

LIST OF JOURNAL PAPERS 2018

- 1 - Cabello, M., Soler, V., Rius, G., Montserrat, J., Rebollo, J., Godignon, P.
“**ADVANCED PROCESSING FOR MOBILITY IMPROVEMENT IN 4H-SIC MOSFETS: A REVIEW**”.
MATERIALS SCIENCE IN SEMICONDUCTOR PROCESSING, 78, 22–31, 2018.
DOI: [10.1016/j.mssp.2017.10.030](https://doi.org/10.1016/j.mssp.2017.10.030)
- 2 - Fernández-Martínez, P.; Flores, D.; Hidalgo, S.; Quirion, D.; Durà, R.; Ullán, M.
“**FIRST FABRICATION OF A SILICON VERTICAL JFET FOR POWER DISTRIBUTION IN HIGH ENERGY PHYSICS APPLICATIONS**”.
NUCLEAR INSTRUMENTS & METHODS IN PHYSICS RESEARCH SECTION A-ACCELERATORS SPECTROMETERS DETECTORS AND ASSOCIATED EQUIPMENT. Vol: 877, 269 – 277, 2018.
DOI: [10.1016/j.nima.2017.08.043](https://doi.org/10.1016/j.nima.2017.08.043)
- 3 - Rafí J.M., Pellegrini G., Godignon P., Quirion D., Hidalgo S., Matilla O., Fontserè A., Molas B., Takakura K., Tsunoda I., Yoneoka M., Pothin D., Fajardo P.
“**FOUR-QUADRANT SILICON AND SILICON CARBIDE PHOTODIODES FOR BEAM POSITION MONITOR APPLICATIONS: ELECTRICAL CHARACTERIZATION AND ELECTRON IRRADIATION EFFECTS**”.
JOURNAL OF INSTRUMENTATION. Vol. 13, 4298 – 4300, 2018.
DOI: [10.1088/1748-0221/13/01/C01045](https://doi.org/10.1088/1748-0221/13/01/C01045)
- 4 - Kramberger G., Carulla M., Cavallaro E., Cindro V., Flores D., Galloway Z., Grinstein S., Hidalgo S., Fadeyev V., Lange J., Mandi I., Merlos A., McKinney-Martinez F., Mikuž M., Quirion D., Pellegrini G.
“**RADIATION HARDNESS OF GALLIUM DOPED LOW GAIN AVALANCHE DETECTORS**”.
NUCLEAR INSTRUMENTS & METHODS IN PHYSICS RESEARCH SECTION A-ACCELERATORS SPECTROMETERS DETECTORS AND ASSOCIATED EQUIPMENT. Vol: 898, 53 – 59, 2018.
DOI: [10.1016/j.nima.2018.04.060](https://doi.org/10.1016/j.nima.2018.04.060)
- 5 - Kramberger G., Carulla M., Cavallaro E., Cindro V., Flores D., Galloway Z., Grinstein S., Hidalgo S., Fadeyev V., Lange J., Mandi I., Merlos A., McKinney-Martinez F., Mikuž M., Quirion D., Pellegrini G.
“**RADIATION HARDNESS OF THIN LOW GAIN AVALANCHE DETECTORS**”.
NUCLEAR INSTRUMENTS & METHODS IN PHYSICS RESEARCH SECTION A-ACCELERATORS SPECTROMETERS DETECTORS AND ASSOCIATED EQUIPMENT. Vol. 891, 68 – 77, 2018.
DOI: [10.1016/j.nima.2018.02.018](https://doi.org/10.1016/j.nima.2018.02.018)
- 6 - Apresyan A., Xie S., Pena C., Arcidiacono R., Cartiglia N., Carulla M., Derylo G., Ferrero M., Flores D., Freeman P., Galloway Z., Ghassemi A., Al Ghou, H., Gray L., Hidalgo S., Kamada.
“**STUDIES OF UNIFORMITY OF 50 μm LOW-GAIN AVALANCHE DETECTORS AT THE FERMILAB TEST BEAM**”.
NUCLEAR INSTRUMENTS & METHODS IN PHYSICS RESEARCH SECTION A-ACCELERATORS SPECTROMETERS DETECTORS AND ASSOCIATED EQUIPMENT. Vol: 895, 158 – 172, 2018.
DOI: [10.1016/j.nima.2018.03.074](https://doi.org/10.1016/j.nima.2018.03.074)

- 7 - Phulpin T., Isoird K., Tremouilles D., Austin P., Perpiñà X., Leon J., Vellvehi M.
“CONTRIBUTION TO SILICON-CARBIDE-MESFET ESD ROBUSTNESS ANALYSIS”.
IEEE TRANSACTIONS ON DEVICE AND MATERIALS RELIABILITY. Vol. 18, 214-223, 2018.
DOI: [10.1109/TDMR.2018.2817255](https://doi.org/10.1109/TDMR.2018.2817255)
- 8 - Loto, O.; Florentin, M.; Masante, C.; Donato, N.; Hicks, M.L.; Pakpour-Tabrizi, A.C.; Jackman, R.; Zuerbig, V.; Godignon, P.; Eon, D.; Pernot, J.; Udrea, F.; Gheeraert, E.
“GATE OXIDE ELECTRICAL STABILITY OF P-TYPE DIAMOND MOS CAPACITORS”.
IEEE TRANSACTIONS ON ELECTRON DEVICES. Vol. 65, pp. 3361-3364, 2018.
DOI: [10.1109/TDMR.2018.2817255](https://doi.org/10.1109/TDMR.2018.2817255)
- 9 - Llobet, J., Rius, G., Chuquitarqui, A., Borrise, X., Koops, R., van Veghel, M., Perez-Murano, F.
“ARRAYS OF SUSPENDED SILICON NANOWIRES DEFINED BY ION BEAM IMPLANTATION: MECHANICAL COUPLING AND COMBINATION WITH CMOS TECHNOLOGY”
NANOTECHNOLOGY 29, 15, 155303, 2018.
DOI: [10.1088/1361-6528/aaac67](https://doi.org/10.1088/1361-6528/aaac67)
- 10 - Hébert, C., Masvidal-Codina, E., Suarez-Perez, A., Calia, A.B., Piret, G., Garcia-Cortadella, R., Illa, X., Del Corro Garcia, E., De la Cruz Sanchez, J-M., Casals, D., Prats-Alfonso, E., Bousquet, J., Godignon, P., Yvert, B., Villa, R., Sanchez-Vives, M.V., Guimerà-Brunet, A., Garrido, J.A.
“FLEXIBLE GRAPHENE SOLUTION-GATED FIELD-EFFECT TRANSISTORS: EFFICIENT TRANSDUCERS FOR MICRO-ELECTROCORTICOGRAPHY”
ADVANCED FUNCTIONAL MATERIALS, vol 28, 1703976, 2018
DOI: [10.1002/adfm.201703976](https://doi.org/10.1002/adfm.201703976)
- 11 - Allaire, C.; Benitez, J.; Bomben, M.; Calderini, G.; Carulla, M.; Cavallaro, E.; Falou, A.; Flores, D.; Freeman, P.; Galloway, Z.; Gkougkousis, E.L.; Grabas, H.; Grinstein, S.; Gruey, B.; Guindon, S.; Correia, A.M. Henriques; Hidalgo, S.; Kastanas, A.; Labitan, C.; Lacour, D.; Lange, J.; Lanni, F.; Lenzi, B.; Luce, Z.; Makovec, N.; Marchiori, G.; Masetti, L.; Merlos, A.; McKinney-Martinez, F.; Nikolic-Audit, I.; Pellegrini, G.; Polifka, R.; Quirion, D.; Rummeler, A.; Sadrozinski, H.F.-W.; Seiden, A.; Serin, L.; Simion, S.; Spencer, E.; Trincaz-Duvoid, S.; Wilder, M.; Zatserklyaniy, A.; Zerwas, D.; Zhao, Y.
“BEAM TEST MEASUREMENTS OF LOW GAIN AVALANCHE DETECTOR SINGLE PADS AND ARRAYS FOR THE ATLAS HIGH GRANULARITY TIMING DETECTOR”
JOURNAL OF INSTRUMENTATION, vol. 13, P06017, 2018
DOI: [10.1088/1748-0221/13/06/p06017](https://doi.org/10.1088/1748-0221/13/06/p06017)
- 12 - Navas, J., Araujo, D., Piñero, J.C., Sánchez-Coronilla, A., Blanco, E., Villar, P., Alcántara, R., Montserrat, J., Florentin, M., Eon, D., Pernot, J.,
“OXYGEN TERMINATION OF HOMOEPITAXIAL DIAMOND SURFACE BY OZONE AND CHEMICAL METHODS: AN EXPERIMENTAL AND THEORETICAL PERSPECTIVE”
APPLIED SURFACE SCIENCE, vol 433, pp. 408-418, 2018
DOI: [10.1016/j.apsusc.2017.10.065](https://doi.org/10.1016/j.apsusc.2017.10.065)
- 13 - Otero, S., Carulla, M., Centis, M., Fernandez, M., Gallrapp, C., Hidalgo, S., Mateu, I., Moll, M., Pellegrini, G., Vila, I.
“RADIATION TOLERANCE OF PROTON-IRRADIATED LGADs”
IEEE TRANSACTIONS ON NUCLEAR SCIENCE, vol 65, 8337797, pp. 1667-1675, 2018
DOI: [10.1109/tns.2018.2826725](https://doi.org/10.1109/tns.2018.2826725)