Resource Summary Report

Generated by kravitz2 on Sep 17, 2026

OrientationJ

RRID:SCR_014796
Type: Tool

Proper Citation

OrientationJ (RRID:SCR_014796)

Resource Information

URL: http://bigwww.epfl.ch/demo/orientation/

Proper Citation: OrientationJ (RRID:SCR_014796)

Description: Software used to automatically characterize the orientation and isotropy properties of a region of interest in an image based on the evaluation of the structure tensor in a local neighborhood. OrientationJ has four functionalities: visual representation of the orientation, quantitative orientation measurement, making distribution of orientations, and corner detection.

Synonyms: Orientation J

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

Keywords: orientation, isotropy, region of interest, visual representation, quantitative orientation measurement, data analysis software

Availability: Acknowledgement requested, Free for research purposes, Can be redistributed with consent

Resource Name: OrientationJ

Resource ID: SCR_014796

Record Creation Time: 20220129T080322+0000

Record Last Update: 20260912T195822+0000

Ratings and Alerts

No rating or validation information has been found for OrientationJ.

No alerts have been found for OrientationJ.

Data and Source Information

Source: SciCrunch Registry

Usage and Citation Metrics

We found 153 mentions in open access literature.

Listed below are recent publications. The full list is available at kravitz2 .

Debbi L, et al. (2026) The Effect of Mechanical Loading on Sprouting Angiogenesis from Engineered Macro-vessel Model. Small methods, 10(4), e00850.

Liu Y, et al. (2026) Topology-optimized melt-electrowritten PCL patch for abdominal wall reconstruction. Bioactive materials, 55, 529.

Kaivola J, et al. (2026) Restoring the tumour mechanophenotype of vocal fold cancer reverts its malignant properties. Nature materials, 25(5), 868.

Herrera A, et al. (2026) Cell type-specific response to curvature controls tissue growth dynamics in biomaterial pores. Bioactive materials, 61, 482.

Tsutsumi M, et al. (2026) Significance of fiber orientation in the interosseous sacroiliac ligament: An anatomical and histological study of the implications of its mechanical adaptation. Journal of anatomy, 249(1), 68.

Gohel P, et al. (2026) A non-transcriptional mitotic function of POU/Oct factors ensures spindle assembly and chromosome segregation. Journal of cell science, 139(5).

Jung WH, et al. (2026) Matrix Viscoelasticity Regulates Dendritic Cell Migration and Immune Priming. Advanced materials (Deerfield Beach, Fla.), 38(32), e23274.

Ramahdita G, et al. (2026) 3D-Printing-Assisted, Microfabricated Devices Reveal Hierarchical and Temporal Mechanosensing in High-Density Fibroblast Culture. ACS nano, 20(20), 14392.

Sandoval KIO, et al. (2026) EMMIs: Engineered Myometrial Microtissues for Direct Quantification of Oxytocin-Induced Contractility. bioRxiv : the preprint server for biology.

Masuda R, et al. (2026) Orientation-based evaluation of scleral collagen fibers in uveitic secondary glaucoma. Graefe's archive for clinical and experimental ophthalmology = Albrecht von Graefes Archiv fur klinische und experimentelle Ophthalmologie, 264(5), 1435.

Ibrahim AM, et al. (2026) Geometry-Encoded Microtrenches Stabilize Endothelium on High Shear Biomaterial Surfaces. bioRxiv : the preprint server for biology.

Admiraal J, et al. (2026) Building the blood-brain barrier: a scalable self-assembling 3D model of the brain microvasculature under unidirectional flow. Fluids and barriers of the CNS, 23(1), 29.

Chen X, et al. (2026) Stiff matrix-induced KRTAP2-3 expression suppresses ciliogenesis via actin tension-driven chromatin remodeling. Cell death & disease, 17(1).

P??rez-Verdugo F, et al. (2026) Mechanosensitive feedback organizes cell shape and motion during hindbrain neuropore morphogenesis. Current biology : CB, 36(8), 1903.

Kodithuwakku Arachchige M, et al. (2025) Directional Swimming of B. Subtilis Bacteria Near a Switchable Polar Surface. Small (Weinheim an der Bergstrasse, Germany), 21(5), e2403088.

Eckert J, et al. (2025) Capturing nematic order on tissue surfaces of arbitrary geometry. Nature communications, 16(1), 7596.

Schlangen M, et al. (2025) Meat analogues: The relationship between mechanical anisotropy, macrostructure, and microstructure. Current research in food science, 10, 100980.

Jia N, et al. (2025) Laminin-conjugated aligned nanofiber yarns for topographical and biochemical guidance of neurite outgrowth and branching regulation. Journal of nanobiotechnology, 23(1), 769.

Sung BH, et al. (2025) Exosomes are specialized vehicles to induce fibronectin assembly. bioRxiv : the preprint server for biology.

Alimi OA, et al. (2025) Porous Decellularized Nerve Grafts Facilitate Recellularization and Nerve Regeneration in a Rat Model of Critical Long-Gap Peripheral Nerve Injury. Advanced healthcare materials, 14(25), e2502320.