

# Jae-Pyoung Ahn

## List of Publications by Year in descending order

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149  
papers

5,163  
citations

109321

35  
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102487

66  
g-index

152  
all docs

152  
docs citations

152  
times ranked

7940  
citing authors

#	ARTICLE	IF	CITATIONS
1	Easy Synthesis and Magnetic Properties of Iron Oxide Nanoparticles. <i>Chemistry of Materials</i> , 2004, 16, 2814-2818.	6.7	524
2	Long-term clinical study and multiscale analysis of in vivo biodegradation mechanism of Mg alloy. <i>Proceedings of the National Academy of Sciences of the United States of America</i> , 2016, 113, 716-721.	7.1	337
3	Superplastic Deformation of Defect-Free Au Nanowires via Coherent Twin Propagation. <i>Nano Letters</i> , 2011, 11, 3499-3502.	9.1	189
4	The growth of AA graphite on (111) diamond. <i>Journal of Chemical Physics</i> , 2008, 129, 234709.	3.0	188
5	Structure and mechanical properties of W incorporated diamond-like carbon films prepared by a hybrid ion beam deposition technique. <i>Carbon</i> , 2006, 44, 1826-1832.	10.3	161
6	TiO <sub>2</sub> single-crystalline nanorod electrode for quasi-solid-state dye-sensitized solar cells. <i>Applied Physics Letters</i> , 2005, 87, 113113.	3.3	143
7	Se-Rich MoSe <sub>2</sub> Nanosheets and Their Superior Electrocatalytic Performance for Hydrogen Evolution Reaction. <i>ACS Nano</i> , 2020, 14, 6295-6304.	14.6	125
8	Improvement in hydrogen sorption kinetics of MgH <sub>2</sub> with Nb hydride catalyst. <i>Acta Materialia</i> , 2007, 55, 5073-5079.	7.9	113
9	A room temperature Na/S battery using a $\gamma$ -alumina solid electrolyte separator, tetraethylene glycol dimethyl ether electrolyte, and a S/C composite cathode. <i>Journal of Power Sources</i> , 2016, 301, 332-337.	7.8	106
10	Structure and mechanical properties of Ag-incorporated DLC films prepared by a hybrid ion beam deposition system. <i>Thin Solid Films</i> , 2007, 516, 248-251.	1.8	103
11	Activation of a Ni electrocatalyst through spontaneous transformation of nickel sulfide to nickel hydroxide in an oxygen evolution reaction. <i>Applied Catalysis B: Environmental</i> , 2018, 233, 130-135.	20.2	103
12	Enhanced plasticity in a bulk amorphous matrix composite: macroscopic and microscopic viewpoint studies. <i>Acta Materialia</i> , 2005, 53, 129-139.	7.9	102
13	A singular flexible cathode for room temperature sodium/sulfur battery. <i>Journal of Power Sources</i> , 2016, 307, 31-37.	7.8	102
14	Release of N <sub>2</sub> from the Carbon Nanotubes via High-Temperature Annealing. <i>Journal of Physical Chemistry B</i> , 2005, 109, 1683-1688.	2.6	95
15	Deformation-induced nanocrystallization and its influence on work hardening in a bulk amorphous matrix composite. <i>Acta Materialia</i> , 2004, 52, 1525-1533.	7.9	90
16	Origin of Size Dependency in Coherent-Twin-Propagation-Mediated Tensile Deformation of Noble Metal Nanowires. <i>Nano Letters</i> , 2013, 13, 5112-5116.	9.1	88
17	Helical Structure of Single-Crystalline ZnGa <sub>2</sub> O <sub>4</sub> Nanowires. <i>Journal of the American Chemical Society</i> , 2005, 127, 10802-10803.	13.7	87
18	Sodium Polysulfides during Charge/Discharge of the Room-Temperature Na/S Battery Using TEGDME Electrolyte. <i>Journal of the Electrochemical Society</i> , 2016, 163, A611-A616.	2.9	82

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19	Mechanochemical synthesis and characterization of TiB <sub>2</sub> and VB <sub>2</sub> nanopowders. <i>Materials Letters</i> , 2008, 62, 2461-2464.	2.6	63
20	Synthesis and surface modification of hydrophobic magnetite to processible magnetite@silica-propylamine. <i>Journal of Magnetism and Magnetic Materials</i> , 2005, 293, 177-181.	2.3	62
21	Oxidation of nanophase tin particles. <i>Scripta Materialia</i> , 1999, 11, 211-220.	0.5	61
22	Subcellular Neural Probes from Single-Crystal Gold Nanowires. <i>ACS Nano</i> , 2014, 8, 8182-8189.	14.6	61
23	Phase Evolution of Re <sub>1-x</sub> Mo <sub>x</sub> Se <sub>2</sub> Alloy Nanosheets and Their Enhanced Catalytic Activity toward Hydrogen Evolution Reaction. <i>ACS Nano</i> , 2020, 14, 11995-12005.	14.6	59
24	A new method for mapping the three-dimensional atomic distribution within nanoparticles by atom probe tomography (APT). <i>Ultramicroscopy</i> , 2018, 190, 30-38.	1.9	51
25	Synaptic devices based on two-dimensional layered single-crystal chromium thiophosphate (CrPS <sub>4</sub> ). <i>NPG Asia Materials</i> , 2018, 10, 23-30.	7.9	48
26	Microstructural evolution of NbF <sub>5</sub> -doped MgH <sub>2</sub> exhibiting fast hydrogen sorption kinetics. <i>Journal of Power Sources</i> , 2008, 178, 373-378.	7.8	46
27	Facile phase and composition tuned synthesis of tin chalcogenide nanocrystals. <i>RSC Advances</i> , 2013, 3, 10349.	3.6	44
28	Spinodally Decomposed PbSe-PbTe Nanoparticles for High-Performance Thermoelectrics: Enhanced Phonon Scattering and Unusual Transport Behavior. <i>ACS Nano</i> , 2016, 10, 7197-7207.	14.6	44
29	Revealing the factors determining the selectivity of guaiacol HDO reaction pathways using ZrP-supported Co and Ni catalysts. <i>Journal of Catalysis</i> , 2019, 377, 343-357.	6.2	43
30	Unusual stress behavior in W-incorporated hydrogenated amorphous carbon films. <i>Applied Physics Letters</i> , 2005, 86, 111902.	3.3	42
31	Degradation mechanism of room temperature Na/Ni <sub>3</sub> S <sub>2</sub> cells using Ni <sub>3</sub> S <sub>2</sub> electrodes prepared by mechanical alloying. <i>Journal of Power Sources</i> , 2013, 244, 764-770.	7.8	42
32	Catalytically Active Au Layers Grown on Pd Nanoparticles for Direct Synthesis of H <sub>2</sub> O <sub>2</sub> : Lattice Strain and Charge-Transfer Perspective Analyses. <i>ACS Nano</i> , 2019, 13, 4761-4770.	14.6	42
33	Intercalated complexes of 1Tâ€²-MoS <sub>2</sub> nanosheets with alkylated phenylenediamines as excellent catalysts for electrochemical hydrogen evolution. <i>Journal of Materials Chemistry A</i> , 2019, 7, 2334-2343.	10.3	41
34	Microstructure and gas-sensing properties of thick film sensor using nanophase SnO <sub>2</sub> powder. <i>Sensors and Actuators B: Chemical</i> , 2004, 99, 18-24.	7.8	38
35	Facile conductive bridges formed between silicon nanoparticles inside hollow carbon nanofibers. <i>Nanoscale</i> , 2013, 5, 4790.	5.6	37
36	Synthesis and Magnetic Properties of Manganese-Doped GaP Nanowires. <i>Journal of Physical Chemistry B</i> , 2005, 109, 9311-9316.	2.6	36

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37	IrO <sub>2</sub> –ZnO Hybrid Nanoparticles as Highly Efficient Trifunctional Electrocatalysts. <i>Journal of Physical Chemistry C</i> , 2017, 121, 14899-14906.	3.1	35
38	Formation of Zintl Ions and Their Configurational Change during Sodiation in Na–Sn Battery. <i>Nano Letters</i> , 2017, 17, 679-686.	9.1	32
39	Studies on Catalytic Activity of Hydrogen Peroxide Generation according to Au Shell Thickness of Pd/Au Nanocubes. <i>ACS Applied Materials &amp; Interfaces</i> , 2018, 10, 38109-38116.	8.0	32
40	Two-dimensional MoS <sub>2</sub> /Fe-phthalocyanine hybrid nanostructures as excellent electrocatalysts for hydrogen evolution and oxygen reduction reactions. <i>Nanoscale</i> , 2019, 11, 14266-14275.	5.6	32
41	Magnetic properties, structure and shape-memory transitions in Ni-Mn-Ga thin films grown by ion-beam sputtering. <i>IEEE Transactions on Magnetics</i> , 2001, 37, 2141-2143.	2.1	31
42	Coordinatively Induced Length Control and Photoluminescence of WO <sub>3</sub> Nanorods. <i>Inorganic Chemistry</i> , 2005, 44, 7171-7174.	4.0	31
43	A Cu-based amorphous alloy with a simultaneous improvement in its glass forming ability and plasticity. <i>Metals and Materials International</i> , 2007, 13, 21-24.	3.4	31
44	3D-networked carbon nanotube/diamond core-shell nanowires for enhanced electrochemical performance. <i>NPG Asia Materials</i> , 2014, 6, e115-e115.	7.9	31
45	Role of atomic-scale chemical heterogeneities in improving the plasticity of Cu-Zr-Ag bulk amorphous alloys. <i>Acta Materialia</i> , 2018, 157, 209-217.	7.9	31
46	Metastable hexagonal close-packed palladium hydride in liquid cell TEM. <i>Nature</i> , 2022, 603, 631-636.	27.8	31
47	Deformation twinning of ultrahigh strength aluminum nanowire. <i>Acta Materialia</i> , 2018, 160, 14-21.	7.9	30
48	Tailored Palladium–Platinum Nanoconcave Cubes as High Performance Catalysts for the Direct Synthesis of Hydrogen Peroxide. <i>ACS Applied Materials &amp; Interfaces</i> , 2020, 12, 6328-6335.	8.0	30
49	Room-Temperature Ferromagnetic Ga <sub>1-x</sub> Mn <sub>x</sub> As (x ≈ 0.05) Nanowires: Dependence of Electronic Structures and Magnetic Properties on Mn Content. <i>Chemistry of Materials</i> , 2009, 21, 1137-1143.	6.7	29
50	Three-Dimensional Structure of Twinned and Zigzagged One-Dimensional Nanostructures Using Electron Tomography. <i>Nano Letters</i> , 2010, 10, 1682-1691.	9.1	28
51	Selective crack suppression during deformation in metal films on polymer substrates using electron beam irradiation. <i>Nature Communications</i> , 2019, 10, 4454.	12.8	26
52	Intercalation of cobaltocene into WS <sub>2</sub> nanosheets for enhanced catalytic hydrogen evolution reaction. <i>Journal of Materials Chemistry A</i> , 2019, 7, 8101-8106.	10.3	26
53	Strain hardening of an amorphous matrix composite due to deformation-induced nanocrystallization during quasistatic compression. <i>Applied Physics Letters</i> , 2004, 84, 2781-2783.	3.3	25
54	The effect of electric current and surface oxidization on the growth of Sn whiskers. <i>Applied Surface Science</i> , 2010, 256, 7166-7174.	6.1	25

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55	Interfacial Reactions in the Li/Si diffusion couples: Origin of Anisotropic Lithiation of Crystalline Si in Li <sup>+</sup> Si batteries. <i>Scientific Reports</i> , 2017, 7, 14028.	3.3	25
56	Sloughing a Precursor Layer to Expose Active Stainless Steel Catalyst for Water Oxidation. <i>ACS Applied Materials &amp; Interfaces</i> , 2018, 10, 24499-24507.	8.0	25
57	Pattern-Selective Epitaxial Growth of Twin-Free Pd Nanowires from Supported Nanocrystal Seeds. <i>ACS Nano</i> , 2010, 4, 2919-2927.	14.6	24
58	Face-Centered-Cubic Lithium Crystals Formed in Mesopores of Carbon Nanofiber Electrodes. <i>ACS Nano</i> , 2013, 7, 5801-5807.	14.6	24
59	Effect of orthorhombic phase on hydrogen gas sensing property of thick-film sensors fabricated by nanophase tin dioxide. <i>Sensors and Actuators B: Chemical</i> , 2003, 94, 125-131.	7.8	23
60	Chemically Evolved Composite Lithium-Ion Conductors with Lithium Thiophosphates and Nickel Sulfides. <i>ACS Energy Letters</i> , 2017, 2, 1740-1745.	17.4	23
61	Three-dimensional evaluation of compositional and structural changes in cycled LiNi <sub>1/3</sub> Co <sub>1/3</sub> Mn <sub>1/3</sub> O <sub>2</sub> by atom probe tomography. <i>Journal of Power Sources</i> , 2018, 379, 160-166.	7.8	23
62	Ultrafast Sodiation of Single-Crystalline Sn Anodes. <i>ACS Applied Materials &amp; Interfaces</i> , 2018, 10, 560-568.	8.0	22
63	Effect of green density on subsequent densification and grain growth of nanophase SnO <sub>2</sub> powder during isothermal sintering. <i>Scripta Materialia</i> , 1997, 8, 637-643.	0.5	21
64	Ultrahigh Tensile Strength Nanowires with a Ni/Ni <sup>+</sup> Au Multilayer Nanocrystalline Structure. <i>Nano Letters</i> , 2016, 16, 3500-3506.	9.1	21
65	Failure criterion of silver nanowire electrodes on a polymer substrate for highly flexible devices. <i>Scientific Reports</i> , 2017, 7, 45903.	3.3	21
66	Anisotropic alloying of Re <sub>1-x</sub> Mo <sub>x</sub> S <sub>2</sub> nanosheets to boost the electrochemical hydrogen evolution reaction. <i>Journal of Materials Chemistry A</i> , 2020, 8, 25131-25141.	10.3	21
67	High rate capabilities induced by multi-phasic nanodomains in iron-substituted calcium cobaltite electrodes. <i>Journal of Materials Chemistry</i> , 2009, 19, 1829.	6.7	20
68	Ga Ordering and Electrical Conductivity in Nanotwin and Superlattice-Structured Ga-Doped ZnO. <i>Crystal Growth and Design</i> , 2012, 12, 1167-1172.	3.0	20
69	High performance enzyme fuel cells using a genetically expressed FAD-dependent glucose dehydrogenase $\beta$ -subunit of <i>Burkholderia cepacia</i> immobilized in a carbon nanotube electrode for low glucose conditions. <i>Physical Chemistry Chemical Physics</i> , 2013, 15, 9508.	2.8	20
70	Strain Mapping and Raman Spectroscopy of Bent GaP and GaAs Nanowires. <i>ACS Omega</i> , 2018, 3, 3129-3135.	3.5	20
71	Phase Controlled Growth of Cd <sub>3</sub> As <sub>2</sub> Nanowires and Their Negative Photoconductivity. <i>Nano Letters</i> , 2020, 20, 4939-4946.	9.1	20
72	Nickel phosphide polymorphs with an active (001) surface as excellent catalysts for water splitting. <i>CrystEngComm</i> , 2019, 21, 1143-1149.	2.6	19

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73	Suppressing the Dark Current in Quantum Dot Infrared Photodetectors by Controlling Carrier Statistics. <i>Advanced Optical Materials</i> , 2022, 10, 2101611.	7.3	19
74	The Preparation of TiO <sub>2</sub> Nanoparticle Photocatalysts by a Flame Method and Their Photocatalytic Reactivity for the Degradation of 2-Propanol. <i>Chemistry Letters</i> , 2004, 33, 1562-1563.	1.3	18
75	Observation of partial reduction of manganese in the lithium rich layered oxides, 0.4Li <sub>2</sub> MnO <sub>3</sub> •0.6LiNi <sub>1/3</sub> Co <sub>1/3</sub> Mn <sub>1/3</sub> O <sub>2</sub> , during the first charge. <i>Physical Chemistry Chemical Physics</i> , 2017, 19, 1268-1275.		18
76	Diffusion kinetics governing the diffusivity and diffusion anisotropy of alloying anodes in Na-ion batteries. <i>Nano Energy</i> , 2019, 65, 104041.	16.0	18
77	ZrO <sub>2</sub> -Modified LiMn <sub>2</sub> O <sub>4</sub> Thin-Film Cathodes Prepared by Pulsed Laser Deposition. <i>Journal of the Electrochemical Society</i> , 2010, 157, A567.	2.9	17
78	Fabrication of Atom Probe Tomography Specimens from Nanoparticles Using a Fusible Bi-In-Sn Alloy as an Embedding Medium. <i>Microscopy and Microanalysis</i> , 2019, 25, 438-446.	0.4	17
79	Effect of compact structures on the phase transition, subsequent densification and microstructure evolution during sintering of ultrafine gamma alumina powder. <i>Scripta Materialia</i> , 1999, 11, 133-140.	0.5	16
80	Anisotropic growth of Pt on Pd nanocube promotes direct synthesis of hydrogen peroxide. <i>Applied Surface Science</i> , 2021, 562, 150031.	6.1	16
81	Origin of high Coulombic loss during sodiation in Na-Sn battery. <i>Journal of Power Sources</i> , 2017, 343, 513-519.	7.8	15
82	Bent Polytypic ZnSe and CdSe Nanowires Probed by Photoluminescence. <i>Small</i> , 2017, 13, 1603695.	10.0	15
83	Polymorphism of GeSbTe Superlattice Nanowires. <i>Nano Letters</i> , 2013, 13, 543-549.	9.1	14
84	Effects of Surface Oxide on the Nitridation Behavior of Aluminum Particles. <i>Metallurgical and Materials Transactions A: Physical Metallurgy and Materials Science</i> , 2015, 46, 496-504.	2.2	14
85	Two-dimensional MoS <sub>2</sub> •melamine hybrid nanostructures for enhanced catalytic hydrogen evolution reaction. <i>Journal of Materials Chemistry A</i> , 2019, 7, 22571-22578.	10.3	14
86	Effect of compact density on phase transition kinetics from anatase phase to rutile phase during sintering of ultrafine titania powder compacts. <i>Scripta Materialia</i> , 1998, 10, 1087-1096.	0.5	13
87	High-strength Cu-Zr binary alloy with an ultrafine eutectic microstructure. <i>Journal of Materials Research</i> , 2008, 23, 1987-1994.	2.6	13
88	A new absorption band and visible absorption properties in V-doped TiO <sub>2</sub> nanopowder. <i>Surface and Interface Analysis</i> , 2012, 44, 1449-1452.	1.8	13
89	Microstructural and textural characterization in MgO thin film using HRTEM. <i>Thin Solid Films</i> , 2009, 517, 3995-3998.	1.8	12
90	<i>In Situ</i> Temperature-Dependent Transmission Electron Microscopy Studies of Pseudobinary GeTe <sub>2</sub> •Bi <sub>2</sub> Te <sub>3</sub> (x = 3~8) Nanowires and First-Principles Calculations. <i>Nano Letters</i> , 2015, 15, 3923-3930.	9.1	12

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91	Synthesis of Polytypic Gallium Phosphide and Gallium Arsenide Nanowires and Their Application as Photodetectors. ACS Omega, 2019, 4, 3098-3104.	3.5	12
92	Electrical resistivity and microstructural evolution of electrodeposited Co and Co-W nanowires. Materials Characterization, 2020, 166, 110451.	4.4	12
93	Facile Direct Seed-Mediated Growth of AuPt Bimetallic Shell on the Surface of Pd Nanocubes and Application for Direct H <sub>2</sub> O <sub>2</sub> Synthesis. Catalysts, 2020, 10, 650.	3.5	12
94	Characterization of Pd and Pd@Au core-shell nanoparticles using atom probe tomography and field evaporation simulation. Journal of Alloys and Compounds, 2020, 831, 154721.	5.5	12
95	Nonvolatile Memory Effects of NiO Layers Embedded in Al <sub>2</sub> O <sub>3</sub> High-k Dielectrics Using Atomic Layer Deposition. Electrochemical and Solid-State Letters, 2010, 13, H209.	2.2	11
96	Gas-phase substitution synthesis of Cu <sub>1.8</sub> S and Cu <sub>2</sub> S superlattice nanowires from CdS nanowires. CrystEngComm, 2011, 13, 2091.	2.6	11
97	Ultrafast chemical lithiation of single crystalline silicon nanowires: in situ characterization and first principles modeling. RSC Advances, 2015, 5, 17438-17443.	3.6	11
98	Effect of carbon on the nitridation behavior of aluminum powder. Journal of Alloys and Compounds, 2016, 689, 218-224.	5.5	11
99	Isotropic Sodiation Behaviors of Ultrafast-Chargeable Tin Crystals. ACS Applied Materials & Interfaces, 2018, 10, 41389-41397.	8.0	10
100	Diffusion Along Dislocations Mitigates Self-Limiting Na Diffusion in Crystalline Sn. Small, 2020, 16, e2004868.	10.0	10
101	Twin boundary sliding in single crystalline Cu and Al nanowires. Acta Materialia, 2020, 196, 69-77.	7.9	10
102	Thorn-like BN nanostructures. Solid State Communications, 2005, 133, 139-143.	1.9	9
103	Preparation of bimetal incorporated TiO <sub>2</sub> photocatalytic nano-powders by flame method and their photocatalytic reactivity for the degradation of diluted 2-propanol. Current Applied Physics, 2007, 7, 118-123.	2.4	9
104	Electrical properties and microstructural characterization of single ZnO nanowire sensor manufactured by FIB. Thin Solid Films, 2009, 517, 4003-4006.	1.8	9
105	Structure of multi-wall carbon nanotubes: AA-stacked graphene helices. Applied Physics Letters, 2013, 102, 161911.	3.3	9
106	Anomalous Stagewise Lithiation of Gold-Coated Silicon Nanowires: A Combined In Situ Characterization and First-Principles Study. ACS Applied Materials & Interfaces, 2015, 7, 16976-16983.	8.0	9
107	Aqueous-phase synthesis of Pd/TiO <sub>2</sub> /Fe <sub>3</sub> O <sub>4</sub> hybrid nanostructures and their enhanced catalytic properties. Chemical Physics Letters, 2018, 712, 13-19.	2.6	9
108	Epitaxially aligned submillimeter-scale silver nanoplates grown by simple vapor transport. Nanoscale, 2019, 11, 17436-17443.	5.6	9

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109	Understanding filamentary growth and rupture by Ag ion migration through single-crystalline 2D layered CrPS <sub>4</sub> . <i>NPG Asia Materials</i> , 2020, 12, .	7.9	9
110	Self-Assembly of Pulverized Nanoparticles: An Approach to Realize Large-Capacity, Long-Lasting, and Ultra-Fast-Chargeable Na-Ion Batteries. <i>Nano Letters</i> , 2021, 21, 9044-9051.	9.1	9
111	Effect of compact structure on phase transformation kinetics from anatase phase to rutile phase and microstructure evolution during sintering of ultrafine titania powder compacts. <i>Metals and Materials International</i> , 1999, 5, 129-134.	0.2	8
112	Nanocomposite ta-C films prepared by the filtered vacuum arc process using nanosized Ni dots on a Si substrate. <i>Chemical Physics Letters</i> , 2003, 380, 774-779.	2.6	8
113	Improvement in Oxidation Resistance of Ferritic Stainless Steel by Carbon Ion Implantation. <i>Electrochemical and Solid-State Letters</i> , 2010, 13, B40.	2.2	8
114	Evaluation of energy loss at Sn anodes based on phase transition behaviors and formation of electrically resistive phases of Na <sup>+</sup> /Sn batteries. <i>Journal of Materials Chemistry A</i> , 2018, 6, 9428-9436.	10.3	8
115	Real-time effect of electron beam on MoS <sub>2</sub> field-effect transistors. <i>Nanotechnology</i> , 2020, 31, 455202.	2.6	8
116	Crack Healing Mechanism by Application of Stack Pressure to the Carbon-Based Composite Anode of an All-Solid-State Battery. <i>ACS Applied Energy Materials</i> , 2022, 5, 5227-5235.	5.1	8
117	Lithiation Pathway Mechanism of Si-C Composite Anode Revealed by the Role of Nanopore using <i>in Situ</i> Lithiation. <i>ACS Energy Letters</i> , 2022, 7, 2469-2476.	17.4	8
118	Synthesis and liquid phase sintering of TiN/TiB <sub>2</sub> /Fe-Cr-Ni nanocomposite powder. <i>Journal of Alloys and Compounds</i> , 2006, 422, 62-66.	5.5	7
119	Partitioning of the organic layers for the fabrication of high efficiency organic photovoltaic devices. <i>Organic Electronics</i> , 2009, 10, 1091-1096.	2.6	7
120	Focused Ion Beam-Based Specimen Preparation for Atom Probe Tomography. <i>Applied Microscopy</i> , 2016, 46, 14-19.	1.4	7
121	Growth of Nanostructured Polycrystalline Cerium Oxide Through a Solvothermal Precipitation Using Near-Supercritical Fluids. <i>Journal of Nanoscience and Nanotechnology</i> , 2010, 10, 130-134.	0.9	6
122	Comparison of Nonvolatile Memory Effects in Ni-Based Layered and Dotted Nanostructures Prepared through Atomic Layer Deposition. <i>Electrochemical and Solid-State Letters</i> , 2011, 14, J41.	2.2	6
123	Nitridation-assisted Al infiltration for fabricating Al composites. <i>Journal of Materials Science</i> , 2017, 52, 4333-4344.	3.7	6
124	Anisotropic Swelling Governed by Orientation-Dependent Interfacial Na Diffusion in Single-Crystalline Sb. <i>Chemistry of Materials</i> , 2019, 31, 1696-1703.	6.7	6
125	Effect of Convection Gas on the Synthesis of Nanophase Tin Oxides During a Gas Condensation Method. <i>Metals and Materials International</i> , 1997, 3, 188-192.	0.2	5
126	Monte Carlo Simulation of Phase Separation Behavior in a Cu-Co Alloy Nanoparticle. <i>Journal of Materials Research</i> , 2002, 17, 925-928.	2.6	5



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127	Three-dimensionally kinked high-conducting CoGe nanowire growth induced by rotational twinning. <i>Journal of Materials Chemistry C</i> , 2013, 1, 6259.	5.5	5
128	Electrical resistivity evolution in electrodeposited Ru and Ru-Co nanowires. <i>Journal of Materials Science and Technology</i> , 2022, 105, 17-25.	10.7	5
129	Microstructural analysis of oxide layer formation in ferritic stainless steel interconnects. <i>Materials at High Temperatures</i> , 2011, 28, 285-289.	1.0	4
130	The Effects of Nitrogen Bonding on Hardness of AlN/CrN Multilayer Hard Coatings. <i>Journal of Nanoscience and Nanotechnology</i> , 2012, 12, 1476-1479.	0.9	4
131	Thermally stable and low-resistance W/Ti/Au contacts to n-type GaN. <i>Journal of Materials Science: Materials in Electronics</i> , 2009, 20, 9-13.	2.2	3
132	Electrical characteristics of In/ITO p-type ohmic contacts for high-performance GaN-based light-emitting diodes. <i>Materials Science in Semiconductor Processing</i> , 2010, 13, 272-275.	4.0	3
133	Deformation criterion for face-centered-cubic metal nanowires. <i>Materials Science &amp; Engineering A: Structural Materials: Properties, Microstructure and Processing</i> , 2018, 736, 431-437.	5.6	3
134	Direct-Contact Microelectrical Measurement of the Electrical Resistivity of a Solid Electrolyte Interface. <i>Nano Letters</i> , 2019, 19, 3692-3698.	9.1	3
135	Facile Aqueous Phase Synthesis of Pd@FePt Core-Shell Nanoparticles for Methanol Oxidation Reaction. <i>Catalysts</i> , 2021, 11, 130.	3.5	3
136	Structural Stability During Charge-Discharge Cycles in Zr-doped LiCoO <sub>2</sub> Powders. <i>Journal of the Korean Ceramic Society</i> , 2008, 45, 167-171.	2.3	3
137	Effects of Pt Junction on Electrical Transport of Individual ZnO Nanorod Device Fabricated by Focused Ion Beam. <i>Journal of Nanoscience and Nanotechnology</i> , 2012, 12, 1466-1470.	0.9	2
138	Development of residual strains and their relaxation processes in atomically thin layers of core-shell structured nanoparticles. <i>Materials Characterization</i> , 2021, 175, 111064.	4.4	2
139	Tensile Test of an Al Nanowire using In-situ Transmission Electron Microscopy and its Dynamic Deformation Behavior. <i>Journal of Korean Institute of Metals and Materials</i> , 2016, 54, 386-389.	1.0	2
140	Advanced Methodologies for Manipulating Nanoscale Features in Focused Ion Beam. <i>Applied Microscopy</i> , 2015, 45, 208-213.	1.4	2
141	Methods to evaluate the twin formation energy: comparative studies of the atomic simulations and in-situ TEM tensile tests. <i>Applied Microscopy</i> , 2020, 50, 19.	1.4	2
142	Three-Dimensional Structure of Helical and Zigzagged Nanowires Using Electron Tomography. <i>Materials Research Society Symposia Proceedings</i> , 2008, 1144, 1.	0.1	1
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146	Electrical Transport Phenomena of Single ZnO Nanowire Device Directly Measured Using Nano Manipulator. <i>Materials Research Society Symposia Proceedings</i> , 2010, 1258, 1.	0.1	0
147	Hardness and Nitrogen Bonding Structure of Al <sub>x</sub> Ti <sub>1-x</sub> N/CrN Multilayer Hard Coating. <i>Journal of Nanoscience and Nanotechnology</i> , 2012, 12, 1581-1584.	0.9	0
148	Effect of magnesium on nitridation and infiltration of aluminum powder. <i>Metals and Materials International</i> , 2016, 22, 557-561.	3.4	0
149	Elucidating in-Situ Lithiation Pathway of Si-C Composite Anode in Lithium Ion Battery. <i>ECS Meeting Abstracts</i> , 2022, MA2022-01, 2251-2251.	0.0	0