

Claudio Bruschini

Publication List - January 2023

Journal Articles

- [1] Michael A. Wayne et al. "Massively parallel, real-time multispeckle diffuse correlation spectroscopy using a 500 500 SPAD camera". In: *Biomedical Optics Express* 14.2 (Jan. 2023), p. 703. DOI: 10.1364/B0E.473992.
- [2] Ekin Kizilkan et al. "Guard-Ring-Free InGaAs/InP Single-Photon Avalanche Diode Based on a Novel One-Step Zn-Diffusion Technique". In: *IEEE Journal of Selected Topics in Quantum Electronics* 28.5: Lidars and Photonic Radars (Sept. 2022), pp. 1–9. DOI: 10.1109/JSTQE.2022.3162527.
- [3] Michael Wayne et al. "A 500×500 Dual-Gate SPAD Imager With 100% Temporal Aperture and 1 ns Minimum Gate Length for FLIM and Phasor Imaging Applications". In: *IEEE Transactions on Electron Devices* 69.6 (June 2022), pp. 2865–2872. DOI: 10.1109/TED.2022.3168249.
- [4] Francesco Gramuglia et al. "Sub-10 ps Minimum Ionizing Particle Detection With Geiger-Mode APDs". In: *Frontiers in Physics* 10 (May 2022). Equally contributing last authorship. DOI: 10.3389/fphy.2022.849237.
- [5] Jason T. Smith et al. "In vitro and in vivo NIR fluorescence lifetime imaging with a time-gated SPAD camera". In: *Optica* 9.5 (May 2022), p. 532. DOI: 10.1364/OPTICA.454790.
- [6] 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.
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- [9] Gur Lubin et al. "Resolving the Controversy in Biexciton Binding Energy of Cesium Lead Halide Perovskite Nanocrystals through Heralded Single-Particle Spectroscopy". In: *ACS Nano* 15.12 (Nov. 2021), pp. 19581–19587. DOI: 10.1021/acsnano.1c06624.
- [10] 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.
- [11] 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.

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- [12] Cristoforo Abbattista et al. "Towards Quantum 3D Imaging Devices". In: *Applied Sciences* 11.14 (July 2021), p. 6414. DOI: 10.3390/app11146414.
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Conference Proceedings

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Conference Presentations

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- [2] Francesco Gramuglia et al. “Direct MIP detection with sub-10 ps timing resolution Geiger-Mode APDs”. In: *15th Pisa Meeting on Advanced Detectors, La Biodola, Isola d’Elba, Italy, 22-28 May 2022*. Vol. 1047. Poster - 15th Pisa Meeting on Advanced Detectors, La Biodola, Isola d’Elba, Italy, 22-28 May 2022. Elsevier BV, Feb. 2023, p. 167813. DOI: 10.1016/j.nima.2022.167813.
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