

Publications and conferences

1. Paniagua-Domínguez, R.; Yu, Y. F.; Khaidarov, E.; Choi, S.; Leong, V.; Bakker, R. M.; Liang, X.; Fu, Y. H.; Valuckas, V.; Krivitsky, L. A.; Kuznetsov, A. I.; “A Metalens with a Near-Unity Numerical Aperture”, *Nano Letters*, **18** (3), 2124–2132, 2018.
2. Emani, N. K.; Khaidarov, E.; Paniagua-Domínguez, R.; Fu, Y. H.; Valuckas, V.; Lu, S.; Zhang, X.; Tan, S. T.; Demir, H. V.; Kuznetsov, A. I.; “High-efficiency and low-loss gallium nitride dielectric metasurfaces for nanophotonics at visible wavelengths”, *Applied Physics Letters*, **111** (22), 221101, 2017.
3. Khaidarov, E.; Hao, H.; Paniagua-Domínguez, R.; Yu, Y. F.; Fu, Y. H.; Valuckas, V.; Yap, S. L. K.; Toh, Y. T.; Ng, J. S. K.; Kuznetsov, A. I.; “Asymmetric Nanoantennas for Ultrahigh Angle Broadband Visible Light Bending”, *Nano Letters*, **17** (10), 6267–6272, 2017.
4. Khaidarov, E.; Liu, Z.; Akimov, Y.; Paniagua-Domínguez, R.; Fu, Y. H.; Yu, Y. F.; Valuckas, V.; Ha, S. T.; Bai, P.; Png, C. E.; Lu, S.; Tan, S. T.; Demir H. V.; Kuznetsov, A. I.; “Controlling LED radiation with dielectric metasurfaces”, *SPIE Photonics West OPTO*, San Francisco, CA, USA, 2019 (Oral presentation).
5. Khaidarov, E.; Liu, Z.; Akimov, Y.; Paniagua-Domínguez, R.; Fu, Y. H.; Yu, Y. F.; Valuckas, V.; Ha, S. T.; Bai, P.; Png, C. E.; Lu, S.; Tan, S. T.; Demir H. V.; Kuznetsov, A. I.; “LED emission control with dielectric metasurfaces”, *Gordon Research Conference on Plasmonics and Nanophotonics*, Newry, ME, USA, 2018 (Poster).
6. Khaidarov, E.; Hao, H.; Paniagua-Domínguez, R.; Yu, Y. F.; Fu, Y. H.; Valuckas; Kuznetsov, A. I.; “Dielectric metasurfaces for beam bending and near-unity numerical aperture lenses”, *CLEO PR*, Singapore, 2017 (Oral presentation).
7. Khaidarov, E.; Hao, H.; Paniagua-Domínguez, R.; Yu, Y. F.; Fu, Y. H.; Valuckas, V.; Kuznetsov, A. I.; “Overcoming the constraints of high angle visible light beam bending with asymmetric nanoantenna-based titanium dioxide metasurfaces”, *META*, Incheon, Seoul, South Korea, 2017 (Poster).
8. Khaidarov, E.; Hao, H.; Paniagua-Domínguez, R.; Yu, Y. F.; Fu, Y. H.; Valuckas, V.; Kuznetsov, A. I.; “High-angle visible light bending with TiO₂ metasurfaces”, *ICMAT*, Singapore, 2017 (Best Poster Award).
9. Khaidarov, E.; Chipouline, A.; Kabashin, A.; Nazarenko, I.; “Narrow bandwidth resonances in periodic plasmonic structures”, *Metamaterials*, Copenhagen, Denmark, 2014 (Poster).
10. Khaidarov, E.; Chipouline, A.; Zagorskin, A.; Ilichev, E.; “Dynamics of nanolaser coupled with high-Q microresonator as an analog of superconducting structure”, *Metamaterials*, Bordeaux, France, 2013 (Poster).

Patents

1. Liu, Z.; Akimov, Y.; Sun, S.; Khaidarov, E.; Paniagua-Domínguez, R.; Kuznetsov, A. I.; Demir, H. V.; “A Device For Control Of Random Light Emission”, Sg. Patent Application No.: 10201710683Y, filed on 21/12/2017.
2. Paniagua-Domínguez, R.; Khaidarov, E.; Kuznetsov, A. I.; Hao, H.; Yu, Y. F.; Liang, X.; “Diffraction optical element and method of forming thereof”, Sg. patent application No: 10201608361Y, filed on 05/10/2016.