Pablo Alonso-GonzÃ¡lez

List of Publications by Year
in descending order

74 papers	7,956 citations	76326 40 h-index	85541 71 g-index
78 all docs	78 docs citations	78 times ranked	7183 citing authors

#	Article	IF	Citations
1	Optical nano-imaging of gate-tunable graphene plasmons. Nature, 2012, 487, 77-81.	27.8	1,820
2	Highly confined low-loss plasmons in grapheneâ€"boron nitride heterostructures. Nature Materials, 2015, 14, 421-425.	27.5	847
3	In-plane anisotropic and ultra-low-loss polaritons in a natural van der Waals crystal. Nature, 2018, 562, 557-562.	27.8	506
4	Controlling graphene plasmons with resonant metal antennas and spatial conductivity patterns. Science, 2014, 344, 1369-1373.	12.6	292
5	Acoustic terahertz graphene plasmons revealed by photocurrent nanoscopy. Nature Nanotechnology, 2017, 12, 31-35.	31.5	257
6	Boron nitride nanoresonators for phonon-enhanced molecular vibrational spectroscopy at the strong coupling limit. Light: Science and Applications, 2018, 7, 17172-17172.	16.6	257
7	Tuning quantum nonlocal effects in graphene plasmonics. Science, 2017, 357, 187-191.	12.6	251
8	Resolving the electromagnetic mechanism of surface-enhanced light scattering at single hot spots. Nature Communications, 2012, 3, 684.	12.8	207
9	Nanofocusing of mid-infrared energy with tapered transmission lines. Nature Photonics, 2011, 5, 283-287.	31.4	203
10	Plasmonic Nickel Nanoantennas. Small, 2011, 7, 2341-2347.	10.0	175
11	Real-space mapping of tailored sheet and edge plasmons in graphene nanoresonators. Nature Photonics, 2016, 10, 239-243.	31.4	167
12	Giant optical anisotropy in transition metal dichalcogenides for next-generation photonics. Nature Communications, 2021, 12, 854.	12.8	154
13	Experimental Verification of the Spectral Shift between Near- and Far-Field Peak Intensities of Plasmonic Infrared Nanoantennas. Physical Review Letters, 2013, 110, 203902.	7.8	144
14	Thermoelectric detection and imaging of propagating grapheneÂplasmons. Nature Materials, 2017, 16, 204-207.	27.5	141
15	Real-Space Mapping of Fano Interference in Plasmonic Metamolecules. Nano Letters, 2011, 11, 3922-3926.	9.1	129
16	Broad spectral tuning of ultra-low-loss polaritons in a van der Waals crystal by intercalation. Nature Materials, 2020, 19, 964-968.	27.5	129
17	Twisted Nano-Optics: Manipulating Light at the Nanoscale with Twisted Phonon Polaritonic Slabs. Nano Letters, 2020, 20, 5323-5329.	9.1	126
18	Strong Plasmon Reflection at Nanometer-Size Gaps in Monolayer Graphene on SiC. Nano Letters, 2013, 13, 6210-6215.	9.1	121

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19	Nanoimaging of resonating hyperbolic polaritons in linear boron nitride antennas. Nature Communications, 2017, 8, 15624.	12.8	121
20	Infrared Permittivity of the Biaxial van der Waals Semiconductor Î±â€MoO₃ from Nearâ€•and Farâ€Field Correlative Studies. Advanced Materials, 2020, 32, e1908176.	21.0	99
21	Longitudinal and transverse coupling in infrared gold nanoantenna arrays: long range versus short range interaction regimes. Optics Express, 2011, 19, 15047.	3.4	94
22	Real-space observation of vibrational strong coupling between propagating phonon polaritons and organic molecules. Nature Photonics, 2021, 15, 197-202.	31.4	90
23	Terahertz Nanofocusing with Cantilevered Terahertz-Resonant Antenna Tips. Nano Letters, 2017, 17, 6526-6533.	9.1	84
24	Mapping the near fields of plasmonic nanoantennas by scatteringâ€type scanning nearâ€field optical microscopy. Laser and Photonics Reviews, 2015, 9, 637-649.	8.7	81
25	Efficient Coupling of Light to Graphene Plasmons by Compressing Surface Polaritons with Tapered Bulk Materials. Nano Letters, 2014, 14, 2896-2901.	9.1	80
26	Near-field photocurrent nanoscopy on bare and encapsulated graphene. Nature Communications, 2016, 7, 10783.	12.8	80
27	Strain-Tunable Single Photon Sources in WSe₂ Monolayers. Nano Letters, 2019, 19, 6931-6936.	9.1	71
28	Analytical approximations for the dispersion of electromagnetic modes in slabs of biaxial crystals. Physical Review B, 2019, 100, .	3.2	67
29	Plasmons in Cylindrical 2D Materials as a Platform for Nanophotonic Circuits. ACS Photonics, 2015, 2, 280-286.	6.6	58
30	Launching of hyperbolic phonon-polaritons in h-BN slabs by resonant metal plasmonic antennas. Nature Communications, 2019, 10, 3242.	12.8	56
31	Chemical switching of low-loss phonon polaritons in Î±-MoO3 by hydrogen intercalation. Nature Communications, 2020, 11, 2646.	12.8	54
32	Nanoscaleâ€Confined Terahertz Polaritons in a van der Waals Crystal. Advanced Materials, 2021, 33, e2005777.	21.0	53
33	Enabling propagation of anisotropic polaritons along forbidden directions via a topological transition. Science Advances, 2021, 7, .	10.3	53
34	Visualizing the near-field coupling and interference of bonding and anti-bonding modes in infrared dimer nanoantennas. Optics Express, 2013, 21, 1270.	3.4	52
35	Deeply subwavelength phonon-polaritonic crystal made of a van der Waals material. Nature Communications, 2019, 10, 42.	12.8	51
36	Manipulating polaritons at the extreme scale in van der Waals materials. Nature Reviews Physics, 2022, 4, 578-594.	26.6	51

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37	Single Photon Emission from Site-Controlled InAs Quantum Dots Grown on GaAs(001) Patterned Substrates. ACS Nano, 2009, 3, 1513-1517.	14.6	50
38	Planar refraction and lensing of highly confined polaritons in anisotropic media. Nature Communications, 2021, 12, 4325.	12.8	48
39	Nanofocusing of Hyperbolic Phonon Polaritons in a Tapered Boron Nitride Slab. ACS Photonics, 2016, 3, 924-929.	6.6	44
40	Acoustic Graphene Plasmon Nanoresonators for Field-Enhanced Infrared Molecular Spectroscopy. ACS Photonics, 2017, 4, 3089-3097.	6.6	43
41	Intrinsic Plasmonâ€"Phonon Interactions in Highly Doped Graphene: AÂNear-Field Imaging Study. Nano Letters, 2017, 17, 5908-5913.	9.1	42
42	Formation and optical characterization of single InAs quantum dots grown on GaAs nanoholes. Applied Physics Letters, 2007, 91, 163104.	3.3	39
43	Active Tuning of Highly Anisotropic Phonon Polaritons in Van der Waals Crystal Slabs by Gated Graphene. ACS Photonics, 2022, 9, 383-390.	6.6	37
44	Focusing of in-plane hyperbolic polaritons in van der Waals crystals with tailored infrared nanoantennas. Science Advances, 2021, 7, eabj0127.	10.3	36
45	Low density InAs quantum dots with control in energy emission and top surface location. Applied Physics Letters, 2008, 93, 183106.	3.3	34
46	Formation of Lateral Low Density In(Ga)As Quantum Dot Pairs in GaAs Nanoholes. Crystal Growth and Design, 2009, 9, 2525-2528.	3.0	33
47	Active control of micrometer plasmon propagation in suspended graphene. Nature Communications, 2022, 13, 1465.	12.8	31
48	Nanoscale Guiding of Infrared Light with Hyperbolic Volume and Surface Polaritons in van der Waals Material Ribbons. Advanced Materials, 2020, 32, e1906530.	21.0	29
49	Site-controlled lateral arrangements of InAs quantum dots grown on GaAs(001) patterned substrates by atomic force microscopy local oxidation nanolithography. Nanotechnology, 2009, 20, 125302.	2.6	27
50	Charge control in laterally coupled double quantum dots. Physical Review B, 2011, 84, .	3.2	27
51	New process for high optical quality InAs quantum dots grown on patterned GaAs(001) substrates. Nanotechnology, 2007, 18, 355302.	2.6	26
52	Electrical detection of hyperbolic phonon-polaritons in heterostructures of graphene and boron nitride. Npj 2D Materials and Applications, 2017, 1, .	7.9	25
53	Anisotropy and Modal Hybridization in Infrared Nanophotonics Using Low-Symmetry Materials. ACS Photonics, 2022, 9, 1078-1095.	6.6	18
54	Ordered InAs QDs using prepatterned substrates by monolithically integrated porous alumina. Journal of Crystal Growth, 2006, 294, 168-173.	1.5	16

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55	Compositional Analysis with Atomic Column Spatial Resolution by 5th-Order Aberration-Corrected Scanning Transmission Electron Microscopy. Microscopy and Microanalysis, 2011, 17, 578-581.	0.4	16
56	Hyperspectral Nanoimaging of van der Waals Polaritonic Crystals. Nano Letters, 2021, 21, 7109-7115.	9.1	13
57	Active and Passive Tuning of Ultranarrow Resonances in Polaritonic Nanoantennas. Advanced Materials, 2022, 34, e2104954.	21.0	13
58	Nanofocusing of acoustic graphene plasmon polaritons for enhancing mid-infrared molecular fingerprints. Nanophotonics, 2020, 9, 2089-2095.	6.0	12
59	Direct formation of InAs quantum dots grown on InP (001) by solid-source molecular beam epitaxy. Applied Physics Letters, 2009, 94, .	3.3	10
60	Formation of Spatially Addressed Ga(As)Sb Quantum Rings on GaAs(001) Substrates by Droplet Epitaxy. Crystal Growth and Design, 2009, 9, 1216-1218.	3.0	10
61	Improvement of InAs quantum dots optical properties in close proximity to GaAs(001) substrate surface. Journal of Crystal Growth, 2008, 310, 4676-4680.	1.5	8
62	On the Large Near-Field Enhancement on Nanocolumnar Gold Substrates. Scientific Reports, 2019, 9, 13933.	3.3	8
63	Growth of Low-Density Vertical Quantum Dot Molecules with Control in Energy Emission. Nanoscale Research Letters, 2010, 5, 1913-1916.	5.7	7
64	Extracting the Infrared Permittivity of SiO2 Substrates Locally by Near-Field Imaging of Phonon Polaritons in a van der Waals Crystal. Nanomaterials, 2021, 11, 120.	4.1	7
65	Van der Waals Semiconductors: Infrared Permittivity of the Biaxial van der Waals Semiconductor Î±â€MoO₃ from Nearâ€•and Farâ€Field Correlative Studies (Adv. Mater. 29/2020). Advanced Materials, 2020, 32, 2070220.	21.0	5
66	Surface Localization of Buried IIIâ€“V Semiconductor Nanostructures. Nanoscale Research Letters, 2009, 4, 873-877.	5.7	4
67	Transmission electron microscopy study of vertical quantum dots molecules grown by droplet epitaxy. Applied Surface Science, 2010, 256, 5659-5661.	6.1	4
68	Propagation and nanofocusing of infrared surface plasmons on tapered transmission lines: Influence of the substrate. Optics Communications, 2012, 285, 3378-3382.	2.1	4
69	Emission properties of single InAs/GaAs quantum dot pairs and molecules grown in GaAs nanoholes. Journal of Physics: Conference Series, 2010, 210, 012028.	0.4	1
70	Mid-infrared nanophotonics based on antennas and transmission lines. , 2011, , .		0
71	Graphene opto-electronics and plasmonics for infrared frequencies. , 2015, , .		0
72	Fabrication of Semiconductor Quantum Dot Molecules: Droplet Epitaxy and Local Oxidation Nanolithography Techniques. Lecture Notes in Nanoscale Science and Technology, 2014, , 1-28.	0.8	0

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73	La vid y el vino en el Cono Sur de AmÃ©rica Argentina y Chile (1545-2019). Aspectos polÃticos, econÃ³micos, sociales, culturales y enolÃ³gicos. Mendoza, 2019. ROTUR Revista De Ocio Y Turismo, 2019, 13, 86-89.	0.3	0
74	Characterization and modelling of semiconductor quantum nanostructures grown by droplet epitaxy. , 2008, , 91-92.		0