

# Sergio O Valenzuela

## List of Publications by Year in descending order

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Version: 2024-02-01

45  
papers

5,670  
citations

201674

27  
h-index

265206

42  
g-index

49  
all docs

49  
docs citations

49  
times ranked

7024  
citing authors

#	ARTICLE	IF	CITATIONS
1	Spin Hall effects. <i>Reviews of Modern Physics</i> , 2015, 87, 1213-1260.	45.6	2,087
2	Opportunities and challenges for spintronics in the microelectronics industry. <i>Nature Electronics</i> , 2020, 3, 446-459.	26.0	471
3	Bottom-up synthesis of multifunctional nanoporous graphene. <i>Science</i> , 2018, 360, 199-203.	12.6	429
4	The 2017 Magnetism Roadmap. <i>Journal Physics D: Applied Physics</i> , 2017, 50, 363001.	2.8	279
5	Van der Waals heterostructures for spintronics and opto-spintronics. <i>Nature Nanotechnology</i> , 2021, 16, 856-868.	31.5	261
6	Graphene spintronics: the European Flagship perspective. <i>2D Materials</i> , 2015, 2, 030202.	4.4	243
7	Strongly anisotropic spin relaxation in graphene-transition metal dichalcogenide heterostructures at room temperature. <i>Nature Physics</i> , 2018, 14, 303-308.	16.7	193
8	Amplitude spectroscopy of a solid-state artificial atom. <i>Nature</i> , 2008, 455, 51-57.	27.8	134
9	Tunable room-temperature spin galvanic and spin Hall effects in van der Waals heterostructures. <i>Nature Materials</i> , 2020, 19, 170-175.	27.5	127
10	Microwave-Induced Cooling of a Superconducting Qubit. <i>Science</i> , 2006, 314, 1589-1592.	12.6	126
11	Two-dimensional materials prospects for non-volatile spintronic memories. <i>Nature</i> , 2022, 606, 663-673.	27.8	116
12	The 2021 quantum materials roadmap. <i>JPhys Materials</i> , 2020, 3, 042006.	4.2	111
13	Graphene spintronics: puzzling controversies and challenges for spin manipulation. <i>Journal Physics D: Applied Physics</i> , 2014, 47, 094011.	2.8	95
14	Pseudospin-driven spin relaxation mechanism in graphene. <i>Nature Physics</i> , 2014, 10, 857-863.	16.7	86
15	Magnon-drag thermopile. <i>Nature Materials</i> , 2012, 11, 199-202.	27.5	82
16	NONLOCAL ELECTRONIC SPIN DETECTION, SPIN ACCUMULATION AND THE SPIN HALL EFFECT. <i>International Journal of Modern Physics B</i> , 2009, 23, 2413-2438.	2.0	76
17	Determination of the spin-lifetime anisotropy in graphene using oblique spin precession. <i>Nature Communications</i> , 2016, 7, 11444.	12.8	76
18	Thermoelectric spin voltage in graphene. <i>Nature Nanotechnology</i> , 2018, 13, 107-111.	31.5	72



#	ARTICLE	IF	CITATIONS
37	Resolving spin currents and spin densities generated by charge-spin interconversion in systems with reduced crystal symmetry. <i>2D Materials</i> , 2022, 9, 035014.	4.4	9
38	The phase diagram of 2D antiferromagnets. <i>Nature Nanotechnology</i> , 2019, 14, 1088-1089.	31.5	8
39	Impact of the <i>in situ</i> rise in hydrogen partial pressure on graphene shape evolution during CVD growth of graphene. <i>RSC Advances</i> , 2018, 8, 8234-8239.	3.6	7
40	Investigating the spin-orbit interaction in van der Waals heterostructures by means of the spin relaxation anisotropy. <i>APL Materials</i> , 2019, 7, .	5.1	7
41	Heat dissipation in few-layer MoS <sub>2</sub> and MoS <sub>2</sub> /hBN heterostructure. <i>2D Materials</i> , 2022, 9, 015005.	4.4	6
42	A barrier to spin filters. <i>Nature Electronics</i> , 2018, 1, 328-329.	26.0	3
43	Magnetization in high-temperature superconducting strips during transverse magnetic field application. <i>Physica B: Condensed Matter</i> , 2000, 284-288, 837-838.	2.7	0
44	Generation of pure spin currents in a single electron transistor with a superconducting island. <i>Proceedings of SPIE</i> , 2011, , .	0.8	0
45	Magnon-drag thermopile. , 2012, , .		0