

## ELENCO DELLE PUBBLICAZIONI DI VALERIO RE

### Lavori pubblicati su riviste internazionali

- J.1 - G. Lutz, P.F. Manfredi, F. Maloberti, V. Re, V. Speziali, W. Buttler, H. Vogt: "On the design of a JFET-CMOS front-end for low noise data acquisition from microstrip detectors", **Nucl. Instrum. Methods**, A264 (1988) pp. 391-398.
- J.2 - P.F. Manfredi, V. Re, V. Speziali, D. Marioli: "Low noise design of readout electronics for microstrip vertex detectors", **Nucl. Instrum. Methods**, A274 (1989) pp. 477-484.
- J.3 - G. Lutz, P.F. Manfredi, V. Re, V. Speziali: "Limitations in the accuracy of detector charge measurements set by the 1/f noise in the front-end amplifier", **Nucl. Instrum. Methods**, A277 (1989) pp. 194-203.
- J.4 - W. Buttler, V. Liberali, G. Lutz, F. Maloberti, P.F. Manfredi, V. Re, V. Speziali: "JFET-CMOS microstrip front-end", **Nucl. Instrum. Methods**, A279 (1989) pp. 204-211.
- J.5 - W. Buttler, V. Liberali, G. Lutz, F. Maloberti, P.F. Manfredi, V. Re, V. Speziali: "Evolution in the criteria that underlie the design of a monolithic preamplifier system for microstrip detectors", **Nucl. Instrum. Methods**, A288 (1990) pp. 140-149.
- J.6 - V. Re, et al: "Investigation of the electromagnetic calorimeter based on liquid Krypton", **Nucl. Instrum. Methods**, A289 (1990) pp. 468-474.
- J.7 - W. Buttler, M. Citterio, G. Lutz, P.F. Manfredi, V. Re, V. Speziali: "A monolithic radiation-tolerant charge-sensitive preamplifier", **Nucl. Instrum. Methods**, A292 (1990) pp. 435-438.
- J.8 - W. Buttler, G. Lutz, P.F. Manfredi, V. Re, V. Speziali, A. Tomasini: "NJFET-PMOS preamplifier system: an upgraded version", **Nucl. Instrum. Methods**, A315 (1992) pp. 420-424.
- J.9 - V. Re, et al: "Space and energy resolution in a liquid Krypton E. M. calorimeter", **Nucl. Instrum. Methods**, A315 (1992) pp. 491-493.
- J.10 - V. Re, et al: "Liquid Krypton calorimeter for KEDR detector", **Nucl. Instrum. Methods**, A316 (1992) pp. 8-13.
- J.11 - V. Radeka, S. Rescia, P.F. Manfredi, V. Re, V. Speziali: "Monolithic preamplifier employing epitaxial N-channel JFETs", **Nucl. Instrum. Methods**, A326 (1993) pp. 77-81.
- J.12 - G. Cesura, V. Re, A. Tomasini: "Radiation sensitivity of noise in monolithic JFET circuits exposed to  $^{60}\text{Co}$   $\gamma$ -Rays", **Nuclear Physics B**, 32 (1993) pp. 546-554.
- J.13 - G. Cesura, P.F. Manfredi, V. Re, V. Speziali: "JFET-CMOS process to meet the requirements of tracking applications at short processing times", **Nucl. Instrum. Methods**, A344 (1994) pp. 166-172.
- J.14 - V. Re, et al: "Particle identification in a LKr ionization chamber by the dE/dx method", **Nucl. Instrum. Methods**, A344 (1994) pp. 156-160.
- J.15 - G. Cesura, V. Re: "Effects of  $\gamma$ -rays and neutrons on the noise behaviour of monolithic JFET circuits", **IEEE Trans. Nucl. Sci.**, Vol. 41, No. 3, June 1994, pp. 577-582.

- J.16 - F. Lanni, P.F. Manfredi, V. Radeka, V. Re, S. Rescia, V. Speziali: "Monolithic silicon JFET front-end for calorimetry", **Nucl. Instrum. Methods**, A360 (1995) pp. 158-161.
- J.17 - P. Cantoni, P.L. Frabetti, L. Stagni, R. Diaferia, F.Lanni, B. Maggi, F. Palombo, A. Sala, P.F. Manfredi, V. Re, V. Speziali: "Particle identification in a LKr ionization chamber by multiple induced current measurements using the shape analysis of the signal", **Nucl. Instrum. Methods**, A360 (1995) pp. 427-429.
- J.18 - P. Cantoni, L. Stagni, P.A. Kulinich, C. Brazzelli, F.Lanni, B. Maggi, F. Palombo, P.F. Manfredi, V. Re, V. Speziali: "Experimental study of particle separation in a LKr ionization chamber by dE/dx method using the shape analysis of the signal", **Nucl. Instrum. Methods**, A364 (1995) pp. 258-264.
- J.19 - V. Re, F. Svelto: "Instrumentation for high accuracy noise characterisation of front-end devices in detector applications", **Nuclear Physics B**, 44 (1995) pp. 599-606.
- J.20 - P.F. Manfredi, V. Re, V. Speziali: "JFET preamplifiers for low noise applications in calorimetry and radiation spectroscopy", **Nuclear Physics B**, 44 (1995) pp. 613-616.
- J.21 - V. Re, F. Svelto: "High accuracy measurement of the low-frequency noise of front-end P-channel FETs", **Nuclear Physics B**, 44 (1995) pp. 607-612.
- J.22 - V. Re, et al: "Recent results from diamond microstrip detectors", **Nucl. Instrum. Methods**, A367 (1995) pp. 202-206.
- J.23 - V. Re, et al: "Radiation hardness studies of CVD diamond detectors", **Nucl. Instrum. Methods**, A367 (1995) pp. 207-211.
- J.24 - F. Nava, M. Alietti, C. Canali, A. Cavallini, C. Chiossi, C. del Papa, V. Re, C. Lanzieri: "Performances of SI GaAs detectors fabricated with implanted ohmic contacts", **IEEE Trans. Nucl. Sci.**, Vol. 43, No. 3, June 1996, pp. 1130-1136.
- J.25 - R. Becker, A. Grillo, R. Jacobsen, R. Johnson, I. Kipnis, M. Levi, L. Luo, P.F. Manfredi, M. Nyman, V. Re, N. Roe, S. Shapiro: "Signal processing in the front-end electronics of BaBar vertex detector", **Nucl. Instrum. Methods**, A377 (1996) pp. 459-464.
- J.26 - V. Re, et al: "Liquid Krypton calorimeter for KEDR detector and last prototype results", **Nucl. Instrum. Methods**, A379 (1996) pp. 475-477.
- J.27 - V. Re, et al: "Recent results from the RD42 Diamond Detector Collaboration", **Nucl. Instrum. Methods**, A383 (1996) pp. 64-74.
- J.28 - A. Alberigi Quaranta, C. Canali, A. Cavallini, C. del Papa, P.F. Manfredi, F. Nava, V. Re: "Analysis of the output signal waveform and performances of semi-insulating GaAs particle detectors", **Nucl. Instrum. Methods**, A380 (1996) pp. 201-204.
- J.29 - P.F. Manfredi, V. Re, V. Speziali: "JFET-based monolithic preamplifiers for spectrometry applications", **Nucl. Instrum. Methods**, A380 (1996) pp. 308-311.
- J.30 - V. Re, et al: "Recent results on a chemical-vapor-deposited diamond microstrip detectors", **Nucl. Instrum. Methods**, A380 (1996) pp. 183-185.
- J.31 - V. Re, et al: "The test of the LKr calorimeter prototype at the tagged photon beam", **Nucl. Instrum. Methods**, A394 (1997) pp. 35-45.
- J.32 - V. Re: "A fast JFET-CMOS-SIMOX multichannel amplifier system for tracking detectors", **Nucl. Instrum. Methods**, A396 (1997) pp. 405-413.

- J.33 - V. Re, et al: "A Time-over-Threshold machine: the readout integrated circuit for the BABAR silicon vertex tracker", **IEEE Trans. Nucl. Sci.**, Vol. 44, No. 3, June 1997, pp. 289-297.
- J.34 - V. Re, et al: "Performance of CVD diamond microstrip detectors under particle irradiation", **IEEE Trans. Nucl. Sci.**, Vol. 44, No. 3, June 1997, pp. 815-818.
- J.35 - V. Re, et al: "Neutron irradiation of CVD diamond samples for tracking detectors", **Nucl. Instrum. Methods**, A388 (1997), pp. 421-426.
- J.36 - P.F. Manfredi, I. Kipnis, A. Leona, L. Luo, E. Mandelli, M. Momayezi, M. Nyman, M. Pedrali Noy, V. Re, N. Roe, F. Svelto: "The analog front-end section of the BaBar silicon vertex tracker readout IC", **Nuclear Physics B**, 61B (1998) pp. 532-538.
- J.37 - V. Re, P. d'Angelo, L. Milazzo: "A fast JFET-CMOS-SIMOX monolithic amplifier system for the E831 microvertex detector", **Nuclear Physics B**, 61B (1998) pp. 551-555.
- J.38 - V. Re, P. d'Angelo, L. Milazzo: "Radiation hardness characterisation of the monolithic amplifier system for the E831 microvertex detector", **Nucl. Instrum. Methods**, A409 (1998), pp. 339-342.
- J.39 - P.F. Manfredi, E. Mandelli, V. Re, V. Speziali: "Noise behaviour of DMILL JFETs", **Nucl. Instrum. Methods**, A409 (1998), pp. 332-335.
- J.40 - V. Re, et al: "Status of diamond particle detectors", **Nucl. Instrum. Methods**, A418 (1998), pp. 196-202.
- J.41 - V. Re, et al: "The rad-hard readout system of the BaBar silicon vertex tracker", **Nucl. Instrum. Methods**, A409 (1998), pp. 354-359.
- J.42 - P.F. Manfredi, V. Re, V. Speziali: "Monolithic JFET preamplifier with nonresistive charge reset", **IEEE Trans. Nucl. Sci.** Vol. 45, No. 4, August 1998, pp. 2257-2260.
- J.43 - V. Re, et al: "Recent results on CVD diamond radiation sensors", **Nucl. Instrum. Methods**, A409 (1998), pp. 264-270.
- J.44 - P.F. Manfredi, A. Leona, E. Mandelli, V. Re, V. Speziali: "Design hints for best noise and signal behaviour in DMILL amplifiers", **Nucl. Instrum. Methods**, A421 (1999), pp. 552-557.
- J.45 - V. Re, E. Mandelli, A. Perazzo, L. Ratti: "Radiation hardness characterisation of the front-end chip for the BaBar Silicon Vertex Tracker", **Nuclear Physics B**, 78 (1999) pp. 670-674.
- J.46 - V. Re, et al: "Proton irradiation of CVD diamond detectors for high-luminosity experiments at the LHC", **Nucl. Instrum. Methods**, A426 (1999), pp. 173-180.
- J.47 - V. Re, et al: "Functional characteristics and radiation tolerance of AToM, the front-end chip of BaBar Silicon Vertex Tracker", **IEEE Trans. Nucl. Sci.**, vol. 46, No. 6, December 1999, pp. 1865 – 1870.
- J.48 - V. Re, et al: "Review of the development of diamond radiation sensors", **Nucl. Instrum. Methods**, A434 (1999), pp. 131-145.
- J.49 - V. Re, L. Ratti: "Front-end electronics for energy and position measurements with semiconductor radiation detectors", **Journal "Informacije MIDE"**, vol. 29 (1999) 1, pp. 20-25.
- J.50 - V. Re, et al: "The first bump-bonded pixel detectors on CVD diamond", **Nucl. Instrum. Methods**, A436 (1999), pp. 326-335.
- J.51 - P.F. Manfredi, L. Ratti, V. Re, V. Speziali: "Noise degradation induced by  $\gamma$  rays on P- and N-channel junction field-effect transistors", **IEEE Trans. Nucl. Sci.**, vol. 46, No. 5, October 1999, pp. 1294 – 1299.

- J.52 - V. Re, et al: "CVD diamond detectors for ionizing radiation", **Nucl. Instrum. Methods**, A435 (1999), pp. 194-201.
- J.53 - P.F. Manfredi, A. Leona, E. Mandelli, A. Perazzo, V. Re: "Noise limits in a front-end system based on time-over-threshold signal processing", **Nucl. Instrum. Methods**, A439 (2000), pp. 361-367.
- J.54 - V. Re, et al: "The design and construction of the BaBar Silicon Vertex Tracker", **Nucl. Instrum. Methods**, A447 (2000), pp. 15-25.
- J.55 - V. Re, et al: "The BaBar silicon vertex tracker", **Nucl. Instrum. Methods**, A453 (2000), pp. 78-83.
- J.56 - P.F. Manfredi, L. Ratti, V. Re, N.A. Roe, V. Speziali: "Noise limits of AToM, a 128 channel CMOS readout chip in applications with room temperature high granularity detectors", **Nucl. Instrum. Methods**, A458 (2001), pp. 382-391.
- J.57 - V. Re, et al: "The analog signal processor of the AUGER fluorescence detector prototype", **Nucl. Instrum. Methods**, A461 (2001), pp. 440-448.
- J.58 - V. Re, et al: "The BaBar silicon vertex tracker", **Nucl. Instrum. Methods**, A461 (2001), pp. 162-167.
- J.59 - P.F. Manfredi, M. Manghisoni, L. Ratti, V. Re: "A bilinear analog compressor to adapt the signal dynamic range in the AUGER fluorescence detector", **Nucl. Instrum. Methods**, A461 (2001), pp. 526-529.
- J.60 - M. Manghisoni, V. Re, V. Speziali, F. Svelto: "Experimental studies of the noise properties of a deep submicron CMOS process", **Nucl. Instrum. Methods**, A461 (2001), pp. 537-539.
- J.61 - B. Turner, P. Datte, P.F. Manfredi, J. Millaud, L. Ratti, V. Re, V. Speziali, M.T. Burks, N. Mokhov, M. Placidi, H. Schmickler: "Development of a detector for bunch by bunch measurement and optimization of luminosity in the LHC", **Nucl. Instrum. Methods**, A461 (2001), pp. 107-110.
- J.62 - V. Re, et al: "The analog signal processing system for the AUGER fluorescence detector prototype", **IEEE Trans. Nucl. Sci.**, vol. 48, No. 3, June 2001, pp. 444 – 449.
- J.63 - V. Re, I. Bietti, R. Castello, M. Manghisoni, V. Speziali, F. Svelto: "Experimental study and modeling of white noise sources in submicron P and N-MOSFETs", **IEEE Trans. Nucl. Sci.**, vol. 48, No. 4, August 2001, pp. 1577-1586.
- J.64 - M. Manghisoni, L. Ratti, V. Re, V. Speziali: "Selection criteria for P- and N-channel JFETs as input elements in low-noise radiation-hard charge preamplifiers", **IEEE Trans. Nucl. Sci.**, vol. 48, No. 4, August 2001, pp. 1598-1604.
- J.65 - V. Re, et al: "First-year experience with the BaBar silicon vertex tracker", **Nucl. Instrum. Methods**, A473 (2001), pp. 7-16.
- J.66 - V. Re, et al: "Feasibility studies of microelectrode silicon detectors with integrated electronics", **Nucl. Instrum. Methods**, A478 (2002), pp. 372-376.
- J.67 - M. Manghisoni, L. Ratti, V. Re, V. Speziali: "Low-noise design criteria for detector readout systems in deep submicron CMOS technology", **Nucl. Instrum. Methods**, A478 (2002), pp. 362-366.
- J.68 - J.F. Beche, M.T. Burks, P.S. Datte, M. Haguenaer, P.F. Manfredi, J.E. Millaud, M. Placidi, L. Ratti, V. Re, V.J. Riot, H. Schmickler, V. Speziali, W.C. Turner: "An ionization chamber shower detector for the LHC luminosity monitor", **IEEE Trans. Nucl. Sci.**, vol. 49, No. 1, February 2002, pp. 285-292.
- J.69 - V. Re, et al: "Design and characterization of integrated front-end transistors in a micro-strip detector technology", **Nucl. Instrum. Methods**, A485 (2002), pp. 193-198.

- J.70 - V. Re, et al: "The BaBar silicon vertex tracker, performance and running experience", **Nucl. Instrum. Methods**, A485 (2002), pp. 10-14.
- J.71 - G.F. Dalla Betta, M. Boscardin, P. Gregori, N. Zorzi, G. U. Pignatelli, G. Batignani, M. Giorgi, L. Bosisio, L. Ratti, V. Re, V. Speziali: "A fabrication process for silicon microstrip detectors with integrated front-end electronics", **IEEE Trans. Nucl. Sci.**, vol. 49, No. 3, June 2002, pp. 1022-1026.
- J.72 - V. Re, et al: "The BaBar detector", **Nucl. Instrum. Methods**, A479 (2002), pp. 1-116.
- J.73 - M. Manghisoni, L. Ratti, V. Re, V. Speziali: "Instrumentation for noise measurements on CMOS transistors for fast detector preamplifiers", **IEEE Trans. Nucl. Sci.**, vol. 49, No. 3, June 2002, pp. 1281-1286.
- J.74 - M. Manghisoni, L. Ratti, V. Re, V. Speziali: "Submicron CMOS technologies for low-noise analog front-end circuits", **IEEE Trans. Nucl. Sci.**, vol. 49, No. 4, August 2002, pp. 1783-1790.
- J.75 - M. Manghisoni, L. Ratti, V. Re, V. Speziali: "Radiation hardness perspectives for the design of analog detector readout circuits in the 0.18- $\mu\text{m}$  CMOS generation", **IEEE Trans. Nucl. Sci.**, vol. 49, No. 6, December 2002, pp. 2902-2909.
- J.76 - V. Re, et al: "The BaBar Silicon Vertex Tracker: performance, running experience, and radiation damage studies", **IEEE Trans. Nucl. Sci.**, vol. 49, No. 6, December 2002, pp. 3284-3289.
- J.77 - V. Re, et al: "Performance of the BaBar silicon vertex tracker", **Nucl. Instrum. Methods**, A501 (2003), pp. 14-21.
- J.78 - M. Manghisoni, L. Ratti, V. Re, V. Speziali, G. Traversi, A. Candelori: "Comparison of ionizing radiation effects in 0.18 and 0.25  $\mu\text{m}$  CMOS technologies for analog applications", **IEEE Trans. Nucl. Sci.**, vol. 50, No. 6, December 2003, pp. 1827-1833.
- J.79 - G.F. Dalla Betta, M. Manghisoni, L. Ratti, V. Re, V. Speziali, G. Traversi: "Effects of gamma-rays on JFET devices and circuits fabricated in a detector-compatible process", **IEEE Trans. Nucl. Sci.**, vol. 50, No. 6, December 2003, pp. 2474-2480.
- J.80 - P.F. Manfredi, M. Manghisoni, L. Ratti, V. Re, V. Speziali: "Resolution limits achievable with CMOS front-end in X and gamma-ray analysis with semiconductor detectors", **Nucl. Instrum. Methods**, A512 (2003), pp. 167-178.
- J.81 - G.F. Dalla Betta, M. Manghisoni, L. Ratti, V. Re, V. Speziali: "JFET preamplifiers with different reset techniques on detector-grade high-resistivity silicon", **Nucl. Instrum. Methods**, A512 (2003), pp. 199-206.
- J.82 - M. Manghisoni, L. Ratti, V. Re, V. Speziali, G.F. Dalla Betta, M. Boscardin, G. Batignani, M. Giorgi, L. Bosisio: "JFET front-end circuits integrated in a detector-grade silicon substrate", **IEEE Trans. Nucl. Sci.**, vol. 50, No. 4, August 2003, pp. 942-947.
- J.83 - G.F. Dalla Betta, M. Manghisoni, L. Ratti, V. Re, V. Speziali, et al: "Recent results from the development of silicon detectors with integrated electronics", **Nucl. Instrum. Methods**, A518 (2004), pp. 354-356.
- J.84 - M. Manghisoni, L. Ratti, V. Re, V. Speziali, G. Traversi, G. Fallica: "Gamma – ray response of SOI bipolar junction transistors for fast, radiation tolerant front-end electronics", **Nucl. Instrum. Methods**, A518 (2004), pp. 477-481.

- J.85 - P. F. Manfredi, M. Manghisoni, L. Ratti, V. Re, V. Speziali, G. Traversi, P.S. Datte, P. Denes, J. Millaud, A. Ratti, W.C. Turner, M. Placidi: "The readout of the LHC beam luminosity monitor: accurate shower energy measurements at a 40 MHz repetition rate", **Nucl. Instrum. Methods**, A518 (2004), pp. 501-506.
- J.86 - V. Re, et al: "Sensor performance of the BaBar Silicon Vertex Tracker after 4 years of data taking", **Nucl. Instrum. Methods**, A518 (2004), pp. 286-289.
- J.87 - V. Re, et al: "Radiation hardness and monitoring of the BaBar vertex tracker", **Nucl. Instrum. Methods**, A518 (2004), pp. 290-294.
- J.88 - M. Manghisoni, L. Ratti, V. Re, V. Speziali, G. Traversi, G. Fallica, S. Leonardi: "Noise analysis of NPN SOI bipolar transistors for the design of charge measuring systems", **IEEE Trans. Nucl. Sci.**, vol. 51, No. 3, June 2004, pp. 980-986.
- J.89 - P.F. Manfredi, V. Re: "Trends in the design of spectroscopy amplifiers for room temperature solid state detectors", **IEEE Trans. Nucl. Sci.**, vol. 51, No. 3, June 2004, pp. 1182-1190.
- J.90 - G.-F. Dalla Betta, M. Manghisoni, L. Ratti, V. Re, V. Speziali, G. Traversi, A. Candelori: "Proton induced damage in JFET transistors and charge preamplifiers on high-resistivity silicon", **IEEE Trans. Nucl. Sci.**, vol. 51, No. 5, October 2004, pp. 2880-2886.
- J.91 - V. Re, et al: "Properties and performance of the prototype instrument for the Pierre Auger Observatory", **Nucl. Instrum. Methods**, A523 (2004), pp. 50-95.
- J.92 - V. Re, et al: "The BaBar Silicon Vertex Tracker: performance and radiation damage studies", **Nucl. Instrum. Methods**, A530 (2004), pp. 7-11.
- J.93 - V. Re, et al: "A study for the detection of ionizing particles with phototransistors on thick high-resistivity silicon substrates", **Nucl. Instrum. Methods**, A530 (2004), pp. 98-104.
- J.94 - V. Re, et al: "Performance, radiation damage, and future plans of the BABAR silicon vertex tracker:", **IEEE Trans. Nucl. Sci.**, vol. 51, No. 5, October 2004, pp. 2298-2301.
- J.95 - R. Yarema, J. Hoff, A. Mekkaoui, M. Manghisoni, V. Re, P. F. Manfredi, L. Ratti, V. Speziali: "Fermilab Silicon Strip Readout Chip for BTeV", **IEEE Trans. Nucl. Sci.**, vol. 52, No. 3, June 2005, pp. 799-804.
- J.96 - L. Ratti, M. Manghisoni, E. Oberti, V. Re, V. Speziali, G. Traversi, G. Fallica, R. Modica: "Response of SOI bipolar transistors exposed to gamma-rays under different dose rate and bias conditions ", **IEEE Trans. Nucl. Sci.**, vol. 52, No. 4, August 2005, pp. 1040-1047.
- J.97 - V. Re, M. Manghisoni, L. Ratti, V. Speziali, G. Traversi: "Survey of noise performances and scaling effects in deep submicrometer CMOS devices from different foundries", **IEEE Trans. Nucl. Sci.**, vol. 52, No. 6, December 2005, pp. 2733-2740.
- J.98 - V. Re, et al: "Status and prospects of the BaBar SVT", **Nucl. Instrum. Methods**, A560 (2006), pp. 5-8.
- J.99 -V. Re, L. Ratti, M. Manghisoni, V. Speziali, G. Traversi: "Total ionizing dose effects on the noise performances of a 0.13  $\mu\text{m}$  CMOS technology", **IEEE Trans. Nucl. Sci.**, vol. 53, No. 3, June 2006, pp. 1599-1606.
- J.100 -V. Re, et al: "A novel monolithic active pixel detector in 0.13  $\mu\text{m}$  triple well CMOS technology with pixel level analog processing", **Nucl. Instrum. Methods**, A565 (2006), pp. 195-201.

- J.101 -M. Manghisoni, V. Re, L. Ratti, V. Speziali, G. Traversi: "Noise performance of 0.13  $\mu\text{m}$  CMOS technologies for detector front-end applications", **IEEE Trans. Nucl. Sci.**, vol. 53, No. 4, August 2006, pp. 2456-2462.
- J.102 -V. Re, M. Manghisoni, L. Ratti, J. Hoff, A. Mekkaoui, R. Yarema: "FSSR2, a self-triggered low noise readout chip for silicon strip detectors", **IEEE Trans. Nucl. Sci.**, vol. 53, No. 4, August 2006, pp. 2470-2476.
- J.103 -V. Re, L. Ratti, M. Manghisoni, V. Speziali, G. Traversi: "Design criteria for low noise front-end electronics in the 0.13  $\mu\text{m}$  CMOS generation", **Nucl. Instrum. Methods**, A568 (2006), pp. 343-349.
- J.104 -L. Ratti, M. Manghisoni, V. Re, V. Speziali, G. Traversi, S. Bettarini, G. Calderini, R. Cenci, F. Forti, M. Giorgi, F. Morsani, G. Rizzo: "Monolithic pixel detectors in a 0.13  $\mu\text{m}$  CMOS technology with sensor level continuous time charge amplification and shaping", **Nucl. Instrum. Methods**, A568 (2006), pp. 159-166.
- J.105 -V. Re et al: "A new approach to the design of monolithic active pixel detectors in 0.13  $\mu\text{m}$  triple well CMOS technology", **Nucl. Instrum. Methods**, A569 (2006), pp. 61-64.
- J.106 - M. Dinardo, G. Cardoso, J. Hoff, M. Manghisoni, A. Mekkaoui, L. Moroni, L. Ratti, V. Re, F. Valsecchi, R. Yarema: "First prototype of a silicon microstrip detector with the data-driven readout chip FSSR2 for a tracking-based trigger system", **Nucl. Instrum. Methods**, A572 (2007), pp. 388-391.
- J.107 - V. Re, et al: "Development of deep N-well monolithic active pixel sensors in a 0.13  $\mu\text{m}$  CMOS technology", **Nucl. Instrum. Methods**, A572 (2007), pp. 277-280.
- J.108 - M. Manghisoni, L. Ratti, V. Re, V. Speziali, G. Traversi: "130 nm and 90 nm CMOS Technologies for Detector Front-end Applications", **Nucl. Instrum. Methods**, A572 (2007), pp. 368-370.
- J.109 - G. Traversi, M. Manghisoni, L. Ratti, V. Re, V. Speziali: "Pixel-Level Continuous-Time Analog Signal Processing for 130 nm CMOS MAPS", **Nucl. Instrum. Methods**, A572 (2007), pp. 396-398.
- J.110 - C. Cattadori, O. Chkvorets, M. Junker, K. Kroeninger, L. Pandola, A. Pullia, V. Re, C. Tomei, C. Ur, F. Zocca: "The GERmanium Detector Array readout: status and developments", **Nucl. Instrum. Methods**, A572 (2007), pp. 479-480.
- J.111 - M. Manghisoni, L. Ratti, V. Re, V. Speziali, G. Traversi: "Resolution limits in 130 nm and 90 nm CMOS technologies for analog front-end applications", **IEEE Trans. Nucl. Sci.**, vol. 54, no. 3, June 2007, pp. 531-537.
- J.112 - G. Traversi, M. Manghisoni, L. Ratti, V. Re, V. Speziali: "CMOS MAPS with pixel level sparsification and time stamping capabilities for applications at the ILC", **Nucl. Instrum. Methods**, A581 (2007), pp. 291-294.
- J.113 -L. Gonella, F. Faccio, M. Silvestri, S. Gerardin, D. Pantano, V. Re, M. Manghisoni, L. Ratti, A. Ranieri: "Total ionizing dose effects in 130-nm commercial CMOS technologies for HEP experiments", **Nucl. Instrum. Methods**, A582 (2007), pp. 750-754.
- J.114 -V. Re, M. Manghisoni, L. Ratti, V. Speziali, G. Traversi: "Impact of lateral isolation oxides on radiation-induced noise degradation in CMOS technologies in the 100-nm regime", **IEEE Trans. Nucl. Sci.**, vol. 54, no. 6, December 2007, pp. 2218-2226.

- J.115 -V. Re, L. Gaioni, M. Manghisoni, L. Ratti, V. Speziali, G. Traversi: "CMOS technologies in the 100 nm range for rad-hard front-end electronics in future collider experiments", **Nucl. Instrum. Methods**, A596 (2008), pp. 107-112.
- J.116 -V. Re, L. Gaioni, M. Manghisoni, L. Ratti, V. Speziali, G. Traversi, R. Yarema: "Noise behavior of a 180 nm CMOS SOI technology for detector front-end electronics", **IEEE Trans. Nucl. Sci.**, vol. 55, no. 4, August 2008, pp. 2408-2413.
- J.117 - V. Re, A. Bulgheroni, M. Caccia, M. Jastrzab, M. Manghisoni, E. Pozzati, L. Ratti, G. Traversi: "Monolithic Active Pixel Sensors for the vertex detector at the International Linear Collider", **Il Nuovo Cimento**, vol. 123 B, no. 6-7, June-July 2008, pp. 994-996.
- J.118 -V. Re, L. Gaioni, M. Manghisoni, L. Ratti, G. Traversi: "Comprehensive study of total ionizing dose damage mechanisms and their effects on noise sources in a 90 nm CMOS technology", **IEEE Trans. Nucl. Sci.**, vol. 55, no. 6, December 2008, pp. 3272-3279.
- J.119 - L. Ratti, M. Manghisoni, V. Re, G. Traversi: "Design optimization of charge preamplifiers with CMOS processes in the 100 nm gate length regime", **IEEE Trans. Nucl. Sci.**, vol. 56, no. 1, February 2009, pp. 235-242.
- J.120 - L. Ratti, C. Andreoli, L. Gaioni, M. Manghisoni, E. Pozzati, V. Re, G. Traversi: "TID effects in deep N-well CMOS monolithic active pixel sensors", **IEEE Trans. Nucl. Sci.**, vol. 56, no. 4, August 2009, pp. 2124-2131.
- J.121 - L. Ratti, M. Manghisoni, V. Re, G. Traversi: "Design of time invariant analog front-end circuits for deep n-well CMOS MAPS", **IEEE Trans. Nucl. Sci.**, vol. 56, no. 4, August 2009, pp. 2360-2373.
- J.122 - G. Traversi, A. Bulgheroni, M. Caccia, M. Jastrzab, M. Manghisoni, E. Pozzati, L. Ratti, V. Re: "First generation of deep N-well CMOS MAPS with in-pixel sparsification for the ILC Vertex Detector", **Nucl. Instrum. Methods**, A604 (2009), pp. 390-392.
- J.123 - V. Re: "Status and perspectives of deep N-well 130 nm CMOS MAPS", **Journal of Instrumentation**, vol. 4, March 2009, P03005, doi: 10.1088/1748-0221/4/03/P03005, pp. 1-8.