OF1-35: Design Procedures for Millimetre Wave MMIC Voltage Controlled Oscillators
P.J. Garner, M.J. Howes, C.M. Snowden, Dept. of EEE, Univ. of Leeds, Leeds, UK

OF1-36: A Flip-Chip High Efficiency X-Band HPA
P. Cameron, W. Pan, R. Nicklaus, Hughes Aircraft Co., Solid State Micro. Lab., Fullerton, CA, T. Cisco, Hughes Aircraft Co., Radar Systems, El Segundo, CA

OF1-37: First Demonstration of a 0.5W, 2 to 8 GHz MMIC HBT Distributed Power Amplifier Based on a Large Signal Design Approach
J.P. Viaud, M. Lajugie, Thomson-CSF, Massy, France, R. Quere, IRCOM, Limoges, France, J. Obregon

OF1-38: Robust Cascode HBTs for Efficient High Power Microwave Applications
M. Salib, B. Bayraktaroglu, Northrop Grumman Corp., Baltimore, MD

OF1-39: Transfer Characteristic of IM3 Relative Phase for a GaAs FET Amplifier
N. Suematus, T. Shigematsu, Y. Iyama, O. Ishida, Info. Tech. R&D Ctr., Mitsubishi Elec. Corp., Kanagawa, Japan

OF1-40: Pulsed Internal-Node Waveform Study of Flip-Chip MMIC Power Amplifiers
J.W. Bao, C.J. Wei, J.C.M. Hwang, Lehigh Univ., Bethlehem, PA, R.F. Wang, C.P. Wen, Hughes Aircraft Co., Torrance, CA

OF1-41: Measurement of Dynamic Load Lines of Power Heterojunction Bipolar Transistor
S. Ohara, Y. Nakasha, T. Iwai, K. Joshin, Fujitsu Labs. Ltd., Atsugi, Japan

OF1-42: A Theory for Distributed Amplifiers Exploiting Growing Wave
M. Farina, T. Rozzi, Dip. Elett., Univ. Ancona, Ancona, Italy

OF1-43: A Low Noise Direct Detector at Submillimeter Wavelength Using SIS Junction
A. Karpov, J. Blondel, M. Voss, K.H. Gundlach, Inst. de Radioastronomie Millimetreque, St. Martin d'Heres, France

OF1-45: A New Hybrid Technology for Millimeter-Wave Integrated Circuits
A.V. Chenakin, A.E. Martynyuk, Mexico Nat'l. Univ., Mexico, V.I. Skachko, Kiev Polytechnic Inst., Kiev, Ukraine

OF1-46: Air Bridge Based Planar Hybrid Technology for Microwave and Millimeter-Wave Applications
E. Wasige, G. Kompa, F. van Raay, FG HF-Technik, I.W. Rangelow, W. Scholz, F. Shi, R. Kassing, AG Tech. Physik, R. Meyer, Tech. Elek., Univ. of Kassel, Kassel, Germany

OF1-47: Low Power, Tunable Active Inductor and Its Applications to Monolithic VCO and BPF
J. Ko, K. Lee, Dept. of EE, KAIST, Taejon, Korea

OF1-48: A Low Loss, 5.5 GHz–20 GHz Monolithic Balun
M. Tutt, H. Q. Tserng, A. Ketterson, Sys. Comp. Lab., Texas Instr., Dallas, TX

OF1-49: InP MMICs for V-Band FMCW Radar
K. Sasaki, J. Utsu, K. Matsugatani, K. Hoshino, T. Taguchi, Y. Ueno, Research Labs., DENSO Corp., Aichi, Japan

OF1-50: MMIC Tunable Bandpass Filter Using a Ring Resonator with Loss Compensation
D.K. Paul, M. Michael, K.Konstantinou, Dept. of EEE, UMIST, Manchester, UK

OF1-51: CMOS Layout and Bias Optimization for RF IC Design Applications
C.S. Kim, H.K. Yu, H. Cho, K.S. Nam, Semiconductor Tech. Div., Elec. & Telecomm. Research Inst., Taejon, Korea, S. Lee, Dept. of EE, Hankuk Univ. of Foreign Studies, Kyungki-do, Korea

OF1-52: Power Performance of Thermally-Shunted Heterojunction Bipolar Transistors
T. Jenkins, C. Bozada, C. Cerny, G. DeSalvo, R. Dettmer, J. Ebel, J. Gillespie, C. Havasy, L. Kehias, K. Nakano, C. Pettiford, T. Quach, J. Sewell, D. Via, Wright-Patterson AFB, OH, R. Anholt, Gateway Modeling, Inc., Minneapolis, MN

OF1-53: The Development of Planar Schottky Diode Waveguide Mixers at Submillimeter Wavelengths
J.L. Hesler, T.W. Crowe, W.L. Bishop, R.M. Weikle, II, Dept. of EE, Univ. of Virginia, Charlottesville, VA, R.F. Bradley, S.-K. Pan, Nat'l Radio Astronomy Observatory, Charlottesville, VA

OF1-54: A High Power 270 GHz Frequency Tripler Featuring a Schottky Diode Parallel Pair
J. Thornton, C. M. Mann, Rutherford Appleton Lab., UK, P. de Maagt ESTEC, Noordwijk, The Netherlands

OF1-55: A mm-Wave Tapered Slot Antenna with Improved Radiation Pattern
S. Sugawara, Y. Maia, K. Adachi, K. Mori, General Elec. R&D Ctr., RICHO Co., Ltd., Natori, Japan, K. Mizuno, Tohoku Univ., Sendai, Japan

OF1-56: Power Generation of Millimeter-wave SiC Avalanche Transit Time Oscillator at High Temperature
C.C. Meng, G.Z. Liao, Dept. of EE, Nat'l. Chung-Hsing Univ., Taiwan, ROC

OF1-57: Millimeter-, Submillimeter-Wave InP Pretuned Oscillator
A.S. Kosov, V.A. Zotov, Space Research Inst., Russian Acad. of Sci., Moscow, Russia, V.M. Vald-Perlov, Scientific Research Inst., "Pulsar"

OF1-58: 30 GHz GaAs Monolithic Low Noise Amplifier-Antennas
L. Roy, Dept. of ECE, Univ. of Ottawa, Ottawa, Canada

OF1-59: A Low Cost W-Band Multi-Beam Doppler Radar for Automotive Applications
R.H. Rasshofer, E.M. Biebl, TU Munchen, Munchen, Germany

OF1-60: A Three-Dimensional Active Antenna for a High-Speed Wireless Communication
T. Seki, K. Uehara, K. Kagoshima, NTT Wireless Systems Labs., Kanagawa, Japan

OF1-61: Optimization of RF (MMIC)/Optical Subcarrier Multiplexed Communications System
S. Han, R. Gaudino, M. Shell, J. Laskar, D.J. Blumenthal, Georgia Inst. of Tech., Atlanta, GA

OF1-62: Printed Microwave Couplers with Thermal Isolation
R.A. Brown, P. Ensaf, T. Marshall, M. Piket-May, B. Popovic, Z. Popovic, Univ. of Colorado, Boulder, CO

OF1-63: Advantages of Flip Chip Technology in Millimeter-Wave Packaging
T. Krems, W.H. Haydl, H. Massler, J. Rudiger, IAF, Freiburg, Germany

OF1-64: Integral Microwave Circulators for Multi-Chip Module (MCM) Applications
V. Krishnamurthy, B. Whitmore, GE Corporate Research & Dev. Ctr., Schenectady, NY, K. Paik, Korea Advanced Inst. for Sci. & Tech., Taejon, Korea

OF1-65: Microwave Si Power Transistor with Monolithically Fabricated Impedance Matching Circuits
P. Li, C. Luck, E. Soshea, R. Perko, Corp. R&D Ctr., M/A-COM, Lowell, MA, T. Boles, P. Noonan, D. Haggis, Microelec. Div., M/A-COM, Burlington, MA

OF1-66: Surface Mount Microwave Package Characterization Technique
A. Pham, C. Chun, J. Laskar, School of ECE, Georgia Inst. of Tech., Atlanta, GA, B. Hutchison, Hewlett-Packard Co., Microwave Tech. Div., Santa Rosa, CA

OF1-67: Miniature LTCC Filters for Digital Receivers
A. Bailey, W. Foley, M. Hageman, C. Murray, K. Sparks, Northrop Grumman, Baltimore, MD, K. Zaki, Univ. of MD, EE Dept., College Park, MD

OF1-68: Characteristics of Finite Ground Coplanar Waveguide Lumped Elements
G.E. Ponchak, NASA Lewis Research Ctr., Cleveland, OH, L.P.B. Katehi, Univ. of Michigan, Ann Arbor, MI