Satoshi Moriyama

List of Publications by Year
in descending order

#	Article	IF	Citations
1	Electron transport tuning of graphene by helium ion irradiation. Nano Express, 2022, 3, 024002.	2.4	5
2	Direct Growth of Germanene at Interfaces between Van der Waals Materials and Ag(111). Advanced Functional Materials, 2021, 31, 2007038.	14.9	27
3	ON current enhancement and variability suppression in tunnel FETs by the isoelectronic trap impurity of beryllium. Japanese Journal of Applied Physics, 2021, 60, SBBA01.	1.5	2
4	Room-temperature negative magnetoresistance of helium-ion-irradiated defective graphene in the strong Anderson localization regime. Carbon, 2021, 175, 87-92.	10.3	6
5	Analog of a Quantum Heat Engine Using a Single-Spin Qubit. Physical Review Letters, 2020, 125, 166802.	7.8	57
6	Multifunctional Pt(II)-Based Metallo-Supramolecular Polymer with Carboxylic Acid Groups: Electrochemical, Mechanochemical, Humidity, and pH Response. ACS Applied Polymer Materials, 2020, 2, 4149-4159.	4.4	17
7	Helical Fe(II)-Based Metallo-Supramolecular Polymers: Effect of Crown Ether Groups Located outside the Helix on Hydrous Proton Channel Formation. ACS Applied Polymer Materials, 2020, 2, 4521-4530.	4.4	4
8	Charge-carrier mobility in hydrogen-terminated diamond field-effect transistors. Journal of Applied Physics, 2020, 127, .	2.5	33
9	Single-Carrier Transport in Graphene/hBN Superlattices. Nano Letters, 2020, 20, 2551-2557.	9.1	10
10	Fabrication of folded bilayer-bilayer graphene/hexagonal boron nitride superlattices. Applied Physics Express, 2020, 13, 035003.	2.4	2
11	Bubble-Free Transfer Technique for High-Quality Graphene/Hexagonal Boron Nitride van der Waals Heterostructures. ACS Applied Materials & Interfaces, 2020, 12, 8533-8538.	8.0	49
12	Discrete quantum levels and Zeeman splitting in ultra-thin gold-nanowire quantum dots. Journal of Applied Physics, 2019, 126, 044303.	2.5	1
13	High-temperature operation of a silicon qubit. Scientific Reports, 2019, 9, 469.	3.3	33
14	Quantum Interferometry with a <mml:math xmlns:mml="http://www.w3.org/1998/Math/MathML" display="inline"><mml:mi>g</mml:mi></mml:math> -Factor-Tunable Spin Qubit. Physical Review Letters, 2019, 122, 207703.	7.8	25
15	Topological valley currents in bilayer graphene/hexagonal boron nitride superlattices. Applied Physics Letters, 2019, 114, .	3.3	29
16	Fabryâ€"PÃ©rot resonances and a crossover to the quantum Hall regime in ballistic graphene quantum point contacts. Scientific Reports, 2019, 9, 3031.	3.3	11
17	Effect of gap width on electron transport through quantum point contact in hBN/graphene/hBN in the quantum Hall regime. Applied Physics Letters, 2019, 114, 023101.	3.3	6
18	Quantum oscillations in diamond field-effect transistors with a <mml:math xmlns:mml="http://www.w3.org/1998/Math/MathML"><mml:mi>h</mml:mi></mml:math> -BN gate dielectric. Physical Review Materials, 2019, 3, .	2.4	16

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19	High-mobility diamond field effect transistor with a monocrystalline h-BN gate dielectric. APL Materials, 2018, 6, .	5.1	59
20	Observation of the quantum valley Hall state in ballistic graphene superlattices. Science Advances, 2018, 4, eaaq0194.	10.3	78
21	One-Dimensional Anhydrous Proton Conducting Channel Formation at High Temperature in a Pt(II)-Based Metallo-Supramolecular Polymer and Imidazole System. ACS Applied Materials & Interfaces, 2017, 9, 13406-13414.	8.0	35
22	Solvent Effect on Electrochemical Properties of a Co(II)â€Based Metalloâ€Supramolecular Polymer Film. Macromolecular Symposia, 2016, 363, 12-19.	0.7	5
23	Imidazoliumâ€based poly(ionic liquid)s with poly(ethylene oxide) main chains: Effects of spacer and tail structures on ionic conductivity. Journal of Polymer Science Part A, 2016, 54, 2896-2906.	2.3	19
24	Thermal and quantum phase slips in niobium-nitride nanowires based on suspended carbon nanotubes. Applied Physics Letters, 2016, 108, .	3.3	14
25	Proton Conductive Nanosheets Formed by Alignment of Metallo-Supramolecular Polymers. ACS Applied Materials & Interfaces, 2016, 8, 13526-13531.	8.0	26
26	Geometrically isomeric Pt(<scp>ii</scp>)/Fe(<scp>ii</scp>)-based heterometallo-supramolecular polymers with organometallic ligands for electrochromism and the electrochemical switching of Raman scattering. Journal of Materials Chemistry C, 2016, 4, 9428-9437.	5.5	58
27	Quaternary Ammonium Cation Functionalized Poly(Ionic Liquid)s with Poly(Ethylene Oxide) Main Chains. Macromolecular Chemistry and Physics, 2016, 217, 2551-2557.	2.2	6
28	A Co(II)-based metallo-supramolecular polymer as a novel enzyme immobilization matrix for electrochemical glucose biosensing. European Polymer Journal, 2016, 83, 499-506.	5.4	12
29	Characterization of Effective Mobility and Its Degradation Mechanism in MoS2MOSFETs. IEEE Nanotechnology Magazine, 2016, 15, 651-656.	2.0	14
30	An insight into ion-conduction phenomenon of gold nanocluster ligand based metallo-supramolecular polymers. Journal of Materials Chemistry A, 2016, 4, 4398-4401.	10.3	14
31	Proton conduction in Mo(<scp>vi</scp>)-based metallo-supramolecular polymers. Chemical Communications, 2015, 51, 11012-11014.	4.1	15
32	Platinum(II)-Based Metallo-Supramolecular Polymer with Controlled Unidirectional Dipoles for Tunable Rectification. ACS Applied Materials & Interfaces, 2015, 7, 19034-19042.	8.0	24
33	Effect of a three-dimensional hyperbranched structure on the ionic conduction of metallo-supramolecular polymers. RSC Advances, 2015, 5, 49224-49230.	3.6	19
34	Black-to-Transmissive Electrochromism with Visible-to-Near-Infrared Switching of a Co(II)-Based Metallo-Supramolecular Polymer for Smart Window and Digital Signage Applications. ACS Applied Materials & Interfaces, 2015, 7, 18266-18272.	8.0	97
35	Fabrication of high-<i>k</i>/metal-gate MoS₂field-effect transistor by device isolation process utilizing Ar-plasma etching. Japanese Journal of Applied Physics, 2015, 54, 046502.	1.5	20
36	Synthesis and characterization of glycidyl-polymer-based poly(ionic liquid)s: highly designable polyelectrolytes with a poly(ethylene glycol) main chain. RSC Advances, 2015, 5, 87940-87947.	3.6	14

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37	Modulation of superconducting critical temperature in niobium film by using all-solid-state electric-double-layer transistor. Applied Physics Letters, 2015, 107, .	3.3	26
38	Selective Edge Modification in Graphene and Graphite by Chemical Oxidation. Journal of Nanoscience and Nanotechnology, 2014, 14, 2974-2978.	0.9	7
39	Field-induced confined states in graphene. Applied Physics Letters, 2014, 104, 053108.	3.3	19
40	Real-time humidity-sensing properties of ionically conductive Ni(ii)-based metallo-supramolecular polymers. Journal of Materials Chemistry A, 2014, 2, 7754.	10.3	41
41	Three-Dimensional Fe(II)-based Metallo-Supramolecular Polymers with Electrochromic Properties of Quick Switching, Large Contrast, and High Coloration Efficiency. ACS Applied Materials & Interfaces, 2014, 6, 9118-9125.	8.0	116
42	Single electron transistors with ultra-thin Au nanowires as a single Coulomb island. Applied Physics Letters, 2013, 102, 203117.	3.3	7
43	Ionic conductivity of Ni(ii)-based metallo-supramolecular polymers: effects of ligand modification. Journal of Materials Chemistry A, 2013, 1, 9016.	10.3	30
44	Multi-colour electrochromic properties of Fe/Ru-based bimetallo-supramolecular polymers. Journal of Materials Chemistry C, 2013, 1, 3408.	5.5	113
45	Coulomb blockade behavior in nanostructured graphene with direct contacts. Materials Express, 2013, 3, 92-96.	0.5	1
46	Introducing Nonuniform Strain to Graphene Using Dielectric Nanopillars. Applied Physics Express, 2011, 4, 075102.	2.4	101
47	Fabrication of quantum-dot devices in graphene. Science and Technology of Advanced Materials, 2010, 11, 054601.	6.1	15
48	Density-of-State Oscillation of Quasiparticle Excitation in the Spin Density Wave Phase of<mml:math xmlns:mml="http://www.w3.org/1998/Math/MathML" display="inline"><mml:mo stretchy="false">(</mml:mo><mml:mi>TMTSF</mml:mi><mml:msub><mml:mo) Tj ETQq0 0 0 rgBT /Overlock 10 Tf 50 297 Td (stretchy= Physical Review Letters, 2010, 105, 267201.	7.8	3
49	Inelastic cotunneling mediated singlet-triplet transition in carbon nanotubes. Physical Review B, 2009, 80, .	3.2	3
50	Effect of Quantum Hall State of Substrate on Single-Electron Transport of Carbon Nanotube Quantum Dots. Japanese Journal of Applied Physics, 2009, 48, 015001.	1.5	0
51	Coupled Quantum Dots in a Graphene-Based Two-Dimensional Semimetal. Nano Letters, 2009, 9, 2891-2896.	9.1	59
52	Artificial atom and quantum terahertz response in carbon nanotube quantum dots. Journal of Physics Condensed Matter, 2008, 20, 454203.	1.8	2
53	Spin effects in single-electron transport through carbon nanotube quantum dots. Physical Review B, 2007, 76, .	3.2	5
54	Shell structures and electron-spin configurations in single-walled carbon nanotube quantum dots. Physica Status Solidi (B): Basic Research, 2007, 244, 2371-2377.	1.5	6

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55	Carbon nanotubes as building blocks of quantum dots. Physica E: Low-Dimensional Systems and Nanostructures, 2006, 35, 338-343.	2.7	6
56	One-Dimensional Shell Structures and Excitation Spectrum in Single-Wall Carbon Nanotube Quantum Dots. Japanese Journal of Applied Physics, 2006, 45, 3633-3637.	1.5	3
57	Quantum-dot nanodevices with carbon nanotubes. Journal of Vacuum Science and Technology A: Vacuum, Surfaces and Films, 2006, 24, 1349-1355.	2.1	31
58	Importance of electronâ€"electron interactions and Zeeman splitting in single-wall carbon nanotube quantum dots. Physica E: Low-Dimensional Systems and Nanostructures, 2005, 26, 473-476.	2.7	1
59	Excitation spectroscopy of two-electron shell structures in carbon nanotube quantum dots in magnetic fields. Applied Physics Letters, 2005, 87, 073103.	3.3	14
60	Four-Electron Shell Structures and an Interacting Two-Electron System in Carbon-Nanotube Quantum Dots. Physical Review Letters, 2005, 94, 186806.	7.8	110
61	Carbon nanotube quantum dots fabricated on a GaAsâˆ•AlGaAs two-dimensional electron gas substrate. Journal of Applied Physics, 2005, 98, 076106.	2.5	14
62	Selecting single quantum dots from a bundle of single-wall carbon nanotubes using the large current flow process. Science and Technology of Advanced Materials, 2004, 5, 613-615.	6.1	3
63	Carbon nanotubes as a building block of quantum dot devices. Physica E: Low-Dimensional Systems and Nanostructures, 2004, 24, 10-13.	2.7	1
64	Electrical transport in semiconducting carbon nanotubes. Physica E: Low-Dimensional Systems and Nanostructures, 2004, 24, 46-49.	2.7	26
65	Observation of discrete quantum levels in multi-wall carbon nanotube quantum dots. Physica E: Low-Dimensional Systems and Nanostructures, 2004, 24, 50-53.	2.7	2
66	Two-electron and four-electron periodicity in single-wall carbon nanotube quantum dots. Superlattices and Microstructures, 2003, 34, 377-382.	3.1	10
67	Effect of the large current flow on the low-temperature transport properties in a bundle of single-walled carbon nanotubes. Applied Physics Letters, 2003, 83, 3803-3805.	3.3	4
68	Single and coupled quantum dots in single-wall carbon nanotubes. Superlattices and Microstructures, 2002, 31, 141-149.	3.1	5