Reinhard Schnettler

List of Publications by Year in descending order

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102 papers 5,902 citations

126907 33 h-index 75 g-index

103 all docs 103 docs citations

103 times ranked 7994 citing authors

#	Article	IF	Citations
1	Surgical treatment outcome after serial debridement of infected nonunionâ€"A retrospective cohort study. European Journal of Orthopaedic Surgery and Traumatology, 2022, 32, 183-189.	1.4	6
2	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. European Journal of Trauma and Emergency Surgery, 2020, 46, 1085-1092.	1.7	2
3	An introduction to bone tissue engineering. International Journal of Artificial Organs, 2020, 43, 69-86.	1.4	107
4	In Vitro and In Vivo Biocompatibility Studies of a Cast and Coated Titanium Alloy. Molecules, 2020, 25, 3399.	3.8	10
5	Polymicrobial infections and microbial patterns in infected nonunions – a descriptive analysis of 42 cases. BMC Infectious Diseases, 2020, 20, 667.	2.9	14
6	Comparison of Material-mediated Bone Regeneration Capacities of Sintered and Non-sintered Xenogeneic Bone Substitutes <i>via</i> 2D and 3D Data. In Vivo, 2019, 33, 2169-2179.	1.3	16
7	Effects of testosterone and $17\hat{1}^2$ -estradiol on osteogenic and adipogenic differentiation capacity of human bone-derived mesenchymal stromal cells of postmenopausal women. Bone Reports, 2019, 11, 100226.	0.4	6
8	Improved In Vitro Test Procedure for Full Assessment of the Cytocompatibility of Degradable Magnesium Based on ISO 10993-5/-12. International Journal of Molecular Sciences, 2019, 20, 255.	4.1	63
9	Safety assessment of microsilver-loaded poly(methyl methacrylate) (PMMA) cement spacers in patients with prosthetic hip infections. Bone and Joint Research, 2019, 8, 387-396.	3.6	12
10	Purification processes of xenogeneic bone substitutes and their impact on tissue reactions and regeneration. International Journal of Artificial Organs, 2018, 41, 789-800.	1.4	42
11	Strontium and bisphosphonate coated iron foam scaffolds for osteoporotic fracture defect healing. Biomaterials, 2018, 157, 1-16.	11.4	75
12	Importance of Mechanoreceptors and Other Neural Structures Within the Anterior Intermeniscal Ligament in the Etiology of Anterior Knee Pain After Tibial Nailing. Journal of Orthopaedic Trauma, 2018, 32, 526-533.	1.4	2
13	In Vivo Analysis of the Biocompatibility and Macrophage Response of a Non-Resorbable PTFE Membrane for Guided Bone Regeneration. International Journal of Molecular Sciences, 2018, 19, 2952.	4.1	58
14	Additive Manufacturing for Guided Bone Regeneration: A Perspective for Alveolar Ridge Augmentation. International Journal of Molecular Sciences, 2018, 19, 3308.	4.1	65
15	Applications of Metals for Bone Regeneration. International Journal of Molecular Sciences, 2018, 19, 826.	4.1	159
16	Drug Release as a function of bioactivity, incubation regime, liquid, and initial load: Release of bortezomib from calcium phosphateâ€containing silica/collagen xerogels. Journal of Biomedical Materials Research - Part B Applied Biomaterials, 2018, 106, 1165-1173.	3.4	6
17	Cell behavior of human mesenchymal stromal cells in response to silica/collagen based xerogels and calcium deficient culture conditions. Biomedical Materials (Bristol), 2017, 12, 045003.	3.3	13
18	TLR9 mediates S. aureus killing inside osteoblasts via induction of oxidative stress. BMC Microbiology, 2016, 16, 230.	3.3	29

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19	Bone formation and degradation behavior of nanocrystalline hydroxyapatite with or without collagen-type 1 in osteoporotic bone defects $\hat{a} \in \hat{a}$ an experimental study in osteoporotic goats. Injury, 2016, 47, S58-S65.	1.7	27
20	Effects of macroporous, strontium loaded xerogel-scaffolds on new bone formation in critical-size metaphyseal fracture defects in ovariectomized rats. Injury, 2016, 47, S52-S61.	1.7	20
21	A novel intramedullary callus distraction system for the treatment of femoral bone defects. Strategies in Trauma and Limb Reconstruction, 2016, 11, 113-121.	0.8	5
22	Biocompatibility of magnesium implants in primary human reaming debris-derived cells stem cells in vitro. Journal of Orthopaedics and Traumatology, 2016, 17, 63-73.	2.3	38
23	Effects of dendritic core–shell glycoarchitectures on primary mesenchymal stem cells and osteoblasts obtained from different human donors. Journal of Nanobiotechnology, 2015, 13, 65.	9.1	7
24	Dendritic Glycopolymer as Drug Delivery System for Proteasome Inhibitor Bortezomib in a Calcium Phosphate Bone Cement: First Steps Toward a Local Therapy of Osteolytic Bone Lesions. Macromolecular Bioscience, 2015, 15, 1283-1295.	4.1	15
25	Local Delivery of Antibiotics in the Surgical Treatment of Bone Infections. Techniques in Orthopaedics, 2015, 30, 230-235.	0.2	12
26	The Biocompatibility of Degradable Magnesium Interference Screws: An Experimental Study with Sheep. BioMed Research International, 2015, 2015, 1-15.	1.9	54
27	Characterization of bone turnover and energy metabolism in a rat model of primary and secondary osteoporosis. Experimental and Toxicologic Pathology, 2015, 67, 287-296.	2.1	10
28	Impact of prophylactic CpG Oligodeoxynucleotide application on implant-associated Staphylococcus aureus bone infection. Bone, 2015, 78, 194-202.	2.9	13
29	Histological Comparison of New Biodegradable Magnesium-Based Implants for Maxillofacial Applications. Journal of Maxillofacial and Oral Surgery, 2015, 14, 637-645.	1.4	13
30	Small changes in bone structure of female $\hat{l}\pm7$ nicotinic acetylcholine receptor knockout mice. BMC Musculoskeletal Disorders, 2015, 16, 5.	1.9	15
31	Enhanced osteogenesis on titanium implants by UVB photofunctionalization of hydrothermally grown TiO ₂ coatings. Journal of Biomaterials Applications, 2015, 30, 71-84.	2.4	17
32	The role of soft-tissue traction forces in bone segment transport for callus distraction. Strategies in Trauma and Limb Reconstruction, 2015, 10, 21-26.	0.8	8
33	Impaired extracellular matrix structure resulting from malnutrition in ovariectomized mature rats. Histochemistry and Cell Biology, 2015, 144, 491-507.	1.7	17
34	Bone status of acetylcholinesterase-knockout mice. International Immunopharmacology, 2015, 29, 222-230.	3.8	11
35	Expression of choline and acetylcholine transporters in synovial tissue and cartilage of patients with rheumatoid arthritis and osteoarthritis. Cell and Tissue Research, 2015, 359, 465-477.	2.9	28
36	Synergistic Toxicity of Gentamicin- and Nanosilver-Doped Polymethylmethacrylate Bone Cement on Primary Human Osteoclasts. Cells Tissues Organs, 2014, 199, 384-392.	2.3	1

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37	Negative Influence of a Long-Term High-Fat Diet on Murine Bone Architecture. International Journal of Endocrinology, 2014, 2014, 1-9.	1.5	25
38	Silver nanoparticles do not alter human osteoclastogenesis but induce cellular uptake. Toxicology Reports, 2014, 1, 900-908.	3.3	12
39	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). Injury, 2014, 45, 501-505.	1.7	13
40	Triple fracture during rehabilitation after revision total knee arthroplasty. Knee Surgery, Sports Traumatology, Arthroscopy, 2014, 22, 2662-2664.	4.2	0
41	Bone Matrix, Cellularity, and Structural Changes in a Rat Model with High-Turnover Osteoporosis Induced by Combined Ovariectomy and a Multiple-Deficient Diet. American Journal of Pathology, 2014, 184, 765-777.	3.8	24
42	BDNF and its TrkB receptor in human fracture healing. Annals of Anatomy, 2014, 196, 286-295.	1.9	52
43	Rifampicin–fosfomycin coating for cementless endoprostheses: Antimicrobial effects against methicillin-sensitive Staphylococcus aureus (MSSA) and methicillin-resistant Staphylococcus aureus (MRSA). Acta Biomaterialia, 2014, 10, 4518-4524.	8.3	20
44	Elastic softening of β-type Ti–Nb alloys by indium (In) additions. Journal of the Mechanical Behavior of Biomedical Materials, 2014, 39, 162-174.	3.1	73
45	Differences of bone healing in metaphyseal defect fractures between osteoporotic and physiological bone in rats. Injury, 2014, 45, 487-493.	1.7	42
46	Biocompatibility of silver nanoparticles and silver ions in primary human mesenchymal stem cells and osteoblasts. Acta Biomaterialia, 2014, 10, 439-449.	8.3	234
47	Delayed union and nonunions: Epidemiology, clinical issues, and financial aspects. Injury, 2014, 45, S3-S7.	1.7	445
48	Expression of muscarinic acetylcholine receptors M3 and M5 in osteoporosis. Medical Science Monitor, 2014, 20, 869-874.	1.1	9
49	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. Medical Science Monitor, 2014, 20, 1942-1949.	1.1	14
50	Calibration of cone beam CT using relative attenuation ratio for quantitative assessment of bone density: a small animal study. International Journal of Computer Assisted Radiology and Surgery, 2013, 8, 733-739.	2.8	17
51	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. Molecular Imaging and Biology, 2013, 15, 336-344.	2.6	21
52	Quantitative assessment of microcirculation and diffusion in the bone marrow of osteoporotic rats using VCT, DCE-MRI, DW-MRI, and histology. Acta Radiologica, 2013, 54, 205-213.	1.1	13
53	Allogenous bone with collagen for repair of deep osteochondral defects. Journal of Surgical Research, 2013, 185, 667-675.	1.6	9
54	Osteoporosis influences osteogenic but not angiogenic response during bone defect healing in a rat model. Injury, 2013, 44, 923-929.	1.7	12

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55	Bone formation induced by strontium modified calcium phosphate cement in critical-size metaphyseal fracture defects in ovariectomized rats. Biomaterials, 2013, 34, 8589-8598.	11.4	161
56	Biphasic scaffolds for repair of deep osteochondral defects in a sheep model. Journal of Surgical Research, 2013, 183, 184-192.	1.6	35
57	A new metaphyseal bone defect model in osteoporotic rats to study biomaterials for the enhancement of bone healing in osteoporotic fractures. Acta Biomaterialia, 2013, 9, 7035-7042.	8.3	76
58	Biomaterials for enhancement of bone healing in osteoporotic fractures. BioNanoMaterials, 2013, 14, .	1.4	0
59	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. Medical Science Monitor Basic Research, 2013, 19, 76-86.	2.6	18
60	Effects of Multi-Deficiencies-Diet on Bone Parameters of Peripheral Bone in Ovariectomized Mature Rat. PLoS ONE, 2013, 8, e71665.	2.5	36
61	Podoplanin Immunopositive Lymphatic Vessels at the Implant Interface in a Rat Model of Osteoporotic Fractures. PLoS ONE, 2013, 8, e77259.	2.5	2
62	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. American Journal of Nuclear Medicine and Molecular Imaging, 2013, 3, 118-28.	1.0	7
63	Pyrocarbon spacer as a trapezium replacement for arthritis of the trapeziometacarpal joint; a follow-up study of 60 cases. Acta Orthopaedica Belgica, 2013, 79, 648-54.	0.4	12
64	Light- and transmission-electron-microscopic investigations on distribution of CD44, connexin 43 and actin cytoskeleton during the foreign body reaction to a nanoparticular hydroxyapatite in mini-pigs. Acta Biomaterialia, 2012, 8, 2807-2814.	8.3	7
65	Expression of the non-neuronal cholinergic system in human knee synovial tissue from patients with rheumatoid arthritis and osteoarthritis. Life Sciences, 2012, 91, 1048-1052.	4.3	17
66	Quantitative analyses of bone composition in acetylcholine receptor M3R and alpha7 knockout mice. Life Sciences, 2012, 91, 997-1002.	4.3	25
67	Clinical and prognostic role of annexin A2 in multiple myeloma. Blood, 2012, 120, 1087-1094.	1.4	81
68	Nanocrystalline hydroxyapatite facilitates bone apposition to polymethylmethacrylate: Histological investigation using a sheep model. Journal of Orthopaedic Research, 2012, 30, 1290-1295.	2.3	6
69	Induction of osteoporosis with its influence on osteoporotic determinants and their interrelationships in rats by DEXA. Medical Science Monitor, 2012, 18, BR199-BR207.	1.1	44
70	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. Bone, 2011, 48, 1146-1153.	2.9	40
71	Assessment of angiogenesis in osseointegration of a silica–collagen biomaterial using 3D-nano-CT. Acta Biomaterialia, 2011, 7, 3773-3779.	8.3	30
72	Effects of gentamicin and gentamicinâ€"RGD coatings on bone ingrowth and biocompatibility of cementless joint prostheses: An experimental study in rabbits. Acta Biomaterialia, 2011, 7, 1274-1280.	8.3	42

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73	Phosphoserine-modified calcium phosphate cements: bioresorption and substitution. Journal of Tissue Engineering and Regenerative Medicine, 2011, 5, 11-19.	2.7	13
74	Ag/SiO _x C _y plasma polymer coating for antimicrobial protection of fracture fixation devices. Journal of Biomedical Materials Research - Part B Applied Biomaterials, 2010, 94B, 196-202.	3.4	28
75	Bond Strength of an Alkylene Bis(dilactoyl)-Methacrylate Bone Adhesive: a Biomechanical Evaluation in Sheep. Journal of Biomaterials Science, Polymer Edition, 2010, 21, 1345-1358.	3.5	5
76	Enhancement of bone formation in hydroxyapatite implants by rhBMPâ€2 coating. Journal of Biomedical Materials Research - Part B Applied Biomaterials, 2009, 90B, 75-81.	3.4	13
77	A health economic analysis of the use of rhBMP-2 in Gustilo–Anderson grade III open tibial fractures for the UK, Germany, and France. Injury, 2009, 40, 1269-1275.	1.7	48
78	Comparison of new bone formation, implant integration, and biocompatibility between RGDâ€hydroxyapatite and pure hydroxyapatite coating for cementless joint prosthesesâ€"An experimental study in rabbits. Journal of Biomedical Materials Research - Part B Applied Biomaterials, 2009, 88B, 66-74.	3.4	16
79	Biodegradable βâ€Triâ€Calciumphosphate/hydroxyethyl methacrylate enhanced three component bone adhesive demonstrates biocompatibility without evidence of systemic toxicity in a rabbit model. Journal of Biomedical Materials Research - Part B Applied Biomaterials, 2009, 90B, 767-777.	3.4	12
80	Expression of non-neuronal cholinergic system in osteoblast-like cells and its involvement in osteogenesis. Cell and Tissue Research, 2009, 338, 203-215.	2.9	70
81	Observations on the microvasculature of bone defects filled with biodegradable nanoparticulate hydroxyapatite. Biomaterials, 2008, 29, 3429-3437.	11.4	25
82	Ein \hat{l}^2 -TCP angereicherter Knochenklebstoff. BIOmaterialien: Offizielles Organ Der Deutschen Gesellschaft Fuer Biomaterialien, 2008, 9, .	0.1	0
83	Treatment of a Double Nonunion of the Femur by rhBMP-2. Journal of Orthopaedic Trauma, 2007, 21, 734-737.	1.4	10
84	Effects of platelet factors on biodegradation and osteogenesis in metaphyseal defects filled with nanoparticular hydroxyapatiteâ€"an experimental study in minipigs. Growth Factors, 2007, 25, 191-201.	1.7	5
85	Treatment of Periprosthetic Femoral Fractures by Effective Lengthening of the Prosthesis. Clinical Orthopaedics and Related Research, 2007, 463, 120-127.	1.5	26
86	Connexin 43 expression of foreign body giant cells after implantation of nanoparticulate hydroxyapatite. Biomaterials, 2007, 28, 4912-4921.	11.4	13
87	Immunochemical, ultrastructural and electrophysiological investigations of bone-derived stem cells in the course of neuronal differentiation. Bone, 2006, 38, 911-921.	2.9	48
88	The effects of combined gentamicin–hydroxyapatite coating for cementless joint prostheses on the reduction of infection rates in a rabbit infection prophylaxis model. Biomaterials, 2006, 27, 4627-4634.	11.4	166
89	Treatment Strategies in Thoracolumbar Vertebral Fractures: Are there Indications for Biomaterials?. European Journal of Trauma and Emergency Surgery, 2006, 32, 253-257.	0.3	4
90	Bone Adhesives in Trauma and Orthopedic Surgery. European Journal of Trauma and Emergency Surgery, 2006, 32, 141-148.	0.3	61

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91	The tissue response to an alkylene bis(dilactoyl)-methacrylate bone adhesive. Biomaterials, 2005, 26, 1389-1396.	11.4	45
92	Glycerol-l-lactide coating polymer leads to delay in bone ingrowth in hydroxyapatite implants. Journal of Controlled Release, 2005, 106, 154-161.	9.9	6
93	Nanocrystalline hydroxyapatite and calcium sulphate as biodegradable composite carrier material for local delivery of antibiotics in bone infections. Biomaterials, 2005, 26, 2677-2684.	11.4	345
94	Human reaming debris: a source of multipotent stem cells. Bone, 2005, 36, 74-83.	2.9	139
95	New blood vessel formation and expression of VEGF receptors after implantation of platelet growth factor-enriched biodegradable nanocrystalline hydroxyapatite. Growth Factors, 2005, 23, 125-133.	1.7	21
96	Effect of glycerol-l-lactide coating polymer on bone ingrowth of bFGF-coated hydroxyapatite implants. Journal of Controlled Release, 2004, 99, 103-111.	9.9	15
97	Calcium Phosphate-Based Bone Substitutes. European Journal of Trauma and Emergency Surgery, 2004, 30, 219.	0.3	32
98	An in vitro assessment of the antibacterial properties and cytotoxicity of nanoparticulate silver bone cement. Biomaterials, 2004, 25, 4383-4391.	11.4	831
99	In Vitro Testing of Antimicrobial Activity of Bone Cement. Antimicrobial Agents and Chemotherapy, 2004, 48, 4084-4088.	3.2	49
100	Bone ingrowth in bFGF-coated hydroxyapatite ceramic implants. Biomaterials, 2003, 24, 4603-4608.	11.4	79
101	Bioresorbierbare Klebstoffe in der operativen. BlOmaterialien: Offizielles Organ Der Deutschen Gesellschaft Fuer Biomaterialien, 2003, 4, .	0.1	10
102	RECOMBINANT HUMAN BONE MORPHOGENETIC PROTEIN-2 FOR TREATMENT OF OPEN TIBIAL FRACTURES. Journal of Bone and Joint Surgery - Series A, 2002, 84, 2123-2134.	3.0	1,092