

# 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/>

**Proper Citation:** Texas A and M University Materials Characterization Core Facility (RRID:SCR\_022202)

**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 consolation 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,

**Funding:**

**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:** 20250407T220641+0000

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## 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.

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## Data and Source Information

**Source:** [SciCrunch Registry](#)

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## Usage and Citation Metrics

We found 37 mentions in open access literature.

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

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

Kulesa KM, et al. (2024) Interfacing High-Throughput Electrosynthesis and Mass Spectrometric Analysis of Azines. Analytical chemistry, 96(21), 8249.

Tran TQ, et al. (2024) 3D Printed Carbon Nanotube/Phenolic Composites for Thermal Dissipation and Electromagnetic Interference Shielding. ACS applied materials & interfaces, 16(50), 69929.

Zhang W, et al. (2024) 3D structure-functional design of a biomass-derived photocatalyst for antimicrobial efficacy and chemical degradation under ambient conditions. Green chemistry : an international journal and green chemistry resource : GC, 26(19), 10139.

Arole K, et al. (2024) Effects of Intercalation on ML-Ti<sub>3</sub>C<sub>2</sub>T<sub>z</sub> MXene Properties and Friction Performance. *ACS applied materials & interfaces*, 16(46), 64156.

Alden SE, et al. (2024) High-Throughput Single-Entity Electrochemistry with Microelectrode Arrays. *Analytical chemistry*, 96(22), 9177.

Ponis J, et al. (2024) Atomistic Origins of Conductance Switching in an  $\alpha$ -Cu<sub>0.9</sub>V<sub>2</sub>O<sub>5</sub> Neuromorphic Single Crystal Oscillator. *Journal of the American Chemical Society*, 146(50), 34536.

Wang Y, et al. (2024) Electrochemical imaging of neurotransmitter release with fast-scan voltammetric ion conductance microscopy. *Science advances*, 10(50), eado9322.

Colvin L, et al. (2024) Computational Model-Assisted Development of a Nonenzymatic Fluorescent Glucose-Sensing Assay. *ACS sensors*, 9(11), 6218.

Lin H, et al. (2024) Integrating Photoactive Ligands into Crystalline Ultrathin 2D Metal-Organic Framework Nanosheets for Efficient Photoinduced Energy Transfer. *Journal of the American Chemical Society*, 146(2), 1491.

Hsiao CC, et al. (2024) Switchable Charge Storage Mechanism via in Situ Activation of MXene Enables High Capacitance and Stability in Aqueous Electrolytes. *ACS nano*, 18(9), 7180.

Garg M, et al. (2024) Molecularly Imprinted Wearable Sensor with Paper Microfluidics for Real-Time Sweat Biomarker Analysis. *ACS applied materials & interfaces*, 16(35), 46113.

Ahmed S, et al. (2024) Zinc Nitrate Hexahydrate Pseudobinary Eutectics for Near-Room-Temperature Thermal Energy Storage. *ACS applied engineering materials*, 2(3), 530.

Bryant MT, et al. (2024) Mutual Effects and Uptake of Organic Contaminants and Nanoplastics by Lettuce in Co-Exposure. *ACS agricultural science & technology*, 4(4), 463.

Leng M, et al. (2024) Resonance-Assisted Self-Doping in Robust Open-Shell Ladder-Type Oligoaniline Analogues. *Angewandte Chemie (International ed. in English)*, e202409149.

DeFlorio W, et al. (2024) Bioinspired Superhydrophobic Nanocoating Based on Polydopamine and Nanodiamonds to Mitigate Bacterial Attachment to Polyvinyl Chloride Surfaces in Food Industry Environments. *Industrial & engineering chemistry research*, 63(14), 6235.

Li Y, et al. (2024) Tough Monolayer Silver Nanowire-Reinforced Double-Layer Graphene. *ACS applied materials & interfaces*.

Personick ML, et al. (2024) Nanomaterials Synthesis Discovery via Parallel Electrochemical Deposition. *Chemistry of materials : a publication of the American Chemical Society*, 36(6), 3034.

Mahnaz F, et al. (2024) Intermediate Transfer Rates and Solid-State Ion Exchange are Key Factors Determining the Bifunctionality of In<sub>2</sub>O<sub>3</sub>/HZSM-5 Tandem CO<sub>2</sub> Hydrogenation Catalyst. ACS sustainable chemistry & engineering, 12(13), 5197.

Arole K, et al. (2024) Annealing Ti<sub>3</sub>C<sub>2</sub>T<sub>z</sub> MXenes to Control Surface Chemistry and Friction. ACS applied materials & interfaces, 16(5), 6290.