

Resource Summary Report

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Texas A and M University Materials Characterization Core Facility

RRID:SCR_022202

Type: Tool

Proper Citation

Texas A and M University Materials Characterization Core Facility (RRID:SCR_022202)

Resource Information

URL: <https://mcf.tamu.edu/>

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Description: Core provides access to instrumentation essential for studies of surface and interfacial properties of materials, such as ion and electron based spectroscopies, electron, optical and scanning probe microscopies. Core provides training to students and faculty on instrumentation as well as consultation of measurements needs and data interpretation, supports educational activities involving lab tours, workshops, hands on demonstrations, outreach and broader impact related activities through our open house and lunchtime seminar series. Supports collaborative research projects with outside industrial users.

Abbreviations: MCF

Synonyms: Texas A&M University TAMU-Materials Characterization Facility (MCF), TAMU-Materials Characterization Facility (MCF)

Resource Type: core facility, service resource, access service resource

Keywords: USEDit, ABRF, ion and electron based spectroscopies, electron microscopy, optical and scanning probe microscopies,

Availability: open

Resource Name: Texas A and M University Materials Characterization Core Facility

Resource ID: SCR_022202

Alternate IDs: ABRF_1349

Alternate URLs: <https://coremarketplace.org/?FacilityID=1349>

Record Creation Time: 20220427T191217+0000

Record Last Update: 20260801T191249+0000

Ratings and Alerts

No rating or validation information has been found for Texas A and M University Materials Characterization Core Facility.

No alerts have been found for Texas A and M University Materials Characterization Core Facility.

Data and Source Information

Source: [SciCrunch Registry](#)

Usage and Citation Metrics

We found 68 mentions in open access literature.

Listed below are recent publications. The full list is available at [ASWG](#) .

Festus K, et al. (2026) Efficient Separation of C₂H₆/C₂H₄ and C₃H₈/C₂H₆/CH₄ Light Hydrocarbons Using Robust Porous Polymer Networks for C₂H₄ and CH₄ Purification. ACS applied materials & interfaces, 18(1), 2444.

Ngozichukwu B, et al. (2025) Synthesis, Characterization, and Electrochemical Behavior of Layered Vanadium Nitride MXene. ACS nano, 19(38), 34438.

Rahman MS, et al. (2025) Soft, stretchable conductive hydrogels for high-performance electronic implants. Science advances, 11(12), eads4415.

Arshad MU, et al. (2025) Toughening Mechanisms in Stacked Bilayer Graphene Sheets by Means of Sandwiched 1D Nano-rebars. Nano letters, 25(17), 7153.

Zhang Y, et al. (2025) Multiscale Engineered Heterogeneous Hydrogel Composites for Digital Light Processing 3D Printing. ACS applied materials & interfaces, 17(37), 51605.

Alden SE, et al. (2025) Optically Transparent Carbon-Silicon Nitride Windows for Correlative Structural and Electrochemical Analysis of Nanomaterials. Analytical chemistry, 97(22), 11798.

Floyd KR, et al. (2025) Harnessing the copper surface for direct mechanocatalysis: a case study on mechanochemical sulfonylurea synthesis. Chemical science, 16(42), 19830.

Bryant MT, et al. (2025) Synergistic Effects of Polystyrene Nanoplastics and Cadmium on the Metabolic Processes and Their Accumulation in Hydroponically Grown Lettuce (Lactuca sativa). Journal of agricultural and food chemistry, 73(26), 16157.

Yesudoss DK, et al. (2025) Lattice-Nitrogen-Mediated Chemistry Suppresses Hydrogen Evolution for Record Faradaic Efficiency in Ammonia Synthesis. *Journal of the American Chemical Society*, 147(32), 29327.

Auh YH, et al. (2025) Nacre-like MXene/Polyacrylic Acid Layer-by-Layer Multilayers as Hydrogen Gas Barriers. *ACS applied materials & interfaces*, 17(21), 31392.

Benavides OR, et al. (2025) Seeing deep to map cell-biomaterial interactions via whole mount light sheet imaging and automated analytics in decellularized extracellular matrix models. *Biomaterials science*.

Powell JA, et al. (2025) Structural Templation of MOF-Derived Zirconia Nanoparticles. *ACS applied materials & interfaces*, 17(47), 64842.

Soukar J, et al. (2025) Nanomaterial-induced mitochondrial biogenesis enhances intercellular mitochondrial transfer efficiency. *Proceedings of the National Academy of Sciences of the United States of America*, 122(43), e2505237122.

Mi C, et al. (2025) Towards non-blinking and photostable perovskite quantum dots. *Nature communications*, 16(1), 204.

Yoo RMS, et al. (2025) Vibrational Property Tuning of MXenes Revealed by Sublattice N Reactivity in Polar and Nonpolar Solvents. *Journal of the American Chemical Society*, 147(12), 10104.

Hargett SE, et al. (2025) Nanoengineered Shape-Memory Hemostat. *Small science*, 5(2), 2400321.

Hidayatova L, et al. (2025) Efficient Mn²⁺ Doping in Non-Stoichiometric Cesium Lead Bromide Perovskite Quantum Dots. *Journal of the American Chemical Society*, 147(38), 35069.

Das S, et al. (2025) Polysulfamates as "Macroisosteres" of Polyurethanes with Improved Degradability. *Angewandte Chemie (International ed. in English)*, 64(39), e202510841.

Fisher SG, et al. (2025) Biopolymer and Carnauba Wax Coating for Improved Paper Oxygen Barrier, Water Vapor Barrier, and Grease Resistance. *ACS applied materials & interfaces*, 17(39), 55307.

Mitchell CL, et al. (2025) Neuroprotective Parkinson's Disease Therapeutic: Transition Metal Dichalcogenide Nanoflower Treatments Alleviate Pathological Cell Stress. *bioRxiv* : the preprint server for biology.