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**Список основных публикаций по теме оппонируемой диссертации  
в рецензируемых научных изданиях за последние 5 лет**

1. A. Trichet, L. Sun, G. Pavlovic, N. A. Gippius, G. Malpuech, W. Xie, Z. Chen, M. Richard, and Le Si Dang. One-dimensional zno exciton polaritons with negligible thermal broadening at room temperature. *Physical Review B*, 83(4):041302, January 2011.
2. Thomas Weiss, Nikolay A. Gippius, Gerard Granet, Sergei G. Tikhodeev, Richard Taubert, Liwei Fu, Heinz Schweizer, and Harald Giessen. Strong resonant mode coupling of fabry-perot and grating resonances in stacked two-layer systems. *Photonics and Nanostructures-fundamentals and Applications*, 9(4):390–397, October 2011.
3. Nikolay A. Gippius, Thomas Weiss, Sergei G. Tikhodeev, and Harald Giessen. Resonant mode coupling of optical resonances in stacked nanostructures. *Optics Express*, 18(7):7569–7574, March 2010.
4. A. B. Akimov, N. A. Gippius, and S. G. Tikhodeev. Optical fano resonances in photonic crystal slabs near diffraction threshold anomalies. *Jetp Letters*, 93(8):427–430, June 2011.
5. S. V. Lobanov, T. Weiss, N. A. Gippius, and S. G. Tikhodeev. Radiation from an oscillating point dipole from a photonic crystal layer of dielectric nanocolumns. *Jetp Letters*, 93(10):555–558, July 2011.
6. T. V. Shubina, A. A. Toropov, G. Pozina, J. P. Bergman, M. M. Glazov, N. A. Gippius, P. Dis- seix, J. Leymarie, B. Gil, and B. Monemar. Excitonic parameters of GaN studied by time-of-flight spectroscopy. *Applied Physics Letters*, 99(10):101108, September 2011.
7. A. B. Akimov, A. S. Vengurlekar, T. Weiss, N. A. Gippius, and S. G. Tikhodeev. Surface plasmon polaritons in metallo-dielectric meander-type gratings. *Jetp Letters*, 90(5):355–358, November 2009.
8. N. A. Gippius and S. G. Tikhodeev. Application of the scattering matrix method for calculating the optical properties of metamaterials. *Physics-uspekhi*, 52(9):Russian Acad Sci, Div Phys Sci, September 2009.
9. T. Weiss, N. A. Gippius, S. G. Tikhodeev, G. Granet, and H. Giessen. Efficient calculation of the optical properties of stacked metamaterials with a fourier modal method. *Journal of Optics A-pure and Applied Optics*, 11(11):114019, November 2009.
10. T. V. Shubina, M. M. Glazov, A. A. Toropov, N. A. Gippius, A. Vasson, J.

- Leymarie, A. Kavokin, A. Usui, J. P. Bergman, G. Pozina, and B. Monemar. Resonant light delay in GaN with ballistic and diffusive propagation. *Physical Review Letters*, 100(8):087402, February 2008.
11. N. A. Gippius, S. G. Tikhodeev, A. Christ, J. Kuhl, and H. Giessen. Waveguide plasmon polaritons in metal-dielectric photonic crystal slabs. *Physics of the Solid State*, 47(1):145–149, 2005.
  12. N. A. Gippius, S. G. Tikhodeev, and T. Ishihara. Optical properties of photonic crystal slabs with an asymmetrical unit cell. *Physical Review B*, 72(4):045138, July 2005.
  13. N. A. Gippius, S. G. Tikhodeev, L. V. Keldysh, and V. D. Kulakovskii. Hard excitation of stimulated polariton-polariton scattering in semiconductor microcavities. *Physics-усpekhi*, 48(3):306–312, March 2005.
  14. N. A. Gippius, S. G. Tikhodeev, V. D. Kulakovskii, D. N. Krizhanovskii, and A. I. Tartakovskii. Nonlinear dynamics of polariton scattering in semiconductor microcavity: Bistability vs. stimulated scattering. *Europhysics Letters*, 67(6):997–1003, September 2004.