

Ágoston Schranz – List of Publications

Journal Papers

- J5** Ágoston Schranz, Eszter Udvary, and Balázs Matolcsy. “Efficiency Improvement of a Time-of-Arrival Quantum Random Number Generator”. In: *Optical Engineering* 60.3 (2021), p. 034112. DOI: 10.1117/1.OE.60.3.034112
- J4** Balázs Matolcsy, Eszter Udvary, and Ágoston Schranz. “Common-mode noise filtering with space-divided differential 2x2 VLC for V2V applications”. In: *Optical and Quantum Electronics* 53.4 (2021), p. 182. DOI: 10.1007/s11082-021-02808-z
- J3** Ágoston Schranz and Eszter Udvary. “Error probability in polarization sensitive communication systems in terms of moments of the channel’s rotation angle”. In: *Optical and Quantum Electronics* 53.1 (Jan. 2021), p. 62. ISSN: 0306-8919. DOI: 10.1007/s11082-020-02690-1
- J2** Ádám Marosits, Ágoston Schranz, and Eszter Udvary. “Amplified spontaneous emission based quantum random number generator”. In: *Informations Journal* 12.2 (2020), pp. 12–17. DOI: 10.36244/icj.2020.2.2
- J1** Ágoston Schranz and Eszter Udvary. “Mathematical analysis of a quantum random number generator based on the time difference between photon detections”. In: *Optical Engineering* 59.4 (2020), p. 044104. DOI: 10.1117/1.OE.59.4.044104

Conference Papers

- C9** Schranz, Ágoston et al. “A Portable Ambient Optical Noise Measurement Station”. In: *2023 23rd International Conference on Transparent Optical Networks (ICTON)*. IEEE, July 2023, pp. 1–6. DOI: 10.1109/icton59386.2023.10207414
- C8** Ágoston Schranz, Ádám Marosits, and Eszter Udvary. “Effects of Sampling Rate on Amplified Spontaneous Emission Based Single-Bit Quantum Random Number Generation”. In: *21st International Conference on Transparent Optical Networks (ICTON)*. IEEE, 2019, pp. 1–4. DOI: 10.1109/ICTON.2019.8840188
- C7** Ágoston Schranz and Eszter Udvary. “Quantum Bit Error Rate Analysis of the Polarization based BB84 Protocol in the Presence of Channel Errors”. In: *Proceedings of the 7th International Conference on Photonics, Optics and Laser Technology - Volume 1: PHOTOPTICS*. INSTICC. SciTePress, 2019, pp. 181–189. ISBN: 978-9-897-58364-3. DOI: 10.5220/0007384101810189

- C6** Ágoston Schranz and Eszter Udvary. “Transmitter Design Proposal for the BB84 Quantum Key Distribution Protocol using Polarization Modulated Vertical Cavity Surface-emitting Lasers”. In: *Proceedings of the 6th International Conference on Photonics, Optics and Laser Technology*. INSTICC. SciTePress, 2018, pp. 252–258. ISBN: 978-9-897-58286-8. DOI: 10.5220/0006638002520258
- C5** Gábor Szabó, Ágoston Schranz, and Eszter Udvary. “Nonlinear Modulation Characteristics of LEDs in Radio on Visible Light Systems”. In: *International Interdisciplinary PhD Workshop 2016*. 2016, pp. 6–10
- C4** Ágoston Schranz. “Investigation of VCSEL Polarization for Quantum Key Distribution”. In: *International Interdisciplinary PhD Workshop 2016*. 2016, pp. 117–120
- C3** Ágoston Schranz. “Experimental Investigation of VCSEL for Quantum Communications”. In: *Mesterpróba 2016*. 2016, pp. 8–11
- C2** Eszter Udvary, Ágoston Schranz, and Balázs Matolcsy. “Dispersion and off-set filtering in RSOA based networks”. In: *18th International Conference on Transparent Optical Networks (ICTON)*. 2016, pp. 1–4. DOI: 10.1109/ICTON.2016.7550690
- C1** Ágoston Schranz, Eszter Udvary, and Zsolt Kis. “Photon statistics determination for single photon based quantum key distribution”. In: *18th International Conference on Transparent Optical Networks (ICTON)*. IEEE. 2016, pp. 1–4. DOI: 10.1109/ICTON.2016.7550483

Book Chapters

- B1** Ágoston Schranz and Eszter Udvary. “Polarization Modulated Vertical-Cavity Surface-Emitting Lasers in Quantum Key Distribution”. In: *Optics, Photonics and Laser Technology 2018*. Vol. 223. Springer Series in Optical Sciences. Springer, Cham., 2019, pp. 75–92. DOI: 10.1007/978-3-030-30113-2_4