Husam Niman Alshareef

List of Publications by Citations

481	29,964	91	156
papers	citations	h-index	g-index
515	37,062	11.2	7.95
ext. papers	ext. citations	avg, IF	L-index

#	Paper	IF	Citations
481	Plasma-Assisted Synthesis of NiCoP for Efficient Overall Water Splitting. *Nano Letters*, **2016**, 16, 7718-7725	11.5	812
480	Substrate dependent self-organization of mesoporous cobalt oxide nanowires with remarkable pseudocapacitance. *Nano Letters*, **2012**, 12, 2559-67	11.5	702
479	High-performance nanostructured supercapacitors on a sponge. *Nano Letters*, **2011**, 11, 5165-72	11.5	627
478	One-step electrodeposited nickel cobalt sulfide nanosheet arrays for high-performance asymmetric supercapacitors. *ACS Nano*, **2014**, 8, 9531-41	16.7	599
477	Symmetrical MnO2-carbon nanotube-textile nanostructures for wearable pseudocapacitors with high mass loading. *ACS Nano*, **2011**, 5, 8904-13	16.7	540
476	Effect of Postetch Annealing Gas Composition on the Structural and Electrochemical Properties of Ti2CTx MXene Electrodes for Supercapacitor Applications. *Chemistry of Materials*, **2015**, 27, 5314-5323	9.6	535
475	Rechargeable Aqueous Zinc-Ion Battery Based on Porous Framework Zinc Pyrovanadate Intercalation Cathode. *Advanced Materials*, **2018**, 30, 1705580	24	523
474	Highly Stable Aqueous Zinc-Ion Storage Using a Layered Calcium Vanadium Oxide Bronze Cathode. *Angewandte Chemie - International Edition*, **2018**, 57, 3943-3948	16.4	509
473	All Pseudocapacitive MXene-RuO2 Asymmetric Supercapacitors. *Advanced Energy Materials*, **2018**, 8, 1703043	21.8	459
472	Selenide-Based Electrocatalysts and Scaffolds for Water Oxidation Applications. *Advanced Materials*, **2016**, 28, 77-85	24	446
471	All-MXene (2D titanium carbide) solid-state microsupercapacitors for on-chip energy storage. *Energy and Environmental Science*, **2016**, 9, 2847-2854	35.4	428
470	Recent Developments in p-Type Oxide Semiconductor Materials and Devices. *Advanced Materials*, **2016**, 28, 3831-92	24	409
469	Layered MgxV2O5nH2O as Cathode Material for High-Performance Aqueous Zinc Ion Batteries. *ACS Energy Letters*, **2018**, 3, 2602-2609	20.1	381
468	Amorphous NiFe-OH/NiFeP Electrocatalyst Fabricated at Low Temperature for Water Oxidation Applications. *ACS Energy Letters*, **2017**, 2, 1035-1042	20.1	369
467	Zinc-ion batteries: Materials, mechanisms, and applications. *Materials Science and Engineering Reports*, **2019**, 135, 58-84	30.9	355
466	MXenes stretch hydrogel sensor performance to new limits. *Science Advances*, **2018**, 4, eaat0098	14.3	334
465	Atomic layer deposition of SnO2 on MXene for Li-ion battery anodes. *Nano Energy*, **2017**, 34, 249-256	17.1	307

464	Intercorrelated In-Plane and Out-of-Plane Ferroelectricity in Ultrathin Two-Dimensional Layered Semiconductor InSe. *Nano Letters*, **2018**, 18, 1253-1258	11.5	293
463	H2O2 assisted room temperature oxidation of Ti2C MXene for Li-ion battery anodes. *Nanoscale*, **2016**, 8, 7580-7	7.7	287
462	MXene-on-Paper Coplanar Microsupercapacitors. *Advanced Energy Materials*, **2016**, 6, 1601372	21.8	269
461	Direct Chemical Synthesis of MnO2 Nanowhiskers on Transition-Metal Carbide Surfaces for Supercapacitor Applications. *ACS Applied Materials & Interfaces*, **2016**, 8, 18806-14	9.5	256
460	Carbon nanotube-coated macroporous sponge for microbial fuel cell electrodes. *Energy and Environmental Science*, **2012**, 5, 5265-5270	35.4	255
459	High performance supercapacitors using metal oxide anchored graphene nanosheet electrodes. *Journal of Materials Chemistry*, **2011**, 21, 16197		253
458	Record mobility in transparent p-type tin monoxide films and devices by phase engineering. *ACS Nano*, **2013**, 7, 5160-7	16.7	248
457	A Self-Powered and Flexible Organometallic Halide Perovskite Photodetector with Very High Detectivity. *Advanced Materials*, **2018**, 30, 1704611	24	245
456	Asymmetric Flexible MXene-Reduced Graphene Oxide Micro-Supercapacitor. *Advanced Electronic Materials*, **2018**, 4, 1700339	6.4	244
455	Low temperature synthesis of ternary metal phosphides using plasma for asymmetric supercapacitors. *Nano Energy*, **2017**, 35, 331-340	17.1	242
454	MXene electrochemical microsupercapacitor integrated with triboelectric nanogenerator as a wearable self-charging power unit. *Nano Energy*, **2018**, 45, 266-272	17.1	236
453	Continuous production of pure liquid fuel solutions via electrocatalytic CO2 reduction using solid-electrolyte devices. *Nature Energy*, **2019**, 4, 776-785	62.3	226
452	Aqueous Zinc-Ion Storage in MoS by Tuning the Intercalation Energy. *Nano Letters*, **2019**, 19, 3199-3206	11.5	223
451	Flexible, Highly Graphitized Carbon Aerogels Based on Bacterial Cellulose/Lignin: Catalyst-Free Synthesis and its Application in Energy Storage Devices. *Advanced Functional Materials*, **2015**, 25, 3193-3202	15.6	219
450	Impurities and Electronic Property Variations of Natural MoS2 Crystal Surfaces. *ACS Nano*, **2015**, 9, 9124-33	13.7	207
449	Heteroatom-Mediated Interactions between Ruthenium Single Atoms and an MXene Support for Efficient Hydrogen Evolution. *Advanced Materials*, **2019**, 31, e1903841	24	197
448	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	6.4	194
447	SnSe2 2D Anodes for Advanced Sodium Ion Batteries. *Advanced Energy Materials*, **2016**, 6, 1601188	21.8	192

446	Giant Photoluminescence Enhancement in CsPbCl3 Perovskite Nanocrystals by Simultaneous Dual-Surface Passivation. *ACS Energy Letters*, **2018**, 3, 2301-2307	20.1	189
445	Enhanced rate performance of mesoporous Co(3)O(4) nanosheet supercapacitor electrodes by hydrous RuO(2) nanoparticle decoration. *ACS Applied Materials & Interfaces*, **2014**, 6, 4196-206	9.5	188
444	Large Dielectric Constant Enhancement in MXene Percolative Polymer Composites. *ACS Nano*, **2018**, 12, 3369-3377	16.7	181
443	Conducting polymer micro-supercapacitors for flexible energy storage and Ac line-filtering. *Nano Energy*, **2015**, 13, 500-508	17.1	174
442	Two-dimensional heterostructures of V2O5 and reduced graphene oxide as electrodes for high energy density asymmetric supercapacitors. *Journal of Materials Chemistry A*, **2014**, 2, 17146-17152	13	168
441	Qualitative model for the fatigue-free behavior of SrBi2Ta2O9. *Applied Physics Letters*, **1996**, 68, 690-692	3.4	168
440	Is NiCo2S4 Really a Semiconductor?. *Chemistry of Materials*, **2015**, 27, 6482-6485	9.6	167
439	Novel amperometric glucose biosensor based on MXene nanocomposite. *Scientific Reports*, **2016**, 6, 36422	4.9	167
438	Thermoelectric Properties of Two-Dimensional Molybdenum-Based MXenes. *Chemistry of Materials*, **2017**, 29, 6472-6479	9.6	163
437	Synthesis Strategies of Porous Carbon for Supercapacitor Applications. *Small Methods*, **2020**, 4, 1900853	12.8	161
436	Nanostructured cobalt sulfide-on-fiber with tunable morphology as electrodes for asymmetric hybrid supercapacitors. *Journal of Materials Chemistry A*, **2014**, 2, 16190-16198	13	161
435	Evidence for topological type-II Weyl semimetal WTe. *Nature Communications*, **2017**, 8, 2150	17.4	160
434	Effect of pH-induced chemical modification of hydrothermally reduced graphene oxide on supercapacitor performance. *Journal of Power Sources*, **2013**, 233, 313-319	8.9	159
433	Facile synthesis of polyaniline nanotubes using reactive oxide templates for high energy density pseudocapacitors. *Journal of Materials Chemistry A*, **2013**, 1, 3315	13	158
432	A MXene-Based Wearable Biosensor System for High-Performance In Vitro Perspiration Analysis. *Small*, **2019**, 15, e1901190	11	157
431	Large-Area Deposition of MoS2 by Pulsed Laser Deposition with In Situ Thickness Control. *ACS Nano*, **2016**, 10, 6054-61	16.7	156
430	Photoinduced changes in the fatigue behavior of SrBi2Ta2O9 and Pb(Zr,Ti)O3 thin films. *Journal of Applied Physics*, **1996**, 80, 1682-1687	2.5	155
429	Nanostructured Ternary Electrodes for Energy-Storage Applications. *Advanced Energy Materials*, **2012**, 2, 381-389	21.8	154

428	High performance In2O3 thin film transistors using chemically derived aluminum oxide dielectric. *Applied Physics Letters*, **2013**, 103, 033518	3.4	148
427	Dipole model explaining high-k/metal gate field effect transistor threshold voltage tuning. *Applied Physics Letters*, **2008**, 92, 092901	3.4	146
426	Active Edge Sites Engineering in Nickel Cobalt Selenide Solid Solutions for Highly Efficient Hydrogen Evolution. *Advanced Energy Materials*, **2017**, 7, 1602089	21.8	145
425	Asymmetric supercapacitors with metal-like ternary selenides and porous graphene electrodes. *Nano Energy*, **2016**, 24, 78-86	17.1	139
424	Highly Efficient Laser Scribed Graphene Electrodes for On-Chip Electrochemical Sensing Applications. *Advanced Electronic Materials*, **2016**, 2, 1600185	6.4	136
423	MXene hydrogels: fundamentals and applications. *Chemical Society Reviews*, **2020**, 49, 7229-7251	58.5	135
422	Capacitance enhancement of polyaniline coated curved-graphene supercapacitors in a redox-active electrolyte. *Nanoscale*, **2013**, 5, 4134-8	7.7	131
421	High-performance non-volatile organic ferroelectric memory on banknotes. *Advanced Materials*, **2012**, 24, 2165-70	24	129
420	Electrical properties of ferroelectric thin-film capacitors with hybrid (Pt,RuO2) electrodes for nonvolatile memory applications. *Journal of Applied Physics*, **1995**, 77, 2146-2154	2.5	129
419	Graphitic Nanocarbon with Engineered Defects for High-Performance Potassium-Ion Battery Anodes. *Advanced Functional Materials*, **2019**, 29, 1903641	15.6	128
418	MXetronics: Electronic and photonic applications of MXenes. *Nano Energy*, **2019**, 60, 179-197	17.1	128
417	Microscale electrostatic fractional capacitors using reduced graphene oxide percolated polymer composites. *Applied Physics Letters*, **2013**, 102, 232901	3.4	125
416	Phosphine plasma activation of □Fe2O3 for high energy asymmetric supercapacitors. *Nano Energy*, **2018**, 49, 155-162	17.1	123
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414	MXene-Contacted Silicon Solar Cells with 11.5% Efficiency. *Advanced Energy Materials*, **2019**, 9, 1900180	21.8	117
413	Two-Dimensional TiCT MXene Membranes as Nanofluidic Osmotic Power Generators. *ACS Nano*, **2019**, 13, 8917-8925	16.7	117
412	MXene Printing and Patterned Coating for Device Applications. *Advanced Materials*, **2020**, 32, e1908486	24	116
411	Sodium-ion battery anodes: Status and future trends. *EnergyChem*, **2019**, 1, 100012	36.9	116

410	Laser-Scribed Graphene Electrodes for Aptamer-Based Biosensing. *ACS Sensors*, **2017**, 2, 616-620	9.2	115
409	Porous MXenes enable high performance potassium ion capacitors. *Nano Energy*, **2019**, 62, 853-860	17.1	115
408	Nanocomposites of ferroelectric polymers with surface-hydroxylated BaTiO3 nanoparticles for energy storage applications. *Journal of Materials Chemistry*, **2012**, 22, 11196		114
407	Highly Stable Supercapacitors with Conducting Polymer Core-Shell Electrodes for Energy Storage Applications. *Advanced Energy Materials*, **2015**, 5, 1401805	21.8	113
406	Oxide Thin-Film Electronics using All-MXene Electrical Contacts. *Advanced Materials*, **2018**, 30, e1706656	24	113
405	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	8.9	112
404	Lignin Laser Lithography: A Direct-Write Method for Fabricating 3D Graphene Electrodes for Microsupercapacitors. *Advanced Energy Materials*, **2018**, 8, 1801840	21.8	111
403	Imprint in Ferroelectric Capacitors. *Japanese Journal of Applied Physics*, **1996**, 35, 1521-1524	1.4	108
402	Review of MXene electrochemical microsupercapacitors. *Energy Storage Materials*, **2020**, 27, 78-95	19.4	105
401	Tunable Multipolar Surface Plasmons in 2D TiC T MXene Flakes. *ACS Nano*, **2018**, 12, 8485-8493	16.7	105
400	Conductive Metal□Organic Frameworks Selectively Grown on Laser-Scribed Graphene for Electrochemical Microsupercapacitors. *Advanced Energy Materials*, **2019**, 9, 1900482	21.8	104
399	Bistacked Titanium Carbide (MXene) Anodes for Hybrid Sodium-Ion Capacitors. *ACS Energy Letters*, **2018**, 3, 2094-2100	20.1	103
398	Self-templating Scheme for the Synthesis of Nanostructured Transition-Metal Chalcogenide Electrodes for Capacitive Energy Storage. *Chemistry of Materials*, **2015**, 27, 4661-4668	9.6	103
397	Atmospheric effects on the photovoltaic performance of hybrid perovskite solar cells. *Solar Energy Materials and Solar Cells*, **2015**, 137, 6-14	6.4	101
396	Morphological and Electrochemical Cycling Effects in MnO2 Nanostructures by 3D Electron Tomography. *Advanced Functional Materials*, **2014**, 24, 3130-3143	15.6	97
395	Two-Dimensional SnO Anodes with a Tunable Number of Atomic Layers for Sodium Ion Batteries. *Nano Letters*, **2017**, 17, 1302-1311	11.5	95
394	Thermoelectric Performance of the MXenes M2CO2 (M = Ti, Zr, or Hf). *Chemistry of Materials*, **2016**, 28, 1647-1652	9.6	95
393	Optimization of poly(vinylidene fluoride-trifluoroethylene) films as non-volatile memory for flexible electronics. *Organic Electronics*, **2010**, 11, 925-932	3.5	94

392	Work function engineering using lanthanum oxide interfacial layers. *Applied Physics Letters*, **2006**, 89, 232103	3.4	93
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390	Surface Passivation of MoO Nanorods by Atomic Layer Deposition toward High Rate Durable Li Ion Battery Anodes. *ACS Applied Materials & Interfaces*, **2015**, 7, 13154-63	9.5	91
389	Electrolyte Engineering Enables High Stability and Capacity Alloying Anodes for Sodium and Potassium Ion Batteries. *ACS Energy Letters*, **2020**, 5, 766-776	20.1	91
388	Electrode surface engineering by atomic layer deposition: A promising pathway toward better energy storage. *Nano Today*, **2016**, 11, 250-271	17.9	91
387	MXenes for Plasmonic Photodetection. *Advanced Materials*, **2019**, 31, e1807658	24	90
386	New Insight on the Role of Electrolyte Additives in Rechargeable Lithium Ion Batteries. *ACS Energy Letters*, **2019**, 4, 2613-2622	20.1	90
385	A novel strategy for the synthesis of highly stable ternary SiOx composites for Li-ion-battery anodes. *Journal of Materials Chemistry A*, **2019**, 7, 15969-15974	13	89
384	Artificial Solid Electrolyte Interphase for Suppressing Surface Reactions and Cathode Dissolution in Aqueous Zinc Ion Batteries. *ACS Energy Letters*, **2019**, 4, 2776-2781	20.1	89
383	2D Organic–Inorganic Hybrid Thin Films for Flexible UV–Visible Photodetectors. *Advanced Functional Materials*, **2017**, 27, 1605554	15.6	87
382	All conducting polymer electrodes for asymmetric solid-state supercapacitors. *Journal of Materials Chemistry A*, **2015**, 3, 7368-7374	13	87
381	Electrochemical Energy Storage Devices Using Electrodes Incorporating Carbon Nanocoils and Metal Oxides Nanoparticles. *Journal of Physical Chemistry C*, **2011**, 115, 14392-14399	3.8	86
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379	General synthesis of single-atom catalysts with high metal loading using graphene quantum dots. *Nature Chemistry*, **2021**, 13, 887-894	17.6	86
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377	MXene based self-assembled cathode and antifouling separator for high-rate and dendrite-inhibited Li–S battery. *Nano Energy*, **2019**, 61, 478-485	17.1	85
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374	Morphology-Dependent Enhancement of the Pseudocapacitance of Template-Guided Tunable Polyaniline Nanostructures. *Journal of Physical Chemistry C*, **2013**, 117, 15009-15019	3.8	81
373	Conducting polymer/carbon nanocoil composite electrodes for efficient supercapacitors. *Journal of Materials Chemistry*, **2012**, 22, 5177		81
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368	Direct Writing of Additive-Free MXene-in-Water Ink for Electronics and Energy Storage. *Advanced Materials Technologies*, **2019**, 4, 1800256	6.8	78
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361	Microfabricated Pseudocapacitors Using Ni(OH)2 Electrodes Exhibit Remarkable Volumetric Capacitance and Energy Density. *Advanced Energy Materials*, **2015**, 5, 1401303	21.8	72
360	MXenes for Rechargeable Batteries Beyond the Lithium-Ion. *Advanced Materials*, **2021**, 33, e2004039	24	71
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358	MXene-conducting polymer electrochromic microsupercapacitors. *Energy Storage Materials*, **2019**, 20, 455-461	19.4	69
357	Solution synthesis of VSe2 nanosheets and their alkali metal ion storage performance. *Nano Energy*, **2018**, 53, 11-16	17.1	69

356	Highly Stable Aqueous Zinc-Ion Storage Using a Layered Calcium Vanadium Oxide Bronze Cathode. *Angewandte Chemie*, **2018**, 130, 4007-4012	3.6	68
355	Partially Reduced Holey Graphene Oxide as High Performance Anode for Sodium-Ion Batteries. *Advanced Energy Materials*, **2019**, 9, 1803215	21.8	68
354	Mechanistic Insight into the Stability of HfO2 -Coated MoS2 Nanosheet Anodes for Sodium Ion Batteries. *Small*, **2015**, 11, 4341-50	11	67
353	Hybrid Microsupercapacitors with Vertically Scaled 3D Current Collectors Fabricated using a Simple Cut-and-Transfer Strategy. *Advanced Energy Materials*, **2017**, 7, 1601257	21.8	65
352	Polyoxometalate-Cyclodextrin Metal-Organic Frameworks: From Tunable Structure to Customized Storage Functionality. *Journal of the American Chemical Society*, **2019**, 141, 1847-1851	16.4	65
351	Tuning the Electrochemical Performance of Titanium Carbide MXene by Controllable In Situ Anodic Oxidation. *Angewandte Chemie - International Edition*, **2019**, 58, 17849-17855	16.4	64
350	On-Chip MXene Microsupercapacitors for AC-Line Filtering Applications. *Advanced Energy Materials*, **2019**, 9, 1901061	21.8	64
349	A general strategy for the fabrication of high performance microsupercapacitors. *Nano Energy*, **2015**, 16, 1-9	17.1	63
348	SnO2 anode surface passivation by atomic layer deposited HfO2 improves Li-ion battery performance. *Small*, **2014**, 10, 2849-58	11	63
347	Molecular-Scale Interfacial Model for Predicting Electrode Performance in Rechargeable Batteries. *ACS Energy Letters*, **2019**, 4, 1584-1593	20.1	61
346	Highly Doped 3D Graphene Na-Ion Battery Anode by Laser Scribing Polyimide Films in Nitrogen Ambient. *Advanced Energy Materials*, **2018**, 8, 1800353	21.8	61
345	Highly Stable Phosphonate-Based MOFs with Engineered Bandgaps for Efficient Photocatalytic Hydrogen Production. *Advanced Materials*, **2020**, 32, e1906368	24	60
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332	Model-Based Design of Graphite-Compatible Electrolytes in Potassium-Ion Batteries. *ACS Energy Letters*, **2020**, 5, 2651-2661	20.1	49
331	MXene Derived Metal-Organic Frameworks. *Journal of the American Chemical Society*, **2019**, 141, 20037-20042	2004	49
330	Electrolyte-Mediated Stabilization of High-Capacity Micro-Sized Antimony Anodes for Potassium-Ion Batteries. *Advanced Materials*, **2021**, 33, e2005993	24	48
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315	Enhancement of p-type mobility in tin monoxide by native defects. *Applied Physics Letters*, **2013**, 102, 212105	3.4	42
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313	Micro-Pseudocapacitors with Electroactive Polymer Electrodes: Toward AC-Line Filtering Applications. *ACS Applied Materials & Interfaces*, **2016**, 8, 12748-55	9.5	42
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