

David Artigas

List of Publications by Year in descending order

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Version: 2024-02-01

92
papers

2,387
citations

201385

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214527

47
g-index

92
all docs

92
docs citations

92
times ranked

2086
citing authors

| # | ARTICLE | IF | CITATIONS |
|----|----------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------|------|-----------|
| 1 | Observation of Dyakonov Surface Waves. <i>Physical Review Letters</i> , 2009, 102, 043903. | 2.9 | 152 |
| 2 | Dyakonov Surface Waves: A Review. <i>Electromagnetics</i> , 2008, 28, 126-145. | 0.3 | 149 |
| 3 | Anisotropy-induced photonic bound states in the continuum. <i>Nature Photonics</i> , 2017, 11, 232-236. | 15.6 | 138 |
| 4 | Dyakonov Surface Waves in Photonic Metamaterials. <i>Physical Review Letters</i> , 2005, 94, 013901. | 2.9 | 130 |
| 5 | Measurement and correction of in vivo sample aberrations employing a nonlinear guide-star in two-photon excited fluorescence microscopy. <i>Biomedical Optics Express</i> , 2011, 2, 3135. | 1.5 | 115 |
| 6 | In vivo, pixel-resolution mapping of thick filaments' orientation in nonfibrillar muscle using polarization-sensitive second harmonic generation microscopy. <i>Journal of Biomedical Optics</i> , 2009, 14, 014001. | 1.4 | 88 |
| 7 | Ultrashort pulse characterisation with SHG collinear-FROG. <i>Optics Express</i> , 2004, 12, 1169. | 1.7 | 87 |
| 8 | Lossless directional guiding of light in dielectric nanosheets using Dyakonov surface waves. <i>Nature Nanotechnology</i> , 2014, 9, 419-424. | 15.6 | 86 |
| 9 | Image formation by linear and nonlinear digital scanned light-sheet fluorescence microscopy with Gaussian and Bessel beam profiles. <i>Biomedical Optics Express</i> , 2012, 3, 1492. | 1.5 | 83 |
| 10 | Decoupled illumination detection in light sheet microscopy for fast volumetric imaging. <i>Optica</i> , 2015, 2, 702. | 4.8 | 83 |
| 11 | A simple scanless two-photon fluorescence microscope using selective plane illumination. <i>Optics Express</i> , 2010, 18, 8491. | 1.7 | 72 |
| 12 | Compact ultrafast semiconductor disk laser: targeting GFP based nonlinear applications in living organisms. <i>Biomedical Optics Express</i> , 2011, 2, 739. | 1.5 | 67 |
| 13 | Quantitative discrimination between endogenous SHG sources in mammalian tissue, based on their polarization response. <i>Optics Express</i> , 2009, 17, 10168. | 1.7 | 58 |
| 14 | Fast image analysis in polarization SHG microscopy. <i>Optics Express</i> , 2010, 18, 17209. | 1.7 | 54 |
| 15 | Practical dyakonons. <i>Optics Letters</i> , 2012, 37, 4311. | 1.7 | 54 |
| 16 | Estimation of the effective orientation of the SHG source in primary cortical neurons. <i>Optics Express</i> , 2009, 17, 14418. | 1.7 | 52 |
| 17 | Asymmetrical splitting of higher-order optical solitons induced by quintic nonlinearity. <i>Optics Communications</i> , 1997, 143, 322-328. | 1.0 | 49 |
| 18 | Effect of molecular organization on the image histograms of polarization SHG microscopy. <i>Biomedical Optics Express</i> , 2012, 3, 2681. | 1.5 | 43 |

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|----|-------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------|-----|-----------|
| 19 | Measurement of electric field by interferometric spectral trace observation. <i>Optics Letters</i> , 2005, 30, 1063. | 1.7 | 38 |
| 20 | Optical Dyakonov surface waves at magnetic interfaces. <i>Optics Letters</i> , 2005, 30, 3075. | 1.7 | 35 |
| 21 | Estimating the helical pitch angle of amylopectin in starch using polarization second harmonic generation microscopy. <i>Journal of Optics (United Kingdom)</i> , 2010, 12, 084007. | 1.0 | 34 |
| 22 | Quantitative Imaging of Microtubule Alteration as an Early Marker of Axonal Degeneration after Ischemia in Neurons. <i>Biophysical Journal</i> , 2013, 104, 968-975. | 0.2 | 34 |
| 23 | Fast monitoring of in-vivo conformational changes in myosin using single scan polarization-SHG microscopy. <i>Biomedical Optics Express</i> , 2014, 5, 4362. | 1.5 | 33 |
| 24 | Starch-based second-harmonic-generated collinear frequency-resolved optical gating pulse characterization at the focal plane of a high-numerical-aperture lens. <i>Optics Letters</i> , 2004, 29, 2282. | 1.7 | 31 |
| 25 | Efficient femtosecond optical parametric oscillators based on aperiodically poled nonlinear crystals. <i>Optics Letters</i> , 2002, 27, 851. | 1.7 | 30 |
| 26 | Signalling effect of NIR pulsed lasers on axonal growth. <i>Journal of Neuroscience Methods</i> , 2010, 186, 196-201. | 1.3 | 28 |
| 27 | Soliton content with quadratic nonlinearities. <i>Optics Communications</i> , 1999, 164, 153-159. | 1.0 | 27 |
| 28 | Third-harmonic generation for the study of <i>Caenorhabditis elegans</i> embryogenesis. <i>Journal of Biomedical Optics</i> , 2010, 15, 1. | 1.4 | 27 |
| 29 | Topological properties of bound states in the continuum in geometries with broken anisotropy symmetry. <i>Physical Review A</i> , 2018, 98, . | 1.0 | 27 |
| 30 | Femtosecond second-harmonic pulse compression in aperiodically poled lithium niobate: a systematic comparison of experiment and theory. <i>Journal of the Optical Society of America B: Optical Physics</i> , 2001, 18, 1212. | 0.9 | 25 |
| 31 | Continuous-wave self-pumped optical parametric oscillator based on Yb ³⁺ -doped bulk periodically poled LiNbO ₃ (MgO). <i>Applied Physics Letters</i> , 2001, 79, 293-295. | 1.5 | 23 |
| 32 | Enhanced localization of Dyakonov-like surface waves in left-handed materials. <i>Physical Review B</i> , 2006, 74, . | 1.1 | 23 |
| 33 | Starch-based backwards SHG for in situ MEFISTO pulse characterization in multiphoton microscopy. <i>Journal of Microscopy</i> , 2008, 230, 70-75. | 0.8 | 22 |
| 34 | Low-threshold, high-repetition-frequency femtosecond optical parametric oscillator based on chirped-pulse frequency conversion. <i>Journal of the Optical Society of America B: Optical Physics</i> , 2003, 20, 1309. | 0.9 | 21 |
| 35 | Generation of multicolor spatial solitons with pulsed light. <i>Optics Communications</i> , 2001, 192, 347-355. | 1.0 | 20 |
| 36 | Idler-resonant femtosecond tandem optical parametric oscillator tuning from 21 μ m to 42 μ m. <i>Journal of the Optical Society of America B: Optical Physics</i> , 2004, 21, 1551. | 0.9 | 20 |

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|----|----------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------|-----|-----------|
| 37 | Lost writing uncovered by laser two-photon fluorescence provides a terminus post quem for Roman colonization of Hispania Citerior. <i>Journal of Archaeological Science</i> , 2007, 34, 1594-1600. | 1.2 | 20 |
| 38 | Low-threshold femtosecond optical parametric oscillator based on chirped-pulse frequency conversion. <i>Optics Letters</i> , 2003, 28, 543. | 1.7 | 19 |
| 39 | Simultaneous analytical characterisation of two ultrashort laser pulses using spectrally resolved interferometric correlations. <i>Optics Express</i> , 2006, 14, 4538. | 1.7 | 19 |
| 40 | Coupling plasmons and dyakonons. <i>Optics Letters</i> , 2012, 37, 1983. | 1.7 | 16 |
| 41 | Angular control of anisotropy-induced bound states in the continuum. <i>Optics Letters</i> , 2019, 44, 5362. | 1.7 | 16 |
| 42 | Pulse compression and gain enhancement in a degenerate optical parametric amplifier based on aperiodically poled crystals. <i>Optics Letters</i> , 2002, 27, 442. | 1.7 | 15 |
| 43 | Two-photon fluorescence imaging with 30 fs laser system tunable around 1 micron. <i>Optics Express</i> , 2014, 22, 16456. | 1.7 | 15 |
| 44 | Sub-diffraction discrimination with polarization-resolved two-photon excited fluorescence microscopy. <i>Optica</i> , 2017, 4, 911. | 4.8 | 15 |
| 45 | Efficiency of quadratic soliton generation. <i>Optics Letters</i> , 2001, 26, 1277. | 1.7 | 14 |
| 46 | Dyakonov surface wave resonant transmission. <i>Optics Express</i> , 2011, 19, 6339. | 1.7 | 14 |
| 47 | Dynamic behaviour in a nonlinear directional coupler with feedback. <i>Journal of Modern Optics</i> , 1997, 44, 1207-1216. | 0.6 | 11 |
| 48 | Dynamics of quadratic soliton excitation. <i>Optics Communications</i> , 1999, 162, 347-356. | 1.0 | 11 |
| 49 | Quadratic solitons: existence versus excitation. <i>IEEE Journal of Selected Topics in Quantum Electronics</i> , 2002, 8, 497-505. | 1.9 | 11 |
| 50 | Dispersion-managed cnoidal pulse trains. <i>Physical Review E</i> , 2003, 68, 026613. | 0.8 | 11 |
| 51 | Periodically switched nonlinear structures for frequency conversion: theory and experimental demonstration. <i>IEEE Journal of Quantum Electronics</i> , 2004, 40, 1122-1130. | 1.0 | 11 |
| 52 | Decrease in laser ablation threshold for epithelial tissue microsurgery in a living <i>Drosophila</i> embryo during dorsal closure. <i>Journal of Microscopy</i> , 2008, 232, 362-368. | 0.8 | 10 |
| 53 | STED imaging performance estimation by means of Fourier transform analysis. <i>Biomedical Optics Express</i> , 2017, 8, 2472. | 1.5 | 9 |
| 54 | Phase space description of nonlinear directional couplers. <i>IEEE Journal of Quantum Electronics</i> , 1994, 30, 1587-1595. | 1.0 | 8 |

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|----|-----------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------|-----|-----------|
| 55 | Supermode analysis of the three-waveguide nonlinear directional coupler: the critical power. Optics Communications, 1996, 131, 53-60. | 1.0 | 8 |
| 56 | Polarization conversion spectroscopy of hybrid modes. Optics Letters, 2009, 34, 3911. | 1.7 | 8 |
| 57 | Dyakonov Surface Waves. Optics and Photonics News, 2009, 20, 25. | 0.4 | 7 |
| 58 | Unidirectional guided resonances in anisotropic waveguides. Optics Letters, 2021, 46, 2545. | 1.7 | 7 |
| 59 | Transition from Dirac points to exceptional points in anisotropic waveguides. Physical Review Research, 2019, 1, . | 1.3 | 7 |
| 60 | High idler conversion in femtosecond optical parametric oscillators. Optics Communications, 2002, 210, 113-120. | 1.0 | 6 |
| 61 | Starch granules as a probe for the polarization at the sample plane of a high resolution multiphoton microscope. , 2008, , . | | 6 |
| 62 | Conformal transformation of Dyakonov surface waves into bound states of cylindrical metamaterials. Physical Review B, 2019, 100, . | 1.1 | 6 |
| 63 | Slow light mediated by mode topological transitions in hyperbolic waveguides. Optics Letters, 2021, 46, 58. | 1.7 | 5 |
| 64 | Surface bound states in the continuum in Dyakonov structures. Physical Review B, 2022, 105, . | 1.1 | 5 |
| 65 | Influence of distant femtosecond laser pulses on growth cone filopodia. Cytotechnology, 2008, 58, 103-111. | 0.7 | 4 |
| 66 | Nonlinear resonant conversion of modes in optical waveguides. Optics Communications, 1995, 118, 28-34. | 1.0 | 3 |
| 67 | Polarization dependant in vivo second harmonic generation imaging of Caenorhabditis elegans vulval, pharynx, and body wall muscles. , 2008, , . | | 3 |
| 68 | 59: Ultrastructural analysis of myocardiocyte sarcomeric changes in relation with cardiac dysfunction in human fetuses with intrauterine growth restriction. American Journal of Obstetrics and Gynecology, 2011, 204, S34. | 0.7 | 3 |
| 69 | Nonlinear microscopy pulse optimization at the sample plane using second-harmonic generation from starch. , 2004, 5463, 56. | | 2 |
| 70 | Three-dimensional polarization second harmonic generation (3D-PSHG) imaging: the effect of the tilted-off the plane SHG active structures. , 2011, , . | | 2 |
| 71 | Polarization second harmonic generation (PSHG) imaging of neurons: estimating the effective orientation of the SHG source in axons. Proceedings of SPIE, 2010, , . | 0.8 | 1 |
| 72 | Practical optical quality assessment and correction of a nonlinear microscope. Proceedings of SPIE, 2010, , . | 0.8 | 1 |

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|----|--------------------------------------------------------------------------------------------------------------------------------------------------------------------|-----|-----------|
| 73 | <title>Effects of saturation and asymmetrical distribution of nonlinearity on nonlinear directional couplers</title>. , 1994, , . | | 0 |
| 74 | Ultra-short pulses to signal neuronal growth cone machinery. , 2007, , . | | 0 |
| 75 | Two-photon fluorescence imaging and femtosecond laser microsurgery to study drosophila dorsal closure. Proceedings of SPIE, 2008, , . | 0.8 | 0 |
| 76 | Optical extraction of the helical pitch angle of amylopectin in starch. Proceedings of SPIE, 2010, , . | 0.8 | 0 |
| 77 | Assessing structural characteristics of axons in cortical neurons using polarization sensitive SHG. Proceedings of SPIE, 2010, , . | 0.8 | 0 |
| 78 | Imaging amylopectin's order in starch using 3-dimensional polarization SHG. , 2011, , . | | 0 |
| 79 | Portable semiconductor disk laser for in vivo tissue monitoring: a platform for the development of clinical applications. Proceedings of SPIE, 2011, , . | 0.8 | 0 |
| 80 | Open-loop wavefront sensing scheme for specimen aberrations correction in two-photon excited fluorescence microscopy. Proceedings of SPIE, 2011, , . | 0.8 | 0 |
| 81 | Compact ultrafast semiconductor disk laser for nonlinear imaging in living organisms. , 2011, , . | | 0 |
| 82 | In-vivo third-harmonic generation microscopy at 1550nm three-dimensional long-term time-lapse studies in living C. elegans embryos. Proceedings of SPIE, 2011, , . | 0.8 | 0 |
| 83 | Depth aberrations characterization in linear and nonlinear microscopy schemes using a shack-Hartmann wavefront sensor. , 2012, , . | | 0 |
| 84 | Two-photon fluorescence imaging with 30 fs laser system tunable around 1 micron. , 2013, , . | | 0 |
| 85 | Light sheet microscopy for visualiasing fast biological dynamics in 3D. , 2016, , . | | 0 |
| 86 | Bound states in the continuum in anisotropic structures. , 2017, , . | | 0 |
| 87 | Existence Loci of Bound States in the Continuum in the Parameter Space of Anisotropic Planar Structures. , 2019, , . | | 0 |
| 88 | Waveguide Stopped Light Mediated by Mode Transitions. , 2019, , . | | 0 |
| 89 | Bound States in the Continuum and Unidirectional Guided Resonances in Anisotropic Structures with Multiple Radiation Channels. , 2021, , . | | 0 |
| 90 | Soliton content with quadratic nonlinearities. , 2001, , . | | 0 |

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|----|-------------------------------------------------------------------------------------------------------------|----|-----------|
| 91 | Light Sheet Microscopy with Wavefront Coding for Fast Volumetric Imaging of Biological Samples. , 2016, , . | | 0 |
| 92 | Nonlinear imaging applications of high-power lasers: figures of merit. , 2018, , 377-408. | | 0 |