References

1. H. Matsumoto and K. Hashimoto (eds.), Report of the URSI Inter Commission Working Group on SPS, URSI, 2006, available at http://www.ursi.org.
2. A. Smith, "Earth vs. Space for Solar Energy, Round 2," Physics and Society, 2004,v. 33, n.2, pp. 3-4..
3. S. Fetter, "Space Solar Power: An Idea Whose Time Will Never Come?," Physics and Society, 2004, v. 33, n. 1, , pp. 10-11.
4. International Telecommunication Union, Question ITU-R 210-1/1 on "Wireless Power Transmission," 2006, http://www.itu.int/itudoc/itu-r/publica/que/rsg1/ 210-1.html.
5. P. Glaser, "Power from the Sun: Its Future," Science, 162, 22 November 1968.
6. W. C. Brown, "Satellite Power Stations: A New Source of Energy," IEEE Spectrum, 1973, v. 10, n. 3, pp. 38-47.
7. US Department of Energy and NASA, "Satellite Power System, Concept Development and Evaluation Program, Reference System Report," October 1978 (published January 1979).
8. "Special Sections on SSPS," Radio Science Bulletin, Nos. 310 and 311, 2004.
9. Proc. of the 4th Int. Conf. on Solar Power from Space – SPS '04, July 2004, Granada, Spain, ESA SP-567, December 2004.
10. R. M. Dickinson and W. C. Brown, "Radiated Microwave Power Transmission System Efficiency," NASA TM 33-727, JPL, CIT, Pasadena, CA, May 15, 1975.
11. National Research Council, Laying the Foundation for Space Solar Power: An Assessment of NASA's Space Solar Power 31 Investment Strategy, Washington, DC, USA, National Academy Press, 2001.
12. NASA– Marshall Space Flight Center, Press Release 98-190: http://www.msfc.nasa.gov/news/news/releases/1998/98-190.html.

13. M. Shimokura, N. Kaya, N. Shinohara, and H. Matsumoito, "Point-to-Point Microwave Power Transmission Experiment," Trans. Institute of Electric Engineers Japan, 1996, v. 116-B, n. 6, pp. 648-653 (in Japanese).
14. H. Matsumoto and T. Kimura, "Nonlinear Excitation of Electron Cyclotron Waves by a Monochromatic Strong Microwave: Computer Simulation Analysis of the MINIX Results," Space Power, 1986, v. 6, pp. 187-191.
15. H. Matsumoto, "Numerical Estimation of SPS Microwave Impact on Ionospheric Environment," Acta Astronautica, 1982, v. 9, pp. 493-497.
16. M. Nagatomo and K. Itoh, "An Evolutionary Satellite Power System for International Demonstration in Developing Nations," Space Power, 1993, v. 12, pp. 23-36; also at http://www.spacefuture.com/archive/an_evolutionary_satellite_power_system_for_international_demonstration_in_developing_nations.shtml
17. N. Shinohara, Y. Hisada, M. Mort, and JAXA SSPS WG4 Team, "Request and Roadmap for Microwave Power Transmission System of Space Solar Power System (SSPS)," Proc. of IAF2005, Japan, 2005.
18. Y. Kobayashi, T. Saito, K. Ijichi, and H. Kanai, Proc. of the 4th Int. Conf. on Solar Power from Space – SPS '04, July 2004, Granada, Spain, ESA SP-567, December 2004.
19. Proc. of the 4th Int. Conf. on Solar Power from Space – SPS '04, July 2004, Granada, Spain, ESA SP-567, December 2004.
20. R. M. Dickinson and W. C. Brown, "Radiated Microwave Power Transmission System Efficiency," NASA TM 33-727, JPL, CIT, Pasadena, CA, May 15, 1975.
21. K. Nanokaichi, N. Shinohara, S. Kawasaki, T. Mitani and H. Matsumoto, "Development of Waveguide-Slot-Fed Active Integrated Antenna for Microwave Power Transmission," Proceedings of the XXVIIIth General Assembly of International Union of Radio Science (URSI), New Delhi, India, October 23-29, 2005, D08.4 (0950).32
22. J. Zbitou, M. Latrach, and S. Toutain, "Hybrid Rectenna and Monolithic Integrated Zero-Bias Microwave Rectifier," IEEE Transactions on Microwave Theory and Techniques, 2006, v. 54, pp. 147-152.

23. W. C. Brown, “Electronic and Mechanical Improvement of the Receiving Terminal of a Free-Space Microwave Power Transmission System,” Wayland, MA, Raytheon Company, Tech. Report PT-4964, NASA Report No. CR-135194, NASA Contract No. NAS 3-19722, August 1977, p. 66.
24. J. O. McSpadden, L. Fan, and K. Chang, “Design and Experiments of a High-Conversion-Efficiency 5.8-GHz Rectenna,” IEEE Transactions on Microwave Theory and Techniques, December 1998, MTT-46, v. 12, pp. 2053-2060.
25. N. Shinohara, H. Matsumoto, A. Yamamoto, H. Okegawa, T. Mizuno, H. Uematsu, H. Ikematsu, and I. Mikami, “Development of High Efficiency Rectenna at mW input,” Technical Report of IEICE, SPS2004-08 (2005-04), pp. 15-20 (in Japanese).
26. N. Shinohara and H. Matsumoto, “Dependence of dc Output of a Rectenna Array on the Method of Interconnection of its Array Elements,” Electrical Engineering in Japan, 1998, v. 125, n. 1, pp. 9-17.
27. J. F. Drake, M. Swisdak, H. Che, and M. A. Shay, “Electron Acceleration from Contracting Magnetic Islands During Reconnection,” Nature, October 5, 2006.
28. H. Feingold, et al., “Evaluation of Comparison of Space Solar Power Concepts,” IAC-02-R.1.08, IAF, 2002.
29. J. C. Mankins, “A Fresh Look at Space Solar Power: New Architectures, Concepts and Technologies,” Acta Astronautica, 1997, v. 41, n. 4-10, pp. 347-359.
30. W. Seboldt, M. Klimke, M. Leipold, and N. Hanowski, “European Sail Tower SPS Concept,” Acta Astronautica, 2001, v. 48, n. 5- 12, pp. 785-792.
31. L. Summerer, “Solar Power from Space – European Strategy in the Light of Global Sustainable Development,” ESA SPS Programme Plan 2003/2005, GS03.L36, July 2003, http://www.esa.int/gsp/ACT/doc/ESA_SPS_ProgrammePlan2_06 .pdf.
32. H. Matsumoto, N. Kaya, I. Kimura, S. Miyatake, M. Nagatomo, and T. Obayashi, “MINIX Project Toward the Solar Power Satellite – Rocket Experiment of Microwave Energy 30 Transmission and Associated

Nonlinear Plasma Physics in the Ionosphere," ISAS Space Energy Symposium, 1982, pp. 69-76.

33. N. Kaya, H. Matsumoto, and R. Akiba, "Rocket Experiment METS Microwave Energy Transmission in Space," Space Power, 1992, v. 11, n. 3-4, pp. 267-274.
34. National Research Council, Laying the Foundation for Space Solar Power: An Assessment of NASA's Space Solar Power 31 Investment Strategy, Washington, DC, USA, National Academy Press, 2001.
35. NASA – Marshall Space Flight Center, Press Release 98-190: http://www.msfc.nasa.gov/news/news/releases/1998/98-190.html.
36. H. Cikanek, "Innovative Aerospace Propulsion Systems an Technologies," NASA Glenn Research Center, 2-4 April 2000, Report No. 216-433-6196, http://www.aero-space.nasa.gov/events/home&home/glenn/invasp/sld003.htm.
37. ESA General Studies Programme, "System Concepts, Architectures and Technologies for Space Exploration and Utilisation (SE&U Study), Executive Summary," Contract 127/98/NL/JG (SC), http://www.esa.int/SPECIALS/GSP/SEMTG7 0P4HD_0.html.
38. V. Blandow, P. Schmidt, W. Weindorf, M. Zerta, and W. Zittel, "Earth and Space-Based Power Generation Systems – A Comparison Study," Final Report 17682/03/NL/EC, ESA final report – LBST, 2004.
39. L. Summerer, M. Vasile, R. Biesbroek, and F. Ongaro, "Space and Ground Based Large Scale Solar Power Plants – European Perspective," IAC-03/R.1.09, 2003.
40. M. Imaizumi, K. Tanaka, S. Kawakita, T. Sumita, H., Naito, and S. Kuwajima, "Study on Power Generation System for a Space Photovoltaic Power Satellite," Proceedings of 48th Space Sciences and Technology Conference, 2004, pp. 111-115.
41. G. A. Landis, "Reinventing the Solar Power Satellite," NASA/TM-2004-212743, 2004, pp. 1-30.

42. S. Kawasaki, “A Unit Plate of a Thin Multilayered Active Integrated Antenna for Space Solar Power System,” Radio Science Bulletin, 2004, n. 310, pp. 15-22.

43. N. Shinohara, H. Matsumoto, and K. Hashimoto, “Solar Power Station/Satellite (SPS) with Phase Controlled Magnetrons,” IEICE Trans. Electron., 2003, E86-C, pp. 1550-1555.

44. T. R. Robinson, T. K. Yeoman, and R. S. Dhillon, “Environmental Impact of High Power Density Microwave Beams on Different Atmospheric Layers,” Radio and Space Plasma Physics Group Tech. Rep. 63, ESA Contract number: 18156/04/NL/MV, Leicester University, UK, 2004.

45. W. C. Brown, “The History of Power Transmission by Radio Waves,” IEEE Transactions on Microwave Theory and Techniques,” 1984, MTT-32, pp. 1230-1242.

46. F. W. Perkins and R. G. Roble, “Ionospheric Heating by Radio Waves: Predictions for Arecibo and the Satellite Power Station,” J. Geophys. 1977, Res., 83, A4, pp. 1611-1624. 33

47. G. M. Batanov, I. A. Kossyi, and V. P. Silakov, Plasma Physics Reports, 28, 3, 2002, pp. 204-228 (translated from Fizika Plazmy, 2002, v. 28, n. 3, pp. 229-256).

48. J. Lavergnat and M. Sylvain, Radio Wave Propagation, Principles and Techniques, New York, John Wiley and Sons, 2000.

49. A. R. Thompson, “Effects of a Satellite Power System on Ground-Based Radio and Radar Astronomy,” Radio Science, 1981, v. 16, pp. 35-45.

50. J. C. Lin, “Space Solar-Power Stations, Wireless Power Transmissions, and Biological Implications,” IEEE Microwave Magazine, March 2002, pp. 36-42.

51. ICNIRP, “Guidelines for Limiting Exposure to Time-Varying Electric, Magnetic, and Electromagnetic Fields (Up to 300 GHz),” Health Physics, 1998, v. 74, pp. 494-522.

52. J. C. Lin ,”The New IEEE Standard for Human Exposure to Radio-Frequency Radiation and the Current ICNIRP Guidelines,” Radio Science Bulletin, 2006, No. 317, pp 61-63.

53. S. K. Kar and M. K. Mohanty, “Thermal and Electrical Performance analysis of Rooftop Solar Photovoltaic Power Generator,” Int. J. Renew. ENERGY Res, 2017, v. 7, n. 4.

54. W. C. Brown, “Beamed Microwave power transmission and its application to space,” IEEE Trans. Microw. Theory Tech, 1992, v. 40, n. 6, pp. 1239–1250.

55. A. Bensenouci and A. Medjelled, “Thermodynamic and Efficiency Analysis of Solar Steam Power Plant Cycle,” Int. J. Renew. ENERGY Res, 2016, v. 6, n. 4.

56. B. Adapa, M. R. Pawar, and S. Alapati, “Spacing Optimization Study of Single-axis Polar Mounted Solar-thermal Passive Tracker based Solar Photovoltaic Plant,” Int. J. Renew. ENERGY Res, 2016, v. 6, n. 4, pp. 4–8.

57. M.A. Green, K. Emery, Y. Hishikawa, and W. Warta, “Solar Cell Efficiency Tables, Prog. Photovolt,” Res. Appl. 2008, 16, n. 61.

58. M.A. Stan, D.J. Aiken, A.B. Cornfeld, B. Cho, J. Diaz, A. Korostyshevsky, V. Ley, P. Patel, P. Sharps, and T. Varghese, “Evolution of the High Efficiency Triple Junction Solar Cell for Space Power,” 33rd Photovoltaic Specialists Conference, 2008

59. W. C. Brown, “The History of Power Transmission by Radio Waves,” IEEE Trans. Microw. Theory Tech, 1984, v. 32, pp. 1230–1242.

60. N. Shinohara, H. Matsumoto, and K. Hashimoto, “Solar Power Station/Satellite (SPS) with Phase Controlled Magnetrons,” IEICE Trans. Electron., vol. E86–C, 2003.

61. R. B. Vaganov, B. G. Klevitskii, I. P. Korshunov, E. N. Korshunova, and A. D. Shatrov, “Transport of Microwave Energy from a Solar Power Station to the Earth and from the Earth to Low orbit Objects,” 2010, v. 55, n. 11, pp. 1246–1252.

62. N. Shinohara and H. Matsumoto, “Design of Space Solar Power System (SSPS) with Phase and Amplitude Controlled Magnetron,” vol. Proc. of 2, no. IEEE 0-780308404-0/04, pp. 624–626, 2004.

63. D. Hogg, “Fun with the Friis transmission equation,” IEEE Antennas Propag. Mag, 1993, v. 35, pp. 33–35.

64. K. Chaudhary and B. R. Vishvakarma, “Feasibility Study of LEO, GEO and Molniya Orbit Based Satellite Solar Power Station for Some Identified Sites in India,” Adv. Sp. Res, 2010, v. 46, n. 9, pp. 1177–1183.

65. N. Shinohara and H. Matsumoto, “Microwave Power Transmission System with Phase and Amplitude Controlled Magnetrons,” in Proceedings of 2nd International Conference on Recent Advances in Space Technologies (RAST 2005), 2004, pp. 28–33.

66. J. C. Mankins, “SPS-ALPHA: The First Practical Solar Power Satellite via Arbitrarily Large Phased Array (A 2011-2012 NIAC Project) - 10th International Energy Conversion Engineering Conference (AIAA),” August 2012, pp. 1–13.

67. H. Hayami, M. Nakamura, and K. Yoshioka, “The Life Cycle CO2 Emission Performance of the DOE/NASA Solar Power Satellite System: A Comparison of Alternative Power Generation Systems in Japan,” IEEE Trans. Syst. Man, Cybern. - Part C, Applic, 2005.

68. V. F. Fusco and S. L. Karode,”Self-phasing antenna array techniques for mobile communications applications,” IEE Electronics & Communication Engineering Journal, Dec. 1999, v.11, n. 6, pp.279-286.

69. J. Tuovinen, G. S. Shiroma, W. E. Forsyth, and W. A. Shiroma ,“Multipath communications using a phase-conjugate array,” IEEE MTT-S International Microwave Symposium Digest, Jun. 2003, v. 3, pp.1681-1684.

70. N. Shinohara and H. Matsumoto,”Experimental study of large rectenna array for microwave energy transmission,” IEEE Trans. Microwave Theory and Techniques, Mar. 1998, v. 46, n. 3, pp.261-268.

71. J. Heikkinen and M. Kivikoski, “Low-profile circularly polarized rectifying antenna for wireless power transmission at 5.8 GHz,” IEEE Microwave and Wireless Components Letters, 2004, v. 14, n. 4, pp.162-164.

72. J. Y. Park, S. M. Han, and T. Itoh, “A rectenna design with harmonic-rejecting circular-sector antenna,” IEEE Antennas and Wireless Propagation Letters, 2004, v. 3, pp.52-54.

73. C. -H. Chin, Q. Xue, and C. H. Chan, “Design of a 5.8-GHz rectenna incorporating a new patch antenna,” IEEE Antennas and Wireless Propagation Letters, 2004, v. 4, pp.175-178.

74. M. Ali, G. Yang, and R. Dougal, “A new circularly polarized rectenna for wireless power transmission and data communication,” IEEE Antennas and Wireless Propagation Letters, 2005, v. 4, pp.205-208.

75. J. Heikkinen and M. Kivikoski, “A novel dual-frequency circularly polarized rectenna,” IEEE Antennas and Wireless Propagation Letters, 2003, v. 2, pp.330-333.

76. J. A. Hagerty and Z. Popovic, “An experimental and theoretical characterization of a broadband arbitrarily-polarized rectenna array,” IEEE MTT-S International Microwave Symposium Digest, May 2001, v. 3, pp.1855-1858.

77. B. Strassner and K. Chang, “Highly efficient C-band circularly polarized rectifying antenna array for wireless microwave power transmission,” IEEE Trans. Antennas and Propagation, Jun. 2003, v. 51, n. 6, pp.1347-1356.

78. D. A. Fleri and C. L. D., “Nonlinear analysis of the Schottky-barrier mixer diode,” IEEE Transactions on Microwave Theory and Techniques, 1973, v. 21, n. 1, pp. 39{43}.

79. S. Keyrouz, H. J. Visser, and A. G. Tijhuis, Rectier analysis for radio frequency energy harvesting and power transport," in 42th European Microwave Conference, 2012.

80. H. J. Visser, Approximate Antena Analysis for CAD. John Wiley & Sons, Chichester, UK, 2009.

81. J. A. C. Theeuwes, H. J. Visser, M. C. van Beurden, and G. J. N. Doodeman, Efficient, compact wireless battery design," in Proc. European Conf. Wireless Technologies, 2007, pp. 233-236.

82. HSMS-286x, surface mount zero bias Schottky diodes data sheet. [Online]. Available: http://www.avagotech.com.

83. H. Sun, Y. X. Guo, M. He, and Z. Zhong, “Design of a high-efficiency 2.45-GHz rectenna for low-input-power energy harvesting,” IEEE Antennas Wirel. Propag. Lett., 2012, v. 11, pp. 929–932.

84. J. Lu and S. Lin, “Broadband Design of Planar Circularly Polarized Annular-Ring Antenna for RFID Applications,” Progress In Electromagnetics Research Letters, April 2017, v. 68, pp. 1–8.

85. K. C. Prakash et al., “Circularly Polarized Dodecagonal Patch Antenna With Polygonal Slot for Rfid Applications,” Progress In Electromagnetics Research C, 2016, vol. 61, n. 2, pp. 9–15.

86. A. Douyere, J. D. L. S. Luk, and F. Alicalapa, “High efficiency microwave rectenna circuit : modelling and design,” Electron. Lett., 2008, v. 44, n. 24, pp. 1–2.

87. H. Sun, “An Enhanced Rectenna Using Differentially-Fed Rectifier for Wireless Power Transmission,” IEEE Antennas Wirel. Propag. Lett., 2016, v. 15, pp. 32–35.

88. C. H. K. Chin, Q. Xue, and C. H. Chan, “Design of a 5.8-GHz rectenna incorporating a new patch antenna,” IEEE Antennas Wirel. Propag. Lett., 2005, v. 4, n. 1, pp. 175–178.

89. T. Matsunaga, E. Nishiyama, I. Toyoda, and A. Structure, “5. 8-GHz Stacked Differential Mode Rectenna Suitable for Large-Scale Rectenna Arrays,” IEEE Trans. Antennas Propag., 2015, v. 63, n. 12, pp. 5944–5949.

90. T. Sakamoto, Y. Ushijima, E. Nishiyama, M. Aikawa, and I. Toyoda, “5.8-GHz series/parallel connected rectenna array using expandable differential rectenna units,” IEEE Trans. Antennas Propag., Sep. 2013, v. 61, n. 9, pp. 4872–4875.

91. J. H. Chou, D. B. Lin, K. L. Weng, and H. J. Li, “All polarization receiving rectenna with harmonic rejection property for wireless power transmission,” IEEE Trans. Antennas Propag., 2014, v. 62, n. 10, pp. 5242–5249.

92. Y. J. Ren and K. Chang, “5.8-GHz circularly polarized dual-diode rectenna and rectenna array for microwave power transmission,” IEEE Trans. Microw. Theory Tech., 2006, v. 54, n. 4, pp. 1495–1502.

93. Fu-Jhuan Huang, Tzong-Chee Yo, Chien-Ming Lee, and Ching-Hsing Luo, “Design of Circular Polarization Antenna With Harmonic Suppression for Rectenna Application,” IEEE Antennas Wirel. Propag. Lett., 2012, v. 11, pp. 592–595.

94. H. Jabbar, S. Member, Y. S. S. Member, and T. T. Jeong, “RF Energy Harvesting System and Circuits for Charging of Mobile Devices,” IEEE Trans. Consum. Electron. 2010, v. 56, n. 1, pp. 247–253.

95. J. L. Li, T. Yuan, N. Yuan, S. Member, and L. Li, “A Novel Series-Fed Taper Antenna Array Design,” IEEE Antennas Wirel. Propag. Lett., May 2014 v. 7, n. , pp. 362–365.

96. P. Nintanavongsa, U. Muncuk, D. R. Lewis, and K. R. Chowdhury, “Design Optimization and Implementation for RF Energy Harvesting Circuits,” IEEE J. Emerg. Sel. Top. Circuits Syst., Mar. 2012, v. 2, n. 1, pp. 24–33.

97. V. Marian, B. Allard, C. Vollaire, and J. Verdier, “Strategy for microwave energy harvesting from ambient field or a feeding source,” IEEE Trans. Power Electron., Nov. 2012, v. 27, n. 11, pp. 4481–4491.

98. O. Nizhnik, “Global high-power rectenna site selection,” Energy Res. Journal, 2012 v. 3, n. 1, pp. 12–19.

99. J. A. Hagerty and Z. B. Popovic, “An experimental and theoretical characterization of a broadband arbitrarily polarized rectenna array,” in Proc. IEEE MTT-S Int. Micro. Symp. Dig., Phoenix, AZ, May 2001, pp. 1855–1858.

100. J. A. Hagerty, F. B. Helmbrecht, W. H. McCalpin, R. A. Zane, and Z. B. Popovic, “Recycling ambient microwave energy with broad-band rectenna arrays,” IEEE Trans. Microw. Theory. Tech., Mar. 2004, v. 52, n. 3, pp. 1014–1024.

101. C. Walsh, S. Rondineau, M. Jankovic, G. Zhao, and Z. A. Popovic, “Conformal 10 GHz rectenna for wireless powering of piezoelectric sensor electronics,” in Proc. IEEE MTT-S Int. Microw. Symp., Long Beach, CA, Jun. 2005, pp. 1–4.

102. G. K. Ottman, H. Hoffman, and G. A. Lesieutre, “Optimized Piezoelectric Energy Harvesting Circuit Using Step- down Converter in Discontinous Conduction Mode,” IEEE Trans. Power Electron., 2002, v. 17, n. 5, pp. 696–703.

103. G. K. Ottman, H. F. Hofmann, A. C. Bhatt, and G. A. Lesieutre, “Adaptive piezoelectric energy harvesting circuit for wireless remote power supply,” IEEE Trans. Power Electron., Sep. 2002, v. 17, n. 5, pp. 669–676.

104. M. A. Abdourraziq and M. Maaroufi, “Experimental Verification of the Main MPPT Techniques for Photovoltaic System,” Int. J. Power Electron. Drive Syst., 2017, v. 8, n. 1, pp. 384–391.

105. X. Liu and L. A. C. Lopes, “An improved perturbation and observation maximum power point tracking algorithm for PV arrays,” in Proc.IEEE 35th Power Electron. Spec. Conf., Aachen, Germany, Jun. 2004, vol. 3, pp. 2005–2010.

106. N. Femia, G. Petrone, G. Spagnuolo, and M. Vitelli, “Optimization of perturb and observe maximum power point tracking method,” IEEE Trans. Power Electron., Jul. 2005, v. 20, n. 4, pp. 963–973.

107. S. Jain and V. Agarwal, “A new algorithm for rapid tracking of approximate maximum power point in photovoltaic systems,” IEEE Power Electron. Lett., Mar. 2004, v. 2, n. 1, pp. 16–19.

108. Pandey, N. Dasgupta, and A. K. Mukerjee, “A simple single-sensor MPPT algorithm,” IEEE Trans. Power Electron., Mar. 2007, v. 22, n. 2, pp. 698–700.

109. T. Esram, J. W. Kimball, P. T. Krein, P. L. Chapman, and P. Midya,“Dynamic maximum power point tracking of photovoltaic arrays using ripple correlation control,” IEEE Trans. Power Electron., Sep. 2006, v. 21, n. 5, pp. 1282–1291.

110. H. Jabbar, S. Member, Y. S. S. Member, and T. T. Jeong, “RF Energy Harvesting System and Circuits for Charging of Mobile Devices,” IEEE Trans. Consum. Electron, 2010, v. 56, n. 1, pp. 247–253.

111. T. Paing, J. Shin, R. Zane, and Z. Popovic, “Resistor emulation approach to low-power RF energy harvesting,” IEEE Trans. Power Electron., 2008, v. 23, n. 3, pp. 1494–1501.

112. E. Lefeuvre, D. Audigier, C. Richard, and D. Guyomar, “Buck-boost converter for sensorless power optimization of piezoelectric energy harvester,” IEEE Trans. Power Electron., 2007, v. 22, n. 5, pp. 2018–2025.

113. Kasyap et al., “Energy reclamation from a vibrating piezoceramic composite beam,” in Proc. 9th Int. Congr. Sound Vibr. (ICSV9), 2002.

114. Z. Liu, Z. Zhong, and Y. X. Guo, “Intermodulation harvesting rectifier design for high efficiency multi-sine wireless power transfer,” IEEE MTT-S Int. Microw. Symp. Dig., vol. 2016–Augus, no. c, pp. 4–6, 2016.

115. S. Ladan, S. Member, and K. Wu, “Nonlinear Modeling and Harmonic Recycling of Millimeter-Wave Rectifier Circuit,” IEEE Trans. Microw. Theory Tech., 2016, v. 63, n. 3, pp. 1–8.

116. R. W. Erickson and D. Maksimovic´, Fundamentals of Power Electronics, 2nd ed. New York: Springer, 2001, pp. 637–663.

117. B. G. Dobbs and P. L. Chapman, “A multiple-input DC-DC converter topology,” IEEE Power Electron. Lett., 2003, v. 99, n. 1, pp. 862–868.

118. P. Niu and P. Chapman, “Design and performance of linear biomechanical energy conversion devices,” in Proc. IEEE 37th Power Electron.Spec. Conf., Jeju, Korea, Jun. 2006, pp. 1–6.

119. E. Lefeuvre, D. Audigier, C. Richard, and D. Guyomar, “Buck-boost converter for sensorless power optimization of piezoelectric energy harvester,” IEEE Trans. Power Electron., Sep. 2007, v. 22, n. 5, pp. 2018–2025.

120. D. A. Bennett, R. H. Selfridge, J. N. Harb, and D. T. Comer, “A control circuit for a microsensor hybrid power supply,” IEEE Trans. Ind. Electron., Feb. 2004, v. 51, n. 1, pp. 74–80.

121. T. S. Paing and R. A. Zane, “Resistor emulation approach to low power energy harvesting,” in Proc. IEEE 37th Power Electron. Spec. Conf., Jeju, Korea, Jun. 2006, pp. 1–7.

122. T. S. Paing, J. Morroni, A. Dolgov, J. Shin, J. Brannan, R. A. Zane, and Z. B. Popovic, “Wirelessly-powered wireless sensor platform,” in Proc. IEEE 37th Eur. Microw. Conf.,Munich, Germany, Oct. 2007, pp. 1-4.