

Claudio Bruschini

Publication List - October 2021

Journal Articles

- [1] Francesco Gramuglia et al. "A Low-noise CMOS SPAD Pixel with 12.1 ps SPTR and 3 ns Dead Time". In: *IEEE Journal of Selected Topics in Quantum Electronics* (2021), pp. 1–1. DOI: 10.1109/JSTQE.2021.3088216.
- [2] Francesco Gramuglia et al. "Engineering Breakdown Probability Profile for PDP and DCR Optimization in a SPAD Fabricated in a Standard 55nm BCD Process". In: *IEEE Journal of Selected Topics in Quantum Electronics* (2021), pp. 1–1. DOI: 10.1109/JSTQE.2021.3114346.
- [3] Petr Bruza et al. "Single-photon avalanche diode imaging sensor for subsurface fluorescence LiDAR". In: *Optica* 8.8 (Aug. 2021), p. 1126. DOI: 10.1364/OPTICA.431521.
- [4] Gur Lubin et al. "Heralded Spectroscopy Reveals Exciton–Exciton Correlations in Single Colloidal Quantum Dots". In: *Nano Letters* 21.16 (Aug. 2021), pp. 6756–6763. DOI: 10.1021/acs.nanolett.1c01291.
- [5] Cristoforo Abbattista et al. "Towards Quantum 3D Imaging Devices". In: *Applied Sciences* 11.14 (July 2021), p. 6414. DOI: 10.3390/app11146414.
- [6] Francesco Gramuglia et al. "Light Extraction Enhancement Techniques for Inorganic Scintillators". In: *Crystals* 11.4 (Mar. 2021), p. 362. DOI: 10.3390/cryst11040362.
- [7] Vytautas Zickus et al. "Fluorescence lifetime imaging with a megapixel SPAD camera and neural network lifetime estimation". In: *Scientific Reports* 10.1 (Dec. 2020). DOI: 10.1038/s41598-020-77737-0.
- [8] Sizhuo Ma et al. "Quanta burst photography". In: *ACM Transactions on Graphics* 39.4 (July 2020). DOI: 10.1145/3386569.3392470.
- [9] Kazuhiro Morimoto et al. "A megapixel time-gated SPAD image sensor for 2D and 3D imaging applications". In: *Optica* 4 (Apr. 2020), p. 346. DOI: 10.1364/OPTICA.386574.
- [10] Arin Ulku et al. "Wide-field time-gated SPAD imager for phasor-based FLIM applications". In: *Methods and Applications in Fluorescence* 8.2 (Feb. 2020), p. 024002. DOI: 10.1088/2050-6120/ab6ed7.
- [11] Myung-Jae Lee et al. "First Near-Ultraviolet- and Blue-Enhanced Backside-Illuminated Single-Photon Avalanche Diode Based on Standard SOI CMOS Technology". In: *IEEE Journal of Selected Topics in Quantum Electronics* 25.5 (2019), pp. 1–6. DOI: 10.1109/jstqe.2019.2918930.
- [12] Rinat Ankri et al. "Single-Photon, Time-Gated, Phasor-Based Fluorescence Lifetime Imaging through Highly Scattering Medium". In: *ACS Photonics* 7.1 (Dec. 2019), pp. 68–79. DOI: 10.1021/acsp Photonics.9b00874.

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- [13] Gur Lubin et al. “Quantum correlation measurement with single photon avalanche diode arrays”. In: *Optics Express* 27.23 (Oct. 2019), p. 32863. DOI: 10.1364/OE.27.032863.
- [14] Claudio Bruschini et al. “Single-photon avalanche diode imagers in biophotonics: review and outlook”. In: *Light: Science & Applications* 8.1 (Sept. 2019). DOI: 10.1038/s41377-019-0191-5.
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Conference Proceedings

- [1] Giancarlo Sportelli et al. "Towards the ideal PET detector: a scalable architecture with high intrinsic spatial resolution, DOI and sub-200 ps TOF capability". In: *IEEE Nuclear Science Symposium, Yokohama, Japan (virtual event)*. Oct. 2021.
- [2] Francesco Gramuglia et al. "SPAD Microcells with 12.1 ps SPTR for SiPMs in TOF-PET Applications". In: *IEEE Nuclear Science Symposium, Yokohama, Japan (virtual event)*. IEEE, Oct. 2021.
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