

# Hideyuki Nakano

## List of Publications by Year in descending order

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72  
papers

2,696  
citations

185998

28  
h-index

182168

51  
g-index

74  
all docs

74  
docs citations

74  
times ranked

3052  
citing authors

#	ARTICLE	IF	CITATIONS
1	Improving Powder Magnetic Core Properties via Application of Thin, Insulating Silica-Nanosheet Layers on Iron Powder Particles. <i>Nanomaterials</i> , 2017, 7, 1.	1.9	252
2	Soft Synthesis of Single-Crystal Silicon Monolayer Sheets. <i>Angewandte Chemie - International Edition</i> , 2006, 45, 6303-6306.	7.2	230
3	Silicon Nanosheets and Their Self-Assembled Regular Stacking Structure. <i>Journal of the American Chemical Society</i> , 2010, 132, 2710-2718.	6.6	197
4	Synthesis and Optical Properties of Monolayer Organosilicon Nanosheets. <i>Journal of the American Chemical Society</i> , 2010, 132, 5946-5947.	6.6	154
5	Synthesis and Modification of Silicon Nanosheets and Other Silicon Nanomaterials. <i>Chemistry - A European Journal</i> , 2011, 17, 9864-9887.	1.7	147
6	Preparation of Alkyl-Modified Silicon Nanosheets by Hydrosilylation of Layered Polysilane (Si <sub>6</sub> H <sub>6</sub> ). <i>Journal of the American Chemical Society</i> , 2012, 134, 5452-5455.	6.6	119
7	Preparation and structure of novel siloxene nanosheets. <i>Chemical Communications</i> , 2005, , 2945.	2.2	118
8	Monolayer-to-bilayer transformation of silicenes and their structural analysis. <i>Nature Communications</i> , 2016, 7, 10657.	5.8	88
9	Understanding the Zero-Strain Lithium Insertion Scheme of Li <sub>1/3</sub> Ti <sub>5/3</sub> O <sub>4</sub> : Structural Changes at Atomic Scale Clarified by Raman Spectroscopy. <i>Journal of Physical Chemistry C</i> , 2014, 118, 2992-2999.	1.5	86
10	Electron transport properties of Si nanosheets: Transition from direct tunneling to Fowler-Nordheim tunneling. <i>Applied Physics Letters</i> , 2011, 99, .	1.5	79
11	Direct Observation of Dirac Cone in Multilayer Silicene Intercalation Compound CaSi <sub>2</sub> . <i>Advanced Materials</i> , 2015, 27, 856-860.	11.1	75
12	Large-Domain Colloidal Crystal Films Fabricated Using a Fluidic Cell. <i>Langmuir</i> , 2005, 21, 5367-5371.	1.6	57
13	Preparation of Barium-Containing Silicon Clathrate Compound. <i>Fullerenes, Nanotubes, and Carbon Nanostructures</i> , 1995, 3, 21-28.	0.6	53
14	Close-Packed Colloidal Crystalline Arrays Composed of Polystyrene Latex Coated with Titania Nanosheets. <i>Langmuir</i> , 2005, 21, 8918-8922.	1.6	51
15	High-Power Electrochemical Energy Storage System Employing Stable Radical Pseudocapacitors. <i>Angewandte Chemie - International Edition</i> , 2014, 53, 1324-1328.	7.2	41
16	Soft chemical synthesis of silicon nanosheets and their applications. <i>Applied Physics Reviews</i> , 2016, 3, .	5.5	38
17	Surface Modification of Layered Polysilane with <i>n</i> -Alkylamines, $\pm$ -Diaminoalkanes, and $\pm$ -Aminocarboxylic Acids. <i>Chemistry of Materials</i> , 2015, 27, 1292-1298.	3.2	37
18	The electronic and structural properties of novel organomodified Si nanosheets. <i>Physical Chemistry Chemical Physics</i> , 2011, 13, 15418.	1.3	35

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19	Isolation of Hypervalent Group-16 Radicals and Their Application in Organic-Radical Batteries. <i>Journal of the American Chemical Society</i> , 2016, 138, 479-482.	6.6	35
20	Liquid-Phase Exfoliation of Germanane Based on Hansen Solubility Parameters. <i>Chemistry of Materials</i> , 2018, 30, 5333-5338.	3.2	34
21	Chemical modification of group IV graphene analogs. <i>Science and Technology of Advanced Materials</i> , 2018, 19, 76-100.	2.8	33
22	Controlling the Quantity of Radical Oxygen Occluded in a New Aluminum Silicate with Nanopores. <i>Chemistry of Materials</i> , 2003, 15, 4879-4881.	3.2	32
23	Characteristics and structural change of layered polysilane (Si <sub>6</sub> H <sub>6</sub> ) anode for lithium ion batteries. <i>Journal of Power Sources</i> , 2011, 196, 1503-1507.	4.0	32
24	Anion secondary batteries utilizing a reversible BF <sub>4</sub> insertion/extraction two-dimensional Si material. <i>Journal of Materials Chemistry A</i> , 2014, 2, 7588.	5.2	32
25	Close-Packed Colloidal Crystalline Arrays Composed of Silica Spheres Coated with Titania. <i>Langmuir</i> , 2006, 22, 1268-1272.	1.6	30
26	Multilayer Germanenes Formed in Zintl-Phase CaGe <sub>2</sub> by Fluoride Diffusion. <i>ChemistrySelect</i> , 2016, 1, 5579-5583.	0.7	30
27	Preparation and Photocurrent Generation of Silicon Nanosheets with Aromatic Substituents on the Surface. <i>Journal of Physical Chemistry C</i> , 2016, 120, 10991-10996.	1.5	30
28	Giant Enhancement of Seebeck Coefficient by Deformation of Silicene Buckled Structure in Calcium-Intercalated Layered Silicene Film. <i>Advanced Materials Interfaces</i> , 2022, 9, 2101752.	1.9	26
29	Structural Study of the Solid Solutions in a CaSi <sub>2</sub> -LaSi <sub>2</sub> System. <i>Journal of Solid State Chemistry</i> , 1994, 108, 260-266.	1.4	25
30	Synthesis of Siloxene Derivatives with Organic Groups. <i>Chemistry Letters</i> , 2010, 39, 938-939.	0.7	25
31	Oxidative Destruction of Hydrocarbons on Ca <sub>12</sub> Al <sub>14-x</sub> Si <sub>x</sub> O <sub>33+0.5x</sub> (0 ≤ x ≤ 4) with Radical Oxygen Occluded in Nanopores. <i>Catalysis Letters</i> , 2006, 106, 139-143.	1.4	24
32	Mechanochemical lithiation of layered polysilane. <i>Chemical Communications</i> , 2014, 50, 9761-9764.	2.2	21
33	Si-C composite anode of layered polysilane (Si <sub>6</sub> H <sub>6</sub> ) and sucrose for lithium ion rechargeable batteries. <i>Journal of Materials Chemistry</i> , 2011, 21, 11941.	6.7	20
34	Preparation of hierarchical porous silica and its optical property. <i>Microporous and Mesoporous Materials</i> , 2006, 96, 205-209.	2.2	19
35	Synthesis and modification of two-dimensional crystalline silicon nanosheets. <i>Journal of the Ceramic Society of Japan</i> , 2014, 122, 748-754.	0.5	18
36	Growth of CaSi <sub>2</sub> single-phase polycrystalline ingots using the phase relationship between CaSi <sub>2</sub> and associated phases. <i>Acta Materialia</i> , 2014, 81, 41-49.	3.8	17

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37	Characteristics of layered polysilane and its application to lithium ion battery anodes. Japanese Journal of Applied Physics, 2015, 54, 035201.	0.8	16
38	Direct Chemical Synthesis of Benzyl-Modified Silicane from Calcium Disilicide. Chemistry of Materials, 2019, 31, 4720-4725.	3.2	16
39	Synthesis of Amorphous Silica Nanosheets and Their Photoluminescence. Journal of the American Ceramic Society, 2005, 88, 3522-3524.	1.9	14
40	Preparation of Hollow BaTiO <sub>3</sub> and Anatase Spheres by the Layer-by-Layer Colloidal Templating Method. Journal of the American Ceramic Society, 2006, 89, 1455-1457.	1.9	14
41	Improving battery safety by reducing the formation of Li dendrites with the use of amorphous silicon polymer anodes. Scientific Reports, 2015, 5, 13219.	1.6	14
42	Interactions between stacked layers of phenyl-modified silicene. New Journal of Physics, 2013, 15, 125018.	1.2	13
43	Crystal structures and thermodynamic stabilities of two new CaGe <sub>2</sub> polymorphs. Acta Materialia, 2018, 151, 347-355.	3.8	13
44	Growth of tr6-CaSi <sub>2</sub> thin films on Si(111) substrates. Japanese Journal of Applied Physics, 2018, 57, 120313.	0.8	13
45	Polymorphic transformations of CaSi <sub>2</sub> and CaGe <sub>2</sub> . Journal of Solid State Chemistry, 2021, 295, 121919.	1.4	12
46	In Situ XAFS Study of LiNi <sub>0.5</sub> Mn <sub>0.5</sub> O <sub>2</sub> Cathode for Li Rechargeable Batteries.. Journal of the Ceramic Society of Japan, 2003, 111, 33-36.	1.3	11
47	Hansen Solubility Parameters of Stacked Silicanes Derived from Porous Silicon. ACS Omega, 2019, 4, 11838-11843.	1.6	10
48	Versatile Reducing Reaction Field within Layered Polysilane for Efficient One-Pot Synthesis of Metal Nanoparticles. ChemNanoMat, 2017, 3, 534-537.	1.5	9
49	Thermoelectric power factor enhancement of calcium-intercalated layered silicene by introducing metastable phase. Applied Physics Express, 2021, 14, 115505.	1.1	9
50	Easy Access to Martin's Hypervalent Sulfur Anions toward an Electrode Material for Organic Rechargeable Batteries. Bulletin of the Chemical Society of Japan, 2016, 89, 546-548.	2.0	8
51	Synthesis and optical properties of two-dimensional nanosilicon compounds. Japanese Journal of Applied Physics, 2017, 56, 05DA02.	0.8	8
52	Silicanes Modified by Conjugated Substituents for Optoelectronic Devices. Advanced Optical Materials, 2019, 7, 1900696.	3.6	8
53	Factors Affecting the Volumetric Energy Density of Lithium-Ion Battery Materials: Particle Density Measurements and Cross-Sectional Observations of Layered LiCo <sub>1-x</sub> Ni <sub>x</sub> O <sub>2</sub> with 0 ≤ x ≤ 1. ACS Applied Materials & Interfaces, 2014, 6, 10583-10592.	4.0	7
54	Determination of cation distribution in the Fe[Li <sub>1/2</sub> Fe <sub>3/2</sub> ]O <sub>4</sub> ~ LiFeTiO <sub>4</sub> ~ Li[Li <sub>1/3</sub> Ti <sub>5/3</sub> ]O <sub>4</sub> system: Mixed nature of solid solution and superlattice. Journal of Solid State Chemistry, 2017, 247, 67-76.	1.4	6

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55	Solid-State Electrochemistry of Copper(I) Coordination Polymers Containing Tetrafluoroborate Anions. <i>Inorganic Chemistry</i> , 2019, 58, 2379-2385.	1.9	5
56	Growth and fluorination of CaSi <sub>2</sub> thin film. <i>Japanese Journal of Applied Physics</i> , 2020, 59, SFFC02.	0.8	5
57	Transformation of CaSi overgrowth domains to the CaSi <sub>2</sub> crystal phase via vacuum annealing. <i>Japanese Journal of Applied Physics</i> , 2022, 61, 025506.	0.8	5
58	Properties and Mechanism of Layered Polysilane (Si <sub>6</sub> H <sub>6</sub> ) Anode. <i>IOP Conference Series: Materials Science and Engineering</i> , 2011, 18, 122005.	0.3	4
59	Solution-Processed Silicene Field-Effect Transistor: Operation Due to Stacking Defects on the Channel. <i>Advanced Functional Materials</i> , 2020, 30, 1908746.	7.8	4
60	Soft Chemical Synthesis of Functionalized Silicene. <i>Springer Series in Materials Science</i> , 2016, , 85-106.	0.4	3
61	Formation mechanism of Cu <sub>2</sub> O particles using layered CaSi <sub>2</sub> as a reduction/oxidation mediator. <i>Journal of the American Ceramic Society</i> , 2019, 102, 5738-5745.	1.9	3
62	Suppression of thermal runaway by continuous heat generation using porous silicon covered with a thin oxide layer. <i>Journal of Power Sources</i> , 2021, 506, 230209.	4.0	3
63	TWO-DIMENSIONAL MICROMETER-SIZED SINGLE-CRYSTALLINE Si THIN NANOSHEETS DERIVED FROM CaSi <sub>2</sub> . <i>International Journal of Nanoscience</i> , 2007, 06, 117-120.	0.4	2
64	Formation of Silicon Quantum Dots Sheet on a Nonmetallic CaF <sub>2</sub> Surface. <i>Advanced Materials Interfaces</i> , 2020, 7, 2001295.	1.9	2
65	Photo-energy Transfer in $\pi$ - $\pi^*$ Conjugated Polysilanes Prepared by Platinum-catalyzed Reactions of Arylacetylenes with Layered Polysilane. <i>Chemistry Letters</i> , 2020, 49, 1174-1177.	0.7	2
66	Synthesis of Si-Ge Nanosheets and Their Dispersion of Organic Solvents with Focus on the Hansen Solubility Parameters. <i>ACS Omega</i> , 0, , .	1.6	2
67	Optical Properties and Microstructures of Colloidal Crystalline Arrays. , 2007, , .		1
68	Optical Properties of Silicon Nanosheets Modified with Triphenylamine and Quinoline Units: Charge and Energy Transfer from Conjugated Substituents to the Catenated Silicon Backbone. <i>Journal of Physical Chemistry C</i> , 2020, 124, 17347-17351.	1.5	1
69	Controlling the Quantity of Radical Oxygen Occluded in a New Aluminum Silicate with Nanopores.. <i>ChemInform</i> , 2004, 35, no.	0.1	0
70	Preparation and Structure of Novel Siloxene Nanosheets.. <i>ChemInform</i> , 2005, 36, no.	0.1	0
71	Optical properties and microstructures of colloidal crystalline arrays composed of titania nanosheets coated core-shell structured spheres. , 2006, , .		0
72	Two-dimensional silicon nanosheets. <i>Series in Materials Science and Engineering</i> , 2017, , 77-96.	0.1	0