

Hideyuki Nakano

List of Publications by Year in descending order

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72
papers

2,696
citations

185998

28
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182168

51
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74
all docs

74
docs citations

74
times ranked

3052
citing authors

#	ARTICLE	IF	CITATIONS
1	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
2	Transformation of CaSi overgrowth domains to the CaSi ₂ crystal phase via vacuum annealing. <i>Japanese Journal of Applied Physics</i> , 2022, 61, 025506.	0.8	5
3	Polymorphic transformations of CaSi ₂ and CaGe ₂ . <i>Journal of Solid State Chemistry</i> , 2021, 295, 121919.	1.4	12
4	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
5	Thermoelectric power factor enhancement of calcium-intercalated layered silicene by introducing metastable phase. <i>Applied Physics Express</i> , 2021, 14, 115505.	1.1	9
6	Growth and fluorination of CaSi ₂ thin film. <i>Japanese Journal of Applied Physics</i> , 2020, 59, SFFC02.	0.8	5
7	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
8	Formation of Silicon Quantum Dots Sheet on a Nonmetallic CaF ₂ Surface. <i>Advanced Materials Interfaces</i> , 2020, 7, 2001295.	1.9	2
9	Photo-energy Transfer in π - π Conjugated Polysilanes Prepared by Platinum-catalyzed Reactions of Arylacetylenes with Layered Polysilane. <i>Chemistry Letters</i> , 2020, 49, 1174-1177.	0.7	2
10	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
11	Hansen Solubility Parameters of Stacked Silicenes Derived from Porous Silicon. <i>ACS Omega</i> , 2019, 4, 11838-11843.	1.6	10
12	Silicenes Modified by Conjugated Substituents for Optoelectronic Devices. <i>Advanced Optical Materials</i> , 2019, 7, 1900696.	3.6	8
13	Direct Chemical Synthesis of Benzyl-Modified Silicene from Calcium Disilicide. <i>Chemistry of Materials</i> , 2019, 31, 4720-4725.	3.2	16
14	Formation mechanism of Cu ₂ O particles using layered CaSi ₂ as a reduction/oxidation mediator. <i>Journal of the American Ceramic Society</i> , 2019, 102, 5738-5745.	1.9	3
15	Solid-State Electrochemistry of Copper(I) Coordination Polymers Containing Tetrafluoroborate Anions. <i>Inorganic Chemistry</i> , 2019, 58, 2379-2385.	1.9	5
16	Crystal structures and thermodynamic stabilities of two new CaGe ₂ polymorphs. <i>Acta Materialia</i> , 2018, 151, 347-355.	3.8	13
17	Chemical modification of group IV graphene analogs. <i>Science and Technology of Advanced Materials</i> , 2018, 19, 76-100.	2.8	33
18	Growth of tr6-CaSi ₂ thin films on Si(111) substrates. <i>Japanese Journal of Applied Physics</i> , 2018, 57, 120313.	0.8	13

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19	Liquid-Phase Exfoliation of Germanane Based on Hansen Solubility Parameters. <i>Chemistry of Materials</i> , 2018, 30, 5333-5338.	3.2	34
20	Synthesis and optical properties of two-dimensional nanosilicon compounds. <i>Japanese Journal of Applied Physics</i> , 2017, 56, 05DA02.	0.8	8
21	Versatile Reducing Reaction Field within Layered Polysilane for Efficient One-Pot Synthesis of Metal Nanoparticles. <i>ChemNanoMat</i> , 2017, 3, 534-537.	1.5	9
22	Determination of cation distribution in the $\text{Fe}[\text{Li}_{1/2}\text{Fe}_{3/2}]\text{O}_4 \sim \text{LiFeTiO}_4 \sim \text{Li}[\text{Li}_{1/3}\text{Ti}_{5/3}]\text{O}_4$ system: Mixed nature of solid solution and superlattice. <i>Journal of Solid State Chemistry</i> , 2017, 247, 67-76.	1.4	6
23	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
24	Two-dimensional silicon nanosheets. <i>Series in Materials Science and Engineering</i> , 2017, , 77-96.	0.1	0
25	Soft chemical synthesis of silicon nanosheets and their applications. <i>Applied Physics Reviews</i> , 2016, 3, .	5.5	38
26	Easy Access to Martin's Hypervalent Sulfur Anions toward an Electrode Material for Organic Rechargeable Batteries. <i>Bulletin of the Chemical Society of Japan</i> , 2016, 89, 546-548.	2.0	8
27	Monolayer-to-bilayer transformation of silicenes and their structural analysis. <i>Nature Communications</i> , 2016, 7, 10657.	5.8	88
28	Multilayer Germanenes Formed in Zintl-Phase CaGe_2 by Fluoride Diffusion. <i>ChemistrySelect</i> , 2016, 1, 5579-5583.	0.7	30
29	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
30	Soft Chemical Synthesis of Functionalized Silicene. <i>Springer Series in Materials Science</i> , 2016, , 85-106.	0.4	3
31	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
32	Improving battery safety by reducing the formation of Li dendrites with the use of amorphous silicon polymer anodes. <i>Scientific Reports</i> , 2015, 5, 13219.	1.6	14
33	Characteristics of layered polysilane and its application to lithium ion battery anodes. <i>Japanese Journal of Applied Physics</i> , 2015, 54, 035201.	0.8	16
34	Surface Modification of Layered Polysilane with <i>n</i> -Alkylamines, Diaminoalkanes, and Aminocarboxylic Acids. <i>Chemistry of Materials</i> , 2015, 27, 1292-1298.	3.2	37
35	Direct Observation of Dirac Cone in Multilayer Silicene Intercalation Compound CaSi_2 . <i>Advanced Materials</i> , 2015, 27, 856-860.	11.1	75
36	Mechanochemical lithiation of layered polysilane. <i>Chemical Communications</i> , 2014, 50, 9761-9764.	2.2	21

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37	Growth of CaSi ₂ single-phase polycrystalline ingots using the phase relationship between CaSi ₂ and associated phases. <i>Acta Materialia</i> , 2014, 81, 41-49.	3.8	17
38	Anion secondary batteries utilizing a reversible BF ₄ insertion/extraction two-dimensional Si material. <i>Journal of Materials Chemistry A</i> , 2014, 2, 7588.	5.2	32
39	Factors Affecting the Volumetric Energy Density of Lithium-Ion Battery Materials: Particle Density Measurements and Cross-Sectional Observations of Layered LiCo _{1-x} Ni _x O ₂ with 0 ≤ x ≤ 1. <i>ACS Applied Materials & Interfaces</i> , 2014, 6, 10583-10592.	4.0	7
40	Understanding the Zero-Strain Lithium Insertion Scheme of Li[Li _{1/3} Ti _{5/3}]O ₄ : Structural Changes at Atomic Scale Clarified by Raman Spectroscopy. <i>Journal of Physical Chemistry C</i> , 2014, 118, 2992-2999.	1.5	86
41	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
42	High-Power Electrochemical Energy Storage System Employing Stable Radical Pseudocapacitors. <i>Angewandte Chemie - International Edition</i> , 2014, 53, 1324-1328.	7.2	41
43	Interactions between stacked layers of phenyl-modified silicene. <i>New Journal of Physics</i> , 2013, 15, 125018.	1.2	13
44	Preparation of Alkyl-Modified Silicon Nanosheets by Hydrosilylation of Layered Polysilane (Si ₆ H ₆). <i>Journal of the American Chemical Society</i> , 2012, 134, 5452-5455.	6.6	119
45	Si-C composite anode of layered polysilane (Si ₆ H ₆) and sucrose for lithium ion rechargeable batteries. <i>Journal of Materials Chemistry</i> , 2011, 21, 11941.	6.7	20
46	The electronic and structural properties of novel organomodified Si nanosheets. <i>Physical Chemistry Chemical Physics</i> , 2011, 13, 15418.	1.3	35
47	Electron transport properties of Si nanosheets: Transition from direct tunneling to Fowler-Nordheim tunneling. <i>Applied Physics Letters</i> , 2011, 99, .	1.5	79
48	Properties and Mechanism of Layered Polysilane (Si ₆ H ₆) Anode. <i>IOP Conference Series: Materials Science and Engineering</i> , 2011, 18, 122005.	0.3	4
49	Synthesis and Modification of Silicon Nanosheets and Other Silicon Nanomaterials. <i>Chemistry - A European Journal</i> , 2011, 17, 9864-9887.	1.7	147
50	Characteristics and structural change of layered polysilane (Si ₆ H ₆) anode for lithium ion batteries. <i>Journal of Power Sources</i> , 2011, 196, 1503-1507.	4.0	32
51	Synthesis of Siloxene Derivatives with Organic Groups. <i>Chemistry Letters</i> , 2010, 39, 938-939.	0.7	25
52	Silicon Nanosheets and Their Self-Assembled Regular Stacking Structure. <i>Journal of the American Chemical Society</i> , 2010, 132, 2710-2718.	6.6	197
53	Synthesis and Optical Properties of Monolayer Organosilicon Nanosheets. <i>Journal of the American Chemical Society</i> , 2010, 132, 5946-5947.	6.6	154
54	TWO-DIMENSIONAL MICROMETER-SIZED SINGLE-CRYSTALLINE Si THIN NANOSHEETS DERIVED FROM CaSi ₂ . <i>International Journal of Nanoscience</i> , 2007, 06, 117-120.	0.4	2

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55	Optical Properties and Microstructures of Colloidal Crystalline Arrays. , 2007, , .		1
56	Close-Packed Colloidal Crystalline Arrays Composed of Silica Spheres Coated with Titania. Langmuir, 2006, 22, 1268-1272.	1.6	30
57	Optical properties and microstructures of colloidal crystalline arrays composed of titania nanosheets coated core-shell structured spheres. , 2006, , .		0
58	Preparation of Hollow BaTiO ₃ and Anatase Spheres by the Layer-by-Layer Colloidal Templating Method. Journal of the American Ceramic Society, 2006, 89, 1455-1457.	1.9	14
59	Preparation of hierarchical porous silica and its optical property. Microporous and Mesoporous Materials, 2006, 96, 205-209.	2.2	19
60	Oxidative Destruction of Hydrocarbons on Ca ₁₂ Al _{14-x} Si _x O _{33+0.5x} (0 ≤ x ≤ 4) with Radical Oxygen Occluded in Nanopores. Catalysis Letters, 2006, 106, 139-143.	1.4	24
61	Soft Synthesis of Single-Crystal Silicon Monolayer Sheets. Angewandte Chemie - International Edition, 2006, 45, 6303-6306.	7.2	230
62	Synthesis of Amorphous Silica Nanosheets and Their Photoluminescence. Journal of the American Ceramic Society, 2005, 88, 3522-3524.	1.9	14
63	Preparation and Structure of Novel Siloxene Nanosheets.. ChemInform, 2005, 36, no.	0.1	0
64	Large-Domain Colloidal Crystal Films Fabricated Using a Fluidic Cell. Langmuir, 2005, 21, 5367-5371.	1.6	57
65	Preparation and structure of novel siloxene nanosheets. Chemical Communications, 2005, , 2945.	2.2	118
66	Close-Packed Colloidal Crystalline Arrays Composed of Polystyrene Latex Coated with Titania Nanosheets. Langmuir, 2005, 21, 8918-8922.	1.6	51
67	Controlling the Quantity of Radical Oxygen Occluded in a New Aluminum Silicate with Nanopores.. ChemInform, 2004, 35, no.	0.1	0
68	Controlling the Quantity of Radical Oxygen Occluded in a New Aluminum Silicate with Nanopores. Chemistry of Materials, 2003, 15, 4879-4881.	3.2	32
69	In Situ XAFS Study of LiNi _{0.5} Mn _{0.5} O ₂ Cathode for Li Rechargeable Batteries.. Journal of the Ceramic Society of Japan, 2003, 111, 33-36.	1.3	11
70	Preparation of Barium-Containing Silicon Clathrate Compound. Fullerenes, Nanotubes, and Carbon Nanostructures, 1995, 3, 21-28.	0.6	53
71	Structural Study of the Solid Solutions in a CaSi ₂ -LaSi ₂ System. Journal of Solid State Chemistry, 1994, 108, 260-266.	1.4	25
72	Synthesis of Si-Ge Nanosheets and Their Dispersion of Organic Solvents with Focus on the Hansen Solubility Parameters. ACS Omega, 0, , .	1.6	2