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Photoluminescent Ti C MXene Quantum Dots for Multicolor Cellular Imaging

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555	Top-Down Fabrication of Stable Methylammonium Lead Halide Perovskite Nanocrystals by Employing a Mixture of Ligands as Coordinating Solvents. 2017 , 56, 9571-9576		84
554	Top-Down Fabrication of Stable Methylammonium Lead Halide Perovskite Nanocrystals by Employing a Mixture of Ligands as Coordinating Solvents. 2017 , 129, 9699-9704		26
553	Recent advance in MXenes: A promising 2D material for catalysis, sensor and chemical adsorption. 2017 , 352, 306-327		315
552	Charge Transfer in Ultrafine LDH Nanosheets/Graphene Interface with Superior Capacitive Energy Storage Performance. 2017 , 9, 37645-37654		95
551	Room Temperature Gas Sensing of Two-Dimensional Titanium Carbide (MXene). 2017 , 9, 37184-37190		314
550	Theoretical prediction of MXene-like structured TiC as a high capacity electrode material for Na ion batteries. 2017 , 19, 29106-29113		33
549	Mn ₃ O ₄ nanoparticles on layer-structured Ti ₃ C ₂ MXene towards the oxygen reduction reaction and zinc-air batteries. 2017 , 5, 20818-20823		166
548	Hollow MXene Spheres and 3D Macroporous MXene Frameworks for Na-Ion Storage. <i>Advanced Materials</i> , 2017 , 29, 1702410	24	465
547	Metallic MXene Saturable Absorber for Femtosecond Mode-Locked Lasers. <i>Advanced Materials</i> , 2017 , 29, 1702496	24	295
546	Versatile Cutting Method for Producing Fluorescent Ultrasmall MXene Sheets. 2017 , 11, 11559-11565		90
545	Surface Modified TiC MXene Nanosheets for Tumor Targeting Photothermal/Photodynamic/Chemo Synergistic Therapy. 2017 , 9, 40077-40086		329
544	Flexible MXene/Graphene Films for Ultrafast Supercapacitors with Outstanding Volumetric Capacitance. 2017 , 27, 1701264		934
543	Oxygen-rich carbon-nitrogen quantum dots as cocatalysts for enhanced photocatalytic H ₂ production activity of TiO ₂ nanofibers. 2017 , 27, 333-337		14
542	A polyoxometalate-functionalized two-dimensional titanium carbide composite MXene for effective cancer theranostics. 2018 , 11, 4149-4168		75
541	Effect of glycine functionalization of 2D titanium carbide (MXene) on charge storage. 2018 , 6, 4617-4622		74
540	2D magnetic titanium carbide MXene for cancer theranostics. 2018 , 6, 3541-3548		63
539	Two-dimensional transition metal carbides and nitrides (MXenes) for biomedical applications. 2018 , 47, 5109-5124		450

538	2D/2D Heterojunction of Ultrathin MXene/Bi ₂ WO ₆ Nanosheets for Improved Photocatalytic CO ₂ Reduction. 2018 , 28, 1800136		757
537	Formation of quasi-core-shell In ₂ S ₃ /anatase TiO ₂ @metallic Ti ₃ C ₂ T _x hybrids with favorable charge transfer channels for excellent visible-light-photocatalytic performance. 2018 , 233, 213-225		211
536	Organic/inorganic hybrid perovskite quantum dots for light-emitting diodes. 2018 , 6, 4831-4841		49
535	Recent Advances in Layered Ti ₃ C ₂ T _x MXene for Electrochemical Energy Storage. 2018 , 14, e1703419		478
534	Two-dimensional titanium carbide (MXene)-based solid-state electrochemiluminescent sensor for label-free single-nucleotide mismatch discrimination in human urine. 2018 , 263, 400-407		68
533	Clay-Inspired MXene-Based Electrochemical Devices and Photo-Electrocatalyst: State-of-the-Art Progresses and Challenges. <i>Advanced Materials</i> , 2018 , 30, e1704561	24	301
532	Metallic Ti ₃ C ₂ T _x MXene Gas Sensors with Ultrahigh Signal-to-Noise Ratio. 2018 , 12, 986-993		664
531	Cutting-Edge Nanomaterials for Advanced Multimodal Bioimaging Applications. 2018 , 2, 1700265		21
530	Two-dimensional MXenes for energy storage. 2018 , 338, 27-45		170
529	Light-Emitting Transition Metal Dichalcogenide Monolayers under Cellular Digestion. <i>Advanced Materials</i> , 2018 , 30, 1703321	24	12
528	The synergetic effects of Ti ₃ C ₂ T _x MXene and Pt as co-catalysts for highly efficient photocatalytic hydrogen evolution over g-CN. 2018 , 20, 11405-11411		134
527	Ratiometric photoluminescence sensing based on Ti ₃ C ₂ T _x MXene quantum dots as an intracellular pH sensor. 2018 , 10, 1111-1118		168
526	Recent progress in two-dimensional inorganic quantum dots. 2018 , 47, 586-625		169
525	A Red-Phosphorous-Assisted Ball-Milling Synthesis of Few-Layered Ti ₃ C ₂ T _x (MXene) Nanodot Composite. 2018 , 4, 56-60		29
524	In Situ High-Pressure X-ray Diffraction and Raman Spectroscopy Study of Ti ₃ C ₂ T _x MXene. 2018 , 13, 343		28
523	Recent Progress of MXene-Based Nanomaterials in Flexible Energy Storage and Electronic Devices. 2018 , 1, 183-195		87
522	Research Update: Beyond graphene—Synthesis of functionalized quantum dots of 2D materials and their applications. 2018 , 6, 120701		6
521	Exploring the synergy of 2D MXene-supported black phosphorus quantum dots in hydrogen and oxygen evolution reactions. 2018 , 6, 21255-21260		100

520	Two-dimensional quantum dots: Fundamentals, photoluminescence mechanism and their energy and environmental applications. 2018 , 10, 222-240	58
519	Fluorescent TiC MXene quantum dots for an alkaline phosphatase assay and embryonic stem cell identification based on the inner filter effect. 2018 , 10, 19579-19585	68
518	Universal TiC MXenes Based Self-Standard Ratiometric Fluorescence Resonance Energy Transfer Platform for Highly Sensitive Detection of Exosomes. 2018 , 90, 12737-12744	156
517	Preparation of Ti3C2Tx MXene-Derived Quantum Dots with White/Blue-Emitting Photoluminescence and Electrochemiluminescence. 2018 , 6, 1800951	42
516	In situ formation of NaTi2(PO4)3 cubes on Ti3C2 MXene for dual-mode sodium storage. 2018 , 6, 18525-18532	36
515	Ultrathin MXene Nanosheets Decorated with TiO Quantum Dots as an Efficient Sulfur Host toward Fast and Stable Li-S Batteries. 2018 , 14, e1802443	89
514	High photoluminescence quantum yield of 18.7% by using nitrogen-doped Ti3C2 MXene quantum dots. 2018 , 6, 6360-6369	104
513	Facile synthesis of BCNO quantum dots with applications for ion detection, chemosensor and fingerprint identification. 2018 , 203, 214-221	18
512	MXene nanoribbons as electrocatalysts for the hydrogen evolution reaction with fast kinetics. 2018 , 20, 19390-19397	53
511	High-yield fabrication of TiCT MXene quantum dots and their electrochemiluminescence behavior. 2018 , 10, 14000-14004	56
510	Strong and biocompatible poly(lactic acid) membrane enhanced by Ti3C2Tz (MXene) nanosheets for Guided bone regeneration. 2018 , 229, 114-117	46
509	Insights into 2D MXenes for Versatile Biomedical Applications: Current Advances and Challenges Ahead. 2018 , 5, 1800518	245
508	Aggregation-Resistant 3D MXene-Based Architecture as Efficient Bifunctional Electrocatalyst for Overall Water Splitting. 2018 , 12, 8017-8028	258
507	Black Phosphorus Quantum Dot/Ti3C2 MXene Nanosheet Composites for Efficient Electrochemical Lithium/Sodium-Ion Storage. 2018 , 8, 1801514	170
506	MXene debris modified eggshell membrane as separator for high-performance lithium-sulfur batteries. 2018 , 352, 695-703	59
505	A hydrothermal etching route to synthesis of 2D MXene (Ti3C2, Nb2C): Enhanced exfoliation and improved adsorption performance. 2018 , 44, 18886-18893	145
504	Thick and freestanding MXene/PANI pseudocapacitive electrodes with ultrahigh specific capacitance. 2018 , 6, 22123-22133	151
503	Phospholipid-Tailored Titanium Carbide Nanosheets as a Novel Fluorescent Nanoprobe for Activity Assay and Imaging of Phospholipase D. 2018 , 90, 6742-6748	35

502	Modified MXene/Holey Graphene Films for Advanced Supercapacitor Electrodes with Superior Energy Storage. 2018 , 5, 1800750	216
501	Luminescent, low-toxic and stable gradient-alloyed Fe:ZnSe(S)@ZnSe(S) core:shell quantum dots as a sensitive fluorescent sensor for lead ions. 2018 , 29, 445602	16
500	Solvent-regulated preparation of well-intercalated TiCT MXene nanosheets and application for highly effective electromagnetic wave absorption. 2018 , 29, 355201	47
499	MXene: An emerging material for sensing and biosensing. 2018 , 105, 424-435	268
498	Molecular-level heterostructures assembled from layered black phosphorene and Ti3C2 MXene as superior anodes for high-performance sodium ion batteries. 2019 , 65, 104037	92
497	TiC MXene quantum dot-encapsulated liposomes for photothermal immunoassays using a portable near-infrared imaging camera on a smartphone. 2019 , 11, 15659-15667	104
496	Photothermal enhanced enzymatic activity of lipase covalently immobilized on functionalized Ti3C2TX nanosheets. 2019 , 378, 122205	26
495	Highly fluorescent TiC MXene quantum dots for macrophage labeling and Cu ion sensing. 2019 , 11, 14123-14133	32
494	Ti3C2Tx (MXene)-Silicon Heterojunction for Efficient Photovoltaic Cells. 2019 , 9, 1901063	46
493	TiC/CuO heterostructure based signal-off photoelectrochemical sensor for high sensitivity detection of glucose. 2019 , 142, 111535	44
492	Application of Ti C MXene Quantum Dots for Immunomodulation and Regenerative Medicine. 2019 , 8, e1900569	64
491	Boosting the Photocatalytic Ability of g-CN for Hydrogen Production by TiC MXene Quantum Dots. 2019 , 11, 41440-41447	150
490	The rationale and emergence of electroconductive biomaterial scaffolds in cardiac tissue engineering. 2019 , 3, 041501	47
489	CsPbBr Perovskite Nanocrystal Grown on MXene Nanosheets for Enhanced Photoelectric Detection and Photocatalytic CO Reduction. 2019 , 10, 6590-6597	155
488	Flexible TiCT/PEDOT:PSS films with outstanding volumetric capacitance for asymmetric supercapacitors. 2019 , 48, 1747-1756	69
487	Cytotoxicity Assessment of Ti-Al-C Based MAX Phases and TiCT MXenes on Human Fibroblasts and Cervical Cancer Cells. 2019 , 5, 6557-6569	32
486	Poly-L-lysine-protected TiC MXene quantum dots with high quantum yield for fluorometric determination of cytochrome c and trypsin. 2019 , 186, 770	32
485	Harnessing Photoluminescent Properties of Carbon Nitride Nanosheets in a Hierarchical Matrix. 2019 , 29, 1905576	19

484	Manipulation of the electrical behaviors of Cu/MXene/SiO ₂ /W memristor. 2019 , 12, 106504	9
483	Hollow-structured MXene-PDMS composites as flexible, wearable and highly bendable sensors with wide working range. 2019 , 555, 751-758	55
482	Facile Synthesis of TiCT-Poly(vinylpyrrolidone) Nanocomposites for Nonvolatile Memory Devices with Low Switching Voltage. 2019 , 11, 38061-38067	11
481	Plasma-modified TiCT/CdS hybrids with oxygen-containing groups for high-efficiency photocatalytic hydrogen production. 2019 , 11, 18797-18805	91
480	Full-color carbon dots with multiple red-emission tuning: on/off sensors, in vitro and in vivo multicolor bioimaging. 2019 , 54, 6815-6825	33
479	Highly sensitive, reliable and flexible piezoresistive pressure sensors featuring polyurethane sponge coated with MXene sheets. 2019 , 542, 54-62	134
478	Boosting the Yield of MXene 2D Sheets via a Facile Hydrothermal-Assisted Intercalation. 2019 , 11, 8443-8452	95
477	Engineered Exosome-Mediated Near-Infrared-II Region VC Quantum Dot Delivery for Nucleus-Target Low-Temperature Photothermal Therapy. 2019 , 13, 1499-1510	147
476	Ultrathin Ti ₃ C ₂ nanosheets based off-on fluorescent nanoprobe for rapid and sensitive detection of HPV infection. 2019 , 286, 222-229	58
475	Hydrochromic full-color MXene quantum dots through hydrogen bonding toward ultrahigh-efficiency white light-emitting diodes. 2019 , 16, 90-101	50
474	Plasmonic MXene-based nanocomposites exhibiting photothermal therapeutic effects with lower acute toxicity than pure MXene. 2019 , 14, 4529-4539	30
473	Horizontal Growth of Lithium on Parallely Aligned MXene Layers towards Dendrite-Free Metallic Lithium Anodes. <i>Advanced Materials</i> , 2019 , 31, e1901820	24 112
472	TiC Sheets with an Adjustable Surface and Feature Sizes to Regulate the Chemical Stability. 2019 , 58, 9397-9403	15
471	Facile preparation of sulfonic groups functionalized Mxenes for efficient removal of methylene blue. 2019 , 45, 17653-17661	74
470	Fluorine-free Ti ₃ C ₂ T _x as anode materials for Li-ion batteries. 2019 , 104, 106472	21
469	A New Memristor with 2D Ti C T MXene Flakes as an Artificial Bio-Synapse. 2019 , 15, e1900107	90
468	One-step hydrothermal synthesis of fluorescent MXene-like titanium carbonitride quantum dots. 2019 , 105, 151-157	24
467	Plasmonic Light Illumination Creates a Channel To Achieve Fast Degradation of TiCT Nanosheets. 2019 , 58, 7285-7294	17

466	Two-Dimensional Ti ₃ C ₂ TX/Polyaniline Nanocomposite from the Decoration of Small-Sized Graphene Nanosheets: Promoted Pseudocapacitive Electrode Performance for Supercapacitors. 2019 , 6, 2748-2754		14
465	Demonstration of a White Laser with V C MXene-Based Quantum Dots. <i>Advanced Materials</i> , 2019 , 31, e1901117	24	53
464	Alkali-induced 3D crinkled porous Ti ₃ C ₂ MXene architectures coupled with NiCoP bimetallic phosphide nanoparticles as anodes for high-performance sodium-ion batteries. 2019 , 12, 2422-2432		171
463	Ti ₃ C ₂ MXene quantum dots/TiO ₂ inverse opal heterojunction electrode platform for superior photoelectrochemical biosensing. 2019 , 289, 131-137		52
462	Tuning the Electrical Conductivity of Ti ₂ CO ₂ MXene by Varying the Layer Thickness and Applying Strains. 2019 , 123, 6802-6811		25
461	White Photoluminescent TiC MXene Quantum Dots with Two-Photon Fluorescence. 2019 , 6, 1801470		92
460	Tuning the photoluminescence of large Ti ₃ C ₂ Tx MXene flakes. 2019 , 45, 11468-11474		11
459	Ultrafine TiC MXene Nanodots-Interspersed Nanosheet for High-Energy-Density Lithium-Sulfur Batteries. 2019 , 13, 3608-3617		158
458	Synthesis of Ti ₃ C ₂ /TiO ₂ heterostructure by microwave heating with high electrochemical performance. 2019 , 6, 065056		6
457	Cold pressing-built microreactors to thermally manipulate microstructure of MXene film as an anode for high-performance lithium-ion batteries. 2019 , 305, 11-23		9
456	Fluoride-free synthesis and microstructure evolution of novel two-dimensional Ti ₃ C ₂ (OH) ₂ nanoribbons as high-performance anode materials for lithium-ion batteries. 2019 , 45, 8395-8405		34
455	Reliability Improvement of Resistance Switching Devices by Insertion of a Novel 2D Material MXene. 2019 ,		0
454	Environmental Stability of MXenes as Energy Storage Materials. 2019 , 6,		35
453	Multiwall carbon nanotubes loaded with MoS ₂ quantum dots and MXene quantum dots: NonPt bifunctional catalyst for the methanol oxidation and oxygen reduction reactions in alkaline solution. 2019 , 464, 78-87		64
452	Ti ₃ C ₂ MXene nanoparticles modified metal oxide composites for enhanced photoelectrochemical water splitting. 2019 , 44, 2704-2710		41
451	Applications of 2D MXenes in energy conversion and storage systems. 2019 , 48, 72-133		878
450	Ultra-efficient electromagnetic wave absorption with ethanol-thermally treated two-dimensional NbCT nanosheets. 2019 , 537, 306-315		35
449	Boosting the Photocatalytic Ability of Cu ₂ O Nanowires for CO ₂ Conversion by MXene Quantum Dots. 2019 , 29, 1806500		204

448	2D MXenes: Electromagnetic property for microwave absorption and electromagnetic interference shielding. 2019 , 359, 1265-1302		418
447	Two-dimensional Nb-based M4C3Tx MXenes and their sodium storage performances. 2019 , 45, 5761-5767		15
446	Multifunctional Two-Dimensional Core-Shell MXene@Gold Nanocomposites for Enhanced Photo-Radio Combined Therapy in the Second Biological Window. 2019 , 13, 284-294		148
445	TiCT -Based Three-Dimensional Hydrogel by a Graphene Oxide-Assisted Self-Convergence Process for Enhanced Photoredox Catalysis. 2019 , 13, 295-304		143
444	Cation-intercalated engineering and X-ray absorption spectroscopic characterizations of two dimensional MXenes. 2020 , 31, 969-979		8
443	Future Applications of MXenes in Biotechnology, Nanomedicine, and Sensors. 2020 , 38, 264-279		98
442	Facile preparation of biosurfactant-functionalized Ti2CTX MXene nanosheets with an enhanced adsorption performance for Pb(II) ions. 2020 , 297, 111810		34
441	MXene/chitosan nanocoating for flexible polyurethane foam towards remarkable fire hazards reductions. 2020 , 381, 120952		112
440	2D Nanomaterials for Cancer Theranostic Applications. <i>Advanced Materials</i> , 2020 , 32, e1902333	24	193
439	MXene aerogel-based phase change materials toward solar energy conversion. 2020 , 206, 110229		78
438	MXene Quantum Dot/Polymer Hybrid Structures with Tunable Electrical Conductance and Resistive Switching for Nonvolatile Memory Devices. 2020 , 6, 1900493		24
437	Inorganic 2D Luminescent Materials: Structure, Luminescence Modulation, and Applications. 2020 , 8, 1900978		29
436	Sacrificial Agent-Free Photocatalytic Oxygen Evolution from Water Splitting over Ag3PO4/MXene Hybrids. 2020 , 4, 1900434		33
435	MXene-based sensors and biosensors: next-generation detection platforms. 2020 , 361-372		3
434	Enhanced mechanical properties of poly(lactic acid) composites with ultrathin nanosheets of MXene modified by stearic acid. 2020 , 137, 48621		8
433	2D titanium carbide-based nanocomposites for photocatalytic bacteriostatic applications. 2020 , 266, 118609		51
432	Highly sensitive fluorescent sensing for intracellular glutathione based on Ti3C2 quantum dots. 2020 , 31, 175-181		6
431	Recent development and prospects of surface modification and biomedical applications of MXenes. 2020 , 12, 1325-1338		85

430	Mo ₂ B, an MBene member with high electrical and thermal conductivities, and satisfactory performances in lithium ion batteries. 2020 , 2, 347-355	11
429	Self-assembled Ti ₃ C ₂ MXene and N-rich porous carbon hybrids as superior anodes for high-performance potassium-ion batteries. 2020 , 13, 246-257	160
428	Magnetron-sputtering deposited molybdenum carbide MXene thin films as a saturable absorber for passively Q-switched lasers. 2020 , 8, 1608-1613	15
427	A "naked-eye" colorimetric and ratiometric fluorescence probe for uric acid based on TiC MXene quantum dots. 2020 , 1103, 134-142	47
426	MXene Surface Terminations Enable Strong Metal-Support Interactions for Efficient Methanol Oxidation on Palladium. 2020 , 12, 2400-2406	38
425	Hollow MXene Sphere/Reduced Graphene Aerogel Composites for Piezoresistive Sensor with Ultra-High Sensitivity. 2020 , 6, 1901064	77
424	Chemistry of two-dimensional MXene nanosheets in theranostic nanomedicine. 2020 , 31, 937-946	16
423	Experimental investigation of energy storage properties and thermal conductivity of a novel organic phase change material/MXene as A new class of nanocomposites. 2020 , 27, 101115	63
422	Solvothermal synthesis of in situ nitrogen-doped Ti ₃ C ₂ MXene fluorescent quantum dots for selective Cu ²⁺ detection. 2020 , 46, 8320-8327	44
421	2D MXene-Integrated 3D-Printing Scaffolds for Augmented Osteosarcoma Phototherapy and Accelerated Tissue Reconstruction. 2020 , 7, 1901511	86
420	MXetronics: MXene-Enabled Electronic and Photonic Devices. 2020 , 2, 55-70	78
419	Harmonic Mode-Locked Er-Doped Fiber Laser by Evanescent Field-Based MXene Ti ₃ C ₂ T _x (T= F, O, or OH) Saturable Absorber. 2020 , 532, 1900437	33
418	MXenes: A new class of 2D layered materials: Synthesis, properties, applications as supercapacitor electrode and beyond. 2020 , 18, 100509	44
417	Selective detection of Fe ions based on fluorescence MXene quantum dots via a mechanism integrating electron transfer and inner filter effect. 2020 , 12, 1826-1832	67
416	The tunable electric and magnetic properties of 2D MXenes and their potential applications. 2020 , 1, 3104-3121	16
415	Zero-Dimensional MXene-Based Optical Devices for Ultrafast and Ultranarrow Photonics Applications. 2020 , 7, 2002209	27
414	An Electrodeposited MXene-TiCT Nanosheets Functionalized by Task-Specific Ionic Liquid for Simultaneous and Multiplexed Detection of Bladder Cancer Biomarkers. 2020 , 16, e2002517	18
413	Chemical-Combined Ball-Milling Synthesis of Fluorine-Free Porous MXene for High-Performance Lithium Ion Batteries. 2020 , 3, 10234-10241	18

412	Photocatalytic Applications of Two-Dimensional Ti ₃ C ₂ MXenes: A Review. 2020 , 3, 9581-9603	58
411	In-situ construction of ternary TiC MXene@TiO/ZnInS composites for highly efficient photocatalytic hydrogen evolution. 2020 , 580, 669-680	70
410	Mussel-inspired preparation of MXene-PDA-Bi ₆ O ₇ composites for efficient adsorptive removal of iodide ions. 2020 , 8, 104261	8
409	Surface Functionalization of Single-Layered TiCT MXene and Its Application in Multilevel Resistive Memory. 2020 , 12, 9865-9871	33
408	0D/2D MXene Quantum Dot/Ni-MOF Ultrathin Nanosheets for Enhanced N ₂ Photoreduction. 2020 , 8, 17791-17799	26
407	Pseudocapacitive Charge Storage in MXene-VO for Asymmetric Flexible Energy Storage Devices. 2020 , 12, 54791-54797	12
406	Ti ₃ C ₂ T _x MXene Quantum Dots with Enhanced Stability for Ultrafast Photonics. 2020 , 3, 11850-11860	15
405	Humidity-Enabled Ionic Conductive Trace Carbon Dioxide Sensing of Nitrogen-Doped TiCT MXene/Polyethyleneimine Composite Films Decorated with Reduced Graphene Oxide Nanosheets. 2020 , 92, 16033-16042	24
404	Constructing Ti ₃ C ₂ MXene/ZnIn ₂ S ₄ heterostructure as a Schottky catalyst for photocatalytic environmental remediation. 2020 ,	7
403	Resistive-switching tunability with size-dependent all-inorganic zero-dimensional tetrahedrite quantum dots. 2020 , 63, 2497-2508	3
402	Mechanotribological Aspects of MXene-Reinforced Nanocomposites. <i>Advanced Materials</i> , 2020 , 32, e2003154	54
401	Surface-Related Features Responsible for Cytotoxic Behavior of MXenes Layered Materials Predicted with Machine Learning Approach. 2020 , 13,	10
400	Recent Advances of Spatial Self-Phase Modulation in 2D Materials and Passive Photonic Device Applications. 2020 , 16, e2002252	11
399	Vertically Aligned Nanopatterns of Amine-Functionalized Ti ₃ C ₂ MXene via Soft Lithography. 2020 , 7, 2000424	10
398	Humidity activated ionic-conduction formaldehyde sensing of reduced graphene oxide decorated nitrogen-doped MXene/titanium dioxide composite film. 2020 , 323, 128695	43
397	Emerging Low-Dimensional Nanoagents for Bio-Microimaging. 2020 , 30, 2003147	8
396	Other Applications. 2020 , 303-404	
395	Mixed Mercaptocarboxylic Acid Shells Provide Stable Dispersions of InPZnS/ZnSe/ZnS Multishell Quantum Dots in Aqueous Media. 2020 , 10,	2

394	Arbitrary deformable and high-strength electroactive polymer/MXene anti-exfoliative composite films assembled into high performance, flexible all-solid-state supercapacitors. 2020 , 12, 20797-20810	11
393	State of the art recent progress in two dimensional MXenes based gas sensors and biosensors: A comprehensive review. 2020 , 424, 213514	79
392	Biomimetic anchoring of Fe ₃ O ₄ onto Ti ₃ C ₂ MXene for highly efficient removal of organic dyes by Fenton reaction. 2020 , 8, 104369	18
391	0D/2D Heterojunctions of TiC MXene QDs/SiC as an Efficient and Robust Photocatalyst for Boosting the Visible Photocatalytic NO Pollutant Removal Ability. 2020 , 12, 40176-40185	38
390	Core-Shell Structured MXene@Carbon Nanodots as Bifunctional Catalysts for Solar-Assisted Water Splitting. 2020 ,	28
389	A facile and rapid approach to synthesize uric acid-capped TiC MXene quantum dots for the sensitive determination of 2,4,6-trinitrophenol both on surfaces and in solution. 2020 , 8, 10837-10844	11
388	A perspective on MXenes: Their synthesis, properties, and recent applications. 2020 , 128, 170902	30
387	Fluoride-Free 2D Niobium Carbide MXenes as Stable and Biocompatible Nanoplatfoms for Electrochemical Biosensors with Ultrahigh Sensitivity. 2020 , 7, 2001546	38
386	2D Titanium Carbide (Ti ₃ C ₂ T _x) in Accommodating Intraocular Lens Design. 2020 , 30, 2000841	9
385	Insight into Adsorption Performance and Mechanism on Efficient Removal of Methylene Blue by Accordion-like VCT MXene. 2020 , 11, 4253-4260	27
384	A phenol phosphorescent microsensor of mesoporous molecularly imprinted polymers.. 2020 , 10, 17906-17913	3
383	Continuous flow vortex fluidic-mediated exfoliation and fragmentation of two-dimensional MXene. 2020 , 7, 192255	4
382	Lysine demethylase KDM3A regulates nanophotonic hyperthermia resistance generated by 2D silicene in breast cancer. 2020 , 255, 120181	15
381	Room temperature manufacturing photoluminescent graphene quantum dots based on MXene. 2020 , 167, 863-869	8
380	Semiconducting quantum dots: Modification and applications in biomedical science. 2020 , 63, 1631-1650	12
379	Highly Efficient Electrochemical Reduction of Nitrogen to Ammonia on Surface Termination Modified TiCT MXene Nanosheets. 2020 , 14, 9089-9097	71
378	3D bioprinting of cell-laden electroconductive MXene nanocomposite bioinks. 2020 , 12, 16069-16080	55
377	CsPbBr ₃ /Ti ₃ C ₂ T _x MXene QD/QD Heterojunction: Photoluminescence Quenching, Charge Transfer, and Cd Ion Sensing Application. 2020 , 3, 3305-3314	20

376	Preparation and Biomedical Applications of Multicolor Carbon Dots: Recent Advances and Future Challenges. 2020 , 37, 1900489	16
375	Engineering of 2D transition metal carbides and nitrides MXenes for cancer therapeutics and diagnostics. 2020 , 8, 4990-5013	34
374	Recent Advances in 2D MXenes for Photodetection. 2020 , 30, 2000907	74
373	Quantum confinement-induced enhanced nonlinearity and carrier lifetime modulation in two-dimensional tin sulfide. 2020 , 9, 1963-1972	8
372	Janus-Structured Co-Ti ₃ C ₂ MXene Quantum Dots as a Schottky Catalyst for High-Performance Photoelectrochemical Water Oxidation. 2020 , 30, 2000637	54
371	Surface termination modification on high-conductivity MXene film for energy conversion. 2020 , 829, 154634	19
370	A fluorescent microsensor for the selective detection of bifenthrin.. 2020 , 10, 19425-19430	2
369	Effects of the Intercalant and the Temperature in Hybrid-MoS ₂ Nanodots Fabrication and Their Photoluminescence Enhancement. 2020 , 76, 980-984	2
368	High Anti-Interference TiCT MXene Field-Effect-Transistor-Based Alkali Indicator. 2020 , 12, 32970-32978	14
367	Broadband ultrafast photonics of two-dimensional transition metal carbides (MXenes). 2020 , 4, 032003	7
366	Investigating the Electrocatalysis of a TiC/Carbon Hybrid in Polysulfide Conversion of Lithium-Sulfur Batteries. 2020 , 12, 13904-13913	37
365	Vortex Fluidic Mediated Synthesis of TiO ₂ Nanoparticle/MXene Composites. 2020 , 6, 657-662	4
364	Nitrogen Doped Intercalation TiO/TiN/TiCT Nanocomposite Electrodes with Enhanced Pseudocapacitance. 2020 , 10,	13
363	MXenes: Applications in electrocatalytic, photocatalytic hydrogen evolution reaction and CO ₂ reduction. 2020 , 486, 110850	57
362	Development in the innovation of lead halide-based perovskite quantum dots from rare earth-doped garnet-based phosphors for light-emitting diodes. 2020 , 21-56	1
361	Highly efficient removal of iodine ions using MXene-PDA-AgO composites synthesized by mussel-inspired chemistry. 2020 , 567, 190-201	15
360	Ultrafast Transient Spectra and Dynamics of MXene (Ti ₃ C ₂ T _x) in Response to Light Excitations of Various Wavelengths. 2020 , 124, 6441-6447	23
359	Helical core-sheath elastic yarn-based dual strain/humidity sensors with MXene sensing layer. 2020 , 55, 6187-6194	29

358	Biodegradable and photostable Nb ₂ C MXene quantum dots as promising nanofluorophores for metal ions sensing and fluorescence imaging. 2020 , 309, 127735	50
357	Algae Extraction Controllable Delamination of Vanadium Carbide Nanosheets with Enhanced Near-Infrared Photothermal Performance. 2020 , 59, 6601-6606	42
356	Review of MXene electrochemical microsupercapacitors. 2020 , 27, 78-95	105
355	Two-dimensional MXenes: From morphological to optical, electric, and magnetic properties and applications. 2020 , 848, 1-58	321
354	Nickel oxide nanoparticles decorated highly conductive Ti ₃ C ₂ MXene as cathode catalyst for rechargeable LiO ₂ battery. 2020 , 824, 153803	11
353	Ultrathin boron nanosheets as an emerging two-dimensional photoluminescence material for bioimaging. 2020 , 5, 705-713	20
352	Algae Extraction Controllable Delamination of Vanadium Carbide Nanosheets with Enhanced Near-Infrared Photothermal Performance. 2020 , 132, 6663-6668	8
351	Layered MXene Protected Lithium Metal Anode as an Efficient Polysulfide Blocker for Lithium-Sulfur Batteries. 2020 , 3, 892-899	11
350	Dual-Emission Reverse Change Ratio Photoluminescence Sensor Based on a Probe of Nitrogen-Doped TiC Quantum Dots@DAP to Detect HO and Xanthine. 2020 , 92, 7770-7777	43
349	Novel thin-film reverse osmosis membrane with MXene Ti ₃ C ₂ T _x embedded in polyamide to enhance the water flux, anti-fouling and chlorine resistance for water desalination. 2020 , 603, 118036	43
348	Remarkable surface-enhanced Raman scattering of highly crystalline monolayer Ti ₃ C ₂ nanosheets. 2020 , 63, 794-805	29
347	UV-light modulated Ti ₃ C ₂ T _x MXene/g-C ₃ N ₄ heterojunction film for electromagnetic interference shielding. 2020 , 134, 105899	20
346	Two-dimensional transition metal carbide and nitride (MXene) derived quantum dots (QDs): synthesis, properties, applications and prospects. 2020 , 8, 7508-7535	95
345	Nonoxidized MXene Quantum Dots Prepared by Microexplosion Method for Cancer Catalytic Therapy. 2020 , 30, 2000308	40
344	Hydrogen Bond Interaction Promotes Flash Energy Transport at MXene-Solvent Interface. 2020 , 124, 10306-10314	18
343	2D/2D/0D TiO ₂ /C ₃ N ₄ /Ti ₃ C ₂ MXene composite S-scheme photocatalyst with enhanced CO ₂ reduction activity. 2020 , 272, 119006	298
342	Insights into the Photothermal Conversion of 2D MXene Nanomaterials: Synthesis, Mechanism, and Applications. 2020 , 30, 2000712	126
341	Label-free and near-zero-background-noise photoelectrochemical assay of methyltransferase activity based on a BiS/TiC Schottky junction. 2020 , 56, 5799-5802	14

- 340 Two-dimensional (2D) materials beyond graphene in cancer drug delivery, photothermal and photodynamic therapy, recent advances and challenges ahead: A review. **2021**, 61, 101830 11
- 339 Booming development and present advances of two dimensional MXenes for photodetectors. **2021**, 403, 126336 19
- 338 Photo-controlled degradation of PLGA/TiC hybrid coating on Mg-Sr alloy using near infrared light. **2021**, 6, 568-578 13
- 337 Accordion-like composite of carbon-coated Fe₃O₄ nanoparticle decorated Ti₃C₂ MXene with enhanced electrochemical performance. **2021**, 56, 2486-2496 6
- 336 High performance humidity sensing property of Ti₃C₂T_x MXene-derived Ti₃C₂T_x/K₂Ti₄O₉ composites. **2021**, 326, 128969 29
- 335 Quantum dots-based hydrogels for sensing applications. **2021**, 408, 127351 22
- 334 2D titanium carbide MXenes as emerging optical biosensing platforms. **2021**, 171, 112730 40
- 333 Design of TiCT/TiO/PANI multi-layer composites for excellent electromagnetic wave absorption performance. **2021**, 583, 510-521 62
- 332 TiC MXene mediated Prussian blue in situ hybridization and electrochemical signal amplification for the detection of exosomes. **2021**, 224, 121879 23
- 331 Intercalation-Induced Reversible Electrochromic Behavior of Two-Dimensional Ti₃C₂T_x MXene in Organic Electrolytes. **2021**, 8, 151-156 9
- 330 Application of two-dimensional materials as anodes for rechargeable metal-ion batteries: A comprehensive perspective from density functional theory simulations. **2021**, 35, 203-282 23
- 329 Mixed-dimensional heterostructure of few-layer MXene based vertical aligned MoS₂ nanosheets for enhanced supercapacitor performance. **2021**, 859, 157797 18
- 328 3D hierarchical architecture collaborating with 2D/2D interface interaction in NiAl-LDH/Ti₃C₂ nanocomposite for efficient and selective photoconversion of CO₂. **2021**, 59, 9-18 19
- 327 Carbon Vacancy Mediated Incorporation of Ti₃C₂ Quantum Dots in a 3D Inverse Opal g-C₃N₄ Schottky Junction Catalyst for Photocatalytic H₂O₂ Production. **2021**, 9, 481-488 16
- 326 2-D/2-D heterostructured biomimetic enzyme by interfacial assembling Mn₃(PO₄)₂ and MXene as a flexible platform for realtime sensitive sensing cell superoxide. **2021**, 14, 879-886 13
- 325 State-of-the-art recent progress in MXene-based photocatalysts: a comprehensive review. **2021**, 13, 9463-9504 31
- 324 Two-dimensional biomaterials: material science, biological effect and biomedical engineering applications. **2021**, 50, 11381-11485 23
- 323 Applications of MXene (Ti₃C₂T_x) in photocatalysis: a review. **2021**, 2, 1570-1594 29

322	Heterostructures of titanium-based MXenes in energy conversion and storage devices. 2021 , 9, 8395-8465	10
321	Optical properties of two-dimensional materials. 2021 , 165-206	
320	Modulation of the Electronic Properties of MXene (TiCT) Surface-Covalent Functionalization with Diazonium. 2021 , 15, 1388-1396	34
319	Facile microwave-assisted synthesis of TiC MXene quantum dots for ratiometric fluorescence detection of hypochlorite. 2021 , 188, 15	13
318	Light-emitting MXene quantum dots. 2021 , 4, 20007701-20007715	14
317	Two-dimensional TiC MXene-based nanostructures for emerging optoelectronic applications. 2021 , 8, 2929-2963	7
316	A remarkably ultra-sensitive large area matrix of MXene based multifunctional physical sensors (pressure, strain, and temperature) for mimicking human skin. 2021 , 9, 4523-4534	18
315	Transition metal carbide MXene. 2021 , 671-709	
314	MXene and black phosphorus based 2D nanomaterials in bioimaging and biosensing: progress and perspectives. 2021 , 9, 5195-5220	7
313	A review on optoelectronic device applications of 2D transition metal carbides and nitrides. 2021 , 200, 109452	10
312	Insights and Perspectives Regarding Nanostructured Fluorescent Materials toward Tackling COVID-19 and Future Pandemics. 2021 , 4, 911-948	15
311	MXenes: Synthesis, Optical Properties, and Applications in Ultrafast Photonics. 2021 , 17, e2006054	41
310	Progress and biomedical applications of MXenes. 2021 , 2, 1480-1508	21
309	Chlorophyll-Based Organic Heterojunction on Ti C T MXene Nanosheets for Efficient Hydrogen Production. 2021 , 27, 5277-5282	13
308	Role of Nanostructured Biomaterials in the Treatment and Diagnosis of Biological Disorder. 2021 , 6, 23-30	0
307	Highly Enhanced Light-Matter Interaction in MXene Quantum Dots-Monolayer WS Heterostructure. 2021 , 17, e2006309	11
306	Ultrafast mode-locking in highly stacked Ti ₃ C ₂ T _x MXenes for 1.9- μ m infrared femtosecond pulsed lasers. 2021 , 10, 1741-1751	11
305	MXenes and the progress of LiS battery development—perspective. 2021 , 3, 021002	4

304	Perspectives on solution processing of two-dimensional MXenes. 2021 , 48, 214-214		51
303	Flexible Self-Powered Integrated Sensing System with 3D Periodic Ordered Black Phosphorus@MXene Thin-Films. <i>Advanced Materials</i> , 2021 , 33, e2007890	24	46
302	MXene-xanthan nanocomposite films with layered microstructure for electromagnetic interference shielding and Joule heating. 2021 , 410, 128348		18
301	Ti3C2Tx/PANI composites with tunable conductivity towards anticorrosion application. 2021 , 410, 128310		36
300	3D Hydrangea-like InVO4/Ti3C2Tx Hierarchical Heterosystem Collaborating with 2D/2D Interface Interaction for Enhanced Photocatalytic CO2 Reduction. 2021 , 7, 815-823		4
299	MXene in the lens of biomedical engineering: synthesis, applications and future outlook. 2021 , 20, 33		30
298	MXene-Derived TiO Quantum Dots Distributed on Porous Carbon Nanosheets for Stable and Long-Life Li-S Batteries: Enhanced Polysulfide Mediation via Defect Engineering. <i>Advanced Materials</i> , 2021 , 33, e2008447	24	44
297	Hierarchical structure of in-situ Fe2O3 nanoparticles decorated on crumpled Ti3C2Tx nanosheets with enhanced cycle performance as anode for lithium ion battery. 2021 , 47, 21807-21807		4
296	A sensitive electrochemical DNA sensor for detecting Helicobacter pylori based on accordion-like TiCTx: a simple strategy. 2021 , 413, 4353-4362		6
295	Biocompatibility nanoprobe of MXene N-TiC quantum dot/Fe for detection and fluorescence imaging of glutathione in living cells. 2021 , 201, 111631		11
294	Manganese dioxide nanosheets decorated on MXene (Ti3C2Tx) with enhanced performance for asymmetric supercapacitors. 2021 , 47, 12211-12220		3
293	All-solid-state WO/TQDs/InS Z-scheme heterojunctions bridged by TiC quantum dots for efficient removal of hexavalent chromium and bisphenol A. 2021 , 409, 125027		21
292	A 3D Hierarchical Ti3C2Tx/TiO2 Heterojunction for Enhanced Photocatalytic CO2 Reduction. 2021 , 7, 910-915		2
291	Lysozyme Adsorption on Different Functionalized MXenes: A Multiscale Simulation Study. 2021 , 37, 5932-5942		0
290	Chemically-confined mesoporous Fe2O3 nanospheres with Ti3C2Tx MXene via alkali treatment for enhanced lithium storage. 2021 , 495, 229758		13
289	Sensing with MXenes: Progress and Prospects. <i>Advanced Materials</i> , 2021 , 33, e2005846	24	66
288	2D Materials for Nonlinear Photonics and Electro-Optical Applications. 2021 , 8, 2100367		10
287	Electronically coupled layered double hydroxide/MXene quantum dot metallic hybrids for high-performance flexible zinc-air batteries. 2021 , 3, 1134		22

286	Titanium Carbide (Ti ₃ C ₂) MXene as a Promising Co-catalyst for Photocatalytic CO ₂ Conversion to Energy-Efficient Fuels: A Review. 2021 , 35, 10374-10404	26
285	Antipathogenic properties and applications of low-dimensional materials. 2021 , 12, 3897	17
284	Engineering lattice defects in 2D nanomaterials for enhancing biomedical performances. 2021 ,	1
283	Scavenging activity and reaction mechanism of Ti ₃ C ₂ T _x MXene as a novel free radical scavenger. 2021 , 47, 16555-16561	5
282	Acoustomicrofluidic Synthesis of Pristine Ultrathin TiCT MXene Nanosheets and Quantum Dots. 2021 ,	19
281	Investigating the effect of Ti ₃ C ₂ (MXene) nanosheet on human umbilical vein endothelial cells via a combined untargeted and targeted metabolomics approach. 2021 , 178, 810-821	8
280	The introduction of amino termination on Ti ₃ C ₂ MXene surface for its flexible film with excellent property. 2021 , 179, 400-407	3
279	2D MXene Nanomaterials for Versatile Biomedical Applications: Current Trends and Future Prospects. 2021 , 17, e2100946	13
278	Photocatalysis over MXene-based hybrids: Synthesis, surface chemistry, and interfacial charge kinetics. 2021 , 9, 070703	9
277	Dew-of-Leaf ³ structure multiple synergetic antimicrobial modality hybrid: A rapid and long lasting bactericidal material. 2021 , 416, 129072	6
276	Insight into two-dimensional MXenes for environmental applications: Recent progress, challenges, and prospects. 2021 , 28, 100256	8
275	Efficient Full-Color Boron Nitride Quantum Dots for Thermostable Flexible Displays. 2021 , 15, 14610-14617	9
274	MXenes for Optoelectronic Devices. 2021 , 7, 2100295	15
273	Recent developments on fluorescent hybrid nanomaterials for metal ions sensing and bioimaging applications: A review. 2021 , 333, 115950	29
272	Bifunctional Catalytic Activity Guided by Rich Crystal Defects in Ti ₃ C ₂ MXene Quantum Dot Clusters for LiO ₂ Batteries. 2021 , 11, 2003069	21
271	Nanodots Derived from Layered Materials: Synthesis and Applications. <i>Advanced Materials</i> , 2021 , 33, e2006661	24 8
270	MXene-based electromagnetic wave response. 2021 , 3, 042001	2
269	Black Phosphorus@TiCT MXene Composites with Engineered Chemical Bonds for Commercial-Level Capacitive Energy Storage. 2021 ,	17

268	Amino-Functionalized Ti ₃ C ₂ MXene Quantum Dots as Photoluminescent Sensors for Diagnosing Histidine in Human Serum. 2021 , 4, 8192-8199	8
267	Recent advances in transition metal carbides and nitrides (MXenes): Characteristics, environmental remediation and challenges. 2021 , 418, 129296	16
266	Imidazole metal-organic frameworks embedded in layered Ti ₃ C ₂ T _x Mxene as a high-performance electrochemiluminescence biosensor for sensitive detection of HIV-1 protein. 2021 , 167, 106332	6
265	High-rate electrospun Ti ₃ C ₂ T _x MXene/carbon nanofiber electrodes for flexible supercapacitors. 2021 , 556, 149710	9
264	The capabilities of nanoelectronic 2-D materials for bio-inspired computing and drug delivery indicate their significance in modern drug design. 2021 , 279, 119272	3
263	Synthesis and characterization of 2D MXene: Device fabrication for humidity sensing. 2021 , 7, 100390-100390	3
262	MXene Quantum Dots/Copper Heterostructure for Synergistically Enhanced N ₂ Electroreduction.	9
261	Energy conversion and optical applications of MXene quantum dots. 2021 , 56, 17942-17978	5
260	Fluorescent nitrogen-doped Ti ₃ C ₂ MXene quantum dots as a unique on-off-on nanoprobe for chromium (VI) and ascorbic acid based on inner filter effect. 2021 , 342, 130074	14
259	Recent advances of MXenes as electrocatalysts for hydrogen evolution reaction. 2021 , 5,	20
258	Mechanochemistry-induced biaxial compressive strain engineering in MXenes for boosting lithium storage kinetics. 2021 , 87, 106053	4
257	Surface plasmon resonance aptasensor based on niobium carbide MXene quantum dots for nucleocapsid of SARS-CoV-2 detection. 2021 , 188, 316	18
256	MXenes and their derivatives as nitrogen reduction reaction catalysts: recent progress and perspectives. 2021 , 22, 100864	3
255	MXene-Derived Quantum Dots for Energy Conversion and Storage Applications. 2021 , 35, 14304-14324	5
254	Mechanism of Nitrogen-Doped TiC Quantum Dots for Free-Radical Scavenging and the Ultrasensitive HO Detection Performance. 2021 , 13, 42442-42450	5
253	Engineering MXenes (Ti ₃ C ₂ T _x) surface with TiO ₂ for enhancing anti-corrosion performance of coatings. 2021 , 230, 124086	3
252	Pd nanoparticles immobilized on aniline-functionalized MXene as an effective catalyst for hydrogen production from formic acid. 2021 , 46, 33098-33106	1
251	Versatile TiCT MXene for free-radical scavenging. 2021 , 1-9	6

250	Enhanced polysulfide conversion through metal oxide-support interaction in MnOx/MXene. 2021 , 420, 130452	8
249	Fabrication of Smart Tantalum Carbide MXene Quantum Dots with Intrinsic Immunomodulatory Properties for Treatment of Allograft Vasculopathy.. 2021 , 31, 2106786	12
248	Rapid synthesis of polyimidazole functionalized MXene via microwave-irradiation assisted multi-component reaction and its iodine adsorption performance. 2021 , 420, 126580	7
247	Advances and challenges in 2D MXenes: From structures to energy storage and conversions. 2021 , 40, 101273	19
246	Cytotoxicity of MXene-based nanomaterials for biomedical applications: A mini review. 2021 , 201, 111592	25
245	Perforative pore formation on nanoplates for 2D porous MXene membranes via H ₂ O ₂ mild etching. 2021 , 47, 29930-29940	4
244	Laser-Mediated antibacterial effects of Few- and Multi-Layer Ti ₃ C ₂ T _x MXenes. 2021 , 567, 150795	9
243	Construction of ionic liquid functionalized MXene with extremely high adsorption capacity towards iodine via the combination of mussel-inspired chemistry and Michael addition reaction. 2021 , 601, 294-304	5
242	Solvothermal synthesis of nitrogen-doped MXene quantum dots for the detection of alizarin red based on inner filter effect. 2021 , 195, 109720	5
241	Construction of BiOCO/TiC heterojunctions for enhancing the visible-light photocatalytic activity of tetracycline degradation. 2021 , 601, 581-593	23
240	Insights into different dimensional MXenes for photocatalysis. 2021 , 424, 130340	16
239	Two-dimensional transition metal carbides and/or nitrides (MXenes) and their applications in sensors. 2021 , 21, 100527	11
238	Silk fibroin-Ti ₃ C ₂ T _x hybrid nanofiller enhance corrosion protection for waterborne epoxy coatings under deep sea environment. 2021 , 423, 130195	11
237	Specific recognition and photothermal release of circulating tumor cells using near-infrared light-responsive 2D MXene nanosheets@hydrogel membranes. 2021 , 235, 122770	4
236	Construction ZnIn ₂ S ₄ /Ti ₃ C ₂ of 2D/2D heterostructures with enhanced visible light photocatalytic activity: A combined experimental and first-principles DFT study. 2021 , 570, 151183	8
235	Interfacial engineering of 2D/2D MXene heterostructures: face-to-face contact for augmented photodegradation of amoxicillin. 2021 , 426, 131246	11
234	Electrochemical and optical biosensors based on multifunctional MXene nanoplatforms: Progress and prospects. 2021 , 235, 122726	12
233	Novel Ti ₃ C ₂ /Bi@BiOI nanosheets with gradient oxygen vacancies for the enhancement of spatial charge separation and photocatalytic performance: The roles of reactive oxygen and iodine species. 2021 , 426, 130764	9

232	Ti3C2 MXene/Ag2ZnGeO4 Schottky heterojunctions with enhanced photocatalytic performances: Efficient charge separation and mechanism studies. 2022 , 278, 119560	2
231	Cracked-earth-like titanium carbide MXene membranes with abundant hydroxyl groups for oil-in-water emulsion separation. 2022 , 607, 378-388	5
230	High-throughput screening and spatial profiling of low-mass pesticides using a novel TiC MXene nanowire (TMN) as MALDI MS matrix. 2022 , 286, 131826	1
229	High-energy ball milling assisted one-step preparation of g-C3N4/TiO2@Ti3C2 composites for effective visible light degradation of pollutants. 2022 , 889, 161771	3
228	MXene quantum dots decorated Ni nanoflowers for efficient Cr (VI) reduction. 2022 , 423, 127053	5
227	Fascinating MXene nanomaterials: emerging opportunities in the biomedical field. 2021 , 9, 5437-5471	15
226	Highly efficient and selective nitrate electroreduction to ammonia catalyzed by molecular copper catalyst@Ti3C2Tx MXene.	7
225	Rational Design of High-Concentration Ti in Porous Carbon-Doped TiO Nanosheets for Efficient Photocatalytic Ammonia Synthesis. <i>Advanced Materials</i> , 2021 , 33, e2008180	24 51
224	Quantum dots in cell imaging and their safety issues. 2021 , 9, 5765-5779	14
223	MXene derivatives: synthesis and applications in energy conversion and storage.. 2021 , 11, 16065-16082	9
222	A Facile, High-Yield, and Freeze-and-Thaw-Assisted Approach to Fabricate MXene with Plentiful Wrinkles and Its Application in On-Chip Micro-Supercapacitors. 2020 , 30, 1910048	73
221	Recent progress and advances in the environmental applications of MXene related materials. 2020 , 12, 3574-3592	88
220	Nonlinear optics of MXene in laser technologies. 2020 , 3, 032004	5
219	MXenes: focus on optical and electronic properties and corresponding applications. 2020 , 9, 1601-1620	31
218	Two-dimensional MXene-based materials for photothermal therapy. 2020 , 9, 2233-2249	32
217	Photocatalytic reduction of CO2 by halide perovskites: recent advances and future perspectives.	7
216	Ti3C2 MXene: A reactive combustion catalyst for efficient burning rate control of ammonium perchlorate based solid propellant. 2022 , 186, 678-687	4
215	Structure and performance insights in carbon dots-functionalized MXene-epoxy ultrathin anticorrosion coatings. 2021 , 132838	7

214	Progress of Phototherapy Applications in the Treatment of Bone Cancer. 2021 , 22,	7
213	Performance improvement of photovoltaic: Utilization of two-dimensional Ti ₃ C ₂ T _x MXene. 2021 , 27, 101566	0
212	Review MXene Based Transducer for Biosensor Applications.	1
211	Thermal Stability and Photocatalysis of a Novel Two-Dimensional MXene. 2018 , 08, 326-332	0
210	Molecular ammonia sensing of PEDOT:PSS/nitrogen doped MXene TiCT composite film at room temperature. 2021 , 33,	5
209	Two-Dimensional Transition Metal Carbides and Nitrides (MXenes): Synthesis to Applications. 2021 , 179-199	
208	Two-dimensional Ti ₂ C MXene-induced photocurrent polarity switching photoelectrochemical biosensing platform for ultrasensitive and selective detection of soluble CD146. 2022 , 350, 130859	4
207	Nitrogen-doped Ti ₃ C ₂ MXene quantum dots as novel high-efficiency electrochemiluminescent emitters for sensitive mucin 1 detection. 2022 , 350, 130891	5
206	Two-Dimensional MXene-Polymer Heterostructure with Ordered In-Plane Mesochannels for High-Performance Capacitive Deionization. 2021 , 60, 26528-26534	30
205	Nitrogen, boron-doped TiC MXene quantum dot-based ratiometric fluorescence sensing platform for point-of-care testing of tetracycline using an enhanced antenna effect by Eu. 2021 , 188, 401	7
204	Ball milling synthesis of porous g-C ₃ N ₄ ultrathin nanosheets functionalized with alkynyl groups for strengthened photocatalytic activity. 2021 , 282, 120097	5
203	Two-Dimensional MXene-Polymer Heterostructure with Ordered In-Plane Mesochannels for High-Performance Capacitive Deionization. 2021 , 133, 26732	7
202	Self-Assembled Polyaniline/TiCT Nanocomposites for High-Performance Electrochromic Films. 2021 , 11,	1
201	MXene TiCT-Derived Nitrogen-Functionalized Heterophase TiO Homojunctions for Room-Temperature Trace Ammonia Gas Sensing. 2021 , 13, 56485-56497	14
200	Nitrogen-Doped Ti ₂ C MXene Quantum Dots as Antioxidants. 2021 , 4, 12308-12315	5
199	In Situ Controllable Fabrication of Two-Dimensional Magnetic FeO/TiO@TiCT Composites for Highly Efficient Phosphopeptides Enrichment. 2021 , 13, 54665-54676	2
198	Fluorine-free synthesis of TiC MQDs for smartphone-based fluorescent and colorimetric determination of acetylcholinesterase and organophosphorus pesticides. 2021 , 189, 7	1
197	Potential of MXene-Based Heterostructures for Energy Conversion and Storage. 78-96	12

196	Folic Acid-Targeted MXene Nanoparticles for Doxorubicin Loaded Drug Delivery. 2021 , 74, 847	0
195	The 10th anniversary of MXenes: Challenges and prospects for their surface modification toward future biotechnological applications.. 2022 , 182, 114099	6
194	Unleashing non-conjugated polymers as charge relay mediators.. 2022 , 13, 497-509	3
193	Engineering a surface defect-rich Ti ₃ C ₂ quantum dots/mesoporous C ₃ N ₄ hollow nanosphere Schottky junction for efficient N ₂ photofixation.	5
192	Sublimation of MXene/camphor device: a study on self-destructive dry transiency.	1
191	Rational design of TiCl MXenes nanodots-interspersed MXene@NiAl-layered double hydroxides for enhanced pseudocapacitor storage.. 2022 , 609, 393-402	1
190	Photosensitive Ti ₃ C ₂ for dyes degradation. 2022 , 13, 100247	1
189	Effect of surface-deposited Ti ₃ C ₂ T _x MXene on the photoelectrochemical water-oxidation performance of iron-doped titania nanorod array. 2022 , 431, 134124	3
188	Direct inkjet printing of flexible MXene/graphene composite films for supercapacitor electrodes. 2022 , 900, 163436	8
187	Construction of ultra-small Pt nanoparticles @Ti ₃ C ₂ T _x MXene electrocatalyst for efficient and stable electrochemical hydrodechlorination of chloramphenicol. 2022 , 433, 134415	4
186	Redox chemistry-enabled stepwise surface dual nanoparticle engineering of 2D MXenes for tumor-sensitive and MRI-guided photonic breast-cancer hyperthermia in the NIR-II biowindow.. 2022 ,	2
185	Introduction to 2D MXenes: fundamental aspects, MAX phases and MXene derivatives, current challenges, and future prospects. 2022 , 1-47	
184	Investigations of 2D Ti ₃ C ₂ (MXene)-CoCr ₂ O ₄ nanocomposite as an efficient electrode material for electrochemical supercapacitors.	1
183	Titanium Carbide MXene Nanostructures as Catalysts and Cocatalysts for Photocatalytic Fuel Production: A Review. 2022 , 5, 18-54	6
182	Bovine serum albumin functionalized blue emitting Ti ₃ C ₂ MXene Quantum Dots as a sensitive fluorescence probe for Fe ions detection and its toxicity analysis.. 2022 ,	4
181	Optical and mechanical properties of MXenes. 2022 , 131-169	1
180	Ultrafast Shaped Laser Induced Synthesis of MXene Quantum Dots/Graphene for Transparent Supercapacitors.. <i>Advanced Materials</i> , 2022 , e2110013	24 10
179	Blood compatibility evaluations of two-dimensional Ti ₃ C ₂ nanosheets.. 2021 ,	0

178	Eu doped TiC quantum dots to form a ratiometric fluorescence platform for visual and quantitative point-of-care testing of tetracycline derivatives.. 2022 , 272, 120956	0
177	Ionic liquid exfoliated TiCT MXene nanosheets for photoacoustic imaging and synergistic photothermal/chemotherapy of cancer.. 2022 ,	4
176	MXenes with applications in supercapacitors and secondary batteries: A comprehensive review. 2022 , 100080	2
175	Plasmonic MXene Nanoparticle-Enabled High-Performance Two-Dimensional MoS Photodetectors.. 2022 ,	6
174	Advanced porous borocarbonitride nanoarchitectonics: Their structural designs and applications. 2022 , 190, 142-169	2
173	Microwave-assisted synthesis of nitrogen, phosphorus-doped Ti ₃ C ₂ MXene quantum dots for colorimetric/fluorometric dual-modal nitrite assay with a portable smartphone platform. 2022 , 357, 131410	6
172	Synthesis of Ti ₃ C ₂ MXene@PANI composites for excellent anticorrosion performance of waterborne epoxy coating. 2022 , 165, 106673	2
171	Advances in MXenes-based optical biosensors: A review.. 2022 , 202, 113995	6
170	Investigation of interaction between MXene nanosheets and human plasma and protein corona composition.. 2022 ,	0
169	A Si-CdTe Composite Quantum Dots Probe with Dual-Wavelength Emission for Sensitively Monitoring Intracellular H ₂ O ₂ . 2112083	4
168	Interfacial Self-assembly of Organics/MXene Hybrid Cathodes Toward High-Rate-Performance Sodium Ion Batteries.. 2022 ,	2
167	Light-emitting Ti ₂ N (MXene) quantum dots: synthesis, characterization and theoretical calculations.	2
166	From 0D to 3D MXenes: their diverse syntheses, morphologies and applications. 2022 , 6, 818-842	2
165	Ti ₃ C ₂ T _x /PANI/Liquid Metal Composite Microspheres with 3D Nanoflower Structure: Preparation, Characterization, and Applications in EMI Shielding. 2022 , 9, 2102266	7
164	Optimizing the electronic spin state and delocalized electron of NiCo ₂ (OH) /MXene composite by interface engineering and plasma boosting oxygen evolution reaction. 2022 ,	2
163	A "signal on/off" biomimetic electrochemiluminescence sensor using titanium carbide nanodots as co-reaction accelerator for ultra-sensitive detection of ciprofloxacin.. 2022 , 1206, 339690	1
162	Review Towards 5th Generation AI and IoT Driven Sustainable Intelligent Sensors Based on 2D MXenes and Borophene.	22
161	Recent advance on machine learning of MXenes for energy storage and conversion.	1

160	Titanium carbide MXene-based hybrid hydrogel for chemo-photothermal combinational treatment of localized bacterial infection.. 2022 ,	9
159	3D printing of TiC-MXene-incorporated composite scaffolds for accelerated bone regeneration.. 2022 , 17,	2
158	Smart MXene Quantum Dot-Based Nanosystems for Biomedical Applications.. 2022 , 12,	8
157	Biomedical Engineering of Two-Dimensional MXenes.. 2022 , 114178	6
156	Hydrothermal synthesis of MXene-MoS ₂ composites for highly efficient removal of pesticides. 2022 , 588, 152597	3
155	MXene materials for advanced thermal management and thermal energy utilization. 2022 , 97, 107177	5
154	CRISPR-Cas12a-mediated luminescence resonance energy transfer aptasensing platform for deoxynivalenol using gold nanoparticle-decorated TiCT MXene as the enhanced quencher.. 2022 , 433, 128750	6
153	Regulation of the rutile/anatase TiO ₂ phase junction in-situ grown on OH terminated Ti ₃ C ₂ T (MXene) towards remarkably enhanced photocatalytic hydrogen evolution. 2022 , 439, 135685	7
152	Edge stimulated hydrogen evolution reaction on monodispersed MXene quantum dots. 2022 , 442, 136119	3
151	High-Entropy Carbonitride MAX Phases and Their Derivative MXenes. 2022 , 12, 2103228	9
150	MXene-Derived Quantum Dot@Gold Nanobones Heterostructure-Based Electrochemiluminescence Sensor for Triple-Negative Breast Cancer Diagnosis.. 2021 , 93, 17086-17093	10
149	Interfacing MXene Flakes on a Magnetic Fiber Network as a Stretchable, Flexible, Electromagnetic Shielding Fabric.. 2021 , 12,	6
148	MXene-A New Paradigm Toward Artificial Nitrogen Fixation for Sustainable Ammonia Generation: Synthesis, Properties, and Future Outlook. 2022 , 4, 212-245	3
147	Additive-mediated intercalation and surface modification of MXenes.. 2022 ,	9
146	Investigating the Biological Effect of Multidimensional Ti ₃ C ₂ (MXene)-Based Nanomaterials through a Metabolomics Approach: a Multidimensional-Determined Alteration in Energy Metabolism.	1
145	Biotransformation of 2D Nanomaterials through Stimulated Bacterial Respiration-Produced Extracellular Reactive Oxygen Species: A Common but Overlooked Process.. 2022 ,	1
144	A novel Z-scheme NH ₂ -MIL-125(Ti)/Ti ₃ C ₂ QDs/ZnIn ₂ S ₄ photocatalyst with fast interfacial electron transfer properties for visible light-driven antibiotic degradation and hydrogen evolution. 2022 , 121094	0
143	Properties and applications of quantum dots derived from two-dimensional materials. 2022 , 7,	

142	Low Temperature Step Annealing Synthesis of the Ti ₂ AlN MAX Phase to Fabricate MXene Quantum Dots. 2022 , 12, 4154	1
141	Two-Dimensional Quantum Dot-Based Electrochemical Biosensors.. 2022 , 12,	1
140	Preparation of Ti ₃ C ₂ T _x quantum dots/activated semi-coke composite and its electrocatalytic performance. 2022 , 322, 124259	1
139	MXenes: state-of-the-art synthesis, composites and bioapplications.	1
138	FeP ₂ monolayer: Isoelectronic analogue of MoS ₂ with excellent electronic and optical properties.	0
137	Greatly Enhanced Electromagnetic Interference Shielding Effectiveness and Mechanical Properties of Polyaniline-Grafted TiCT MXene-PVDF Composites.. 2022 ,	2
136	Unleashing Insulating Polymer as Charge Transport Cascade Mediator. 2110848	0
135	In situ Modified Mesoporous MXene Film with Excellent Oxidation Resistance for High-Performance Supercapacitor. 2022 , 27, 101483	1
134	Wettability of MXene films.. 2022 , 622, 759-768	1
133	Ultraviolet emissive Ti ₃ C ₂ T _x MXene quantum dots for multiple anti-counterfeiting. 2022 , 595, 153563	2
132	Tin-anchored Ti ₃ C ₂ quantum dots with high conductivity for efficient photocatalytic reduction.	
131	Amino Termination of Ti ₃ C ₂ MXene Induces its Graphene Hybridized Film with Enhanced Ordered Nanostructure and Excellent Multiperformance. 2102418	0
130	Synthesis, Toxicity Assessment, Environmental and Biomedical Applications of MXenes: A Review. 2022 , 12, 1797	3
129	Multilayer intercalation: MXene/cobalt ferrite electromagnetic wave absorbing two-dimensional materials. 2022 , 168, 110797	0
128	MXenes in photomedicine: Advances and prospects.	3
127	Comparative Study of Cold Electron Emission from 2D Ti ₃ C ₂ T _x MXene Nanosheets with Respect to Its Precursor Ti ₃ SiC ₂ MAX Phase.	0
126	Engineered 2D materials for optical bioimaging and path toward therapy and tissue engineering.	2
125	MXene-based Quantum Dots Optimize Hydrogen Production via Spontaneous Evolution of Cl- to O-terminated Surface Groups.	2

124	Self-powered Aptasensors Made with the In ₂ O ₃ /In ₂ S ₃ /Ti ₃ C ₂ Composite for Dual-mode Detection of Microcystin-LR.	0
123	An inorganic base stripping approach to synthesize N-doped Ti ₃ C ₂ quantum dots as fluorescence nanoprobe for the simultaneous detection of Co ²⁺ and Ag ⁺ ions. 2022 , 180, 107629	1
122	Tunable fluorescent amino-functionalized Ti ₃ C ₂ T _x MXene quantum dots for ultrasensitive Fe ³⁺ ion sensing.	2
121	Engineering van der Waals Materials for Advanced Metaphotonics.	2
120	Room-temperature MXene-derived Ti ³⁺ and rich oxygen vacancies in carbon-doped amorphous TiO _x nanosheets for enhanced photocatalytic activity. 2022 , 165979	0
119	Ti ₃ C ₂ T _x MXene Quantum Dots with Surface-Terminated Groups (-F, -OH, =O, -Cl) for Ultrafast Photonics. 2022 , 12, 2043	
118	Biomedical Applications of MXene-Integrated Composites: Regenerative Medicine, Infection Therapy, Cancer Treatment, and Biosensing. 2203430	7
117	Synthesis of strong electron donating-accepting type organic fluorophore and its polypeptide nanoparticles for NIR-II phototheranostics. 2022 , 44, 102574	1
116	Metal-organic frameworks-derived Co ₃ O ₄ /Ti ₃ C ₂ T _x Mxene nanocomposites for high performance ethanol sensing. 2022 , 369, 132232	1
115	Ti ₃ C ₂ quantum dots modified on BiOBr surface for sewage disposal: The induction of the piezo-phototronic effect from edge to whole. 2022 , 599, 153911	1
114	Application of MXene as a new generation of highly conductive coating materials for electromembrane-surrounded solid-phase microextraction. 2022 , 11, 2565-2574	0
113	Covalently N-Doped MXene Quantum Dots for Highly Stable Fluorescent Cu ²⁺ Ion Sensor.	2
112	MXene as Emerging Low Dimensional Material in Modern Energy and Bio Application: A Review. 74, 109-154	
111	Biomedical Applications of MXenes: From Nanomedicine to Biomaterials.	4
110	Structure engineering of mesoporous MXenes through a general microexplosion assisted exfoliation strategy. 2022 , 921, 166079	1
109	Patternable Nanocellulose/Ti ₃ C ₂ T _x Flexible Films with Tunable Photoresponsive and Electromagnetic Interference Shielding Performances.	1
108	MXenes: promising 2D memristor materials for neuromorphic computing components. 2022 ,	4
107	Wide range pressure sensor construction based on tension-compression conversion and gradient stiffness design strategy. 2022 , 161, 107082	0

106	Confined Gold Single Atoms/MXene Heterostructure-Based Electrochemiluminescence Functional Material and Its Sensing Application. 2022 , 94, 11016-11022	3
105	Photothermal-Effect-Enhanced Photoelectrochemical Water Splitting in MXene-Nanosheet-Modified ZnO Nanorod Arrays. 2022 , 5, 11150-11159	1
104	Obtaining Ambient-Stable MXene Ti ₃ C ₂ T _x through Avoidance of Surface Oxidation Active Sites. 2022 , 9, 2200991	0
103	Recent advances and trends in the applications of MXene nanomaterials for tissue engineering and regeneration.	1
102	MXenes as Emerging Materials: Synthesis, Properties, and Applications. 2022 , 27, 4909	3
101	Ti ₃ C ₂ MXene: recent progress in its fundamentals, synthesis, and applications.	2
100	Advancements in MXene-Polymer Nanocomposites in Energy Storage and Biomedical Applications. 2022 , 14, 3433	1
99	A facile pot synthesis of (Ti ₃ AlC ₂) MAX phase and its derived MXene (Ti ₃ C ₂ T _x). 2022 ,	1
98	Quantum Dots Compete at the Acme of MXene Family for the Optimal Catalysis. 2022 , 14,	5
97	Hierarchical Au nanoarrays functionalized 2D Ti ₂ CT _x MXene membranes for the detection of exosomes isolated from human lung carcinoma cells. 2022 , 216, 114647	2
96	Recent advances on semiconductor/MXene hybrids for harvesting light and photoelectrochemical water oxidation: A mini review. 2022 , 450, 138381	
95	The surface functional modification of Ti ₃ C ₂ T _x MXene by phosphorus doping and its application in quasi-solid state flexible supercapacitor. 2022 , 606, 154817	0
94	Black phosphorus quantum dots modified monolayer Ti ₃ C ₂ T _x nanosheet for field-effect transistor gas sensor. 2022 , 373, 132696	1
93	Efficient PPCPs degradation by self-assembly Ag/Ti ₃ C ₂ @BiPO ₄ activated peroxydisulfate with microwave irradiation: Enhanced adsorptive binding and radical generation. 2023 , 452, 139298	0
92	Construction of novel In ₂ S ₃ /Ti ₃ C ₂ MXene quantum dots/SmFeO ₃ Z-scheme heterojunctions for efficient photocatalytic removal of sulfamethoxazole and 4-chlorophenol: Degradation pathways and mechanism insights. 2023 , 451, 138933	0
91	Upconversion fluorescence of MXene nanosheets and the sensitive detection of l-tryptophan. 2022 , 1, 1080-1087	1
90	Quantum Dots: Applications in Environmental Remediation. 2022 , 1-22	0
89	Investigation on conformational variation and enzymatic activity of trypsin affected by Ti ₃ C ₂ QDs via spectroscopic technique and molecular modeling. 2023 , 285, 121878	0

88	Two-dimensional Ti ₃ C ₂ T _x MXene promotes electrophysiological maturation of neural circuits. 2022 , 20,	0
87	Magnetic Ti ₃ C ₂ MXene Nanomaterials for Doxorubicin Adsorption from Aqueous Solutions: Kinetic, Isotherms, and Thermodynamic Studies. 2022 , 7, 31945-31953	0
86	Deep Learning-Enabled MXene/PEDOT:PSS Acoustic Sensor for Speech Recognition and Skin-Vibration Detection. 2200140	0
85	Mxene Ti ₃ C ₂ generated TiO ₂ nanoparticles in situ and uniformly embedded in rGO sheets as high stable anodes for potassium ion batteries. 2022 , 167414	0
84	Recent Advancement in Rational Design Modulation of MXene: A Voyage from Environmental Remediation to Energy Conversion and Storage.	1
83	Biomedical Applications of an Ultra-Sensitive Surface Plasmon Resonance Biosensor Based on Smart MXene Quantum Dots (SMQDs). 2022 , 12, 743	2
82	A Review on MXene Synthesis, Stability, and Photocatalytic Applications. 2022 , 16, 13370-13429	4
81	Solar driven photocatalytic dye degradation through the novel Ti ₂ CZnCo ₂ O ₄ MXenes nanocomposite. 2022 , 133, 113034	0
80	Recent Progress of Electrode Architecture for MXene/MoS ₂ Supercapacitor: Preparation Methods and Characterizations. 2022 , 13, 1837	0
79	Laser Manufactured Nano-MXenes with Tailored Halogen Terminations Enable Interfacial Ionic Stabilization of High Performance Perovskite Solar Cells. 2202395	2
78	MXenes for neurodegenerative disorders. 2022 ,	2
77	Two-dimensional photonic MXene nanomedicine. 2022 ,	1
76	New Horizons for MXenes in Biosensing Applications. 2022 , 12, 820	3
75	The interfacial embedding of halogen-terminated carbon dots produces highly efficient and stable flexible perovskite solar cells. 2022 , 37, 988-999	0
74	Recent Progress in Two Dimensional MXene for Photocatalysis: A Critical Review.	0
73	Titanium carbide@Poly (3,4-propylenedioxythiophene) composite as electrode for asymmetric flexible supercapacitors. 2022 ,	0
72	Synergistically modulating the electronic structure of Cr-doped FeNi LDH nanoarrays by O-vacancy and coupling of MXene for enhanced oxygen evolution reaction. 2022 ,	1
71	Ti ₃ C ₂ T _x MXene Nanosheet-Based Probe for Ion Fluorescence and Visual Detection of Ag ⁺ in Aqueous Solution and Living Cells.	0

70	Recent advances in MXenes: new horizons in biomedical technologies. 2022 , 26, 101205	0
69	Towards hospital-on-chip supported by 2D MXenes-based 5th generation intelligent biosensors. 2023 , 220, 114847	4
68	In situ growing Prussian blue nanocrystals on Ti ₃ C ₂ lamellae as high-performance electrode for potassium-ion storage. 2023 , 610, 155583	0
67	Two-dimensional transition metal carbides and nitrides (MXenes) based biosensing and molecular imaging. 2022 ,	1
66	Emerging applications of MXenes for photodetection: Recent advances and future challenges. 2022 ,	0
65	MXene quantum dots enhanced 3D-printed electrochemical sensor for the highly sensitive detection of dopamine. 2022 , 108180	0
64	Insights into electronic and magnetic properties of MXenes: From a fundamental perspective. 2022 , 34, e00516	0
63	Label-free, rapid and ratiometric detection of tetracyclines via guest stacking-induced emission triggered by MXene-derived nanosensors. 2022 , 133026	0
62	Emerging carbon-based quantum dots for sustainable photocatalysis.	0
61	A review related to MXene preparation and its sensor arrays of electronic skins.	0
60	Current progresses in two-dimensional MXene-based framework: prospects from superficial synthesis to energy conversion and storage applications. 2023 , 27, 101238	0
59	Ultralight Ti ₃ C ₂ T _x -derivative chrysanthemum-like Na ₂ Ti ₃ O ₇ /Ti ₃ C ₂ T _x MXene quantum dots 3D/0D heterostructure with advanced microwave absorption performance. 2023 , 456, 140985	1
58	Construction of 1D/0D CdS nanorods/Ti ₃ C ₂ QDs Schottky heterojunctions for efficient photocatalysis. 2023 , 11, 109191	1
57	A review of recent progress in 2D MXenes: Synthesis, properties, and applications. 2023 , 132, 109634	0
56	MXenes and MXene-supported nanocomposites: a novel materials for aqueous environmental remediation. 2022 , 12, 34766-34789	0
55	Ambient-stable MXene with superior performance suitable for widespread applications. 2022 , 140635	0
54	Applications of MXenes in human-like sensors and actuators.	2
53	Toward Smart Sensing by MXene. 2206126	2

52	Highly Enhanced Photocatalytic Hydrogen Production Performance of Heterostructured Ti ₃ C ₂ /TiO ₂ /rGO Composites. 2022 , 38, 15579-15591	0
51	MXene quantum dots/perovskite heterostructure enabling highly specific ultraviolet detection for skin prevention. 2022 ,	1
50	Recent Advances in MXene-Based Aerogels: Fabrication, Performance and Application. 2211889	0
49	Manipulation of Charge-Transfer Kinetics via Ti ₃ C ₂ T _x (T = O) Quantum Dot and N-Doped Carbon Dot Coloaded on CdS for Photocatalytic Hydrogen Production. 587-600	1
48	Fiber-Optic Microfiber: Tracking Activity Enhancement and Suppression of Heterogeneous Photocatalysts.	0
47	Porous 2D Ti ₃ C ₂ MXene nanosheets sandwiched between imine-based covalent organic frameworks (COFs) for excellent corrosion protective coatings. 2023 , 456, 141001	1
46	A comparative overview of MXenes and metal oxides as cocatalysts in clean energy production through photocatalysis.	0
45	MXenes-based nanomaterials for biosensing and biomedicine. 2023 , 479, 215002	1
44	0D/2D/3D ternary Au/Ti ₃ C ₂ /TiO ₂ photocatalyst based on accelerating charge transfer and enhanced stability for efficiently hydrogen production. 2023 , 615, 156397	0
43	MXene-derived Ti ₃ C ₂ quantum dots-based ratiometric fluorescence probe for ascorbic acid and acid phosphatase determination. 2023 , 187, 108397	0
42	New Horizons in the Synthesis, Properties, and Applications of MXene Quantum Dots. 2202139	0
41	Application Prospects of MXenes Materials Modifications for Sensors. 2023 , 14, 247	1
40	Super-elastic and mechanically durable MXene-based nanocomposite aerogels enabled by interfacial engineering with dual crosslinking strategy.	0
39	Latest advances on MXenes in biomedical research and health care. 2023 , 48, 283-290	0
38	Ti ₃ C ₂ /Mn _{0.5} Cd _{0.5} S composite photocatalyst for enhanced H ₂ generation. 2023 , 297, 127410	0
37	Additively manufactured MAX- and MXene-composite scaffolds for bone regeneration- recent advances and future perspectives. 2023 , 225, 113282	0
36	Structural, physical, wear and anticorrosive properties of electroactive polyamide/Ti ₃ C ₂ T _x MXene nanocomposite. 2023 , 178, 107496	0
35	MXenes: from past to future perspectives. 2023 , 463, 142351	0

- 34 Thinking green with 2-D and 3-D MXenes: Environment friendly synthesis and industrial scale applications and global impact. **2023**, 178, 113238 ○
- 33 Fabrication of a SAPNI/I-Ti3C2Tx 3D structure hybrid for the enhancement of higher barrier and self-passivation coatings. **2023**, 946, 169371 ○
- 32 Nanocomposite having hierarchical architecture of MXene-WO3 nanorod@rGOsponge and porous carbon for cathode and anode materials for high-performance flexible all-solid-state asymmetric supercapacitor device. **2023**, 623, 157042 ○
- 31 Advances in the synthesis and applications of 2D MXene-metal nanomaterials. **2023**, 38, 102873 ○
- 30 Highly flexible, foldable carbon cloth/MXene/polyaniline/CoNi layered double hydroxide electrode for high-performance all solid-state supercapacitors. **2023**, 64, 107116 ○
- 29 A highly conductive MXene-based rubber composite with relatively stable conductivity under small deformation and high sensing sensitivity at large strain. **2023**, 170, 107545 ○
- 28 Crafting two-dimensional materials for contrast agents, drug, and heat delivery applications through green technologies. **2023**, 31, 369-389 ○
- 27 Ti3C2T MXene supported ZnO nanocomposites with highly efficient photocatalytic performance for degradation of VOCs. **2023**, 133, 109763 ○
- 26 Emerging Trends and Recent Progress of MXene as a Promising 2D Material for Point of Care (POC) Diagnostics. **2023**, 13, 697 ○
- 25 Modulation of Surface TiD Species in 2D-Ti3C2TX MXene for Developing a Highly Efficient Electrocatalyst for Hydrogen Evolution and Methanol Oxidation Reactions. **2023**, 39, 2995-3005 ○
- 24 Highly efficient, remarkable sensor activity and energy storage properties of MXenes and borophene nanomaterials. **2023**, 100392 ○
- 23 Cytocompatibility of Ti3C2Tx MXene with Red Blood Cells and Human Umbilical Vein Endothelial Cells and the Underlying Mechanisms. **2023**, 36, 347-359 ○
- 22 Flexible, Stretchable, and Transparent MXene Nanosheet/Thermoplastic Polyurethane Films for Multifunctional Heating and Electromagnetic Interference Shielding. **2023**, 6, 3395-3404 ○
- 21 Fabrication and properties of the 6-aminocaproic acid-modified MXene-based PA6 nanocomposites. **2023**, 30, 529-541 ○
- 20 Green, HF-Free Synthesis of MXene Quantum Dots and their Photocatalytic Activity for Hydrogen Evolution. 2300063 ○
- 19 Post-Ammonia-Treated V2CTx MXene at Different Pressures: Effects on Morphology, Electronic, and Optical Properties. **2023**, 127, 4609-4617 ○
- 18 Advances and challenges in designing MXene quantum dots for sensors. **2023**, 2, 213-234 ○
- 17 MXene Ti3C2 decorated g-C3N4/ZnO photocatalysts with improved photocatalytic performance for CO2 reduction. **2023**, ○

- 16 Study on the electromagnetic wave absorption performance of Ti₃C₂ MXene with different etching states. **2023**, 58, 4824-4839 ○
- 15 Roles of MXenes in biomedical applications: recent developments and prospects. **2023**, 21, ○
- 14 Ru(II) Complex Grafted Ti₃C₂T_x MXene Nano Sheet with Photothermal/Photodynamic Synergistic Antibacterial Activity. **2023**, 13, 958 ○
- 13 High-performance warm white LED based on thermally stable all inorganic perovskite quantum dots. **2023**, 6, 230022-230022 ○
- 12 Synthesis and optical properties of light-emitting V₂N MXene quantum dots. **2023**, 138, 113660 ○
- 11 The Rise of MXene: A Wonder 2D Material, from Its Synthesis and Properties to Its Versatile Applications: A Comprehensive Review. **2023**, 381, ○
- 10 Phase Stability and Dual-Mode Photoluminescence Modulation in Er-Doped Lead Zirconate Titanate Antiferroelectrics. ○
- 9 Magnetic Ti₃C₂ MXene Nanosheets Prepared for Enrichment of Phosphopeptides. **2023**, 15, 16505-16514 ○
- 8 A novel fluorescent nanoprobe based on potassium permanganate functionalized Ti₃C₂ QDs for the unique turn-on/dual detection of Cr³⁺ and Hg²⁺ ions. **2023**, 190, ○
- 7 Bioresource Polymer Composite for Energy Generation and Storage: Developments and Trends. ○
- 6 In Situ Self-Assembled Formation of Nitrogen-Rich Ag@Ti₃C₂ Film for Sensitive Detection and Spatial Imaging of Pesticides with Laser Desorption/Ionization Mass Spectrometry (LDI-MS). **2023**, 15, 18402-18413 ○
- 5 Efficient activation of persulfate by Ti₃C₂ MXene QDs modified ZnFe₂O₄ for the rapid degradation of tetracycline. **2023**, 328, 138546 ○
- 4 Low Dose of Ti₃C₂ MXene Quantum Dots Mitigate SARS-CoV-2 Infection. ○
- 3 MXene/NiO Composites for Chemiresistive-Type Room Temperature Formaldehyde Sensor. **2023**, 11, 258 ○
- 2 Delaminated or Multi-layer Ti₃C₂T_x-MXene-incorporated polydimethylsiloxane mixed matrix membrane for enhancing CO₂ /N₂ separation. **2023**, 100410 ○
- 1 Investigation of the optical and electronic properties of functionalized Ti₃C₂ Mxene with halid atoms using DFT calculation. **2023**, 35, 106136 ○