

List of Publications

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Journals

1. D.Stefanakis, **N. Makris**, K. Zekentes and D. Tassis "Comparison of Impact Ionization Models for 4H-SiC Along the < 0001 > Direction, Through Breakdown Voltage Simulations at Room Temperature", vol.68, no. 5, pp. 2582-2586, Mar. 2021, doi: 10.1109/TED.2021.3066143.
2. **N. Makris**, M. Bucher, L. Chevas, F. Jazaeri and J. -M. Sallese, "Free Carrier Mobility, Series Resistance, and Threshold Voltage Extraction in Junction FETs," in IEEE Transactions on Electron Devices, vol. 67, no. 11, pp. 4658-4661, Nov. 2020, doi: 10.1109/TED.2020.3025841.
3. M. Bucher, **N. Makris** and L. Chevas, "Generalized Constant Current Method for Determining MOSFET Threshold Voltage," in IEEE Transactions on Electron Devices, vol. 67, no. 11, pp. 4559-4562, Nov. 2020, doi: 10.1109/TED.2020.3019019.
4. **N. Makris**, M. Bucher, F. Jazaeri and J. Sallese, "CJM: A Compact Model for Double-Gate Junction FETs," in IEEE Journal of the Electron Devices Society, vol. 7, pp. 1191-1199, 2019, doi: 10.1109/JEDS.2019.2944817
5. **N. Makris**, F. Jazaeri, J. Sallese, R. K. Sharma and M. Bucher, "Charge-Based Modeling of Long-Channel Symmetric Double-Gate Junction FETs--Part I: Drain Current and Transconductances," in IEEE Transactions on Electron Devices, vol. 65, no. 7, pp. 2744-2750, July 2018. doi: 10.1109/TED.2018.2838101
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8. N. Mavredakis, **N. Makris**, P. Habas and M. Bucher, "Charge-Based Compact Model for Bias-Dependent Variability of 1/ f Noise in MOSFETs," in IEEE Transactions on Electron Devices, vol. 63, no. 11, pp. 4201-4208, Nov. 2016. doi: 10.1109/TED.2016.2608722
9. Antonopoulos, M. Bucher, K. Papathanasiou, **N. Makris**, N. Mavredakis, R. K. Sharma, P. Sakalas, M. Schroter, "Modeling of High Frequency Noise of Silicon CMOS Transistors for RFIC Design", *Int. Journal of Numerical Modelling: Electronic Networks, Devices and Fields*, Vol. 27, N° 5-6, pp. 802-811, Sept.-Dec. 2014. [doi](#)
10. W. Grabinski, M. Brinson, P. Nenzi, F. Lannutti, **N. Makris**, A. Antonopoulos, M. Bucher, "Open source circuit simulation tools for RF compact semiconductor devices modeling", *Invited paper, Int. Journal of Numerical Modelling: Electronic Networks, Devices and Fields*, Vol. 27, N° 5-6, pp. 761-779, Sept.-Dec. 2014. [doi](#)
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3. A. Nikolaou, L. Chevas, A. Papadopoulou, **N. Makris**, M. Bucher, G. Borghello and F. Faccio, "Forward and Reverse Operation of Enclosed-Gate MOSFETs and Sensitivity to High Total Ionizing Dose," 2019 MIXDES - 26th International Conference "Mixed Design of Integrated Circuits and Systems", Rzeszów, Poland, 2019, pp. 306-309, doi: 10.23919/MIXDES.2019.8787098.
4. A. Papadopoulou, **N. Makris**, L. Chevas, A. Nikolaou and M. Bucher, "Design of Micropower Operational Transconductance Amplifiers for High Total Ionizing Dose Effects," 2019 8th International Conference on Modern Circuits and Systems Technologies (MOCAS), Thessaloniki, Greece, 2019, pp. 1-4, doi: 10.1109/MOCAS.2019.8742031.
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6. M. Kayambaki, **N. Makris**, K. Tsagaraki, A. Stavrinidis, G. Konstantinidis, K. Zekentes," Under-mask penetration for different crystal orientations in 4H-SiC TSI-VJFETs", 7th International Conference Micro & Nano 2018, Thessaloniki, Greece, 5-7 November 2018 (oral presentation)
7. A. Papadopoulou, L. Chevas, A. Nikolaou, **N. Makris**, M. Bucher, "Weak Inversion Ring Oscillator Design Study in 65nm CMOS technology under Total Ionizing Dose Effects", 7th International Conference Micro & Nano 2018, Thessaloniki, Greece, 5-7 November 2018 (poster)
8. L. Chevas, M.-I. Iosifidis, **N. Makris**, M. Bucher, "Electrical Behavior of Commercial Discrete Power VDMOS Transistors and their Compact Modeling", 7th International Conference Micro & Nano 2018, Thessaloniki, Greece, 5-7 November 2018 (poster)
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