

Publicaciones

Grupo de Investigación Biosensado multiespectral/Multispectral biosensing

1. A. E. Serebryannikov, H. Hajian, M. Beruete, E. Ozbay, and G. A. E. Vandenbosch, "Tunable deflection and asymmetric transmission of THz waves using a thin slab of graphene-dielectric metamaterial, with and without ENZ components," *Opt. Mater. Express* 8, 3887 (2018).
2. V. Pacheco-Peña and M. Beruete, "Steering surface plasmons with a graded index dielectric medium," *J. Phys. D: Appl. Phys.* 51, 485101 (2018).
3. M. Beruete, U. Beaskoetxea, and T. Akalin, "Flat Corrugated and Bull's-Eye Antennas," in *Aperture Antennas for Millimeter and Sub-Millimeter Wave Applications. Signals and Communication Technology*, A. Boriskin and R. Sauleau, eds., 1st ed. (Springer International Publishing, 2018), pp. 111–141.
4. V. Pacheco-Peña, I. V. Minin, O. V. Minin, and M. Beruete, "Phase Reversal Technique Applied to Fishnet Metalenses," *Int. J. Antennas Propag.* 2018, 1–8 (2018).
5. U. Beaskoetxea, A. E. Torres-García, and M. Beruete, "Ku-Band Low-Profile Asymmetric Bull's-Eye Antenna With Reduced Sidelobes and Monopole Feeding," *IEEE Antennas Wirel. Propag. Lett.* 17, 401–404 (2018).
6. M. Navarro-Cía, V. Pacheco-Peña, S. A. Kuznetsov, and M. Beruete, "Extraordinary THz Transmission with a Small Beam Spot: The Leaky Wave Mechanism," *Adv. Opt. Mater.* 6, 1701312 (2018).
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9. S. Legaria, V. Pacheco-Peña, and M. Beruete, "Super-Oscillatory Metalens at Terahertz for Enhanced Focusing with Reduced Side Lobes," *Photonics* 5, 56 (2018).
10. J.M Pérez-Escudero, A.E. Torres-García, R. Gonzalo, I. Ederra, «A simplified design of microstrip to waveguide transition», *Electronics*, 7 (10), 215 (2018)
11. I. Liberal, I. Ederra, R. Ziolkowski, «Quantum antenna arrays: The role of quantum interference on direction-dependent photon statistics», *Phys. Rev. A*, 95 (5), 053847 (2018)
12. J. Teniente, Iñigo Ederra, J.C. Iriarte and R. Gonzalo, "Advanced Feeds for mm-Wave Antenna Systems," in *Aperture Antennas for Millimeter and Sub-Millimeter Wave Applications. Signals and Communication Technology*, A. Boriskin and R. Sauleau, eds., 1st ed. (Springer International Publishing, 2018), pp. 75–110.
13. I. Liberal, I. Ederra, Y. Li, Isotropic single-photon sources, *Opt. Lett.*, 43 (12), 2736-2739 (2018)

14. A. Tellechea, I. Ederra, R. Gonzalo, J. C. Iriarte, «Dispersion Properties of an Elliptical Patch with Cross Shaped Aperture for Synchronized Propagation of Transverse Magnetic and Electric Surface Waves», *Appl. Sciences*, 8, 472 (2018)
15. A. Tellechea, F. Caminita, E. Martini, I. Ederra, J. Teniente, J. C. Iriarte, R. Gonzalo, S. Maci, «Experimental Validation of a Ku-band Dual Circularly Polarized Metasurface Antenna», *EEE Trans. Antennas Propag.*, 66, 1153-1159 (2018)
16. Pacheco-Peña, V.; Engheta, N.; Kuznetsov, S.; Gentshev, A.; Beruete-Díaz, M. Experimental Realization of an Epsilon-Near-Zero Graded-Index Metalens at Terahertz Frequencies. *Physical Review Applied* 2017; 8(3): 0-0.
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19. Pacheco-Peña, V.M.; Minin, I.V.; Minin, O.V.; Beruete-Díaz, M. On the Performance of the Zoned Fishnet Metamaterial Lens With Positive and Negative Reference Phase. *IEEE Antennas and Wireless Propagation Letters* 2017; 16: 1460-1463.
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27. I. Liberal, A. M. Mahmoud, Y. Li, B. Edwards, and N. Engheta, "Photonic doping of epsilon-near-zero media," *Science* 355, 1058–1062 (2017).
28. B. Orazbayev, N. Mohammadi Estakhri, A. Alù, and M. Beruete, "Experimental Demonstration of Metasurface-Based Ultrathin Carpet Cloaks for Millimeter Waves," *Adv. Opt. Mater.* 5, 1600606 (2017).

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33. L. G. Santesteban, I. Palacios, C. Miranda, J. C. Iriarte, J. B. Royo, and R. Gonzalo, "Terahertz time domain spectroscopy allows contactless monitoring of grapevine water status," *Front. Plant Sci.* 6, 404 (2015).