## **Resource Summary Report**

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# **Mimics**

RRID:SCR\_012153 Type: Tool

**Proper Citation** 

Mimics (RRID:SCR\_012153)

#### **Resource Information**

URL: http://biomedical.materialise.com/mimics

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**Description:** Software for medical image processing. Use Mimics for the segmentation of 3D medical images (coming from CT, MRI, microCT, CBCT, Ultrasound, Confocal Microscopy) and the result will be highly accurate 3D models of your patient's anatomy. You can then use these patient-specific models for a variety of engineering applications directly in Mimics or 3-matic, or export the 3D models and anatomical landmark points to 3rd party software, like statistical, CAD, or FEA packages.

Abbreviations: Mimics

**Synonyms:** Materialise MIMICS, Mimics - Medical Image Segmentation for Engineering on Anatomy

**Resource Type:** image analysis software, segmentation software, commercial organization, software application, image processing software, software resource, data processing software

**Keywords:** segmentation, 3d-rendering, micro-ct, ct, mri, cbct, ultrasound, confocal microscopy, anatomy

Funding:

Resource Name: Mimics

Resource ID: SCR\_012153

Alternate IDs: rid\_000086

Record Creation Time: 20220129T080308+0000

Record Last Update: 20250503T060310+0000

#### **Ratings and Alerts**

No rating or validation information has been found for Mimics.

No alerts have been found for Mimics.

#### Data and Source Information

Source: <u>SciCrunch Registry</u>

### **Usage and Citation Metrics**

We found 940 mentions in open access literature.

Listed below are recent publications. The full list is available at <u>NIF</u>.

Lu S, et al. (2025) Location or size? A finite element analysis study of necrotic lesion impact on femoral head collapse. Journal of orthopaedic surgery and research, 20(1), 48.

Shang Z, et al. (2025) Biomechanical Characteristics of First Coronal Reverse Vertebrae in Lenke Type V Adolescent Idiopathic Scoliosis: A Study Using Finite Element Analysis. Orthopaedic surgery, 17(2), 563.

Ono A, et al. (2025) X-Ray Fluoroscopy-Based Kinematic Analysis of Quadrupedal Locomotion in Slow and Fast Fatigue-Resistant Motor Neuron-Deleted Mice. Muscle & nerve, 71(2), 257.

Zhong Y, et al. (2025) Optimal suturing techniques in patch-bridging reconstruction for massive rotator cuff tears: A finite element analysis. Asia-Pacific journal of sports medicine, arthroscopy, rehabilitation and technology, 39, 22.

Zhang X, et al. (2025) Reducing the Brace Correction Stress on the Secondary Lumbar Curve Results in Excellent Muscle, Bone, and Disc Mechanical Performance: A Musculoskeletal Finite Element Simulation of AIS Patient With Rigo A3. Orthopaedic surgery, 17(2), 525.

Lv Z, et al. (2025) Bolstered bone regeneration by multiscale customized magnesium scaffolds with hierarchical structures and tempered degradation. Bioactive materials, 46, 457.

Liu J, et al. (2025) Fracture Line Morphology and a Novel Classification of Pilon Fractures. Orthopaedic surgery, 17(2), 540.

Liu C, et al. (2025) Application of a 3D Fusion Model to Evaluate the Efficacy of Clear Aligner Therapy in Malocclusion Patients: Prospective Observational Study. Journal of medical Internet research, 27, e67378.

Hwang S, et al. (2025) Clinical outcome and volumetric 3D analysis of biofluorescence imaging system guided surgery for Medication-Related Osteonecrosis of the Jaw(MRONJ). BMC oral health, 25(1), 123.

Bao X, et al. (2025) Study on the crack propagation morphology and initiation law of coal rock under the action of underwater electric pulse. Scientific reports, 15(1), 2013.

Bae SJ, et al. (2025) Changes of temporomandibular joint space volume during 1 year after transoral vertical ramus osteotomy in patients with mandibular asymmetry. Scientific reports, 15(1), 3102.

Tabernée Heijtmeijer SJC, et al. (2025) Postoperative accuracy quantification of corrective osteotomies: standardisation of Q3D-CT methodology. European journal of trauma and emergency surgery : official publication of the European Trauma Society, 51(1), 81.

Choi JH, et al. (2025) Clinical Efficacy of Three-Dimensional-Printed Pure Titanium Fracture Plates with Locking Screw Systems in Distal Tibia Fractures. Medicina (Kaunas, Lithuania), 61(1).

Wang X, et al. (2025) Construction of functional tissue-engineered microvasculatures using circulating fibrocytes as mural cells. Journal of tissue engineering, 16, 20417314251315523.

He X, et al. (2025) Three-Dimensional Printed Prosthesis Reconstructs Bilateral Type III Pelvic Defect After Malignant Tumors Resection. Orthopaedic surgery, 17(1), 260.

Zhu J, et al. (2025) Exploring the optimal reconstruction strategy for Enneking III defects in pelvis bone tumors: a finite element analysis. Journal of orthopaedic surgery and research, 20(1), 96.

Yao X, et al. (2025) New evidence for the earliest ornithischian dinosaurs from Asia. iScience, 28(1), 111641.

Lin W, et al. (2025) Biomechanical Evaluation of Clival Screw Fixation for Occipitocervical Instablity: A Finite Element Analysis. Orthopaedic surgery, 17(2), 583.

Xie X, et al. (2025) Osteoarthritis-like changes in rat temporomandibular joint induced by unilateral anterior large overjet treatment. Scientific reports, 15(1), 1646.

Hussain A, et al. (2025) Anterior Cruciate Ligament Mechanical Response to Load in the Setting of Changes to the Medial Meniscus. Bioengineering (Basel, Switzerland), 12(1).