Robab Kazemi

Professor

College: Electrical & Computer Engineering

Education

Degree	Graduated in	Major	University
BSc	2004	Electrical Engineering-Electronic	AmirKabir University of Technology (Tehran Polytechnic)
MSc	2007	Electrical Engineering- Communications (Fields & Waves)	K.N. Toosi University of Techology
Ph.D	2012	Electrical Engineering- Communications (Fields & Waves)	K.N. Toosi University of Techology
Post Doctoral	2013	Electrical Engineering- Communications (Fields & Waves)	The University of Tennessee

Papers in Conferences

1. ز. اسداله‌زاده ضیا و ر. کاظمی،طراحی شیفت دهنده فاز فراپهن باند برای استفاده در شبکه‌های بی‌سیم،پنجمین کنفرانس مهندسی مخابرات ایران،دانشگاه شاهرود، شاهرود، ایران،۱۴۰۰.
2. ح. حملبر گرامی و ر. کاظمی،روشی جدید برای ایجاد صفرهای انتقال قابل تنظیم در فیلترهای میان‌گذر برای کاربردهای ۵G،پنجمین کنفرانس مهندسی مخابرات ایران،دانشگاه شاهرود، شاهرود، ایران،۱۴۰۰.
3. ع. نخستین روحی و ر. کاظمی،کنترل جهت پرتو تشعشعی آنتن مایکرواستریپ با استفاده از سطوح PGM،ششمین کنفرانس الکترومغناطیس مهندسی (کام) ایران،دانشگاه مالک اشتر، تهران، ایران،۱۳۹۷.
4. ا. نوری مقدم , ر. کاظمی , ح. کاظمی،طراحی آنتن آرایه فازی مایکرواستریپ با استفاده از سطوح امپدانسی راکتیو،چهارمین کنفرانس مهندسی مخابرات ایران،شماره صفحات ۹۸-۱۰۳،دانشگاه تبریز، تبریز، ایران،۱۳۹۷.
5. پ. ابراهیم‌پور و ر. کاظمی،بهینه‌سازی راندمان و الگوی تشعشعی آنتن‌های آرایه بازتابی،چهارمین کنفرانس مهندسی مخابرات ایران،شماره صفحات ۳۷-۴۲،دانشگاه تبریز، تبریز، ایران،۱۳۹۷.
6. نسرین بهاری و رباب کاظمی،بررسی و ارزیابی اثر لایه سیلیکون در طراحی آنتن مایکرواستریپ برای کاربردهای هایپرترمیا،اولین کنفرانس بین‌المللی دستاوردهای نوین پژوهشی در مهندسی برق و کامپیوتر،دانشگاه امیرکبیر، تهران، ایران،۱۳۹۵.
7. ح. ثقفی و ر. کاظمی،آنتن مسطح با پلاریزاسیون دایروی باند فوق وسیع قابل استفاده در تغذیه رفلکتورهای سهموی X باند،۱۳۹۵،چهارمین کنفرانس الکترومغناطیس مهندسی (کام) ایران،دانشگاه علوم دریایی امام خمینی، نوشهر، ایران.
8. ح. ثقفی و ر. کاظمی،طراحی شبکه تغذیه مسطح برای آنتن‌های حلزونی شکل و بررسی اثر صفحه رفلکتور روی عملکرد

آنتن،سومین کنفرانس الکترومغناطیس مهندسی (کام) ایران،سازمان پژوهش¬های علمی و صنعتی ایران، تهران، ایران،۱۳۹۳.

9. ر. کاظمی , ح. کریمانپور , ب. ظهوری زنگنه،ایجاد تجارت الکترونیک روی بستر شبکه فیبر نوری برق تهران،کنفرانس بین المللی تجارت الکترونیک و تجارت جهانی،سالن همایش‌های رازی، تهران،ایران،۱۳۸۵.

10. در بهبود NGSDH ح. کریمانپور , ر. کاظمی , ب. ظهوری زنگنه،بررسی بکارگیری شبکه فیبر نوری مبتنی بر تکنولوژی عملکرد سیستم کنترل شبکه برق تهران،سیزدهمین کنفرانس اپتیک و فتونیک ایران،مرکز تحقیقات مخابرات ایران، تهران، ایران،۱۳۸۵.

11. R Masoumi , R Kazemi , AE Fathy ,Design and Implementation of a Slant Polarized Wideband Vivaldi Antenna Array Feed for Monopulse Radar Reflectors ,IEEE Radio and Wireless Symposium (RWS) ,pp. 33-36 ,San Juan, PR, USA ,2025.

12. H. Hamlbar Gerami ,& R. Kazemi ,A Low Profile and Low Cross-Polarization Metasurface Antenna for 5G mm-wave Applications ,The 6th International Conference on Millimeter-Wave and Terahertz Technologies (MMWaTT) ,Tehran, Iran ,2022.

13. R. Masoumi ,& R. Kazemi ,Optimized Isolation and Cloaking of Two Closely Spaced and Interleaved Patch Array Antennas via Elliptical Metasurfaces for 5G Applications ,The 6th International Conference on Millimeter-Wave and Terahertz Technologies (MMWaTT) ,Tehran, Iran ,2022.

14. N. Lopez et al. ,3D Printed Wideband High-Power X-Band Radial Combiner ,IEEE/MTT-S International Microwave Symposium (IMS) ,Denver, CO, USA ,2022.

15. Low Cost Spatial Processing for 5G Interference Mitigation and Capacity Improvement ,IEEE AP-S International Symposium on Antennas and Propagation- USNC-URSI Radio Science Meeting ,Marina Sands, Singapore ,2021.

16. F. Tamjid et al. ,Development of Wideband Spiral Antennas for GNSS Applications ,IEEE AP-S Symp. Antennas and Propagation and CNC/USNC-URSI joint meeting ,Montreal, Canada ,2020.

17. M. Richardson , C. J. Bauder , R. Kazemi , A. E. Fathy ,Design of a Rigid UWB Log Spiral Antenna for GPR Applications in Harsh Environment ,IEEE Radio and Wireless Symposium (RWS) ,San Antonio, TX, USA ,2020.

18. F. Tamjid et al. ,Implementation of a Low Cost Interfering Signal Cancellation Approach Based on a Fast Power Minimization Technique Using Particle Swarm Optimization Algorithm ,IEEE Radio and Wireless Symposium (RWS ,San Antonio, TX, USA ,2020.

19. N. Tran et al. ,Antenna Array Output Power Minimization Using Particle Swarm Optimization ,URSI International Symposium on Electromagnetic Theory (EMTS) ,San Diego, CA, USA ,2019.

20. F. Quaiyum , R. Kazemi , A.E. Fathy ,Phase shifter control scheme implementation for steerable /adaptive L-band phased arrays ,USNC–URSI National Radio Science Meeting ,Boulder, CO, USA ,2017.

21. R. Kazemi , G. Hegazi , A.E. Fathy ,X-band all-waveguide radial combiner for high power applications ,IEEE MTT-S Int. Microwave Symp. (IMS) ,Phoenix, AZ, USA ,2015.

22. R. Kazemi ,& A. Fathy ,16-element Vivaldi Antenna Array Fed by a Single Ridge Substrate Integrated Waveguide with over 75% Bandwidth ,IEEE MTT-S Int. Microwave Symp. (IMS), ,Tampa, FL, USA ,2014.

23. R. Kazemi ,& A. Fathy ,Design of Single-Ridge SIW Power Dividers with Over 75% Bandwidth ,IEEE MTT-S Int. Microwave Symp. (IMS) ,Tampa, FL, USA ,2014.

24. R. Kazemi ,& A. Fathy ,UWB 4-element ridge-SIW Vivaldi antenna array ,IEEE Int. Symp. Ant. Propag. and USNC-URSI National Radio Science Meeting ,Memphis, TN, USA ,2014.

25. Y. Koo , R. Kazemi , J. Phillips , A. Fathy ,Conformal multilayer hyperthermia applicators for superficial cancer treatment in veterinary patients ,IEEE Topical Conference on Biomedical Wireless Technologies, Networks, and Sensing Systems (BioWireleSS) ,Austin, TX, USA ,2013.

26. R. Kazemi , A. Fathy , S. Yang , R. Sadeghzadeh ,Development of an Ultra Wide Band GCPW to SIW Transition ,Radio and Wireless Symp. (RWS) ,Santa Clara, CA, USA ,2012.

27. Y. Koo , R. Kazemi , A. Fathy , J. Phillips ,Construction of a conformal applicator for hyperthermia treatment of superficial skin cancer ,IEEE Int. Symp. Ant. Propag. and USNC-URSI National Radio Science Meeting ,Chicago, USA ,2012.

28. R. Kazemi ,& A. Fathy ,An eight-element Dielectric Rod Antenna Array Integrated to a Substrate

Integrated Feed for Wide Band Applications ,IEEE Int. Symp. Ant. Propag. and USNC-URSI National Radio Science Meeting ,Chicago, IL, USA ,2012.

29. R. Kazemi , A. Fathy , R. Sadeghzadeh ,An Optimized Low Loss Feed Network of a Compact Vivaldi Antenna Array for High Quality Radar Imaging System ,IEEE MTT-S Int. Microwave Symp. (IMS) ,Montreal, QC, Canada ,2012.
30. R. Kazemi , A. Fathy , R. Sadeghzadeh ,Ultra-Wide Band Vivaldi Antenna Array Using Low Loss SIW Power Divider and GCPW Wide Band Transition ,Radio and Wireless Symp. (RWS) ,Santa Clara, CA, USA ,2012.
31. R. Kazemi ,& A. Fathy ,Dielectric Rod Antenna with Substrate Integrated Waveguide Planar Feed for Wide Band Applications ,IEEE Int. Symp. Ant. Propag. and USNC-URSI National Radio Science Meeting ,Chicago, IL, USA ,2012.
32. R. Kazemi ,& R. Sadeghzadeh ,A new Compact Wide Band Eight Way SIW Power Divider at X-band ,Int. Union of Radio Science Meeting (URSI) ,Boulder, CO, USA ,2011.
33. J. Phillips , Y. Koo , R. Kazemi , A. Fathy ,Conformal ultra-wideband multilayer applicators (CUMLA) for hyperthermia in veterinary patients: simulation results and validation of antennae operating at 434 MHz and 915 MHz ,Veterinary Cancer Society Annual Meeting ,Albuquerque, New Mexico ,2011.
34. R. Kazemi , R. Sadeghzadeh , A. Fathy ,A new compact Wide Band 8-Way SIW Power Divider at X-Band ,Loughborough Antenna and Propagation Conf. (LAPC 2011) ,Loughborough, UK ,2011.
35. J. Phillips et al. ,Development and commercialization of a conformal ultrawideband multilayer lens applicator (CUMLA) for therapeutic hyperthermia ,Comparative & Experimental Medicine and Public Health Research Symposium ,Knoxville, TN, USA ,2011.
36. R. Ala , R. Sadeghzadeh , R. Kazemi ,Two-layer Dielectric Rod Antenna for Far Distance ,Loughborough Antenna and Propagation Conf. (LAPC 2010) ,Loughborough, UK ,2010.
37. R. Kazemi , R. Sadeghzadeh , R. Fatemi ,Solid State Development of a C Band Pulse Altimeter ,,” IEEE Asia-Pacific Conference on Applied Electromagnetics (APACE) ,Melaka, Malaysia ,2007.
38. B. Zohuri , Zanganeh , H. Karimanpour , R. Kazemi ,Study of Using Optical Fiber Technology Based on NGSDH in Improving the Operation of Network Control System in Tehran Regional Electric Company ,IEEE Int. Conf. Communication Technology (ICCT) ,Guilin, China ,2006.
39. ر. کاظمی ,& ر. معصومی ,Design Procedure for a Novel LMDS Base Station Reflectarray Antenna ,پنجمین کنفرانس مهندسی مخابرات ایران ,دانشگاه شاهرود، شاهرود، ایران ,1400.
40. ر. کاظمی ,A Small Printed Quadrifilar Helical Antenna for BGAN/GPS Applications ,سومین کنفرانس مهندسی مخابرات ایران ,دانشگاه شهید رجایی، تهران، ایران ,1395.
41. ر. کاظمی , ر. صادق‌زاده , ر. فاطمی مفرد ,Optimization of a C Band Pulse Altimeter by Using Solid State Devices ,همایش سامانه‌های ناوبری ,دانشگاه مالک اشتر، تهران، ایران ,1385.

Papers in Journals

1. ر. معصومی و ر. کاظمی،حذف تزویج متقابل دو آرایه آنتن پچ هم فرکانس با استفاده از پوشش فراسطحی برای کاربردهای چرخش پرتو،مجله مهندسی برق دانشگاه تبریز،،۲۰۲۳.
2. مجله مهندسی،GPSو BGAN کوچک برای کاربردهای (PQHA) ر. کاظمی،بهینه‌سازی آنتن مارپیچی چهاربازویی چاپیِ برق دانشگاه تبریز،۱۳۹۷.
3. ر. کاظمی،طراحی آنتن شکافی باند وسیع با الگوی تشعشعی یک‌طرفه با استفاده از سطح امپدانس بالا و لایه فریت،مجله مهندسی برق دانشگاه تبریز،۱۳۹۶.
4. ر. کاظمی و م. معصومی،مدلهای پیاده‌سازی ایجاد تجارت الکترونیک و نیازهای فنی آن،ماهنامه علمی- تخصصی صنعت برق،۱۳۸۷.
5. Z. Hemmati ,& R. Kazemi,Design of a Compact Slot Antenna Array for Hyperthermia Treatment in Noncentral Breast Cancer Therapy,International Journal of Antennas and Propagation,2025.
6. H Hamlbar Gerami , R Kazemi , AE Fathy,Design and Implementation of a Compact Dual-Band MIMO Antenna Module With Enhanced Bandwidth and Isolation,International Journal of RF and Microwave Computer-Aided Engineering,2025.

7. H. Hamlbar Gerami ,& R. Kazemi,A Low-Profile Metasurface MIMO Antenna with Suppressed Higher-Order Modes for 5G Applications,AUT Journal of Electrical Engineering,pp. 153-164,2024.
8. H. Hamlbar Gerami ,& R. Kazemi,Development of a compact metasurface antenna with reconfigurable pattern through mode combination technique for 5G mm-wave applications,IET Microwaves, Antennas & Propagation,2024.
9. R. Masoumi , R. Kazemi , A.E. Fathy,Optimizing Isolation in Interleaved Co-Frequency Orthogonally Polarized Circular Patch Array Antennas Using Conformal Mantle Cloaks and Integrated Decoupling Patches,IEEE Open Journal of Antennas and Propagation,2024.
10. H. Hamlbar Gerami , R. Kazemi , A.E. Fathy,Development of a metasurface-based slot antenna for 5G MIMO applications with minimized cross-polarization and stable radiation patterns through mode manipulation,Scientific Reports,2024.
11. R. Kazemi ,& A.E. Fathy,Radial Power Combiners - An Overview,IEEE Microwave Magazine,pp. 64-85,2024.
12. H. Saghafi , R. Kazemi , H. Hamlbar Gerami,Development of a Broadband and High-Gain Circularly Polarized Array of Multilayer Slot Antennas for X-band Wireless Communication Networks,International Journal of RF and Microwave Computer-Aided Engineering,2023.
13. R. Kazemi , Z. Asadollahzadeh Zia , R. Masoumi,A Single-Layer Ultra-Wideband Dual-Channel Differential Phase Shifter Using Coupled Lines,Iranian Journal of Electrical and Electronic Engineering,2023.
14. A. Nouri Moqadam ,& R. Kazemi,High-Resolution Imaging of Narrow Bone Fractures with a Novel Microwave Transceiver Sensor Utilizing Dual-Polarized RIS and SRR Array Antennas,IEEE Sensors Journal,2023.
15. R. Masoumi , R. Kazemi , A.E. Fathy,Design and Implementation of Elliptical Mantle Cloaks for Polarization Decoupling of Two Tightly Spaced Interleaved Co-Frequency Patch Array Antennas,Scientific Reports,2023.
16. A. Nouri Moqadam ,& R. Kazemi,Design of a Novel Dual-Polarized Microwave Sensor for Human Bone Fracture Detection Using Reactive Impedance Surfaces,Scientific Reports,2023.
17. R. Masoumi ,& R. Kazemi,Design Procedure for a Novel LMDS Base Station Reflectarray Antenna,AUT Journal of Electrical Engineering,2023.
18. N. Grigoor , Feghi , R. Masoumi , R. Kazemi,Development of a Fully Planar Logarithmic Spiral Antenna with Integrated Balun in UWB GPR Systems for Landmines Detection,Electromagnetics,2023.
19. R. Masoumi ,& R. Kazemi,Exploring the Potential of Elliptical Metasurfaces for Decoupling and Cloaking of Tightly Spaced and Interleaved Patch Array Antennas in 5G Applications,AUT Journal of Electrical Engineering,2023.
20. P. Ebrahimour Sarydar , R. Kazemi , A. Fathy,Development of an Ultra-Wide Band and Low Cross-polarization Reflectarray Antenna Using Novel Unit Cells with Wide-range Linear Phase,International Journal of RF and Microwave Computer-Aided Engineering,2021.
21. F. Tamjid et al.,Towards High Performance Wideband GNSS Antennas- Design Tradeoffs and Development of Wideband Feed Network Structures,IEEE Transactions on Antennas and Propagation,2020.
22. R. Kazemi ,& R. Safamanzar,A Single Layer SIW H-plane Horn Antenna with Nearly Equal E- and H-plane Beamwidths,Electromagnetics,2020.
23. R. Kazemi ,& A. Hassanpour,Design Procedure for a Wideband High Power Multi-Way SIW Radial Divider/Combiner,Journal of Electromagnetic Waves and Applications,2020.
24. A. Nouri Moqadam ,& R. Kazemi,A Novel Triple-Band Microwave Chip-Less Sensor Tag for Structural Health Monitoring Applications,Electromagnetics,2019.
25. R. Kazemi , S. Yang , S. Suleiman , A.E. Fathy,Design Procedure for Compact Dual Circularly Polarized Slotted Substrate Integrated Waveguide Antenna Arrays,IEEE Transactions on Antennas and Propagation,2019.
26. r. Kazemi , J. Palmer , F. Quaiyum , A. Fathy,Steerable Miniaturized Printed Quadrifilar Helical Array

Antenna Using Digital Phase Shifters for BGAN/GPS Applications,IET Microwaves, Antennas & Propagation,2018.
27. R. Kazemi,Development of a Logarithmic Spiral Antenna in UWB GPR for Humanitarian Demining,Electromagnetics,2018.
28. R. Kazemi,A Small Printed Quadrifilar Helical Antenna for BGAN/GPS Applications,Journal of Electrical and Computer Engineering Innovations (JECEI),2017.
29. R. Kazemi ,& A.E. Fathy,Design of a Wideband Eight-Way Single Ridge Substrate Integrated Waveguide Power Divider,IET Microwaves, Antennas & Propagation,2015.
30. Development of a High SAR Conformal Antenna for Hyperthermia Tumors Treatment,IEEE Transactions on Antennas and Propagation,2014.
31. H. Saghafi ,& R. Kazemi,Grounded Coplanar Waveguide Fed Ultra Wideband Fractal Monopole Antenna,Int. J. of Electronics; Mechanical and Mechatronics Engineering,2013.
32. R. Heidari ,& R. Kazemi,Ultra Wideband Fabric-Based Slot Antenna on Human Body for Medical Application,J. of Artificial Intelligence in Electrical Engineering,2013.
33. R. Kazemi , R.A. Sadeghzadeh , A.E. Fathy,Design of a Wide Band Eight-way Compact SIW Power Combiner fed by a Low Loss GCPW to SIW Transition,Progress in Electromagnetics Research C (PIER),2012.
34. R. Kazemi , A.E. Fathy , R.A. Sadeghzadeh,Dielectric Rod Antenna Array with Substrate Integrated Waveguide Planar Feed Network for Wide Band Applications,IEEE Transactions on Antennas and Propagation,2012.
35. R. Kazemi , A.E. Fathy , R.A. Sadeghzadeh,Design guidelines for multi-layer dielectric rod antennas fed by Vivaldi antennas,IET Microwaves, Antennas & Propagation,2012.
36. O.A. Smrkovski et al.,Performance Characteristics of a Conformal Ultra Wideband Multilayer Applicator (CUMLA) for Hyperthermia in Veterinary Patients: A pilot evaluation of its use in the adjuvant treatment of non-resectable tumors,Veterinary and Comparative Oncology,2011.
37. R. Kazemi , R.A. Sadeghzadeh , R. Fatemi , Mofrad,Optimization of a C Band Pulse Altimeter,Microwave Journal,2008.

Thesis

1. Design of Metasurface Antennas Using Characteristic Mode Analysis (CMA) and Equivalent Circuit Model ، Hamed Hamlbar Gerami ، 2025/9/8
2. Design and Implementation of a Compact Rotman Lens with Wide Scan Angle for 5G Systems ، Aysan Kamyab ، 2025/9/2
3. Design of a L-band Diplexer Using Gap Waveguide (GW) Technology for Satellite Systems ، Ali Ebrahimifard ، 2025/2/2
4. Modelling and Simulation of a Smart TV Equipped with Reconfigurable Intelligent Surfaces (RIS) ، Sobhan Akbarifard ، 2024/9/10
5. Minimizing the Reflection of Electromagnetic Waves with Metamaterial Structures ، Reza Samadi ، 2024/2/7
6. Wireless Energy Harvesting by Reconfigurable Broadband/ Multiband Antennas ، Yousef Notaj Nosaleh ، 2023/9/18
7. Modeling, Simulation and Electromagnetic Evaluation of Chaff Clouds ، Ali Vakili Zonouz ، 2023/9/18
8. Implementation of a Microwave System for Bone Fracture Diagnosis ، Aslan Noori Moqadam ، 2023/9/9
9. Design of Metamaterial and Metasurface Structures for Electromagnetic Cloaking Based on Scattering Cancellation Method ، Reza Masoumi ، 2023/9/9
10. Studying the Application of Lens Antennas in 5G Communications Systems ، Vahid Ghorbani ، 2023/9/5
11. Conformal Antennas and Their Applications in Treatment of Cancerous Cells Using Hyperthermia ،

Zahra Hemmati ، 2022/9/21
12. Design and Implementation of a UWB Phase Shifter for Wireless Applications ، Zohreh Assadollahzadeh Zia ، 2022/1/19
13. Study of Techniques for Radar Cross Section Reduction of Communication Antennas ، Hossein Raghib Hokmabadi ، 2021/9/15
14. Design and Fabrication of Chipless RFID Sensor Tags for Crack Detection in Structures ، Reza Gheibi Zarnagh ، 2021/2/17
15. Design of a High Gain Array Antenna Based on SIW Technique at Ka-Band ، Raha Roosefid ، 2021/2/17
16. Study and Design of Planar Dual-Reflector Antennas Using SIW Technique ، Arash Shabkhiz Nematabad ، 2021/2/17
17. Study of Antennas in Ground-penetrating Radar Systems (GPR) for Mine Detection ، Narek Grigor Feghi ، 2019/9/11
18. Design of a N-way SIW Radial Combiner ، Ali Hassanpour ، 2019/9/11
19. Improvement of Radiation Characteristics of the Horn Antenna Using SIW Technique and Air Holes ، Rasoul Safamanzar ، 2019/5/28
20. Optimization of the Reflectarrays Performance: Bandwidth and Phase Error Investigation ، Pouya Ebrahimpour Saraydar ، 2019/2/6
21. Control of the Main Beam Direction of the Antenna's Radiation Pattern Using Metasurfaces ، Ata Nakhostin Rouhi ، 2018/2/6
22. Design and Fabrication of a Printed MIMO Antenna for WLAN Applications ، Mojtaba Sobhani ، 2018/2/5
23. Design of Optimal Microstrip Antenna in Cancer Cells Treatment for Hyperthermia Applications ، Nasrin Bahari ، 2016/10/6
24. Study of Antennas with Amost Fixed Phase Center at Ultra Wide-Band Frequency Range ، Reyhaneh Pashakhah ، 2014/10/6
25. Study of Feed Networks and the Effect of Ground Plane on the Planar Helical Antenna Performance ، Hossein Saghafi ، 2014/9/21
26. Design of Antennas on Fabric for Health Monitoring ، Roya Heidari ، 2014/2/6
27. Implementation of a Circularly Polarized Microstrip Antenna with Reconfigurable Capability ، Negar Shafaei ، 2014/2/4
28. Design and Fabrication of an Unequal-Split SIW Power Divider at X Band ، Leila Namazi ، 2013/12/3
29. Design of a SIW-based MIMO Antenna for 5G Smart Phones ، Saba Salmanpour
30. Design of a Wideband Nolen Beamforming Network Based on RSIW Technology for 5G Applications ، Afshin Mahmoudi
31. Design of a Sub-6 GHz Diplexer for 5G and LTE Systems ، Reza Habibzadeh