Resource Summary Report

Generated by dkNET on May 19, 2025

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

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

Funding:

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: 20250519T203840+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 99 mentions in open access literature.

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

Eustache RP, et al. (2025) Medusa's gaze: Cell traces and fibrils but no collagen in permineralized Jurassic ichthyosaur bone. iScience, 28(1), 111523.

Marzban S, et al. (2024) Spatial interactions modulate tumor growth and immune infiltration. bioRxiv : the preprint server for biology.

Chen SM, et al. (2024) Hierarchical and reconfigurable interfibrous interface of bioinspired Bouligand structure enabled by moderate orderliness. Science advances, 10(14), eadl1884.

Melogno I, et al. (2024) A transient radial cortical microtubule array primes cell division in Arabidopsis. Proceedings of the National Academy of Sciences of the United States of America, 121(29), e2320470121.

Balasubramaniam L, et al. (2024) Different Biomechanical Cell Behaviors in an Epithelium Drive Collective Epithelial Cell Extrusion. Advanced science (Weinheim, Baden-Wurttemberg, Germany), 11(42), e2401573.

Skillin NP, et al. (2024) Stiffness anisotropy coordinates supracellular contractility driving long-range myotube-ECM alignment. Science advances, 10(22), eadn0235.

Potolitsyna E, et al. (2024) Cytoskeletal rearrangement precedes nucleolar remodeling during adipogenesis. Communications biology, 7(1), 458.

Zhang B, et al. (2024) GelMA micropattern enhances cardiomyocyte organization, maturation, and contraction via contact guidance. APL bioengineering, 8(2), 026108.

Hidalgo-Ogalde B, et al. (2024) Nonreciprocal feedback induces migrating oblique and horizontal banded vegetation patterns in hyperarid landscapes. Scientific reports, 14(1), 14635.

Kitana W, et al. (2024) Biofabrication of Composite Bioink-Nanofiber Constructs: Effect of

Rheological Properties of Bioinks on 3D (Bio)Printing and Cells Interaction with Aligned Touch Spun Nanofibers. Advanced healthcare materials, 13(6), e2303343.

Shteinberg G, et al. (2024) Plant Biomimetic Principles of Multifunctional Soft Composite Development: A Synergistic Approach Enabling Shape Morphing and Mechanical Robustness. ACS biomaterials science & engineering, 10(6), 3707.

Sekine S, et al. (2024) Emergence of periodic circumferential actin cables from the anisotropic fusion of actin nanoclusters during tubulogenesis. Nature communications, 15(1), 464.

Kim M, et al. (2024) Regulation of Corneal Stromal Cell Behavior by Modulating Curvature Using a Hydraulically Controlled Organ Chip Array. Research square.

Seo JY, et al. (2024) Mechanical shutdown of battery separators: Silicon anode failure. Nature communications, 15(1), 10134.

Muñoz A, et al. (2024) FiberO for an automated quantitative analysis of fibers orientation and organization in biological fibrous tissues. Frontiers in bioengineering and biotechnology, 12, 1497837.

Raoux C, et al. (2023) Unveiling the lamellar structure of the human cornea over its full thickness using polarization-resolved SHG microscopy. Light, science & applications, 12(1), 190.

Grubb S, et al. (2023) Ultrastructure of precapillary sphincters and the neurovascular unit. Vascular biology (Bristol, England), 5(1).

Skillin NP, et al. (2023) Stiffness anisotropy coordinates supracellular contractility driving long-range myotube-ECM alignment. bioRxiv : the preprint server for biology.

Liu YX, et al. (2023) Visualization of porosity and pore size gradients in electrospun scaffolds using laser metrology. PloS one, 18(3), e0282903.

Sapudom J, et al. (2023) Collagen Fibril Orientation Instructs Fibroblast Differentiation Via Cell Contractility. Advanced science (Weinheim, Baden-Wurttemberg, Germany), 10(22), e2301353.