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 AlGaIn/GaN HEMT-based VCOs, varactor-tuned with low phase noise. *Shealy, J.B.*, +, *MWCL Jun 01* 244-245  
 compact microstrip reson. cell, microwave transistor oscillator appl. *Quan Xue*, +, *MWCL May 01* 202-204  
 loop phase-locked grid oscillator array, PM, test bed implement. *Wenzhang Wang*, +, *MWCL Nov 01* 441-443

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- broadband feedforward amp. using photonic bandgap, IMT-2000 band, photonic bandgap, predistortion. *Jinho Yoon, +, MWCL Nov 01 450-452*
- compact microstrip reson. cell, microwave transistor oscillator appl. *Quan Xue, +, MWCL May 01 202-204*
- InP-based HEMT oscillator, 38 GHz, opt. injection locking tech. *Furuta, H., +, MWCL Jan 01 19-21*
- opt. fiber recirculating delay line, fiber grating array. *Zhang, W., +, MWCL May 01 217-219*
- PBG CPW, ground plane etching, FDTD. *Yun-Qi Fu, +, MWCL Nov 01 447-449*

**Microwave power amplifiers**

- broadband feedforward amp. using photonic bandgap, IMT-2000 band, photonic bandgap, predistortion. *Jinho Yoon, +, MWCL Nov 01 450-452*
- class-A power amps., efficiency improve. using defected ground struct. *Jong-Sik Lim, +, MWCL Apr 01 170-172*
- GaN HEMT, broadband push-pull microwave power amp. *Jong-Wook Lee, +, MWCL Sep 01 367-369*

**Microwave power amplifiers; cf. MMIC power amplifiers****Microwave power transistors**

- InP DHBT, lin. X-band operation. *Kehias, L., +, MWCL Sep 01 361-363*

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- HTSC waveguide, microwave propag. *Yassin, G., +, MWCL Oct 01 413-415*

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- mm-wave six-port reflectometer based on sampled-transm. line archit. *Ulker, S., +, MWCL Aug 01 340-342*

**Microwave switches**

- all-metal high-isolation series and series/shunt MEMS switches. *Muldavin, J.B., +, MWCL Sep 01 373-375*
- GaAs HEMT MMIC MEMS switched dual-path power amp. *Kim, M., +, MWCL Jul 01 285-286*
- inline capacitive and DC-contact MEMS shunt switches. *Muldavin, J.B., +, MWCL Aug 01 334-336*
- MEMS microswitch, reconfigurable microwave cct. *Duffy, S., +, MWCL Mar 01 106-108*
- MMIC true-time delay network, metal-to-metal contact RF MEMS switches. *Kim, M., +, MWCL Feb 01 56-58*
- reconfigurable RF ccts., MEM relay, surface micromachining. *Mihailovich, R.E., +, MWCL Feb 01 53-55*
- W-band high-isolation MEMS shunt switches, T-match/ $\pi$ -match design. *Rizk, J., +, MWCL Jan 01 10-12*

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- InP MMIC amp. for 180-205 GHz, radioastronomy and imaging-array receiver appls. *Archer, J.W., +, MWCL Jan 01 4-6*

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- coupled nonlin. oscillator arrays, difference pattern beam steering. *Health, T., MWCL Aug 01 343-345*
- injection-locked act. antenna arrays, heterostruct. interband tunnel diodes, model. *Kai Liu, +, MWCL Aug 01 331-333*

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- reduced surface-wave twin arc-slot antenna for MM-wave appls. *Hickey, M.A., +, MWCL Nov 01 459-461*

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- W-band high-isolation MEMS shunt switches, T-match/ $\pi$ -match design. *Rizk, J., +, MWCL Jan 01 10-12*
- wideband low-loss symmetric 3 dB power divider, design/perform. *Vassilev, V., +, MWCL Jan 01 30-32*

**Millimeter wave devices; cf. Millimeter wave amplifiers; Millimeter wave circuits; Millimeter wave frequency converters; Millimeter wave oscillators****Millimeter wave directional couplers**

- dual directional couplers, WR3 waveguide bands. *Erickson, N.R., MWCL May 01 205-207*

**Millimeter wave frequency converters**

- InP HEMT MMIC freq. doubler, 164 GHz, design and perform. *Radisic, V., +, MWCL Jun 01 241-243*

**Millimeter wave generation**

- Fabry-Perot slave laser two-mode injection-locking for 60-GHz mm-wave source. *Ogusu, M., +, MWCL Mar 01 101-103*

- fiber mm-wave radio, 60-GHz IF sig. transmiss., two-mode locked Fabry-Perot slave laser. *Ogusu, M., +, MWCL Jul 01 290-292*

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- planar platform with integrated microstrip & rect. waveguide. *Deslandes, D., +, MWCL Feb 01 68-70*
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- elec. field mapping syst. using opt. fiber-based electrooptic probe. *Yang, K., +, MWCL Apr 01 164-166*
- six-port reflectometer based on sampled-transm. line archit. *Ulker, S., +, MWCL Aug 01 340-342*

**Millimeter wave oscillators**

- coupled nonlin. oscillator arrays, difference pattern beam steering. *Health, T., MWCL Aug 01 343-345*
- InP act. device/varactor MMIC HEMT VCO, 80 GHz. *Radisic, V., +, MWCL Aug 01 325-327*
- InP-based HEMT oscillator, 38 GHz, opt. injection locking tech. *Furuta, H., +, MWCL Jan 01 19-21*

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- waveguide backshort, tunable, MM and sub-MM wavelengths. *Mottonen, V.S., +, MWCL Sep 01 370-372*

**MIM devices**

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- inverted overlay CPW lines, micromachined, airbridge connection, MMICs at mm-wave freqs. *Youngwoo Kwon, +, MWCL Feb 01 59-61*
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- RF mixed-sig. cct., Faraday cage isolation struct. *Wu, J.H., +, MWCL Oct 01 410-412*

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- 5~6 GHz-band GaAs MESFET-based cross-coupled differential oscillator MMICs with low phase-noise performance. *Yoon, S.-W., +, MWCL Dec 01 495-497*
- air-gap overlay struct. low-loss monolithic CPW filters. *Hong-Teuk Kim, +, MWCL Aug 01 328-330*
- MMIC true-time delay network, metal-to-metal contact RF MEMS switches. *Kim, M., +, MWCL Feb 01 56-58*
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- GaAs MESFET MMIC adaptive transversal preamplifier for high speed lightwave systs. *Freundorfer, A.P., +, MWCL Jul 01 293-295*
- InP MMIC amp. for 180-205 GHz, radioastronomy and imaging-array receiver appls. *Archer, J.W., +, MWCL Jan 01 4-6*
- ultra-short-pulse transmitter, MESFET impulse shaping cct. *Jeong Soo Lee, +, MWCL May 01 208-210*

**MMIC amplifiers; cf. MMIC power amplifiers****MMIC frequency converters**

- InP HEMT MMIC freq. doubler, 164 GHz, design and perform. *Radisic, V., +, MWCL Jun 01 241-243*

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- InP act. device/varactor MMIC HEMT VCO, 80 GHz. *Radisic, V., +, MWCL Aug 01 325-327*
- InP-based HEMT oscillator, 38 GHz, opt. injection locking tech. *Furuta, H., +, MWCL Jan 01 19-21*
- InP MMIC HBT/RTD oscillator for wireless appls., low power, wire bond inductor. *De Los Santos, H.J., +, MWCL May 01 193-195*
- Si bipolar VCO, 2.6-GHz wireless appls., phase noise degrad. *Samori, C., +, MWCL May 01 199-201*

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- GaAs MESFET MMIC phase shifter, varactor tuning. *Ellinger, F., +, MWCL Mar 01 104-105*

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- GaAs HEMT MMIC MEMS switched dual-path power amp. *Kim, M., +, MWCL Jul 01 285-286*
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- W-CDMA handset lin. variable gain/power amp., large dyn. range. *Hau, G., +, MWCL Jan 01 13-15*

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- leaky coaxial cable, adjustable coupling loss, mobile comms. in complex environs. *Jun Hong Wang, MWCL Aug 01 346-348*

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**Optical fibres**

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- high isolation planar filters using EM bandgap substrs. *Chappell, J.*, + , *MWCL Jun 01* 246-248
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- microstrip ring hybrid incorp. PBG cell based slow-wave struct. *Kam Man Shum*, + , *MWCL Jun 01* 258-260
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- microstrip line substr., S-param. meas. *Hinojosa, J.*, *MWCL Jul 01* 305-307
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- 5~6 GHz-band GaAs MESFET-based cross-coupled differential oscillator MMICs with low phase-noise performance. *Yoon, S.-W.*, + , *MWCL Dec 01* 495-497
- AlGaIn/GaN HEMT-based VCOs, varactor-tuned with low phase noise. *Shealy, J.B.*, + , *MWCL Jun 01* 244-245
- Fabry-Perot slave laser two-mode injection-locking for 60-GHz mm-wave source. *Ogusu, M.*, + , *MWCL Mar 01* 101-103
- fiber mm-wave radio, 60-GHz IF sig. transmiss., two-mode locked Fabry-Perot slave laser. *Ogusu, M.*, + , *MWCL Jul 01* 290-292
- injection-locked act. antenna arrays, heterostruct. interband tunnel diodes, model. *Kai Liu*, + , *MWCL Aug 01* 331-333
- InP-based HEMT oscillator, 38 GHz, opt. injection locking tech. *Furuta, H.*, + , *MWCL Jan 01* 19-21
- Si bipolar VCO, 2.6-GHz wireless appls., phase noise degrad. *Samori, C.*, + , *MWCL May 01* 199-201
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- CPW bends, ps time-domain charactn. using photocond. near-field probe. *Jongjoo Lee*, + , *MWCL Nov 01* 453-455
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- microstrip ring hybrid incorp. PBG cell based slow-wave struct. *Kam Man Shum*, + , *MWCL Jun 01* 258-260
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- split-mode resonator bandpass filter, PBG excitation. *Siou Teck Chew*, + , *MWCL Sep 01* 364-366
- Planar waveguides**
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- Power bipolar transistors**
- InP DHBT, lin. X-band operation. *Kehias, L.*, + , *MWCL Sep 01* 361-363
- Power combiners**
- circ. switched-beam phased array antenna, BFN, mobile satellite comms. *Karmakar, N.C.*, + , *MWCL Jan 01* 7-9
- loop phase-locked grid oscillator array, PM, test bed implement. *Wenzhang Wang*, + , *MWCL Nov 01* 441-443
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- circ. switched-beam phased array antenna, BFN, mobile satellite comms. *Karmakar, N.C.*, + , *MWCL Jan 01* 7-9
- MM-wave wideband low-loss symmetric 3 dB power divider, design/perform. *Vassilev, V.*, + , *MWCL Jan 01* 30-32
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- Printed circuit manufacture**
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- Probes**
- CPW bends, ps time-domain charactn. using photocond. near-field probe. *Jongjoo Lee*, + , *MWCL Nov 01* 453-455
- elec. field mapping syst. using opt. fiber-based electrooptic probe. *Yang, K.*, + , *MWCL Apr 01* 164-166
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- Pulse generators**
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- Pulse shaping circuits**
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