

Titles of Device Application Papers

Abstracts and complete text available from InterFET upon request

JFET for Completely Depleted High Resistivity Silicon

V. Radeka, P. Rehak, S. Rescia (Brookhaven National Laboratory), E Gatti, A. Longoni, M. Sampietro & G. Bertuccio (Politecnico di Milano), P. Holl, L. Struder (Max-Planck-Institut), J. Kemmer (Tu Munchen, 8048 Garching and MBB GmbH)

Circuit Design of Battery Operated Nuclear Radiation Measuring Instruments

J. H. Howes (Harwell Laboratory, England)

An Improved Operating Mode for a Si(Li) X-Ray Spectrometer

N. W. Madden, F. S. Goulding, J. M. Jaklevic, D. A. Landis, C. S. Rossington, J. T. Walton (Lawrence Berkeley Laboratory)

Methods of Reducing Noise of Junction Field Effect Transistor (JFET) Amplifiers

H. E. Kern, J. M. McKenzie (Bell Telephone Laboratories, Inc.)

Improved Process for Manufacture of Radiation Hard N-Channel JFETs for Detector Electronics

Larry A. Rehn, Dan E. Roberts (InterFET Corporation)

JFET Monolithic Preamplifier With Outstanding Noise Behaviour and Radiation Hardness Characteristics

Veljko Radeka & Sergio Rescia (Brookhaven National Laboratory), P.F. Manfredi, V. Speziali, F. Svelto (Universita di Pavia, Dipartimento di Elettronica)

Monolithic JFET Preamplifier for Ionization Chamber Calorimeters

Larry A. Rehn, Dan E. Roberts (InterFET Corporation)

Monolithic JFET Charge Preamplifier for Calorimetry at High Luminosity Hadron Colliders

Veljko Radeka, Sergio Rescia (Brookhaven (National Laboratory), Larry A. Rehn (InterFET Corporation), P.F. Manfredi, V. Speziali (Universita di Pavia, Dipartimento di Elettronica)

Limitations in the Accuracy of Detector Charge Measurements Set By the 1/f Noise In the Front End Amplifier

G. Lutz (Max Planck Institut fur Physik und Astrophysik), P. F. Manfredi, V. Re, V. Speziali (Universita di Pavia, Dipartimento di Elettronica)

Integrated FET and Charge Reset Device for Gamma Spectrometers

T. Nashashibi (Link Analytical), P. Sangsingkeow (Tennelec-Nucleus, Inc.)

A Study of Low-Noise JFETs Exposed to Large Doses of Gamma Rays and Neutrons

Mauro Citterio, Sergio Rescia, Veljko Radeka (Brookhaven National Laboratory)

RAD-Hard Electronics Development Program for SSC Liquid-Argon Calorimeters

A. Stevens and J. Dawson (Argonne National Laboratory), H. Kraner, V. Radeka, & S. Rescia (Brookhaven National Laboratory)

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Radiation Effects on JFETs, Mosfets, and Bipolar Transistors, as Related to SSC Circuit Design

E. J. Kennedy, B. Gray & A. Wu (The University of Tennessee), G. T. Alley & C. L. Britton, Jr. (Oak Ridge National Laboratory), P. L. Skubic (The University of Oklahoma)

Perspectives in the Design of Transformerless, Low-Noise Front-end Electronics for Large Capacitance Detectors & Calorimeters in Elementary Particle Physics

M. Bertolaccini, G. Padovini (Politecnico di Milano) D.V. Camin (INFN), P. F. Manfredi (Universita di Pavia), J. A. Preston (University of the West Indies), Larry A. Rehn (InterFET Corporation)

Transient Radiation Response of JFETs and MOSFETs At Cryogenic Temperatures

D. M. Long (General Electric Company)

Low-Temperature Electronics for Cryogenic Instrumentation

Randall K. Kirschman (University of Southampton)

Performance of a 60 gram Cryogenic Germanium Detector

A. Cummings, N. Wang, T. Shutt, P. Barnes, A. Lange, B. Sadoulet, C. Stubbs (Center for Particle Astrophysics), J. Emes, E.E. Haller, J. Rich, R. Ross, G. Smith (Lawrence Berkeley Laboratory), Y. Giraud-Heraud (College de France)

Effects of Scintillation Light Collection on the Time Resolution of a Time-of-Flight Detector for Annihilation Quanta

Sibylle I. Ziegler, Hermann Ostertag, Wolfgang K. Kuebler, Walter J. Lorenz – Deutsches Krebsforschungszentrum, Heidelberg and Ernst W. Otten – Universitat Mainz

Performance of a Coincidence Based Blood Activity Monitor

William W. Moses – Lawrence Berkeley Laboratory

Transistor Reset Preamplifier for High Rate High Resolution Spectroscopy

D.A. Landis, C.P. Cork, N.W. Madden, F.S. Goulding (Lawrence Berkeley Laboratory)

Transmission Line Connections Between Detector & Front End Electronics in Liquid Argon Calorimetry

R.L. Chase, C. de La Taille, S. Rescia & N. Seguin (Laboratoire de l'Accelérateur Linéaire, France & Brookhaven National Laboratory)

Transistor Noise Characteristics for Low-Frequency Analog Cryogenic Instrumentation

Randall K. Kirschman