Satoshi Watanabe

List of Publications by Year in descending order

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156536 162838 4,026 189 32 57 citations h-index g-index papers 192 192 192 4369 docs citations times ranked citing authors all docs

| # | Article | lF | CITATIONS |
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| 1 | Drastic Reduction of the Solid Electrolyte–Electrode Interface Resistance via Annealing in Battery Form. ACS Applied Materials & Samp; Interfaces, 2022, 14, 2703-2710. | 4.0 | 9 |
| 2 | 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. | 1.9 | 4 |
| 3 | Nickelâ€Catalyzed Acyl Group Transfer of <i>oâ€</i> Alkynylphenol Esters Accompanied by Câ^'O Bond Fission for Synthesis of Benzo[<i>b</i>)furan. ChemCatChem, 2021, 13, 2086-2092. | 1.8 | 12 |
| 4 | Applications of Interatomic Potentials Using Neural Network in Materials Science. The Brain & Neural Networks, 2021, 28, 3-30. | 0.1 | 0 |
| 5 | Tuning the Schottky Barrier Height at the Interfaces of Metals and Mixed Conductors. ACS Applied Materials & Samp; Interfaces, 2021, 13, 15746-15754. | 4.0 | 10 |
| 6 | Phase stability of Au-Li binary systems studied using neural network potential. Physical Review B, 2021, 103, . | 1.1 | 12 |
| 7 | Alloying Process at the Interface of Au-Li Studied Using Neural Network Potential. Vacuum and Surface Science, 2021, 64, 369-374. | 0.0 | O |
| 8 | Defect enriched hierarchical iron promoted Bi2MoO6 hollow spheres as efficient electrocatalyst for water oxidation. Chemical Engineering Journal, 2021, 426, 131884. | 6.6 | 16 |
| 9 | High-dimensional neural network atomic potentials for examining energy materials: some recent simulations. JPhys Energy, 2021, 3, 012003. | 2.3 | 18 |
| 10 | Ionic Rectification across Ionic and Mixed Conductor Interfaces. Nano Letters, 2021, 21, 10086-10091. | 4.5 | 1 |
| 11 | The effect of phonon anharmonicity on the lattice thermal conductivity of rare-earth pyrochlores: A first-principles study. Ceramics International, 2020, 46, 9947-9951. | 2.3 | 4 |
| 12 | Quantum inverse scattering method and generalizations of symplectic Schur functions and Whittaker functions. Journal of Geometry and Physics, 2020, 149, 103571. | 0.7 | 1 |
| 13 | 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. | 1.2 | 6 |
| 14 | Straintronic effect for superconductivity enhancement in Li-intercalated bilayer MoS ₂ . Nanoscale Advances, 2020, 2, 3150-3155. | 2.2 | 4 |
| 15 | 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. | 2.8 | 8 |
| 16 | Mechanically Tunable Spontaneous Vertical Charge Redistribution in Few-Layer WTe < sub > 2 < /sub > . Journal of Physical Chemistry C, 2020, 124, 2008-2012. | 1.5 | 8 |
| 17 | First-principles study of Li-ion distribution at <mml:math xmlns:mml="http://www.w3.org/1998/Math/MathML"><mml:mrow><mml:mi>γ</mml:mi><mml:mtext>â^'<td></td><td>:m:sl:msub><</td></mml:mtext></mml:mrow></mml:math> | | :m : sl:msub>< |

Theoretical prediction of superconductivity in monolayer h-BN doped with alkaline-earth metals (Ca,) Tj ETQq0 0 0 rgBT /Overlock 10 Tf

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| 19 | Low-Energy-Consumption Three-Valued Memory Device Inspired by Solid-State Batteries. ACS Applied Materials & Solid-Stat | 4.0 | 5 |
| 20 | Simulating lattice thermal conductivity in semiconducting materials using high-dimensional neural network potential. Applied Physics Express, 2019, 12, 095001. | 1.1 | 29 |
| 21 | Persistent superconductivity in atomic layer-magnetic molecule van der Waals heterostructures: a comparative study. Molecular Systems Design and Engineering, 2019, 4, 511-518. | 1.7 | 10 |
| 22 | Moisture effect on the diffusion of Cu ions in Cu/Ta ₂ O ₅ /Pt and Cu/SiO ₂ /Pt resistance switches: a first-principles study. Science and Technology of Advanced Materials, 2019, 20, 580-588. | 2.8 | 10 |
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| 24 | Atomic energy mapping of neural network potential. Physical Review Materials, 2019, 3, . | 0.9 | 24 |
| 25 | Inelastic electron tunneling spectroscopy by STM of phonons at solid surfaces and interfaces. Progress in Surface Science, 2018, 93, 131-145. | 3.8 | 8 |
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| 33 | Theoretical prediction of phonon-mediated superconductivity with T c â‰^ 25 K in Li-intercalated hexagonal boron nitride bilayer. Applied Physics Express, 2017, 10, 093101. | 1.1 | 22 |
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| 36 | Electric field response in bilayer graphene: Ab initio investigation. Applied Physics Express, 2016, 9, 115104. | 1.1 | 2 |

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| 37 | Performance Upper Limit of subâ€10 nm Monolayer MoS ₂ Transistors. Advanced Electronic Materials, 2016, 2, 1600191. | 2.6 | 97 |
| 38 | Surface phonon excitation on clean metal surfaces in scanning tunneling microscopy. Physical Review B, 2016, 93, . | 1.1 | 13 |
| 39 | Model Hamiltonian approach to the magnetic anisotropy of iron phthalocyanine at solid surfaces. Physical Review B, 2016, 94, . | 1.1 | 5 |
| 40 | Emergence of Negative Capacitance in Multidomain Ferroelectric–Paraelectric Nanocapacitors at Finite Bias. Advanced Materials, 2016, 28, 335-340. | 11.1 | 30 |
| 41 | DFT calculations on atom-specific electronic properties of G/SiC(0001). Surface Science, 2016, 647, 39-44. | 0.8 | 14 |
| 42 | First-principles study of metal–insulator control by ion adsorption on Ti2C MXene dioxide monolayers. Applied Physics Express, 2016, 9, 015001. | 1.1 | 26 |
| 43 | Electronic and magnetic effects of a stacking fault in cobalt nanoscale islands on the ${\rm Ag}(111)$ surface. Physical Review B, 2015, 92, . | 1.1 | 13 |
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| 46 | Interface Structure in Cu/Ta ₂ O ₅ /Pt Resistance Switch: A First-Principles Study. ACS Applied Materials & Study. ACS | 4.0 | 15 |
| 47 | 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. | 1.3 | 26 |
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| 51 | Conduction paths in Cu/amorphous-Ta2O5/Pt atomic switch: First-principles studies. Journal of Applied Physics, 2014, 115 , . | 1.1 | 30 |
| 52 | Spin polarized currents through a quantum dot: Non-equilibrium Green's function simulations under Hartree approximation. Japanese Journal of Applied Physics, 2014, 53, 115203. | 0.8 | 1 |
| 53 | Oxygen vacancy effects on an amorphous-TaO _{<i>x</i>} -based resistance switch: a first principles study. Nanoscale, 2014, 6, 10169-10178. | 2.8 | 45 |
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| 62 | Non-equilibrium thermal transport simulation of conical carbon nanofibers. Transactions of the Materials Research Society of Japan, 2013, 38, 183-186. | 0.2 | 1 |
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| 64 | Diameter Dependence of Sub-Terahertz AC Response of Metallic Carbon Nanotubes with a Single Atomic Vacancy. Japanese Journal of Applied Physics, 2012, 51, 04DN01. | 0.8 | 0 |
| 65 | Elastic Transient Energy Transport and Energy Balance in a Single-Level Quantum Dot System. Japanese Journal of Applied Physics, 2012, 51, 094303. | 0.8 | 6 |
| 66 | Parallel-sheets model analysis of space charge layer formation at metal/ionic conductor interfaces. Solid State Ionics, 2012, 226, 62-70. | 1.3 | 9 |
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| 85 | Conductive Path Formation in the Ta ₂ O ₅ Atomic Switch: First-Principles Analyses. ACS Nano, 2010, 4, 6477-6482. | 7.3 | 50 |
| 86 | Structural characterization of amorphous Ta2O5 and SiO2–Ta2O5 used as solid electrolyte for nonvolatile switches. Applied Physics Letters, 2010, 97, . | 1.5 | 16 |
| 87 | Single-electron pumping from a quantum dot into an electrode. Applied Physics Letters, 2010, 96, . | 1.5 | 13 |
| 88 | Effects of resonant scattering by probe contacts on nanoscale four-probe resistance measurements. New Journal of Physics, 2010, 12, 083017. | 1.2 | 0 |
| 89 | Theoretical Study of Quantum Interference Effects on Nanoscale Four-probe Measurements. Hyomen Kagaku, 2010, 31, 374-379. | 0.0 | 0 |
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| 99 | Excess-silver-induced bridge formation in a silver sulfide atomic switch. Applied Physics Letters, 2008, 93, . | 1.5 | 46 |
| 100 | Vortex dynamics and critical current in superconductors with unidirectional twin boundaries. Physical Review B, 2008, 77, . | 1.1 | 8 |
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| 102 | Quantum Electron Transport through Ultrathin Si Films: Effects of Interface Passivation on Fermi-Level Pinning. Physical Review Letters, 2008, 101, 166801. | 2.9 | 5 |
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| 108 | Simulation for Measurements of Electric Properties of Surface Nanostructures. , 2007, , 119-124. | | 0 |

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| 110 | Effects of energetic stability in transport measurements of single benzene-dithiolate by the STM break junction technique. Chemical Physics Letters, 2006, 428, 367-370. | 1.2 | 3 |
| 111 | Dependence of Electric Properties of Al Atomic Chains on Structure of Chain–Electrode Junction. Japanese Journal of Applied Physics, 2006, 45, 8991-8993. | 0.8 | 2 |
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| 115 | ab initioCalculation of Capacitance of Nanostructures. Japanese Journal of Applied Physics, 2005, 44, 5348-5353. | 0.8 | 5 |
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| 118 | Publisher's Note: Electronic Transport in FullereneC20Bridge Assisted by Molecular Vibrations [Phys. Rev. Lett.95, 065501 (2005)]. Physical Review Letters, 2005, 95, . | 2.9 | 3 |
| 119 | Electronic Transport in FullereneC20Bridge Assisted by Molecular Vibrations. Physical Review Letters, 2005, 95, 065501. | 2.9 | 51 |
| 120 | Universal Quantization Phenomena of Thermal Conductance in Carbon Nanotubes. Hyomen Kagaku, 2005, 26, 398-403. | 0.0 | 1 |
| 121 | Migration-Enhanced Epitaxy of Cubic BN: AnAb InitioStudy. Japanese Journal of Applied Physics, 2004, 43, 4092-4100. | 0.8 | 4 |
| 122 | Epitaxial Growth of Cubic BN on Diamond: AnAb InitioStudy. Japanese Journal of Applied Physics, 2004, 43, 7944-7946. | 0.8 | 4 |
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| 124 | Low-temperature thermal conductance of carbon nanotubes. Thin Solid Films, 2004, 464-465, 350-353. | 0.8 | 5 |
| 125 | Universal Features of Quantized Thermal Conductance of Carbon Nanotubes. Physical Review Letters, 2004, 92, 075502. | 2.9 | 186 |
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