

Gerhard Schmidmaier

List of Publications by Year in descending order

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Version: 2024-02-01

81
papers

2,075
citations

201674

27
h-index

265206

42
g-index

84
all docs

84
docs citations

84
times ranked

2136
citing authors

| # | ARTICLE | IF | CITATIONS |
|----|--|------|-----------|
| 1 | Functional outcome and CEUSâ€ assessed deltoid muscle vitality after fractureâ€ specific versusâ€ standard prosthetic design in reverse shoulder arthroplasty for trauma. <i>Journal of Orthopaedic Research</i> , 2023, 41, 489-499. | 2.3 | 4 |
| 2 | ^{99m} Tc-polyphosphonate labelling â€ Enhancement of a novel method for the quantification of osteogenic differentiation of MSCs in vitro. <i>Injury</i> , 2022, 53, S34-S39. | 1.7 | 5 |
| 3 | Treatment of Infection-Related Non-Unions with Bioactive Glassâ€ A Promising Approach or Just Another Method of Dead Space Management?. <i>Materials</i> , 2022, 15, 1697. | 2.9 | 4 |
| 4 | The rationale behind implant coatings to promote osteointegration, bone healing or regeneration. <i>Injury</i> , 2021, 52, S106-S111. | 1.7 | 20 |
| 5 | The AMANDUS Project PART IIâ€ Advanced Microperfusion Assessed Non-Union Diagnostics with Contrast-Enhanced Ultrasound (CEUS): A Reliable Diagnostic Tool for the Management and Pre-operative Detection of Infected Upper-Limb Non-unions. <i>Ultrasound in Medicine and Biology</i> , 2021, 47, 478-487. | 1.5 | 6 |
| 6 | Posttraumatic Perfusion Analysis of Quadriceps, Patellar, and Achilles Tendon Regeneration With Dynamic Contrastâ€ Enhanced Ultrasound and Dynamic Contrastâ€ Enhanced Magnetic Resonance Imaging. <i>Journal of Ultrasound in Medicine</i> , 2021, 40, 491-501. | 1.7 | 5 |
| 7 | Expression of VEGF in Peripheral Serum Is a Possible Prognostic Factor in Bone-Regeneration via Masquelet-Techniqueâ€ A Pilot Study. <i>Journal of Clinical Medicine</i> , 2021, 10, 776. | 2.4 | 0 |
| 8 | Preoperative contrast-enhanced ultrasound (CEUS) of long bone nonunions reliably predicts microbiology of tissue culture samples but not of implant-sonication. <i>Orthopaedics and Traumatology: Surgery and Research</i> , 2021, , 102862. | 2.0 | 2 |
| 9 | Evidence-based uncertainty: do implant-related properties of titanium reduce the susceptibility to perioperative infections in clinical fracture management? A systematic review. <i>Infection</i> , 2021, 49, 813-821. | 4.7 | 6 |
| 10 | The Influence of an Occult Infection on the Outcome of Autologous Bone Grafting During Surgical Bone Reconstruction: A Large Single-Center Case-Control Study. <i>Journal of Inflammation Research</i> , 2021, Volume 14, 995-1005. | 3.5 | 7 |
| 11 | Systemic Administration of PTH Supports Vascularization in Segmental Bone Defects Filled with Ceramic-Based Bone Graft Substitute. <i>Cells</i> , 2021, 10, 2058. | 4.1 | 6 |
| 12 | Antibiotic-loaded amphora-shaped pores on a titanium implant surface enhance osteointegration and prevent infections. <i>Bioactive Materials</i> , 2021, 6, 2331-2345. | 15.6 | 20 |
| 13 | Contrast-Enhanced Ultrasound: A Viable Diagnostic Tool in Predicting Treatment Failure after Non-union Revision Surgery for Upper- and Lower-Limb Non-unions. <i>Ultrasound in Medicine and Biology</i> , 2021, 47, 3147-3158. | 1.5 | 5 |
| 14 | Impact of High-Dose Anti-Infective Agents on the Osteogenic Response of Mesenchymal Stem Cells. <i>Antibiotics</i> , 2021, 10, 1257. | 3.7 | 3 |
| 15 | Impact of intraoperative femoral fractures in primary hip arthroplasty: a comparative study with a mid-term follow-up. <i>HIP International</i> , 2020, 30, 544-551. | 1.7 | 14 |
| 16 | Contrast-Enhanced Ultrasound (CEUS) Identifies Perfusion Differences Between Tibial Fracture Unions and Non-Unions. <i>Ultraschall in Der Medizin</i> , 2020, 41, 44-51. | 1.5 | 14 |
| 17 | LIPUS vs. reaming in non-union treatment: Cytokine expression course as a tool for evaluation and differentiation of non-union therapy. <i>Journal of Orthopaedics</i> , 2020, 17, 208-214. | 1.3 | 0 |
| 18 | Preoperative deltoid assessment by contrast-enhanced ultrasound (CEUS) as predictor for shoulder function after reverse shoulder arthroplasty: a prospective pilot study. <i>Archives of Orthopaedic and Trauma Surgery</i> , 2020, 140, 1001-1012. | 2.4 | 20 |

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|----|--|-----|-----------|
| 19 | Intra-observer and Device-Dependent Inter-observer Reliability of Contrast-Enhanced Ultrasound for Muscle Perfusion Quantification. <i>Ultrasound in Medicine and Biology</i> , 2020, 46, 275-285. | 1.5 | 19 |
| 20 | Contrast-Enhanced Ultrasound (CEUS) as Predictor for Early Retear and Functional Outcome After Supraspinatus Tendon Repair. <i>Journal of Orthopaedic Research</i> , 2020, 38, 1150-1158. | 2.3 | 14 |
| 21 | Contrast-enhanced ultrasound for determining muscular perfusion after oral intake of L-citrulline, L-arginine, and galloylated epicatechines. <i>Medicine (United States)</i> , 2020, 99, e22318. | 1.0 | 3 |
| 22 | <p>Non-Union Treatment Based on the â€œDiamond Conceptâ€œ Is a Clinically Effective and Safe Treatment Option in Older Adults</p>. <i>Clinical Interventions in Aging</i> , 2020, Volume 15, 1221-1230. | 2.9 | 10 |
| 23 | Tibial plateau fracture: does fracture classification influence the choice of surgical approach? A retrospective multicenter analysis. <i>European Journal of Trauma and Emergency Surgery</i> , 2020, , 1. | 1.7 | 7 |
| 24 | Evaluation of two different types of radial head prosthesis in practical use. Using either EvolveÂ® or MoPyCÂ® radial head prosthesis in the treatment of comminuted radial head fractures. <i>Orthopedic Reviews</i> , 2020, 12, 8386. | 1.3 | 2 |
| 25 | A new sequential animal model for infection-related non-unions with segmental bone defect. <i>BMC Musculoskeletal Disorders</i> , 2020, 21, 329. | 1.9 | 9 |
| 26 | Differences in gait analysis and clinical outcome after TightRopeÂ® or screw fixation in acute syndesmosis rupture: study protocol for a prospective randomized pilot study. <i>Trials</i> , 2020, 21, 606. | 1.6 | 6 |
| 27 | Does Age Influence the Outcome of Lower Limb Non-Union Treatment? A Matched Pair Analysis. <i>Journal of Clinical Medicine</i> , 2019, 8, 1276. | 2.4 | 9 |
| 28 | Evaluation of the clinical use of the ETN PROtectÂ® in non-union therapy. <i>Injury</i> , 2019, 50, 32-39. | 1.7 | 13 |
| 29 | Supplementation with 45S5 Bioactive Glass Reduces In Vivo Resorption of the Î²-Tricalcium-Phosphate-Based Bone Substitute Material Vitoss. <i>International Journal of Molecular Sciences</i> , 2019, 20, 4253. | 4.1 | 13 |
| 30 | The AMANDUS Projectâ€”Advanced Microperfusion Assessed Non-Union Diagnostics With Contrast-Enhanced Ultrasound (CEUS) for the Detection of Infected Lower Extremity Non-Unions. <i>Ultrasound in Medicine and Biology</i> , 2019, 45, 2281-2288. | 1.5 | 23 |
| 31 | Osteogenic differentiation of mesenchymal stem cells is enhanced in a 45S5-supplemented Î²-TCP composite scaffold: an in-vitro comparison of Vitoss and Vitoss BA. <i>PLoS ONE</i> , 2019, 14, e0212799. | 2.5 | 48 |
| 32 | Development and validation of an objective assessment scale for chest tube insertion under â€directâ€™ and â€indirectâ€™ rating. <i>BMC Medical Education</i> , 2018, 18, 320. | 2.4 | 5 |
| 33 | Chemokine analysis as a novel diagnostic modality in the early prediction of the outcome of non-union therapy: a matched pair analysis. <i>Journal of Orthopaedic Surgery and Research</i> , 2018, 13, 249. | 2.3 | 2 |
| 34 | A Preliminary Study of Contrast-Enhanced Ultrasound (CEUS) and Cytokine Expression Analysis (CEA) as Early Predictors for the Outcome of Tibial Non-Union Therapy. <i>Diagnostics</i> , 2018, 8, 55. | 2.6 | 8 |
| 35 | Gelatinâ€coating increases inâ€vivo bone formation capacity of threeâ€dimensional 45S5â€bioactive glassâ€based crystalline scaffolds. <i>Journal of Tissue Engineering and Regenerative Medicine</i> , 2018, 13, 179-190. | 2.7 | 7 |
| 36 | Initial peri- and postoperative antibiotic treatment of infected nonunions: results from 212 consecutive patients after mean follow-up of 34 months. <i>Therapeutics and Clinical Risk Management</i> , 2018, Volume 14, 59-67. | 2.0 | 14 |

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|----|--|-----|-----------|
| 37 | Complications and risk management in the use of the reaming-irrigator-aspirator (RIA) system: RIA is a safe and reliable method in harvesting autologous bone graft. PLoS ONE, 2018, 13, e0196051. | 2.5 | 28 |
| 38 | Comparison of the clinical effectiveness of Bone Morphogenetic Protein (BMP) -2 and -7 in the adjunct treatment of lower limb nonunions. Orthopaedics and Traumatology: Surgery and Research, 2018, 104, 1241-1248. | 2.0 | 42 |
| 39 | Evaluation of the clinical effectiveness of bioactive glass (S53P4) in the treatment of non-unions of the tibia and femur: study protocol of a randomized controlled non-inferiority trial. Trials, 2018, 19, 299. | 1.6 | 12 |
| 40 | Contrast-Enhanced Ultrasound Determines Supraspinatus Muscle Atrophy After Cuff Repair and Correlates to Functional Shoulder Outcome. American Journal of Sports Medicine, 2018, 46, 2735-2742. | 4.2 | 30 |
| 41 | Bone morphogenetic proteinsâ€™7 andâ€™2 in the treatment of delayed osseous union secondary to bacterial osteitis in a rat model. BMC Musculoskeletal Disorders, 2018, 19, 261. | 1.9 | 9 |
| 42 | Insulin-Like Growth Factor-1 as a Possible Alternative to Bone Morphogenetic Protein-7 to Induce Osteogenic Differentiation of Human Mesenchymal Stem Cells in Vitro. International Journal of Molecular Sciences, 2018, 19, 1674. | 4.1 | 62 |
| 43 | Contrast-Enhanced Ultrasound Quantifies the Perfusion Within Tibial Non-Unions and Predicts the Outcome of Revision Surgery. Ultrasound in Medicine and Biology, 2018, 44, 1853-1859. | 1.5 | 24 |
| 44 | Safety study: is there a pathologic IGF-1, PDGF and TGFß cytokine expression caused by adjunct BMP-7 in tibial and femoral non-union therapy?. Therapeutics and Clinical Risk Management, 2018, Volume 14, 691-697. | 2.0 | 6 |
| 45 | Evaluation of App-Based Serious Gaming as a Training Method in Teaching Chest Tube Insertion to Medical Students: Randomized Controlled Trial. Journal of Medical Internet Research, 2018, 20, e195. | 4.3 | 48 |
| 46 | Dynamic contrast-enhanced ultrasound and elastography assess deltoid muscle integrity after reverse shoulder arthroplasty. Journal of Shoulder and Elbow Surgery, 2017, 26, 108-117. | 2.6 | 40 |
| 47 | Dynamic contrast-enhanced magnetic resonance imaging (DCE-MRI) for the prediction of non-union consolidation. Injury, 2017, 48, 357-363. | 1.7 | 20 |
| 48 | Continuous stimulation with differentiation factors is necessary to enhance osteogenic differentiation of human mesenchymal stem cells <i>in-vitro</i>. Growth Factors, 2017, 35, 179-188. | 1.7 | 43 |
| 49 | Treatment of atrophic femoral non-unions according to the diamond concept: Results of one- and two-step surgical procedure. Journal of Orthopaedics, 2017, 14, 123-133. | 1.3 | 37 |
| 50 | Micro-Computed-Tomography-Guided Analysis of In Vitro Structural Modifications in Two Types of 45S5 Bioactive Glass Based Scaffolds. Materials, 2017, 10, 1341. | 2.9 | 11 |
| 51 | A Pronounced Inflammatory Activity Characterizes the Early Fracture Healing Phase in Immunologically Restricted Patients. International Journal of Molecular Sciences, 2017, 18, 583. | 4.1 | 45 |
| 52 | Use of the suprapatellar approach in intramedullary nailing of a multi-fragmentary dislocated tibia fracture with a hypermobile intermediate fragment in a young patient. Orthopedic Reviews, 2016, 8, 6738. | 1.3 | 0 |
| 53 | Patients’ safety: is there a systemic release of gentamicin by gentamicin-coated tibia nails in clinical use?. Therapeutics and Clinical Risk Management, 2016, Volume 12, 1387-1393. | 2.0 | 28 |
| 54 | The treatment of nonunions with application of BMP-7 increases the expression pattern for angiogenic and inflammable cytokines: a matched pair analysis. Journal of Inflammation Research, 2016, Volume 9, 155-165. | 3.5 | 18 |

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|----|--|-----|-----------|
| 55 | Progenitor cells and tissue repair: more to come?. <i>Injury</i> , 2016, 47, S1-S2. | 1.7 | 2 |
| 56 | Dynamic Contrast-Enhanced Sonography and Dynamic Contrast-Enhanced Magnetic Resonance Imaging for Preoperative Diagnosis of Infected Nonunions. <i>Journal of Ultrasound in Medicine</i> , 2016, 35, 933-942. | 1.7 | 38 |
| 57 | Bone formation of human mesenchymal stem cells harvested from reaming debris is stimulated by low-dose bone morphogenetic protein-7 application in vivo. <i>Journal of Orthopaedics</i> , 2016, 13, 404-408. | 1.3 | 19 |
| 58 | Treatment with recombinant human bone morphogenetic protein 7 leads to a transient induction of neutralizing autoantibodies in a subset of patients. <i>BBA Clinical</i> , 2016, 6, 100-107. | 4.1 | 6 |
| 59 | Dynamic contrast-enhanced ultrasound (CEUS) after open and minimally invasive locked plating of proximal humerus fractures. <i>Injury</i> , 2016, 47, 1725-1731. | 1.7 | 30 |
| 60 | Three-dimensional polymer coated 45S5-type bioactive glass scaffolds seeded with human mesenchymal stem cells show bone formation in vivo. <i>Journal of Materials Science: Materials in Medicine</i> , 2016, 27, 119. | 3.6 | 48 |
| 61 | Quantification of TGF- β 1, PDGF and IGF-1 cytokine expression after fracture treatment vs. non-union therapy via masquelet. <i>Injury</i> , 2016, 47, 342-349. | 1.7 | 39 |
| 62 | Heidelberg-mCT-Analyzer: a novel method for standardized microcomputed-tomography-guided evaluation of scaffold properties in bone and tissue research. <i>Royal Society Open Science</i> , 2015, 2, 150496. | 2.4 | 11 |
| 63 | A new animal model for delayed osseous union secondary to osteitis. <i>BMC Musculoskeletal Disorders</i> , 2015, 16, 362. | 1.9 | 10 |
| 64 | Validity of subjective smoking status in orthopedic patients. <i>Therapeutics and Clinical Risk Management</i> , 2015, 11, 1297. | 2.0 | 18 |
| 65 | Are atrophic long-bone nonunions associated with low-grade infections?. <i>Therapeutics and Clinical Risk Management</i> , 2015, 11, 1843. | 2.0 | 34 |
| 66 | Tissue loss and bone repair: Time to develop an international strategy?. <i>Injury</i> , 2015, 46, S1-S2. | 1.7 | 8 |
| 67 | RIA fractions contain mesenchymal stroma cells with high osteogenic potency. <i>Injury</i> , 2015, 46, S23-S32. | 1.7 | 43 |
| 68 | Reaming in treatment of non-unions in long bones: cytokine expression course as a tool for evaluation of non-union therapy. <i>Archives of Orthopaedic and Trauma Surgery</i> , 2015, 135, 1107-1116. | 2.4 | 27 |
| 69 | Treatment of atrophic tibia non-unions according to "diamond concept": Results of one- and two-step treatment. <i>Injury</i> , 2015, 46, S39-S50. | 1.7 | 104 |
| 70 | Stimulation of Bone Healing by Sustained Bone Morphogenetic Protein 2 (BMP-2) Delivery. <i>International Journal of Molecular Sciences</i> , 2014, 15, 8539-8552. | 4.1 | 38 |
| 71 | A pilot study investigating the histology and growth factor content of human non-union tissue. <i>International Orthopaedics</i> , 2014, 38, 2623-2629. | 1.9 | 17 |
| 72 | Bioactive-Coated Implants in Trauma Surgery. <i>European Journal of Trauma and Emergency Surgery</i> , 2008, 34, 60-68. | 1.7 | 16 |

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|----|---|-----|-----------|
| 73 | The diamond concept – open questions. <i>Injury</i> , 2008, 39, S5-S8. | 1.7 | 242 |
| 74 | Carrier systems and application of growth factors in orthopaedics. <i>Injury</i> , 2008, 39, S37-S43. | 1.7 | 88 |
| 75 | Clinical evaluation of medicinal products for acceleration of fracture healing in patients with osteoporosis. <i>Bone</i> , 2008, 43, 343-347. | 2.9 | 57 |
| 76 | Bisphosphonates incorporated in a poly(D,L-lactide) implant coating inhibit osteoclast like cells in vitro. <i>Journal of Biomedical Materials Research - Part A</i> , 2007, 83A, 1184-1191. | 4.0 | 29 |
| 77 | Biodegradable polylactide membranes for bone defect coverage: biocompatibility testing, radiological and histological evaluation in a sheep model. <i>Clinical Oral Implants Research</i> , 2006, 17, 439-444. | 4.5 | 32 |
| 78 | Collective Review: Bioactive Implants Coated with Poly(D,L-lactide) and Growth Factors IGF-I, TGF- β 21, or BMP-2 for Stimulation of Fracture Healing. <i>Journal of Long-Term Effects of Medical Implants</i> , 2006, 16, 61-69. | 0.7 | 53 |
| 79 | Development and Characterization of a Standard Closed Tibial Fracture Model in the Rat. <i>European Journal of Trauma and Emergency Surgery</i> , 2004, 30, 35-42. | 0.3 | 33 |
| 80 | Long-term effects of local growth factor (IGF-I and TGF- β 21) treatment on fracture healing. A safety study for using growth factors. <i>Journal of Orthopaedic Research</i> , 2004, 22, 514-519. | 2.3 | 76 |
| 81 | Synergistic effect of IGF-I and TGF- β 1 on fracture healing in rats Single versus combined application of IGF-I and TGF- β 1. <i>Acta Orthopaedica</i> , 2003, 74, 604-610. | 1.4 | 97 |