

# Christopher Nimsky

## List of Publications by Year in descending order

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316  
papers

14,713  
citations

15504

65  
h-index

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340  
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340  
docs citations

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times ranked

10671  
citing authors

| #  | ARTICLE   | IF   | CITATIONS |
|----|---|------|-----------|
| 1  | Quantification of, Visualization of, and Compensation for Brain Shift Using Intraoperative Magnetic Resonance Imaging. <i>Neurosurgery</i> , 2000, 47, 1070-1080.   | 1.1  | 514       |
| 2  | A Clinical Trial of Progesterone for Severe Traumatic Brain Injury. <i>New England Journal of Medicine</i> , 2014, 371, 2467-2476.  | 27.0 | 404       |
| 3  | Preoperative and Intraoperative Diffusion Tensor Imaging-based Fiber Tracking in Glioma Surgery. <i>Neurosurgery</i> , 2005, 56, 130-138.   | 1.1  | 379       |
| 4  | Intraoperative Magnetic Resonance Imaging with the Magnetom Open Scanner: Concepts, Neurosurgical Indications, and Procedures: A Preliminary Report. <i>Neurosurgery</i> , 1998, 43, 739-747.               | 1.1  | 338       |
| 5  | CLINICAL EVALUATION AND FOLLOW-UP OUTCOME OF DIFFUSION TENSOR IMAGING-BASED FUNCTIONAL NEURONAVIGATION. <i>Neurosurgery</i> , 2007, 61, 935-949.  | 1.1  | 320       |
| 6  | INTRAOPERATIVE SUBCORTICAL LANGUAGE TRACT MAPPING GUIDES SURGICAL REMOVAL OF GLIOMAS INVOLVING SPEECH AREAS. <i>Neurosurgery</i> , 2007, 60, 67-82.   | 1.1  | 273       |
| 7  | Intraoperative High-Field-Strength MR Imaging: Implementation and Experience in 200 Patients. <i>Radiology</i> , 2004, 233, 67-78.  | 7.3  | 260       |
| 8  | Correlation of the extent of tumor volume resection and patient survival in surgery of glioblastoma multiforme with high-field intraoperative MRI guidance. <i>Neuro-Oncology</i> , 2011, 13, 1339-1348.    | 1.2  | 258       |
| 9  | Intraoperative Diffusion-Tensor MR Imaging: Shifting of White Matter Tracts during Neurosurgical Procedures—Initial Experience. <i>Radiology</i> , 2005, 234, 218-225.                                      | 7.3  | 235       |
| 10 | Intraoperative visualization of the pyramidal tract by diffusion-tensor-imaging-based fiber tracking. <i>NeuroImage</i> , 2006, 30, 1219-1229.  | 4.2  | 228       |
| 11 | Intraoperative compensation for brain shift. <i>World Neurosurgery</i> , 2001, 56, 357-364.   | 1.3  | 199       |
| 12 | Functional neuronavigation with magnetoencephalography: outcome in 50 patients with lesions around the motor cortex. <i>Journal of Neurosurgery</i> , 1999, 91, 73-79.                                      | 1.6  | 193       |
| 13 | GBM Volumetry using the 3D Slicer Medical Image Computing Platform. <i>Scientific Reports</i> , 2013, 3, 1364.  | 3.3  | 185       |
| 14 | Intraoperative visualization for resection of gliomas: the role of functional neuronavigation and intraoperative 1.5 T MRI. <i>Neurological Research</i> , 2006, 28, 482-487.                               | 1.3  | 184       |
| 15 | Intraoperative magnetic resonance imaging during transsphenoidal surgery. <i>Journal of Neurosurgery</i> , 2001, 95, 381-390.   | 1.6  | 181       |
| 16 | Gliomas: Histopathologic Evaluation of Changes in Directionality and Magnitude of Water Diffusion at Diffusion-Tensor MR Imaging. <i>Radiology</i> , 2006, 240, 803-810.                                    | 7.3  | 181       |
| 17 | Seizure outcome and use of antiepileptic drugs after epilepsy surgery according to histopathological diagnosis: a retrospective multicentre cohort study. <i>Lancet Neurology</i> , The, 2020, 19, 748-757. | 10.2 | 177       |
| 18 | Integration of Functional Magnetic Resonance Imaging Supported by Magnetoencephalography in Functional Neuronavigation. <i>Neurosurgery</i> , 1999, 44, 1249-1256.  | 1.1  | 171       |

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|----|--|------|-----------|
| 19 | Functional Magnetic Resonance Imaging-integrated Neuronavigation: Correlation between Lesion-to-Motor Cortex Distance and Outcome. <i>Neurosurgery</i> , 2004, 55, 904-915.                                  | 1.1  | 168       |
| 20 | Preoperative Grading of Gliomas by Using Metabolite Quantification with High-Spatial-Resolution Proton MR Spectroscopic Imaging. <i>Radiology</i> , 2006, 238, 958-969.                                      | 7.3  | 168       |
| 21 | Small interfering RNA-mediated xCT silencing in gliomas inhibits neurodegeneration and alleviates brain edema. <i>Nature Medicine</i> , 2008, 14, 629-632.   | 30.7 | 166       |
| 22 | Operative treatment of prolactinomas: indications and results in a current consecutive series of 212 patients. <i>European Journal of Endocrinology</i> , 2008, 158, 11-18.                                  | 3.7  | 157       |
| 23 | The Natural History of Cerebral Dural Arteriovenous Fistulae. <i>Neurosurgery</i> , 2012, 71, 594-603.   | 1.1  | 154       |
| 24 | PREOPERATIVE AND INTRAOPERATIVE DIFFUSION TENSOR IMAGING-BASED FIBER TRACKING IN GLIOMA SURGERY. <i>Neurosurgery</i> , 2007, 61, 130-138.  | 1.1  | 149       |
| 25 | Volumetric Assessment of Glioma Removal by Intraoperative High-field Magnetic Resonance Imaging. <i>Neurosurgery</i> , 2004, 55, 358-371.  | 1.1  | 148       |
| 26 | Prognostic Value of Residual Fluorescent Tissue in Glioblastoma Patients After Gross Total Resection in 5-Aminolevulinic Acid-Guided Surgery. <i>Neurosurgery</i> , 2013, 72, 915-921.                       | 1.1  | 148       |
| 27 | Correlation of Sensorimotor Activation with Functional Magnetic Resonance Imaging and Magnetoencephalography in Presurgical Functional Imaging: A Spatial Analysis. <i>NeuroImage</i> , 2001, 14, 1214-1228. | 4.2  | 147       |
| 28 | Intraoperative High-Field Magnetic Resonance Imaging in Transsphenoidal Surgery of Hormonally Inactive pituitary Macroadenomas. <i>Neurosurgery</i> , 2006, 59, 105-114.                                     | 1.1  | 145       |
| 29 | Strategies for brain shift evaluation. <i>Medical Image Analysis</i> , 2004, 8, 447-464.   | 11.6 | 143       |
| 30 | Prediction of visual field deficits by diffusion tensor imaging in temporal lobe epilepsy surgery. <i>NeuroImage</i> , 2009, 45, 286-297.  | 4.2  | 135       |
| 31 | Intraoperative Magnetic Resonance Imaging Combined with Neuronavigation: A New Concept. <i>Neurosurgery</i> , 2001, 48, 1082-1091.   | 1.1  | 130       |
| 32 | THREE-DIMENSIONAL MICROSURGICAL AND TRACTOGRAPHIC ANATOMY OF THE WHITE MATTER OF THE HUMAN BRAIN. <i>Neurosurgery</i> , 2008, 62, SHC989-SHC1028.  | 1.1  | 130       |
| 33 | Diffusion tensor imaging and white matter tractography in patients with brainstem lesions. <i>Acta Neurochirurgica</i> , 2007, 149, 1117-1131.   | 1.7  | 127       |
| 34 | Imaging of human brain tumor tissue by near-infrared laser coherence tomography. <i>Acta Neurochirurgica</i> , 2009, 151, 507-517.   | 1.7  | 121       |
| 35 | Improved delineation of brain tumors: an automated method for segmentation based on pathologic changes of 1H-MRSI metabolites in gliomas. <i>NeuroImage</i> , 2004, 23, 454-461.                             | 4.2  | 118       |
| 36 | Diffusion tensor imaging and optimized fiber tracking in glioma patients: Histopathologic evaluation of tumor-invaded white matter structures. <i>NeuroImage</i> , 2007, 34, 949-956.                        | 4.2  | 117       |

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|----|---|------|-----------|
| 37 | Computational modeling of the WHO grade II glioma dynamics: principles and applications to management paradigm. <i>Neurosurgical Review</i> , 2008, 31, 263-269.  | 2.4  | 113       |
| 38 | Localisation of the sensorimotor cortex during surgery for brain tumours: feasibility and waveform patterns of somatosensory evoked potentials. <i>Journal of Neurology, Neurosurgery and Psychiatry</i> , 2002, 72, 221-229.     | 1.9  | 112       |
| 39 | Intraoperative identification of motor areas of the rhomboid fossa using direct stimulation. <i>Journal of Neurosurgery</i> , 1993, 79, 393-399.  | 1.6  | 109       |
| 40 | FUNCTIONAL BRAIN MAPPING AND ITS APPLICATIONS TO NEUROSURGERY. <i>Operative Neurosurgery</i> , 2007, 60, 185-202.   | 0.8  | 109       |
| 41 | Integration of Functional Magnetic Resonance Imaging Supported by Magnetoencephalography in Functional Neuronavigation. <i>Neurosurgery</i> , 1999, 44, 1249-1255.  | 1.1  | 106       |
| 42 | Intraoperative functional MRI: Implementation and preliminary experience. <i>NeuroImage</i> , 2005, 26, 685-693.  | 4.2  | 104       |
| 43 | DIFFUSION TENSOR TRACTOGRAPHY PREDICTS MOTOR FUNCTIONAL OUTCOME IN PATIENTS WITH SPONTANEOUS INTRACEREBRAL HEMORRHAGE. <i>Neurosurgery</i> , 2008, 62, 97-103.  | 1.1  | 102       |
| 44 | Intra-operative magnetic resonance imaging in neurosurgery. <i>Acta Neurochirurgica</i> , 2004, 146, 543-557.   | 1.7  | 101       |
| 45 | A systematic review of functional magnetic resonance imaging and diffusion tensor imaging modalities used in presurgical planning of brain tumour resection. <i>Neurosurgical Review</i> , 2013, 36, 205-214.                     | 2.4  | 99        |
| 46 | Implementation of Fiber Tract Navigation. <i>Operative Neurosurgery</i> , 2006, 58, ONS-292-ONS-304.  | 0.8  | 98        |
| 47 | Transsphenoidal surgery in acromegaly investigated by intraoperative high-field magnetic resonance imaging. <i>European Journal of Endocrinology</i> , 2005, 153, 239-248.  | 3.7  | 95        |
| 48 | Comparison of navigated 3D ultrasound findings with histopathology in subsequent phases of glioblastoma resection. <i>Acta Neurochirurgica</i> , 2008, 150, 1033-1042.  | 1.7  | 95        |
| 49 | New approach to localize speech relevant brain areas and hemispheric dominance using spatially filtered magnetoencephalography. <i>Human Brain Mapping</i> , 2001, 14, 236-250.   | 3.6  | 94        |
| 50 | Diffusion tensor-based fiber tracking and intraoperative neuronavigation for the resection of a brainstem cavernous angioma. <i>World Neurosurgery</i> , 2007, 68, 285-291.   | 1.3  | 94        |
| 51 | Metabolic Imaging of Cerebral Gliomas: Spatial Correlation of Changes in $^{18}\text{F}$ -Fluoroethyl-L-Tyrosine PET and Proton Magnetic Resonance Spectroscopic Imaging. <i>Journal of Nuclear Medicine</i> , 2008, 49, 721-729. | 5.0  | 89        |
| 52 | Combining fMRI and MEG increases the reliability of presurgical language localization: A clinical study on the difference between and congruence of both modalities. <i>NeuroImage</i> , 2006, 32, 1793-1803.                     | 4.2  | 88        |
| 53 | The Stem Cell Marker Prominin-1/CD133 on Membrane Particles in Human Cerebrospinal Fluid Offers Novel Approaches for Studying Central Nervous System Disease. <i>Stem Cells</i> , 2008, 26, 698-705.                              | 3.2  | 87        |
| 54 | ADAM8 as a drug target in pancreatic cancer. <i>Nature Communications</i> , 2015, 6, 6175.  | 12.8 | 85        |

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|----|---|-----|-----------|
| 55 | Low-field magnetic resonance imaging for intraoperative use in neurosurgery: a 5-year experience. <i>European Radiology</i> , 2002, 12, 2690-2703.  | 4.5 | 82        |
| 56 | Magnetic source imaging supports clinical decision making in glioma patients. <i>Clinical Neurology and Neurosurgery</i> , 2004, 107, 20-26.  | 1.4 | 82        |
| 57 | Comparing 0.2 Tesla With 1.5 Tesla Intraoperative Magnetic Resonance Imaging. <i>Academic Radiology</i> , 2005, 12, 1065-1079.  | 2.5 | 81        |
| 58 | Cellular characterization of the peritumoral edema zone in malignant brain tumors. <i>Cancer Science</i> , 2009, 100, 1856-1862.  | 3.9 | 79        |
| 59 | Flat-panel detector volumetric CT for visualization of subarachnoid hemorrhage and ventricles: preliminary results compared to conventional CT. <i>Neuroradiology</i> , 2008, 50, 517-523.                                  | 2.2 | 74        |
| 60 | Intraoperative Visualization of Fiber Tracking Based Reconstruction of Language Pathways in Glioma Surgery. <i>Neurosurgery</i> , 2012, 70, 911-920.  | 1.1 | 73        |
| 61 | Implementation of augmented reality support in spine surgery. <i>European Spine Journal</i> , 2019, 28, 1697-1711.  | 2.2 | 73        |
| 62 | Quantification of Glioma Removal by Intraoperative High-Field Magnetic Resonance Imaging: An Update. <i>Neurosurgery</i> , 2011, 69, 852-863.   | 1.1 | 72        |
| 63 | Intraoperative imaging with open magnetic resonance imaging and neuronavigation. <i>Child's Nervous System</i> , 2000, 16, 829-831.   | 1.1 | 71        |
| 64 | Brain Shift Compensation and Neurosurgical Image Fusion Using Intraoperative MRI: Current Status and Future Challenges. <i>Critical Reviews in Biomedical Engineering</i> , 2012, 40, 175-185.                              | 0.9 | 71        |
| 65 | Pituitary Adenoma Volumetry with 3D Slicer. <i>PLoS ONE</i> , 2012, 7, e51788.  | 2.5 | 69        |
| 66 | Use of Intraoperative Magnetic Resonance Imaging in Tailored Temporal Lobe Surgeries for Epilepsy. <i>Epilepsia</i> , 2002, 43, 864-873.  | 5.1 | 68        |
| 67 | Adaptation of a Hexapod-Based Robotic System for Extended Endoscope-Assisted Transsphenoidal Skull Base Surgery. <i>Minimally Invasive Neurosurgery</i> , 2004, 47, 41-46.  | 0.9 | 66        |
| 68 | Visualization of the Pyramidal Tract in Glioma Surgery by Integrating Diffusion Tensor Imaging in Functional Neuronavigation. <i>Zentralblatt Fur Neurochirurgie</i> , 2005, 66, 133-141.                                   | 0.5 | 66        |
| 69 | Proton Magnetic Resonance Spectroscopic Imaging Integrated into Image-guided Surgery: Correlation to Standard Magnetic Resonance Imaging and Tumor Cell Density. <i>Operative Neurosurgery</i> , 2005, 56, ONS-291-ONS-298. | 0.8 | 65        |
| 70 | Determination of the elasticity parameters of brain tissue with combined simulation and registration. <i>International Journal of Medical Robotics and Computer Assisted Surgery</i> , 2005, 1, 87-95.                      | 2.3 | 65        |
| 71 | Integration of biochemical images of a tumor into frameless stereotaxy achieved using a magnetic resonance imaging/magnetic resonance spectroscopy hybrid data set. <i>Journal of Neurosurgery</i> , 2004, 101, 287-294.    | 1.6 | 63        |
| 72 | Neuronavigation: concept, techniques and applications. <i>Neurology India</i> , 2002, 50, 244-55.   | 0.4 | 63        |

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|----|---|-----|-----------|
| 73 | Follow-up and long-term outcome of nonfunctioning pituitary adenoma operated by transsphenoidal surgery with intraoperative high-field magnetic resonance imaging. <i>Acta Neurochirurgica</i> , 2014, 156, 2233-2243.            | 1.7 | 61        |
| 74 | Patient Perception of Combined Awake Brain Tumor Surgery and Intraoperative 1.5-T Magnetic Resonance Imaging. <i>Neurosurgery</i> , 2010, 67, 594-600.  | 1.1 | 57        |
| 75 | Development and characterization of new nanoscaled ultrasound active lipid dispersions as contrast agents. <i>European Journal of Pharmaceutics and Biopharmaceutics</i> , 2011, 77, 430-437.                                     | 4.3 | 57        |
| 76 | Robust Detection and Segmentation for Diagnosis of Vertebral Diseases Using Routine MR Images. <i>Computer Graphics Forum</i> , 2014, 33, 190-204.  | 3.0 | 54        |
| 77 | Frameless Stereotactic Brain Biopsy Procedures Using the Stealth Station: Indications, Accuracy and Results. <i>Zentralblatt Fur Neurochirurgie</i> , 2003, 64, 166-170.  | 0.5 | 51        |
| 78 | Molecular profiling of the tumor microenvironment in glioblastoma patients: correlation of microglia/macrophage polarization state with metalloprotease expression profiles and survival. <i>Bioscience Reports</i> , 2019, 39, . | 2.4 | 51        |
| 79 | ADAM8 in invasive cancers: links to tumor progression, metastasis, and chemoresistance. <i>Clinical Science</i> , 2019, 133, 83-99.   | 4.3 | 51        |
| 80 | Periventricular nodular heterotopia: A challenge for epilepsy surgery. <i>Seizure: the Journal of the British Epilepsy Association</i> , 2007, 16, 81-86.   | 2.0 | 50        |
| 81 | INTRAOPERATIVE MAGNETIC RESONANCE IMAGING AT 3-T USING A DUAL INDEPENDENT OPERATING ROOM-MAGNETIC RESONANCE IMAGING SUITE. <i>Neurosurgery</i> , 2008, 63, 412-426.   | 1.1 | 50        |
| 82 | Square-Cut: A Segmentation Algorithm on the Basis of a Rectangle Shape. <i>PLoS ONE</i> , 2012, 7, e31064.  | 2.5 | 49        |
| 83 | Merits and Limits of Tractography Techniques for the Uninitiated. <i>Advances and Technical Standards in Neurosurgery</i> , 2016, , 37-60.  | 0.5 | 49        |
| 84 | Intraoperative magnetic resonance imaging-guided transsphenoidal surgery for giant pituitary adenomas. <i>Neurosurgical Review</i> , 2010, 33, 83-90.   | 2.4 | 48        |
| 85 | Neuroendovascular Optical Coherence Tomography Imaging and Histological Analysis. <i>Neurosurgery</i> , 2011, 69, 430-439.  | 1.1 | 48        |
| 86 | The metalloprotease-disintegrin ADAM8 contributes to temozolomide chemoresistance and enhanced invasiveness of human glioblastoma cells. <i>Neuro-Oncology</i> , 2015, 17, 1474-1485.   | 1.2 | 48        |
| 87 | Interaction of Discoidin Domain Receptor 1 with a 14-3-3-Beclin-1-Akt1 Complex Modulates Glioblastoma Therapy Sensitivity. <i>Cell Reports</i> , 2019, 26, 3672-3683.e7.  | 6.4 | 48        |
| 88 | Intraoperative magnetic resonance imaging in epilepsy surgery. <i>Journal of Magnetic Resonance Imaging</i> , 2000, 12, 547-555.  | 3.4 | 47        |
| 89 | Image-Guided Removal of Supratentorial Cavernomas in Critical Brain Areas: Application of Neuronavigation and Intraoperative Magnetic Resonance Imaging. <i>Minimally Invasive Neurosurgery</i> , 2003, 46, 72-77.                | 0.9 | 47        |
| 90 | Integration of the OpenIGTLink Network Protocol for image-guided therapy with the medical platform MeVisLab. <i>International Journal of Medical Robotics and Computer Assisted Surgery</i> , 2012, 8, 282-290.                   | 2.3 | 47        |

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|-----|---|-----|-----------|
| 91  | Microscope-Based Augmented Reality in Degenerative Spine Surgery: Initial Experience. <i>World Neurosurgery</i> , 2019, 128, e541-e551.   | 1.3 | 47        |
| 92  | Spine Surgery Supported by Augmented Reality. <i>Global Spine Journal</i> , 2020, 10, 41S-55S.  | 2.3 | 47        |
| 93  | Proton Magnetic Resonance Spectroscopic Imaging in the Border Zone of Gliomas. <i>Investigative Radiology</i> , 2007, 42, 218-223.  | 6.2 | 46        |
| 94  | Comparison of navigated transcranial magnetic stimulation and functional magnetic resonance imaging for preoperative mapping in rolandic tumor surgery. <i>Neurosurgical Review</i> , 2013, 36, 65-76.  | 2.4 | 46        |
| 95  | Pre- and Intraoperative Tractographic Evaluation of Corticospinal Tract Shift. <i>Neurosurgery</i> , 2011, 69, 696-705.   | 1.1 | 45        |
| 96  | Augmented reality in intradural spinal tumor surgery. <i>Acta Neurochirurgica</i> , 2019, 161, 2181-2193.   | 1.7 | 45        |
| 97  | Open surgery of giant paraclinoid aneurysms improved by intraoperative angiography and endovascular retrograde suction decompression. <i>Acta Neurochirurgica</i> , 1997, 139, 1026-1032.   | 1.7 | 44        |
| 98  | Limited Benefit of Intraoperative Low-field Magnetic Resonance Imaging in Craniopharyngioma Surgery. <i>Neurosurgery</i> , 2003, 53, 72-81.   | 1.1 | 44        |
| 99  | ERRATA. <i>Neurosurgery</i> , 2013, 73, E913.   | 1.1 | 44        |
| 100 | An Automated Robotic Approach with Redundant Navigation for Minimal Invasive Extended Transsphenoidal Skull Base Surgery. <i>Minimally Invasive Neurosurgery</i> , 2005, 48, 159-164.   | 0.9 | 43        |
| 101 | INTRAOPERATIVE FLUORESCENCE STAINING OF MALIGNANT BRAIN TUMORS USING 5-AMINOFLUORESCEIN-LABELED ALBUMIN. <i>Operative Neurosurgery</i> , 2009, 64, ons53-ons61.   | 0.8 | 43        |
| 102 | INTRAOPERATIVE COMPUTED TOMOGRAPHY WITH INTEGRATED NAVIGATION SYSTEM IN A MULTIDISCIPLINARY OPERATING SUITE. <i>Operative Neurosurgery</i> , 2009, 64, ons231-ons240.   | 0.8 | 42        |
| 103 | ADAM8 expression in breast cancer derived brain metastases: Functional implications on MMP9 expression and transendothelial migration in breast cancer cells. <i>International Journal of Cancer</i> , 2018, 142, 779-791.                                | 5.1 | 42        |
| 104 | Intraoperative Low-Field Magnetic Resonance Imaging in Pediatric Neurosurgery. <i>Pediatric Neurosurgery</i> , 2003, 38, 83-89.   | 0.7 | 41        |
| 105 | Detection of tumour invasion into the pyramidal tract in glioma patients with sensorimotor deficits by correlation of 18F-fluoroethyl-L-tyrosine PET and magnetic resonance diffusion tensor imaging. <i>Acta Neurochirurgica</i> , 2009, 151, 1061-1069. | 1.7 | 41        |
| 106 | Optic Radiation Fiber Tractography in Glioma Patients Based on High Angular Resolution Diffusion Imaging with Compressed Sensing Compared with Diffusion Tensor Imaging - Initial Experience. <i>PLoS ONE</i> , 2013, 8, e70973.                          | 2.5 | 41        |
| 107 | Cube-Cut: Vertebral Body Segmentation in MRI-Data through Cubic-Shaped Divergences. <i>PLoS ONE</i> , 2014, 9, e93389.  | 2.5 | 41        |
| 108 | Hybrid Visualization for White Matter Tracts using Triangle Strips and Point Sprites. <i>IEEE Transactions on Visualization and Computer Graphics</i> , 2006, 12, 1181-1188.  | 4.4 | 40        |

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|-----|---|------|-----------|
| 109 | Intraoperative Real-Time Querying of White Matter Tracts During Frameless Stereotactic Neuronavigation. <i>Neurosurgery</i> , 2011, 68, 506-516.  | 1.1  | 40        |
| 110 | Manual Refinement System for Graph-Based Segmentation Results in the Medical Domain. <i>Journal of Medical Systems</i> , 2012, 36, 2829-2839.   | 3.6  | 40        |
| 111 | Intraoperative DTI and brain mapping for surgery of neoplasm of the motor cortex and the corticospinal tract: our protocol and series in BrainSUITE. <i>Neurosurgical Review</i> , 2012, 35, 401-412.   | 2.4  | 40        |
| 112 | Intraoperative high-field MRI for transsphenoidal reoperations of nonfunctioning pituitary adenoma. <i>Journal of Neurosurgery</i> , 2014, 121, 1166-1175.  | 1.6  | 40        |
| 113 | Correction of susceptibility artifacts in diffusion tensor data using non-linear registration. <i>Medical Image Analysis</i> , 2007, 11, 588-603.   | 11.6 | 39        |
| 114 | Intraoperative Magnetic Resonance Imaging Combined with Neuronavigation: A New Concept. <i>Neurosurgery</i> , 2001, 48, 1082-1091.  | 1.1  | 39        |
| 115 | Reliable navigation registration in cranial and spine surgery based on intraoperative computed tomography. <i>Neurosurgical Focus</i> , 2019, 47, E11.  | 2.3  | 38        |
| 116 | Application Accuracy of Automatic Registration in Frameless Stereotaxy. <i>Stereotactic and Functional Neurosurgery</i> , 2006, 84, 109-117.  | 1.5  | 37        |
| 117 | IMPLEMENTATION OF FIBER TRACT NAVIGATION. <i>Neurosurgery</i> , 2007, 61, ONS-292-ONS-304.  | 1.1  | 37        |
| 118 | The role of sphingosine kinase isoforms and receptors S1P1, S1P2, S1P3, and S1P5 in primary, secondary, and recurrent glioblastomas. <i>Tumor Biology</i> , 2014, 35, 8979-8989.  | 1.8  | 37        |
| 119 | Augmented Reality in Transsphenoidal Surgery. <i>World Neurosurgery</i> , 2019, 125, e873-e883.   | 1.3  | 37        |
| 120 | Anesthesia During High-field Intraoperative Magnetic Resonance Imaging Experience with 80 Consecutive Cases. <i>Journal of Neurosurgical Anesthesiology</i> , 2003, 15, 255-262.  | 1.2  | 36        |
| 121 | How to overcome the limitations to determine the resection margin of pituitary tumours with low-field intra-operative MRI during trans-sphenoidal surgery: usefulness of Gadolinium-soaked cotton pledgets. <i>Acta Neurochirurgica</i> , 2008, 150, 763-771. | 1.7  | 35        |
| 122 | The MRI volumetry of the posterior fossa and its substructures in trigeminal neuralgia: a validated study. <i>Acta Neurochirurgica</i> , 2009, 151, 669-675.  | 1.7  | 35        |
| 123 | Noninvasive detection of hippocampal sclerosis: correlation between metabolite alterations detected by <sup>1</sup> H-MRS and neuropathology. <i>NMR in Biomedicine</i> , 2008, 21, 545-552.  | 2.8  | 34        |
| 124 | DYNACT SOFT-TISSUE VISUALIZATION USING AN ANGIOGRAPHIC C-ARM SYSTEM. <i>Operative Neurosurgery</i> , 2008, 62, 266-272.   | 0.8  | 33        |
| 125 | Intraoperative computed tomography as reliable navigation registration device in 200 cranial procedures. <i>Acta Neurochirurgica</i> , 2018, 160, 1681-1689.  | 1.7  | 33        |
| 126 | 1.5 T: intraoperative imaging beyond standard anatomic imaging. <i>Neurosurgery Clinics of North America</i> , 2005, 16, 185-200.   | 1.7  | 32        |



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|-----|---|-----|-----------|
| 127 | Optimizing costs of intraoperative magnetic resonance imaging. A series of 29 glioma cases. <i>Acta Neurochirurgica</i> , 2010, 152, 27-33.   | 1.7 | 32        |
| 128 | Metalloproteinases ADAM12 and MMP-14 are associated with cavernous sinus invasion in pituitary adenomas. <i>International Journal of Cancer</i> , 2016, 139, 1327-1339.                           | 5.1 | 32        |
| 129 | Resective surgery for medically refractory epilepsy using intraoperative MRI and functional neuronavigation: the Erlangen experience of 415 patients. <i>Neurosurgical Focus</i> , 2016, 40, E15. | 2.3 | 32        |
| 130 | Intraoperative Acquisition of fMRI and DTI. <i>Neurosurgery Clinics of North America</i> , 2011, 22, 269-277.   | 1.7 | 31        |
| 131 | Therapeutic Impact of Human Bone Marrow Stromal Cells Expanded by Animal Serum-Free Medium for Cerebral Infarct in Rats. <i>Neurosurgery</i> , 2011, 68, 1733-1742.                               | 1.1 | 30        |
| 132 | Intraoperative MRI and Functional Mapping. <i>Acta Neurochirurgica Supplementum</i> , 2011, 109, 61-65.   | 1.0 | 30        |
| 133 | Local and Remote Visualization Techniques for Interactive Direct Volume Rendering in Neuroradiology. <i>Radiographics</i> , 2001, 21, 1561-1572.  | 3.3 | 29        |
| 134 | Fiber Tracking-We Should Move Beyond Diffusion Tensor Imaging. <i>World Neurosurgery</i> , 2014, 82, 35-36.   | 1.3 | 29        |
| 135 | Meta-analysis of Statin Use for the Acute Therapy of Spontaneous Intracerebral Hemorrhage. <i>Journal of Stroke and Cerebrovascular Diseases</i> , 2015, 24, 2521-2526.                           | 1.6 | 29        |
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