Toshimasa Fujisawa

List of Publications by Year
in descending order

140 papers	8,335 citations	101543 36 h-index	48315 88 g-index
141 all docs	141 docs citations	141 times ranked	4179 citing authors

#	Article	IF	Citations
1	Nonequilibrium Charge Dynamics of Tomonagaâ€“Luttinger Liquids in Quantum Hall Edge Channels. Annalen Der Physik, 2022, 534, .	2.4	7
2	Nonuniform heat redistribution among multiple channels in the integer quantum Hall regime. Physical Review B, 2022, 105, .	3.2	1
3	Quantized charge fractionalization at quantum Hall Y junctions in the disorder dominated regime. Nature Communications, 2021, 12, 131.	12.8	12
4	Plasmon modes of coupled quantum Hall edge channels in the presence of disorder-induced tunneling. Physical Review B, 2021, 103, .	3.2	4
5	Time-resolved investigation of plasmon mode along interface channels in integer and fractional quantum Hall regimes. Physical Review B, 2021, 104, .	3.2	4
6	Sensitive current measurement on a quantum antidot with a Corbino-type electrode. Japanese Journal of Applied Physics, 2020, 59, SGGI03.	1.5	1
7	Two-step breakdown of a local Î½=1 quantum Hall state. Physical Review B, 2020, 101, .	3.2	4
8	Quantum anti-dot formed with an airbridge gate in the quantum Hall regime. Applied Physics Express, 2019, 12, 065002.	2.4	1
9	Charge equilibration in integer and fractional quantum Hall edge channels in a generalized Hall-bar device. Physical Review B, 2019, 99, .	3.2	15
10	Surface-acoustic-wave resonators with Ti, Cr, and Au metallization on GaAs. Applied Physics Express, 2019, 12, 055001.	2.4	3
11	Spectroscopic study on hot-electron transport in a quantum Hall edge channel. Physical Review B, 2019, 99, .	3.2	19
12	Ballistic hot-electron transport in a quantum Hall edge channel defined by a double gate. Applied Physics Letters, 2019, 115, .	3.3	6
13	Generation and detection of edge magnetoplasmons in a quantum Hall system using a photoconductive switch. Japanese Journal of Applied Physics, 2018, 57, 04FK02.	1.5	2
14	Coupling between quantum Hall edge channels on opposite sides of a Hall bar. Solid State Communications, 2018, 283, 32-36.	1.9	3
15	Electronic energy spectroscopy of monochromatic edge magnetoplasmons in the quantum Hall regime. Journal of Physics Condensed Matter, 2018, 30, 345301.	1.8	2
16	Signatures of a Nonthermal Metastable State in Copropagating Quantum Hall Edge Channels. Physical Review Letters, 2018, 120, 197701.	7.8	26
17	Tomonagaâ€“Luttinger-liquid nature of edge excitations in integer quantum Hall edge channels. Reviews in Physics, 2018, 3, 32-43.	8.9	24
18	Negative and positive cross-correlations of current noises in quantum Hall edge channels at bulk filling factor $u =1$. Journal of Physics Condensed Matter, 2017, 29, 225302.	1.8	6

#	Article	IF	Citations
19	Waveform measurement of charge- and spin-density wavepackets in a chiral Tomonagaâ€“Luttinger liquid. Nature Physics, 2017, 13, 559-562.	16.7	69
20	Charge fractionalization in artificial Tomonaga-Luttinger liquids with controlled interaction strength. Physical Review B, 2017, 96, .	3.2	13
21	Two-electron double quantum dot coupled to coherent photon and phonon fields. Physical Review B, 2017, 96, .	3.2	6
22	Dissipative Landauâ€“Zener transition in double quantum dot under sinusoidal potential modulation. Applied Physics Express, 2017, 10, 115201.	2.4	2
23	Long-lived binary tunneling spectrum in the quantum Hall Tomonaga-Luttinger liquid. Physical Review B, 2016, 93, .	3.2	15
24	Counting Statistics of Single-Electron Transport. Lecture Notes in Physics, 2016, , 151-171.	0.7	0
25	Characteristic Current Levels of a Double Quantum Dot in the Spin Blockade Regime. , 2015, , .		0
26	Exchange-Induced Spin Blockade in a Two-Electron Double Quantum Dot. Physical Review Letters, 2015, 115, 176802.	7.8	2
27	Enhanced electron-phonon coupling for a semiconductor charge qubit in a surface phonon cavity. Scientific Reports, 2015, 5, 15176.	3.3	14
28	An edge-magnetoplasmon Mach-Zehnder interferometer. Applied Physics Letters, 2015, 107, 143101.	3.3	5
29	Shot-Noise Evidence of Fractional Quasiparticle Creation in a Local Fractional Quantum Hall State. Physical Review Letters, 2015, 114, 056802.	7.8	20
30	Plasmon transport and its guiding in graphene. New Journal of Physics, 2014, 16, 063055.	2.9	10
31	Cross-correlation measurement of quantum shot noise using homemade transimpedance amplifiers. Review of Scientific Instruments, 2014, 85, 054704.	1.3	15
32	Spin-dependent tunneling rates for electrostatically defined GaAs quantum dots. Physical Review B, 2014, 90, .	3.2	6
33	Stable and unstable dynamics of Overhauser fields in a double quantum dot. Physical Review B, 2014, 89, .	3.2	4
34	Single-electron counting statistics with a finite frequency bandwidth. Japanese Journal of Applied Physics, 2014, 53, 04EJ01.	1.5	4
35	Time-resolved charge fractionalization in inhomogeneous Luttinger liquids. Physical Review B, 2014, 89, .	3.2	23
36	Fractionalized wave packets from an artificial Tomonagaâ€“Luttinger liquid. Nature Nanotechnology, 2014, 9, 177-181.	31.5	107

#	Article	IF	Citations
37	Plasmon transport in graphene investigated by time-resolved electrical measurements. Nature Communications, 2013, 4, 1363.	12.8	46
38	Distributed-element circuit model of edge magnetoplasmon transport. Physical Review B, 2013, 88, .	3.2	37
39	Transient Current in the Spin Blockade Region of a Double Quantum Dot. Japanese Journal of Applied Physics, 2013, 52, 110204.	1.5	1
40	Correlation of $1/f$ Noise between Semiconductor Point Contacts with a Common Lead. Japanese Journal of Applied Physics, 2012, 51, 02BJ08.	1.5	1
41	Frequency conversion of radio-frequency edge magnetoplasmons using a quantum point contact. Applied Physics Letters, 2012, 100, 233501.	3.3	4
42	Distributed electrochemical capacitance evidenced in high-frequency admittance measurements on a quantum Hall device. Physical Review B, 2012, 85, .	3.2	34
43	Magnetic-Field Dependence of Tunnel Couplings in Carbon Nanotube Quantum Dots. Physical Review Letters, 2012, 108, 176802.	7.8	30
44	Correlation of 1/fNoise between Semiconductor Point Contacts with a Common Lead. Japanese Journal of Applied Physics, 2012, 51, 02BJ08.	1.5	0
45	Edge magnetoplasmon transport in gated and ungated quantum Hall systems. Physical Review B, 2011, 84, .	3.2	65
46	Field and Density Dependence of Edge Magnetoplasmon Transport in a Quantum Hall System. Journal of Physics: Conference Series, 2011, 334, 012032.	0.4	0
47	Time Resolved Potential Measurement At Quantum Point Contacts Under Irradiation Of Surface Acoustic Burst Wave. , 2011, , .		3
48	Gate-dependent spinâ€“orbit coupling in multielectron carbon nanotubes. Nature Physics, 2011, 7, 348-353.	16.7	122
49	Interferometric detection of edge magnetoplasmons in AlGaAs/GaAs heterostructures. Physica Status Solidi C: Current Topics in Solid State Physics, 2011, 8, 381-383.	0.8	4
50	Multiple two-qubit operations for a coupled semiconductor charge qubit. Physica E: Low-Dimensional Systems and Nanostructures, 2011, 43, 730-734.	2.7	20
51	Admittance Measurement for a Quantum Point Contact in a Multiterminal Quantum Hall Device. Japanese Journal of Applied Physics, 2011, 50, 04DJ04.	1.5	3
52	Gate-Dependent Orbital Magnetic Moments in Carbon Nanotubes. Physical Review Letters, 2011, 107, 186802.	7.8	20
53	Impact of Valley Polarization on the Resistivity in Two Dimensions. Physical Review Letters, 2011, 106, 196403.	7.8	8
54	Admittance Measurement for a Quantum Point Contact in a Multiterminal Quantum Hall Device. Japanese Journal of Applied Physics, 2011, 50, 04DJ04.	1.5	1

#	Article	IF	Citations
55	Bidirectional single-electron counting and the fluctuation theorem. Physical Review B, 2010, 81, .	3.2	89
56	Wide-band capacitance measurement on a semiconductor double quantum dot for studying tunneling dynamics. Applied Physics Letters, 2010, 96, 032104.	3.3	11
57	Kondo Effect in a Semiconductor Quantum Dot with a Spin-Accumulated Lead. Physical Review Letters, 2010, 104, 036804.	7.8	36
58	Intrinsic Gap and Exciton Condensation in theÎ½T=1Bilayer System. Physical Review Letters, 2010, 104, 056802.	7.8	17
59	Separately contacted monocrystalline silicon double-layer structure with an amorphous silicon dioxide barrier made by wafer bonding. Semiconductor Science and Technology, 2010, 25, 125001.	2.0	0
60	Voltage-controlled group velocity of edge magnetoplasmon in the quantum Hall regime. Physical Review B, 2010, 81, .	3.2	58
61	Fano-Kondo Interplay in a Side-Coupled Double Quantum Dot. Physical Review Letters, 2009, 103, 266806.	7.8	91
62	Correlated Coherent Oscillations in Coupled Semiconductor Charge Qubits. Physical Review Letters, 2009, 103, 056802.	7.8	125
63	Spin splitting of upper electron subbands in a SiO2/Si(100)/SiO2 quantum well with in-plane magnetic field. Applied Physics Letters, 2009, 94, 142101.	3.3	1
64	Electrons and holes in a 40 nm thick silicon slab at cryogenic temperatures. Applied Physics Letters, 2009, 94, 142104.	3.3	9
65	NEGATIVE MAGNETORESISTANCE OF A SILICON 2DEG UNDER IN-PLANE MAGNETIC FIELD DUE TO SPIN-SPLITTING OF UPPER SUBBANDS. International Journal of Modern Physics B, 2009, 23, 2938-2942.	2.0	0
66	Time-Dependent Local Potential Induced by Scanning Gate Microscopy. Japanese Journal of Applied Physics, 2009, 48, 04C148.	1.5	2
67	Correlation Measurement of Time-Dependent Potentials in a Semiconductor Quantum Point Contact. Japanese Journal of Applied Physics, 2009, 48, 04C149.	1.5	4
68	GaAs microcavity excitonâ€polaritons in a trap. Physica Status Solidi (B): Basic Research, 2008, 245, 1076-1080.	1.5	26
69	Bound states induced by a single donor in a semiconductor quantum well: A scanning tunneling spectroscopy study. Physica E: Low-Dimensional Systems and Nanostructures, 2008, 40, 1418-1420.	2.7	0
70	Spatial imaging of valence band electronic structures in a GaSb/InAs quantum well. Applied Surface Science, 2008, 254, 7889-7892.	6.1	1
71	Observation of Bogoliubov excitations in exciton-polariton condensates. Nature Physics, 2008, 4, 700-705.	16.7	245
72	Pauli-spin-blockade transport through a silicon double quantum dot. Physical Review B, 2008, 77, .	3.2	115

#	Article	IF	Citations
73	A Triple Quantum Dot in a Single-Wall Carbon Nanotube. Nano Letters, 2008, 8, 1055-1060.	9.1	58
74	Coherence Time of Nuclear Spins in GaAs Quantum Well Probed by Submicron-Scale All-Electrical Nuclear Magnetic Resonance Device. Japanese Journal of Applied Physics, 2008, 47, 3115-3117.	1.5	1
75	Voltage-pulse-induced electromigration. Nanotechnology, 2008, 19, 145709.	2.6	4
76	Spin-Conserved Single-Electron Transport between Zeeman Sublevels in a Few-Electron Quantum Dot. Japanese Journal of Applied Physics, 2008, 47, 3107-3110.	1.5	0
77	Direct Measurement of the Binding Energy and Bohr Radius of a Single Hydrogenic Defect in a Semiconductor Quantum Well. Physical Review Letters, 2008, 100, 056806.	7.8	16
78	Many-body excitations in the tunneling current spectra of a few-electron quantum dot. Physical Review B, 2008, 77, .	3.2	4
79	A gate-defined silicon quantum dot molecule. Applied Physics Letters, 2008, 92, 222104.	3.3	33
80	Electric Field Induced Nuclear Spin Resonance Mediated by Oscillating Electron Spin Domains in GaAs-Based Semiconductors. Physical Review Letters, 2008, 101, 137602.	7.8	11
81	Spin-Dependent Phase Diagram of theÎ½T=1Bilayer Electron System. Physical Review Letters, 2008, 100, 106803.	7.8	36
82	Mechanism of Electron Accumulation Layer Formation at the MBE-grown InAs(111)A Surface. Hyomen Kagaku, 2008, 29, 747-757.	0.0	13
83	Imaging the percolation of localized states in a multisubband two-dimensional electronic system subject to a disorder potential. Physical Review B, 2007, 76, .	3.2	7
84	Zeeman splitting in single-electron transport through a few-electron quantum dot. Physical Review B, 2007, 76, .	3.2	4
85	Controlled resonant tunneling in a coupled double-quantum-dot system. Applied Physics Letters, 2007, 90, 103116.	3.3	31
86	Spatial Imaging of Two-Dimensional Electronic States in Semiconductor Quantum Wells. Physical Review Letters, 2007, 98, 136802.	7.8	42
87	Decoherence of nuclear spins due to dipole-dipole interactions probed by resistively detected nuclear magnetic resonance. Applied Physics Letters, 2007, 91, .	3.3	24
88	Coherent zero-state and Ï€-state in an excitonâ€“polariton condensate array. Nature, 2007, 450, 529-532.	27.8	366
89	Time-dependent single-electron transport through quantum dots. Reports on Progress in Physics, 2006, 69, 759-796.	20.1	94
90	Single-electron charge qubit in a double quantum dot. , 2006, , 279-287.		2

#	Article	IF	Citations
91	Pauli blockade transport in the cotunneling regime through a double quantum dot. Physica Status Solidi C: Current Topics in Solid State Physics, 2006, 3, 3766-3769.	0.8	0
92	Real-Time Observation of Charge States and Energy Relaxation in a Double Quantum Dot. Japanese Journal of Applied Physics, 2006, 45, 3629-3632.	1.5	1
93	Bidirectional Counting of Single Electrons. Science, 2006, 312, 1634-1636.	12.6	323
94	Surface-Acoustic-Wave-Induced Transport in a Double Quantum Dot. Physical Review Letters, 2006, 96, 136807.	7.8	54
95	Counting statistics of single electron transport through a double quantum dot. , 2006, , .		0
96	Pauli spin blockade in cotunneling transport through a double quantum dot. Physical Review B, 2005, 72, .	3.2	36
97	Electrical Pump-and-Probe Study of Spin Singlet-Triplet Relaxation in a Quantum Dot. Physical Review Letters, 2005, 95, 056803.	7.8	39
98	Controlled decoherence of a charge qubit in a double quantum dot. Journal of Vacuum Science & Technology an Official Journal of the American Vacuum Society B, Microelectronics Processing and Phenomena, 2004, 22, 2035.	1.6	28
99	Electron counting of single-electron tunneling current. Applied Physics Letters, 2004, 84, 2343-2345.	3.3	114
100	Background charge fluctuation in a GaAs quantum dot device. Applied Physics Letters, 2004, 85, 768-770.	3.3	84
101	Rotation and phase-shift operations for a charge qubit in a double quantum dot. Physica E: Low-Dimensional Systems and Nanostructures, 2004, 21, 1046-1052.	2.7	65
102	High-frequency manipulation of few-electron double quantum dotsâ€"toward spin qubits. Physica E: Low-Dimensional Systems and Nanostructures, 2004, 22, 518-521.	2.7	28
103	Coherent Charge Oscillation in a Semiconductor Double Quantum Dot. IEEE Nanotechnology Magazine, 2004, 3, 300-303.	2.0	5
104	Investigation of spin state in a quantum dot by using strongly asymmetric tunnel barriers. Physica Status Solidi (B): Basic Research, 2003, 238, 262-265.	1.5	6
105	Coherent Manipulation of Electronic States in a Double Quantum Dot. Physical Review Letters, 2003, 91, 226804.	7.8	679
106	Electromagnetic Aharonov-Bohm effect in a two-dimensional electron gas ring. Physical Review B, 2003, 67, .	3.2	68
107	Electrical Pump and Probe Measurements of a Quantum Dot in the Coulomb Blockade Regime. Japanese Journal of Applied Physics, 2003, 42, 4804-4808.	1.5	0
108	Electrical pulse measurement, inelastic relaxation, and non-equilibrium transport in a quantum dot. Journal of Physics Condensed Matter, 2003, 15, R1395-R1428.	1.8	47

#	Article	IF	Citations
109	Nonequilibrium Transport through a Vertical Quantum Dot in the Absence of Spin-Flip Energy Relaxation. Physical Review Letters, 2002, 88, 236802.	7.8	57
110	Impedance analysis of a radio-frequency single-electron transistor. Applied Physics Letters, 2002, 81, 3257-3259.	3.3	25
111	Out-of-Equilibrium Kondo Effect in a Mesoscopic Device. Physical Review Letters, 2002, 89, 156801.	7.8	94
112	Electron transport through double quantum dots. Reviews of Modern Physics, 2002, 75, 1-22.	45.6	1,534
113	Spin-dependent energy relaxation inside a quantum dot. Physica B: Condensed Matter, 2002, 314, 224-229.	2.7	6
114	Allowed and forbidden transitions in artificial hydrogen and helium atoms. Nature, 2002, 419, 278-281.	27.8	342
115	Energy relaxation process in a quantum dot studied by DC current and pulse-excited current measurements. Physica B: Condensed Matter, 2001, 298, 573-579.	2.7	16
116	Novel Kondo anomaly in quantum dots. Materials Science and Engineering B: Solid-State Materials for Advanced Technology, 2001, 84, 10-16.	3.5	3
117	A Double Quantum Dot as an Artificial Two-Level System. Japanese Journal of Applied Physics, 2001, 40, 2100-2104.	1.5	26
118	Transient current spectroscopy of a quantum dot in the Coulomb blockade regime. Physical Review B, 2001, 63, .	3.2	99
119	Inelastic tunneling in a double quantum dot coupled to a bosonic environment. Physica E: Low-Dimensional Systems and Nanostructures, 2000, 7, 413-419.	2.7	18
120	Transmission Type RF Single Electron Transistor Operation of a Semiconductor Quantum Dot. Japanese Journal of Applied Physics, 2000, 39, 2338-2340.	1.5	7
121	Charge noise analysis of an AlGaAs/GaAs quantum dot using transmission-type radio-frequency single-electron transistor technique. Applied Physics Letters, 2000, 77, 543-545.	3.3	75
122	The Kondo Effect in the Unitary Limit. Science, 2000, 289, 2105-2108.	12.6	707
123	Microwave spectroscopy of a double quantum dot in the low- and high-power regime. Physica B: Condensed Matter, 1999, 272, 31-35.	2.7	17
124	Elastic and inelastic single electron tunneling in coupled two dot system. Microelectronic Engineering, 1999, 47, 101-105.	2.4	13
125	Microwave spectroscopy of a quantum-dot molecule. Nature, 1998, 395, 873-876.	27.8	522
126	Spontaneous Emission Spectrum in Double Quantum Dot Devices. , 1998, 282, 932-935.		361

#	Article	IF	Citations
127	Multiple Photon Assisted Tunneling between Two Coupled Quantum Dots. Japanese Journal of Applied Physics, 1997, 36, 4000-4003.	1.5	21
128	Photon assisted tunnelling in single and coupled quantum dot systems. Superlattices and Microstructures, 1997, 21, 247-254.	3.1	57
129	Tunnelling and transfer between 1D and 2D electrons in adjusted quantum wells with thin barrier. Physica B: Condensed Matter, 1996, 227, 31-33.	2.7	1
130	Resonant tunneling properties of single electron transistors with a novel doubleâ€gate geometry. Applied Physics Letters, 1996, 68, 526-528.	3.3	20
131	Transport Properties of Modulation-Doped Structures Grown by Molecular Beam Epitaxy after Focused Ion Beam Implantation. Japanese Journal of Applied Physics, 1994, 33, 771-774.	1.5	6
132	Nanostructure fabrication and the science using focused ion beams. Journal of Vacuum Science & Technology an Official Journal of the American Vacuum Society B, Microelectronics Processing and Phenomena, 1994, 12, 3755.	1.6	4
133	AlGaAs/InGaAs/GaAs single electron transistors fabricated by Ga focused ion beam implantation. Applied Physics Letters, 1994, 64, 2250-2252.	3.3	17
134	Subâ€¼m wide channels with surface potential compensated by focused Si ion beam implantation. Applied Physics Letters, 1993, 63, 51-53.	3.3	10
135	Direct Evidence for the Negative-U Property of the DX Center as Studied by Hydrostatic Pressure Experiments on GaAs Simultaneously Doped with Ge and Si. Japanese Journal of Applied Physics, 1990, 29, L388-L390.	1.5	39
136	The Local-Environment-DependentDXCenters: Evidence for the Single Energy Level with a Specified Configuration. Japanese Journal of Applied Physics, 1989, 28, L891-L894.	1.5	93
137	DX centers in IIIâ€“V compound and alloy semiconductors as studied by hydrostatic pressure experiments. Journal of Crystal Growth, 1989, 98, 243-248.	1.5	25
138	Metastable Behavior of the DX Center in Si-Doped GaAs. Japanese Journal of Applied Physics, 1988, 27, L2373-L2375.	1.5	14
139	Observation of the Persistent Photoconductivity Due to the DX Center in GaAs under Hydrostatic Pressure. Japanese Journal of Applied Physics, 1985, 24, L893-L894.	1.5	78
140	Bidirectional Current Drag Induced by Two-Electron Cotunneling in Coupled Double Quantum Dots. Applied Physics Express, 0, 2, 081101.	2.4	21