Satoshi Moriyama

List of Publications by Year
in descending order

68 papers	1,646 citations	279798 23 h-index	302126 39 g-index
68 all docs	68 docs citations	68 times ranked	1887 citing authors

#	Article	IF	Citations
1	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
2	Multi-colour electrochromic properties of Fe/Ru-based bimetallo-supramolecular polymers. Journal of Materials Chemistry C, 2013, 1, 3408.	5.5	113
3	Four-Electron Shell Structures and an Interacting Two-Electron System in Carbon-Nanotube Quantum Dots. Physical Review Letters, 2005, 94, 186806.	7.8	110
4	Introducing Nonuniform Strain to Graphene Using Dielectric Nanopillars. Applied Physics Express, 2011, 4, 075102.	2.4	101
5	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
6	Observation of the quantum valley Hall state in ballistic graphene superlattices. Science Advances, 2018, 4, eaaq0194.	10.3	78
7	Coupled Quantum Dots in a Graphene-Based Two-Dimensional Semimetal. Nano Letters, 2009, 9, 2891-2896.	9.1	59
8	High-mobility diamond field effect transistor with a monocrystalline h-BN gate dielectric. APL Materials, 2018, 6, .	5.1	59
9	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
10	Analog of a Quantum Heat Engine Using a Single-Spin Qubit. Physical Review Letters, 2020, 125, 166802.	7.8	57
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	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
13	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
14	High-temperature operation of a silicon qubit. Scientific Reports, 2019, 9, 469.	3.3	33
15	Charge-carrier mobility in hydrogen-terminated diamond field-effect transistors. Journal of Applied Physics, 2020, 127, .	2.5	33
16	Quantum-dot nanodevices with carbon nanotubes. Journal of Vacuum Science and Technology A: Vacuum, Surfaces and Films, 2006, 24, 1349-1355.	2.1	31
17	Ionic conductivity of Ni(ii)-based metallo-supramolecular polymers: effects of ligand modification. Journal of Materials Chemistry A, 2013, 1, 9016.	10.3	30
18	Topological valley currents in bilayer graphene/hexagonal boron nitride superlattices. Applied Physics Letters, 2019, 114, .	3.3	29

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19	Direct Growth of Germanene at Interfaces between Van der Waals Materials and Ag(111). Advanced Functional Materials, 2021, 31, 2007038.	14.9	27
20	Electrical transport in semiconducting carbon nanotubes. Physica E: Low-Dimensional Systems and Nanostructures, 2004, 24, 46-49.	2.7	26
21	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
22	Proton Conductive Nanosheets Formed by Alignment of Metallo-Supramolecular Polymers. ACS Applied Materials & Interfaces, 2016, 8, 13526-13531.	8.0	26
23	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
24	Platinum(II)-Based Metallo-Supramolecular Polymer with Controlled Unidirectional Dipoles for Tunable Rectification. ACS Applied Materials & Interfaces, 2015, 7, 19034-19042.	8.0	24
25	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
26	Field-induced confined states in graphene. Applied Physics Letters, 2014, 104, 053108.	3.3	19
27	Effect of a three-dimensional hyperbranched structure on the ionic conduction of metallo-supramolecular polymers. RSC Advances, 2015, 5, 49224-49230.	3.6	19
28	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
29	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
30	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
31	Fabrication of quantum-dot devices in graphene. Science and Technology of Advanced Materials, 2010, 11, 054601.	6.1	15
32	Proton conduction in Mo(<scp>vi</scp>)-based metallo-supramolecular polymers. Chemical Communications, 2015, 51, 11012-11014.	4.1	15
33	Excitation spectroscopy of two-electron shell structures in carbon nanotube quantum dots in magnetic fields. Applied Physics Letters, 2005, 87, 073103.	3.3	14
34	Carbon nanotube quantum dots fabricated on a GaAsâˆ•AlGaAs two-dimensional electron gas substrate. Journal of Applied Physics, 2005, 98, 076106.	2.5	14
35	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
36	Thermal and quantum phase slips in niobium-nitride nanowires based on suspended carbon nanotubes. Applied Physics Letters, 2016, 108, .	3.3	14

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37	Characterization of Effective Mobility and Its Degradation Mechanism in MoS2MOSFETs. IEEE Nanotechnology Magazine, 2016, 15, 651-656.	2.0	14
38	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
39	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
40	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
41	Two-electron and four-electron periodicity in single-wall carbon nanotube quantum dots. Superlattices and Microstructures, 2003, 34, 377-382.	3.1	10
42	Single-Carrier Transport in Graphene/hBN Superlattices. Nano Letters, 2020, 20, 2551-2557.	9.1	10
43	Single electron transistors with ultra-thin Au nanowires as a single Coulomb island. Applied Physics Letters, 2013, 102, 203117.	3.3	7
44	Selective Edge Modification in Graphene and Graphite by Chemical Oxidation. Journal of Nanoscience and Nanotechnology, 2014, 14, 2974-2978.	0.9	7
45	Carbon nanotubes as building blocks of quantum dots. Physica E: Low-Dimensional Systems and Nanostructures, 2006, 35, 338-343.	2.7	6
46	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
47	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
48	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
49	Room-temperature negative magnetoresistance of helium-ion-irradiated defective graphene in the strong Anderson localization regime. Carbon, 2021, 175, 87-92.	10.3	6
50	Single and coupled quantum dots in single-wall carbon nanotubes. Superlattices and Microstructures, 2002, 31, 141-149.	3.1	5
51	Spin effects in single-electron transport through carbon nanotube quantum dots. Physical Review B, 2007, 76, .	3.2	5
52	Solvent Effect on Electrochemical Properties of a Co(II)â€Based Metalloâ€Supramolecular Polymer Film. Macromolecular Symposia, 2016, 363, 12-19.	0.7	5
53	Electron transport tuning of graphene by helium ion irradiation. Nano Express, 2022, 3, 024002.	2.4	5
54	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

#	Article	IF	Citations
55	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
56	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
57	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
58	Inelastic cotunneling mediated singlet-triplet transition in carbon nanotubes. Physical Review B, 2009, 80, .	3.2	3
59	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 ETQq1 1 0.784314 rgBT /Overlock 10 Tf 50 577 Td (Physical Review Letters, 2010, 105, 267201.	7.8	3
60	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
61	Artificial atom and quantum terahertz response in carbon nanotube quantum dots. Journal of Physics Condensed Matter, 2008, 20, 454203.	1.8	2
62	Fabrication of folded bilayer-bilayer graphene/hexagonal boron nitride superlattices. Applied Physics Express, 2020, 13, 035003.	2.4	2
63	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
64	Carbon nanotubes as a building block of quantum dot devices. Physica E: Low-Dimensional Systems and Nanostructures, 2004, 24, 10-13.	2.7	1
65	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
66	Coulomb blockade behavior in nanostructured graphene with direct contacts. Materials Express, 2013, 3, 92-96.	0.5	1
67	Discrete quantum levels and Zeeman splitting in ultra-thin gold-nanowire quantum dots. Journal of Applied Physics, 2019, 126, 044303.	2.5	1
68	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