

List of publications

Patents

1. **Plasmonic metamaterial structure.**

A. V. Zayats, P. Wang, M. E. Nasir, W. Dickson, and A. V. Krasavin, international application published under No. WO 2018/134592 (2018).

Book contributions

4. **Nonlinear plasmonic metasurfaces.** (Chapter)

G. Sartorello, A. V. Krasavin, A. E. Minovich, and A. V. Zayats, as a part of “*Nonlinear Meta-optics*”, edited by C. De Angelis, D. Neshev, and G. Leo (ISBN 978-1-138-57654-4, CRC Taylor and Francis, 2020).

3. **Nonlinear nanoplasmonics.** (Chapter)

A. V. Krasavin, P. Ginzburg, and A. V. Zayats, as a part of “*Quantum Photonics: Pioneering Advances and Emerging Applications*”, edited by R. W. Boyd, S. G. Lukishova, and V. N. Zadkov (ISBN 978-3-319-98400-1, Springer, 2019).

2. **Hydrodynamic model for nonlinear plasmonics.** (Chapter)

A. V. Krasavin, P. Ginzburg, G. A. Wurtz, and A. V. Zayats, as a part of “*Recent Trends in Computational Photonics*”, edited by A. Agrawal, T. Benson, G. A. Wurtz, and R. De La Rue (ISBN 978-3-319-55437-2, Springer, 2017).

1. **Active plasmonics.** (Chapter)

A. V. Krasavin, K. F. MacDonald, and N. I. Zheludev, as a part of “*Nanophotonics with Surface Plasmons*”, edited by V. M. Shalaev and S. Kawata (ISBN 978-0-444-52838-4, Elsevier Science, 2007).

Journal articles

97. **Meso-chiral optical properties of plasmonic nanoparticles: uncovering hidden chirality.**
Y. Xie, A. V. Krasavin, and A. V. Zayats, *Nanophotonics* **14**, 4479 (2025).
96. **The 2025 active metamaterials roadmap: Active plasmonic epsilon-near-zero optical metamaterials.**
A. V. Krasavin and A. V. Zayats, *Journal of Physics D*, accepted (2025).
95. **Highly tunable optical response in dielectric-embedded plasmonic nanocavities.**
J. Zheng, A. V. Krasavin, Z. Li, X. Guo, A. V. Zayats, L. Tong, and P. Wang, *Photonics Research* **9**, 2593 (2025).
94. **Active control of excitonic strong coupling and electroluminescence in electrically driven plasmonic nanocavities.**
J. Zheng, A. V. Krasavin, R. Yang, Z. Wang, Y. Feng, L. Tang, L. Li, X. Guo, D. Dai, A. V. Zayats, L. Tong, and P. Wang, *Science Advances* **11**, eadt9808 (2025).
93. **Roadmap on nonlocality in photonic materials and metamaterials: Light manipulation using structural nonlocality in plasmonic metamaterials.**
A. V. Krasavin and A. V. Zayats, *Optical Materials Express* **15**, 1544 (2025).
92. **Longitudinal field controls vector vortex beams in anisotropic epsilon-near-zero metamaterials.**
V. Aita, D. J. Roth, A. Zaleska, A. V. Krasavin, L. H. Nicholls, M. Shevchenko, F. J. Rodriguez-Fortuno, and A. V. Zayats, *Nature Communications* **16**, 3807 (2025).
91. **Unidirectional chiral scattering from single enantiomeric plasmonic nanoparticles.**
Y. Xie, A. V. Krasavin, D. J. Roth, and A. V. Zayats, *Nature Communications* **16**, 1125 (2025).
90. **Electric tuning of plasmonic resonances in ultrathin gold nanoribbon arrays.**
Z. Wang, A. V. Krasavin, C. Pan, J. Zheng, Z. Li, X. Guo, A. V. Zayats, L. Tong, and P. Wang, *Photonics Research* **12**, 1750 (2024).
89. **Nanophotonics with plasmonic nanorod metamaterials.**
D. J. Roth, A. V. Krasavin, and A. V. Zayats, *Laser & Photonics Reviews* **18**, 2300886 (2024).
88. **Copper-based core-shell metamaterials with ultra-broadband and reversible ENZ tunability.**
A. Zaleska, A. V. Krasavin, A. V. Zayats, and W. Dickson, *Materials Advances* **5**, 5845 (2024).
87. **Tunable polarization control with self-assembled arrays of anisotropic plasmonic coaxial nanocavities.**
H. Ni, A. Ping, T. Cai, B. Ni, J. Chang, and A. V. Krasavin, *Optics Express* **32**, 16901 (2024).
86. **Large area single crystal gold of single nanometer thickness for nanophotonics.**
C. Pan, Y. Tong, H. Qian, A. V. Krasavin, J. Li, J. Zhu, Y. Zhang, B. Cui, Z. Li, C. Wu, L. Liu, L. Li, X. Guo, A. V. Zayats, L. Tong, and P. Wang, *Nature Communications* **15**, 2840 (2024).
85. **Gradient-induced long-range optical pulling force based on photonic band gap.**
W. Lu, A. V. Krasavin, S. Lan, A. V. Zayats, Q. Dai, *Light: Science & Applications* **13**, 93 (2024).
84. **Roadmap on electromagnetic metamaterials and metasurfaces: Ultrafast plasmonics.**
A. Yu. Bykov, A. V. Krasavin, A. V. Zayats, *Journal of Physics: Photonics* **6**, 032502 (2024).

83. **High linearity temperature-compensated SPR fiber sensor for the detection of glucose solution concentrations.**
Y. Xu, J. Chang, H. Ni, T. Dai, A. V. Krasavin, and M. Chen, *Optics & Laser Technology* **169**, 110133 (2024).
82. **Thermal control of polarisation of light with nonlocal plasmonic anisotropic metamaterials.**
J. Wu, A. Yu. Bykov, A. V. Krasavin, and A. V. Zayats, *Applied Physics Letters* **123**, 171701 (2023).
81. **Multimode hybrid gold-silicon nanoantennas for tailored nanoscale optical confinement.**
C. P. T. McPolin, Y. N. Vila, A. V. Krasavin, J. Llorca, and A. V. Zayats, *Nanophotonics* **12**, 2997 (2023).
80. **Waveguide-integrated light-emitting metal-insulator-graphene tunnel junctions.**
L. Liu, A. V. Krasavin, J. Li, L. Li, L. Yang, X. Guo, D. Dai, A. V. Zayats, L. Tong, and P. Wang, *Nano Letters* **23**, 3731 (2023).
79. **Broadband transient response and wavelength-tunable photoacoustics in plasmonic hetero-nanoparticles.**
A. Yu. Bykov, Y. Xie, A. V. Krasavin, and A. V. Zayats, *Nano Letters* **23**, 2786 (2023).
78. **Effect of mirror quality on optical response of nanoparticle-on-mirror plasmonic nanocavities.**
Z. Wang, L. Liu, D. Zhang, A. V. Krasavin, J. Zheng, C. Pan, E. He, Z. Wang, S. Zhong, Z. Li, M. Ren, X. Guo, A. V. Zayats, L. Tong, and P. Wang, *Advanced Optical Materials* **11**, 2201914 (2023).
77. **Molecular plasmonics with metamaterials.**
P. Wang, A. V. Krasavin, L. Liu, Y. Jiang, Z. Li, X. Guo, L. Tong, and A. V. Zayats, *Chemical Reviews* **122**, 15031 (2022).
76. **Humidity-induced direct modification of the optical response of plasmonic nanorod metamaterials.**
Y. Jiang, A. V. Krasavin, M. E. Nasir, P. Wang, and A. V. Zayats, *Optical Materials Express* **12**, 4574 (2022).
75. **Temperature stability of individual plasmonic Au and TiN nanodiscs.**
R. Bower, C. P. T. McPolin, A. V. Krasavin, A. V. Zayats, and P. K. Petrov, *Optical Materials Express* **12**, 3471 (2022).
74. **Atomically smooth single-crystalline platform for low-loss plasmonic nanocavities.**
L. Liu, A. V. Krasavin, J. Zheng, Y. Tong, P. Wang, X. Wu, B. Hecht, C. Pan, J. Li, L. Li, X. Guo, A. V. Zayats, and L. Tong, *Nano Letters* **22**, 1786 (2022).
73. **Dual-mode independent detection of pressure and refractive index by miniature grating-coupled surface plasmon sensor.**
H. Ni, L. Zhang, A. Ping, A. V. Krasavin, H. Ali, B. Ni, and J. Chang, *Optics Express* **30**, 5758 (2022).
72. **A brief review on optical properties of planar metallic interfaces and films: from classical view to quantum description.**
A. V. Krasavin, *Journal of Physics: Photonics* **3**, 042006 (2021).
71. **Mode engineering in large arrays of coupled plasmonic-dielectric nanoantennas.**
M. E. Nasir, A. V. Krasavin, R. M. Córdova-Castro, C. P. T. McPolin, J.-S. G. Bouillard, P. Wang, and A. V. Zayats, *Advanced Optical Materials* **9**, 2001467 (2021).

70. **Self-assembled plasmonic coaxial nanocavities for high-definition broad-angle coloring in reflection and transmission.**
H. Ni, A. V. Krasavin, L. Zhang, A. Ping, C. Pan, J. Cheng, M. Wang, J. Chang, and A. V. Zayats, *Advanced Optical Materials* **9**, 2001923 (2021).
69. **Rational design of bimetallic photocatalysts based on plasmonically-derived hot carriers.**
J. U. Salmón-Gamboa, M. Romero-Gómez, D. J. Roth, A. V. Krasavin, P. Wang, W. Dickson, and A. V. Zayats, *Nanoscale Advances* **3**, 767 (2021).
68. **Reconfigurable cavity-based plasmonic platform for resonantly enhanced sub-bandgap photodetection.**
C. P. T. McPolin, M. Romero-Gómez, A. V. Krasavin, W. Dickson, and A. V. Zayats, *Journal of Applied Physics* **128**, 203101 (2020).
67. **Lasing at the nanoscale: Coherent emission of surface plasmons by an electrically driven nanolaser.**
D. Yu. Fedyanin, A. V. Krasavin, A. V. Arsenin, and A. V. Zayats, *Nanophotonics* **9**, 3965 (2020).
66. **Excitation of surface plasmons by inelastic electron tunneling.**
L. Liu, Y. Xu, J. Zhu, P. Wang, L. Tong, and A. V. Krasavin, *Frontiers in Physics* **8**, 251 (2020).
65. **Optoelectronic synapses based on hot-electron-induced chemical processes.**
P. Wang, M. E. Nasir, A. V. Krasavin, W. Dickson, and A. V. Zayats, *Nano Letters* **20**, 1536 (2020).
64. **Tunneling-induced broadband and tuneable optical emission from plasmonic nanorod metamaterials.**
A. V. Krasavin, P. Wang, M. E. Nasir, Y. Jiang, and A. V. Zayats, *Nanophotonics* **9**, 427 (2020).
63. **Plasmonic metamaterials for nanochemistry and sensing.**
P. Wang, M. E. Nasir, A. V. Krasavin, W. Dickson, Y. Jiang, and A. V. Zayats, *Accounts of Chemical Research* **52**, 318 (2019).
62. **Polarization dependence of second harmonic generation from plasmonic nanoprism arrays.**
K. Y. Raygoza-Sánchez, I. Rocha-Mendoza, P. Segovia, A. V. Krasavin, G. Marino, T. Cesca, N. Michieli, G. Mattei, A. V. Zayats, and R. Rangel-Rojo, *Scientific Reports* **9**, 11514 (2019).
61. **Anisotropic plasmonic CuS nanocrystals as a natural electronic material with hyperbolic optical dispersion.**
R. M. Córdova-Castro, M. Casavola, M. van Schilfgaard, A. V. Krasavin, M. Green, D. Richards, and A. V. Zayats, *ACS Nano* **13**, 6550 (2019).
60. **Nanocone-based plasmonic metamaterials.**
R. M. Córdova-Castro, A. V. Krasavin, M. E. Nasir, A. V. Zayats, and W. Dickson, *Nanotechnology* **30**, 055301 (2019).
59. **Optimizing hot carrier effects in Pt-decorated plasmonic heterostructures.**
J. U. Salmón-Gamboa, M. Romero-Gómez, D. J. Roth, M. J. Barber, P. Wang, S. M. Fairclough, M. E. Nasir, A. V. Krasavin, W. Dickson, and A. Zayats, *Faraday Discussions* **214**, 387 (2019).
58. **Metaparticles: Dressing nano-objects with a hyperbolic coating.**
P. Wang, A. V. Krasavin, F. N. Viscomi, A. M. Adawi, J.-S. Bouillard, L. Zhang, D. J. Roth, L. Tong, and A. V. Zayats, *Laser & Photonics Reviews* **12**, 1800179 (2018).

57. **Optomechanical manipulation with hyperbolic metasurfaces.**
A. Ivinskaya, N. Kostina, A. Proskurin, M. I. Petrov, A. A. Bogdanov, S. Sukhov, A. V. Krasavin, A. Karabchevsky, A. S. Shalin, and P. Ginzburg, *ACS Photonics* **5**, 4371 (2018).
56. **Imaging electric and magnetic modes and their hybridization in single and dimer AlGaAs nanoantennas.**
C. P. T. McPolin, G. Marino, A. V. Krasavin, V. Gili, L. Carletti, C. De Angelis, G. Leo, and A. V. Zayats, *Advanced Optical Materials* **6**, 1800664 (2018).
55. **Circular dichroism enhancement in plasmonic nanorod metamaterials.**
D. Vestler, I. Shishkin, E. A. Gurvitz, M. E. Nasir, A. Ben-Moshe, A. P. Slobozhanyuk, A. V. Krasavin, T. Levi-Belenkova, A. S. Shalin, P. Ginzburg, G. Markovich, and A. V. Zayats, *Optics Express* **26**, 17844 (2018).
54. **Generalization of optical theorem: Experimental proof for radially polarized beams.**
A. V. Krasavin, P. Segovia, R. Dubrovka, N. Olivier, G. A. Wurtz, P. Ginzburg, and A. V. Zayats, *Light: Science & Applications* **7**, 36 (2018).
53. **Evidence of high-order nonlinearities in supercontinuum white-light generation from a gold nanofilm.**
J. Chen, A. Krasavin, P. Ginzburg, A. Zayats, T. Pullerits, K. Karki, *ACS Photonics* **5**, 1927 (2018).
52. **Second-harmonic generation from hyperbolic plasmonic nanorod metamaterial slab.**
G. Marino, P. Segovia, A. V. Krasavin, P. Ginzburg, N. Olivier, G. A. Wurtz, and A. V. Zayats, *Laser & Photonics Reviews* **12**, 1700189 (2018).
51. **Free-electron optical nonlinearities in plasmonic nanostructures: A review of the hydrodynamic description.**
A. V. Krasavin, P. Ginzburg, and A. V. Zayats, *Laser & Photonics Reviews*, **12**, 1700082 (2018).
50. **Reactive tunnel junctions in electrically driven plasmonic nanorod metamaterials.**
P. Wang, A. V. Krasavin, M. E. Nasir, W. Dickson, and A. V. Zayats, *Nature Nanotechnology* **13**, 159 (2018).
49. **Spontaneous emission inside a hyperbolic metamaterial waveguide.**
D. J. Roth, A. V. Krasavin, A. Wade, W. Dickson, A. Murphy, S. Kéna-Cohen, R. Pollard, G. A. Wurtz, D. R. Richards, S. A. Maier, and A. V. Zayats, *ACS Photonics* **4**, 2513 (2017).
48. **Spontaneous emission in non-local materials.**
P. Ginzburg, D. Roth, M. E. Nasir, P. Segovia Olvera, A. V. Krasavin, J. Levitt, L. M. Hirvonen, B. Wells, K. Suhling, D. Richards, V. Podolskiy, and A. Zayats, *Light: Science & Applications* **6**, e16273 (2017).
47. **Universal switching of plasmonic signals using optical resonator modes.**
C. P. T. McPolin, N. Olivier, J.-S. Bouillard, D. O'Connor, A. V. Krasavin, W. Dickson, G. A. Wurtz, and A. V. Zayats, *Light: Science & Applications* **6**, e16237 (2017).
46. **Benchmarking system-level performance of passive and active plasmonic components: Integrated circuits approach.**
A. V. Krasavin and A. V. Zayats, *Proceedings of the IEEE*, **104**, 2338 (2016).
45. **Integrated plasmonic circuitry on a vertical-cavity surface-emitting semiconductor laser platform.**
C. P. T. McPolin, J.-S. Bouillard, S. Vilain, A. V. Krasavin, W. Dickson, D. O'Connor, G. A. Wurtz, J. Justice, B. Corbett, and A. V. Zayats, *Nature Communications* **7**, 12409 (2016).

44. **Nonlocality-driven supercontinuum white light generation in plasmonic nanostructures.**
A. V. Krasavin, P. Ginzburg, G. A. Wurtz, and A. V. Zayats, *Nature Communications* **7**, 11497 (2016).
43. **Spectral variation of fluorescence lifetime near single metal nanoparticles.**
J. Li, A. V. Krasavin, L. Webster, P. Segovia, A. V. Zayats, and D. Richards, *Scientific Reports*, **6**, 21349 (2016).
42. **Hyperbolic metamaterial antenna for second-harmonic generation tomography.**
P. Segovia, G. Marino, A. V. Krasavin, N. Olivier, G. A. Wurtz, P. A. Belov, P. Ginzburg, and A. V. Zayats, *Optics Express* **23**, 30730 (2015).
41. **Purcell effect in hyperbolic metamaterial resonators.**
A. P. Slobozhanyuk, P. Ginzburg, D. A. Powell, I. Iorsh, A. S. Shalin, P. Segovia, A. V. Krasavin, G. A. Wurtz, V. A. Podolskiy, P. A. Belov, Y. S. Kivshar, and A. V. Zayats, *Physical Review B* **92**, 195127 (2015).
40. **Active nanophotonic circuitry based on dielectric-loaded plasmonic waveguides.**
A. V. Krasavin and A. V. Zayats, *Advanced Optical Materials* **3**, 1662 (2015).
39. **Nonperturbative hydrodynamic model for multiple harmonics generation in metallic nanostructures.**
P. Ginzburg, A. V. Krasavin, G. A. Wurtz, and A. V. Zayats, *ACS Photonics* **2**, 8 (2015).
38. **Fluorescence axial nanotomography with plasmonics.**
N. I. Cade, G. Fruhwirth, A. V. Krasavin, T. Ng, and D. Richards, *Faraday Discussions* **178**, 371 (2015).
37. **Impact of nonradiative line broadening on emission in photonic and plasmonic cavities.**
P. Ginzburg, A. V. Krasavin, D. Richards, and A. V. Zayats, *Physical Review A* **90**, 043836 (2014).
36. **Looking into meta-atoms of plasmonic nanowire metamaterial.**
K.-T. Tsai, G. Wurtz, J.-Y. Chu, T.-Y. Cheng, H.-H. Wang, A. V. Krasavin, J.-H. He, B. M. Wells, V. A. Podolskiy, J.-K. Wang, Y.-L. Wang, and A. V. Zayats, *Nano Letters* **14**, 4971 (2014).
35. **Mechanical, electrostatic, and electromagnetic manipulation of microobjects and nanoobjects in electron microscopes.**
A. I. Denisyuk, A. V. Krasavin, F. E. Komissarenko, and I. S. Mukhin, *Advances in Imaging and Electron Physics* **186**, 101 (2014).
34. **Dipolar emission in trench metal-insulator-metal waveguides for short-scale plasmonic communications: Numerical optimisation.**
R. McCarron, W. Dickson, A. V. Krasavin, G. Wurtz, and A. V. Zayats, *Journal of Optics* **16**, 114006 (2014).
33. **Auxetic properties of cubic metal single crystals.**
V. V. Krasavin and A. V. Krasavin, *Physica Status Solidi B* **251**, 2314 (2014).
32. **Self-induced torque in hyperbolic metamaterials.**
P. Ginzburg, A. V. Krasavin, A. N. Poddubny, P. A. Belov, Y. S. Kivshar, and A. V. Zayats, *Physical Review Letters* **111**, 036804 (2013).

31. **Fabrication and optical properties of large-scale arrays of gold nanocavities based on rod-in-a-tube coaxials.**
A. Murphy, Y. Sonnefraud, A. V. Krasavin, P. Ginzburg, F. Morgan, J. McPhillips, G. Wurtz, S. A. Maier, A. V. Zayats, and R. Pollard, *Applied Physics Letters* **102**, 103103 (2013).
30. **Cascaded second-order surface plasmon solitons due to intrinsic metal nonlinearity.**
P. Ginzburg, A. V. Krasavin and A. V. Zayats, *New Journal of Physics* **15**, 013031 (2013).
29. **A mechanical model of cell segregation driven by differential adhesion.**
W. R. Taylor, R. Morley, A. Krasavin, L. Gregory, D. G. Wilkinson, and A. Poliakov, *PLOS ONE* **7**, e43226 (2012).
28. **Photonic signal processing on electronic scales: Electro-optical field-effect nanoplasmonic modulator.**
A. V. Krasavin and A. V. Zayats, *Physical Review Letters* **109**, 053901 (2012).
27. **Nonlinearly coupled localized plasmon resonances: Resonant second-harmonic generation.**
P. Ginzburg, A. Krasavin, Y. Sonnefraud, A. Murphy, R. J. Pollard, S. A. Maier, and A. V. Zayats, *Physical Review B* **86**, 085422 (2012).
26. **Surface plasmon polariton amplification upon electrical injection in highly integrated plasmonic circuits.**
D. Yu. Fedyanin, A. V. Krasavin, A. V. Arsenin, and A. V. Zayats, *Nano Letters* **12**, 2459 (2012).
25. **Optically-programmable nonlinear photonic component for dielectric-loaded plasmonic circuitry.**
A. V. Krasavin, S. Randhawa, J.-S. Bouillard, J. Renger, R. Quidant, and A. V. Zayats, *Optics Express* **19**, 25222 (2011).
24. **Guiding light at the nanoscale: Numerical optimization of ultrasubwavelength metallic wire plasmonic waveguides.**
A. V. Krasavin and A. V. Zayats, *Optics Letters* **36**, 3127 (2011).
23. **All-plasmonic modulation via stimulated emission of copropagating surface plasmon polaritons on a substrate with gain.**
A. V. Krasavin, T. P. Vo, W. Dickson, P. M. Bolger, and A. V. Zayats, *Nano Letters* **11**, 2231 (2011).
22. **Experimental demonstration of dielectric-loaded plasmonic waveguide disk resonators at telecom wavelengths.**
S. Randhawa, A. V. Krasavin, T. Holmgaard, J. Renger, S. I. Bozhevolnyi, A. V. Zayats, and R. Quidant, *Applied Physics Letters* **98**, 161102 (2011).
21. **Electro-optic switching element for dielectric-loaded surface plasmon polariton waveguides.**
A. V. Krasavin and A. V. Zayats, *Applied Physics Letters* **97**, 041107 (2010).
20. **Numerical analysis of long-range surface plasmon polariton modes in nanoscale plasmonic waveguides.**
A. V. Krasavin and A. V. Zayats, *Optics Letters* **35**, 2118 (2010).
19. **Silicon-based plasmonic waveguides.**
A. V. Krasavin and A. V. Zayats, *Optics Express* **18**, 11791 (2010).

18. **Amplified spontaneous emission of surface plasmon polaritons and limitations on the increase of their propagation length.**
P. M. Bolger, W. Dickson, A. V. Krasavin, L. Liebscher, S. G. Hickey, D. V. Skryabin, and A. V. Zayats, *Optics Letters* **35**, 1197 (2010).
17. **All-optical active components for dielectric-loaded plasmonic waveguides.**
A. V. Krasavin and A. V. Zayats, *Optics Communications* **283**, 1581 (2010).
16. **Wavelength selection by dielectric-loaded plasmonic components.**
T. Holmgaard, Z. Chen, S. I. Bozhevolnyi, L. Markey, A. Dereux, A. V. Krasavin, and A. V. Zayats, *Applied Physics Letters* **94**, 051111 (2009).
15. **Wavelength-selective directional coupling with dielectric-loaded plasmonic waveguides.**
Z. Chen, T. Holmgaard, S. I. Bozhevolnyi, A. V. Krasavin, A. V. Zayats, L. Markey, and A. Dereux, *Optics Letters* **34**, 310 (2009).
14. **Efficient excitation of dielectric-loaded surface plasmon-polariton waveguide modes at telecommunication wavelengths.**
T. Holmgaard, S. I. Bozhevolnyi, L. Markey, A. Dereux, A. V. Krasavin, P. Bolger, and A. V. Zayats, *Physical Review B* **78**, 165431 (2008).
13. **Bend- and splitting loss of dielectric-loaded surface plasmon-polariton waveguides.**
T. Holmgaard, Z. Chen, S. I. Bozhevolnyi, L. Markey, A. Dereux, A. V. Krasavin, and A. V. Zayats, *Optics Express* **16**, 13585 (2008).
12. **Three-dimensional numerical modeling of photonic integration with dielectric-loaded SPP waveguides.**
A. V. Krasavin and A. V. Zayats, *Physical Review B* **78**, 045425 (2008).
11. **Optical modulation of surface plasmon-polariton coupling in a gallium/aluminium composite.**
K. F. MacDonald, A. V. Krasavin, and N. I. Zheludev, *Optics Communications* **278**, 207 (2007).
10. **Passive photonic elements based on dielectric-loaded surface plasmon polariton waveguides.**
A. V. Krasavin and A. V. Zayats, *Applied Physics Letters* **90**, 211101 (2007).
9. **Gallium/aluminum nanocomposite material for nonlinear optics and nonlinear plasmonics.**
A. V. Krasavin, K. F. MacDonald, A. S. Schwanecke, and N. I. Zheludev, *Applied Physics Letters* **89**, 031118 (2006).
8. **Generation of travelling surface plasmon waves by free-electron impact.**
M. V. Bashevoy, F. Jonsson, A. V. Krasavin, N. I. Zheludev, and M. I. Stockman, *Nano Letters* **6**, 1113 (2006).
7. **Broken enantiomeric symmetry for electromagnetic waves interacting with planar chiral nanostructures.**
M. Reichelt, S. W. Koch, A. V. Krasavin, J. V. Moloney, A. S. Schwanecke, T. Stroucken, E. M. Wright, and N. I. Zheludev, *Applied Physics B: Lasers and Optics* **84**, 97 (2006).
6. **Extraordinary properties of light transmission through a small chiral hole in a metallic screen.**
A. V. Krasavin, A. S. Schwanecke, and N. I. Zheludev, *Journal of Optics A: Pure and Applied Optics* **8**, S98 (2006).

5. **Polarization conversion and “focusing” of light propagating through a small chiral hole in a metallic screen.**
A. V. Krasavin, A. S. Schwanecke, M. Reichelt, T. Stroucken, S. W. Koch, E. M. Wright, and N. I. Zheludev, *Applied Physics Letters* **86**, 201105 (2005).
4. **Active control of surface plasmon-polariton waves.**
A. V. Krasavin, A. V. Zayats, and N. I. Zheludev, *Journal of Optics A: Pure and Applied Optics* **7**, S85 (2005).
3. **High-contrast modulation of light with light by control of surface plasmon polariton wave coupling.**
A. V. Krasavin, A. V. Zayats, K. F. MacDonald, and N. I. Zheludev, *Applied Physics Letters* **85**, 3369 (2004).
2. **Active plasmonics: Controlling signals in Au/Ga waveguide using nanoscale structural transformations.**
A. V. Krasavin and N. I. Zheludev, *Applied Physics Letters* **84**, 1416 (2004).
1. **Broken time reversal of light interaction with planar chiral nanostructures.**
A. S. Schwanecke, A. Krasavin, D. M. Bagnall, A. Potts, A. V. Zayats, and N. I. Zheludev, *Physical Review Letters* **91**, 247404 (2003).

Other articles

2. **Nonlocal nonlinear plasmonics.**
A. V. Krasavin, P. Ginzburg, G. A. Wurtz, and A. V. Zayats, in *SPIE Newsroom* (2016).
1. **Nonlinear plasmonics: Controlling light with light.**
W. Dickson, A. Krasavin, A. V. Zayats, and G. A. Wurtz, in *SPIE Newsroom* (2009).

Conference presentations

207. **Optical polarisation control of transient reflectivity of anisotropic plasmonic metamaterial.**
J. Wu, A. Y. Bykov, A. V. Krasavin, A. Zaleska, F. J. Rodriguez-Fortuno, and A. V. Zayats, in *SPIE Photonics West*, paper 13909-57 (2026).
206. **Plasmon-enhanced spectroscopy of oxygen-vacancy dynamics in plasmonic cavities.**
M. Nicolussi, A. Zaleska, H. Cossey, A. V. Krasavin, and A. V. Zayats, in *MEMRISYS 2025* (2025).
205. **Plasmonic heterostructures and metamaterials for photocatalytic and sensing applications. (Invited)**
A. Zaleska, Y. Xie, A. Krasavin, D. Ridhards, W. Dickson, and A. Zayats, in *248th ECS Meeting*, paper M03-2981 (2025).
204. **Electrically driven plasmonic nanocavities for active control of excitonic strong coupling. (Invited)**
A. V. Krasavin, J. Zheng, L. Liu, Z. Wang, L. Tong, P. Wang, and A. V. Zayats, in *SPIE Optics + Photonics*, paper 13579-62 (2025).
203. **Anisotropic ENZ metamaterials for electrochemistry and light modulation. (Invited)**
A. Zaleska, A. V. Krasavin, J. Wu, A. Y. Bykov, W. Dickson, and A. V. Zayats, in *SPIE Optics + Photonics*, paper 13577-15 (2025).
202. **Two-dimensional gold flakes for nonlinear and low-loss plasmonics. (Invited)**
A. Krasavin, C. Pan, L. Liu, Z. Wang, A. Zayats, L. Tong, and P. Wang, in *15th International Conference on Metamaterials, Photonic Crystals and Plasmonics* (2025).
201. **Optical and electrical properties of titanium nitride thin films at the nanoscale. (Invited)**
R. Bower, C. P. T. McPolin, A. V. Krasavin, B. Rente, A. V. Zayats, N. Petkov, and Peter Petrov, in *The 11th International Conference on Antennas and Electromagnetic Systems* (2025).
200. **Probing hydrogen oxidation using surface enhanced infra-red spectroscopy.**
J. Rietbrock, M. Spry, A. Holm Hoholdt, A. Krasavin, A. Zayats, S. Maier, A. Bagger, Y. Katayama, F. Xie, J. Lischner, and I. Stephens, in *London Plasmonics Forum* (2025).
199. **Hidden chirality of plasmonic nanostructures.**
Y. Xie, A. V. Krasavin, and A. V. Zayats, in *London Plasmonics Forum* (2025).
198. **Synaptic evolution in plasmonic cavities.**
M. Nicolussi, A. V. Krasavin, and A. V. Zayats, in *London Plasmonics Forum* (2025).
197. **Unidirectional scattering from chiral plasmonic nanoparticles.**
Y. Xie, A. V. Krasavin, D. J. Roth, and A. V. Zayats, in *The 11th International Conference on Surface Plasmon Photonics*, paper C27 (2025).
196. **Hybrid plasmonic-dielectric metamaterials for controlling hot-electron processes and chirality. (Invited)**
A. Zaleska, Y. Xie, J. Wu, A. V. Krasavin, A. Y. Bykov, and A. V. Zayats, in *SPIE Optics + Optoelectronics*, paper 13523-11 (2025).
195. **Tailoring nanomaterials for ultrafast and chiral plasmonics.**
A. Zaleska, Y. Xie, J. Wu, A. Krasavin, A. Bykov and A. Zayats, in *2024 MRS Fall Meeting & Exhibit*, paper EL07.13.01 (2024).

194. **Time-dependent quadratic nonlinearity and polarisation control in the epsilon near-zero regime. (Keynote)**
A. Y. Bykov, J. Wu, A. Zaleska, A. V. Krasavin, and A. V. Zayats, in *SPIE Optics + Photonics*, paper 13111-29 (2024).
193. **Controlling vector beams with anisotropic metamaterials. (Invited)**
V. Aita, A. Zaleska, A. Krasavin, and A. V. Zayats, in *SPIE Optics + Photonics*, paper 13109-89 (2024).
192. **Ultrafast pulse management with hyperbolic metamaterials.**
J. Wu, J. Kingsley-Smith, A. Yu. Bykov, A. V. Krasavin, F. J. Rodriguez-Fortuno, and A. V. Zayats, in *London Plasmonics Forum* (2024).
191. **Unidirectional chiral scattering from single enantiomeric nanoparticles.**
Y. Xie, A. V. Krasavin, D. J. Roth, and A. V. Zayats, in *London Plasmonics Forum* (2024).
190. **Explored ultra-broadband and reversable ENZ tunability in copper-based plasmonic metamaterials. (Invited)**
A. Zaleska, A. V. Krasavin, A. V. Zayats, and W. Dickson, in *London Plasmonics Forum* (2024).
189. **Rotating chiral dipoles for unidirectional scattering.**
Y. Xie, A. V. Krasavin, D. J. Roth, and A. V. Zayats, in *SPIE Photonics Europe*, paper 12991-77 (2024).
188. **Ultra-broad and reversible ENZ tunability in copper-based plasmonic metamaterials.**
A. Zaleska, A. V. Krasavin, A. V. Zayats, and W. Dickson, in *SPIE Photonics Europe*, paper 12990-61 (2024).
187. **Atomically smooth single crystalline platform for high quality plasmonic resonances.**
A. V. Krasavin, L. Liu, Z. Wang, J. Zheng, D. Zhang, C. Pan, M. Ren, X. Guo, A. V. Zayats, L. Tong, and P. Wang, in *The 6th International Conference on Frontiers of nano-Photonics* (2024).
186. **Ultrafast pulse management with hyperbolic metamaterials.**
J. Wu, J. Kingsley-Smith, A. Yu. Bykov, A. V. Krasavin, F. J. Rodriguez-Fortuno, and A. V. Zayats, in *Asia Communications and Photonics Conference*, paper ACPPOEM-0731-153 (2023).
185. **Single-emitter photon emission rate enhancement with nanomaterials at the super-resolution level.**
M. Cordova, Y. Vaddi, C. Cabriel, D. Jonker, M. Zapata-Herrera, A. Krasavin, A. Susarrey-Arce, R. Sapienza, Y. De Wilde, V. Krachmalnicoff, A. Zayats, R. Carminati, I. Izeddin, and R. Boyd, in *Frontiers in Optics + Laser Science*, paper JTU4A.52 (2023).
184. **Ultrashort pulse management with nanorod and nanotube metamaterials. (Invited)**
A. V. Zayats, A. Zaleska, A. V. Krasavin, A. Bykov, F. J. Rodriguez-Fortuno, F. Lotti, T. Stefaniuk, J. Wu, and W. Dickson, in *SPIE Optics + Photonics*, paper 12646-62 (2023).
183. **Effect of mirror quality on the optical properties of nanoparticle-on-mirror plasmonic nanocavities.**
Z. Wang, A. V. Krasavin, and P. Wang, in *META 2023* (2023).
182. **Spin-orbit coupling and topology of optical fields in metamaterials. (Invited)**
V. Aita, D. Roth, A. Krasavin, and A. Zayats, in *META 2023* (2023).
181. **Scalable self-assembled plasmonic metamaterials: fabrication and application. (Invited)**
A. Zaleska, F. Lotti, A. Krasavin, W. Dickson, and A. V. Zayats, in *META 2023* (2023).

180. **Controlling spontaneous emission with nanomaterials at the single-emitter level.**
R. M. Cordova-Castro, C. Cabriel, D. Jonker, M. Zapata-Herrera, A. Krasavin, A. Susarrey-Arce, R. Sapienza, Y. De Wilde, V. Krachmalnicoff, A. Zayats, I. Izeddin, and R. W. Boyd, in *META 2023* (2023).
179. **Longitudinal field tailoring for interactions of complex beams with anisotropic metamaterials.**
V. Aita, D. J. Roth, A. V. Krasavin, A. Zaleska, F. J. Rodriguez Fortuno, and A. V. Zayats, in *Photonics and Electromagnetics Research Symposium* (2023).
178. **Wavelength-selective photoacoustics in plasmonic hetero-nanoparticles.**
Y. Xie, A. Yu. Bykov, A. V. Krasavin, P. Wang, and A. V. Zayats, in *Photonics and Electromagnetics Research Symposium* (2023).
177. **Dynamics of nonlinear response of plasmonic heterostructures. (Keynote)**
A. Yu. Bykov, D. J. Roth, A. V. Krasavin, and A. V. Zayats, in *Photonics and Electromagnetics Research Symposium* (2023).
176. **Optical spin-orbit coupling in plasmonics and metamaterials. (Invited)**
V. Aita, D. Roth, A. Krasavin, and A. Zayats, in *11th International Conference on Materials for Advanced Technologies*, paper A-1162 (2023).
175. **Shaping vector beams and ultrashort pulses in hyperbolic metamaterials. (Invited)**
V. Aita, D. Roth, T. Stefaniuk, M. A. Shevchenko, A. V. Krasavin, and A. V. Zayats, in *SPIE Optics and Optoelectronics*, paper 12568-1 (2023).
174. **Tailoring complex vector beams and pulses with strongly anisotropic metamaterials. (Invited)**
D. Roth, V. Aita, T. Stefaniuk, M. Shevchenko, A. Krasavin, and A. Zayats, in *The 16th International Congress on Artificial Materials for Novel Wave Phenomena* (2022).
173. **Temperature stability of individual plasmonic Au and TiN nanodiscs.**
R. Bower, C. P. T. McPolin, A. V. Krasavin, and A. V. Zayats, in *SPIE Advanced Electronic and Photonic Materials*, paper AM101-44 (2022).
172. **Tailoring optical field topologies with plasmonics and metamaterials. (Keynote)**
A. V. Krasavin, V. Aita, D. J. Roth, A. Yu. Bykov, and A. V. Zayats, in *SPIE Optics and Photonics*, paper 12197-24 (2022).
171. **Interaction of complex beams with strongly anisotropic ENZ metamaterials.**
V. Aita, D. Roth, A. Zaleska, A. V. Krasavin, L. H. Nicholls, N. A. Shevchenko, F. J. Rodriguez-Fortuno, and A. V. Zayats, in *META 2022* (2022).
170. **Ultrafast manipulation of light with nanorod plasmonic metamaterials. (Invited)**
A. Krasavin, L. Nicholls, A. Neira, F. Rodríguez-Fortuno, M. Nasir, G. Wurtz, and A. Zayats, in *META 2022* (2022).
169. **High-resolution broad-angle colour definition with self-assembled plasmonic coaxial nanocavity arrays.**
A. V. Krasavin, H. Ni, L. Zhang, A. Ping, C. Pan, J. Cheng, M. Wang, J. Chang, and A. Zayats, in *SPIE Photonics Europe* (2022).
168. **Modelling polarisation properties of plasmonic nanorod metamaterial in the nonlocal regime.**
J. Wu, A. Yu. Bykov, A. V. Krasavin, and A. V. Zayats, in *SPIE Photonics Europe* (2022).

167. **Interaction of complex beams with anisotropic metamaterials.**
V. Aita, D. J. Roth, A. Zaleska, A. V. Krasavin, L. H. Nicholls, N. A. Shevchenko, F. J. Rodriguez-Fortuno, and A. V. Zayats, in *SPIE Photonics Europe* (2022).
166. **Wavelength-tuneable photoacoustics in plasmonic Au/SiO₂/Au nanoparticles.**
Y. Xie, A. Bykov, A. Krasavin, P. Wang, and A. Zayats, in *SPIE Photonics Europe* (2022).
165. **Aluminium nanorod metamaterials as sensing platform for label-free DNA detection in the UV.**
M. Romero, C. McPolin, A. V. Krasavin, G. Dickson, A. V. Zayats, and W. Dickson, in *Applications of Nanophotonic & Plasmonic Metamaterials in Biosensing Meeting* (2021).
164. **Large scale fabrication of plasmonic nanorod metamaterials.**
M. E. Nasir, A. V. Krasavin, and A. V. Zayats, in *Metamaterials Manufacturing at the Nanometre Length Scale Meeting* (2021).
163. **Optoelectronic synapses based on hot-electron-driven reactive tunnel junctions.**
P. Wang, M. E. Nasir, A. V. Krasavin, W. Dickson, and A. V. Zayats, in *London Plasmonics Forum* (2021).
162. **Refractory nano-plasmonic materials.**
R. Bower, C. McPolin, A. Krasavin, A. V. Zayats, and P. K. Petrov, in *London Plasmonics Forum* (2021).
161. **Reconfigurable cavity-based plasmonic platform for resonantly enhanced sub-bandgap photodetection.**
C. P. T. McPolin, M. Romero Gomez, A. V. Krasavin, W. Dickson, and A. V. Zayats, in *London Plasmonics Forum* (2021).
160. **Metamaterial-enhanced photoluminescence spectroscopy. (Invited)**
D. J. Roth, P. Ginzburg, M. E. Nasir, A. V. Krasavin, K. Suhling, D. Richards, V. A. Podolskiy, and A. V. Zayats, in *SPIE Nanoscience + Engineering* (2020).
150. **Highly tunable Aluminium metamaterials for hot carrier generation.**
R. M. Romero Gomez, C. McPolin, A. Krasavin, M. E. Nasir, W. P. Wardley, F. J. Rodriguez Fortuno, A. V. Zayats, and W. Dickson, in *London Plasmonics Forum* (2020).
158. **Electrically-driven plasmonic nanorod metamaterials.**
P. Wang, A. V. Krasavin, M. E. Nasir, W. Dickson, and A. V. Zayats, in *Progress In Electromagnetics Research Symposium* (2019).
157. **Hot-electron effects in electrically-driven plasmonic nanostructures: Light, sensing and artificial synapses.**
A. Krasavin, A. Zayats, Y. Jiang, P. Wang, and M. Nasir, in *Materials Research Meeting*, paper G4-13-K04 (2019).
156. **Electrically driven chemical reactions.**
P. Wang, A. V. Krasavin, Y. Jiang, M. E. Nasir, and A. V. Zayats, in *Catalysis Hub Meeting* (2019).
155. **Hot-electron effects in electrically-driven plasmonic nanostructures. (Keynote)**
P. Wang, A. Krasavin, and A. V. Zayats, in *SPIE/COS Photonics Asia*, paper 11194-7 (2019).
154. **Plasmonic metamaterials for sensing applications.**
P. Wang, A. V. Krasavin, M. E. Nasir, W. Dickson, and A. V. Zayats, in *META 2019* (2019).

153. **Optoelectronic memristors based on reactive tunnel junctions.**
P. Wang, A. V. Krasavin, M. E. Nasir, and A. V. Zayats, in *MEMRISYS 2019* (2019).
152. **Taming ultrafast nonlinear response of plasmonic nanostructures. (Invited)**
L. H. Nicholls, F. J. Rodriguez Fortuno, A. V. Krasavin, G. A. Wurtz, and A. V. Zayats, in *Progress In Electromagnetics Research Symposium* (2019).
151. **Nanoscale light in resonant nanostructures. (Invited)**
C. P. T. McPolin, P. Wang, A. V. Krasavin, and A. V. Zayats, in *Progress In Electromagnetics Research Symposium* (2019).
150. **Hot-electron effects in plasmonic heterostructures. (Invited)**
P. Wang, J. Salmon, A. Bykov, G. Sartorello, D. Roth, A. V. Krasavin, and A. V. Zayats, in *Progress In Electromagnetics Research Symposium* (2019).
149. **Plasmonic metamaterials for high-sensitivity sensing applications. (Invited)**
P. Wang, M. Nasir, A. Krasavin, W. Dickson, and A. Zayats, in *The 9th International Multidisciplinary Conference on Optofluidics* (2019).
148. **Memristive plasmonic tunnel junctions. (Invited)**
A. V. Krasavin, P. Wang, M. E. Nasir, W. Dickson and A. V. Zayats, in *London Plasmonics Forum* (2019).
147. **Optimizing hot carrier effects in Pt-decorated plasmonic heterostructures.**
J. U. Salmon-Gamboa, M. Romero-Gómez, D. J Roth, M. J Barber, P. Wang, S. M. Fairclough, M. E Nasir, A. V Krasavin, W. Dickson, and A. Zayats, in *Faraday Discussions* (2019).
146. **Hot-electron generation in plasmonic nanocone-based metamaterials.**
R. M. Cordova-Castro, A. V. Krasavin, P. Wang, J. Salmon, C. McPolin, L. Nicholls, A. Bykov, M. E. Nasir, A. Zair, W. Dickson, and A. Zayats, in *Faraday Discussions* (2019).
145. **Electro-photo-chemistry in plasmonic tunnel junctions.**
P. Wang, A. Krasavin, M. Nasir, W. Dickson, and A. V. Zayats, in *Faraday Discussions* (2019).
144. **Metaparticles: Zero-dimensional hyperbolic metamaterials.**
P. Wang, A. V. Krasavin, F. N. Viscomi, A. M. Adawi, J.-S. G. Bouillard, L. Zhang, D. J. Roth, L. Tong, A. V. Zayats, in *The 7th International Topical Meeting on Nanophotonics and Metamaterials*, paper Sat4f.59 (2019).
143. **Scattering of radially polarized light: Generalization of the optical theorem.**
A. V. Krasavin, P. Segovia, R. Dubrovka, N. Olivier, P. Ginzburg, A. V. Zayats, in *The 7th International Topical Meeting on Nanophotonics and Metamaterials*, paper Sat4f.50 (2019).
142. **On the plasmonic metamaterials for photovoltaics by controlling field enhancement.**
R. M. Cordova-Castro, A. V. Krasavin, P. Wang, M. E. Nasir, W. Dickson, and A. Zayats, in *PlusAlliance Workshop* (2018).
141. **Electron dynamics in plasmonic nanostructures in hydrodynamic description (and beyond).**
A. V. Krasavin, P. Ginzburg, L. Nicholls, G. A. Wurtz, and A. Zayats, in *PlusAlliance Workshop* (2018).
140. **Plasmonic metamaterials.**
W. Dickson, M. Nasir, M. Cordova-Castro, A. Zaleska, A. Krasavin, P. Wang, G. Wurtz, and A. Zayats, in *PlusAlliance Workshop* (2018).

139. **Fabrication, characterization and applications of a gradient refractive index plasmonic metamaterial.**
R. M. Córdova-Castro, B. Wells, A. V. Krasavin, M. E. Nasir, W. Dickson, V. A. Podolskiy, and A. V. Zayats, in *The 12th International Congress on Artificial Materials for Novel Wave Phenomena* (2018).
138. **Nonlinearities in plasmonic nanostructures: Hydrodynamic description. (Invited)**
A. Krasavin, P. Ginzburg, and A. V. Zayats, in *SPIE Optics + Photonics*, paper 10731-4 (2018).
137. **Electrically driven plasmonic nanorod metamaterials. (Invited)**
P. Wang, A. Krasavin, M. Nasir, and A. V. Zayats, in *SPIE Optics + Photonics*, paper 10719-58 (2018).
136. **Nonlinear Kerr-optics with plasmonic nanorod metamaterials. (Invited)**
L. H. Nicholls, A. D. Neira, F. J. Rodriguez Fortuno, M. E. Nasir, A. V. Krasavin, G. A. Wurtz, and A. V. Zayats, in *Progress In Electromagnetics Research Symposium* (2018).
135. **Generalization of optical theorem for complex vectorial beams. (Invited)**
A. V. Krasavin, P. Segovia, R. Dubrovka, N. Olivier, G. A. Wurtz, P. B. Ginzburg, and A. V. Zayats, in *Progress In Electromagnetics Research Symposium* (2018).
134. **Electrically-driven nanoscale chemistry with plasmonic nanorod metamaterials. (Invited)**
P. Wang, A. V. Krasavin, M. E. Nasir, W. Dickson, and A. V. Zayats, in *Progress In Electromagnetics Research Symposium* (2018).
133. **Electrical generation of hot electrons in plasmonic nanorod metamaterials. (Invited)**
P. Wang, A. Krasavin, M. Nasir, W. Dickson, and A. Zayats, in *META 2018, The 9th International Conference on Metamaterials, Photonic Crystals and Plasmonics* (2018).
132. **Waveguided modes, nonlinearity and magneto-optics in self-assembled metamaterials. (Invited)**
M. E. Nasir, P. Wang, A. Bykov, A. V. Krasavin, B. Fan, V. A. Podolskiy, and A. V. Zayats, in *META 2018, The 9th International Conference on Metamaterials, Photonic Crystals and Plasmonics* (2018).
131. **Large area self-assembled split-nanorod metamaterials. (Invited)**
M. E. Nasir, R. M. Cordova-Castro, J.-S. Bouillard, P. Wang, A. V. Krasavin, and A. V. Zayats, in *META 2018, The 9th International Conference on Metamaterials, Photonic Crystals and Plasmonics* (2018).
130. **Engineering optical responses of plasmonic objects with a hyperbolic coating.**
P. Wang, A. Krasavin, F. Viscomi, A. Adawi, J.-S. Bouillard, D. Roth, G. Sartorello, and A. Zayats, in *META 2018, The 9th International Conference on Metamaterials, Photonic Crystals and Plasmonics* (2018).
129. **Chemistry and light with tunnelling electrons. (Invited)**
P. Wang, A. V. Krasavin, M. E. Nasir, W. Dickson, and A. V. Zayats, in *London Plasmonics Forum* (2018).
128. **Mind the nanoscale gap: Tunnel junctions beyond electronic transport. (Invited)**
P. Wang, A. V. Krasavin, M. E. Nasir, and A. V. Zayats, in *The International Symposium On Plasmonics and Nano-photonics* (2018).
127. **Hot electrons in electrically driven plasmonic nanorod metamaterials.**
P. Wang, A. Krasavin, M. Nasir, W. Dickson, A. Zayats, in *SPIE Photonics Europe*, paper 10671-47 (2018).

126. **Structured hyperbolic metamaterials for control of spontaneous emission.**
D. Roth, M. E. Nasir, A. V. Krasavin, P. Ginzburg, W. Dickson, D. Richards, V. A. Podolskiy, A. V. Zayats, in *SPIE Photonics Europe*, paper 10671-23 (2018).
125. **Controlling light at the nanoscale: from metallic nanoparticles to novel artificial materials.**
R. M. Cordova-Castro, A. V. Krasavin, M. E. Nasir, W. Dickson, and A. V. Zayats, in *STEM for Britain* (2018).
124. **Electrically driven metamaterials. (Invited)**
P. Wang, A. V. Krasavin, M. Nasir, and A. V. Zayats, in *SPIE Photonics West*, paper 10536-26 (2018).
123. **Nonlinear components for polarization control. (Invited)**
L. Nicholls, F. J. Rodriguez Fortuno, M. Nasir, A. V. Krasavin, G. A. Wurtz, and A. V. Zayats, in *SPIE Photonics West*, paper 10535-11 (2018).
122. **Field enhancement in strongly-coupled plasmonic nanocone metamaterials.**
R. M. Cordova-Castro, A. V. Krasavin, M. E. Nasir, W. Dickson, and A. V. Zayats, in *Metamaterials 2017* (2017).
121. **Macroscale ultrasharp nanocone metamaterials - optical properties and applications. (Invited)**
M. Cordova-Castro, W. P. Wardley, M. E. Nasir, G. A. Wurtz, A. Krasavin, A. V. Zayats, and W. Dickson, in *META'17, the 8th International Conference on Metamaterials, Photonic Crystals and Plasmonics* (2017).
120. **Controlling field enhancement with plasmonic nanocone metamaterials.**
R. M. Cordova-Castro, M. E. Nasir, A. V. Krasavin, W. Dickson, and A. V. Zayats, in *CLEO/Europe-EQEC 2017*, paper EH-P.15 WED (2017).
119. **Accelerating spontaneous emission with metamaterials. (Invited)**
D. Roth, P. Wang, M. E. Nasir, A. V. Krasavin, B. Wells, P. Ginzburg, D. R. Richards, V. A. Podolskiy, and A. V. Zayats, in *The 9th International Conference on Materials for Advanced Technologies* (2017).
118. **Engineering ultrafast nonlinearities with metamaterials and metasurfaces. (Invited)**
L. Nicholls, T. Stefaniuk, A. V. Krasavin, G. Sartorello, G. Marino, M. E. Nasir, W. Dickson, G. A. Wurtz, F. J. Rodrigues-Fortuno, and A. V. Zayats, in *The 9th International Conference on Materials for Advanced Technologies* (2017).
117. **Investigation of cathodoluminescence emission from Si and Au/Si nanostructures.**
Y. Nel Vila, C. McPolin, A. Krasavin, and A. V. Zayats, in *London Plasmonics Forum* (2017).
116. **Switchable dielectric trapping of plasmonic and magnetic nanoparticles.**
T. Brick, A. Bykov, M. Cordova Castro, E. Cortés, A. Krasavin, A. Lauri, and J. Salmon, in *London Plasmonics Forum* (2017).
115. **Nonlocal nonlinear plasmonics in hydrodynamic description.**
A. V. Krasavin, P. Ginzburg, and A. V. Zayats, in *The 8th International Conference on Surface Plasmon Photonics*, paper Oral-85 (2017).
114. **Benchmarking active and passive plasmonic components for nanophotonic circuitry.**
A. V. Krasavin and A. V. Zayats, in *The 8th International Conference on Surface Plasmon Photonics*, paper P-07-86 (2017).

113. **Electrically-driven plasmonic nanorod metamaterials.**
P. Wang, A. V. Krasavin, M. E. Nasir, W. Dickson, and A. V. Zayats, in *The 8th International Conference on Surface Plasmon Photonics*, paper Oral-19 (2017).
112. **Nonlinear optics of plasmonic metamaterials. (Invited)**
A. V. Krasavin, A. D. Neira, G. Sartorello, L. Nicholls, G. A. Wurtz, and A. V. Zayats, in *CLEO 2017*, paper FTh1G.6 (2017).
111. **Engineering optical density of states with nonlocal metamaterials. (Invited)**
V. A. Podolskiy, P. Ginzburg, D. Roth, A. Krasavin, B. Wells, and A. Zayats, in *CLEO 2017*, paper FTh1G.1 (2017).
110. **Nonlinear plasmonics in nonperturbative hydrodynamic model. (Invited)**
A. V. Krasavin, G. Marino, P. Ginzburg, G. A. Wurtz, and A. V. Zayats, in *SPIE Photonics West*, paper 10111-54 (2017).
109. **Electrically-driven plasmonic nanorod metamaterials.**
P. Wang, A. V. Krasavin, M. E. Nasir, W. Dickson, and A. V. Zayats, in *SPIE Photonics Asia*, paper 10028-47 (2016).
108. **Metallic nanostructures for active control of light. (Invited)**
A. V. Krasavin and A. V. Zayats, in *OSA Subwavelength Photonics Incubator* (2016).
107. **Shape matters: Tuning plasmonic resonances in single nanoparticles and their arrays.**
R. M. Córdoba, A. Krasavin, W. Dickson, E. R. Méndez, A. Zayats, in *SPIE Optics + Photonics*, paper 9921-63 (2016).
106. **Spontaneous emission and non-radiative processes inside a hyperbolic metamaterial. (Invited)**
D. Roth, M. E. Nasir, A. V. Krasavin, P. Ginzburg, W. Dickson, A. Le Marois, K. Suhling, D. R. Richards, V. A. Podolskiy, A. V. Zayats, in *SPIE Nanoscience + Engineering*, paper 9920-45 (2016).
105. **Figures of merit for passive and active plasmonic circuits. (Invited)**
A. V. Krasavin and A. V. Zayats, in *Progress In Electromagnetics Research Symposium* (2016).
104. **Second-harmonic generation in hyperbolic plasmonic nanorod metamaterials. (Invited)**
A. V. Krasavin, G. Marino, P. Segovia, N. Olivier, P. Ginzburg, G. A. Wurtz, and A. V. Zayats, in *Progress In Electromagnetics Research Symposium* (2016).
103. **Nonlocal nonlinear plasmonics. (Invited)**
A. V. Krasavin, P. Ginzburg, G. Marino, P. Segovia, G. A. Wurtz, and A. V. Zayats, in *Progress In Electromagnetics Research Symposium* (2016).
102. **Nonlinear optics and optomechanics with plasmonic metamaterials. (Invited)**
L. Nicholls, T. Stefaniuk, G. Sartorello, G. Marino, A. V. Krasavin, F. Rodrigues Fortuno, W. Dickson, and A. V. Zayats, in *International Conference on Optical MEMS and Nanophotonics*, paper Mo2.11 (2016).
101. **Tuning plasmonic resonances in single nanoparticles and their arrays.**
R. M. Córdoba, A. Krasavin, W. Dickson, E. R. Méndez, A. Zayats, in *The 12th International Symposium on Photonic and Electromagnetic Crystal Structures* (2016).
100. **Shape matters: Tuning plasmonic resonances in single nanoparticles and their arrays.**
R. M. Córdoba-Castro, A. Krasavin, W. Dickson, E. Méndez, A. Zayats, in *Plasmonics and Light Scattering Workshop* (2016).

99. **Electrically-driven emission from plasmonic nanorod metamaterials.**
P. Wang, A. V. Krasavin, M. E. Nasir, W. Dickson, and A. V. Zayats, in *London Plasmonics Forum* (2016).
98. **Frequency tuneable second-harmonic generation in plasmonic nanorod metamaterial slab.**
G. Marino, P. Segovia, A. V. Krasavin, P. Ginzburg, M. E. Nasir, W. Dickson, N. Olivier, G. Wurtz, and A. Zayats, in *London Plasmonics Forum* (2016).
97. **Field enhancement in Au nanocone metamaterials.**
R. M. Córdova, M. Nasir, A. Krasavin, W. Dickson, A. Zayats, in *London Plasmonics Forum* (2016).
96. **Ultrafast coherent nonlinear response in arrays of multipolar plasmonic resonators.**
G. Sartorello, N. Olivier, J. Zhang, W. Yue, D. Gozstola, O. Wiederrecht, A. Krasavin, P. Ginzburg, G. Wurtz, and A. Zayats, in *London Plasmonics Forum* (2016).
95. **Frequency tuneable second-harmonic generation in plasmonic nanorod metamaterial slab.**
G. Marino, P. Segovia, A. V. Krasavin, P. Ginzburg, N. Olivier, G. A. Wurtz, and A. V. Zayats, in *SPIE Photonics Europe 2016*, paper 9884-46 (2016).
94. **Electrically driven plasmonic nanorod metamaterials.**
P. Wang, A. V. Krasavin, M. E. Nasir, W. Dickson, and A. V. Zayats, in *SPIE Photonics Europe 2016*, paper 9884-71 (2016).
93. **Plasmonic modulators based on bismuth ferrite for low-loss optical switching.**
V. E. Babicheva, S. V. Zhukovsky, A. V. Krasavin, A. V. Zayats, and A. V. Lavrinenko, in *MRS Fall Meeting*, paper GG10.06 (2015).
92. **Nonlinearities in hyperbolic plasmonic metamaterials.**
A. D. Barbosa Neira, S. Peruch, G. Marini, M. Nasir, A. V. Krasavin, N. Olivier, W. Dickson, G. A. Wurtz, and A. V. Zayats, in *SPIE Optics + Photonics*, paper 9544-35 (2015).
91. **Control of ultrafast coherent nonlinear response of plasmonic metasurfaces. (Invited).**
G. Sartorello, N. Olivier, J. Zhang, W. Yue, A. V. Krasavin, P. Ginzburg, G. Wurtz, and A. V. Zayats, in *Progress In Electromagnetics Research Symposium*, Abstract Book, p. 935 (2015).
90. **Hydrodynamic model for nonlinear plasmonics: From nonlinear mode coupling to supercontinuum generation. (Invited)**
A. V. Krasavin, P. Ginzburg, G. Sartorello, P. Segovia, G. Marino, G. Wurtz, and A. V. Zayats, in *Progress In Electromagnetics Research Symposium*, Abstract Book, p. 861 (2015).
89. **Ultrafast all-optical switching of surface plasmon polariton modes via Fano resonances.**
C. McPolin, N. Olivier, J.-S. Bouillard, D. O'Connor, A. Krasavin, W. Dickson, G. A. Wurtz, and A. V. Zayats, in *CLEO/Europe-EQEC*, paper EH-4.2 (2015).
88. **Active plasmonic circuitry.**
A. V. Krasavin, and A. V. Zayats, in *London Plasmonics Forum* (2015).
87. **Second harmonic generation from uniaxial plasmonic metamaterials: From elliptical to hyperbolic dispersion regimes.**
G. Marino, P. Segovia, A. V. Krasavin, P. Ginzburg, M. E. Nasir, W. Dickson, N. Olivier, G. Wurtz, and A. Zayats, in *The 7th International Conference on Surface Plasmon Photonics*, paper Th-04-P-54 (2015).

86. **Ultrafast coherent nonlinear response in arrays of multipolar plasmonic resonators.**
G. Sartorello, N. Olivier, J. Zhang, A. V. Krasavin, P. Ginzburg, G. Wurtz, and Anatoly Zayats, in *The 7th International Conference on Surface Plasmon Photonics*, paper We-03-D-3 (2015).
85. **Electrically pumped coherent surface plasmon polariton source integrated on a chip.**
D. Fedyanin, A. V. Krasavin, A. Arsenin, and A. Zayats, in *The 7th International Conference on Surface Plasmon Photonics*, paper Mo-01-P-33 (2015).
84. **Hydrodynamic model for nonlinear plasmonics: From harmonic generations to coherent supercontinuum.**
A. V. Krasavin, P. Ginzburg, P. Segovia, G. Wurtz, and A. V. Zayats, in *The 7th International Conference on Surface Plasmon Photonics*, paper M0-01-F-3 (2015).
83. **Hybrid plasmonic nanophotonics. (Invited)**
A. V. Krasavin, W. Dickson, G. A. Wurtz, and A. V. Zayats, in *E-MRS Spring Meeting 2015*, paper I-111 (2015).
82. **Comparing plasmonic waveguides: A comprehensive figure of merit.**
A. Krasavin and A. Zayats, in *OWTNM 2015*, Abstract Book, p. 27 (2015).
81. **Modelling coherent nonlinearities in nanostructured plasmonic metamaterials.**
G. Marino, P. Segovia, A. Krasavin, P. Ginzburg, N. Olivier, G. A. Wurtz, and A. V. Zayats, in *OWTNM 2015*, Abstract Book, p. 23 (2015).
80. **Fluorescence axial nanotomography with plasmonics.**
D. Richards, N. I. Cade, G. O. Fruhwirth, A. V. Krasavin, and Tony Ng, in *Faraday Discussions 2015*, paper 4908 (2015).
79. **Electrically driven coherent surface plasmon polariton source at the nanoscale.**
D. Fedyanin, A. Arsenin, A. Krasavin, and A. Zayats, in *The 4th International Topical Meeting on Nanophotonics and Metamaterial*, paper TUE4f-P-62 (2015).
78. **Nonlinear plasmonics in nonperturbative hydrodynamic description.**
P. Ginzburg, A. Krasavin, P. Segovia, G. A. Wurtz, and A. V. Zayats, in *The 4th International Topical Meeting on Nanophotonics and Metamaterial*, paper WED5f-P-47 (2015).
77. **Directional excitation of surface plasmon polaritons by vertical-cavity surface emitting lasers.**
C. McPolin, J.-S. Bouillard, D. O'Connor, A. V. Krasavin, W. Dickson, J. Justice, B. Corbett, G. A. Wurtz, and A. V. Zayats, in *Photon 14 Conference* (2014).
76. **Second harmonic generation from plasmonic metamaterials in the vicinity of epsilon-near-zero.**
G. Marino, P. Segovia, A. Krasavin, P. Ginzburg, M. Nazir, W. Dickson, N. Olivier, G. A. Wurtz, and A. V. Zayats, in *Photon 14 Conference* (2014).
75. **Experimental demonstration of plasmonic switching via optical cavity resonances.**
C. McPolin, J.-S. Bouillard, D. O'Connor, A.V. Krasavin, W. Dickson, G. A. Wurtz, and A. V. Zayats, in *The 13th International Conference on Near-field Optics, Nanophotonics and Related Techniques*, paper 2B.5 (2014).
74. **Nonlinear plasmonics for nanoscale light manipulation and imaging.**
A. V. Krasavin, P. Segolia Olvera, P. Ginzburg, and A. V. Zayats, in *SPIE Optics + Photonics 2014*, paper 9163-116 (2014).

73. **Lossless surface plasmon polariton guiding in electrically driven nanowaveguides.**
D. Y. Fedyanin, A. V. Krasavin, A. V. Arsenin, A. V. Zayats, in *SPIE Optics + Photonics 2014*, paper 9163-19 (2014).
72. **Guiding, switching and sensing with nanorod metamaterials. (Invited)**
G. A. Wurtz, W. Dickson, P. Ginzburg, A. V. Krasavin, and A. V. Zayats, in *SPIE Optics + Photonics 2014*, paper 9160-38 (2014).
71. **Plasmonic and metamaterial devices based on opto-mechanical interactions.**
P. Ginzburg, A. V. Krasavin, A. S. Shalin, P. A. Belov, Y. S. Kivshar, and A. V. Zayats, in *SPIE Optics + Photonics 2014*, paper 9160-27 (2014).
70. **Surface Nonlinearities in Plasmonics.**
A. V. Krasavin, P. Segovia, P. Ginzburg, and A. V. Zayats, in *CLEO 2014*, paper FTh4K.7 (2014).
69. **Classical and quantum opto-mechanics with plasmonics and metamaterials.**
P. Ginzburg, A. V. Krasavin, A. S. Shalin, P. A. Belov, Y. S. Kivshar, and A. V. Zayats, in *CLEO 2014*, paper FTu3C.2 (2014).
68. **Nonlinearities in plasmonics and metamaterials. (Invited)**
P. Ginzburg, A. Krasavin, P. Segovia, and A. V. Zayats, in *Annual International Conference "Days of Diffraction"* (2014).
67. **Nonlinear plasmonics. (Invited)**
P. Ginzburg, A. V. Krasavin, P. Segovia, G. A. Wurtz, and A. V. Zayats, in *The Nonlinear Meeting* (2014).
66. **Photonics at the nanoscale: From novel phenomena to promising applications. (Invited)**
A. V. Krasavin, S. I. Bozhevolnyi, T. Holmgaard, and A. V. Zayats, in *The 4th International Scientific Conference: State-of-the-art Trends of Scientific Research of Artificial and Natural Nanoobjects*, Abstract Book, p. 65 (2014).
65. **Plasmonics and metamaterials meet opto-mechanical applications. (Invited)**
P. Ginzburg, A. S. Shalin, A. V. Krasavin, P. A. Belov, Y. S. Kivshar, and A. V. Zayats, in *International Conference on Metamaterials and Nanophysics 2014* (2014).
64. **Anisotropic plasmonic metamaterials. (Invited)**
W. Dickson, W. Wardley, G. A. Wurtz, M. Nasir, A. Krasavin, P. Ginzburg, and A. V. Zayats, in *International Conference on Metamaterials and Nanophysics 2014* (2014).
63. **Experimental demonstration of plasmonic switching via optical cavity resonances.**
C. McPolin, J.-S. G. Bouillard, D. O'Connor, A. V. Krasavin, W. Dickson, G. A. Wurtz, and A. V. Zayats, in *SPIE Photonics Europe 2014*, paper 9126-49 (2014).
62. **Coherent surface plasmon polariton emission from a nanodiode.**
D. Yu. Fedyanin, A. V. Krasavin, A. V. Arsenin, and A. V. Zayats, in *SPIE Photonics Europe 2014*, paper 9126-10 (2014).
61. **Quantum opto-mechanical phenomena in hyperbolic metamaterials.**
P. Ginzburg, A. Krasavin, A. N. Poddubny, A. S. Shalin, M. Nazir, J. Lewitt, K. Suhling, P. A. Belov, Yu. S. Kivshar, and A. V. Zayats, in *The 7th International Congress on Advanced Electromagnetic Materials in Microwaves and Optics* (2013).

60. **Arrays of plasmonic nanocavities for nonlinear light interactions.**
A. Murphy, Y. Sonnefraud, P. Ginzburg, A. Krasavin, S. Maier, A. Zayats, and R. Pollard, in *The 7th International Congress on Advanced Electromagnetic Materials in Microwaves and Optics*, Conference Proceedings, p. 517 (2013).
59. **Active plasmonic circuitry.**
A. V. Krasavin and A. V. Zayats, in *Progress In Electromagnetics Research Symposium*, Abstract Book, p. 773 (2013).
58. **Nonlinear nanoplasmonics: Making use of metallic nonlinearities.**
P. Gunzburg, A. V. Krasavin, and A. V. Zayats, in *Progress In Electromagnetics Research Symposium*, Abstract Book, p. 1358 (2013).
57. **Nanoscale nonlinear plasmonics.**
P. Gunzburg, A. V. Krasavin, P. Segovia, and A. V. Zayats, in *The 6th International Conference on Surface Plasmon Photonics*, paper Th-30-P-17 (2013).
56. **Quantum opto-mechanical phenomena on the nano-scale. (Invited)**
P. Ginzburg, A. Krasavin, A. N. Poddubny, A. S. Shalin, P. A. Belov, Y. S. Kivshar, and A. V. Zayats, in *Annual International Conference "Days of Diffraction"*, Conference Proceedings, p. 112 (2013).
55. **A plasmonic switch based on electrically controlled cavity resonances**
C. McPolin, D. O'Connor, J.-S. Bouillard, A. V. Krasavin, W. Dickson, G. A. Wurtz, and A. V. Zayats, in *CLEO EUROPE/IQEC* (2013).
54. **Plasmonics for the design of active nanodevices. (Invited)**
W. Dickson, A. Krasavin, G. A. Wurtz, and A. V. Zayats, in *The 4th International Conference on Metamaterials, Photonic Crystals and Plasmonics* (2013).
53. **Active functionalities with hybrid plasmonic nanostructures. (Invited)**
W. Dickson, A. Krasavin, G. A. Wurtz, and A. V. Zayats, in *The 4th International Conference on Metamaterials, Photonic Crystals and Plasmonics* (2013).
52. **Metamaterial counterpart of baron Munchhausen: Self-induced electromagnetic forces.**
P. Ginzburg, A. Krasavin, A. Zayats, A. Poddubny, P. Belov, and Yu. Kivshar, in *The 4th International Topical Meeting on Nanophotonics and Metamaterials*, paper FRI4f.61 (2013).
51. **Nonlinear surface plasmonics: Exploiting intrinsic metal nonlinearities.**
P. Ginzburg, A. Krasavin, and A. Zayats, in *The 4th International Topical Meeting on Nanophotonics and Metamaterials*, paper SAT3s.3 (2013).
50. **Optical computing. (Invited)**
A. V. Krasavin and A. V. Zayats, in *The Future of Computing Symposium* (2012).
49. **Surface plasmon polariton amplification upon electrical injection: Towards deep-subwavelength active plasmonic devices.**
D. Yu. Fedyanin, A. V. Krasavin, A. V. Arsenin, and A. V. Zayats, in *European Optical Society Annual Meeting 2012*, paper 6147 (2012).
48. **Active plasmonics: The current challenges. (Invited)**
G. Wurtz, A. Krasavin, and A. Zayats, in *Workshop on Metallic Nano-objects* (2012).

47. **A plasmonic switch based on an optically controlled nonlinear cavity.**
C. McPolin, D. O'Connor, J.-S. Bouillard, A. V. Krasavin, W. Dickson, G. A. Wurtz, and A. V. Zayats, in *The 12th International Conference on Near-field optics, Nanophotonics and Related Techniques* (2012).
46. **Surface plasmon polariton amplification upon electrical injection: Towards active plasmonic interconnects.**
D. Yu. Fedyanin, A. V. Krasavin, A. V. Arsenin, and A. V. Zayats, in *The 12th International Conference on Near-field optics, Nanophotonics and Related Techniques*, paper TuD-2 (2012).
45. **Active plasmonics for the design of nanodevices. (Invited)**
G. Wurtz, A. Krasavin, and A. Zayats, in *Workshop on Metallic Nano-objects in Solid Matrix* (2012).
44. **Active nanodevices: On the use of plasmonics to manipulate optical signals at the nanoscale. (Invited)**
G. Wurtz, A. Krasavin, and A. V. Zayats, in *SPIE Optics + Photonics 2012* (2012).
43. **Active plasmonics: Manipulation of light at the nanoscale. (Invited)**
A. V. Krasavin, A. V. Zayats, D. Yu. Fedyanin, and A. V. Arsenin, in *Annual International Conference "Days of Diffraction"*, Conference Proceedings, p. 146 (2012).
42. **Fabrication of self-assembled gold coaxial nanorod-tube arrays for nanoscale light interactions.**
A. Murphy, Y. Sonnefraud, P. Ginzburg, A. Krasavin, S. Maier, A. Zayats, and R. Pollard, in *E-MRS Spring Meeting* (2012).
41. **Nano-optics. (Keynote)**
A. V. Krasavin, A. V. Zayats, W. Dickson, J.-S. Bouillard, and G. A. Wurtz, in *Plasmata'11*, Conference Proceedings, p. 21 (2011).
40. **Plasmon amplification and nonlinear plasmonic waveguides.**
A. V. Krasavin, P. Bolger, J.-S. Bouillard, A. V. Zayats, S. Randhawa, J. Renger, and R. Quidant, in *Nonlinear Photonics: Theory, Materials, Applications*, Abstract Book, p. 27 (2011).
39. **All-optical and electro-optical active plasmonic telecom components.**
S. Randhawa, J. Renger, A. Krasavin, A. Zayats, L. Sebastien, A. Bouhelier, and R. Quidant, in *Nonlinear Optics: Materials, Fundamentals and Applications*, paper NTuA2 (2011).
38. **Nanoscale photonic transistor.**
A. V. Krasavin and A. V. Zayats, in *Integrated Photonics Research, Silicon and Nano Photonics 2011*, paper IWB2 (2011).
37. **All optical and electro optical active plasmonic telecom components.**
S. Randhawa, A. V. Krasavin, J. Renger, A. Zayats, S. Lazache, A. Bouhelier, and R. Quidant, in *Integrated Photonics Research, Silicon and Nano Photonics 2011*, paper ITuB2 (2011).
36. **Nanoscale integrated field-effect SPP modulator.**
A. V. Krasavin and A. V. Zayats, in *The 5th International Conference on Surface Plasmon Photonics*, paper ThP-10 (2011).
35. **Nanoscale Si-SPP waveguides.**
A. V. Krasavin and A. V. Zayats in *Photon 10 Conference* (2010).

34. **Novel plasmonic platform based on nanorod metamaterials. (Invited)**
G. Wurtz, W. Dickson, R. Pollard, P. Evans, W. Hendren, J. McPhillips, A. Krasavin, P. Bolgaer, C. Bower, W. Harrison, V. Podolskiy, and A. V. Zayats in *International Conference on Coherent and Nonlinear Optics*, paper IMC5 (2010).
33. **Active plasmonic device.**
S. Vilain, J.-S. Bouillard, A. Krasavin, W. Dickson, and A. V. Zayats in *The 11th International Conference on Near-field Optics, Nanophotonics and Related Techniques*, paper O-84 (2010).
32. **Nanoscale Si-SPP waveguides**
A. V. Krasavin and A. V. Zayats, in *Integrated Photonics Research, Silicon and Nanophotonics and Photonics in Switching*, paper ITuB3 (2010).
31. **Active plasmonic circuitry.**
A. V. Krasavin, P. M. Bolger, W. Dickson, D. O'Connor, and A. V. Zayats, in *Plasmonics UK Meeting*, paper P8 (2010).
30. **High-density photonic integration with nanowire plasmonic waveguides. (Invited)**
A. V. Krasavin and A. V. Zayats, in *SPIE Photonics Europe 2010*, paper 7712-63 (2010).
29. **Active plasmonic components for integrated circuits.**
A. Krasavin, P. Bolger, T. Holmgaard, Z. Chen, S. Bozhevolnyi, L. Markey, A. Dereux, and A. Zayats, in *The 4th International Conference on Surface Plasmon Photonics*, paper O-39 (2009).
28. **Amplifying surface plasmon polaritons in active metallo-dielectric waveguides.**
P. Bolger, T. P. Vo, A. Krasavin, W. Dickson, and A. Zayats, in *The 4th International Conference on Surface Plasmon Photonics*, paper P-MON-020-B (2009).
27. **Active components for integrated plasmonic circuits.**
A. V. Krasavin, P. Bolger and A. V. Zayats, T. Holmgaard, Z. Chen, S. I. Bozhevolnyi, L. Markey, and A. Dereux, in *2nd IEEE LEOS Winter Topicals 2009*, paper TuA1.3 (2008).
26. **Modeling and near-field studies of photonic integration with dielectric-loaded plasmonic waveguides. (Keynote)**
A. V. Krasavin, T. Holmgaard, S. I. Bozhevolnyi, L. Markey, A. Dereux, P. M. Bolger, and A. V. Zayats, in *The 10th International Conference on Near-field Optics, Nanophotonics and Related Techniques*, paper O9 (2008).
25. **Photonic integration with dielectric-loaded SPP waveguides.**
A. V. Krasavin, P. M. Bolger, A. V. Zayats, T. Holmgaard, S. I. Bozhevolnyi, L. Markey, and A. Dereux, in *Integrated Photonics and Nanophotonics Research and Applications*, paper IMB4 (2008).
24. **Excitation and characterization of dielectric-loaded surface plasmonpolariton waveguides at telecommunication wavelengths.**
T. Holmgaard, S. I. Bozhevolnyi, L. Markey, A. Dereux, A. V. Krasavin, and A. V. Zayats, in *Nanophotonics II*, Proceedings of SPIE Vol. 6988, p. T9880 (2008).
23. **Full 3D numerical simulations of dielectric-loaded SPP waveguides.**
A. V. Krasavin, P. M. Bolger, G. A. Wurtz, and A. V. Zayats, in *Surface Plasmon Photonics 3*, paper TuP24 (2007).
22. **Generating plasmon waves by electron beam excitation**
M. V. Bashevoy, F. Jonsson, A. V. Krasavin, N. I. Zheludev, Y. Chen, and M. I. Stockman, in *The 9th International Conference on Near-field Optics, Nanophotonics and Related Techniques*, paper Mo2-2 (2006).

21. **Generation of travelling surface plasmon waves by free-electron impact.**
M. V. Bashevoy, F. Jonsson, A. V. Krasavin, N. I. Zheludev, Y. Chen, and M. I. Stockman, in *Quantum Electronics and Photonics 16*, Programme, p. 15 (2006).
20. **Nonlinear plasmonics in a gallium/aluminium nano-composite.**
K. F. MacDonald, A. V. Krasavin, B. F. Soares, M. V. Bashevoy, F. Jonsson, and N. I. Zheludev, in *Quantum Electronics and Photonics 16*, paper P2.14 (2006).
19. **New material for nonlinear plasmonics: a gallium/aluminium nano-composite.**
K. F. MacDonald, A. V. Krasavin, and N. I. Zheludev, in *SPIE Optics + Photonics 2006*, paper 6320-39 (2006).
18. **Gallium/Aluminium nano-composite for nonlinear-optical and plasmonic switching applications.**
K. F. MacDonald, A. V. Krasavin, and N. I. Zheludev, in *CLEO/QELS 2006*, paper QMF4 (2006).
17. **Generation of propagating plasmonic waves on unstructured gold surface by an electron beam.**
M. V. Bashevoy, F. Jonsson, A. V. Krasavin, N. I. Zheludev, Y. Chen, and M. I. Stockman, in *CLEO/QELS 2006, Postdeadline Papers*, paper QPDA10 (2006).
16. **Polarisation properties of planar chiral nanostructures.**
S. Takahashi, G. A. Wurtz, A. Krasavin, N. I. Zheludev, and A. V. Zayats, in *The 5th Asia-Pacific Conference on Near-Field Optics*, paper P-75 (2005).
15. **Planar chiral meta-materials. (Invited)**
N. I. Zheludev, A. S. Schwanecke, A. V. Krasavin, V. A. Fedotov, S. L. Prosvirnin, and A. V. Zayats, in *Optics and Optoelectronics*, paper 5955-11 (2005).
14. **Polarization conversion and “focusing” of light propagating through a small chiral hole in a metallic screen, geometrical chirality and the Rayleigh-Wien paradox. (Invited)**
A. V. Krasavin, A. S. Schwanecke, M. Reichelt, T. Stroucken, S. W. Koch, and N. I. Zheludev, in *Progress In Electromagnetics Research Symposium*, Conference Proceedings, p. 231 (2005).
13. **Active switching of SPP signals using nanoscale structural transformations.**
A. V. Krasavin, K. F. MacDonald, A. V. Zayats, V. A. Fedotov, and N. I. Zheludev, in *Plasmonics: Metallic Nanostructures and their Optical Properties III at Photonics 2005*, paper 5927-60 (2005).
12. **Optical properties and geometrical chirality of 2D nano-patterns and their ensembles.**
A. S. Schwanecke, A. V. Krasavin, Y. Chen, A. V. Fedotov, and N. I. Zheludev, in *Optics + Photonics 2005*, paper 5924-25 (2005).
11. **Ga-Al and Ga-Ag nano-structured films for active plasmonics applications.**
K. F. MacDonald, A. V. Krasavin, and N. I. Zheludev, in *IQEC and CLEO-PR*, paper CFI1-3 (2005).
10. **Polarization-controlled nano-focusing.**
N. I. Zheludev, A. V. Krasavin, and A. S. Schwanecke, in *IQEC and CLEO-PR*, paper JWH2-2 (2005).
9. **Active switching of surface plasmon polariton waves in Ga-Al and Ga-Ag layered structures.**
A. V. Krasavin, K. F. MacDonald, and N. I. Zheludev, in *Surface Plasmon Photonics 2*, Abstract Book, p. 101 (2005).
8. **Polarization conversion and polarization-controllable nano-focusing of light propagating through a small chiral hole in a metallic screen.**
A. V. Krasavin, A. S. Schwanecke, and N. I. Zheludev, in *Surface Plasmon Photonics 2*, Abstract Book, p. 100 (2005).

7. **3N: Nanowatt Nanosecond Nanophotonics. (Invited)**
B. Soares, K. MacDonald, V. Fedotov, A. Krasavin, M. Bashevoy, and N. I. Zheludev, in *International Conference on Coherent and Nonlinear Optics*, paper IThK2 (2005).
6. **Nano³ photonics. (Invited)**
N. I. Zheludev, K. F. MacDonald, A. V. Krasavin, and B. F. Soares, in *Microtechnologies for the New Millennium 2005*, paper 5840-58 (2005).
5. **Active plasmonics.**
A. V. Krasavin, K. F. MacDonald, A. V. Zayats, and N. I. Zheludev, in *Nanophotonics for Information Systems*, paper NWA4 (2005).
4. **Planar chirality in nanostructures: Polarization conversion and “focusing” of light propagating through small chiral holes.**
A. V. Krasavin, A. S. Schwanecke, Y. Chen, and N. I. Zheludev, in *Nanophotonics for Information Systems*, paper NWA5 (2005).
3. **Active plasmonics: A new concept for “optical chips”.**
A. V. Krasavin, K. F. MacDonald, and N. I. Zheludev, in *SET for Britain*, paper 53 (2004).
2. **Active plasmonics: A new concept for controlling surface plasmon-polariton waves.**
A. V. Krasavin, A. V. Zayats, and N. I. Zheludev, in *Quantum Electronics and Photonics 16*, Abstract Book, p. 83 (2003).
1. **Dynamics of an electron wave packet in Rydberg atom under the influence of a circularly polarised electromagnetic wave.**
A. Krasavin, in *XLIV MIPT Conference: Contemporary Problems of Fundamental and Applied Sciences*, Abstract Book, p. 32 (2001).