



AOSOC 2000



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Pre-Conference
Booklet

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2EB10 High Temperature Superconductive Microwave Filters for Space Applications

Jagdish P. Shivhare, P.P. Vaidya, S. Shrinivasulu, C.N. Lal, D. Balasubramanyam, A.D. Dave, O.P. Kaushik, Space Application Center, ISRO..

2EB11 Further Development of a Future ESM Channeliser with High Temperature Superconducting Filters

R.F. Jeffries, R.B. Greed, D.C. Voyce, BAE SYSTEMS, Marconi Research Centre; G. Nudd, MAv, Stanmore, Middlesex; R.G. Humphreys, S.W. Goodyear, DERA, Malvern, Worcester.

2EB12 A Ka-band microstrip band-pass filter using double-sided YBCO films

T. Yoshitake, W. Hattori, S. Murakami, S. Suzuki, NEC Corporation.

2EC Bi Crystal and Junction Physics

2EC01 Theory of Resonant Tunneling in NSmD Structures with 2D-electron transport in Sm layer.

Igor Devyatov, Denis Goncharov, Mikhail Kupriyanov, Moscow State University, Institute of Nuclear Physics.

2EC02 YBCO Josephson junctions on bicrystal sapphire substrates for submm wave applications

K. Y. Constantinian, G. A. Ovsyannikov, I. V. Borisenko, A. D. Mashtakov, Institute of Radio Engineering and Electronics RAS; N. G. Pogosyan, A. A. Hakhoumian, Institute of Radiophysics and Electronics Armenian NAS; J. Mygind, N. F. Pedersen, Department of Physics, Technical University of Denmark.

2EC04 Controlled adjustments of High-Tc Josephson Junctions by Doping their Electrodes

C.W. Schneider, G. Hammerl, R.R. Schulz, B. Goetz, A. Schmehl, H. Bielefeldt, J. Mannhart, University of Augsburg; H. Hilgenkamp, University of Twente.

2EC05 Superconducting current - phase dependence in Josephson YBCO bicrystal junctions on sapphire

I. V. Borisenko, G. A. Ovsyannikov, K. Y. Constantinian, A. D. Mashtakov, Institute of Radio Engineering and Electronics, Russian Academy of Sciences, Moscow .

2EC06 Effect of grain boundary angle on noise correlation in grain boundary junctions

P. Mikheenko, S. Corner, F. Wellhofer, R. Chakalov, M.S. Colclough, C.M. Muirhead, School of Physics, University of Birmingham, UK.

2EC07 Faceting of grain-boundary and spread of critical currents in thin-film YBCO bicrystal junctions.

P. Shadrin, Institute of Radioengineering and Electronics, Russian Academy of Sciences, Moscow, 103907, Russia; Y. Divin, IFF-IMF, Forschungszentrum Juelich GmbH, Juelich, D-52425, Germany.

2EC08 Spin injection into HTS materials and grain boundary junctions

P. Mikheenko, J. Ireland, M. Allsworth, C. Severac, F. Wellhofer, R. Chakalov, C.M. Muirhead, M.S. Colclough, School of Physics, University of Birmingham, UK.

2EC09 Capacitance as a probe of high angle grain boundary transport in oxide superconductors

Edward Tarte, Philip McBrien, James Ransley, Frank Kahlmann, Jan Evetts, IRC in Superconductivity, Madingley Road, Cambridge, CB3 0HE UK; Edward Romans, Colin Pegrum, Department of Physics and Applied Physics, Strathclyde University, Glasgow, G4 0NG, UK.

2EC10 Manifestation of interface bound states in current-phase relationship of HTS Josephson junctions

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2EC11 Inelastic Resonant Tunneling Effects in Conductivity and Microwave Response of YBaCuO Josephson Junctions formed on Bicrystal Boundary

Aleksandr Verevkin, Yale University; Andrej Lipatov, Denis Meledin, Vadim Ilyin, MSPU.

2EC12 Andreev reflection in layered structures: implications for high critical temperature grain boundary Josephson junctions

Alexander Golubov, University of Twente; Francesco Tafuri, INFN - Seconda Universita.

2EC13 Two-states complementary behavior of an all high Tc dc pi-SQUID

B. Chesca, R. Schulz, B. Goetz, C. Schneider, H. Hilgenkamp, J. Mannhart, University of Augsburg.

2EC14 YBa2Cu3O7 Bicrystal Grain Boundary Junction Microstructure

Jerome A. Luine, TRW; Alexander M. Klushin, Forschungszentrum Jülich GmbH, Institut für Schicht-und Ionentechnik; Vladimir Z. Kresin, Lawrence Berkeley Laboratory.

2ED Tunable Microwave Devices

2ED01 Laser Trimming for Tuning HTS Microwave filters

Simon Goodyear, Nick Parker, Richard Humphreys, DERA Malvern.

2ED02 High Temperature Superconducting Ferrite Phase Shifter with New Latching Structure

K.S.K. Yeo, M.J. Lancaster, University of Birmingham.

2ED03 Tuning Properties of 2GHz Superconducting Microstrip-line Filters

H. Fuke, Y. Terashima, H. Kayano, M. Yamazaki, F. Aiga, H. Yoshino, Y. Suzuki, R. Katoh, Toshiba Corporation.

2ED04 Frequency Agile Microwave Filters Based on YBCO/STO Heterostructure on LAO Substrate

B. Marcilhac, Y. Lemaitre, D. Mansart, J.C. Mage, THOMSON-CSF; P. Woodall, K. Bouzehouane, J.P. Contour, CNRS.

2ED05 Effect of Varying Dielectrics on YBCO for use in MEMS Capacitive Switches

Alfredo Corrales, Florida International University (FIU); James Reid, John Derov, AFRL; Grover Larkins, Yuri Vlasov, FIU.

2ED06 1/2 wave YBa2Cu3O7 on LaAlO3 Resonators with Tunable BaTiO3 and SrTiO3 coupling capacitors

G.L. Larkins, Jr., Yu.A. Vlasov, P. Brown, J.M. Vargas, Florida International University.

2ED07 Broadband and Low Driving-Voltage LiNbO3 Optical Modulator with High Tc Superconducting Transmissionline

K. Yoshida, H. Takeuchi, H. Morita, H. Kanya, Kyushu University; Y. Kanda, Fukuoka Institute of Technology; T. Uchiyama, Z. Wang, CRL.

2ED08 An Integrated HTS and Schottky Barrier Diode Circuit for Bandwidth Modulation.

Dr. M. W. Hosking, University of Portsmouth.

2ED09 Transmission characteristics of HTS microstrip resonators with a ferrite component

T. Nurgaliev, Institute of Electronics BAS, Bulgaria ; S. Miteva, Institute of Electronics BAS, Bulgaria; A. Jenkins, D. Dew-Hughes, University of Oxford, UK.

2ED10 Strontium titanate thin films for tunable YBCO microwave filters

Brian Moeckly, Yongming Zhang, Conductus, Inc..