Jose L Lado

List of Publications by Year
in descending order

80 papers	3,273 citations	201674 27 h-index	149698 56 g-index
80 all docs	80 docs citations	80 times ranked	4534 citing authors

#	Article	IF	Citations
1	MoirÃ©-Enabled Topological Superconductivity. Nano Letters, 2022, 22, 328-333.	9.1	26
2	Non-Hermitian many-body topological excitations in interacting quantum dots. Physical Review Research, 2022, 4, .	3.6	17
3	Microscopic origin of multiferroic order in monolayer NiI₂. 2D Materials, 2022, 9, 025010.	4.4	25
4	Designing spin-textured flat bands in twisted graphene multilayers via helimagnet encapsulation. 2D Materials, 2022, 9, 024002.	4.4	3
5	Controlling magnetism through Ising superconductivity in magnetic van der Waals heterostructures. Physical Review B, 2022, 105, .	3.2	3
6	Confinement-Engineered Superconductor to Correlated-Insulator Transition in a van der Waals Monolayer. Nano Letters, 2022, 22, 1845-1850.	9.1	11
7	Nonunitary multiorbital superconductivity from competing interactions in Dirac materials. Physical Review Research, 2022, 4, .	3.6	5
8	Noncontact Andreev Reflection as a Direct Probe of Superconductivity on the Atomic Scale. Nano Letters, 2022, 22, 4042-4048.	9.1	2
9	Dynamical topological excitations in parafermion chains. Physical Review Research, 2021, 3, .	3.6	7
10	Spontaneous Valley Spirals in Magnetically Encapsulated Twisted Bilayer Graphene. Physical Review Letters, 2021, 126, 056803.	7.8	13
11	Inducing a many-body topological state of matter through Coulomb-engineered local interactions. Physical Review Research, 2021, 3, .	3.6	9
12	Interaction-induced topological superconductivity in antiferromagnet-superconductor junctions. Physical Review Research, 2021, 3, .	3.6	2
13	Quasiperiodic criticality and spin-triplet superconductivity in superconductor-antiferromagnet moirÃ© patterns. Physical Review Research, 2021, 3, .	3.6	2
14	Many-body Majorana-like zero modes without gauge symmetry breaking. Physical Review Research, 2021, 3, .	3.6	3
15	Synthesis, engineering, and theory of 2D van der Waals magnets. Applied Physics Reviews, 2021, 8, .	11.3	41
16	Correlation-induced valley topology in buckled graphene superlattices. 2D Materials, 2021, 8, 035057.	4.4	7
17	Spinâ€“orbit correlations and exchange-bias control in twisted Janus dichalcogenide multilayers. New Journal of Physics, 2021, 23, 073038.	2.9	8
18	Emulating Heavy Fermions in Twisted Trilayer Graphene. Physical Review Letters, 2021, 127, 026401.	7.8	37

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19	Neural network enhanced hybrid quantum many-body dynamical distributions. Physical Review Research, 2021, 3, .	3.6	4
20	Lee-Yang theory of criticality in interacting quantum many-body systems. Physical Review Research, 2021, 3, .	3.6	9
21	Tunable moire spinons in magnetically encapsulated twisted van der Waals quantum spin liquids. Physical Review Research, 2021, 3, .	3.6	5
22	Correlations in the elastic Landau level of spontaneously buckled graphene. 2D Materials, 2021, 8, 015011.	4.4	12
23	Artificial heavy fermions in a van der Waals heterostructure. Nature, 2021, 599, 582-586.	27.8	69
24	Kondo lattice mediated interactions in flat-band systems. Physical Review Research, 2021, 3, .	3.6	6
25	Putting a twist on spintronics. Science, 2021, 374, 1048-1049.	12.6	2
26	Accessing new magnetic regimes by tuning the ligand spin-orbit coupling in van der Waals magnets. Science Advances, 2020, 6, eabb9379.	10.3	42
27	Emergence of criticality through a cascade of delocalization transitions in quasiperiodic chains. Nature Physics, 2020, 16, 832-836.	16.7	64
28	Quantum Confinement of Dirac Quasiparticles in Graphene Patterned with Subâ€Nanometer Precision. Advanced Materials, 2020, 32, e2001119.	21.0	19
29	Exchange-bias controlled correlations in magnetically encapsulated twisted van der Waals dichalcogenides. Journal Physics D: Applied Physics, 2020, 53, 474001.	2.8	12
30	Solitonic in-gap modes in a superconductor-quantum antiferromagnet interface. Physical Review Research, 2020, 2, .	3.6	10
31	Electrical band flattening, valley flux, and superconductivity in twisted trilayer graphene. Physical Review Research, 2020, 2, .	3.6	34
32	Impurity-induced resonant spinon zero modes in Dirac quantum spin liquids. Physical Review Research, 2020, 2, .	3.6	12
33	Antichiral states in twisted graphene multilayers. Physical Review Research, 2020, 2, .	3.6	14
34	Gap Opening in Twisted Double Bilayer Graphene by Crystal Fields. Nano Letters, 2019, 19, 8821-8828.	9.1	39
35	Electrically Tunable Flat Bands and Magnetism in Twisted Bilayer Graphene. Physical Review Letters, 2019, 123, 096802.	7.8	69
36	Impurity-induced triple point fermions in twisted bilayer graphene. Physical Review B, 2019, 99, .	3.2	34

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37	Tuning the Exchange Bias on a Single Atom from 1ÂmT to 10ÂT. Physical Review Letters, 2019, 122, 227203.	7.8	54
38	Interaction-Driven Surface Chern Insulator in Nodal Line Semimetals. Physical Review Letters, 2019, 122, 016803.	7.8	21
39	Defect-induced magnetism and Yu-Shiba-Rusinov states in twisted bilayer graphene. Physical Review Materials, 2019, 3, .	2.4	17
40	Topological spin excitations in Harper-Heisenberg spin chains. Physical Review Research, 2019, 1, .	3.6	25
41	Detecting nonunitary multiorbital superconductivity with Dirac points at finite energies. Physical Review Research, 2019, 1, .	3.6	13
42	Single spin resonance driven by electric modulation of the <mml:math xmlns:mml="http://www.w3.org/1998/Math/MathML"><mml:mi>g</mml:mi></mml:math> -factor anisotropy. Physical Review Research, 2019, 1, .	3.6	18
43	Probing magnetism in 2D van der Waals crystalline insulators via electron tunneling. Science, 2018, 360, 1218-1222.	12.6	668
44	Real-space mapping of topological invariants using artificial neural networks. Physical Review B, 2018, 97, .	3.2	44
45	Electrically Tunable Gauge Fields in Tiny-Angle Twisted Bilayer Graphene. Physical Review Letters, 2018, 121, 146801.	7.8	77
46	Electrically controlled nuclear polarization of individual atoms. Nature Nanotechnology, 2018, 13, 1120-1125.	31.5	39
47	Hyperfine interaction of individual atoms on a surface. Science, 2018, 362, 336-339.	12.6	74
48	Electron and Cooper-pair transport across a single magnetic molecule explored with a scanning tunneling microscope. Physical Review B, 2018, 97, .	3.2	23
49	Electrical spin manipulation in graphene nanostructures. Physical Review B, 2018, 97, .	3.2	21
50	Two-Dimensional Topological Superconductivity with Antiferromagnetic Insulators. Physical Review Letters, 2018, 121, 037002.	7.8	22
51	Electronic transport in gadolinium atomic-size contacts. Physical Review B, 2017, 95, .	3.2	4
52	On the origin of magnetic anisotropy in two dimensional CrI ₃. 2D Materials, 2017, 4, 035002.	4.4	524
53	Characterization of highly crystalline lead iodide nanosheets prepared by room-temperature solution processing. Nanotechnology, 2017, 28, 455703.	2.6	45
54	Electrical detection of individual skyrmions in graphene devices. Physical Review B, 2017, 96, .	3.2	3

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55	Electrically Controllable Magnetism in Twisted Bilayer Graphene. Physical Review Letters, 2017, 119, 107201.	7.8	114
56	Engineering the Eigenstates of Coupled Spin- <mml:math xmlns:mml="http://www.w3.org/1998/Math/MathML" display="inline"><mml:mrow><mml:mn>1</mml:mn><mml:mo>/</mml:mo><mml:mn>2</mml:mn></mml:mrow></mml:math> Atoms on a Surface. Physical Review Letters, 2017, 119, 227206.	7.8	78
57	Exchange mechanism for electron paramagnetic resonance of individual adatoms. Physical Review B, 2017, 96, .	3.2	38
58	Anomalous magnetism in hydrogenated graphene. Physical Review B, 2017, 96, .	3.2	13
59	Emergence of quasiparticle Bloch states in artificial crystals crafted atom-by-atom. SciPost Physics, 2017, 2, .	4.9	22
60	Quantum spin Hall effect in rutile-based oxide multilayers. Physical Review B, 2016, 94, .	3.2	11
61	Topological features of engineered arrays of adsorbates in honeycomb lattices. Physica B: Condensed Matter, 2016, 496, 1-8.	2.7	0
62	Centimeter-Scale Synthesis of Ultrathin Layered MoO₃ by van der Waals Epitaxy. Chemistry of Materials, 2016, 28, 4042-4051.	6.7	100
63	Engineering spin exchange in nonbipartite graphene zigzag edges. Physical Review B, 2016, 94, .	3.2	22
64	Landau levels in 2D materials using Wannier Hamiltonians obtained by first principles. 2D Materials, 2016, 3, 035023.	4.4	21
65	A kilobyte rewritable atomic memory. Nature Nanotechnology, 2016, 11, 926-929.	31.5	123
66	Dirac topological insulator in the<mml:math xmlns:mml="http://www.w3.org/1998/Math/MathML"><mml:msub><mml:mi>d</mml:mi><mml:msup><mml:mi>z</mml:mi><mml:mn> of a honeycomb oxide. Physical Review B, 2016, 94, .	3.2	1
67	Unconventional Yuâ€“Shibaâ€“Rusinov states in hydrogenated graphene. 2D Materials, 2016, 3, 025001.	4.4	19
68	Quantum spin Hall phase in multilayer graphene. Physical Review B, 2015, 91, .	3.2	4
69	Quantum anomalous Hall effect in graphene coupled to skyrmions. Physical Review B, 2015, 92, .	3.2	28
70	Electronic properties of transition metal atoms on<mml:math xmlns:mml="http://www.w3.org/1998/Math/MathML"><mml:mrow><mml:msub><mml:mi mathvariant="normal">Cu</mml:mi><mml:mn>2</mml:mn></mml:msub><mml:mi mathvariant="normal">N</mml:mi><mml:mo>/</mml:mo><mml:mi mathvariant="normal">Cu</mml:mi></mml:mrow><mml:mo>(</mml:mo><mml:mn>100</mml:mn><mml:mo>)</mml:mo></mml:mrow Physical Review B, 2015, 92, .	3.2	19
71	[illegible] xmlns:mml="http://www.w3.org/1998/Math/MathML"><mml:msub><mml:mi>t</mml:mi><mml:mrow><mml:mn>2</mml:mn><mml: perovskite-related compounds:<mml:math xmlns:mml="http://www.w3.org/1998/Math/MathML"><mml:msub><mml:mi>SrIrO</mml:mi><mml:mn>3</mml:mn></mml:msub>< xmlns:mml="http://www.w3.org/1998/Math/MathML"><mml:mrow><mml:msub><mml:mi>Sr</mml:mi><mml:mn>2</mml:mn></mml Physical Review B, 2015, 92, .	3.2	10
72	Majorana Zero Modes in Graphene. Physical Review X, 2015, 5, .	8.9	71

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73	Edge states in graphene-like systems. Synthetic Metals, 2015, 210, 56-67.	3.9	40
74	Controlled Complete Suppression of Single-Atom Inelastic Spin and Orbital Cotunneling. Nano Letters, 2015, 15, 6542-6546.	9.1	25
75	Noncollinear magnetic phases and edge states in graphene quantum Hall bars. Physical Review B, 2014, 90, .	3.2	25
76	Magnetic Edge Anisotropy in Graphenelike Honeycomb Crystals. Physical Review Letters, 2014, 113, 027203.	7.8	65
77	Quantum Hall effect in gapped graphene heterojunctions. Physical Review B, 2013, 88, .	3.2	17
78	<i>Ab initio</i>study of<mml:math xmlns:mml="http://www.w3.org/1998/Math/MathML" display="inline"><mml:msub><mml:mi>Z</mml:mi><mml:mn>2</mml:mn></mml:msub></mml:math>topological phases in perovskite (111) (SrTiO<mml:math xmlns:mml="http://www.w3.org/1998/Math/MathML") Tj ETQq0 0 0 rgBT /Overlock 10 Tf 5 xmlns:mml="http://www.w3.org/1998/Math/MathML" display="inline"><mml:msub><mml:mrow		