Heidi-lynn Ploeg

List of Publications by Year in Descending Order

58 papers	973 citations	18 h-index	30 g-index
65 ext. papers	1,128 ext. citations	2.7 avg, IF	4.18 L-index

#	Paper	IF	Citations
58	Trabecular bone density distribution in the scapula of patients undergoing reverse shoulder arthroplasty.. *JSES International*, **2022**, 6, 32-39	1.2	
57	Analytical model for dental implant insertion torque.. *Journal of the Mechanical Behavior of Biomedical Materials*, **2022**, 131, 105223	4.1	
56	Evaluation of telavancin-loaded bone cement: Elution, eluate activity, and mechanical properties. *Materialia*, **2021**, 20, 101239	3.2	
55	Statistical shape modelling to analyse the talus in paediatric clubfoot. *Proceedings of the Institution of Mechanical Engineers, Part H: Journal of Engineering in Medicine*, **2021**, 235, 849-860	1.7	0
54	Evaluation of experimental, analytical, and computational methods to determine long-bone bending stiffness. *Journal of the Mechanical Behavior of Biomedical Materials*, **2021**, 115, 104253	4.1	2
53	Mechanical, elution, and antibacterial properties of simplex bone cement loaded with vancomycin. *Journal of the Mechanical Behavior of Biomedical Materials*, **2020**, 103, 103588	4.1	9
52	Effect of insertion factors on dental implant insertion torque/energy-experimental results. *Journal of the Mechanical Behavior of Biomedical Materials*, **2020**, 112, 103995	4.1	3
51	Residual Equinus After the Ponseti Method: An MRI-based 3-Dimensional Analysis. *Journal of Pediatric Orthopaedics*, **2018**, 38, e271-e277	2.4	8
50	Preclinical Analysis to Assess Aseptic Loosening of Orthopaedic Implants. *Lecture Notes in Bioengineering*, **2018**, 129-143	0.8	
49	2404. Telavancin (TLV) and Vancomycin (VAN) Activity and Impact on Mechanical Properties When Incorporated into Orthopedic Bone Cement. *Open Forum Infectious Diseases*, **2018**, 5, S718-S718	1	78
48	Monitoring Motor Symptoms During Activities of Daily Living in Individuals With Parkinson\'s Disease. *Frontiers in Neurology*, **2018**, 9, 1036	4.1	36
47	Design of a surrogate for evaluation of methods to predict bone bending stiffness. *Journal of the Mechanical Behavior of Biomedical Materials*, **2018**, 88, 346-351	4.1	2
46	Data for vancomycin elution, activity and impact on mechanical properties when incorporated into orthopedic bone cement. *Data in Brief*, **2018**, 20, 14-19	1.2	
45	Vancomycin elution, activity and impact on mechanical properties when added to orthopedic bone cement. *Journal of the Mechanical Behavior of Biomedical Materials*, **2018**, 87, 80-86	4.1	26
44	Characterization of the quasi-static and viscoelastic properties of orthopaedic bone cement at the macro and nanoscale. *Journal of Biomedical Materials Research - Part B Applied Biomaterials*, **2017**, 105, 1461-1468	3.5	2
43	The Influence of Force Direction on the Fracture Pattern and Fracture Resistance of Canine Teeth in Dogs. *Journal of Veterinary Dentistry*, **2017**, 34, 8-17	1	6
42	Combined exposure to big endothelin-1 and mechanical loading in bovine sternal cores promotes osteogenesis. *Bone*, **2016**, 85, 115-22	4.7	7

41	The Influence of Axial Grooves on Dislodgment Resistance of Prosthetic Metal Crowns in Maxillary Fourth Premolar Teeth of Dogs. *Journal of Veterinary Dentistry*, **2016**, 33, 151-156	1	3
40	The Influence of Axial Grooves on Dislodgment Resistance of Prosthetic Metal Crowns in Canine Teeth of Dogs. *Journal of Veterinary Dentistry*, **2016**, 33, 146-150	1	3
39	Mechanical, material, and antimicrobial properties of acrylic bone cement impregnated with silver nanoparticles. *Materials Science and Engineering C*, **2015**, 48, 188-96	8.3	75
38	The Influence of Crown Height to Diameter Ratio on the Force to Fracture of Canine Teeth in Dogs. *Journal of Veterinary Dentistry*, **2015**, 32, 155-63	1	17
37	Quantitative Comparison of Mathematical Models to Measure Surface Area of Canine Teeth Prepared to Receive Full Veneer Crowns in Dogs. *Frontiers in Veterinary Science*, **2015**, 2, 31	3.1	1
36	The dependence of knee joint stability on the cruciate and collateral ligaments. *Movement and Sports Sciences - Science Et Motricite*, **2015**, 37-54	0.5	
35	Fracture healing in mice lacking Pten in osteoblasts: a micro-computed tomography image-based analysis of the mechanical properties of the femur. *Journal of Biomechanics*, **2015**, 48, 310-7	2.9	13
34	Estimating the density of femoral head trabecular bone from hip fracture patients using computed tomography scan data. *Proceedings of the Institution of Mechanical Engineers, Part H: Journal of Engineering in Medicine*, **2014**, 228, 616-626	1.7	11
33	Modification of acrylic bone cement with mesoporous silica nanoparticles: effects on mechanical, fatigue and absorption properties. *Journal of the Mechanical Behavior of Biomedical Materials*, **2014**, 29, 451-61	4.1	44
32	Multiscale characterization of acrylic bone cement modified with functionalized mesoporous silica nanoparticles. *Journal of the Mechanical Behavior of Biomedical Materials*, **2014**, 37, 141-52	4.1	21
31	The influence of low concentrations of a water soluble poragen on the material properties, antibiotic release, and biofilm inhibition of an acrylic bone cement. *Materials Science and Engineering C*, **2014**, 42, 168-76	8.3	17
30	Effect of preparation surface area on the clinical outcome of full veneer crowns in dogs. *Journal of Veterinary Dentistry*, **2014**, 31, 22-5	1	12
29	Dependence of anisotropy of human lumbar vertebral trabecular bone on quantitative computed tomography-based apparent density. *Journal of Biomechanical Engineering*, **2014**, 136, 091003	2.1	15
28	Accounting for structural compliance in nanoindentation measurements of bioceramic bone scaffolds. *Ceramics International*, **2014**, 40, 12485-12492	5.1	3
27	Repeatable calibration of Hounsfield units to mineral density and effect of scanning medium. *Advances in Biomechanics and Applications*, **2014**, 1, 15-22		5
26	Mice lacking pten in osteoblasts have improved intramembranous and late endochondral fracture healing. *PLoS ONE*, **2013**, 8, e63857	3.7	30
25	Mechanical characterization of injection-molded macro porous bioceramic bone scaffolds. *Journal of the Mechanical Behavior of Biomedical Materials*, **2012**, 9, 137-52	4.1	36
24	Comparison of the influences of structural characteristics on bulk mechanical behaviour: experimental study using a bone surrogate. *Medical and Biological Engineering and Computing*, **2012** , 50, 61-7	3.1	8

23	Determination of the translational and rotational stiffnesses of an L4-L5 functional spinal unit using a specimen-specific finite element model. *Journal of the Mechanical Behavior of Biomedical Materials*, **2012**, 13, 45-61	4.1	31
22	Effect of Sintering Temperature on Microstructural Properties of Bioceramic Bone Scaffolds. *Ceramic Transactions*, **2012**, 101-109	0.1	
21	Comparison of Two Bone Surrogates for Interbody Device Subsidence Testing **2012**, 15-24		
20	Comparison of Two Bone Surrogates for Interbody Device Subsidence Testing **2012**, 15-24		
19	Comparison of Two Bone Surrogates for Interbody Device Subsidence Testing. *Journal of ASTM International*, **2012**, 9, 103498		
18	The influence of glove and hand position on pressure over the ulnar nerve during cycling. *Clinical Biomechanics*, **2011**, 26, 642-8	2.2	22
17	A new bone surrogate model for testing interbody device subsidence. *Spine*, **2011**, 36, 1289-96	3.3	6
16	The effect of sintering temperature on the microstructure and mechanical properties of a bioceramic bone scaffold. *Journal of the Mechanical Behavior of Biomedical Materials*, **2011**, 4, 2150-60	4.1	22
15	3D Elastomeric Scaffolds Fabricated by Casting in Micro End Milled Moulds. *Journal of Biomimetics, Biomaterials, and Tissue Engineering*, **2011**, 9, 17-23		1
14	Time-dependent fixation and implantation forces for a femoral knee component--an in vitro study. *Medical Engineering and Physics*, **2010**, 32, 968-73	2.4	7
13	Recovery of bone strength in young pigs from an induced short-term dietary calcium deficit followed by a calcium replete diet. *Medical Engineering and Physics*, **2010**, 32, 1116-23	2.4	16
12	Initial fixation of a femoral knee component: an in vitro and finite element study. *International Journal of Experimental and Computational Biomechanics*, **2009**, 1, 23		5
11	Material and Mechanical Properties of Tricalcium Phosphate-Based (TCP) Scaffolds **2009**,		4
10	Post-yield relaxation behavior of bovine cancellous bone. *Journal of Biomechanics*, **2009**, 42, 2728-33	2.9	5
9	Hip stem fatigue test prediction. *International Journal of Fatigue*, **2009**, 31, 894-905	5	22
8	Precision, repeatability and accuracy of Optotrak optical motion tracking systems. *International Journal of Experimental and Computational Biomechanics*, **2009**, 1, 114		30
7	A methodology for the pre-clinical evaluation of patellar implants. *International Journal of Experimental and Computational Biomechanics*, **2009**, 1, 129		
6	Gender differences in bicycle saddle pressure distribution during seated cycling. *Medicine and Science in Sports and Exercise*, **2008**, 40, 1126-34	1.2	36

5	A Calibration Procedure for a Bone Loading System. *Journal of Medical Devices, Transactions of the ASME*, **2008**, 2,	1.3	5
4	Compressive properties of trabecular bone in the distal femur. *Journal of Biomechanics*, **2008**, 41, 1077-85	2.9	34
3	Biodynamics. Influence of gender, power, and hand position on pelvic motion during seated cycling. *Medicine and Science in Sports and Exercise*, **2007**, 39, 2204-11	1.2	37
2	Bone remodelling of a proximal femur with the thrust plate prosthesis: an in vitro case. *Computer Methods in Biomechanics and Biomedical Engineering*, **2004**, 7, 131-7	2.1	18
1	Determination of orthotropic bone elastic constants using FEA and modal analysis. *Journal of Biomechanics*, **2002**, 35, 767-73	2.9	178