

Lijun Yang

List of Publications by Year in descending order

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111
papers

10,712
citations

66315

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30894

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114
docs citations

114
times ranked

12182
citing authors

#	ARTICLE	IF	CITATIONS
1	Boron-Doped Carbon Nanotubes as Metal-Free Electrocatalysts for the Oxygen Reduction Reaction. <i>Angewandte Chemie - International Edition</i> , 2011, 50, 7132-7135.	7.2	1,121
2	Can Boron and Nitrogen Co-doping Improve Oxygen Reduction Reaction Activity of Carbon Nanotubes?. <i>Journal of the American Chemical Society</i> , 2013, 135, 1201-1204.	6.6	855
3	Nitrogen-Doped Carbon Nanocages as Efficient Metal-Free Electrocatalysts for Oxygen Reduction Reaction. <i>Advanced Materials</i> , 2012, 24, 5593-5597.	11.1	693
4	Hydrophilic Hierarchical Nitrogen-Doped Carbon Nanocages for Ultrahigh Supercapacitive Performance. <i>Advanced Materials</i> , 2015, 27, 3541-3545.	11.1	680
5	Carbon-Based Metal-Free ORR Electrocatalysts for Fuel Cells: Past, Present, and Future. <i>Advanced Materials</i> , 2019, 31, e1804799.	11.1	649
6	Significant Contribution of Intrinsic Carbon Defects to Oxygen Reduction Activity. <i>ACS Catalysis</i> , 2015, 5, 6707-6712.	5.5	519
7	Carbon Nanocages as Supercapacitor Electrode Materials. <i>Advanced Materials</i> , 2012, 24, 347-352.	11.1	508
8	Porous 3D Few-Layer Graphene-Like Carbon for Ultrahigh-Power Supercapacitors with Well-Defined Structure-Performance Relationship. <i>Advanced Materials</i> , 2017, 29, 1604569.	11.1	358
9	Single Cobalt Atom and N Codoped Carbon Nanofibers as Highly Durable Electrocatalyst for Oxygen Reduction Reaction. <i>ACS Catalysis</i> , 2017, 7, 6864-6871.	5.5	256
10	Compressing Carbon Nanocages by Capillarity for Optimizing Porous Structures toward Ultrahigh-Volumetric Performance Supercapacitors. <i>Advanced Materials</i> , 2017, 29, 1700470.	11.1	243
11	Hierarchical carbon nanocages confining high-loading sulfur for high-rate lithium-sulfur batteries. <i>Nano Energy</i> , 2015, 12, 657-665.	8.2	231
12	Engineering Lower Coordination Atoms onto NiO/Co ₃ O ₄ Heterointerfaces for Boosting Oxygen Evolution Reactions. <i>ACS Catalysis</i> , 2020, 10, 12376-12384.	5.5	223
13	The simplest construction of single-site catalysts by the synergism of micropore trapping and nitrogen anchoring. <i>Nature Communications</i> , 2019, 10, 1657.	5.8	220
14	Promotion Effects of Nitrogen Doping into Carbon Nanotubes on Supported Iron Fischer-Tropsch Catalysts for Lower Olefins. <i>ACS Catalysis</i> , 2014, 4, 613-621.	5.5	218
15	Mesostructured NiO/Ni composites for high-performance electrochemical energy storage. <i>Energy and Environmental Science</i> , 2016, 9, 2053-2060.	15.6	212
16	From Carbon-Based Nanotubes to Nanocages for Advanced Energy Conversion and Storage. <i>Accounts of Chemical Research</i> , 2017, 50, 435-444.	7.6	196
17	Co nanoparticle embedded in atomically-dispersed Co-N-C nanofibers for oxygen reduction with high activity and remarkable durability. <i>Nano Energy</i> , 2018, 52, 485-493.	8.2	188
18	Alloyed Co-Mo Nitride as High-Performance Electrocatalyst for Oxygen Reduction in Acidic Medium. <i>ACS Catalysis</i> , 2015, 5, 1857-1862.	5.5	172

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19	Activity, Performance, and Durability for the Reduction of Oxygen in PEM Fuel Cells, of Fe/N/C Electrocatalysts Obtained from the Pyrolysis of Metal-Organic-Framework and Iron Porphyrin Precursors. <i>Electrochimica Acta</i> , 2015, 159, 184-197.	2.6	129
20	Is the rapid initial performance loss of Fe/N/C non precious metal catalysts due to micropore flooding?. <i>Energy and Environmental Science</i> , 2017, 10, 296-305.	15.6	127
21	Efficient synergism of electrocatalysis and physical confinement leading to durable high-power lithium-sulfur batteries. <i>Nano Energy</i> , 2019, 57, 34-40.	8.2	104
22	Identifying the Active Site of N-Doped Graphene for Oxygen Reduction by Selective Chemical Modification. <i>ACS Energy Letters</i> , 2018, 3, 986-991.	8.8	102
23	Composition-Graded Cu@Pd Nanospheres with Ir-Doped Surfaces on N-Doped Porous Graphene for Highly Efficient Ethanol Electro-Oxidation in Alkaline Media. <i>ACS Catalysis</i> , 2020, 10, 1171-1184.	5.5	98
24	Effect of oxygen adsorbability on the control of Li ₂ O ₂ growth in Li-O ₂ batteries: Implications for cathode catalyst design. <i>Nano Energy</i> , 2017, 36, 68-75.	8.2	93
25	Encapsulation of Iron Nitride by Fe@N@C Shell Enabling Highly Efficient Electroreduction of CO ₂ to CO. <i>ACS Energy Letters</i> , 2018, 3, 1205-1211.	8.8	84
26	Carbon-Based Nanocages: A New Platform for Advanced Energy Storage and Conversion. <i>Advanced Materials</i> , 2020, 32, e1904177.	11.1	84
27	An active and robust Si-Fe/N/C catalyst derived from waste reed for oxygen reduction. <i>Applied Catalysis B: Environmental</i> , 2018, 237, 85-93.	10.8	78
28	Sub-nanometer-scale fine regulation of interlayer distance in Ni@Co layered double hydroxides leading to high-rate supercapacitors. <i>Nano Energy</i> , 2020, 76, 105026.	8.2	77
29	Cobalt/zinc dual-sites coordinated with nitrogen in nanofibers enabling efficient and durable oxygen reduction reaction in acidic fuel cells. <i>Journal of Materials Chemistry A</i> , 2020, 8, 3686-3691.	5.2	76
30	Hierarchical carbon nanocages as high-rate anodes for Li- and Na-ion batteries. <i>Nano Research</i> , 2015, 8, 3535-3543.	5.8	71
31	Hierarchical sulfur and nitrogen co-doped carbon nanocages as efficient bifunctional oxygen electrocatalysts for rechargeable Zn-air battery. <i>Journal of Energy Chemistry</i> , 2019, 34, 64-71.	7.1	69
32	Growth and Characterization of Ternary AlGaIn Alloy Nanocones across the Entire Composition Range. <i>ACS Nano</i> , 2011, 5, 1291-1296.	7.3	60
33	Sulfur and Nitrogen Codoped Carbon Tubes as Bifunctional Metal-Free Electrocatalysts for Oxygen Reduction and Hydrogen Evolution in Acidic Media. <i>Chemistry - A European Journal</i> , 2016, 22, 10326-10329.	1.7	59
34	Achieving Ultrahigh Volumetric Energy Storage by Compressing Nitrogen and Sulfur Dual-Doped Carbon Nanocages via Capillarity. <i>Advanced Materials</i> , 2020, 32, e2004632.	11.1	56
35	Axial ligand effect on the stability of Fe@N@C electrocatalysts for acidic oxygen reduction reaction. <i>Nano Energy</i> , 2020, 78, 105128.	8.2	54
36	In situ construction of porous hierarchical (Ni _{3-x} Fe _x)FeN/Ni heterojunctions toward efficient electrocatalytic oxygen evolution. <i>Nano Research</i> , 2020, 13, 328-334.	5.8	52

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37	Is iron nitride or carbide highly active for oxygen reduction reaction in acidic medium?. <i>Catalysis Science and Technology</i> , 2017, 7, 51-55.	2.1	50
38	Mesostructured carbon-based nanocages: an advanced platform for energy chemistry. <i>Science China Chemistry</i> , 2020, 63, 665-681.	4.2	48
39	Revealing the importance of kinetics in N-coordinated dual-metal sites catalyzed oxygen reduction reaction. <i>Journal of Catalysis</i> , 2021, 396, 215-223.	3.1	47
40	Advanced Ni-Nx-C single-site catalysts for CO ₂ electroreduction to CO based on hierarchical carbon nanocages and S-doping. <i>Nano Research</i> , 2020, 13, 2777-2783.	5.8	46
41	Carbon-Based Nanocages: Carbon-Based Nanocages: A New Platform for Advanced Energy Storage and Conversion (<i>Adv. Mater.</i> 27/2020). <i>Advanced Materials</i> , 2020, 32, 2070206.	11.1	46
42	Electrocatalysis of S-doped carbon with weak polysulfide adsorption enhances lithium-sulfur battery performance. <i>Chemical Communications</i> , 2019, 55, 6365-6368.	2.2	45
43	Efficient Ternary Synergism of Platinum/Tin Oxide/Nitrogen-Doped Carbon Leading to High-Performance Ethanol Oxidation. <i>ACS Catalysis</i> , 2018, 8, 8477-8483.	5.5	44
44	A mini review on carbon-based metal-free electrocatalysts for oxygen reduction reaction. <i>Chinese Journal of Catalysis</i> , 2013, 34, 1986-1991.	6.9	42
45	Construction of hierarchical FeNi ₃ @(Fe,Ni) ₂ S ₂ core-shell heterojunctions for advanced oxygen evolution. <i>Nano Research</i> , 2021, 14, 4220-4226.	5.8	42
46	The Influence of the Epitaxial Growth Process Parameters on Layer Characteristics and Device Performance in Si-Passivated Ge pMOSFETs. <i>Journal of the Electrochemical Society</i> , 2009, 156, H979.	1.3	41
47	Stabilizing the active phase of iron-based Fischer-Tropsch catalysts for lower olefins: mechanism and strategy. <i>Chemical Science</i> , 2019, 10, 6083-6090.	3.7	41
48	Sulfur and Nitrogen Codoped Carbon Tubes as Bifunctional Metal-Free Electrocatalysts for Oxygen Reduction and Hydrogen Evolution in Acidic Media. <i>Chemistry - A European Journal</i> , 2016, 22, 10261-10261.	1.7	40
49	Tungsten-Doped CoP Nanoneedle Arrays Grown on Carbon Cloth as Efficient Bifunctional Electrocatalysts for Overall Water Splitting. <i>ChemElectroChem</i> , 2019, 6, 5229-5236.	1.7	36
50	High reaction activity of nitrogen-doped carbon nanotubes toward the electrooxidation of nitric oxide. <i>Chemical Communications</i> , 2011, 47, 7137.	2.2	35
51	Tailoring the nano heterointerface of hematite/magnetite on hierarchical nitrogen-doped carbon nanocages for superb oxygen reduction. <i>Journal of Materials Chemistry A</i> , 2018, 6, 21313-21319.	5.2	34
52	Manganese oxide-induced strategy to high-performance iron/nitrogen/carbon electrocatalysts with highly exposed active sites. <i>Nanoscale</i> , 2016, 8, 8480-8485.	2.8	33
53	A general strategy to construct yolk-shelled metal oxides inside carbon nanocages for high-stable lithium-ion battery anodes. <i>Nano Energy</i> , 2020, 68, 104368.	8.2	32
54	Identifying Iron-Nitrogen/Carbon Active Structures for Oxygen Reduction Reaction under the Effect of Electrode Potential. <i>Journal of Physical Chemistry Letters</i> , 2020, 11, 2896-2901.	2.1	32

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55	In situ construction of $\text{I}^3\text{-MoC}/\text{VN}$ heterostructured electrocatalysts with strong electron coupling for highly efficient hydrogen evolution reaction. <i>Chemical Engineering Journal</i> , 2021, 416, 129130.	6.6	31
56	Tuning metal catalysts via nitrogen-doped nanocarbons for energy chemistry: From metal nanoparticles to single metal sites. <i>EnergyChem</i> , 2021, 3, 100066.	10.1	31
57	Alcohol-Tolerant Platinum Electrocatalyst for Oxygen Reduction by Encapsulating Platinum Nanoparticles inside Nitrogen-Doped Carbon Nanocages. <i>ACS Applied Materials & Interfaces</i> , 2016, 8, 16664-16669.	4.0	28
58	Boosting faradaic efficiency of CO_2 electroreduction to CO for $\text{Fe}^{\text{II}}/\text{N}^{\text{I}}/\text{C}$ single-site catalysts by stabilizing Fe^{3+} sites via F-doping. <i>Nano Research</i> , 2022, 15, 7896-7902.	5.8	27
59	Convenient immobilization of $\text{Pt}^{\text{II}}/\text{Sn}$ bimetallic catalysts on nitrogen-doped carbon nanotubes for direct alcohol electrocatalytic oxidation. <i>Nanotechnology</i> , 2011, 22, 395401.	1.3	26
60	Superionic conductor-mediated growth of ternary ZnCdS nanorods over a wide composition range. <i>Nano Research</i> , 2015, 8, 584-591.	5.8	26
61	Promoting Effects of Au Submonolayer Shells on Structure-Designed $\text{Cu}^{\text{II}}/\text{Pd}/\text{Ir}$ Nanospheres: Greatly Enhanced Activity and Durability for Alkaline Ethanol Electro-Oxidation. <i>ACS Applied Materials & Interfaces</i> , 2020, 12, 25961-25971.	4.0	26
62	Creation of $\text{Ge}^{\text{II}}/\text{N}^{\text{I}}/\text{C}$ Configures in Carbon Nanotubes: Origin of Enhanced Electrocatalytic Performance for Oxygen Reduction Reaction. <i>ACS Applied Materials & Interfaces</i> , 2016, 8, 10383-10391.	4.0	23
63	Design of Thiazolo[5,4- <i>d</i>]thiazole-Bridged Ionic Covalent Organic Polymer for Highly Selective Oxygen Reduction to H_2O . <i>Chemistry of Materials</i> , 2020, 32, 8553-8560.	3.2	23
64	Thermally Conductive AlN Network Shield for Separators to Achieve Dendrite-Free Plating and Fast Li^+ Ion Transport toward Durable and High-Rate Lithium-Metal Anodes. <i>Advanced Science</i> , 2022, 9, e2200411.	5.6	23
65	Regulation of oxygen vacancy within oxide pyrochlores by F-doping to boost oxygen-evolution activity. <i>Journal of Power Sources</i> , 2021, 502, 229903.	4.0	22
66	Atomistic simulation of the 60° dislocation mobility in silicon crystal. <i>Superlattices and Microstructures</i> , 2006, 40, 113-118.	1.4	20
67	Structural and Compositional Regulation of Nitrogen-Doped Carbon Nanotubes with Nitrogen-Containing Aromatic Precursors. <i>Journal of Physical Chemistry C</i> , 2013, 117, 7811-7817.	1.5	18
68	Boosting oxygen reduction activity of spinel CoFe_2O_4 by strong interaction with hierarchical nitrogen-doped carbon nanocages. <i>Science Bulletin</i> , 2017, 62, 1365-1372.	4.3	18
69	First-principles study of catalytic activity of W-doped cobalt phosphide toward the hydrogen evolution reaction. <i>Chinese Journal of Catalysis</i> , 2020, 41, 1698-1705.	6.9	18
70	Advanced non-precious electrocatalyst of the mixed valence CoO_x nanocrystals supported on N-doped carbon nanocages for oxygen reduction. <i>Science China Chemistry</i> , 2015, 58, 180-186.	4.2	17
71	Theoretical Exploration of the Thermodynamic Process Competition between NRR and HER on Transition-Metal-Doped CoP (101) Facets. <i>Journal of Physical Chemistry C</i> , 2021, 125, 17051-17057.	1.5	15
72	Spinel Nickel Cobaltite Mesostructures Assembled from Ultrathin Nanosheets for High-Performance Electrochemical Energy Storage. <i>ACS Applied Energy Materials</i> , 2018, 1, 684-691.	2.5	14

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73	Breaking the scaling relationship of ORR on carbon-based single-atom catalysts through building a local collaborative structure. <i>Catalysis Science and Technology</i> , 2021, 11, 7764-7772.	2.1	14
74	The Influence of the Epitaxial Growth Process Parameters on Layer Characteristics and Device Performance in Si-passivated Ge pMOSFETs. <i>ECS Transactions</i> , 2009, 19, 183-194.	0.3	13
75	Doping sp ² carbon to boost the activity for oxygen reduction in an acidic medium: a theoretical exploration. <i>RSC Advances</i> , 2016, 6, 48498-48503.	1.7	13
76	An In-Depth Theoretical Exploration of Influences of Non-Metal Elements Doping on the ORR Performance of Co ₄ . <i>ChemCatChem</i> , 2021, 13, 2303-2310.	1.8	12
77	Vertically Grown Few-Layer MoS ₂ Nanosheets on Hierarchical Carbon Nanocages for Pseudocapacitive Lithium Storage with Ultrahigh-Rate Capability and Long-Term Recyclability. <i>Chemistry - A European Journal</i> , 2019, 25, 3843-3848.	1.7	11
78	Carbon Nanocages: Nitrogen-Doped Carbon Nanocages as Efficient Metal-Free Electrocatalysts for Oxygen Reduction Reaction (Adv. Mater. 41/2012). <i>Advanced Materials</i> , 2012, 24, 5646-5646.	11.1	10
79	Enlarging ion-transfer micropore channels of hierarchical carbon nanocages for ultrahigh energy and power densities. <i>Science China Materials</i> , 2021, 64, 2173-2181.	3.5	10
80	Free-Standing Monolithic Sulfur Cathode of Reduced Graphene Oxide Wrapped Sulfur-Filled Carbon Nanocages with High Areal Capacity. <i>Acta Chimica Sinica</i> , 2018, 76, 627.	0.5	10
81	The Composite-Template Method to Construct Hierarchical Carbon Nanocages for Supercapacitors with Ultrahigh Energy and Power Densities. <i>Small</i> , 2022, 18, e2107082.	5.2	10
82	Effective enhancement of electrochemical energy storage of cobalt-based nanocrystals by hybridization with nitrogen-doped carbon nanocages. <i>Science China Materials</i> , 2019, 62, 1393-1402.	3.5	8
83	Construction of Cobalt/Nitrogen/Carbon Electrocatalysts with Highly Exposed Active Sites for Oxygen Reduction Reaction. <i>Acta Chimica Sinica</i> , 2019, 77, 60.	0.5	8
84	Confinement and Electrocatalysis of Cerium Fluoride Nanocages to Boost the Lithium-Sulfur Batteries Performance. <i>Small Structures</i> , 2022, 3, .	6.9	8
85	Hierarchical LiNi _x Co _y O ₂ mesostructures as high-performance cathode materials for lithium ion batteries. <i>Journal of Power Sources</i> , 2016, 326, 279-284.	4.0	7
86	Defect-induced deposition of manganese oxides on hierarchical carbon nanocages for high-performance lithium-oxygen batteries. <i>Nano Research</i> , 2022, 15, 4132-4136.	5.8	7
87	Ge-H empirical potential and simulation of Si epitaxy on Ge(100) by chemical vapor deposition from SiH ₄ . <i>Physical Review B</i> , 2009, 79, .	1.1	6
88	Supercapacitor Nanostructures: Carbon Nanocages as Supercapacitor Electrode Materials (Adv. Tj ETQq0 0 0 rgBT/Overlock_10 Tf 50 1	11.1	6
89	Multi-scale simulation of lithium diffusion in the presence of a 30° partial dislocation and stacking fault in Si. <i>Journal of Applied Physics</i> , 2014, 115, 043532.	1.1	6
90	Carbon Nanocages Supported LiFePO ₄ Nanoparticles as High-Performance Cathode for Lithium Ion Batteries. <i>Acta Chimica Sinica</i> , 2014, 72, 653.	0.5	6

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91	Multi-scale simulation of the stability and diffusion of lithium in the presence of a 90Å° partial dislocation in silicon. <i>Journal of Applied Physics</i> , 2014, 116, 213504.	1.1	5
92	Nonmacrocylic Iron(II) Soluble Redox Mediators Leading to High-Rate LiO ₂ Battery. <i>CCS Chemistry</i> , 2021, 3, 1350-1358.	4.6	5
93	Synthesis and Electrocatalytic Oxygen Reduction Performance of the Sulfur-Doped Carbon Nanocages. <i>Acta Chimica Sinica</i> , 2014, 72, 1070.	0.5	5
94	Influence of Preparation Methods on Catalytic Performance of Fe/NCNTs Fischer-Tropsch Catalysts. <i>Acta Chimica Sinica</i> , 2014, 72, 1017.	0.5	5
95	Surface-diffusion enhanced Ga incorporation in ZnO nanowires by oxygen vacancies. <i>Applied Surface Science</i> , 2016, 361, 221-225.	3.1	4
96	Communication—An Organic Solvent System-Assisted Electrodeposition of Highly Active Pt for the Oxygen Reduction Reaction. <i>Journal of the Electrochemical Society</i> , 2018, 165, J3392-J3394.	1.3	4
97	Atomic mechanism of the distribution and diffusion of lithium in a cracked Si anode. <i>Scripta Materialia</i> , 2021, 197, 113807.	2.6	4
98	Ruthenium Nanoparticles Supported on Hierarchical Nitrogen-Doped Carbon Nanocages for Selective Hydrogenation of Acetophenone in Mild Conditions. <i>Acta Chimica Sinica</i> , 2017, 75, 686.	0.5	4
99	Hierarchical Nitrogen-doped Carbon Nanocages as High-rate Long-life Cathode Material for Rechargeable Magnesium Batteries. <i>Acta Chimica Sinica</i> , 2020, 78, 444.	0.5	4
100	Hierarchical Carbon Nanocages as the High-performance Cathode for Li-O ₂ Battery Promoted by Soluble Redox Mediator. <i>Acta Chimica Sinica</i> , 2020, 78, 572.	0.5	4
101	DIFFUSION OF LITHIUM IN SILICON AFFECTED BY 60Å° MISFIT-DISLOCATION. <i>Modern Physics Letters B</i> , 2013, 27, 1350168.	1.0	3
102	Phase-equilibrium-dominated vapor-liquid-solid mechanism: further evidence. <i>Science China Materials</i> , 2016, 59, 20-27.	3.5	3
103	Morphology and composition evolution of one-dimensional InxAl1-x nanostructures induced by the vapour pressure ratio. <i>CrystEngComm</i> , 2016, 18, 213-217.	1.3	3
104	Hierarchical Carbon Nanocages as Efficient Catalysts for Oxidative Coupling of Benzylamine to N-Benzylidene Benzylamine. <i>Acta Chimica Sinica</i> , 2021, 79, 539.	0.5	3
105	Alloyed Pt-Ru Nanoparticles Immobilized on Mesostructured Nitrogen-Doped Carbon Nanocages for Efficient Methanol Electrooxidation. <i>Acta Chimica Sinica</i> , 2016, 74, 587.	0.5	3
106	Carbon Nanocages//Tungsten Trioxide Nanorods Supercapacitors with in situ Polymerized Gel Electrolytes. <i>Acta Chimica Sinica</i> , 2021, 79, 755.	0.5	2
107	Silicon acid batteries enabled by a copper catalysed electrochemo-mechanical process. <i>Energy and Environmental Science</i> , 2021, 14, 6672-6677.	15.6	2
108	Advanced carbon-based nanotubes/nanocages for energy conversion and storage: synthesis, performance and mechanism. , 2013, , .		1

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109	Constructing monolithic sulfur cathodes with multifunctional N,P dual-doped carbon nanocages to achieve high-areal-capacity lithium-sulfur batteries. <i>FlatChem</i> , 2021, 28, 100253.	2.8	1
110	The influence of crack on the Si anode performance in Na- and Mg-ion batteries: An atomic multiscale study. <i>Computational Materials Science</i> , 2022, 205, 111237.	1.4	1
111	Constructing Si ₃ N ₄ nanowires by phase-equilibrium-dominated vapor-liquid-solid mechanism. <i>Physical Review Materials</i> , 20	0.9	0