# Thierry ChaneliÃ¨re

List of Publications by Year
in descending order



Version: 2024-02-01

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|---|---|---|---|
| 41 papers | 1,895 citations | 430874 18 h-index | 276875 41 g-index |
| 42 all docs | 42 docs citations | 42 times ranked | 1269 citing authors |

| # | Article | IF | Citations |
|---|---|---|---|
| 1 | Limits to the sensitivity of a rare-earth-enabled cryogenic vibration sensor. AVS Quantum Science, 2022, 4, 024401. | 4.9 | 1 |
| 2 | Twenty-threeâ€“millisecond electron spin coherence of erbium ions in a natural-abundance crystal. Science Advances, 2021, 7, eabj9786. | 10.3 | 42 |
| 3 | Demonstration of site-selective angular resolved absorption spectroscopy of the <mml:math xmlns:mml="http://www.w3.org/1998/Math/MathML" display="inline" id="d1e513" altimg="si43.svg"><mml:mrow><mml:msup><mml:mrow /><mml:mrow><mml:mn>4</mml:mn></mml:mrow></mml:msup><mml:msub><mml:mrow><mml:mi>I</mml:mi></mml:mrow><mml:mrow /><mml:mrow><mml:mn>4</mml:mn></mml:mrow></mml:msub><mml:mrow>. Optical Materials: X, 2020, 8, 100062. | 0.8 | 3 |
| 4 | Multimode Storage of Quantum Microwave Fields in Electron Spins over 100Âms. Physical Review Letters, 2020, 125, 210505. | 7.8 | 21 |
| 5 | Superhyperfine induced photon-echo collapse of erbium in <mml:math xmlns:mml="http://www.w3.org/1998/Math/MathML"><mml:mrow><mml:msub><mml:mi mathvariant="normal">Y</mml:mi><mml:mn>2</mml:mn></mml:msub><mml:mi>Si</mml:mi><mml:msub><mml:mi mathvariant="normal">O</mml:mi><mml:mn>5</mml:mn></mml:msub></mml:mrow></mml:math>. Physical Review B, 2020, 102, . | 3.7 | 9 |
| 6 | Hyperfine spectroscopy in a quantum-limited spectrometer. Magnetic Resonance, 2020, 1, 315-330. | 1.9 | 9 |
| 7 | Optical study of the anisotropic erbium spin flip-flop dynamics. Physical Review B, 2019, 100, . | 3.2 | 13 |
| 8 | Piezospectroscopic measurement of high-frequency vibrations in a pulse-tube cryostat. Review of Scientific Instruments, 2019, 90, 034901. | 1.3 | 13 |
| 9 | Two-pulse photon echo area theorem in an optically dense medium. Optics Express, 2019, 27, 28983. | 3.4 | 9 |
| 10 | Phase-space-density limitation in laser cooling without spontaneous emission. Physical Review A, 2018, 98, . | 2.5 | 4 |
| 11 | Selective Optical Addressing of Nuclear Spins through Superhyperfine Interaction in Rare-Earth Doped Solids. Physical Review Letters, 2018, 120, 197401. | 7.8 | 24 |
| 12 | Ultrasound-modulated optical tomography in scattering media: flux filtering based on persistent spectral hole burning in the optical diagnosis window. Optics Letters, 2018, 43, 3993. | 3.3 | 17 |
| 13 | Quantum Optical Memory Protocols in Atomic Ensembles. Advances in Atomic, Molecular and Optical Physics, 2018, , 77-150. | 2.3 | 16 |
| 14 | Quantum memory in an orthogonal geometry of silenced echo retrieval. Optics and Spectroscopy (English Translation of Optika I Spektroskopiya), 2017, 123, 211-216. | 0.6 | 9 |
| 15 | Effects of disorder on optical and electron spin linewidths in Er 3+ ,Sc 3+ :Y 2 SiO 5. Optical Materials, 2017, 63, 69-75. | 3.6 | 20 |
| 16 | RF Spectrum Analyzer for Pulsed Signals: Ultra-Wide Instantaneous Bandwidth, High Sensitivity, and High Time-Resolution. Journal of Lightwave Technology, 2016, 34, 4658-4663. | 4.6 | 38 |
| 17 | Spectral-hole memory for light at the single-photon level. Physical Review A, 2016, 93, . | 2.5 | 11 |
| 18 | Optical measurement of heteronuclear cross-relaxation interactions in Tm:YAG. Physical Review B, 2015, 92, . | 3.2 | 10 |

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|---|---|---|---|
| 19 | Light-shift-modulated photon-echo. Optics Letters, 2015, 40, 1294. | 3.3 | 20 |
| 20 | Photon echo with a few photons in two-level atoms. Laser Physics, 2014, 24, 094003. | 1.2 | 21 |
| 21 | Large efficiency at telecom wavelength for optical quantum memories. Optics Letters, 2014, 39, 2711. | 3.3 | 48 |
| 22 | Strong excitation of emitters in an impedance matched cavity: the area theorem, Ï€-pulse and self-induced transparency. Optics Express, 2014, 22, 4423. | 3.4 | 12 |
| 23 | Quantum memory with a controlled homogeneous splitting. New Journal of Physics, 2013, 15, 045015. | 2.9 | 8 |
| 24 | Securing coherence rephasing with a pair of adiabatic rapid passages. New Journal of Physics, 2013, 15, 055024. | 2.9 | 13 |
| 25 | Atomic frequency comb storage as a slow-light effect. Journal of Physics B: Atomic, Molecular and Optical Physics, 2012, 45, 124002. | 1.5 | 13 |
| 26 | Emission of photon echoes in a strongly scattering medium. Optics Express, 2011, 19, 15236. | 3.4 | 11 |
| 27 | Revival of silenced echo and quantum memory for light. New Journal of Physics, 2011, 13, 093031. | 2.9 | 99 |
| 28 | Highly multimode storage in a crystal. New Journal of Physics, 2011, 13, 013013. | 2.9 | 112 |
| 29 | Photonâ€echo quantum memory in solid state systems. Laser and Photonics Reviews, 2010, 4, 244-267. | 8.7 | 351 |
| 30 | Light storage protocols in Tm:YAG. Journal of Luminescence, 2010, 130, 1572-1578. | 3.1 | 21 |
| 31 | Coherent response to optical excitation in a strongly absorbing rare-earth ion-doped crystal. Journal of the Optical Society of America B: Optical Physics, 2010, 27, 32. | 2.1 | 7 |
| 32 | Slow light using spectral hole burning in a<mml:math xmlns:mml="http://www.w3.org/1998/Math/MathML" display="inline"><mml:mrow><mml:msup><mml:mrow><mml:mtext>Tm</mml:mtext></mml:mrow><mml:mrow><mml:mn>3</mml:mn></mml:m yttrium-aluminum-garnet crystal. Physical Review A, 2009, 79, . | 2.5 | 25 |
| 33 | Why the two-pulse photon echo is not a good quantum memory protocol. Physical Review A, 2009, 79, . | 2.5 | 70 |
| 34 | Thulium doped crystals for quantum information storage. Journal of Luminescence, 2009, 129, 1951-1954. | 3.1 | 3 |
| 35 | Spectral hole burning for stopping light. Physical Review A, 2009, 79, . | 2.5 | 18 |
| 36 | Observation of ultra-narrow electromagnetically induced transparency and slow light using purely electronic spins in a hot atomic vapor. Europhysics Letters, 2008, 82, 54002. | 2.0 | 33 |

| # | Article | IF | Citations |
|---|---|---|---|
| 37 | Stimulated optical pumping in a Tm3+:YAG crystal. Journal of Physics Condensed Matter, 2007, 19, 386226. | 1.8 | 3 |
| 38 | Quantum Interference of Electromagnetic Fields from Remote Quantum Memories. Physical Review Letters, 2007, 98, 113602. | 7.8 | 44 |
| 39 | Dual-Species Matter Qubit Entangled with Light. Physical Review Letters, 2007, 98, 123602. | 7.8 | 19 |
| 40 | Storage and retrieval of single photons transmitted between remote quantum memories. Nature, 2005, 438, 833-836. | 27.8 | 666 |
| 41 | Light transport in cold atoms: the fate of coherent backscattering in the weak localization regime. Physica B: Condensed Matter, 2003, 328, 157-162. | 2.7 | 8 |