Yuta Sato

List of Publications by Year
in descending order

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75 papers	2,485 citations	257101 24 h-index	205818 48 g-index
77 all docs	77 docs citations	77 times ranked	3373 citing authors

#	Article	IF	Citations
1	Imaging active topological defects in carbon nanotubes. Nature Nanotechnology, 2007, 2, 358-360.	15.6	338
2	One-dimensional van der Waals heterostructures. Science, 2020, 367, 537-542.	6.0	238
3	On the so-called â€œsemi-ionicâ€•Câ€“F bond character in fluorineâ€“GIC. Carbon, 2004, 42, 3243-3249.	5.4	198
4	Visualizing and identifying single atoms using electron energy-loss spectroscopy with low accelerating voltage. Nature Chemistry, 2009, 1, 415-418.	6.6	152
5	Performance of low-voltage STEM/TEM with delta corrector and cold field emission gun. Journal of Electron Microscopy, 2010, 59, S7-S13.	0.9	98
6	Perovskite Solar Cells Using Carbon Nanotubes Both as Cathode and as Anode. Journal of Physical Chemistry C, 2017, 121, 25743-25749.	1.5	89
7	Which Do Endohedral Ti2C80Metallofullerenes Prefer Energetically:Â Ti2@C80or Ti2C2@C78? A Theoretical Study. Journal of Physical Chemistry B, 2005, 109, 20251-20255.	1.2	78
8	Chiral-Angle Distribution for Separated Single-Walled Carbon Nanotubes. Nano Letters, 2008, 8, 3151-3154.	4.5	69
9	Structures ofD5d-C80andIh-Er3N@C80Fullerenes and Their Rotation Inside Carbon Nanotubes Demonstrated by Aberration-Corrected Electron Microscopy. Nano Letters, 2007, 7, 3704-3708.	4.5	63
10	Doping of single-walled carbon nanotubes controlled via chemical transformation of encapsulated nickelocene. Nanoscale, 2015, 7, 1383-1391.	2.8	60
11	Polymeric acid-doped transparent carbon nanotube electrodes for organic solar cells with the longest doping durability. Journal of Materials Chemistry A, 2018, 6, 14553-14559.	5.2	60
12	Defect-Induced Atomic Migration in Carbon Nanopeapod:Â Tracking the Single-Atom Dynamic Behavior. Nano Letters, 2004, 4, 2451-2454.	4.5	57
13	Functionalized graphene sheets coordinating metal cations. Carbon, 2014, 75, 81-94.	5.4	57
14	Short-range structures of poly(dicarbon monofluoride) (C2F)n and poly(carbon monofluoride) (CF)n. Carbon, 2004, 42, 2897-2903.	5.4	55
15	Entrapping of Exohedral Metallofullerenes in Carbon Nanotubes:â€‰ (CsC60)n@SWNT Nano-Peapods. Journal of the American Chemical Society, 2005, 127, 17972-17973.	6.6	47
16	Aberration-corrected STEM/TEM imaging at 15 kV. Ultramicroscopy, 2014, 145, 50-55.	0.8	42
17	Reversible intercalation of HF in fluorineâ€“GICs. Carbon, 2003, 41, 351-357.	5.4	41
18	Direct imaging of intracage structure in titanium-carbide endohedral metallofullerene. Physical Review B, 2006, 73, .	1.1	35

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19	One-dimensional van der Waals heterostructures: Growth mechanism and handedness correlation revealed by nondestructive TEM. Proceedings of the National Academy of Sciences of the United States of America, 2021, 118, .	3.3	35
20	Unique Tubeâ€“Ring Interactions: Complexation of Singleâ€Walled Carbon Nanotubes with Cycloparaphenyleneacetylenes. Small, 2018, 14, e1800720.	5.2	34
21	Molecular interactions on single-walled carbon nanotubes revealed by high-resolution transmission microscopy. Nature Communications, 2015, 6, 7732.	5.8	33
22	Chirality-dependent growth of single-wall carbon nanotubes as revealed inside nano-test tubes. Nanoscale, 2017, 9, 7998-8006.	2.8	29
23	Mechanistic insights into the photocatalytic properties of metal nanocluster/graphene ensembles. Examining the role of visible light in the reduction of 4-nitrophenol. Nanoscale, 2017, 9, 9685-9692.	2.8	26
24	Synthesis and Atomic Characterization of a Ti₂O₃ Nanosheet. Journal of Physical Chemistry Letters, 2011, 2, 1820-1823.	2.1	25
25	Sulfur-Doped Graphene-Supported Nickel-Core Palladium-Shell Nanoparticles as Efficient Oxygen Reduction and Methanol Oxidation Electrocatalyst. ACS Applied Energy Materials, 2018, 1, 3869-3880.	2.5	25
26	Vanadium phosphideâ€“phosphorus composite as a high-capacity negative electrode for sodium secondary batteries using an ionic liquid electrolyte. Electrochemistry Communications, 2019, 102, 46-51.	2.3	25
27	CuP₂/C Composite Negative Electrodes for Sodium Secondary Batteries Operating at Roomâ€toâ€Intermediate Temperatures Utilizing Ionic Liquid Electrolyte. ChemElectroChem, 2018, 5, 1340-1344.	1.7	24
28	Nickel clusters embedded in carbon nanotubes as high performance magnets. Scientific Reports, 2015, 5, 15033.	1.6	23
29	Lithium fluoride/iron difluoride composite prepared by a fluorolytic solâ€“gel method: Its electrochemical behavior and chargeâ€“discharge mechanism as a cathode material for lithium secondary batteries. Journal of Power Sources, 2019, 412, 180-188.	4.0	23
30	Blue emission at atomically sharp 1D heterojunctions between graphene and h-BN. Nature Communications, 2020, 11, 5359.	5.8	23
31	Direct conversion mechanism of fluorineâ€“GIC into poly(carbon monofluoride), (CF). Carbon, 2003, 41, 1971-1977.	5.4	22
32	Chiral vector and metal catalyst-dependent growth kinetics of single-wall carbon nanotubes. Carbon, 2018, 133, 283-292.	5.4	21
33	Exfoliated graphene ligands stabilizing copper cations. Carbon, 2011, 49, 3375-3378.	5.4	19
34	Enhancing the Infrared Response of Carbon Nanotubes From Oligo-Quaterthiophene Interactions. Journal of Physical Chemistry C, 2016, 120, 28802-28807.	1.5	19
35	Refluorination of pyrocarbon prepared from fluorineâ€“GIC. Solid State Sciences, 2003, 5, 1285-1290.	1.5	17
36	Fermi level shift in carbon nanotubes by dye confinement. Carbon, 2019, 149, 772-780.	5.4	17

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37	Thermal decomposition of 1st stage fluorineâ€“graphite intercalation compounds. Journal of Fluorine Chemistry, 2001, 110, 31-36.	0.9	16
38	Gate Effect of Vacancy-type Defect of Fullerene Cages on Metal-Atom Migrations in Metallofullerenes. Nano Letters, 2006, 6, 1389-1395.	4.5	16
39	Iron and Ruthenium Nanoparticles in Carbon Prepared by Thermolysis of Buckymetallocenes. Chemistry - an Asian Journal, 2009, 4, 457-465.	1.7	15
40	Quantitative evaluation of temporal partial coherence using 3D Fourier transforms of through-focus TEM images. Ultramicroscopy, 2013, 134, 86-93.	0.8	15
41	Correlation between atomic rearrangement in defective fullerenes and migration behavior of encaged metal ions. Physical Review B, 2006, 73, .	1.1	14
42	Reaction of layered carbon fluorides CxF (x=2.5â€“3.6) and hydrogen. Carbon, 2006, 44, 664-670.	5.4	14
43	Vanadium diphosphide as a negative electrode material for sodium secondary batteries. Journal of Power Sources, 2021, 483, 229182.	4.0	14
44	Siteâ€Dependent Migration Behavior of Individual Cesium Ions Inside and Outside C₆₀ Fullerene Nanopeapods. Small, 2008, 4, 1080-1083.	5.2	13
45	Metal resist for extreme ultraviolet lithography characterized by scanning transmission electron microscopy. Applied Physics Express, 2016, 9, 031601.	1.1	13
46	Covalently functionalized layered MoS₂ supported Pd nanoparticles as highly active oxygen reduction electrocatalysts. Nanoscale, 2020, 12, 18278-18288.	2.8	13
47	Coreâ€“Shell Pd@M (M=Ni, Cu, Co) Nanoparticles/Graphene Ensembles with High Mass Electrocatalytic Activity Toward the Oxygen Reduction Reaction. Chemistry - A European Journal, 2019, 25, 11105-11113.	1.7	12
48	Direct evidence for covalent functionalization of carbon nanohorns by high-resolution electron microscopy imaging of C60 conjugated onto their skeleton. Carbon, 2012, 50, 3909-3914.	5.4	11
49	Pyrolytically prepared carbon from fluorineâ€“GIC. Carbon, 2003, 41, 1149-1156.	5.4	10
50	Atomic imaging and spectroscopy of low-dimensional materials with interrupted periodicities. Journal of Electron Microscopy, 2012, 61, 285-291.	0.9	9
51	Ballistic- and quantum-conductor carbon nanotubes: A reference experiment put to the test. Physical Review B, 2014, 90, .	1.1	9
52	Effect of hydrogen-gas treatment on the local structure of graphene-like graphite. Carbon, 2020, 163, 162-168.	5.4	9
53	Characterization of 'metal resist' for EUV lithography. Proceedings of SPIE, 2016, , .	0.8	8
54	Nanostructural characterization of artificial pinning centers in PLD-processed REBa2Cu3O7-Î´ films. Ultramicroscopy, 2017, 176, 151-160.	0.8	8

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55	Deoxofluorination of graphite oxide with sulfur tetrafluoride. Dalton Transactions, 2020, 49, 47-56.	1.6	7
56	Structures of Highly Fluorinated Compounds of Layered Carbon. , 2017, , 283-303.		6
57	Optimization of the Carbon Content in Copper Phosphideâ€“Carbon Composites for High Performance Sodium Secondary Batteries Using Ionic Liquids. ChemElectroChem, 2020, 7, 2477-2484.	1.7	6
58	Distributions of hafnia and titania cores in EUV metal resists evaluated by scanning transmission electron microscopy and electron energy loss spectroscopy. Applied Physics Express, 2016, 9, 111801.	1.1	5
59	Graphene-Like Graphite Negative Electrode Rapidly Chargeable at Constant Voltage. Journal of the Electrochemical Society, 2020, 167, 110518.	1.3	5
60	Thermal decomposition mechanism of fluorineâ€“graphite intercalation compounds. Carbon, 2001, 39, 954-956.	5.4	3
61	HR-TEM study of atomic defects in carbon nanostructures. AIP Conference Proceedings, 2005, , .	0.3	3
62	Tuning of photoluminescence intensity and Fermi level position of individual single-walled carbon nanotubes by molecule confinement. Carbon, 2022, 186, 423-430.	5.4	3
63	Electronâ€Induced Puncturing of Endohedral Metallofullerenes. Fullerenes Nanotubes and Carbon Nanostructures, 2006, 14, 261-267.	1.0	2
64	Innovative electron microscope for light-element atom visualization. Synthesiology, 2012, 4, 172-182.	0.2	2
65	Reducing Effect of a Slight Amount of NaCl Vapor on Pest Oxidation of Taâ€“75at%Al at High Temperature. Oxidation of Metals, 2016, 85, 39-49.	1.0	2
66	Carbon Nanomaterials: Unique Tubeâ€“Ring Interactions: Complexation of Singleâ€Walled Carbon Nanotubes with Cycloparaphenyleneacetylenes (Small 26/2018). Small, 2018, 14, 1870120.	5.2	2
67	The study for substrate temperature effects on thermoelectric properties of the amorphous Si-Ge-Au thin films. , 0, , .		1
68	Direct Imaging of Irradiation-induced Atomic Defects in Carbon Nanotubes. Materia Japan, 2008, 47, 646-646.	0.1	1
69	é›»å¡•å¾®é¡ã«ã‚ˆã‚‹ã•ã©ã¼ãƒ³ãƒŠãƒŽãƒãƒ¥ãƒ¼ãƒ–ã®è¦³å¯Ÿ. Materia Japan, 2007, 46, 259-264.	0.1	0
70	Electrical Transport and Optical Properties of Carbon Nanotubes probed by In Situ and Cross-Correlated Experiments. Microscopy and Microanalysis, 2007, 13, .	0.2	0
71	HR-TEM of Carbon Network, Towards Individual C-C Bond Imaging. Microscopy and Microanalysis, 2009, 15, 122-123.	0.2	0
72	Imaging Individual Molecules and Atoms by Aberration-Corrected Transmission Electron Microscopy. Nihon Kessho Gakkaishi, 2011, 53, 280-284.	0.0	0

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73	Innovative electron microscope for light-element atom visualization. Synthesiology, 2011, 4, 166-175.	0.2	0
74	Aberration-Corrected Electron Microscopy for Nanocarbon Materials. Journal of the Vacuum Society of Japan, 2011, 54, 264-269.	0.3	0
75	Structural Study of the Interfaces of Fe(Co)/AlOx/Fe Ferromagnetic Tunnel Junctions.. Journal of the Magnetics Society of Japan, 1999, 23, 1321-1324.	0.4	0