

Husam Niman Alshareef

List of Publications by Year in Descending Order

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The third column is the impact factor (IF) of the journal, and the fourth column is the number of citations of the article.

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

#	Paper	IF	Citations
481	MXenes for Energy Harvesting.. <i>Advanced Materials</i> , 2022 , e2108560	24	13
480	Preferred Orientation of TiN Coatings Enables Stable Zinc Anodes. <i>ACS Energy Letters</i> , 2022 , 7, 197-203	20.1	13
479	Additive-mediated intercalation and surface modification of MXenes.. <i>Chemical Society Reviews</i> , 2022 ,	58.5	9
478	Co-Solvent Electrolyte Engineering for Stable Anode-Free Zinc Metal Batteries.. <i>Journal of the American Chemical Society</i> , 2022 ,	16.4	24
477	Regulating the redox reversibility of zinc anode toward stable aqueous zinc batteries. <i>Nano Energy</i> , 2022 , 107331	17.1	2
476	Memristive technologies for data storage, computation, encryption, and radio-frequency communication. <i>Science</i> , 2022 , 376,	33.3	24
475	High-Capacity NH Charge Storage in Covalent Organic Frameworks. <i>Journal of the American Chemical Society</i> , 2021 , 143, 19178-19186	16.4	21
474	Lattice Orientation Heredity in the Transformation of 2D Epitaxial Films. <i>Advanced Materials</i> , 2021 , e2105490	19.0	1
473	The development of integrated circuits based on two-dimensional materials. <i>Nature Electronics</i> , 2021 , 4, 775-785	28.4	26
472	Controlled Deposition of Zinc-Metal Anodes via Selectively Polarized Ferroelectric Polymers. <i>Advanced Materials</i> , 2021 , e2106937	24	19
471	Growth of Two-Dimensional Materials at the Wafer Scale. <i>Advanced Materials</i> , 2021 , e2108258	24	9
470	Lignin Derived Porous Carbons: Synthesis Methods and Supercapacitor Applications.. <i>Small Methods</i> , 2021 , 5, e2100896	12.8	10
469	Muscle Fatigue Sensor Based on Ti C T MXene Hydrogel.. <i>Small Methods</i> , 2021 , 5, e2100819	12.8	5
468	High-Yield Ti C T MXene-MoS Integrated Circuits. <i>Advanced Materials</i> , 2021 , e2107370	24	4
467	Direct and continuous generation of pure acetic acid solutions via electrocatalytic carbon monoxide reduction. <i>Proceedings of the National Academy of Sciences of the United States of America</i> , 2021 , 118,	11.5	24
466	Engineering Band-Type Alignment in CsPbBr Perovskite-Based Artificial Multiple Quantum Wells. <i>Advanced Materials</i> , 2021 , 33, e2005166	24	1
465	Tungsten Blue Oxide as a Reusable Electrocatalyst for Acidic Water Oxidation by Plasma-Induced Vacancy Engineering. <i>CCS Chemistry</i> , 2021 , 3, 1553-1561	7.2	8

464	Giant Ferroelectric Resistance Switching Controlled by a Modulatory Terminal for Low-Power Neuromorphic In-Memory Computing. <i>Advanced Materials</i> , 2021 , 33, e2008709	24	20
463	Dopant-Assisted Matrix Stabilization Enables Thermoelectric Performance Enhancement in n-Type Quantum Dot Films. <i>ACS Applied Materials & Interfaces</i> , 2021 , 13, 18999-19007	9.5	0
462	Covalent Assembly of Two-Dimensional COF-on-MXene Heterostructures Enables Fast Charging Lithium Hosts. <i>Advanced Functional Materials</i> , 2021 , 31, 2101194	15.6	16
461	Electrochemical Zinc Ion Capacitors: Fundamentals, Materials, and Systems. <i>Advanced Energy Materials</i> , 2021 , 11, 2100201	21.8	37
460	Ferroelectric Switching: Giant Ferroelectric Resistance Switching Controlled by a Modulatory Terminal for Low-Power Neuromorphic In-Memory Computing (Adv. Mater. 21/2021). <i>Advanced Materials</i> , 2021 , 33, 2170167	24	1
459	Status of rechargeable potassium batteries. <i>Nano Energy</i> , 2021 , 83, 105792	17.1	37
458	Fly Ash Carbon Anodes for Alkali Metal-Ion Batteries. <i>ACS Applied Materials & Interfaces</i> , 2021 , 13, 26421-26430	9.5	3
457	General synthesis of single-atom catalysts with high metal loading using graphene quantum dots. <i>Nature Chemistry</i> , 2021 , 13, 887-894	17.6	86
456	A Cyclized Polyacrylonitrile Anode for Alkali Metal Ion Batteries. <i>Angewandte Chemie - International Edition</i> , 2021 , 60, 1355-1363	16.4	16
455	A Cyclized Polyacrylonitrile Anode for Alkali Metal Ion Batteries. <i>Angewandte Chemie</i> , 2021 , 133, 1375-1383	16.3	2
454	Electrochemical multi-analyte point-of-care perspiration sensors using on-chip three-dimensional graphene electrodes. <i>Analytical and Bioanalytical Chemistry</i> , 2021 , 413, 763-777	4.4	19
453	MXenes for Rechargeable Batteries Beyond the Lithium-Ion. <i>Advanced Materials</i> , 2021 , 33, e2004039	24	71
452	Unraveling the New Role of an Ethylene Carbonate Solvation Shell in Rechargeable Metal Ion Batteries. <i>ACS Energy Letters</i> , 2021 , 6, 69-78	20.1	41
451	Opportunities of Aqueous Manganese-Based Batteries with Deposition and Stripping Chemistry. <i>Advanced Energy Materials</i> , 2021 , 11, 2002904	21.8	37
450	An unconventional full dual-cation battery. <i>Nano Energy</i> , 2021 , 81, 105539	17.1	7
449	TiCT MXene-Activated Fast Gelation of Stretchable and Self-Healing Hydrogels: A Molecular Approach. <i>ACS Nano</i> , 2021 , 15, 2698-2706	16.7	52
448	An Anode-Free Zn-MnO Battery. <i>Nano Letters</i> , 2021 , 21, 1446-1453	11.5	35
447	Electrolyte-Mediated Stabilization of High-Capacity Micro-Sized Antimony Anodes for Potassium-Ion Batteries. <i>Advanced Materials</i> , 2021 , 33, e2005993	24	48

446	Berry Phase Engineering in SrRuO/SrIrO/SrTiO Superlattices Induced by Band Structure Reconstruction. <i>ACS Nano</i> , 2021 , 15, 5086-5095	16.7	5
445	All-Solution-Processed Quantum Dot Electrical Double-Layer Transistors Enhanced by Surface Charges of TiCT MXene Contacts. <i>ACS Nano</i> , 2021 , 15, 5221-5229	16.7	12
444	Marinite Li ₂ Ni(SO ₄) ₂ as a New Member of the Bisulfate Family of High-Voltage Lithium Battery Cathodes. <i>Chemistry of Materials</i> , 2021 , 33, 6108-6119	9.6	2
443	MXenes for Optoelectronic Devices. <i>Advanced Electronic Materials</i> , 2021 , 7, 2100295	6.4	15
442	Chiral Helimagnetism and One-Dimensional Magnetic Solitons in a Cr-Intercalated Transition Metal Dichalcogenide. <i>Advanced Materials</i> , 2021 , 33, e2101131	24	9
441	Hierarchically structured Ti ₃ C ₂ T _x MXene paper for Li-S batteries with high volumetric capacity. <i>Nano Energy</i> , 2021 , 86, 106120	17.1	26
440	Molecular Engineering of Covalent Organic Framework Cathodes for Enhanced Zinc-Ion Batteries. <i>Advanced Materials</i> , 2021 , 33, e2103617	24	31
439	Zincophilic Laser-Scribed Graphene Interlayer for Homogeneous Zinc Deposition and Stable Zinc-Ion Batteries. <i>Energy Technology</i> , 2021 , 9, 2100490	3.5	5
438	Status and Prospects of Laser-Induced Graphene for Battery Applications. <i>Energy Technology</i> , 2021 , 9, 2100454	3.5	2
437	Two-Dimensional TiO ₂ /TiS ₂ Hybrid Nanosheet Anodes for High-Rate Sodium-Ion Batteries. <i>ACS Applied Energy Materials</i> , 2021 , 4, 8721-8727	6.1	2
436	Rational design of carbon anodes by catalytic pyrolysis of graphitic carbon nitride for efficient storage of Na and K mobile ions. <i>Nano Energy</i> , 2021 , 87, 106184	17.1	10
435	Accordion-Like Carbon with High Nitrogen Doping for Fast and Stable K Ion Storage. <i>Advanced Energy Materials</i> , 2021 , 11, 2101928	21.8	19
434	Laser-scribed graphene sensor based on gold nanostructures and molecularly imprinted polymers: Application for Her-2 cancer biomarker detection. <i>Sensors and Actuators B: Chemical</i> , 2021 , 347, 130556	8.5	8
433	Selective Toluene Detection with MoCT MXene at Room Temperature. <i>ACS Applied Materials & Interfaces</i> , 2020 , 12, 57218-57227	9.5	28
432	All-Carbon Hybrid Mobile Ion Capacitors Enabled by 3D Laser-Scribed Graphene. <i>Energy Technology</i> , 2020 , 8, 2000193	3.5	2
431	Direct Pyrolysis of Supramolecules: An Ultrahigh Edge-Nitrogen Doping Strategy of Carbon Anodes for Potassium-Ion Batteries. <i>Advanced Materials</i> , 2020 , 32, e2000732	24	78
430	Photothermoelectric Response of TiCT MXene Confined Ion Channels. <i>ACS Nano</i> , 2020 , 14, 9042-9049	16.7	25
429	Phenanthroline Covalent Organic Framework Electrodes for High-Performance Zinc-Ion Supercapattery. <i>ACS Energy Letters</i> , 2020 , 5, 2256-2264	20.1	74

428	Codoped Holey Graphene Aerogel by Selective Etching for High-Performance Sodium-Ion Storage. <i>Advanced Energy Materials</i> , 2020 , 10, 2000099	21.8	29
427	Carbon Nanotubes Coupled with Metal Ion Diffusion Layers Stabilize Oxide Conversion Reactions in High-Voltage Lithium-Ion Batteries. <i>ACS Applied Materials & Interfaces</i> , 2020 , 12, 16276-16285	9.5	9
426	Unprecedented Surface Plasmon Modes in Monoclinic MoO Nanostructures. <i>Advanced Materials</i> , 2020 , 32, e1908392	24	12
425	MXene Printing and Patterned Coating for Device Applications. <i>Advanced Materials</i> , 2020 , 32, e1908486	24	116
424	Photoluminescent Ferroelectric LiNbO ₃ Crystals Grown from MXenes. <i>Advanced Functional Materials</i> , 2020 , 30, 1909843	15.6	6
423	Highly Stable Phosphonate-Based MOFs with Engineered Bandgaps for Efficient Photocatalytic Hydrogen Production. <i>Advanced Materials</i> , 2020 , 32, e1906368	24	60
422	Single-Crystal Hybrid Perovskite Platelets on Graphene: A Mixed-Dimensional Van Der Waals Heterostructure with Strong Interface Coupling. <i>Advanced Functional Materials</i> , 2020 , 30, 1909672	15.6	22
421	Ultrasound-Driven Two-Dimensional TiCT MXene Hydrogel Generator. <i>ACS Nano</i> , 2020 , 14, 3199-3207	16.7	43
420	Fully Integrated Indium Gallium Zinc Oxide NO Gas Detector. <i>ACS Sensors</i> , 2020 , 5, 984-993	9.2	45
419	Electrolyte Engineering Enables High Stability and Capacity Alloying Anodes for Sodium and Potassium Ion Batteries. <i>ACS Energy Letters</i> , 2020 , 5, 766-776	20.1	91
418	An Empirical Model for the Design of Batteries with High Energy Density. <i>ACS Energy Letters</i> , 2020 , 5, 807-816	20.1	52
417	Synthesis Strategies of Porous Carbon for Supercapacitor Applications. <i>Small Methods</i> , 2020 , 4, 1900853	12.8	161
416	A Site-Selective Doping Strategy of Carbon Anodes with Remarkable K-Ion Storage Capacity. <i>Angewandte Chemie</i> , 2020 , 132, 4478-4485	3.6	26
415	Review of MXene electrochemical microsupercapacitors. <i>Energy Storage Materials</i> , 2020 , 27, 78-95	19.4	105
414	Enhanced Quality of Wafer-Scale MoS ₂ Films by a Capping Layer Annealing Process. <i>Advanced Functional Materials</i> , 2020 , 30, 1908040	15.6	9
413	Fully Transparent Transceiver Using Single Binary Oxide Thin Film Transistors. <i>Advanced Electronic Materials</i> , 2020 , 6, 1901083	6.4	3
412	Electropolymerization growth of an ultrathin, compact, conductive and microporous (UCCM) polycarbazole membrane for high energy LiS batteries. <i>Nano Energy</i> , 2020 , 73, 104769	17.1	15
411	A Hierarchical Three-Dimensional Porous Laser-Scribed Graphene Film for Suppressing Polysulfide Shuttling in Lithium-Sulfur Batteries. <i>ACS Applied Materials & Interfaces</i> , 2020 , 12, 18833-18839	9.5	22

410	Role of acid mixtures etching on the surface chemistry and sodium ion storage in TiCT MXene. <i>Chemical Communications</i> , 2020 , 56, 6090-6093	5.8	29
409	Engineering Sodium-Ion Solvation Structure to Stabilize Sodium Anodes: Universal Strategy for Fast-Charging and Safer Sodium-Ion Batteries. <i>Nano Letters</i> , 2020 , 20, 3247-3254	11.5	41
408	Inkjet-printed Ti3C2Tx MXene electrodes for multimodal cutaneous biosensing. <i>JPhys Materials</i> , 2020 , 3, 044004	4.2	10
407	Nanohybrid thin-film composite carbon molecular sieve membranes. <i>Materials Today Nano</i> , 2020 , 9, 100065	9.5	12
406	A Site-Selective Doping Strategy of Carbon Anodes with Remarkable K-Ion Storage Capacity. <i>Angewandte Chemie - International Edition</i> , 2020 , 59, 4448-4455	16.4	86
405	Made-to-order porous electrodes for supercapacitors: MOFs embedded with redox-active centers as a case study. <i>Chemical Communications</i> , 2020 , 56, 1883-1886	5.8	19
404	MXetronics: MXene-Enabled Electronic and Photonic Devices 2020 , 2, 55-70		78
403	Laser scribed graphene: A novel platform for highly sensitive detection of electroactive biomolecules. <i>Biosensors and Bioelectronics</i> , 2020 , 168, 112509	11.8	18
402	Electrochemical sensors and biosensors using laser-derived graphene: A comprehensive review. <i>Biosensors and Bioelectronics</i> , 2020 , 168, 112565	11.8	47
401	Hydrated Mg _x V ₅ O ₁₂ Cathode with Improved Mg ²⁺ Storage Performance. <i>Advanced Energy Materials</i> , 2020 , 10, 2002128	21.8	13
400	Titanium Carbide MXene Nucleation Layer for Epitaxial Growth of High-Quality GaN Nanowires on Amorphous Substrates. <i>ACS Nano</i> , 2020 , 14, 2202-2211	16.7	5
399	Large-Area Pulsed Laser Deposited Molybdenum Diselenide Heterojunction Photodiodes. <i>ACS Applied Materials & Interfaces</i> , 2020 , 12, 51645-51653	9.5	4
398	A Highly Conductive Conjugated Polyelectrolyte for Flexible Organic Thermoelectrics. <i>ACS Applied Energy Materials</i> , 2020 , 3, 8667-8675	6.1	5
397	Model-Based Design of Graphite-Compatible Electrolytes in Potassium-Ion Batteries. <i>ACS Energy Letters</i> , 2020 , 5, 2651-2661	20.1	49
396	Electrochemical Zinc Ion Capacitors Enhanced by Redox Reactions of Porous Carbon Cathodes. <i>Advanced Energy Materials</i> , 2020 , 10, 2001705	21.8	75
395	Fluorophosphates: Next Generation Cathode Materials for Rechargeable Batteries. <i>Advanced Energy Materials</i> , 2020 , 10, 2001449	21.8	19
394	Iontronics Using VCT MXene-Derived Metal-Organic Framework Solid Electrolytes. <i>ACS Nano</i> , 2020 , 14, 9840-9847	16.7	10
393	Autonomous MXene-PVDF actuator for flexible solar trackers. <i>Nano Energy</i> , 2020 , 77, 105277	17.1	12

392	Efficient Na-Ion Storage in 2D TiS ₂ Formed by a Vapor Phase Anion-Exchange Process. <i>Small Methods</i> , 2020 , 4, 2000439	12.8	6
391	Covalent Organic Frameworks as Negative Electrodes for High-Performance Asymmetric Supercapacitors. <i>Advanced Energy Materials</i> , 2020 , 10, 2001673	21.8	41
390	Model-Based Design of Stable Electrolytes for Potassium Ion Batteries. <i>ACS Energy Letters</i> , 2020 , 5, 3124-3131	3.1	32
389	Anisotropic Growth of Al-Intercalated Vanadate by Tuning Surface Hydrophilicity for High-Rate Zn-Ion Storage. <i>Small Structures</i> , 2020 , 1, 2000040	8.7	23
388	MXene hydrogels: fundamentals and applications. <i>Chemical Society Reviews</i> , 2020 , 49, 7229-7251	58.5	135
387	Thermoelectric properties of oil fly ash-derived carbon nanotubes coated with polypyrrole. <i>Journal of Applied Physics</i> , 2020 , 128, 235104	2.5	1
386	New Opportunities for Functional Materials from Metal Phosphonates 2020 , 2, 582-594		18
385	Synthesis and electrochemical properties of 2D molybdenum vanadium carbides (solid solution MXenes). <i>Journal of Materials Chemistry A</i> , 2020 , 8, 8957-8968	13	38
384	Self-Healing and Stretchable 3D-Printed Organic Thermoelectrics. <i>Advanced Functional Materials</i> , 2019 , 29, 1905426	15.6	72
383	Understanding Ostwald Ripening and Surface Charging Effects in Solvothermally-Prepared Metal Oxide/Carbon Anodes for High Performance Rechargeable Batteries. <i>Advanced Energy Materials</i> , 2019 , 9, 1902194	21.8	40
382	Tuning the Electrochemical Performance of Titanium Carbide MXene by Controllable In Situ Anodic Oxidation. <i>Angewandte Chemie</i> , 2019 , 131, 18013-18019	3.6	17
381	Tuning the Electrochemical Performance of Titanium Carbide MXene by Controllable In Situ Anodic Oxidation. <i>Angewandte Chemie - International Edition</i> , 2019 , 58, 17849-17855	16.4	64
380	Continuous production of pure liquid fuel solutions via electrocatalytic CO ₂ reduction using solid-electrolyte devices. <i>Nature Energy</i> , 2019 , 4, 776-785	62.3	226
379	MAPbI ₃ Single Crystals Free from Hole-Trapping Centers for Enhanced Photodetectivity. <i>ACS Energy Letters</i> , 2019 , 4, 2579-2584	20.1	28
378	3D Laser Scribed Graphene Derived from Carbon Nanospheres: An Ultrahigh-Power Electrode for Supercapacitors. <i>Small Methods</i> , 2019 , 3, 1900005	12.8	47
377	A novel strategy for the synthesis of highly stable ternary SiO _x composites for Li-ion-battery anodes. <i>Journal of Materials Chemistry A</i> , 2019 , 7, 15969-15974	13	89
376	Graphitic Nanocarbon with Engineered Defects for High-Performance Potassium-Ion Battery Anodes. <i>Advanced Functional Materials</i> , 2019 , 29, 1903641	15.6	128
375	MXenes for Plasmonic Photodetection. <i>Advanced Materials</i> , 2019 , 31, e1807658	24	90

374	Highly Passivated n-Type Colloidal Quantum Dots for Solution-Processed Thermoelectric Generators with Large Output Voltage. <i>Advanced Energy Materials</i> , 2019 , 9, 1901244	21.8	9
373	Molecular-Scale Interfacial Model for Predicting Electrode Performance in Rechargeable Batteries. <i>ACS Energy Letters</i> , 2019 , 4, 1584-1593	20.1	61
372	On-Chip MXene Microsupercapacitors for AC-Line Filtering Applications. <i>Advanced Energy Materials</i> , 2019 , 9, 1901061	21.8	64
371	Solar Cells: MXene-Contacted Silicon Solar Cells with 11.5% Efficiency (Adv. Energy Mater. 22/2019). <i>Advanced Energy Materials</i> , 2019 , 9, 1970083	21.8	3
370	Porous MXenes enable high performance potassium ion capacitors. <i>Nano Energy</i> , 2019 , 62, 853-860	17.1	115
369	Solid state MXene based electrostatic fractional capacitors. <i>Applied Physics Letters</i> , 2019 , 114, 232903	3.4	10
368	Wettability-Driven Assembly of Electrochemical Microsupercapacitors. <i>ACS Applied Materials & Interfaces</i> , 2019 , 11, 20905-20914	9.5	24
367	High-Performance Monolayer MoS ₂ Films at the Wafer Scale by Two-Step Growth. <i>Advanced Functional Materials</i> , 2019 , 29, 1901070	15.6	24
366	MXene-Contacted Silicon Solar Cells with 11.5% Efficiency. <i>Advanced Energy Materials</i> , 2019 , 9, 1900180	21.8	117
365	Integration of Electrochemical Microsupercapacitors with Thin Film Electronics for On-Chip Energy Storage. <i>Advanced Materials</i> , 2019 , 31, e1807450	24	20
364	MXene based self-assembled cathode and antifouling separator for high-rate and dendrite-inhibited LiB battery. <i>Nano Energy</i> , 2019 , 61, 478-485	17.1	85
363	Aqueous Zinc-Ion Storage in MoS by Tuning the Intercalation Energy. <i>Nano Letters</i> , 2019 , 19, 3199-3206	11.5	223
362	MXene-conducting polymer electrochromic microsupercapacitors. <i>Energy Storage Materials</i> , 2019 , 20, 455-461	19.4	69
361	Energy Harvesting-Storage Bracelet Incorporating Electrochemical Microsupercapacitors Self-Charged from a Single Hand Gesture. <i>Advanced Energy Materials</i> , 2019 , 9, 1900152	21.8	30
360	MXetronics: Electronic and photonic applications of MXenes. <i>Nano Energy</i> , 2019 , 60, 179-197	17.1	128
359	A MXene-Based Wearable Biosensor System for High-Performance In Vitro Perspiration Analysis. <i>Small</i> , 2019 , 15, e1901190	11	157
358	Highly Stretchable and Air-Stable PEDOT:PSS/Ionic Liquid Composites for Efficient Organic Thermoelectrics. <i>Chemistry of Materials</i> , 2019 , 31, 3519-3526	9.6	51
357	Conductive Metal-Organic Frameworks Selectively Grown on Laser-Scribed Graphene for Electrochemical Microsupercapacitors. <i>Advanced Energy Materials</i> , 2019 , 9, 1900482	21.8	104

356	Ferroelectrics: MXene-Derived Ferroelectric Crystals (Adv. Mater. 14/2019). <i>Advanced Materials</i> , 2019 , 31, 1970102	24	1
355	A 0D Lead-Free Hybrid Crystal with Ultralow Thermal Conductivity. <i>Advanced Functional Materials</i> , 2019 , 29, 1809166	15.6	23
354	2D Optoelectronics: High-Performance Monolayer MoS ₂ Films at the Wafer Scale by Two-Step Growth (Adv. Funct. Mater. 32/2019). <i>Advanced Functional Materials</i> , 2019 , 29, 1970224	15.6	1
353	Metal Halide Perovskite and Phosphorus Doped g-C ₃ N ₄ Bulk Heterojunctions for Air-Stable Photodetectors. <i>ACS Energy Letters</i> , 2019 , 4, 2315-2322	20.1	23
352	Heterostructured MXene and g-C ₃ N ₄ for high-rate lithium intercalation. <i>Nano Energy</i> , 2019 , 65, 104030	17.1	37
351	Photo-carrier extraction by triboelectricity for carrier transport layer-free photodetectors. <i>Nano Energy</i> , 2019 , 65, 103958	17.1	13
350	Photo-assisted electrochemical hydrogen evolution by plasmonic Ag nanoparticle/nanorod heterogeneity. <i>Information Materials</i> , 2019 , 1, 417-425	23.1	44
349	Enhancement of Dielectric Permittivity of TiCT MXene/Polymer Composites by Controlling Flake Size and Surface Termination. <i>ACS Applied Materials & Interfaces</i> , 2019 , 11, 27358-27362	9.5	36
348	Two-Dimensional TiCT MXene Membranes as Nanofluidic Osmotic Power Generators. <i>ACS Nano</i> , 2019 , 13, 8917-8925	16.7	117
347	Sodium-ion battery anodes: Status and future trends. <i>EnergyChem</i> , 2019 , 1, 100012	36.9	116
346	Artificial Solid Electrolyte Interphase for Suppressing Surface Reactions and Cathode Dissolution in Aqueous Zinc Ion Batteries. <i>ACS Energy Letters</i> , 2019 , 4, 2776-2781	20.1	89
345	Heteroatom-Mediated Interactions between Ruthenium Single Atoms and an MXene Support for Efficient Hydrogen Evolution. <i>Advanced Materials</i> , 2019 , 31, e1903841	24	197
344	All-Oxide Thin Film Transistors and Rectifiers Enabling On-Chip Capacitive Energy Storage. <i>Advanced Electronic Materials</i> , 2019 , 5, 1900531	6.4	2
343	New Insight on the Role of Electrolyte Additives in Rechargeable Lithium Ion Batteries. <i>ACS Energy Letters</i> , 2019 , 4, 2613-2622	20.1	90
342	MXene-Derived Ferroelectric Crystals. <i>Advanced Materials</i> , 2019 , 31, e1806860	24	26
341	Low-Temperature-Processed Colloidal Quantum Dots as Building Blocks for Thermoelectrics. <i>Advanced Energy Materials</i> , 2019 , 9, 1803049	21.8	11
340	KAUSTat: A Wireless, Wearable, Open-Source Potentiostat for Electrochemical Measurements 2019 , ,		4
339	MXene Derived Metal-Organic Frameworks. <i>Journal of the American Chemical Society</i> , 2019 , 141, 20037-20042	20.4	49

338	Direct Writing of Additive-Free MXene-in-Water Ink for Electronics and Energy Storage. <i>Advanced Materials Technologies</i> , 2019 , 4, 1800256	6.8	78
337	Partially Reduced Holey Graphene Oxide as High Performance Anode for Sodium-Ion Batteries. <i>Advanced Energy Materials</i> , 2019 , 9, 1803215	21.8	68
336	Laser-derived graphene: A three-dimensional printed graphene electrode and its emerging applications. <i>Nano Today</i> , 2019 , 24, 81-102	17.9	86
335	Polyoxometalate-Cyclodextrin Metal-Organic Frameworks: From Tunable Structure to Customized Storage Functionality. <i>Journal of the American Chemical Society</i> , 2019 , 141, 1847-1851	16.4	65
334	Solubility contrast strategy for enhancing intercalation pseudocapacitance in layered MnO ₂ electrodes. <i>Nano Energy</i> , 2019 , 56, 357-364	17.1	27
333	Zinc-ion batteries: Materials, mechanisms, and applications. <i>Materials Science and Engineering Reports</i> , 2019 , 135, 58-84	30.9	355
332	Wafer scale quasi single crystalline MoS ₂ realized by epitaxial phase conversion. <i>2D Materials</i> , 2019 , 6, 015030	5.9	20
331	UV-Induced Ferroelectric Phase Transformation in PVDF Thin Films. <i>Advanced Electronic Materials</i> , 2019 , 5, 1800363	6.4	12
330	P-Type SnO Thin Film Phototransistor with Perovskite-Mediated Photogating. <i>Advanced Electronic Materials</i> , 2019 , 5, 1800538	6.4	34
329	Oxide Thin-Film Electronics using All-MXene Electrical Contacts. <i>Advanced Materials</i> , 2018 , 30, e1706656	24	113
328	Stable and low contact resistance electrical contacts for high temperature SiGe thermoelectric generators. <i>Scripta Materialia</i> , 2018 , 152, 36-39	5.6	7
327	Phosphine plasma activation of Fe ₂ O ₃ for high energy asymmetric supercapacitors. <i>Nano Energy</i> , 2018 , 49, 155-162	17.1	123
326	Large Dielectric Constant Enhancement in MXene Percolative Polymer Composites. <i>ACS Nano</i> , 2018 , 12, 3369-3377	16.7	181
325	Titelbild: Highly Stable Aqueous Zinc-Ion Storage Using a Layered Calcium Vanadium Oxide Bronze Cathode (Angew. Chem. 15/2018). <i>Angewandte Chemie</i> , 2018 , 130, 3899-3899	3.6	1
324	Thin-Film Electronics: Oxide Thin-Film Electronics using All-MXene Electrical Contacts (Adv. Mater. 15/2018). <i>Advanced Materials</i> , 2018 , 30, 1870103	24	
323	Highly Stable Aqueous Zinc-Ion Storage Using a Layered Calcium Vanadium Oxide Bronze Cathode. <i>Angewandte Chemie</i> , 2018 , 130, 4007-4012	3.6	68
322	Intercorrelated In-Plane and Out-of-Plane Ferroelectricity in Ultrathin Two-Dimensional Layered Semiconductor InSe. <i>Nano Letters</i> , 2018 , 18, 1253-1258	11.5	293
321	Anomalous Li Storage Capability in Atomically Thin Two-Dimensional Sheets of Nonlayered MoO ₃ . <i>Nano Letters</i> , 2018 , 18, 1506-1515	11.5	43

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3 ¹⁹	All Pseudocapacitive MXene-RuO ₂ Asymmetric Supercapacitors. <i>Advanced Energy Materials</i> , 2018 , 8, 1703043	21.8	459
3 ¹⁸	A Self-Powered and Flexible Organometallic Halide Perovskite Photodetector with Very High Detectivity. <i>Advanced Materials</i> , 2018 , 30, 1704611	24	245
3 ¹⁷	MXene electrochemical microsupercapacitor integrated with triboelectric nanogenerator as a wearable self-charging power unit. <i>Nano Energy</i> , 2018 , 45, 266-272	17.1	236
3 ¹⁶	Low-Temperature Deposition of Layered SnSe ₂ for Heterojunction Diodes. <i>Advanced Materials Interfaces</i> , 2018 , 5, 1800128	4.6	10
3 ¹⁵	Tunable Multipolar Surface Plasmons in 2D TiC T MXene Flakes. <i>ACS Nano</i> , 2018 , 12, 8485-8493	16.7	105
3 ¹⁴	Atomic-layer-deposited AZO outperforms ITO in high-efficiency polymer solar cells. <i>Journal of Materials Chemistry A</i> , 2018 , 6, 10176-10183	13	23
3 ¹³	Solution synthesis of VSe ₂ nanosheets and their alkali metal ion storage performance. <i>Nano Energy</i> , 2018 , 53, 11-16	17.1	69
3 ¹²	Applications of Plasma in Energy Conversion and Storage Materials. <i>Advanced Energy Materials</i> , 2018 , 8, 1801804	21.8	47
3 ¹¹	Bistacked Titanium Carbide (MXene) Anodes for Hybrid Sodium-Ion Capacitors. <i>ACS Energy Letters</i> , 2018 , 3, 2094-2100	20.1	103
3 ¹⁰	Lignin Laser Lithography: A Direct-Write Method for Fabricating 3D Graphene Electrodes for Microsupercapacitors. <i>Advanced Energy Materials</i> , 2018 , 8, 1801840	21.8	111
3 ⁰⁹	MXenes stretch hydrogel sensor performance to new limits. <i>Science Advances</i> , 2018 , 4, eaat0098	14.3	334
3 ⁰⁸	Asymmetric Flexible MXene-Reduced Graphene Oxide Micro-Supercapacitor. <i>Advanced Electronic Materials</i> , 2018 , 4, 1700339	6.4	244
3 ⁰⁷	Rechargeable Aqueous Zinc-Ion Battery Based on Porous Framework Zinc Pyrovanadate Intercalation Cathode. <i>Advanced Materials</i> , 2018 , 30, 1705580	24	523
3 ⁰⁶	Orthorhombic Ti ₂ O ₃ : A Polymorph-Dependent Narrow-Bandgap Ferromagnetic Oxide. <i>Advanced Functional Materials</i> , 2018 , 28, 1705657	15.6	21
3 ⁰⁵	Multipolar Surface Plasmons in 2D Ti ₃ C ₂ T _x Flakes: an Ultra-High Resolution EELS with Conventional TEM and In-Situ Heating Study. <i>Microscopy and Microanalysis</i> , 2018 , 24, 1578-1579	0.5	3
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3 ⁰³	Optimizing thermal conduction in bulk polycrystalline SrTiO ₃ ceramics via oxygen non-stoichiometry. <i>MRS Communications</i> , 2018 , 8, 1470-1476	2.7	2

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