Resource Summary Report

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MATLAB Tutorial on Diffusion Tensor MRI

RRID:SCR_009507
Type: Tool

Proper Citation

MATLAB Tutorial on Diffusion Tensor MRI (RRID:SCR_009507)

Resource Information

URL: http://www.nitrc.org/projects/dwmri_in_matlab/

Proper Citation: MATLAB Tutorial on Diffusion Tensor MRI (RRID:SCR_009507)

Description: An on-line tutorial on how to use MATLAB for Diffusion-Weighted MRI processing. The following subjects are covered in this tutorial: Generation of Synthetic Diffusion-Weighted MRI datasets, Diffusion Tensor (DTI) Estimation from DW-MRI, DTI Visualization as a field of ellipsoids, Higher-order Diffusion Tensor Estimation from DW-MRI, Computing of Tensor Orientation Distribution Functions (Tensor ODF), Computing of Fiber Orientations, Higher-order Diffusion Tensor Image Visualization as fields of spherical functions, Multi-fiber reconstruction etc. The tutorial contains numerous illustrations, figures and Matlab scripts embedded in the text. The reader/user can automatically generate Matlab script for a self-designed DW-MRI experiment by selecting which steps needs to be followed. The code that corresponds to the selected steps is then appropriately merged in the Matlab Script Generator, and the user can easily copy and paste the produced code directly to the Matlab command prompt.

Abbreviations: MATLAB Tutorial on Diffusion Tensor MRI

Resource Type: narrative resource, data or information resource, training material

Keywords: magnetic resonance, dti, matlab, mri, visualization

Funding:

Resource Name: MATLAB Tutorial on Diffusion Tensor MRI

Resource ID: SCR_009507

Alternate IDs: nlx_155656

Record Creation Time: 20220129T080253+0000

Record Last Update: 20250523T054737+0000

Ratings and Alerts

No rating or validation information has been found for MATLAB Tutorial on Diffusion Tensor MRI.

No alerts have been found for MATLAB Tutorial on Diffusion Tensor MRI.

Data and Source Information

Source: SciCrunch Registry

Usage and Citation Metrics

We have not found any literature mentions for this resource.