Jose H Garcia

List of Publications by Year in descending order

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29 papers	1,338 citations	516710 16 h-index	501196 28 g-index
32 all docs	32 docs citations	32 times ranked	1268 citing authors

#	Article	IF	Citations
1	Room-Temperature Spin Hall Effect in Graphene/MoS₂ van der Waals Heterostructures. Nano Letters, 2019, 19, 1074-1082.	9.1	186
2	Giant Spin Lifetime Anisotropy in Graphene Induced by Proximity Effects. Physical Review Letters, 2017, 119, 206601.	7.8	161
3	Spin transport in graphene/transition metal dichalcogenide heterostructures. Chemical Society Reviews, 2018, 47, 3359-3379.	38.1	150
4	Tunable room-temperature spin galvanic and spin Hall effects in van der Waals heterostructures. Nature Materials, 2020, 19, 170-175.	27.5	127
5	Large spin relaxation anisotropy and valley-Zeeman spin-orbit coupling in <mml:math xmlns:mml="http://www.w3.org/1998/Math/MathML"><mml:msub><mml:mi>WSe</mml:mi><mml:mn>2</mml:mn></mml:msub></mml:math> /graphene/ <mml:math xmlns:mml="http://www.w3.org/1998/Math/MathML"><mml:mi>h</mml:mi></mml:math> -BN heterostructures. Physical Review B, 2018, 97, .	3.2	118
6	Spin Hall Effect and Weak Antilocalization in Graphene/Transition Metal Dichalcogenide Heterostructures. Nano Letters, 2017, 17, 5078-5083.	9.1	91
7	Real-Space Calculation of the Conductivity Tensor for Disordered Topological Matter. Physical Review Letters, 2015, 114, 116602.	7.8	78
8	Magnetism, symmetry and spin transport in van der Waals layered systems. Nature Reviews Physics, 2022, 4, 150-166.	26.6	72
9	Linear scaling quantum transport methodologies. Physics Reports, 2021, 903, 1-69.	25.6	46
10	Canted Persistent Spin Texture and Quantum Spin Hall Effect in<mml:math xmlns:mml="http://www.w3.org/1998/Math/MathML" display="inline"><mml:mrow><mml:msub><mml:mrow><mml:mi>WTe</mml:mi></mml:mrow><mml:mrow><mml:mn>2</mml:mn></mml:mrow> Physical Review Letters, 2020, 125, 256603.	7.8	38
11	Valley-polarized quantum transport generated by gauge fields in graphene. 2D Materials, 2017, 4, 031006.	4.4	35
12	Kuboâ€“Bastin approach for the spin Hall conductivity of decorated graphene. 2D Materials, 2016, 3, 024007.	4.4	26
13	Deciphering the origin of nonlocal resistance in multiterminal graphene on hexagonal-boron-nitride with ab initio quantum transport: Fermi surface edge currents rather than Fermi sea topological valley currents. JPhys Materials, 2018, 1, 015006.	4.2	24
14	Quantum Hall effect in graphene with interface-induced spin-orbit coupling. Physical Review B, 2018, 97, .	3.2	20
15	Control of spinâ€“charge conversion in van der Waals heterostructures. APL Materials, 2021, 9, .	5.1	20
16	Valley-polarized quantum anomalous Hall phase in bilayer graphene with layer-dependent proximity effects. Physical Review B, 2021, 104, .	3.2	18
17	Nonlocal Spin Dynamics in the Crossover from Diffusive to Ballistic Transport. Physical Review Letters, 2020, 124, 196602.	7.8	17
18	Manipulation of spin transport in graphene/transition metal dichalcogenide heterobilayers upon twisting. 2D Materials, 0, , .	4.4	16

#	Article	IF	Citations
19	Adatoms and Anderson localization in graphene. Physical Review B, 2014, 90, .	3.2	13
20	Janus monolayers of magnetic transition metal dichalcogenides as an all-in-one platform for spin-orbit torque. Physical Review B, 2021, 104, .	3.2	13
21	Valley Hall effect and nonlocal resistance in locally gapped graphene. Physical Review B, 2021, 103, .	3.2	12
22	Low-symmetry topological materials for large charge-to-spin interconversion: The case of transition metal dichalcogenide monolayers. Physical Review Research, 2021, 3, .	3.6	11
23	Charge and spin transport anisotropy in nanopatterned graphene. JPhys Materials, 2018, 1, 015005.	4.2	10
24	Cloaking resonant scatterers and tuning electron flow in graphene. Physical Review B, 2015, 91, .	3.2	8
25	Magnetism, spin dynamics, and quantum transport in two-dimensional systems. MRS Bulletin, 2020, 45, 357-365.	3.5	8
26	Have mysterious topological valley currents been observed in graphene superlattices?. JPhys Materials, 2022, 5, 021001.	4.2	8
27	Finite-size correction scheme for supercell calculations in Dirac-point two-dimensional materials. Scientific Reports, 2018, 8, 9348.	3.3	4
28	Shubnikovâ€“de Haas oscillations in the anomalous Hall conductivity of Chern insulators. Physical Review B, 2018, 98, .	3.2	3
29	Giant valley-polarized spin splittings in magnetized Janus Pt dichalcogenides. Physical Review B, 2022, 105, .	3.2	3