

List of the publications of I.A. Shelykh

Conference proceedings not included

Topical reviews and chapters in monographs

1. O. Kyriienko, I.A. Shelykh and A.V. Kavokin, Terahertz emission in polaritonic systems with nitrides, Chapter 16 of „III- Nitride Semiconductors and their Modern Devices“, Ed. by Bernard Gil, Oxford University press, ISBN 978-0-19-968172-3 (2013)
2. F.P. Laussy, T. Taylor, I.A. Shelykh and A.V. Kavokin, Superconductivity with excitons and polaritons: review and extension, *Journal of Nanophotonics* **6**, 053818 (2012)
3. T.C.H. Liew, I.A. Shelykh, G. Malpuech, Polariton devices, *Physica E* **43**, 1543 (2011)
4. I.A. Shelykh, A.V. Kavokin, Yu.G. Rubo, T.C.H. Liew and G. Malpuech, Polariton polarization sensitive phenomena in planar semiconductor microcavities, *Semicond. Sci. Technol.* **25**, 013001 (2010)
5. I.A. Shelykh, M. Rosenau da Costa, A.C.F. Seridonio, Fractional quantization of the ballistic conductance in 1D electron and hole systems, *J. Phys.: Condensed Matter* **20**, 164214 (2008)
6. I.A. Shelykh, A.V. Kavokin, G. Malpuech, Spin dynamics of exciton- polaritons in microcavities, *Phys. Stat. Sol. (b)*, **242**, 2271 (2005)

Regular articles

1. Tintu Kuriakose, Paul M. Walker, Toby Dowling, Oleksandr Kyriienko, Ivan A. Shelykh, Phillipe St-Jean, Nicola Carlon Zambon, Aristide Lemaître, Isabelle Sagnes, Luc Legratiet, Abdelmounaim Harouri, Sylvain Ravets, Maurice S. Skolnick, Alberto Amo, Jacqueline Bloch & Dmitry N. Krizhanovskii, *Nature Phot.* (2022). <https://doi.org/10.1038/s41566-022-01019-6>
2. Hangyong Shan, Ivan Iorsh, Bo Han, Christoph Rupperecht, Heiko Knopf, Falk Eilenberger, Martin Esmann, Kentaro Yumigeta, Kenji Watanabe, Takashi Taniguchi, Sebastian Klemmt, Sven Höfling, Sefaattin Tongay, Carlos Antón-Solanas, Ivan A. Shelykh & Christian Schneider, Brightening of a dark monolayer semiconductor via strong light-matter coupling in a cavity, *Nature Comm.* **13**, 3001 (2022).
3. Yaroslav Vladimirovich Zhumagulov, Salvatore Chiavazzo, Dmitry Romanovich Gulevich, Vasili Perebeinos, Ivan Andreevich Shelykh, Oleksandr Kyriienko, Microscopic theory of exciton and trion polaritons in doped monolayers of transition metal dichalcogenides, *npj Comput. Mater.* **8**, 92 (2022)
4. Vasily Kravtsov, Tatiana Ivanova, Artem N. Abramov, Polina V Shilina, Pavel O. Kapralov, Dmitry N. Krizhanovskii, Vladimir N. Berzhansky, Vladimir I. Belotelov, Ivan A. Shelykh, Alexander I. Chernov and Ivan V. Iorsh, Valley polarization of trions in monolayer MoSe2 interfaced with bismuth iron garnet, *2D Mater.* **9** 015019 (2022)
5. Daria Zvyagintseva, Helgi Sigurdsson, Valerii K. Kozin, Ivan Iorsh, Ivan A. Shelykh, Vladimir Ulyantsev & Oleksandr Kyriienko, Machine learning of phase transitions in nonlinear polariton lattices, *Communications Physics* **5**, 8 (2022)
6. L. S. Ricco, V. K. Kozin, A. C. Seridonio, and I. A. Shelykh, Reshaping the Jaynes-Cummings ladder with Majorana bound states, *Phys. Rev. A* **106**, 023702 (2022)

7. W. C. Silva, W. N. Mizobata, J. E. Sanches, L. S. Ricco, I. A. Shelykh, M. de Souza, M. S. Figueira, E. Vernek, and A. C. Seridonio, Topological charge Fano effect in multi-Weyl semimetals, *Phys. Rev. B* **105**, 235135 (2022)
8. A.D. Belogur, D.A. Baghdasaryan, I.V. Iorsh, I.A. Shelykh, and V. Shahnazaryan, Theory of Nonlinear Excitonic Response of Hybrid Organic Perovskites in the Regime of Strong Light-Matter Coupling, *Phys. Rev. Applied* **17**, 044048 (2022)
9. D. A. Baghdasaryan, E. S. Hakobyan, D. B. Hayrapetyan, I. V. Iorsh, I. A. Shelykh, and V. Shahnazaryan, Tunable strongly interacting dipolar excitons in hybrid perovskites, *Phys. Rev. Materials* **6**, 034003 (2022)
10. L. S. Ricco, V. K. Kozin, A. C. Seridonio, I. A. Shelykh, Accessing the degree of Majorana nonlocality in a quantum dot-optical microcavity system, *Sci. Rep.* **12**, 1983 (2022)
11. Y. Marques, I. A. Shelykh, and I. V. Iorsh, Bound Photonic Pairs in 2D Waveguide Quantum Electrodynamics, *Phys. Rev. Lett.* **127**, 273602 (2021)
12. C. E. Whittaker, T. Dowling, A. V. Nalitov, A. V. Yulin, B. Royall, E. Clarke, M. S. Skolnick, I. A. Shelykh and D. N. Krizhanovskii, Optical analogue of Dresselhaus spin-orbit interaction in photonic graphene, *Nat. Photonics* **15**, 193 (2021).
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