

***Publications of Gabriel M. Rebeiz***  
(Updated June 2004)

**Books:**

*RF MEMS: Theory, Design and Technology*, John Wiley and Sons, February 2003.  
(Reviews of the book can be found on Amazon.com and are available on request)

**Journal Papers (1987-2001):**

1. R.C. Compton, R.C. McPhedran, Z. Popovic, G.M. Rebeiz, P.P. Tong and D.B. Rutledge, "Bow-tie antennas on a dielectric half-space: Theory and Experiment," *IEEE Trans. Antennas Propagat.*, vol. AP-35, pp. 622-631, 1987.
2. G.M. Rebeiz, W. Regehr and D.B. Rutledge, R.L. Savage and N.C. Luhmann, Jr. "Submillimeter-wave antennas on thin membranes," *Int. J. Infrared Millimeter Waves*, vol. 8, pp. 1249-1256, Oct. 1987.
3. G.M. Rebeiz, C.C. Ling and D.B. Rutledge, "Large area bolometers for millimeter-wave power calibration," *Int. J. Infrared Millimeter Waves*, vol. 10, pp. 931-936, Oct. 1989.
4. G.M. Rebeiz, D.P. Kasilingam, Y. Guo, P.A. Stimpson, and D.B. Rutledge, "Monolithic millimeter-wave two-dimensional horn imaging arrays," *IEEE Trans. Antennas Propagat.*, vol. AP-38, pp. 1473-1482, Sept. 1990.
5. S.S. Gearhart, C.C. Ling and G.M. Rebeiz, "Integrated 222 GHz corner-reflector antennas," *Microwave Optical Tech. Lett.*, vol. 4, pp. 12-15, Jan. 1991
6. W.Y. Ali-Ahmad and G.M. Rebeiz, Gordon Chin and Hermant Davee, "802 GHz integrated horn antennas imaging array," *Int. J. Infrared Millimeter Waves*, vol. 12, pp. 481-486, May 1991.
7. W.Y. Ali-Ahmad and G.M. Rebeiz, "92 GHz dual-polarized integrated horn antennas," *IEEE Trans. Antennas Propagat.*, vol. AP-39, pp. 820-825, June 1991.
8. W. Harokoupos, Jr., P.B. Katehi, W.Y. Ali-Ahmad and G.M. Rebeiz, "Surface wave excitation from open microstrip discontinuities," *IEEE Trans. Microwave Theory Tech.*, vol. MTT-39, pp. 1098-1107, July 1991.
9. S.S. Gearhart, C.C. Ling and G.M. Rebeiz, "Integrated millimeter-wave corner-reflector antennas," *IEEE Trans. Antennas Propagat.*, vol. AP-39, pp. 1000-1006, July 1991.
10. S.S. Gearhart, C.C. Ling and G.M. Rebeiz, H. Davee and G. Chin, "Integrated 119 um linear corner-cube array," *IEEE Microwave Guided Wave Lett.*, vol. MGWL-1, pp. 155-157, July, 1991.
11. C.C. Ling and G.M. Rebeiz, "A wideband monolithic quasi-optical power meter for millimeter-wave and submillimeter-wave applications," *IEEE Trans. Microwave Theory Tech.*, vol. MTT-39, pp. 1257-1261, Aug. 1991.
12. G.V. Eleftheriades, W.A. Ali-Ahmad, L.P. Katehi and G.M. Rebeiz, "Millimeter-wave integrated horn antennas: Part I: Theory," *IEEE Trans. Antennas Propagat.*, vol. AP-39, pp. 1575-1581, Nov. 1991.
13. W.A. Ali-Ahmad, G.V. Eleftheriades, L.P. Katehi and G.M. Rebeiz, "Millimeter-wave integrated horn antennas: Part II: Experiment," *IEEE Trans. Antennas Propagat.*, vol. AP-39, pp. 1582-1586, Nov. 1991.
14. G.M. Rebeiz and D.B. Rutledge, "Integrated horn antennas for millimeter-wave applications," **Invited paper**, *Annales de Telecommunications*, France, pp. 38-48, Jan. 1992.

15. G.V. Eleftheriades, W.Y. Ali-Ahmad and G.M. Rebeiz, "A 20 dB quasi-integrated horn antenna," *IEEE Microwave Guided Wave Lett.*, vol. MGWL-2, pp. 75-78, Feb. 1992.
16. D.F. Filipovic, W.A. Ali-Ahmad and G.M. Rebeiz, "Millimeter-Wave Double-Dipole Antennas for High-Gain Integrated Reflector Illumination," *IEEE Trans. Microwave Theory Tech.* vol. MTT-40, pp. 962-967, May 1992.
17. G.V. Eleftheriades and G.M. Rebeiz, "High-gain step-profiled integrated diagonal horn antennas," *IEEE Trans. Microwave Theory Tech.*, vol. MTT-40, pp. 801-805, May 1992.
18. H. Ekstrom, S.S. Gearhart, P.R. Acharya, G.M. Rebeiz, E.L. Kollberg, S. Jacobsson, "348 GHz endfire slotline antennas on thin dielectric membranes," *IEEE Microwave Guided Wave Lett.*, vol. MGWL-2, pp. 57-58, Aug. 1992.
19. C.C. Ling and G.M. Rebeiz, "94 GHz integrated horn monopulse antennas," *IEEE Trans. Antennas Propagat.*, vol. AP-40, pp. 981-984, Aug. 1992.
20. G.M. Rebeiz, "Millimeter-wave and terahertz integrated-circuit antennas," **Invited paper**, *IEEE Proceedings - Special Issue on Space Terahertz Technology*, vol. 80, pp. 1748-1770, Nov. 1992.
21. W.Y. Ali-Ahmad, and G.M. Rebeiz, "An 86-106 GHz quasi-integrated low-noise receiver," *IEEE Trans. Microwave Theory Tech.*, vol. MTT-41, No. 4, pp. 558-564, Apr. 1993.
22. W.Y. Ali-Ahmad, W.L. Bishop, T.W. Crowe and G.M. Rebeiz, "250 GHz quasi-integrated low-noise Schottky-receiver," *Int. J. Infrared Millimeter Waves*, vol. 14, pp. 737-748, Apr. 1993.
23. C. Chi and G.M. Rebeiz, "A quasi-optical amplifier," *IEEE Microwave Guided Wave Lett.*, vol. MGWL-3, pp. 164-166, June 1993.
24. S.S. Gearhart, J. Hessler, W.L. Bishop, T.W. Crowe and G.M. Rebeiz, "A 760 GHz planar Schottky receiver," *IEEE Microwave Guided Wave Lett.*, vol. MGWL-3, pp. 205-207, July 1993.
25. B.K. Kormanyos and G.M. Rebeiz, "A 26-220 GHz harmonic-mixer receiver," **Invited paper**, *Microwave J.*, vol. 36, pp. 103-108, July 1993.
26. G.V. Eleftheriades and G.M. Rebeiz, "Analysis and design of millimeter-wave quasi-integrated horn antennas" *IEEE Trans. Microwave Theory and Tech.*, vol. MTT-41, pp. 954-965, June/July 1993.
27. D.F. Filipovic, S.S. Gearhart and G.M. Rebeiz, "Double-slot antennas on extended hemispherical and elliptical dielectric lens," *IEEE Trans. Microwave Theory Tech. Special Issue on Quasi-Optical Techniques*, vol. MTT-41, pp. 1738-1749, Oct. 1993.
28. B.K. Kormanyos, P.H. Ostdiek, W.L. Bishop, T.W. Crowe and G. M. Rebeiz, "A planar wideband 80-200 GHz subharmonic receiver," *IEEE Trans. Microwave Theory Tech. Special Issue on Quasi-Optical Techniques*, vol. MTT-41, pp. 1730-1737, Oct. 1993.
29. P.R. Acharya, H. Ekstrom, S.S. Gearhart, J.F. Johansson, S. Jacobson, G. M. Rebeiz and E.L. Kollberg, "Tapered slotline antennas at 802 GHz," *IEEE Trans. Microwave Theory Tech. Special Issue on Quasi-Optical Techniques*, vol. MTT-41, pp. 1715-1719, Oct. 1993.
30. C.C. Ling and G.M. Rebeiz, "A 94 GHz planar monopulse receiver," *IEEE Microwave Guided Wave Lett.*, Vol. MGWL-3, pp. 358-360, Oct. 1993.
31. G.V. Eleftheriades and G.M. Rebeiz, "Self and mutual admittance of slot antennas on a dielectric half-space," *Int. J. Infrared Millimeter Waves*, vol. 14, pp. 1925-1946, Oct. 1993.
32. D.F. Filipovic and G.M. Rebeiz, "Double-slot antennas on extended hemispherical and elliptical quartz dielectric lenses," *Int. J. Infrared Millimeter Waves*, vol. 14, pp. 1905-1924, Oct. 1993.
33. U.U. Graf, D.T. Jafee, E.J. Kim, J.H. Lacy, h. Ling, J.T. Moore and G.M. Rebeiz, "Fabrication and evaluation of an etched infrared diffraction grating," *Applied Optics*, vol. 33, pp. 96-102, Jan. 1994.
34. W.Y. Ali-Ahmad and G.M. Rebeiz, "A 335 GHz integrated Schottky receiver," *IEEE Microwave Guided Wave Lett.*, vol. MGWL-4, pp. 37-39, Feb. 1994.

35. B.K. Kormanyos, W.L. Harokoupos, L.P. Katehi and G.M. Rebeiz, "CPW-fed active slot-antennas," *IEEE Trans. Microwave Theory Tech.*, vol. MTT-42, pp. 541-545, Apr. 1994.
36. C.C. Ling, J.C. Landry, H. Davee, G. Chin and G.M. Rebeiz, "Large area bolometers for THz power measurements," *IEEE Trans. Microwave Theory Tech.*, vol. MTT-42, pp. 758-760, Apr. 1994.
37. T. H. Lee, C.Y. Chi, J. East, P. Siegel and G.M. Rebeiz, "Millimeter-wave subharmonic mixers using the planar-doped barrier diode," *IEEE Trans. Microwave Theory Tech.*, vol. MTT-42, pp. 742-749, Apr. 1994.
38. T.P. Budka, M.W. Trippe, S. Weinreb and G. M. Rebeiz, "A 75 to 115 GHz quasi-optical amplifier," *IEEE Trans. Microwave Theory Tech.*, vol. MTT-42, pp. 899-901, May 1994.
39. B.K. Kormanyos and G.M. Rebeiz, "Oscillator design for maximum added power efficiency," *IEEE Trans Microwave Guided Wave Lett.*, vol. MGWL-4, pp. 205-207, June 1994.
40. B.K. Kormanyos and G.M. Rebeiz, "20 GHz power combining slot-oscillator array," *IEEE Trans. Microwave Guided Wave Lett.*, vol. MGWL-4, pp. 226-228, July 1994.
41. D.F. Filipovic, R.F. Bradley and G.M. Rebeiz, "A planar broadband balanced doubler using a novel balun design," *IEEE Trans. Microwave Guided Wave Lett.*, vol. MGWL-4, pp. 229-231, July 1994.
42. C.C. Ling and G.M. Rebeiz, "A 94 GHz integrated monopulse tracking receiver," *IEEE Trans. Microwave Theory Tech.*, vol. MTT-42, No. 10, pp. 1863-1871, Oct. 1994.
43. G.V. Eleftheriades, A.S. Omar, L.P. Katehi and G.M. Rebeiz, "Some important properties of waveguide generalized scattering matrices in the context of the mode matching technique," *IEEE Trans. Microwave Theory Tech.*, vol. MTT-42, pp. 1896-1903, Oct. 1994.
44. H. Lee, C.Y. Chi, J.R. East, G. M. Rebeiz and G.I. Haddad, "A novel biased anti-parallel diode structure for subharmonic mixing," *IEEE Microwave Guided Wave Lett.*, vol. MGWL-4, pp. 341-343, Oct. 1994.
45. S. S. Gearhart and G. M. Rebeiz, "A monolithic 250 GHz Schottky diode receiver," *IEEE Trans. Microwave Theory Tech.*, vol. MTT-42, pp. 2504-2511, Dec. 1994.
46. H. Zirath, C.Y. Chi, N. Rorsman and G.M. Rebeiz, "A 40 GHz integrated quasi-optical slot HFET mixer," *IEEE Trans. Microwave Theory Tech.*, vol. MTT-42, pp. 2492-2497, Dec. 1994.
47. T.M. Weller, L.P. Katehi and G.M. Rebeiz, "High performance microshield line components," *IEEE Trans. Microwave Theory Tech.*, vol. MTT-43, pp. 534-543, Mar. 1995.
48. C.Y. Chi and G.M. Rebeiz, "Planar microwave and millimeter-wave lumped elements and coupled-line filters using micro-machining techniques," *IEEE Trans. Microwave Theory Tech.*, vol. MTT-43, pp. 730-738, Apr. 1995.
49. S.V. Robertson, L.P. Katehi and G.M. Rebeiz, "A planar quasi-optical mixer using a folded slot antenna," *IEEE Trans. Microwave Theory Tech.*, vol. MTT-43, pp. 896-899, Apr. 1995.
50. S.E. Rosenbaum, B.K. Kormanyos, L.M. Jelloian, M. Matloubian, A.S. Brown, L.E. Larson, L. Nguyen, L.P. Katehi and G.M. Rebeiz, "155 GHz and 213 GHz AlInAs/GaInAs/InP HEMT MMIC oscillators," *IEEE Trans. Microwave Theory Tech.*, vol. MTT-43, pp. 927-932, Apr. 1995.
51. S. Mollenkopf, L.P. Katehi and G.M. Rebeiz, "A 20 GHz low-cost MIC active receiver/radiometer," *IEEE Trans. Microwave Theory Tech.*, vol. MTT-43, pp. 989-993, Apr. 1995.
52. T.M. Weller, L.P. Katehi and G.M. Rebeiz, "A 250 GHz microshield band-pass filter," *IEEE Microwave Guided Wave Lett.*, vol. MGWL-5, pp. 153-155, May 1995.
53. G. Gauthier, W.Y. Ali-Ahmad, T.P. Budka, D.F. Filipovic and G.M. Rebeiz, "A uniplanar 90 GHz low-cost millimeter-wave receiver," *IEEE Trans. Microwave Theory Tech.*, vol. MTT-43, pp. 1669-1672, July 1995.

54. T.M. Weller, L.P. Katehi and G.M. Rebeiz, "Single and double folded-slot antennas on semi-infinite substrates," *IEEE Trans. Antennas Propagat.*, vol. AP-43, pp. 1423-1428, Dec. 1995.
55. S.V. Robertson, L.P. Katehi and G.M. Rebeiz, "Micromachined W-band filters," *IEEE Trans. Microwave Theory Tech.*, vol. MTT-44, pp. 598-606, April 1996.
56. C.Y. Chi and G.M. Rebeiz, "Conductor-loss limited stripline resonators and filters," *IEEE Trans. Microwave Theory Tech.*, vol. MTT-44, pp. 626-630, April 1996.
57. J.M. La Heurtre, L.P. Katehi and G.M. Rebeiz, "CPW-fed slot-antennas on layered substrates," *IEEE Trans. Antennas Propagat.*, vol. AP-44, pp. 1102-1111, Aug. 1996.
58. S. Raman and G.M. Rebeiz, "Single- and dual-polarized millimeter-wave slot-ring antennas," *IEEE Trans. Antennas Propagat.*, vol. AP-44, pp. 1438-1444, Nov. 1996.
59. T.P. Budka, S.D. Waclawik and G.M. Rebeiz, "A coaxial 0.5-18 GHz near electric field measurement system for planar microwave circuits using integrated probes," *IEEE Trans. Microwave Theory Tech.*, vol. MTT-44, pp. 2174-2184, Dec. 1996.
60. G.M. Rebeiz, L.P. Katehi, T.M. Weller, C.Y. Chi and S.V. Robertson, "Micromachined filters for microwave and millimeter-wave applications," **Invited paper**, Special Issue on Passive and Active Filters, *Int. J. of Microwave and Millimeter-Wave Computer Aided Engineering*, vol. 7, pp. 149-166, Feb. 1997.
61. C.Y. Chi and G.M. Rebeiz, "Design of lange-couplers and single-sideband mixers using micromachining techniques," *IEEE Trans. Microwave Theory Tech.*, vol. MTT-45, pp. 291-294, Feb. 1997.
62. S. Barker and G.M. Rebeiz, "IF-based polarimetric receivers," *IEEE Microwave Guided-Wave Letters*, vol. 7, pp. 81-83, March 1997.
63. D.F. Filipovic, G.P. Gauthier, S. Raman and G.M. Rebeiz, "Off-axis properties of silicon and quartz dielectric lens antennas," *IEEE Trans. Antennas Propagat.*, vol. AP-45, pp. 760-766, June 1997.
64. S. Raman and G.M. Rebeiz, "A high-performance uniplanar W-band subharmonic mixer," *IEEE Trans. Microwave Theory Tech.*, vol. MTT-45, pp. 955-962, June 1997.
65. G.P. Gauthier, A. Courtay and G.M. Rebeiz, "Microstrip antennas on synthesized low dielectric constant substrates," *IEEE Trans. Antennas Propagat.*, vol. 45, pp. 1310-1314, Aug. 1997.

#### **Journal Papers (1998-2001):**

66. T.P. Budka, E.M. Tentzeris, S.D. Waclawik, N.I. Dib, L.P. Katehi and G.M. Rebeiz, "Near field mapping above a coupled-line filter and a MMIC," *Microwave J.*, pp. 94-106, March 1998.
67. A.R. Brown and G.M. Rebeiz, "Micromachined micropackaged filter banks," *IEEE Microwave Guided Wave Lett.*, Vol. MGWL-8, pp. 158-160, April 1998.
68. C.T. Nguyen, L.P. Katehi and G.M. Rebeiz, "Micromachined devices for wireless communications," *Proceedings of the IEEE*, **Invited paper**, Special Issue on Integrated Sensors, Microactuators and Microsystems, pp. 1756-1768, April 1998.
69. V. Lubecke, K. Mizuno and G.M. Rebeiz, "Micromachining for Terahertz application," **Invited paper**, *IEEE Trans. Microwave Theory Tech.*, Vol. 46, pp. 1821-1831, Nov. 1998.
70. N.S. Barker and G.M. Rebeiz, "Distributed MEMS true-time delay phase shifters and wideband switches," *IEEE Trans. Microwave Theory Tech.*, Vol. 46, pp. 1881-1890, Nov. 1998. (**IEEE 2000 Microwave Prize**)
71. S.V. Robertson, A.R. Brown, L.P. Katehi and G.M. Rebeiz, "A 10-60 GHz micromachined directional coupler," *IEEE Trans. Microwave Theory Tech.*, Vol. 46, p. 1845-1849, Nov. 1998.

72. S. Raman, S. Barker and G.M. Rebeiz, "A W-band dielectric-lens-based integrated monopulse radar receiver," *IEEE Trans. Microwave Theory Tech.*, Vol. 46, pp. 2283-2288, Dec. 1998.
73. P. Blondy, A.R. Brown, D. Cros and G.M. Rebeiz, "Low loss micromachined filters for millimeter-wave communication systems," *IEEE Trans. Microwave Theory Tech.*, Vol. 46, pp. 2308-2316, Dec. 1998.
74. G.P. Gauthier, S. Raman and G.M. Rebeiz, "A 90-100 GHz double folded-slot antenna," *IEEE Trans. Antennas Propagat.*, Vol. 47, pp. 1120-1122, June 1999.
75. A.R. Brown, P. Blondy and G.M. Rebeiz, "Microwave and millimeter-wave high-Q micromachined resonators," *Int. J. of RF and Microwave Computer-Aided Engineering*, Vol. 9, pp. 326-337, July 1999.
76. A.R. Brown and G.M. Rebeiz, "A high-performance integrated K-band diplexer," *IEEE Trans. Microwave Theory Tech.*, Vol. 47, pp. 1477-1481, August 1999.
77. A.R. Brown and G.M. Rebeiz, "A Ka-band micromachined low phase-noise oscillator," *IEEE Trans. Microwave Theory Tech.*, Vol. 47, pp. 1504-1508, August 1999.
78. J.B. Muldavin and G.M. Rebeiz, "Millimeter-wave tapered-slot on synthesized low-permittivity substrates," *IEEE Trans. Antennas Propagat.*, Vol. 47, pp. 1276-1280, Aug. 1999.
79. G.P. Gauthier, J.-P. Raskin, L.P. Katehi and G.M. Rebeiz, "A 94 GHz aperture-coupled micromachined microstrip antenna," *IEEE Trans. Antennas Propagat.*, Vol. 47, pp. 1761-1766, Dec. 1999.
80. J.-P. Raskin, G. Gauthier, L.P. Katehi, and G.M. Rebeiz, "Mode conversion at GCPW-to-microstrip line transitions," *IEEE Trans. Microwave Theory Tech.*, Vol. 48, pp. 158-161, Jan. 2000.
81. J.-P. Raskin, G. Gauthier, L.P. Katehi and G.M. Rebeiz, "W-band single layer vertical transitions," *IEEE Trans. Microwave Theory Tech.*, Vol. 48, pp. 161-164, Jan. 2000.
82. J.S. Hayden and G.M. Rebeiz, "Low-loss cascadable MEMS distributed X-band phase shifters," *IEEE Microwave Guided Wave Lett.*, Vol. 10, pp. 142-144, April 2000.
83. N.S. Barker and G.M. Rebeiz, "Distributed MEMS transmission line BPSK modulator," *Microwave Guided Wave Lett.*, Vol. 10, pp. 198-200, May 2000.
84. J.B. Muldavin and G.M. Rebeiz, "High isolation MEMS shunt switches; Part 1: Modeling," *IEEE Trans. Microwave Theory Tech.*, Vol. 48, pp. 1045-1052, June 2000.
85. J.B. Muldavin and G.M. Rebeiz, "High isolation MEMS shunt switches; Part 2: Design," *IEEE Trans. Microwave Theory Tech.*, Vol. 48, pp. 1053-1056, June 2000.
86. A.R. Brown and G.M. Rebeiz, "A varactor tuned RF filter," *IEEE Trans. Microwave Theory Tech.*, Vol. 48, pp. 1157-1160, July 2000.
87. G.P. Gauthier, J.-P. Raskin and G.M. Rebeiz, "A 140-170 GHz low-noise uniplanar subharmonic Schottky-receiver," *IEEE Trans. Microwave Theory Tech.*, Vol. 48, pp. 1416-1419, Aug. 2000.
88. L.D. DiDomenico and G.M. Rebeiz, "Frequency stability in adaptive retrodirective arrays," *IEEE Trans. Aerospace Electronic Systems*, Vol. 36, No. 4, pp. 1219-1231, Oct. 2000.
89. N.S. Barker and G.M. Rebeiz, "Optimization of distributed MEMS transmission-line phase shifters—U-band and W-band designs," *IEEE Trans. Microwave Theory Tech.*, Vol. 48, pp. 1957-1966, Nov. 2000.
90. J.P. Raskin, A.R. Brown, B.T. Yakub and G.M. Rebeiz, "A novel parametric-effect MEMS amplifier," *IEEE Trans. Micro-Electro-Mechanical Systems*, Vol. 9, pp. 528-537, Dec. 2000.
91. J.S. Hayden and G.M. Rebeiz, "2-bit MEMS distributed X-band phase shifters," *IEEE Microwave Guided Wave Lett.*, Vol. 10, pp. 540-542, Dec. 2000.
92. J. Rizk, G.L. Tan, J.B. Muldavin and G.M. Rebeiz, "High-isolation W-band switches," *IEEE Microwave and Wireless Components Lett.*, vol. 11, pp. 10-12, Jan. 2001.

93. L.D. DiDomenico and G.M. Rebeiz, "Digital communications using self-phased arrays," *IEEE Trans. Microwave Theory Techn.*, vol. 49, pp. 677-684, April 2001.
94. J.B. Muldavin and G.M. Rebeiz, "Inline capacitive and DC-contact MEMS shunt switches," *IEEE Microwave and Wireless Components Lett.*, vol. 11, pp. 334-336, Aug. 2001.
95. J.B. Muldavin and G.M. Rebeiz, "All-metal high-isolation series and series/shunt MEMS switches," *IEEE Microwave and Wireless Components Lett.*, vol. 11, pp. 373-375, Sept. 2001.
96. G.M. Rebeiz and J.B. Muldavin, "RF MEMS switches and switch circuits," *IEEE Microwave Magazine*, **Invited paper**, vol. 2, no. 4, pp. 59-71, Dec. 2001.

#### **Journal Papers (2002):**

97. J.B. Rizk and G.M. Rebeiz, "Millimeter-wave Fermi tapered slot antennas on micromachined silicon substrates," *IEEE Trans. Antennas Propagat.*, Vol. 50, No. 3, pp. 373-383, March 2002.
98. G.M. Rebeiz, "Phase noise analysis of MEMS-based circuits and phase shifters," *IEEE Trans. Microwave Theory Techn.*, Vol. 50, No. 5, pp. 1316-1323, May 2002.
99. G.L. Tan and G.M. Rebeiz, "A DC-contact shunt switch," *IEEE Microwave and Wireless Components Lett.*, vol. 12, No. 6, pp. 212-214, June 2002.
100. G.M. Rebeiz, G.L. Tan and J.S. Hayden, "RF MEMS phase shifters: design and applications," *IEEE Microwave Magazine*, **Invited paper**, vol. 3, no. 2, pp. 72-81, June 2002.
101. B. Schoenlinner, X. Wu, J.P. Ebling, G.V. Eleftheriades and G.M. Rebeiz, "Wide-scan spherical-lens antennas for automotive radars," *IEEE Trans. Microwave Theory Techn.*, vol. 50, pp. 2166-2175, Sept. 2002.

#### **Journal Papers (2003):**

102. G.L. Tan, R.E. Mihailovich, J.B. Hacker, J.F. DeNatale and G.M. Rebeiz, "Low-loss 2- and 4-bit TTD MEMS phase Shifters based on SP4T Switches." *IEEE Trans. Microwave Theory Techn.* Special Issue on RF MEMS, vol. 51, no. 1, pp. 297-304, Jan. 2003.
103. J.S. Hayden and G.M. Rebeiz, "Very low loss distributed X-band and Ka-band MEMS phase shifters using metal-air-metal capacitors." *IEEE Trans. Microwave Theory Techn.* Special Issue on RF MEMS, vol. 51, no. 1, pp. 309-314, Jan. 2003.
104. L. Dussopt and G.M. Rebeiz, "A low phase noise silicon 18 GHz push-push VCO" *IEEE Microwave and Wireless Components Lett.*, Vol. 13, No. 1, pp. 4-6, Jan. 2003.
105. G.L. Tan, R.E. Mihailovich, J.B. Hacker, J.F. DeNatale and G.M. Rebeiz, "A 2-bit miniature X-band MEMS phase shifter," *IEEE Microwave and Wireless Components Lett.*, Vol. 13, No. 4, pp. 146-148, April 2003.
106. L. Dussopt and G.M. Rebeiz, "Intermodulation distortion and power handling in RF MEMS switched, varactors and tunable filters," *IEEE Trans. Microwave Theory Techn.*, vol. 51, no. 4, pp. 1247-1256, April 2003.
107. A.A. Tamijani, L. Dussopt and G.M. Rebeiz, "Miniature and tunable filters using MEMS capacitors," *IEEE Trans. Microwave Theory Techn.*, vol. 51, no. 7, pp. 1878-1885, July 2003.
108. J.B. Rizk and G.M. Rebeiz, "W-Band CPW RF MEMS circuits on quartz substrates," *IEEE Trans. Microwave Theory Techn.*, vol. 51, no. 7, pp. 1857-1862, July 2003.
109. L. Dussopt and G.M. Rebeiz, "An X- to Ku-Band 3-bit digital MEMS varactor," *IEEE Microwave and Wireless Components Lett.*, vol. 13, no. 9, pp. 361-363, September 2003.

### Journal Papers (2004):

110. J.J. Hung, L. Dussopt and G.M. Rebeiz, "2-bit and 3-bit W-band RF MEMS phase shifters," *IEEE Trans. Microwave Theory Techn.*, vol. 52, no.2, pp. 600-606, Feb. 2004.
111. P.A. Grajek, B. Schoenlinner and G.M. Rebeiz, "A 24 GHz high-gain Yagi-Uda antenna array," *IEEE Trans. Antennas Propagation*, vol. 52, No. 5, pp. 1257-1261, May 2004.
112. T. Vaha-Heikkilla and G. M. Rebeiz, "A 4-18 GHz Reconfigurable RF MEMS Matching Network for Power Amplifier Applications," Accepted for publication in the RF MEMS Special issue of *Int. J. of Microwave Computer Aided Engineering*, January 2004.
113. A. Abbaspour-Tamijani, K. Sarabandi, and G.M. Rebeiz, "Antenna-Filter-Antenna Arrays as a Class of Bandpass Frequency Selective Surfaces," Accepted for publication in the *IEEE Trans. Microwave Theory Techn.*, February 2004.
114. B. Schoenlinner, A. Abbaspour-Tamijani, L.C. Kempel and G.M. Rebeiz, "Switchable low-loss RF MEMS Ka-Band frequency selective surface," Accepted for publication in the *IEEE Trans. Microwave Theory Techn.*, April 2004.
115. S.J. Park, K. Van Caekenberghe and G.M. Rebeiz, "A miniature 2.1 GHz low loss microstrip filter with independent electric and magnetic coupling," Submitted for publication in the *IEEE Microwave and Wireless Letters*, February 2004.
116. J.J. Hung, T. M. Hancock and G. M. Rebeiz, "High power, high-efficiency SiGe Ku- and Ka-band balanced frequency doublers," Accepted for publication in the *IEEE Trans. Microwave Theory Techn.*, June 2004.
117. K. Entesari and G. M. Rebeiz, "A differential 4-bit 6.5-10 GHz RF MEMS tunable filter," Submitted for publication in the *IEEE Trans. Microwave Theory Techn.*, April 2004.
118. T. M. Hancock and G. M. Rebeiz, "A 12 GHz SiGe phase shifter with integrated LNA," Submitted for publication in the *IEEE Trans. Microwave Theory Techn.*, April 2004.
119. A. Abbaspour-Tamijani, K. Sarabandi, and G. M. Rebeiz, "A millimeter-wave bandpass filter-lens array," Submitted for publication in the *IEEE Trans. Antennas Propagation*, March 2004.
120. T. Vaha-Heikkilla, J. Varis, J. Tuovinen and G. M. Rebeiz, "A 20-50 GHz single-stub impedance tuner," Submitted for publication in the *IEEE Microwave and Wireless Letters*, August 2004.

### Articles in Magazines and Newsletters:

1. G.M. Rebeiz, L.P. Katehi, W.Y. Ali-Ahmad, G.V. Eleftheriades and C.C. Ling, "Integrated horn antennas for millimeter-wave applications," *Antennas and Propagation Magazine*, vol. 34, pp. 7-16, Feb. 1992.
2. G.M. Rebeiz, L.P. Katehi, W.Y. Ali-Ahmad, G.V. Eleftheriades and C.C. Ling, "Integrated horn antennas for millimeter-wave applications," *The Radioscientist*, vol. 3, pp. 68-77, Sept. 1992.
3. L.P. Katehi, G.M. Rebeiz et al. "Micromachined circuits for millimeter-wave and submillimeter-wave applications," *Antennas and Propagation Magazine*, vol. 35, pp. 9-17, Oct. 1993.
4. G.M. Rebeiz, "The highest-frequency (155 GHz and 215 GHz) three-terminal transistor oscillator in the world-Reported," *Antennas and Propagation Magazine*, vol. 36, pp. 36-38, Feb. 1994.
5. G.M. Rebeiz and J.B. Muldavin, "RF MEMS switches and switch circuits," *IEEE Microwave Magazine*, **Invited paper**, vol. 2, no. 4, pp. 59-71, Dec. 2001.
6. G.M. Rebeiz, G.L Tan and J.S. Hayden, "RF MEMS phase shifters: design and applications," *IEEE Microwave Magazine*, **Invited paper**, vol. 3, no. 2, pp. 72-81, June 2002.

### Book Chapters:

1. D.F. Filipovic, G. V. Eleftheriades and G. M. Rebeiz, "Off-axis Imaging Properties of Substrate Lens Antennas," in *Astronomical Society of the Pacific*, D.T. Emerson and J.M. Payne, Eds., Vol. 75, 1994.
2. L.P. Katehi, G. M. Rebeiz, T.M. Weller, R.F. Drayton, S.V. Robertson and C.Y. Chi "Si Micromachining in High-Frequency Applications," in *The Industrial Electronics Handbook*, CRC-Press, 1997.
3. A.R. Brown and G. M. Rebeiz, "Micromachined K-Band high-Q resonators, filters, and low phase-noise oscillators," in *RF Technologies for Low Power Wireless Communications*, T. Itoh, G. Haddad and J. Harvey, Eds., Wiley, 2001.

### Conference Papers (1987-2000):

1. R.C. Compton, G.M. Rebeiz and D.B. Rutledge, "Developments in two-dimensional imaging arrays," *10th Int. Conf. Infrared Millimeter Waves*, Orlando, FL, Dec. 1985.
2. G.M. Rebeiz, W. Regehr and D.B. Rutledge, R.L. Savage, C.W. Domier and N.C. Luhmann, Jr. "Submillimeter-wave antennas on thin membranes," *11th Int. Conf. Infrared Millimeter Waves*, Pisa, Italy, pp. 694-696, Oct. 1986.
3. R.C. Compton, R.C. McPhedran, Z. Popovic, G.M. Rebeiz, P.P. Tong and D.B. Rutledge, "Bow-tie antennas on a dielectric: Theory vs. Experiment," *11th Int. Conf. Infrared Millimeter Waves*, Pisa, Italy, pp. 171-173, Oct. 1986.
4. G.M. Rebeiz, R.C. Compton and D.B. Rutledge, "Integrated-circuit antennas," *SPIE Symposium*, Orlando, FL, May 1987.
5. G.M. Rebeiz, W. Regehr and D.B. Rutledge, R.L. Savage and N.C. Luhmann, Jr. "Submillimeter-wave antennas on thin membranes," *IEEE AP-S Int. Symp.*, Blacksburg, VA, June 1987.
6. J. Howard, E. Doyle, G.M. Rebeiz, R.L. Savage, W. Peebles, S.S. Gull and N.C. Luhmann, Jr., "Two-dimensional imaging on the Microtor Tokamak," *14th European Conf. Controlled Fusion and Plasma Diagnostics*, June 1987.
7. G.M. Rebeiz, Y. Guo and D.B. Rutledge, "Two-dimensional horn imaging arrays," *12th Int. Conf. Infrared Millimeter-Waves*, pp. 224-225, Lake Buena Vista, FL, Dec. 1987.
8. G.M. Rebeiz, D.P. Kasilingam and D.B. Rutledge, "Two-dimensional horn imaging arrays," *SPIE Symp. on Innovative Science and Technology*, Los Angeles, CA, Jan. 1988.
9. G.M. Rebeiz, Y. Guo, P.A. Stimson and D.B. Rutledge, D.P. Kasilingam, "Progress in two-dimensional horn imaging arrays," *18th European Microwave Conf.*, Stockholm, Sweden, Sept. 1988.
10. G.M. Rebeiz, P.A. Stimson, Y. Guo and D.B. Rutledge, "Efficiency of millimeter-wave horn imaging arrays," *13th Int. Conf. Infrared Millimeter Waves*, pp. 31-32, Waikiki Beach, HI, Dec. 1988.
11. G.M. Rebeiz, C.C. Ling and D.B. Rutledge, "Large area bolometers for millimeter-wave power calibration," *13th Int. Conf. Infrared Millimeter-Waves*, pp. 141-142, Waikiki Beach, HI, Dec. 1988.
12. G.V. Eleftheriades, W.A. Ali-Ahmad, L.P. Katehi and G.M. Rebeiz, "Theoretical analysis of a dipole-fed horn antenna," *First Intl. Conf. on Space Terahertz Tech.*, pp. 187-200, Ann Arbor, MI, Mar. 1990.
13. C.C. Ling and G.M. Rebeiz, "A wideband monolithic submillimeter-wave quasi-optical power meter," *First Int. Conf. on Space Terahertz Tech.*, pp. 214-217, Ann Arbor, MI, Mar. 1990.
14. W.Y. Ali-Ahmad, C.C. Ling, S.S. Gearhart and G.M. Rebeiz, "Novel monolithic millimeter-wave antenna structures," *8th Annual Benjamin Franklin Symposium*, pp. 6-9, Philadelphia, PA, Mar. 1990.
15. S.S. Gearhart, C.C. Ling and G.M. Rebeiz, "Monolithic millimeter-wave corner-reflector antennas," *IEEE AP-S Int. Symp.*, pp. 1914-1917, Dallas, TX, May 1990.
16. C.C. Ling and G.M. Rebeiz, "A wideband monolithic submillimeter-wave quasi-optical power meter," *IEEE MTT-S Int. Microwave Symp. Digest*, pp. 1315-1318, Dallas, TX, May 1990.
17. W.Y. Ali-Ahmad, C.C. Ling and G.M. Rebeiz, "Two-dimensional dual-polarized millimeter-wave horn antenna arrays," *IEEE AP-S Int. Symp.*, pp. 1429-1432, Dallas, TX, May 1990.
18. G.V. Eleftheriades, W.A. Ali-Ahmad, L.P. Katehi and G.M. Rebeiz, "Radiation pattern and input impedance of dipole-fed horn antennas," *URSI-B Symp.*, Dallas, TX, May 1990.

19. W. Harokoupos, W.Y. Ali-Ahmad, G.M. Rebeiz, and P.B. Katehi, "Surface wave excitation in antenna feed networks," *URSI-B Int. Symp.*, Dallas, TX, May 1990.
20. G.M. Rebeiz and F.T. Ulaby, "Monolithic antenna arrays for millimeter-wave remote-sensing," *IEEE IGARSS-URSI Symp.*, Baltimore, MD, May 1990.
21. W.Y. Ali-Ahmad, G.V. Eleftheriades and G.M. Rebeiz, "Progress in 94 GHz integrated horn antennas," *Journees Intl. de Nice sur les Antennes*, pp. 230-233, Nov. 1990. **(Best Student Paper Award)**
22. S.S. Gearhart, C.C. Ling and G.M. Rebeiz, "200-260 GHz integrated corner-reflector antennas," *Journees Int. Nice sur les Antennes*, pp. 604-607, Nov. 1990.
23. W.Y. Ali-Ahmad, G.V. Eleftheriades and G.M. Rebeiz, "94 GHz integrated horn-antennas: Impedance, patterns and double polarized applications," *15'th Int. Conf. Infrared and Millimeter Waves*, pp. 614-616, Lake Buena Vista, FL, Dec. 1990.
24. D. Filipovic, W. Y. Ali-Ahmad and G.M. Rebeiz, "Millimeter-wave double-dipole antennas for high-efficiency reflector illumination," *15'th Int. Conf. Infrared Millimeter Waves*, pp. 617-619, Lake Buena Vista, FL, Dec. 1990.
25. B.K. Kormanyos, C.C. Ling and G.M. Rebeiz, "A planar wideband subharmonic millimeter-wave receiver," *Second Int. Conf. on Space Terahertz Tech.*, pp. 616-621, Pasadena, CA, Mar. 1991.
26. G.V. Eleftheriades, W.Y. Ali-Ahmad, L.P. Katehi and G.M. Rebeiz, "Integrated horn antennas for terahertz applications," *Second Int. Conf. on Space Terahertz Tech.*, pp. 82-90, Pasadena, CA, Mar. 1991.
27. D. Filipovic, W. Y. Ali-Ahmad and G.M. Rebeiz, "Millimeter-wave double-dipole antennas for high-efficiency reflector illumination," *Second Int. Conf. on Space Terahertz Tech.*, pp. 491-496, Pasadena, CA, Mar. 1991.
28. S.S. Gearhart, C.C. Ling and G.M. Rebeiz, G. Chin and H. Dave, "Integrated terahertz corner-cube antennas and receivers," *Second Int. Conf. on Space Terahertz Tech.*, pp. 57-62, Pasadena, CA, Mar. 1991.
29. G.M. Rebeiz and F.T. Ulaby, "Millimeter-wave monolithic antenna and receiver arrays for space-based applications," *Int. Symp. on Optical Eng. Photonic in Aerospace Sensing*, SPIE, Orlando, FL, pp. 199-203, Apr. 1991.
30. G.M. Rebeiz and F.T. Ulaby, "Millimeter-wave monolithic receivers for remote sensing applications," *IEEE IGARSS - URSI Symp.*, Espoo, Finland, June 1991.
31. N.L. Dib, W.P. Harokopus Jr., P.B. Katehi, C. Ling and G.M. Rebeiz, "Study of a novel planar transmission line", *IEEE MTT-S Int. Microwave Symp. Digest*, pp. 623-626, Boston, MA, June 1991.
32. B.K. Kormanyos, C.C. Ling and G.M. Rebeiz, "A planar wideband millimeter-wave subharmonic receiver," *IEEE MTT-S Int. Microwave Symp. Digest*, pp. 213-216, Boston, MA, June 1991.
33. C.C. Ling and G.M. Rebeiz, "94 GHz integrated monopulse antennas," *IEEE AP-S Int. Symp.*, pp. 987-990, London, Ontario, June 1991.
34. W.Y. Ali-Ahmad, G.V. Eleftheriades and G.M. Rebeiz, "Millimeter-wave integrated diagonal horn antennas," *IEEE AP-S Int. Symp.*, pp. 984-986, London, Ontario, June 1991.
35. G.V. Eleftheriades, L.P.B. Katehi and G.M. Rebeiz, "High-gain step-profiled integrated horn antennas," *IEEE AP-S Int. Symp.*, pp. 980-983, London, Ontario, June 1991.
36. G.V. Eleftheriades and G.M. Rebeiz, "A high gain quasi-integrated horn antenna" *16th Int. Conf. Infrared and Millimeter Waves*, pp. 505-506, Lausanne, Switzerland, Aug. 1991.
37. G. M. Rebeiz, "Antennas and Devices: The marriage of the future," **Invited paper**, *1991 Int. Device Research Symp.*, Charlottesville, VA, Dec. 1991.

38. B.K. Kormanyos and G.M. Rebeiz, "Quasi-optical cpw-fed slot-antenna oscillators," *Third Int. Conf. on Space Terahertz Tech.*, pp. 37-44, Ann Arbor, MI, Mar. 1992.
39. G.V. Eleftheriades, W.Y. Ali-Ahmad and G.M. Rebeiz, "Progress in terahertz integrated horn antenna and receivers," *Third Int. Conf. on Space Terahertz Tech.*, pp. 324-344, Ann Arbor, MI, Mar. 1992.
40. D.F. Filipovic, B.K. Kormanyos, S.S. Gearhart and G.M. Rebeiz, "Double-slot and log-periodic antennas on extended hemispherical dielectric lenses," *Third Int. Conf. on Space Terahertz Tech.*, pp. 382-393, Ann Arbor, MI, Mar. 1992.
41. H. Ekstrom, S.S. Gearhart, P.R. Acharya, G. M. Rebeiz, S. Jacobson and E. Kollberg, "Slot-line end-fire antennas for terahertz frequencies," *Third Int. Conf. on Space Terahertz Tech.*, pp. 280-290, Ann Arbor, MI, Mar. 1992.
42. G. M. Rebeiz, "Integrated submillimeter-wave antennas and receivers," **Invited paper**, *1992 IEEE Int. Microwave Symp.*, pp. 1145-1149, Albuquerque, NM, June 1992.
43. W.Y. Ali-Ahmad and G.M. Rebeiz, "A 90 GHz quasi-integrated horn antenna receiver," *1992 IEEE Int. Microwave Symp.*, pp. 1417-1420, Albuquerque, NM, June 1992. **(Best Student Paper Award)**
44. B.K. Kormanyos and G.M. Rebeiz, "A 30-180 GHz harmonic mixer receiver," *IEEE Int. Microwave Symp.*, pp. 341-344, Albuquerque, NM, June 1992.
45. G.V. Eleftheriades and G.M. Rebeiz, "A systematic approach towards the design of multimode quasi-integrated horn antennas for receiver applications," pp. 285-288, *IEEE AP-S Symp.*, Chicago, IL, 1992. **(Best Student Paper Award)**
46. S.S. Gearhart, H. Ekstrom, P. Acharya, E. Kollberg, S. Jacobson and G. M. Rebeiz, "Submillimeter-wave endfire slotline antennas," *IEEE AP-S Symp.*, pp. 1898-1901, Chicago, IL, 1992.
47. C.C. Ling and G.M. Rebeiz, "Advances in 94 GHz integrated horn monopulse antennas," *IEEE AP-S Symp.*, pp. 2167-2170, Chicago, IL, 1992.
48. D.F. Filipovic and G.M. Rebeiz, "An azimuthal omni-directional array for multi-target acquisition and tracking," *IEEE AP-S Symp.*, pp. 637-640, Chicago, IL, 1992.
49. B.K. Kormanyos, L.P. Katehi and G.M. Rebeiz, "Active CPW-fed antennas for power applications," *22'nd European Microwave Conf.*, pp. 894-898, Helsinki, Finland, Aug. 1992.
50. G.M. Rebeiz, C.Y. Chi, B.K. Kormanyos, G.V. Eleftheriades and W.Y. Ali-Ahmad, "Millimeter-wave integrated horn antennas and quasi-optical balanced receivers," *Int. Symp. on Antennas and Propagation*, pp. 1137-1140, Sapporo, Japan, Sept. 1992.
51. G.M. Rebeiz, W.Y. Ali-Ahmad, G.V. Eleftheriades, C.C. Ling, S.S. Gearhart and Chen-Yu Chi, "Advances in active and passive integrated millimeter-wave antennas," **Invited paper**, *10'th Journees Int. de Nice sur les Antennas*, pp. 322-325, Nov. 1992.
52. G.V. Eleftheriades, S.S. Gearhart, C. Chi and G.M. Rebeiz, "Dielectric-slab loaded integrated horn antennas," *Proc. 17'th Int. Conf. Infrared Millimeter Waves*, pp. 276-277, Pasadena, CA, Dec. 1992.
53. W.Y. Ali-Ahmad and G.M. Rebeiz, "250 GHz quasi-integrated low-noise Schottky-receiver," *Proc. 17'th Int. Conf. Infrared Millimeter Waves*, pp. 330-331, Pasadena, CA, Dec. 1992.
54. S.S. Gearhart, J. Hessler, W.L. Bishop, T.W. Crowe and G.M. Rebeiz, "A 760 GHz planar Schottky receiver," *Fourth Int. Conf. Space Terahertz Tech.*, pp. 516-521, Los Angeles, CA, Mar. 1993.
55. T.P. Budka, M.W. Trippe, S. Weinreb and G. M. Rebeiz, "A 75 to 115 GHz quasi-optical amplifier," *Fourth Int. Conf. Space Terahertz Tech.*, pp. 104-112, Los Angeles, CA, Mar. 1993.
56. D.F. Filipovic, S.S. Gearhart and G.M. Rebeiz, "Double-slot antennas on extended hemispherical and elliptical substrates," *Fourth Int. Conf. Space Terahertz Tech.*, pp. 157-183, Los Angeles, CA, Mar. 1993.

57. T.M. Weller, L.P. Katehi and G.M. Rebeiz, "Fabrication and characterization of microshield circuits," *Fourth Int. Conf. Space Terahertz Tech.*, pp. 223-237, Los Angeles, CA, Mar. 1993.
58. W.Y. Ali-Ahmad, W.L. Bishop, T.W. Crowe and G.M. Rebeiz, "A submillimeter-wave planar low-noise Schottky receiver," *IEEE MTT-S Int. Microwave Symp.*, pp. 527-530, Atlanta, GA, June 1993.
59. G. Gauthier, T.P. Budka, W.Y. Ali-Ahmad, D.F. Filipovic and G.M. Rebeiz, "A low-noise 86-90 GHz uniplanar Schottky-receiver," *IEEE MTT-S Int. Microwave Symp.*, pp. 325-328, Atlanta, GA, June 1993.
60. T.M. Weller, G. M. Rebeiz and L.P. Katehi, "Experimental results on microshield transmission lines," *IEEE MTT-S Int. Microwave Symp.*, pp. 827-830, Atlanta, GA, June 1993.
61. T.P. Budka, M.W. Trippe, S. Weinreb and G.M. Rebeiz, "A 75 to 115 GHz quasi-optical amplifier," *IEEE AP-S Int. Symp.*, pp. 576-579, Ann Arbor, MI, June 1993.
62. C.C. Ling and G.M. Rebeiz, "A 94 GHz integrated monopulse receiver," *IEEE AP-S Int. Symp.*, pp. 608-611, Ann Arbor, MI, June 1993.
63. C.Y. Chi and G.M. Rebeiz, "A back-to-back horn-antenna quasi-optical amplifier," *IEEE AP-S Int. Symp.*, Ann Arbor, MI, pp. 660-663, June 1993.
64. G.V. Eleftheriades and G.M. Rebeiz, "Cavity backed printed dipoles arrays with substrate mode control using via-hole technology," *IEEE AP-S Int. Symp.*, pp. 592-595, Ann Arbor, MI, June 1993.
65. J.M. La Heurtre, L.P. Katehi and G.M. Rebeiz, "CPW-fed active slot-antennas radiating through layered substrates," *URSI Meeting*, p. 14, Ann Arbor, MI, June 1993.
66. B.K. Kormanyos, L.P. Katehi and G.M. Rebeiz, "Power combining designs with cpw-fed slot antennas," *URSI Meeting*, Ann Arbor, MI, p. 164, June 1993.
67. G.M. Rebeiz, "Advances in integrated active antennas and receivers at millimeter-wave frequencies," **Invited paper**, *24<sup>th</sup> General Assembly Meeting of URSI*, Japan, August 1993.
68. S.V. Robertson, L.P. Katehi and G.M. Rebeiz, "A folded-slot quasi-optical planar balanced mixer," *22<sup>nd</sup> European Microwave Conference*, pp. 542-543, Madrid, Spain, Sept. 1993.
69. C.C. Ling and G.M. Rebeiz, "A 94 GHz integrated monopulse tracking receiver with IF beam control " *Workshop on Millimeter-Wave Power Generation and Beam Control*, Alabama, Sept. 1993.
70. "Optical Performance and Evaluation of an Etched Echelle Grating", U.U. Graf, D.T. Jaffe, J.H. Lacy, H. Ling, J.T. Moore, E.J. Kim, and G. Rebeiz, in ASP Conference Series vol. 41, *Astronomical Infrared Spectroscopy: Future Observational Directions*, S. Kwok ed. (San Francisco: ASP), p. 397, 1993.
71. S.E. Rosenbaum, L.M. Jelloian, A.S. Brown, M.A. Thompson, M. Matloubian, L.E. Larson, R.F. Lohr, B.K. Kormanyos, G.M. Rebeiz and L.P.B. Katehi, "A 213 GHz AlInAs/GaInAs/InP HEMT MMIC oscillator," *IEEE-Electron Device Meeting Technical Digest*, pp. 924-926, December 1993.
72. D. Filipovic, G.V. Eleftheriades and G.M. Rebeiz, "Off-axis imaging properties of substrate lens antennas," *Fifth Int. Conf. on Space Terahertz Tech.*, pp. 778-787, Ann Arbor, MI May 1994.
73. T. Weller, S. Robertson, L.P. Katehi and G.M. Rebeiz, "Millimeter and submillimeter wave microshield line components," *Fifth Int. Conf. on Space Terahertz Tech.*, pp. 802-810, Ann Arbor, MI, May 1994.
74. S. Raman, D.F. Filipovic, P. Stimson, R.J. Dengler, P. Siegel and G.M. Rebeiz, "230 GHz beam pattern measurements of a dipole array-fed dielectric filled parabola," *Fifth Int. Conf. on Space Terahertz Tech.*, pp. 788-795, Ann Arbor, MI, May 1994.
75. R.W. Haas, S. Raman, G.M. Rebeiz, W.R. McGrath, G. Chin and H. Dave, "A submillimeter wave platelet horn array: fabrication and performance," *Fifth Int. Conf. Space on Terahertz Tech.*, pp. 674-681, Ann Arbor, MI, May 1994.

76. T-H. Lee, C-Y. Chi, J.R. East, G.M. Rebeiz and G.I. Haddad, "A novel biased anti-parallel Schottky diode structure for subharmonic mixing," *Fifth Int. Conf. on Space Terahertz Tech.*, pp. 342-354, Ann Arbor, MI, May 1994.
77. S.S. Gearhart and G.M. Rebeiz, "A monolithic double-slot Schottky-diode receiver," *Fifth Int. Conf. on Space Terahertz Tech.*, pp. 369-378, Ann Arbor, MI, May 1994.
78. D.F. Filipovic, G.V. Eleftheriades and G.M. Rebeiz, "Off-axis imaging properties of substrate lens antennas" *Astronomical Society of the Pacific Conference Series*, vol. 75, pp. 106-113, May 1994.
79. S.V. Robertson, L.P.B. Katehi and G.M. Rebeiz, "W-Band microshield low-pass filters," *IEEE MTT-S Int. Microwave Symp.*, pp. 625-628, San Diego, CA, June 1994.
80. C.-Y. Chi and G.M. Rebeiz, "Planar millimeter-wave microstrip lumped elements using micro-machining techniques," *IEEE MTT-S Int. Microwave Symp.*, pp. 657-660, San Diego, CA, June 1994.
81. B.K. Kormanyos, S.E. Rosenbaum, L.P. Katehi and G.M. Rebeiz, "Monolithic 155 GHz and 215 GHz Quasi-Optical Slot Oscillators," *IEEE MTT-S Int. Microwave Symp.*, pp. 835-838, San Diego, CA, June 1994.
82. T.-H. Lee, C.-Y. Chi, J.R. East, G.M. Rebeiz and G.I. Haddad, "A quasi-optical subharmonically-pumped receiver using separately biased Schottky diode pairs," *IEEE MTT-S Int. Microwave Symp.*, pp. 783-786, San Diego, CA, June 1994.
83. S.S. Gearhart and G.M. Rebeiz, "A monolithic 250 GHz Schottky-diode receiver," *IEEE MTT-S Int. Microwave Symp.*, pp. 1333-1336, San Diego, CA, June 1994. **(Best Student Paper Award)**
84. S. Mollenkopf and G.M. Rebeiz, "A 22 GHz MIC active receiver/radiometer," *IEEE MTT-S Int. Microwave Symp.*, pp. 1347-1350, San Diego, CA, June 1994.
85. H. Zirath, C.-Y. Chi, N. Rorsman, and G.M. Rebeiz, "A 40 GHz integrated quasi optical slot HFET mixer," *IEEE MTT-S Int. Microwave Symp.*, pp. 1451-1454, San Diego, CA, June 1994.
86. D.F. Filipovic, R.F. Bradley, and G.M. Rebeiz, "A planar broadband MIC balanced varactor doubler using a novel grounded-cpw to slotline transition," *IEEE MTT-S Int. Microwave Symp.*, pp. 1633-1636, San Diego, CA, June 1994.
87. G.M. Rebeiz, "Millimeter-wave receivers for automotive applications" **Invited paper**, *IEEE MTT-S Int. Symp. Workshop on Automotive Electronics*, San Diego, CA, June 1994.
88. B.K. Kormanyos and G.M. Rebeiz, "20 GHz power combining slot-oscillator array," *IEEE AP-S Symp.*, pp. 840-843, Seattle, WA, July 1994.
89. C.-Y. Chi and G.M. Rebeiz, "Novel low-loss interdigitated filters for millimeter-wave applications," *24th European Microwave Conference*, pp. 1357-1359, Cannes, France, Sept. 1994.
90. G.M. Rebeiz, "Low-cost millimeter-wave quasi-optical automotive sensors and landing systems," **Invited paper**, *19th Int. Conf. Infrared Millimeter Waves*, pp. 429-430, Sendai, Japan, Oct. 1994.
91. G. Gauthier, D.F. Filipovic, S. Raman and G.M. Rebeiz, "Progress report on off-axis imaging properties of extended-hemispherical lenses: Experiment at 250 GHz," *Sixth Int. Conf. on Space Terahertz Technology*, p. 407, Pasadena, CA, March 1995.
92. G.M. Rebeiz, "Integrated millimeter-wave antennas/receivers and novel high-efficiency micromachined antennas structures," **Invited paper**, *9th IEE Int. Conf. on Antennas and Propagation*, Eindhoven, Holland, April 1995.
93. G.M. Rebeiz, "Micromachined microwaves and millimeter-waves," **Invited paper**, *9<sup>eme</sup> Journees Nationales Microondes*, Paris, France, April 1995.
94. T.P. Budka and G.M. Rebeiz, "A microwave circuit electric field imager," *IEEE MTT-S Int. Microwave Symp.*, pp. 1139-1142, Orlando, FL, May 1995. **(Best Student Paper Award.)**

95. T.P. Budka, E.M. Tentzeris, S.D. Waclawik, N.I. Dib, L.P. Katehi and G.M. Rebeiz, "An experimental and theoretical comparison of the electric fields above a coupled line bandpass filter," *IEEE MTT-S Int. Microwave Symp.*, pp. 1487-1490, Orlando, FL, May 1995.
96. C-Y. Chi and G.M. Rebeiz, "A low-loss 20 GHz micromachined bandpass filter," *IEEE MTT-S Int. Microwave Symp.*, pp. 1531-1534, Orlando, FL, May 1995.
97. S.V. Robertson, L.P. Katehi and G.M. Rebeiz, "Micromachined self-packaged W-band bandpass filters," *IEEE MTT-S Int. Microwave Symp.*, pp. 1543-1546, Orlando, FL, May 1995.
98. S. Raman and G.M. Rebeiz, "94 GHz slot-ring antennas for monopulse applications," *IEEE AP-S Symp.*, pp. 722-725, New Port Beach, CA, June 1995. **(Best Student Paper Award.)**
99. S. Raman, T.M. Weller, L.P. Katehi and G.M. Rebeiz, "A double-folded slot antenna at 94 GHz," *IEEE AP-S Symp.*, pp. 710-713, New Port Beach, CA, June 1995.
100. G.M. Rebeiz, "Low-cost millimeter-wave front-end technology," **Invited paper**, *Workshop on Millimeter-Wave Technology and Applications*, European-Space Agency, The Netherlands, Dec. 1995.
101. G.M. Rebeiz and L.P. Katehi, "Micromachined microwaves and millimeter-waves at the University of Michigan," **Invited paper**, *URSI National Radio Science Meeting*, Boulder, CO, Jan. 1996.
102. D.F. Filipovic and G.M. Rebeiz, "Off-axis properties of dielectric lens antennas," *Sixth Int. Conf. on Space Terahertz Technology*, p. 228, Charlottesville, VA, Mar. 1996.
103. S. Raman and G.M. Rebeiz, "Integrated millimeter-wave polarimetric radar receivers," *IEEE National Radar Conference*, Ann Arbor, MI, pp. 232-237, May 1996.
104. G.M. Rebeiz and R.M. Weikle, "Advances in quasi-optical mm-wave solid-state electronics," **Invited Paper**, *WOCSDICE Workshop*, Vilnius, Lithuania, May 1996.
105. T.P. Budka, S.D. Waclawik and G.M. Rebeiz, "Near-electric field mapping above X-band MMICs using modulated scattering," *IEEE MTT-S Int. Microwave Symp.*, pp. 1703-1706, June 1996.
106. T.J. Ellis and G.M. Rebeiz, "MM-wave tapered slot antennas on micromachined photonic bandgap dielectrics," *IEEE MTT-S Int. Microwave Symp.*, pp. 1157-1160, June 1996. **(Student Paper Award.)**
107. S. Raman and G.M. Rebeiz, "A 94 GHz uniplanar subharmonic mixer," *IEEE MTT-S Int. Microwave Symp.*, pp. 385-388, June 1996. **(Best Student Paper Award.)**
108. L.P. Katehi and G.M. Rebeiz, "Novel micromachining approaches to MMIC's using low parasitic high-performance transmission media and environments," **Invited paper**, *IEEE MTT-S Int. Microwave Symp.*, pp. 1145-1148, June 1996.
109. S.V. Robertson, L.P. Katehi and G.M. Rebeiz, "A 20-40 GHz micromachined directional coupler," *IEEE MTT-S Int. Microwave Symp.*, pp. 797-800, June 1996.
110. A. Courtney, G.P. Gauthier and G.M. Rebeiz, "Microstrip antennas on localized micromachined dielectric substrates," *IEEE AP-S Symp.*, pp. 1246-1249, July 1996.
111. S. Barker and G.M. Rebeiz, "Planar front-ends with polarization agile IF systems," *IE E AP-S Symp.*, Epp. 1532-1535, July 1996.
112. T.J. Ellis and G.M. Rebeiz, "Improvements in tapered slot antennas on thick dielectric substrates using micromachining techniques," *IEEE AP-S Symp.*, pp. 992-995, July 1996.
113. G.M. Rebeiz and L.P. Katehi, "Micromachined microwaves and millimeter-waves at the University of Michigan," **Invited Paper**, *XXV General Assembly of URSI*, Aug.- Sept. 1996.
114. L.P. Katehi and G.M. Rebeiz, "Micromachined Circuits for high-frequency applications," **Invited Paper**, *XXV General Assembly of URSI*, Aug.-Sept. 1996.
115. G.M. Rebeiz, S. Raman, T. Ellis, G. Gauthier and S. Barker, "High-performance mm-wave sensors using uniplanar and micromachined technologies," **Invited Paper**, *WRI Int. Symp.*, NY, Sept. 1996.

116. T.J. Ellis and G.M. Rebeiz, "Integration of tapered slot antennas on MMIC substrates through dielectric micromachining," *Antenna Applications Symposium*, Illinois, pp. 96-110, Sept. 1996.
117. G.M. Rebeiz, S. Raman, G.P. Gauthier and T.J. Ellis, "Advances in millimeter-wave antenna and sensor front-end technologies," **Distinguished (Invited) Speaker**, *Int. Symp. Antennas and Propagation (ISAP)*, Chiba, Japan, pp. 1221-1244, Sept. 1996.
118. G.M. Rebeiz, "Micromachined antennas and receivers for low-loss microwave and millimeter-wave applications," **Invited Paper**, *Microwaves and RF*, London, Oct. 1996.
119. G.M. Rebeiz, "Applications of micromachining technology to microwave and millimeter-wave systems," **Distinguished (Invited) Speaker**, *Int. Conf. on Antenna and Propagation (ICAP)*, Edinburgh, Scotland, April 1997.
120. G.M. Rebeiz, "Micromachining for microwave and millimeter-wave systems," **Distinguished (Invited) Speaker**, *Benjamin Franklin Symposium*, Philadelphia, PA, May 1997.
121. T.J. Ellis and G.M. Rebeiz, "A planar circuit design for high-order subharmonic mixers," *IEEE MTT-S Int. Microwave Symp.*, Denver, CO, pp. 1039-1042, June 1997.
122. N.S. Barker and G.M. Rebeiz, "An octave bandwidth monopulse process," *IEEE MTT-S Int. Microwave Symp.*, Denver, CO, pp. 405-408, June 1997. **(Student Paper Award.)**
123. S. Raman and G.M. Rebeiz, "Single and dual-polarized slot-ring subharmonic receivers," *IEEE MTT-S Int. Microwave Symp.*, Denver, CO, pp. 565-568, June 1997.
124. G.M. Rebeiz, "Applications of micromachining technology to microwave and millimeter-wave systems," **Invited Paper**, *20th ESA/ESTEC Antenna Workshop*, Noordwijk, Holland, June 1997.
125. G. Gauthier, N. Dib, L.P. Katehi and G.M. Rebeiz, "77 GHz dual-polarized microstrip antennas on thin dielectric membranes," *IEEE AP-S*, Montreal, Canada, pp. 1874-1877, June 1997.
126. J.B. Muldavin, T.J. Ellis and G.M. Rebeiz, "Tapered-slot antennas on thick dielectric substrates using micromachining techniques," *IEEE AP-S*, Montreal, Canada, pp. 1110-1113, June 1997.
127. S. Raman, G.P. Gauthier and G.M. Rebeiz, "W-band on-wafer measurements of uniplanar slot-type antennas," *IEEE AP-S*, Montreal, Canada, pp. 554-557, June 1997.
128. J.D. Shumpert, T.J. Ellis, G.M. Rebeiz and L.P.B. Katehi, "Microwave and millimeter-wave propagation in photonic band-gap structures," *URSI*, Montreal, Canada, p. 678, June 1997.
129. A.R. Brown and G.M. Rebeiz, "Tunable micromachined interdigital filters," *Wireless Communications Conference*, Boulder, CO, pp. 193-197, August 1997.
130. T.J. Ellis, R.L. Robertson, L.P.B. Katehi, G.M. Rebeiz, "A dual-polarized planar antenna for radar and communication systems," *ARL Symposium*, College Park, MD, February 1998.
131. G.P. Gauthier, L.P. Katehi and G.M. Rebeiz, "A 94 GHz aperture-coupled micromachined microstrip antenna." *1998 IEEE-MTT Int. Microwave Symp.*, Baltimore, MD, pp. 993-996, June 1998. **(Best Student Paper Award.)**
132. G.P. Gauthier, L.P. Katehi and G.M. Rebeiz, "W-band finite ground coplanar waveguide (FGCPW) to microstrip line transition," *1998 IEEE-MTT Int. Microwave Symp.*, Baltimore, MD, pp. 107-109, June 1998.
133. P. Blondy, A.R. Brown, D. Cros, G.M. Rebeiz, "Low loss micromachined elliptic filters for millimeter wave telecommunication systems," *1998 IEEE MTT-S Int. Microwave Symp.*, Baltimore, MD, pp. 1181-1184, June 1998.
134. S. Raman, N.S. Barker, and G.M. Rebeiz, "A W-band dielectric-lens-based integrated monopulse radar receiver," *1998 IEEE MTT-S Int. Microwave Symp.*, Baltimore, MD, pp. 517-520, June 1998.
135. T.J. Ellis and G.M. Rebeiz, "A novel feed-forward mixer for wireless communications," *1998 IEEE MTT-S Int. Microwave Symp.*, Baltimore, MD, pp. 1423-1426, June 1998.

136. L.P.B. Katehi, G.M. Rebeiz and C.T.-C Nguyen, "MEMS and Si-micromachined components for low-power, high-frequency communications systems," **Invited Paper**, *1998 IEEE MTT-S Int. Microwave Symp.*, Baltimore, MD, pp. 1569-1571, June 1998.
137. G.M. Rebeiz and L.P. Katehi, "Silicon micromachining for high frequency application," *1998 IEEE MTT-S Int. Microwave Symp. Workshop on High Frequency Silicon Micromachining and Multi-Chip Integration*, Baltimore, MD, June 1998.
138. L.P. Katehi and G.M. Rebeiz, "Micromachining techniques for high-frequency circuits," **Invited paper**, *1998 IEEE AP/URSI Symposium*, Atlanta, GA, June 1998.
139. L.P. Katehi and G.M. Rebeiz, "Micromachined low-loss transmission-lines, transitions and high-efficiency antennas for millimeter-wave phased-array applications," *ANTEM '98 Conference*, Ottawa, Canada, p. 449, Aug. 1998.
140. G.M. Rebeiz, "Micromachining for microwave and millimeter-wave systems," **Distinguished Speaker**, *ANTEM '98 Conference*, Ottawa, Canada, pp. 11-14, Aug. 1998.
141. N.S. Barker and G.M. Rebeiz, "Distributed MEMS true-time delay phase shifters," *22nd Annual Antenna Applications Symp.*, IL, Sept. 1998.
142. G.M. Rebeiz and L.P. Katehi, "A millimeter-wave phased array using the power cube approach," *22nd Annual Antenna Applications Symp.*, IL, Sept. 1998.
143. K.J. Herrick, J.-G. Yook, S.V. Robertson, G.M. Rebeiz and L.P. Katehi, "W-band micromachined vertical interconnection for three-dimensional microwave ICs", *European Microwave Conference*, Oct. 1998.
144. N.S. Barker and G.M. Rebeiz, "Novel wideband distributed MEMS phase shifters and high isolation switches," *European Microwave Conference*, pp. 730-734 (vol. 2), Amsterdam, Oct. 1998.
145. G.M. Rebeiz, "Advances in microwave/mm-wave high-Q components, microstrip and PBG antennas, and switches/phased-arrays using micromachining techniques," **Invited Paper**, *European Microwave Conference*, Oct. 1998.
146. T. Ellis, R.L. Robertson, L.P. Katehi and G.M. Rebeiz, "A dual polarized antenna for radar and communication systems," *European Microwave Conference*, pp. 12-18 (vol. 2), Amsterdam, Oct. 1998.
147. L.D. DiDominico and G.M. Rebeiz, "Mobile digital communications using phase conjugating arrays," *Proc. of the IEEE Military Communications Conf.*, pp. 318-322, Boston, MA, Oct., 1998.
148. G.M. Rebeiz, "Novel technologies for the microwave and mm-wave bands," **Invited Paper**, *Asia-Pacific Microwave Conf.*, Workshop WS1, Japan, Dec. 1998.
149. G.M. Rebeiz, "Advances in microwave/millimeter-wave high-Q components, filters, antennas and switches using micromachining techniques", **Invited Paper**, *3rd RIEC Int. Symp.*, Japan, Dec. 1998.
150. A.R. Brown and G.M. Rebeiz, "A high-performance integrated K-band diplexer," *1999 IEEE-MTT Int. Microwave Symp.*, pp. 1231-1234, June 1999.
151. J.B. Muldavin and G.M. Rebeiz, "30 GHz tuned MEMS switches," *1999 IEEE-MTT Int. Microwave Symp.*, pp. 1511-1514, CA, June 1999.
152. T.J. Ellis, J.-P. Raskin, L.P. Katehi and G.M. Rebeiz, "A wideband CPW-to-microstrip transition for millimeter-wave packaging," *1999 IEEE-MTT Int. Microwave Symp.*, pp. 629-632, June 1999.
153. G.P. Gauthier, J.-P. Raskin and G.M. Rebeiz, "A 140-170 GHz low-noise uniplanar subharmonic Schottky-receiver," *1999 IEEE-MTT Int. Microwave Symp.*, June 1999.
154. N.S. Barker and G.M. Rebeiz, "Optimization of distributed MEMS phase shifters," *1999 IEEE-MTT Int. Microwave Symp.*, pp. 299-302, June 1999. **(Best Student Paper Award.)**

155. A.R. Brown and G.M. Rebeiz, "Micromachined high-Q resonators, low loss diplexers and low phase noise oscillators for a 28 GHz front-end," **Invited Paper**, *1999 IEEE Radio and Wireless Conference*, pp. 247-256, August 1999.
156. P. Blondy, A.R. Brown, D. Cros, G.M. Rebeiz, "Filtres micro usinés sur membranes pour systemes de telecommunications millimétriques," *Journées Nationales MicroOndes, Arcachon, France*, May 1999.
157. W. H. Weedon, W.J. Payne and G.M. Rebeiz, "MEMS-switched reconfigurable multi-band antenna: Design and modeling," *23rd Annual Antenna Applications Symp.*, IL, Sept. 1999.
158. J.B. Muldavin, N.S. Barker and G.M. Rebeiz, "Electromagnetic and mechanical modeling of microwave/MM-wave MEMS switches," *23rd Annual Antenna Applications Symp.*, IL, Sept. 1999.
159. G.M. Rebeiz, "MEMS switches, varactors and low loss phase shifters," **Invited Paper**, *EuMC Workshop on Micromachining*, Munich, Germany, Oct. 1999.
160. A.R. Brown and G.M. Rebeiz, "A Ka-band micromachined low phase-noise oscillator," *European Microwave Conference*, Vol. 2, pp. 407-410, Oct, 1999.
161. J. B. Muldavin, G.L. Tan, N.S. Barker, and G.M. Rebeiz, "Accurate electromagnetic and mechanical modeling of CPW MEMS switches," *Workshop on Affordability and Cost Reduction for Radar Systems*, Redstone Arsenal, AL, April 2000.
162. J.S. Hayden and G. M. Rebeiz, "Wideband low cost TTD phase shifters for low cost T/R modules", *Workshop on Affordability and Cost Reduction for Radar Systems*, Redstone Arsenal, AL, April 2000.
163. A.R. Brown and G.M. Rebeiz, "Low phase noise 10 and 30 GHz filters and oscillators," *Workshop on Affordability and Cost Reduction for Radar Systems*, Redstone Arsenal, AL, April 2000.
164. G.M. Rebeiz, "MEMS phase shifters for microwave and millimeter-wave applications," **Invited paper**, *Millennium Conf. on Antennas and Propagation (AP2000)*, Davos, Switzerland, April 2000.
165. J.B. Muldavin and G.M. Rebeiz, "X-band tunable MEMS resonators," *Second Topical Meeting on Silicon Monolithic Integrated Circuits in RF Systems*, pp. 116-18, Garmisch, Germany, April 2000.
166. J. Rizk, G.L. Tan, J.B. Muldavin and G.M. Rebeiz, "High-isolation W-band shunt MEMS switches," *10<sup>th</sup> Symp. on Space Terahertz Technology*, Ann Arbor, MI, May 2000.
167. J.B. Muldavin and G.M. Rebeiz, "High-isolation inductively-tuned X-band MEMS shunt switches," *IEEE-MTT Int. Microwave Symp.*, pp. 169-172, June 2000.
168. G.-L. Tan and G.M. Rebeiz, "High-power millimeter-wave planar doublers," *IEEE-MTT Int. Microwave Symp.*, pp. 1601-1604, June 2000.
169. L.D. DiDomenico and G.M. Rebeiz, "Digital communications using self-phased arrays," *IEEE-MTT Int. Microwave Symp.*, pp. 1705-1708, June 2000.
170. J.S. Hayden and G.M. Rebeiz, "One and two-bit low-loss cascable MEMS distributed X-band phase shifters," *IEEE-MTT Int. Microwave Symp.*, pp. 161-164, June 2000.
171. J.P. Raskin, A.R. Brown, B.T. Khuri-Yakub and G.M. Rebeiz, "Novel parametric-effect MEMS amplifiers/transducers," *Transducers 2000*, Hilton Head, June 2000.
172. G.M. Rebeiz, "Advances in RF MEMS for low power applications," **Invited Paper**, *IEEE Antenna & Propagat. Symp.*, July 2000.
173. G.M. Rebeiz, "RF MEMS: A novel technology for high-performance systems," **Plenary Talk**, *European Microwave Conf.*, Oct. 2000.
174. G.L. Tan and G.M. Rebeiz, "Microwave absorptive MEMS switches," *European Microwave Conf.*, pp. 24-27, Oct. 2000.
175. J. Rizk, J.B. Muldavin, G.L. Tan and G.M. Rebeiz, "Design of X-band MEMS microstrip shunt switches," *European Microwave Conf.*, pp. 20-23, Oct. 2000.

176. J.B. Muldavin and G.M. Rebeiz, "Novel series and shunt MEMS switch geometries for X-band applications," *European Microwave Conf.*, pp. 261-264, Oct. 2000.
177. G.M. Rebeiz, "Comparison of MEMS switches with PIN diodes and FETs," **Plenary Talk**, *GaAs IC Symp.*, Nov. 2000.
178. J.S. Hayden and G.M. Rebeiz, "One and two-bit MEMS distributed W-band phase shifters," *European Microwave Conf.*, pp. 384-287, Oct. 2000.

#### Conference Papers (2001):

179. G. M. Rebeiz, **Invited Talk**, *GOMAC*, San Antonio, Texas, April 2001.
180. J. B. Muldavin and G. M. Rebeiz, "Nonlinear electro-mechanical modeling of MEMS switches," *IEEE Int. Microwave Theory and Techniques Symp.*, pp. 2119-2122, May 2001.
181. J. S. Hayden, A. Malczewski, J. Kleber, C. L. Goldsmith and G. M. Rebeiz, "2 and 4-bit DC-18 GHz microstrip MEMS distributed phase shifters," *IEEE Int. Microwave Theory and Techniques Symp.*, pp. 219-222, May 2001.
182. G. L. Tan and G. M. Rebeiz, "DC-26 GHz MEMS series-shunt absorptive switches," *IEEE Int. Microwave Theory and Techniques Symp.*, pp. 325-328, May 2001.
183. K. Nimmagada and G. M. Rebeiz, "A 1.9 GHz double-balanced subharmonic mixer for direct conversion receivers," *IEEE Int. RFIC Symp.*, pp. 253-256, May 2001.
184. G.-L. Tan, G. M. Rebeiz, et al., "Development of very low loss 2-bit and 4-bit monolithic X-band MEMS phase shifters," **Invited Paper**, *IEEE Antennas and Propagation Symp.*, July 2001.
185. L. Dussopt and G. M. Rebeiz, "A very low phase noise SiGe VCO at X-band frequencies," *IEEE Topical Meeting on Silicon Monolithic Integrated Circuits in RF Systems*, Sept. 2001. (Meeting cancelled due to Sept. 11, 2001).
186. J. B. Muldavin and G. M. Rebeiz, "Novel DC-contact MEMS shunt switches and high-isolation series/shunt designs," *European Microwave Conf.*, pp. 275-277, London, Sept. 2001.
187. G. M. Rebeiz, "Phase noise analysis of MEMS-based phase shifters," *European Microwave Conf.*, pp. 1-4, London, Sept. 2001.
188. B. Schoenlinner, X. Wu, G. V. Eleftheriades and G. M. Rebeiz, "Spherical-lens antennas for 77 GHz automotive radars," *European Microwave Conf.*, pp. 317-320, London, Sept. 2001.
189. G. M. Rebeiz, "Advances in RF MEMS Technology," **Invited Paper**, IEICE Meeting, Tokyo, Japan, Sept. 2001.

#### Conference Papers (2002):

190. M. Straayer, J. Cabanillas, and G. M. Rebeiz, "A very low-noise transformer-based 1.7 GHz CMOS VCO," *IEEE Solid State Circuits Conference*, San Francisco, CA, Feb. 2002.
191. G. L. Tan, G. M. Rebeiz, R. Mihailovich, J. DeNatale, B. Taft, N. Karabudak, and B. Kornrumpf, "Low loss RF MEMS phase shifters for satellite communication systems," *AIAA*, Montreal, Canada, May 2002.
192. J. Rizk, E. Chaiban and G. M. Rebeiz, "Steady state thermal analysis and high-power reliability considerations of RF MEMS capacitive switches," *IEEE Int. Microwave Theory and Techniques Symp.*, pp. 239-242, Seattle, Washington, June 2002.

193. J. S. Hayden and G. M. Rebeiz, "A low-loss Ka-band distributed MEMS 2-bit phase shifter using metal-air-metal capacitors," *IEEE Int. Microwave Theory and Techniques Symp.*, pp. 337-340, Seattle, Washington, June 2002.
194. L. Dussopt, D. Guillois and G. M. Rebeiz, "A low phase noise silicon 9 GHz VCO and an 18 GHz push-push oscillator," *IEEE Int. Microwave Theory and Techniques Symp.*, pp. 695-698, Seattle, Washington, June 2002.
195. L. Dussopt and G. M. Rebeiz, "High-Q millimeter-wave MEMS varactors: extended tuning range and discrete-position designs," *IEEE Int. Microwave Theory and Techniques Symp.*, pp. 1205-1208, Seattle, Washington, June 2002.
196. B. Schoenlinner and G. M. Rebeiz, "Compact multibeam imaging system for automotive radars," *IEEE Int. Microwave Theory and Techniques Symp.*, pp. 1373-1376, Seattle, Washington, June 2002.
197. J. Cabanillas, L. Dussopt, J. M. Lopez-Villegas, and G. M. Rebeiz, "A 900 MHz low phase noise CMOS quadrature oscillator," *IEEE RFIC (Radio Frequency Integrated Circuits) Symp.*, pp. 63-66, Seattle, Washington, June 2002. **Best paper award (second place).**
198. G. L. Tan, R. E. Mihailovich, J. B. Hacker, J. F. DeNatale, and G. M. Rebeiz, "a very-low-loss 2-bit X-band RF MEMS phase shifter," *IEEE Int. Microwave Theory and Techniques Symp.*, pp. 333-335, Seattle, Washington, June 2002.
199. J. Rizk and G. M. Rebeiz, "Digital-type RF MEMS switched capacitors," *IEEE Int. Microwave Theory and Techniques Symp.*, pp. 1217-1220, Seattle, Washington, June 2002.
200. A. Abbaspour-Tamijani, J. Rizk, and G. M. Rebeiz, "Integration of filters and microstrip antennas," *IEEE Antennas and Propagation Symposium*, San Antonio, TX, June 2002.
201. A. Abbaspour-Tamijani, L. Dussopt, and G. M. Rebeiz, "A millimeter-wave tunable filter using MEMS varactors," *European Microwave Conf.*, pp. 813-815, Milan, Italy, October 2002.

### Conference Papers (2003):

202. G. M. Rebeiz, "The use of RF MEMS in defense applications," **Kilby Plenary Speaker**, GOMAC Conference, Ft. Lauderdale, Florida, March 2003.
203. T. Vaha-Heikkila, J. Rizk, J. Varis, J. Tuovinen, and G. M. Rebeiz, "A 6-24 GHz tunable MEMS impedance matching network," *MM-Wave Workshop, European Space Agency*, pp. 491-496, Espoo, Finland, May 2003.
204. L. Dussopt and G. M. Rebeiz, "Nonlinear distortions in RF-MEMS switches, varactors and tunable networks at millimeter-wave frequencies," *MM-Wave Workshop, European Space Agency*, pp. 231-236, Espoo, Finland, May 2003.
205. A. Abbaspour-Tamijani, L. Dussopt, and G. M. Rebeiz, "A high performance MEMS miniature tunable bandpass filter," *IEEE Int. Microwave Symposium*, pp. 1785-1788, Philadelphia, PA, June 2003.
206. G. L. Tan, R. E. Mihailovich, J. B. Hacker, J. F. DeNatale, and G. M. Rebeiz, "A 4-bit miniature X-band MEMS phase shifter using switched-LC networks," *IEEE Int. Microwave Symposium*, pp. 1477-1480, Philadelphia, PA, June 2003.
207. J. B. Rizk and G. M. Rebeiz, "W-band microstrip RF-MEMS switches and phase shifters," *IEEE Int. Microwave Symposium*, pp. 1485-1488, Philadelphia, PA, June 2003.

208. A. Abbaspour-Tamijani, B. Schoenlinner, K. Sarabandi, and G. M. Rebeiz, "A new class of bandpass frequency selective structures," *IEEE Antennas and Propagation Symposium*, pp. 817-820, Columbus, OH, June 2003.
209. G. M. Rebeiz, "RF MEMS switches: status of the technology," **Invited Paper**, *Transducers*, Boston, MA, June 2003.
210. K. Entesari, T. Vaha-Heikkila, and G. M. Rebeiz, "Miniaturized differential filters for C- and Ku-band applications," *European Microwave Conference*, Munich, Germany, October 2003.
211. T. M. Hancock, I. Gresham, and G. M. Rebeiz, "Compact low phase-noise 23 GHz VCO fabricated in a commercial SiGe bipolar process," *European Microwave Conference*, Munich, Germany, October 2003.
212. J.-J. Hung, L. Dussopt, and G. M. Rebeiz, "A low-loss distributed 2-bit W-band MEMS phase shifter," *European Microwave Conference*, Munich, Germany, October 2003.
213. B. Schoenlinner, J. P. Ebling, L. C. Kempel, and G. M. Rebeiz, "Compact multibeam dual-frequency (24 and 77 GHz) imaging antenna for automotive radars," *European Microwave Conference*, Munich, Germany, October 2003. **Best paper award (second place)**.
214. B. Pillans, G. M. Rebeiz, and J. B. Lee, "Advances in RF MEMS technology," *IEEE GaAs IC Conference*, San Diego, CA, November 2003.
215. G. M. Rebeiz, "RF MEMS for defense and commercial applications," **Plenary Speaker**, *Canadian MEMS Workshop*, Ottawa, Canada, August 2003.

#### **Conference Papers (2004):**

216. N. Nishijima, J.-J. Hung, and G. M. Rebeiz, "Parallel-contact metal-contact RF MEMS switches for high power applications," *IEEE MEMS Conference*, Maastricht, Netherlands, Jan. 2004.
- 217-220. IMS 2004 –RF MEMS Switch, Tunable 30 GHz FSS (Student paper award, 3<sup>rd</sup> place), RF MEMS Reconfigurable Networks (x2).
- 221-223. RFIC 2004 – 0.1 ns SiGe Switches, 9-18 GHz SiGe doublers, 6 GHz quadrature oscillator
224. APS – Antenna paper
- 225-226. EMC 2004 – DC-50 GHz Packaging, V-Band Matching Network.