

Pavel Streda

List of Publications by Year in descending order

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64
papers

2,564
citations

361296
20
h-index

182361
51
g-index

64
all docs

64
docs citations

64
times ranked

1347
citing authors

#	ARTICLE	IF	CITATIONS
1	Theory of quantised Hall conductivity in two dimensions. Journal of Physics C: Solid State Physics, 1982, 15, L717-L721.	1.5	515
2	Quantized Hall effect and edge currents. Physical Review B, 1984, 29, 1616-1619.	1.1	296
3	Edge states, transmission matrices, and the Hall resistance. Physical Review Letters, 1987, 59, 1973-1975.	2.9	238
4	Quantized Multichannel Magnetotransport through a Barrier in Two Dimensions. Physical Review Letters, 1988, 61, 2797-2800.	2.9	210
5	Transport coefficients in strong magnetic fields. Journal of Physics C: Solid State Physics, 1977, 10, 2153-2161.	1.5	209
6	Antisymmetric Spin Filtering in One-Dimensional Electron Systems with Uniform Spin-Orbit Coupling. Physical Review Letters, 2003, 90, 256601.	2.9	178
7	Quantised thermopower of a channel in the ballistic regime. Journal of Physics Condensed Matter, 1989, 1, 1025-1027.	0.7	120
8	Critical non-dissipative current of quantum Hall regime. Journal of Physics C: Solid State Physics, 1984, 17, L483-L486.	1.5	91
9	New nonlocal magnetoresistance effect at the crossover between the classical and quantum transport regimes. Physical Review Letters, 1991, 67, 3014-3017.	2.9	60
10	Theory of electronic thermal transport: Magnetoquantum corrections to the thermal transport coefficients. Physical Review B, 1985, 31, 7291-7295.	1.1	51
11	Scattering experiments in two-dimensional systems in the presence of quantizing magnetic fields. Physical Review B, 1989, 39, 10892-10900.	1.1	50
12	Hall-Like Effect Induced by Spin-Orbit Interaction. Physical Review Letters, 1999, 83, 376-379.	2.9	49
13	Galvanomagnetic Effects in Alloys in Quantizing Magnetic Fields. Physica Status Solidi (B): Basic Research, 1975, 70, 537-548.	0.7	42
14	Thermodynamic derivation of the Hall current and the thermopower in quantising magnetic field. Journal of Physics C: Solid State Physics, 1983, 16, L895-L899.	1.5	40
15	The relation between transport coefficients and scattering matrices in strong magnetic fields. Journal of Physics C: Solid State Physics, 1988, 21, 4357-4365.	1.5	37
16	Thermomagnetic coefficients of inversion layer in high magnetic field. Journal of Physics C: Solid State Physics, 1983, 16, L369-L374.	1.5	35
17	Current-induced coupling of the edge and bulk channels in GaAs/AlxGa1-xAs heterostructures. Physical Review B, 1992, 45, 8763-8766.	1.1	33
18	Universal Transport Properties of Inversion Layers in Quantizing Magnetic Field. Physica Status Solidi (B): Basic Research, 1984, 125, 849-860.	0.7	27

#	ARTICLE	IF	CITATIONS
19	Two-Component Interference Effect: Model of a Spin-Polarized Transport. <i>Physical Review Letters</i> , 2001, 86, 1598-1601.	2.9	24
20	Strength of Topologically Induced Magnetic Moments in a Quantum Device. <i>Physical Review Letters</i> , 1998, 80, 1710-1713.	2.9	20
21	Giant magnetoresistance in lateral surface superlattices. <i>Physical Review B</i> , 1994, 50, 8938-8941.	1.1	17
22	Edge-state properties and bulk eigenenergy spectra of periodically modulated two-dimensional electron systems in a magnetic field. <i>Physical Review B</i> , 1994, 50, 11955-11966.	1.1	16
23	Magnetoresistance in domain walls: effect of randomness. <i>Surface Science</i> , 2001, 482-485, 1107-1112.	0.8	16
24	Edge state transport in high magnetic fields in a two-dimensional electron gas. <i>Surface Science</i> , 1990, 229, 229-232.	0.8	15
25	Experimental determination of the transport coefficients of bismuth in the range 1Â-5â€“50 K. <i>European Physical Journal D</i> , 1982, 32, 791-809.	0.4	13
26	Magnetoresistance of a two-dimensional electron gas in nearly parallel magnetic fields. <i>Physical Review B</i> , 1995, 51, 11144-11147.	1.1	13
27	Anomalous Hall conductivity: Local orbitals approach. <i>Physical Review B</i> , 2010, 82, .	1.1	13
28	Orbital momentum and topological phase transformation. <i>Physical Review B</i> , 2015, 92, .	1.1	13
29	Quantum Hall effect in a one-dimensional lateral superlattice: Nearly dissipationless transport across high potential barriers. <i>Physical Review B</i> , 1995, 51, 10236-10239.	1.1	11
30	On the theory of thermomagnetic transport and its application to two-dimensional systems. <i>Physics Letters, Section A: General, Atomic and Solid State Physics</i> , 1984, 102, 201-203.	0.9	8
31	Breakdown of the quantum Hall effect. <i>Journal of Physics C: Solid State Physics</i> , 1986, 19, L155-L159.	1.5	8
32	Oscillation amplitudes of the Shubnikov-dehaas effect. <i>European Physical Journal D</i> , 1983, 33, 49-64.	0.4	7
33	Critical Current of the Quantum Hall Regime. <i>Physica Status Solidi (B): Basic Research</i> , 1984, 124, K97.	0.7	7
34	Semiclassical magnetotransport theory for two-dimensional electron systems in lateral superlattices. <i>Physical Review B</i> , 1997, 55, 14439-14449.	1.1	7
35	Intrinsic anomalous Hall effect and local polarizabilities. <i>Physical Review B</i> , 2010, 82, .	1.1	6
36	Magnetic Breakdown Effects in Two-Dimensional Periodic Systems. <i>Physica Scripta</i> , 1991, T39, 162-168.	1.2	5

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37	Non-local magnetoresistance at the crossover between the classical and quantum transport regimes. <i>Surface Science</i> , 1992, 263, 298-302.	0.8	5
38	Rashba spin-orbit coupling and anti-symmetric spin filtering in one-dimensional electron systems. <i>Physica E: Low-Dimensional Systems and Nanostructures</i> , 2004, 22, 460-463.	1.3	5
39	Hall current and electron polarizability of a two-dimensional electron gas subjected to weak superlattice potentials. <i>Physical Review B</i> , 2007, 76, .	1.1	5
40	Electron Polarizability of Crystalline Solids in Quantizing Magnetic Fields and Topological Gap Numbers. <i>Physical Review Letters</i> , 2008, 100, 146804.	2.9	5
41	Landau levels in disordered alloys. <i>European Physical Journal D</i> , 1974, 24, 794-809.	0.4	4
42	Quantum oscillations of the thermogalvanomagnetic transport coefficients: CPA model calculation. <i>European Physical Journal D</i> , 1981, 31, 1114-1137.	0.4	4
43	Streda, Kucera, and MacDonald Reply. <i>Physical Review Letters</i> , 1989, 62, 230-230.	2.9	4
44	Normal and spin Hall effects as a response to the gradient of the chemical potential. <i>Physical Review B</i> , 2006, 73, .	1.1	4
45	Publisher's Note: Anomalous Hall conductivity: Local orbitals approach [Phys. Rev. B, 045115 (2010)]. <i>Physical Review B</i> , 2010, 82, .	1.1	4
46	The mean jump number of a vacancy in annealing experiments. <i>European Physical Journal D</i> , 1969, 19, 783-788.	0.4	3
47	The squid picovoltmeter operating in magnetic fields up to 3.2 T. <i>Cryogenics</i> , 1978, 18, 670-674.	0.9	3
48	Temperature-dependent scaling and current-dependent non-ohmic behaviour between integer quantum Hall plateaux. <i>Semiconductor Science and Technology</i> , 1993, 8, 25-30.	1.0	3
49	Resonance behaviour of the Hall-like effect induced by spin-orbit interaction in a four-terminal junction. <i>Physica E: Low-Dimensional Systems and Nanostructures</i> , 2000, 6, 727-730.	1.3	3
50	Hall effect of Bloch electrons: Influence of the local charge polarization. <i>Physical Review B</i> , 2006, 74, .	1.1	3
51	Thermopower in Strong Magnetic Fields and the Mott Rule. <i>Physica Status Solidi (B): Basic Research</i> , 1981, 103, K137.	0.7	2
52	Interlayer Hall effect in double quantum wells subject to in-plane magnetic fields. <i>Physical Review B</i> , 2002, 66, .	1.1	2
53	Theory of electrical resistance of multivalley semiconductors with screw dislocations. <i>European Physical Journal D</i> , 1973, 23, 348-355.	0.4	1
54	Magnetoresistance anomaly of a two-dimensional electron gas in tilted magnetic fields. <i>Surface Science</i> , 1996, 361-362, 533-536.	0.8	1

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55	Non-equilibrium behaviour of spin-resolved quantum transport in tilted magnetic fields. Semiconductor Science and Technology, 1996, 11, 1015-1021.	1.0	1
56	Hall resistance and the diamagnetic moment of periodically modulated two-dimensional systems. Physica E: Low-Dimensional Systems and Nanostructures, 2006, 34, 69-72.	1.3	1
57	Anomalous Hall effect as the response of the orbital momentum to the gradient of electrochemical potential. Physical Review B, 2013, 88, .	1.1	1
58	The mean life time of vacancies in thermal equilibrium. European Physical Journal D, 1968, 18, 807-809.	0.4	0
59	Low-field magnetoresistance of strongly modulated two-dimensional electron gas. Superlattices and Microstructures, 1998, 23, 1245-1248.	1.4	0
60	Longitudinal conductivity and transverse charge redistribution in coupled quantum wells subject to in-plane magnetic fields. Physica E: Low-Dimensional Systems and Nanostructures, 2002, 12, 311-314.	1.3	0
61	Weak-field Hall effect and static polarizability of Bloch electrons. Physical Review B, 2009, 79, .	1.1	0
62	Real-space distribution of the Hall current densities and their spin polarization in nonmagnetic zinc-blende semiconductors. Physical Review B, 2012, 86, .	1.1	0
63	Spin polarization of Bloch states and Hall currents in GaAs quantum wells. EPJ Web of Conferences, 2013, 40, 12003.	0.1	0
64	Local orbitals approach to the anomalous Hall and Nernst effects in itinerant ferromagnets. EPJ Web of Conferences, 2014, 75, 03005.	0.1	0