

Papers in referred international journals:

1. A. Szenes, L. Pothorcki, B. Bánhelyi, M. Csete: “*Plasmonic structure integrated superconducting nanowire single-photon detector with BSCCO stripes*”, (2024) submitted to IEEE JSTQE, <https://arxiv.org/abs/2411.09630>.
2. B. Tóth, A. Szenes, D. Marácz, B. Bánhelyi, T. Csendes, and M. Csete: “*Polarization independent high absorption efficiency single-photon detectors based on three-dimensional integrated superconducting and plasmonic patterns*”, IEEE Journal of Selected Topics in Quantum Electronics **26/3** (2020) 3900309. <https://doi.org/10.1109/JSTQE.2020.2987131>
3. M. Csete, A. Szenes, D. Marácz, B. Bánhelyi, T. Csendes and G. Szabó: “*Plasmonic structure integrated single-photon detectors optimized to maximize polarization contrast*”, IEEE Photonics Journal **9/2** (2017) 4900211, <https://doi.org/10.1109/JPHOT.2017.2690141>.
4. M. Csete, G. Szekeres, A. Szenes, B. Bánhelyi, T. Csendes, G. Szabó: “*Optimized superconducting nanowire single photon detectors to maximize absorptance*”, Progress In Electromagnetics Research B, Vol. **65**, (2016) 81-108, <https://doi.org/10.2528/PIERB15090904>
5. M. Csete, G. Szekeres, A. Szenes, A. Szalai and G. Szabó: “*Plasmonic structure integrated single-photon detector configurations to improve absorptance and polarization contrast*”, Sensors, **15/2**, (2015) 3513-3539, <https://doi.org/10.3390/s150203513>
6. M. Csete, Á. Sipos, A. Szalai, F. Najafi, G. Szabó, K. K. Berggren: „*Improvement of infrared single-photon detectors absorptance by integrated plasmonic structures*”, Scientific Reports **3** (2013) 2406, <https://doi.org/10.1038/srep02406>
7. M. Csete, Á. Sipos, F. Najafi, K. K. Berggren: „*Optimized polar-azimuthal orientations for polarized light illumination of different superconducting nanowire single-photon detector designs*”, Journal of Nanophotonics, **6/1** (2012) 063523, <https://doi.org/10.1117/1.JNP.6.063523>
8. M. Csete, A. Szalai, Á. Sipos, G. Szabó: “*Impact of polar-azimuthal illumination angles on efficiency of nano-cavity-array integrated single-photon detectors*”, Optics Express, **20/15** (2012) 17065-17081, <https://doi.org/10.1364/OE.20.017065>
9. F. Marsili, F. Najafi, E. Dauler, F. Bellei, X. Hu, M. Csete, R. Molnar, K. K. Berggren: „*Single-photon detectors based on ultranarrow superconducting nanowires*”, Nano Letters **11/5** (2011) 2048-2053, <https://doi.org/10.1021/nl2005143>
10. M. Csete, Á. Sipos, F. Najafi, X. Hu, K. K. Berggren: “*Numerical method to optimize the polar-azimuthal orientation of infrared superconducting-nanowire single-photon detectors*”, Applied Optics **50/31**(2011) 5949-5956, <https://doi.org/10.1364/AO.50.005949>

Refereed conference proceedings, book-chapters:

1. M. Csete, A. Szenes, B. Tóth, G. Szabó, B. Bánhelyi, T. Csendes: “*Plasmonic structure integrated superconducting nanowire single-photon detectors for transferring specific quantum information*”, IEEE RAPID conference 2018, talk, proceeding paper 345-348: <https://ieeexplore.ieee.org/document/8509008>, <https://doi.org/10.1109/RAPID.2018.8509008>
2. M. Csete, A. Szenes, B. Tóth, B. Bánhelyi, T. Csendes, G. Szabó: “*Plasmonic structure integrated superconducting nanowire single-photon detectors for quantum information processing*”, OSA Advanced Photonics congress 2018, poster, paper in ISBN: 978-1-943580-43-9 proceeding: <https://doi.org/10.1364/BGPPM.2018.JTu5A.22>.
3. M. Csete, A. Szenes, D. Marácz, B. Bánhelyi, T. Csendes and G. Szabó: “*Plasmonic structure integrated single-photon detectors for absorptance and polarization contrast maximization*”, Tech Connect World 2016, ISBN 978-0-9975-1173-4, 259-262, Washington (2016). <https://publicatio.bibl.u-szeged.hu/15672/>

4. M. Csete, G. Szekeres, B. Bánhelyi, A. Szenes, T. Csendes, G. Szabó: "*Methods to optimize plasmonic structure integrated single-photon detector designs*", in proceeding of COMSOL Conference, Session: Optics, Photonics and Semiconductors (2014) Boston, US, talk.
<https://www.comsol.com/paper/methods-to-optimize-plasmonic-structure-integrated-single-photon-detector-design-19611>
5. G. Szekeres, A. Szenes, M. Csete: "*Plasmon enhanced single-photon detection*" Proc. SPIE 8809, Plasmonics: Metallic Nanostructures and Their Optical Properties XI, 88092Y (2013); San Diego, US, poster.
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6. M. Csete, Á. Sipos, A. Szalai, G. Szabó: "*Optimized illumination directions of single-photon detectors integrated with different plasmonic structures*", Proceeding of COMSOL Conference, Session: Optics, Photonics and Semiconductors, Boston, 2012, talk.
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7. Mária Csete, Áron Sipos, Faraz Najafi, Karl K. Berggren: "*Polar-azimuthal angle dependent efficiency of different infrared superconducting nanowire single-photon detector designs*", Infrared Sensors, Devices, and Applications; and Single Photon Imaging II, Edited by Paul D. LeVan; Ashok K. Sood; Priyalal S. Wijewarnasuriya; Manijeh Razeghi; Jose Luis Pau Vizcaíno; Rengarajan Sudharsanan; Melville P. Ulmer; Tariq Manzur, Proceedings of the SPIE, Volume 8155, pp. 81551K (2011); San Diego, US, invited talk
<https://doi.org/10.1117/12.893879>
8. M. Csete, X. Hu, Á. Sipos, A. Szalai, A. Mathesz, K. Berggren: "*Periodic near-field enhancement on metal-dielectric interfacial gratings at optimized azimuthal orientation*", Proceeding of COMSOL Conference (2009), Boston, US, talk
<https://www.comsol.com/paper/periodic-near-field-enhancement-on-metal-dielectric-interfacial-gratings-at-opti-6426>