Saroj P Dash

List of Publications by Year in descending order

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218677 254184 3,270 43 26 43 h-index citations g-index papers 43 43 43 4316 docs citations times ranked citing authors all docs

#	Article	IF	CITATIONS
1	Electrical creation of spin polarization in silicon at room temperature. Nature, 2009, 462, 491-494.	27.8	565
2	Surface Energy Engineering for Tunable Wettability through Controlled Synthesis of MoS ₂ . Nano Letters, 2014, 14, 4314-4321.	9.1	258
3	Graphene spintronics: the European Flagship perspective. 2D Materials, 2015, 2, 030202.	4.4	243
4	Electrical gate control of spin current in van der Waals heterostructures at room temperature. Nature Communications, 2017, 8, 16093.	12.8	224
5	Long distance spin communication in chemical vapour deposited graphene. Nature Communications, 2015, 6, 6766.	12.8	202
6	High-Performance Molybdenum Disulfide Field-Effect Transistors with Spin Tunnel Contacts. ACS Nano, 2014, 8, 476-482.	14.6	187
7	Enhanced Tunnel Spin Injection into Graphene using Chemical Vapor Deposited Hexagonal Boron Nitride. Scientific Reports, 2014, 4, 6146.	3.3	142
8	Room Temperature Electrical Detection of Spin Polarized Currents in Topological Insulators. Nano Letters, 2015, 15, 7976-7981.	9.1	141
9	Low Schottky Barrier Black Phosphorus Fieldâ€Effect Devices with Ferromagnetic Tunnel Contacts. Small, 2015, 11, 2209-2216.	10.0	111
10	Tunnel magnetoresistance with atomically thin two-dimensional hexagonal boron nitride barriers. Nano Research, 2015, 8, 1357-1364.	10.4	87
11	Unconventional Charge–Spin Conversion in Weylâ€Semimetal WTe ₂ . Advanced Materials, 2020, 32, e2000818.	21.0	83
12	Magnetic proximity in a van der Waals heterostructure of magnetic insulator and graphene. 2D Materials, 2020, 7, 015026.	4.4	80
13	Inversion of Spin Signal and Spin Filtering in Ferromagnet Hexagonal Boron Nitride-Graphene van der Waals Heterostructures. Scientific Reports, 2016, 6, 21168.	3.3	79
14	Observation of charge to spin conversion in Weyl semimetal <mml:math xmlns:mml="http://www.w3.org/1998/Math/MathML"><mml:msub><mml:mi>WTe</mml:mi><mml:mn>2<td>l:ma.⁄6<td>ทl:ทธนb></td></td></mml:mn></mml:msub></mml:math>	l:m a. ⁄6 <td>ทl:ทธนb></td>	ท l:ทธ นb>
15	Gate-tunable spin-galvanic effect in graphene-topological insulator van der Waals heterostructures at room temperature. Nature Communications, 2020, 11, 3657.	12.8	76
16	Efficient Spin Injection into Silicon and the Role of the Schottky Barrier. Scientific Reports, 2013, 3, 3196.	3.3	69
17	Tailoring emergent spin phenomena in Dirac material heterostructures. Science Advances, 2018, 4, eaat9349.	10.3	65
18	Spin-Polarized Tunneling through Chemical Vapor Deposited Multilayer Molybdenum Disulfide. ACS Nano, 2017, 11, 6389-6395.	14.6	53

#	Article	IF	Citations
19	Spintronics with graphene-hexagonal boron nitride van der Waals heterostructures. Applied Physics Letters, 2014, 105, 212405.	3.3	43
20	Electrical Control of Hybrid Monolayer Tungsten Disulfide–Plasmonic Nanoantenna Light–Matter States at Cryogenic and Room Temperatures. ACS Nano, 2020, 14, 1196-1206.	14.6	41
21	Oscillatory spin-polarized tunnelling from silicon quantum wells controlled by electric field. Nature Materials, 2010, 9, 133-138.	27.5	40
22	Challenges and opportunities in 2D heterostructures for electronic and optoelectronic devices. IScience, 2022, 25, 103942.	4.1	38
23	Spin transport and precession in graphene measured by nonlocal and three-terminal methods. Applied Physics Letters, 2014, 104, .	3.3	36
24	Hall sensors batch-fabricated on all-CVD h-BN/graphene/h-BN heterostructures. Scientific Reports, 2017, 7, 15231.	3.3	33
25	Origin and evolution of surface spin current in topological insulators. Physical Review B, 2018, 97, .	3.2	33
26	Two-dimensional spintronic circuit architectures on large scale graphene. Carbon, 2020, 161, 892-899.	10.3	32
27	Electrically Controlled Spin Injection from Giant Rashba Spin–Orbit Conductor BiTeBr. Nano Letters, 2020, 20, 4782-4791.	9.1	27
28	1D ferromagnetic edge contacts to 2D graphene/h-BN heterostructures. 2D Materials, 2018, 5, 014001.	4.4	26
29	Charge-spin conversion in layered semimetal <mml:math xmlns:mml="http://www.w3.org/1998/Math/MathML"><mml:mrow><mml:mi>Ta</mml:mi><mml:msub><mml:mand .<="" 2,="" 2020,="" der="" heterostructures.="" in="" injection="" physical="" research,="" review="" spin="" td="" van="" waals=""><td>ni>3&/mm</td><td>nl:r≥t> < mml:r</td></mml:mand></mml:msub></mml:mrow></mml:math>	ni> 3 &/mm	nl:r ≥ t> < mml:r
30	Gate-tunable Hall sensors on large area CVD graphene protected by h-BN with 1D edge contacts. Journal of Applied Physics, 2017, 122, .	2.5	20
31	All-electrical creation and control of spin-galvanic signal in graphene and molybdenum ditelluride heterostructures at room temperature. Communications Physics, 2021, 4, .	5.3	20
32	Salt-assisted growth of monolayer MoS2 for high-performance hysteresis-free field-effect transistor. Journal of Applied Physics, 2021, 129, .	2.5	19
33	Effect of high-k dielectric and ionic liquid gate on nanolayer black-phosphorus field effect transistors. Applied Physics Letters, 2015, 107, .	3.3	18
34	Manipulation of exciton and trion quasiparticles in monolayer WS2 via charge transfer. Applied Physics Letters, 2019, 115, .	3.3	14
35	Microwave Synthesized 2D Gold and Its 2D-2D Hybrids. Journal of Physical Chemistry Letters, 2022, 13, 6487-6495.	4.6	14
36	Electrically controlled spin-switch and evolution of Hanle spin precession in graphene. 2D Materials, 2019, 6, 035042.	4.4	12

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37	Robust Spin Interconnect with Isotropic Spin Dynamics in Chemical Vapor Deposited Graphene Layers and Boundaries. ACS Nano, 2020, 14, 15864-15873.	14.6	12
38	Thermal creation of electron spin polarization in n-type silicon. Applied Physics Letters, 2013, 103, .	3.3	10
39	Charge-spin conversion signal in WTe2 van der Waals hybrid devices with a geometrical design. Applied Physics Letters, 2020, 117, .	3.3	9
40	Observation of surface dominated topological transport in strained semimetallic ErPdBi thin films. Applied Physics Letters, 2020, 117, 132406.	3.3	3
41	Initial stages of growth of iron on silicon for spin injection through Schottky barrier. Physica Status Solidi (B): Basic Research, 2011, 248, 2300-2304.	1.5	2
42	Surface dominated magnetotransport in Bi2Te2.15Se 0.85 topological insulator. Journal of Applied Physics, 2018, 124, 214302.	2.5	1
43	Disorder is not always bad for charge-to-spin conversion in WTe2. Matter, 2021, 4, 1440-1441.	10.0	1