

Reinhard Schnettler

List of Publications by Year in descending order

Source: <https://exaly.com/author-pdf/11310294/publications.pdf>

Version: 2024-02-01

102
papers

5,902
citations

126907

33
h-index

74163

75
g-index

103
all docs

103
docs citations

103
times ranked

7994
citing authors

#	ARTICLE	IF	CITATIONS
1	RECOMBINANT HUMAN BONE MORPHOGENETIC PROTEIN-2 FOR TREATMENT OF OPEN TIBIAL FRACTURES. <i>Journal of Bone and Joint Surgery - Series A</i> , 2002, 84, 2123-2134.	3.0	1,092
2	An in vitro assessment of the antibacterial properties and cytotoxicity of nanoparticulate silver bone cement. <i>Biomaterials</i> , 2004, 25, 4383-4391.	11.4	831
3	Delayed union and nonunions: Epidemiology, clinical issues, and financial aspects. <i>Injury</i> , 2014, 45, S3-S7.	1.7	445
4	Nanocrystalline hydroxyapatite and calcium sulphate as biodegradable composite carrier material for local delivery of antibiotics in bone infections. <i>Biomaterials</i> , 2005, 26, 2677-2684.	11.4	345
5	Biocompatibility of silver nanoparticles and silver ions in primary human mesenchymal stem cells and osteoblasts. <i>Acta Biomaterialia</i> , 2014, 10, 439-449.	8.3	234
6	The effects of combined gentamicin-hydroxyapatite coating for cementless joint prostheses on the reduction of infection rates in a rabbit infection prophylaxis model. <i>Biomaterials</i> , 2006, 27, 4627-4634.	11.4	166
7	Bone formation induced by strontium modified calcium phosphate cement in critical-size metaphyseal fracture defects in ovariectomized rats. <i>Biomaterials</i> , 2013, 34, 8589-8598.	11.4	161
8	Applications of Metals for Bone Regeneration. <i>International Journal of Molecular Sciences</i> , 2018, 19, 826.	4.1	159
9	Human reaming debris: a source of multipotent stem cells. <i>Bone</i> , 2005, 36, 74-83.	2.9	139
10	An introduction to bone tissue engineering. <i>International Journal of Artificial Organs</i> , 2020, 43, 69-86.	1.4	107
11	Clinical and prognostic role of annexin A2 in multiple myeloma. <i>Blood</i> , 2012, 120, 1087-1094.	1.4	81
12	Bone ingrowth in bFGF-coated hydroxyapatite ceramic implants. <i>Biomaterials</i> , 2003, 24, 4603-4608.	11.4	79
13	A new metaphyseal bone defect model in osteoporotic rats to study biomaterials for the enhancement of bone healing in osteoporotic fractures. <i>Acta Biomaterialia</i> , 2013, 9, 7035-7042.	8.3	76
14	Strontium and bisphosphonate coated iron foam scaffolds for osteoporotic fracture defect healing. <i>Biomaterials</i> , 2018, 157, 1-16.	11.4	75
15	Elastic softening of β -type Ti-Nb alloys by indium (In) additions. <i>Journal of the Mechanical Behavior of Biomedical Materials</i> , 2014, 39, 162-174.	3.1	73
16	Expression of non-neuronal cholinergic system in osteoblast-like cells and its involvement in osteogenesis. <i>Cell and Tissue Research</i> , 2009, 338, 203-215.	2.9	70
17	Additive Manufacturing for Guided Bone Regeneration: A Perspective for Alveolar Ridge Augmentation. <i>International Journal of Molecular Sciences</i> , 2018, 19, 3308.	4.1	65
18	Improved In Vitro Test Procedure for Full Assessment of the Cytocompatibility of Degradable Magnesium Based on ISO 10993-5/12. <i>International Journal of Molecular Sciences</i> , 2019, 20, 255.	4.1	63

#	ARTICLE	IF	CITATIONS
19	Bone Adhesives in Trauma and Orthopedic Surgery. <i>European Journal of Trauma and Emergency Surgery</i> , 2006, 32, 141-148.	0.3	61
20	In Vivo Analysis of the Biocompatibility and Macrophage Response of a Non-Resorbable PTFE Membrane for Guided Bone Regeneration. <i>International Journal of Molecular Sciences</i> , 2018, 19, 2952.	4.1	58
21	The Biocompatibility of Degradable Magnesium Interference Screws: An Experimental Study with Sheep. <i>BioMed Research International</i> , 2015, 2015, 1-15.	1.9	54
22	BDNF and its TrkB receptor in human fracture healing. <i>Annals of Anatomy</i> , 2014, 196, 286-295.	1.9	52
23	In Vitro Testing of Antimicrobial Activity of Bone Cement. <i>Antimicrobial Agents and Chemotherapy</i> , 2004, 48, 4084-4088.	3.2	49
24	Immunochemical, ultrastructural and electrophysiological investigations of bone-derived stem cells in the course of neuronal differentiation. <i>Bone</i> , 2006, 38, 911-921.	2.9	48
25	A health economic analysis of the use of rhBMP-2 in Gustilo-Anderson grade III open tibial fractures for the UK, Germany, and France. <i>Injury</i> , 2009, 40, 1269-1275.	1.7	48
26	The tissue response to an alkylene bis(dilactoyl)-methacrylate bone adhesive. <i>Biomaterials</i> , 2005, 26, 1389-1396.	11.4	45
27	Induction of osteoporosis with its influence on osteoporotic determinants and their interrelationships in rats by DEXA. <i>Medical Science Monitor</i> , 2012, 18, BR199-BR207.	1.1	44
28	Effects of gentamicin and gentamicin-RGD coatings on bone ingrowth and biocompatibility of cementless joint prostheses: An experimental study in rabbits. <i>Acta Biomaterialia</i> , 2011, 7, 1274-1280.	8.3	42
29	Differences of bone healing in metaphyseal defect fractures between osteoporotic and physiological bone in rats. <i>Injury</i> , 2014, 45, 487-493.	1.7	42
30	Purification processes of xenogeneic bone substitutes and their impact on tissue reactions and regeneration. <i>International Journal of Artificial Organs</i> , 2018, 41, 789-800.	1.4	42
31	A new animal model for implant-related infected non-unions after intramedullary fixation of the tibia in rats with fluorescent in situ hybridization of bacteria in bone infection. <i>Bone</i> , 2011, 48, 1146-1153.	2.9	40
32	Biocompatibility of magnesium implants in primary human reaming debris-derived cells stem cells in vitro. <i>Journal of Orthopaedics and Traumatology</i> , 2016, 17, 63-73.	2.3	38
33	Effects of Multi-Deficiencies-Diet on Bone Parameters of Peripheral Bone in Ovariectomized Mature Rat. <i>PLoS ONE</i> , 2013, 8, e71665.	2.5	36
34	Biphasic scaffolds for repair of deep osteochondral defects in a sheep model. <i>Journal of Surgical Research</i> , 2013, 183, 184-192.	1.6	35
35	Calcium Phosphate-Based Bone Substitutes. <i>European Journal of Trauma and Emergency Surgery</i> , 2004, 30, 219.	0.3	32
36	Assessment of angiogenesis in osseointegration of a silica-collagen biomaterial using 3D-nano-CT. <i>Acta Biomaterialia</i> , 2011, 7, 3773-3779.	8.3	30

#	ARTICLE	IF	CITATIONS
37	TLR9 mediates <i>S. aureus</i> killing inside osteoblasts via induction of oxidative stress. <i>BMC Microbiology</i> , 2016, 16, 230.	3.3	29
38	Ag/SiO ₂ /C ₆₀ plasma polymer coating for antimicrobial protection of fracture fixation devices. <i>Journal of Biomedical Materials Research - Part B Applied Biomaterials</i> , 2010, 94B, 196-202.	3.4	28
39	Expression of choline and acetylcholine transporters in synovial tissue and cartilage of patients with rheumatoid arthritis and osteoarthritis. <i>Cell and Tissue Research</i> , 2015, 359, 465-477.	2.9	28
40	Bone formation and degradation behavior of nanocrystalline hydroxyapatite with or without collagen-type 1 in osteoporotic bone defects – an experimental study in osteoporotic goats. <i>Injury</i> , 2016, 47, S58-S65.	1.7	27
41	Treatment of Periprosthetic Femoral Fractures by Effective Lengthening of the Prosthesis. <i>Clinical Orthopaedics and Related Research</i> , 2007, 463, 120-127.	1.5	26
42	Observations on the microvasculature of bone defects filled with biodegradable nanoparticulate hydroxyapatite. <i>Biomaterials</i> , 2008, 29, 3429-3437.	11.4	25
43	Quantitative analyses of bone composition in acetylcholine receptor M3R and alpha7 knockout mice. <i>Life Sciences</i> , 2012, 91, 997-1002.	4.3	25
44	Negative Influence of a Long-Term High-Fat Diet on Murine Bone Architecture. <i>International Journal of Endocrinology</i> , 2014, 2014, 1-9.	1.5	25
45	Bone Matrix, Cellularity, and Structural Changes in a Rat Model with High-Turnover Osteoporosis Induced by Combined Ovariectomy and a Multiple-Deficient Diet. <i>American Journal of Pathology</i> , 2014, 184, 765-777.	3.8	24
46	New blood vessel formation and expression of VEGF receptors after implantation of platelet growth factor-enriched biodegradable nanocrystalline hydroxyapatite. <i>Growth Factors</i> , 2005, 23, 125-133.	1.7	21
47	Evaluation of New Bone Formation in Normal and Osteoporotic Rats with a 3-mm Femur Defect: Functional Assessment with Dynamic PET-CT (dPET-CT) Using 2-Deoxy-2-[18F]Fluoro-d-glucose (18F-FDG) and 18F-Fluoride. <i>Molecular Imaging and Biology</i> , 2013, 15, 336-344.	2.6	21
48	Rifampicin–fosfomycin coating for cementless endoprostheses: Antimicrobial effects against methicillin-sensitive <i>Staphylococcus aureus</i> (MSSA) and methicillin-resistant <i>Staphylococcus aureus</i> (MRSA). <i>Acta Biomaterialia</i> , 2014, 10, 4518-4524.	8.3	20
49	Effects of macroporous, strontium loaded xerogel-scaffolds on new bone formation in critical-size metaphyseal fracture defects in ovariectomized rats. <i>Injury</i> , 2016, 47, S52-S61.	1.7	20
50	Implications of combined Ovariectomy/Multi-Deficiency Diet on rat bone with age-related variation in Bone Parameters and Bone Loss at Multiple Skeletal Sites by DEXA. <i>Medical Science Monitor Basic Research</i> , 2013, 19, 76-86.	2.6	18
51	Expression of the non-neuronal cholinergic system in human knee synovial tissue from patients with rheumatoid arthritis and osteoarthritis. <i>Life Sciences</i> , 2012, 91, 1048-1052.	4.3	17
52	Calibration of cone beam CT using relative attenuation ratio for quantitative assessment of bone density: a small animal study. <i>International Journal of Computer Assisted Radiology and Surgery</i> , 2013, 8, 733-739.	2.8	17
53	Enhanced osteogenesis on titanium implants by UVB photofunctionalization of hydrothermally grown TiO ₂ coatings. <i>Journal of Biomaterials Applications</i> , 2015, 30, 71-84.	2.4	17
54	Impaired extracellular matrix structure resulting from malnutrition in ovariectomized mature rats. <i>Histochemistry and Cell Biology</i> , 2015, 144, 491-507.	1.7	17

#	ARTICLE	IF	CITATIONS
55	Comparison of new bone formation, implant integration, and biocompatibility between RGD-hydroxyapatite and pure hydroxyapatite coating for cementless joint prostheses—An experimental study in rabbits. <i>Journal of Biomedical Materials Research - Part B Applied Biomaterials</i> , 2009, 88B, 66-74.	3.4	16
56	Comparison of Material-mediated Bone Regeneration Capacities of Sintered and Non-sintered Xenogeneic Bone Substitutes via 2D and 3D Data. <i>In Vivo</i> , 2019, 33, 2169-2179.	1.3	16
57	Effect of glycerol-l-lactide coating polymer on bone ingrowth of bFGF-coated hydroxyapatite implants. <i>Journal of Controlled Release</i> , 2004, 99, 103-111.	9.9	15
58	Dendritic Glycopolymers as Drug Delivery System for Proteasome Inhibitor Bortezomib in a Calcium Phosphate Bone Cement: First Steps Toward a Local Therapy of Osteolytic Bone Lesions. <i>Macromolecular Bioscience</i> , 2015, 15, 1283-1295.	4.1	15
59	Small changes in bone structure of female ± 7 nicotinic acetylcholine receptor knockout mice. <i>BMC Musculoskeletal Disorders</i> , 2015, 16, 5.	1.9	15
60	Polymicrobial infections and microbial patterns in infected nonunions—a descriptive analysis of 42 cases. <i>BMC Infectious Diseases</i> , 2020, 20, 667.	2.9	14
61	Application of F-18-Sodium Fluoride (NaF) Dynamic PET-CT (dPET-CT) for Defect Healing: A Comparison of Biomaterials in an Experimental Osteoporotic Rat Model. <i>Medical Science Monitor</i> , 2014, 20, 1942-1949.	1.1	14
62	Connexin 43 expression of foreign body giant cells after implantation of nanoparticulate hydroxyapatite. <i>Biomaterials</i> , 2007, 28, 4912-4921.	11.4	13
63	Enhancement of bone formation in hydroxyapatite implants by rhBMP-2 coating. <i>Journal of Biomedical Materials Research - Part B Applied Biomaterials</i> , 2009, 90B, 75-81.	3.4	13
64	Phosphoserine-modified calcium phosphate cements: bioresorption and substitution. <i>Journal of Tissue Engineering and Regenerative Medicine</i> , 2011, 5, 11-19.	2.7	13
65	Quantitative assessment of microcirculation and diffusion in the bone marrow of osteoporotic rats using VCT, DCE-MRI, DW-MRI, and histology. <i>Acta Radiologica</i> , 2013, 54, 205-213.	1.1	13
66	Preliminary evaluation of different biomaterials for defect healing in an experimental osteoporotic rat model with dynamic PET-CT (dPET-CT) using F-18-Sodium Fluoride (NaF). <i>Injury</i> , 2014, 45, 501-505.	1.7	13
67	Impact of prophylactic CpG Oligodeoxynucleotide application on implant-associated <i>Staphylococcus aureus</i> bone infection. <i>Bone</i> , 2015, 78, 194-202.	2.9	13
68	Histological Comparison of New Biodegradable Magnesium-Based Implants for Maxillofacial Applications. <i>Journal of Maxillofacial and Oral Surgery</i> , 2015, 14, 637-645.	1.4	13
69	Cell behavior of human mesenchymal stromal cells in response to silica/collagen based xerogels and calcium deficient culture conditions. <i>Biomedical Materials (Bristol)</i> , 2017, 12, 045003.	3.3	13
70	Biodegradable β -Tricalciumphosphate/hydroxyethyl methacrylate enhanced three component bone adhesive demonstrates biocompatibility without evidence of systemic toxicity in a rabbit model. <i>Journal of Biomedical Materials Research - Part B Applied Biomaterials</i> , 2009, 90B, 767-777.	3.4	12
71	Osteoporosis influences osteogenic but not angiogenic response during bone defect healing in a rat model. <i>Injury</i> , 2013, 44, 923-929.	1.7	12
72	Silver nanoparticles do not alter human osteoclastogenesis but induce cellular uptake. <i>Toxicology Reports</i> , 2014, 1, 900-908.	3.3	12

#	ARTICLE	IF	CITATIONS
73	Local Delivery of Antibiotics in the Surgical Treatment of Bone Infections. <i>Techniques in Orthopaedics</i> , 2015, 30, 230-235.	0.2	12
74	Safety assessment of microsilver-loaded poly(methyl methacrylate) (PMMA) cement spacers in patients with prosthetic hip infections. <i>Bone and Joint Research</i> , 2019, 8, 387-396.	3.6	12
75	Pyrocarbon spacer as a trapezium replacement for arthritis of the trapeziometacarpal joint; a follow-up study of 60 cases. <i>Acta Orthopaedica Belgica</i> , 2013, 79, 648-54.	0.4	12
76	Bone status of acetylcholinesterase-knockout mice. <i>International Immunopharmacology</i> , 2015, 29, 222-230.	3.8	11
77	Bioresorbierbare Klebstoffe in der operativen. <i>BIOmaterialien: Offizielles Organ Der Deutschen Gesellschaft Fuer Biomaterialien</i> , 2003, 4, .	0.1	10
78	Treatment of a Double Nonunion of the Femur by rhBMP-2. <i>Journal of Orthopaedic Trauma</i> , 2007, 21, 734-737.	1.4	10
79	Characterization of bone turnover and energy metabolism in a rat model of primary and secondary osteoporosis. <i>Experimental and Toxicologic Pathology</i> , 2015, 67, 287-296.	2.1	10
80	In Vitro and In Vivo Biocompatibility Studies of a Cast and Coated Titanium Alloy. <i>Molecules</i> , 2020, 25, 3399.	3.8	10
81	Allogeneous bone with collagen for repair of deep osteochondral defects. <i>Journal of Surgical Research</i> , 2013, 185, 667-675.	1.6	9
82	Expression of muscarinic acetylcholine receptors M3 and M5 in osteoporosis. <i>Medical Science Monitor</i> , 2014, 20, 869-874.	1.1	9
83	The role of soft-tissue traction forces in bone segment transport for callus distraction. <i>Strategies in Trauma and Limb Reconstruction</i> , 2015, 10, 21-26.	0.8	8
84	Light- and transmission-electron-microscopic investigations on distribution of CD44, connexin 43 and actin cytoskeleton during the foreign body reaction to a nanoparticulate hydroxyapatite in mini-pigs. <i>Acta Biomaterialia</i> , 2012, 8, 2807-2814.	8.3	7
85	Effects of dendritic core-shell glycoarchitectures on primary mesenchymal stem cells and osteoblasts obtained from different human donors. <i>Journal of Nanobiotechnology</i> , 2015, 13, 65.	9.1	7
86	Evaluation of bone remodeling with (18)F-fluoride and correlation with the glucose metabolism measured by (18)F-FDG in lumbar spine with time in an experimental nude rat model with osteoporosis using dynamic PET-CT. <i>American Journal of Nuclear Medicine and Molecular Imaging</i> , 2013, 3, 118-28.	1.0	7
87	Glycerol-l-lactide coating polymer leads to delay in bone ingrowth in hydroxyapatite implants. <i>Journal of Controlled Release</i> , 2005, 106, 154-161.	9.9	6
88	Nanocrystalline hydroxyapatite facilitates bone apposition to polymethylmethacrylate: Histological investigation using a sheep model. <i>Journal of Orthopaedic Research</i> , 2012, 30, 1290-1295.	2.3	6
89	Effects of testosterone and 17 β -estradiol on osteogenic and adipogenic differentiation capacity of human bone-derived mesenchymal stromal cells of postmenopausal women. <i>Bone Reports</i> , 2019, 11, 100226.	0.4	6
90	Surgical treatment outcome after serial debridement of infected nonunion—a retrospective cohort study. <i>European Journal of Orthopaedic Surgery and Traumatology</i> , 2022, 32, 183-189.	1.4	6

#	ARTICLE	IF	CITATIONS
91	Drug Release as a function of bioactivity, incubation regime, liquid, and initial load: Release of bortezomib from calcium phosphate-containing silica/collagen xerogels. <i>Journal of Biomedical Materials Research - Part B Applied Biomaterials</i> , 2018, 106, 1165-1173.	3.4	6
92	Effects of platelet factors on biodegradation and osteogenesis in metaphyseal defects filled with nanoparticulate hydroxyapatite—an experimental study in minipigs. <i>Growth Factors</i> , 2007, 25, 191-201.	1.7	5
93	Bond Strength of an Alkylene Bis(dilactoyl)-Methacrylate Bone Adhesive: a Biomechanical Evaluation in Sheep. <i>Journal of Biomaterials Science, Polymer Edition</i> , 2010, 21, 1345-1358.	3.5	5
94	A novel intramedullary callus distraction system for the treatment of femoral bone defects. <i>Strategies in Trauma and Limb Reconstruction</i> , 2016, 11, 113-121.	0.8	5
95	Treatment Strategies in Thoracolumbar Vertebral Fractures: Are there Indications for Biomaterials?. <i>European Journal of Trauma and Emergency Surgery</i> , 2006, 32, 253-257.	0.3	4
96	Importance of Mechanoreceptors and Other Neural Structures Within the Anterior Intermeniscal Ligament in the Etiology of Anterior Knee Pain After Tibial Nailing. <i>Journal of Orthopaedic Trauma</i> , 2018, 32, 526-533.	1.4	2
97	Anterior intermeniscal ligament: frequency in MRI studies and spatial relationship to the entry point for intramedullary tibial nailing related to the risk of iatrogenic violation. <i>European Journal of Trauma and Emergency Surgery</i> , 2020, 46, 1085-1092.	1.7	2
98	Podoplanin Immunopositive Lymphatic Vessels at the Implant Interface in a Rat Model of Osteoporotic Fractures. <i>PLoS ONE</i> , 2013, 8, e77259.	2.5	2
99	Synergistic Toxicity of Gentamicin- and Nanosilver-Doped Polymethylmethacrylate Bone Cement on Primary Human Osteoclasts. <i>Cells Tissues Organs</i> , 2014, 199, 384-392.	2.3	1
100	Ein 125 -TCP angereicherter Knochenklebstoff. <i>BIOMaterialien: Offizielles Organ Der Deutschen Gesellschaft Fuer Biomaterialien</i> , 2008, 9, .	0.1	0
101	Biomaterials for enhancement of bone healing in osteoporotic fractures. <i>BioNanoMaterials</i> , 2013, 14, .	1.4	0
102	Triple fracture during rehabilitation after revision total knee arthroplasty. <i>Knee Surgery, Sports Traumatology, Arthroscopy</i> , 2014, 22, 2662-2664.	4.2	0