Nitin P Padture

List of Publications by Year in descending order

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250 papers	26,788 citations	4942 84 h-index	6630 156 g-index
256 all docs	256 docs citations	256 times ranked	16662 citing authors

#	ARTICLE	IF	CITATIONS
1	CNT-based bifacial perovskite solar cells toward highly efficient 4-terminal tandem photovoltaics. Energy and Environmental Science, 2022, 15, 1536-1544.	15.6	39
2	Delineation and Passivation of Grainâ€Boundary Channels in Metal Halide Perovskite Thin Films for Solar Cells. Advanced Materials Interfaces, 2022, 9, .	1.9	4
3	Rate-dependent deformation of amorphous sulfide glass electrolytes for solid-state batteries. Cell Reports Physical Science, 2022, 3, 100845.	2.8	12
4	Time-resolved vibrational-pump visible-probe spectroscopy for thermal conductivity measurement of metal-halide perovskites. Review of Scientific Instruments, 2022, 93, .	0.6	5
5	Lead removal at trace concentrations from water by inactive yeast cells. Communications Earth & Environment, 2022, 3, .	2.6	8
6	Lead-Free Flexible Perovskite Solar Cells with Interfacial Native Oxide Have >10% Efficiency and Simultaneously Enhanced Stability and Reliability. ACS Energy Letters, 2022, 7, 2256-2264.	8.8	19
7	Low thermal conductivity in high-entropy rare-earth pyrosilicate solid-solutions for thermal environmental barrier coatings. Scripta Materialia, 2021, 191, 40-45.	2.6	59
8	Linking melem with conjugated Schiff-base bonds to boost photocatalytic efficiency of carbon nitride for overall water splitting. Nanoscale, 2021, 13, 9315-9321.	2.8	17
9	Correlations between Electrochemical Ion Migration and Anomalous Device Behaviors in Perovskite Solar Cells. ACS Energy Letters, 2021, 6, 1003-1014.	8.8	39
10	Interpenetrating interfaces for efficient perovskite solar cells with high operational stability and mechanical robustness. Nature Communications, 2021, 12, 973.	5.8	189
11	High-performance methylammonium-free ideal-band-gap perovskite solar cells. Matter, 2021, 4, 1365-1376.	5.0	51
12	On the multiplying factor for the estimation of the average grain size in thin films. Scripta Materialia, 2021, 196, 113748.	2.6	4
13	Real-Time Investigation of Sn(II) Oxidation in Pb-Free Halide Perovskites by X-ray Absorption and MÃ¶ssbauer Spectroscopy. ACS Applied Energy Materials, 2021, 4, 4327-4332.	2.5	9
14	Interfacial toughening with self-assembled monolayers enhances perovskite solar cell reliability. Science, 2021, 372, 618-622.	6.0	313
15	Knowledge extraction and transfer in data-driven fracture mechanics. Proceedings of the National Academy of Sciences of the United States of America, 2021, 118, .	3.3	21
16	Crystallization behavior of air-plasma-sprayed ytterbium-silicate-based environmental barrier coatings. Journal of the European Ceramic Society, 2021, 41, 3696-3705.	2.8	37
17	Flexible perovskite solar cells with simultaneously improved efficiency, operational stability, and mechanical reliability. Joule, 2021, 5, 1587-1601.	11.7	120
18	The effect of atmosphere on the flash-sintering of nanoscale titania ceramics. Scripta Materialia, 2021, 199, 113894.	2.6	10

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19	High-temperature interactions between Yttria-stabilized zirconia thermal barrier coatings and Na-Rich calcia-magnesia-aluminosilicate deposits. Ceramics International, 2021, 47, 19505-19514.	2.3	2
20	<i>In situ</i> transfer of CH₃NH₃PbI₃ single crystals in mesoporous scaffolds for efficient perovskite solar cells. Chemical Science, 2020, 11, 474-481.	3.7	19
21	Sub-1.4eV bandgap inorganic perovskite solar cells with long-term stability. Nature Communications, 2020, 11, 151.	5.8	92
22	Fracture, fatigue, and sliding-wear behavior of nanocomposites of alumina and reduced graphene-oxide. Acta Materialia, 2020, 186, 29-39.	3.8	35
23	High-temperature materials for power generation in gas turbines. , 2020, , 3-62.		13
24	Arrays of Plasmonic Nanostructures for Absorption Enhancement in Perovskite Thin Films. Nanomaterials, 2020, 10, 1342.	1.9	13
25	Sea-salt-induced moderate-temperature degradation of thermally-sprayed MCrAlY bond-coats. Surface and Coatings Technology, 2020, 404, 126459.	2.2	6
26	Perovskite Solar Cells with Enhanced Fill Factors Using Polymer-Capped Solvent Annealing. ACS Applied Energy Materials, 2020, 3, 7231-7238.	2.5	19
27	pâ€“p orbital interaction <i>via</i> magnesium isovalent doping enhances optoelectronic properties of halide perovskites. Chemical Communications, 2020, 56, 15639-15642.	2.2	3
28	Mechanisms of exceptional grain growth and stability in formamidinium lead triiodide thin films for perovskite solar cells. Acta Materialia, 2020, 193, 10-18.	3.8	27
29	High-Performance Lead-Free Solar Cells Based on Tin-Halide Perovskite Thin Films Functionalized by a Divalent Organic Cation. ACS Energy Letters, 2020, 5, 2223-2230.	8.8	96
30	Electron-beam-induced cracking in organic-inorganic halide perovskite thin films. Scripta Materialia, 2020, 187, 88-92.	2.6	16
31	Rare-earth pyrosilicate solid-solution environmental-barrier coating ceramics for resistance against attack by molten calciaâ€“magnesiaâ€“aluminosilicate (CMAS) glass. Journal of Materials Research, 2020, 35, 2373-2384.	1.2	30
32	High-Toughness Inorganic Solid Electrolytes via the Use of Reduced Graphene Oxide. Matter, 2020, 3, 212-229.	5.0	36
33	Encapsulated X-Ray Detector Enabled by All-Inorganic Lead-Free Perovskite Film With High Sensitivity and Low Detection Limit. IEEE Transactions on Electron Devices, 2020, 67, 3191-3198.	1.6	40
34	High toughness carbon-nanotube-reinforced ceramics via ion-beam engineering of interfaces. Carbon, 2020, 163, 169-177.	5.4	19
35	A machine learning approach to fracture mechanics problems. Acta Materialia, 2020, 190, 105-112.	3.8	146
36	Anomalous 3D nanoscale photoconduction in hybrid perovskite semiconductors revealed by tomographic atomic force microscopy. Nature Communications, 2020, 11, 3308.	5.8	53

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37	The Synergism of DMSO and Diethyl Ether for Highly Reproducible and Efficient MA_{0.5}FA_{0.5}PbI₃ Perovskite Solar Cells. Advanced Energy Materials, 2020, 10, 2001300.	10.2	33
38	Facile healing of cracks in organicâ€“inorganic halide perovskite thin films. Acta Materialia, 2020, 187, 112-121.	3.8	51
39	Effect of Grain Size on the Fracture Behavior of Organic-Inorganic Halide Perovskite Thin Films for Solar Cells. Scripta Materialia, 2020, 185, 47-50.	2.6	32
40	Enhanced Thermoelectric Performance in Lead-Free Inorganic CsSn_{1<i>â€“x</i>}Ge_{<i>x</i>}I₃ Perovskite Semiconductors. Journal of Physical Chemistry C, 2020, 124, 11749-11753.	1.5	45
41	Asymmetric alkyl diamine based Dionâ€“Jacobson low-dimensional perovskite solar cells with efficiency exceeding 15%. Journal of Materials Chemistry A, 2020, 8, 9919-9926.	5.2	38
42	Enhancing Chemical Stability and Suppressing Ion Migration in CH₃NH₃PbI₃ Perovskite Solar Cells <i>via</i> Direct Backbone Attachment of Polyesters on Grain Boundaries. Chemistry of Materials, 2020, 32, 5104-5117.	3.2	64
43	Understanding and Engineering Grain Boundaries for High-Performance Halide Perovskite Photovoltaics. , 2020, , .		3
44	Quantum-Dot-Induced Cesium-Rich Surface Imparts Enhanced Stability to Formamidinium Lead Iodide Perovskite Solar Cells. ACS Energy Letters, 2019, 4, 1970-1975.	8.8	82
45	Direct Characterization of Carrier Diffusion in Halide-Perovskite Thin Films Using Transient Photoluminescence Imaging. ACS Photonics, 2019, 6, 2375-2380.	3.2	19
46	Carrier lifetime enhancement in halide perovskite via remote epitaxy. Nature Communications, 2019, 10, 4145.	5.8	93
47	Comprehensive Elucidation of Ion Transport and Its Relation to Hysteresis in Methylammonium Lead Iodide Perovskite Thin Films. Journal of Physical Chemistry C, 2019, 123, 4029-4034.	1.5	16
48	Improved SnO₂ Electron Transport Layers Solutionâ€Deposited at Near Room Temperature for Rigid or Flexible Perovskite Solar Cells with High Efficiencies. Advanced Energy Materials, 2019, 9, 1900834.	10.2	100
49	Fusing Nanowires into Thin Films: Fabrication of Gradedâ€Heterojunction Perovskite Solar Cells with Enhanced Performance. Advanced Energy Materials, 2019, 9, 1900243.	10.2	45
50	Environmental degradation of high-temperature protective coatings for ceramic-matrix composites in gas-turbine engines. Npj Materials Degradation, 2019, 3, .	2.6	92
51	Effect of Grain Boundaries on Charge Transport in Methylammonium Lead Iodide Perovskite Thin Films. Journal of Physical Chemistry C, 2019, 123, 5321-5325.	1.5	28
52	Highly stable and efficient all-inorganic lead-free perovskite solar cells with native-oxide passivation. Nature Communications, 2019, 10, 16.	5.8	430
53	Transmission Electron Microscopy of Halide Perovskite Materials and Devices. Joule, 2019, 3, 641-661.	11.7	94
54	Synthetic Approaches for Halide Perovskite Thin Films. Chemical Reviews, 2019, 119, 3193-3295.	23.0	454

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55	Lead-Free Dionâ€“Jacobson Tin Halide Perovskites for Photovoltaics. ACS Energy Letters, 2019, 4, 276-277.	8.8	101
56	Frontispiece: Bandgap Optimization of Perovskite Semiconductors for Photovoltaic Applications. Chemistry - A European Journal, 2018, 24, .	1.7	1
57	Continuous Grain-Boundary Functionalization for High-Efficiency Perovskite Solar Cells with Exceptional Stability. CheM, 2018, 4, 1404-1415.	5.8	165
58	Direct in situ observation of toughening mechanisms in nanocomposites of silicon nitride and reduced graphene-oxide. Scripta Materialia, 2018, 149, 40-43.	2.6	33
59	Cesium Titanium(IV) Bromide Thin Films Based Stable Lead-free Perovskite Solar Cells. Joule, 2018, 2, 558-570.	11.7	403
60	Earth-Abundant Nontoxic Titanium(IV)-based Vacancy-Ordered Double Perovskite Halides with Tunable 1.0 to 1.8 eV Bandgaps for Photovoltaic Applications. ACS Energy Letters, 2018, 3, 297-304.	8.8	314
61	Thermo-mechanical behavior of organic-inorganic halide perovskites for solar cells. Scripta Materialia, 2018, 150, 36-41.	2.6	100
62	Environmental-barrier coating ceramics for resistance against attack by molten calcia-magnesia-aluminosilicate (CMAS) glass: Part I, YAlO3 and Î³-Y2Si2O7. Journal of the European Ceramic Society, 2018, 38, 3905-3913.	2.8	77
63	Environmental-barrier coating ceramics for resistance against attack by molten calcia-magnesia-aluminosilicate (CMAS) glass: Part II, Î²-Yb2Si2O7 and Î²-Sc2Si2O7. Journal of the European Ceramic Society, 2018, 38, 3914-3924.	2.8	112
64	Exceptional Grain Growth in Formamidinium Lead Iodide Perovskite Thin Films Induced by the Î´-to-Î± Phase Transformation. ACS Energy Letters, 2018, 3, 63-64.	8.8	33
65	Bandgap Optimization of Perovskite Semiconductors for Photovoltaic Applications. Chemistry - A European Journal, 2018, 24, 2305-2316.	1.7	103
66	Materials in the Aircraft Industry. , 2018, , 271-346.		2
67	Subgrain Special Boundaries in Halide Perovskite Thin Films Restrict Carrier Diffusion. ACS Energy Letters, 2018, 3, 2669-2670.	8.8	68
68	Towards multifunctional thermal environmental barrier coatings (TEBCs) based on rare-earth pyrosilicate solid-solution ceramics. Scripta Materialia, 2018, 154, 111-117.	2.6	122
69	Stable Formamidiniumâ€Based Perovskite Solar Cells via In Situ Grain Encapsulation. Advanced Energy Materials, 2018, 8, 1800232.	10.2	78
70	Perovskite Solar Cells: Stable Formamidinium-Based Perovskite Solar Cells via In Situ Grain Encapsulation (Adv. Energy Mater. 22/2018). Advanced Energy Materials, 2018, 8, 1870101.	10.2	1
71	Lewisâ€Adduct Mediated Grainâ€Boundary Functionalization for Efficient Idealâ€Bandgap Perovskite Solar Cells with Superior Stability. Advanced Energy Materials, 2018, 8, 1800997.	10.2	93
72	Toward Eco-friendly and Stable Perovskite Materials for Photovoltaics. Joule, 2018, 2, 1231-1241.	11.7	224

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73	Integration of a functionalized graphene nano-network into a planar perovskite absorber for high-efficiency large-area solar cells. Materials Horizons, 2018, 5, 868-873.	6.4	25
74	In situ direct observation of toughening in isotropic nanocomposites of alumina ceramic and multiwall carbon nanotubes. Acta Materialia, 2017, 127, 203-210.	3.8	37
75	Progress in Tandem Solar Cells Based on Hybrid Organicâ€“Inorganic Perovskites. Advanced Energy Materials, 2017, 7, 1602400.	10.2	130
76	The role of ceramic and glass science research in meeting societal challenges: Report from an <scp>NSF</scp>â€sponsored workshop. Journal of the American Ceramic Society, 2017, 100, 1777-1803.	1.9	23
77	Resistance of 2ZrO₂Â·Y₂O₃ top coat in thermal/environmental barrier coatings to calciaâ€magnesiaâ€aluminosilicate attack at 1500Â°C. Journal of the American Ceramic Society, 2017, 100, 3175-3187.	1.9	30
78	Methylammoniumâ€Mediated Evolution of Mixedâ€Organicâ€Cation Perovskite Thin Films: A Dynamic Compositionâ€Tuning Process. Angewandte Chemie, 2017, 129, 7782-7786.	1.6	12
79	Methylammoniumâ€Mediated Evolution of Mixedâ€Organicâ€Cation Perovskite Thin Films: A Dynamic Compositionâ€Tuning Process. Angewandte Chemie - International Edition, 2017, 56, 7674-7678.	7.2	59
80	Fabrication of compact and stable perovskite films with optimized precursor composition in the fast-growing procedure. Science China Materials, 2017, 60, 608-616.	3.5	12
81	Inhomogeneous oxidation of ZrB2-SiC ultra-high-temperature ceramic particulate composites and its mitigation. Acta Materialia, 2017, 129, 138-148.	3.8	47
82	Ions Matter: Description of the Anomalous Electronic Behavior in Methylammonium Lead Halide Perovskite Devices. Advanced Functional Materials, 2017, 27, 1606584.	7.8	65
83	High-Performance Formamidinium-Based Perovskite Solar Cells via Microstructure-Mediated Î´-to-Î± Phase Transformation. Chemistry of Materials, 2017, 29, 3246-3250.	3.2	99
84	Long Minorityâ€Carrier Diffusion Length and Low Surfaceâ€Recombination Velocity in Inorganic Leadâ€Free CsSnI₃ Perovskite Crystal for Solar Cells. Advanced Functional Materials, 2017, 27, 1604818.	7.8	164
85	Gas-Induced Formation/Transformation of Organicâ€“Inorganic Halide Perovskites. ACS Energy Letters, 2017, 2, 2166-2176.	8.8	51
86	RÃ¼cktitelbild: Homogenous Alloys of Formamidinium Lead Triiodide and Cesium Tin Triiodide for Efficient Idealâ€Bandgap Perovskite Solar Cells (Angew. Chem. 41/2017). Angewandte Chemie, 2017, 129, 12966-12966.	1.6	0
87	Homogenous Alloys of Formamidinium Lead Triiodide and Cesium Tin Triiodide for Efficient Idealâ€Bandgap Perovskite Solar Cells. Angewandte Chemie - International Edition, 2017, 56, 12658-12662.	7.2	69
88	Homogenous Alloys of Formamidinium Lead Triiodide and Cesium Tin Triiodide for Efficient Idealâ€Bandgap Perovskite Solar Cells. Angewandte Chemie, 2017, 129, 12832-12836.	1.6	3
89	Simultaneous Evolution of Uniaxially Oriented Grains and Ultralow-Density Grain-Boundary Network in CH₃NH₃PbI₃ Perovskite Thin Films Mediated by Precursor Phase Metastability. ACS Energy Letters, 2017, 2, 2727-2733.	8.8	82
90	Exceptional Morphology-Preserving Evolution of Formamidinium Lead Triiodide Perovskite Thin Films via Organic-Cation Displacement. Journal of the American Chemical Society, 2016, 138, 5535-5538.	6.6	178

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91	Observation of phase-retention behavior of the HC(NH₂)₂PbI₃ black perovskite polymorph upon mesoporous TiO₂ scaffolds. Chemical Communications, 2016, 52, 7273-7275.	2.2	50
92	Mapping the Photoresponse of CH₃NH₃PbI₃ Hybrid Perovskite Thin Films at the Nanoscale. Nano Letters, 2016, 16, 3434-3441.	4.5	120
93	Physical chemistry of hybrid perovskite solar cells. Physical Chemistry Chemical Physics, 2016, 18, 27024-27025.	1.3	7
94	Heterojunctionâ€Depleted Leadâ€Free Perovskite Solar Cells with Coarseâ€Grained Bâ€Î³â€CsSnI₃ Thin Films. Advanced Energy Materials, 2016, 6, 1601130.	10.2	247
95	Advanced structural ceramics in aerospace propulsion. Nature Materials, 2016, 15, 804-809.	13.3	1,134
96	Lithium-ion battery electrolyte mobility at nano-confined graphene interfaces. Nature Communications, 2016, 7, 12693.	5.8	26
97	Doping and alloying for improved perovskite solar cells. Journal of Materials Chemistry A, 2016, 4, 17623-17635.	5.2	157
98	Thinâ€Film Transformation of NH₄PbI₃ to CH₃NH₃PbI₃ Perovskite: A Methylamineâ€Induced Conversionâ€“Healing Process. Angewandte Chemie - International Edition, 2016, 55, 14723-14727.	7.2	83
99	Thinâ€Film Transformation of NH₄PbI₃ to CH₃NH₃PbI₃ Perovskite: A Methylamineâ€Induced Conversionâ€“Healing Process. Angewandte Chemie, 2016, 128, 14943-14947.	1.6	17
100	Challenges in the ambient Raman spectroscopy characterization of methylammonium lead triiodide perovskite thin films. Frontiers of Optoelectronics, 2016, 9, 81-86.	1.9	27
101	Calcia-magnesia-alumino-silicate (CMAS)-induced degradation and failure of air plasma sprayed yttria-stabilized zirconia thermal barrier coatings. Acta Materialia, 2016, 105, 355-366.	3.8	181
102	Transformative Evolution of Organolead Triiodide Perovskite Thin Films from Strong Room-Temperature Solidâ€“Gas Interaction between HPbI₃-CH₃NH₂ Precursor Pair. Journal of the American Chemical Society, 2016, 138, 750-753.	6.6	156
103	Hybrid Perovskite Quantum Nanostructures Synthesized by Electrospray Antisolventâ€“Solvent Extraction and Intercalation. ACS Applied Materials & Interfaces, 2016, 8, 854-861.	4.0	49
104	Manipulating Crystallization of Organolead Mixed-Halide Thin Films in Antisolvent Baths for Wide-Bandgap Perovskite Solar Cells. ACS Applied Materials & Interfaces, 2016, 8, 2232-2237.	4.0	91
105	Intercalation crystallization of phase-pure Î±-HC(NH₂)₂PbI₃upon microstructurally engineered PbI₂thin films for planar perovskite solar cells. Nanoscale, 2016, 8, 6265-6270.	2.8	41
106	Interaction between ceramic powder and molten calcia-magnesia-alumino-silicate (CMAS) glass, and its implication on CMAS-resistant thermal barrier coatings. Scripta Materialia, 2016, 112, 118-122.	2.6	56
107	Squareâ€Centimeter Solutionâ€Processed Planar CH₃NH₃PbI₃ Perovskite Solar Cells with Efficiency Exceeding 15%. Advanced Materials, 2015, 27, 6363-6370.	11.1	311
108	Methylamineâ€Gasâ€Induced Defectâ€Healing Behavior of CH₃NH₃PbI₃ Thin Films for Perovskite Solar Cells. Angewandte Chemie - International Edition, 2015, 54, 9705-9709.	7.2	377

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109	The Compelling Case for Indentation as a Functional Exploratory and Characterization Tool. Journal of the American Ceramic Society, 2015, 98, 2671-2680.	1.9	67
110	Crystal Morphologies of Organolead Trihalide in Mesoscopic/Planar Perovskite Solar Cells. Journal of Physical Chemistry Letters, 2015, 6, 2292-2297.	2.1	93
111	Microstructures of Organometal Trihalide Perovskites for Solar Cells: Their Evolution from Solutions and Characterization. Journal of Physical Chemistry Letters, 2015, 6, 4827-4839.	2.1	344
112	High-temperature creep deformation of coarse-grained boron carbide ceramics. Journal of the European Ceramic Society, 2015, 35, 1423-1429.	2.8	36
113	Growth control of compact CH₃NH₃PbI₃ thin films via enhanced solid-state precursor reaction for efficient planar perovskite solar cells. Journal of Materials Chemistry A, 2015, 3, 9249-9256.	5.2	128
114	Room-temperature crystallization of hybrid-perovskite thin films via solventâ€“solvent extraction for high-performance solar cells. Journal of Materials Chemistry A, 2015, 3, 8178-8184.	5.2	385
115	Heterojunction metal-oxide-metal Au-Fe3O4-Au single nanowire device for spintronics. Journal of Applied Physics, 2015, 117, 17D710.	1.1	5
116	Carrier separation and transport in perovskite solar cells studied by nanometre-scale profiling of electrical potential. Nature Communications, 2015, 6, 8397.	5.8	205
117	Additive-Modulated Evolution of HC(NH₂)₂PbI₃ Black Polymorph for Mesoscopic Perovskite Solar Cells. Chemistry of Materials, 2015, 27, 7149-7155.	3.2	197
118	Magnetoresistance characteristics in individual Fe3O4 single crystal nanowire. Journal of Applied Physics, 2015, 117, 17E115.	1.1	9
119	2ZrO₂Â·Y₂O₃ Thermal Barrier Coatings Resistant to Degradation by Molten <scp>CMAS</scp>: Part I, Optical Basicity Considerations and Processing. Journal of the American Ceramic Society, 2014, 97, 3943-3949.	1.9	111
120	2ZrO₂Â·Y₂O₃ Thermal Barrier Coatings Resistant to Degradation by Molten <scp>CMAS</scp>: Part <scp>II</scp>, Interactions with Sand and Fly Ash. Journal of the American Ceramic Society, 2014, 97, 3950-3957.	1.9	82
121	In situ Raman spectroscopy studies of high-temperature degradation of thermal barrier coatings by molten silicate deposits. Scripta Materialia, 2014, 76, 29-32.	2.6	59
122	CMAS-Resistant Plasma Sprayed Thermal Barrier Coatings Based on Y2O3-Stabilized ZrO2 with Al3+ and Ti4+ Solute Additions. Journal of Thermal Spray Technology, 2014, 23, 708-715.	1.6	23
123	Direct Observation of Ferroelectric Domains in Solution-Processed CH₃NH₃PbI₃ Perovskite Thin Films. Journal of Physical Chemistry Letters, 2014, 5, 3335-3339.	2.1	411
124	One-step, solution-processed formamidinium lead trihalide (FAPbI_(3âˆ’x)Cl_x) for mesoscopic perovskiteâ€“polymer solar cells. Physical Chemistry Chemical Physics, 2014, 16, 19206-19211.	1.3	130
125	Vapour-based processing of hole-conductor-free CH₃NH₃PbI₃ perovskite/C₆₀ fullerene planar solar cells. RSC Advances, 2014, 4, 28964-28967.	1.7	127
126	Room temperature â€œone-potâ€• solution synthesis of nanoscale CsSnI3 orthorhombic perovskite thin films and particles. Materials Letters, 2013, 110, 127-129.	1.3	58

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127	Ohmic contact formation between metal and AlGaN/GaN heterostructure via graphene insertion. Applied Physics Letters, 2013, 102, .	1.5	25
128	Coal Ash Deposition on Nozzle Guide Vanesâ€"Part I: Experimental Characteristics of Four Coal Ash Types. Journal of Turbomachinery, 2013, 135, .	0.9	37
129	Defect states and disorder in charge transport in semiconductor nanowires. Journal of Applied Physics, 2013, 114, .	1.1	9
130	Thermal-barrier coatings for more efficient gas-turbine engines. MRS Bulletin, 2012, 37, 891-898.	1.7	1,079
131	Composition effects of thermal barrier coating ceramics on their interaction with molten Caâ€"Mgâ€"Alâ€"silicate (CMAS) glass. Acta Materialia, 2012, 60, 5437-5447.	3.8	208
132	Site-specific stamping of graphene micro-patterns over large areas using flexible stamps. Nanotechnology, 2012, 23, 235603.	1.3	5
133	Strengthening of transparent spinel/Si3N4 nanocomposites. Acta Materialia, 2012, 60, 1570-1575.	3.8	28
134	Nanostructured, Infraredâ€•Transparent Magnesiumâ€•Aluminate Spinel with Superior Mechanical Properties. International Journal of Applied Ceramic Technology, 2012, 9, 83-90.	1.1	38
135	Plasma sprayed gadolinium zirconate thermal barrier coatings that are resistant to damage by molten Caâ€"Mgâ€"Alâ€"silicate glass. Surface and Coatings Technology, 2012, 206, 3911-3916.	2.2	110
136	Microstructural effects on the sliding wear of transparent magnesium-aluminate spinel. Journal of the European Ceramic Society, 2012, 32, 3143-3149.	2.8	27
137	Jet Engine Coatings for Resisting Volcanic Ash Damage. Advanced Materials, 2011, 23, 2419-2424.	11.1	198
138	Jet Engine Coatings: Jet Engine Coatings for Resisting Volcanic Ash Damage (Adv. Mater. 21/2011). Advanced Materials, 2011, 23, 2388-2388.	11.1	5
139	Mitigation of damage from molten fly ash to air-plasma-sprayed thermal barrier coatings. Materials Science & Engineering A: Structural Materials: Properties, Microstructure and Processing, 2011, 528, 7214-7221.	2.6	105
140	Effect of MoSi2 content on the lubricated sliding-wear resistance of ZrCâ€"MoSi2 composites. Journal of the European Ceramic Society, 2011, 31, 877-882.	2.8	24
141	High quality, transferrable graphene grown on single crystal Cu(111) thin films on basal-plane sapphire. Applied Physics Letters, 2011, 98, .	1.5	113
142	Comprehensive control of optical polarization anisotropy in semiconducting nanowires. Applied Physics Letters, 2011, 99, .	1.5	11
143	Chronic Fine Particulate Matter Exposure Induces Systemic Vascular Dysfunction via NADPH Oxidase and TLR4 Pathways. Circulation Research, 2011, 108, 716-726.	2.0	275
144	Air-plasma-sprayed thermal barrier coatings that are resistant to high-temperature attack by glassy deposits. Acta Materialia, 2010, 58, 6835-6844.	3.8	163

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145	Thermal-gradient testing of thermal barrier coatings under simultaneous attack by molten glassy deposits and its mitigation. Surface and Coatings Technology, 2010, 204, 2683-2688.	2.2	70
146	Microstructural Effects on the Creep Deformation of Alumina/Singleâ€Wall Carbon Nanotubes Composites. Journal of the American Ceramic Society, 2010, 93, 2042-2047.	1.9	18
147	Chemically synthesized metalâ€“oxideâ€“metal segmented nanowires with high ferroelectric response. Nanotechnology, 2010, 21, 335601.	1.3	2
148	Bipolar resistive switching in individual Auâ€“NiOâ€“Au segmented nanowires. Applied Physics Letters, 2009, 95, .	1.5	44
149	Multifunctional Composites of Ceramics and Singleâ€Walled Carbon Nanotubes. Advanced Materials, 2009, 21, 1767-1770.	11.1	107
150	Toward Siteâ€Specific Stamping of Graphene. Advanced Materials, 2009, 21, 1243-1246.	11.1	80
151	High-temperature mechanical behavior of Al2O3/graphite composites. Journal of the European Ceramic Society, 2009, 29, 3205-3209.	2.8	5
152	Thermal Barrier Coatings Made by the Solution Precursor Plasma Spray Process. Journal of Thermal Spray Technology, 2008, 17, 124-135.	1.6	132
153	Mechanical properties of solution-precursor plasma-sprayed thermal barrier coatings. Surface and Coatings Technology, 2008, 202, 4976-4979.	2.2	25
154	Comment on â€œEffect of sintering temperature on a single-wall carbon nanotube-toughened alumina-based compositeâ€. Scripta Materialia, 2008, 58, 989-990.	2.6	39
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