uniform coupled lines using nonuniform coupled lines synthesis and their realization as backward-wave and forward-wave couplers for MIC and MMIC applications," In 3rd ISRAMT '91. Reno, United States: University of Nevada, August 1991.
11. Uysal, S and J Watkins, "Forward-wave nonuniform microstrip couplers," In 21st European Microwave Conference Proceedings, pp. 722-727. Stuttgart, Germany: Microwave Exhibition & Publishers Ltd, September 1991
12. Uysal, S and J Watkins, "Microwave and millimetre wave monopulse comparators," In IEE Colloquium. London, United Kingdom: IEE, pp. 1-6, November 1991.
13. Uysal, S, J Watkins and C W Turner, "Sum-difference circuits using 0 dB and -3 dB co-directional couplers for hybrid microwave and MIMIC circuit applications," In IEEE MTT-S International Microwave Symposium, pp. 937-940. Albuquerque, United States: IEEE, June 1992.
14. Uysal, S and J Watkins, "Wide band beam forming networks for frequency scanned phased array," In IEEE AP-S International Symposium, Hyatt Regency, Chicago, United States: IEEE, July 1992.
15. Uysal, S and J Watkins, "Novel (- (microstrip magic-T particularly for monopulse comparators for direction finding systems," In Asia-Pacific Microwave Conference '92 Proceedings, Adelaide, Australia: APMC, August 1992.
16. Uysal, S and J Watkins, "Microstrip band-pass filters using nonuniform coupled lines," In 22nd European Microwave Conference Proceedings, Helsinki, Finland: EuMC'92-IEE, August 1992.
17. Uysal, S and P S Kooi, "Narrowband edge-coupled microstrip filter," In 24th European Microwave Conference Proceedings, Cannes, France: EuMC'94-IEE, Vol.24, Pt.1, pp. 484-486, September 1994.
18. Nelson Poh, S M and S Uysal, "-3 dB Wideband tandem microstrip directional couplers and its application to phase shifters," In MINDEF Technology Seminar, Singapore: MINDEF, 1995.

19. Uysal, S and M S Leong, "Narrow, moderate and wide bandwidth loop directional filters," In Asia-Pacific Microwave Conference '95 Proceedings, KAIST, Taejon, South Korea, Vol.1, pp. 44-47. Taejon: APMC '95, October 1995.
20. Uysal, S, "Analytical design equations for edge-coupled microstrip filters," In Asia Pacific Microwave Conference '96, New Delhi, India, pp. 77-79. New Delhi: APMC, December 1996.
21. Uysal, S, "Characteristics of CPW directional couplers with large conductor to ground plane spacing," In Asia Pacific Microwave Conference '96 Proceedings, New Delhi, India, pp. 617-619. New Delhi: APMC, December 1996.
22. Krishnan, S, S Uysal and K W Eccleston, "A new topology for CPW bandpass filters," In PIERS '97, pp. 449. Hong Kong: PIERS, January 1997.
23. Krishnan, S, S Uysal and K W Eccleston, "Hybrid-coupled coplanar waveguide filters," In The 8th MINDEF-NUS R&D Seminar, pp. 116-120. Singapore: MINDEF, 1997.
24. Uysal, S, M S Leong and P S Kooi, "Experimental determination of open-end length extension in coplanar waveguide coupled line DC blocks with finite ground planes," In Asia Pacific Microwave Conference '97 Proceedings, Vol.3, pp. 977-979. Hong Kong: APMC'97, December 1997.
25. Kuek, N S and S Uysal, "Investigation of discontinuous coplanar waveguide line with finite ground planes," In Asia Pacific Microwave Conference '97 Proceedings, Vol.3, pp. 969-972, Hong Kong: APMC'97, December 1997.
26. Krishnan, S, S Uysal and K W Eccleston, "A new topology for narrow bandwidth end-coupled CPW filters," In PIERS '97, United States, 1997.
27. Ng, C H, S Uysal and M S Leong, "Microstrip bowtie patch antenna for wireless indoor communications," In IEEE RAWCON '98, Vol. 1, pp. 205-208, United States, August 1998.
28. Quek, C K, K W Eccleston and S Uysal, "Efficient design techniques for medium bandwidth microwave amplifiers," In APCC/ICCS'98 Proceedings, 4th Asia Pacific Conference on Communication / 6th Singapore International Conference on Communication Systems '98, pp.23-27, Singapore, November 1998.
29. Wu, C H and S Uysal, "A conductor-backed CPW directional coupler with finite ground plane," In Asia Pacific Microwave Conference '98 Proceedings, Vol.2, pp. 681-683. Yokohama, Japan, December 1998.
30. Tan, K W and S Uysal, "Design of conductor-backed asymmetric CPW end-coupled filters," In Asia Pacific Microwave Conference '98 Proceedings, Vol.1, pp. 83-84. Yokohama, Japan, December 1998.
31. Uysal, S, A C Seow, "An x-band microstrip compact monopulse processor," In Asia Pacific Microwave Conference, APMC99 Proceedings, pp. 21-24, Singapore, Dec. 1999.

32. Uysal, S, A K P Loh, "Wideband beam forming network for simple scanning arrays," In Asia Pacific Microwave Conference, APMC99 Proceedings, pp. 25-28, Singapore, Dec. 1999.
33. Uysal, S, J W P Ng, "A Compact coplanar stripline lowpass filter", In Asia Pacific Microwave Conference, APMC99 Proceedings, pp. 307-310, Singapore, Dec. 1999.
34. Kumar, S P T, B Farhang-Boroujeny, S Uysal, C S Ng, "Microwave indoor radio propagation measurements and modeling at 5GHz for future wireless lan systems," In Asia Pacific Microwave Conference, APMC99 Proceedings, pp. 606-609, Singapore, Dec. 1999.
35. Uysal, S, "A double-sided suspended substrate microstrip lowpass filter", SBMO/IEEE MTT-S International Microwave and Optoelectronics Conference, IMOC'2003, Vol.1, pp. 21-23, Brazil, Sept. 2003.
36. Uysal, S, "Multilayer microstrip loop directional filter", SBMO/IEEE MTT-S International Microwave and Optoelectronics Conference, IMOC'2003, Vol.1, pp. 25-29, Brazil, Sept. 2003.
37. Konca, M, S Uysal, "Circular Multi-Directional Patch Antenna Array using a Novel Feed Structure and Equilateral Triangular Patches with Selectable Beams", MMS'2010 Mediterranean Microwave Symposium, pp. 440-443, North Cyprus, Aug. 2010.
38. Uysal, S, M Konca, H Demirel, A Hocanin, "An Integrated Homeland Security Surveillance System", MMS'2010 Mediterranean Microwave Symposium, pp. 284-287, North Cyprus, Aug. 2010.
39. Arbabi, M, M, R Abrishambaf, S Uysal, "Range Free Localization of Wireless Sensor Networks Based on Sugeno Fuzzy Inference", SENSORCOMM 2012, The Sixth International Conference on Sensor Technologies and Applications, pp. 36-41, Italy, Aug. 2012.
40. Jooshesh, A, T A Gulliver, S Uysal, "Space to Ground Optical Power Transmission", BWCCA 2012 7th International Conference on Broadband and Wireless Computing, Communication and Applications, pp. 302-307, Canada, Nov. 2012
41. Mirshahi, S, S Uysal, A Akbari, "Integration of RFID and WSN for Supply Chain Intelligence System", ECAI 2013, 5th International Conference on Electronics Computers and Artificial Intelligence, Romania, pp. 1-6, June 2013.
42. Farazandeh, F, R Abrishambaf, S Uysal, T Gomes, J Cabral, "A Hybrid Energy-Efficient Routing protocol for Wireless Sensor Networks", ECAI 2013, 5th International Conference on Electronics Computers and Artificial Intelligence, Romania, June 2013.
43. Bolourchi, P, S Uysal, "Forest Fire Detection in Wireless Sensor Network Using Fuzzy Logic", 2013 Fifth International Conference on Computational Intelligence, Communication Systems and Networks, pp. 83-87, Spain, Aug. 2013.
44. Jazayeri, M, S Uysal, K Jazayeri, "Analysis of Effects of Sun's Position in the Sky on Solar Radiation and Panel Power Outputs", IEEE AFRICON 2013, International Conference on Sustainable Engineering for a Better Future, Mauritius, Sept. 2013.
45. Jazayeri, K, S Uysal, M Jazayeri, "Determination of Power Losses in Solar Panels Using Artificial Neural Network", IEEE AFRICON 2013, International Conference on Sustainable Engineering for a Better Future, Mauritius, Sept. 2013.

46. Jazayeri, M, S Uysal, K Jazayeri, “A Case Study on Solar Data Collection and Effects of Sun`s Position in the Sky On Solar Panel Output Characteristics in Northern Cyprus”, International Conference on Renewable Energy Research and Applications, ICRERA-2013, Spain, Oct. 2013.
47. Jazayeri, M, S Uysal, K Jazayeri, S Yapici, “Experimental Analysis of Effects of Connection Type on PV System Performance”, International Conference on Renewable Energy Research and Applications, ICRERA-2013, Spain, Oct. 2013.
48. Jazayeri, K, S Uysal, M Jazayeri, “MATLAB/Simulink Based Simulation of Solar Incidence Angle and the Sun`s Position in the Sky with Respect to Observation Points on the Earth”, International Conference on Renewable Energy Research and Applications, ICRERA-2013, Spain, Oct. 2013.
49. Jazayeri, M, S Uysal, K Jazayeri, “Experimental Analysis of Effects of Installation Alignment and Solar Insolation on Power Generation by Solar Panels”, IEEE GHTC 2013, IEEE Global Humanitarian Technology Conference 2013, California, USA, Oct. 2013.
50. Moein Jazayeri, Sener Uysal, Kian Jazayeri, “Evaluation of Maximum Power Point Tracking Techniques in PV Systems Using MATLAB/Simulink”, in *Proceedings - Sixth Annual IEEE Green Technologies Conference*, Corpus Christi, TX, USA, 2014.
51. Moein Jazayeri, Sener Uysal, Kian Jazayeri, “A comparative study on different photovoltaic array topologies under partial shading conditions”, in *Proceedings - IEEE PES T&D Conference and Exposition*, Chicago, IL, USA, 2014.
52. Kian Jazayeri, Moein Jazayeri, Sener Uysal, “Comparative analysis of levenberg-marquardt and bayesian regularization backpropagation algorithms in photovoltaic power estimation using artificial neural network”, in *Proceedings - Lecture Notes in Computer Science (including subseries Lecture Notes in Artificial Intelligence and Lecture Notes in Bioinformatics)*, vol. 9728, New York City, NY, USA 2016
53. Bolourchi, P., Demirel, H., & Uysal, S. (2016, November). Continuous Moment-Based Features for Classification of Ground Vehicle SAR Images. In *Modelling Symposium (EMS)*, 2016, European (pp. 53-57). IEEE.
54. Bolourchi, P., Moradi, M., Demirel, H., & Uysal, S. (2017, April). Feature Fusion for Classification Enhancement of Ground Vehicle SAR Images. *UKSim-AMSS 19th International Conference on Modelling & Simulation*. European (pp. 111-115). I

