GREGORY MOILLE

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Research Experiences

University of Maryland - National Institute of Standards and Technology — Maryland, USA

Postdoctoral Associate — Feb. 2017 - present

- Study of chip-scale integrated micro-resonators made of Silicon Nitride for frequency comb applications.
- Study of novel dispersion design through geometrical tailoring
- These researches involves modelling through in-house devloepd software (python, java, julia, matlab) and proprietary softwares, fabrication in cleanroom (ebeam lithography, ICP dry etch, chemistry), and experiment

Thales Research and Technology — Palaiseau, France

PhD Candidate — Dec. 2012 - Dec. 2016

- Study of carrier dynamics and its effects on the optical modes in III-V photonic crystal cavities for all-optical and electro-optical signal processing.
- I theoretically studied the devices through in-house developed numerical solver, processed them in clean-room, and characterized them with setup developed during this Ph.D.

Academic Experience

Teaching

- some stuff

Mentoring

- some stuff
- some stuff
- some stuff

Selected Publications

Articles

- some stuff
- some stuff

Conferences

- some sutff
- some stuff
- some stuff

Service to Community

Skills Summary

Experimental Skills

- Photonics Charac.
- Non-Linear Optics
- Radio Freq.
- Metrology

NanoFab

- Design Layout
- EBL
- Dy Etching
- Wet Etching

Programming

- Python
- Matlab
- Julia
- Java

Languages

- English
- French
- Italian
- Russian

Complete list of publications

Journal Article

References

[Bla+20] J. A. Black et al. “Optical synthesis by spectral translation”. In: *2020 Conference on Lasers and Electro-Optics (CLEO)*. IEEE. 2020, pp. 1–2.

[Bou+16] J. Bourderionnet et al. “Silicon-on-Insulator photonic crystal

Book Chapters

Conference Proceedings