

H Van Houten

List of Publications by Year in descending order

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74
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citations

101543

36
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102487

66
g-index

74
all docs

74
docs citations

74
times ranked

3730
citing authors

#	ARTICLE	IF	CITATIONS
1	Quantized conductance of point contacts in a two-dimensional electron gas. Physical Review Letters, 1988, 60, 848-850.	7.8	2,851
2	Quantum Transport in Semiconductor Nanostructures. Solid State Physics, 1991, , 1-228.	0.5	892
3	Josephson current through a superconducting quantum point contact shorter than the coherence length. Physical Review Letters, 1991, 66, 3056-3059.	7.8	408
4	Coherent electron focusing with quantum point contacts in a two-dimensional electron gas. Physical Review B, 1989, 39, 8556-8575.	3.2	320
5	Billiard model of a ballistic multiprobe conductor. Physical Review Letters, 1989, 63, 1857-1860.	7.8	289
6	Quantum ballistic and adiabatic electron transport studied with quantum point contacts. Physical Review B, 1991, 43, 12431-12453.	3.2	230
7	Quantized conductance of magnetoelectric subbands in ballistic point contacts. Physical Review B, 1988, 38, 3625-3627.	3.2	215
8	Anomalous integer quantum Hall effect in the ballistic regime with quantum point contacts. Physical Review Letters, 1989, 62, 1181-1184.	7.8	207
9	Characterization of very narrow quasi-one-dimensional quantum channels. Physical Review B, 1988, 37, 10118-10124.	3.2	197
10	Coulomb-Blockade Oscillations in the Thermopower of a Quantum Dot. Europhysics Letters, 1993, 22, 57-62.	2.0	195
11	Quantum oscillations in the transverse voltage of a channel in the nonlinear transport regime. Physical Review Letters, 1990, 65, 1052-1055.	7.8	183
12	Comment on "Conductance oscillations periodic in the density of a one-dimensional electron gas". Physical Review Letters, 1989, 63, 1893-1893.	7.8	163
13	Nonlinear conductance of quantum point contacts. Physical Review B, 1989, 39, 8040-8043.	3.2	163
14	Thermo-electric properties of quantum point contacts. Semiconductor Science and Technology, 1992, 7, B215-B221.	2.0	159
15	Peltier coefficient and thermal conductance of a quantum point contact. Physical Review Letters, 1992, 68, 3765-3768.	7.8	152
16	Boundary scattering and weak localization of electrons in a magnetic field. Physical Review B, 1988, 38, 3232-3240.	3.2	144
17	Coherent Electron Focussing in a Two-Dimensional Electron Gas. Europhysics Letters, 1988, 5, 721-725.	2.0	143
18	Magnetotransport and nonadditivity of point-contact resistances in series. Physical Review B, 1989, 39, 10445-10448.	3.2	133

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19	Submicron conducting channels defined by shallow mesa etch in GaAs/AlGaAs heterojunctions. Applied Physics Letters, 1986, 49, 1781-1783.	3.3	131
20	Four-terminal magnetoresistance of a two-dimensional electron-gas constriction in the ballistic regime. Physical Review B, 1988, 37, 8534-8536.	3.2	130
21	Single-Electron Tunnelling Observed At Room Temperature by Scanning-Tunnelling Microscopy. Europhysics Letters, 1992, 20, 249-254.	2.0	125
22	Flux-cancellation effect on narrow-channel magnetoresistance fluctuations. Physical Review B, 1988, 37, 6544-6546.	3.2	121
23	Spontaneous resistance switching and low-frequency noise in quantum point contacts. Physical Review Letters, 1991, 66, 2148-2151.	7.8	94
24	Experimental study of reduced shot noise in a diffusive mesoscopic conductor. Physical Review B, 1994, 49, 14066-14069.	3.2	84
25	Quenching of the Hall Effect. Physical Review Letters, 1988, 60, 2406-2409.	7.8	80
26	Coulomb-blockade oscillations in disordered quantum wires. Physical Review B, 1992, 45, 9222-9236.	3.2	75
27	Aharonov-bohm effect in a singly connected point contact. Physical Review B, 1988, 38, 10162-10165.	3.2	65
28	Influence of Coulomb repulsion on the Aharonov-Bohm effect in a quantum dot. Physical Review B, 1991, 44, 1657-1662.	3.2	62
29	Boundary scattering modified one-dimensional weak localization in submicron GaAs/AlGaAs heterostructures. Surface Science, 1988, 196, 144-149.	1.9	57
30	Influence of adiabatically transmitted edge channels on single-electron tunneling through a quantum dot. Physical Review B, 1992, 46, 7236-7239.	3.2	53
31	Periodic envelope of Coulomb-blockade oscillations in the quantum Hall regime. Physical Review B, 1992, 46, 12869-12872.	3.2	53
32	Magnetic depopulation of subbands and universal conductance fluctuations in quasi-one dimensional GaAs/AlGaAs heterostructures. Superlattices and Microstructures, 1987, 3, 497-501.	3.1	50
33	Hot-electron spectrometry with quantum point contacts. Physical Review B, 1990, 41, 1207-1210.	3.2	46
34	Chapter 2: Quantum Point Contacts. Semiconductors and Semimetals, 1992, 35, 9-112.	0.7	43
35	Mode Interference Effect in Coherent Electron Focusing. Europhysics Letters, 1988, 7, 359-364.	2.0	41
36	Single-electron tunneling up to room temperature. Physica Scripta, 1992, T45, 289-291.	2.5	39

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37	Coulomb-Blockade Oscillations in Semiconductor Nanostructures. NATO ASI Series Series B: Physics, 1992, , 167-216.	0.2	36
38	Skipping orbits, traversing trajectories, and quantum ballistic transport in microstructures. Superlattices and Microstructures, 1989, 5, 127-132.	3.1	33
39	Electron-electron scattering probed by a collimated electron beam. Semiconductor Science and Technology, 1992, 7, B228-B230.	2.0	32
40	Sawtooth-like thermopower oscillations of a quantum dot in the Coulomb blockade regime. Semiconductor Science and Technology, 1994, 9, 903-906.	2.0	31
41	Three-terminal quantum box resonant tunneling Josephson field-effect switch. Applied Physics Letters, 1991, 58, 1326-1328.	3.3	29
42	Low-frequency noise in quantum point contacts. Semiconductor Science and Technology, 1994, 9, 2178-2189.	2.0	29
43	Andreev reflection and the Josephson effect in a quantum point contact. Physica B: Condensed Matter, 1991, 175, 187-197.	2.7	28
44	Coulomb-blockade oscillations in a quantum dot. Physica B: Condensed Matter, 1991, 175, 226-230.	2.7	25
45	Low-frequency noise of quantum point contacts in the ballistic and quantum Hall regime. Physica B: Condensed Matter, 1991, 175, 213-216.	2.7	24
46	Anomalous mobility and photo-Hall effect in ZnSe-GaAs heterostructures. Journal of Applied Physics, 1989, 66, 3047-3055.	2.5	22
47	Single-electron tunneling in double-barrier junctions by scanning tunneling microscopy. Applied Surface Science, 1993, 67, 222-227.	6.1	21
48	Coulomb blockade oscillations in semiconductor nanostructures. Surface Science, 1992, 263, 442-445.	1.9	18
49	Resonant Josephson Current Through a Quantum Dot. Springer Series in Electrophysics, 1992, , 175-179.	0.2	15
50	Voltage-probe-controlled breakdown of the quantum Hall effect. Physical Review B, 1991, 43, 12118-12121.	3.2	12
51	Observation of excess conductance of a constricted electron gas in the fractional quantum Hall regime. Physical Review B, 1992, 45, 3890-3893.	3.2	12
52	Injection of ballistic hot electrons and cool holes in a two-dimensional electron gas. Surface Science, 1990, 229, 303-306.	1.9	11
53	THE SUPERCONDUCTING QUANTUM POINT CONTACT. , 1992, , 481-497.		9
54	Quantum effects in thermal and thermo-electric transport in semiconductor nanostructures. Physica Scripta, 1993, T49B, 441-445.	2.5	8

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55	Coulomb charging of a quantum dot in the presence of adiabatically transmitted edge channels. Physica B: Condensed Matter, 1993, 189, 80-87.	2.7	7
56	Principles of Solid State Electron Optics. NATO ASI Series Series B: Physics, 1995, , 269-303.	0.2	7
57	Magnetic field effects on switching noise in a quantum point contact. Physical Review B, 1992, 46, 15523-15525.	3.2	5
58	Experimental study of reduced shot noise in a diffusive mesoscopic conductor. Superlattices and Microstructures, 1994, 16, 253-255.	3.1	4
59	Semi-Classical Theory of Magnetoresistance Anomalies in Ballistic Multi-Probe Conductors. NATO ASI Series Series B: Physics, 1990, , 75-94.	0.2	4
60	Beenakker and van Houten reply. Physical Review Letters, 1989, 62, 1921-1921.	7.8	3
61	Photo-hall model for space charge effects in n-ZnSe/GaAs:Cr heterostructures. Journal of Crystal Growth, 1990, 101, 828-834.	1.5	3
62	Coherent electron focusing. Festkörperprobleme, 1989, , 299-316.	0.7	2
63	Coulomb-Blockade Oscillations in Quantum Wires and Dots. Springer Series in Electrophysics, 1992, , 159-169.	0.2	2
64	Coulomb Blockade of the Aharonov-Bohm Effect. NATO ASI Series Series B: Physics, 1991, , 359-370.	0.2	2
65	Selective backscattering and the breakdown of the quantum Hall effect. Surface Science, 1992, 263, 288-292.	1.9	1
66	Quantum transport in nanostructures: from electron waveguide to electron box. Microelectronic Engineering, 1994, 23, 31-39.	2.4	1
67	Coulomb blockade in the presence of adiabatically transmitted edge channels. Surface Science, 1994, 305, 520-526.	1.9	1
68	LATERAL ELECTRON TRANSPORT THROUGH A QUANTUM DOT: COULOMB BLOCKADE AND QUANTUM TRANSPORT. , 1992, , 255-266.		0
69	Quantum and Classical Ballistic Transport in Constricted Two-Dimensional Electron Gases. Springer Series in Solid-state Sciences, 1988, , 198-207.	0.3	0
70	Quantum Wires and Ballistic Point Contacts. , 1989, , 317-417.		0
71	Electron Optics in a Two-Dimensional Electron Gas. NATO ASI Series Series B: Physics, 1991, , 243-274.	0.2	0
72	Oscillating Transverse Voltage in a Channel with Quantum Point Contact Voltage Probes. NATO ASI Series Series B: Physics, 1991, , 335-345.	0.2	0

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73	Coulomb-Regulated Conductance Oscillations in a Disordered Quantum Wire. Springer Series in Solid-state Sciences, 1992, , 301-312.	0.3	0
74	Thermal and Thermo-Electric Transport Properties of Quantum Point Contacts. , 1993, , 365-378.		0