



Department of Electronic Engineering



<http://www.ee.cityu.edu.hk/~pswleung/>

Dr. LEUNG, Peter Sai-Wing 梁世榮

B.Sc., Ph.D.(CityU London), MIET, Senior MIEEE, Chartered Engineer

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Associate Professor, City University of Hong Kong

Founding Chairman, and Chairman of 2007 & 08, EMC Chapter, IEEE Hong Kong Section

Founding Chairman, and Chairman of 2009, PSE (Product Safety Engineering) Chapter, IEEE Hong Kong Section



Me, at the laboratory My office

Applied Electromagnetic Laboratory P7822 G6359, Take Lift 6 or Lift 7, Level 6



..... at APEMC 2011 in Korean ...and in International EMC Symposium in Kyoto 2009

Dr. Leung was born in Hong Kong, and completed his first degree at the City University, London in 1976, graduating with first class honours. He then obtained his doctorate degree in 1981 at the same university. His Ph.D.

thesis was in electromagnetic analysis in linear motors in High Speed Ground Transport applications, under the supervision of the research team led by Professor Arthur J Ellison. Professor Ellison was renowned in his research in electromagnetic field analysis in electrical motors as well as in psychic and paranormal phenomena; Dr. Leung has been greatly influenced by Professor Ellison's interest in these 2 areas.

Dr. Leung joined CHAM Ltd. a computer consultancy firm headed by Professor Spalding of Imperial College, University of London, as project Engineer in 1981. He was responsible for the programme development of a general-purpose 3D-field solution computer programme. In 1982, he joined the Engineering Division of ERA Technology Ltd., as Senior Engineer and was responsible for various research projects funded by industry.

He joined The Engineering Science Division of Hirst Research Centre, GEC Research Co. Ltd. as Principal Engineer, in March 1984, and was responsible for leading a project on the development of electromagnetic launchers for armour-piercing applications. In 1985 he joined the Weapon Department of Thorn EMI Electronics Ltd., and was responsible for the development of the Radar tracking of the multi-launch rocker system. In 1988, Dr. Leung moved to the USA joining Martin Marietta Aerospace in Orlando, working on the same system.

In 1988 Dr. Leung joined the City University of Hong Kong as Senior Lecturer, and at present he is an Associate Professor in the Electronic Engineering Department, and team members of the Applied Electromagnetics Laboratory. His research interests has been in Electromagnetic Compatibility (EMC), including Human safety on RF exposure, EMC in Fixed Installations and Large Systems, EMC Management, and EMC in Railway Systems.

Dr. Leung is actively involved in numerous consultancy projects assisting industry, in both Hong Kong and overseas, in solving EMC/EMI problems. he was the Director of Electromagnetic Compatibility (EMC) Consulting Group of CityU Professional Services Ltd, City University of Hong Kong; he is also a Non-executive Director of EMC Consortium Limited, Hong Kong.

He is Programme Leader of the Master of Science in Electronic and Information Engineering Programme (MScEIE) of City University of Hong Kong fomr 2001 to 2016.

Dr. Leung is also the Authorized Representative and Technical manager to the calibration of Antennas for radiated Measurement of antenna factors in accordance with ANSI C63.5-2006, and the EMC Test facilities of the City University of Hong Kong.

He is also Assessor of the Hong Kong Laboratory Accreditation Scheme (HoKLAS) on EMC area, and a member of the working party on Electrical and Electronic Products, Accreditation Advisory Board, Innovation and Technology Commission (ITC), Government of Hong Kong SAR.

Dr. Leung is also the founding Chairman of EMC Hong Kong Chapter, of IEEE Hong Kong Section.



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CityU Professional Services Ltd
EMC Consulting Group



RESEARCH INTERESTS

- Electromagnetic Compatibility (EMC)
- Human safety on RF exposure
- Bio-medical impacts electromagnetic field to human cells
- EMC in Fixed Installations and Large Systems
- EMC Management
- EMC in Railway Systems

Recent Sponsored EMC Research Projects (*HYPER LINKS TO PROJECTS BELOW FOR DETAILS)

- GRF 2016 Grant - Study of Human Brain Wave for Neuro-Psychological Changes Due To Electromagnetic Exposure (PI)
- GRF 2015 Grant - Reconstruction of Equivalent Source Using a Single Component of the Near Field Measurement for Predicting Far Field Emissions (9042213, Co-PI)
- SRG 2015 Grant - Study of the Impact on Human Brain Wave Activities due to EMI Exposure (7004443)

- SRG 2014 Grant - Biological Effects of Cell Viability and DNA Damage on Human Skin Cells due to Millimeter Wave Exposure (7004235)
- SRG 2013 Grant - Analysis of Specific Absorption Rate (SAR) of 4G Long Term Evolution (LTE) Mobile Devices
- SRG 2012 Grant - Biological effects of direct induced millimeter wave surface current generated by wireless communication devices on human skin cells.
- SRG 2012 Grant - Study of induced EMI in cardiac pacemaker due to magnetic field radiation in high-rise building.
- GRF 2011 Grant - SAR Evaluation of Wireless Communication Devices with a Multi-frequency Operation
- SRG 2011 Grant - Investigation of Induced Body Current Due to Milli-meter Wave Emission
- GRF 2011 Grant - Investigation of Magnetic Field induced in Human body in High-Rise buildings
- GRF 2009 Grant - SAR Evaluation Using Fractional Body Models for Human Safety Considerations of Exposure to RFI

* Those who are interested in a position of Research Fellows, or a Research Studentship for PhD research studies to my research projects, please contact me!!

Recent Completed Sponsored EMC Research Projects

Project No.	Project title	Completion Date	

7004056	<u>Analysis of Specific Absorption Rate (SAR) of 4G Long Term Evolution (LTE) Mobile Devices</u>	2015	Completed
9041672	<u>SAR Evaluation of Wireless Communication Devices with a Multi-frequency Operation</u>	2014	Completed
7002828	<u>Biological Effects of Electromagnetic Wave Generated by Wireless Communication Devices on Human Skin Cells</u>	2014	Completed
9041360	An Effective Approach for Evaluating the SAR and the Electromagnetic Field inside an Electrically Large Complex Cavity	2011	Completed
9041242	Specific Absorption Rates and Electromagnetic Field Radiation by Mobile Phones in Metallic Enclosures	2010	Completed
7002281	Investigation of Fractional Body Models for SAR Evaluation	2009	Completed
7002019	Investigation of Fractional Phantom Head Models for SAR Evaluation	2009	Completed
7001934	Specific Absorption Rates and Electromagnetic Field Radiation by Mobile Phones in Metallic Enclosures	2007	Completed

COURSES TAUGHT IN CITY UNIVERISTY OF HONG KONG

Post-graduate elective course:

- EE6449 – EMC Electromagnetic Compatibility - EMC Theory, Design and Measurement
- EE5604 - Applied Electromagnetics in Electronic Design

** Please click below links to see:*

EMC Consortium Limited

Consultancy information on EMC System management and assessment.

Electromagnetic Compatibility (EMC) Consulting Group

CityU Professional Services Ltd., City University of Hong Kong

EMC SHORT COURSES PROVIDED BY DR PETER LEUNG

- EMC Workshop on Design, Testing and Theory, 12-14, 18 June 1996, Hong Kong. Organized by CityU, sponsored by HKIE, and IEE.

- EMC Workshop on EMC Design and Measurement, 13-17 Jan 1997, Hong Kong. Organized by CityU, sponsored by HKIE and IEE.
- EMC Short Course: Introduction to EMC Testing and Measurement, 22-24 July, Hong Kong. For UL International Limited (Hong Kong).
- Short Course : EMC – Fundamentals, Standards, Measurement and Design, March 2005, Hong Kong. Organized by EMC Consulting Group of CPS Professional Services Ltd, supported by IEEE, Consumer Electronics Chapters.
- Workshop on Transportation/Fixed Installation EMC, Singapore, 2006, for Asia Pacific EMC 2006 Conference, 2006.
- EMC Professional Development Course :EMC from Fundamental to Standard, Measurement and Design, 6 March 2009, for Hong Kong Science Park, Hong Kong.
- EMC Workshop for Doha Metro, 17-19 July 2016, Doha, Qatar.

SELECTED RECENT EMC CONSULTANCY PROJECTS

1. EMC Management Consultancy on Brazil San Paolo SPL6 Metro, EMC Consortium Ltd, 2016.
2. EMC Management Consultancy on Railways Applications, EMC Consortium Ltd, 2015.
3. Electromagnetic Compatibility ("EMC") Management Consulting Services to MHI for Doha Metro Project - Design stage I, MHI, 2015.
4. EMC Assessment to Data centre - Tsuen Wan I-Tech Tower, Wellford Properties Limited, 2015.
5. EMI Assessment of 2.4 GHz radio noise in Signaling for MLRT, HKSTC, 2014.
6. EMI Assessment for Macau Light Rail Transport, Hong Kong Standards and Testing Center, September, 2013
7. EMC Management Consulting Services to MHI for Railway Project SPRLRT 2 in Singapore, Mitsubishi Consortium, October, 2013.
8. EMC assessment of New Buildings to HK- BEAM, ATAL Engineering Limited, 2012.
9. EMI Assessment for Macsment at Red Hill Peninsula, Hong Kong, Hutchison Telephone Company Limited, 2012.
10. EMC Management Consulting Services for Macau Light Rapid Transit (MLRT) System in Macau, by Mitsubishi Heavy Industries. Japan, 2011.
11. EMC Management Consulting Services to MHI for APM (Automated People Mover, Railways) system in Dubai, UAE, by MHI, Japan. 2011.
12. EMC - Electrostatic Discharge assessment, by Audio Mechanical Corp. Ltd. 2010.
13. Consultancy on EMC Conducted Emission issues of Motor/pump design, by Providence Enterprise Ltd. 2010.
14. Electromagnetic Compatibility Management Consulting Services to MHI for Project SPRLRT 2 (Railway System) in Singapore, MHI. 2010
15. EMC Assessment on Radiated Emission from Large Panel of LEDs, by Esprit Regional Services Ltd. 2010.
16. EMC Environmental and Human Safety Assessment of 220KV high tension cables, by Fong's National Engineering Co., Ltd. 2010.
17. Calibration of antenna to ANSIC63.5 for EMC measurement, by Bureau Veritas EMC Testing Laboratory. 2010.
18. EMC Railways System Management Consulting Services to North Terminal APM for Miami , USA, Mitsubishi Heavy Industries, Japan, 2010.
19. EMC Assessment on Shielding Characteristics of Solar Control Window Films, V-Kool Consultant (HK) Ltd. November 2009.
20. Expert Witness Report on Electro-Static Discharge Testing of Electronic Lock, Audio Mechanical Corp. Ltd. September 2009.
21. Design and EMC Developments of Display Systems, BT Automotive, TPO Displays Corp. August 2009.
22. On-site EMC Assessment in E&M plant room of I-Tech Tower, Wellford Properties Limited, August 2009

23. EMC Railways Management Consulting Project to APM System for Hartsfield- Jackson Atlanta International Airport, MHI, Japan, 2009.
24. A Professional Development of a 1 day EMC Course for HKSTP, Hong Kong Science & Technology Parks Corporation, March 2009.
25. Study in relation to EMC of UWB Radio-communications, Office of the Telecommunications Authority, Hong Kong, May 2008.
26. RF Power Assessment of Bi-Directional Amplifier, EMSD, Government of Hong Kong SAR, March 2008
27. EMC Provision of Test on EMI from WLAN on Medical Devices for Kwong Wah Hospital, Hospital Authority of Hong Kong, Nov 2007.
28. On-site EMC Assessment in E&M plant room of I-Tech Tower, Grand Tech Construction Co. July 2007.
29. Radiation Assessment on Safety of Human Exposure to EM Field at Oceania Heights, Sino Estates Management Ltd., May 2007.
30. EMC Verification assessment on the UPS Systems, MGE UPS Systems, MGE China/Hong Kong Ltd, May 2007.
31. Assessment on Air-condition split units in HACTL, ATAL Engineering Ltd. March 2007.
32. EMC Near-field radiations assessment for the high-data rate cables. Solomon Systech Ltd. March 2007.
33. ELF EM Assessment on Safety of Human Exposure to nearby submarine power cables, Swire Properties Management Limited, February, 2007.
34. EMC Assessment on Safety of Human Exposure to RFID Reader Equipment at Chek Lap Kok Airport, Airport Authority of Hong Kong, January 2007.
35. Consultancy on EMC Management of SIDS for Macau Ferry Terminal for Marine Department, KML Engineering Limited, December 2006.
36. EMC Assessment on Safety of Human Exposure to RFI in Central Plaza. Central Plaza Management Co. Ltd., December, 2006.
37. Study on Strategy for Adoption of Wireless Telecommunications Technology in Hospital Authority, Hong Kong Hospital Authority, July 2006.
38. EMC assessment and redesign of a CPU board, Freescale Semiconductor Ltd., June 2006
39. Low Frequency Magnetic Field Radiation Assessment for ASTRIs Office, Hong Kong Applied Science & Technology Research Institute Co. Ltd, May 2006.
40. EM Environment Assessment KCRC East Rail Extension Contract No. DB1561 – Integration Radio System for KCRC. Radio Frequency Engineering Ltd., April 2006.
41. EMC design for display panels, Philips Electronics (HK) Ltd - Mobile Display System, January 2006.
42. EMC pre-test consultancy services PePLink Company, July 2005
43. Consultancy on EMC facility for product re-design, Derrick Law (Export Sales) Limited, Latitude Limited, November 2005.
44. EMC assessment safety of human exposure to FRI in tall buildings , Central Plaza Mgt Co Ltd , March 2005
45. Market Survey and Technology Update in Bluetooth Devices, i.Tech Dynamic Limited, January 2005.
46. EMC Consultancy, East Bloom Industrial Ltd, December 2004.
47. EMC Assessment on Safety of Human Exposure to RFID Reader Equipment at Chek Lap Kok Airport, Hong Kong Airport Authority. November 2004.
48. EMC design of MPEG3 players. AVC Technology Ltd. November 2004.
49. EMC Training Workshop, UL International (HK) Limited, July 2004.
50. EM assessment of Blue Tooth device. Group Sense Ltd., July 2004.
51. EMC Site Assessment on Human safety aspect. Fong' s National Engineering Co. Ltd, July 2004.
52. EM Environment Assessment for KCRC project East Rail External Contracts DB1551 & DB1553, Radio Frequency Engineering Ltd, July 2004.
53. EMC redesign- radiation emission reduction of FTDW85 RF dryer, Fong' s National Engineering Co. Ltd, March 2004.
54. EM Field measurement, Global Challenge Technologies Ltd., March 2004.
55. EMC consultancy on Singapore LTA Contract C413 Design, Integration, supply, Install, Test and Commission of the KPL Expressways Electrical Systems, MWH Consultants (S) Pte Ltd, Jan 2004
56. EMC redesign - PCB redesign for reduction of NEXT on Cat 5 sockets, Lee' s Industrial (Int' l) Co. Ltd., Jan 2004.
57. EMC assessment on safety of human exposure to RFI - SAR of Mobile Phones with Bluetooth Attachment, i.Tech Dynamic Limited. Jan 2004.

58. Consultancy and technical support on EMC assessment of BRE system. SHSI Co Ltd. December 2003.
59. EMC assessment on safety of human exposure to RFI, Central Plaza Management Co. Ltd., October, 2003
60. EMC assessment on safety of human exposure to RFI of power cable, Fong' s National Engineering Co. Ltd., Sept., 2003
61. EMC assessment of KCRC trains. SHSI Co. Ltd., July 2003
62. Design of Doppler radar sensor, Jetfly International Limited. July 2003
63. EMC redesign of LCD module, BT Automotive, Philips Electronics (HK) Ltd., June 2003.
64. EMC Consultancy of Gate equipment for Penny' s Bay Line of MTR Corporation Limited, KML Engineering Ltd, June 2003
65. EMC assessment and management of Broadcasting Equipment installation for KCRC-MLR trains. Shun Hing Systems Integration Co. Ltd., May 2003
66. EMC consulting services to Sumitomo Corporation of America on the North Terminal APM for Miami airport, MHI Ltd Japan, January 2003
67. EMC redesign of a Blue tooth Mobile handset hand-free unit, Unifat Technology Ltd, January 2003
68. EMC Radiation Measurement, Avantwave Ltd, July 2002
69. EMC consultancy, IDT Limited, February 2002
70. Electromagnetic design of Wireless communications accessories, Two in One co. Ltd., October 2001.
71. ESD assessment of Products. Jetfly International Ltd., September 2001.
72. EMC Radiated Measurement, IDT Limited, July 2001
73. EMC management on Singapore Light Rail Systems for Sengkang and Punggol New Towns, Mitsubishi Heavy Industries, Hiroshima, Japan. June 2001
74. EMC Management on Safety of Human Being Exposure to Power Frequency, Golin/Harris International Ltd., June 2001
75. Consultancy on EMC redesign and Measurement, Talentone Development Ltd., June 2001
76. Consultancy on Interference Effect of Current and Further Technologies on Spectrum Management Requirement and Recommendation Using Twisted Pairs Cable, PCCW-HKT, April 2001.
77. EMC assessment HKTA 1035 for meter interface unit, Fortune Technology Ltd., March 2001
78. EMC assessment on safety of human exposure to RF at Pacific place, Swire Properties Management Ltd., Nov 2000
79. Consultancy on EMC product design - Meyer Electronics Ltd., May 2000
80. Consumer products redesign - Computime Ltd., April 2000.
81. EMC Redesign- Sincere electronics Ltd., March 2000.
82. An EMC/RFI assessment of telecommunication transmitter on IT equipment - CTM Companhia de Telecomunidades de Macau, February 2000
83. PC Design Modification- PC Partner Ltd., February 2000
84. EMC assessment of a building site for IT equipment installation - CCL International Ltd., Jan 2000
85. EMC Radiated Emission Design - Newton Power Ltd., November 99
86. Consultancy on EMC radiated Emission design - UniVision Engineering Ltd. July 99
87. EMC testing and consultation - Teletone Development Ltd., May 99
88. EMC design and Modification of Baby Alarms - Lung Cheong Toys Limited, June 1998.
89. Emission measurement of Cellular phones - Office of Telecommunications Authority, May 1998.
90. Measurement of Audio Noise Emission - Kingwall Ltd. January 1998.
91. RFI Measurement of GSM Mobile Phones - Consumer Council. December 1997.
92. Radiation limit study for Subscription TV System - Pacific Satellite International Ltd. Oct 1997.
93. Evaluation of Mains Disturbance Generation by different products - TUV Product Services (Asia) Ltd., September 1997.
94. Family Radio service - Motorola Semiconductors HK Ltd. July 1997
95. EMC requirement Review for LV switchboards - Fed-Supremetech Ltd., May 1997
96. EMC Assessment for MTRC Universal Gate Adaption Kit - MTRC, Feb 1997
97. EMC requirement review for switchgear design - Fed-Supremetech Ltd. Nov., 1996
98. Audio noise measurement of electronic products and parts - Standard Success Electrical Co. Ltd., 1996
99. Performance Analysis & measurement of Philips Audio Speakers - Philips China Hong Kong Group, 1996
100. Comparison of EMC Immunity on Various Toys - Inchcape Testing Services. June 1996
101. EMC Radiated & Conducted Measurements - Team Concept International Ltd. May 1996
102. Dimmer Noise Evaluation using Voltage probe, HKSTC. Oct 1996

103. EMC redesign on Computer Product - VTEC Electronics Ltd. Aug. 1996.
104. EMC Conducted (ESD, FT, CE) measurement - HKSTC Ltd., 1996.
105. EMC radiated measurement - Team Concept Ltd.
106. EMC of telephone set - HB Electronics Ltd.
107. Performance Analysis & measurement of Philips Audio Speakers -Philips Hong Kong Ltd.
108. EMC RE/RS measurement - HB Electronics Ltd.
109. ESD Evaluation of Consumer Product - Inchcape Testing Services Hong Kong Ltd.,
110. Radiated Immunity Evaluation on a Power Supply Unit- Astec Custom Power Ltd.
111. EMC design Modification of telephone set of interference- Everwell Technology Ltd.
112. Immunity Test of telephone set - Team Concept Ltd.
113. EMC Monitoring of a Factory Site in DongGuan, China - Pulse Components Ltd.
114. EMC Design of Answering Machine- Everwell Technology Ltd.
115. Immunity Test of Cordless telephone - Philips Communications System Ltd.
116. EMC Leakage Measurement - TUV Product Services (Asia Ltd).
117. EMC redesign of telephone set - Team Concept Ltd.
118. Design modifications of Power converter on EMC improvement- MIT Technology Co. Ltd.
119. Development of Motor specifications HKPC.
120. EMC design - Team Concept Ltd.
121. EMC design of Hair dryer- Idea Industry International Ltd.
122. Audio noise measurement of electronic components and parts - Standard Success Electrical Co. Ltd.
123. Electrostatic Discharge Tests - Inchcape Testing Services (Hong Kong) Ltd.

SELECTED PUBLICATIONS

1. YL Diao, SW Leung, YQ He, WN Sun, KH Chan, YM Siu, YC Kong, : " Detailed Modeling of Palpebral Fissure and Its Influence on SAR and Temperature Rise in Human Eye Under GHz Exposures" , Bioelectromagnetics, 37:256- 263, 2016.
2. YQ He, SW Leung, WN Sun, KH Chan, YM Siu and YC Kong, : "Impacts of Radio Frequency Interference on Human Brain Waves and Neuropsychological Changes" , Journal of Bioinformatics and Neuroscience (JBINS), ISSN 2188-8116, 1 (1): 8-13, 2015.
3. Y Q He; S W Leung, et al : " Impacts of Radio Frequency Interference on Human Brain Waves and Neuro-psychological Changes", ICIIBMS 2015, pp257-261, Paper T3fp-20929, Track 3: Bioinformatics, Medical Imaging and Neuroscience, Okinawa, Japan.
4. Diao YL, Sun Wn, Leung S W, Chan K H, Siu YM : "Prediction of magnetic field emissions by current source reconstruction using radial basis function network" , Electronics Letters, pp. 1243–1245, Vol. 51 No. 16, 2015.
5. Yongle Wu, Shao Yong Zheng, Sai-Wing Leung, Yuanan Liu, and Quan Xue, "An Analytical Design Method for a Novel Dual-Band Unequal Coupler with Four Arbitrary Terminated Resistances" , IEEE Transactions on Industrial Electronics, Vol. 61, No. 10, October 2014.
6. Yongle Wu, Weinong Sun, Sai-Wing Leung, Yinliang Diao, K H Chan, and Yun-Ming Siu, "Single-Layer Microstrip High- Directivity Coupled-Line Coupler With Tight Coupling," IEEE Transactions on Microwave Theory and Techniques, 61(2), pp 746-753, 2/2013.
7. Yongle Wu, Weinong Sun, Sai-Wing Leung, Yinliang Diao, K H Chan, "A Compact Microstrip Wideband Arbitrary Branch-Line Coupler with Coupled-Line

- Impedance-Transforming Structures,” *Electromagnetics*, pp 256-270, Vol 33, Issue 3, 2013.
8. Yongle Wu, Junyu Shen, Yuanan Liu, Sai-Wing Leung, and Quan Xue, “Miniaturized Arbitrary Phase-Difference Couplers for Arbitrary Coupling Coefficients,” *IEEE Transactions on Microwave Theory and Techniques*, 61(6), pp 2317-2324, 5/2013.
 9. Y Wu, WN Sun, S W Leung, YL Diao, and K H Chan, : “A novel compact dual-frequency coupled-line transformer with simple analytical Design equations for frequency-dependent complex load impedance”, *Progress In Electromagnetics Research*, Vol. 134, 47-62, 2013.
 10. S W Leung, Y L Diao, KH Chan, et al: “Specific Absorption Rate Evaluation for Passengers Using Wireless Communication Devices inside Vehicles with Different Handedness, Passenger Counts, and Seating Locations” , *IEEE Transactions on Biomedical Engineering*, TBME-00336-2012, P1, Volume: PP, Issue 99.
 11. S W Leung, K H Chan, “Development of Electromagnetic Compatibility Courses at the City University of Hong Kong” , pp50-54, *IEEE Electromagnetic Compatibility Magazine*, Vol 1, 2012.
 12. S W Leung, K H Chan, et al, "Electromagnetic Interference of IEEE 802.11 Wireless LAN Systems in Medical Equipment", *IEICE. Transactions on Communications*, E94-B(5), pp 1463-1466, 2011
 13. S W Leung, K H Chan, L C Fung, " Investigation of Power Frequency Magnetic Field Radiation in Typical High-Rise Building" *European Transactions on Electrical Power*, 2011.
 14. K. H. Chan and S. W. Leung, "Evaluation of EM Field Distribution in Automobiles", *Safety and EMC Magazine*, pp29-33, Vol. 3, April 2010, China.
 15. K H Chan, S W Leung, " 香港金融数据中心信息科技设备的实地电磁兼容评估 ", *电磁干扰与兼容*, September, 2010.
 16. C K Tang, K H Chan, L C Fung, S W Leung, "Electromagnetic Interference Immunity Testing of Medical Equipment to Second- and Third-Generation Mobile Phones", *IEEE Transactions on Electromagnetic Compatibility*, Vol. 51, No. 3, pp659-664, August 2009.
 17. C K Tang, K H Chan, L C Fung, S W Leung, "Effect on radio frequency human exposure of mobile phone inside an enclosed metallic elevator", *Microwave and Optical Technology Letters*, 50(8), August 2008, pp 2207-2210, doi: 10.1002/mop.23612.
 18. LEUNG, S W, FUNG, L C and CHAN, K H, "Consultancy Study in relation to Electromagnetic Compatibility of Ultra-wideband Radiocommunications Devices", Contract research by OFTA, HKSAR Government, Office of the Telecommunications Authority (OFTA), The government of the HKSAR, Hong Kong, PRC, 19 February 2009.
 19. C. K. Tang, K. H. Chan, L. C. Fung, and S. W. Leung, "Effect on Radio Frequency human exposure of mobile phone inside an enclosed metallic elevator", *Microwave and Optical Technology Letters*, vol. 50, no. 8, pp. 2207-2210, August 2008.
 20. K M Lee, S W Leung, Y M Siu, "Fuzzy Integration Detector for Multi-Access UWB Impulse Radio", *IEEE Transactions on Aerospace and Electronic System*, October 2007

21. L C Fung, K H Chan, S W Leung, Y F Wong, Paul W K Wu, and C K Tang, "EM Assessment on Human Safety of RFID System at Hong Kong International Airport", accepted to be published in Microwave and Optical Technology Letters, in 2007.
22. K H Chan, C K Tang, K H Wong, L C Fung and S W Leung, "Study of Ground Plane of Dual-Band Patch Antenna on SAR", Microwave and Optical Technology Letters, 2007.
23. Y.M. Siu, K.K. Soo, W.S. Chan and S.W. Leung, "Admission Control for Variable Spreading Gain CDMA Cellular System with Imperfect Power Control and Shadowing" Wireless Communications & Mobile Computing (WCMC) Journal, 2005.
24. K H Chan, L.C. Fung, S W Leung, "SAR of Internal Antenna in Mobile Phone Applications ", pp 286-290, Vol 45/no. 4, Microwave and Optical Technology Letters, May 2005.
25. K H Chan, L.C. Fung, S W Leung, " Experimental Study of SAR Characteristics of Mobile Phones", Microwave and Optical Technology Letters, pp.140-144, Vol 44, January 2004.
26. K H Chan, L.C. Fung, S W Leung, , " Effect of ESD Injection Locations on Induced Noise Inside a Shielded Enclosure", Microwave and Optical Technology Letters, August 2003.
27. L.C. Fung, S W Leung, K H Chan , " Experimental Study of SAR Reduction on Commercial Products and Shielding Materials in Mobile Phone Applications ", Microwave and Optical Technology Letters, March 2003.
28. L C Fung, S W Leung, Wan Lixi "Investigation of Ground Bounce effect on PCBs" Microwave and Optical Technology Letters, Vol. 32, number 4, pp259-264, 2002.
29. S W Leung, J Minett, Y M Siu, "A Fuzzy Approach to Signal Integration", IEEE Transactions on Aerospace and Electronic System, Vol.38, pp.346-351, January 2002.
30. Y.M. Siu, Y S Zhu and S W Leung, "System Performance Enhancement in CDMA Mobile System with Up-link Adaptive Power-control Based on Fuzzy Logic", IEEE Transactions on Professional Communications, October 2001, Volume 19, issue 1, pp. 25-35.
31. L.C. Fung, S W Leung, Lixi Wan : " A Model for Cross-Talk Prediction in PCB Layout", Microwave and Optical Technology Letters, pp142-144, Vol. 30, no 2, July 2001.
32. Y M Siu, W S Chan and S W Leung, " A SFH Spread Spectrum Synchronisation Algorithm for Data broadcasting", IEEE Transactions in Broadcasting, pp71-75, Vol. 47, no. 1, March 2001.
33. S W Leung and James W. Minett, "The Use of Fuzzy Spaces in Radar Signal Detection", pp175-184, Vol. 114/2, International Journal of Fuzzy Sets and Systems, September 2000.
34. S W Leung, J Minett and C F Chung, "An Analysis of the Shadow Feature Technique in Radar Detection" IEEE Transactions on Aerospace and Electronic System, vol. 35 no.3, pp1104-1106, July 1999.
35. Edward K N Yung, S W Leung, " An Integrated Training Program on Product Design in an Undergraduate Course", IEEE Transactions on Education, pp46-52, Vol 40, no.1. Feb 1997.
36. Y S Zhu, S W Leung & C M Wong " Adaptive Non-uniform Sampling Delta Modulation for Audio/Image Processing" IEEE Transactions On Consumer

Electronics, pp1062-1072, vol. 42, no.4, Nov. 1996

37. Y S Zhu, S W Leung & C M Wong "A Digital Audio Processing System Based on Non-uniform Sampling Delta Modulation" IEEE Transactions On Consumer Electronics, pp80-86, vol. 42, Feb. 1996
38. Y S Zhu and S W Leung, "Non-uniform Sampling Delta Modulation for Digital Audio Processing" , Chinese Journal of Acoustics (English Language Edition), vol. 4, pp367-374, 1996, copyright by Acoustical Society of China, PRC and Allerton Press INC., USA

AWARDS:

- Chapter Founder Award, by IEEE EMC Society 2007.
- Certificate of Services, for Service and Contribution as an Vice Chairman, Technical Programme Committee in the Asia Pacific Microwave Conference 2008.
- Certificate of Appreciation, for Services and Contributions towards the Advancement of IEEE and the Engineering Professions, IEEE EMC Society. 2009.
- Certificate in Recognition and appreciation of valued Services and Contributions as Chair (2009) of Product Safety Engineering Society, Hong Kong Chapter, IEEE. 2009
- Certificate of Service, in Appreciated of Outstanding Service and contribution as Programme Leader in MScEIE, for 6 years form academic year 2004/05 to 2009/10. Department of Electronic Engineering, City University of Hong Kong.

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