

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: access service resource, core facility, 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: 20260912T200415+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 86 mentions in open access literature.

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

Ali RF, et al. (2026) Direct Photochemical Patterning of Lithium Niobate Structures for Scalable Nonlinear Optical Metasurfaces. *Small science*, 6(3), e202500606.

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.

Ponis J, et al. (2026) Alkali-Metal Interlocking of 2D V₄O₁₀ Sheets Defines Discretized Interlayer Shear Relationships. *Journal of the American Chemical Society*, 148(8), 8174.

Fisher SG, et al. (2026) Fish-Based Biopolymer Complex Coacervate Coating for Improved Paper Oxygen and Water Barrier. *Biomacromolecules*, 27(1), 795.

Jeong SG, et al. (2026) Strain-stabilized interfacial polarization tunes work function over 1??eV in RuO₂/TiO₂ heterostructures. *Nature communications*, 17(1).

Festus K, et al. (2026) Graphene-inspired porous polymer network for ethane/ethylene separation and methane purification. *Nature communications*, 17(1).

Cheng J, et al. (2026) Site-Selective Modification of Lanthanum Oxychloride to Modulate Halide-Ion Conduction. *ACS applied energy materials*, 9(8), 5265.

Rodriguez A, et al. (2026) Direct Detection of Viruses Using Antibody-Modified Gold Nanorods. *Journal of biophotonics*, 19(2), e202500417.

Biswas S, et al. (2026) Expandable Nanocomposite Shape-Memory Hemostat for the Treatment of Noncompressible Hemorrhage. *Advanced science* (Weinheim, Baden-Wurttemberg, Germany), 13(23), e08439.

Alfaifi A, et al. (2026) Geometry and Surface Feature Evaluation in E-PBF Process Using In-Operando Electron Emission Signal. *Materials* (Basel, Switzerland), 19(11).

Hsieh CM, et al. (2026) Tuning the Mechanical Properties of Crosslinked Copolymers via Sequence and Solvent-Selective Swelling for Vat Photopolymerization. *Angewandte Chemie* (International ed. in English), e8144140.

Banavath R, et al. (2026) Graphene oxide synthesis at a nonthermal plasma-water interface. *Nature communications*, 17(1).

Fan H, et al. (2026) Mechanical characterization of Col1a1 +/- osteogenesis imperfecta bone revealed altered mechanical stiffness heterogeneity across scales. *Cell biomaterials*, 2(2).

Miller SE, et al. (2026) Adhesive and Hemostatic Hydrogel for the Management of Postpartum Hemorrhage. *ACS applied materials & interfaces*, 18(25), 34835.

Atteberry ML, et al. (2026) Controlling the Surface Morphology of Strongly Confined CsPbBr₃ Perovskite Quantum Dots. *Nano letters*, 26(29), 9418.

Sur A, et al. (2025) Evaluating the Origins of Aerobic Oxidation Catalysis with TAM-3, a MOF with Accessible Co(II) Sites and Large Pores. *ACS catalysis*, 15(12), 10328.

Wang Y, et al. (2025) Subcellular Mechanical Imaging of Erythrocytes with Optically Correlated Scanning Ion Conductance Microscopy. *ACS measurement science au*, 5(3), 345.

Mitchell CL, et al. (2025) Neuroprotective properties of transition metal dichalcogenide nanoflowers alleviate acute and chronic neurological conditions linked to mitochondrial dysfunction. *The Journal of biological chemistry*, 301(5), 108498.

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

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.