Shigeru Tsukamoto

List of Publications by Year
in descending order

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49 papers	746 citations	840776 11 h-index	642732 23 g-index
51 all docs	51 docs citations	51 times ranked	826 citing authors

#	Article	IF	Citations
1	Uniaxially Aligned 1D Sandwich-Molecular Wires: Electronic Structure and Magnetism. Journal of Physical Chemistry C, 2022, 126, 3140-3150.	3.1	4
2	Single-crystal graphene on Ir(110). Physical Review B, 2022, 105, .	3.2	7
3	Tailoring magnetic anisotropy by graphene-induced selective skyhook effect on 4f-metals. Nanoscale, 2022, 14, 7682-7691.	5.6	4
4	Selecting the Reaction Path in On-Surface Synthesis through the Electron Chemical Potential in Graphene. Journal of the American Chemical Society, 2022, 144, 11003-11009.	13.7	2
5	Calculation of the Green's function in the scattering region for first-principles electron-transport simulations. Physical Review Research, 2021, 3, .	3.6	4
6	Local dimerization and dedimerization of C60 molecules under a tip of scanning tunneling microscope: A first-principles study. Carbon, 2020, 159, 638-647.	10.3	4
7	Spin-polarized electron transmission through B-doped graphene nanoribbons with Fe functionalization: a first-principles study. New Journal of Physics, 2020, 22, 063022.	2.9	2
8	Efficient calculation of self-energy matrices for electron-transport simulations. Physical Review B, 2019, 100, .	3.2	1
9	Analytical PAW Projector Functions for Reduced Bandwidth Requirements. , 2019, , .		0
10	Improvement of accuracy in the wave-function-matching method for transport calculations. Physical Review B, 2018, 97, .	3.2	8
11	Complex band structure calculations based on the overbridging boundary matching method without using Green's functions. Physical Review B, 2018, 98, .	3.2	4
12	Contour integral method for obtaining the self-energy matrices of electrodes in electron transport calculations. Physical Review B, 2018, 97, .	3.2	1
13	Boron-Doped Graphene Nanoribbons: Electronic Structure and Raman Fingerprint. ACS Nano, 2018, 12, 7571-7582.	14.6	38
14	Self-energy matrices for electron transport calculations within the real-space finite-difference formalism. Physical Review E, 2017, 95, 033309.	2.1	5
15	Imaging Individual Molecular-Like Orbitals of a Non-Planar Naphthalene Diimide on Pt(111): A Combined STM and DFT Study. Journal of Physical Chemistry C, 2017, 121, 26916-26924.	3.1	6
16	First-Principles Calculation Method and Its Applications for Two-Dimensional Materials. Quantum Matter, 2017, 6, 4-17.	0.2	1
17	Real-space method for first-principles electron transport calculations: Self-energy terms of electrodes for large systems. Physical Review B, 2016, 93, .	3.2	10
18	Electronic Structures of Quaterthiophene and Septithiophene on Cu(111): Spatial Distribution of Adsorption-Induced States Studied by STM and DFT Calculation. Journal of Physical Chemistry C, 2016, 120, 6681-6688.	3.1	8

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19	First-principles calculation method for electron transport based on the grid Lippmann-Schwinger equation. Physical Review E, 2015, 92, 033301.	2.1	4
20	Ballistic Electron Transport Through Nanostructure Junctions from a Real-Space Finite-Difference Approach. Quantum Matter, 2015, 4, 403-415.	0.2	1
21	Real-space finite-difference calculation method of generalized Bloch wave functions and complex band structures with reduced computational cost. Physical Review E, 2014, 90, 013306.	2.1	10
22	Tuning electron transport through molecular junctions by chemical modification of the molecular core: First-principles study. Physical Review B, 2013, 88, .	3.2	4
23	Systematic chemical functionalization of hybrid moleculeâ€“surface interfaces. Physica Status Solidi (B): Basic Research, 2013, 250, 2267-2276.	1.5	1
24	Octithiophene on Cu(111) and Au(111): Formation and Electronic Structure of Molecular Chains and Films. Journal of Nanoscience and Nanotechnology, 2012, 12, 4007-4011.	0.9	2
25	Tuning the electron transport of molecular junctions by chemically functionalizing anchoring groups: First-principles study. Physical Review B, 2012, 85, .	3.2	8
26	First-Principles Calculation Methods for Obtaining Scattering Waves to Investigate Transport Properties of Nanostructures. Quantum Matter, 2012, 1, 4-19.	0.2	22
27	Chemical Wiring and Soldering toward All-Molecule Electronic Circuitry. Journal of the American Chemical Society, 2011, 133, 8227-8233.	13.7	93
28	Real-space calculations for electron transport properties of nanostructures. Journal of Physics Condensed Matter, 2011, 23, 394203.	1.8	7
29	Initial stage of adsorption of octithiophene molecules on Cu(111). Surface Science, 2011, 605, 1021-1026.	1.9	10
30	Stabilized scattering wave-function calculations using the Lippmann-Schwinger equation for long conductor systems. Physical Review B, 2011, 84, .	3.2	5
31	First-principles study on atomic configuration of electron-beam irradiated C60film. Physical Review B, 2011, 84, .	3.2	1
32	Molecular Scale Control of Unbound and Bound C₆₀ for Topochemical Ultradense Data Storage in an Ultrathin C₆₀ Film. Advanced Materials, 2010, 22, 1622-1625.	21.0	61
33	Real-space electronic structure calculations with full-potential all-electron precision for transition metals. Physical Review B, 2010, 82, .	3.2	44
34	Connecting single conductive polymers to a single functional molecule. , 2010, , .		0
35	Ballistic Electron Transport Through Atomic Nanowires. Journal of Computational and Theoretical Nanoscience, 2009, 6, 2521-2544.	0.4	2
36	First-Principles Study on Electric and Electronic Properties of P-Introduced Si Monatomic Chains. Journal of Computational and Theoretical Nanoscience, 2009, 6, 2635-2639.	0.4	0

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37	Atomic force microscopy and theoretical investigation of the lifted-up conformation of polydiacetylene on a graphite substrate. Soft Matter, 2008, 4, 1041.	2.7	36
38	Stable molecular orientations of a C60 dimer in a photoinduced dimer row. Carbon, 2007, 45, 1261-1266.	10.3	10
39	First-principles study on electronic responses of a C60 molecule to external electric fields. Chemical Physics, 2007, 342, 135-140.	1.9	5
40	One-Dimensional Surface Reconstruction as an Atomic-Scale Template for the Growth of Periodically Striped Ag Films. Physical Review Letters, 2006, 96, 136104.	7.8	22
41	Mechanisms of electron transport through bellows-shaped fullerene tubes. Journal of Chemical Physics, 2005, 122, 074702.	3.0	11
42	First-principles electronic structure calculations for peanut-shaped C120molecules. Science and Technology of Advanced Materials, 2004, 5, 617-620.	6.1	5
43	First-Principles Study on Electron Conduction Property of Monatomic Sodium Nanowire. Materials Transactions, 2004, 45, 1433-1436.	1.2	7
44	Magnetic orderings in Al nanowires suspended between electrodes. Applied Physics Letters, 2003, 82, 4570-4572.	3.3	6
45	Electron-transport properties of Na nanowires under applied bias voltages. Physical Review B, 2002, 66, .	3.2	65
46	Sudden Suppression of Electron-Transmission Peaks in Finite-Biased Nanowires. Japanese Journal of Applied Physics, 2002, 41, 7491-7495.	1.5	4
47	First-Principles Calculations of Conductance for Na Quantum Wire. Materials Transactions, 2001, 42, 2253-2256.	1.2	6
48	Images of Scanning Tunneling Microscopy on the Si(001)-p(2× 2) Reconstructed Surface. Materials Transactions, 2001, 42, 2247-2252.	1.2	26
49	Geometry and Conduction of an Infinite Single-Row Gold Wire. Materials Transactions, 2001, 42, 2257-2260.	1.2	14