

CURRICULUM VITAE



A. BUTIR-BUTIR PERIBADI (<i>Personal Details</i>)			
Nama Penuh (<i>Full Name</i>)	Suhaidi Bin Shafie		Gelaran (<i>Title</i>): Assoc. Prof. Dr.
No. MyKad / No. Pasport (<i>Mykad No. / Passport No.</i>) 760823-06-5529	Warganegara (<i>Citizenship</i>) Malaysia	Bangsa (<i>Race</i>) Malay	Jantina (<i>Gender</i>) Male
Jawatan (<i>Designation</i>)	Head of Laboratory	Tarikh Lahir (<i>Date of Birth</i>)	23.8.1976

Alamat Semasa (<i>Current Address</i>)	Jabatan/Fakulti (<i>Department/Faculty</i>)	E-mel dan URL (<i>E-mail Address and URL</i>)
No. 8 Jalan BM6/3C Bandar Bukit Mahkota, 43000 Kajang, Selangor Tel: 017-2113989	Department of Electrical and Electronic Engineering, Faculty of Engineering, Universiti Putra Malaysia, 43400 UPM Serdang, Selangor Tel: 03-89466307 Fax: 03-89466327	E-mail: suhaidi@upm.edu.my URL: Web (ITMA): http://www.itma.upm.edu.my/fdIBM13#fdIBM13 Web (Eng): http://www.eng.upm.edu.my Researchgate: http://www.researchgate.net/profile/Suhaidi_Shafie Google Scholar: http://scholar.google.com/citations?user=6Sg1exUAAAAJ&hl=en

B. KELAYAKAN AKADEMIK (<i>Academic Qualification</i>)			
Nama Sijil / Kelayakan (<i>Certificate / Qualification obtained</i>)	Nama Sekolah Institusi (<i>Name of School / Institution</i>)	Tahun (<i>Year obtained</i>)	Bidang pengkhususan (<i>Area of Specialization</i>)
Bachelor of Engineering	University of the Ryukyus	2000	Electrical and Electronics Engineering
Master of Engineering	Tokyo University of Agri. and Technology	2005	Electrical and Electronics Engineering
Doctor of Engineering	Shizuoka University	2008	Nanovision Engineering

C. KEMAHIRAN BAHASA (<i>Language Proficiency</i>)					
Bahasa / <i>Language</i>	Lemah <i>Poor (1)</i>	Sederhana <i>Moderate (2)</i>	Baik <i>Good (3)</i>	Amat Baik <i>Very good (4)</i>	Cemerlang <i>Excellent (5)</i>
English					√
Bahasa Melayu					√
Chinese					
Lain-lain (<i>other</i>):japanese					√

D. PENGALAMAN SAINTIFIK DAN PENGKHUSUSAN (<i>Scientific experience and Specialisation</i>)				
<i>Organization</i>	<i>Position</i>	<i>Start Date</i>	<i>End Date</i>	<i>Expertise</i>
Institute of Advanced Technology, UPM	Research Associate	Nov. 2008	June 2015	Electronics
MIMOS Berhad	Visiting Academic	April 2014	March 2015	IC Design
Universiti Teknologi Petronas	Visiting Lecturer	July 2015	Nov. 2015	IC Design
Universiti Malaysia Perlis	Research Associate	Jan. 2017	Dec. 2018	Electronics Devices

E. PEKERJAAN (<i>Employment</i>)				
<i>Majikan / Employer</i>	<i>Jawatan / Designation</i>	<i>Jabatan / Department</i>	<i>Tarikh lantikan / Start Date</i>	<i>Tarikh tamat / Date Ended</i>
Alps Elektrik (M) Sdn. Bhd.	Engineer	Tuner Design	24.4.2000	6.5.2002
Universiti Putra Malaysia	Tutor	Engineering	7.5.2002	12.10.2008
Universiti Putra Malaysia	Senior Lecturer	Engineering	13.10.2008	31.10.2014
Universiti Putra Malaysia	Assoc. professor	Engineering	1.11.2014	Now
Universiti Putra Malaysia	Head of Laboratory (Functional Devices Laboratory)	Institute of Advanced Technology, UPM	1.7.2015	Now

F. ANUGERAH DAN HADIAH (<i>Honours and Awards</i>)				
<i>Name of awards</i>	<i>Title</i>	<i>Award Authority</i>	<i>Award Type</i>	<i>Year</i>
<i>Academic Awards</i>	Anugerah kecemerlangan dalam pengajaran tahun 2009	Fakulti kejuruteraan UPM	Certificate	2009
	Anugerah kecemerlangan dalam pengajaran tahun 2010	Fakulti kejuruteraan UPM	Certificate	2010
	Anugerah kecemerlangan dalam pengajaran tahun 2011	Fakulti kejuruteraan UPM	Certificate	2011

	Anugerah kecemerlangan dalam pengajaran tahun 2012	Fakulti kejuruteraan UPM	Certificate	2012
	Perkhidmatan Cemerlang	UPM	Certificate	2011
	Anugerah Perkhidmatan Cemerlang	UPM	Certificate & monetary	2012
	Perkhidmatan Cemerlang	UPM	Certificate	2013
	Perkhidmatan Cemerlang	UPM	Certificate	2014
	Perkhidmatan Cemerlang	UPM	Certificate	2015
	Perkhidmatan Cemerlang	UPM	Certificate	2016
	Anugerah Perkhidmatan Cemerlang	UPM	Certificate & monetary	2017
	Gold Medal (Co-researcher)	Pameran Reka Cipta Penyelidikan dan Inovasi (PRPI 2010)	Certificate	2010
	Malaysian Innovative Product Award (Co-researcher)	International Invention, Innovation and Technology Exhibition (ITEX 2012)	Certificate	2012
<i>Non-Academic Awards</i>	IEEE Senior Member	IEEE	Membership	2015
	Technology Specialist (TS)	MBOT	Membership	2018
<i>Awards of Merit</i>				

G. SENARAI PENERBITAN (Sila masukan nama pengarang, tajuk, nama jurnal, jilid, muka surat dan tahun diterbitkan) (*List of publications – author (s), title, journal, volume, page and year published*)

<i>Journal</i>	<ol style="list-style-type: none"> Suhaidi Shafie, Shoji Kawahito, “A Wide Dynamic Range CMOS Image Sensor with Dual Charge Storage and a Multiple Sampling Technique” Technical Report of the Graduate School of Electronic Science and Technology Shizuoka University, Vol. 28, pp.47-51, 2007. (Non-citation index) Yukihiro Ohta, Park Jong Ho, Keigo Isobe, Suhaidi bin Shafie, Mitsuhiro Mase, Shoji Kawahito, Yasuo Wakamori, Takashi Mizota, Norihito Sawamura and Masaaki Sasaki, “Wide Dynamic Range Image Synthesis and Contrast Compression Using
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	<p>Multi Capture with Different Exposure Time in One Frame” Technical Report of the Hamamatsu Industrial Research Institute of Shizuoka Prefecture, No. 17, pp. 6-9, Aug. 2007. (Non-citation index)</p> <ol style="list-style-type: none"> 3. Suhaidi Shafie, Shoji Kawahito, and Shinya Itoh, “A Dynamic Range Expansion Technique for CMOS Image Sensors with Dual Charge Storage in a Pixel and Multiple Sampling” Sensors, Vol. 8, pp. 1915 - 1926, Mar. 2008. (ISI, IF: 1.870, Q1) 4. Suhaidi Shafie, Shoji Kawahito, Hyung-June Yoon and Shinya Itoh, “Dynamic Range Expansion Technique Using Dual Charge Storage in a CMOS APS and Multiple Exposures for Reduced Motion Blur” The Journal of the Institute of Image Information and Television Engineers Japan, Vol. 62, No. 12, pp. 2037-2044, Dec. 2008 (SCOPUS) 5. Izhal Abdul Halin, Wan Zuha Wan Hasan, and Suhaidi Shafie, “Soil Moisture Sensor and Read-out Circuit Topology for Large Array Deployment” IEICE Electronics Express, Vol. 6, No. 17, pp. 1234-1239, Sept. 2009. . (ISI, IF: 0.482) 6. Suhaidi Shafie, Shoji Kawahito, Izhal Abdul Halin and Wan Zuha Wan Hasan, “Non-linearity in Wide Dynamic Range CMOS Image Sensors Utilizing a Partial Charge Transfer Technique” Sensors, Vol.9, pp.9452-9467, Dec. 2009. (ISI, IF: 1.870, Q1) 7. Salsabila Ahmad, Mohd Zainal Abidin Ab Kadir, Suhaidi Shafie, “Current perspective of the renewable energy development in Malaysia” Renewable and Sustainable Energy Reviews, vol. 15, No. 2, pp 897-904. Dec. 2011. (ISI, IF: 4.842, Q1) 8. Wan Zuha Wan Hassan, Mohammad Hamiruce Marhaban, Suhaidi Shafie, ‘Fire Fighting Robot” Journal of Japan Society of Applied Electromagnetic and Mechanics, Vol. 19, pp250-253, 2011 9. Izhal Abdul Halin, Ishak Bin Aris, Maryam Isa, Suhaidi Shafie, “Selection of amplifier for optimized charge transfer in active pixel CMOS time of flight (TOF) image sensors” IEICE Electronics Express, Vol 8, No. 22, pp1913-1999, Nov. 2011. (ISI, IF:0.425, Q4) 10. Norhisam Mison, Mohammad Hamiruce Marhaban, Nashiren Farzilah Mailah, Suhaidi Shafie, “A Mobile Ferromagnetic Shape Detection Sensor Using a Hall Sensor Array and Magnetic Imaging” Sensors, Vol. 11, pp10474-10489, Nov. 2011. (ISI, IF:1.771, Q1) 11. Meftah Salem M. Alfatni , Abd Rashid Mohamed Shariff, Mohd Zaid Abdullah, Mohammad Hamiruce Marhaban, Suhaidi B. Shafie, Osama M. Ben Saeed, “Oil Palm Fruit Ripeness Grading System Based on Basic Gray Level Aura Matrix Feature Extraction and Support Vector Machine, K Nearest Neighbourhood and Artificial Neural Network Supervised Machine Learning” Adv. Sci. Lett., Vol.19, pp. 2612-2614, 2013 (SCOPUS) 12. Salsabila Ahmad, Suhaidi Shafie, Mohd Zainal Abidin Ab Kadir, “Power feasibility of a Low Power Consumption Solar Tracker” Procedia Environmental Sciences, Vol. 17 pp. 494 – 502, 2013 (SCOPUS) 13. De Xing Lioe, Suhaidi Shafie, Harikrishnan Ramiah, Nasri Sulaiman and Izhal Abdul Halin, “Low Power Transmitter for Wireless Capsule Endoscope” Journal of Physics: Conference Series, Vol. 423, No. 012038 PP 1-6, 2013 (SCOPUS) 14. M.H. Chong, H.Jaafar, W.Z.W.Hasan, S.Shafie, M.N.Hamidun, M.M. Isa and A.F. Hawary “An Experiment of Thick Film Force Sensor using MEMS Simulation Software” International Journal Of Theoretical And Applied Information Technology, Vol. 47, No.3, pp. 902-910, Jan. 2013. (SCOPUS) 15. Alfatni, Meftah Salem M.; Shariff, Abdul Rashid Mohamed; Abdullah, Mohd Zaid; Marhaban, Mohd Hamiruce; Shafie, Suhaidi B.; Saeed, Osama M. Ben “Recognition System of Oil Palm Fruit Bunch Types Based on Texture Feature and Image Processing Techniques” Advanced Science Letters, Vol. 19, No. 12, pp. 3441-
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3444, Dec. 2013. (SCOPUS)

16. Shayestegan, M., Marhaban, M.H., **Shafie, S.**, Abdul Sattar, “Fuzzy Logic Based Robot Navigation in Static Environment with Dead Cycle Obstacles” International Journal of Robotic and Automation, Vol. 28, No. 4, pp. 1-10, 2013. (ISI, IF:0.206)
17. Salsabila Ahmad, **Suhaidi Shafie**, Mohd Zainal Abidin Ab Kadir, Noor Syafawati Ahmad, “ON the Effectiveness of Time and Date Based Sun Positioning solar Collector in Tropical Climate” Renewable and Sustainable Energy Reviews, Vol. 28 pp. 635–642, Dec. 2013. (ISI, IF: 4.842, Q1)
18. Amimul Ahsan, Nur Syuhada, Eden Jolhi, Kh. M. Darain, Md. K. Rowshon, Md. Jakariya, Suhaidi Shafie and Abdul H. Ghazali, “Assesment of Distillate Water Quality Parameters Produced by Solar Still for Potable Usage” Fresenius Environmental Bulletin, Vol. 23, No. 3a, pp. 859-866, Mar. 2014. (ISI, IF: 0.716)
19. Mohammad Reza Shokrani, Mohd Nizar B Hamidon, Noor Ain Kamsani Fakhru Zaman Rokhani, **Suhaidi Bin Shafie**, “An RF Energy Harvester System using UHF Micropower CMOS Rectifier based on a Diode Connected CMOS Transistor” Scientific World Journal, Vol. 2014, pp1-11, Mar. 2014. (ISI, IF: 1.730, Q1)
20. **S. Shafie** 1, F. A. M. Fodzi , L. Q. Tung, D. X. Lioe , I. A. Halin , W. Z. W. Hasan , H. Jaafar, “Development of CMOS Imager Block for Capsule Endoscope”, Journal of Physics: Conference Series, Vol. 495, No. 012005 PP 1-6, 2014 (SCOPUS)
21. Lioe De Xing, **Suhaidi Shafie**, Harikrishnan Ramiah, and Tan Gim Heng, “Low Power Up-Conversion Mixer for Medical Remote Sensing” Scientific World Journal, Vol. 2014, Article ID 923893, pp1-5, 2014. (ISI, IF: 1.730, Q1)
22. Nima Khoshsirar, Nurul Amziah Md Yunus, Mohd Nizar hamidon, **Suhaidi Shafie**, Nowshad Amin, “Analysis of Absorber and Buffer Layer Band Gap Grading on CIGS Thin Film Solar Cell Performance Analysis” Pertanika Journal of Science and Technology, (SCOPUS)
23. Shahrooz Hajjighorbani, M. A. M. Radzi, M. Z. A. Ab Kadir, **S. Shafie**, Razieh Khanaki and M. R. Maghami , “Evaluation of Fuzzy Logic Subsets Effects on Maximum Power Point Tracking for Photovoltaic System”, International Journal of Photoenergy, Vol. 2014, No. 719126, pp. 1-13. (SCOPUS)
24. H Jaafar, KS Beh, NAM Yunus, WZW Hasan, **S Shafie**, O Sidek, “A comprehensive study on RF MEMS switch” Microsystem Technologies, Vol. 2014, DOI 10.1007/s00542-014-2276-7, pp. 1-13 (ISI, IF: 0.952, Q3)
25. Rasoul Garmabdari, **Suhaidi Shafie**, Alireza Garmabdari, Haslina Jaafar, Aisa Khoushniat Aram , “Labview Based Flow Rate Monitoring And Measurement Algorithm For Rotary Encoder”, Journal of Engineering Science and Technology, Special Issue on Applied Engineering and Sciences, October (2014) 66 - 75 (SCOPUS)
26. Haslina Jaafar, M. Hidayat Zabidi, Lam Phooi Shan, Azura Che Soh and **Suhaidi Shafie**, “Smart Guidance Parking System Using Modified Dijkstra Algorithm” Journal of Engineering Science and Technology, Special Issue on Applied Engineering and Sciences, October (2014) 132 - 141 (SCOPUS)
27. MSM Alftani, ARM Shariff, MH Marhaban, **SB Shafie**, OM Ben Saaed, “Oil palm fruit maturity classification based on texture feature extraction of fruit thorns and supervised machine learning classifiers using image processing technique, Acta horticulturae (SCOPUS)
28. N Khoshsirar, NAM Yunus, MN Hamidon, **S Shafie**, N Amin, “Analysis of absorber layer properties effect on CIGS solar cell performance using SCAPS”, Optik-International Journal for Light and Electron Optics 126 (7), 681-686 (2015) (ISI, IF:0.769, Q3)
29. Mohammad Kazem Chamran and **Suhaidi Shafie**, “Non-Invasive Air-Coupled V-Type Ultrasonic Leak Detection System”, Journal of Purity, Utility Reaction and

Environment, Vol.4, No.3, pp. 99-107 (2015) ([Non-citation index](#))

30. Rasoul Garmabdari, **Suhaidi Shafie**, Wan Zuha Wan Hassan, Alireza Garmabdari, "Study on the effectiveness of dual complementary Hall-effect sensors in water flow measurement for reducing magnetic disturbance", Flow Measurement and Instrumentation, Vol 45, pp. 280–287 (2015) ([ISI, IF:1.040, Q3](#))
31. Ahmad H. Sabry, Wan Zuha Wan Hasan, Mohd Zainal, Mohd. Amran, **Suhaidi B. Shafie**, "DC Loads Matching Technique as an alternative to AC inverter in residential Solar System Application Evaluation and Comparison" Applied Mechanics and Materials, Vol. 785, pp. 225-230 (2015) ([SCOPUS](#))
32. Ahmad H. Sabry, Wan Zuha Wan Hasan, Mohd Zainal, Mohd. Amran, **Suhaidi B. Shafie**, "Alternative Solar-Battery Charge Controller to Improve System Efficiency, Applied Mechanics and Materials Vol. 785, pp. 156-161 (2015) ([SCOPUS](#))
33. S Hajighorbani, MAM Radzi, MZAA Kadir, **S Shafie**, "Dual Search Maximum Power Point (DSMPP) Algorithm Based on Mathematical Analysis under Shaded Conditions" Energies 8 (10), 12116-12146 (2015) ([ISI, IF: 2.072, Q1](#))
34. S Hajighorbani, MA Mohd Radzi, MZA Ab Kadir, **S Shafie**, " Implementing a Novel Hybrid Maximum Power Point Tracking Technique in DSP via Simulink/MATLAB under Partially Shaded Conditions" Energies 9 (2), 85 (2016) ([ISI, IF: 2.072, Q1](#))
35. Julie R. Ruslia, Noor Shelida Salleh, Masnita M. Isa, KY Tan, Suhaidi Shafie, "Analysis of Power Consumption SAR-ADC Dynamic Comparator" JurnalTeknologi, vol. 78 no. 5–9 (2016) pp. 1–6 ([SCOPUS](#))
36. Bilal I. Abdulrazzaq, Izhal Abdul Halin, Shoji Kawahito, Suhaidi Shafie, Nurul Amziah Md. Yunus, "A review on high-resolution CMOS delay lines: towards sub-picosecond jitter performance", SpringerPlus 5(1), December 2016 ([ISI, IF: 0.982, Q3](#))
37. Bilal I Abdulrazzaq, Omar J Ibrahim, Shoji Kawahito, Roslina M Sidek, Suhaidi Shafie, Nurul Amziah Md Yunus, Lini Lee, Izhal Abdul Halin, "Design of a Sub-Picosecond Jitter with Adjustable-Range CMOS Delay-Locked Loop for High-Speed and Low-Power Applications" Sensors 16 (10), 1593 ([ISI, IF: 2.033, Q1](#))
38. Ehsan Mohsin, Nashiren Farzilah Binti Mailah, Amran Mohd Radzi, Suhaidi Bin Shafie, "Comparison of developed FLC and P&O MPPT algorithms for improving PV system performance at variable irradiation conditions, World Journal of Engineering, Oct 2016, ([SCOPUS](#))
39. Shahrooz Hajighorbani · mohd amran mohd radzi · Mohd Zainal Abidin Ab Kadir · Suhaidi Bin Shafie, "DC-DC converter for photovoltaic powered battery charger" World Journal of Engineering, Oct 2016, ([SCOPUS](#))
40. Salsabila Ahmad, Muhammad Irwanto Misrun, Muzamir Isa, Suhaidi Shafie, "Potential solar cells material using Chlorophyll-Ferrocene complex" International Journal Of Advanced And Applied Sciences, Volume 2, Issue 12, Pages 36-39 ([Non-citation index](#))
41. Samaila Buda, Suhaidi Shafie, Suraya Abdul Rashid, Haslina Jaafar, Ali Khalifa, "Response surface modeling of photogenerated charge collection of silver-based plasmonic dye-sensitized solar cell using central composite design experiments", Results in Physics 7 (2017) 493–497 ([ISI, IF: 1.337, Q2](#))
42. M.H.M. Sidek, N. Azis, W.Z.W. Hasan, M.Z.A. Ab Kadir, S. Shafie, M.A.M. Radzi, "Automated positioning dual-axis solar tracking system with precision elevation and azimuth angle control", Energy 124 (2017) 160-170 ([ISI, IF: 4.52, Q1](#))
43. Samaila Buda, Suhaidi Shafie, Suraya Abdul Rashid, Haslina Jaafar, N.F.M. Sharif, "Enhanced visible light absorption and reduced charge recombination in AgNP plasmonic photoelectrochemical cell" Results in Physics 7 (2017) 2311–2316 ([ISI, IF:](#)

1.337, Q2)

44. Buda Samaila¹, Suhaidi Shafie, Suraya Abdul Rashid, Haslina Jafaar and Ali Khalifa, Statistical Optimisation of Process Parameters on the Efficiency of N-TiO₂ Dye Sensitised Solar Cell Using Response Surface Methodology (RSM) , *Pertanika J. Sci. & Technol.* 25 (S): 111 - 118 (2017) (SCOPUS)
45. MN Mustafa, S Shafie, Z Zainal, Y Sulaiman, " A Novel Poly (3, 4-ethylenedioxythiophene)-graphene Oxide/Titanium Dioxide Composites Counter Electrode for Dye-Sensitized Solar Cell", *Journal of Nanomaterials* 2017 (ISI, Q1)
46. S Shafie, HS Shihab, F Ahmad, AR Ramli, " Zero-Padding in DWT Satellite Image Compression", *PERTANIKA JOURNAL OF SCIENCE AND TECHNOLOGY* 25, 205-213 (SCOPUS)
47. MK Hassan, NFH Eko, S Shafie, " Tuberculosis Bacteria Counting Using Watershed Segmentation Technique", *PERTANIKA JOURNAL OF SCIENCE AND TECHNOLOGY* 25, 275-282 (SCOPUS)
48. CH Ng, HN Lim, S Hayase, Z Zainal, S Shafie, NM Huang, " Capacitive Performance of Graphene-based Asymmetric Supercapacitor", *Electrochimica Acta* 229, 173-182 (ISI, Q1)
49. AH Sabry, WZ Hasan, MZA Ab Kadir, MA Radzi, S Shafie, "Photovoltaic-Powered Smart Home System with Direct Current-Environment", *Journal of Computational and Theoretical Nanoscience* 14 (9), 4158-4173 (SCOPUS)
50. AH Sabry, WZW Hasan, MZAA Kadir, MAM Radzi, S Shafie, " DC-based smart PV-powered home energy management system based on voltage matching and RF module", *PloS one* 12 (9), e0185012 (ISI, Q1)
51. HS Shihab, S Shafie, AR Ramli, F Ahmad, " Enhancement of Satellite Image Compression Using a Hybrid (DWT–DCT) Algorithm", *Sensing and Imaging* 18 (1), 30 (SCOPUS)
52. OID Bashi, WZ Hasan, N Azis, S Shafie, H Wagatsuma, " Unmanned Aerial Vehicle Quadcopter: A Review", *Journal of Computational and Theoretical Nanoscience* 14 (12), 5663-5675 (SCOPUS)
53. MN Mustafa, S Shafie, Z Zainal, Y Sulaiman, " Poly (3, 4-ethylenedioxythiophene) doped with various carbon-based materials as counter electrodes for dye sensitized solar cells" , *Materials & Design* 136, 249-257 (ISI, Q1)
54. Siti Nur Fatin Zuikafly, Ali Khalifa, Fauzan Ahmad, Suhaidi Shafie, Sulaiman Wadi Harun., Conductive graphene as passive saturable absorber with high instantaneous peak power and pulse energy in Q-switched regime, *Results in Physics*, Volume 9, 2018, Pages 371-375, (ISI, IF: 1.337, Q2)
55. AH Sabry, WZW Hasan, MZAA Kadir, MAM Radzi, S Shafie, Wireless Monitoring Prototype for Photovoltaic Parameters, *Indonesian Journal of Electrical Engineering and Computer Science* 11 (1) (ISI, Q1)
56. YH Sabri, WZW Hasan, S Shafie, MAM Radzi, AH Sabry, Daily Harvested Energy of Cadmium Telluride Thin Film Photovoltaic, *Indonesian Journal of Electrical Engineering and Computer Science* 11 (1) (ISI, Q1)
57. CH Ng, HN Lim, S Hayase, Z Zainal, S Shafie, NM Huang, Effects of Temperature on Electrochemical Properties of Bismuth Oxide/Manganese Oxide Pseudocapacitor, *Industrial & Engineering Chemistry Research* 57 (6), 2146-2154 (ISI, Q1)
58. AH Sabry, WZW Hasan, MZAA Kadir, MAM Radzi, S Shafie, Field data-based mathematical modeling by Bode equations and vector fitting algorithm for renewable energy applications, *PloS one* 13 (1), e0191478 (ISI, Q1)
59. CH Ng, HN Lim, S Hayase, Z Zainal, S Shafie, HW Lee, NM Huang, Cesium Lead Halide Inorganic-Based Perovskite-Sensitized Solar Cell for Photo-Supercapacitor

	Application Under High Humidity Condition, ACS Applied Energy Materials (ISI , Q1)
<i>Books/Monographs</i>	1. Proceeding of 2009 IEEE Student Conference on Research and Development ISBN:978-1-4244-5187-6
<i>Chapter in book</i>	1. Recent Trends in Physics of Material Science and Technology, 111-122, Low Power Transmitter for Capsule Endoscope
<i>Proceedings</i>	<ol style="list-style-type: none"> 1. Shoji Kawahito, Jong Ho Park, Keigo Isobe, Suhaidi Shafie, Tetsuya Iida and Takashi Mizota, "A CMOS Image Sensor Integrating Column-Parallel Cyclic ADCs with On-Chip Digital Error-Correction Circuits", in Proc. of International Solid-State Circuit Conference, 2008, Vol. 51, pp. 56-57. 2. Suhaidi Shafie and Shoji Kawahito, "A Wide Dynamic Range CMOS Image Sensor with Dual Charge Storage in a Pixel and a Multiple Sampling Technique", in Proc. of SPIE IS&T, 2008, Vol. 6816-5, pp. 1-9. 3. Suhaidi Shafie and Shoji Kawahito, "A Wide Dynamic Range CMOS Image Sensor with Dual Charge Storage in a Pixel and a Multiple Sampling Technique", in Proc. of The 6th International Conference on Global Research and Education, 2007, pp. 1046-1055. 4. Suhaidi Shafie, S. Kawahito, "A Wide Dynamic Range CMOS Image Sensor with Gated Charge Storage and a Multiple Sampling Technique", in Proc. of IEEE Sensors, 2006, pp. 404-407. 5. J-H. Park, S. Kawahito, K. Isobe, S. Suhaidi, T. Iida and T. Mizota, "A CMOS Image Sensor Integrating 14b Column Parallel Cyclic ADCs with On-Chip Digital Error Correction Circuits", in Proc. of Institute of Television Engineer of Japan Technical Report, 2008, Vol. 32, No. 19, pp. 27 – 30. 6. Suhaidi Shafie, Shinya Ito and Shoji Kawahito, "Dynamic Range Expansion Technique of CMOS Image Sensor with Dual Charge Storage in a Pixel and Multiples Exposures for Reduced Motion Blur", in Proc. of Institute of Television Engineer of Japan Technical Report, 2007, Vol. 31, No. 60, pp. 5 – 8. 7. Suhaidi Shafie and Shoji Kawahito, "A Wide Dynamic Range CMOS Image Sensor with Dual Charge Storage in a pixel and a Multiple Sampling Technique", in Proc. of Institute of Television Engineer of Japan Technical Report, 2007, Vol. 31, No. 3, pp. 13 – 16. 8. Suhaidi Shafie, Akira Kojima, Bernard Gelloz, Nobuyoshi Koshida, "Photoconduction effects in nanocrystalline silicon with a tailored band-gap profile," in Proc. of Applied Physics Conference, 2005, Vol. 52, No. 3, pp. 1638. 9. Amad-ud-Din, Izhal Abdul Halin and Suhaidi B. Shafie, "A Review on Solid State Time of Flight TOF Range Image Sensors," in Proc. of IEEE Student Conference on Research and Development, 2009, C-13. 10. Lioe De Xing, Suhaidi Shafie, Izhal Abdul Halin and S. S. Jamuar, "Design of Front End of a RF Receiver," in Proc. of IEEE Student Conference on Research and Development, 2009, F-11. 11. Izhal Abdul Halin, Suhaidi Shafie, Wan Zuha Wn Hassan, "Photo Charge Transfer Efficiency of CMOS Amplifiers for Time of Flight (TOF) Range Imaging", in Proc. of World Engineering Congress, Conference on Electrical and Electronic Technology, 2010, pp. 294-299. 12. Lioe De Xing, Suhaidi Shafie, "Review of Capsule Endoscopes" in Proc. of Asia Pacific Symposium on Applied Electromagnetics and Mechanics, 2010, pp. 581-585. 13. Mohd Hanif Mohamad Zaini, Suhaidi Shafie, Mohammad Hamiruce Marhaban, Wan

	<p>Zuha Wn Hassan, "PID Controller Implementation with Rotary Encoder" in Proc. of Asia Pacific Symposium on Applied Electromagnetics and Mechanics, 2010, pp. 596-600.</p> <p>14. Wan Zuha Wn Hassan, Mohammad Hamiruce Marhaban, Suhaidi Shafie, "Semi-auto Mobile Robot Using Interface Free Controller(IFC) for Robocon 2010" in Proc. of Asia Pacific Symposium on Applied Electromagnetics and Mechanics, 2010, pp. 601-604.</p> <p>15. Wan Zuha Wn Hassan, Mohammad Hamiruce Marhaban, Suhaidi Shafie, "Fire Fighting Robot" in Proc. of Asia Pacific Symposium on Applied Electromagnetics and Mechanics, 2010, pp. 605-609.</p> <p>16. Lioe De Xing, Suhaidi Shafie, Harikrishnan Ramiah, "Low Power BPSK Modulator for the Application of Capsule Endoscope" in Proc. of International Conference on Modeling, Simulation and Applied Optimization, 2011, pp. 1-4.</p> <p>17. Tung Li Qian, Suhaidi Shafie, M. Iqbal Saripan, "A Local Tone Mapping Operator for High Dynamic Range Images" in Proc. of International Conference on Modeling, Simulation and Applied Optimization, 2011, pp.1-6.</p> <p>18. Suhaidi Shafie, Lim Chee Weh, Izhal Abdul Halin, Maryam Isa, Wan Zuha Wn Hassan, "Design and Development of LED Driver for Low Power Traffic Signage" in Proc. of Regional Symposium on Engineering and Technology, 2011, pp. 349-354.</p> <p>19. Tung Li Qian, Suhaidi Shafie, M. Iqbal Saripan, "A New Technique to Reproduced High-Dynamic- Range Images for Low-Dynamic-Range Display" in Proc. of IEEE International Conference on Signal and Image Processing Applications, 2011, pp399-403.</p> <p>20. Lioe De Xing, Suhaidi Shafie, Harikrishnan Ramiah, "Low Power Modulator for the Application of Capsule Endoscope" in Proc. of Regional symposium on Microelectronics, 2011, pp. 247-250.</p> <p>21. Wan Zuha Wn Hassan, Izhal Abdul Halin, Suhaidi Shafie, Masuri Othman, "An efficient diagnosis march-based algorithm for coupling faults in SRAM" in Proc. of IEEE Regional symposium on Microelectronics, 2011, Kota Kinabalu, Malaysia, pp274-277</p> <p>22. Rasoul Garmabdari, Suhaidi Shafie and Maryam Mohd Isa, "Sensory System for the Electronic Water Meter", in Proc. of IEEE International Circuit and System Conference, 2012, pp. 223-226.</p> <p>23. Lioe De Xing, Suhaidi Shafie, Harikrishnan Ramiah, Nasri Sulaiman," Front End of Low Power Transmitter for Wireless Capsule Endoscope", in Proc. of IEEE International Circuit and System Conference, 2012, pp. 223-226.</p> <p>24. Salsabila Ahmad, Suhaidi Shafie, Mohd Zainal Abidin ab kadir, "A High Power Generation, Low Power Consumption Solar Tracker" in Proc. of IEEE PECon, 2012, pp. 452-455.</p> <p>25. Rasoul Garmabdari, Suhaidi Shafie, Maryam Mohd Isa and Alireza Garmabdari, "Measurement Technique for Bidirectional Four Sensor Rotary Encoder", in Proc. of IEEE International Conference on Smart Instrumentation, Measurement and Applications, 2013, pp. 150-154.</p> <p>26. Mohammad Kazem Chamran, Suhaidi Shafie, "Non-invasive Approach for Domestic Pipeline Monitoring and Corrosion Detection", in Proc. of IEEE International Conference on Smart Instrumentation, Measurement and Applications, 2013, pp. 158-163.</p> <p>27. Rasoul Garmabdari, Suhaidi Shafie, Alireza Garmabdari, Haslina Jaafar, "Labview Based Monitoring Algorithm for Rotary Encoder", in Proc. of International Symposium on Applied Engineering and Science, 2013, Paper ID 024.</p>
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28. Mohammad Kazem Chamran and **Suhaidi Shafie**, “Green Charger by Conservation of Momentum”, in Proc. of International Symposium on Applied Engineering and Science, 2013, Paper ID 076.
29. Haslina Jaafar, M. Hidayat Zabidi, Lam Phooi Shan, Azura Che Soh and **Suhaidi Shafie**, “Smart Guidance Parking System Using Modified Dijkstra Algorithm” in Proc. of International Symposium on Applied Engineering and Science, 2013, Paper ID 099.
30. Nima Khoshsirar, Nurul Amziah Md Yunus, Mohd Nizar Hamidon, **Suhaidi Shafie**, and Nowshad Amin, “Optimization of CIGS Thin Film Solar Cells via Numerical Simulation”, in Proc. of International Symposium on Applied Engineering and Science, 2013, Paper ID 074.
31. MSM Alfatni, ARM Shariff, MZ Abdullah, MH Marhaban, **SB Shafie**, “Oil palm fresh fruit bunch ripeness classification based on rule-based expert system of ROI image processing technique results, IOP Conference Series: Earth and Environmental Science 20 (1), 012018
32. MHM Sidek, WZW Hasan, MZA Ab Kadir, **S Shafie**, MAM Radzi, “GPS based portable dual-axis solar tracking system using astronomical equation” Power and Energy (PECon), 2014 IEEE International Conference on, 245-249
33. S Hajjghorbani, MAM Radzi, MZA Ab Kadir, **S Shafie**, “Novel hybrid maximum power point tracking algorithm for PV systems under partially shaded conditions”, Control Conference (ASCC), 2015 10th Asian, 1-6
34. AH Sabry, WZW Hasan, MZA Kadir, MAM Radzi, **S Shafie**, “Power consumption and size minimization of a wireless sensor node in automation system application”, Micro and Nanoelectronics (RSM), 2015 IEEE Regional Symposium on, 1-4
35. BI Abdulrazzaq, IA Halin, RM Sidek, **S Shafie**, NAM Yunus, S Kawahito, “Sub-picosecond jitter resolution wide range digital delay line for SoC integration”, Circuits and Systems Symposium (ICSyS), 2015 IEEE International, 44-48
36. DNN Talib, **S Shafie**, MN Hamidon, F Ahmad, “An improved readout topology of resistive sensor array for reduced measurement error”, Circuits and Systems Symposium (ICSyS), 2015 IEEE International, 96-99
37. Buda Samaila, Suhaidi Shafie, Suraya Abdul Rashid, Haslina Jaafar, “Improved Efficiency of Dye sensitized Solar Cell” Workshop on Advanced material and Nanotechnology (WAMN) 2015, pp. 51-52
38. A Khalifa, S Shafie, WZW Hasan, HN Lim, M Rusop, B Samaila, Electrical properties of graphene film for counter electrode in dye sensitized solar cells, AIP Conference Proceedings 1963 (1), 020006
39. WC Yew, S Shafie, IA Halin, RM Sidek, Timing generator for 120fps CMOS image sensors on 0.13 μm CMOS technology, Timing generator for 120fps CMOS image sensors on 0.13 μm CMOS technology
40. HK Hameed, WZW Hasan, S Shafie, SA Ahmad, H Jaafar, An amplitude independent muscle activity detection algorithm based on adaptive zero crossing technique and mean instantaneous frequency of the sEMG signal, Micro and Nanoelectronics (RSM), 2017 IEEE Regional Symposium on, 183-186
41. MR Ariffin, S Shafie, WZW Hassan, N Azis, ME Ya'acob, Conceptual design of hybrid photovoltaic-thermoelectric generator (PV/TEG) for Automated Greenhouse system, Research and Development (SCOREd), 2017 IEEE 15th Student Conference on, 309-314

<i>Other publications</i>	<p>Filing</p> <p>Intellectual Property (Copyright) - Real Time Oil Palm Fruit Grading System</p> <p>Intellectual Property (Patent Application 2010700069 Malaysia) - Fruit Ripeness Grading System</p> <p>Intellectual Property (Patent Application PCT/MY2011/000202 PCT) - Fruit Ripeness Grading System</p> <p>Intellectual Property (Patent Application 1301001419 Thailand) - Fruit Ripeness Grading System</p> <p>Intellectual Property (Patent Application W00201301251 Indonesia) - Fruit Ripeness Grading System</p> <p>Intellectual Property (Patent Application BR112013006568.0 Brazil) - Fruit Ripeness Grading System</p> <p>Intellectual Property (Patent Application Malaysia PI 2013701144) - Automatic Dual Axis Solar Tracking Apparatus, System And Method Thereof</p> <p>Intellectual Property (Patent Application Malaysia PI 2013702167) - Apparatus and Method for Measuring Flow rate of Fluid</p>

H. PROJEK PENYELIDIKAN TERDAHULU <i>(Past Research Project)</i>					
<i>Project No.</i>	<i>Project Title</i>	<i>Role</i>	<i>Year</i>	<i>Source of fund</i>	<i>Status</i>
05-01-09-0632RU	Optimizing the quality of wide dynamic range image utilizing the image information synthesis techniques	Project Leader	2009-2011	UPM-RUGS	Completed
05-05-10-1063RU	Design, Fabrication and Implementation of High Efficiency Panel Heater-Triangular Solar Still	Researcher	2010-2012	UPM-RUGS	Completed
06-01-04-SF1250	Design and Fabrication of a High Data Rates, Low Power Binary Phase Shift Keying Modulator for Capsule Endoscope	Project Leader	2012-2014	MOSTI-e-SciFund	Completed
03-01-12-1111FR	Investigation and Characterization of Active Solar Power System	Project Leader	2012-2014	MOHE-FRGS	Completed

	with Angle Controller utilizing Date and Time-based Approach				
	Development of a High Efficiency Solar-Integrated Power System Utilizing Motorized System with Two-Axis Angle Controller	Researcher	2012-2014	KETTHA-PRGS	Completed
GP-IPB/2013/9412702	Design and Development of Imaging Device for Detection of Tuberculosis Infection via Fluorochrome Acid-Fast Stained Tubercle Bacilli Samples	Sub-Project Leader	2013-2015	UPM-PUTRA	Completed
	Enhancing The Technical Aspects of Lightning and Electromagnetics For optimum Power System Design and Protection	Researcher	2013-2015	UPM-RUGS	Completed
	Hyperspectral Imager onboard Autonomous Airborne Platform for Natural Resource and Environmental Assessment	Researcher	2013-2015	UPM-RUGS	Completed
	Development of Ultraviolet Pasteurizer for Production of Premium Quality Tropical Fruit Juice	Researcher	2012-2014	UPM-RUGS	Completed
GP-IBT/2013/9417500	High Sensitivity Distribution of Polymer Based Pressure Sensor Array for Under Diabetic Foot	Researcher	2014-2015	UPM-IPI	Completed

	Characterization of Graphene Material in MEMS Pressure Sensor Design for Medical Application	Researcher	2014-2016	MOHE-FRGS	Completed
03-02-14-1524FR	Fundamental research on the Hall-effect sensor based motion sensing unit for electronic water meter to improve the immunity against magnetic disturbance and environmental noise.	Project Leader	2014-2016	MOHE-FRGS	Completed
GP-I/2014/9443300	Ultra Low Power Capacitance-to-Digital Converter for Capacitive type Pressure Sensor Array under Diabetic Foot	Project Leader	2015-2017	UPM-IPI	Completed
PRGS/1/2015/TK03/UPM/02/1	Development of a High Efficiency Portable Solar Generator utilizing Optimum Solar Panel Orientation for Flood Evacuation Centre	Project Leader	2015-2015	MOHE-PRGS (Flood)	Completed
	Localized Surface Plasmon and Reduced Photoanode Bandgap For High Efficiency Dye Sensitized Solar Cell	Project Leader	2015-2017	UPM-IPS	Completed
	Transparent Solar Cell for Tropical Environment	Project Leader	2016-2018	UPM-IPB	On-going
	GQD implementation	Researcher	2016-2018	UPM-IPB	On-going

	in DSSC				
	Temperature Sensor SOC	Project Leader	2017-2019	UPM-IPS	On-going
	Flexible DSSC	Project Leader	2018-2020	UPM-IPI	On-going
	Hybrid Photovoltaic-Thermoelectric power generation	Project Leader	2018-2020	UPM-IPS	On-going

I. PENYELIAAN (Supervision)					
<i>Name</i>	<i>Project Title</i>	<i>Role</i>	<i>Year</i>	<i>Master/Ph.D.</i>	<i>Status</i>
Ali Khalifa Abdgilil (GS37590)	<i>Design and development of Graphene based Optical sensor</i>	Chairman of Supervisory Committee	2013	Ph.D	On-going
Masnita Mat Isa (GS38666)	<i>Design and development of Imaging Devices for Detection of TB Infection via Acid-Fast Stained TB Samples</i>	Chairman of Supervisory Committee	2014	Ph.D	On-going
Julie Roslita Rusli (GS40279)	<i>Design of Capacitance to digital converter for capacitive pressure sensor</i>	Chairman of Supervisory Committee	2014	Ph.D	On-going
Buda Sama'ila (GS41363)	<i>Improvements of Natural Dye Sensitized Solar Cell</i>	Chairman of Supervisory Committee	2014	Ph.D	Completed 2017
Siti Idzura Binti Yusuf (GS)	<i>Ultra-Low Power Solid-state Temperature Sensor</i>	Chairman of Supervisory Committee	2015	Ph.D	On-going
Mohd Ruzaimi Mohd Arifin (GS)	<i>Hybrid Photovoltaic-Thermoelectric Power Generation</i>	Chairman of Supervisory Committee	2016	Ph.D	On-going
Salsabila Ahmad (GS24699)	<i>Design And Implementation Of An Open-Loop Dual-Axis Active Solar Tracking System With Precision Angle Controller</i>	Chairman of Supervisory Committee	2010	MSc	Completed 2012
Tung Li Qian (GS25072)	<i>A Local Mapping Operator for High Dynamic Range Images</i>	Chairman of Supervisory Committee	2009	MSc	Completed 2013
Lioe De Xing (GS25073)	<i>Low Power Modulator for The application of Capsule Endoscope</i>	Chairman of Supervisory Committee	2009	MSc	Completed 2013
Rasoul Garmabdari	<i>Water Flow Detection</i>	Chairman of	2012	MSc	Completed

(GS32994)	<i>and Measurement Technique based on Four Hall Effect Sensors</i>	Supervisory Committee			2014
Mohammad Kazem Chamran (GS32482)	<i>Corrosion Detection Technique in Pipeline</i>	Chairman of Supervisory Committee	2012	MSc	Completed 2015
Mujahid Iqbal (GS35288)	<i>Enhancement Of Tio2 Dye Sensitized Solar Cell</i>	Chairman of Supervisory Committee	2013	MSc	Completed 2016
Halah Saadoon Shihab Al-Obaidi (GS40866)	<i>JPEG Satellite image compression</i>	Chairman of Supervisory Committee	2014	MSc	Completed 2017
Dayang Nurul Nahar Talib	Readout Technique for resistive type pressure sensor array	Chairman of Supervisory Committee	2014	MSc	Completed 2017
Wang Chee Yew	<i>Asynchronous SAR logic for ultra low power SAR ADC</i>	Chairman of Supervisory Committee	2017	MSc	On-going
Suraya Shaban	<i>Flexible Dye Sensitized Solar Cell</i>	Chairman of Supervisory Committee	2017	MSc	On-going

J. PEMERIKSA TESIS (Thesis Examiners)						
No.	Name	Title	Internal/External	Role	Year	Master/Ph.D.
1	Chong Wei Keat (KGA 100009)	<i>Design and Implementation of Low-Voltage and Low-Power Subharmonic Mixer</i>	External (UM)	Examiner	2014	M.Sc.
2	Somayeh Mohammady (GS 23268)	<i>Peak To Average Power Ratio Reduction Based On Optimum Phase Sequence In Orthogonal Frequency Division Multiplexing System.</i>	Internal (UPM)	Examiner	2012	Ph.D.
3	Solmaz Rastegar Moghaddam Mansouri (GS 20935)	<i>Design Of Segmented 14-Bit Low Power Current Steering Digital To Analog Converter</i>	Internal (UPM)	Examiner	2011	M.Sc.
4	Amad Ud Din (GS 23618)	<i>Design Of Standard Cmos ToF Pixel Using CTE Method</i>	Internal (UPM)	Examiner	2011	M.Sc.
5	Haryati Jaafar (GS18027)	<i>Optimization of CCTV location in 2D space</i>	Internal (UPM)	Examiner	2011	M.Sc.
6	Pang Jia Hong (GS 22381)	<i>Design Of A Reconfigurable Fast Fourier Transform Processor Using Genetic Algorithms</i>	Internal (UPM)	Examiner	2012	M.Sc.
7	Yeoh Sing Hsia (GS24688)	<i>Artificial Intelligence-based Electronic Malay Language Learning Tool for</i>	Internal (UPM)	Examiner	2012	M.Sc.

		<i>Blind Children</i>				
8	Mohd Sabir Hussain (GS27689)	<i>Design of Minimast Based on Connection its Antennas and Based Transmission Station (BTS) Using Fiber Optic Cable</i>	<i>Internal (UPM)</i>	Examiner	2013	M.Sc.
9	Lojius Lombigit (GS25920)	<i>Development And Characterization Of Readout Electronics For Neutron Scattering Instrumentation</i>	<i>Internal (UPM)</i>	Chairman	2012	M.Sc.
10	Ahmad Syukri Mohamad (GS21802)	<i>Design and Construction of a 115, 400Hz Aircraft Inverter Using Novel Cascaded Multilevel Inverter Topology</i>	<i>Internal (UPM)</i>	Examiner	2013	M.Sc.
11	Thai Seng Choong (GS24980)	<i>Design and Development of multiple Platform for Monitoring Cathodic Protection System on Under Ground Pipeline</i>	<i>Internal (UPM)</i>	Examiner	2013	M.Sc.
12	Mohd Syahril Noor Shah (GS25636)	<i>Dual Sampling Sigma-Delta Analog To Digital Converter Implementation In Altera De-Ii FPGA</i>	<i>Internal (UPM)</i>	Examiner	2013	M.Sc.
13	Mehrdad Moghbel (GS28846)	<i>Image Segmentation Method For Breast Thermography Based On Random Walkers</i>	<i>Internal (UPM)</i>	Examiner	2013	M.Sc.
14	Hamid Barzabadi Farhani (GS28950)	<i>MGO Doped(BA X, SRI-X) TIO3 Porous Humidity Sensor Design, Fabrication and Characterization in Thick-Film and Bulk Form</i>	<i>Internal (UPM)</i>	Examiner	2013	M.Sc.
15	Muhammad Ammirul Atiqi Mohd zainuri	<i>Photovoltaic Boost DC-DC Converter with Adaptive P&O – Fuzzy Maximum Power Point Tracking Algorithm</i>	<i>Internal (UPM)</i>	Examiner	2013	M.Sc.
16	Masnita Mat Isa (GS22288)	<i>March-based Diagnosis Algorithm for SRAM Stuck-at Faults and Transition Faults</i>	<i>Internal (UPM)</i>	Chairman	2012	M.Sc.
17	Siti Khodijah Mazalan	<i>Multi-type Interior</i>	<i>Internal</i>	Chairman	2012	M.Sc.

	(GS24090)	<i>Permanent Magnet (MTIPM) Motor driving System</i>	<i>(UPM)</i>			
18	Mohammadsoroush Soheilrad (GS25339)	<i>Proportional-Integral Control Optimization Using Imperialist Competitive Algorithm</i>	<i>Internal (UPM)</i>	Chairman	2012	M.Sc.
19	Suhairi Rizuan Che Ahmad (GS25515)	<i>Design Of Double Stator Arc Type Permanent Magnet Generator For Palm Oil Mechanical Cutter Application</i>	<i>Internal (UPM)</i>	Chairman	2012	M.Sc.
20	Nor Azura zakaria (GS22143)	<i>Multiple And Solid Data Background Scheme For Testing Static Single Cell Faults On SRAM Memories</i>	<i>Internal (UPM)</i>	Chairman	2013	M.Sc.
21	Mohsen Fadaee Nejad (GS32083)	<i>Multi-Objective Optimization Of Stand-Alone Hybrid Renewable Energy System By Genetic Algorithm</i>	<i>Internal (UPM)</i>	Chairman	2013	M.Sc.
22	Loo Shing Yan (GS28631)	<i>Genetic Algorithm Based Mass Distribution Optimization Of Legged Robot For Walking Performance Enhancement</i>	<i>Internal (UPM)</i>	Examiner	2013	M.Sc.
23	Ahmad Abbas Al Ameen Salih(GS32024)	<i>Design of High Precision Ground-Based Aircraft Landing System</i>	<i>Internal (UPM)</i>	Examiner	2013	M.Sc.
24	Hessam Jahani Fariman (GS32840)	<i>Hand Movements Classification for Myoelectric Control System Using Adaptive Resonance Theory</i>	<i>Internal (UPM)</i>	Chairman	2014	M.Sc.
25	Nasim heidari Bateni(GS28903)	<i>Physical and Electrical Properties of Ceramic obtained from White Husk Ash and Soda Lime Silica Glass for Electronic Application</i>	<i>Internal (UPM)</i>	Examiner	2014	M.Sc.
26	Ali Driver (GS33237)	<i>Design and Implementation of Solar power Water Distiller System</i>	<i>Internal (UPM)</i>	Chairman	2014	M.Sc.
27	Ali Ghahrael (GS32384)	<i>A Novel Atmospheric Chamber Tto Study the Effect of Ambient Parameters on the Efficiency of Solar Cells</i>	<i>Internal (UPM)</i>	Examiner	2014	M.Sc.

28	Aishah Fauthan (GS33591)	<i>Selective Area Fabrication of Carbon Nanostructure</i>	<i>Internal (UPM)</i>	Chairman	2015	M.Sc.
29	Nueraimaiti Aimaier (GS34530)	<i>Design of a Low Noise Low Power Front End Readout Circuit for Neuron detection using 130nm CMOS technology</i>	<i>Internal (UPM)</i>	Chairman	2015	M.Sc.
30	Amirah Mohamed (GS36160)	<i>Photovoltaic Power Prediction using Hybrid Rough Set Theory and artificial Neural Network</i>	<i>Internal (UPM)</i>	Examiner	2015	M.Sc.
31	Mohd Hasimi Mohd Sidek (GS28019)	<i>Automated Dual-Axis Solar Tracking System Based On Astronomical Equation And Global Positioning System</i>	<i>Internal (UPM)</i>	Chairman	2015	M.Sc.
32	Vijayakumar V.	<i>Effect of Illumination on the Characteristics of Quantum Dot Transistor and Its Applications</i>	<i>External (Sathyabama University Jeppiaar Nagar, Chennai, India)</i>	Examiner	2016	PhD

K. PENGAJARAN (Teaching)		
Code	Subject (Credits)	Years
EEE 3501/ KEE3118	Signal Processing (3)	2008/09
ECC 3001	Engineering Mathematics I(3)	2009/10, 2010/11, 2011/12, 2012/13
KEE5214	Advanced VLSI(3)	2009/10
EEE3100	Electrical and Electronics Technology(2+1)	2009/10, 2010/11, 2011/12, 2015/16
EEE 4203	VLSI Systems Design(3)	2010/11
EEE 3108	Digital System(3+1)	2011/12
EEE3902	Electrical and Electronics Laboratory I(1)	2011/12, 2012/13
EEE 3107	Analog System (3+1)	2012/13, 2013/14, 2016/17
EEE3104	Instrumentation and Measurement (3)	2015/16
EEE4206	Analog Integrated Circuit Design (3)	2017/18, 2018/19

L. KEAHLIAN BADAN PROFESIONAL <i>(Professional Membership)</i>				
<i>Organization</i>	<i>Position</i>	<i>Start Date</i>	<i>End Date</i>	<i>Expertise</i>
Board of Engineer (BEM)	Registered Graduate Engineer	2008	Now	Electronics
IEEE	Senior Member	2009	Now	CAS, EDS,IMS
IAENG	Member	2012	Now	Electronics
IET	Member	2017	Now	Electronics
Board of Technologies (MBOT)	Registered Graduate Technologist	2017	Now	Electronics

M. KEPIMPINAN <i>(Leadership)</i>			
<i>Organization</i>	<i>Position</i>	<i>Start Date</i>	<i>End Date</i>
IEEE CAS	Chair	2017	2018
Functional Device Laboratory, Institute of Advanced Technology, UPM	Head of Laboratory	2015	2018
Symposium on Advanced Material and Nanotechnology 2017	Conference Chair	2017	2017
IEEE International Conference on Circuit and System 2018	Conference Chair	2017	2018