

# Resource Summary Report

Generated by PRECISE-TBI on Sep 19, 2026

## FiberApp

RRID:SCR\_015826

Type: Tool

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### Proper Citation

FiberApp (RRID:SCR\_015826)

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### Resource Information

**URL:** <http://www.fsm.ethz.ch/publications-list/software.html>

**Proper Citation:** FiberApp (RRID:SCR\_015826)

**Description:** Software for tracking and analysis based on algorithms describing structural and topological features of fiber-like objects. The program operates on images from any microscopic source (atomic force or transmission electron microscopy, optical, fluorescence, confocal, etc.), acquiring the spatial coordinates of objects.

**Synonyms:** FiberApp: An Open-Source Software for Tracking and Analyzing Polymers, Biomacromolecules, Filaments, and Fibrous Objects

**Resource Type:** data analysis software, data processing software, software application, software resource

**Keywords:** semiflexible polymer, neurodegenerative disease, fiber-like object, topography, tracking, analysis, microscopic image analysis

**Funding:** Swiss National Science Foundation SNF 2-77002-11

**Availability:** Open source, Available for download

**Resource Name:** FiberApp

**Resource ID:** SCR\_015826

**License URLs:** <https://github.com/ivan-usov/FiberApp/blob/master/LICENSE.md>

**Record Creation Time:** 20220129T080327+0000

**Record Last Update:** 20260912T195831+0000

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### Ratings and Alerts

No rating or validation information has been found for FiberApp.

No alerts have been found for FiberApp.

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## Data and Source Information

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

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## Usage and Citation Metrics

We found 28 mentions in open access literature.

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

Pang J, et al. (2026) Edible mayonnaise-like emulsion stabilized by rice bran protein fibril aggregation: effect of fibril aggregate structure. NPJ science of food, 10(1), 42.

Daicho K, et al. (2025) Uniform elementary fibrils in diverse plant cell walls. Proceedings of the National Academy of Sciences of the United States of America, 122(15), e2426467122.

Li S, et al. (2025) Dual Hydrophilic-Hydrophobic Core Architecture in Soy Glycinin Amyloid Fibrils Revealed by Cryo-EM. Advanced science (Weinheim, Baden-Wurttemberg, Germany), 12(41), e09821.

Frey L, et al. (2024) A structural rationale for reversible vs irreversible amyloid fibril formation from a single protein. Nature communications, 15(1), 8448.

Chibh S, et al. (2024) Amylum forms typical self-assembled amyloid fibrils. Science advances, 10(35), eadp6471.

Low JYK, et al. (2023) Release of frustration drives corneal amyloid disaggregation by brain chaperone. Communications biology, 6(1), 348.

Nirmalraj PN, et al. (2023) Protein fibril length in cerebrospinal fluid is increased in Alzheimer's disease. Communications biology, 6(1), 251.

Ruffino R, et al. (2023) Modulating Polymer Ultrathin Film Crystalline Fraction and Orientation with Nanoscale Curvature. Polymers, 15(22).

Issman L, et al. (2022) Highly Oriented Direct-Spun Carbon Nanotube Textiles Aligned by In Situ Radio-Frequency Fields. ACS nano, 16(6), 9583.

Pavlik P, et al. (2022) Arginine 58 is indispensable for proper function of the Francisella tularensis subsp. holarctica FSC200 HU protein, and its substitution alters virulence and mediates immunity against wild-type strain. Virulence, 13(1), 1790.

Xu Z, et al. (2022) Structure remodeling of soy protein-derived amyloid fibrils mediated by epigallocatechin-3-gallate. Biomaterials, 283, 121455.

Semerdzhev SA, et al. (2022) Interactions between SARS-CoV-2 N-Protein and  $\beta$ -Synuclein Accelerate Amyloid Formation. ACS chemical neuroscience, 13(1), 143.

Zhou J, et al. (2022) Oat Plant Amyloids for Sustainable Functional Materials. Advanced science (Weinheim, Baden-Wurttemberg, Germany), 9(4), e2104445.

Jaklin M, et al. (2022) A new fibrillization mechanism of  $\beta$ -lactoglobulin in glycine solutions. International journal of biological macromolecules, 216, 414.

Perkins HT, et al. (2021) Network organisation and the dynamics of tubules in the endoplasmic reticulum. Scientific reports, 11(1), 16230.

Jurado R, et al. (2021) Understanding the Formation of Apoferritin Amyloid Fibrils. Biomacromolecules, 22(5), 2057.

Nirmalraj PN, et al. (2021) Spatial organization of protein aggregates on red blood cells as physical biomarkers of Alzheimer's disease pathology. Science advances, 7(39), eabj2137.

Adamcik J, et al. (2021) Evolution of Conformation, Nanomechanics, and Infrared Nanospectroscopy of Single Amyloid Fibrils Converting into Microcrystals. Advanced science (Weinheim, Baden-Wurttemberg, Germany), 8(2), 2002182.

Pugliese R, et al. (2020) Cross-Linked Self-Assembling Peptides and Their Post-Assembly Functionalization via One-Pot and In Situ Gelation System. International journal of molecular sciences, 21(12).

Cox H, et al. (2019) Active Modulation of States of Prestress in Self-Assembled Short Peptide Gels. Biomacromolecules, 20(4), 1719.