Zonghoon Lee

List of Publications by Year
in descending order

Source: https://exaly.com/author-pdf/8734803/publications.pdf

Version: 2024-02-01

212 papers	13,303 citations	26630 56 h-index	24258 110 g-index
218 all docs	218 docs citations	218 times ranked	19187 citing authors

#	Article	IF	Citations
1	Precise Layer Control and Electronic State Modulation of a Transition Metal Dichalcogenide via Phaseâ€Transitionâ€Induced Growth. Advanced Materials, 2022, 34, e2103286.	21.0	21
2	Unconventional assemblies of bisacylhydrazones: The role of water for circularly polarized luminescence. Aggregate, 2022, 3, .	9.9	3
3	Observation of the Initial Stage of 3C-SiC Heteroepitaxial Growth on the Si Nanomembrane. Crystal Growth and Design, 2022, 22, 1421-1426.	3.0	3
4	Spiral Growth of Adlayer Graphene. Advanced Materials, 2022, 34, e2107587.	21.0	10
5	Folding and Fracture of Singleâ€Crystal Graphene Grown on a Cu(111) Foil. Advanced Materials, 2022, 34, e2110509.	21.0	11
6	Interface rich CuO/Al₂CuO₄ surface for selective ethylene production from electrochemical CO₂ conversion. Energy and Environmental Science, 2022, 15, 2397-2409.	30.8	54
7	Electrochemical Formation of a Covalentâ€“Ionic Stage-1 Graphite Intercalation Compound with Trifluoroacetic Acid. Chemistry of Materials, 2022, 34, 217-231.	6.7	6
8	In situ tensile and fracture behavior of monolithic ultra-thin amorphous carbon in TEM. Carbon, 2022, 196, 236-242.	10.3	5
9	Silica Particleâ€Mediated Growth of Single Crystal Graphene Ribbons on Cu(111) Foil. Small, 2022, , 2202536.	10.0	1
10	Defect-gradient-induced Rashba effect in van der Waals PtSe2 layers. Nature Communications, 2022, 13, 2759.	12.8	13
11	Design of 2D Layered Catalyst by Coherent Heteroepitaxial Conversion for Robust Hydrogen Generation. Advanced Functional Materials, 2021, 31, 2005449.	14.9	11
12	Vertically oriented MoS₂/WS₂ heterostructures on reduced graphene oxide sheets as electrocatalysts for hydrogen evolution reaction. Materials Chemistry Frontiers, 2021, 5, 3396-3403.	5.9	20
13	Anisotropic Angstrom-Wide Conductive Channels in Black Phosphorus by Top-down Cu Intercalation. Nano Letters, 2021, 21, 6336-6342.	9.1	10
14	Investigation of Oxide Phases of MoS2: van der Waals Epitaxially Formed Î±-MoO3 on MoS2. Microscopy and Microanalysis, 2021, 27, 646-647.	0.4	1
15	Atomic Arrangements of Graphene-like ZnO. Nanomaterials, 2021, 11, 1833.	4.1	5
16	Single-crystal, large-area, fold-free monolayer graphene. Nature, 2021, 596, 519-524.	27.8	205
17	In Situ Scanning Transmission Electron Microscopy Study of MoS₂ Formation on Graphene with a Deep-Learning Framework. ACS Omega, 2021, 6, 21623-21630.	3.5	6
18	Growth and Selective Etching of Twinned Graphene on Liquid Copper Surface. Small, 2021, 17, 2103484.	10.0	7

#	Article	IF	Citations
19	Epitaxially grown copper phosphide (Cu3P) nanosheets nanoarchitecture compared with film morphology for energy applications. Surfaces and Interfaces, 2021, 26, 101369.	3.0	2
20	Growth and Selective Etching of Twinned Graphene on Liquid Copper Surface (Small 40/2021). Small, 2021, 17, .	10.0	0
21	Elucidation of Novel Potassium-Mediated Oxidation and Etching of Two-Dimensional Transition Metal Dichalcogenides. ACS Applied Materials & Interfaces, 2021, 13, 49163-49171.	8.0	1
22	OH molecule-involved formation of point defects in monolayer graphene. Nanotechnology, 2021, 32, 025704.	2.6	0
23	Novel high-k gate dielectric properties of ultrathin hydrocarbon films for next-generation metal-insulator-semiconductor devices. Carbon, 2020, 158, 513-518.	10.3	4
24	Surface Energy Change of Atomic-Scale Metal Oxide Thin Films by Phase Transformation. ACS Nano, 2020, 14, 676-687.	14.6	10
25	Complete determination of the crystallographic orientation of ReX₂ (X = S, Se) by polarized Raman spectroscopy. Nanoscale Horizons, 2020, 5, 308-315.	8.0	37
26	Chemically induced transformation of chemical vapour deposition grown bilayer graphene into fluorinated single-layer diamond. Nature Nanotechnology, 2020, 15, 59-66.	31.5	184
27	Spontaneous Formation of a ZnO Monolayer by the Redox Reaction of Zn on Graphene Oxide. ACS Applied Materials & Interfaces, 2020, 12, 54222-54229.	8.0	9
28	Grapheneâ€Based Hybrid Carbons: Ultrahigh Strength and Modulus Grapheneâ€Based Hybrid Carbons with ABâ€Stacked and Turbostratic Structures (Adv. Funct. Mater. 50/2020). Advanced Functional Materials, 2020, 30, 2070334.	14.9	0
29	Mapping Graphene Grain Orientation by the Growth of WS₂ Films with Oriented Cracks. Chemistry of Materials, 2020, 32, 7484-7491.	6.7	3
30	Remarkably enhanced catalytic activity by the synergistic effect of palladium single atoms and palladiumâ€“cobalt phosphide nanoparticles. Nano Energy, 2020, 78, 105166.	16.0	57
31	Selfâ€Powered Gas Sensors: 2D Transition Metal Dichalcogenide Heterostructures for pâ€•and nâ€Type Photovoltaic Selfâ€Powered Gas Sensor (Adv. Funct. Mater. 43/2020). Advanced Functional Materials, 2020, 30, 2070284.	14.9	1
32	Contrast Transfer Function-Based Exit-Wave Reconstruction and Denoising of Atomic-Resolution Transmission Electron Microscopy Images of Graphene and Cu Single Atom Substitutions by Deep Learning Framework. Nanomaterials, 2020, 10, 1977.	4.1	4
33	Ultrahigh Strength and Modulus Grapheneâ€Based Hybrid Carbons with ABâ€Stacked and Turbostratic Structures. Advanced Functional Materials, 2020, 30, 2005381.	14.9	13
34	2D Transition Metal Dichalcogenide Heterostructures for pâ€•and nâ€Type Photovoltaic Selfâ€Powered Gas Sensor. Advanced Functional Materials, 2020, 30, 2003360.	14.9	102
35	Thiometallate precursors for the synthesis of supported Pt and PtNi nanoparticle electrocatalysts: Size-focusing by S capping. Nanoscale, 2020, 12, 10498-10504.	5.6	5
36	Ultralow-dielectric-constant amorphous boron nitride. Nature, 2020, 582, 511-514.	27.8	173

#	Article	IF	Citations
37	Antiphase Boundaries as Faceted Metallic Wires in 2D Transition Metal Dichalcogenides. Advanced Science, 2020, 7, 2000788.	11.2	3
38	Polytypism in few-layer gallium selenide. Nanoscale, 2020, 12, 8563-8573.	5.6	26
39	Observation of spin-polarized Anderson state around charge neutral point in graphene with Fe-clusters. Scientific Reports, 2020, 10, 4784.	3.3	2
40	One-dimensional hexagonal boron nitride conducting channel. Science Advances, 2020, 6, eaay4958.	10.3	37
41	Conversionless efficient and broadband laser light diffusers for high brightness illumination applications. Nature Communications, 2020, 11, 1437.	12.8	52
42	Synthesis of Highly Oriented Graphite Films with a Low Wrinkle Density and Near-Millimeter-Scale Lateral Grains. Chemistry of Materials, 2020, 32, 3134-3143.	6.7	9
43	Wafer-scale production of patterned transition metal ditelluride layers for two-dimensional metalâ€“semiconductor contacts at the Schottkyâ€“Mott limit. Nature Electronics, 2020, 3, 207-215.	26.0	91
44	Large-area single-crystal AB-bilayer and ABA-trilayer graphene grown on a Cu/Ni(111) foil. Nature Nanotechnology, 2020, 15, 289-295.	31.5	141
45	Improved interface quality of atomic-layer-deposited ZrO2 metal-insulator-metal capacitors with Ru bottom electrodes. Thin Solid Films, 2020, 701, 137950.	1.8	14
46	van der Waals Epitaxial Formation of Atomic Layered Î±-MoO₃ on MoS₂ by Oxidation. ACS Applied Materials & Interfaces, 2020, 12, 22029-22036.	8.0	25
47	Immiscible bi-metal single-atoms driven synthesis of electrocatalysts having superb mass-activity and durability. Applied Catalysis B: Environmental, 2020, 270, 118896.	20.2	102
48	A novel specimen preparation of porous cathode materials in lithium-ion batteries for high-resolution transmission electron microscopy. Materials Characterization, 2019, 155, 109804.	4.4	1
49	Synthesis of two-dimensional MoS2/graphene heterostructure by atomic layer deposition using MoF6 precursor. Applied Surface Science, 2019, 494, 591-599.	6.1	25
50	Reaction Mechanism of Pt Atomic Layer Deposition on Various Textile Surfaces. Chemistry of Materials, 2019, 31, 8995-9002.	6.7	13
51	Monolayer-like Behavior of Bilayer Transition-Metal Dichalcogenides. Microscopy and Microanalysis, 2019, 25, 1780-1781.	0.4	0
52	Highâ€Performance Hydrogen Evolution by Ru Single Atoms and Nitridedâ€Ru Nanoparticles Implanted on Nâ€Doped Graphitic Sheet. Advanced Energy Materials, 2019, 9, 1900931.	19.5	224
53	Atomicâ€Level Customization of 4 in. Transition Metal Dichalcogenide Multilayer Alloys for Industrial Applications. Advanced Materials, 2019, 31, e1901405.	21.0	52
54	Ultrastiff, Strong, and Highly Thermally Conductive Crystalline Graphitic Films with Mixed Stacking Order. Advanced Materials, 2019, 31, e1903039.	21.0	49

#	Article	IF	Citations
55	Dedicated preparation for in situ transmission electron microscope tensile testing of exfoliated graphene. Applied Microscopy, 2019, 49, 3.	1.4	4
56	Double-Spiral Hexagonal Boron Nitride and Shear Strained Coalescence Boundary. Nano Letters, 2019, 19, 4229-4236.	9.1	15
57	Electrically Robust Singleâ€Crystalline WTe₂ Nanobelts for Nanoscale Electrical Interconnects. Advanced Science, 2019, 6, 1801370.	11.2	17
58	The Third Eastâ€Asia Microscopy Conference (EAMC3). Microscopy Research and Technique, 2019, 82, 3-3.	2.2	0
59	Metallic Transitionâ€Metal Chalcogenides: Electrically Robust Singleâ€Crystalline WTe₂ Nanobelts for Nanoscale Electrical Interconnects (Adv. Sci. 3/2019). Advanced Science, 2019, 6, 1970017.	11.2	1
60	Interfaceâ€Driven Partial Dislocation Formation in 2D Heterostructures. Advanced Materials, 2019, 31, e1807486.	21.0	11
61	Formation of two-dimensional MoS2 and one-dimensional MoO2 nanowire hybrids. Applied Microscopy, 2019, 49, 16.	1.4	0
62	Synthesis of high-quality monolayer graphene by low-power plasma. Current Applied Physics, 2019, 19, 44-49.	2.4	4
63	Graphitization of graphene oxide films under pressure. Carbon, 2018, 132, 294-303.	10.3	84
64	Transient SHG Imaging on Ultrafast Carrier Dynamics of MoS₂ Nanosheets. Advanced Materials, 2018, 30, e1705190.	21.0	23
65	Carrier Dynamics: Transient SHG Imaging on Ultrafast Carrier Dynamics of MoS2 Nanosheets (Adv.) Tj ETQq1 1 0.784314 rgBT /Overlock	21.0	0
66	Large-area niobium disulfide thin films as transparent electrodes for devices based on two-dimensional materials. Nanoscale, 2018, 10, 1056-1062.	5.6	44
67	Local Lattice Match for Commensurate State of Graphene/h-BN van der Waals Heterostructure with TEM Analysis. Microscopy and Microanalysis, 2018, 24, 1616-1617.	0.4	0
68	Orientation-dependent optical characterization of atomically thin transition metal ditellurides. Nanoscale, 2018, 10, 21978-21984.	5.6	24
69	The impact of substrate surface defects on the properties of two-dimensional van der Waals heterostructures. Nanoscale, 2018, 10, 19212-19219.	5.6	10
70	Concentric and Spiral Few-Layer Graphene: Growth Driven by Interfacial Nucleation vs Screw Dislocation. Chemistry of Materials, 2018, 30, 6858-6866.	6.7	21
71	High-Performance Gas Sensor Using a Large-Area WS_{2x}Se_{2â€“2x} Alloy for Low-Power Operation Wearable Applications. ACS Applied Materials & Interfaces, 2018, 10, 34163-34171.	8.0	93
72	Highly Oriented Monolayer Graphene Grown on a Cu/Ni(111) Alloy Foil. ACS Nano, 2018, 12, 6117-6127.	14.6	132

#	Article	IF	Citations
73	Multicomponent electrocatalyst with ultralow Pt loading and high hydrogen evolution activity. Nature Energy, 2018, 3, 773-782.	39.5	542
74	Graphene: Unraveling the Water Impermeability Discrepancy in CVD-Grown Graphene (Adv. Mater.) Tj ETQq0 0 0 rgBT /Overlock 10 Tf 50	21.0	1
75	Low-temperature synthesis of 2D MoS₂ on a plastic substrate for a flexible gas sensor. Nanoscale, 2018, 10, 9338-9345.	5.6	142
76	Investigation of the Microstructure of Laser-Arc Hybrid Welded Boron Steel. Jom, 2018, 70, 1548-1553.	1.9	4
77	Degradation behaviors and mechanisms of MoS2 crystals relevant to bioabsorbable electronics. NPG Asia Materials, 2018, 10, 810-820.	7.9	36
78	Direct observation of leakage currents in a metalâ€“insulatorâ€“metal capacitor using in situ transmission electron microscopy. Nanotechnology, 2018, 29, 435705.	2.6	1
79	Singleâ€Crystalline Nanobelts Composed of Transition Metal Ditellurides. Advanced Materials, 2018, 30, e1707260.	21.0	18
80	Unraveling the Water Impermeability Discrepancy in CVDâ€Grown Graphene. Advanced Materials, 2018, 30, e1800022.	21.0	13
81	Phase Transformation of Two-Dimensional Transition Metal Dichalcogenides. Applied Microscopy, 2018, 48, 43-48.	1.4	9
82	Formation Dynamics of Carbon Atomic Chain from Graphene by Electron Beam Irradiation. Applied Microscopy, 2018, 48, 126-127.	1.4	1
83	Sulfur-Modified Graphitic Carbon Nitride Nanostructures as an Efficient Electrocatalyst for Water Oxidation. Small, 2017, 13, 1603893.	10.0	52
84	Controlled Folding of Single Crystal Graphene. Nano Letters, 2017, 17, 1467-1473.	9.1	92
85	A high-performance transparent graphene/vertically aligned carbon nanotube (VACNT) hybrid electrode for neural interfacing. RSC Advances, 2017, 7, 3273-3281.	3.6	14
86	Chemical Vapor-Deposited Hexagonal Boron Nitride as a Scalable Template for High-Performance Organic Field-Effect Transistors. Chemistry of Materials, 2017, 29, 2341-2347.	6.7	52
87	Role of Graphene in Water-Assisted Oxidation of Copper in Relation to Dry Transfer of Graphene. Chemistry of Materials, 2017, 29, 4546-4556.	6.7	63
88	On-stack two-dimensional conversion of MoS ₂ into MoO ₃. 2D Materials, 2017, 4, 014003.	4.4	51
89	Superaerophobic graphene nano-hills for direct hydrazine fuel cells. NPG Asia Materials, 2017, 9, e378-e378.	7.9	64
90	Evidence of Local Commensurate State with Lattice Match of Graphene on Hexagonal Boron Nitride. ACS Nano, 2017, 11, 7084-7090.	14.6	31

#	Article	IF	Citations
91	Effects of dry oxidation treatments on monolayer graphene. 2D Materials, 2017, 4, 024011.	4.4	12
92	Atomic Scale Study on Growth and Heteroepitaxy of ZnO Monolayer on Graphene. Nano Letters, 2017, 17, 120-127.	9.1	120
93	Molecular beam epitaxy of large-area SnSe ₂ with monolayer thickness fluctuation. 2D Materials, 2017, 4, 014006.	4.4	27
94	Substantial improvements of long-term stability in encapsulation-free WS ₂ using highly interacting graphene substrate. 2D Materials, 2017, 4, 011007.	4.4	20
95	Structural and Optical Properties of Single- and Few-Layer Magnetic Semiconductor CrPS₄. ACS Nano, 2017, 11, 10935-10944.	14.6	85
96	Catalytic chemical vapor deposition of large-area uniform two-dimensional molybdenum disulfide using sodium chloride. Nanotechnology, 2017, 28, 465103.	2.6	42
97	Epitaxial Growth of ZnO Monolayer on Graphene: The Thinnest Metal Oxide Semiconductor. Microscopy and Microanalysis, 2017, 23, 1434-1435.	0.4	4
98	Atomic-scale characterization of plasma-induced damage in plasma-enhanced atomic layer deposition. Applied Surface Science, 2017, 425, 781-787.	6.1	6
99	Porous Two-Dimensional Monolayer Metalâ€“Organic Framework Material and Its Use for the Size-Selective Separation of Nanoparticles. ACS Applied Materials & Interfaces, 2017, 9, 28107-28116.	8.0	51
100	Transition Metal-Based Thiometallates as Surface Ligands for Functionalization of All-Inorganic Nanocrystals. Chemistry of Materials, 2017, 29, 10510-10517.	6.7	13
101	Oxidation behavior of graphene-coated copper at intrinsic graphene defects of different origins. Nature Communications, 2017, 8, 1549.	12.8	60
102	Synthesis and Properties of Two Dimensional Doped Transition Metal Dichalcogenides. Applied Microscopy, 2017, 47, 19-28.	1.4	25
103	Effective Passivation of Black Phosphorus under Ambient Conditions. Applied Microscopy, 2017, 47, 176-186.	1.4	7
104	The First Transmission Electron Microscope Image Imagined by Artificial Intelligence. Applied Microscopy, 2017, 47, 251-252.	1.4	0
105	Microstructural Investigation on Degradation Mechanism of Layered LiNi 0.6 Co 0.2 Mn 0.2 O 2 Cathode Materials by Analytical TEM/STEM. Microscopy and Microanalysis, 2016, 22, 1336-1337.	0.4	0
106	Self-Limiting Layer Synthesis of Transition Metal Dichalcogenides. Scientific Reports, 2016, 6, 18754.	3.3	74
107	Surface treatment process applicable to next generation graphene-based electronics. Carbon, 2016, 104, 119-124.	10.3	10
108	Wafer-scale monolayer MoS₂grown by chemical vapor deposition using a reaction of MoO₃and H₂S. Journal of Physics Condensed Matter, 2016, 28, 184002.	1.8	39

#	Article	IF	Citations
109	Very high frequency plasma reactant for atomic layer deposition. Applied Surface Science, 2016, 387, 109-117.	6.1	13
110	Effect of Al₂O₃ Deposition on Performance of Top-Gated Monolayer MoS₂-Based Field Effect Transistor. ACS Applied Materials & Interfaces, 2016, 8, 28130-28135.	8.0	40
111	The Origin of Improved Electrical Doubleâ€Layer Capacitance by Inclusion of Topological Defects and Dopants in Graphene for Supercapacitors. Angewandte Chemie - International Edition, 2016, 55, 13822-13827.	13.8	161
112	The Origin of Improved Electrical Doubleâ€Layer Capacitance by Inclusion of Topological Defects and Dopants in Graphene for Supercapacitors. Angewandte Chemie, 2016, 128, 14026-14031.	2.0	13
113	Simultaneous improvement in electrical and thermal properties of interface-engineered BiSbTe nanostructured thermoelectric materials. Journal of Alloys and Compounds, 2016, 689, 899-907.	5.5	39
114	Determination of the thickness and orientation of few-layer tungsten ditelluride using polarized Raman spectroscopy. 2D Materials, 2016, 3, 034004.	4.4	35
115	High-resolution electrohydrodynamic inkjet printing of stretchable metal oxide semiconductor transistors with high performance. Nanoscale, 2016, 8, 17113-17121.	5.6	97
116	Birch-Type Hydrogenation of Few-Layer Graphenes: Products and Mechanistic Implications. Journal of the American Chemical Society, 2016, 138, 14980-14986.	13.7	27
117	High surface area carbon from polyacrylonitrile for high-performance electrochemical capacitive energy storage. Journal of Materials Chemistry A, 2016, 4, 18294-18299.	10.3	27
118	Creating Pores on Graphene Platelets by Lowâ€Temperature KOH Activation for Enhanced Electrochemical Performance. Small, 2016, 12, 2376-2384.	10.0	95
119	Raman Signatures of Polytypism in Molybdenum Disulfide. ACS Nano, 2016, 10, 1948-1953.	14.6	92
120	Uniform, large-area self-limiting layer synthesis of tungsten diselenide. 2D Materials, 2016, 3, 014004.	4.4	40
121	Microstructural study on degradation mechanism of layered LiNi0.6Co0.2Mn0.2O2 cathode materials by analytical transmission electron microscopy. Journal of Power Sources, 2016, 307, 641-648.	7.8	187
122	Line-defect mediated formation of hole and Mo clusters in monolayer molybdenum disulfide. 2D Materials, 2016, 3, 014002.	4.4	21
123	Synthesis of aligned symmetrical multifaceted monolayer hexagonal boron nitride single crystals on resolidified copper. Nanoscale, 2016, 8, 2434-2444.	5.6	81
124	The Hide-and-Seek of Grain Boundaries from MoirÃ© Pattern Fringe of Two-Dimensional Graphene. Scientific Reports, 2015, 5, 12508.	3.3	21
125	Dynamics of Triangular Hole Growth in Monolayer Hexagonal Boron Nitride under Electron Irradiation. Microscopy and Microanalysis, 2015, 21, 739-740.	0.4	49
126	Lowâ€Temperature Synthesis of Largeâ€Scale Molybdenum Disulfide Thin Films Directly on a Plastic Substrate Using Plasmaâ€Enhanced Chemical Vapor Deposition. Advanced Materials, 2015, 27, 5223-5229.	21.0	180

#	Article	IF	Citations
127	Rupturing C60Molecules into Graphene-Oxide-like Quantum Dots: Structure, Photoluminescence, and Catalytic Application. Small, 2015, 11, 5296-5304.	10.0	39
128	B21-O-03The Identification of Grain Boundaries in Two-dimensional Graphene using Moire Pattern Fringe. Microscopy (Oxford, England), 2015, 64, i40.2-i40.	1.5	0
129	In situ surface cleaning on a Ge substrate using TMA and MgCp₂for HfO₂-based gate oxides. Journal of Materials Chemistry C, 2015, 3, 4852-4858.	5.5	20
130	Catalytic Conversion of Hexagonal Boron Nitride to Graphene for In-Plane Heterostructures. Nano Letters, 2015, 15, 4769-4775.	9.1	52
131	A Facile Route for Patterned Growth of Metalâ€“Insulator Carbon Lateral Junction through One-Pot Synthesis. ACS Nano, 2015, 9, 8352-8360.	14.6	8
132	Controllable synthesis of molybdenum tungsten disulfide alloy for vertically composition-controlled multilayer. Nature Communications, 2015, 6, 7817.	12.8	188
133	Graphene Edges and Beyond: Temperature-Driven Structures and Electromagnetic Properties. ACS Nano, 2015, 9, 4669-4674.	14.6	31
134	Atomic-scale dynamics of triangular hole growth in monolayer hexagonal boron nitride under electron irradiation. Nanoscale, 2015, 7, 10600-10605.	5.6	63
135	Ferroelectric Tunnel Junction for Dense Cross-Point Arrays. ACS Applied Materials & Interfaces, 2015, 7, 22348-22354.	8.0	18
136	Anomalous polarization dependence of Raman scattering and crystallographic orientation of black phosphorus. Nanoscale, 2015, 7, 18708-18715.	5.6	167
137	Route to the Smallest Doped Semiconductor: Mn²⁺-Doped (CdSe)₁₃ Clusters. Journal of the American Chemical Society, 2015, 137, 12776-12779.	13.7	91
138	Nucleation and Growth of the HfO₂ Dielectric Layer for Graphene-Based Devices. Chemistry of Materials, 2015, 27, 5868-5877.	6.7	43
139	Direct exfoliation and dispersion of two-dimensional materials in pure water via temperature control. Nature Communications, 2015, 6, 8294.	12.8	277
140	Hydrophobicity of Rare Earth Oxides Grown by Atomic Layer Deposition. Chemistry of Materials, 2015, 27, 148-156.	6.7	106
141	Hydrogen-Enriched Reduced Graphene Oxide with Enhanced Electrochemical Performance in Lithium Ion Batteries. Chemistry of Materials, 2015, 27, 266-275.	6.7	53
142	Hole Defects on Two-Dimensional Materials Formed by Electron Beam Irradiation: Toward Nanopore Devices. Applied Microscopy, 2015, 45, 107-114.	1.4	34
143	Carbon Nanotubes/Heteroatomâ€Doped Carbon Coreâ€“Sheath Nanostructures as Highly Active, Metalâ€Free Oxygen Reduction Electrocatalysts for Alkaline Fuel Cells. Angewandte Chemie - International Edition, 2014, 53, 4102-4106.	13.8	168
144	Graphene oxide assisted spontaneous growth of V₂O₅nanowires at room temperature. Nanoscale, 2014, 6, 11066-11071.	5.6	27

#	Article	IF	Citations
145	Fast Synthesis of High-Performance Graphene Films by Hydrogen-Free Rapid Thermal Chemical Vapor Deposition. ACS Nano, 2014, 8, 950-956.	14.6	195
146	Interface-Controlled Synthesis of Heterodimeric Silverâ€“Carbon Nanoparticles Derived from Polysaccharides. ACS Nano, 2014, 8, 11377-11385.	14.6	67
147	Superstructural defects and superlattice domains in stacked graphene. Carbon, 2014, 80, 755-761.	10.3	12
148	Synthesis of wafer-scale uniform molybdenum disulfide films with control over the layer number using a gas phase sulfur precursor. Nanoscale, 2014, 6, 2821.	5.6	166
149	High-Angle Tilt Boundary Graphene Domain Recrystallized from Mobile Hot-Wire-Assisted Chemical Vapor Deposition System. Nano Letters, 2014, 14, 4352-4359.	9.1	22
150	Increasing reversible capacity of soft carbon anode by phosphoric acid treatment. Electrochimica Acta, 2014, 146, 630-637.	5.2	19
151	Monolithic graphene oxide sheets with controllable composition. Nature Communications, 2014, 5, 3383.	12.8	31
152	An Improved Specimen Preparation of Porous Powder Materials for Transmission Electron Microscopy. Microscopy and Microanalysis, 2014, 20, 366-367.	0.4	8
153	Quantitative Evaluation of Dislocation Density in Epitaxial GaAs Layer on Si Using Transmission Electron Microscopy. Applied Microscopy, 2014, 44, 74-78.	1.4	5
154	Silicene on Other Two-dimensional Materials: Formation of Heterostructure. Applied Microscopy, 2014, 44, 123-132.	1.4	14
155	Ordered mesoporous porphyrinic carbons with very high electrocatalytic activity for the oxygen reduction reaction. Scientific Reports, 2013, 3, 2715.	3.3	282
156	Crystal Structure Evolution of Individual Graphene Islands During CVD Growth on Copper Foil. Advanced Materials, 2013, 25, 6744-6751.	21.0	50
157	The influence of inelastic scattering on EFTEM imagesâ€”exemplified at 20kV for graphene and silicon. Ultramicroscopy, 2013, 134, 102-112.	1.9	10
158	Tensile behavior of Al1â^'Mo crystalline and amorphous thin films. Acta Materialia, 2013, 61, 1432-1443.	7.9	24
159	Growth of High-Crystalline, Single-Layer Hexagonal Boron Nitride on Recyclable Platinum Foil. Nano Letters, 2013, 13, 1834-1839.	9.1	336
160	Engineering Electronic Properties of Graphene by Coupling with Si-Rich, Two-Dimensional Islands. ACS Nano, 2013, 7, 301-307.	14.6	30
161	Tuning of magnetic and transport properties in Bi<mml:math xmlns:mml="http://www.w3.org/1998/Math/MathML" display="inline"><mml:msub><mml:mrow /><mml:mn>2</mml:mn></mml:msub></mml:math>Te<mml:math xmlns:mml="http://www.w3.org/1998/Math/MathML" display="inline"><mml:msub><mml:mrow /><mml:mn>3</mml:mn></mml:msub></mml:math> by divalent Fe doping. Physical Review B, 2013, 87, .	3.2	30
162	Direct Mapping of Stacking Structure in Rotated Bilayer Graphene Using Aberration-corrected Transmission Electron Microscopy. Microscopy and Microanalysis, 2013, 19, 1226-1227.	0.4	0

#	Article	IF	Citations
163	Nanographitic layer-mediated synthesis of carbon-TiO2 hybrid nanobelts by metalorganic chemical vapor deposition. Materials Letters, 2012, 81, 20-22.	2.6	3
164	Atomic Resolution Imaging of Rotated Bilayer Graphene Sheets Using a Low kV Aberration-corrected Transmission Electron Microscope. Applied Microscopy, 2012, 42, 218-222.	1.4	8
165	A Study on the H3PO4-Treated Soft Carbon as Anode Materials for Lithium Ion Batteries. Journal of the Korean Electrochemical Society, 2012, 15, 207-215.	0.1	5
166	Size-dependent interaction of Au nanoparticles and graphene sheet. Chemical Communications, 2011, 47, 3610.	4.1	39
167	Fluorographene: A Wide Bandgap Semiconductor with Ultraviolet Luminescence. ACS Nano, 2011, 5, 1042-1046.	14.6	394
168	Grain Boundary Mapping in Polycrystalline Graphene. ACS Nano, 2011, 5, 2142-2146.	14.6	566
169	Direct imaging and chemical analysis of unstained DNA origami performed with a transmission electron microscope. Chemical Communications, 2011, 47, 9375.	4.1	14
170	Multiply folded graphene. Physical Review B, 2011, 83, .	3.2	269
171	Chemical mapping of a block copolymer electrolyte by low-loss EFTEM spectrum-imaging and principal component analysis. Ultramicroscopy, 2011, 111, 239-244.	1.9	30
172	Atomic structural variations of [0001]-tilt grain boundaries during ZnO grain growth occurred by thermal treatments. Applied Surface Science, 2011, 257, 4817-4820.	6.1	5
173	Enhanced Photocatalytic Properties of TiO2Nanobelts via In Situ Doping of C and Fe. Journal of the Electrochemical Society, 2011, 159, K42-K45.	2.9	9
174	Tensile Deformation and Fracture Mechanism of Bulk Bimodal Ultrafine-Grained Al-Mg Alloy. Metallurgical and Materials Transactions A: Physical Metallurgy and Materials Science, 2010, 41, 795-801.	2.2	98
175	Determination of the Local Chemical Structure of Graphene Oxide and Reduced Graphene Oxide. Advanced Materials, 2010, 22, 4467-4472.	21.0	1,044
176	Microstructural Effects on the Creep Deformation of Alumina/Singleâ€Wall Carbon Nanotubes Composites. Journal of the American Ceramic Society, 2010, 93, 2042-2047.	3.8	18
177	Direct Fabrication of Zero- and One-Dimensional Metal Nanocrystals by Thermally Assisted Electromigration. ACS Nano, 2010, 4, 2999-3004.	14.6	16
178	Effects of surface ligands on the charge memory characteristics of CdSe/ZnS nanocrystals in TiO2 thin film. Applied Physics Letters, 2009, 95, 183111.	3.3	8
179	Nanocrystallineâ€“amorphous transitions in Alâ€“Mo thin films: Bulk and surface evolution. Acta Materialia, 2009, 57, 4296-4303.	7.9	23
180	Direct Imaging of Softâ^'Hard Interfaces Enabled by Graphene. Nano Letters, 2009, 9, 3365-3369.	9.1	127

#	Article	IF	Citations
181	Clean and highly ordered graphene synthesized in the gas phase. Chemical Communications, 2009, , 6095.	4.1	82
182	Thermomagnetic Analysis of Nanocrystalline Nd_{4.5}Fe₇₇B_{18.5} Alloy. Materials Transactions, 2009, 50, 2302-2307.	1.2	3
183	In-Situ TEM Observation of Metal Zn Nanocrystal Growth on ZnO Films. Microscopy and Microanalysis, 2009, 15, 698-699.	0.4	0
184	Atomic Resolution Imaging and Spectroscopy of Graphene Using the TEAM 0.5. Microscopy and Microanalysis, 2009, 15, 124-125.	0.4	3
185	Study of Nd-Fe-B alloys with nonstoichiometric Nd content in optimal magnetic state. Science of Sintering, 2009, 41, 209-218.	1.4	3
186	Monodisperse Al3(LiScZr) core/shell precipitates in Al alloys. Scripta Materialia, 2008, 58, 529-532.	5.2	57
187	Substrate-Free Gas-Phase Synthesis of Graphene Sheets. Nano Letters, 2008, 8, 2012-2016.	9.1	691
188	Quantum-dot light-emitting diodes utilizing CdSeâ•ZnS nanocrystals embedded in TiO2 thin film. Applied Physics Letters, 2008, 93, .	3.3	27
189	Tailoring the microstructure and surface morphology of metal thin films for nano-electro-mechanical systems applications. Nanotechnology, 2008, 19, 125705.	2.6	16
190	Development of a radiation hard CMOS monolithic pixel sensor. , 2008, , .		1
191	Synthesis and ferromagnetism of Co-doped TiO2â˜Î´ nanobelts by metallorganic chemical vapor deposition. Applied Physics Letters, 2008, 92, 122508.	3.3	18
192	Resonance properties and microstructure of ultracompliant metallic nanoelectromechanical systems resonators synthesized from Alâ€“32at.%Mo amorphous-nanocrystalline metallic composites. Applied Physics Letters, 2008, 92, .	3.3	14
193	Synthesis and characterization of Auâ€“Ta nanocomposites for nanomechanical cantilever devices. Nanotechnology, 2007, 18, 355303.	2.6	13
194	Co clustering and ferromagnetism in chemical vapor deposited Ti1â˜xCoxO2â˜Î´ thin films. Applied Physics Letters, 2007, 90, 102504.	3.3	8
195	Nanoindentation properties and the microstructure of grain boundary precipitate-free zones (PFZs) in an AlCuSiGe alloy. Philosophical Magazine, 2007, 87, 3905-3919.	1.6	8
196	Active Pixel Sensors for electron microscopy. Nuclear Instruments and Methods in Physics Research, Section A: Accelerators, Spectrometers, Detectors and Associated Equipment, 2007, 579, 891-894.	1.6	22
197	Metallic NEMS components fabricated from nanocomposite Alâ€“Mo films. Nanotechnology, 2006, 17, 3063-3070.	2.6	223
198	Self-Assembled Monolayers on Pt(111):Â Molecular Packing Structure and Strain Effects Observed by Scanning Tunneling Microscopy. Journal of the American Chemical Society, 2006, 128, 5745-5750.	13.7	26

#	Article	IF	Citations
199	Cryomilling for the fabrication of a particulate B4C reinforced Al nanocomposite: Part II. Mechanisms for microstructural evolution. Metallurgical and Materials Transactions A: Physical Metallurgy and Materials Science, 2006, 37, 3111-3117.	2.2	33
200	A Comparison of the Corrosion Behavior of Nanocrystalline and Conventional Al 5083 Samples. Corrosion, 2006, 62, 152-161.	1.1	77
201	Bimodal microstructure and deformation of cryomilled bulk nanocrystalline Alâ€“7.5Mg alloy. Materials Science & Engineering A: Structural Materials: Properties, Microstructure and Processing, 2005, 410-411, 462-467.	5.6	87
202	A tri-modal aluminum based composite with super-high strength. Scripta Materialia, 2005, 53, 481-486.	5.2	191
203	The influence of Sc on thermal stability of a nanocrystalline Al-Mg alloy processed by cryogenic ball milling. Metallurgical and Materials Transactions A: Physical Metallurgy and Materials Science, 2005, 36, 1587-1594.	2.2	9
204	Deformation behavior of bimodal nanostructured 5083 Al alloys. Metallurgical and Materials Transactions A: Physical Metallurgy and Materials Science, 2005, 36, 957-965.	2.2	227
205	Experiment and FEM Analysis of Tensile Behavior of Bimodal Nanocrystalline Al-Mg Alloys. Materials Research Society Symposia Proceedings, 2004, 821, 30.	0.1	4
206	Bimodal Microstructures in Nanocrystalline Al and Al-Mg Alloy Powders Prepared by Cryogenic Ball Milling. Materials Research Society Symposia Proceedings, 2004, 821, 185.	0.1	3
207	Microstructure and microhardness of cryomilled bulk nanocrystalline Al?7.5%Mg alloy consolidated by high pressure torsion. Scripta Materialia, 2004, 51, 209-214.	5.2	106
208	Mechanical properties of an ultrafine-grained Al-7.5 Pct Mg alloy. Metallurgical and Materials Transactions A: Physical Metallurgy and Materials Science, 2003, 34, 603-613.	2.2	139
209	Microstructural evolution and deformation of cryomilled nanocrystalline Al-Ti-Cu Alloy. Metallurgical and Materials Transactions A: Physical Metallurgy and Materials Science, 2003, 34, 1473-1481.	2.2	40
210	Alâ€“Mg alloy engineered with bimodal grain size for high strength and increased ductility. Scripta Materialia, 2003, 49, 297-302.	5.2	330
211	Bimodal Structured Bulk Nanocrystalline Al-7.5Mg Alloy. Materials Research Society Symposia Proceedings, 2003, 791, 1.	0.1	2
212	Bimodal Microstructure and Mechanical Properties of Cryomilled Nanocrystalline Al-7.5Mg. Materials Research Society Symposia Proceedings, 2002, 740, 1.	0.1	1