List of Publications of PD Dr. Boris Naydenov, ResearcherID: O-6649-2017

h-index of 29,more than 2700 citations (October 2018 from Web of Science)
h-index of 33, more than 4200 citations (October 2018 from Google scholar)
Where my name is underlined I am the corresponding author

Patent

F. Jelezko, J. Cai, M. B. Plenio, A. Retzker, **B. Naydenov** and I. Schwarz
Method for the hyperpolarization of nuclear spin in a diamond via long range interactions
Patent No. WO/2014/166883

Pre-prints

1. Q.-Y. Cao, Z.-J. Shu, P.-C. Yang, M. Yu, M.-S. Gong, J.-Y. He, R.-F. Hu, A. Retzker, M. B. Plenio, C. Müller, N. Tomek, **B. Naydenov**, L. P. McGuinness, F. Jelezko and J.-M. Cai
   Protecting quantum spin coherence of nanodiamonds in living cells
   arXiv:1710.10744 (2017)

Papers in peer reviewed journals

1. N. Felgen, **B. Naydenov**, F. Jelezko, J. P. Reithmaier and Cyril Popov
   Homoepitaxial Diamond Structures with Incorporated SiV Centers
   Accepted in Phys. Status Solidi A
   https://doi.org/10.1002/pssa.201800371
2. I. Schwartz, J. Scheuer, B. Tratzmiller, S. Müller, Q. Chen, I. Dhand, Z. Wang, C. Müller, **B. Naydenov**, F. Jelezko and M. B. Plenio
   Robust optical polarization of nuclear spin baths using Hamiltonian engineering of nitrogen-vacancy center quantum dynamics
   Science Advances 4, eaat8978 (2018)
   https://dx.doi.org/10.1126/sciadv.aat8978
3. T. Unden, N. Tomek, T. Weggler, F. Frank, P. London, J. Zopes, C. Degen, N. Raatz, J. Meijer, H. Watanabe, K. M. Itoh, M. B. Plenio, **B. Naydenov** and Fedor Jelezko
   Coherent control of solid state nuclear spin nano-ensembles
   nPJ Quantum Information, 4, 39 (2018)
   https://dx.doi.org/10.1038/s41534-018-0089-8
4. J. F. Haase, P. J. Vetter, T. Unden, A. Smirne, J. Rosskopf, **B. Naydenov**, F. Jelezko, M. B. Plenio, and S. F. Huelga
   Controllable Non-Markovianity for a Spin Qubit in Diamond
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5. J. Forneris, S. Ditalia Tchernij, P. Traina, E. Moreva, N. Skukan, M. Jakšić, V. Grilj, L. Croin, G. Amato, I.P. Degiovanni, **B. Naydenov**, F. Jelezko, M. Genovese and P. Olivero
   Mapping the local spatial charge in defective diamond by means of NV sensors - A "self-diagnostic concept"
   Phys. Rev. Applied 10, 014024 (2018)
   https://dx.doi.org/10.1103/PhysRevApplied.10.014024
6. P. Fernández-Acebal, O. Rosolio, J. Scheuer, C. Müller, S. Müller, S. Schmitt, L. P. McGuinness, I. Schwarz, Q. Chen, A. Retzker, **B. Naydenov**, F. Jelezko and M. B. Plenio
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7. Y. Hovav, **B. Naydenov**, F. Jelezko and N. Bar-Gill
   Low field nuclear polarization using Nitrogen Vacancy centers in diamonds
   Phys. Rev. Lett. 120, 060405 (2018)
   https://doi.org/10.1103/PhysRevLett.120.060405
8. Z. Shu, Z. Zhang, Q. Cao, P. Yang, M. B. Plenio, C. Müller, J. Lang, N. Tomek, **B. Naydenov**, L. P. McGuinness, F. Jelezko, and Jianming Cai
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9. J. Scheuer, I. Schwartz, S. Müller, Q. Chen, I. Dhand, M. B. Plenio, **B. Naydenov** and F. Jelezko
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10. F. Frank, T. Unden, J. Zoller, R. S. Said, T. Calarco, S. Montangero, **B. Naydenov** and F. Jelezko
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