

Dr.B.Manimegalai

Professor, Thiagarajar College of Engineering, Madurai

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Educational Qualification

DEGREE	BRANCH	INSTITUTION
B.E	Electronics and Communication Engineering	Madurai
M.E	Microwave & Optical Engineering	Madurai
PH.D	Development of Fractal Antenna for Multiband wireless applications	Anna

Experience

PERIOD	NO OF YEARS	DESIGNATION	INSTITUTION
1993-1994	1	Teaching Assistant	ACCET, K
1994-1997	3	Lecturer	RVS colleg
1997-2004	12	Lecturer/ Assistant Professor	TCE, Madu
Jan 1993 - Aug 1993	8M	Project Associate	ISRO, ISA
27-8-2004 to 26-07-2009	5	Senior Grade Lecturer	Thiagarajar
27-08-2009 to 26-08-2012	3	Assistant Professor	Thiagarajar
27-08-2012 to 26-08-2015	3	Associate Professor	Thiagarajar
27-08-2015 to Till date	3.5	Professor	Thiagarajar

Publications

Journals

1. Triangular-shaped super-thin microwave network cloak in antenna applications, International Journal of RF and Microwave Computer- Aided Engineering, 2018
2. Review of RF Cloaking Techniques for Antenna Applications ACES Journal, 2018
3. "Modeling and Optimization of EBG structure using Response Surface Methodology for Antenna Applications", Elsevier – AEU-International Journal of Electronics and Communication, 89 (May-2018),
4. "Design and Modeling of TL MTM Structure for Antenna Applications", Advances in Natural and Applied Sciences, 11(7),pp 52-56, May 2017.(ISSN:1995-0772;
5. "Surface Wave Bandgap Analysis of Modified Mushroom like EBG Structure", Advances in Natural and Applied Sciences,11(7), pp 104-110, May 2017.

6. Synthesis of a Capacitive Loaded Mushroom Electromagnetic Band Gap (EBG) Structure using Particle Swarm Optimization-B. Manimegalai, D. Helena Margaret, S. Suba- International Journal of Applied Engineering Research (IJAER), Volume 10, No. 25, 2015
7. B.Manimegalai Electromagnetic coupling reduction between two closely spaced planar monopole antennas for MIMO applications using UC-PBG Structures Journal of Research in Communication Engineering, vol.2, Special Issue 1, Part 1, pp. 34-37, Feb 16-17, 2012
8. B.Manimegalai, Cantor Set Based Prefractal Antenna For Multiband Applications, International Journal Of Microwave And Optical Technology, Vol.4, No.2, pp.95-98, 2009.
9. B.Manimegalai, S.Raju, V.Ahaikumar, A Multifractal antenna for Wireless applications, International Journal IEEE Antennas and wireless propagation Letters, Vol 8, pp 359-362, 2009
10. Comparison of Compact EBG Structures on the Mutual Coupling Reduction of Antenna Arrays, International Journal of Future Computer and Communication, Vol. 3, No. 2, April 2014
- 11.

Conferences

1. Performance Evaluation of Super Thin Cloak with Different Geometrical Shapes - 2018 International Conference on Current Trends ..., 2018
2. Performance Evaluation of Super Thin Cloak with Different Geometrical Shapes - 2018 International Conference on Current Trends ..., 2018
3. Low RCS using superluminal propagation ,Region 10 Conference, TENCON 2017-2017 IEEE, 2017
4. Dual Band Single Layered Meta-Surface Cloak - 2017 IEEE MTT-S International Microwave and RF ..., 2017
5. BandGap analysis of a novel C slot Electromagnetic BandGap Structures-D.Helena Margaret, S.Suba, B.Manimegalai, Indian Antenna Week-2016, June 6-10, 2016 at TCE, Madurai
6. Wearable Button Antenna for Body Area Network Application, S.Saroja Meenakshi, J.K.Vidhyalakshmi, N.Kumutha, B.Manimegalai, Antenna Test & Measurement Society (ATMS India-16) held at Goa on February 1-3, 2016.
7. Reduction of Interference Between Two Neighbouring Antennas by a Modulated Metasurface, N.Kumutha, K.Hariharan, B.Manimegalai, IEEE International WIE Conference on Electrical and Computer Engineering 2015 (IEEE WIECON-ECE 2015), 19-20 December, 2015 at BUET, Dhaka, Bangladesh.
8. IMARC,Bangalore,2015 - Minkowski,"Fractal based antenna for Cognitive Radio",Dec 14 - 17,2014
9. "Adaptive Scheduling algorithm based on construction of CD's with node degree for wireless sensor networks"
10. Design & Simulation of metamaterial antenna for tera herz imaging application
11. 3 days conference on "conformal antenna for aircraft navigation application",Antenna test & measurement society (ATMS - 2014),Feb 10 -12,2014-"
12. "Equivalent circuit model & carbon nanotube based Transmission line at Terahertz frequency",IMARC - 2013,Dec 14-16,2013,New Delhi
13. B.Manimegalai Conformal Fractal antenna for 2.4GHZ Wireless applications, IEEE Indian Antenna Week 2012, May 2012
14. B.Manimegalai Omni directional antenna for 2.4GHz wireless sensor node, International Conference on Electrical and electronic engineering, Nov 2011
15. B.Manimegalai Equivalent circuit model analysis of Fractal antenna, IEEE Indian Antenna Week 2012, May 2012
16. B.Manimegalai Equivalent circuit modeling of Dual Slot antenna for Terahertz applications, IEEE Indian Antenna Week 2012, May 2012
17. B.Manimegalai Numerical analysis of multi fractal cantor antenna using SBTB method, IEEE Indian Antenna Week 2012, May 2012
18. B.Manimegalai Ultra wideband monopole antenna with band rejection characteristic using EBG structure, International conference on emerging technologies and trends in advance engineering research, Feb 20-21, 2012.

19. B.Manimegalai Bandgap analysis of slot loaded electro magnetic bandgap structure for micro strip antenna applications, NCCT 2012, March 2, 2012
20. B.Manimegalai Comparison of compact EBG structures on the mutual coupling reduction of antenna arrays, International conference on Electronics computer technology, April 6-8, 2012.
21. B.Manimegalai Equivalent Circuit Modeling of Dual slot antenna for Terahertz application, International Conference on Computers and Devices for Communication (CODEC), Kolkata, India, December 17th – 19th, 2012.
22. B.Manimegalai Design of Leaky wave terahertz antenna for Security application, International Conference on Microwaves, Antenna, Propagation and Remote Sensing (ICMARS), Jodhpur, India, December 11th – 15th, 2012.
23. B.Manimegalai Magneto-dielectric material based dual band antenna for Wireless application, National Conference on Magnetic materials and applications, Page 151, Jan 2010
24. B.Manimegalai Synthesis of Antenna array Pattern for Radar Application using Particle Swarm Optimization, National Conference ETWT, Page 30, July 2010.
25. B.Manimegalai Investigation of multiband performance of a Sierpinski fractal antenna, National Conference ETWT, Page 179, Jan 2010.
26. B.Manimegalai Antenna Miniaturization Techniques for wireless Applications using magneto dielectrics, National Conference on Magnetic materials and applications, Page 152, Jan 2010.
27. B.Manimegalai Compact antenna for future wireless communication, National Conference on Information tech, Bangalore, Page 181 April 2011
28. B.Manimegalai An Ultra wide band antenna for Cellular Wireless Communications , National Conference on Emerging trends in Information Technology and Communication systems NCET 2011, Page 348, March 2011
29. B. Manimegalai Hilbert curve Multiband fractal antenna for Future Wireless application, Third National Conference on Recent Trends in Communication, Computation and Signal processing , page 151, March 2011
30. B. Manimegalai Minkowski Fractal antenna for Dual band wireless applications, Third National Conference on Recent Trends in Communication, Computation and Signal processing, Page 156, March 2011
31. B. Manimegalai Numerical Analysis of Microstrip Antenna Using Sampling Biorthogonal Time Domain (SBTD) Method International Conference on Logic, Information, Control & Computation, page 33, Feb 2011
32. B.Manimegalai Design and simulation of reconfigurable antenna for cognitive radio, International Conference on wireless technology for humanitarian relief Amrita university India, Dec 2011
33. Design of Dual polarized base station antenna for cell band application using parasitic conductor - International conference on Innovations in Intelligent Instrumentation Optimization & Signal processing , Karunya university 1&2-3-2013
34. B.Manimegalai, A Novel MEMS Based Fractal Antenna For Multiband Wireless Applications, Asia Pacific Microwave Conference , 2005
35. B.Manimegalai, MEMS Based Switchable Coplanar Waveguide Fed Slot Antenna, International Conference On Smart Materials, Structures And Systems, Bangalore, pp. 739-743, 2003
36. B.Manimegalai, A Novel MEMS Based Fractal Antenna For Multiband Wireless Applications, APMC, Available At IEEE Explore, 2005
37. B.Manimegalai, MEMS Novel Fractal Antenna For Space Based Radar Application, IRSI Proceedings Available At IEEE Explore Available At IEEE Explore, 2005
38. B.Manimegalai, Design And Analysis Of Fractal Antenna For UWB Applications', International Radar Symposium India, Bangalore, 2007
39. B.Manimegalai, Analysis Of Dual Band / Smart Fractal Antenna Using FDTD Method, National Conference On Smart Materials And Structures, Hyderabad, 2006
40. B.Manimegalai, Numerical Analysis Of Smart Fractal Antenna For Wireless Application, ISSS-MEMS , 2006
41. B.Manimegalai, MEMS Based Dual Band Dual Polarized Patch Antenna, APMC Proceedings, 2004
42. B.Manimegalai, MEMS Based CPW Fed Slot Antennas, SPIE Proceedings, 2002
43. B.Manimegalai, Source Location Algorithm, INFOTECH, 2000
44. B.Manimegalai, A Multifractal Cantor Antenna For Multiband Wireless Applications, IEEE Antennas And Wireless Propagation Letters, Vol.8, No.2, pp. 359-362, 2009.
45. B.Manimegalai, Miniaturized Multiband Fractal Antenna Using Smart Materials, International Conference On Active/Smart Materials, Madurai, 2008

46. B.Manimegalai, Numerical Analysis And Simulation Of Fractal Antenna, National Conference On Computing And Mathematical Modeling Gandhigram University, 2007

47. B.Manimegalai, Sampling Biorthogonal Time Domain Method For Analyzing Fractal Antenna, International Conference On Microwave And Optical Technology, Aurangabad, 2007

Books

1. B.Manimegalai, Numerical Analysis And Simulation Of Fractal Antenna, NCM, Gandhi Gram University & Published In Book "Mathematics, Computing And Modeling", Allied Publishers Pvt Ltd., 2007

Sponsored Research

TITLE	SPONSORING AGENCY
Development of Conformal antenna array for Avionics applications	DRDO
Development of Fractal Antennas for multiband wireless applications	DRDO

Consultancy

NAME OF INDUSTRY	DETAILS	PR
Siemens, Bangalore	RF Occupancy detection system	-
Honeywell, Madurai	Academic programme	22