

Publicaciones

- [1] Cristina M. Gómez-Sarabia, Enrique Tajahuerce and Jorge Ojeda-Castañeda, "Tunable telephoto; governable Fourier spectrum anamorphic scaling", *OSA Continuum* 4, 815-821 (2021). <https://doi.org/10.1364/OSAC.415096>
- [2] Sudheesh K Rajput, Osamu Matoba, Manoj Kumar, Xiangyu Quan, Yasuhiro Awatsuji, Yosuke Tamada, and Enrique Tajahuerce, "Multi-physical parameter cross-sectional imaging of quantitative phase and fluorescence by integrated multimodal microscopy", *IEEE Journal of Selected Topics in Quantum Electronics* 27, 6801809 (2021). <https://doi.org/10.1109/JSTQE.2021.3064406>
- [3] C. Quevedo-Galán, V. Durán, A. Rosado, A. Pérez-Serrano, J. M. G. Tijero, and I. Esquivias, "Gain-switched semiconductor lasers with pulsed excitation and optical injection for dual-comb spectroscopy," *Opt. Express* 28, 33307-33317 (2020). <https://doi.org/10.1364/OE.404398>
- [4] Soriano-Amat, M., Martins, H.F., Durán, V. et al. Time-expanded phase-sensitive optical time-domain reflectometry. *Light Sci Appl* 10, 51 (2021). <https://doi.org/10.1038/s41377-021-00490-0>
- [5] Alexandra Gimeno-Furió, Raúl Martínez-Cuenca, Rosa Mondragón, Antonio Fabián Vela Gasulla, Carlos Doñate-Buendía, Gladys Mínguez-Vega, Leonor Hernández, "Optical characterisation and photothermal conversion efficiency of a water-based carbon nanofluid for direct solar absorption applications, *Energy*, Volume 212, 2020, 118763, ISSN 0360-5442, <https://doi.org/10.1016/j.energy.2020.118763>
- [6] Josep Forner-Escrig, Rosa Mondragón, Leonor Hernández, Roberto Palma, "Non-linear finite element modelling of light-to-heat energy conversion applied to solar nanofluids", *International Journal of Mechanical Sciences*, Volume 188, 2020, 105952, ISSN 0020-7403. <https://doi.org/10.1016/j.ijmecsci.2020.105952>.
- [7] Torres-Mendieta, Rafael Omar, Mayara Mondego Teixeira, Gladys Mínguez-Vega, Daniele de Souza, Yara Galvão Gobato, Marcelo Assis, Héctor Beltrán-Mir et al. "Toward Expanding the Optical Response of Ag₂CrO₄ and Bi₂O₃ by Their Laser-Mediated Heterojunction" *The Journal of Physical Chemistry C* 124, no. 48, 26404-26414 (2020). <https://doi.org/10.1021/acs.jpcc.0c08301>
- [8] F. Soldevila, A. J. M. Lenz, A. Ghezzi, A. Farina, C. D'Andrea, and E. Tajahuerce, "Giga-voxel multidimensional fluorescence imaging combining single-pixel detection and data fusion," *Opt. Lett.* 46, 4312-4315 (2021). <https://doi.org/10.1364/OL.434127>
- [9] A. Santos-Amador, M. Araiza-Esquivel, H. González, A. Rodríguez-Cobos, E. Tajahuerce, L. Martínez-León, G. Ramírez-Flores, and R. E. Balderas-Navarro, "Phase and amplitude reconstruction in single-pixel transmission microscopy: a comparison of Hadamard, cosine, and noiselet bases," *Appl. Opt.* 60, 6935-6942 (2021). <https://doi.org/10.1364/AO.427698>
- [10] Bahram Javidi, Artur Carnicer, Arun Anand, George Barbastathis, Wen Chen, Pietro Ferraro, J. W. Goodman, Ryoichi Horisaki, Kedar Khare, Malgorzata Kujawinska, Rainer A. Leitgeb, Pierre Marquet, Takanori Nomura, Aydogan Ozcan, YongKeun Park, Giancarlo Pedrini, Pascal Picart, Joseph Rosen, Genaro Saavedra, Natan T. Shaked, Adrian Stern, Enrique Tajahuerce, Lei Tian, Gordon Wetzstein, and Masahiro Yamaguchi, "Roadmap on digital holography [Invited]," *Opt. Express* 29, 35078-35118 (2021). <https://doi.org/10.1364/OE.435915>
- [11] M. Soriano-Amat, H. F. Martins, V. Durán, S. Martin-Lopez, M. Gonzalez-Herraez, and M. R. Fernández-Ruiz, "Quadratic phase coding for SNR improvement in time-expanded phase-sensitive OTDR," *Opt. Lett.* 46, 4406–4409 (2021). <https://doi.org/10.1364/OL.432350>
- [12] V. Billault, V. Durán, C. R. Fernández-Pousa, V. Crozatier, D. Dolfi, and H. G. de Chatellus, "All-optical coherent pulse compression for dynamic laser ranging using an acousto-optic dual comb," *Opt. Express* 29, 21369–21385 (2021). <https://doi.org/10.1364/OE.430998>
- [13] Eduardo Peters, Gustavo Funes, Luis Martínez-León, and Enrique Tajahuerce, "Dynamics of fractional vortex beams at Fraunhofer diffraction zone", *Photonics* 9, 00479 (2022). <https://doi.org/10.3390/photonics9070479>
- [14] Eduardo Peters, Gustavo Funes, Luis Martínez-León, and Enrique Tajahuerce, "Analysis of practical fractional vortex beams at far field", *Optics & Laser Technology* 156, 108480 (2022). <https://doi.org/10.1016/j.optlastec.2022.108480>
- [15] V. Durán; C. Escobar-Vera; M. Soriano-Amat; Hugo F. Martins; Sonia Martin-Lopez; M. Gonzalez-Herraez; M. R. Fernández Ruiz, "Dual electro-optic comb spectroscopy using a single pseudo-randomly driven modulator," *Optics Express*. 30, 25103 – 25110 (2022). <https://doi.org/10.1364/OE.463604>

- [16] M. Soriano-Amat, H. F. Martins; V. Durán; P. Feroso; S. Martin-Lopez; M. Gonzalez-Herraez; M. R. Fernández-Ruiz, "Frequency stability requirements in quasi-integer-ratio time-expanded phase-sensitive OTDR," Journal of Lightwave Technology (published online 2023). <https://10.1109/JLT.2022.3217651>
- [17] M. Soriano-Amat, H. F. Martins, S. Martin-Lopez, M. Gonzalez-Herraez, M. R. Fernández-Ruiz and V. Durán, "Time-expanded ϕ OTDR using low-frequency electronics," accepted for publication in Optics Express in December of 2022 (published at the beginning of 2023).
- [18] J. García Plaza, M. Díaz Heras, Rosa Mondragón Cazorla, Leonor Hernández López, A. Calderón, C. Barreneche, J. Canales Vázquez, A.J. Fernández, J.A. Almendros Ibáñez "Experimental study of different coatings on silica sand in a directly irradiated fluidised bed: Thermal behaviour and cycling analysis", Applied Thermal Engineering 217, 1-10 (2022). <https://doi.org/10.1016/j.applthermaleng.2022.119169>
- [19] Jorge Burgos Rodríguez, Rosa Mondragón Cazorla, E. Begum Elcioglu, Francisco Fabregat Santiago, Leonor Hernández López "Experimental Characterization and Statistical Analysis of Water-Based Gold Nanofluids for Solar Applications: Optical Properties and Photothermal Conversion Efficiency", Solar RRL. 6, 1-10 (2022). <https://doi.org/10.1002/solr.202200104>
- [20] Trench, Aline Barrios, Vinícius Teodoro, Thales Rafael Machado, Elson Longo, Leticia Guerreiro da Trindade, Gladys Minguez-Vega, Carlos Doñate-Buendía, Eloisa Cordoncillo, and Juan Andrés. "High photocatalytic activity of Ag/Ag₃PO₄: W heterostructure formed by femtosecond laser irradiation", Ecletica Química (Online) 47, 20-27 (2022). <https://doi.org/10.26850/1678-4618eqj.v47.1SI.2022.p20-27>
- [21] Pereira, Paula Fabiana Santos, Ana Carolina Alves de Paula e Silva, Bruna Natália Alves da Silva Pimentel, Ivo Mateus Pinatti, Alexandre Zirpoli Simões, Carlos Eduardo Vergani, Débora Ferreira Barreto-Vieira et al. "Inactivation of SARS-CoV-2 by a chitosan/ α -Ag₂WO₄ composite generated by femtosecond laser irradiation", Scientific Reports 12, 1-18 (2022). <https://doi.org/10.1038/s41598-022-11902-5>
- [22] Elvira, Iris, Andrés Puerto, Gladys Minguez-Vega, Adrián Rodríguez-Palomo, Alejandro Gómez-Tornero, Angel García-Cabañes, and Mercedes Carrascosa. "Micro-patterns of gold nanoparticles assembled by photovoltaic optoelectronic tweezers: application to plasmonic fluorescence enhancement", Optics Express 30, 41541-41553 (2022). <https://doi.org/10.1364/OE.471928>