



Publikationsübersicht der Forschungsgruppe MINTOS seit 2011

2019

- Swartman B, Benner L, Grechenig S, Franke J, Grützner PA, Schnetzke M.
Normal values of distal radioulnar translation assessed by three-dimensional C-arm scans: a cadaveric study.
J Hand Surg Eur Vol. 2019 Feb 6;1753193419826486. doi: 10.1177/1753193419826486.
- Vetter SY, Steffen K, Swartman B, Schnetzke M, Keil H, Franke J, Grützner PA, Beisemann N.
Influence of intraoperative conventional fluoroscopy versus cone beam CT on long-term clinical outcome in isolated displaced talar fractures.
J Orthop Surg Res. 2019 Jan 8;14(1):8. doi: 10.1186/s13018-018-1043-3.
- Vetter SY, Gassauer M, Uhlmann L, Swartman B, Schnetzke M, Keil H, Franke J, Grützner PA, Beisemann N.
A standardised computed tomography measurement method for distal fibular rotation.
Eur J Trauma Emerg Surg. 2019 Apr 8. doi: 10.1007/s00068-019-01120-6.
- Schnetzke M, Feuchtenhofer F, Keil H, Swartman B, Vetter S, Grützner PA, Franke J.
Radiographic assessment of overlengthening of the MoPyC radial head prosthesis: a cadaveric study.
Arch Orthop Trauma Surg. 2019 Nov;139(11):1543-1549. doi: 10.1007/s00402-019-03187-7.
Epub 2019 Apr 13. IF: 1,973.
- Swartman B, Benner L, Franke J, Grützner PA, Vetter SY, Schnetzke M.
Distal radioulnar joint instability with three different injury patterns assessed by three-dimensional C-arm scans: a cadaveric study.
J Hand Surg Eur Vol. 2019 Sep 2;1753193419870378. doi: 10.1177/1753193419870378.
- Vetter SY, Privalov M, Beisemann N, Swartman B, Keil H, Kirsch J, Grützner PA, Franke J.
Influence of ankle joint position on angles and distances of the ankle mortise using intraoperative cone beam CT: A cadaveric study.
PLoS One. 2019 May 31;14(5):e0217737. doi: 10.1371/journal.pone.0217737.
- Beisemann N, Keil H, Swartman B, Schnetzke M, Franke J, Grützner PA, Vetter SY.
Intraoperative 3D imaging leads to substantial revision rate in management of tibial plateau fractures in 559 cases.
J Orthop Surg Res. 2019 Jul 24;14(1):236. doi: 10.1186/s13018-019-1286-7.
- Thomas S, Isensee F, Kohl S, Privalov M, Beisemann N, Swartman B, Keil H, Vetter SY, Franke J, Grützner PA, Maier-Hein L, Nolden M, Maier-Hein K.

Computer-assisted intra-operative verification of surgical outcome for the treatment of syndesmotic injuries through contralateral side comparison.
Int J Comput Assist Radiol Surg. 2019 Aug 7. doi: 10.1007/s11548-019-02043-8.

- Vetter SY, Beisemann N, Keil H, Schnetzke M, Swartman B, Franke J, Grützner PA, Privalov M. Comparison of three different reduction methods of the ankle mortise in unstable syndesmotic injuries.
Sci Rep. 2019 Oct 28;9(1):15445. doi: 10.1038/s41598-019-51988-y. IF: 4,011.
- Privalov M, Euler F, Keil H, Swartman B, Beisemann N, Franke J, Grützner PA, Vetter SY. Influence of reduction quality on functional outcome and quality of life in treatment of tibial plafond fractures: a retrospective cohort study.
BMC Musculoskelet Disord. 2019 Nov 13;20(1):534. doi: 10.1186/s12891-019-2932-2. IF: 2,002.
- Privalov M, Beisemann N, Swartman B, Vetter SY, Grützner PA, Franke J, Keil H. First experiences with intraoperative CT in navigated sacroiliac (SI) instrumentation: An analysis of 25 cases and comparison with conventional intraoperative 2D and 3D imaging.
Injury. 2020 Feb 19. pii: S0020-1383(20)30168-6. doi: 10.1016/j.injury.2020.02.093. [Epub ahead of print] IF: 1,834.

2018

- Vetter SY, Magaraggia J, Beisemann N, Schnetzke M, Keil H, Franke J, Grützner PA, Swartman B. Virtual guidance versus virtual implant planning system in the treatment of distal radius fractures. Int J Med Robot. 2018 Aug 7:e1945. doi: 10.1002/rcs.1945.
- Keil H, Beisemann N, Schnetzke M, Vetter SY, Swartman B, Grützner PA, Franke J. Intraoperative assessment of reduction and implant placement in acetabular fractures- limitations of 3D-imaging compared to computed tomography. J Orthop Surg Res. 2018 Apr 10;13(1):78. doi: 10.1186/s13018-018-0780-7.
- Keil H, Schnetzke M, Kocharyan A, Vetter SY, Beisemann N, Swartman B, Grützner PA, Franke J. Long-term results after non-operative and operative treatment of radial neck fractures in adults. J Orthop Surg Res. 2018 Feb 2;13(1):28. doi: 10.1186/s13018-018-0731-3.
- Swartman B, Frere D, Wei W, Schnetzke M, Grechenig S, Matityahu A, Beisemann N, Keil H, Franke J, Grützner PA, Vetter SY. Wire Placement in the Sustentaculum Tali Using a 2D Projection-Based Software Application for Mobile C-Arms: Cadaveric Study. Foot Ankle Int. 2018 Apr;39(4):485-492. doi: 10.1177/1071100717746618. Epub 2018 Jan 19.
- Schnetzke M, Fuchs J, Vetter SY, Swartman B, Keil H, Grützner PA, Franke J. Intraoperative three-dimensional imaging in the treatment of distal radius fractures. Arch Orthop Trauma Surg. 2018 Apr;138(4):487-493. doi: 10.1007/s00402-018-2867-3. Epub 2018 Jan 10.
- Keil H, Grützner PA, Franke J.

Bildgebung in der Beckenchirurgie. OP-Journal 2018; 34(01): 5-16

- Keil H, Grützner PA, Franke J.
Bildgebung für den Orthopäden und Unfallchirurgen. Orthopädie und Unfallchirurgie
up2date 2018; 13(01): 27-50
- Vetter SY, Schüler S, Hackbusch M, Müller M, Swartman B, Schnetzke M, Grützner PA, Franke J.
Tablets for Image Review and Communication in Daily Routine of Orthopedic Surgeons-An
Evaluation Study. J Digit Imaging. 2018 Feb;31(1):74-83. doi: 10.1007/s10278-017-0011-5.
- Keil H, Beisemann N, Swartman B, Vetter SY, Grützner PA, Franke J.
Intra-operative imaging in trauma surgery.
EFORT Open Rev., 2018 Oct 3;3(10):541-549

2017

- Thomas S, Schnetzke M, Brehler M, Swartman B, Vetter S, Franke J, Grützner PA, Meinzer HP,
Nolden M.
Upper ankle joint space detection on low contrast intraoperative fluoroscopic C-arm
projections. Proc. SPIE 10135, Medical Imaging 2017: Image-Guided Procedures, Robotic
Interventions, and Modeling, 101351I (March 3, 2017); doi:10.1117/12.2255633
- Franke J, Swartman B, Grützner PA.
Intraoperative imaging in the treatment of complex joint fractures.
OUP 2017; 1: 019–025 DOI 10.3238/oup.2016.0019–0025
- Swartman B, Beisemann N, Schnetzke M, Keil H, Vetter S, Franke J, Grützner PA.
Drahtplatzierung im MFK V. 2D-projektionsbasierte Software-Applikation für mobile C-Bögen
- Eine experimentelle Studie an Leichenpräparaten.
Orthopädische Nachrichten. Kongressausgabe 04/2017
- Swartman B, Frere D, Wei W, Schnetzke M, Beisemann N, Keil H, Franke J, Grützner PA, Vetter
S.
2D projection-based software application for mobile C-arms optimises wire placement in the
proximal femur – An experimental study.
Injury 2017 Jul 25. pii: S0020-1383(17)30440-0. doi: 10.1016/j.injury.2017.07.022
- Swartman B, Frere D, Wei W, Schnetzke M, Grechenig A, Matityahu A, Beisemann N, Keil H,
Franke J, Grützner PA, Vetter SY.
Wire Placement in the Lisfranc Joint Using a 2D Projection-Based Software Application for
Mobile C-Arms: an Experimental Study in 20 Cadaver Specimens.
Klaus Radermacher and Ferdinando Rodriguez Y Baena (editors). CAOS 2017. 17th Annual
Meeting of the International Society for Computer Assisted Orthopaedic Surgery, vol 1, pages
385–390
- Matte D, Swartman B, Grützner PA, Franke J.
Intraoperative 3-D Röntgenkontrolle bei Verletzungen des Fußes und des Sprunggelenks.
Trauma Berufskrankhb 2017 19 (Suppl 2):S144–S148 DOI 10.1007/s10039-017-0273-7 Online
publiziert: 13. Juli 2017

- Schnetzke M, Fuchs J, Vetter SY, Swartman B, Keil H, Grützner PA, Franke J.
Intraoperative three-dimensional imaging in the treatment of distal radius fractures. Arch Orthop Trauma Surg. 2018 Jan 10. doi: 10.1007/s00402-018-2867-3.

2016

- Franke J, Vetter SY, Reising K, Herrmann S, Südkamp NP, Grützner PA, von Recum J.
Intraoperative virtual implant planning for volar plate osteosynthesis of distal radius fractures. Unfallchirurg. 2016 Jan;119(1):36-42.
- Schnetzke M, Fuchs J, Vetter SY, Beisemann N, Grützner PA, Franke J.
Intraoperative 3D imaging in the treatment of elbow fractures – A retrospective analysis of indications, intraoperative revision rate, and implications of 36 cases.
BMC Medical Imaging, 2016 Mar 18;16:24.
- Görres J, Brehler M, Franke J, Vetter SY, Grützner PA, Meinzer HP, Wolf I.
Articular surface segmentation using active shape models for intraoperative implant assessment. Int J Comput Assist Radiol Surg. 2016 Apr 19.
- Brehler M, Görres J, Vetter SY, Franke J, Grützner PA, Meinzer HP, Wolf I.
Intra-operative assessment of fractured articular surfaces in cone beam CT image data.
Int J Comput Assist Radiol Surg. 2016 Apr;11(4):603-12. doi: 10.1007/s11548-015-1304-0.
Epub 2015 Oct 8.
- Vetter SY, Euler F, von Recum J, Wendl K, Grützner PA, Franke J.
Impact of Intraoperative Cone Beam Computed Tomography on Reduction Quality and Implant Position in Treatment of Tibial Plafond Fractures.
Foot Ankle Int 1071100716650532, online first May 17, 2016
- Franke J, Vetter SY, Beisemann N, Swartman B, Grützner PA, Schnetzke M.
3D Sicherheit bei gelenknahen Osteosynthesen.
Der Unfallchirurg. 2016 September 9 (10)
- A. J. Stevenson, B. Swartman, A. T. Bucknill.
Perkutane interne Fixation bei Beckenfrakturen.
Der Unfallchirurg. 2016 September 22 (10)
- Sven Yves Vetter, Benedict Swartman, Nils Beisemann, Marc Schnetzke, Holger Keil, Jan vonRecum, Paul Alfred Grutzner, Jochen Franke.
Postoperative Malrotation After Closed Reduction and Intramedullary Nailing of Femoral Shaft Fractures.
J Orthop Spine Trauma. 2016 June; 2(2):e7191. Published online 2016 September 26.
- J. Franke, S. Y Vetter, N. Beisemann, B. Swartman, P. A. Grützner, M. Schnetzke.
3-D-Sicherheit bei gelenknahen Osteosynthesen.
Unfallchirurg, published online 06. September 2016

- Marc Schnetzke, Sven Y Vetter, Nils Beisemann, Benedict Swartman, Paul A Grützner, Jochen Franke.
Management of syndesmotoc injuries: What is the evidence?
World Journal of Orthopedics, ESPS Manuscript NO: 27218; accepted 07. September 2016

2015

- Vetter S., Grützner PA, Franke J.
Intraoperative Anwendung von 3D C-Bögen.
OP-Journal 30(3), 144-148, 2015

2014

- Brehler M, Görres J, Wolf I, Franke J, von Recum J, Grützner PA, Meinzer HP, Nabers D.
Automatic standard plane adjustment on mobile C-Arm CT images of the calcaneus using atlas-based feature registration.
In: Proceedings of SPIE Medical Imaging, 2014.
- Görres J, Brehler M, Franke J, Wolf I, Vetter SY, Grützner PA, Meinzer HP, Nabers D.
Surgical screw segmentation for mobile C-arm CT devices
In: Proceedings of SPIE Medical Imaging, 2014.
- Brehler M, Görres J, Wolf I, Franke J, von Recum J, Grützner PA, Meinzer HP, Nabers (Wald) D.
Atlasbasierte Feature-Registrierung zur automatischen Einstellung der Standard-Ebenen bei mobilen C-Bogen CT Daten.
In: Deserno TM et al. (Hrsg.). Bildverarbeitung für die Medizin 2014, Informatik aktuell.
Springer- Verlag Berlin Heidelberg 2014.
- Görres J, Brehler M, Franke J, Wolf I, Vetter SY, Grützner PA, Meinzer HP, Nabers (Wald) D.
Detektion chirurgischer Schrauben in 3D C-Bogen Daten.
In: Deserno TM et al. (Hrsg.). Bildverarbeitung für die Medizin 2014, Informatik aktuell.
Springer- Verlag Berlin Heidelberg 2014.
- Görres J, Brehler M, Franke J, Barth K, Vetter SY, Córdova A, Grützner PA, Meinzer HP, Wolf I, Nabers D.
Intraoperative detection and localization of cylindrical implants in cone-beam CT image data.
Int J Comput Assist Radiol Surg. 2014 Apr 18. DOI:10.1007/s11548-014-0998-8
- Franke J, Wendl K, Suda AJ, Giese T, Grützner PA, von Recum J.
Intraoperative 3D imaging in the treatment of calcaneal fractures.
J Bone Joint Surg Am. 2014 May 7;96(9):e72. doi: 10.2106/JBJS.L.01220.
- Franke J, von Recum J, Suda AJ, Vetter S, Grutzner PA, Wendl K.
Predictors of a persistent dislocation after reduction of syndesmotoc injuries detected with intraoperative three-dimensional imaging.
Foot & ankle international. 2014;35(12):1323-8.

- Vetter SY, Franke J, Grützner PA.
Intraoperative Anwendung von 3-D C-Bögen.
OP Journal 2014; 30: 144-148 DOI 10.1055/s-0034-1383303
- Vetter SY, Swartman B, Grützner PA, Franke J.
Intraoperative 3D-Navigation am Becken.
Management & Krankenhaus, Supp. kompakt 2014;10:21-22
- Vetter SY, Mühlhäuser I, von Recum J, Grützner PA, Franke J.
Validation of a Virtual Implant Planning System (VIPS) in Distal Radius Fractures.
Bone Joint J 2014; 96-B:(SUPP 16) 50
- Vetter SY, Beisemann N, Hogan A, von Recum J, Grützner PA, Franke J.
Computer assisted surgery in trauma and osteotomy.
Orthopaedics and Trauma 2014, Vol 28:5, 286-293
DOI: 10.1016/j.mporth.2014.08.001

2013

- Franke J, von Recum J, Wendl K, Grützner PA.
Intraoperative 3-dimensional imaging – beneficial or necessary?
Unfallchirurg 2013; 116:185–190 German.
- Franke J, Grützner PA.
Navigation in Trauma Surgery: 3D navigation with a mobile C-arm.
In: Haaker RG, Konermann WH (eds.). Computer and Template Assisted Orthopedic Surgery.
Springer- Verlag Berlin Heidelberg 2013
- Franke J, Vetter SY, Mühlhäuser I, Grützner PA, von Recum J.
Virtual Implant Planning System – First Clinical Results.
Bone Joint J 2013; 95-B no. SUPP 28 76

2012

- von Recum J, Wendl K, Vock B, Grützner PA, Franke J.
Intraoperative 3D C-arm imaging: State of the art.
Unfallchirurg. 2012 Mar;115(3):196-201. German.
- Franke J, von Recum J, Suda AJ, Grützner PA, Wendl K.
Intraoperative 3D imaging in the treatment of acute unstable syndesmotic injuries.
J Bone Joint Surg Am. 2012;94:1386-90

2011

- Franke J, von Recum J, Grützner PA, Wendl K.
OSG-Frakturen und Pilon-Frakturen: Vorteile durch intraoperative 3D-Bildgebung?

Trauma Berufskrankh, 2011, Band 13, Heft 3

- Wendl K, Franke J, Grützner PA.
Navigiertes Operieren an der Wirbelsäule.
OP-Journal, 2011, 27:1-5