

## Annex 1: List of most important publications of the NCCR

- A. Acin, N. Gisin, and L. Masanes. "From Bell's theorem to secure quantum key distribution." *Phys. Rev. Lett.*, **97**, 120405 (2006).
- M. Atatüre, J. Dreiser, A. Badolato, A. Högele, K. Karrai and A. Imamoglu. "Quantum-dot spin-state preparation with near-unity fidelity." *Science*, **312**, 551 (2006).
- M. Beck, D. Hofstetter, T. Aellen, J. Faist, U. Oesterle, M. Illegems, E. Gini and H. Melchior. "Continuous-wave operation of a mid-infrared semiconductor laser at room-temperature." *Science*, **295**, 301 (2002).
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- P. Eckle, A. Pfeiffer, C. Cirelli, A. Staudte, R. D orner, H. G. Muller, M. B uttiker, U. Keller. "Atto-second ionization and tunneling delay time measurements." *Science*, **322**, 1525-1529, (2008).
- N. Gisin, S. Pironio, N. Sangouard. "Proposal for implementing device-independent quantum key distribution based on a heralded qubit amplifier." *Phys. Rev. Lett.*, **105**, 070501 (2010).
- M. Holler, F. Schapper, L. Gallmann, U. Keller, "Attosecond electron wave-packet interference observed by transient absorption. *Phys. Rev. Lett.*, **106**, 123601 (2011).
- A. Hugi, R. Terazzi, Y. Bonetti, A. Wittmann, M. Fischer, M. Beck, J. Faist and E. Gini. "External cavity quantum cascade laser tunable from 7.6 to 11.4  $\mu\text{m}$ ." *Appl. Phys. Lett.*, **95**, 061103 (2009).
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- M. Ninck, A. Galler, T. Feurer, and T. Brixner. "Programmable common-path vector field synthesizer for femtosecond pulses." *Optics Letters*, **32**, 3379 (2007).
- I. Marcikic, H. de Riedmatten, W. Tittel, H. Zbinden and N. Gisin. "Long-distance teleportation of qubits at telecommunication wavelengths." *Nature*, **421**, 509, (2003).
- T. C. H. Liew and V. Savona. "Single photons from coupled quantum modes." *Phys. Rev. Lett.*, **104**, 183601 (2010).
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