

Publications – Institute for Quantum Optics

- (1) Siyushev P, Nesladek M, Bourgeois E, Gulka m, Hruby J, Yamamoto T, Trupke M, Teraji T, Isoya J & Jelezko F **(2019)** Photoelectrical imaging and coherent spin-state readout of single nitrogen-vacancy centers in diamond. *Science* Vol. 363, Issue 6428, pp. 728-731
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- (3) Dietrich A., Bürk M., Steiger E. S., Antoniuk L., Tran T. T., Nguyen M., Aharonovich I., Jelezko F. & Kubanek A. **(2018)** Observation of Fourier transform limited lines in hexagonal boron nitride. *Phys. Rev. B* **98**, 081414(R)
- (4) Unden T., Tomek N., Weggler T., Frank F., London P., Zopes J., Degen C., Raatz N., Meijer J., Watanabe H., Itoh K. M., Plenio M. B., Naydenov B. & Jelezko F. **(2018)** Coherent control of solid state nuclear spin nano-ensemble. *npj Quantum Information* 4, Article number: 39
- (5) Nizovtsev A. P., Kilin S. Ya, Pushkarchuk A. L., Pushkarchuk V. A., Kuten S. A., Zhikol O. A., Schmitt S., Unden T. & Jelezko F. **(2018)** Non-flipping ¹³C spins near an NV center in diamond: hyperfine and spatial characteristics by density functional theory simulation of the C₅₁₀[NV]H₂₅₂ cluster. *New Journal of Physics* 20, 023022
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- (10) Häußler S., Thiering G., Dietrich A., Waasem N., Teraji T., Isoya J., Iwasaki T., Hatano M., Jelezko F., Gali A. & Kubanek A. **(2017)** Photoluminescence excitation spectroscopy of SiV⁻ and GeV⁻ color center in diamond. *New Journal of Physics*, Volume 19
- (11) Bhaskar M. K., Sukachev D. D., Sipahigil A., Evans R. E., Burek M. J., Nguyen C. T., Rogers L. J., Siyushev P., Metsch M. H., Park H., Jelezko F., Loncar M. & Lukin M. D. **(2017)** Quantum Nonlinear Optics with a Germanium-Vacancy Color Center in a Nanoscale Diamond Waveguide. *Phys. Rev. Lett.* 118, 223603
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 - (21) Chen Q., Schwarz I., Jelezko F., Retzker A. & Plenio M. B. **(2016)** Resonance-inclined optical nuclear spin polarization of liquids in diamond structures. *Phys. Rev. B* 93, 060408
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