

### List of all scientific peer reviewed publications relating to the foreground of the project M19-M38

<b>LIST OF ALL SCIENTIFIC PEER REVIEWED PUBLICATIONS RELATING TO THE FOREGROUND OF THE PROJECT BY NANONETS2SENSE PARTNERS M19-M38</b>										
<i>Publications could be: Article in Journal, Publication in Conference/Workshop Proceedings, Chapter in a Book, Thesis/Dissertation</i>										
No.	Title	Main author, Partners involved	Title of the Journal/ Proceedings/ Book...	Number, date or frequency	Publisher	Place of publication or Open repositionnery (as Hal)	Year of publication	Relevant pages	ISBN	Permanent identifiers (if available) DOI
1	Wafer-scale HfO <sub>2</sub> encapsulated silicon nanowire field effect transistor for efficient label-free DNA hybridization detection in dry environment.	G. Jayakumar, M. Legallais, P-E. Hellstrom, M. Mouis, I. Pignot-Paintrand, V. Stambouli-Sene, C. Ternon and M. Östling KTH and GINP	Nanotechnology	Vol 30, Number18	IOP	Open access hal- 02012585	2019		(in press)	<a href="https://doi.org/10.1088/1361-6528/aaffa5">doi.org/10.1088/1361-6528/aaffa5</a>
2	Pixel based biosensor for enhanced control: Silicon nanowires monolithically integrated with field-effect transistors in fully depleted silicon on insulator technology	G. Jayakumar and M. Östling, KTH	Nanotechnology	Vol.30, Number 22	IOP	Open access	2019			<a href="https://dx.doi.org/10.1088/1361-6528/ab0469">https://dx.doi.org/10.1088/1361-6528/ab0469</a>
3	Monolithic Wafer Scale Integration of Silicon Nanoribbon Sensors with CMOS for Lab-on-Chip Application	G. Jayakumar, P-E. Hellström and M. Östling, KTH	Micromachines	Vol 9, Issue11	MDPI	Open access	2018			<a href="https://doi.org/10.3390/mi9110544">doi: 10.3390/mi9110544</a>
4	Electrical characteristics of silicon percolating nanonet-based field effect transistors in the presence of dispersion	T Cazimajou, M Legallais, M Mouis, C Ternon, B Salem, G Ghibaudo GINP	Solid-State Electronic	2018 Vol. 143	Elsevier	hal- 01948032	2018	83-89		<a href="https://doi.org/10.1016/j.sse.2017.11.013">10.1016/j.sse.2017.11.013</a>
5	An innovative large scale integration of silicon nanowire-based field effect transistors	M Legallais, TTT Nguyen, M Mouis, B Salem, E Robin, P Chenevier, C. Ternon GINP	Solid-State Electronic	2018 Vol. 143	Elsevier	hal- 01948061	2018	97-102		<a href="https://doi.org/10.1016/j.sse.2017.11.008">10.1016/j.sse.2017.11.008</a>
6	Utilizing the superior etch stop	G. Jayakumar, P-E.Hellström	Microelectronic	Vol. 212	Elsevier		2019	Pages 13-		<a href="https://doi.org/">https://doi.org/</a>

## Table of Publications

August 2017 – March 2019

	quality of HfO <sub>2</sub> in the front end of line wafer scale integration of silicon nanowire biosensors	and M. Östling, KTH	Engineering					20		<a href="https://doi.org/10.1016/j.mee.2019.03.006">g/10.1016/j.mee.2019.03.006</a>
7	First evidence of superiority of Si nanonet field effect transistors over multi-parallel Si nanowires in view of electrical DNA hybridization detection	Nguyen, T.T.T., Legallais, M., Morisot, F., Cazimajou, T., Stambouli-Sene, V., Mouis, M., Salem, B., & Ternon, C GINP	Material Research Express	2019	IOP	hal-01947795	2019	6 016301		<a href="https://doi.org/10.1088/2053-1591/aae0d5">10.1088/2053-1591/aae0d5</a>
8	Optimizing Paste Formulation for Improving the Performances of CMOS-Based MOx Chemiresistors Prepared by Ink-Jet Printing	C. Zuliani, L. Jerg, A. Hart, W. Simmendinger, M. Camara and Z. Ali CCS	Multidisciplinary Digital Publishing Institute Proceedings	Proceedings 2018 Vol.2, Number13	MDPI	Open access	2018	774		<a href="https://doi.org/10.3390/proceedings2130774">https://doi.org/10.3390/proceedings2130774</a>
9	Evaluation of Silicon Nanonet Field Effect Transistor as Photodiodes	M. Kayaharman, M. Legallais, C. Ternon, S. Park, B. Salem, M. Irannejad, E. Abdel-Rahman, M. Yavuz GINP	Multidisciplinary Digital Publishing Institute Proceedings	Proceedings 2017 Vol.2, Number3	MDPI	Open access hal-02016904	2017	124		<a href="https://doi.org/10.3390/ecs-a-4-04925">10.3390/ecs-a-4-04925</a>
10	Finite element simulation of 2D percolating silicon-nanonet field-effect transistor	T. Cazimajou ; M. Mouis ; G. Ghibaudo GINP	EUROSOI-ULIS 2018, Granada, Spain	March 2018	IEEE Xplore	hal-02016613	2018	Pages 1-3		<a href="https://doi.org/10.1109/ULIS.2018.8354760">10.1109/ULIS.2018.8354760</a>
11	Analytical expression of top surface charge sensitivity in fully depleted semiconductor on insulator MOS transistor.	G. Ghibaudo and G. Pananakakis, GINP	Nanoelectronic Devices ISTE OpenScience		ISTE	Open access	2019	Vol 3, pages 1-6 (2019).		<a href="https://doi.org/10.21494/ISTE.OP.2019.0347">10.21494/ISTE.OP.2019.0347</a>
12	Conception, étude et modélisation d'une nouvelle génération de transistors à nanofils de silicium pour applications biocapteurs	Maxime LEGALLAIS GINP	PhD thesis			Open Access	2017			<a href="https://tel.archives-ouvertes.fr/tel-01745520">https://tel.archives-ouvertes.fr/tel-01745520</a>
13	Fabrication et caractérisation de transistors à base de nanonet de silicium pour la détection électrique de l'ADN	Duc-Trung NGUYEN GINP	Master Dissertation M2 internship				2018			

## Table of Publications

August 2017 – March 2019

No.	Title	Main author, Partners involved	Title of the Journal/ Proceedings/ Book...	Publisher	Place of publication or Open repositionnery (as Hal)	Year of publicatio n	ISBN	Permanent identifiers (if available) DOI
1	ZnO based Nanowire Network for Gas Sensing Applications	F. Morisot, C. Zuliani, J. Luque, Z. Ali, M. Mouis, V.H Nguyen, D. Munoz-Rojas, O. Lourhzal, M. Texier, T. W. Cornelius, C.Ternon <b>GINP &amp; CCS</b>	Material Research Express	IOP		accepted		
2	Material Engineering of Percolating Silicon Nanowire Networks for Reliable and Efficient Electronic Devices	M. Legallais, TTT Nguyen, T Cazimajou, M Mouis, B Salem and C Ternon <b>GINP</b>	Materials Chemistry and Physics	Elsevier		submitted		
3	Al <sub>2</sub> O <sub>3</sub> , Al doped ZnO and SnO <sub>2</sub> encapsulation of randomly oriented ZnO nanowire networks for high performance and stable electrical devices	Morisot F., Nguyen V. H., Montemont C., Maindron T., Muñoz-Rojas D., Mouis M., Langlet M., Ternon C. <b>GINP</b>	Nanotechnology	IOP		accepted		
4	Monolithic fabrication of nano-to-millimeter scale integrated transistors based on transparent and flexible silicon nanonets.	TTT Nguyen, T Cazimajou, M Legallais, T Arjmand, V H Nguyen, M Mouis, B Salem, E Robin, and C Ternon <b>GINP</b>	Nano Futures	IOP		accepted		
5	DNA grafting on silicon nanonets using an eco-friendly functionalization process based on epoxy silane	Demes-Causse, T and Morisot, F and Legallais, M and Calais, A and Pernot, E and Pignot-Paintrand, I and Ternon, C and Stambouli, V <b>GINP</b>	Materials Today, Proc	Elsevier		accepted		
6	Low Temperature Electrical Characteristics of Si Nanonet Field Effect Transistors	T Cazimajou, TTT Nguyen, M Legallais, M Mouis, CTernon, G Ghibaudo, <b>GINP</b>	Proceedings of EUROSOCI-ULIS, 2019	IEEE Xplore		accepted 2019		
7	Low frequency noise characterization of Si Nanonet Field Effect Transistors	T Cazimajou, C Theodorou, M Mouis, TTT Nguyen, M Legallais, C Ternon and G Ghibaudo <b>GINP</b>	Proceedings of ICNF 2019 (Neufchatel, Switzerland)	IEEE Xplore		accepted June 2019		