## Husam Niman Alshareef

List of Publications by Year in descending order

Source: https://exaly.com/author-pdf/14024/publications.pdf

Version: 2024-02-01

501 papers

45,144 citations

112 h-index 192 g-index

515 all docs

515 docs citations

515 times ranked 36051 citing authors

#	Article	IF	CITATIONS
1	Plasma-Assisted Synthesis of NiCoP for Efficient Overall Water Splitting. Nano Letters, 2016, 16, 7718-7725.	9.1	1,079
2	Substrate Dependent Self-Organization of Mesoporous Cobalt Oxide Nanowires with Remarkable Pseudocapacitance. Nano Letters, 2012, 12, 2559-2567.	9.1	778
3	Effect of Postetch Annealing Gas Composition on the Structural and Electrochemical Properties of Ti <sub>2</sub> CT <sub><i>x</i></sub> MXene Electrodes for Supercapacitor Applications. Chemistry of Materials, 2015, 27, 5314-5323.	6.7	771
4	All Pseudocapacitive MXeneâ€RuO <sub>2</sub> Asymmetric Supercapacitors. Advanced Energy Materials, 2018, 8, 1703043.	19.5	757
5	Highly Stable Aqueous Zincâ€lon Storage Using a Layered Calcium Vanadium Oxide Bronze Cathode. Angewandte Chemie - International Edition, 2018, 57, 3943-3948.	13.8	742
6	Rechargeable Aqueous Zincâ€lon Battery Based on Porous Framework Zinc Pyrovanadate Intercalation Cathode. Advanced Materials, 2018, 30, 1705580.	21.0	738
7	One-Step Electrodeposited Nickel Cobalt Sulfide Nanosheet Arrays for High-Performance Asymmetric Supercapacitors. ACS Nano, 2014, 8, 9531-9541.	14.6	687
8	High-Performance Nanostructured Supercapacitors on a Sponge. Nano Letters, 2011, 11, 5165-5172.	9.1	670
9	Zinc-ion batteries: Materials, mechanisms, and applications. Materials Science and Engineering Reports, 2019, 135, 58-84.	31.8	604
10	Symmetrical MnO <sub>2</sub> â€"Carbon Nanotubeâ€"Textile Nanostructures for Wearable Pseudocapacitors with High Mass Loading. ACS Nano, 2011, 5, 8904-8913.	14.6	582
11	Layered Mg <i><sub><i>x</i></sub></i> Cathode Material for High-Performance Aqueous Zinc Ion Batteries. ACS Energy Letters, 2018, 3,2602-2609.	17.4	581
12	MXenes stretch hydrogel sensor performance to new limits. Science Advances, 2018, 4, eaat0098.	10.3	556
13	Recent Developments in pâ€₹ype Oxide Semiconductor Materials and Devices. Advanced Materials, 2016, 28, 3831-3892.	21.0	552
14	All-MXene (2D titanium carbide) solid-state microsupercapacitors for on-chip energy storage. Energy and Environmental Science, 2016, 9, 2847-2854.	30.8	551
15	Selenideâ€Based Electrocatalysts and Scaffolds for Water Oxidation Applications. Advanced Materials, 2016, 28, 77-85.	21.0	544
16	Intercorrelated In-Plane and Out-of-Plane Ferroelectricity in Ultrathin Two-Dimensional Layered Semiconductor In <sub>2</sub> Se <sub>3</sub> . Nano Letters, 2018, 18, 1253-1258.	9.1	509
17	Amorphous NiFe-OH/NiFeP Electrocatalyst Fabricated at Low Temperature for Water Oxidation Applications. ACS Energy Letters, 2017, 2, 1035-1042.	17.4	505
18	Continuous production of pure liquid fuel solutions via electrocatalytic CO2 reduction using solid-electrolyte devices. Nature Energy, 2019, 4, 776-785.	39.5	458

#	Article	IF	Citations
19	Atomic layer deposition of SnO 2 on MXene for Li-ion battery anodes. Nano Energy, 2017, 34, 249-256.	16.0	423
20	Synthesis Strategies of Porous Carbon for Supercapacitor Applications. Small Methods, 2020, 4, 1900853.	8.6	403
21	H <sub>2</sub> O <sub>2</sub> assisted room temperature oxidation of Ti <sub>2</sub> C MXene for Li-ion battery anodes. Nanoscale, 2016, 8, 7580-7587.	5.6	396
22	MXeneâ€onâ€Paper Coplanar Microsupercapacitors. Advanced Energy Materials, 2016, 6, 1601372.	19.5	368
23	MXene hydrogels: fundamentals and applications. Chemical Society Reviews, 2020, 49, 7229-7251.	38.1	368
24	Heteroatomâ€Mediated Interactions between Ruthenium Single Atoms and an MXene Support for Efficient Hydrogen Evolution. Advanced Materials, 2019, 31, e1903841.	21.0	363
25	Aqueous Zinc-lon Storage in MoS <sub>2</sub> by Tuning the Intercalation Energy. Nano Letters, 2019, 19, 3199-3206.	9.1	362
26	General synthesis of single-atom catalysts with high metal loading using graphene quantum dots. Nature Chemistry, 2021, 13, 887-894.	13.6	362
27	Direct Chemical Synthesis of MnO <sub>2</sub> Nanowhiskers on Transition-Metal Carbide Surfaces for Supercapacitor Applications. ACS Applied Materials & Samp; Interfaces, 2016, 8, 18806-18814.	8.0	350
28	A Selfâ€Powered and Flexible Organometallic Halide Perovskite Photodetector with Very High Detectivity. Advanced Materials, 2018, 30, 1704611.	21.0	339
29	Large Dielectric Constant Enhancement in MXene Percolative Polymer Composites. ACS Nano, 2018, 12, 3369-3377.	14.6	334
30	MXene electrochemical microsupercapacitor integrated with triboelectric nanogenerator as a wearable self-charging power unit. Nano Energy, 2018, 45, 266-272.	16.0	333
31	Low temperature synthesis of ternary metal phosphides using plasma for asymmetric supercapacitors. Nano Energy, 2017, 35, 331-340.	16.0	324
32	Asymmetric Flexible MXeneâ€Reduced Graphene Oxide Microâ€Supercapacitor. Advanced Electronic Materials, 2018, 4, 1700339.	5.1	324
33	Record Mobility in Transparent p-Type Tin Monoxide Films and Devices by Phase Engineering. ACS Nano, 2013, 7, 5160-5167.	14.6	306
34	Carbon nanotube-coated macroporous sponge for microbial fuel cell electrodes. Energy and Environmental Science, 2012, 5, 5265-5270.	30.8	284
35	High performance supercapacitors using metal oxide anchored graphene nanosheet electrodes. Journal of Materials Chemistry, 2011, 21, 16197.	6.7	280
36	A MXeneâ€Based Wearable Biosensor System for Highâ€Performance In Vitro Perspiration Analysis. Small, 2019, 15, e1901190.	10.0	280

#	Article	IF	Citations
37	Thermoelectric Properties of Two-Dimensional Molybdenum-Based MXenes. Chemistry of Materials, 2017, 29, 6472-6479.	6.7	270
38	Novel amperometric glucose biosensor based on MXene nanocomposite. Scientific Reports, 2016, 6, 36422.	3.3	268
39	Evidence for topological type-II Weyl semimetal WTe2. Nature Communications, 2017, 8, 2150.	12.8	263
40	Flexible, Highly Graphitized Carbon Aerogels Based on Bacterial Cellulose/Lignin: Catalystâ€Free Synthesis and its Application in Energy Storage Devices. Advanced Functional Materials, 2015, 25, 3193-3202.	14.9	262
41	Co-Solvent Electrolyte Engineering for Stable Anode-Free Zinc Metal Batteries. Journal of the American Chemical Society, 2022, 144, 7160-7170.	13.7	252
42	Giant Photoluminescence Enhancement in CsPbCl <sub>3</sub> Perovskite Nanocrystals by Simultaneous Dual-Surface Passivation. ACS Energy Letters, 2018, 3, 2301-2307.	17.4	244
43	SnSe <sub>2</sub> 2D Anodes for Advanced Sodium Ion Batteries. Advanced Energy Materials, 2016, 6, 1601188.	19.5	243
44	Impurities and Electronic Property Variations of Natural MoS <sub>2</sub> Crystal Surfaces. ACS Nano, 2015, 9, 9124-9133.	14.6	240
45	MXene Printing and Patterned Coating for Device Applications. Advanced Materials, 2020, 32, e1908486.	21.0	239
46	Two-Dimensional Ti <sub>3</sub> C <sub>2</sub> T <sub><i>x</i></sub> MXene Membranes as Nanofluidic Osmotic Power Generators. ACS Nano, 2019, 13, 8917-8925.	14.6	235
47	MXetronics: Electronic and photonic applications of MXenes. Nano Energy, 2019, 60, 179-197.	16.0	231
48	Enhanced Rate Performance of Mesoporous Co <sub>3</sub> O <sub>4</sub> Nanosheet Supercapacitor Electrodes by Hydrous RuO <sub>2</sub> Nanoparticle Decoration. ACS Applied Materials & Samp; Interfaces, 2014, 6, 4196-4206.	8.0	226
49	MXenes for Rechargeable Batteries Beyond the Lithiumâ€lon. Advanced Materials, 2021, 33, e2004039.	21.0	224
50	Review of MXene electrochemical microsupercapacitors. Energy Storage Materials, 2020, 27, 78-95.	18.0	223
51	Memristive technologies for data storage, computation, encryption, and radio-frequency communication. Science, 2022, 376, .	12.6	220
52	Sodium-ion battery anodes: Status and future trends. EnergyChem, 2019, 1, 100012.	19.1	217
53	Conducting polymer micro-supercapacitors for flexible energy storage and Ac line-filtering. Nano Energy, 2015, 13, 500-508.	16.0	214
54	Graphitic Nanocarbon with Engineered Defects for Highâ∈Performance Potassiumâ∈lon Battery Anodes. Advanced Functional Materials, 2019, 29, 1903641.	14.9	212

#	Article	IF	Citations
55	A round robin study of flexible large-area roll-to-roll processed polymer solar cell modules. Solar Energy Materials and Solar Cells, 2009, 93, 1968-1977.	6.2	205
56	Is NiCo <sub>2</sub> S <sub>4</sub> Really a Semiconductor?. Chemistry of Materials, 2015, 27, 6482-6485.	6.7	203
57	Concentrated dual-cation electrolyte strategy for aqueous zinc-ion batteries. Energy and Environmental Science, 2021, 14, 4463-4473.	30.8	203
58	Highly Efficient Laser Scribed Graphene Electrodes for Onâ€Chip Electrochemical Sensing Applications. Advanced Electronic Materials, 2016, 2, 1600185.	5.1	202
59	Large-Area Deposition of MoS <sub>2</sub> by Pulsed Laser Deposition with <i>In Situ</i> Thickness Control. ACS Nano, 2016, 10, 6054-6061.	14.6	202
60	Two-dimensional heterostructures of V <sub>2</sub> O <sub>5</sub> and reduced graphene oxide as electrodes for high energy density asymmetric supercapacitors. Journal of Materials Chemistry A, 2014, 2, 17146-17152.	10.3	193
61	Nanostructured cobalt sulfide-on-fiber with tunable morphology as electrodes for asymmetric hybrid supercapacitors. Journal of Materials Chemistry A, 2014, 2, 16190-16198.	10.3	191
62	Porous MXenes enable high performance potassium ion capacitors. Nano Energy, 2019, 62, 853-860.	16.0	190
63	Electrochemical Zinc Ion Capacitors Enhanced by Redox Reactions of Porous Carbon Cathodes. Advanced Energy Materials, 2020, 10, 2001705.	19.5	189
64	Qualitative model for the fatigueâ€free behavior of SrBi2Ta2O9. Applied Physics Letters, 1996, 68, 690-692.	3.3	185
65	Facile synthesis of polyaniline nanotubes using reactive oxide templates for high energy density pseudocapacitors. Journal of Materials Chemistry A, 2013, 1, 3315.	10.3	182
66	Effect of pH-induced chemical modification of hydrothermally reduced graphene oxide on supercapacitor performance. Journal of Power Sources, 2013, 233, 313-319.	7.8	180
67	Asymmetric supercapacitors with metal-like ternary selenides and porous graphene electrodes. Nano Energy, 2016, 24, 78-86.	16.0	180
68	Tunable Multipolar Surface Plasmons in 2D Ti <sub>3</sub> C <sub>2</sub> <i>T</i> < <sub><i>x</i></sub> <mxene 12,="" 2018,="" 8485-8493.<="" acs="" flakes.="" nano,="" td=""><td>14.6</td><td>179</td></mxene>	14.6	179
69	Lignin Laser Lithography: A Directâ€Write Method for Fabricating 3D Graphene Electrodes for Microsupercapacitors. Advanced Energy Materials, 2018, 8, 1801840.	19.5	179
70	MXenes for Plasmonic Photodetection. Advanced Materials, 2019, 31, e1807658.	21.0	175
71	Phenanthroline Covalent Organic Framework Electrodes for High-Performance Zinc-Ion Supercapattery. ACS Energy Letters, 2020, 5, 2256-2264.	17.4	175
72	Phosphine plasma activation of $\hat{l}_{\pm}$ -Fe2O3 for high energy asymmetric supercapacitors. Nano Energy, 2018, 49, 155-162.	16.0	173

#	Article	IF	Citations
73	Active Edge Sites Engineering in Nickel Cobalt Selenide Solid Solutions for Highly Efficient Hydrogen Evolution. Advanced Energy Materials, 2017, 7, 1602089.	19.5	171
74	Nanostructured Ternary Electrodes for Energyâ€Storage Applications. Advanced Energy Materials, 2012, 2, 381-389.	19.5	170
<b>7</b> 5	Photoinduced changes in the fatigue behavior of SrBi2Ta2O9and Pb(Zr,Ti)O3thin films. Journal of Applied Physics, 1996, 80, 1682-1687.	2.5	168
76	High performance In2O3 thin film transistors using chemically derived aluminum oxide dielectric. Applied Physics Letters, 2013, 103, .	3.3	168
77	Oxide Thinâ€Film Electronics using Allâ€MXene Electrical Contacts. Advanced Materials, 2018, 30, e1706656.	21.0	165
78	Direct Pyrolysis of Supermolecules: An Ultrahigh Edgeâ€Nitrogen Doping Strategy of Carbon Anodes for Potassiumâ€Ion Batteries. Advanced Materials, 2020, 32, e2000732.	21.0	164
79	A Siteâ€Selective Doping Strategy of Carbon Anodes with Remarkable Kâ€Ion Storage Capacity. Angewandte Chemie - International Edition, 2020, 59, 4448-4455.	13.8	162
80	Dipole model explaining high-k/metal gate field effect transistor threshold voltage tuning. Applied Physics Letters, 2008, 92, .	3.3	161
81	MXeneâ€Contacted Silicon Solar Cells with 11.5% Efficiency. Advanced Energy Materials, 2019, 9, 1900180.	19.5	161
82	New Insight on the Role of Electrolyte Additives in Rechargeable Lithium Ion Batteries. ACS Energy Letters, 2019, 4, 2613-2622.	17.4	160
83	Ti <sub>3</sub> C <sub>2</sub> T <sub><i>x</i></sub> MXene-Activated Fast Gelation of Stretchable and Self-Healing Hydrogels: A Molecular Approach. ACS Nano, 2021, 15, 2698-2706.	14.6	157
84	MXetronics: MXene-Enabled Electronic and Photonic Devices. , 2020, 2, 55-70.		156
85	Electrochemical Zinc Ion Capacitors: Fundamentals, Materials, and Systems. Advanced Energy Materials, 2021, 11, 2100201.	19.5	156
86	Microscale electrostatic fractional capacitors using reduced graphene oxide percolated polymer composites. Applied Physics Letters, 2013, 102, 232901.	3.3	155
87	Artificial Solid Electrolyte Interphase for Suppressing Surface Reactions and Cathode Dissolution in Aqueous Zinc Ion Batteries. ACS Energy Letters, 2019, 4, 2776-2781.	17.4	155
88	Laser-Scribed Graphene Electrodes for Aptamer-Based Biosensing. ACS Sensors, 2017, 2, 616-620.	7.8	153
89	Capacitance enhancement of polyaniline coated curved-graphene supercapacitors in a redox-active electrolyte. Nanoscale, 2013, 5, 4134.	5.6	151
90	Molecular Engineering of Covalent Organic Framework Cathodes for Enhanced Zincâ€lon Batteries. Advanced Materials, 2021, 33, e2103617.	21.0	151

#	Article	IF	CITATIONS
91	Bistacked Titanium Carbide (MXene) Anodes for Hybrid Sodium-Ion Capacitors. ACS Energy Letters, 2018, 3, 2094-2100.	17.4	145
92	Electrical properties of ferroelectric thinâ€film capacitors with hybrid (Pt,RuO2) electrodes for nonvolatile memory applications. Journal of Applied Physics, 1995, 77, 2146-2154.	2.5	144
93	Conductive Metal–Organic Frameworks Selectively Grown on Laserâ€Scribed Graphene for Electrochemical Microsupercapacitors. Advanced Energy Materials, 2019, 9, 1900482.	19.5	142
94	Deposition of nanomaterials: A crucial step in biosensor fabrication. Materials Today Communications, 2018, 17, 289-321.	1.9	140
95	Highly Stable Supercapacitors with Conducting Polymer Coreâ€Shell Electrodes for Energy Storage Applications. Advanced Energy Materials, 2015, 5, 1401805.	19.5	139
96	Highâ€Performance Nonâ€Volatile Organic Ferroelectric Memory on Banknotes. Advanced Materials, 2012, 24, 2165-2170.	21.0	138
97	Laser-derived graphene: A three-dimensional printed graphene electrode and its emerging applications. Nano Today, 2019, 24, 81-102.	11.9	138
98	Electrolyte Solvation Structure Design for Sodium Ion Batteries. Advanced Science, 2022, 9, .	11.2	138
99	MXene-conducting polymer electrochromic microsupercapacitors. Energy Storage Materials, 2019, 20, 455-461.	18.0	136
100	Electrolyte Engineering Enables High Stability and Capacity Alloying Anodes for Sodium and Potassium Ion Batteries. ACS Energy Letters, 2020, 5, 766-776.	17.4	134
101	Thermoelectric Performance of the MXenes $M < sub > 2 < / sub > CO < sub > 2 < / sub > (M = Ti, Zr, or Hf).$ Chemistry of Materials, 2016, 28, 1647-1652.	6.7	132
102	MXene based self-assembled cathode and antifouling separator for high-rate and dendrite-inhibited Li–S battery. Nano Energy, 2019, 61, 478-485.	16.0	131
103	An Anode-Free Zn–MnO <sub>2</sub> Battery. Nano Letters, 2021, 21, 1446-1453.	9.1	131
104	The development of integrated circuits based on two-dimensional materials. Nature Electronics, 2021, 4, 775-785.	26.0	129
105	Nanocomposites of ferroelectric polymers with surface-hydroxylated BaTiO3 nanoparticles for energy storage applications. Journal of Materials Chemistry, 2012, 22, 11196.	6.7	128
106	Formation of SrBi <sub>2</sub> Ta <sub>2</sub> O <sub>9</sub> : Part I. Synthesis and characterization of a novel "sol-gel―solution for production of ferroelectric SrBi <sub>2</sub> Ta <sub>2</sub> O <sub>9</sub> thin films. Journal of Materials Research, 1996, 11, 2274-2281.	2.6	127
107	Enhancement of the energy storage properties of supercapacitors using graphene nanosheets dispersed with metal oxide-loaded carbon nanotubes. Journal of Power Sources, 2011, 196, 8858-8865.	7.8	127
108	2D Organic–Inorganic Hybrid Thin Films for Flexible UV–Visible Photodetectors. Advanced Functional Materials, 2017, 27, 1605554.	14.9	125

#	Article	IF	Citations
109	Imprint in Ferroelectric Capacitors. Japanese Journal of Applied Physics, 1996, 35, 1521-1524.	1.5	122
110	Self-templating Scheme for the Synthesis of Nanostructured Transition-Metal Chalcogenide Electrodes for Capacitive Energy Storage. Chemistry of Materials, 2015, 27, 4661-4668.	6.7	121
111	Two-Dimensional SnO Anodes with a Tunable Number of Atomic Layers for Sodium Ion Batteries. Nano Letters, 2017, 17, 1302-1311.	9.1	118
112	Atmospheric effects on the photovoltaic performance of hybrid perovskite solar cells. Solar Energy Materials and Solar Cells, 2015, 137, 6-14.	6.2	117
113	Tuning the Electrochemical Performance of Titanium Carbide MXene by Controllable In Situ Anodic Oxidation. Angewandte Chemie - International Edition, 2019, 58, 17849-17855.	13.8	117
114	Molecular-Scale Interfacial Model for Predicting Electrode Performance in Rechargeable Batteries. ACS Energy Letters, 2019, 4, 1584-1593.	17.4	117
115	Highly Stable Phosphonateâ€Based MOFs with Engineered Bandgaps for Efficient Photocatalytic Hydrogen Production. Advanced Materials, 2020, 32, e1906368.	21.0	117
116	MXenes for Energy Harvesting. Advanced Materials, 2022, 34, e2108560.	21.0	117
117	Selfâ∈Healing and Stretchable 3Dâ∈Printed Organic Thermoelectrics. Advanced Functional Materials, 2019, 29, 1905426.	14.9	115
118	Optimization of poly(vinylidene fluoride-trifluoroethylene) films as non-volatile memory for flexible electronics. Organic Electronics, 2010, 11, 925-932.	2.6	114
119	Onâ€Chip MXene Microsupercapacitors for ACâ€Line Filtering Applications. Advanced Energy Materials, 2019, 9, 1901061.	19.5	113
120	Electrochemical sensors and biosensors using laser-derived graphene: A comprehensive review. Biosensors and Bioelectronics, 2020, 168, 112565.	10.1	113
121	Status of rechargeable potassium batteries. Nano Energy, 2021, 83, 105792.	16.0	113
122	All conducting polymer electrodes for asymmetric solid-state supercapacitors. Journal of Materials Chemistry A, 2015, 3, 7368-7374.	10.3	112
123	A novel strategy for the synthesis of highly stable ternary SiO <sub>x</sub> composites for Li-ion-battery anodes. Journal of Materials Chemistry A, 2019, 7, 15969-15974.	10.3	112
124	Direct Writing of Additiveâ€Free MXeneâ€inâ€Water Ink for Electronics and Energy Storage. Advanced Materials Technologies, 2019, 4, 1800256.	5.8	112
125	MXene Derived Metal–Organic Frameworks. Journal of the American Chemical Society, 2019, 141, 20037-20042.	13.7	110
126	Polyoxometalate–Cyclodextrin Metal–Organic Frameworks: From Tunable Structure to Customized Storage Functionality. Journal of the American Chemical Society, 2019, 141, 1847-1851.	13.7	110

#	Article	IF	CITATIONS
127	High-Capacity NH <sub>4</sub> <sup>+</sup> Charge Storage in Covalent Organic Frameworks. Journal of the American Chemical Society, 2021, 143, 19178-19186.	13.7	109
128	Highly Stable Aqueous Zincâ€ion Storage Using a Layered Calcium Vanadium Oxide Bronze Cathode. Angewandte Chemie, 2018, 130, 4007-4012.	2.0	108
129	Solution synthesis of VSe2 nanosheets and their alkali metal ion storage performance. Nano Energy, 2018, 53, 11-16.	16.0	108
130	Morphological and Electrochemical Cycling Effects in MnO <sub>2</sub> Nanostructures by 3D Electron Tomography. Advanced Functional Materials, 2014, 24, 3130-3143.	14.9	107
131	Thin Film Complementary Metal Oxide Semiconductor (CMOS) Device Using a Single-Step Deposition of the Channel Layer. Scientific Reports, 2014, 4, 4672.	3.3	107
132	Covalent Organic Frameworks as Negative Electrodes for Highâ€Performance Asymmetric Supercapacitors. Advanced Energy Materials, 2020, 10, 2001673.	19.5	107
133	Opportunities of Aqueous Manganeseâ€Based Batteries with Deposition and Stripping Chemistry. Advanced Energy Materials, 2021, 11, 2002904.	19.5	107
134	Electrode surface engineering by atomic layer deposition: A promising pathway toward better energy storage. Nano Today, 2016, 11, 250-271.	11.9	106
135	Surface Passivation of MoO <sub>3</sub> Nanorods by Atomic Layer Deposition toward High Rate Durable Li Ion Battery Anodes. ACS Applied Materials & Interfaces, 2015, 7, 13154-13163.	8.0	105
136	Controlled Deposition of Zincâ€Metal Anodes via Selectively Polarized Ferroelectric Polymers. Advanced Materials, 2022, 34, e2106937.	21.0	105
137	Morphology-Dependent Enhancement of the Pseudocapacitance of Template-Guided Tunable Polyaniline Nanostructures. Journal of Physical Chemistry C, 2013, 117, 15009-15019.	3.1	103
138	Electrochemical Energy Storage Devices Using Electrodes Incorporating Carbon Nanocoils and Metal Oxides Nanoparticles. Journal of Physical Chemistry C, 2011, 115, 14392-14399.	3.1	101
139	Additive-mediated intercalation and surface modification of MXenes. Chemical Society Reviews, 2022, 51, 2972-2990.	38.1	101
140	Work function engineering using lanthanum oxide interfacial layers. Applied Physics Letters, 2006, 89, 232103.	3.3	100
141	Unraveling the New Role of an Ethylene Carbonate Solvation Shell in Rechargeable Metal Ion Batteries. ACS Energy Letters, 2021, 6, 69-78.	17.4	99
142	High performance solution-deposited amorphous indium gallium zinc oxide thin film transistors by oxygen plasma treatment. Applied Physics Letters, 2012, 100, .	3.3	98
143	An Empirical Model for the Design of Batteries with High Energy Density. ACS Energy Letters, 2020, 5, 807-816.	17.4	97
144	Conformal coating of Ni(OH)2 nanoflakes on carbon fibers by chemical bath deposition for efficient supercapacitor electrodes. Journal of Materials Chemistry A, 2013, 1, 14897.	10.3	96

#	Article	IF	Citations
145	Partially Reduced Holey Graphene Oxide as High Performance Anode for Sodiumâ€lon Batteries. Advanced Energy Materials, 2019, 9, 1803215.	19.5	96
146	Electrolyteâ€Mediated Stabilization of Highâ€Capacity Microâ€Sized Antimony Anodes for Potassiumâ€Ion Batteries. Advanced Materials, 2021, 33, e2005993.	21.0	96
147	Preferred Orientation of TiN Coatings Enables Stable Zinc Anodes. ACS Energy Letters, 2022, 7, 197-203.	17.4	95
148	Direct and continuous generation of pure acetic acid solutions via electrocatalytic carbon monoxide reduction. Proceedings of the National Academy of Sciences of the United States of America, 2021, 118, .	7.1	93
149	Ultrasound-Driven Two-Dimensional Ti <sub>3</sub> C <sub>2</sub> T <sub><i>x</i></sub> MXene Hydrogel Generator. ACS Nano, 2020, 14, 3199-3207.	14.6	91
150	Synthesis and electrochemical properties of 2D molybdenum vanadium carbides – solid solution MXenes. Journal of Materials Chemistry A, 2020, 8, 8957-8968.	10.3	90
151	Effect of B-site cation stoichiometry on electrical fatigue of RuO2//Pb(ZrxTi1â^'x)O3//RuO2 capacitors. Journal of Applied Physics, 1996, 79, 1013.	2.5	89
152	Conducting polymer/carbon nanocoil composite electrodes for efficient supercapacitors. Journal of Materials Chemistry, 2012, 22, 5177.	6.7	89
153	Model-Based Design of Graphite-Compatible Electrolytes in Potassium-Ion Batteries. ACS Energy Letters, 2020, 5, 2651-2661.	17.4	88
154	Accordionâ€Like Carbon with High Nitrogen Doping for Fast and Stable K Ion Storage. Advanced Energy Materials, 2021, 11, 2101928.	19.5	88
155	2D Covalentâ€Organic Framework Electrodes for Supercapacitors and Rechargeable Metalâ€lon Batteries. Advanced Energy Materials, 2022, 12, 2100177.	19.5	87
156	Photothermoelectric Response of Ti <sub>3</sub> C <sub>2</sub> T <sub><i>x</i></sub> MXene Confined lon Channels. ACS Nano, 2020, 14, 9042-9049.	14.6	86
157	Microfabricated Pseudocapacitors Using Ni(OH) <sub>2</sub> Electrodes Exhibit Remarkable Volumetric Capacitance and Energy Density. Advanced Energy Materials, 2015, 5, 1401303.	19.5	84
158	High energy density supercapacitors using macroporous kitchen sponges. Journal of Materials Chemistry, 2012, 22, 14394.	6.7	83
159	Selective Toluene Detection with Mo <sub>2</sub> CT <sub><i>x</i></sub> MXene at Room Temperature. ACS Applied Materials & Detection with Mo <sub>2</sub> CT <sub>57218-57227.</sub>	8.0	83
160	Covalent Assembly of Twoâ€Dimensional COFâ€onâ€MXene Heterostructures Enables Fast Charging Lithium Hosts. Advanced Functional Materials, 2021, 31, 2101194.	14.9	83
161	Highly Doped 3D Graphene Naâ€lon Battery Anode by Laser Scribing Polyimide Films in Nitrogen Ambient. Advanced Energy Materials, 2018, 8, 1800353.	19.5	83
162	Highly Stretchable and Air-Stable PEDOT:PSS/Ionic Liquid Composites for Efficient Organic Thermoelectrics. Chemistry of Materials, 2019, 31, 3519-3526.	6.7	81

#	Article	IF	Citations
163	Lignin Derived Porous Carbons: Synthesis Methods and Supercapacitor Applications. Small Methods, 2021, 5, e2100896.	8.6	80
164	Organic Acid Etching Strategy for Dendrite Suppression in Aqueous Zincâ€lon Batteries. Advanced Energy Materials, 2022, 12, 2102797.	19.5	79
165	Mechanistic Insight into the Stability of HfO <sub>2</sub> â€Coated MoS <sub>2</sub> Nanosheet Anodes for Sodium Ion Batteries. Small, 2015, 11, 4341-4350.	10.0	78
166	Ternary chalcogenide micro-pseudocapacitors for on-chip energy storage. Chemical Communications, 2015, 51, 10494-10497.	4.1	78
167	Engineering Sodium-Ion Solvation Structure to Stabilize Sodium Anodes: Universal Strategy for Fast-Charging and Safer Sodium-Ion Batteries. Nano Letters, 2020, 20, 3247-3254.	9.1	78
168	Large Thermoelectric Power Factor in Pr-Doped SrTiO <sub>3â^îÎ</sub> Ceramics via Grain-Boundary-Induced Mobility Enhancement. Chemistry of Materials, 2014, 26, 2478-2485.	6.7	77
169	Titanium Carbide (MXene) as a Current Collector for Lithium-Ion Batteries. ACS Omega, 2018, 3, 12489-12494.	3.5	77
170	Applications of Plasma in Energy Conversion and Storage Materials. Advanced Energy Materials, 2018, 8, 1801804.	19.5	77
171	Role of acid mixtures etching on the surface chemistry and sodium ion storage in Ti <sub>3</sub> C <sub>2</sub> T <sub>x</sub> MXene. Chemical Communications, 2020, 56, 6090-6093.	4.1	76
172	Poly(3-hexylthiophene) and CdSe Quantum Dot Bulk Heterojunction Solar Cells: Influence of the Functional End-Group of the Polymer. Macromolecules, 2009, 42, 3845-3848.	4.8	75
173	Hybrid Microsupercapacitors with Vertically Scaled 3D Current Collectors Fabricated using a Simple Cutâ€andâ€Transfer Strategy. Advanced Energy Materials, 2017, 7, 1601257.	19.5	75
174	Allâ€Polymer Bistable Resistive Memory Device Based on Nanoscale Phaseâ€Separated PCBMâ€Ferroelectric Blends. Advanced Functional Materials, 2013, 23, 2145-2152.	14.9	74
175	Anomalous Li Storage Capability in Atomically Thin Two-Dimensional Sheets of Nonlayered MoO <sub>2</sub> . Nano Letters, 2018, 18, 1506-1515.	9.1	74
176	A general strategy for the fabrication of high performance microsupercapacitors. Nano Energy, 2015, 16, 1-9.	16.0	72
177	Fully Integrated Indium Gallium Zinc Oxide NO <sub>2</sub> Gas Detector. ACS Sensors, 2020, 5, 984-993.	7.8	72
178	SnO <sub>2</sub> Anode Surface Passivation by Atomic Layer Deposited HfO <sub>2</sub> Improves Liâ€lon Battery Performance. Small, 2014, 10, 2849-2858.	10.0	71
179	Model-Based Design of Stable Electrolytes for Potassium Ion Batteries. ACS Energy Letters, 2020, 5, 3124-3131.	17.4	71
180	Metal-Free, Single-Polymer Device Exhibits Resistive Memory Effect. ACS Nano, 2013, 7, 10518-10524.	14.6	70

#	Article	lF	CITATIONS
181	3D Printing of Hydrogels for Stretchable Ionotronic Devices. Advanced Functional Materials, 2021, 31, 2107437.	14.9	70
182	Enhancement of Dielectric Permittivity of Ti <sub>3</sub> C <sub>2</sub> T <sub><i>x</i></sub> MXene/Polymer Composites by Controlling Flake Size and Surface Termination. ACS Applied Materials & mp; Interfaces, 2019, 11, 27358-27362.	8.0	68
183	Hierarchically structured Ti3C2T MXene paper for Li-S batteries with high volumetric capacity. Nano Energy, 2021, 86, 106120.	16.0	67
184	Driving force behind voltage shifts in ferroelectric materials. Applied Physics Letters, 1996, 68, 1681-1683.	3.3	65
185	Enhanced high temperature thermoelectric response of sulphuric acid treated conducting polymer thin films. Journal of Materials Chemistry C, 2016, 4, 215-221.	5.5	65
186	3D Laser Scribed Graphene Derived from Carbon Nanospheres: An Ultrahighâ€Power Electrode for Supercapacitors. Small Methods, 2019, 3, 1900005.	8.6	64
187	Giant Ferroelectric Resistance Switching Controlled by a Modulatory Terminal for Lowâ€Power Neuromorphic Inâ€Memory Computing. Advanced Materials, 2021, 33, e2008709.	21.0	63
188	Low Resistance Ohmic Contacts to Bi[sub 2]Te[sub 3] Using Ni and Co Metallization. Journal of the Electrochemical Society, 2010, 157, H666.	2.9	62
189	Hybrid van der Waals p–n Heterojunctions based on SnO and 2D MoS <sub>2</sub> . Advanced Materials, 2016, 28, 9133-9141.	21.0	62
190	Voltage offsets and imprint mechanism in SrBi2Ta2O9thin films. Journal of Applied Physics, 1996, 80, 4573-4577.	2.5	60
191	Porous Ti <sub>3</sub> C <sub>2</sub> T <sub><i>x</i></sub> MXene Membranes for Highly Efficient Salinity Gradient Energy Harvesting. ACS Nano, 2022, 16, 792-800.	14.6	60
192	Phase evolution and annealing effects on the electrical properties of Pb(Zr0.53Ti0.47)O3 thin films with RuO2 electrodes. Thin Solid Films, 1995, 256, 73-79.	1.8	59
193	MXenes for Optoelectronic Devices. Advanced Electronic Materials, 2021, 7, 2100295.	5.1	59
194	Experimental and modeling study of the capacitance–voltage characteristics of metal–insulator–semiconductor capacitor based on pentacene/parylene. Thin Solid Films, 2011, 519, 4313-4318.	1.8	58
195	Supercapacitors based on two dimensional VO 2 nanosheet electrodes in organic gel electrolyte. Electrochimica Acta, 2016, 220, 601-608.	5.2	58
196	Layered SnS sodium ion battery anodes synthesized near room temperature. Nano Research, 2017, 10, 4368-4377.	10.4	58
197	MXene-Coated Membranes for Autonomous Solar-Driven Desalination. ACS Applied Materials & Samp; Interfaces, 2022, 14, 5265-5274.	8.0	57
198	Codoped Holey Graphene Aerogel by Selective Etching for Highâ€Performance Sodiumâ€lon Storage. Advanced Energy Materials, 2020, 10, 2000099.	19.5	56

#	Article	IF	CITATIONS
199	Hydrated eutectic electrolytes for high-performance Mg-ion batteries. Energy and Environmental Science, 2022, 15, 1282-1292.	30.8	56
200	Transparent p-type SnO nanowires with unprecedented hole mobility among oxide semiconductors. Applied Physics Letters, 2013, 103, .	3.3	54
201	Heterostructured MXene and g-C3N4 for high-rate lithium intercalation. Nano Energy, 2019, 65, 104030.	16.0	54
202	Shape-controlled porous nanocarbons for high performance supercapacitors. Journal of Materials Chemistry A, 2014, 2, 5236.	10.3	53
203	Influence of Stacking Morphology and Edge Nitrogen Doping on the Dielectric Performance of Graphene–Polymer Nanocomposites. Chemistry of Materials, 2014, 26, 2856-2861.	6.7	53
204	Micro-Pseudocapacitors with Electroactive Polymer Electrodes: Toward AC-Line Filtering Applications. ACS Applied Materials & Samp; Interfaces, 2016, 8, 12748-12755.	8.0	52
205	Photoâ€assisted electrochemical hydrogen evolution by plasmonic Ag nanoparticle/nanorod heterogeneity. InformaÄnÃ-Materiály, 2019, 1, 417-425.	17.3	52
206	Enhancement of p-type mobility in tin monoxide by native defects. Applied Physics Letters, 2013, 102, .	3.3	51
207	Low temperature processing of Nbâ€doped Pb(Zr,Ti)O3 capacitors with La0.5Sr0.5CoO3 electrodes. Applied Physics Letters, 1996, 68, 272-274.	3.3	50
208	Metal gate work function engineering using AlNx interfacial layers. Applied Physics Letters, 2006, 88, 112114.	3.3	50
209	Marker Pen Lithography for Flexible and Curvilinear Onâ€Chip Energy Storage. Advanced Functional Materials, 2015, 25, 4976-4984.	14.9	50
210	Large Intercalation Pseudocapacitance in 2D VO <sub>2</sub> (B): Breaking through the Kinetic Barrier. Advanced Materials, 2018, 30, e1803594.	21.0	50
211	Understanding Ostwald Ripening and Surface Charging Effects in Solvothermallyâ€Prepared Metal Oxide–Carbon Anodes for High Performance Rechargeable Batteries. Advanced Energy Materials, 2019, 9, 1902194.	19.5	50
212	Fluorophosphates: Next Generation Cathode Materials for Rechargeable Batteries. Advanced Energy Materials, 2020, 10, 2001449.	19.5	50
213	Rational design of carbon anodes by catalytic pyrolysis of graphitic carbon nitride for efficient storage of Na and K mobile ions. Nano Energy, 2021, 87, 106184.	16.0	50
214	Regulating the redox reversibility of zinc anode toward stable aqueous zinc batteries. Nano Energy, 2022, 99, 107331.	16.0	50
215	Decoupling the Fermi-level pinning effect and intrinsic limitations on p-type effective work function metal electrodes. Microelectronic Engineering, 2008, 85, 2-8.	2.4	49
216	Electronic structures and stability of Ni/Bi <sub>2</sub> Te <sub>3</sub> and Co/Bi <sub>7</sub> Te <sub>7</sub> Electronic structures and stability of Ni/Bi <sub>2</sub> Te <sub>3</sub> Electronic structures and stability of Ni/Bi <sub>2</sub> Te <sub>3</sub> Electronic structures and stability of Ni/Bi <sub>2</sub> Te <sub>3</sub> Electronic structures and stability of Ni/Bi <sub>2</sub> Te <sub>3</sub> Electronic structures and stability of Ni/Bi <sub>2</sub> Te <sub>3</sub> Electronic structures and stability of Ni/Bi <sub>2</sub> Te <sub>3</sub> Electronic structures and stability of Ni/Bi <sub>2</sub> Electronic structures and stability of Ni/Bi <sub>3</sub> Electroni	2.8	49

#	Article	IF	Citations
217	Laser scribed graphene: A novel platform for highly sensitive detection of electroactive biomolecules. Biosensors and Bioelectronics, 2020, 168, 112509.	10.1	49
218	Muscle Fatigue Sensor Based on Ti <sub>3</sub> C <sub>2</sub> T <i>&gt;<sub>x</sub></i> MXene Hydrogel. Small Methods, 2021, 5, e2100819.	8.6	49
219	High Temperature Thermoelectric Properties of Strontium Titanate Thin Films with Oxygen Vacancy and Niobium Doping. ACS Applied Materials & Samp; Interfaces, 2013, 5, 7268-7273.	8.0	48
220	A conducting polymer nucleation scheme for efficient solid-state supercapacitors on paper. Journal of Materials Chemistry A, 2014, 2, 17058-17065.	10.3	48
221	Low Temperature Processed Complementary Metal Oxide Semiconductor (CMOS) Device by Oxidation Effect from Capping Layer. Scientific Reports, 2015, 5, 9617.	3.3	48
222	Monolithic laser scribed graphene scaffolds with atomic layer deposited platinum for the hydrogen evolution reaction. Journal of Materials Chemistry A, 2017, 5, 20422-20427.	10.3	48
223	Fractal Electrochemical Microsupercapacitors. Advanced Electronic Materials, 2017, 3, 1700185.	5.1	48
224	A Siteâ€Selective Doping Strategy of Carbon Anodes with Remarkable Kâ€Ion Storage Capacity. Angewandte Chemie, 2020, 132, 4478-4485.	2.0	48
225	Energy Harvestingâ€Storage Bracelet Incorporating Electrochemical Microsupercapacitors Selfâ€Charged from a Single Hand Gesture. Advanced Energy Materials, 2019, 9, 1900152.	19.5	47
226	A general approach toward enhancement of pseudocapacitive performance of conducting polymers by redox-active electrolytes. Journal of Power Sources, 2014, 267, 521-526.	7.8	46
227	Enhanced ZnO Thin-Film Transistor Performance Using Bilayer Gate Dielectrics. ACS Applied Materials & Samp; Interfaces, 2016, 8, 22751-22755.	8.0	46
228	Inherent electrochemistry and charge transfer properties of few-layered two-dimensional Ti <sub>3</sub> C <sub>2</sub> T <sub>x</sub> MXene. Nanoscale, 2018, 10, 17030-17037.	5.6	46
229	A two-step annealing process for enhancing the ferroelectric properties of poly(vinylidene fluoride) (PVDF) devices. Journal of Materials Chemistry C, 2015, 3, 2366-2370.	5.5	45
230	Pâ€Type SnO Thin Film Phototransistor with Perovskiteâ€Mediated Photogating. Advanced Electronic Materials, 2019, 5, 1800538.	5.1	45
231	Crystal orientation dependent thermoelectric properties of highly oriented aluminum-doped zinc oxide thin films. Applied Physics Letters, 2013, 102, .	3.3	44
232	Interface characterization of nickel contacts to bulk bismuth tellurium selenide. Surface and Interface Analysis, 2009, 41, 440-444.	1.8	43
233	Growth of 2D Materials at the Wafer Scale. Advanced Materials, 2022, 34, e2108258.	21.0	43
234	Effective work function modification of atomic-layer-deposited-TaN film by capping layer. Applied Physics Letters, 2006, 89, 032113.	3.3	41

#	Article	IF	Citations
235	NiCo2O4@TiN Core-shell Electrodes through Conformal Atomic Layer Deposition for All-solid-state Supercapacitors. Electrochimica Acta, 2016, 196, 611-621.	5.2	41
236	Indiumâ€Free Fully Transparent Electronics Deposited Entirely by Atomic Layer Deposition. Advanced Materials, 2016, 28, 7736-7744.	21.0	41
237	Solubility contrast strategy for enhancing intercalation pseudocapacitance in layered MnO2 electrodes. Nano Energy, 2019, 56, 357-364.	16.0	41
238	A Cyclized Polyacrylonitrile Anode for Alkali Metal Ion Batteries. Angewandte Chemie - International Edition, 2021, 60, 1355-1363.	13.8	41
239	Highly stable thin film transistors using multilayer channel structure. Applied Physics Letters, 2015, 106, .	3.3	40
240	Largeâ€Area Chemical Vapor Deposited MoS <sub>2</sub> with Transparent Conducting Oxide Contacts toward Fully Transparent 2D Electronics. Advanced Functional Materials, 2017, 27, 1703119.	14.9	40
241	MAPbl <sub>3</sub> Single Crystals Free from Hole-Trapping Centers for Enhanced Photodetectivity. ACS Energy Letters, 2019, 4, 2579-2584.	17.4	40
242	Highâ€Performance Monolayer MoS <sub>2</sub> Films at the Wafer Scale by Twoâ€5tep Growth. Advanced Functional Materials, 2019, 29, 1901070.	14.9	40
243	Chiral Helimagnetism and Oneâ€Dimensional Magnetic Solitons in a Crâ€Intercalated Transition Metal Dichalcogenide. Advanced Materials, 2021, 33, e2101131.	21.0	40
244	A model for optical and electrical polarization fatigue in srbi2ta2o9 and Pb(Zr,Ti)o3. Integrated Ferroelectrics, 1997, 15, 53-67.	0.7	39
245	Integration of Dual Metal Gate CMOS on High-k Dielectrics Utilizing a Metal Wet Etch Process. Electrochemical and Solid-State Letters, 2005, 8, G271.	2.2	39
246	P-Type Cu <sub>2</sub> O/SnO Bilayer Thin Film Transistors Processed at Low Temperatures. ACS Applied Materials & Discrete Supplied Materials & Discrete Supplied Suppl	8.0	39
247	Significant enhancement in thermoelectric properties of polycrystalline Pr-doped SrTiO3â^Î ceramics originating from nonuniform distribution of Pr dopants. Applied Physics Letters, 2014, 104, .	3.3	39
248	Layer-by-layer assembled graphene-coated mesoporous SnO2 spheres as anodes for advanced Li-ion batteries. Journal of Power Sources, 2014, 263, 239-245.	7.8	39
249	Polymer ferroelectric field-effect memory device with SnO channel layer exhibits record hole mobility. Scientific Reports, 2014, 4, 5243.	3.3	39
250	Hybrid dual gate ferroelectric memory for multilevel information storage. Organic Electronics, 2015, 16, 9-17.	2.6	39
251	Composition dependence of the work function of Ta1â^'xAlxNy metal gates. Applied Physics Letters, 2006, 88, 072108.	3.3	38
252	Tuning the Electrochemical Performance of Titanium Carbide MXene by Controllable In Situ Anodic Oxidation. Angewandte Chemie, 2019, 131, 18013-18019.	2.0	38

#	Article	IF	CITATIONS
253	Impact of Gate Dielectric in Carrier Mobility in Low Temperature Chalcogenide Thin Film Transistors for Flexible Electronics. Electrochemical and Solid-State Letters, 2010, 13, H313.	2.2	37
254	Correlation of Mn charge state with the electrical resistivity of Mn doped indium tin oxide thin films. Applied Physics Letters, 2010, 97, .	3.3	37
255	Fabrication and characterization of all-polymer, transparent ferroelectric capacitors on flexible substrates. Organic Electronics, 2011, 12, 2225-2229.	2.6	37
256	Wettability-Driven Assembly of Electrochemical Microsupercapacitors. ACS Applied Materials & Samp; Interfaces, 2019, 11, 20905-20914.	8.0	37
257	A Hierarchical Three-Dimensional Porous Laser-Scribed Graphene Film for Suppressing Polysulfide Shuttling in Lithium–Sulfur Batteries. ACS Applied Materials & Shuttling in Lithium—Sulfur Batteries. ACS Applied Materials & Shuttling in Lithium–Sulfur Batteries. ACS Applied Materials & Shuttling in Lithium—Sulfur Batteries. ACS Applied Materials & Shuttling in Lithium—Sulfur Batteries. ACS Applied Materials & Shuttling in Lithium—Sulfur Batteries.	8.0	37
258	Electrochemical multi-analyte point-of-care perspiration sensors using on-chip three-dimensional graphene electrodes. Analytical and Bioanalytical Chemistry, 2021, 413, 763-777.	3.7	37
259	Laser-scribed graphene sensor based on gold nanostructures and molecularly imprinted polymers: Application for Her-2 cancer biomarker detection. Sensors and Actuators B: Chemical, 2021, 347, 130556.	7.8	37
260	Relationships among ferroelectric fatigue, electronic charge trapping, defect-dipoles, and oxygen vacancies in perovskite oxides. Integrated Ferroelectrics, 1997, 16, 77-86.	0.7	36
261	Effect of H2 content on reliability of ultrathin in-situ steam generated (ISSG) SiO2. IEEE Electron Device Letters, 2000, 21, 430-432.	3.9	36
262	A Plasmaâ€Assisted Route to the Rapid Preparation of Transitionâ€Metal Phosphides for Energy Conversion and Storage. Small Methods, 2017, 1, 1700111.	8.6	36
263	Orthorhombic Ti <sub>2</sub> O <sub>3</sub> : A Polymorphâ€Dependent Narrowâ€Bandgap Ferromagnetic Oxide. Advanced Functional Materials, 2018, 28, 1705657.	14.9	36
264	Metal Halide Perovskite and Phosphorus Doped g-C <sub>3</sub> N <sub>4</sub> Bulk Heterojunctions for Air-Stable Photodetectors. ACS Energy Letters, 2019, 4, 2315-2322.	17.4	36
265	Highâ€Performance Ferroelectric Memory Based on Phaseâ€Separated Films of Polymer Blends. Advanced Functional Materials, 2014, 24, 1372-1381.	14.9	35
266	Exploring and controlling intrinsic defect formation in SnO <sub>2</sub> thin films. Journal of Materials Chemistry C, 2016, 4, 758-765.	5.5	35
267	MXeneâ€Derived Ferroelectric Crystals. Advanced Materials, 2019, 31, e1806860.	21.0	35
268	Autonomous MXene-PVDF actuator for flexible solar trackers. Nano Energy, 2020, 77, 105277.	16.0	35
269	Anisotropic Growth of Alâ€Intercalated Vanadate by Tuning Surface Hydrophilicity for Highâ€Rate Znâ€Ion Storage. Small Structures, 2020, 1, 2000040.	12.0	35
270	On Oxygen Deficiency and Fast Transient Charge-Trapping Effects in High-\$k\$ Dielectrics. IEEE Electron Device Letters, 2006, 27, 984-987.	3.9	34

#	Article	IF	Citations
271	Enhanced Thermoelectric Figure-of-Merit in Thermally Robust, Nanostructured Superlattices Based on SrTiO <sub>3</sub> . Chemistry of Materials, 2015, 27, 2165-2171.	6.7	34
272	Tungsten Blue Oxide as a Reusable Electrocatalyst for Acidic Water Oxidation by Plasma-Induced Vacancy Engineering. CCS Chemistry, 2021, 3, 1553-1561.	7.8	34
273	Growth mechanism of TiN film on dielectric films and the effects on the work function. Thin Solid Films, 2005, 486, 141-144.	1.8	33
274	Enhanced carrier density in Nb-doped SrTiO3 thermoelectrics. Journal of Applied Physics, 2012, 111, .	2.5	33
275	Atomic-layer-deposited AZO outperforms ITO in high-efficiency polymer solar cells. Journal of Materials Chemistry A, 2018, 6, 10176-10183.	10.3	33
276	New Opportunities for Functional Materials from Metal Phosphonates. , 2020, 2, 582-594.		33
277	Leakage and interface engineering in titanate thin films for non-volatile ferroelectric memory and ulsi drams. Integrated Ferroelectrics, 1995, 7, 291-306.	0.7	32
278	Intrinsic characteristics of high-k devices and implications of fast transient charging effects (FTCE). , $0, \dots$		32
279	Comparison of effective work function extraction methods using capacitance and current measurement techniques. IEEE Electron Device Letters, 2006, 27, 598-601.	3.9	32
280	Ultraviolet laser deposition of graphene thin films without catalytic layers. Applied Physics Letters, 2013, 102, .	3.3	32
281	Temperature dependent thermoelectric properties of chemically derived gallium zinc oxide thin films. Journal of Materials Chemistry C, 2013, 1, 4122.	5.5	32
282	Role of phonon scattering by elastic strain field in thermoelectric Sr1â^'xYxTiO3â^'δ. Journal of Applied Physics, 2014, 115, .	2.5	32
283	Integration of Electrochemical Microsupercapacitors with Thin Film Electronics for On hip Energy Storage. Advanced Materials, 2019, 31, e1807450.	21.0	32
284	A OD Leadâ€Free Hybrid Crystal with Ultralow Thermal Conductivity. Advanced Functional Materials, 2019, 29, 1809166.	14.9	32
285	Effect of composition and annealing conditions on the electrical properties of Pb(ZrxTi1â^'x)O3 thin films deposited by the sol-gel process. Thin Solid Films, 1994, 252, 38-43.	1.8	31
286	Transparent SnO–SnO <sub>2</sub> p–n Junction Diodes for Electronic and Sensing Applications. Advanced Materials Interfaces, 2015, 2, 1500374.	3.7	31
287	Wafer scale quasi single crystalline MoS <sub>2</sub> realized by epitaxial phase conversion. 2D Materials, 2019, 6, 015030.	4.4	31
288	Made-to-order porous electrodes for supercapacitors: MOFs embedded with redox-active centers as a case study. Chemical Communications, 2020, 56, 1883-1886.	4.1	31

#	Article	lF	CITATIONS
289	Hydrated Mg <i><sub>x</sub></i> V <sub>5</sub> O <sub>12</sub> Cathode with Improved Mg <sup>2+</sup> Storage Performance. Advanced Energy Materials, 2020, 10, 2002128.	19.5	31
290	An aqueous 2.1 V pseudocapacitor with MXene and V-MnO2 electrodes. Nano Research, 2022, 15, 535-541.	10.4	31
291	Nanoroses of Nickel Oxides: Synthesis, Electron Tomography Study, and Application in CO Oxidation and Energy Storage. ChemSusChem, 2012, 5, 1241-1248.	6.8	30
292	Electroforming-free resistive switching memory effect in transparent $\langle i \rangle p \langle  i \rangle$ -type tin monoxide. Applied Physics Letters, 2014, 104, .	3.3	30
293	Graphene based integrated tandem supercapacitors fabricated directly on separators. Nano Energy, 2015, 15, 1-8.	16.0	30
294	All-Solution-Processed Quantum Dot Electrical Double-Layer Transistors Enhanced by Surface Charges of Ti <sub>3</sub> C <sub>2</sub> T <sub><i>x</i></sub> MXene Contacts. ACS Nano, 2021, 15, 5221-5229.	14.6	30
295	An Aqueous Mg <sup>2+</sup> â€Based Dualâ€Ion Battery with High Power Density. Advanced Functional Materials, 2021, 31, 2107523.	14.9	30
296	Inkjet-printed Ti <sub>3</sub> C <sub>2</sub> T <sub>x</sub> MXene electrodes for multimodal cutaneous biosensing. JPhys Materials, 2020, 3, 044004.	4.2	30
297	Interfacial oxygen and nitrogen induced dipole formation and vacancy passivation for increased effective work functions in TiN/HfO2 gate stacks. Applied Physics Letters, 2010, 96, .	3.3	29
298	Electropolymerization growth of an ultrathin, compact, conductive and microporous (UCCM) polycarbazole membrane for high energy Li–S batteries. Nano Energy, 2020, 73, 104769.	16.0	29
299	Metallization schemes for dielectric thin film capacitors. Journal of Materials Research, 1997, 12, 347-354.	2.6	28
300	A novel low temperature integration of hybrid CMOS devices on flexible substrates. Organic Electronics, 2009, 10, 1217-1222.	2.6	28
301	Unprecedented Surface Plasmon Modes in Monoclinic MoO <sub>2</sub> Nanostructures. Advanced Materials, 2020, 32, e1908392.	21.0	28
302	Singleâ€Crystal Hybrid Perovskite Platelets on Graphene: A Mixedâ€Dimensional Van Der Waals Heterostructure with Strong Interface Coupling. Advanced Functional Materials, 2020, 30, 1909672.	14.9	28
303	Scaled Deposition of Ti <sub>3</sub> C <sub>2</sub> <i>T</i> <sub><i>x</i></sub> MXene on Complex Surfaces: Application Assessment as Rear Electrodes for Silicon Heterojunction Solar Cells. ACS Nano, 2022, 16, 2419-2428.	14.6	28
304	Hierarchical Nanocapsules of Cu-Doped MoS <sub>2</sub> @H-Substituted Graphdiyne for Magnesium Storage. ACS Nano, 2022, 16, 3955-3964.	14.6	28
305	Interface Characterization of Cobalt Contacts on Bismuth Selenium Telluride for Thermoelectric Devices. Electrochemical and Solid-State Letters, 2009, 12, H395.	2.2	27
306	Determination of Contact Resistivity by the Cox and Strack Method for Metal Contacts to Bulk Bismuth Antimony Telluride. Electrochemical and Solid-State Letters, 2009, 12, H302.	2.2	27

#	Article	IF	Citations
307	Electroforming free resistive switching memory in two-dimensional VOx nanosheets. Applied Physics Letters, 2015, 107, .	3.3	27
308	Nanoscale Crossâ€Point Resistive Switching Memory Comprising pâ€Type SnO Bilayers. Advanced Electronic Materials, 2015, 1, 1400035.	5.1	27
309	Novel Ferroelectric Polymer Memory Coupling Two Identical Thinâ€Film Transistors. Advanced Electronic Materials, 2016, 2, 1500206.	5.1	27
310	Oxidant-Dependent Thermoelectric Properties of Undoped ZnO Films by Atomic Layer Deposition. Chemistry of Materials, 2017, 29, 2794-2802.	6.7	27
311	Iontronics Using V <sub>2</sub> CT <sub><i>x</i></sub> MXene-Derived Metal–Organic Framework Solid Electrolytes. ACS Nano, 2020, 14, 9840-9847.	14.6	27
312	Status and Prospects of Laserâ€Induced Graphene for Battery Applications. Energy Technology, 2021, 9, 2100454.	3.8	27
313	Analysis of the oxidation kinetics and barrier layer properties of ZrN and Pt/Ru thin films for DRAM applications. Thin Solid Films, 1996, 280, 265-270.	1.8	26
314	Lattice dynamics and substrate-dependent transport properties of (In, Yb)-doped CoSb3 skutterudite thin films. Journal of Applied Physics, 2011, 110, 083710.	2.5	25
315	Major enhancement of the thermoelectric performance in Pr/Nb-doped SrTiO3 under strain. Applied Physics Letters, 2013, 103, .	3.3	25
316	Nanohybrid thin-film composite carbon molecular sieve membranes. Materials Today Nano, 2020, 9, 100065.	4.6	25
317	Three-Dimensional Ti <sub>3</sub> C <sub>2</sub> T <sub><i>x</i></sub> MXene-Prussian Blue Hybrid Microsupercapacitors by Water Lift-Off Lithography. ACS Nano, 2022, 16, 1974-1985.	14.6	25
318	Processing and Structural Characterization of Ferroelectric Thin Films Deposited by Ion Beam Sputtering. Materials Research Society Symposia Proceedings, 1990, 200, 65.	0.1	24
319	Thermal response of Ru electrodes in contact with SiO2 and Hf-based high-k gate dielectrics. Journal of Applied Physics, 2005, 98, 043520.	2.5	24
320	Influence of calcination temperature on the morphology and energy storage properties of cobalt oxide nanostructures directly grown over carbon cloth substrates. Materials for Renewable and Sustainable Energy, 2013, 2, 1.	3.6	24
321	Ultrathin Epitaxial Ferromagnetic <i>i&gt;î³</i> à€Fe <sub>2</sub> O <sub>3</sub> Layer as High Efficiency Spin Filtering Materials for Spintronics Device Based on Semiconductors. Advanced Functional Materials, 2016, 26, 5679-5689.	14.9	24
322	Spin Filtering in Epitaxial Spinel Films with Nanoscale Phase Separation. ACS Nano, 2017, 11, 5011-5019.	14.6	24
323	High‥ield Ti <sub>3</sub> C <sub>2</sub> T <i>&gt;<sub>x</sub></i> MXene–MoS <sub>2</sub> Integrated Circuits. Advanced Materials, 2022, 34, e2107370.	21.0	24
324	Microstructure and $90\hat{A}^\circ$ domain assemblages of Pb(Zr, Ti)O <sub>3</sub> //RuO <sub>2</sub> capacitors as a function of Zr-to-Ti stoichiometry. Journal of Materials Research, 1996, 11, 2309-2317.	2.6	23

#	Article	IF	CITATIONS
325	Thermal annealing effects on a representative high-k/metal film stack. Semiconductor Science and Technology, 2006, 21, 1437-1440.	2.0	23
326	Morphological and chemical study of the initial growth of CdS thin films deposited using an ammonia-free chemical process. Applied Surface Science, 2007, 254, 499-505.	6.1	23
327	Pulsed laser deposition and thermoelectric properties of In- and Yb-doped CoSb <sub>3</sub> skutterudite thin films. Journal of Materials Research, 2011, 26, 1836-1841.	2.6	23
328	Photo-carrier extraction by triboelectricity for carrier transport layer-free photodetectors. Nano Energy, 2019, 65, 103958.	16.0	23
329	Metal–Organic Frameworks in Mixed-Matrix Membranes for High-Speed Visible-Light Communication. Journal of the American Chemical Society, 2022, 144, 6813-6820.	13.7	23
330	Impact of Soft Annealing on the Performance of Solution-Processed Amorphous Zinc Tin Oxide Thin-Film Transistors. ACS Applied Materials & Samp; Interfaces, 2013, 5, 3587-3590.	8.0	22
331	Transparent Flash Memory Using Single Ta <sub>2</sub> O <sub>5</sub> Layer for Both Charge-Trapping and Tunneling Dielectrics. ACS Applied Materials & Samp; Interfaces, 2017, 9, 21856-21863.	8.0	22
332	Fly Ash Carbon Anodes for Alkali Metal-Ion Batteries. ACS Applied Materials & Samp; Interfaces, 2021, 13, 26421-26430.	8.0	22
333	Integration of dual metal gate CMOS with TaSiN (NMOS) and Ru (PMOS) gate electrodes on HfO/sub 2/gate dielectric., 0, , .		21
334	Organic ferroelectric memory devices with inkjet-printed polymer electrodes on flexible substrates. Microelectronic Engineering, 2013, 105, 68-73.	2.4	21
335	Zincophilic Laserâ€Scribed Graphene Interlayer for Homogeneous Zinc Deposition and Stable Zincâ€Ion Batteries. Energy Technology, 2021, 9, 2100490.	3.8	21
336	Electropolymerized Star-Shaped Benzotrithiophenes Yield π-Conjugated Hierarchical Networks with High Areal Capacitance. ACS Applied Materials & https://www.loop.com/archical-loop.com/archica	8.0	20
337	A review of composition-structure-property relationships for PZT-based heterostructure capacitors. Integrated Ferroelectrics, 1995, 6, 173-187.	0.7	19
338	Electrical performance of polymer ferroelectric capacitors fabricated on plastic substrate using transparent electrodes. Organic Electronics, 2012, 13, 1541-1545.	2.6	19
339	Polarization-tuned diode behaviour in multiferroic BiFeO3thin films. Journal Physics D: Applied Physics, 2013, 46, 055304.	2.8	19
340	Multistate Resistive Switching Memory for Synaptic Memory Applications. Advanced Materials Interfaces, 2016, 3, 1600192.	3.7	19
341	Functionalized NbS2 as cathode for Li- and Na-ion batteries. Applied Physics Letters, 2017, 111, .	3.3	19
342	Lowâ€Temperatureâ€Processed Colloidal Quantum Dots as Building Blocks for Thermoelectrics. Advanced Energy Materials, 2019, 9, 1803049.	19.5	19

#	Article	IF	Citations
343	Enhanced Quality of Waferâ€Scale MoS <sub>2</sub> Films by a Capping Layer Annealing Process. Advanced Functional Materials, 2020, 30, 1908040.	14.9	19
344	Berry Phase Engineering in SrRuO <sub>3</sub> /SrIrO <sub>3</sub> /SrTiO <sub>3</sub> Superlattices Induced by Band Structure Reconstruction. ACS Nano, 2021, 15, 5086-5095.	14.6	19
345	Plasmonic Nb <sub>2</sub> C <i>T</i> <sub><i>x</i></sub> MXene-MAPbl <sub>3</sub> Heterostructure for Self-Powered Visible-NIR Photodiodes. ACS Nano, 2022, 16, 7904-7914.	14.6	19
346	Band Edge n-MOSFETs with High-k/Metal Gate Stacks Scaled to EOT=0.9nm with Excellent Carrier Mobility and High Temperature Stability. , 2006, , .		18
347	Modeling the Power Output of Piezoelectric Energy Harvesters. Journal of Electronic Materials, 2011, 40, 1477-1484.	2.2	18
348	Effect of oxygen vacancy distribution on the thermoelectric properties of La-doped SrTiO3 epitaxial thin films. Journal of Applied Physics, 2012, 112, .	2.5	18
349	Structure and properties of heteroepitaxial Pb(Zr0.35Ti0.65)O3/SrRuO3multilayer thin films on SrTiO3(100) prepared by MOCVD and RF sputtering. Integrated Ferroelectrics, 1995, 10, 31-38.	0.7	17
350	Device performance of in situ steam generated gate dielectric nitrided by remote plasma nitridation. Applied Physics Letters, 2001, 78, 3875-3877.	3.3	17
351	Impact of semiconductor/contact metal thickness ratio on organic thin-film transistor performance. Applied Physics Letters, 2008, 92, 153305.	3.3	17
352	Doped polymer electrodes for high performance ferroelectric capacitors on plastic substrates. Applied Physics Letters, 2012, 101, 143303.	3.3	17
353	<i>In situ</i> growth of <i>p</i> and <i>n</i> -type graphene thin films and diodes by pulsed laser deposition. Applied Physics Letters, 2013, 103, .	3.3	17
354	The effect of poling conditions on the performance of piezoelectric energy harvesters fabricated by wet chemistry. Journal of Materials Chemistry A, 2015, 3, 9837-9842.	10.3	17
355	La0.5Sr0.5CoO3 electrode technology for Pb(Zr,Ti)O3 thin film nonvolatile memories. Microelectronic Engineering, 1995, 29, 223-230.	2.4	16
356	Fabrication and Characterization of High-Mobility Solution-Based Chalcogenide Thin-Film Transistors. IEEE Transactions on Electron Devices, 2013, 60, 327-332.	3.0	16
357	Fabrication and characterization of nanostructured Fe3S4, an isostructural compound of half-metallic Fe3O4. Journal of Applied Physics, 2015, 117, .	2.5	16
358	Atomicâ€Layerâ€Deposited SnO <sub>2</sub> as Gate Electrode for Indiumâ€Free Transparent Electronics. Advanced Electronic Materials, 2017, 3, 1700155.	5.1	16
359	Solid state MXene based electrostatic fractional capacitors. Applied Physics Letters, 2019, 114, .	3.3	16
360	UVâ€Induced Ferroelectric Phase Transformation in PVDF Thin Films. Advanced Electronic Materials, 2019, 5, 1800363.	5.1	16

#	Article	IF	CITATIONS
361	Electrochemical Thinâ€Film Transistors using Covalent Organic Framework Channel. Advanced Functional Materials, 2022, 32, .	14.9	16
362	Influence of AlN layers on the interface stability of HfO2 gate dielectric stacks. Applied Physics Letters, 2006, 89, 041906.	3.3	15
363	Interface Engineering for Precise Threshold Voltage Control in Multilayerâ€Channel Thin Film Transistors. Advanced Materials Interfaces, 2016, 3, 1600713.	3.7	15
364	Experimental Route to Scanning Probe Hotâ€Electron Nanoscopy (HENs) Applied to 2D Material. Advanced Optical Materials, 2017, 5, 1700195.	7.3	15
365	Lowâ€Temperature Deposition of Layered SnSe <sub>2</sub> for Heterojunction Diodes. Advanced Materials Interfaces, 2018, 5, 1800128.	3.7	15
366	Titanium Carbide MXene Nucleation Layer for Epitaxial Growth of High-Quality GaN Nanowires on Amorphous Substrates. ACS Nano, 2020, 14, 2202-2211.	14.6	15
367	Links between Electrical and Optical Fatigue in Pb (Zr,Ti)O3 Thin Films. Journal of the American Ceramic Society, 1996, 79, 1714-1716.	3.8	14
368	Probing the doping mechanisms and electrical properties of Al, Ga and In doped ZnO prepared by spray pyrolysis. Journal of Materials Chemistry C, 2016, 4, 5953-5961.	5.5	14
369	Carbon Nanotubes Coupled with Metal Ion Diffusion Layers Stabilize Oxide Conversion Reactions in High-Voltage Lithium-Ion Batteries. ACS Applied Materials & Interfaces, 2020, 12, 16276-16285.	8.0	14
370	Voltage Shifts and Defect-Dipoles in Ferroelectric Capacitors. Materials Research Society Symposia Proceedings, 1996, 433, 257.	0.1	13
371	Gate-last TiN/HfO2 band edge effective work functions using low-temperature anneals and selective cladding to control interface composition. Applied Physics Letters, 2012, 100, .	3.3	13
372	Contact resistance and stability study for Au, Ti, Hf and Ni contacts on thin-film Mg 2 Si. Journal of Alloys and Compounds, 2017, 699, 1134-1139.	5.5	13
373	An unconventional full dual-cation battery. Nano Energy, 2021, 81, 105539.	16.0	13
374	Hillock Formation in Platinum Films. Materials Research Society Symposia Proceedings, 1992, 260, 575.	0.1	12
375	Electrical characterization of sol-gel derived PZT thin films. , 0, , .		12
376	Thin Film Transistors for Flexible Electronics: Contacts, Dielectrics and Semiconductors. Journal of Nanoscience and Nanotechnology, 2011, 11, 5532-5538.	0.9	12
377	Determination of maximum power transfer conditions of bimorph piezoelectric energy harvesters. Journal of Applied Physics, 2012, 111, 102812.	2.5	12
378	Vertically aligned carbon nanotube field-effect transistors. Carbon, 2012, 50, 4628-4632.	10.3	12

#	Article	IF	CITATIONS
379	Doping site dependent thermoelectric properties of epitaxial strontium titanate thin films. Journal of Materials Chemistry C, 2014, 2, 9712-9719.	5.5	12
380	New insights on the synthesis and electronic transport in bulk polycrystalline Pr-doped SrTiO3â^Î. Journal of Applied Physics, 2015, 117, 055102.	2.5	12
381	Highly Passivated nâ€Type Colloidal Quantum Dots for Solutionâ€Processed Thermoelectric Generators with Large Output Voltage. Advanced Energy Materials, 2019, 9, 1901244.	19.5	12
382	Efficient Naâ€lon Storage in 2D TiS <sub>2</sub> Formed by a Vapor Phase Anionâ€Exchange Process. Small Methods, 2020, 4, 2000439.	8.6	12
383	Engineering Bandâ€√ype Alignment in CsPbBr <sub>3</sub> Perovskiteâ€Based Artificial Multiple Quantum Wells. Advanced Materials, 2021, 33, e2005166.	21.0	12
384	Two-Dimensional TiO <sub>2</sub> /TiS <sub>2</sub> Hybrid Nanosheet Anodes for High-Rate Sodium-lon Batteries. ACS Applied Energy Materials, 2021, 4, 8721-8727.	5.1	12
385	Evaluation of titanium silicon nitride as gate electrodes for complementary metal-oxide semiconductor. Applied Physics Letters, 2006, 88, 142113.	3.3	11
386	Dipole controlled metal gate with hybrid low resistivity cladding for gate-last CMOS with low Vt. , 2010, , .		11
387	Modeling of MEMS piezoelectric energy harvesters using electromagnetic and power system theories. Smart Materials and Structures, 2011, 20, 085001.	3.5	11
388	Sixâ€Fold Mobility Improvement of Indiumâ€Zinc Oxide Thinâ€Film Transistors Using a Simple Water Treatment. Advanced Electronic Materials, 2015, 1, 1500014.	5.1	11
389	KAUSTat: A Wireless, Wearable, Open-Source Potentiostat for Electrochemical Measurements., 2019,,.		11
390	A Highly Conductive Conjugated Polyelectrolyte for Flexible Organic Thermoelectrics. ACS Applied Energy Materials, 2020, 3, 8667-8675.	5.1	11
391	Photoluminescent Ferroelectric LiNbO <sub>3</sub> Crystals Grown from MXenes. Advanced Functional Materials, 2020, 30, 1909843.	14.9	11
392	Systematic investigation of amorphous transition-metal-silicon-nitride electrodes for metal gate CMOS applications. , 0, , .		10
393	The effect of metal thickness, overlayer and high-k surface treatment on the effective work function of metal electrode. , 0, , .		10
394	Temperature dependence of the work function of ruthenium-based gate electrodes. Thin Solid Films, 2006, 515, 1294-1298.	1.8	10
395	Organic Thin-Film Transistors with Low Threshold Voltage Variation on Low-Temperature Substrates. Electrochemical and Solid-State Letters, 2009, 12, H50.	2.2	10
396	Characterization of current transport in ferroelectric polymer devices. Organic Electronics, 2014, 15, 22-28.	2.6	10

#	Article	IF	Citations
397	Thermoelectric Properties of Strontium Titanate Superlattices Incorporating Niobium Oxide Nanolayers. Chemistry of Materials, 2014, 26, 2726-2732.	6.7	10
398	In-situ CdS/CdTe heterojuntions deposited by pulsed laser deposition. Thin Solid Films, 2016, 608, 1-7.	1.8	10
399	Stable and low contact resistance electrical contacts for high temperature SiGe thermoelectric generators. Scripta Materialia, 2018, 152, 36-39.	5.2	10
400	Transparent Electronics Using One Binary Oxide for All Transistor Layers. Small, 2018, 14, e1803969.	10.0	10
401	Plasma nitridation of very thin gate dielectrics. Microelectronic Engineering, 2001, 59, 317-322.	2.4	9
402	Evaluation and integration of metal gate electrodes for future generation dual metal CMOS., 2005,,.		9
403	Gate First Metal-Aluminum-Nitride PMOS Electrodes for 32nm Low Standby Power Applications. , 2007, ,		9
404	Study of Hafnium (IV) Oxide Nanoparticles Synthesized by Polymerized Complex and Polymer Precursor Derived Sol-Gel Methods. Materials Science Forum, 0, 644, 75-78.	0.3	9
405	A flexible organic active matrix circuit fabricated using novel organic thin film transistors and organic light-emitting diodes. Semiconductor Science and Technology, 2010, 25, 115001.	2.0	9
406	Anomalous enhancement of the thermoelectric figure of merit by V co-doping of Nb-SrTiO3. Applied Physics Letters, 2012, 100, 193110.	3.3	9
407	Energy harvesting from radio frequency propagation using piezoelectric cantilevers. Solid-State Electronics, 2012, 68, 13-17.	1.4	9
408	General Top-Down Ion Exchange Process for the Growth of Epitaxial Chalcogenide Thin Films and Devices. Chemistry of Materials, 2017, 29, 690-698.	6.7	9
409	Hybrid van der Waals SnO/MoS <sub>2</sub> Heterojunctions for Thermal and Optical Sensing Applications. Advanced Electronic Materials, 2017, 3, 1700396.	5.1	9
410	Optimizing thermal conduction in bulk polycrystalline SrTiO3â^Î ceramics via oxygen non-stoichiometry. MRS Communications, 2018, 8, 1470-1476.	1.8	9
411	A Review of Orientation-Microstructure-Property Relationships for PZT / Metal or Metal-Oxide Layered Heterostructures. Materials Research Society Symposia Proceedings, 1994, 341, 341.	0.1	8
412	Non-traditional solution routes to ferroelectric materials. Integrated Ferroelectrics, 1997, 18, 213-223.	0.7	8
413	Simplified manufacturable band edge metal gate solution for NMOS without a capping layer. , 2006, , .		8
414	A Capacitance-Based Methodology for the Estimation of Piezoelectric Coefficients of Poled Piezoelectric Materials. Electrochemical and Solid-State Letters, 2010, 13, G108.	2.2	8

#	Article	IF	CITATIONS
415	Variation of equation of state parameters in the Mg <sub>2</sub> (Si <sub>1) Tj ETQq1 1 0.784314 rgBT /Overlock</sub>	2 10 Tf 50	7,42 Td (â <sup>°</sup> 4
416	Impact of semiconductor/metal interfaces on contact resistance and operating speed of organic thin film transistors. Journal of Computational Electronics, 2011, 10, 144-153.	2.5	8
417	Modeling the transport properties of epitaxially grown thermoelectric oxide thin films using spectroscopic ellipsometry. Applied Physics Letters, 2012, 100, .	3.3	8
418	Fabrication of Relaxer-Based Piezoelectric Energy Harvesters Using a Sacrificial Poly-Si Seeding Layer. Journal of Electronic Materials, 2014, 43, 3898-3904.	2.2	8
419	The Impact of Surface Chemistry on Bio-derived Carbon Performance as Supercapacitor Electrodes. Journal of Electronic Materials, 2017, 46, 1628-1636.	2.2	8
420	A Cyclized Polyacrylonitrile Anode for Alkali Metal Ion Batteries. Angewandte Chemie, 2021, 133, 1375-1383.	2.0	8
421	Rf Magnetron Sputter-Deposition of La <sub>0.5</sub> Sr <sub>0.5</sub> CoO <sub>3</sub> //Pt Composite Electrodes for Pb(Zr, Ti)O <sub>3</sub> Thin Film Capacitors. Materials Research Society Symposia Proceedings, 1996, 433, 145.	0.1	7
422	Deposition Method-Induced Stress Effect on Ultrathin Titanium Nitride Etch Characteristics. Electrochemical and Solid-State Letters, 2006, 9, G361.	2.2	7
423	Dielectric Properties of PMMA-SiO <sub>2</sub> Hybrid Films. Materials Science Forum, 0, 644, 25-28.	0.3	7
424	Optimization of Pb(Zr0.53,Ti0.47)O3 films for micropower generation using integrated cantilevers. Solid-State Electronics, 2011, 63, 89-93.	1.4	7
425	Improved electrical stability of CdS thin film transistors through hydrogen-based thermal treatments. Semiconductor Science and Technology, 2014, 29, 085001.	2.0	7
426	To what extent can charge localization influence electron injection efficiency at graphene–porphyrin interfaces?. Physical Chemistry Chemical Physics, 2015, 17, 14513-14517.	2.8	7
427	Solar Cells: MXeneâ€Contacted Silicon Solar Cells with 11.5% Efficiency (Adv. Energy Mater. 22/2019). Advanced Energy Materials, 2019, 9, 1970083.	19.5	7
428	Thermoelectric properties of oil fly ash-derived carbon nanotubes coated with polypyrrole. Journal of Applied Physics, 2020, 128, 235104.	2.5	7
429	Marinite Li <sub>2</sub> Ni(SO <sub>4</sub> ) <sub>2</sub> as a New Member of the Bisulfate Family of High-Voltage Lithium Battery Cathodes. Chemistry of Materials, 2021, 33, 6108-6119.	6.7	7
430	Sputter deposition of SrTiO3 thin films for voltage tunable capacitors. Integrated Ferroelectrics, 1997, 17, 247-256.	0.7	6
431	Electron mobility in MOSFETs with ultrathin RTCVD silicon nitride/oxynitride stacked gate dielectrics. Solid-State Electronics, 2003, 47, 149-153.	1.4	6
432	Modulation of the work function of silicon gate electrode using thin TaN interlayers. Applied Physics Letters, 2005, 87, 052109.	3.3	6

#	Article	IF	Citations
433	Evaluation of tantalum silicon alloy systems as gate electrodes. Applied Physics Letters, 2005, 87, 212110.	3.3	6
434	Time dependent breakdown characteristics of parylene dielectric in metal–insulator–metal capacitors. Organic Electronics, 2009, 10, 1024-1027.	2.6	6
435	Characterization of organic thin films using transmission electron microscopy and Fourier Transform Infra Red spectroscopy. Thin Solid Films, 2009, 517, 5825-5829.	1.8	6
436	Contact materials for nanoelectronics. MRS Bulletin, 2011, 36, 90-94.	3.5	6
437	Homo-junction ferroelectric field-effect-transistor memory device using solution-processed lithium-doped zinc oxide thin films. Applied Physics Letters, 2012, 100, .	3.3	6
438	Electrical and piezoelectric properties of BiFeO3 thin films grown on SrxCa1â^'xRuO3-buffered SrTiO3 substrates. Journal of Applied Physics, 2012, 111, 114102.	2.5	6
439	Laser energy tuning of carrier effective mass and thermopower in epitaxial oxide thin films. Applied Physics Letters, 2012, 100, 162106.	3.3	6
440	Encapsulation of high frequency organic Schottky diodes. Thin Solid Films, 2013, 531, 509-512.	1.8	6
441	Integrating carbon nanotubes into silicon by means of vertical carbon nanotube field-effect transistors. Nanoscale, 2014, 6, 8956-8961.	5.6	6
442	Synthesis–property relationship in thermoelectric Sr <sub>1â°'<i>x</i></sub> Yb <sub><i>x</i></sub> TiO <sub>3â^'<i>δ</i></sub> ceramics. Journal Physics D: Applied Physics, 2014, 47, 385302.	2.8	6
443	Electrical transport characterization of Al and Sn doped Mg 2 Si thin films. Journal of Alloys and Compounds, 2017, 720, 156-160.	5.5	6
444	Lattice Orientation Heredity in the Transformation of 2D Epitaxial Films. Advanced Materials, 2022, 34, e2105190.	21.0	6
445	Electrical bias stressing and radiation induced charge trapping in HfO2/SiO2 dielectric stacks. Journal of Applied Physics, 2007, 101, 104101.	2.5	5
446	Impact of Carbon Incorporation on the Effective Work Function of WN and TaN Metal Gate Electrodes. Electrochemical and Solid-State Letters, 2008, 11, H182.	2.2	5
447	Low temperature integration of hybrid CMOS devices on plastic substrates. , 2009, , .		5
448	Fabrication and Characterization of Pb(Zr0.53,Ti0.47)O3-Pb(Nb1/3,Zn2/3)O3 Thin Films on Cantilever Stacks. Journal of Electronic Materials, 2011, 40, 85-91.	2.2	5
449	Large-Area Pulsed Laser Deposited Molybdenum Diselenide Heterojunction Photodiodes. ACS Applied Materials & Samp; Interfaces, 2020, 12, 51645-51653.	8.0	5
450	Fully Transparent Transceiver Using Single Binary Oxide Thin Film Transistors. Advanced Electronic Materials, 2020, 6, 1901083.	5.1	5

#	Article	IF	Citations
451	Charge trapping in resistance degraded ferroelectrics. Integrated Ferroelectrics, 1997, 18, 49-61.	0.7	4
452	Intrinsic reoxidation of microwave plasma-nitrided gate dielectrics. Applied Physics Letters, 2005, 86, 132901.	3.3	4
453	Realiability Characteristics of Metal/High-K Pmos with Top Interface Engineered Band Offset Dielectric (BOD)., 2006,,.		4
454	A simplified approach to estimating total trap contributions in negative bias temperature instability. Journal of Applied Physics, 2009, 106, 024508.	2.5	4
455	Experimental and theoretical investigation of the effect of SiO2 content in gate dielectrics on work function shift induced by nanoscale capping layers. Applied Physics Letters, 2012, 101, .	3.3	4
456	Ternary Ni–Cu–OH and Ni–Co–OH electrodes for electrochemical energy storage. Materials for Renewable and Sustainable Energy, 2015, 4, 1.	3.6	4
457	Thermal response in van der Waals heterostructures. Journal of Physics Condensed Matter, 2017, 29, 035504.	1.8	4
458	Multipolar Surface Plasmons in 2D Ti3C2Tx Flakes: an Ultra-High Resolution EELS with Conventional TEM and In-Situ Heating Study. Microscopy and Microanalysis, 2018, 24, 1578-1579.	0.4	4
459	Allâ€Oxide Thin Film Transistors and Rectifiers Enabling Onâ€Chip Capacitive Energy Storage. Advanced Electronic Materials, 2019, 5, 1900531.	5.1	4
460	RPN Oxynitride Gate Dielectrics for 90 nm Low Power CMOS Applications. , 2002, , .		3
461	A systematic study of the influence of nitrogen in tuning the effective work function of nitrided metal gates. , $0$ , , .		3
462	Slow trap charging and detrapping in the negative bias temperature instability in HfSiON dielectric based field effect transistors. Journal of Applied Physics, 2008, 104, 124109.	2.5	3
463	51.1: <i>Invited Paper</i> : Flexible CMOS and Electrophoretic Displays. Digest of Technical Papers SID International Symposium, 2009, 40, 760-763.	0.3	3
464	Novel Materials and Integration Schemes for CMOS-Based Circuits for Flexible Electronics. ECS Transactions, 2009, 25, 503-511.	0.5	3
465	Study on the Microstructure and Electrical Properties of Pb(Zr <sub>0.53</sub> ) Tj ETQq1 1 0.784314 rgBT /Ove	erlock 10	Tf 50 182 Td (
466	Effects of FeSb6 octahedral deformations on the electronic structure of LaFe4Sb12. Chemical Physics Letters, 2011, 514, 54-57.	2.6	3
467	(Invited) Band-Edge Effective Work Functions by Controlling HfO <sub>2</sub> /TiN Interfacial Composition for Gate-Last CMOS. ECS Transactions, 2011, 35, 285-295.	0.5	3
468	Anomalous positive flatband voltage shifts in metal gate stacks containing rare-earth oxide capping layers. Applied Physics Letters, 2012, 100, 102111.	3.3	3

#	Article	IF	CITATIONS
469	Synthesis of Non-uniformly Pr-doped SrTiO <sub>3</sub> Ceramics and Their Thermoelectric Properties. Journal of Visualized Experiments, 2015, , e52869.	0.3	3
470	Dopant-Assisted Matrix Stabilization Enables Thermoelectric Performance Enhancement in n-Type Quantum Dot Films. ACS Applied Materials & Samp; Interfaces, 2021, 13, 18999-19007.	8.0	3
471	Correlation between the reliability of ultrathin ISSG SiO 2 and hydrogen content., 2000, 4181, 220.		2
472	Growth mechanism of ALD-TiN and the thickness dependence of work function. , 0, , .		2
473	Nanoscale gadolinium oxide capping layers on compositionally variant gate dielectrics. Applied Physics Letters, 2010, 97, 202108.	3.3	2
474	MnO <sub>2</sub> : Morphological and Electrochemical Cycling Effects in MnO <sub>2</sub> Nanostructures by 3D Electron Tomography (Adv. Funct. Mater. 21/2014). Advanced Functional Materials, 2014, 24, 3106-3106.	14.9	2
475	Formation of Metallic States between Insulating SnO and SnO <sub>2</sub> . Advanced Materials Interfaces, 2016, 3, 1500334.	3.7	2
476	2D Optoelectronics: Highâ€Performance Monolayer MoS <sub>2</sub> Films at the Wafer Scale by Twoâ€Step Growth (Adv. Funct. Mater. 32/2019). Advanced Functional Materials, 2019, 29, 1970224.	14.9	2
477	Allâ€Carbon Hybrid Mobile Ion Capacitors Enabled by 3D Laserâ€Scribed Graphene. Energy Technology, 2020, 8, 2000193.	3.8	2
478	Characterization of ultrathin gate dielectrics formed by in-situ steam generation with nitrogen postprocessing. Journal of Electronic Materials, 2002, 31, 124-128.	2.2	1
479	Oxygen Transfer from Metal Gate to High-k Gate Dielectric Stack: Interface Structure & Property Changes. ECS Transactions, 2007, 11, 213-218.	0.5	1
480	Radiation response of nanometric HfSiON/SiO2 gate stacks. Journal of Applied Physics, 2008, 103, .	2.5	1
481	Negative bias temperature instability and relaxation in HfSiON gate stack field effect devices. Applied Physics Letters, 2008, 92, 153512.	3.3	1
482	Depth Profiling of La[sub 2]O[sub 3]â^•HfO[sub 2] Stacked Dielectrics for Nanoelectronic Device Applications. Electrochemical and Solid-State Letters, 2011, 14, H139.	2.2	1
483	Liâ€lon Batteries: SnO <sub>2</sub> Anode Surface Passivation by Atomic Layer Deposited HfO <sub>2</sub> Improves Liâ€lon Battery Performance (Small 14/2014). Small, 2014, 10, 2738-2738.	10.0	1
484	Flexible Lithography: Marker Pen Lithography for Flexible and Curvilinear On-Chip Energy Storage (Adv. Funct. Mater. 31/2015). Advanced Functional Materials, 2015, 25, 5076-5076.	14.9	1
485	Hybrid Materials: 2D Organic–Inorganic Hybrid Thin Films for Flexible UV–Visible Photodetectors (Adv. Funct. Mater. 15/2017). Advanced Functional Materials, 2017, 27, .	14.9	1
486	Titelbild: Highly Stable Aqueous Zincâ€lon Storage Using a Layered Calcium Vanadium Oxide Bronze Cathode (Angew. Chem. 15/2018). Angewandte Chemie, 2018, 130, 3899-3899.	2.0	1

#	Article	IF	CITATIONS
487	Ferroelectrics: MXeneâ€Derived Ferroelectric Crystals (Adv. Mater. 14/2019). Advanced Materials, 2019, 31, 1970102.	21.0	1
488	Ferroelectric Switching: Giant Ferroelectric Resistance Switching Controlled by a Modulatory Terminal for Lowâ€Power Neuromorphic Inâ€Memory Computing (Adv. Mater. 21/2021). Advanced Materials, 2021, 33, 2170167.	21.0	1
489	Prospective technology for system-on-a-chip: N 2 implant followed by VHP O 2 reoxidation. , 2000, , .		O
490	Ultra-Thin High Quality Oxynitride Formed by NH3 Nitridation and High Pressure O2 Re-oxidation. , 2000, , .		0
491	Gate Dielectrics for High Performance and Low Power CMOS SoC Applications. , 2002, , .		O
492	Physical Characterization of Novel Metal Electrodes for Hf-based Transistors. AIP Conference Proceedings, 2005, , .	0.4	0
493	In-Line Control and Rapid Process Development of Nitrided Gate Oxides. AIP Conference Proceedings, 2005, , .	0.4	O
494	Demonstration of high performance transistors with PVD metal gate. , 0, , .		0
495	Work function engineering of RuHf alloys as gate electrodes for future generation dual metal CMOS. , 0, , .		0
496	Application of x-ray metrology in the characterization of metal gate thin films. Journal of Vacuum Science & Technology B, 2006, 24, 2437.	1.3	0
497	Structural and Morphological Properties of Hf <sub>X</sub> Zr <sub>1-x</sub> O <sub>2</sub> Thin Films Prepared by Pechini Route. Materials Science Forum, 0, 644, 113-116.	0.3	0
498	Synthesis and Characterization of Pb(Zr, Ti)O-Pb(Nb, Zn)O Thin Film Cantilevers for Energy Harvesting Applications. Smart Materials Research, 2012, 2012, 1-9.	0.5	0
499	Supercapacitors: Highly Stable Supercapacitors with Conducting Polymer Coreâ€Shell Electrodes for Energy Storage Applications (Adv. Energy Mater. 8/2015). Advanced Energy Materials, 2015, 5, .	19.5	0
500	Thin-Film Electronics: Oxide Thin-Film Electronics using All-MXene Electrical Contacts (Adv. Mater.) Tj ETQq0 0 0 0	rgBT /Over	rlogk 10 Tf 50
501	Characteristics of Vertical Carbon Nanotube Field-Effect Transistors on <i>p</i> -GaAs. Nanoscience and Nanotechnology Letters, 2019, 11, 1239-1246.	0.4	0