



MARIAN K. KAZIMIERCZUK

Professor of Electrical Engineering
Wright State University
Dayton, OH 45435

Phone: 937 775-5059

Fax: 937-775-3936

marian.kazimierczuk@wright.edu

RESEARCH INTERESTS

Power Electronics, Switching-Mode PWM and Resonant DC/DC Power Converters, DC/AC Inverters, Resonant Rectifiers, RF Tuned Power Transistor Amplifiers and Oscillators, Power Management, High-Frequency Magnetic Devices, Semiconductor Device Modeling, Power Integrated Circuits, Electronic Ballasts, Lighting Systems, Modeling and Controls of Power Converters, Sensors, Electronic Circuits, Integrated Circuits, Energy Harvesting/Scavenging, Renewable Energy Sources, CAD, and Engineering Education.

EDUCATION

1962-1966 High School, Liceum Ogólnokształcące im. J. I. Kraszewskiego, Kraszewski's Lycee, Drohiczyn, Poland (ranked first in class, summa cum laude).

1966-1971 Department of Electronics, Warsaw University of Technology, Warsaw, Poland.

1972-1973 Post Graduate Study of Higher Engineering Education, Technical University of Warsaw, Warsaw, Poland.

1972-1977 Ph.D. Graduate Studies, Department of Electronics, Warsaw University of Technology, Warsaw, Poland.

1977-1984 D.Sc. (Habilitation) Graduate Studies, Department of Electronics, Warsaw University of Technology, Warsaw, Poland.

DEGREES

- 1971 **M.Sci.**
Thesis: "Gunn's diode oscillator for X-band with varactor tuning"
Supervisor: Professor Adam Smolinski and co-supervisor Professor Janusz A. Dobrowolski
Department of Electronics, Technical University of Warsaw, Warsaw, Poland
- 1978 **Ph.D.**
Dissertation: "High-efficiency tuned power transistor amplifier"
Supervisor: Professor Jan Ebert
Department of Electronics, Technical University of Warsaw, Warsaw, Poland
- 1984 **D. Sci.**
Dissertation: "High-efficiency tuned power amplifiers, frequency multipliers, and oscillators," Warsaw Technical University Publisher, pp. 1-143, Warsaw 1984
Department of Electronics, Technical University of Warsaw, Warsaw, Poland

PROFESSIONAL ACADEMIC EXPERIENCE

1972-1978 Instructor, Department of Electronics, Technical University of Warsaw, Warsaw, Poland

1978-1984 Assistant Professor, Department of Electronics, Technical University of Warsaw, Warsaw, Poland

Courses taught High-Frequency High-Power Techniques
Radio Transmitters
Electromagnetic Field Theory
Microwave Theory and Technique

Electronic Measurements
 Fundamentals of Electronics
 Circuit Theory
 Electronic Circuits and Systems
 Radio Transmitters Laboratory
 Radio Receivers Laboratory
 Electronics Laboratory
 Radio Electronics Laboratory, Chair, 1978-1984
 Electronic Apparatus Laboratory, Chair, 1978-1984.

1984 Design Engineer Design Automation Inc, Lexington, MA 02420

1984-1985 Visiting Professor, Department of Electrical and Computer Engineering, Virginia Polytechnic Institute and State University (Virginia Tech), Blacksburg, VA 24061

Courses taught	EE3101	Electromagnetic Fields
	EE3201	Electronics I
	EE3202	Electronics II
	EE4201	Electronic Circuits and Systems I

1985-1990 Assistant Professor, Department of Electrical Engineering, Wright State University, Dayton, OH 45435

1990-1994 Associate Professor, Department of Electrical Engineering, Wright State University, Dayton, OH 45435

1994-2021 Professor, Department of Electrical Engineering, Wright State University, Dayton, OH 45435

2022-present Rmeritus Professor, Department of Electrical Engineering, Wright State University, Dayton, OH 45435

Courses taught	EE 331/531	Electronic Devices
	EE 431/631	Electronic Circuits
	EE 434/634	Electronic Circuits Laboratory
	EE 444/644	Linear Integrated Circuits
	EE 449/649	Pulse and Digital Circuits
	EE 499/699	Special Problems in Engineering
	EE 4990	Design Industrial Clinics
	EE4910	Senior Design Project I
	EE 7410	Power Semiconductor Devices
	EE 7420	Power Electronics II
	EE 7430	Power Electronics III
	EE 7440	RF Power Amplifiers
	EE 8900	Independent Studies
	EE 8990	Ph. D. Dissertation
	EGR 8910	Ph.D. Seminar

STUDENT SUPERVISION/ADVISING

22 Ph.D. students

100 M.S. students

6 post-doctoral positions

3 sabbatical positions

PROFESSIONAL NON-ACADEMIC EXPERIENCE

1984 Design Automation, Inc., 809 Massachusetts Avenue, Lexington, MA 02173, (617) 862-8998

Project Engineer responsible for designing high-efficiency switching-mode dc/dc converters

1991 Wright-Patterson AFB, Wright Laboratory, Dayton, OH, Summer Faculty Fellowship

1995 Wright-Patterson AFB, Wright Laboratory, Dayton, OH, Summer Faculty Fellowship

1996 Wright-Patterson AFB, Wright Laboratory, Dayton, OH, Summer Faculty Fellowship

PROFESSIONAL MEMBERSHIPS

IEEE Gold Life Fellow

2020-present

IEEE, Fellow

2005-present

IEEE, Senior Member

1991-2004

Power Electronics Society	1991-present
Circuit and Systems Society	1991-present
Industrial Electronics Society	1991-present
Aerospace and Electronic Systems Society	1991-present
Industry Applications Society	1991-present
Tau Beta Pi	1992-present
Electrical Manufacturing and Coil Winding Association	1991-present
EMCWA, Board of Directors	1991-present
American Society for Engineering Education	2007-present

AWARDS

- 1977 President of the Technical University of Warsaw
- 1978 President of the Technical University of Warsaw
- 1979 President of the Technical University of Warsaw
- 1980 President of the Technical University of Warsaw
- 1981 Minister of Science, University Education, and Technology
- 1982 Minister of Science, University Education, and Technology
- 1983 Secretary of Division IV of Technical Sciences, Polish Academy of Sciences
- 1984 President of the Technical University of Warsaw
- 1985 Minister of Science, University Education and Technology
- 1990 Harrel V. Noble Award, IEEE Dayton Section
- 1991 Excellence in Research Award, College of Engineering and Computer Science, Wright State University
- 1991 Presidential Award for Faculty Excellence in Research, Wright State University
- 1993 Excellence in Teaching Award, College of Engineering and Computer Science, Wright State University
- 1993 Nominated for the Presidential Teaching Excellence Award, Wright State University
- 1994 Nominated for the Presidential Teaching Excellence Award, Wright State University
- 1994 Electrical Manufacturing and Coil Winding for outstanding contribution
- 1995 Award for Outstanding Professional Achievement, the Affiliate Societies Council of the Engineering and Science Foundation of Dayton
- 1995 Outstanding Faculty Member, College of Engineering and Computer Science, Wright State University
- 1995 Presidential Award, Outstanding Faculty Member, Wright State University
- 1996-2000 Brage Golding Distinguished Professor of Research Award, Wright State University
- 1997 Excellence in Professional Service Award, College of Engineering and Computer Science, Wright State University
- 1998 Award of the Ohio House of Representatives
- 1997 Nominated for the Presidential Professional Service Award, Wright State University
- 2000 Excellence in Teaching Award, College of Engineering and Computer Science, Wright State University
- 2000 Nominated for the Presidential Teaching Award, Wright State University
- 2002 Excellence in Professional Service Award, College of Engineering and Computer Science, Wright State University
- 2002 Nominated for the Presidential Professional Service Award, Wright State University
- 2003 Excellence in Research Award, College of Engineering and Computer Science, Wright State University
- 2004 Board of Trustees' Award for Faculty Excellence, Wright State University (This is the highest award given by Wright State University. "It is intended to honor those who serve as the most outstanding of role models for all faculties.")
- 2005 Finalist for the Excellence in Teaching Award, College of Engineering and Computer Science, Wright State University
- 2006 Nominated for Robert J. Kegerreis Distinguished Professor of Teaching by CECS
- 2007 Nominated for Robert J. Kegerreis Distinguished Professor of Teaching by CECS
- 2007 Finalist for the Excellence in Teaching Award, College of Engineering and Computer Science, Wright State University
- 2008 Nominated for Robert J. Kegerreis Distinguished Professor of Teaching by CECS
- 2008 Outstanding Teacher Award from the American Society for Engineering Education, North-Central Section.
- 2008 Excellence in Teaching Award, College of Engineering and Computer Science, Wright State University.
- 2008 Nominated for the 2009 Kyoto Prize in Advanced Technology
- 2009 (Nov.17). National Professor of Technical Sciences of Poland conferred by the President of the Republic of Poland.

2009 Nominated for Robert J. Kegerreis Distinguished Professor of Teaching by CECS.
 2009-2013 Robert J. Kegerreis Distinguished Professor of Teaching, Wright State University
 2010 Award from the Senate of the State of Ohio
 2010 Southwestern Ohio Council for Higher Education (SOCHE) Teaching Award
 2010 Green County Achievement Award
 2011 Ohio Magazine Excellence in Education Honoree May 2011.
 2014-2018 Frederick A. White Distinguished Professor of Professional Service, Wright State University
 2015 Distinguished Fellow of the Collegium of Eminent Scientists of Polish Origin and Ancestry, The Kosciuszko Foundation, USA
 2016 Nomination for the Global Advocate/Citizen Award in WSIF
 2018 Semi-finalist for the Excellence in Teaching Award, College of Engineering and Computer Science, Wright State University
 2019 Nomination for the University Professor Award.
 2020-2025 University Professor.

PUBLICATIONS

Books

1. M. K. Kazimierczuk and D. Czarkowski, *Resonant Power Converters*, John Wiley & Sons, New York, NY, pp. 1-481, 1995, ISBN 0-471-04706-6 (The monograph/textbook is intended for graduate courses and practicing engineers); M. K. Kazimierczuk and D. Czarkowski, *Resonant Power Converters*, IEEE Press and John Wiley & Sons, New York, NY 2nd Edition, 2011, pp. 1-595, ISBN 978-0-470-90538-8.
2. M. K. Kazimierczuk and D. Czarkowski, *Solutions for Resonant Power Converters*, John Wiley & Sons, New York, NY, pp. 1-80, 1995, ISBN 0-471-12849-X, ISBN-978-0-471-12849-6.
3. A. Aminian and M. K. Kazimierczuk, *Electronic Devices: A Design Approach*, Prentice Hall, Upper Saddle River, NJ, pp. 1-810, 2004, ISBN-10: 0-13-013560-7 and ISBN-13: 978-0130135605 (The textbook is intended for undergraduate courses, 3 quarters or 2 semesters).
4. M. K. Kazimierczuk and A. Aminian, *Laboratory Manual to Accompany Electronic Devices: A Design Approach*, Prentice Hall, Upper Saddle River, NJ, pp. 1-149, 2004, ISBN 0-13086203-7 (The book is intended for undergraduate courses).
5. M. K. Kazimierczuk and A. Aminian, *Instructor's Solutions Manual to Accompany Electronic Devices: A Design Approach*, Prentice Hall, Upper Saddle River, NJ, pp. 1-543, 2004. ISBN 0-13-049984-6.
6. M. K. Kazimierczuk, *Pulse-Width Modulated DC-DC Power Converters*, John Wiley & Sons, Chichester, UK, 2008, pp. 1-782, ISBN-10: 0-470-77301-4, ISBN-13: 978-0-470-77301-7; 2nd Ed., 2016, pp. 1-930. (The monograph/textbook is intended for graduate students, researchers, and practicing engineers).
7. M. K. Kazimierczuk, *Solutions Manual for Pulse-Width Modulated DC-DC Power Converters*, John Wiley & Sons, Chichester, UK, 2008, ISBN-978-0-470-74101-6.
8. M. K. Kazimierczuk, *RF Power Amplifiers*, John Wiley & Sons, Chichester, UK, 2008, pp. 1-405, ISBN 978-0-470-77946-0; 2nd Ed. 2015, pp. 1-658. (The monograph/textbook is intended for graduate students, researchers, and practicing engineers). Best Seller. In Chinese, IEEE Press/John Wiley & Sons, Beijing, China, 2015.
9. M. K. Kazimierczuk, *Solutions Manual for RF Power Amplifiers*, John Wiley & Sons, Chichester, UK, 2008, ISBN 978-0-470-72134-6.
10. M. K. Kazimierczuk, *High-Frequency Magnetic Components*, John Wiley & Sons, Chichester, UK, 2009, pp. 1-486, ISBN-978-0-470-71453-9, 2nd Ed, 2014., pp. 1-729, ISBN-978-1-118-71779-0. (The monograph/textbook is intended for graduate students, researchers, and practicing engineers). In Chinese, IEEE Press/John Wiley & Sons, Beijing, China, 2012.
11. M. K. Kazimierczuk, *Solutions Manual for High-Frequency Magnetic Components*, John Wiley & Sons, Chichester, UK, 2009. ISBN: 978-0-470-72133-9.

12. M. K. Kazimierczuk, *Laboratory Manual for Electronic Circuits*, Prentice Hall, 2011. ISBN-10-1-256068438-3 and ISBN-13-978-1-256068438-3, 2011.
13. M. K. Kazimierczuk and A. Ayachit, *Laboratory Manual for Pulse-Width Modulated DC-DC Power Converters*, John Wiley & Sons, Chichester, UK, 2016, pp. 1-247.
14. M. K. Kazimierczuk, D. K. Saini, and A. Ayachit, *Average-Current Mode Control of DC-DC Power Converters*, John Wiley & Sons, Chichester, UK, 2022, pp. 1-336, ISBN-13: 978-1-119-52565-3. DOI: 10.1002/9781119525592.

Book Chapter

1. A. Reatti, M. K. Kazimierczuk, and A. Ayachit, and F. Corti, *Emerging Capabilities and Applications of Wireless Power Transfer*, Ch. 3, *Resonant Compensations in Inductive Wireless Power Transfer System*. IGI Global: International Science and Technology Research, New York, 2018.

Peer-Reviewed International Archival Journal Articles

1977

1. J. Ebert and M. K. Kazimierczuk, "High-efficiency RF power transistor amplifier," *Bull. Polon. Sci., Ser. Sci. Tech.*, vol. 25, no. 2, pp. 135-138, 1977.

1980

2. M. K. Kazimierczuk and J. M. Modzelewski, "Drive-transformer-less Class-D voltage switching tuned power amplifier," *Proceedings of the IEEE*, vol. 68, no. 6, pp. 740-741, June 1980.

1981

3. M. K. Kazimierczuk, "Class E tuned power amplifier with shunt inductor," *IEEE Journal of Solid-State Circuits*, vol. SC-16, no. 2, pp. 2-7, February 1981.
4. J. Ebert and M. K. Kazimierczuk, "Class E high-efficiency tuned power oscillator," *IEEE Journal of Solid-State Circuits*, vol. SC-16, no. 2, pp. 62-66, April 1981.
5. J. Ebert and M. K. Kazimierczuk, "Applying the Class E concept to the RF power generator," *Bull. Acad. Polon. Sci., Ser. Sci. Tech.*, vol. 29, no. 1-2, pp. 79-87, 1981.

1982

6. M. K. Kazimierczuk, "A new approach to the design of tuned power oscillators," *IEEE Transactions on Circuits and Systems*, vol. CAS-29, no. 4, pp. 261-267, April 1982.

1983

7. M. K. Kazimierczuk, "Effects of the collector current fall time on the Class E tuned power amplifier," *IEEE Journal of Solid-State Circuits*, vol. SC-18, no. 2, pp. 181-193, April 1983.
8. M. K. Kazimierczuk, "Exact analysis of Class E tuned power amplifier with only one inductor and one capacitor in load network," *IEEE Journal of Solid-State Circuits*, vol. SC-18, no. 2, pp. 214-221, April 1983.
9. M. K. Kazimierczuk, "Parallel operation of power transistors in switching amplifiers," *Proceedings of the IEEE*, vol. 71, no. 12, pp. 1456-1457, December 1983.

1984

10. M. K. Kazimierczuk, "Charge-control analysis of Class E tuned power amplifier with only one inductor and one capacitor in load network," *IEEE Transactions on Electronic Devices*, vol. ED-31, no. 3, pp. 366-373, March 1984.
11. M. K. Kazimierczuk, "Accurate measurements of lifetime of excess base stored charge at high collector currents," *IEEE Transactions on Electronic Devices*, vol. ED-31, no. 3, pp. 374-378, March 1984.
12. M. K. Kazimierczuk, "Collector amplitude modulation of Class E tuned power amplifier," *IEEE Transactions on Circuits and Systems*, vol. CAS-31, no. 6, pp. 543-549, June 1984.
13. M. K. Kazimierczuk and N. O. Sokal, "Cause of instability of power amplifier with parallel-connected power transistors," *IEEE Journal of Solid-State Circuits*, vol. SC-19, no. 4, pp. 541-542, August 1984.

1986

14. M. K. Kazimierczuk, "Class E tuned power amplifier with non-sinusoidal output voltage," *IEEE Journal of Solid-State Circuits*, vol. SC-21, pp. 575-581, August 1986.
15. M. K. Kazimierczuk, "Generalization of conditions for 100-percent efficiency and nonzero output power in power amplifiers and frequency multipliers," *IEEE Transactions on Circuits and Systems*, vol. CAS-33, no. 8, pp. 805-807, August 1986.

1987

16. M. K. Kazimierczuk and K. Puczek, "Exact analysis of Class E tuned power amplifier at any Q and switch duty cycle," *IEEE Transactions on Circuits and Systems*, vol. CAS-34, no. 2, pp. 149-159, February 1987.

1988

17. M. K. Kazimierczuk, "High-speed driver for switching power MOSFETs," *IEEE Transactions on Circuits and Systems*, vol. CAS-35, no. 2, pp. 254-256, February 1988.
18. M. K. Kazimierczuk, "Design-oriented analysis of boost zero-voltage-switching resonant dc/dc converter," *IEEE Transactions on Power Electronics*, vol. PE-3, no. 2, pp. 126-136, April 1988.
19. M. K. Kazimierczuk, "Steady-state analysis of a buck zero-current-switching resonant dc/dc converter," *IEEE Transactions on Power Electronics*, vol. PE-3, no. 3, pp. 286-296, July 1988.
20. M. K. Kazimierczuk, "A network theorem dual to Miller's theorem," *IEEE Transactions on Education*, vol. E-31, pp. 265-269, no. 6, November 1988.

1989

21. M. K. Kazimierczuk and X. T. Bui, "Class E dc/dc converters with an inductive impedance inverter," *IEEE Transactions on Power Electronics*, vol. PE-4, no. 1, pp. 124-135, January 1989.
22. J. Jozwik and M. K. Kazimierczuk, "Dual SEPIC PWM switching-mode dc/dc power converter," *IEEE Transactions on Industrial Electronics*, vol. IE-36, no. 2, pp. 64-70, February 1989.
23. M. K. Kazimierczuk and W. A. Tabisz, "Class C-E high-efficiency tuned power amplifier," *IEEE Transactions on Circuits and Systems*, vol. CAS-36, no. 3, pp. 421-428, March 1989.
24. M. K. Kazimierczuk and W. D. Morse, "State-plane analysis of zero-voltage-switching resonant dc/dc converters," *IEEE Transactions on Aerospace and Electronic Systems*, vol. AES-25, no. 2, pp. 232-239, March 1989.
25. M. K. Kazimierczuk and W. D. Morse, "State-plane analysis of zero-current-switching resonant dc/dc power converters," *IEEE Transactions on Power Electronics*, vol. PE-4, pp. 265-271, April 1989.
26. M. K. Kazimierczuk, "Analysis of buck/boost zero-current-switching resonant dc/dc converter," *IEEE Proceedings, Part B, Electric Power Applications*, vol. 136, no. 3, pp. 127-135, May 1989.
27. M. K. Kazimierczuk and J. Jozwik, "Optimal topologies of resonant dc/dc converters," *IEEE Transactions on Aerospace and Electronic Systems*, vol. AES-25, no. 2, pp. 362-372, May 1989.
28. M. K. Kazimierczuk and J. Jozwik, "Class E zero-voltage-switching rectifier with a series capacitor," *IEEE Transactions on Circuits and Systems*, vol. CAS-36, no. 5, pp. 926-928, June 1989.
29. M. K. Kazimierczuk and K. Puczek, "Power-output capability of Class E amplifier at any loaded Q and switch duty cycle," *IEEE Transactions on Circuits and Systems*, vol. CAS-36, no. 8, pp. 1142-1143, August 1989.
30. M. K. Kazimierczuk and X. T. Bui, "Class E dc/dc converters with a capacitive impedance inverter," *IEEE Transactions on Industrial Electronics*, vol. IE-36, no. 8, pp. 425-433, August 1989.
31. M. K. Kazimierczuk, "Analysis and design of buck/boost zero-voltage-switching resonant dc/dc converter," *IEEE Proceedings, Pt. G, Circuits, Devices, and Systems*, Vol. 136, no. 4, pp. 157-166, August 1989.
32. M. K. Kazimierczuk and K. Puczek, "Class E tuned power amplifier with an antiparallel diode or a series diode at switch, with any loaded Q and switch duty cycle," *IEEE Transactions on Circuits and Systems*, vol. CAS-36, no. 9, pp. 1201- 209, September 1989.

33. M. K. Kazimierczuk and J. Jozwik, "DC/DC converter with Class E zero-voltage-switching inverter and Class E zero-current-switching rectifier," *IEEE Transactions on Circuits and Systems*, vol. CAS-36, no. 11, pp. 1485-1488, November 1989.
34. M. K. Kazimierczuk and J. Jozwik, "Resonant dc/dc converter with Class-E inverter and Class-E rectifier," *IEEE Transactions on Industrial Electronics*, vol. IE-36, no. 4, pp. 568-578, November 1989.
35. M. K. Kazimierczuk, "Class E low dv_D/dt rectifier," *IEE Proceedings, Pt. B, Electric Power Applications*, vol. 136, pp. 257-262, November 1989.
36. M. K. Kazimierczuk and J. Jozwik, "Class E² narrow-band resonant dc/dc converters," *IEEE Transactions on Instrumentation and Measurements*, vol. IM-38, no. 6, pp. 1064-1068, December 1989.

1990

37. M. K. Kazimierczuk and J. Jozwik, "Class E zero-voltage-switching and zero-current-switching rectifiers," *IEEE Transactions on Circuits and Systems*, vol. CAS-37, no. 3, pp. 436-444, March 1990.
38. M. K. Kazimierczuk and X. T. Bui, "Class-E amplifier with an inductive impedance inverter," *IEEE Transactions on Industrial Electronics*, vol. IE-37, no. 2, pp. 160-166, April 1990.
39. J. Jozwik and M. K. Kazimierczuk, "Analysis and design of Class-E² dc/dc converter," *IEEE Transactions on Industrial Electronics*, vol. IE-37, no. 2, pp. 173-183, April 1990.
40. M. K. Kazimierczuk, "Analysis of Class E zero-voltage-switching rectifier," *IEEE Transactions on Circuits and Systems*, vol. CAS-37, no. 6, pp. 747-755, June 1990.
41. M. K. Kazimierczuk and J. Jozwik, "Class E² resonant dc/dc power converter," *IEE Proceedings, Pt. G, Circuits, Devices and Systems*, vol. 137, no. 6, pp. 193-196, June 1990.
42. M. K. Kazimierczuk and J. Jozwik, "Analysis and design of Class E zero-current-switching rectifier," *IEEE Transactions on Circuits and Systems*, vol. CAS-37, no. 8, pp. 1000-1009, August 1990.

1991

43. M. K. Kazimierczuk and K. Puczek, "Class E low dv/dt synchronous rectifier with controlled duty ratio and output voltage," *IEEE Transactions on Circuits and Systems*, vol. CAS-38, no. 10, pp. 1165-1172, October 1991.
44. M. K. Kazimierczuk, "Class D current-driven rectifiers for resonant dc/dc converter applications," *IEEE Transactions on Industrial Electronics*, vol. IE-38, no. 10, pp. 344-354, October 1991.
45. M. K. Kazimierczuk, "Class D voltage-switching MOSFET power amplifier," *IEE Proceedings, Part B, Electric Power Applications*, vol. 138, no. 11, pp. 285-296, November 1991.

1992

46. M. K. Kazimierczuk, W. Szaraniec, and S. Wang, "Analysis and design of parallel resonant converter at high Q_L ," *IEEE Transactions on Aerospace and Electronic Systems*, vol. AES-28, no. 1, pp. 35-50, January 1992.
47. M. K. Kazimierczuk and S. Wang, "Frequency-domain analysis of series resonant converter for continuous conduction mode," *IEEE Transactions on Power Electronics*, vol. PE-6, no. 2, pp. 270-279, April 1992.
48. M. K. Kazimierczuk and W. Szaraniec, "Analysis of Class E rectifier with a series capacitor," *IEE Proceedings, Part G, Circuits, Devices and Systems*, vol. 139, pp. 269-276, June 1992.
49. M. K. Kazimierczuk, "Synthesis of phase-modulated dc/ac inverters and dc/dc converters," *IEE Proceedings, Pt. B, Electric Power Applications*, vol. 139, pp. 387-394, July 1992.
50. A. Ivascu, M. K. Kazimierczuk, and S. Birca-Galateanu, "Class E resonant low dv/dt rectifier," *IEEE Transactions on Circuits and Systems*, vol. CAS-39, no. 8, pp. 604-613, August 1992.
51. D. Czarkowski and M. K. Kazimierczuk, "Linear circuits models of PWM flyback and buck/boost converters," *IEEE Transactions on Circuits and Systems*, vol. CAS-39, no. 8, pp. 688-693, August 1992.
52. M. K. Kazimierczuk and W. Szaraniec, "Class D zero-voltage switching inverter with only one shunt capacitor," *IEE Proceedings, Part B, Electric Power Applications*, vol. 139, pp. 449-456, September 1992.
53. D. Czarkowski and M. K. Kazimierczuk, "Static- and dynamic-circuit models of PWM buck-derived dc-dc converters," *IEE Proceedings, Part G, Circuits, Devices and Systems*, vol. 139, pp. 669-679, December 1992.

1993

54. M. K. Kazimierczuk, N. Thirunarayan, and S. Wang, "Analysis of series-parallel resonant converter," *IEEE Transactions on Aerospace and Electronic Systems*, vol. AES-29, no. 1, pp. 88-99, January 1993.
55. M. K. Kazimierczuk and W. Szaraniec, "Analysis of Class E low di/dt rectifier with a series inductor," *IEEE Transactions on Aerospace and Electronic Systems*, vol. AES-29, no. 1, pp. 278-287, January 1993.
56. M. Mikolajewski and M. K. Kazimierczuk, "Zero-voltage-ripple rectifiers and dc/dc resonant converters," *IEEE Transactions on Power Electronics*, vol. PE-6, no. 1, pp. 12-17, January 1993.
57. A. Reatti, M. K. Kazimierczuk, and R. Redl, "Class E full-wave low dv/dt rectifier," *IEEE Transactions on Circuits and Systems*, vol. CAS-40, no. 2, pp. 73-85, February 1993.
58. M. K. Kazimierczuk and N. Thirunarayan, "Class D voltage-switching inverter with tapped resonant inductor," *IEE Proceedings, Pt. B, Electric Power Applications*, vol. 140, pp. 177-185, May 1993.
59. D. Czarkowski and M. K. Kazimierczuk, "Single-capacitor phase-controlled series resonant converter," *IEEE Transactions on Circuits and Systems*, vol. CAS-40, no. 6, pp. 383-391, June 1993.
60. M. K. Kazimierczuk and W. Szaraniec, "Class D-E resonant dc/dc converter," *IEEE Transactions on Aerospace and Electronics Systems*, vol. AES-29, no. 8, pp. 963-976, July 1993.
61. D. Czarkowski and M. K. Kazimierczuk, "Energy-conservation approach to modeling PWM dc-dc converters," *IEEE Transactions on Aerospace and Electronic Systems*, vol. AES-29, no. 3, pp. 1059-1063, July 1993.
62. D. Czarkowski and M. K. Kazimierczuk, "Phase-controlled series-parallel resonant converter," *IEEE Transactions on Power Electronics*, vol. PE-8, no. 3, pp. 309-319, July 1993.
63. M. K. Kazimierczuk and M. Jutty, "Phase-modulated series-parallel resonant converter with series load," *IEE Proceedings, Pt. B, Electric Power Applications*, vol. 140, pp. 297-306, September 1993.
64. M. K. Kazimierczuk and W. Szaraniec, "Electronic ballast for fluorescent lamps," *IEEE Transactions on Power Electronics*, vol. PE-8, no. 4, pp. 386-395, October 1993.
65. A. Ivascu, M. K. Kazimierczuk, and S. Birca-Galateanu, "Class E resonant low di/dt rectifier," *IEE Proceedings, Part G, Circuits, Devices and Systems*, vol. 140, pp. 417-423, December 1993.
66. M. K. Kazimierczuk, D. Czarkowski, and N. Thirunarayan, "A new phase-controlled parallel resonant converter," *IEEE Transactions on Industrial Electronics*, vol. IE-40, no. 12, pp. 542-552, December 1993.

1994

67. D. Czarkowski and M. K. Kazimierczuk, "Application of state feedback with integral control to pulse-width modulated push-pull dc-dc converter," *IEE Proceedings, Part D, Control Theory and Applications*, vol. 141, no. 2, pp. 99-103, March 1994.
68. M. K. Kazimierczuk, B. Tomescu, and A. Ivascu, "Class E resonant rectifier with a series capacitor," *IEEE Transactions on Circuits and Systems*, vol. 41, no. 12, pp. 885-890, December 1994.
69. M. K. Kazimierczuk and R. Cravens II, "Closed-loop characteristics of voltage-mode-controlled PWM boost dc-dc converter with an integral-lead controller," *Journal of Circuits, Systems and Computers*, vol. 4, no. 4, pp. 429-458, December 1994.
70. M. K. Kazimierczuk and N. Thirunarayan, "Dynamic performance of MCTs under inductive load conditions," *Journal of Circuits, Systems and Computers*, vol. 4, no. 4, pp. 471-485, December 1994.

1995

71. M. K. Kazimierczuk and M. Jutty, "Fixed-frequency phase-controlled full-bridge resonant converter with a series load," *IEEE Transactions on Power Electronics*, vol. PE-10, no. 1, pp. 9-18, January 1995.
72. D. Czarkowski, L. R. Pujara, and M. K. Kazimierczuk, "Robust stability of state-feedback control of PWM dc-dc push-pull converter," *IEEE Transactions on Industrial Electronics*, vol. IE-41, no. 1, pp. 108-111, February 1995.
73. M. K. Kazimierczuk and A. Abdulkarim, "Current-source converter with parallel-resonant circuit," *IEEE Transactions on Industrial Electronics*, vol. IE-42, no. 2, pp. 199-208, April 1995.
74. D. Czarkowski and M. K. Kazimierczuk, "Static characteristics of MOS-controlled thyristors - Analysis, simulation and experimental results," *Journal of Circuits, Systems and Computers*, vol. 5, no. 1, pp. 65-80, March 1995.

75. M. K. Kazimierczuk and R. Cravens II, "Open and closed-loop dc and small-signal characteristics of PWM buck-boost converter for CCM," *Journal of Circuits, Systems and Computers*, vol. 5, no. 3, pp. 261-303, September 1995.
 76. M. K. Kazimierczuk, N. Thirunarayan, B. T. Nguyen, and J. A. Weimer, "Experimental static and dynamic characteristics of MOS-controlled thyristors for resistive loads," *Journal of Circuits, Systems and Computers*, vol. 5, no. 3, pp. 393-410, September 1995.
 77. R. E. Siferd, R. C. Cravens II, and M. K. Kazimierczuk, "CMOS PWM control circuit with programmable dead time," *Journal of Circuits, Systems and Computers*, vol. 5, no. 3, pp. 429-441, September 1995.
 78. M. K. Kazimierczuk, "Reverse recovery of power pn junction diodes," *Journal of Circuits, Systems and Computers*, vol. 5, no. 4, pp. 589-606, December 1995.
 79. M. Bartoli, N. Neferi, A. Reatti, and M. K. Kazimierczuk, "Modeling winding losses in high-frequency power inductors," *Journal of Circuits, Systems and Computers*, vol. 5, no. 4, pp. 607-626, December 1995.
 80. M. K. Kazimierczuk and R. C. Cravens II, "Experimental results for the small-signal study of the PWM boost DC-DC converter with an integral-lead controller," *Journal of Circuits, Systems and Computers*, vol. 5, no. 4, pp. 747-755, December 1995.
 81. M. K. Kazimierczuk and R. S. Geise, "Single-loop current-mode control of a PWM boost dc-to-dc converter with a non-symmetric phase control," *Journal of Circuits, Systems and Computers*, vol. 5, no. 4, pp. 699-734, December 1995.
- 1996**
82. M. K. Kazimierczuk and R. C. Cravens II, "Current-source parallel-resonant dc/ac inverter with transformer," *IEEE Transactions on Power Electronics*, vol. PE-11, no. 2, pp. 275-284, March 1996.
 83. M. K. Kazimierczuk, M. J. Mescher, and R. P. Prenger, "Class D current-driven center-topped transformer controllable synchronous rectifier," *IEEE Transactions on Circuits and Systems, Part I, Fundamental Theory and Applications*, vol. 43, no. 8, pp. 670-680, August 1996.
- 1997**
84. M. K. Kazimierczuk and A. Massarini, "Feed-forward control of dc-dc PWM boost converter," *IEEE Transactions on Circuits and Systems, Part I, Fundamental Theory and Applications*, vol. 44, no. 2, pp. 143-148, February 1997.
 85. M. K. Kazimierczuk and C. Wu, "Frequency-controlled series-resonant converter with center-topped synchronous rectifier," *IEEE Transactions on Aerospace and Electronic Systems*, vol. 33, no. 3, pp. 939-947, July 1997.
 86. A. Massarini and M. K. Kazimierczuk, "Self-capacitance of inductors," *IEEE Transactions on Power Electronics*, vol. 12, no. 3, pp. 671-676, July 1997.
 87. A. Massarini, U. Reggiani, and M. K. Kazimierczuk, "Analysis of networks with ideal switches by state equations," *IEEE Transactions on Circuits and Systems, Part I, Fundamental Theory and Applications*, vol. 44, no. 8, pp. 692-697, August 1997.
- 1998**
88. D. Czarkowski and M. K. Kazimierczuk, "ZVS Class D series resonant inverter – Time state space simulation and experimental results," *IEEE Transactions on Circuits and Systems, Part I, Fundamental Theory and Applications*, vol. 45, no. 11, pp. 1141-1147, November 1998.
- 1999**
89. M. K. Kazimierczuk, G. Sancineto, U. Reggiani, and A. Massarini, "High-frequency small-signal model of ferrite core inductors," *IEEE Transactions on Magnetics*, vol. 35, no. 5, pp. 4185-4191, September 1999.
 90. G. Grandi, M. K. Kazimierczuk, A. Massarini, and U. Reggiani, "Stray capacitance of single layer solenoid air-core inductors," *IEEE Transactions on Industry Applications*, vol. 35, no. 5, pp. 1162-1168, September/October 1999.
 91. M. K. Kazimierczuk and L. A. Starman, "Dynamic performance of PWM dc-dc boost converter with input voltage feed-forward control," *IEEE Transactions on Circuits and Systems, Part I, Fundamental Theory and Applications*, vol. 46, no. 12, pp. 1473-1481, December 1999.

2000

92. A. J. Frazier and M. K. Kazimierczuk, "DC-AC power inversion using sigma-delta modulation," *IEEE Transactions on Circuits and Systems, Part I, Fundamental Theory and Applications*, vol. 46, no.1, pp. 79-82, January 2000.
93. M. K. Kazimierczuk and A. J. Edstrom, "Open-loop peak voltage feed-forward control of a PWM buck converter," *IEEE Transactions on Circuits and Systems, Part I, Fundamental Theory and Applications*, vol. 47, no. 5, pp. 740-746, May 2000. <https://doi.org/10.1109/81.847879>
94. M. K. Kazimierczuk, "Transfer function of current modulator in PWM converters with current-mode control," *IEEE Transactions on Circuits and Systems, Part I, Fundamental Theory and Applications*, vol. 47, no. 9, pp. 1407-1412, September 2000.

2001

95. W. Pietrenko, W. Janke, and M. K. Kazimierczuk, "Application of semi-analytical recursive convolution algorithms for large-signal time-domain simulation of switch-mode power converters," *IEEE Transactions on Circuits and Systems, Part I, Fundamental Theory and Applications*, vol. 48, no. 10, pp. 1246-1252, October 2001.

2002

96. A. Reatti and M. K. Kazimierczuk, "Comparison of various methods for calculating the ac resistance of inductors," *IEEE Transactions on Magnetics*, vol. 37, no. 3, pp. 1512-1518, May 2002.

2003

97. A. Reatti and M. K. Kazimierczuk, "Small-signal model of PWM converters for discontinuous conduction mode and its application for boost converter," *IEEE Transactions on Circuits and Systems, Part I, Fundamental Theory and Applications*, vol. 50, no. 1, pp. 65-73, January 2003.
98. B. Bryant and M. K. Kazimierczuk, "Effect of a current sensing resistor on required MOSFET size," *IEEE Transactions on Circuits and Systems, Part I, Fundamental Theory and Applications*, vol. 50, no. 5, pp. 708-711, May 2003.
99. T. Suetsugu and M. K. Kazimierczuk, "ZVS condition predicting sensor for the Class E amplifier," *IEEE Transactions on Circuits and Systems, Part I, Fundamental Theory and Applications*, vol. 50, no. 6, pp. 763-769, June 2003.
100. T. Suetsugu and M. K. Kazimierczuk, "Comparison of Class E amplifier with nonlinear and linear shunt capacities," *IEEE Transactions on Circuits and Systems, Part I, Fundamental Theory and Applications*, vol. 50, no. 8, pp. 1089-1097, August 2003.
101. T. Suetsugu and M. K. Kazimierczuk, "Voltage clamped Class E amplifier with Zener diode," *IEEE Transactions on Circuits and Systems, Part I, Fundamental Theory and Applications*, vol. 50, no. 10, pp. 1347-1349, October 2003.

2004

102. G. Grandi, M. K. Kazimierczuk, A. Massarini, U. Reggiani, and G. Sancineto, "Model of laminated iron-core inductors for high frequencies," *IEEE Transactions on Magnetics*, vol. 40, no. 4, pp. 1839-1845, July 2004.
103. T. Suetsugu and M. K. Kazimierczuk, "Analysis and design of Class E amplifier with shunt capacitance composed of nonlinear and linear capacitances," *IEEE Transactions on Circuits and Systems, Part I: Regular Papers*, vol. 51, no. 7, pp. 1261-1268, July 2004.
104. D. Kessler and M. K. Kazimierczuk, "Power losses and efficiency of Class E power amplifier at any duty cycle," *IEEE Transactions on Circuits and Systems, Part I: Regular Papers*, vol. 51, no. 9, pp. 1675-1689, September 2004.

2005

105. T. Suetsugu and M. K. Kazimierczuk, "Design procedure of lossless voltage-clamped Class E amplifier with transformer and diode," *IEEE Transactions on Power Electronics*, vol. 20, no. 1, pp. 56-64, January 2005.
106. M. K. Kazimierczuk, V. G. Krizhanovski, J. V. Rassokhina, and D. V. Chernov, "Class-E MOSFET tuned power oscillator design procedure," *IEEE Transactions on Circuits and Systems, Part I: Regular Papers*, vol. 52, no. 6, pp. 1138-1147, June 2005.

107. R. Kleismit, G. Kozlowski, R. Bigger, I. Maartense, M. K. Kazimierczuk, and D. B. Mast, "Characterization of local dielectric properties of superconductor $\text{YBa}_2\text{Cu}_3\text{O}_{7-8}$ using evanescent microwave microscopy," *IEEE Transactions on Applied Superconductivity*, vol. 15, no. 2, pp. 2915-2918, June 2005.
108. R. A. Kleismit, M. El-Ashry, G. Kozlowski, M. S. Amer, M. K. Kazimierczuk, and R. R. Bigger, "Local dielectric and strain measurements in $\text{YBa}_2\text{Cu}_3\text{O}_{7-8}$ thin films by evanescent microscopy and Raman spectroscopy," *Superconductor Science and Technology*, vol. 18, pp. 1197-1203, July 2005.
109. B. Bryant and M. K. Kazimierczuk, "Open-loop power-stage transfer functions relevant to current-mode control of boost PWM converter operating in CCM," *IEEE Transactions on Circuits and Systems, Part I: Regular Papers*, vol. 52, no. 10, pp. 2158-2164, October 2005.
110. B. Bryant and M. K. Kazimierczuk, "Modeling the closed-current loop of PWM DC-DC converters with peak current-mode control converter operating in CCM," *IEEE Transactions on Circuits and Systems, Part I: Regular Papers*, vol. 52, no. 11, pp. 2404-2412, November 2005.

2006

111. B. Bryant and M. K. Kazimierczuk, "Voltage loop of boost PWM DC-DC converters with peak current-mode control," *IEEE Transactions on Circuits and Systems, Part I, Regular Papers*, vol. 53, no. 1, pp. 99-105, January 2006.
112. K. Jirasereeamornkul, M. K. Kazimierczuk, I. Boonyaroonate, and K. Chamnongthai, "Single-stage electronic ballast with Class E rectifier as power-factor corrector," *IEEE Transactions on Circuits and Systems, Part I: Regular Papers*, vol. 53, no. 1, pp. 139-148, January 2006.
113. R. Kleismit, M. K. Kazimierczuk, and G. Kozlowski, "Sensitivity and resolution of evanescent microwave microscope," *IEEE Transactions on Microwave Theory and Technique*, vol. 54, no. 2, pp. 639-647, February 2006.
114. M. K. Kazimierczuk, V. G. Krizhanovski, J. V. Rassokhina, and D. V. Chernov, "Injection-locked Class-E oscillator," *IEEE Transactions on Circuits and Systems, Part I: Regular Papers*, vol. 53, no. 6, pp. 1214-1222, June 2006.
115. T. Suetsugu and M. K. Kazimierczuk, "Design procedure of Class E amplifier for off-nominal operation at 50% duty ratio," *IEEE Trans. Circuits and Systems, Part I, Regular Papers*, vol. 53, no. 7, pp. 1468-1476, July 2006.

2007

116. B. Bryant and M. K. Kazimierczuk, "Voltage-loop power-stage transfer functions with MOSFET delay for boost PWM converter operating in CCM," *IEEE Transactions on Industrial Electronics*, vol. 54, no. 1, pp. 347-353, February 2007.
117. V. G. Krizhanovski, D. V. Chernov, and M. K. Kazimierczuk, "Low-voltage electronic ballast based on Class E oscillator," *IEEE Trans. Power Electronics*, vol. 22, no. 3, pp. 863-870, May 2007.
118. T. Suetsugu and M. K. Kazimierczuk, "Off-nominal operation of Class E amplifier at any duty ratio," *IEEE Trans. Circuits and Systems, Part I, Regular Papers*, vol. 54, no. 6, pp. 1389-1397, June 2007.

2008

119. T. Suetsugu and M. K. Kazimierczuk, "Maximum operating frequency of Class E amplifier at any duty cycle," *IEEE Trans. Circuits and Systems, Part II, Express Briefs*, vol. 55, no. 8, pp. 768-770, August 2008.

2009

120. R. A. Kleismit, G. Kozlowski, B. D. Foy, B. E. Hull, and M. K. Kazimierczuk, "Local complex permittivity measurement of porcine skin tissue in the frequency range from 1 GHz to 15 GHz by evanescent microscopy," *Physics in Medicine and Biology*, vol. 54, no. 3, pp. 699-713, February 2009.
121. N. Kondrath and M. K. Kazimierczuk, "Bandwidth of current transformers," *IEEE Transactions on Instrumentation and Measurements*, vol. 58, no. 6, pp. 2008-2016, June 2009.
122. H. Sekiya, T. Watanabe, T. Suetsugu, and M. K. Kazimierczuk, "Analysis of Class DE amplifiers with nonlinear shunt capacitances," *IEEE Transactions on Circuits and Systems, Part I, Regular Papers*, vol. 56, no. 10, pp. 2363-2371, October 2009.

2010

123. V. P. Galigekere, D. Murthy-Bellur, and M. K. Kazimierczuk, "An overview and simulation of dc-dc-ac and Z-source grid connected inverters," *How2Power*, February 2010.
124. H. Sekiya, N. Sagawa, and M. K. Kazimierczuk, "Analysis of Class DE amplifier with nonlinear shunt capacitances at any grading coefficient for high Q and duty cycle 25%," *IEEE Transactions on Power Electronics*, vol. 25, no. 4, pp. 924-932, April 2010.
125. D. M. Bellur and M. K. Kazimierczuk, "Two-transistor zeta-flyback converter with reduced transistor voltage stress," *Proc IET, Electronic Letters*, vol. 46, no. 10, pp. 719-720, May 13, 2010.
126. J. J. Lee and M. K. Kazimierczuk, "Effects of load changes on the control-to-output transfer function of a buck-boost converter in CCM," *How2Power*, May 2010.
127. D. Murthy-Bellur and M. K. Kazimierczuk, "Harmonic winding loss in buck dc-dc converter for discontinuous conduction mode," *Proc. IET, Power Electronics*, vol. 3, no. 5, pp. 740-754, September 2010.
128. D. Murthy-Bellur and M. K. Kazimierczuk, "Winding losses caused by harmonics in high-frequency transformers for pulse-width modulated DC-DC converters in discontinuous conduction mode," *Proc. IET, Power Electronics*, vol. 3, no. 5, pp. 804-817, September 2010.
129. H. Sekiya, N. Sagawa, and M. K. Kazimierczuk, "Analysis of Class-DE amplifier with linear and nonlinear shunt capacitances at 25% duty cycle," *IEEE Transactions on Circuits and Systems, Part I, Regular Papers*, vol. 57, no. 9, pp. 2334-2342, September 2010.
130. M. K. Kazimierczuk and R. Wojda, "Foil winding resistance and power loss in individual layers of inductors," *International Journal of Electronics and Telecommunications*, vol. 56, no. 3, pp. 237-246, September 2010.
131. N. Kondrath and M. K. Kazimierczuk, "Characteristics and applications of silicon carbide devices in power electronics," *International Journal of Electronics and Telecommunications*, vol. 56, no. 3, pp. 231-236, September 2010.
132. R. C. Fitch, Jr., M. K. Kazimierczuk, J. K. Gillespe, A. G. Mattamana, P. L. Orlando, K. S. Groves, and T. K. Quach, "Hybrid integration of microwave circuit solenoid inductors and ALGaIn/GaN HEMTs using an Su-8 photosensitive epoxy interposer layer," *The Electrochemical Society (ECS) Transactions*, vol. 33, no. 13, pp. 23-45, October 2010.
133. N. Kondrath and M. K. Kazimierczuk, "Control current and relative stability of peak current-mode controlled PWM dc-dc converters without slope compensation," *IET Proc., Power Electronics*, vol. 3, no. 6, pp. 936-946, November 2010.
134. N. Kondrath and M. K. Kazimierczuk, "Inductor winding loss owing to skin and proximity effects including harmonics in non-isolated PWM dc-dc converters operating in continuous conduction mode," *IET Proc., Power Electronics*, vol. 3, no. 6, pp. 989-1000, November 2010.
135. M. K. Kazimierczuk and D. Murthy-Bellur, "Loop gain of the common-drain Colpitts oscillator," *International Journal of Electronics and Telecommunications*, vol. 56, no. 4, pp. 423-426, December 2010.
136. R. Miyahare, H. Sekiya, and M. K. Kazimierczuk, "Novel design procedure of Class- E_M power amplifiers," *IEEE Transactions on Microwave Theory and Techniques*, vol. 58, no. 12, pp. 3607-3616, December 2010.

2011

137. D. Murthy-Bellur and M. K. Kazimierczuk, "Isolated two-switch Zeta converter with reduced transistor voltage stress," *IEEE Trans. Circuits and Systems, Part II, Express Briefs*, vol. 58, no. 1, pp. 41-45, January 2011.
138. D. Murthy-Bellur and M. K. Kazimierczuk, "Zero-current transition two-switch flyback pulse-width modulated dc-dc converter," *Proc. IET, Power Electronics*, vol. 4, no. 3, pp. 288-295, 2011.
139. D. Murthy-Bellur, N. Kondrath, and M. K. Kazimierczuk, "Transformer winding loss caused by skin and proximity effects including harmonics in PWM DC-DC flyback converter for continuous conduction mode," *IET Proc., Power Electronics*, vol. 4, no. 4, pp. 363-373, April 2011.
140. M. K. Kazimierczuk and D. Murthy-Bellur, "Loop gain of common-gate Colpitts oscillator," *IET Proc, Circuits, Devices and Systems, Part G*, vol. 5, no. 4, pp. 275-284, 2011.

141. N. Kondrath and M. K. Kazimierczuk, "Loop gain and margins of stability of inner-current loop of peak current-mode controlled PWM DC-DC converters in CCM," *IET Proc., Power Electronics*, vol. 4, no. 6, pp. 701-707, 2011.
142. N. Kondrath and M. K. Kazimierczuk, "Control-to-output transfer function of peak current-mode controlled PWM dc-dc boost converter in CCM," *IET Electronics Letters*, vol. 47, no. 17, pp. 991-993, August 18, 2011.
143. D. Murthy-Bellur and M. K. Kazimierczuk, "Two-switch flyback dc-dc converter in discontinuous-conduction mode," *International Journal of Circuit Theory and Applications*, vol. 39, no. 8, pp. 849-864, August 2011.
144. X. Wei, H. Sekiya, S. Kurokawa, T. Suetsugu, and M. K. Kazimierczuk, "Effect of MOSFET parasitic capacitances on Class-E power amplifier," *IEEE Transactions on Circuits and Systems, Part I, Regular Papers*, vol. 58, no. 10, pp. 2556-2564, October 2011.
145. D. Murthy-Bellur and M. K. Kazimierczuk, "Two-switch flyback PWM dc-dc converter for continuous-conduction mode," *International Journal of Circuit Theory and Applications*, vol. 39, no. 11, pp. 1145-1160, November 2011.
146. A. Ayachit, V. P. Galigerkere, and M. K. Kazimierczuk, "Power electronic circuitry in LED modules: An overview," *How2Power*, pp. 1-11, December 2011.

2012

147. N. Kondrath and M. K. Kazimierczuk, "Comparison of wide- and high-frequency duty-ratio-to-inductor-current transfer functions of dc-dc PWM buck converter in CCM," *IEEE Transactions on Industrial Electronics*, vol. 59, no. 1, pp. 641-643, January 2012.
148. M. K. Kazimierczuk and D. Murthy-Bellur, "Synthesis of LC oscillators," *International Journal of Electrical Engineering Education*, vol. 49, no. 1, pp. 26-31, January 2012.
149. D. A. Nagarajan, D. Murthy-Bellur, and M. K. Kazimierczuk, "Harmonic winding losses in the transformer of a forward pulse-width modulated dc-dc converter for continuous conduction mode," *Proc. IET, Power Electronics*, vol. 5, no. 2, pp. 221-236, 2012.
150. R. P. Wojda and M. K. Kazimierczuk, "Winding resistance of litz wire and multi-strand inductors," *Proc. IET, Power Electronics*, vol. 5, no. 2, pp. 257-268, 2012 (The Best Journal Paper Award from IET Power Electronics in the year 2012).
151. N. Kondrath and M. K. Kazimierczuk, "Control-to-output transfer function of a dc-dc pulse-width-modulated buck converter in continuous conduction mode," *IET Power Electronics*, vol. 5, no. 5, pp. 582-590, 2012.
152. R. P. Wojda and M. K. Kazimierczuk, "Proximity-effect winding loss in different conductors using magnetic averaging technique," *Emerald COMPEL: The International Journal for Computation and Mathematics in Electrical and Electronic Engineering*, vol. 31, no.6, pp. 1793-1814, December 2012.
153. V. P. Galigekere and M. K. Kazimierczuk, "Analysis of Z-source PWM dc-to-dc converter for steady state," *IEEE Trans. Circuits and Systems, Part I, Regular Papers*, vol. 59, no. 3, pp. 854-863, April 2012.
154. X. Wei, T. Nagashima, S. Kurokawa, H. Sakiya, and M. K. Kazimierczuk, "Push-pull Class-E-M power amplifier for low harmonic-contents and high output-power applications," *IEEE Transactions on Circuits and Systems, Part I: Regular Papers*, vol. 59, no. 9, pp. 2137-2146, September 2012.
155. R. P. Wojda and M. K. Kazimierczuk, "Optimum foil thickness of inductor conducting dc and non-sinusoidal periodic currents," *IET Power Electronics*, vol. 5, no. 6, pp. 801-812, 2012.
156. N. Kondrath and M. K. Kazimierczuk, "Control-to-output transfer function of a dc-dc pulse-width-modulated buck converter in continuous conduction mode," *IET Power Electronics*, vol. 5, no. 5, pp. 582-590, May 2012.
157. N. Kondrath and M. K. Kazimierczuk, "Unified model to derive control-to-output transfer function of peak current-mode controlled PWM dc-dc converters in CCM," *IET Power Electronics*, vol. 5, no. 9, pp. 1706-1713, November 2012.

2013

158. R. P. Wojda and M. K. Kazimierczuk, "Analytical optimization of solid-round-wire windings," *IEEE Trans. Industrial Electronics*, vol. 60, no. 3, pp. 1033-1041, March 2013.

159. V. P. Galigekere and M. K. Kazimierczuk, "Small-signal modeling of Z-source dc-to-dc converter using circuit averaging technique," *IEEE Transactions on Power Electronics*, vol. 28, no. 3, pp. 1286-1296, March 2013.
160. R. P. Wojda and M. K. Kazimierczuk, "Magnetic field distribution and analytical optimization of foil windings conducting sinusoidal currents," *IEEE Magnetics Letters*, vol. 4, paper no. 0500204, April 2013.
161. A. Ayachit and M. K. Kazimierczuk, "Analysis of switching network in PWM dc-dc converters in terms of averaged resistance and conductance," *Electronics Letters*, vol. 49, no. 11, pp. 715-717, 23rd May 2013.
162. R. P. Wojda and M. K. Kazimierczuk, "Analytical winding foil thickness optimization of inductors conducting harmonic currents," *IET Power Electronics*, vol. 6, no. 5, pp. 963-973, May 2013.
163. R. P. Wojda and M. K. Kazimierczuk, "Analytical winding size optimization for different conductor shapes using Ampere's law," *IET Power Electronics*, vol. 6, no. 6, pp. 1058-1068, June 2013.
164. R. Wojda and M. K. Kazimierczuk, "Analytical optimization of solid-round-wire windings conducting dc and ac non-sinusoidal periodic currents," *IET Power Electronics*, vol. 6, no. 7, pp. 1462-1474, July 2013.
165. M. Hayati, A. Lotfi, M. K. Kazimierczuk, and H. Sekiya, "Performance study of Class-E power amplifier with a shunt inductor at sub-nominal condition," *IEEE Transactions on Power Electronics*, vol. 28, no. 8, pp. 3834-3844, August 2013.
166. T. Suetsugu, X. Wei, and M. K. Kazimierczuk, "Design equations for off-nominal operation of Class E amplifier with nonlinear shunt capacitance at $D = 0.5$," *IEICE Transactions on Communications*, vol. E96B, no. 9, pp. 2198-2205, September 2013.
167. A. Ayachit and M. K. Kazimierczuk, "Thermal effects on inductor winding resistance at high frequencies," *IEEE Magnetics Letters*, vol. 4, paper no. 0500304, 19th November 2013.
168. M. Hayati, A. Lotfi, M. K. Kazimierczuk, and H. Sekiya, "Analysis and design of Class-E power amplifier with MOSFET parasitic linear and nonlinear capacitances at any duty cycle," *IEEE Transactions on Power Electronics*, vol. 28, no. 11, pp. 5222-5232, November 2013.

2014

169. T. Nagashima, X. Wei, T. Suetsugu, M. K. Kazimierczuk, and H. Sekiya, "Waveform equations, output power, and power conversion efficiency for Class-E inverter outside nominal operation," *IEEE Trans. Industrial Electronics*, vol. 61, no. 4, pp. 1799-1810, April 2014.
170. X. Wei, T. Nagashima, M. K. Kazimierczuk, H. Sakiya, and T. Suetsugu, "Analysis and design of Class-E_M power amplifier," *IEEE Circuits and Systems, Part I: Regular Papers*, vol. 61, no. 4, pp. 976-986, April 2014.
171. M. Hayati, A. Lotfi, M. K. Kazimierczuk, and H. Sekiya, "Modeling and analysis of Class-E amplifier with a shunt inductor at sub-nominal operation for any duty ratio," *IEEE Circuits and Systems, Part I: Regular Papers*, vol. 61, no. 4, pp. 987-1000, April 2014.
172. M. Hayati, A. Lotfi, M. K. Kazimierczuk, and H. Sekiya, "Analysis, design, and implementation of Class-E ZVS power amplifier with MOSFET nonlinear drain-to-source parasitic capacitance at any duty cycle," *IEEE Transactions on Power Electronics*, vol. 29, no. 9, pp. 4989-4999, September 2014.
173. C. Ekkaravarodome, K. Jirasereeamornkul, and M. K. Kazimierczuk, "Class-D zero-current-switching rectifier as power-factor corrector for lighting applications," *IEEE Transactions on Power Electronics*, vol. 29, no. 9, pp. 4938-4948, September 2014.
174. C. Ekkaravarodome, K. Jirasereeamornkul, and M. K. Kazimierczuk, "Implementation of a DC-side Class-DE low dv/dt rectifier as power-factor corrector for ballast applications," *IEEE Transactions on Power Electronics*, vol. 29, no. 10, pp. 5486-5499, October 2014.

2015

175. M. Hayati, A. Lotfi, M. K. Kazimierczuk, and H. Sekiya, "Generalized design considerations and analysis of Class E amplifier for square and sinusoidal voltage waveforms," *IEEE Transactions on Industrial Electronics*, vol. 62, no. 1, pp. 211-220, January 2015.
176. S. Pasko, M. K. Kazimierczuk, and B. Grzesik, "Self-capacitance of coupled toroidal inductors for EMI filters," *IEEE Transactions on Electromagnetic Compatibility*, vol. 57, no. 2, pp. 216-223, April 2015.

177. N. Kondrath, A. Ayachit, and M. K. Kazimierczuk, "Minimum required magnetizing inductance for multiple-output flyback dc-dc converter in CCM," *IET Electronic Letters*, vol. 51, no. 12, pp. 930-931, June 11, 2015.
178. H. Sekiya, X. Wei, T. Nagashima, and M. K. Kazimierczuk, "Steady-state analysis and design of Class-DE inverter at any duty ratio," *IEEE Transactions on Power Electronics*, vol. 38, no. 7, pp. 3685-3694, July 2015.
179. R. Wojda and M. K. Kazimierczuk, "Analytical optimization of litz-wire windings independent of porosity factor," *International Journal of Computation and Mathematics in Electrical and Electronics Engineering, COMPEL*, vol. 34, no. 3, pp. 920-940, July 2015.
180. T. Nagashima, X. Wei, E. Bou, E. Alarcon, M. K. Kazimierczuk, and H. Sekiya, "Analysis and design of loosely inductive coupled wireless power transfer with class E² dc-dc converter," *IEEE Transactions on Circuits and Systems –I, Regular Papers*, vol. 62, no. 11, pp. 2781-2791, November 2015.

2016

181. X. Wei, H. Sekiya, T. Nagashima, and M. K. Kazimierczuk, "Steady-state analysis and design of Class-D inverter at any duty cycle," *IEEE Transactions on Power Electronics*, vol. 31, no. 1, pp.394-405, January 2016.
182. Q. Deng, J. Liu, D. Czarkowski, M. K. Kazimierczuk, M. Bojarski, H. Zhou, and W. Hu, "Frequency-dependent resistance of litz-wire square solenoid coils and quality factor optimization for wireless power transfer," *IEEE Transactions on Industrial Electronics*, vol. 63, no. 5, pp. 2825-2837, May 2016.
183. A. Ayachit and M. K. Kazimierczuk, "Steinmetz equation for gapped magnetic cores," *IEEE Magnetic Letters*, vol. 7, paper no. 1302704, May 10, 2016.
184. M. Catelani, L. Ciani, M. K. Kazimierczuk, and A. Reatti, "Matlab PV solar concentrator performance prediction based on triple junction solar cell," vol. 88, pp. 310-317, *Measurement*, Elsevier, June 2016.
185. A. Ayachit and M. K. Kazimierczuk, "Transfer functions of a transformer at different values of coupling coefficient," *IET Circuits, Devices and Systems*, vol. 10, no. 4, pp. 337-348, July 2016.
186. M. Hayati, S. Roshani, M. K. Kazimierczuk, and H. Sekiya, "Analysis and design of Class E power amplifier considering MOSFET parasitic input and output capacitances," *IET Circuits, Devices and Systems*, vol. 10, no. 5, pp. 433-440, September 2016.
187. M. Hayati, S. Roshani, M. K. Kazimierczuk, and H. Sekiya, "A Class-E power amplifier design considering MOSFET nonlinear drain-to-source and nonlinear gate-to-drain capacitances at any grading coefficient," *IEEE Transactions on Power Electronics*, vol. 31, no. 11, pp. 7770-7709, November 2016.
188. A. Cappelletti, M. Catelani, L. Ciani, M. K. Kazimierczuk, and A. Reatti, "Practical issues and characterization of a photovoltaic/thermal linear focus 20x solar concentrator," *IEEE Transactions on Instrumentation and Measurements*, vol. 65, no. 5, pp. 681-706, October 2016.
189. T. Salvatierra and M. K. Kazimierczuk, "DC analysis and design of a PWM buck converter operated as a dynamic power supply," *International Journal of Circuit Theory and Applications*, vol. 45, no. 5, pp. 681-706, May 2016.
190. Y. P. Siwakoti, F. Blaabjerg, V. P. Galigekere, A. Ayachit, and M. K. Kazimierczuk, "A-source impedance network," *IEEE Transactions on Power Electronics*, vol. 31, no. 12, pp., 8081-8087, December 2016,

2017

191. A. Reatti, M. K. Kazimierczuk, M. Cataliani, and L. Ciani, "Monitoring and field data acquisition system for hybrid static plan," *Measurement*, Elsevier, vol. 68, pp. 384-392, February 2017.
192. A. Ayachit, A. Reatti, and M. K. Kazimierczuk, "Magnetizing inductance of multiple-output flyback converter for discontinuous-conduction mode," *IET Power Electronics*, vol. 10, no. 4, pp. 451-461, March 2017.
193. T. Nagashima, X. Wei, E. Bou, E. Alacron, T. Suetsugu, M. K. Kazimierczuk, and H. Sekiya, "Steady-state analysis of Class E² converter outside the nominal operation," *IEEE Trans. Industrial Electronics*, vol. 64, no. 4, pp. 3227-3238, April 2017.
194. A. Ayachit and M. K. Kazimierczuk, "Sensitivity of effective permeability for gapped magnetic cores with fringing effect," *IET Circuits, Devices & Systems*, vol. 11, no. 3, pp. 209-215, May 2017.

195. A. Ayachit and M. K. Kazimierczuk, "Self-capacitance of single-layer inductors with separation between conductor turns," *IEEE Transactions on Electromagnetic Compatibility*, vol. 59, no. 5, pp. 1642-1645, October 2017.
- 2018**
196. M. Hayati, S. Roshani, M. K. Kazimierczuk, and H. Sekiya, "Design of Class E power amplifier with new structure and flat top switch voltage waveform," *IEEE Transactions on Power Electronics*, vol. 33, no. 3, pp. 2571-2579, March 2018.
 197. D. K. Saini, A. Ayachit, A. Reatti, and M. K. Kazimierczuk, "Analysis and design of choke inductors for switched-mode power inverters," *IEEE Transactions on Industrial Electronics*, vol. 64, no. 3, pp. 2234-2244, March 2018.
 198. A. Lofti, A. Ershadi, M. Hayati, M. K. Kazimierczuk, and H. Sekiya, A. Katsuki, and F. Kurokawa, "Outside nominal operation analysis and design consideration of inverse Class-E power amplifier," *IEEE Journal of Emerging and Selected Topics in Power Electronics*, vol. 6, no. 1, pp. 165-174, March 2018.
 199. R. P. Wojda and M. K. Kazimierczuk, "Winding resistance and power loss of inductors with litz and solid-round wires," *IEEE Transactions on Industry Applications*, vol. 54, no. 4, pp. 3548-3555, July/August 2018.
 200. A. Ayachit, Y. P. Siwakoti, V. P. N. Galigekere, M. K. Kazimierczuk, and F. Blaabjerg, "Steady-state and small-signal analysis of A-source converter," *IEEE Transactions on Power Electronics*, vol. 33, no. 8, pp. 7118-7131, August 2018.
 201. S. Mangkaljan, C. Ekkaravarodome, K. Jirasereeamornkul, P. Thounthong, K. Higuchi, and M. K. Kazimierczuk, "A single-stage LED driver based on ZCDS Class-E current driven rectifier as a PFC for street lighting applications," *IEEE Transactions on Power Electronics*, vol. 33, no. 10, pp. 8710-8227, October 2018.
 202. A. Lofti, A. Medi, A. Katsuki, F. Kurokawa, H. Sekya, M. K. Kazimierczuk, and T. Suetsugu, "Sub-nominal operation of Class-E nonlinear shunt capacitance PA at any duty ratio and grading coefficient," *IEEE Transactions on Industrial Electronics*, vol. 65, no. 10, pp. 7878-7887, October 2018.
 203. M. Hayati, H. Abbas, M. K. Kazimierczuk, and H. Sekiya, "Analysis and study of the duty cycle effects on the Class-EM power amplifier including MOSFET nonlinear gate-to-drain and drain-to-source capacitances," *IEEE Transactions on Power Electronics*, vol. 33, no. 12, pp. 10550-10562, December 2018.
- 2019**
204. A. Luchetta, S. Manetti, M. C. Picciralli, A. Reatti, F. Corti, M. Cateliani, L. Ciani, and M. K. Kazimierczuk, "MLMVNN for parameter fault detection in PWM dc-dc converters and its applications for buck and boost dc-dc converters," *IEEE Transactions on Instrumentation and Measurements*, vol. 68, no. 2, pp. 439-449, February 2019.
 205. A. Ayachit and M. K. Kazimierczuk, "Averaged small-signal models of PWM DC-DC converters including switching loss," *IEEE Transactions on Circuits and Systems II: Express Briefs*, vol. 66, no. 2, pp. 262-266, February 2019.
 206. A. Ayachit, F. Corti, A. Reatti, and M. K. Kazimierczuk, "Zero-voltage switching operation of the transformer Class-E inverter at any coupling coefficient," *IEEE Transactions on Industrial Electronics*, vol. 66, no. 3, pp. 1809-1819, March 2018.
 207. J. Liu, Q. Deng, D. Czarkowski, M. K. Kazimierczuk, H. Zhou, and W. Hu, "Frequency optimization for inductive power transfer based on AC resistance evaluation in litz-wire coil," *IEEE Transactions on Power Electronics*, vol. 34, no. 3, pp. 2355-2363, March 2019.
 208. D. K. Saini, A. Ayachit, and M. K. Kazimierczuk, "Design and characterization of single-layer air-core inductors," *IET Circuits Devices & Systems*, vol. 13, no. 2, pp. 211-218, March 2019.
 209. A. Ayachit, D. K. Saini, T. Salvatierra, and M. K. Kazimierczuk, "Analysis, design, and performance evaluation of zero-voltage-ripple buck dc-dc converter," *IET Power Electronics*, vol. 12, no. 5, pp. 964-1001, May 2019.
 210. A. Lofti, A. Katsuki, F. Kurokawa, H. Sakiya, M. K. Kazimierczuk, and F. Blaabjerg, "Analysis of Class-DE PA using MOSFET devices with non-equally gradient coefficient," *IEEE Transactions on Circuits and Systems-I; Regular Papers*, vol. 66, no. 7, pp. 2794-2802, July 2019.

211. A. Lotfi, A. Katsuki, F. Kurokawa, H. Sakiya, M. K. Kazimierczuk, and F. Blaabjerg, "Steady-state analysis of Class-E shunt inductor inverter outside ZCS and ZDCS conditions," *IEEE Transactions on Components, Packaging and Manufacturing Technology*, vol. 9, no. 8, pp. 1587-1594, August 2019.
212. Q. Deng, Z. Wang, C. Chen, D. Czarkowski, M. K. Kazimierczuk, H. Zhou, and W. Hu, "Modeling and control of inductive power transfer system supplied by multiphase phase-controlled inverter" *IEEE Transactions Power Electronics*, vol. 34, no. 9, pp. 9303-9314, September 2019.
213. D. K. Saini and M. K. Kazimierczuk, "Open-loop transfer functions of buck-boost converter by circuit-averaging technique," *IET Power Electronics*, vol. 12, no. 11, pp. 2858-2864, September 2019.
214. Q. Deng, P. Sun, W. Hu, D. Czarkowski, M. K. Kazimierczuk, H. Zhou, and W. Hu, "Modular parallel multi-inverter system for high-power inductive power transfer," *IEEE Transactions on Power Electronics*, vol. 34, no. 10, pp. 9422-9434, October 2019.
215. D. Whitman and M. K. Kazimierczuk, "An analytical correction to Dowell's equation for inductors and transformers using cylindrical coordinates," *IEEE Transactions on Power Electronics*, vol. 34, no. 11, pp. 10425-10432, November 2019.

2020

216. F. W. Chen, G. H. Garnier, Q. J. Deng, M. K. Kazimierczuk, and X. T. Zhuan, "Control-oriented modeling of wireless power transfer systems with phase-shift control," *IEEE Transactions on Power Electronics*, vol. 35, no. 2, pp. 2119-2134, February 2020.
217. H. Jedi, A. Ayachit, T. Salvatierra, A. Ayachit, and M. K. Kazimierczuk, "High-frequency single-switch ZVS gate based on a Class ϕ_2 resonant inverter," *IEEE Transactions on Industrial Electronics*, vol. 67, no. 6, pp. 4527-4535, June 2020.
218. J. Anders, M. K. Kazimierczuk, K. D. Leedy, N. Miller, T. Cooper, M. Streby, and M. Schuette, "Concurrently measured gated Hall and field effect transport," *Applied Physics Letters*, vol. 116, no. 25, 06.23.2020.
219. Q. J. Deng, Y. Cheng, F. W. Chen, D. Czarkowski, M. K. Kazimierczuk, H. Zhou and W. Hu, "Wire/wireless Hybrid charging system for electrical vehicles with minimum rated power requirements for dc module," *IEEE Transactions on Vehicular Technology*, vol. 69, no. 10, pp. 10889-10898, October 2020.
220. F. Chen, P. C. Young, G. H. Garnier, Q. J. Deng, M. K. Kazimierczuk, "Data-driven modeling of wireless power transfer systems with multiple transmitters," *IEEE Transactions on Power Electronics*, vol. 35, no. 11, pp. 11363-11379, November 2020.
221. H. Abbasi, M. Hayati, M. K. Kazimierczuk, and H. Sekiya, "Design of class-E (M) amplifier with consideration of parasitic non-linear capacitances and on-state resistance," *IET Power Electronics*, vol. 13, no. 11, pp. 3065-3071, November 4, 2020.
222. S. Zarghami, M. Hayati, M. K. Kazimierczuk, and H. Sekiya, "Continuous Class-F power amplifier using quasi-elliptic low-pass filtering matching network," *IEEE Transactions on Circuits and Systems-II: Express Briefs*, vol. 67, no. 11, pp. 2407-241, November 2020.
223. F. Corti, A. Reatti, A. G. Pattizi, L. Ciani M. Catelani, and M. K. Kazimierczuk, "A probabilistic evaluation of power converters as support in their design," *IET Power Electronics*, vol. 13, no. 19, pp. 4542-4550, December 2020.

2021

224. H. Al-Baidhani, R. Ordonez, T. Salvatierra, and M. K. Kazimierczuk, "Simplified nonlinear voltage-mode converter of PWM dc-dc buck converter," *IEEE Transactions on Energy Conversion*, vol. 36, no.1, pp. 431-440, March 2021.
225. A. Chadha and M. K. Kazimierczuk, "Small-signal modeling of open-loop PWM tapped-inductor buck dc-dc converter in CCM," *IEEE Transactions on Industrial Electronics*, vol. 68, no. 7, pp. 5765-5775, July 2021. <https://doi.org/10.1109/TIE.2020.2996157>
226. J. Anders, K. D. Leedy, M. K. Kazimierczuk, and M. Schuette, "Interface control and electron transport in ALD ZnO/Al₂O₃ FTEs studied by gated Hall effect," *Semiconductor Science and Technology*, vol. 36, no. 7, pp. 1-6, June 1, 2021, article no. 075005.
227. S. Zaghani, M. Hayati, M. K. Kazimierczuk, and H. Sekiya, "A novel design methodology for extended continuous Class-F power amplifiers in wireless applications," *Wireless Networks*, vol. 27, no. 6, pp. 3947-3968, August 2021.

228. Q. J. Deng, Z. Li, J. Liu, S. Li, D. Czarkowski, M. K. Kazimierczuk, H. Zhou, and W. Hu, "Multi-inverter phase-shifted control for inductive power transfer with overlapped transmitters," *IEEE Transactions on Power Electronics*, vol. 36, no. 8, pp. 8799-8811, August 2021.

2022

229. F. Corti, A. Laudani, G. M. Lozito, A. Reatti, A. Bartolini, L. Ciani, and M. K. Kazimierczuk, "Modelling of a pulse-skipping modulated dc-dc buck converter," *IET Power Electronics*, pp. 1-12, 07 October 2022. <http://doi.org/10.1049/pel2.12379>
230. H. Al-Baidhani and M. K. Kazimierczuk, "Simplified double-integral sliding-mode control of PWM dc-ac converters with constant switching frequency," *Applied Sciences*, MDPI, no. 12, pp. 1-13, 2022. [appls-ci-1924613; http://doi.org/10.3390/app122010312](https://doi.org/10.3390/app122010312)

2023

231. H. Al-Baidhani and M. K. Kazimierczuk, "Simplified nonlinear current-mode control of dc-dc Cuk converter for low-cost industrial applications," *Sensors*, 23, 1462, pp. 1-17, January 2023. <https://doi.org/10.3390/s23031462>
232. H. Al-Baidhani and M. K. Kazimierczuk, "State feedback with integral control circuit design of inverting dc-0dc buck-boost converter double-integral sliding-mode control of PWM dc-ac converters with constant switching frequency," *Applied Sciences*, MDPI, no. 2, pp. 1-132, 2023.
233. M. K. Kazimierczuk, G. M. Lozito, F. Corti, A. Reatti, "Accurate design of output filter for -dc-dc PWM buck converter and derived topologies," *IEEE Transactions on Circuits and Systems – I, Regular Papers*, 2023.
234. A. Reatti and M. K. Kazimierczuk, "Comparison of modeling methods of PWM dc-dc power converters operated in DCM including parasitic components," *IEEE Transactions on Industrial Electronics*, 2023.

Submitted Papers

1. J. J. Lee and M. K. Kazimierczuk, "Analysis of PWM switched-inductor dc-dc buck-boost converter in CCM for steady-state," *IEEE Trans. Circuits and Systems-I: Regular Papers*.
2. J. J. Lee and M. K. Kazimierczuk, "Small-signal analysis of PWM switched-inductor dc-dc buck-boost converter in CCM," *IEEE Trans. Circuits and Systems-I: Regular Papers*.
3. S. Zarghami, M. Hayti, M. K. Kazimierczuk, and H. Sekiya, "Investigation and design of ultra-wideband extended continuous Class-F35 power amplifier," *IEEE Trans. Circuits and Systems-I: Regular Papers*.
4. A. Ayachit and M. K. Kazimierczuk, "Optimal air-gap length for single-layer inductors with dc and sinusoidal currents," *IEEE Transactions on Magnetics*,
5. L. Kathi and M. K. Kazimierczuk, "Circuit-average modeling and power stage transfer functions of lossy non-isolated Cuk dc-dc converter," *IEEE Transactions on Industrial Electronics*..
6. S. Zarghami, M. Hayati, M. K. Kazimierczuk, and H. Sekya, "Extended continuous class-F power amplifier with new design space," *IET Microwaves, Antennas & Propagation*.
7. F. Corti, A. Reatti, L. Ciani, G. Patrizi, M. Catelani, and M. K. Kazimierczuk, "A probabilistic evaluation of power converters as support in their design," *IET Power Electronics*.
8. D. K. Saini, A. Ayachit and M. K. Kazimierczuk, "Power-stage transfer functions and pole-zero analysis of fly-back converter," *IEEE Transactions on Power Conversion*.

Conference Papers

1. J. Ebert and M. K. Kazimierczuk, "Class E radio frequency power oscillator," Proceedings of the 1980 European Conference on Circuit Theory and Design, Vol. 1, 1980, pp. 220-225.
2. M. K. Kazimierczuk, "A new concept of Class F tuned power amplifier," Proceedings of the 27th Midwest Symposium on Circuits and Systems, Morgantown, WV, June 11-12, 1984, pp. 425-428.

3. M. K. Kazimierczuk and J. Jozwik, "New topologies of high-efficiency high-frequency zero-voltage-switching resonant dc/dc converters," Proceedings of the 29th Midwest Symposium on Circuits and Systems, Lincoln, NE, August 11-12, 1986, pp. 474-477.
4. K. Puczkowski and M. K. Kazimierczuk, "Impedance inverter for Class E resonant dc/dc converter," Proceedings of the 29th Midwest Symposium on Circuits and Systems, Lincoln, NE, August 11-12, 1986, pp. 707-710.
5. M. K. Kazimierczuk and J. Jozwik, "Analysis and design of buck zero-voltage-switching resonant dc/dc converter," Proceedings of the 12th International PCI '86 Conference (SATECH'86), Boston, MA, October 27-30, 1986, pp. 35-54.
6. M. K. Kazimierczuk and K. Puczkowski, "Feedback control of zero-voltage-switching resonant dc/dc converters," Proceedings of the 2nd International High Frequency Power Conversion Conference, Washington, DC, April 21-23, 1987, pp. 98-115; reprinted in the book "Recent Developments in Resonant Power Conversion," edited by K. Kit Sum, Intertec Communications Press, Ventura, CA, 1988, pp. 307-324.
7. M. K. Kazimierczuk and W. D. Morse, "Boundary of energy conversion for zero-current-switching resonant dc/dc power converters," Proceedings of the 13th Power Electronics Congress (PCI'87), Munich, West Germany, May 11-13, 1987, pp. 220-235; reprinted in the book "Recent Developments in Resonant Power Conversion," edited by K. Kit Sum, Intertec Communications Press, Ventura, CA, 1988, pp. 176-191.
8. M. K. Kazimierczuk and W. D. Morse, "State-plane analysis of zero-voltage-switching resonant dc/dc converters," Proceedings of the IEEE National Aerospace and Electronics Conference (NAECON '87), Dayton, OH, May 18-22, 1987, Vol. 2, pp. 433-440.
9. M. K. Kazimierczuk and J. Jozwik, "Generalized topologies of zero-voltage-switching and zero-current-switching resonant dc/dc converters," Proceedings of the IEEE National Aerospace and Electronics Conference (NAECON '87), Dayton, OH, May 18-22, 1987, Vol. 2, pp. 472-478.
10. M. K. Kazimierczuk and K. Puczkowski, "Control circuit for Class E resonant dc/dc converter," Proceedings of the IEEE National Aerospace and Electronics Conference (NAECON '87), Dayton, OH, May 18-22, 1987, Vol. 2, pp. 416-423.
11. M. K. Kazimierczuk and W. D. Morse, "Boundary of energy conversion for zero-voltage-switching resonant dc/dc power converters," Proceedings of the IEEE National Aerospace and Electronics Conference (NAECON '87), Dayton, OH, May 18-22, 1987, Vol. 2, pp. 484-491.
12. M. K. Kazimierczuk and K. Puczkowski, "Control circuit for zero-current-switching resonant dc/dc converters," Proceedings of the 30th Midwest Symposium on Circuits and Systems, Syracuse, NY, August 16-18, 1987, pp. 173-176.
13. M. K. Kazimierczuk and W. D. Morse, "State-plane analysis of zero-current-switching resonant dc/dc power converters," Proceedings of the 5th IEEE International Conference on Systems Engineering, Dayton, OH, September 9-11, 1987, pp. 371-376.
14. M. K. Kazimierczuk, "A complete characterization of boost zero-current-switching resonant dc/dc converter for steady-state operation," Proceedings of the 14th International PCI 87 Conference (SATECH '87), Long Beach, CA, September 14-17, 1987, pp. 29-47; reprinted in the book "Recent Developments in Resonant Power Conversion," edited by K. Kit Sum, Communications Press, Ventura, CA, 1988, pp. 192-210.
15. M. K. Kazimierczuk and J. Jozwik, "Class E resonant rectifiers," Proceedings of the 31st Midwest Symposium on Circuits and Systems, St. Louis, MO, August 10-12, 1988, pp. 138-141.
16. M. K. Kazimierczuk and X. T. Bui, "A family of Class E resonant dc/dc power converters," Proceedings of the 16th International PCI '88 Conference (SATECH '88), Dearborn, MI, October 3-6, 1988, pp. 69-93.
17. M. K. Kazimierczuk and J. Jozwik, "DC/DC converter with Class E inverter and rectifier," Proceedings of the 4th High Frequency Power Conversion Conference, Naples, FL, May 14-18, 1989, pp. 383-394.
18. M. K. Kazimierczuk and X. T. Bui, "Class E amplifier operating from a short circuit to an open circuit," Proceedings of the IEEE National Aerospace and Electronics Conference (NAECON '89), Dayton, OH, May 22-26, 1989, Vol. 1, pp. 240-245.
19. M. K. Kazimierczuk and J. Jozwik, "Class E zero-current-switching rectifier with a parallel inductor," Proceedings of the IEEE National Aerospace and Electronics Conference (NAECON '89), Dayton, OH, May 22-26, 1989, Vol. 1, pp. 233-239.

20. M. K. Kazimierczuk and J. Jozwik, "Class E zero-current-switching rectifier with a series inductor," Proceedings of the 32nd IEEE Midwest Symposium on Circuits and Systems, Urbana-Champaign, IL, pp. 788-791, August 14-16, 1989.
21. M. K. Kazimierczuk and W. Szaraniec, "Dc-to-dc converter with a Class D inverter and Class E rectifier," Proceedings of the 33rd Midwest Symposium on Circuits and Systems, Calgary, Alberta, Canada, August 12-15, 1990, pp. 200-203.

1992

22. D. Czarkowski and M. K. Kazimierczuk, "Circuit models of PWM dc-dc converters," Proceedings of the IEEE National Aerospace and Electronics Conference (NAECON '92), Dayton, OH, May 18-22, 1992, pp. 407-413.
23. D. Czarkowski and M. K. Kazimierczuk, "Expression for I-V forward characteristic of MCTs," Proceedings of the IEEE 4th International Symposium on Power Semiconductor Devices and ICs (ISPSD '92), Tokyo, Japan, May 19-21, 1992, pp. 250-251.
24. D. Czarkowski and M. K. Kazimierczuk, "Circuit models of PWM half-bridge dc/dc converter," Proceedings of the 35th IEEE Midwest Symposium on Circuits and Systems, Washington, DC, August 9-12, 1992, pp. 469-472.
25. D. Czarkowski and M. K. Kazimierczuk, "Integral control of PWM dc-dc buck-derived converters," Proceedings of the 1st IEEE Conference on Control Applications, Dayton, OH, September 13-16, 1992, vol. 2, pp. 776-781.
26. D. Czarkowski and M. Kazimierczuk, "A new and systematic method of modeling PWM dc-dc converters," Proceedings of the IEEE International Conference on Systems Engineering, Kobe, Japan, September 17-19, 1992, pp. 628-631.
27. M. K. Kazimierczuk, N. Thirunarayan, B. T. Nguyen, G. L. Fronista, and J. A. Weimer, "Experimental static and dynamic characteristics of MOS-controlled thyristors," Proceedings of the IEEE Industry Applications Society Annual Meeting, Houston, TX, October 4-9, 1992, Vol. 1, pp. 1150-1157.
28. D. Czarkowski and M. Kazimierczuk, "Equation for terminal volt-ampere characteristics of MOS controlled thyristors," Proceedings of the IEEE Industry Applications Society Annual Meeting, Houston, TX, October 4-9, 1992, Vol. 1, pp. 1158-1164.
29. D. Czarkowski and M. K. Kazimierczuk, "Simulation and experimental results for Class D series resonant inverter," Proceedings of the IEEE International Telecommunications Energy Conference (INTELEC '92), Washington, DC, October 4-8, 1992, pp. 153-157.
30. D. Czarkowski and M. K. Kazimierczuk, "SPICE compatible averaged models of PWM full-bridge converter," Proceedings of the IEEE International Conference on Industrial Electronics, Control, Instrumentation, and Automation (IECON '92), San Diego, CA, November 9-13, 1992, Vol. 1, pp. 488-493.

1993

31. M. Kazimierczuk, N. Thirunarayan, B. T. Nguyen, and J. A. Weimer, "Measured switching characteristics of MOS-controlled thyristors under inductive conditions," Proceedings of the 10th Symposium on Space Nuclear Power and Propulsion, American Institute of Physics, Albuquerque, NM, January 10-14, 1993, pp. 459-468.
32. D. Czarkowski, L. R. Pujara, and M. K. Kazimierczuk, "Robust stability of integral control of PWM dc-dc converters," Proceedings of the 10th Symposium on Space Nuclear Power and Propulsion, American Institute of Physics, Albuquerque, NM, January 10-14, 1993, pp. 469-474.
33. D. Czarkowski and M. K. Kazimierczuk, "Phase-controlled CLL resonant converter," Proceedings of the IEEE Applied Power Electronics Conference, San Diego, CA, March 7-11, 1993, pp. 432-438.
34. A. Reatti and M. K. Kazimierczuk, "Efficiency of the transformer version of Class E half-wave low dv_D/dt rectifier," Proceedings of the IEEE International Symposium on Circuits and Systems, Chicago, IL, May 3-6, 1993, pp. 2331-2334.
35. M. K. Kazimierczuk, D. Q. Vuong, B. T. Nguyen, and J. A. Weimer, "Topologies of bidirectional PWM dc-dc power converters," Proceedings of the IEEE National Aerospace and Electronics Conference (NAECON'93), Dayton, OH, May 24-28, 1993, Vol. 1, pp. 435-441.
36. M. K. Kazimierczuk, N. Sathappan, and D. Czarkowski, "A voltage-mode-controlled PWM buck dc-dc converter with a proportional controller," Proceedings of the IEEE National Aerospace and Electronics Conference (NAECON'93), Dayton, OH, May 24-28, 1993, Vol. 1, pp. 413-419.

37. M. K. Jutty and M. K. Kazimierczuk, "Efficiency of the transformer Cuk PWM converter," Proceedings of the IEEE National Aerospace and Electronics Conference (NAECON'93), Dayton, OH, May 24-28, 1993, Vol. 2, pp. 639-644.
38. M. K. Kazimierczuk and D. Czarkowski, "Phase-controlled series resonant converter," Proceedings of the IEEE Power Electronics Specialists Conference, Seattle, WA, June 20-24, 1993, pp. 1002-1008.
39. A. Reatti and M. K. Kazimierczuk, "Comparison of the efficiencies of the Class D and Class E rectifiers," Proceedings of the 36th IEEE Midwest Symposium on Circuits and Systems, Detroit, MI, August 16-18, 1993, pp. 871-874.
40. M. K. Kazimierczuk and D. Czarkowski, "Application of the principle of energy conservation to modeling the PWM converters," Proceedings of the 2nd IEEE Conference on Control Applications, Vancouver, Canada, September 13-16, 1993, pp. 291-296.
41. M. K. Jutty, V. Swaminathan, and M. K. Kazimierczuk, "Frequency characteristics of ferrite core inductors," Proceedings of the Conference of Electrical Manufacturing and Coil Winding, Chicago (Rosemont), IL, October 4-7, 1993, pp. 369-372.
42. M. K. Kazimierczuk and M. J. Mescher, "Series resonant converter with phase-controlled synchronous rectifier," Proceedings of the IEEE International Conference on Industrial Electronics, Control, Instrumentation, and Automation (IECON'93), Lahaina, Maui, HI, November 15-19, 1993, Vol. 2, pp. 852-856.

1994

43. M. K. Kazimierczuk and M. J. Mescher, "Class D converter with half-wave regulated synchronous rectifier," Proceedings of the IEEE Applied Power Electronics Conference, Orlando, FL, Vol. 2, February 13-17, 1994, pp. 1005-1011.
44. M. K. Kazimierczuk and R. Cravens, II, "Open-loop dc and small-signal characteristics of PWM buck-boost converter for CCM," Proceedings of the IEEE National Aerospace and Electronics Conference (NAECON'94), Dayton, OH, May 23-26, 1994, pp. 226-233.
45. B. T. Nguyen, J. A. Weimer, and M. K. Kazimierczuk, "Efficiency of buck PWM dc-dc converter for the More Electric Aircraft (MEA)," IEEE National Aerospace and Electronics Conference (NAECON'94), Dayton, OH, May 23-26, 1994.
46. R. Cravens, II, R. Siferd, and M. K. Kazimierczuk, "CMOS design of control circuitry for dc-dc converters," Proceedings of the IEEE National Aerospace and Electronics Conference (NAECON'94), Dayton, OH, May 23-26, 1994, pp. 223-225.
47. R. E. Strawser, B. T. Nguyen, and M. K. Kazimierczuk, "Analysis of a buck PWM dc-dc converter in discontinuous conduction mode," Proceedings of the IEEE National Aerospace and Electronics Conference (NAECON'94), Dayton, OH, May 23-26, 1994, pp. 35-42.
48. M. K. Kazimierczuk, R. Cravens, II, and A. Reatti, "Closed-loop input impedance of the PWM buck converter," Proceedings of the IEEE International Symposium on Circuits and Systems, London, UK, May 30-June 3, 1994, pp. 61-64.
49. M. K. Kazimierczuk, R. Cravens, II, "Current-source parallel-resonant DC/AC inverter with transformer," Proceedings of the IEEE Power Electronics Specialists Conference, 1994, pp. 135-141.
50. M. Bartoli, A. Reatti, and M. K. Kazimierczuk, "Efficiency of a Class-E dc/dc converter with a full-wave rectifier at any loaded quality factor," IEEE Midwest Symposium on Circuits and Systems, Lafayette, LA, August 3-5, 1994, pp. 1257-1260.
51. M. K. Kazimierczuk, R. C. Cravens II, and J. P. Harrington, "Closed-loop input impedance of a voltage-mode-controlled PWM boost dc-dc converter for CCM," IEEE Midwest Symposium on Circuits and Systems, Lafayette, LA, August 3-5, 1994, pp. 1253-1256.
52. M. K. Kazimierczuk, C. Wu, and R. C. Cravens II, "Frequency-controlled series-resonant dc-dc converter with center-tapped synchronous rectifier," IEEE Midwest Symposium on Circuits and Systems, Lafayette, LA, August 3-5, 1994, pp. 1245-1248.
53. M. Bartoli, A. Reatti, and M. K. Kazimierczuk, "High-frequency models of ferrite core inductors," (Invited paper), Proceedings of the IEEE International Conference on Industrial Electronics, Control, Instrumentation, and Automation (IECON'94), Bologna, Italy, September 5-9, 1994, pp. 1670-1675.

54. M. Bartoli, A. Reatti, and M. K. Kazimierczuk, "Off-line full-range high-frequency high-efficiency Class D² resonant power supply," Proceedings the IEEE International Conference on Industrial Electronics, Control, Instrumentation, and Automation (IECON'94), Bologna, Italy, September 5-9, 1994, pp. 159-163.
55. M. Bartoli, A. Reatti, and M. K. Kazimierczuk, "Predicting the high-frequency ferrite-core inductor performance," Proceedings of the Conference of Electrical Manufacturing and Coil Winding, Chicago (Rosemont), IL, September 27-29, 1994, pp. 409-413.
56. M. Bartoli, A. Reatti, and M. K. Kazimierczuk, "Modeling iron-powder inductors at high frequencies," Proceedings of the IEEE Industry Applications Society Annual Meeting, Denver, CO, October 2-7, 1994, pp. 1225-1232.

1995

57. M. K. Kazimierczuk and Robert Cravens II, "Input impedance of closed-loop PWM buck-boost converter for CCM," IEEE International Symposium on Circuits and Systems, Seattle, WA, April 30-May 3, 1995, pp. 2047-2050.
58. M. K. Kazimierczuk, S. T. Nguyen, B. T. Nguyen, and J. A. Weimer, "A study of MOS-controlled thyristor driver," IEEE National Aerospace and Electronics Conference (NAECON'95), Dayton, OH, May 22-26, 1995, Vol. 1, pp. 56-60.
59. M. K. Kazimierczuk and S. T. Nguyen, "Small-signal analysis of open-loop PWM flyback dc-dc converter for CCM," IEEE National Aerospace and Electronics Conference (NAECON'95), Dayton, OH, May 22-26, 1995, Vol. 1, pp. 69-76.
60. M. K. Kazimierczuk and S. T. Nguyen, "Closed-loop voltage-mode-controlled PWM flyback dc-dc converter for CCM with integral-lead controller," IEEE National Aerospace and Electronics Conference (NAECON'95), Dayton, OH, May 22-26, 1995, Vol. 1, pp. 61-68.
61. M. K. Kazimierczuk and R. S. Geise, "A new non-symmetric phase, integral-lead controller for PWM DC-DC converters," 4th IEEE Conference on Control Applications, Albany, NY, September 28-29, 1995.
62. M. Bartoli, A. Reatti, and M. K. Kazimierczuk, "Class-E current-driven center-tapped low dv/dt rectifier," Proceedings of the IEEE Industry Applications Society Annual Meetings, Orlando, FL, October 8-12, 1995, pp. 874-881.
63. M. K. Kazimierczuk, R. S. Geise, and A. Reatti, "Small-signal analysis of a PWM boost dc-dc converter with a non-symmetric phase integral-lead controller," 17th IEEE International Telecommunications Energy Conference (INTELEC'95), The Hague, The Netherlands, October 29-November 1, 1995, pp. 608-615.
64. M. Bartoli, A. Reatti, and M. K. Kazimierczuk, "Hybrid zero-current-switching rectifier for high-frequency dc-dc converter applications," 17th International Telecommunications Energy Conference (INTELEC'95), The Hague, The Netherlands, October 29-November 1, 1995, pp. 510-517.

1996

65. M. K. Kazimierczuk, R. C. Cravens II, J. A. Weimer, and S. Fries-Carr, "Frequency characterization of super capacitors," 16th Capacitor and Resistor Technology Symposium, New Orleans, LA, March 11-15, 1996, pp. 209-217.
66. A. Massarini and M. K. Kazimierczuk, "Modeling the parasitic capacitance of inductors," 16th Capacitor and Resistor Technology Symposium, CARTS '96, New Orleans, LA, March 11-15, 1996, pp. 78-85.
67. M. Bartoli, A. Reatti, M. K. Kazimierczuk, "Open-loop small-signal control-to-output transfer function of PWM buck converter for CCM: modeling and measurements," Proceedings of the 8th Mediterranean Electrotechnical Conference (MELCOM'96), Bari, Italy, May 13-16, 1996, pp. 1203-1206.
68. A. Massarini and M. K. Kazimierczuk, "A new representation of Dirac delta impulses in time-domain computer analysis of networks with ideal switches," IEEE International Symposium on Circuits and Systems, Atlanta, GA, May 12-15, 1996, pp. 565-568.
69. M. Bartoli, A. Reatti, and M. K. Kazimierczuk, "Open loop small-signal control-to-output transfer function of PWM buck converter for CCM: modeling and measurements," IEEE International Symposium on Circuits and Systems, Atlanta, GA, May 12-15, 1996, pp. 1203-1206.
70. M. K. Kazimierczuk and R. C. Cravens II, "Applications of super-capacitors for voltage regulation of aircraft distributed power systems," Proceedings of the IEEE Power Electronics Specialists Conference, Baveno, Italy, June 24-27, 1996, pp. 835-841.

71. M. Bartoli, N. Noferi, A. Reatti, and M. K. Kazimierczuk, "Modeling Litz-wire winding losses in high-frequency power inductors," Proceedings of the IEEE Power Electronics Specialists Conference, Baveno, Italy, June 24-27, 1996, pp. 1690-1696.
72. A. Massarini, M. K. Kazimierczuk, and G. Grandi, "Lumped parameter models for single- and multiple-layer inductors," Proceedings of the IEEE Power Electronics Specialists Conference, Baveno, Italy, June 24-27, 1996, pp. 295-301.
73. M. Vichare, M. K. Kazimierczuk, M. Ramalingam, and K. Reinhardt, "High-temperature dynamic characterization of 4H-silicon carbide p-n diodes," 31st IEEE Intersociety Energy Conversion Engineering Conference, Washington, DC, August 11-16, 1996, pp. 534-539.
74. M. Vichare, M. K. Kazimierczuk, M. Ramalingam, and K. Reinhardt, "Thermal effects on the dynamics of 4th-silicon carbide MOSFETs," 31st IEEE Intersociety Energy Conversion Engineering Conference, Washington, DC, August 11-16, 1996, pp. 540-545.
75. M. K. Kazimierczuk, M. A. Izadi, and A. Massarini, "Feedforward control of PWM buck converter with saw-tooth peak value modulation," IEEE Midwest Symposium on Circuits and Systems, Ames, IA, August 18-21, 1996, pp. 885-888.
76. L. R. Pujara, M. K. Kazimierczuk, and A. S. M. N. I. Shaheen, "Robust stability of PWM buck dc-dc converter," IEEE International Conference on Control Applications, Dearborn, MI, September 15-18, 1996, pp. 632-637.
77. M. Bartoli, A. Reatti, and M. K. Kazimierczuk, "Minimum copper and core losses soft-ferrite power inductor design," Proceedings of the IEEE Industry Applications Society Annual Meeting, San Diego, CA, October 6-10, 1996, pp. 1369-1376.
78. G. Grandi, M. K. Kazimierczuk, A. Massarini, and U. Reggiani, "Stray capacitances of single-layer air-core inductors for high-frequency applications," Proceedings of the IEEE Industry Applications Society Annual Meeting, San Diego, CA, October 6-10, 1996, pp. 1384-1388.

1997

79. A. Liberatore, M. Bartoli, A. Reatti, and M. K. Kazimierczuk, "Full-range power supply based on a two-inductor resonant current-clamped (L^2R -CC) DC-DC converter," IEEE International Symposium on Circuits and Systems, Hong Kong, June 9-12, 1997, pp. 873-876.
80. G. Grandi, M. K. Kazimierczuk, A. Massarini, and U. Reggiani, "Optimal design of single-layer solenoid air-core inductors for high-frequency applications," IEEE Midwest Symposium on Circuits and Systems, Sacramento, CA, August 3-6, 1997, pp. 358-361.
81. V. R. Garuda, M. K. Kazimierczuk, M. L. Ramalingam, L. Tolkinen, and M. D. Roth, "High-temperature testing of a buck converter using silicon and silicon carbide diodes," 32nd IEEE Intersociety Energy Conversion Engineering Conference, Honolulu, HI, July 27-August 1, 1997, pp. 317-322.
82. A. S. M. N. I. Shaheen, L. R. Pujara, and M. K. Kazimierczuk, "Comparison of the Kharitonov method with others for robust stability analysis of a PWM converter," IEEE International Conference on Control Applications, October 1997.
83. B. T. Nguyen, J. A. Weimer, M. K. Kazimierczuk, and B. Jordan, "Application of feedforward-controlled boost converter for the regulation of supercapacitor voltage," World Aviation Congress and Exposition, Anaheim, CA, October 13-16, 1997.
84. V. R. Garuda, M. K. Kazimierczuk, M. Ramalingam, C. Turnstall, and L. Tolkinen, "High-temperature performance characterization of a buck converter using SiC and Si devices," IEEE Power Electronics Specialists Conference, Fukuoka, Japan, May 17-22, 1998, pp. 1561-1567.

1999

85. M. K. Kazimierczuk and Anders J. Edstrom, "DC and AC analysis of buck PWM DC-DC converter with peak-voltage-modulation feedforward control," IEEE International Symposium on Circuits and Systems, Orlando, FL, May 30-June 2, 1999, paper V-246, vol. V, pp. 246-249.
86. M. K. Kazimierczuk, A. Massarini, and M. A. Izadi, "Feedforward control with reference voltage modulation," IEEE International Symposium on Circuits and Systems, Orlando, FL, May 30-June 2, 1999, paper V-250.
87. U. Reggiani, G. Grandi, G. Sancineto, M. K. Kazimierczuk, and A. Massarini, "High-frequency behavior of laminated iron-core inductors for filter applications," IEEE Applied Power Electronics Conference, New Orleans, LA, February 6-10, 2000, pp. 654-660.

88. A. Reatti and M. K. Kazimierczuk, "Current-controlled current-source model for a PWM dc-dc boost converter operated in discontinuous conduction mode," IEEE International Symposium on Circuits and Systems, Geneva, Switzerland, May 28-31, 2000, Paper III-239, vol. III, pp. 239-242.
- 2010**
89. M. K. Kazimierczuk, A. J. Edstrom, and A. Reatti, "A buck PWM dc-dc converter with reference-voltage modulation feedforward control," IEEE International Symposium on Circuits and Systems, Sydney, Australia, May 7-May 9, 2001, paper III-537, vol. III, pp. 537-541.
 90. K. Howard and M. K. Kazimierczuk, "Eddy-current power loss in laminated iron cores," IEEE International Symposium on Circuits and Systems, Sydney, Australia, May 7-May 9, 2001, paper III-668, vol. III, pp. 668-672.
 91. D. J. Kessler and M. K. Kazimierczuk, "Power losses and efficiency of Class E RF power amplifiers at any duty cycle," IEEE International Symposium on Circuits and Systems, Sydney, Australia, May 7-May 9, 2001, paper III-533, vol. III, pp. 533-537.
 92. B. Bryant and M. K. Kazimierczuk, "Impact of the current sense resistor on the MOSFET aspect ratio," Midwest Symposium on Circuits and Systems, Fairborn, OH, August 14-17, 2001, pp. 964-967.
 93. V. G. Krizhanovski, J. V. Rossokhina, A. N. Rudiakova and M. K. Kazimierczuk, "High-efficiency operation of microwave power amplifiers," Proc. 11th International Conference on Microwave and Telecommunication Technology (CriMiCo '2001), Sevastopol, Ukraine, September 10-14, 2001, pp. 105-107.
 94. A. N. Rudiakova, V. G. Krizhanovski, and M. K. Kazimierczuk, "Phase tuning approach to polyharmonic power amplifiers," Proc. European Microwave Week Conference, London, UK, September 24-28, 2001, pp. 105-107.
 95. R. A. Kleismit and M. K. Kazimierczuk, "Evanescent microwave sensor scanning for detection of sub-surface defects in wires," Proc. Electrical Manufacturing and Coil Winding Conference, Cincinnati, OH, October 15-18, 2001, pp. 245-250.
- 2002**
96. A. Reatti, L. Pellegrini, and M. K. Kazimierczuk, "Impact of boost converter parameters on open-loop dynamic performance for DCM," IEEE International Symposium on Circuits and Systems, Scottsdale, AZ, May 26-29, 2002, paper V-513, pp. 513-516.
 97. A. Reatti, L. Pelligini, and M. K. Kazimierczuk, "Measurement of open-loop small-signal control-to-output transfer function of a PWM boost converter operated in DCM," IEEE International Symposium on Circuits and Systems, Scottsdale, AZ, May 26-29, 2002, paper V-849, pp. 849-851.
 98. B. Bryant and M. K. Kazimierczuk, "Derivation of PWM dc-dc buck-boost converter topology," IEEE International Symposium on Circuits and Systems, Scottsdale, AZ, May 26-29, 2002, paper V-841, pp. 841-844.
 99. T. Suetsugu and M. K. Kazimierczuk, "Voltage clamped class E amplifier with a Zener diode across the switch", IEEE International Symposium on Circuits and Systems, Scottsdale, AZ, May 26-29, 2002, paper IV-361, pp. 361-364.
 100. T. Suetsugu and M. K. Kazimierczuk, "A method for predicting the ZVS condition of class E amplifier," IEEE International Symposium on Circuits and Systems, Scottsdale, AZ, May 26-29, 2002, paper III-413, pp. 413-416
 101. W. Pietrenko, W. Janke, and M. K. Kazimierczuk, "Large-signal time-domain simulation of Class E amplifier," IEEE International Symposium on Circuits and Systems, Scottsdale, AZ, May 26-29, 2002, paper V-21, pp. 21-24.
 102. A. N. Rudiakova, J. V. Rossokhina, M. K. Kazimierczuk, and V. G. Krizhanovski, "High-efficiency microwave BJT power amplifier simulation," IEEE International Symposium on Circuits and Systems, Scottsdale, AZ, May 26-29, 2002, paper V-33, pp. 33-36.
 103. D. V. Chernov, V. G. Krizhanovski, and M. K. Kazimierczuk, "Class-E MOSFET low-voltage power oscillator," IEEE International Symposium on Circuits and Systems, Scottsdale, AZ, May 26-29, 2002, paper V-509, pp. 509-511.
 104. A. N. Rudiakova, J. V. Rossokhina, M. K. Kazimierczuk, and V. G. Krizhanovski, "Class N high-efficiency power amplifier," IEEE International Symposium on Circuits and Systems, Scottsdale, AZ, May 26-29, 2002, paper V-517, pp. 517-520.
 105. T. Suetsugu and M. K. Kazimierczuk, "Voltage-clamped Class E amplifier with a Zener diode across the choke coil," IEEE International Symposium on Circuits and Systems, Scottsdale, AZ, May 26-29, 2002, paper V-505, pp. 505-508.

106. T. Suetsugu, M. K. Kazimierczuk, K. Nakamura, and M. Kawashima, "A simple synchronization method using Gold code for M-ARY/DS power-line communications," Proceedings of IEEE International Midwest Symposium on Circuits and Systems (MWSCAS2002), Tulsa, OK, August 4-7, 2002, vol. II, pp. 131-134.
107. T. Suetsugu and M. K. Kazimierczuk, "A method for predicting ZVS condition of class E amplifier for any duty radio," Proceedings of IEEE International Conference on Electronics, Circuits and Systems (ICECS2002), Dubrovnik, Croatia, September 15-18, 2002, pp. 959-962.
108. R. Kleismit and M. K. Kazimierczuk, "Evanescent microwave sensing of thermal defects in integrated circuit substrates," Proceedings of Electrical Manufacturing and Coil Winding Conference, Cincinnati, OH, October 15-17, 2002, pp. 65-68.

2003

109. B. Bryant and M. K. Kazimierczuk, "Derivation of the Cuk PWM dc-dc converter circuit topology," IEEE International Symposium on Circuits and Systems, Bangkok, Thailand, May 25-28, 2003, Vol. III, pp. 292-295.
110. T. Suetsugu and M. K. Kazimierczuk, "Feasibility study of on-chip Class E dc-dc converter," IEEE International Symposium on Circuits and Systems, Bangkok, Thailand, May 25-28, 2003, Vol. III, pp. 443-446.
111. T. Suetsugu and M. K. Kazimierczuk, "Lossless voltage clamping of a class E amplifier with a transformer and a diode," IEEE International Symposium on Circuits and Systems, Bangkok, Thailand, May 25-28, 2003, Vol. III, pp. 276-279.
112. R. Kleismit and M. K. Kazimierczuk, "Evanescent microwave microscopy of thermally-damaged charge coupled devices," Proceedings of Electrical Manufacturing and Coil Winding Conference, Indianapolis, IN, September 23-25, 2003, pp. 458-488.
113. T. Suetsugu and M. K. Kazimierczuk, "Analysis of sub-optimum operation of Class E amplifier," IEEE Midwest Symposium on Circuits and Systems, Cairo, Egypt, December 27-30, 2003.

2004

114. B. Bryant and M. K. Kazimierczuk, "Sample and hold effect in PWM dc-dc converters with peak current-mode control," IEEE International Symposium on Circuits and Systems, Vancouver, BC, Canada, May 23-26, 2004, Vol. V, pp. 860-863.
115. B. Bryant and M. K. Kazimierczuk, "Small-signal duty cycle to inductor current transfer function for boost PWM dc-dc converter in continuous conduction mode," IEEE International Symposium on Circuits and Systems, Vancouver, BC, Canada, May 23-26, 2004, Vol. V, pp. 856-859.
116. T. Suetsugu and M. K. Kazimierczuk, "Design equations for sub-optimum operation of Class E amplifier with nonlinear shunt capacitance," IEEE International Symposium on Circuits and Systems, Vancouver, BC, Canada, May 23-26, 2004, Vol. V, pp. 560-563.
117. T. Suetsugu and M. K. Kazimierczuk, "Optimum operation detector of the Class E amplifier," the 47th IEEE International Midwest Symposium on Circuits and Systems, Hiroshima, Japan, August 9-12, 2004, Vol. II, pp. 297-300.
118. K. Jirasereeamornkul and M. K. Kazimierczuk, "Comparison of topologies for high-power-factor single-stage electronic ballasts based on class D resonant inverter," Proceedings of Electrical Manufacturing and Coil Winding Conference, Indianapolis, IN, September 21-23, 2004.
119. R. Kleismit, G. Kozlowski, R. R. Bigger, I. Maartense, M. K. Kazimierczuk, and D. B. Mast, "Characterization of local dielectric properties of superconductor $\text{Yba}_2\text{Cu}_3\text{O}_{7-x}$ using evanescent microwave microscopy," IEEE Applied Superconductivity Conference, Jacksonville, FL, October 4-8, 2004.
120. T. Suetsugu and M. K. Kazimierczuk, "Design equations for optimum and suboptimum equations of the Class E amplifier with nonlinear shunt capacitance at any duty cycle," Proceedings of International Symposium on Nonlinear Theory and Its Applications, Fukuoka, Japan, pp. 331-334, Nov. 29-Dec. 2004.

2005

121. T. Suetsugu and M. K. Kazimierczuk, "Steady-state behavior of Class E amplifier outside designed conditions," IEEE International Symposium on Circuits and Systems, Kobe, Japan, May 23-26, 2005, pp. 708-711.
122. T. Suetsugu and M. K. Kazimierczuk, "Voltage-clamped Class E amplifier with transmission-line transformer," IEEE International Symposium on Circuits and Systems, Kobe, Japan, May 23-26, 2005, pp. 712-715.

123. T. Suetsugu and M. K. Kazimierczuk, "Sub-optimum operation of Class E amplifier with nonlinear shunt capacitance at any duty cycle," IEEE International Symposium on Circuits and Systems, Kobe, Japan, May 23-26, 2005.
124. K. H. Abed, M. K. Kazimierczuk, S. B. Nerurkar, and M. P. Senadeera, "Linearization techniques in power amplifiers for 1.9 GHz wireless transmitters," 48th IEEE International Midwest Symposium on Circuits and Systems, Cincinnati, OH, August 7-10, 2005.
125. K. H. Abed, K. Y. Wong, and M. K. Kazimierczuk, "Implementations of novel low-power drivers for integrated buck converter," 48th IEEE International Midwest Symposium on Circuits and Systems, Cincinnati, OH, August 7-10, 2005.
126. D. Murthy and M. K. Kazimierczuk, "Performance evaluation of flyback converter," Proceedings of Electrical Manufacturing and Coil Winding Conference, Indianapolis, IN, October 23-26, 2005.
127. N. Das and M. K. Kazimierczuk, "An overview of technical challenges in the design of current transformers," Proceedings of Electrical Manufacturing and Coil Winding Conference, Indianapolis, IN, October 23-26, 2005.
128. N. Das and M. K. Kazimierczuk, "Power losses and efficiency of buck PWM DC-DC power converter," Proceedings of Electrical Manufacturing and Coil Winding Conference, Indianapolis, IN, October 23-26, 2005.
129. K. Jirasereeamornkul, M. K. Kazimierczuk, I. Boonyaroonate, and K. Chamnongthai, "Application of power source element in power factor correction," IEEE Region 10 Conference Tencon'05, Melbourne, Australia, November 21-24, 2005.

2006

130. K. H. Abed, K. Y. Wong, and M. K. Kazimierczuk, "CMOS zero-cross-conduction low-power driver and power MOSFETs for integrated synchronous buck converter," IEEE International Symposium on Circuits and Systems, Island of Kos, Greece, May 21-24, 2006, pp. 2745-2748.
131. T. Suetsugu and M. K. Kazimierczuk, "Integration of class DE inverter for on-chip power supplies," IEEE International Symposium on Circuits and Systems, Island of Kos, Greece, May 21-24, 2006, pp. 3133-3136.
132. T. Suetsugu and M. K. Kazimierczuk, "Sub-optimum operation of class E amplifier with nonlinear shunt capacitance at any duty cycle," IEEE International Symposium on Circuits and Systems, Island of Kos, Greece, May 21-24, 2006, pp. 249-252.
133. V. G. Krizhanovski, D. V. Chernov, and M. K. Kazimierczuk, "Low-voltage self-oscillating class E electronic ballast for fluorescent lamps," IEEE International Symposium on Circuits and Systems, Island of Kos, Greece, May 21-24, 2006, pp. 2273-2276.
134. T. Suetsugu and M. K. Kazimierczuk, "Integration of Class DE synchronized dc-dc converter for on-chip power supplies," 37th IEEE Power Electronics Specialists Conference, Jeju, South Korea, June 18-22, 2006, Paper PS 1-69, pp. 433-437.
135. N. Das and M. K. Kazimierczuk, "Applications of silicon carbide power devices in power electronics," Proceedings of Electrical Manufacturing and Coil Winding Conference, Indianapolis, IN, September 18-20, 2006.
136. D. Murthy-Bellur and M. K. Kazimierczuk, "Active circuits for flyback dc-dc converter," Proceedings of Electrical Manufacturing and Coil Winding Conference, Indianapolis, IN, September 18-20, 2006.
137. V. P. Galigekere and M. K. Kazimierczuk, "Analysis and design of a poly-phase buck converter," Proceedings of Electrical Manufacturing and Coil Winding Conference, Indianapolis, IN, September 18-20, 2006.

2007

138. T. Suetsugu and M. K. Kazimierczuk, "Output characteristics of Class E amplifier with nonlinear shunt capacitance," IEEE Symposium on Circuits and Systems, New Orleans, LA, May 27-30, 2007, pp. 541-544.
139. H. Griffith, M. K. Kazimierczuk, and G. Suburanyum, "Development of design rule guidelines for a CPW based periodic leaky wave antenna," 2007 Meeting of the International Union of Radio Science, Ottawa, ON, Canada, July 22-26, 2007.
140. V. P. Galigekere and M. K. Kazimierczuk, "Performance of SiC diodes," IEEE Midwest Symposium on Circuits and Systems, Montreal, QC, Canada, August 5-8, 2007, pp. 682-685.
141. N. Das and M. K. Kazimierczuk, "Applications of silicon carbide power devices in three-phase voltage-fed induction motor drives for electric vehicles," Proceedings of Electrical Manufacturing and Coil Winding Conference, Nashville, TN, October 22-24, 2007.

142. V. P. Galigekere and M. K. Kazimierczuk, "Effect of SiC Schottky and Si junction diode reverse recovery on boost converter," Proceedings of Electrical Manufacturing and Coil Winding Conference, Nashville, TN, October 22-24, 2007.
143. D. Murthy-Bellur and M. K. Kazimierczuk, "DC-DC converters for electric vehicle applications," Proceedings of Electrical Manufacturing and Coil Winding Conference, Nashville, TN, October 22-24, 2007.
144. H. Sekiya, T. Watanabe, T. Suetsugu, and M. K. Kazimierczuk, "Analysis and design of Class DE amplifier," The 7th IEEE International Conference on Power Electronics and Drive Systems, Bangkok, Thailand, November 27-30, 2007, pp. 937-942.

2008

145. T. Suetsugu and M. K. Kazimierczuk, "ZVS operating frequency versus duty cycle of Class E amplifier with nonlinear capacitance," IEEE International Symposium on Circuits and Systems, Seattle, WA, May 23-26, 2008, pp. 3258-3261.
146. D. Murthy-Bellur and M. K. Kazimierczuk, "PSpice and MATLAB applications in teaching power electronics to graduate students at Wright State University, Conference of American Society of Engineering Education, North Central Section, Dayton, OH, March 28-29, 2008.
147. N. Kondrath and M. K. Kazimierczuk, "DC voltage transfer function and component stresses of common-diode tapped-inductor PWM boost converter," Proceedings of Electrical Manufacturing and Coil Winding Conference, Orlando, FL, November 3-5, 2008.
148. J. J. Lee and M. K. Kazimierczuk, "Transient inductor current waveforms in a PWM boost converter in CCM," Proceedings of Electrical Manufacturing and Coil Winding Conference, Orlando, FL, November 3-5, 2008.
149. H. Sekiya and M. K. Kazimierczuk, "Optimal core and wire of resonant inductor for Class-E amplifier," International Workshop on Vision, Communications and Circuits (IWVCC 2008), vol. 141, no. 2, pp. 52-62, 1994.
150. R. Miyahara, H. Sekiya, and M. K. Kazimierczuk, "Design of Class- E_M power amplifier taking into account auxiliary circuit," IEEE Industrial Electronics Conference (IECON'2008), Orlando, FL, November 17-19, 2008, pp. 679-684.

2009

151. T. Suetsugu and M. K. Kazimierczuk, "Analysis of dynamic response of Class E amplifier," IEEE International Symposium on Circuits and Systems, Taipei, Taiwan, May 24-27, 2009, pp. 2866-2869.
152. H. Sekiya, R. Miyahara, and M. K. Kazimierczuk, "Design of Class DE amplifier with linear and nonlinear shunt capacitances for 25% duty cycle," IEEE International Symposium on Circuits and Systems, Taipei, Taiwan, May 24-27, 2009, pp. 2870-2872.
153. N. Kondrath and M. K. Kazimierczuk, "Margins of stability of inner-current loop of current-mode controlled PWM dc-dc converters," IEEE International Symposium on Circuits and Systems, Taipei, Taiwan, May 24-27, 2009, pp. 1985-1988.
154. M. K. Kazimierczuk and H. Sekiya, "Design of ac resonant inductors using area product method," IEEE Energy Conversion Congress and Exhibition, San Jose, CA, September 20-24, 2009, pp. 994-1001.
155. J. J. Lee and M. K. Kazimierczuk, "Effects of load changes on the control-to-output transfer function of a buck-boost converter in CCM," Proceedings of Electrical Manufacturing and Coil Winding Conference, Nashville, TN, September 28-30, 2009.
156. N. Kondrath and M. K. Kazimierczuk, "Analysis and design of tapped-inductor PWM buck converter in CCM," Proceedings of Electrical Manufacturing and Coil Winding Conference, Nashville, TN, September 28-30, 2009.
157. H. Sekiya and M. K. Kazimierczuk, "Design of RF-choke inductors using core geometry coefficient," Proceedings of Electrical Manufacturing and Coil Winding Conference, Nashville, TN, September 28-30, 2009.
158. D. Murthy-Bellur and M. K. Kazimierczuk, "Review of zero-current switching flyback dc-dc converters," Proceedings of Electrical Manufacturing and Coil Winding Conference, Nashville, TN, September 28-30, 2009.
159. V. P. Galigekere and M. K. Kazimierczuk, "Role of power electronics in renewable energy systems," Proceedings of Electrical Manufacturing and Coil Winding Conference, Nashville, TN, September 28-30, 2009.

160. V. P. Galigerkere, D. Murthy Bellur, and M. K. Kazimierczuk, "An overview and simulation of dc-dc-ac and Z-source grid connected inverters," Proceedings of Electrical Manufacturing and Coil Winding Conference, Nashville, TN, September 28-30, 2009.

2010

161. R. Miyahara, H. Sekiya, and M. K. Kazimierczuk, "Novel design procedure of Class- E_M power amplifiers," IEEE International Symposium on Radio-Frequency Integration Technology, Singapore, December 9-11, 2009.
162. N. Sagawa, H. Sekiya, and M. K. Kazimierczuk, "Computer-aided design of Class-E switching circuits taking into account optimized inductor design," IEEE 25th Applied Power Electronics Conference, Palm Springs, February 21-25, 2010, pp. 2212-2219.
163. X. Wei, H. Sekiya, T. Suetsugu, S. Kuroiwa, and M. K. Kazimierczuk, "Effect of MOSFET gate-to-drain parasitic capacitance on Class-E power amplifier," IEEE International Symposium on Circuits and Systems, Paris, France, May 30-June 2, 2010, pp. 3200-3203.
164. N. Kondrath and M. K. Kazimierczuk, "Duty-ratio-to-inductor current and duty ratio-to-output voltage transfer functions of peak current-mode controlled DC-DC PWM buck converter in CCM," IEEE International Symposium on Circuits and Systems, Paris, France, May 30-June 2, 2010, pp. 2734-2737.
165. D. Murthy-Bellur and M. K. Kazimierczuk, "Two-switch flyback-forward PWM DC-DC converter with reduced switch voltage stress," IEEE International Symposium on Circuits and Systems, Paris, France, May 30-June 2, 2010, pp. 3705-3708.
166. T. Suetsugu and M. K. Kazimierczuk, "Power efficiency calculation of Class E amplifier with nonlinear capacitance," IEEE International Symposium on Circuits and Systems, Paris, France, May 30-June 2, 2010, pp. 2714-2717.
167. L. Sarri, A. Reatti, and M. K. Kazimierczuk, "Modeling of a solar battery charger based on PWM buck-boost converter operated under discontinuous conduction mode," Proc. 35th Photovoltaic Specialists Conference, Honolulu, Hawaii, June 20-25, 2010.
168. L. Sarri, A. Luchetta, A. Reatti, and M. K. Kazimierczuk, "Frequency-domain analysis of PWM dc-dc converter including exact rms parasitic resistances for photovoltaic applications," Proc. 35th Photovoltaic Specialists Conference, Honolulu, Hawaii, June 20-25, 2010.
169. L. Sarri, A. Reatti, and M. K. Kazimierczuk, "Development and optimization of a low concentration PV/T system," Proc. 35th Photovoltaic Specialists Conference, Honolulu, Hawaii, June 20-25, 2010.
170. R. C. Fitch, Jr., M. K. Kazimierczuk, J. K. Gillespe, A. G. Mattamana, P. L. Orlando, K. S. Groves, and T. K. Quach, "Hybrid integration of microwave circuit solenoid inductors and ALGaN/GaN HEMTs using an Su-8 photosensitive epoxy interposer layer," 218th Electrochemical Society's 2010 Meeting, State-of-the-Art Program on Compound Semiconductors 52 (SOTAPOCS 52), Las Vegas, NV, October 10-15, 2010.
171. T. Poomalee, K. Jirasereeamornkul and M. K. Kazimierczuk, "Vacuum tube amplifiers using electronic dc transformer," Audio Engineering Society 129th Convention, San Francisco, CA, November 4-7, 2010.
172. M. K. Kazimierczuk and H. Sekiya, "Core geometry coefficient for resonant inductors," Proceedings of Electrical Manufacturing and Coil Winding Conference, Dallas, TX, October 18-20, 2010.
173. V. P. Galigerkere and M. K. Kazimierczuk, "Dynamic response of PWM Z-source inverter and PWM Z-source converter," Proceedings of Electrical Manufacturing and Coil Winding Conference, Dallas, TX, October 18-20, 2010.
174. N. Kondrath, A. Kondrath, and M. K. Kazimierczuk, "Bandwidth of transformers," Proceedings of Electrical Manufacturing and Coil Winding Conference, Dallas, TX, October 18-20, 2010.
175. R. Wojda and M. K. Kazimierczuk, "Comparison of winding resistance with litz wire and solid wire," Proceedings of Electrical Manufacturing and Coil Winding Conference, Dallas, TX, October 18-20, 2010.

2011

176. V. P. Galigerkere and M. K. Kazimierczuk, "Small-signal modeling of PWM Z-source converter by circuit-averaging technique," IEEE International Symposium on Circuits and Systems, Rio de Janeiro, Brazil, May 15-18, 2011, pp. 1600-1603.
177. M. K. Kazimierczuk and R. Wojda, "Design of Class F_3 RF power amplifier," IEEE International Symposium on Circuits and Systems, Rio de Janeiro, Brazil, May 15-18, 2011, pp. 2785-2788.

178. T. Nagashima, X. Wei, H. Sakiya, and M. K. Kazimierczuk, "Power conversion efficiency of Class-E amplifier outside nominal operations," IEEE International Symposium on Circuits and Systems, Rio de Janeiro, Brazil, May 15-18, 2011, pp. 749-752.
179. D. Murthy-Bellur and M. K. Kazimierczuk, "Active-clamp ZVS two-switch flyback converter," IEEE International Symposium on Circuits and Systems, Rio de Janeiro, Brazil, May 15-18, 2011, pp. 241-244.
180. A. Ayachit, V. P. Galigerkere, and M. K. Kazimierczuk, "Power electronics circuitry in LED modules: An overview," Proceedings of Electrical Manufacturing and Coil Winding Conference, Nashville, TN, September 19-21, 2011.
181. R. Wojda and M. K. Kazimierczuk, "Proximity winding loss in solid-round conductors," Proceedings of Electrical Manufacturing and Coil Winding Conference, Nashville, TN, September 19-21, 2011.
182. D. Murthy-Bellur and M. K. Kazimierczuk, "Design of loosely coupled wireless power transfer systems," Proceedings of Electrical Manufacturing and Coil Winding Conference, Nashville, TN, September 19-21, 2011.
183. H. Sakiya, N. Sagawa, Y. Li, and M. K. Kazimierczuk, "Design of Class-DE power amplifier including optimal resonant inductor design," Proceedings of Electrical Manufacturing and Coil Winding Conference, Nashville, TN, September 19-21, 2011.
184. R. M. Kotecha and M. K. Kazimierczuk, "Audio-susceptibility of PWM dc-dc boost converter," Proceedings of Electrical Manufacturing and Coil Winding Conference, Nashville, TN, September 19-21, 2011.
185. T. Suetsugu and M. K. Kazimierczuk, "Diode peak voltage clamping of Class E amplifier," 37th Annual Conference of the *IEEE Industrial Electronics Society (IECON)*, Melbourne, Australia, November 7-10, 2011.

2012

186. M. Kavimandan and M. K. Kazimierczuk, "Calculation of inductance internal dimensions based on modified Grover's equation for desired inductance," Proceedings of Electrical Manufacturing and Coil Winding Conference, Milwaukee, WI, May 7-10, 2012.
187. M. Kavimandan and M. K. Kazimierczuk, "Matlab base educational GUI calculators for spiral of Inductors," Proceedings of Electrical Manufacturing and Coil Winding Conference, Milwaukee, WI, May 7-10, 2012.
188. R. Wojda and M. K. Kazimierczuk, "Optimization of foil windings for multi-harmonic currents," Proceedings of Electrical Manufacturing and Coil Winding Conference, Milwaukee, WI, May 7-10, 2012.
189. R. Wojda and M. K. Kazimierczuk, "Optimization of solid-round windings for multi-harmonic currents," Proceedings of Electrical Manufacturing and Coil Winding Conference, Milwaukee, WI, May 7-10, 2012.
190. A. Ayachit, D. Murthy-Bellur, and M. K. Kazimierczuk, "Steady-state analysis of series resonant converter using extended describing function method," Proceedings of the 55th IEEE Midwest Symposium on Circuits and Systems, Boise, Idaho, August 5-8, 2012, pp. 1160-1164.
191. D. Murthy-Bellur, A. Bauer, W. Kerin, and M. K. Kazimierczuk, "Inverter using loosely coupled inductors for wireless power transfer," Proceedings of the 55th IEEE Midwest Symposium on Circuits and Systems, Boise, Idaho, August 5-8, 2012, 1164-1167.
192. N. Kondrath and M. K. Kazimierczuk, "Audio-susceptibility of the inner-loop of peak current-mode controlled PWM dc-dc buck converter in CCM," Proc. 38th Annual Conference of the IEEE Industrial Electronics Society (IECON 2012), Montreal, Canada, October 25-28, 2012, pp. 249-254.
193. M. K. Kazimierczuk and D. Murthy-Bellur, "Synthesis of LC oscillation," *International Journal of Engineering Education*, pp. 26-41, 2012.

2013

194. R. Thippayanet, C. Ekkaravarodome, K. Jirassereeamornkul, K. Chamnoghthai, M. K. Kazimierczuk, and K. Higuchi, "Push-pull zero-voltage switching resonant dc-dc converter based on half bridge Class-DE rectifier," IEEE International Conference on Power Electronics and Drive Systems (PEDS'13), Kitakyushu, Japan, 22-25 April 2013.
195. T. R. Salvatierra and M. K. Kazimierczuk, "Inductor design for PWM buck converter operated as dynamic supply or amplitude modulator for RF transmitters," IEEE Midwest Symposium on Circuits and Systems, Columbus, OH, August 3-7, 2013, pp. 37-40.
196. A. Ayachit and M. K. Kazimierczuk, "Steady-state analysis of PWM quadratic buck converter in CCM," IEEE 56th Midwest Symposium on Circuits and Systems, Columbus, OH, August 3-7, 2013, pp. 493-496.

197. A. Ayachit and M. K. Kazimierczuk, "Two-phase buck converter as a dynamic power supply for RF power amplifier applications," IEEE 56th Midwest Symposium on Circuits and Systems, Columbus, OH, August 3-7, 2013, pp. 493-496.
198. N. Kondrath and M. K. Kazimierczuk, "Slope compensation and relative stability for peak current-mode controlled PWM dc-dc converters in CCM," IEEE 56th Midwest Symposium on Circuits and Systems, Columbus, OH, August 3-7, 2013, pp. 477-480.
199. N. Kondrath and M. K. Kazimierczuk, "Control-to-output transfer function including feed-forward gains of peak current-mode controlled PWM dc-dc converters in CCM," Proc. 39th Annual Conference of the IEEE Industrial Electronics Society (IECON' 2013), Vienna, Austria, November 10-13, 2013, pp. 576-581.

2014

200. T. Nagashima, K. Inoue, X. Wei, E. Bou, E. Alarcon, M. K. Kazimierczuk, and H. Sekiya, "Analytical design procedure for resonant inductively coupled wireless power transfer with Class-E² dc-dc converter," IEEE International Symposium on Circuits and Systems (ISCAS'2014), Melbourne, Australia, June 1-5, 2014, pp. 114-116.
201. M. Bojarski, D. Czarkowski, F. de Leon, Q. Deng, M. K. Kazimierczuk, and H. Sekiya, "Multiphase resonant inverter with common resonant circuit," IEEE International Symposium on Circuits and Systems (ISCAS'2014), Melbourne, Australia, June 1-5, 2014, pp. 2443-2448.
202. Ayachit, A.; Kazimierczuk, M.K., "Power losses and efficiency analysis of the quadratic buck converter in CCM," 2014 IEEE 57th International Midwest Symposium on Circuits and Systems (MWSCAS), pp.463-466, 3-6 Aug. 2014
203. A. Ayachit and M. K. Kazimierczuk, "Open-loop small-signal transfer functions of the quadratic buck PWM dc-dc converter in CCM," 40th Annual Conference of the IEEE Industrial Electronics Society (IECON'2014), Dallas, TX, October 29 – November 2, 2014.
204. N. Kondrath and M. K. Kazimierczuk, "Output Impedance of peak current-mode controlled PWM dc-dc converters with only inner loop closed in CCM," IEEE International Symposium on Industrial Electronics (IECON'2014), Dallas, TX, October 29 – November 2, 2014.
205. A. Reatti and M. K. Kazimierczuk, "DCM operated PWM dc-dc converter modeling including the effects of parasitic components on duty-ratio constraint," IEEE International Symposium on Circuits and Systems (ISCAS'2014), Melbourne, Australia, June 1-5, 2014.
206. A. Reatti and M. K. Kazimierczuk, "Safety and monitoring system for a solar photovoltaic and thermal concentrator plant," IEEE International Symposium on Circuits and Systems (ISCAS'2014), Melbourne, Australia, June 1-5, 2014.
207. A. Reatti, M. K. Kazimierczuk, L. Catalani, and L. Ciani, "Monitoring systems for a solar photovoltaic and thermal concentrator plant," 20th IMECO TC-4, Benevento, Italy, September 15-17, 2014, pp. 999-1004.

2015

208. A. Ayachit, M. K. Kazimierczuk, and A. Reatti, "Small-signal model of the boost PWM dc-dc converter at boundary-conduction mode using circuit averaging technique," IEEE International Symposium on Circuits and Systems (ISCAS'2015), Portugal, June 24-27, 2015, pp. 229-232.
209. A. Reatti L. Ciani, and M. K. Kazimierczuk, "Linear solar PV/T concentrator monitoring system based on performance index derivation," 2015 IEEE Instrumentation and Measurement Technology Conference, Pisa, Italy, May 11-14, 2015.
210. A. Reatti, S. Manetti, M. C. Piccirilli, A. Luchetta, and M. K. Kazimierczuk, "Multilevel DC-AC converters for renewable power generation plants: comparison, simulation, and experimental tests," 15th IEEE International Conference on Environment and Electrical Engineering (EEEIC15), Rome, Italy, June 10-13, 2015, pp. 760-765.
211. A. Reatti, S. Manetti, M. C. Piccirilli, A. Luchetta, and M. K. Kazimierczuk, "Comparison of DCM operated PWM DC-DC converter modeling methods including the effects of parasitic components on duty ratio constraint," 15th IEEE International Conference on Environment and Electrical Engineering (EEEIC15), Rome, Italy, June 10-13, 2015, pp. 766-771.
212. A. Reatti, S. Manetti, M. C. Piccirilli, A. Luchetta, and M. K. Kazimierczuk, "Effects of parasitic components on diode duty cycle and small-signal model of PWM DC-DC buck converter in DCM," 15th IEEE International Conference on Environment and Electrical Engineering (EEEIC15), Rome, Italy, June 10-13, 2015, pp. 772-777.

213. A. Reatti, S. Manetti, M. C. Piccirilli, A. Luchetta, and M. K. Kazimierczuk, "Derivations of network transfer functions for PWM DC-DC buck converter in DCM influencing effects of parasitic components on duty cycle," 15th IEEE International Conference on Environment and Electrical Engineering (EEEIC15), Rome, Italy, June 10-13, 2015, pp. 779-783.
214. A. Ayachit, D. K. Saini, and M. K. Kazimierczuk, "Two-phase buck DC-DC converter as dynamic power supply for amplitude-modulated Class-DE power amplifier," IEEE Midwest Symposium on Circuits and Systems, Colorado Springs, CO, August 2-5, 2015, pp. 1-4.
215. A. Reatti, M. K. Kazimierczuk, and L. Ciani, "Monitoring and field data acquisition system for a hydrostatic concentrator plant," *Measurement*, 2016.
216. I. Bakadanzi, M. A. Catelani, M. K. Kazimierczuk, L. Ciani, A. Luchetta, S. Manetti, and A. Reatti, "MLVNN for parameters faults detection in a DC-DC boost converter," Proc. of 212-st IMEKO World Congress on Measurement in Research and Industry, Prague, Czech Republic, August 30-September 4, 2015, pp. 445-449.
217. A. Reatti, M. K. Kazimierczuk, and L. Ciani, "Matlab PV thermal solar concentrator performance prediction based on triple-junction solar cell model," IEEE Energy Conversion Congress and Expo Conference, Montreal, Quebec, Canada, September 20-24, 2015.
218. A. Ayachit, D. K. Saini, M. K. Kazimierczuk, and T. Suetsugu, "Three-coil power transfer system using Class_E² dc-dc converter," IEEE International Telecommunications Energy Conference (INTELEC'15), October 18-20, Namba, Osaka, Japan, 2015, pp.1116-1119.
219. D. K. Saini, A. Ayachit, M. K. Kazimierczuk, and T. Suetsugu, "Buck dc-ac converter using gallium-nitride FETs for amplitude-modulated Class-E RF power amplifiers," 41st Annual Conference of the IEEE Industrial Electronics Society (IECON'2015), Yokohama, Japan, November 9-17, 2015, pp. 3579-3584.
220. D. K. Saini, A. Ayachit, M. K. Kazimierczuk, and T. Suetsugu, "Small-signal analysis of PWM boost converter with complex load impedance," 41st Annual Conference of the IEEE Industrial Electronics Society (IECON'2015), Yokohama, Japan, November 9-17, 2015, pp. 3597-3602.
221. A. Reatti, A. M. K. Kazimierczuk, M. Catelani, and L. Ciani, "Linear solar PV/T concentrator monitoring system and derivation of performance index," In 2015 IEEE International Instrumentation and Measurement Technology Conference, I2MTC 2015, Pisa, 2015, Institute of Electrical and Electronics Engineers Inc., vol. 2015, pp. 1285-1290, ISBN:9781479961139.

2016

222. A. Reatti, A. Luchetta, S. Manetti, S. Manetti, M. C. Piccirilli, L. Ciani, M. K. Kazimierczuk, and M. Catelani, "Multilayer neural network with multivalued neurons MLMVN based Class-E resonant inverter faults detection," The 8-th IET International Conference on Power Electronics, Machines and Drives, (PEMD2016), April 19-21, 2016, Glasgow, Scotland, UK, Paper A14.1, pp. 1-6.
223. D. K. Saini, A. Ayachit, M. K. Kazimierczuk, and H. Sekiya, "Small-signal analysis of closed-loop PWM boost converter with complex impedance load," IEEE International Symposium on Circuits and Systems (ISCAS'2016), Montreal, Canada, May 22-25, 2016, pp. 433-436.
224. A. Ayachit and M. K. Kazimierczuk, "Effect of air gap on power losses in low and high permeability magnetic cores," Electrical Manufacturing and Coil Winding Conference, May 11-12, 2016, Milwaukee, WI.
225. A. Ayachit and M. K. Kazimierczuk, "Control-to-output transfer functions of buck and boost dc-dc converters in CCM with constant power loads," Electrical Manufacturing and Coil Winding Conference, May 11-12, 2016, Milwaukee, WI.
226. D. K. Saini and M. K. Kazimierczuk, "Design of RF choke for Class-A RF power amplifier," Electrical Manufacturing and Coil Winding Conference, May 11-12, 2016, Milwaukee, WI.
227. D. K. Saini and M. K. Kazimierczuk, "Small-signal analysis of cascaded boost converters in CCM," Electrical Manufacturing and Coil Winding Conference, May 11-12, 2016, Milwaukee, WI.
228. A. Ayachit, S. J. Tritschler, and M. K. Kazimierczuk, "Wireless energy transfer using ac current transformers," Electrical Manufacturing and Coil Winding Conference, May 11-12, 2016, Milwaukee, WI.
229. M. Catelani, L. Ciani, A. Luchetta, S. Manetti, M.C. Piccirilli, A. Reatti, and M. K. Kazimierczuk, "Fault detection of resonant inverters for wireless power transmission using MLMVNN," The IEEE 2nd International Forum on Research and Technologies for Society and Industry Leveraging a Better Tomorrow (RTSI), 7-9 Sept. 2016, Bologna, Italy, pp. 1-5.

230. Y. P. Siwakoti, F. Blaabjerg, V. P. Galigerkere, and M. K. Kazimierczuk, "A-source impedance network, IEEE Energy Conversion Congress & Exposition!! (ECCE2016), Milwaukee, WI, September 18-22, 2016.
 231. A. Ayachit, A. Reatti, and M. K. Kazimierczuk, "Small-signal modeling of PWM dual-SEPIC dc-dc converter by circuit averaging techniques," 42nd Annual Conference of the IEEE Industrial Electronics Society (IECON'2016), Florence, Italy, October 23-26, 2016, pp. 3606-3611.
 232. D. K. Saini, A. Reatti, and M. K. Kazimierczuk, "Average current-mode control of buck dc-dc converter with reduced control voltage ripple," 42nd Annual Conference of the IEEE Industrial Electronics Society (IECON'2016), Florence, Italy, October 23-26, 2016, pp. 3270-3275.
 233. L. Albertoni, F. Grasso, J. Matteucci, M. C. Piccirilli, A. Reatti, A. Ayachit, and M. K. Kazimierczuk, "Analysis and design of full-bridge Class-DE inverter at fixed duty cycle," 42nd Annual Conference of the IEEE Industrial Electronics Society (IECON'2016), Florence, Italy, October 23-26, 2016, pp. 5609-5614.
 234. A. Ayachit, D. K. Saini, A. Reatti, and M. K. Kazimierczuk, "Design and power loss analysis of choke for Class-E ZVS power amplifier," 42nd Annual Conference of the IEEE Industrial Electronics Society (IECON'2016), Florence, Italy, October 23-26, 2016, pp. 5621-5626, pp. 5621-5626.
 235. F. Corti, F. Grasso, A. Reatti, A. Ayachit, D. K. Saini, and M. K. Kazimierczuk, "Design of Class-E ZVS inverter with loosely-coupled transformer at fixed coupling coefficient," 42nd Annual Conference of the IEEE Industrial Electronics Society (IECON'2016), Florence, Italy, October 23-26, 2016, pp. 5627-5632.
 236. F. Corti, F. Grasso, A. Reatti, and M. K. Kazimierczuk, "Fault diagnosis for PWM DC-DC buck-boost power converters using MVN neural networks," 42nd Annual Conference of the IEEE Industrial Electronics Society (IECON'2016), Florence, Italy, October 23-26, 2016.
 237. A. Reatti, A. Luchetta, S. Manetti, M. C. Piccirilli, and M. K. Kazimierczuk, "MLMVNN for parameter fault detection in PWM dc-dc converters and its application for buck dc-dc converter," 16th IEEE International Conference on Environment and Electrical Engineering (EEEIC16), Milan, Italy, June 10-13, 2016, pp. 760-765.
- 2017**
238. M. Catalani, L. Ciani, F. Corti, A. Luchetta, S. Manetti, M. C. Piccirilli, F. Grasso, A. Reatti, M. K. Kazimierczuk, and A. Ayachit, "Fault detection in Class-E2 resonant converter," IEEE International Instrumentation and Measurement Technology Conference (I2MTC 2017), Torino, Italy, May 22-25, 2017.
 239. M. Catalani, L. Ciani, F. Corti, A. Luchetta, S. Manetti, M. C. Piccirilli, F. Grasso, A. Reatti, M. K. Kazimierczuk, and A. Ayachit, "Class-E dc-ac inverter design centering," IEEE International Conference on Environment and Electrical Engineering (EEEIC2017/I&CPS Europe), Milan, Italy, June 6-9, 2017.
 240. M. C. Piccirilli, A. Reatti, F. Corti, P. De La Perre, A. Nepote, M. K. Kazimierczuk, and A. Ayachit, "Distortion analysis and equivalent impedance estimation of Class-D full-wave rectifier," 17th IEEE International Conference on Environment and Electrical Engineering (EEEIC17), Milan, Italy, June 6-9, 2017.
 241. M. Catalani, L. Ciani, F. Corti, A. Luchetta, S. Manetti, M. C. Piccirilli, F. Grasso, A. Reatti, M. K. Kazimierczuk, and A. Ayachit, "Fault detection in Class-E² resonant converters," IEEE Instrumentation and Measurement Technology Conference (I2MTC 2017), Torino, Italy, May 22-25, 2017.
 242. D. K. Saini and M. K. Kazimierczuk, "True-average current-mode controlled buck-boost DC-DC PWM converter, IEEE Symposium on Circuits and Systems (ISCAS'2017, Baltimore, MD, USA, May 28-31, 2017. (R)
 243. A. Reatti, F. Corti, and M. K. Kazimierczuk, "Inductive power transfer through a bond-graph analogy, an innovative approach," 15th IEEE International Conference on Environment and Electrical Engineering (EEEIC17), Milan, Italy.
 244. T. Salvatierra, D. K. Saini, A. Ayachit, D. K. Saini, and M. K. Kazimierczuk, "Semiconductor losses of PWM buck dc-ac converter operated as dynamic power supply," IEEE 60th International Midwest Symposium on Circuits and Systems (MWSCAS 2017), Boston, MA, USA, August 6-9, 2017, pp. 233-236.
 245. D. K. Saini, A. Ayachit, T. Salvatierra, and M. K. Kazimierczuk, "Design of zero-voltage-ripple buck dc-dc converter," IEEE 60th International Midwest Symposium on Circuits and Systems (MWSCAS 2017), Boston, MA, USA, August 6-9, 2017, pp. 456-459.
 246. D. K. Saini, A. Ayachit, and M. K. Kazimierczuk, "Audio-susceptibility of inner loop of true-average current-mode controlled buck dc-dc converter," IEEE 60th International Midwest Symposium on Circuits and Systems (MWSCAS 2017), Boston, MA, USA, August 6-9, 2017, pp. 460-463.

247. D. K. Saini, A. Ayachit, T. Suetsugu, and M. K. Kazimierczuk, "High switching frequency performance of E-GaN FETs and silicon MOSFETs," IEEE Annual Meeting of Industry Applications Society, Cincinnati, OH, October 1-5, 2017.
- 2018**
248. H. Jedi, A. Ayachit, and M. K. Kazimierczuk, "Resonant gate-drive circuit with reduced switching loss," The 2018 IEEE Texas Power and Energy Conference (TPEC), College Station, TX, 8-9 February 2018.
 249. Al Baidhani Humam Abdulmunem Salih and M. K. Kazimierczuk, "PWM-based proportional-integral sliding-mode current control of DC-DC boost converter," The 2018 IEEE Texas Power and Energy Conference (TPEC), College Station, TX, 8-9 February 2018.
 250. L. Kathi, D. K. Saini, A. Ayachit, and M. K. Kazimierczuk, "Open-loop small-signal modeling of Cuk dc-dc converter for CCM by circuit-averaging technique," The 2018 IEEE Texas Power and Energy Conference (TPEC), College Station, TX, 8-9 February 2018.
 251. A. Chadha, D. K. Saini, A. Ayachit, and M. K. Kazimierczuk, "Steady-state analysis of PWM tapped-inductor buck dc-dc converter in CCM," The 2018 IEEE Texas Power and Energy Conference (TPEC), College Station, TX, 8-9 February 2018.
 252. Al Baidhani Humam Abdulmunem Salih and M. K. Kazimierczuk, "Nonlinear modeling and PWM-based sliding-mode control of dc-dc buck converter for CCM," The 9-th IEEE Innovative Smart Grid Technology Conference (ISGT 2018), Washington, DC, February 19-22, 2018.
 253. A. Reatti, F. Corti, M. K. Kazimierczuk, and A. Ayachit, "Design of a loosely coupled transformer loaded by a series-parallel Class-DE inverter," IEEE IAS, P&CPS, IEEE 4th Industrial & Commercial Power Systems Technical Conference, Niagara Falls, ON, Canada, May 7-10, 2018.
 254. D. K. Saini, A. Chadha, A. Ayachit, A. Reatti, and M. K. Kazimierczuk, "Duty cycle and input-to-output voltage transfer functions of tapped-inductor buck dc-dc converter," IEEE International Symposium on Circuits and Systems (ISCAS'2018), Florence, Italy, May 27-30, 2018.
 255. H. Al-Baidhani, M. K. Kazimierczuk, and A. Reatti, "Nonlinear modeling and voltage-mode control of boost dc-dc converter for CCM," IEEE International Symposium on Circuits and Systems (ISCAS'2018), Florence, Italy, May 27-30, 2018.
 256. H. Jedi, A. Reatti, and M. K. Kazimierczuk, "A current-source sinusoidal gate driver for high-frequency applications," IEEE International Symposium on Circuits and Systems (ISCAS'2018), Florence, Italy, May 27-30, 2018.
 257. I. Azenberg, F. Corti, F. Grasso, A. Luchetta, S. Monetti, M.C. Piccirelli, A. Reatti, and M. K. Kazimierczuk, "A multi-step approach to the single fault diagnosis of dc-dc switched power converters," IEEE International Symposium on Circuits and Systems (ISCAS'2018), Florence, Italy, May 27-30, 2018.
 258. A. Reatti, F. Corti, L. Pugi, M. K. Kazimierczuk, G. Migliazza, and E. Lorenzani, "Control strategies for Class-E inverter with wide load variation, 17th IEEE International Conference on Environment and Electrical Engineering (EEEIC17), Palermo, Italy, June 12-15, 2018.
 259. A. Agasthya, M. Forouzesh, Y. P. Siwakoti, M. K. Kazimierczuk, and F. Blaabjerg, "Average current-mode control of PWM A-source converter," in Proc. IEEE Energy Conversion Conference & Expo (ECCE'2018), Portland, OR, September 23-27, 2018, pp. 5994-5999.
 260. H. Al-Baidhani, M. K. Kazimierczuk, and R. Ordonez, "Nonlinear modelling and control of PWM dc-dc buck-boost converter for CCM," 44th Annual Conference of the IEEE Industrial Electronics Society (IECON'2018), Washington, DC, USA, October 21-23, 2018, pp.1374-1379.
 261. H. Jedi and M. K. Kazimierczuk, "High-frequency single-switch inverter for driving capacitive loads," 44th Annual Conference of the IEEE Industrial Electronics Society (IECON'2018), Washington, DC, USA, October 21-23, 2018, pp. 1255-1260.
- 2019**
262. H. Al-Baidhani, M. K. Kazimierczuk, T. Salvatierra, A. Reatti, and F. Corti, "Sliding-mode voltage control of dynamic power supply for CCM," IEEE International Symposium on Circuits and Systems (ISCAS'2019), Sapporo, Japan, May 26-29, 2019.
 263. A. Reatti, F. Corti, A. Tesi, A. Torali, and M. K. Kazimierczuk, "Nonlinear exact analysis and solution of power stage of dc-dc PWM boost converter," IEEE International Symposium on Circuits and Systems (ISCAS'2019), Sapporo, Japan, May 26-29, 2019.

264. A. Reatti, F. Corti, A. Tesi, A. Torali, and M. K. Kazimierczuk, "Effects of parasitic components on dynamic performance of power stages of dc-dc PWM buck and boost converters in CCM," IEEE International Symposium on Circuits and Systems (ISCAS'2019), Sapporo, Japan, May 26-29, 2019.
<https://doi.org/10.1109/ISCAS.2019.8702520>
 265. N. Kollipara, M. K. Kazimierczuk, A. Reatti, and F. Corti, A, "Phase-control and power optimization of LLC converter," IEEE International Symposium on Circuits and Systems (ISCAS'2019), Sapporo, Japan, May 26-29, 2019.
 266. A. Agasthya, M. Abdul-Hak, and M. K. Kazimierczuk, "Analysis of multiple-EV wireless power transfer systems using a single transmitter coil," IEEE Transportation Electrification Conference, Novi, MI, June 19-21, 2019.
 267. A. Agasthya, M. Abdul-Hak, and M. K. Kazimierczuk, "Transfer function of wireless power transfer systems with series-parallel compensation schemes," IEEE Transportation Electrification Conference, Novi, MI, June 19-21, 2019.
 268. A. Agasthya, S. U. Hassan, Y. P. Siwakoti, M. Abdul-Hak, M. K. Kazimierczuk, and F. Blaabjerg, "Coupled-inductor bidirectional dc-dc converter for EV charging applications with wide voltage conversion ratio and low parts counts," in Proc. IEEE Energy Conversion Conference & Expo (ECCE'2019), Baltimore, MD, September 29-October 27, 2019.
 269. H. Al-Baidhani, M. K. Kazimierczuk, A. Reatti, and F. Grasso, "Digital integral-lead control of dc-dc buck converter for CCM," 45th Annual Conference of the IEEE Industrial Electronics Society (IECON'2019), Lisbon, Portugal, October 14-17, 2019.
 270. A. Chadha and M. K. Kazimierczuk, "Tapped-inductor buck dc-dc converter with complex load," IEEE 62nd International Midwest Symposium on Circuits and Systems (MWSCAS 2019), Dallas, TX, USA, August 4-7, 2019.
- 2020**
271. F. Corti, A. Reatti, M. C. Piccirilli, F. Grasso, L. P. Luci, and M. K. Kazimierczuk, "Simultaneous wireless power and data transfer: Overview and application to electric vehicles," IEEE International Symposium on Circuits and Systems (ISCAS'2020), Seville, Spain, May 17-20, October 11-14, 2020.
 272. A. Bartolini, F. Corti, L. A. Reatti, L. Ciani, F. Grasso, and M. K. Kazimierczuk, "Analysis and design of stand-alone photovoltaic system for precision agriculture network of sensors," 20th IEEE International Conference on Environment and Electrical Engineering (EEEIC20), Madrid, Spain, June 9-12, 2020.
<https://doi.org/10.1109/EEEIC/ICPSEurope49358.2020.9160554>
- 2021**
273. H. Al-Baidhani, M. K. Kazimierczuk, and H. Sekiya, "Digital integral-lead control design of dc-dc buck converter for CCM," IEEE International Symposium on Circuits and Systems (ISCAS'2021), Daegu, Korea, May 23-26, 2021.
 274. H. Al-Baidhani, M. K. Kazimierczuk, and H. Sekiya, "Pole placement via state feedback with integral control of inverting dc-dc buck-boost converter," The 3-rd International Symposium on Industrial Electronics (ISIE2021), Kyoto, Japan, 20-23 June 2021.
- 2022**
275. H. Al-Baidhani, M. K. Kazimierczuk, and A. Reatti, "Modeling and control of bridgeless single-switch non-inverting ac-dc Cuk converter in DCM," 48th Annual Conference of the IEEE Industrial Electronics Society (IECON'2022), Brussels, Belgium, October 17-20, 2022.

Citations:

1. Science Citation Index H. Al-Baidhani, M. K. Kazimierczuk, *Web of Science (WOS)*, *Web of Knowledge*, Clarivate Analytics (formally Thomson-Reuters) Science Citation Index: 6,677 citations of journal papers, Hirsh h-index = 46. The average citation of journal papers per paper AVG = 30.91. <https://www.webof-science.com/wos/woscc/citation-report/5205d3a8-bb32-4e8b-a6c1-56fa78f0e0b2-3a540692>
http://apps.webofknowledge.com/Search.do?product=WOS&SID=1DgQiaX-QHv84i1GALB4&search_mode=GeneralSearch&prID=d7561cd6-bfe5-4982-8530-a0e050f3f17e
2. Google Scholar: 19,356 citations, h-index = 66, i10-index = 304. Since 2018, 6,542 citations, h-index = 35, i10-index = 158.
<http://scholar.google.com/citations?user=O4JmDHYAAAAJ&hl=en>

3. D-Index = 65,
4. Scopus (Elsevier): 11,125 citations, h-index 55.
5. Research Gate: Research Interests Score = 6,078, Reads 98,426, Citations = 13,190, h-index 57, Recommendations 189. Mentions 84.
6. Research.com
h-index = 66, citations 19,308, world rankings 382, USA ranking 198 in electronics and electrical engineering.
<https://research.com/u/marian-k-kazimierzczuk>
7. Microsoft Academic Ranking: 2368 citations, G-index = 36, h-index = 25.
8. Top Authors in Engineering, 229-th position in the world, 154-th in USA, 1-st in Ohio. He is one of the top engineering authors in the international pool of more than 2 million of publishing authors.
9. Top Authors in Electrical & Electronic Engineering, 75-th position in the world, 52-nd in USA, 2-nd in Ohio. He is one of the top authors in the international pool of more than half of a million of publishing authors in the areas of electrical and electronic technology.
10. Google Scholar: 1st in world in RF Electronics, 1st in the world in Modeling and Control, 4th in the world in Magnetism, 4th in the world in Industrial Electronics, and 48th in the world in Power Electronics.
11. ORCID: 0000-0003-4275-0507

Stanford University List of World's Top 2% Scientists in Electronics and Electrical Engineering D-Index = 65

The list is prepared by Stanford University in cooperation with Dutch publisher Elsevier BV and SciTech Strategies. It was published by PLOS Biology Journal. data.mendeley.com.

381 position in the world, 199 position in USA, 1 position in Ohio, 1 position among all Poles and Polish Ancestry

<https://research.com/scientists-rankings/electronics-and-electrical-engineering>

USA Top 2% Scientists in Electronics and Electrical Engineering

199 position in USA

<https://research.com/scientists-rankings/electronics-and-electrical-engineering/us>

<https://research.com/u/marian-k-kazimierzczuk>

World's Top 2% Scientists of All Scientists

11,799 in 2020 (career Table 1) and 12,484-th in 2019 position among all scientists in the world. In the first 2% of 160,000 researchers in all disciplinary sectors, who were found to be the most influential in their own area. Table-S7.-single year-2019

2019 single-year career score

https://data.mendeley.com/public-files/datasets/btchxktzyw/files/dd0904a8-0eba-4cf3-be4a-c6092261fed5/file_downloaded

14,422-nd position in the entire career through 2020. Table-S6-career-2019

Career-long, All careers score

https://data.mendeley.com/public-files/datasets/btchxktzyw/files/9cb11466-b3a6-4f20-92e6-02f5d9b81d1d/file_downloaded

14423	Nye, Joseph S.	Harvard University	USA	116	1963	2019	14420	4885	31	28	91	3503	96	3826
14424	Kazmierczuk, Marian K.	Wright State University	USA	426	1977	2020	14421	6774	40	30,90952	37	1333	119	2762
14425	Holunak, Keith J.	University of California, Los Angeles	USA	167	1977	2020	14422	12335	54	28,57738	13	374	45	2553

AD Scientific Index 2023

<https://www.adscientificindex.com/university/Wright+State+University/>

<https://www.adscientificindex.com/scientist/marian-k-kazmierczuk/832805>

Total Citations

18,858, 2-nd position at WSU, 14,980 position in USA, 16338 position in North America, 40,604 position in the World

Total 5 Years Citations

7,306, 2-nd position at WSU, 17,012 position in USA, 18,686 position in North America, 31,134 position in the World

Total h-index

Score 65, 2-nd position at WSU, 12,705 position in USA, 13,974 position in North America, 27,691 position in the World

Total 5 Years h-index

Score 37, 3-ed at WSU, 18,652 position in USA, 20,714 position in North America, 47,376 position in the World

Total i10 Index

Score 296, 2-nd position at WSU, 3627 (top 2%), 4,020 position in North America, 9507 (top 2%) position in the World

Last 5 Years i10 Index

Score 168, 1-st position at WSU, 5,643 position in USA, 6,288 position in North America, 15658 (top 2%) position in the World

Engineering & Technology

1-st at WSU, 2,007 position in USA., 2,185 position in North America, 4,224 position in the World

Electrical & Electronic Engineering

1-st at WSU, 305 position in USA., 334 position in North America, 616 position in the World

AD Scientific Index 2022

Total h-index

25,311 position in the World, 13,135 position in USA, 2-nd position at WSU

<https://www.adscientificindex.com/?university=Wright+State+University>

<https://www.adscientificindex.com/university/Wright+State+University/>

<https://www.adscientificindex.com/>

Total Citations

WSU 29052 position in the world, 2-nd at WSU

Last 5 Years h-index

48,095 position in the world, 3-rd at WSU

Last 5 Years Citation

37352 position in the world, 2-nd at WSU

Total i10 Index

8761 position in the world, 2-nd position at WSU

Lat 5 Years i10 Index

14359 position in the world, 1-st position at WSU

Research Gate

Research Gate ranks my "Research Interests Score" higher than 99% of Research Gate members.

Productivity

Approximately 5 articles in top international archival referred journals per year, 5 international conference papers per year, and 1 book per 2 years for the last 33 years. Grants and contracts include NSF, National Academy of Science, DOE, DOD, DARPA, and industry.

Journal Articles (In Polish)

1. J. Ebert and M. K. Kazimierzczuk, "New method of improving efficiency of RF power amplifier," Tech. Report of Inst. of Radio-electronics, Technical University of Warsaw, no. 31, pp. 1-19, 1977.
2. J. Ebert and M. K. Kazimierzczuk, "New method of improving efficiency of high frequency power amplifier," Prz. Telekom., vol. 40, no. 6, pp. 165-168, 1977.
3. M. K. Kazimierzczuk, "Theory of Class E high-frequency power amplifier," Rozpr. Elektrot., vol. 25, no. 4, pp. 1957-1986, 1979.
4. M. K. Kazimierzczuk, "Theoretical analysis of Class E amplifier at arbitrary switch duty ratio," Rozpr. Elektrot., vol. 25, no. 4, pp. 987-1003, 1979.
5. M. K. Kazimierzczuk, "Theory of Class E high-frequency power amplifier with series inductor," Arch. Elektrot., vol. 29, no. 1, pp. 207-228, 1980.
6. M. K. Kazimierzczuk, "Analysis of Class E amplifier with series inductor under optimum operating conditions," Rozpr. Elektrot., vol. 26, no. 3, pp. 707-721, 1980.
7. M. K. Kazimierzczuk, "Collector power loss and collector efficiency of Class E amplifier with shunt capacitor," Elektronika, vol. 21, no. 5, pp. 24-30, 1980.
8. M. K. Kazimierzczuk, "Theory of Class E high-frequency power amplifier with series capacitor," Arch. Elektrot., vol. 29, no. 2, pp. 487-490, 1980.
9. M. K. Kazimierzczuk, "Theoretical analysis of Class E amplifier with series capacitor at arbitrary switch-duty ratio," Arch. Elektrot., vol. 29, no. 3, pp. 709-723, 1980.
10. M. K. Kazimierzczuk, "Analysis of the Class E tuned power amplifier with series inductor," Tech. Report, Inst. of Radio-electronics, Technical University of Warsaw, no. 57, pp. 1-21, 1980.
11. J. Ebert and M. K. Kazimierzczuk, "Concept of Class E tuned power oscillator," Tech. Report, Inst. of Radio-electronics, Tech. Univ. of Warsaw, no. 54, pp. 1-15, 1980.

12. M. K. Kazimierczuk, "Experimental verification of evaluation method for power loss and collector efficiency of Class E amplifier with shunt capacitor," *Elektronika*, vol. 22, no. 4, pp. 30-35, 1981.
13. M. K. Kazimierczuk, "Class E high-power high-frequency amplifier," *Prz. Telekom.*, vol. 44, no. 2, pp. 35-43, 1981.
14. M. K. Kazimierczuk, "Analysis, design, and experimental results for Class E amplifier," *Rozpr. Elektrot.*, vol. 27, no. 3, pp. 495-521, 1981.
15. M. K. Kazimierczuk, "Analysis of Class E amplifier with series inductor at arbitrary switch-duty ratio," *Arch. Elektrot.*, vol. 30, no. 2, pp. 493-504, 1981.

Conference Papers (In Polish)

1. M. K. Kazimierczuk, "Class E high-frequency power amplifier with series inductor," III Kraj. Konf. Teoria Obwodów i Układy Elektroniczne, Stawiska k. Gdanska, 24-27.10.1979, Teksty Referatów, ITE PG, IPE PW, SUE KEiT PAN, pp. 493-497.
2. M. K. Kazimierczuk, "Class E amplifier analysis method," VIII Symp. Metody Matematyczne w Elektrotechnice, Pokrzywna k. Glucholazow, 21-26.05.1979, Inst. Elektrot., WSI w Opolu, PTETiS, Zesz. Nauk. WSI w Opolu nr. 63, Elektryka, z. 10, cz. III, Układy Elektryczne, pp. 119-129, 1980.
3. M. K. Kazimierczuk, "Design method of high-frequency power oscillators," IX Symp. Metody Matematyczne w Elektrotechnice, Pokrzywna k. Glucholazow, 26-31.05.1980, Inst. Elektrot., WSI w Opolu PTETiS, Zesz. Nauk. WSI w Opolu, no. 73, Elektryka, z. 16, cz. III, Układy Elektryczne, pp. 83-96, 1981.
4. M. K. Kazimierczuk, "Method of analysis of Class E amplifier with series capacitor," IX Symp. Metody Matematyczne w Elektrotechnice, Pokrzywna k. Glucholazow, 26-31.05. 1980, Inst. Elektrot., WSI w Opolu, PTETiS, Zesz. Nauk. WSI w Opolu, no. 73, Elektryka, z. 16, cz. III, Układy Elektryczne, pp. 69-82, 1981.
5. M. K. Kazimierczuk, "Method of analysis of Class E amplifier with shunt inductor," Prace X Symp. Metody Matematyczne w Elektrotechnice, Karpacz, 23-30.05.1981, PTETiS, Wydż. Elektryczny i Wydż. Elektroniki PW, pp. 493-504.
6. M. K. Kazimierczuk, J. Krakowski, and R. Rozycki, "Identification of the inverse current amplification for bipolar transistors," IV Kraj. Konf. Teoria Obwodów i Układy Elektroniczne, Drzonkow k. Zielonej Gory, 28-30.10.1981, Teksty Referatów, IE WSI w Zielonej Gorze, IPE PW, SUE KEiT PAN, pp. 311-316.
7. M. K. Kazimierczuk and J. M. Modzelewski, "Measurements of switching power losses in high-frequency power transistor amplifiers," Zesz. Nauk. III Symp. Kierunki Rozwoju Metrologii Elektrycznej, Wilga, 14-15.05.1981, IE-TIME PW, SE KE PAN, pp. 66-71.
8. M. K. Kazimierczuk, "Class E amplifier with nonsinusoidal output voltage," V Kraj. Konf. Teoria Obwodów i Układow Elektronicznych, Sulejow-Podklasztorze, 24-26.11.1982, Teksty Referatów, IE PL, IPE, SUE KEiT PAN, PS IEEE, pp. 132-136.
9. M. K. Kazimierczuk, "Charge analysis of saturated transistor with time-dependent collector current," VI Kraj. Konf. Teoria Obwodów i Układy Elektroniczne, Kozubnik k. Porabki, 19-22.10.1983, Teksty Referatów, IE PSL, IPE PW, SUE KEiT PAN, PS IEEE, pp. 342-346.
10. M. K. Kazimierczuk and W. A. Tabisz. "Computer-aided analysis of the Class C-E tuned power amplifier," VIII Kraj. Konf. Teoria Obwodów i Układy Elektroniczne, pp. 251-255, 1985, Teksty Referatów.

In Russian:

1. M. K. Kazimierczuk and J. Ebert, "Improvement of efficiency of power amplifiers," *Izv. VUZ SSSR, Radioelektronika*, vol. 20, no. 11, pp. 103-106, 1977.

PATENTS

<https://patents.google.com/?inventor=Marian+Kazimierczuk&oq=Marian+Kazimierczuk>

1. J. A. Weimer, M. K. Kazimierczuk, A. Massarini, and R. C. Cravens II, "Feed-forward control of aircraft bus dc boost converter," U.S. Patent 5,982,156, November 9, 1999.

2. J. A. Weimer, B. T. Nguyen, M. K. Kazimierczuk, and B. A. Jordan, "Super-capacitor charging," U. S. Patent 5,914,542, January 22, 1999.
3. J. A. Weimer, M. K. Kazimierczuk, and R. C. Cravens, "Super-capacitor battery clone," U.S. Patent 5,848,652, December 15, 1998.
4. M. K. Kazimierczuk, "High-frequency power amplifier," Polish Patent, no. 113882, 1983.
5. M. K. Kazimierczuk, "High-frequency power amplifier," Polish Patent, no. 117980, 1984.
6. M. K. Kazimierczuk, "Method of compensation for dispersion of parameters for paralleled transistors in switching-mode amplifiers", Polish Patent, no. P-223321, 1983.
7. M. K. Kazimierczuk and J. M. Modzelewski, "Class D tuned power amplifier," Polish Patent, no. P-218668, 1983.
8. M. K. Kazimierczuk and J. Ebert, "Tuned power oscillator," Polish Patent, no. P-213078, 1984.

PATENT INFRINGEMENT EXPERTISE

Served as an expert witness and participated in many patent litigations and patent invalidations.

TECHNICAL REPORTS

1. M. K. Kazimierczuk, "A new type of electronic ballast for gas discharge lamps," Final Technical Report, Ohio Department of Development, Thomas Edison Program, June 30, 1990.
2. M. K. Kazimierczuk and N. Thirunarayan, "Characterization and application of power electronic devices," Final Technical Report of the Project for the U.S. Air Force, Southeastern Center for Electrical Engineering Education, January 1992.
3. M. K. Kazimierczuk and D. Q. Vuong, "High power density up/down power converter for the More Electric Aircraft", Final Technical Report of the Project for the U.S. Air Force, Southeastern Center for Electrical Engineering Education, February 1993.
4. M. K. Kazimierczuk, "Synthesis, analysis, and design of resonant dc/dc converters," Final Technical Report of the NSF Project, February 1994.
5. M. K. Kazimierczuk, "Female and minority undergraduate support program," Final Technical Report of the NSF Project, February 1994.
6. M. K. Kazimierczuk, "Research experience for undergraduate program, Final Technical Report of the NSF Project, February 1994.
7. M. K. Kazimierczuk and M. Vichare, "Characterization of silicon carbide power semiconductor devices for high-temperature operation," Final Technical Report for Universal Energy Systems, Inc., December 1996.
8. M. K. Kazimierczuk and V. R. Garuda, "Semiconductor devices for aircraft power system applications," Final Technical Report for Universal Energy Systems, Inc., May 1998.
9. M. K. Kazimierczuk and D. Hanna, "Parameterized and distributed power regulator," Final Report, August 2002.
10. M. K. Kazimierczuk, "Design of high-efficiency microwave power amplifiers with poly-harmonic operation," NSF, Final Report, December 2002.
11. M. K. Kazimierczuk and K. S. Gudmundsson, "Evaluating phase-only filter algorithm performance on ARO IR image sequences using the quality metric scene evaluator," US Army, Final Report, February 2004.
12. M. K. Kazimierczuk, "Energy Conversion Science and Security of Large-Scale Systems," DOE, Final Report, June 2007.
13. M. K. Kazimierczuk, "Power Line Urban Sentry (PLUS), Inductive Core and Recharging Research," Defense Research Associates, 2009.

RESEARCH CONTRIBUTIONS

The objectives of my professional life have been contributions to the advancement of fundamental science and engineering, the inquiry and advancement of knowledge and perform research for the benefit of humanity. I always wanted to be a good educator and researcher. The body of my work is impressive. My research has high practical relevance. It is transformative in nature. I have tried to achieve a sustained record of excellence and to make profound contribution to the field. The mission of my scientific life has been advancing the technology for the benefit of humanity. A testimony to the quality of my research are peer reviewed archival journal papers, conference papers, and monographs at a high international level. My articles are published in the best peer-reviewed international journals and international conference proceedings, which are indexed in the leading databases of science and engineering, such as *Thomson-Reuters ISI Science Citation Index* and *scholar.google.com*. My monographs are published by top internationally recognized publishers, such as John Wiley & Sons, Prentice-Hall (Pearson), and IEEE Press. One of the main objectives of my research is to reduce the dependence of mankind on fossil fuel. The major contributions of my research are as follows:

1. Major and lasting contributions to the invention and development of electronic ballasts for fluorescent lamps [64]. A multibillion-dollar industry has been created. Electronic ballasts improve the quality of artificial light by *eliminating the flickering and producing healthy light*. They also improve the *power quality* by *reducing current harmonics* in utility power lines, *increasing power factor*, lowering electromagnetic pollution, and protecting environment. Electronic ballasts drive fluorescent lamps at high frequencies. Traditional incandescent bulbs convert only 5% of energy into artificial light and 90% of energy into heat. The efficiency of fluorescent lamps is over five times higher than that of incandescent lamps, thereby *saving a large amount of energy*. This invention was adopted quickly and rapidly diffused around the world. A new research discipline has been created. There are special issues on electronic ballasts in the top international archival journals and conference sessions. Fluorescent lamps driven by electronic ballasts have become the core of the worldwide lighting market. European Union has decided to replace all low-efficiency incandescent bulbs by fluorescent tubes with electronic ballasts. Electronic ballast are a significant component of "green energy technology." The invention of electronic ballasts has a worldwide impact by improving of quality of life and saving energy. The U.S. Congress has set 2012 as the year in which the U.S. will phase out incandescent bulbs. Australia has chosen 2010 as its deadline to eliminate incandescent bulbs. European Union will eliminate all incandescent bulbs by 2012; 100 W bulbs by 2009, 75 W bulbs by 2010, 60 W by 2011, and 40 W and 25 W by 2011. The energy savings by replacing incandescent bulbs with fluorescent lamps is estimated to be \$70 billion per year. It also reduces the emission of CO₂ by 15 mln tons a year. This has been an extraordinary and lasting contribution with a global impact for the greater good of humanity and the world. On September 20, 2010, General Electric made the last incandescent bulb.
2. Contribution to soft-switching power circuits (zero-voltage switching and zero-current switching techniques) [1], [3]-[5], [8], [12], [14]-[16], [21], [30], [32], [38], [B1].
3. Invention of the Class E RF zero-voltage switching power oscillator [4].
4. Invention of the Zeta (dual SEPIC) dc-dc converter widely used in industry [22].
5. Invention of feed-forward control of boost PWM dc-dc power converter (US Patent) [75].
6. Design of the first (or one of the first) electronic ballast for fluorescent lamps [64].
7. Design of the first (or one of the first) power factor corrector [64].
8. Invention of the Class E RF zero-current switching power amplifier [3].
9. Invention of the RF Class F power amplifier with quarter-wave transmission line [C2].
10. Invention and analysis of high-frequency Class E rectifiers [28], [33]-[44], [50].
11. Derivation of expression for self-capacitance of inductors [86], [90], [176], [195].
12. Derivation of small-signal circuit models of switching-mode PWM dc-dc power converters [61]. These models are widely used for studying dynamic performance of dc-dc power converters and designing control circuits.
13. Derivation of a model for peak-current-mode controlled PWM dc-dc converters [109]-[111], [116]. This model is useful in designing two-loop control circuits for PWM dc-dc power converters.
14. Contribution to average current-mode control, which improves noise immunity and reduces THD [B14].
15. Analysis and design of PWM dc-dc converters (including a monograph and graduate textbook by John Wiley & Sons, 2008) [B6].
16. Development of high-efficiency high-frequency power amplifiers and RF transmitters, including Class E and Class D switching-mode power amplifiers (including a monograph and graduate textbook by John Wiley & Sons, 2008) [B8]. Class E amplifier is the most efficient transmitter used in wireless communications.
17. Development of high-efficiency resonant dc-dc converters (including a monograph and graduate textbook by John Wiley & Sons, 1995) [B10].

18. Modeling and control of PWM dc-dc converters [109]-[111], [116], [224].
19. Analysis and design of high-frequency magnetic components [B10], [79], [86], [89], [90], [96], [102], [130], [132], [150], [162], [176], [195], [199], [208], [215].
20. Battery chargers [212], [214], [219], [228].
21. Development of evanescent microscope, used for testing superconductors and other materials (especially dielectric constant) as well as biological tissues [107], [108], [113], [119], [120].
22. Nonlinear control of PWM dc-dc power converters [224], [230], [231].
23. External research funding from the most competitive federal agencies, such as NSF, National Academy of Science, Department of Energy, and Department of Defense.

NEW COURSES DEVELOPED

EE 7410	Power Semiconductor Devices
EE 7420	Power Electronics
EE 7430	High-Frequency Magnetic Components
EE 7440	RF Power Amplifiers
EE 8990	Independent Studies
EE 8980	Ph.D. Dissertations
EGR 891	Ph.D. Seminar
EE 2010	Analog Circuit Theory
EE 3310	Electronic Devices
EE 332	Electronic Devices Laboratory
EE 431	Electronic Circuits
EE 432	Electronic Circuits Laboratory
EE 434	Electronics Laboratory
EE 4440	Linear Integrated Circuits (course and laboratory)
EE 449	Digital Electronics Laboratory
EE 4910	Senior Design Project
EE 499	Independent Studies

The objectives of his teaching activities have been to develop, advance, disseminate, and exploit knowledge. He has developed, has been maintaining, and updating a sequence of hardware laboratories in the area of electronics for undergraduate students of electrical engineering and computer engineering departments: EE332, EE432, EE434, EE444, and EE449. He has been responsible for all electronics courses and laboratories in the Department of Electrical Engineering for over 25 years. He has written an undergraduate textbook: *Electronic Devices: A Design Approach*, Prentice Hall, 2004 and a *Laboratory Manual to Accompany Electronic Devices: A Design Approach*, Prentice Hall, 2004. He has practiced a creative teaching, inspiring curiosity, and predictive thinking.

He has developed a sequence of four graduate courses in the area of power electronics for graduate M.S and Ph.D. students: EE7410, EE 7420, EE7430, and EE7440.

1. EE7410 covers fundamental characteristics and simulation models of power devices, such as silicon (Si) and silicon-carbide (SiC) power MOSFETs, power junction and Schottky diodes, and IGBTs. In addition, power stages of PWM switching dc/dc converters are analyzed. A computer laboratory has been also developed.
2. EE7420 Power Electronics derives small-signal linear time-invariant models of power stages of PWM converters for continuous and discontinuous conduction modes. Using these models, transfer functions and step responses of power stages of PWM converters are derived. Voltage-mode control, current-mode control, and feed-forward strategies are discussed in detail. A computer laboratory has been also developed. For these two courses, he has published a book: *Pulse-Width Modulated DC-DC Power Converters*, John Wiley & Sons, New York, NY, 2008, pp. 1-782, ISBN-10: 0-470-77301-4, ISBN-13: 978-0-470-77301-7; 2nd Ed., 2016, pp. 1-930.
3. EE7430 High-Frequency Magnetic Components covers properties of magnetic materials, magnetic cores, complex permeability, core losses, eddy currents, skin effect, proximity effect, Dowell's equation, winding losses, losses caused by harmonics, self-capacitance, and design of power inductors and transformers. For

this course, he has published a book: *High-Frequency Magnetic Components*, John Wiley & Sons, New York, NY, 2009, pp. 1-486, ISBN-978-0-470-71453-9, 2-nd Ed, 2014., pp. 1-729, ISBN-978-1-118-71779-0.

4. EE7440 RF power Amplifiers. Covers important topics for radio transmitters. For his course, he has published a book: *RF Power Amplifiers*, John Wiley & Sons, New York, NY, 2008, pp. 1-405, ISBN 978-0-470-77946-0; 2-nd Ed. 2015, pp. 1-658.
5. EE7450 Power Electronics III covers RF resonant power amplifiers, high-frequency power dc/ac inverters, high-frequency rectifiers, and high-frequency magnetic devices. The theory is illustrated by design projects. For this course, he has written a graduate text book: *Resonant Power Converters, 1-st Ed., John Wiley & Sons*, 1995, 2nd Ed., 2011.

All the four courses are non-required and attract 60 to 105 graduate students every quarter or semester. His teaching and research brings a healthy balance of scientific progress and spiritual depth.

His teaching philosophy is provide deep understanding the major scientific and engineering concepts and to develop lifelong learning skills. Learning is a lifelong journey in today's world. Soft skills such as social and behavioral skills are as important as hard skills in math and science. He encouraging research-based learning and developing intellectual skills.

LABORATORY DEVELOPMENT AND SUPERVISION

1. Developed and supervises student hardware laboratories for undergraduate courses EE332, EE432, EE444, and EE449.
2. Has written and published by Prentice-Hall a laboratory manual for these laboratories.
3. Developed and supervises software and hardware student laboratories for graduate courses EE7410, EE7420, EE7430, and EE7440.

COURSE DIRECTOR

EE331, EE332, EE431, EE432, EE401, EE444, EE449, EE741, EE742, EE743, EE880, EE4440, EE7410, EE7420, and EE7440.

BOOKS

1. Two undergraduate textbooks with solutions manuals in electronics area published by Prentice-Hall.
2. Five graduate books with solutions manuals in power electronics area published by John Wiley & Sons.

GTAs

Four my Graduate Teaching Assistants won the College Excellence in Teaching Awards: Brad Bryant, Simon J. Tritzler, Weston R. Earick, and Dakshina Murthy. Thomas R. Salvatierra was a finalist in 2008.

INVITED SEMINARS

1. "Resonant dc/dc power converters," Department of Electrical Engineering, University of Toledo, Toledo, OH, November 11, 1991.
2. "Modeling of switching-mode power converters," Guest speaker, Annual Meeting of Italian Researchers on Circuits and Systems, Cagliari, Italy, June 28, 1996.
3. "Relative stability of switching-mode power converters with current-mode control," Silesian University of Technology, Poland, December 2, 2009.
4. "Engineering Education in the United States," Silesian University of Technology, Poland, December 3, 2009.
5. "Education in the USA, Warsaw University of Technology, December 2009.
6. "GaN transistors," Technical University of Denmark, August 2015.

M.S. GRADUATE STUDENTS SUPERVISED AT WRIGHT STATE UNIVERSITY

- | | | |
|-----------------------------|----------|------|
| 1. Xung T. Bui | M.S.E.E. | 1988 |
| 2. Jacek Jozwik | M.S.E.E. | 1990 |
| 3. Shan Wang | M.S.E.E. | 1991 |
| 4. Abdulkarim A. Abdulkarim | M.S.E.E. | 1992 |
| 5. Nandakumar Thirunarayan | M.S.E.E. | 1992 |

6. Dung Q. Vuong	M.S.E.E.	1992
7. Dariusz Czarkowski	M.S.E.E.	1993
8. Venkatramani Swaminathan	M.S.E.E.	1993
9. Nehru Sathappan	M.S.E.E.	1994
10. Manikantan K. Jutty	M.S.E.E.	1994
11. Peter T. Lamm	M.S.E.E.	1994
12. Robert C. Cravens II	M.S.E.E.	1994
13. Chuyun Wu	M.S.E.E.	1994
14. Richard E. Strawser	M.S.E.E.	1994
15. Kevin L. Thayer	M.S.E.E.	1994
16. Robert S. Geise	M.S.E.E.	1994
17. Sonny Nguyen	M.S.E.E.	1994
18. Ali Izadi	M.S.E.E.	1995
19. Makarand Vichare	M.S.E.E.	1996
20. ASM Nazirul Shaheen	M.S.E.E.	1997
21. Paul J. Baker	M.S.E.E.	1997
22. Carlos M. Cordoza	M.S.E.E.	1997
23. LaVern Starman	M.S.E.E.	1997
24. David C. Liptak	M.S.E.E.	1998
25. Venugopal Rao Garuda	M.S.E.E.	1998
26. Donald J. Kessler	M.S.E.E.	1998
27. Anders J. Edstrom	M.S.E.E.	1998
28. Masoud Pourali	M.S.E.E.	1999
29. David Hanna	M.S.E.E.	2000
30. Brad S. Bryant	M.S.E.E.	2000
31. Ronald L. McDonald	M.S.E.E.	2000
32. Skip Shattuck	M.S.E.E.	2000
33. Kenroy Howard	M.S.E.E.	2000
34. Jeffrey Allen Ross	M.S.E.E.	2001
35. Anders P. Walker	M.S.E.E.	2002
36. Erich J. Kring	M.S.E.E.	2002
37. Mahbuba Rahman	M.S.E.E.	2003
38. Simon Joe Tritschler	M.S.E.E.	2003
39. Benjamin J. Gerten	M.S.E.E.	2003
40. Bharath Tanneru	M.S.E.E.	2004
41. Chris A. Evans	M.S.E.E.	2004
42. Donald E. Peters	M.S.E.E.	2004
43. Subash P. Ramakrishnan	M.S.E.E.	2005
44. Melaka P. Senadeera	M.S.E.E.	2005
45. Kim Ying Wong	M.S.E.E.	2005
46. Emad M. Al-Tabakha	M.S.E.E.	2005
47. Nisha Das	M.S.E.E.	2005
48. Dakshina Murthy	M.S.E.E.	2006
49. Weston R. Earick	M.S.E.E.	2006
50. Derrick N. Langley	M.S.E.E.	2007
52. Julie J. Lee	M.S.E.E.	2007
53. Veda Pakakash N. Galigekere	M.S.E.E.	2007
54. Hamdi Abdelbagi	M.S.E.E.	2007
55. Thomas Lange	M.S.E.E.	2008
56. Mandar D. Kavimanden	M.S.E.E.	2008
57. Manish Dalal	M.S.E.E.	2009
58. Gary Richard Doss	M.S.E.E.	2009
59. Daniel J. Whitman	M.S.E.E.	2010
60. Jeremy D. Gassmann	M.S.E.E.	2010
61. Thomas R. Salvatierra	M.S.E.E.	2010
62. Venkata Sai Aditya Kumar Choragudi	M.S.E.E.	2011
63. Dhivya Ammanambakkan Nagarajan	M.S.E.E.	2011

64. Ramchandran Mahendrabhai Kotecha	M.S.E.E.	2011
65. Curt Zackiewicz	M.S.E.E.	2011
66. Agasthya Ayachit	M.S.E.E.	2011
67. Keshava Gopalakrishna	M.S.E.E.	2013
68. Ramayya J. George	M.S.E.E.	2014
69. Sourav Dey	M.S.E.E.	2014
70. Shweta Chauhan	M.S.E.E.	2014
71. Alex David Compton	M.S.E.E.	2015
72. Dalvir K. Saini	M.S.E.E.	2015
73. Lokesh Kathi	M.S.E.E.	2015
74. Ankit Chadha	M.S.E.E.	2015
75. Alex Michael Kavouras	M.S.E.E.	2015
76. Scott Atkins	M.S.E.E.	2015
77. Varun Pundhir	M.S.E.E.	2016
78. Avinash Lanka	M.S.E.E.	2016
79. Sowjanya Kommu	M.S.E.E.	2016
80. Abhishek Vijay Danekar	M.S.E.E.	2017
81. Michael Trombley	M.S.E.E.	2017
82. Nathaniel Smith	M.S.E.E.	2018
83. Nagasri Kollipara	M.S.E.E.	2018
84. Donald Danko	M.S.E.E.	2019
85. Anuroop Redy Dasari	M.S.E.E.	2020
86. Celenia Franklin	M.S.E.E.	2020
87. Erich Steinbrunner	M.S.E.E.	2021
88. Owen D. Reimer	M.S.E.E.	2021
89. Steven P. Cornett	M.S.E.E.	2021

Total 88 MS Students

Also, advised 36 M.S. students at the Department of Electronics, Warsaw University of Technology, Warsaw, Poland.

PH.D. STUDENTS SUPERVISION

22 Ph.D. students graduated and happily employed.

1. Karl S. Gudmundsson 2004, Assoc. Prof., Dean, Keilir Institute of Technology, Island, karlsg@keilir.net, (354) 821-5664; now Full Professor, Director of Allied Center, Faculty of Electrical and Computer Engineering, University of Island, karlsg@hi.is, www.fag.hi.is, Mobile + 354 8216466.
2. Brad S. Bryant 2004, Design engineer, Dayton-Phoenix Co., Dayton, OH, brad@bcaudio.biz.
3. Richard A. Kleismit 2005, Assistant Research Prof., Physics Department, Wright State University
4. Donald J. Kessler 2005, University of Dayton, (Formerly General Dynamics), Dayton, OH, ki6sz@earth-link.net, (937) 429-8857
5. Greg Gazzell 2009, Wright-Patterson Research Laboratory, US Air Force Base, Greg.Gazzell@wpafb.af.mil.
6. Simon Joseph Tritschler 2010, Department of Biomedical, Industrial, and Human Factor Engineering, Wright State University, (formally Tiburon Co, Dayton, OH), jopseph.tritschler@wright.edu.
7. Nisha Kondrath 2010, 2021 L3 Harris Co, Philadelphia, Assistant Professor, Department of Electrical and Computer Engineering, Villanova University, Villanova, PA 190850 (formally Assistant Professor, University of Minnesota-Duluth, Swenson College of Engineering, Department of Electrical and Computer Engineering, Duluth, MN, nisha.condrath@villanova.edu. Tel.: (218) 726-6385).
8. Dakshina Murthy-Bellur 2011, Cummings, Inc, dakshina.murthy-bellur@cummings.com
Assistant Professor, Penn State Erie, School of Engineering, Department of Electrical, Computer, and Software Engineering, REDC 166, 5101 Jordan Road, Erie, PA 16563-6153 (814) 898-7169, dsm19@psu.edu

9. Robert Carl Fitch, Jr. 2011, Air Force Research Laboratories, WPAFB, Dayton, OH,
Robert.Fitch@wpafb.af.mil
10. Veda Prakash N. Galigekere, 2012, Senior electrical engineer, Lear Co., 21557 Telegraph Rd, Southfield, MI48033; Oakridge Ridge National Laboratory, Power Electronics and Electric Machinery Group, TN, galigerkerevn@ornl.gov
11. Julie J. Lee 2012, Case Western Reserve University, Dept of Electrical Eng., Cleveland, OH; Emerson, Cleveland, OH.
12. Rafal Wojda 2012, Research and Development Scientist, ABB, Cracow, Poland, Oakridge Ridge National Laboratory, Power Electronics and Electric Machinery Group, TN, wojda.raf@ornl.gov
13. Thomas R. Salvatierra 2015, Electronics Engineer, PowerSphyr Inc., Grand Rapids, MI49525, Salvatierra.2@wright.edu, 2020 Grand Valley State University, School of Engineering, Grand Rapids MI,(616) 331-6004.
14. Todd Grimes 9/9/2016, RNET Technologies Co., Dayton, OH.
15. Dalvir K. Saini Defended 5/18/2018, Research Engineer, University of Dayton Research Institute. dalvir.saini@udri.udayton.edu
16. Agasthya Ayachit Defended 7/2/2018, Systems Engineer, Mercedes-Benz Research & Development, Redford, MI, agasthya.ayachit@daimler.com
17. Hur Jedi Started (1/2/2015).Research proposal 4/18/2018, defended 11/16/2018. Jedi.2@wright.edu
18. Ankit Chadha Started (1/7/2016). Chadkha.2@wright.edu, defended December 6, 2019, X-Wave Innovations, Inc, Chicago Tools.
19. Humam Al-Baidhani Started (1/2/2015). al-bahami.2@wright.edu, defended April 8, 2020.
20. Lokesh Kathi Started (1/7/2016). lokesh.kati64@wright.edu, defended July 31, 2020.
21. Daniel J. Whitman Started (9/07/2010). Proposal defense Aug. 15, 2019, defended May 14, 2021. Dwhitman44@gmail.com
22. Jason Anders Candidacy exam, 7/2/2019, mail.jason.321@gmail.co, defended July 9, 2021.
23. Aji Georges Mattamana Started May 2020. Candidacy exam, 4/22/2022 aji.mattamana@us.af.mil.
23. Owen D. Reimer Started August 23, 2021
23. Richard Allan Fowlkes Started (9/9/2016), Candidacy exam, 4/26/2018. Fowlkes.3@wright.edu .
24. Weston R. Earick Passed Qualifying Exam, Candidacy Exam, Research Proposal, 8/17/10.
25. William C. Quinn Started (8/25/2012).

GRADUATE STUDENTS TEACHING AWARDS

1. Brad S. Bryant 2002
2. Simon Joseph Tritschler 2005
3. Weston R. Earick 2003
4. Dakshina Murthy-Bellur 2007 – 2008
5. Simon Joseph Tritschler 2010

STUDENTS RESEARCH AWARDS

1. Brad S. Bryant 2003 - 2004
2. Dakshina Murthy-Bellur 2009 - 1010
3. Dalvir K. Saini 2015
4. Agasthya Ayachit 2018

UNDERGRADUATE STUDENT SCHOLARSHIPS

Attracted over \$460,000 (about \$22,000 per year) for student scholarships from the Electrical Manufacturing and Coil Winding Association (EMCWA) for the last 20 years.

GRADUATE STUDENT SUPPORT

J. Jozwik (10 quarters), N. Thirunarayan (9 quarters), D. Czarkowski (10 quarters), D. Q. Vuong (8 quarters), M. Hoffman (4 quarters), M. Vichare (9 quarters), V. Garuda (4 quarters), D. Hanna (2 quarters), Nisha Das (1 quarter), Jeff Bouger (16 quarters), and Thomas Salvatierra (9.67 semesters).

Total Support (70.67 quarters)

POST-DOCTORS, SABBATICALS, AND RESEARCH ASSOCIATES

1. Wojciech Szaraniec
2. Alberto Reatti (sabbatical)
3. Massimo Bartoli
4. Antonio Massarini (sabbatical)
5. Andrea Armani
6. Giuseppe Sancineto
7. Tadashi Suetsugu (sabbatical)
8. Kamon Jirasereeamornkul
9. Hiroo Sekiya (2 year sabbatical), Feb. 1, 2008-Feb. 1, 2010.
10. Francesco Crasso
11. Xiang Zhiang 2018
12. Alessio Torali 2018
13. Alessandro Bartolini 2019
14. Lucas Sangoi Mendonca 2019
15. Lorenzo Valeri 2022

Fulbright Scholars

1. Rafal Wojda
2. Andrey Kapustin

EQUIPMENT DESIGNED

High-frequency high-voltage tuned power amplifier for nuclear accelerator at $f = 200$ MHz and $V_o = 200$ kV.
Meters for the power gain and the output power of high-frequency power transistors at 100, 175, and 400 MHz.
Radiotelephone for $f = 175$ MHz.
Meters of the distance of the Earth satellites.
Frequency multipliers for atomic frequency standard.
Meters of the cross-modulation distortion of PIN diodes.
Class E high-efficiency dc/dc converter at $f = 2$ MHz, $V_o = 5$ V, $P_o = 50$ W, and total efficiency over 85%.
Electronic ballast at $f = 50$ kHz, $P_o = 80$ W, and PF > 0.99.

GRANTS AND CONTRACTS

1. "High-efficiency switching-mode tuned power amplifiers," PI, Wright State University, Seed Grant, No. 216-028, 1986, \$1500.
2. "Switched-mode resonant dc/dc converters," PI, Wright State University, Research Incentive Award, Grant No. 241-262, 1987/88, \$1200.
3. "Resonant dc/dc power converters," PI, Ohio State Research Challenge Grant, No. 660-763, 3/7/88-6/30/89, \$33,000.
4. "New type of ballast for gas discharge lamps," PI, Ohio Department of Development, Ohio's Thomas Edison Program, Contract No. 661-399, 3/1/89-6/30/90, \$53,500.
5. "High-efficiency switching power supply," PI, ASTEC, Inc., Advanced Technology Group, Milpitas, CA, Contract No. 550-404, 5/1/90 - 4/30/91, \$15,000.

6. "Synthesis, analysis, and design of resonant dc/dc converters," PI, NSF, Grant No. ECS-8922695, WSU No. 661708, 8/1/90 - 6/30/93, \$98,719.
7. "Female and Minority Undergraduate Support Program," PI, NSF, Grant No. ECS-9246861, WSU No. 662060, 3/1/92 - 6/30/93, \$15,000.
8. "Characterization and application of power electronic devices," PI, Southeastern Center for Electrical Engineering Education (SCEEE), Contract No. F33615-90-C-2088, WSU No. 661816, 2/19/91 - 1/31/92, \$43,745.
9. "High power density up/down power converter for the More Electric Aircraft," PI, Southeastern Center for Electrical Engineering Education (SCEEE), Contract No. F33615-90-C-2088, WSU No. 662077, 4/13/92 - 2/7/93, \$43,275.
10. "Research Experience for Undergraduates Program", PI, NSF, Grant ECS-9345338, WSU No. 662341, 1/5/93 - 6/30/93, \$15,000.
11. "Heat sensitive color system," Undergraduate Design Clinic Project, Standard Register Co., 09/15/94 - 06/10/95, \$10,000.
12. "Development and packaging of SiC power semiconductor devices for aircraft applications," PI, Universal Energy Systems, Inc., Contract No. F33615-C-2284, WSU No. 662864, 3/1/95 - 9/30/96, \$35,413.
13. "Semiconductor devices for aircraft power system applications," PI, Universal Energy Systems, Inc., Contract No. F33615-92-C2284, WSU No. 663374, 1/1/96 - 9/30/97, \$28,200.
14. "Parameterized and distributed power regulator," PI, University of Cincinnati, Contract No. F33615-96-2-1945, WSU No. 663-786, 3/1/98 - 9/30/98, \$22,000.
15. "Design of high-efficiency microwave power amplifiers with poly-harmonic operation," PI, NSF and National Academy of Sciences, Grant No. INT-0002341, WSU No. 664-661, 12/15/2000 - 12/31/2002, \$15,000.
16. "Developing effective strategies and performance matrices for automatic target recognition," Co-PI, Army Research Office, University of South Alabama, WSU No. 665015, 6/4/2003 - 12/31/2003, \$15,690.
17. "EMCWA Technical Committee Grant," Electrical Manufacturing and Coil Winding Association, Inc., 12/17/04, \$450.
18. "State Technologies Advancement Collaborative Program (STAC)," PI, US Department of Energy, Contract No. 541-0319-3, WSU No. 666349, 01/01/05-12/31/07, \$315,500 (\$98,000).
19. "Electromagnetic Far Field Distribution of Three-Phase Power Transmission Lines," PI, Defense Research Associates, Inc., 9/1/2007-8/32/2008, \$50,000.
20. NEWSTARs Program, US Air Force, Co-PI, Contract FA8650-D-1848, WSU Account nr. 666595, \$80,000, 1/2/2008-31/12/2011.
21. "Student Scholarship Program," EMCWA, \$440,000.
22. M. Emmert, F. Garber, and M. K. Kazimierczuk, Co-PI, NEWSTARs Program, US Air Force, Co-PI, Contract FA8650-D-1848, WSU Account nr. 666595, \$12789, 1/2/2010-31/12/2013.
23. "Near-field nano-evanescent microwave microscope for interdisciplinary research," Co-PI, NSF Proposal No. 6539578, \$1,518,942, Nov. 28, 2007 (05-610).
24. "Electric dual mode vehicle development project," Ohio Dept. of Development Technology, \$1,467,124.
25. "Power Line Urban Sentry (PLUS), Inductive Core and Recharging Research," Co-PI, 3/21/2009-10/31/2009, WSU Nr. 667596, \$73,091, Defense Research Associates.
26. "Electric dual mode vehicle development project," Co-PI, WSU Proposal No. 09-307-10, Mono-mobile Corp., 40/1/2009-3/31/2010.
27. "Research of multi-function software defined architecture-based cognitive electronic warfare technology," US Air Force, Co-PI, WSU Account 668266, \$25,514, 11/23/2010-11/22/2011.
28. "Class E, high-efficiency transmitting amplifier (CHEETA)," PI, WSU No. 668679, FO-P 668679-283015-20014, Contract No. FA8650-11-C-7184, DPAS Rating DO-07, 11/1/2011-12/30/2014, \$351,256.
29. "Micro-scale Power Conversion (MPC)," PI, DARPA, WSU Proposal Number 11-843-13, DARPA, \$351,256.01 11/1/2011-11/1/2014.

30. "Micro-scale Power Conversion (MPC)," PI, WSU Account Number 668679, DARPA, first phase \$87,077.01, 11/1/2011-7/30/2012, second phase \$88,066.32 (\$175,143.33), 8/1/2012-4/30/2013, third phase \$58,710.88 (\$233,853.33), 5/1/2013-10/30/2013. Total \$351,256.01, total 11/1/2011-11/1/2014.
31. "Reexamination of the perfect fluid model within general relativity form an engineering prospective in light of the accelerating expansion phenomenon," Pi, WSU No. 12-0740-10, \$113,962, 10/01/2012-09/01/2013.
32. "Electronic properties of nitrides and oxides", UES AFRL, \$62,153, 8/26/2019-4/30/2021, Prime Contract #FA8650-16-5408, Delivery Order #FA8550-17-F-5418 (NeMO TO 02).

The total sum of external funding \$1,236,242 + 440,000 and internal funding \$35,700; TOTAL External Funding: \$1,262,456 + \$440,000 = \$1,702,456.

In addition, I supervise 2 Iraqi PhD students whose tuition and fees are paid in full for the entire PhD program by Iraqi government. Hur Jedi graduated in Fall 2018 and left to Iraq in February 2019. Humam Al-Baidhani will graduate in 2019.

REVIEWER OF TECHNICAL JOURNALS, NSF, URC, and PUBLISHERS

IEEE Transactions on Circuits and Systems (15 papers a year)
 IEEE Transactions on Power Electronics (10 papers a year)
 IEEE Transactions on Aerospace and Electronic Systems (12 papers a year)
 IEEE Transactions on Industrial Electronics (8 papers a year)
 IEEE Transactions on Electron Devices (3 papers a year)
 IEEE Transactions on Control Systems Technology (2 papers a year)
 IEEE Transactions on Magnetics (2 papers a year)
 IEEE Transactions on Industry Applications (2 papers a year)
 IEEE Transactions on Electromagnetic Compatibility (3 papers a year)
 IEEE Transactions on Education (3 papers a year)
 IEEE Transactions on Dielectric and Electrical Insulation (2 paper a year)
 IEEE Transactions on Plasma Science (1 paper a year)
 IEEE Power Electronics Specialists Conference (15 papers a year)
 IEEE International Symposium on Circuits and Systems (6 papers a year)
 IEE Proceedings, Pt. B, Electric Power Applications (10 papers a year)
 IEE Proceedings, Pt. G, Circuits, Devices and Systems (4 papers a year)
 IEE Proceedings on Control Theory and Applications (1 paper a year)
 IEEE International Conference on Decision and Control (1 paper a year)
 Journal of Power Electronics (3 papers a year)
 Automatica (2 paper a year)
 Electronic Letters (9 papers a year)
 Solid-State Electronics (2 papers a year)
 International Journal of Circuit Theory and Application (25 paper a year)
 Journal of Circuits, Systems, and Computers (5 papers a year)
 Analog Integrated Circuits and Signal Processing (1 paper a year)
 COMPEL: Int. Journal for Computation and Mathematics in Electronics and Electrical Eng. (5 papers a year)
 Archives of Electrical Engineering (1 year)
 Emerald COMPEL: The International Journal for Computation and Mathematics in Electrical and Electronic Eng.
 Journal of Power Electronics (3 paper a year)
 Bulletin of the Polish Academy of Sciences (2 papers per year)
 Hindawi Publishing Corporation, VLSI
 European Conference on Circuit Theory and Design (2 papers a year)
 Reviewer for Dept. of Energy (DOE) (6 proposals a year)
 Reviewer for NSF (4 proposals a year)
 National Academy of Science, USA (1 proposal a year)

Book Reviews

John Wiley & Sons Publishers (6 books)
 Prentice-Hall (3 books)
 McGraw-Hill (2 books)
 Taylor & Francis (3 books)

Elsevier Scientific Publishing Company (1 book)
West Publishing Company (2 books)

SERVICE AND ACADEMIC OUTREACH

UNIVERSITY COMMITTEES

Faculty Senate	Member	1997-1998
Senate Executive Committee	Member	1997-1998
Promotion and Tenure Committee	Member	1995-1997, 2001-2003, 2006-2007, 2009-2010
Student Affairs Committee	Member	1993-1995, 1999-2003, 2005-2006
Budget Review Committee	Member	1998-1999, 2001-2002
Graduate Council Committee	Member	1992-1995, 1996-1998, 1999-2003, 2009-2011, 2011-2013
Research Council Committee	Member	2011-2013
Outside Interest Committee	Member	1011-2014
Graduate School Hearing Committee	Member	2012
Students Affairs Committee	Member	2011-2011
Graduate Policy Committee	Member	2000-2001
Agenda Committee	Member	1994-1997
Academic Dishonesty Hearing Panel	Member	1994-1998
Due Process Committee	Member	1995-1996
Strategic Planning Council Committee	Member	1995-1997
Academic Programs Sub-committee	Member	1995-1997
Tenure Removal Committee	Member	1998-2001
Library Committee	Member	1999-2001
Faculty Diversity Committee	Member	1999-2001
Petitions Committee	Member	2003-2005, 2012-2013
Parking Committee	Member	2005-2010
Civil Engagement Task Force Committee	Member	2004-20012
Faculty Budget Priority Committee	Member	2005-2006
Buildings and Grounds Committee	Member	2005-2006
Dining Services Committee	Member	2006-2007
Marshall at Graduation Ceremony		1997, 1998, 2006
Undergraduate Academic Program Review Committee	Member	2007-2011
Teaching and Learning Advisory Council	Member	2008-2010
Service-Learning Sub-committee of UCAP	Member	2009-2012
Search Committee, Dean of College of Eng. & Comp. Sci.	Member	2010
Search Committee, Dean of College of Eng. & Comp. Sci.	Member	2013
Research Integrity Committee	Member	2013-
AAUP-WSU Bargaining Council Committee	Member	2010-11

COLLEGE COMMITTEES

Steering Committee	Member	2000-2006
Steering Committee	Chair	2001-2002
Faculty Development Committee	Member	1995-1999, 2002-2004, 2007-20014
Teaching Committee	Chair	2003-2004
Teaching Committee	Member	2009-2011
Curriculum Committee	Member and Scribe	1988-1989, 2004-2006
Due Process Committee	Chair and Scribe	1992-1993
Ad Hoc Committee to Review Bylaws	Member and Scribe	1992-1993
Due Process Committee	Member	1991-1993
Teaching Award Committee	Member	1993-1997, 2001-2004, 2008-2012
Three-Year Review Committee of EE Department Chair	Member	1995-1996

Ph.D. Dissertation Qualified Faculty		1997-
Ph.D. Student Affairs Committee	Member	2003-2006, 2008-2010
Ph.D. Planning Committee	Member	1996-2002
Ph.D. Admissions Committee	Member	1998-2003
Ph.D. Program Coordinating Committee	Member	1996-2006
Ph.D. Steering Committee	Member	1998-2003
EE Chair Search Committee	Member	1998-2000
Math Ad Hoc Committee	Member	2000-2002
Ph.D. Review Committee	Member	2000-2001
Petition Committee	Chair	2003-2005
Graduate Council Representative	Alternate	2003-2004, 2006-2007, 2009-2010
University Promotion and Tenure Committee	Representative	2006-2007
Senior Lecture Promotion Committee	Member	2008-2009
CSCE Ad-hoc Strategic Planning Advisory	Member	2009-2010
Ph.D. Program Students Affairs Committee	Member	2012-2013

DEPARTMENT COMMITTEES

EE Faculty Development Committee	Member	1990-2006, 2009-12
EE Faculty Development Committee	Chair	1996-2000, 2003-2004, 2007-2009 2010-2012
Engineering Physics Program Committee	Co-Director	1993-2008
Engineering Physics Program Committee	Member	2008-2011
Curriculum Committee	Member	1988-2009
Curriculum Committee	Chair	2004-2005
Graduate Program Committee	Member	1986-1988, 1994-2008
EE Undergraduate Studies Committee	Member	2004-2009
EP Undergraduate Studies Committee	Co-Director	2004-2006
GTA Committee	Member	1996-2001
Laboratory Resources Committee	Member	1986-2012
Laboratory Resources Committee	Chair	2003-2006
Electronics/VLSI Subcommittee	Chair	1988-2006
Electronics/VLSI Subcommittee	Member	2003-2008
EE Core Subcommittee	Member	2003-2006
Bylaws Committee	Member	2000-2002
Bylaws Committee	Chair	2002-2003, 2005-2007
Telecommunications Faculty Search Committee	Member	1999-2002
VLSI Faculty Search Committee	Member	1999-2002
Ad Hoc Faculty Search Committee	Member	2003-2006
Academic Computing Committee	Member	2013-2014
Ph.D. Committee of Electrical Engineering	Member	2015-2016

PROFESSIONAL SERVICE

1. IEEE Fellows Committee Evaluator 2017-

PANEL REVIEW OF RESEARCH PROPOSALS

2. U.S. Department of Energy 2011-2019

The proposal are in various areas of energy such as solar and wind renewable energy sources, clean energy, elective vehicles. wide-band gap (WBG) power semiconductor devices (SiC and GaN). The objective is the make the US industry competitive.

Power of America 2012-
Bonneville Power Administration 2011-2017

3. European Research Council (ERC, StG PE17) 2012-2020

The ERC is a research funding agency of EU, like the NSF in the USA.

Two 1-week meetings a year (in March and June) take place in Brussels, Belgium.

The Panels evaluates multidisciplinary proposals in varies areas of engineering and sciences such as renewable energy sources, sensors, nanotechnology, medical images, and applied physics and chemistry. The very top world scientists are selected and serve as Panel Members in the ERC Panels to evaluate research proposals. In addition to review many proposals, the Panel Members serve as lead reviewers. Up 12 non-panel members and experts in the field of the proposal review each proposal.

4. Hong Kong Research Grants Council 1998-2004

5. Swiss National Foundation 2019

6. Industrial Research Council KU Leuven, Belgium 2019

ASSOCIATE EDITOR

<i>IEEE Transactions on Circuits and Systems, I</i>	1993-1995, 1997-2001, 2003-2005
<i>IEEE Transactions on Industrial Electronics</i>	2005-2019
<i>International Journal of Circuit Theory and Applications</i>	2008-2020
<i>International Journal of Circuits, Systems, and Computers</i>	1992-2000
<i>IET Circuits, Devices & Systems</i>	2013-present
<i>IEEE Transaction on Circuits and Systems, I</i>	
Guest Editor, Special Issue on Switching Circuits and Systems	August 2003
<i>IEEE Transaction on Power Electronics</i>	
Guest Editor, Special Issue on Lighting Applications	May 2007
Member of the Advisory Editorial Board of the Archives of Electrical Engineering	2009

IEEE TECHNICAL COMMITTEE CHAIR

Technical Committee for Power Systems Electronics Circuits for the IEEE Circuits and Systems Society	2001-2002, 2004-2005
--	----------------------

IEEE CONFERENCE TRACK CHAIR

IEEE International Symposium on Circuits and Systems, Power Systems and Power Electronics Circuits	2001, 2002, 2004, 2005, 2006
IEEE Power Electronics Specialists Conference, Topic Chair, Resonant Power Converters	2006

DISTINGUISHED LECTURER

IEEE Distinguished Lecturer for the Circuits and Systems Society	2004-2006
--	-----------

OHIO AEROSPACE INSTITUTE

Member of the Steering Committee of the Focus Group, "Aerospace Power and Propulsion"

CONFERENCE TECHNICAL PROGRAM COMMITTEE

IEEE International Symposium on Circuits & Systems	1996-2019
IEEE Power Electronics Specialists Conference	1994-2004
IEEE Energy Conversion Congress and Exhibition	2010-2014
IEEE International Power Electronics Conference	1999-2000
IEEE International Symposium on Industrial Electronics	1996, 2014
International Conference of Electronics, Circuits, and Systems	2004-2006
IEEE International Conference on Power Electronics and Drive Systems,	

International Steering Committee	2007
Electrical Manufacturing and Coil Winding Association Conference	
Technical Program Co-Chair	2008-
IEEE INTELEC Technical Committee Member	2015

SESSION CHAIR

1st IEEE Conference on Control Applications, Dayton, OH	1992
Session TP-4 Machines, Co-chair	
IEEE Power Electronics Specialists Conference	
Session 14 Topology IV: Power Factor Correction, Chair	1993
Session 18 Topology V: Converter Topologies, Chair	
IEEE Midwest Symposium on Circuits and Systems	1996
Session: Antennas, Radar and RF Microwave Systems, Chair	
IEEE International Symposium on Circuits and Systems, Atlanta, GA	1996
Organized and Chaired a Panel Session on Power Electronics	
IEEE Power Electronics Specialists Conference	1996
Session: Passive Components 2, Chair	
IEEE International Symposium on Circuits & Systems, Geneva, Switzerland	2000
Session: Industrial Applications & Sensors I	
Power Electronics Track for IEEE Intl Symposium on Circuits & Systems	2001
Associate Chair	
IEEE International Symposium on Circuits and Systems, Sidney, Australia	2001
Organized and chaired two Special Sessions in Power Electronics	
Midwest Symposium on Circuits and Systems	2001
Organized and chaired two Special Sessions in Power Electronics	
IEEE International Symposium on Circuits & Systems, Phoenix, AZ	2002
Session Chair: Simulation of Power Electronic Circuits	
IEEE International Symposium on Circuits and Systems, Bangkok, Thailand	2003
Session Chair: Power Converters	
IEEE International Symposium on Circuits and Systems, Vancouver, BC, Canada	2004
Chair for Power Electronics Track and Power Systems Track	
Session Chair: Power Converters	
IEEE International Symposium on Circuits and Systems, Island of Kos, Greece	2006
Session Chair: Integrated Power Converters	
Session Chair: Power Electronic Circuits	
Session Chair: Power Integration	
Session Chair: Control of Power Converters	
Session Chair: Power Circuits	
IEEE International Symposium on Circuits and Systems, New Orleans	2007
Session Chair: Power Integrated Circuits	
IEEE Midwest Symposium on Circuits and Systems	2007
Session Chair: Power Electronic Circuits	

TRACK CHAIR

IEEE International Symposium on Circuits & Systems, Phoenix, AZ	2002
Co-chair of Power Electronics Track	
Session: Simulation of Power Electronic Circuits	
IEEE International Symposium on Circuits and Systems, Bangkok, Thailand	2003
Chair for Power Electronics Track and Power Systems Track	
Session: Power Converters	
IEEE International Symposium on Circuits and Systems, Vancouver, BC, Canada	2004
Chair for Power Electronics Track and Power Systems Track	
Session: Power Converters	
IEEE International Symposium on Circuits and Systems, Kobe, Japan	2005
Co-Chair for Power Electronics Track and Power Systems Track	
Session: Power Converter Circuits	
IEEE International Symposium on Circuits and Systems, Island of Kos, Greece	2006
Chair for Power Electronics Track and Power Systems Track	
Session: Integrated Power Converters	

IEEE Power Electronics Specialists Conference, Jeju, South Korea, Track Chair for Resonant Converters	2006
IEEE International Symposium on Circuits and Systems, New Orleans Chair for Power Electronics Track and Power Systems Track Session: DC-DC Power Converters	2007
Session Chair	2008
Electrical Manufacturing Association Conference, Nashville, TN,	2009
IEEE International Symposium on Circuits and Systems, Paris, France Review Committee Member (RCM)	2010
Session Chair: Integrated & Wireless Power Circuits	
Session Chair: Power Electronics I	
Session Chair: Switched Capacitor Converters & Power Amplifiers	
American Society of Engineering Education Session Chair	2010
Electrical Manufacturing Association Conference, Dallas, TX Program-Co-chair	
Session Chair: Power Electronics	
IEEE International Symposium on Circuits and Systems, Rio de Janeiro, Brazil Review Committee Member (RCM)	2011
Session Chair: Power Electronics Circuits I	
Session Chair: Power Converters II	
IEEE International Symposium on Circuits and Systems, Seoul, South Korea Review Committee Member (RCM)	2012

SPECIAL ISSUES

Organized two Special Issues on Automotive Electronics in the Journal of Circuits, Systems, and Computers
Part 1, No. 4, 1994, Part 2, No. 1, 1995.

Organized two Special Issues on Power Electronics in the Journal of Circuits, Systems, and Computers
Part 1, No. 3, 1995, Part 2, No. 4, 1995.

Gust Editor for Special Issues on Switching Circuits and Systems in the IEEE Transactions on Circuits and Systems-I, No. 8, August 2003.

Guest Editor for Special Issues on Electronic Ballasts in the IEEE Transactions on Power Electronics,
No. 5, May 2007.

OTHER IEEE SERVICE

IEEE Power Electronics Society Superconductivity Committee, Representative 1992-1999

Electrical Manufacturing and Coil Winding 2008-present
Member of Board of Directors

PH.D. COMMITTEES IN OTHER UNIVERSITIES

1. Randall Shaffer, University of Dayton, 1999
2. Ian Douglas de Vries, University of Cape Town, South Africa, 1999
3. Samuel Sau-Man Chan, City University of Hong Kong, 2005
4. Leung Ka Sing, City University of Hong Kong, 2005
5. Chin Yat Chung, City University of Hong Kong, 2006
6. Carl Ngai-Man Ho, City University of Hong Kong, 2006
7. Siu Wai Leung, City University of Hong Kong, 2007
8. Song Tingting, City University of Hong Kong, 2007
9. Szymon Pasko, Silesian University of Technology, Poland, 2010
10. Mickey Madsen, Technical University of Denmark, Denmark, 2015
11. Maria Del Carmen Mira Albert, Technical University of Denmark, Denmark, 2016
12. Nirmana Perera, EPFL, Lausanne, Switzerland, 2022
13. P. V. V. Kishore, Andhra University, India, in progress.

