Satoshi Watanabe

List of Publications by Year in descending order

189 papers	4,026 citations	136950 32 h-index	144013 57 g-index
192 all docs	192 docs citations	192 times ranked	3829 citing authors

#	Article	IF	Citations
1	First-principles study on energetics ofc-BN(001) reconstructed surfaces. Physical Review B, 1996, 54, 5586-5603.	3.2	460
2	Universal Features of Quantized Thermal Conductance of Carbon Nanotubes. Physical Review Letters, 2004, 92, 075502.	7.8	186
3	Interaction of Ga Adsorbates with Dangling Bonds on the Hydrogen Terminated Si(100) Surface. Japanese Journal of Applied Physics, 1996, 35, L1085-L1088.	1.5	130
4	Design principle for increasing charge mobility of Ï€-conjugated polymers using regularly localized molecular orbitals. Nature Communications, 2013, 4, 1691.	12.8	115
5	Theoretical calculations of the scanning-tunneling-microscopy images of the Si(111)â^š3 Ã— â^š3 -Ag surface. Physical Review B, 1991, 44, 8330-8333.	3.2	109
6	Study of Li atom diffusion in amorphous Li3PO4 with neural network potential. Journal of Chemical Physics, 2017, 147, 214106.	3.0	108
7	Jahn-Teller Distortion in Dangling-Bond Linear Chains Fabricated on a Hydrogen-Terminated Si(100)-2Ã—1Surface. Physical Review Letters, 1999, 82, 4034-4037.	7.8	98
8	Performance Upper Limit of subâ€10 nm Monolayer MoS₂ Transistors. Advanced Electronic Materials, 2016, 2, 1600191.	5.1	97
9	First-principles study on electronic structure of the (001) surface ofSrTiO3. Physical Review B, 1995, 51, 11049-11054.	3.2	92
10	Electron Transport through Single Molecules Comprising Aromatic Stacks Enclosed in Selfâ€Assembled Cages. Angewandte Chemie - International Edition, 2011, 50, 5708-5711.	13.8	92
11	Electron Conduction through Surface States of the Si(111)-(7Ã—7) Surface. Physical Review Letters, 1998, 81, 890-893.	7.8	76
12	Self-Consistent Density Functional Calculation of Field Emission Currents from Metals. Physical Review Letters, 2000, 85, 1750-1753.	7.8	74
13	Highly Conductive [3Ã—n] Goldâ€Ion Clusters Enclosed within Selfâ€Assembled Cages. Angewandte Chemie - International Edition, 2013, 52, 6202-6205.	13.8	69
14	Single-Molecule Conductance of Ï€-Conjugated Rotaxane: New Method for Measuring Stipulated Electric Conductance of Ï€-Conjugated Molecular Wire Using STM Break Junction. Small, 2012, 8, 726-730.	10.0	67
15	Anisotropic electronic structure of theSi(111)â^'(4Ã—1)Insurface. Physical Review B, 2001, 63, .	3.2	61
16	First-principles calculations of multiplet structures of transition metal deep impurities in IIâ€“VI and IIIâ€“V semiconductors. Materials Science and Engineering B: Solid-State Materials for Advanced Technology, 1989, 3, 313-324.	3.5	57
17	Theoretical study of atomic and electronic structures of atomic wires on an H-terminated Si(100)2Ã—1 surface. Physical Review B, 1996, 54, R17308-R17311.	3.2	57
18	Nonequilibrium Quantum Transport Properties of a Silver Atomic Switch. Nano Letters, 2007, 7, 2688-2692.	9.1	55

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19	First-principles study on energetics of cBN(001) reconstructed surfaces. Surface Science, 1995, 341, L1037-L1041.	1.9	52
20	Electronic Transport in FullereneC20Bridge Assisted by Molecular Vibrations. Physical Review Letters, 2005, 95, 065501.	7.8	51
21	First-principles simulations on bulk Ta2O5 and Cu/Ta2O5/Pt heterojunction: Electronic structures and transport properties. Journal of Applied Physics, 2009, 106, .	2.5	51
22	Conductive Path Formation in the Ta₂O₅ Atomic Switch: First-Principles Analyses. ACS Nano, 2010, 4, 6477-6482.	14.6	50
23	Excess-silver-induced bridge formation in a silver sulfide atomic switch. Applied Physics Letters, 2008, 93, .	3.3	46
24	Visualization of Thermally Fluctuating Surface Structure in Noncontact Atomic-Force Microscopy and Tip Effects on Fluctuation: Theoretical Study of Si(111)-(â^š3Ã—â^š3)-Ag Surface. Physical Review Letters, 2002, 88, 046106.	7.8	45
25	Oxygen vacancy effects on an amorphous-TaO_x-based resistance switch: a first principles study. Nanoscale, 2014, 6, 10169-10178.	5.6	45
26	Scanning Tunneling Spectroscopy of Dangling-Bond Wires Fabricated on the Si(100)-2Ã—1-H Surface. Japanese Journal of Applied Physics, 1997, 36, L361-L364.	1.5	41
27	Germanene and stanene on two-dimensional substrates: Dirac cone and Z2 invariant. Physical Review B, 2017, 96, .	3.2	39
28	Visualizing Type-II Weyl Points in Tungsten Ditelluride by Quasiparticle Interference. ACS Nano, 2017, 11, 11459-11465.	14.6	37
29	Structural and Cohesive Properties of aC60Monolayer. Physical Review Letters, 2001, 87, 048301.	7.8	36
30	Theoretical Study of Ga Adsorbates around Dangling-Bond Wires on an H-Terminated Si Surface: Possibility of Atomic-Scale Ferromagnets. Japanese Journal of Applied Physics, 1997, 36, L929-L932.	1.5	35
31	Total Energy Distribution of Field-Emitted Electrons from Al(100) Surface with Single-Atom Terminated Protrusion. Physical Review Letters, 2001, 87, 177601.	7.8	34
32	Universality and Diversity in a Phonon-Transmission Histogram of Isotope-Disordered Carbon Nanotubes. Physical Review Letters, 2011, 106, 215503.	7.8	34
33	Controlled Modification of Superconductivity in Epitaxial Atomic Layerâ€“Organic Molecule Heterostructures. Nano Letters, 2017, 17, 2287-2293.	9.1	34
34	Theoretical study on the structural phase transition of Si(111) 3Ã—3 -Ag surface. Surface Science, 2001, 493, 206-213.	1.9	32
35	Ferromagnetism in a Hubbard model for an atomic quantum wire: A realization of flat-band magnetism from even-membered rings. Physical Review B, 1998, 57, R6854-R6857.	3.2	30
36	Conduction paths in Cu/amorphous-Ta2O5/Pt atomic switch: First-principles studies. Journal of Applied Physics, 2014, 115, .	2.5	30

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37	Emergence of Negative Capacitance in Multidomain Ferroelectricâ€“Paraelectric Nanocapacitors at Finite Bias. Advanced Materials, 2016, 28, 335-340.	21.0	30
38	Multiplet Structures of Transition Metal Deep Impurities in ZnS. Journal of the Physical Society of Japan, 1987, 56, 1078-1091.	1.6	29
39	Electronic structure of an atomic wire on a hydrogen-terminated Si(111) surface: First-principles study. Physical Review B, 1995, 52, 10768-10771.	3.2	29
40	Cu Diffusion in Amorphous Ta₂O₅ Studied with a Simplified Neural Network Potential. Journal of the Physical Society of Japan, 2017, 86, 104004.	1.6	29
41	Simulating lattice thermal conductivity in semiconducting materials using high-dimensional neural network potential. Applied Physics Express, 2019, 12, 095001.	2.4	29
42	Theoretical analysis of space charge layer formation at metal/ionic conductor interfaces. Solid State Ionics, 2011, 183, 20-25.	2.7	28
43	Ab Initio Calculation of the Electric Properties of Al Atomic Chains under Finite Bias Voltages. Japanese Journal of Applied Physics, 2002, 41, L989-L991.	1.5	26
44	Migration of Ag in low-temperature Ag2S from first principles. Journal of Chemical Physics, 2008, 128, 014704.	3.0	26
45	The electronic structure of quasi-free-standing germanene on monolayer MX (M = Ga, In; X = S, Se, Te). Physical Chemistry Chemical Physics, 2015, 17, 19039-19044.	2.8	26
46	First-principles study of metalâ€“insulator control by ion adsorption on Ti2C MXene dioxide monolayers. Applied Physics Express, 2016, 9, 015001.	2.4	26
47	Theoretical calculations of STM images of the Si(111)î—Ag and -Sb surfaces. Surface Science, 1993, 287-288, 1036-1040.	1.9	25
48	Scanning tunnelling spectroscopy of superconductivity on surfaces of LiTi2O4(111) thin films. Nature Communications, 2017, 8, 15975.	12.8	24
49	Atomic energy mapping of neural network potential. Physical Review Materials, 2019, 3, .	2.4	24
50	Spatially extended underscreened Kondo state from collective molecular spin. Physical Review B, 2015, 92, .	3.2	22
51	Theoretical prediction of phonon-mediated superconductivity with T c â‰ˆ 25 K in Li-intercalated hexagonal boron nitride bilayer. Applied Physics Express, 2017, 10, 093101.	2.4	22
52	Partitioned Real-Space Density Functional Calculations of Bielectrode Systems under Bias Voltage and Electric Field. Physical Review Letters, 2001, 86, 540-543.	7.8	20
53	Universal transition between inductive and capacitive admittance of metallic single-walled carbon nanotubes. Physical Review B, 2010, 82, .	3.2	19
54	Atomic-scale characterization of the interfacial phonon in graphene/SiC. Physical Review B, 2017, 96, .	3.2	19

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55	Atom structures on the Si(100) surface. Surface Science, 1997, 386, 161-165.	1.9	18
56	Simulation of interaction force between Si tip and Si(111) 3Ã—3 -Ag surface of IET structure in noncontact AFM. Surface Science, 2001, 493, 188-193.	1.9	18
57	STM Images Apparently Corresponding to a Stable Structure: Considerable Fluctuation of a Phase Boundary of the Si(111)-(3Ã—3)-Ag Surface. Physical Review Letters, 2001, 87, 156102.	7.8	18
58	High-dimensional neural network atomic potentials for examining energy materials: some recent simulations. JPhys Energy, 2021, 3, 012003.	5.3	18
59	Two chirality classes of ac quantum transport in metallic carbon nanotubes. Physical Review B, 2010, 81, .	3.2	16
60	Structural characterization of amorphous Ta2O5 and SiO2â€“Ta2O5 used as solid electrolyte for nonvolatile switches. Applied Physics Letters, 2010, 97, .	3.3	16
61	Defect enriched hierarchical iron promoted Bi2MoO6 hollow spheres as efficient electrocatalyst for water oxidation. Chemical Engineering Journal, 2021, 426, 131884.	12.7	16
62	Structure and stability of the out-of-phase boundary in a surface superlattice, Si(111)âˆš3 Ã— âˆš3R30Â°â€”Ag. Surface Science, 1995, 344, 143-148.	1.9	15
63	First-principles study of atomic wires on a H-terminated Si(100)-(2 Ã— 1) surface. Surface Science, 1997, 386, 340-342.	1.9	15
64	Direct Observation of One-Dimensional Ga-Atom Migration on a Si(100)-(2Ã—1)-H Surface: A Local Probe of Adsorption Energy Variation. Physical Review Letters, 1999, 83, 4116-4119.	7.8	15
65	Interface Structure in Cu/Ta₂O₅/Pt Resistance Switch: A First-Principles Study. ACS Applied Materials & Interfaces, 2015, 7, 519-525.	8.0	15
66	Theoretical calculations of the scanning tunneling microscopy images of the Si(111) âˆš3 Ã— âˆš3-Ag surface: effects of the tip shape. Applied Surface Science, 1992, 60-61, 437-442.	6.1	14
67	Adsorbed Si on theSi(111)â”(7Ã—7)surface studied by scanning tunneling microscopic and molecular-orbital approaches:â€,Stationary and diffusing Si adsorbates. Physical Review B, 2002, 66, .	3.2	14
68	DFT calculations on atom-specific electronic properties of G/SiC(0001). Surface Science, 2016, 647, 39-44.	1.9	14
69	A Comparative Study on the Diffusion Behaviors of Metal and Oxygen Ions in Metal-Oxide-Based Resistance Switches via ab Initio Molecular Dynamics Simulations. ACS Applied Electronic Materials, 2019, 1, 585-594.	4.3	14
70	Theory of Scanning Tunneling Microscopy/Spectroscopy for Adsorbed Surfaces and Layer Crystal Surfaces. Japanese Journal of Applied Physics, 1993, 32, 1352-1359.	1.5	13
71	First Principles Study of the Effect of Tip Shape on Scanning Tunneling Microscopy Images. Japanese Journal of Applied Physics, 1993, 32, 2911-2913.	1.5	13
72	Ab InitioCalculation of Capacitance of Semi-Infinite Jellium Electrodes with a Nanoscale Gap. Japanese Journal of Applied Physics, 2003, 42, L766-L768.	1.5	13

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73	Single-electron pumping from a quantum dot into an electrode. Applied Physics Letters, 2010, 96, .	3.3	13
74	Electronic and magnetic effects of a stacking fault in cobalt nanoscale islands on the Ag(111) surface. Physical Review B, 2015, 92, .	3.2	13
75	Surface phonon excitation on clean metal surfaces in scanning tunneling microscopy. Physical Review B, 2016, 93, .	3.2	13
76	First-principles calculation of As atomic wires on a H-terminated Si(100) surface. Physical Review B, 1999, 60, 1456-1459.	3.2	12
77	Atomic and electronic structure of the Si(111)-â˜š3xâ˜š3-Ag surface reexamined using first-principles calculations. Science and Technology of Advanced Materials, 2000, 1, 167-172.	6.1	12
78	Electrostatic and dynamical effects of an aqueous solution on the zero-bias conductance of a single molecule: A first-principles study. Physical Review B, 2009, 80, .	3.2	12
79	Molecular orbital concept on spin-flip transport in molecular junctions. Theoretical Chemistry Accounts, 2011, 130, 775-788.	1.4	12
80	Nonvolatile three-terminal operation based on oxygen vacancy drift in a Pt/Ta₂O_{5â˜x}/Pt, Pt structure. Applied Physics Letters, 2013, 102, 233508.	3.3	12
81	Nickelâ€Catalyzed Acyl Group Transfer of oâ€Alkynylphenol Esters Accompanied by Câ˜O Bond Fission for Synthesis of Benzo[b]furan. ChemCatChem, 2021, 13, 2086-2092.	3.7	12
82	Phase stability of Au-Li binary systems studied using neural network potential. Physical Review B, 2021, 103, .	3.2	12
83	Structural stability and electronic states of gold nanowires. Surface Science, 2001, 482-485, 1266-1271.	1.9	11
84	Theoretical analysis of field emission from metallic nanostructures on Si(100) surfaces. Journal of Physics Condensed Matter, 2004, 16, 4685-4696.	1.8	11
85	Comparative Study of Charged and Neutral Oxygen Vacancies in Cubic Zirconia from First Principles. Applied Physics Express, 0, 2, 061402.	2.4	11
86	Orbital-separation approach for consideration of finite electric bias within density-functional total-energy formalism. Physical Review B, 2011, 84, .	3.2	11
87	Property Change of Si(111) Surface by Scanning Tunneling Microscope Manipulation. Japanese Journal of Applied Physics, 1996, 35, L1367-L1370.	1.5	10
88	Difference between staying and diffusing Si adsorbates on the Si(111)7Ã—7 surface. Surface Science, 2003, 532-535, 737-745.	1.9	10
89	Theoretical Analysis of AC Transport in Carbon Nanotubes with a Single Atomic Vacancy: Sharp Contrast between DC and AC Responses in Vacancy Position Dependence. Applied Physics Express, 2011, 4, 075103.	2.4	10
90	Persistent superconductivity in atomic layer-magnetic molecule van der Waals heterostructures: a comparative study. Molecular Systems Design and Engineering, 2019, 4, 511-518.	3.4	10

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91	Moisture effect on the diffusion of Cu ions in Cu/Ta₂O₅/Pt and Cu/SiO₂/Pt resistance switches: a first-principles study. Science and Technology of Advanced Materials, 2019, 20, 580-588.	6.1	10
92	Tuning the Schottky Barrier Height at the Interfaces of Metals and Mixed Conductors. ACS Applied Materials & Interfaces, 2021, 13, 15746-15754.	8.0	10
93	Theoretical analysis of field emission from atomically sharp aluminum tips. Surface Science, 2002, 516, 265-271.	1.9	9
94	Computational Study on Stable Structures, Formation Energies, and Conductance of Single Benzene-dithiolate between Two Au Electrodes. Japanese Journal of Applied Physics, 2005, 44, 7729-7731.	1.5	9
95	Parallel-sheets model analysis of space charge layer formation at metal/ionic conductor interfaces. Solid State Ionics, 2012, 226, 62-70.	2.7	9
96	Surface structure of novel semimetal WTe₂. Applied Physics Express, 2017, 10, 045702.	2.4	9
97	Drastic Reduction of the Solid Electrolyteâ€“Electrode Interface Resistance via Annealing in Battery Form. ACS Applied Materials & Interfaces, 2022, 14, 2703-2710.	8.0	9
98	Reduced Density of Missing-Dimer Vacancies on Tungsten-Contaminated Si(100)-(2Ã—n) Surface by Hydrogen Termination. Japanese Journal of Applied Physics, 2000, 39, 4518-4520.	1.5	8
99	First-Principles Study of Apparent Barrier Height. Japanese Journal of Applied Physics, 2002, 41, L1172-L1174.	1.5	8
100	Density functional analysis of field emission from metals. Materials Science & Engineering A: Structural Materials: Properties, Microstructure and Processing, 2002, 327, 1-6.	5.6	8
101	Vortex dynamics and critical current in superconductors with unidirectional twin boundaries. Physical Review B, 2008, 77, .	3.2	8
102	Inelastic electron tunneling spectroscopy by STM of phonons at solid surfaces and interfaces. Progress in Surface Science, 2018, 93, 131-145.	8.3	8
103	Prediction of viscosity behavior in oxide glass materials using cation fingerprints with artificial neural networks. Science and Technology of Advanced Materials, 2020, 21, 492-504.	6.1	8
104	Mechanically Tunable Spontaneous Vertical Charge Redistribution in Few-Layer WTe₂. Journal of Physical Chemistry C, 2020, 124, 2008-2012.	3.1	8
105	First-principles study of Li-ion distribution at <mml:math xmlns:mml="http://www.w3.org/1998/Math/MathML"><mml:mrow><mml:mi>Î³</mml:mi><mml:mtext>â€²</mml:mtext><mml:msub><mml:mi>/metal interfaces. Physical Review Materials, 2020, 4, .	2.4	8
106	Theoretical prediction of superconductivity in monolayer h-BN doped with alkaline-earth metals (Ca,) Tj ETQq0 0 0 rgBT /Overlock 10 Tf	1.8	8
107	Tight-Binding Calculation of Current Distribution in a Porphin Connected to Two Semi-Infinite Wires. Japanese Journal of Applied Physics, 2003, 42, L892-L894.	1.5	6
108	First Principles Study of Oxygen Vacancies Near Nickel/Zirconia Interface. E-Journal of Surface Science and Nanotechnology, 2010, 8, 93-100.	0.4	6

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109	Quantum transient currents in molecular systems weakly coupled with electrodes. Journal of Applied Physics, 2011, 109, 123705.	2.5	6
110	Elastic Transient Energy Transport and Energy Balance in a Single-Level Quantum Dot System. Japanese Journal of Applied Physics, 2012, 51, 094303.	1.5	6
111	Anomalous metallic-like transport of Coâ€“Pd ferromagnetic nanoparticles cross-linked with Ï€-conjugated molecules having a rotational degree of freedom. Physical Chemistry Chemical Physics, 2014, 16, 288-296.	2.8	6
112	Effects of density and composition on the properties of amorphous alumina: A high-dimensional neural network potential study. Journal of Chemical Physics, 2020, 153, 164119.	3.0	6
113	Analysis of single Si atoms deposited on the Si(111)7Ã—7 surface. Thin Solid Films, 2000, 369, 73-78.	1.8	5
114	First-Principles Calculation of Vibrational Properties of a Nanostructure in Electric Fields. Japanese Journal of Applied Physics, 2003, 42, 4639-4641.	1.5	5
115	Low-temperature thermal conductance of carbon nanotubes. Thin Solid Films, 2004, 464-465, 350-353.	1.8	5
116	ab initioCalculation of Capacitance of Nanostructures. Japanese Journal of Applied Physics, 2005, 44, 5348-5353.	1.5	5
117	Quantum Electron Transport through Ultrathin Si Films: Effects of Interface Passivation on Fermi-Level Pinning. Physical Review Letters, 2008, 101, 166801.	7.8	5
118	Theoretical study of four-probe resistance in nanoscale measurements: Monatomic carbon chains and (5,5)-carbon nanotubes. Physical Review B, 2009, 79, .	3.2	5
119	Simulation of Noncontact Atomic Force Microscopy of Hydrogen- and Methyl-Terminated Si(001) Surfaces. Japanese Journal of Applied Physics, 2009, 48, 025506.	1.5	5
120	ac response of quantum point contacts with a split-gate configuration. Physical Review B, 2011, 84, .	3.2	5
121	Model Hamiltonian approach to the magnetic anisotropy of iron phthalocyanine at solid surfaces. Physical Review B, 2016, 94, .	3.2	5
122	Low-Energy-Consumption Three-Valued Memory Device Inspired by Solid-State Batteries. ACS Applied Materials & Interfaces, 2019, 11, 45150-45154.	8.0	5
123	Novel features of surface electronic structure revealed by the theoretical simulation of scanning tunneling microscopy/spectroscopy. Surface Science, 1993, 287-288, 1004-1012.	1.9	4
124	Control of Surface Current on a Si(111) Surface by Using Nanofabrication. Japanese Journal of Applied Physics, 1999, 38, 3866-3870.	1.5	4
125	Migration-Enhanced Epitaxy of Cubic BN: AnAb InitioStudy. Japanese Journal of Applied Physics, 2004, 43, 4092-4100.	1.5	4
126	Epitaxial Growth of Cubic BN on Diamond: AnAb InitioStudy. Japanese Journal of Applied Physics, 2004, 43, 7944-7946.	1.5	4

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127	The effect of phonon anharmonicity on the lattice thermal conductivity of rare-earth pyrochlores: A first-principles study. Ceramics International, 2020, 46, 9947-9951.	4.8	4
128	Straintronic effect for superconductivity enhancement in Li-intercalated bilayer MoS₂. Nanoscale Advances, 2020, 2, 3150-3155.	4.6	4
129	The dependence of lattice thermal conductivity on phonon modes in pyrochloreâ€related Ln 2 Sn 2 O 7 (LnÂ=ÂLa, Gd). Journal of the American Ceramic Society, 2021, 104, 27-33.	3.8	4
130	Study of Initial Stage of Molecular Adsorption on Si(100) by Scanning Tunneling Microscopy. Japanese Journal of Applied Physics, 1996, 35, L1360-L1363.	1.5	3
131	Direct Imaging of Thermodynamic Process in Atom Migration by Using Scanning Tunneling Microscopy. Japanese Journal of Applied Physics, 2002, 41, 3085-3091.	1.5	3
132	Ab initio calculation of stable structures of a Na atomic chain under bias voltages. Science and Technology of Advanced Materials, 2003, 4, 585-591.	6.1	3
133	Publisherâ€™s Note: Electronic Transport in FullereneC20Bridge Assisted by Molecular Vibrations [Phys. Rev. Lett.95, 065501 (2005)]. Physical Review Letters, 2005, 95, .	7.8	3
134	Effects of energetic stability in transport measurements of single benzene-dithiolate by the STM break junction technique. Chemical Physics Letters, 2006, 428, 367-370.	2.6	3
135	Inelastic transient electrical currents and phonon heating in a single-level quantum dot system. Journal of Applied Physics, 2013, 113, 123701.	2.5	3
136	Review of our density functional study on the structures of conductive filaments and ion migration behaviors in tantalum oxide based resistive switching devices. , 2014, , .		3
137	Materials Search of Perovskite Cathode in SOFC by Statistical Analysis. ECS Transactions, 2015, 68, 549-556.	0.5	3
138	Simulations of constant-height atomic force microscope images of a H-terminated Si(100)2*1 surface with a CH3 impurity. E-Journal of Surface Science and Nanotechnology, 2006, 4, 197-200.	0.4	3
139	Theoretical Analysis of Apparent Barrier Height on an Al Surface: Difference by Measurement Methods. Japanese Journal of Applied Physics, 2005, 44, 5459-5461.	1.5	2
140	Submatrix inversion approach to the ab initio Green's function method for electrical transport. E-Journal of Surface Science and Nanotechnology, 2006, 4, 484-489.	0.4	2
141	Dependence of Electric Properties of Al Atomic Chains on Structure of Chainâ€“Electrode Junction. Japanese Journal of Applied Physics, 2006, 45, 8991-8993.	1.5	2
142	Chemically Softened Boundary of Metal/Vacuum/Solid-Electrolyte from First Principles. Journal of Physical Chemistry C, 2009, 113, 17780-17786.	3.1	2
143	A Numerical Approach to Transient Currents in a Quantum Dot Connected to a Single Electrode. ECS Transactions, 2010, 33, 85-91.	0.5	2
144	Two Types of On-State Observed in the Operation of a Redox-Based Three-Terminal Device. Key Engineering Materials, 0, 596, 111-115.	0.4	2

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145	Wavelet analysis of quantum transient transport in a quantum dot. Applied Physics Letters, 2013, 102, 233107.	3.3	2
146	Anomalous satellite inductive peaks in alternating current response of defective carbon nanotubes. Journal of Applied Physics, 2014, 115, .	2.5	2
147	First-principles calculation of charged capacitors under open-circuit conditions using the orbital-separation approach. Physical Review B, 2015, 92, .	3.2	2
148	Electric field response in bilayer graphene: Ab initio investigation. Applied Physics Express, 2016, 9, 115104.	2.4	2
149	AC Power Consumption of Single-Walled Carbon Nanotube Interconnects: Non-Equilibrium Green's Function Simulation. Japanese Journal of Applied Physics, 2012, 51, 045104.	1.5	2
150	Diameter Dependence of Sub-Terahertz AC Response of Metallic Carbon Nanotubes with a Single Atomic Vacancy. Japanese Journal of Applied Physics, 2012, 51, 04DN01.	1.5	2
151	Elastic Transient Energy Transport and Energy Balance in a Single-Level Quantum Dot System. Japanese Journal of Applied Physics, 2012, 51, 094303.	1.5	2
152	Quantum theory of scanning tunneling microscopy and spectroscopy and its application to surface electronic processes. Journal of Molecular Catalysis, 1993, 82, 253-263.	1.2	1
153	Theoretical study on atomic and electronic structures of Ag-adsorbed Si NC-AFM tips. Applied Surface Science, 2002, 188, 331-334.	6.1	1
154	Theoretical Analysis of Electron Standing Waves and Electric Field Intensity in the Vacuum Gap of Scanning Tunneling Microscopy. Japanese Journal of Applied Physics, 2003, 42, 4642-4645.	1.5	1
155	Repulsion-Induced Order Formation in Graphite-Diamondlike Transition of Boron Nitride: A Molecular Dynamics Study. Journal of the Physical Society of Japan, 2003, 72, 1611-1614.	1.6	1
156	Tight-Binding Analysis of Surface Electronic Conduction Measured with Micro-Multipoint Scanning Tunneling Microscopy Probes. Japanese Journal of Applied Physics, 2006, 45, 2136-2139.	1.5	1
157	Non-contact Atomic Force Microscopy Simulations of Hydrogen-terminated Si(100) Surfaces with a Methyl. Journal of Physics: Conference Series, 2007, 61, 785-789.	0.4	1
158	Adsorption of Benzene on Si(001) from Noncontact Atomic Force Microscopy Simulation. Japanese Journal of Applied Physics, 2008, 47, 6092.	1.5	1
159	Numerical Analysis of Superconducting Current Injected from Quasi One Dimensional Leads into Mesoscopic Samples. Applied Physics Express, 2009, 2, 063005.	2.4	1
160	Switching behavior of superconducting current injected from quasi-one-dimensional leads into mesoscopic samples. Physica C: Superconductivity and Its Applications, 2010, 470, 949-952.	1.2	1
161	Effects of Molecular Dynamics on Electrical Conductance of Single Molecular Junction in Aqueous Solution: First Principles Calculations. E-Journal of Surface Science and Nanotechnology, 2010, 8, 38-43.	0.4	1
162	AC Power Consumption of Single-Walled Carbon Nanotube Interconnects: Non-Equilibrium Green's Function Simulation. Japanese Journal of Applied Physics, 2012, 51, 045104.	1.5	1

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163	Vortex dynamics and matching effect in superconductors with planar pinning arrays. Physica C: Superconductivity and Its Applications, 2013, 485, 125-131.	1.2	1
164	Alternating current response of carbon nanotubes with randomly distributed impurities. Applied Physics Letters, 2014, 105, 173106.	3.3	1
165	Spin polarized currents through a quantum dot: Non-equilibrium Greenâ€™s function simulations under Hartree approximation. Japanese Journal of Applied Physics, 2014, 53, 115203.	1.5	1
166	Quantum inverse scattering method and generalizations of symplectic Schur functions and Whittaker functions. Journal of Geometry and Physics, 2020, 149, 103571.	1.4	1
167	Multistage Order-Disorder Surface Transition of Si(111)(sqrt{3} imes sqrt{3})-Ag Surface with Defects. Journal of the Physical Society of Japan, 2003, 72, 13-16.	1.6	1
168	Non-equilibrium thermal transport simulation of conical carbon nanofibers. Transactions of the Materials Research Society of Japan, 2013, 38, 183-186.	0.2	1
169	Theory of Non-Contact Atomic Force Microscopy. Nanoscience and Technology, 2002, , 257-278.	1.5	1
170	Universal Quantization Phenomena of Thermal Conductance in Carbon Nanotubes. Hyomen Kagaku, 2005, 26, 398-403.	0.0	1
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