

Stepan S Tsirkin

List of Publications by Year in descending order

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47
papers

2,758
citations

331259

21
h-index

214527

47
g-index

47
all docs

47
docs citations

47
times ranked

3797
citing authors

#	ARTICLE	IF	CITATIONS
1	Wannier90 as a community code: new features and applications. Journal of Physics Condensed Matter, 2020, 32, 165902.	0.7	807
2	Negative flat band magnetism in a spin-orbit-coupled correlated kagome magnet. Nature Physics, 2019, 15, 443-448.	6.5	283
3	Unfolding spinor wave functions and expectation values of general operators: Introducing the unfolding-density operator. Physical Review B, 2015, 91, .	1.1	274
4	Atom-specific spin mapping and buried topological states in a homologous series of topological insulators. Nature Communications, 2012, 3, 635.	5.8	192
5	Tunable anomalous Hall conductivity through volume-wise magnetic competition in a topological kagome magnet. Nature Communications, 2020, 11, 559.	5.8	112
6	Ab initio calculation of the shift photocurrent by Wannier interpolation. Physical Review B, 2018, 97, .	1.1	98
7	Gyrotropic effects in trigonal tellurium studied from first principles. Physical Review B, 2018, 97, .	1.1	95
8	Composite Weyl nodes stabilized by screw symmetry with and without time-reversal invariance. Physical Review B, 2017, 96, .	1.1	82
9	Magnetism and anomalous transport in the Weyl semimetal PrAlGe: possible route to axial gauge fields. Npj Quantum Materials, 2020, 5, .	1.8	78
10	Fractional corner charges in spin-orbit coupled crystals. Physical Review Research, 2019, 1, .	1.3	78
11	Band Structure Engineering in Topological Insulator Based Heterostructures. Nano Letters, 2013, 13, 6064-6069.	4.5	57
12	Radial Spin Texture of the Weyl Fermions in Chiral Tellurium. Physical Review Letters, 2020, 125, 216402.	2.9	47
13	High performance Wannier interpolation of Berry curvature and related quantities with WannierBerri code. Npj Computational Materials, 2021, 7, .	3.5	46
14	Unconventional Transverse Transport above and below the Magnetic Transition Temperature in Weyl Semimetal EuCd_2As_2 . Physical Review Letters, 2021, 126, 076602.	2.9	40
15	Nontrivial spin structure of graphene on Pt(111) at the Fermi level due to spin-dependent hybridization. Physical Review B, 2014, 90, .	1.1	38
16	Visualizing spin-dependent bulk scattering and breakdown of the linear dispersion relation in Bi_2Te_3 . Physical Review B, 2013, 88, .	1.1	34
17	From triple-point materials to multiband nodal links. Physical Review B, 2021, 103, .	1.1	28
18	New generation of two-dimensional spintronic systems realized by coupling of Rashba and Dirac fermions. Scientific Reports, 2015, 5, 12819.	1.6	27

#	ARTICLE	IF	CITATIONS
19	IrRep: Symmetry eigenvalues and irreducible representations of ab initio band structures. Computer Physics Communications, 2022, 272, 108226.	3.0	27
20	Many-Body Resonance in a Correlated Topological Kagome Antiferromagnet. Physical Review Letters, 2020, 125, 046401.	2.9	24
21	Inelastic decay of electrons in Shockley-type metal-organic interface states. Physical Review B, 2015, 92, .	1.1	21
22	Renormalization-group description of nonequilibrium critical short-time relaxation processes: A three-loop approximation. Journal of Experimental and Theoretical Physics, 2008, 106, 1095-1101.	0.2	20
23	Variation of the character of spin-orbit interaction by Pt intercalation underneath graphene on Ir(111). Physical Review B, 2015, 92, .	1.1	20
24	Nodeless superconductivity and its evolution with pressure in the layered dirac semimetal 2M-WS2. Npj Quantum Materials, 2019, 4, .	1.8	20
25	Model pseudopotential for the (110) surface of fcc noble metals. Surface Science, 2010, 604, 804-810.	0.8	19
26	Many-body interactions and Rashba splitting of the surface state on Cu(110). Physical Review B, 2014, 89, .	1.1	18
27	Momentum-resolved electron dynamics of image-potential states on Cu and Ag surfaces. Physical Review B, 2012, 85, .	1.1	17
28	Signatures of Weyl Fermion Annihilation in a Correlated Kagome Magnet. Physical Review Letters, 2021, 127, 256403.	2.9	17
29	Multiple quantum phase transitions of different nature in the topological kagome magnet $\text{Co}_3\text{Sn}_2\text{As}_x\text{In}_x\text{S}_2$. Npj Quantum Materials, 2021, 6, .	1.8	16
30	Inelastic electron-electron scattering for surface states on Cu(110) and Ag(110). Physical Review B, 2011, 84, .	1.1	15
31	Band structure of overdoped cuprate superconductors: Density functional theory matching experiments. Physical Review B, 2019, 99, .	1.1	15
32	Phonon-induced scattering of excited electrons and holes on (110) noble metal surfaces. Physical Review B, 2010, 82, .	1.1	12
33	Low-temperature magnetic crossover in the topological kagome magnet TbMn_6Sn_6 . Communications Physics, 2022, 5, .	2.0	12
34	Dependence of the intrinsic line width of surface states on the wave vector: The Cu(111) and Ag(111) surfaces. Physics of the Solid State, 2010, 52, 1768-1773.	0.2	11
35	Model pseudopotential for the Cu(110) surface. Physics of the Solid State, 2010, 52, 188-194.	0.2	10
36	Temperature dependence of the dynamics of the first image-potential state on Ag(111). Physical Review B, 2012, 86, .	1.1	7

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37	Flat bands with fragile topology through superlattice engineering on single-layer graphene. <i>Physical Review Research</i> , 2021, 3, .	1.3	7
38	On different mechanisms of electron-phonon scattering of electron and hole excitations on an Ag(110) surface. <i>Journal of Experimental and Theoretical Physics</i> , 2010, 110, 788-793.	0.2	6
39	Non-Abelian chiral spin liquid on a simple non-Archimedean lattice. <i>Physical Review B</i> , 2020, 101, .	1.1	6
40	Green's function approach to the lifetimes of image potential resonances at metal surfaces. <i>Physical Review B</i> , 2013, 88, .	1.1	5
41	Contribution of phonons to the line width of surface electronic states on Pd(111). <i>Physics of the Solid State</i> , 2011, 53, 2508-2514.	0.2	4
42	Method of calculating the electron-phonon scattering of surface electronic states on the (110) surface of noble metals. <i>Russian Physics Journal</i> , 2011, 54, 92-101.	0.2	3
43	Crystal-induced transverse current in collinear antiferromagnetic $\langle i \rangle \hat{I}^3 \langle i \rangle$ -FeMn. <i>Applied Physics Letters</i> , 2022, 120, .	1.5	3
44	Electronic structure and excitations on clean and nanostructured metal surfaces. <i>European Physical Journal B</i> , 2010, 75, 37-47.	0.6	2
45	Lifetimes of electronic excitations in unoccupied surface states and the image potential states on Pd(110). <i>Journal of Experimental and Theoretical Physics</i> , 2012, 115, 673-680.	0.2	2
46	Method for calculating the contribution of inelastic electron-electron scattering lifetimes of electronic states on (110) noble metal surfaces. <i>Russian Physics Journal</i> , 2012, 54, 1196-1207.	0.2	2
47	Image potential eigenstates and resonances on the (110) surfaces of noble metals: Energies and lifetimes. <i>Journal of Experimental and Theoretical Physics</i> , 2014, 118, 167-175.	0.2	1