List of publications, Dr. Mária Csete

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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. D. Vass, A. Szenes, B. Bánhelyi, M. Csete: „*Time-varying wave phenomena in optimized configurations of ENZ materials constructed with layered core-shell nanoresonators*", prepared for publication in OMEX.

3. D. Vass, A. Szenes, B. Bánhelyi, M. Csete: „*Impedance matched amplifiers and amplifying mirrors by tailoring the band-structure of layered core-shell nanoresonators*", prepared for publication in OMEX.

4. E. Tóth, B. Bánhelyi, Á. Sipos, O. A. Fekete, M. Csete: „*Babinet complementary patterns of miniarrays for plasmonic spectral engineering and complex structure enhanced lasing*", prepared for publication in Plasmonics (2024).

5. D. Vass, E. Tóth, A. Szenes, B. Bánhelyi, I. Papp, T. Bíró, L. P. Csernai, N. Kroó, and M. Csete: "*Plasmonic nanoprism distributions to promote enhanced and uniform energy deposition in passive and active targets",* submitted Scientific Reports, https://arxiv.org/abs/2404.12716

6. A. Szenes, D. Vass, B. Bánhelyi, and M. Csete: "*Solid and hollow plasmonic nanoresonators for carrier envelope phase read-out*", Optical Materials Express 14/11 (2024) 2668-2680, https://doi.org/10.1364/OME.532140.

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116. A. Szenes, D. Vass, B. Bánhelyi, and M. Csete: "*Plasmonic resonators for carrier envelope phase read-out*", talk at PIERS (2023).

117. D. Vass, A. Szenes, B. Bánhelyi, and M. Csete: "*Active individual core-shell nanoresonators for plasmonic lasing*", talk at PIERS (2023).

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119. D. Vass, A. Szenes, B. Bánhelyi, M. Csete: "*Plasmonic nanoresonators embedded into active shells optimized for near-field and far-field stimulated emission*", 7th Nano Boston Conference, 2021, talk.

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121. B. Bánhelyi, O. Fekete, Á. Sipos, A. Szenes, E. Tóth, D. Vass, M. Csete: „*Optimalizált nanoplazmonika*", Szimpózium a hazai kvantumelektronikai kutatások eredményeiről (9.) (2021) (Szeged), ISBN: 978-963-306-775-8, https://doi.org/10.14232/kvantumelektronika.9, http://acta.bibl.u-szeged.hu/71659/

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123. M. Csete, A. Szenes, D. Marászi, B. Bánhelyi: "*Plasmonic grating integrated polarization insensitive single-photon detectors*", abstract and talk, Nanoworld conference 2020.

124. M. Csete: "*Plasmon enhanced light-matter interaction phenomena*", talk at International Workshop on Collectivity, 2019. Kőszeg, Hungary, https://indico.cern.ch/event/800723/

125. B. Tóth, A. Szenes, D. Marászi, B. Bánhelyi, T. Csendes, M. Csete: "*Polarization insensitive high detection efficiency via single-photon detectors based on two-dimensional plasmonic grating integrated into a crossed absorbing nanowire pattern*", talk at PIERS conference 2019, Rome Italy.

126. D. Vass, A. Szenes, B. Bánhelyi, T. Csendes, M. Csete: "*Superradiance achievable via SiV color centers in broken-symmetry and symmetrical arrays in ellipsoidal core-shell plasmonic nanoresonators*", talk at PIERS conference, 2019, Rome Italy.

127. B. Tóth, A. Szenes, B. Bánhelyi, T. Csendes, M. Csete: "*Plasmonic structure integrated superconducting nanowire single-photon detectors to maximize singlet oxygen luminescence detection efficiency*", poster at SPP9, 2019, Copenhagen, Denmark.

128. D. Vass, A. Szenes, B. Bánhelyi, T. Csendes, M. Csete: "*Superradiance achievable via diamond color centers in symmetrical and broken-symmetry arrays in spherical core-shell plasmonic nanoresonators*". poster at SPP9 2019, Copenhagen, Denmark.

129. A. Szenes, D. Vass, B. Bánhelyi, T. Csendes, M. Csete: "*High efficiency diamond color center fluorescence enhancement via dimers of ellipsoidal core-shell plasmonic nanoresonators*", poster at SPP9, 2019, Copenhagen, Denmark.

130. M. Csete, E. Tóth, A. Török, A. Somogyi, B. Bánhelyi and T. Csendes: "*Strong-coupling of emitters and grating-coupled modes*", NFO 15, poster. http://nfo15.utt.fr/doc/NFO15_Poster_Abstract.pdf

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138. M. Csete, A. Szenes, L. Szabó, B. Bánhelyi, T. Csendes, G. Szabó: "*Plasmonic nanoresonators to enhance diamond color center emission*", Nanoworld conference (2017) Newton, talk.

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140. M. Csete, A Somogyi, A. Szenes, E. Tóth, G. Veszprémi, L. Zs. Szabó, E. Csapó, D. Ungor, B. Bánhelyi, T. Csendes, G. Szabó, I. Dékány: "*Plasmon enhanced fluorescence bio-sensing via optimized nanorod and alloy sphere based configurations*", Quantum Plasmonics (2017), Benasque, poster.

141. M. Csete: "*Plasmon enhanced light-matter interaction",* invited talk, MIT Lincoln Laborarory, 2016.

142. M. Csete, L. Zs. Szabó, A. Szenes, B. Bánhelyi, T. Csendes, G. Szabó: "*Optimizing fluorescence of diamond color centers encapsulated into core-shell nano-resonators*", talk at COMSOL conference 2016, Boston (2016).

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144. T. Csendes, B. Bánhelyi, M. Csete, D. Zombori, G. Szabó, A. Szenes: "*Parallel Implementation of GLOBAL with Applications to Nanophotonical Detector Development*", talk at XIII. Workshop on Global Optimization, Braga, Portugália (2016).

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148. Mária Csete, András Szenes, Gábor Szekeres, Balázs Bánhelyi, Tibor Csendes, Gábor Szabó: "*Modeling plasmonic structure integrated single-photon detectors to maximize polarization contrast*", COMSOL conference, talk, 2015

149. M. Csete, G. Szekeres, A. Szenes, B. Bánhelyi, T. Csendes, G. Szabó: "*Optimization of Plasmonic Structure Integrated Single-photon Detector Designs to Enhance Absorptance*", Advanced Photonics 2015, Boston, US, poster.

150. M. Csete, G. Szekeres, B. Bánhelyi, A. Szenes, T. Csendes, G. Szabó: "*Optimization of plasmonic structure integrated single-photon detector designs*", SPP7 2015, Jerusalem, Izrael, poster.

151. Á. Sipos, A. Somogyi, G. Szabó, M. Csete: "*Tunable plasmonic properties of rounded object-arrays achievable via interferometric illumination of colloid sphere monolayers*", SPP7 2015, Jerusalem, Izrael, poster.

152. A. Szalai, A. Somogyi, J. Balázs, E. Csapó, I. Dékány, M. Csete: "*Plasmonic Modes on Arrays of Nanoparticle Aggregates*", SPP7 2015, Jerusalem, Izrael, poster.

153. M. Csete, G. Szekeres, B. Bánhelyi, A. Szenes, T. Csendes, G. Szabó, "*Optimized plasmonic structure integrated single-photon detectors for quantum information processing*", poszter, Quantum Plasmonics, 2015 Benasque, Spanyolország.

154. M. Csete: „*Plasmonically enhanced light-matter interaction*", Smart functional materials for shaping our future 2014, Debrecen, Hungary, invited talk.

155. Á. Sipos, A. Somogyi, G. Szabó, M. Csete: „*Interferometric Illumination of Colloid Sphere Monolayers*“, NFO13, 2014, Salt Lake City, Utah, US, talk.

156. G. Szekeres, A. Szenes, G. Szabó and M. Csete: „*Improvement of infrared single-photon detectors absorptance and polarization-contrast via plasmonic structure configurations*“, NFO13, 2014, Salt Lake City, Utah, US, poster.

157. A. Szalai, E. Csapó, L. Tóth, A. Somogyi, I. Dékány, M. Csete: „*Standing and propagating plasmonic modes on arrays of nanoparticle aggregates*“, NFO13, 2014, Salt Lake City, Utah, USA, poster.

158. M. Csete: "*Absorptance and polarization contrast improvement via plasmonic structure integrated infrared single-photon detector configurations*", Nanolight 2014, Mar 02 - 08, Benasque (2014), talk.

159. Á. Sipos, A. Somogyi, G. Szabó, M. Csete: "*Interferometric illumination of colloid sphere monolayers for complex plasmonic array fabrication and spectral engineering*", Nanolight 2014, Mar 02 - 08, Benasque (2014), poster.

160. A. Szalai, A. Somogyi, J. Balázs, G. Szabó, M. Csete: "*Coupled surface plasmon resonance on wavelength-scaled shallow rectangular gratings*", Nanolight 2014, Mar 02 - 08, Benasque (2014), poster.

161. M. Csete: "*Plasmon enhanced photodetection*", Jet Propulsion Laboratory, Aug 2013, invited talk.

162. G. Szekeres, Á. Sipos, A. Szenes, M. Csete: "*Improvement of infrared single-photon detectors absorptance via grating anomalies on integrated plasmonic structures"*, PIERS conference 2013 Stockholm, talk.

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