Hyunjung Shin

List of Publications by Year
in descending order

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205	12,024	28274	29157
papers	citations	55 h-index	104 g-index

213	213	213	15335
all docs	docs citations	times ranked	citing authors

#	Article	IF	Citations
1	High-Efficiency Perovskite Solar Cells. Chemical Reviews, 2020, 120, 7867-7918.	47.7	1,480
2	Self-formed grain boundary healing layer for highly efficient CH3NH3PbI3 perovskite solar cells. Nature Energy, 2016, 1, .	39.5	902
3	Universal Approach toward Hysteresis-Free Perovskite Solar Cell via Defect Engineering. Journal of the American Chemical Society, 2018, 140, 1358-1364.	13.7	708
4	Controlling the Thickness of the Surface Oxide Layer on Cu Nanoparticles for the Fabrication of Conductive Structures by Inkâ€Jet Printing. Advanced Functional Materials, 2008, 18, 679-686.	14.9	459
5	Random Circuit Breaker Network Model for Unipolar Resistance Switching. Advanced Materials, 2008, 20, 1154-1159.	21.0	330
6	An ultra-thin, un-doped NiO hole transporting layer of highly efficient (16.4%) organicâ€“inorganic hybrid perovskite solar cells. Nanoscale, 2016, 8, 11403-11412.	5.6	307
7	Principle of ferroelectric domain imaging using atomic force microscope. Journal of Applied Physics, 2001, 89, 1377-1386.	2.5	293
8	Template-Directed Synthesis of Oxide Nanotubes: Fabrication, Characterization, and Applications. Chemistry of Materials, 2008, 20, 756-767.	6.7	289
9	Formation of TiO2 and ZrO2 Nanotubes Using Atomic Layer Deposition with Ultraprecise Control of the Wall Thickness. Advanced Materials, 2004, 16, 1197-1200.	21.0	251
10	Layer-by-layer assembled charge-trap memory devices with adjustable electronic properties. Nature Nanotechnology, 2007, 2, 790-795.	31.5	251
11	Perovskite Solar Cells with Inorganic Electronâ€•and Holeâ€Transport Layers Exhibiting Longâ€Term (â‰ˆ500) Tj ETQq1 1 0.784314 rgB e1801010.	21.0	174
12	In-Situ Formed Type I Nanocrystalline Perovskite Film for Highly Efficient Light-Emitting Diode. ACS Nano, 2017, 11, 3311-3319.	14.6	161
13	Rapid Self-Assembly of Monodisperse Colloidal Spheres in an Ink-Jet Printed Droplet. Chemistry of Materials, 2004, 16, 4212-4215.	6.7	151
14	Synthesis and characterization of TiO₂ thin films on organic self-assembled monolayers: Part I. Film formation from aqueous solutions. Journal of Materials Research, 1995, 10, 692-698.	2.6	145
15	Solution-processed SnO₂thin film for a hysteresis-free planar perovskite solar cell with a power conversion efficiency of 19.2%. Journal of Materials Chemistry A, 2017, 5, 24790-24803.	10.3	143
16	Achieving Reproducible and High-Efficiency (>21%) Perovskite Solar Cells with a Presynthesized FAPbI₃ Powder. ACS Energy Letters, 2020, 5, 360-366.	17.4	139
17	Bias-Stress-Stable Solution-Processed Oxide Thin Film Transistors. ACS Applied Materials & Interfaces, 2010, 2, 611-615.	8.0	138
18	Al-Doped ZnO Thin Film: A New Transparent Conducting Layer for ZnO Nanowire-Based Dye-Sensitized Solar Cells. Journal of Physical Chemistry C, 2010, 114, 7185-7189.	3.1	134

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19	Perovskite Cluster-Containing Solution for Scalable D-Bar Coating toward High-Throughput Perovskite Solar Cells. ACS Energy Letters, 2019, 4, 1189-1195.	17.4	134
20	Direct-write fabrication of colloidal photonic crystal microarrays by ink-jet printing. Journal of Colloid and Interface Science, 2006, 298, 713-719.	9.4	130
21	Low temperature deposition of patterned TiO2 thin films using photopatterned selfâ€assembled monolayers. Applied Physics Letters, 1996, 69, 860-862.	3.3	116
22	In situ X-ray diffraction studies of mixed LiMn2O4â€“LiNi1/3Co1/3Mn1/3O2 composite cathode in Li-ion cells during chargeâ€“discharge cycling. Journal of Power Sources, 2009, 192, 652-659.	7.8	105
23	Acid Dissociation Constant: A Criterion for Selecting Passivation Agents in Perovskite Solar Cells. ACS Energy Letters, 0, , 1612-1621.	17.4	99
24	Tunable Memory Characteristics of Nanostructured, Nonvolatile Charge Trap Memory Devices Based on a Binary Mixture of Metal Nanoparticles as a Charge Trapping Layer. Advanced Materials, 2009, 21, 178-183.	21.0	97
25	Defect-Induced Epitaxial Growth for Efficient Solar Hydrogen Production. Nano Letters, 2017, 17, 6676-6683.	9.1	96
26	Origin of surface potential change during ferroelectric switching in epitaxial PbTiO3 thin films studied by scanning force microscopy. Applied Physics Letters, 2009, 94, 032907.	3.3	94
27	Spatial Charge Separation in Asymmetric Structure of Au Nanoparticle on TiO₂ Nanotube by Light-Induced Surface Potential Imaging. Nano Letters, 2014, 14, 4413-4417.	9.1	94
28	Self-oriented Sb₂Se₃ nanoneedle photocathodes for water splitting obtained by a simple spin-coating method. Journal of Materials Chemistry A, 2017, 5, 2180-2187.	10.3	91
29	Bifacial stamping for high efficiency perovskite solar cells. Energy and Environmental Science, 2019, 12, 308-321.	30.8	91
30	Origin of Hysteresis in CH₃NH₃PbI₃ Perovskite Thin Films. Advanced Functional Materials, 2017, 27, 1701924.	14.9	86
31	Bulk layered heterojunction as an efficient electrocatalyst for hydrogen evolution. Science Advances, 2017, 3, e1602215.	10.3	85
32	Deposition mechanism of oxide thin films on self-assembled organic monolayers11Paper presented at Sympos. Synergistic Synthesis of Inororganic Materials, March 1996, SchloÄŸ Ringberg, Germany. Acta Materialia, 1998, 46, 801-815.	7.9	84
33	Edge-On MoS₂ Thin Films by Atomic Layer Deposition for Understanding the Interplay between the Active Area and Hydrogen Evolution Reaction. Chemistry of Materials, 2017, 29, 7604-7614.	6.7	82
34	Metallic Ni₃S₂ Films Grown by Atomic Layer Deposition as an Efficient and Stable Electrocatalyst for Overall Water Splitting. ACS Applied Materials & Interfaces, 2018, 10, 12807-12815.	8.0	78
35	Quantitative analysis of the bit size dependence on the pulse width and pulse voltage in ferroelectric memory devices using atomic force microscopy. Journal of Vacuum Science & Technology an Official Journal of the American Vacuum Society B, Microelectronics Processing and Phenomena, 2001, 19, 818.	1.6	77
36	Interface Properties of Atomic-Layer-Deposited Al₂O₃ Thin Films on Ultraviolet/Ozone-Treated Multilayer MoS₂ Crystals. ACS Applied Materials & Interfaces, 2016, 8, 11189-11193.	8.0	77

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37	Atomic layer deposition of a SnO₂ electron-transporting layer for planar perovskite solar cells with a power conversion efficiency of 18.3%. Chemical Communications, 2019, 55, 2433-2436.	4.1	77
38	Cyclohexylammoniumâ€Based 2D/3D Perovskite Heterojunction with Funnelâ€Like Energy Band Alignment for Efficient Solar Cells (23.91%). Advanced Energy Materials, 2021, 11, 2102236.	19.5	77
39	Atomic layer deposition for efficient and stable perovskite solar cells. Chemical Communications, 2019, 55, 2403-2416.	4.1	76
40	Random and localized resistive switching observation in Pt/NiO/Pt. Physica Status Solidi - Rapid Research Letters, 2007, 1, 280-282.	2.4	75
41	Oriented Grains with Preferred Lowâ€Angle Grain Boundaries in Halide Perovskite Films by Pressureâ€Induced Crystallization. Advanced Energy Materials, 2018, 8, 1702369.	19.5	74
42	Multilevel Data Storage Memory Devices Based on the Controlled Capacitive Coupling of Trapped Electrons. Advanced Materials, 2011, 23, 2064-2068.	21.0	73
43	Scanning resistive probe microscopy: Imaging ferroelectric domains. Applied Physics Letters, 2004, 84, 1734-1736.	3.3	72
44	Electrical properties of TiO2 thin films formed on self-assembled organic monolayers on silicon. Journal of Applied Physics, 1998, 83, 3311-3317.	2.5	71
45	A Quasiâ€Inverse Opal Layer Based on Highly Crystalline TiO₂ Nanoparticles: A New Lightâ€Scattering Layer in Dyeâ€Sensitized Solar Cells. Advanced Energy Materials, 2011, 1, 546-550.	19.5	71
46	New Hybrid Hole Extraction Layer of Perovskite Solar Cells with a Planar pâ€“iâ€“n Geometry. Journal of Physical Chemistry C, 2015, 119, 27285-27290.	3.1	71
47	Halide Perovskite Nanopillar Photodetector. ACS Nano, 2018, 12, 8564-8571.	14.6	70
48	Read/write mechanisms and data storage system using atomic force microscopy and MEMS technology. Ultramicroscopy, 2002, 91, 103-110.	1.9	65
49	Nanoscale size effect of titania (anatase) nanotubes with uniform wall thickness as high performance anode for lithium-ion secondary battery. Journal of Power Sources, 2012, 204, 162-167.	7.8	65
50	Spontaneous Lamellar Alignment in Thicknessâ€Modulated Block Copolymer Films. Advanced Functional Materials, 2009, 19, 2584-2591.	14.9	63
51	Aligned Heterointerfaceâ€Induced 1Tâ€MoS₂ Monolayer with Nearâ€Ideal Gibbs Free for Stable Hydrogen Evolution Reaction. Small, 2019, 15, e1804903.	10.0	63
52	Effect of cantileverâ€“sample interaction on piezoelectric force microscopy. Applied Physics Letters, 2002, 80, 1453-1455.	3.3	60
53	Delocalized Electron Accumulation at Nanorod Tips: Origin of Efficient H₂ Generation. Advanced Functional Materials, 2016, 26, 4527-4534.	14.9	60
54	Surface modification and fabrication of 3D nanostructures by atomic layer deposition. MRS Bulletin, 2011, 36, 887-897.	3.5	59

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55	Template-directed gas-phase fabrication of oxide nanotubes. Journal of Materials Chemistry, 2008, 18, 1362.	6.7	57
56	Metal Chalcogenides on Silicon Photocathodes for Efficient Water Splitting: A Mini Overview. Catalysts, 2019, 9, 149.	3.5	56
57	Synthesis and characterization of TiO2 thin films on organic self-assembled monolayers: Part II. Film formation via an organometallic route. Journal of Materials Research, 1995, 10, 699-703.	2.6	55
58	Defect-Free Graphene Synthesized Directly at 150 Â°C via Chemical Vapor Deposition with No Transfer. ACS Nano, 2018, 12, 2008-2016.	14.6	55
59	Tailored 2D/3D Halide Perovskite Heterointerface for Substantially Enhanced Endurance in Conducting Bridge Resistive Switching Memory. ACS Applied Materials & Interfaces, 2020, 12, 17039-17045.	8.0	55
60	Controlled Fabrication of Multiwall Anatase TiO₂ Nanotubular Architectures. Chemistry of Materials, 2009, 21, 2574-2576.	6.7	51
61	Effect of Rubidium Incorporation on the Structural, Electrical, and Photovoltaic Properties of Methylammonium Lead Iodide-Based Perovskite Solar Cells. ACS Applied Materials & Interfaces, 2017, 9, 41898-41905.	8.0	51
62	Nanowireâ€Based Threeâ€Dimensional Transparent Conducting Oxide Electrodes for Extremely Fast Charge Collection. Advanced Energy Materials, 2011, 1, 829-835.	19.5	50
63	Resistive Switching Memory Devices Composed of Binary Transition Metal Oxides Using Solâ^'Gel Chemistry. Langmuir, 2009, 25, 4274-4278.	3.5	49
64	Wideâ€Bandgap Perovskite/Gallium Arsenide Tandem Solar Cells. Advanced Energy Materials, 2020, 10, 1903085.	19.5	49
65	p-Type CuCrO₂ particulate films as the hole transporting layer for CH₃NH₃PbI₃ perovskite solar cells. RSC Advances, 2018, 8, 27956-27962.	3.6	48
66	Heterojunction Photoanode of Atomic-Layer-Deposited MoS₂ on Single-Crystalline CdS Nanorod Arrays. ACS Applied Materials & Interfaces, 2019, 11, 37586-37594.	8.0	47
67	Understanding Photoluminescence of Monodispersed Crystalline Anatase TiO₂ Nanotube Arrays. Journal of Physical Chemistry C, 2014, 118, 9726-9732.	3.1	46
68	Studies of cobalt thin films deposited by sputtering and MOCVD. Materials Chemistry and Physics, 2003, 80, 560-564.	4.0	45
69	Contact Area Lithography (CAL):Â A New Approach to Direct Formation of Nanometric Chemical Patterns. Chemistry of Materials, 2006, 18, 1085-1088.	6.7	45
70	Fabrication and investigation of ultrathin, and smooth Pb(Zr,Ti)O3 films for miniaturization of microelectronic devices. Journal of Applied Physics, 2002, 92, 7434-7441.	2.5	44
71	Fabrication of Monodisperse Asymmetric Colloidal Clusters by Using Contact Area Lithography (CAL). Journal of the American Chemical Society, 2007, 129, 14232-14239.	13.7	44
72	Electric fatigue in solâ€“gel prepared Pb(Zr,Sn,Ti)NbO3 thin films. Applied Physics Letters, 1998, 73, 1823-1825.	3.3	42

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73	Nonvolatile nanocrystal charge trap flash memory devices using a micellar route to ordered arrays of cobalt nanocrystals. Applied Physics Letters, 2007, 91, 153506.	3.3	42
74	On the Crystallization of Hydroxyapatite under Hydrothermal Conditions: Role of Sebacic Acid as an Additive. ACS Omega, 2020, 5, 27204-27210.	3.5	40
75	High-Resolution Field Effect Sensing of Ferroelectric Charges. Nano Letters, 2011, 11, 1428-1433.	9.1	38
76	Amorphous TiO₂ Coatings Stabilize Perovskite Solar Cells. ACS Energy Letters, 2021, 6, 3332-3341.	17.4	38
77	Thickness effect of ferroelectric domain switching in epitaxial PbTiO3 thin films on Pt(001)/MgO(001). Applied Physics Letters, 2004, 84, 5085-5087.	3.3	37
78	Effect of domain structure on thermal stability of nanoscale ferroelectric domains. Applied Physics Letters, 2002, 80, 4000-4002.	3.3	35
79	Aging Dynamics of Solution-Processed Amorphous Oxide Semiconductor Field Effect Transistors. ACS Applied Materials & Interfaces, 2010, 2, 626-632.	8.0	35
80	Stabilizing Mixed Halide Lead Perovskites against Photoinduced Phase Segregation by A-Site Cation Alloying. ACS Energy Letters, 2021, 6, 837-847.	17.4	34
81	Highly Conformal Deposition of Pure Co Films by MOCVD Using Co[sub 2](CO)[sub 8] as a Precursor. Journal of the Electrochemical Society, 2006, 153, G539.	2.9	32
82	Photoelectrochemical Properties of Vertically Aligned CuInS₂ Nanorod Arrays Prepared via Template-Assisted Growth and Transfer. ACS Applied Materials & Interfaces, 2016, 8, 425-431.	8.0	30
83	Dynamic structural property of organic-inorganic metal halide perovskite. IScience, 2021, 24, 101959.	4.1	29
84	Nonvolatile memory properties of Pt nanoparticle-embedded TiO₂nanocomposite multilayers via electrostatic layer-by-layer assembly. Nanotechnology, 2010, 21, 185704.	2.6	27
85	Natural bone-mimicking nanopore-incorporated hydroxyapatite scaffolds for enhanced bone tissue regeneration. Biomaterials Research, 2022, 26, 7.	6.9	27
86	Nonvolatile Resistive Switching Memory Properties of Thermally Annealed Titania Precursor/Polyelectrolyte Multilayers. Langmuir, 2009, 25, 11276-11281.	3.5	26
87	Confined crystallization of anatase TiO2 nanotubes and their implications on transport properties. Journal of Materials Chemistry A, 2013, 1, 14080.	10.3	26
88	Thermopower engineering of Bi₂Te₃without alloying: the interplay between nanostructuring and defect activation. Semiconductor Science and Technology, 2014, 29, 064003.	2.0	26
89	Strong anisotropy of ferroelectricity in lead-free bismuth silicate. Nanoscale, 2015, 7, 11561-11565.	5.6	26
90	Organic-inorganic hybrid lead halides as absorbers in perovskite solar cells: a debate on ferroelectricity. Journal Physics D: Applied Physics, 2020, 53, 493002.	2.8	26

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91	Fabrication and applications of metal-oxide nano-tubes. Jom, 2010, 62, 44-49.	1.9	25
92	Hierarchical Titania Nanotubes with Self-Branched Crystalline Nanorods. ACS Applied Materials & Interfaces, 2010, 2, 1581-1587.	8.0	25
93	Nanotubular Heterostructure of Tin Dioxide/Titanium Dioxide as a Binderâ€Free Anode in Lithiumâ€Ion Batteries. ChemSusChem, 2015, 8, 2363-2371.	6.8	25
94	Grain Boundary Healing of Organicâ€“Inorganic Halide Perovskites for Moisture Stability. Nano Letters, 2019, 19, 6498-6505.	9.1	24
95	Solid-State Diffusive Amorphization in TiO2/ZrO2 Bilayers. Journal of the American Ceramic Society, 1996, 79, 1975-1978.	3.8	23
96	Pyrolysis of self-assembled organic monolayers on oxide substrates. Journal of Materials Research, 1999, 14, 2116-2123.	2.6	23
97	Ultrathin Hematite on Mesoporous WO₃ from Atomic Layer Deposition for Minimal Charge Recombination. ACS Sustainable Chemistry and Engineering, 2020, 8, 11358-11367.	6.7	23
98	Integrated Catalytic Activity of Patterned Multilayer Films Based on pHâ€Induced Electrostatic Properties of Enzymes. Advanced Materials, 2008, 20, 1843-1848.	21.0	22
99	Screening effect on photovoltaic performance in ferroelectric CH₃NH₃PbI₃perovskite thin films. Journal of Materials Chemistry A, 2015, 3, 20352-20358.	10.3	22
100	Fine tuning of emission property of white light-emitting diodes by quantum-dot-coating on YAG:Ce nanophosphors. Applied Surface Science, 2016, 379, 467-473.	6.1	22
101	An application of polarized domains in ferroelectric thin films using scanning probe microscope. IEEE Transactions on Ultrasonics, Ferroelectrics, and Frequency Control, 2000, 47, 801-807.	3.0	21
102	Heterogeneous Interfacial Properties of Inkâ€Jetâ€Printed Silver Nanoparticulate Electrode and Organic Semiconductor. Advanced Materials, 2008, 20, 3084-3089.	21.0	21
103	Layer-by-layer assembled enzyme multilayers with adjustable memory performance and low power consumption via molecular-level control. Journal of Materials Chemistry, 2012, 22, 4645.	6.7	21
104	Graphene-Templated Synthesis of c-Axis Oriented Sb₂Te₃ Nanoplates by the Microwave-Assisted Solvothermal Method. Chemistry of Materials, 2015, 27, 2315-2321.	6.7	21
105	Synergistic Effect of Porous Hydroxyapatite Scaffolds Combined with Bioactive Glass/Poly(lactic-co-glycolic acid) Composite Fibers Promotes Osteogenic Activity and Bioactivity. ACS Omega, 2019, 4, 2302-2310.	3.5	21
106	Patterning a Two-Dimensional Colloidal Crystal by Water-Mediated Particle Transfer Printing. Chemistry of Materials, 2007, 19, 5553-5556.	6.7	20
107	Mixed-Phase (2H and 1T) MoS2 Catalyst for a Highly Efficient and Stable Si Photocathode. Catalysts, 2018, 8, 580.	3.5	20
108	Wafer-scale single-domain-like graphene by defect-selective atomic layer deposition of hexagonal ZnO. Nanoscale, 2015, 7, 17702-17709.	5.6	19

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109	Heteroepitaxy of GaP on silicon for efficient and cost-effective photoelectrochemical water splitting. Journal of Materials Chemistry A, 2019, 7, 8550-8558.	10.3	19
110	Detection Mechanism of Spontaneous Polarization in Ferroelectric Thin Films Using Electrostatic Force Microscopy. Japanese Journal of Applied Physics, 1999, 38, L264-L266.	1.5	18
111	Photopatternable Organosiloxane-Based Inorganicâ^'Organic SiO₂â^'ZrO₂ Hybrid Dielectrics for Organic Thin Film Transistors. Journal of Physical Chemistry C, 2007, 111, 16083-16087.	3.1	18
112	Low Temperature Synthesis of Rutile TiO₂ Nanocrystals and Their Photovoltaic and Photocatalytic Properties. Journal of Nanoscience and Nanotechnology, 2015, 15, 4516-4521.	0.9	18
113	Stem cell spheroid engineering with osteoinductive and ROS scavenging nanofibers for bone regeneration. Biofabrication, 2021, 13, 034101.	7.1	18
114	Reversible phase transformation of titania (anatase) nanotubes upon electrochemical lithium-intercalation observed by ex situ transmission electron microscopy. Journal of Power Sources, 2014, 249, 59-65.	7.8	17
115	In Operando Stacking of Reduced Graphene Oxide for Active Hydrogen Evolution. ACS Applied Materials & Interfaces, 2019, 11, 43460-43465.	8.0	17
116	Stabilization of NiFe Layered Double Hydroxides on n-Si by an Activated TiO₂ Interlayer for Efficient Solar Water Oxidation. ACS Applied Energy Materials, 2020, 3, 12298-12307.	5.1	17
117	Effects of ion damage on the surface of ITO films during plasma treatment. Applied Surface Science, 2007, 253, 8928-8932.	6.1	16
118	V-shaped metalâ€“oxideâ€“semiconductor transistor probe with nano tip for surface electric properties. Ultramicroscopy, 2008, 108, 1094-1100.	1.9	16
119	Fabrication of a Stable New Polymorph Gold Nanowire with Sixfold Rotational Symmetry. Advanced Materials, 2018, 30, e1706261.	21.0	16
120	Visualization of three dimensional domain structures in ferroelectric PbTiO3 nanotubes. Applied Physics Letters, 2013, 103, .	3.3	15
121	Lateral redistribution of trapped charges in nitride/oxide/Si (NOS) investigated by electrostatic force microscopy. Nanoscale, 2011, 3, 2560.	5.6	14
122	Cerium-Doped Yttrium Aluminum Garnet Hollow Shell Phosphors Synthesized via the Kirkendall Effect. ACS Applied Materials & Interfaces, 2014, 6, 1145-1151.	8.0	14
123	Atomic-Layer Deposition into 2- versus 3-Dimensionally Ordered Nanoporous Media: Pore Size or Connectivity?. Chemistry of Materials, 2018, 30, 4748-4754.	6.7	14
124	High Capacity and Reversibility of Oxygenâ€Vacancyâ€Controlled MoO 3 on Cu in Liâ€Ion Batteries: Unveiling Storage Mechanism in Binderâ€Free MoO 3â^' x Anodes. Energy Technology, 2020, 8, 1901502.	3.8	14
125	Hole trap, charge transfer and photoelectrochemical water oxidation in thickness-controlled TiO2 anatase thin films. Applied Surface Science, 2020, 529, 147020.	6.1	13
126	Formation and characterization of crystalline iron oxide films on self-assembled organic monolayers and their in situ patterning. Journal of Materials Research, 2001, 16, 564-569.	2.6	12

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127	Facile Route to Aligned One-Dimensional Arrays of Colloidal Nanoparticles. Chemistry of Materials, 2007, 19, 1531-1533.	6.7	12
128	Intercellular interaction observed by atomic force microscopy. Ultramicroscopy, 2008, 108, 1148-1151.	1.9	12
129	Initial Self-Ordering of Porous Anodic Alumina: Transition from Polydispersity to Monodispersity. Journal of Physical Chemistry C, 2014, 118, 26789-26795.	3.1	12
130	Enhanced stability of guanidinium-based organic-inorganic hybrid lead triiodides in resistance switching. APL Materials, 2019, 7, .	5.1	12
131	Semiconducting TiO2â^'xSx thin films by atomic layer deposition of TiS2 and its oxidation in ambient. Journal of Vacuum Science and Technology A: Vacuum, Surfaces and Films, 2019, 37, .	2.1	12
132	High-Valent Iodoplumbate-Rich Perovskite Precursor Solution via Solar Illumination for Reproducible Power Conversion Efficiency. Journal of Physical Chemistry Letters, 2021, 12, 1676-1682.	4.6	12
133	Stabilization of 3-D trigonal phase in guanidinium (C(NH2)3) lead triiodide (GAPbI3) films. Applied Surface Science, 2021, 542, 148575.	6.1	12
134	Unusual Hole Transfer Dynamics of the NiO Layer in Methylammonium Lead Tri-iodide Absorber Solar Cells. Journal of Physical Chemistry Letters, 2021, 12, 2770-2779.	4.6	12
135	c-Axis-Oriented Platelets of Crystalline Hydroxyapatite in Biomimetic Intrafibrillar Mineralization of Polydopamine-Functionalized Collagen Type I. ACS Omega, 2022, 7, 4821-4831.	3.5	12
136	Fabrication of Atomic Force Microscope Probe with Low Spring Constant Using SU-8 Photoresist. Japanese Journal of Applied Physics, 2003, 42, L1171-L1174.	1.5	11
137	Magnetic properties of helimagnetic YMn2â^'x(Fe,Co)xO5â^'Îˆâ€Š(0.0â©½xâ©½1.0) for the room temperature ferroism. Journal of Applied Physics, 2004, 95, 7070-7072.	2.5	11
138	Multisegmented nanotubes by surface-selective atomic layer deposition. Journal of Materials Chemistry C, 2013, 1, 621-625.	5.5	11
139	Incorporation of Ge in Cu2ZnSnS4 thin film in a Zn-poor composition range. Materials Science in Semiconductor Processing, 2019, 89, 194-200.	4.0	11
140	Piezoelectric effect in epitaxial PbZr1â^'xTixO3 thin films near morphotropic phase boundary region. Journal of Materials Research, 2005, 20, 787-790.	2.6	10
141	Fabrication of Cu/Co bilayer gate electrodes using selective chemical vapor deposition and soft lithographic patterning. Journal of Applied Physics, 2006, 100, 113705.	2.5	10
142	Evaluation of metalâ€“nanowire electrical contacts by measuring contact end resistance. Nanotechnology, 2012, 23, 245201.	2.6	10
143	Schottky nanocontact on single crystalline ZnO nanorod using conductive atomic force microscopy. Journal of Nanoparticle Research, 2013, 15, 1.	1.9	10
144	Non-equilibrium fractal growth of MoS₂ for electrocatalytic hydrogen evolution. CrystEngComm, 2019, 21, 478-486.	2.6	10

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145	Observation of mechanical fracture and corresponding domain structure changes of polycrystalline PbTiO₃ nanotubes. Physica Status Solidi - Rapid Research Letters, 2011, 5, 59-61.	2.4	9
146	Toward Coordinated Colloids: Site-Selective Growth of Titania on Patchy Silica Particles. Scientific Reports, 2015, 5, 9339.	3.3	9
147	Role of Sulfur Incorporation in p-Type Nickel Oxide (p-NiO) on n-Type Silicon (n-Si) Photoelectrodes for Water Oxidation Reactions. ACS Applied Energy Materials, 2020, 3, 4255-4264.	5.1	9
148	Formation of ferroelectric nano-domains using scanning force microscopy for the future application of memory devices. Integrated Ferroelectrics, 2000, 31, 163-171.	0.7	8
149	Piezoelectric hysteresis measurement using atomic force microscopy. Integrated Ferroelectrics, 2001, 38, 31-38.	0.7	8
150	Contact area lithography and pattern transfer of self-assembled organic monolayers on SiO2/Si substrates. Chemical Communications, 2011, 47, 5145.	4.1	8
151	Charge diffusion in silicon nitrides: Scalability assessment of nitride based flash memory. , 2011, , .		8
152	Memory effect of a single-walled carbon nanotube on nitride-oxide structure under various bias conditions. Applied Physics Letters, 2010, 96, .	3.3	7
153	Nanoscale retentionâ€loss dynamics of polycrystalline PbTiO₃ nanotubes. Physica Status Solidi - Rapid Research Letters, 2011, 5, 289-291.	2.4	7
154	Rapid, conformal gas-phase formation of silica (SiO2) nanotubes from water condensates. Nanoscale, 2013, 5, 5825.	5.6	7
155	Osteogenic Properties of Novel Methylsulfonylmethane-Coated Hydroxyapatite Scaffold. International Journal of Molecular Sciences, 2020, 21, 8501.	4.1	7
156	Selective Vapor-Phase Deposition of Conductive Poly(3,4-ethylenedioxythiophene) Thin Films on Patterned FeCl3 Formed by Microcontact Printing. Bulletin of the Korean Chemical Society, 2006, 27, 1633-1637.	1.9	7
157	Formation and process optimization of scanning resistive probe. Journal of Vacuum Science & Technology B, 2006, 24, 2417.	1.3	6
158	Ferroelectricity in Ultrathin PbZrO3/PbTiO3 Artificial Superlattices by Scanning Probe Microscopy. Ferroelectrics, 2006, 336, 271-277.	0.6	6
159	Iodine-catalyzed chemical vapor deposition of Cu on MPTMS monolayer surface in a low deposition temperature regime. Surface and Coatings Technology, 2007, 201, 9432-9436.	4.8	6
160	Nano-domain engineering in ultrashort-period ferroelectric superlattices. Applied Physics Letters, 2012, 100, 222906.	3.3	6
161	Electrochemical performance of amorphous and anatase TiO₂ nanotube array-based anodes fabricated by atomic layer deposition. Materials Research Innovations, 2015, 19, S5-694-S5-699.	2.3	6
162	Enhanced stabilisation of tetragonal (t)-ZrO₂ in the controlled nanotubular geometry. RSC Advances, 2015, 5, 80472-80479.	3.6	6

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163	Solar Cells: Oriented Grains with Preferred Lowâ€Angle Grain Boundaries in Halide Perovskite Films by Pressureâ€Induced Crystallization (Adv. Energy Mater. 10/2018). Advanced Energy Materials, 2018, 8, 1870045.	19.5	6
164	Charge Trapping in Amorphous Dielectrics for Secure Charge Storage. ACS Applied Materials & Interfaces, 2021, 13, 11507-11514.	8.0	6
165	Effect of metalâ€“insulatorâ€“semiconductor structure derived space charge field on the tip vibration signal in electrostatic force microscopy. Journal of Vacuum Science & Technology an Official Journal of the American Vacuum Society B, Microelectronics Processing and Phenomena, 2000, 18, 2688.	1.6	5
166	Revisit of Phase Transformation Kinetics in PZT Thin Films by Sol-Gel Method Using Scanning Force Microscopy. Integrated Ferroelectrics, 2004, 68, 247-258.	0.7	5
167	Characterization of self-assembling isolated ferroelectric domains by scanning force microscopy. Ultramicroscopy, 2004, 100, 339-346.	1.9	5
168	Nanoscale Ampoule Fabrication by Capillary Autoclosing. Small, 2009, 5, 1936-1941.	10.0	5
169	One Material, Multiple Faces - Nanostructured Bismuth. ECS Transactions, 2009, 25, 25-33.	0.5	5
170	Synthesis of Step-Shaped Bismuth Nanowiresâ€”An Approach Towards the Fabrication of Self-Homojunction. Electrochemical and Solid-State Letters, 2011, 14, E21.	2.2	5
171	Enhancement of light-matter interaction and photocatalytic efficiency of Au/TiO_2 hybrid nanowires. Optics Express, 2016, 24, 15171.	3.4	5
172	Perovskite Solar Cells: Perovskite Solar Cells with Inorganic Electronâ€•and Holeâ€Transport Layers Exhibiting Longâ€Term (â‰ˆ500 h) Stability at 85 Â°C under Continuous 1 Sun Illumination in Ambient Air (Adv. Mater. 29/2018). Advanced Materials, 2018, 30, 1870210.	21.0	5
173	Hot Scientific Debate on Halide Perovskites: Fundamentals, Photovoltaics, and Optoelectronics at Eighth Sungkyun International Solar Forum 2019 (SISF 2019). ACS Energy Letters, 2019, 4, 2475-2479.	17.4	5
174	<title>Deposition of oxide thin films on silicon using organic self-assembled monolayers</title>. , 1996, 2686, 88.		4
175	Size Effects on the Stabilization and Growth of Tetragonal ZrO₂ Crystallites in a Nanotubular Structure. Journal of Nanoscience and Nanotechnology, 2012, 12, 3177-3180.	0.9	4
176	A Sharp Focus on Perovskite Solar Cells at Sungkyun International Solar Forum (SISF). ACS Energy Letters, 2016, 1, 500-502.	17.4	4
177	Formation of yttria-stabilized zirconia nanotubes by atomic layer deposition toward efficient solid electrolytes. Nano Convergence, 2017, 4, 31.	12.1	4
178	Fabrication ofin situPatterned Iron Oxide Films using Micro Contact Printing and Selective Deposition. Molecular Crystals and Liquid Crystals, 2001, 371, 473-476.	0.3	3
179	Stability and read/write characteristics of nano ferroelectric domains. Ferroelectrics, 2001, 259, 289-298.	0.6	3
180	Influence of annealing atmosphere on the electrical conductivity of copper nanoparticle films. Electronic Materials Letters, 2016, 12, 338-342.	2.2	3

#	Article	IF	Citations
181	Binderâ€“Free Nanotubular Heteroâ€Structured Anodes of Îµâ€“Fe₂O₃ (Hematite) and TiN for Liâ€“Ion Battery. ChemistrySelect, 2018, 3, 11027-11034.	1.5	3
182	Nanometer Scale Confined Growth of Single-Crystalline Gold Nanowires via Photocatalytic Reduction. ACS Applied Materials & Interfaces, 2018, 10, 20929-20937.	8.0	3
183	Characteristics of 10-Methacryloyloxidecyl Dihydrogen Phosphate Monomer in Self-Etching Two-Bottled Dental Adhesive System: Comparison with Commercial Products. Materials, 2020, 13, 3553.	2.9	3
184	Tandem Solar Cells: Wideâ€Bandgap Perovskite/Gallium Arsenide Tandem Solar Cells (Adv. Energy Mater.) Tj ETQq0 0 0 rgBT /Overlock 1	19.5	3
185	Enhanced band-filling effect in halide perovskites via hydrophobic conductive linkers. Cell Reports Physical Science, 2022, 3, 100800.	5.6	3
186	Adhesion, passivation, and resistivity of a Ag(Mg) gate electrode for an amorphous silicon thin-film transistor. Journal of Materials Research, 2003, 18, 1441-1446.	2.6	2
187	FERROELECTRIC PROPERTIES OF ULTRA-THIN EPITAXIAL Pb(Zr0.2Ti0.8)O3 THIN FILMS GROWN ON SrRuO3/SrTiO3 SUBSTRATES. Integrated Ferroelectrics, 2005, 73, 125-132.	0.7	2
188	A scanning probe mounted on a field-effect transistor: Characterization of ion damage in Si. Micron, 2017, 101, 197-205.	2.2	2
189	Enthusiastic Discussions on Halide Perovskite Materials beyond Photovoltaics at Sungkyun International Solar Forum 2017 (SISF2017). ACS Energy Letters, 2018, 3, 199-203.	17.4	2
190	Metalâ€Assisted Efficient Nanotubular Electrocatalyst of MoS₂ for Hydrogen Production. ChemCatChem, 2021, 13, 3237-3246.	3.7	2
191	Selective Depositions of Fe-Containing Oxide Films on Mixed Selfassembled Organic Monolayers using Microcontact Printing. Materials Research Society Symposia Proceedings, 1999, 576, 191.	0.1	1
192	Characteristics of Zirconium Based Amorphous Thin Films Deposited by Co-Sputtering. Integrated Ferroelectrics, 2002, 48, 33-40.	0.7	1
193	Fabrication of Isolated Ferroelectric Domains in Nano-Scale. Integrated Ferroelectrics, 2003, 59, 1521-1527.	0.7	1
194	Ultra-thin and isolated dots in polycrystalline lead zirconate titanate films. IEEE Transactions on Ultrasonics, Ferroelectrics, and Frequency Control, 2006, 53, 2333-2339.	3.0	1
195	Fabrication and evaluation of V-shaped MOS transistor probe. Proceedings of the IEEE International Conference on Micro Electro Mechanical Systems (MEMS), 2008, , .	0.0	1
196	Effects of ion beam-irradiated Si on atomic force microscope local oxidation. Chemical Physics Letters, 2013, 566, 44-49.	2.6	1
197	Direct patterning of metal oxides by hard templates and atomic layer deposition. International Journal of Nanotechnology, 2013, 10, 692.	0.2	1
198	SILOXANE-ANCHORED MONOLAYERS AS TEMPLATES FOR OXIDE FILM DEPOSITION. , 1999, , 1-13.		0

#	Article	IF	Citations
199	Controllable Feature Sizes of Highly Conductive Poly(3,4-Ethylenedioxythiophene) Nanofilms Patterned on SiO2 Surface. Journal of Nanoscience and Nanotechnology, 2008, 8, 5080-5084.	0.9	0
200	3D Transparent Conducting Oxides: Nanowireâ€Based Threeâ€Dimensional Transparent Conducting Oxide Electrodes for Extremely Fast Charge Collection (Adv. Energy Mater. 5/2011). Advanced Energy Materials, 2011, 1, 702-702.	19.5	0
201	Kinetics of nanodomain growth in ferroelectric artificial superlattices. Scripta Materialia, 2013, 69, 501-504.	5.2	0
202	Enhanced electron lifetime in dye-sensitised solar cells via suppression of electron-hole recombination. International Journal of Nanotechnology, 2016, 13, 365.	0.2	0
203	Preparation of Inks with Monodisperse Colloidal Silica and their Self-Assembly in a Ink-Jet Printed Droplet. Materials Research Society Symposia Proceedings, 2003, 776, 5171.	0.1	0
204	Application of Ferroelectric Domains in Nanometer Scale for High- Density Storage Devices. , 2004, , 263-279.		0
205	Vertically Aligned Si Nanowire Arrayâ€”A Promising Anode Material for Li-Ion Battery. Energy and Environment Focus, 2017, 6, 83-87.	0.3	0