## Markus A Wimmer

# List of Publications by Year in Descending Order

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The third column is the impact factor (IF) of the journal, and the fourth column is the number of citations of the article.

3,502 145 34 54 h-index g-index citations papers 163 3,949 3.5 5.45 L-index avg, IF ext. citations ext. papers

#	Paper	IF	Citations
145	Biotribometer for Assessment of Cell and Tissue Toxicity of Orthopedic Metal Implant Debris <i>Methods in Molecular Biology</i> , <b>2022</b> , 2394, 713-725	1.4	
144	Optimal surgical component alignment minimizes TKR wear - An in silico study with nine alignment parameters. <i>Journal of the Mechanical Behavior of Biomedical Materials</i> , <b>2022</b> , 125, 104939	4.1	
143	The Association of an Alpha-2 Adrenergic Receptor Agonist and Mortality in Patients With COVID-19 <i>Frontiers in Medicine</i> , <b>2021</b> , 8, 797647	4.9	O
142	Interactions between hyaluronic acid and CoCrMo alloy surface in simulated synovial fluids. <i>Biosurface and Biotribology</i> , <b>2021</b> , 7, 239	1	
141	The mechanism-based approach of understanding run-in and steady state: A gross-slip fretting experiment to fathom tribocorrosion of total hip taper junctions. <i>Biotribology</i> , <b>2021</b> , 25, 100165	2.3	1
140	Towards the understanding of lubrication mechanisms in total knee replacements IPart I: Experimental investigations. <i>Tribology International</i> , <b>2021</b> , 156, 106874	4.9	7
139	Analysis of Friction in Total Knee Prosthesis during a Standard Gait Cycle. <i>Lubricants</i> , <b>2021</b> , 9, 36	3.1	3
138	Microindentation of cartilage before and after articular loading in a bioreactor: assessment of length-scale dependency using two analysis methods <i>Experimental Mechanics</i> , <b>2021</b> , 61, 1069-1080	2.6	0
137	Fretting-corrosion in hip taper modular junctions: The influence of topography and pH levels - An in-vitro study. <i>Journal of the Mechanical Behavior of Biomedical Materials</i> , <b>2021</b> , 118, 104443	4.1	6
136	Transient stiffening of cartilage during joint articulation: A microindentation study. <i>Journal of the Mechanical Behavior of Biomedical Materials</i> , <b>2021</b> , 113, 104113	4.1	1
135	Towards the understanding of lubrication mechanisms in total knee replacements IPart II: Numerical modeling. <i>Tribology International</i> , <b>2021</b> , 156, 106809	4.9	6
134	Corrosion resistance of the nickel-free high-nitrogen steel FeCrMnMoN0.9 under simulated inflammatory conditions. <i>Journal of Biomedical Materials Research - Part B Applied Biomaterials</i> , <b>2021</b> , 109, 902-910	3.5	3
133	Joint line elevation and tibial slope are associated with increased polyethylene wear in cruciate-retaining total knee replacement. <i>Journal of Orthopaedic Research</i> , <b>2020</b> , 38, 1596-1606	3.8	6
132	Backside wear of tibial polyethylene components is affected by gait pattern: A knee simulator study using rare earth tracer technology. <i>Journal of Orthopaedic Research</i> , <b>2020</b> , 38, 1607-1616	3.8	3
131	Sensitivity of total knee replacement wear to variability in motion and load input: A parametric finite element analysis study. <i>Journal of Orthopaedic Research</i> , <b>2020</b> , 38, 1538-1549	3.8	2
130	Can a gait-dependent model predict wear on retrieved total knee arthroplasty components?. <i>Bone and Joint Journal</i> , <b>2020</b> , 102-B, 129-137	5.6	1
129	Nanoscale insight into the degradation mechanisms of the cartilage articulating surface preceding OA. <i>Biomaterials Science</i> , <b>2020</b> , 8, 3944-3955	7.4	6

### (2018-2020)

128	Competitive Binding of Bilirubin and Fatty Acid on Serum Albumin Affects Wear of UHMWPE. <i>Lubricants</i> , <b>2020</b> , 8,	3.1	3
127	Metallic Implants: Atomic Scale Origin of Metal Ion Release from Hip Implant Taper Junctions (Adv. Sci. 5/2020). <i>Advanced Science</i> , <b>2020</b> , 7, 2070027	13.6	78
126	Atomic Scale Origin of Metal Ion Release from Hip Implant Taper Junctions. <i>Advanced Science</i> , <b>2020</b> , 7, 1903008	13.6	7
125	Computational Parametric Studies for Preclinical Evaluation of Total Knee Replacements. <i>Lecture Notes in Computational Vision and Biomechanics</i> , <b>2020</b> , 60-85	0.3	3
124	Articulation of an alumina-zirconia composite ceramic against living cartilage - An in vitro wear test. <i>Journal of the Mechanical Behavior of Biomedical Materials</i> , <b>2020</b> , 103, 103531	4.1	5
123	Expanding instrumented gait testing in the community setting: A portable, depth-sensing camera captures joint motion in older adults. <i>PLoS ONE</i> , <b>2019</b> , 14, e0215995	3.7	7
122	Unsupervised gait retraining using a wireless pressure-detecting shoe insole. <i>Gait and Posture</i> , <b>2019</b> , 70, 408-413	2.6	6
121	Investigation of CoCrMo material loss in a novel bio-tribometer designed to study direct cell reaction to wear and corrosion products. <i>Biotribology</i> , <b>2019</b> , 18,	2.3	3
120	The choice of the femoral center of rotation affects material loss in total knee replacement wear testing - A parametric finite element study of ISO 14243-3. <i>Journal of Biomechanics</i> , <b>2019</b> , 88, 104-112	2.9	8
119	Gait asymmetries in unilateral symptomatic hip osteoarthritis and their association with radiographic severity and pain. <i>HIP International</i> , <b>2019</b> , 29, 209-214	1.7	10
118	Finite element evaluation of the newest ISO testing standard for polyethylene total knee replacement liners. <i>Proceedings of the Institution of Mechanical Engineers, Part H: Journal of Engineering in Medicine</i> , <b>2018</b> , 232, 545-552	1.7	14
117	In vitro simulation of fretting-corrosion in hip implant modular junctions: The influence of pH. <i>Medical Engineering and Physics</i> , <b>2018</b> , 52, 1-9	2.4	15
116	The Effect of Surgical Insertion and Proinflammatory Cytokines on Osteochondral Allograft Survival and Metabolism. <i>Cartilage</i> , <b>2018</b> , 9, 284-292	3	3
115	Wear Characteristics of Conventional Ultrahigh-Molecular-Weight Polyethylene Versus Highly Cross-Linked Polyethylene in Total Ankle Arthroplasty. <i>Foot and Ankle International</i> , <b>2018</b> , 39, 1335-134	143.3	12
114	Level and Downhill Walking to Assess Implant Functionality in Bicruciate- and Posterior Cruciate-Retaining Total Knee Arthroplasty. <i>Journal of Arthroplasty</i> , <b>2018</b> , 33, 2884-2889	4.4	7
113	Linear Penetration as a Surrogate Measure for Volumetric Wear in TKR Tibial Inserts <b>2018</b> , 75-92		
112	Phospholipid Vesicles in Media for Tribological Studies against Live Cartilage. <i>Lubricants</i> , <b>2018</b> , 6,	3.1	7
111	SMART Biosensor for Early Diagnostic Detection of Metal Ion Release in Orthopedic Patients: Initial Outcome. <i>Journal of Bio- and Tribo-Corrosion</i> , <b>2018</b> , 4, 1	2.9	2

110	Peculiarities in Ankle Cartilage. Cartilage, 2017, 8, 12-18	3	16
109	Implications of trauma and subsequent articulation on the release of Proteoglycan-4 and tissue response in adult human ankle cartilage. <i>Journal of Orthopaedic Research</i> , <b>2017</b> , 35, 667-676	3.8	3
108	The Relationship Between Pitching Mechanics and Injury: A Review of Current Concepts. <i>Sports Health</i> , <b>2017</b> , 9, 216-221	4.7	67
107	Prediction of Polyethylene Wear Rates from Gait Biomechanics and Implant Positioning in Total Hip Replacement. <i>Clinical Orthopaedics and Related Research</i> , <b>2017</b> , 475, 2027-2042	2.2	16
106	Influence of molybdate ion and pH on the fretting corrosion of a CoCrMo litanium alloy couple. <i>Biotribology</i> , <b>2017</b> , 11, 20-28	2.3	6
105	Are Instrumented Knee Forces Representative of a Larger Population of Cruciate-Retaining Total Knee Arthroplasties?. <i>Journal of Arthroplasty</i> , <b>2017</b> , 32, 2268-2273	4.4	6
104	Development of a Cartilage Shear-Damage Model to Investigate the Impact of Surface Injury on Chondrocytes and Extracellular Matrix Wear. <i>Cartilage</i> , <b>2017</b> , 8, 444-455	3	14
103	ESTABLISHING A LIVE CARTILAGE-ON-CARTILAGE INTERFACE FOR TRIBOLOGICAL TESTING. <i>Biotribology</i> , <b>2017</b> , 9, 1-11	2.3	13
102	Electrochemically induced tribolayer with molybdenum for hip implants: Tribocorrosion and biocompatibility study. <i>Thin Solid Films</i> , <b>2017</b> , 644, 82-91	2.2	8
101	TKA patients with unsatisfying knee function show changes in neuromotor synergy pattern but not joint biomechanics. <i>Journal of Electromyography and Kinesiology</i> , <b>2017</b> , 37, 90-100	2.5	11
100	Relationship of surface damage appearance and volumetric wear in retrieved TKR polyethylene liners. <i>Journal of Biomedical Materials Research - Part B Applied Biomaterials</i> , <b>2017</b> , 105, 2053-2059	3.5	13
99	Albumin Protein Cleavage Affects the Wear and Friction of Ultra-High Molecular Weight Polyethylene. <i>Lubricants</i> , <b>2017</b> , 5,	3.1	5
98	Fretting-corrosion behavior in hip implant modular junctions: The influence of friction energy and pH variation. <i>Journal of the Mechanical Behavior of Biomedical Materials</i> , <b>2016</b> , 62, 570-587	4.1	26
97	From normal to fast walking: Impact of cadence and stride length on lower extremity joint moments. <i>Gait and Posture</i> , <b>2016</b> , 46, 118-25	2.6	39
96	How Does Wear Rate Compare in Well-functioning Total Hip and Knee Replacements? A Postmortem Polyethylene Liner Study. <i>Clinical Orthopaedics and Related Research</i> , <b>2016</b> , 474, 1867-75	2.2	19
95	Comparison of Antagonist Muscle Activity During Walking Between Total Knee Replacement and Control Subjects Using Unnormalized Electromyography. <i>Journal of Arthroplasty</i> , <b>2016</b> , 31, 1331-1339	4.4	12
94	The champagne toast position isolates the supraspinatus better than the Jobe test: an electromyographic study of shoulder physical examination tests. <i>Journal of Shoulder and Elbow Surgery</i> , <b>2016</b> , 25, 322-9	4.3	17
93	On the Growth Rate of Tribomaterial in Bovine Serum Lubricated Sliding Contacts. <i>Lubricants</i> , <b>2016</b> , 4, 21	3.1	4

92	Wear Scar Similarities between Retrieved and Simulator-Tested Polyethylene TKR Components: An Artificial Neural Network Approach. <i>BioMed Research International</i> , <b>2016</b> , 2016, 2071945	3	3	
91	The Feasibility of Using Augmented Auditory Feedback From a Pressure Detecting Insole to Reduce the Knee Adduction Moment: A Proof of Concept Study. <i>Journal of Biomechanical Engineering</i> , <b>2016</b> , 138, 021014	2.1	11	
90	Hamstring Activity in the Anterior Cruciate Ligament Injured Patient: Injury Implications and Comparison With Quadriceps Activity. <i>Arthroscopy - Journal of Arthroscopic and Related Surgery</i> , <b>2016</b> , 32, 1651-9	5.4	10	
89	A reduction in the knee adduction moment with medial thrust gait is associated with a medial shift in center of plantar pressure. <i>Medical Engineering and Physics</i> , <b>2016</b> , 38, 615-621	2.4	9	
88	Can a linear combination of gait principal component vectors identify hip OA stages?. <i>Journal of Biomechanics</i> , <b>2016</b> , 49, 2023-2030	2.9	11	
87	Human genome-wide expression analysis reorients the study of inflammatory mediators and biomechanics in osteoarthritis. <i>Osteoarthritis and Cartilage</i> , <b>2015</b> , 23, 1939-45	6.2	34	
86	Predictors of throwing velocity in youth and adolescent pitchers. <i>Journal of Shoulder and Elbow Surgery</i> , <b>2015</b> , 24, 1339-45	4.3	39	
85	Variability of TKR knee kinematics and relationship with gait kinetics: implications for total knee wear. <i>BioMed Research International</i> , <b>2015</b> , 2015, 284513	3	5	
84	Knee Flexion and Daily Activities in Patients following Total Knee Replacement: A Comparison with ISO Standard 14243. <i>BioMed Research International</i> , <b>2015</b> , 2015, 157541	3	15	
83	Poly-Ether <b>E</b> ther <b>E</b> etone (PEEK) <b>2015</b> , 223-257			
82	Tribocorrosion in Hip Modular Taper Junctions: Load-Triggered Transitions in Electrochemical and Mechanical Behavior <b>2015</b> , 283-302		1	
81	How have alternative bearings and modularity affected revision rates in total hip arthroplasty?. <i>Clinical Orthopaedics and Related Research</i> , <b>2014</b> , 472, 3747-58	2.2	36	
80	Implementation of a markerless motion analysis method to quantify hyperkinesis in males with fragile X syndrome. <i>Gait and Posture</i> , <b>2014</b> , 39, 827-30	2.6	4	
79	Glenohumeral Function of the Long Head of the Biceps Muscle: An Electromyographic Analysis. <i>Orthopaedic Journal of Sports Medicine</i> , <b>2014</b> , 2, 2325967114523902	3.5	15	
78	Postoperative restoration of upper extremity motion and neuromuscular control during the overhand pitch: evaluation of tenodesis and repair for superior labral anterior-posterior tears. <i>American Journal of Sports Medicine</i> , <b>2014</b> , 42, 2825-36	6.8	61	
77	Electrochemical behavior of titanium in artificial saliva: influence of pH. <i>Journal of Oral Implantology</i> , <b>2014</b> , 40, 3-10	1.2	28	
76	Design of a tribocorrosion bioreactor for the analysis of immune cell response to in situ generated	0.2	9	
	wear products. Journal of Long-Term Effects of Medical Implants, <b>2014</b> , 24, 65-76			

74	What Do the Retrievals Really Tell Us? <b>2014</b> , 173-193		2
73	Effect of tribolayer formation on corrosion of CoCrMo alloys investigated using scanning electrochemical microscopy. <i>Analytical Chemistry</i> , <b>2013</b> , 85, 7159-66	7.8	13
72	Damage due to rolling in total knee replacement The influence of tractive force. Friction, 2013, 1, 178-1	<b>85</b> .6	10
71	The effect of bacterial contamination on friction and wear in metal/polyethylene bearings for total joint repair case report. <i>Wear</i> , <b>2013</b> , 301, 264-270	3.5	11
70	CoCrMo metal-on-metal hip replacements. Physical Chemistry Chemical Physics, 2013, 15, 746-56	3.6	101
69	Analyzing pin-on-ball wear tests by means of the Greenwood Williamson contact model. <i>Wear</i> , <b>2013</b> , 301, 4-10	3.5	4
68	Influence of corrosion on lipopolysaccharide affinity for two different titanium materials. <i>Journal of Prosthetic Dentistry</i> , <b>2013</b> , 110, 462-70	4	15
67	An autonomous mathematical reconstruction to effectively measure volume loss on retrieved polyethylene tibial inserts. <i>Journal of Biomedical Materials Research - Part B Applied Biomaterials</i> , <b>2013</b> , 101, 449-57	3.5	6
66	Computational Framework for Determining Patient-Specific Total Knee Arthroplasty Loading. <i>Journal of Medical Devices, Transactions of the ASME</i> , <b>2013</b> , 7, 0409041-409041	1.3	
65	Improvement in knee loading after use of specialized footwear for knee osteoarthritis: results of a six-month pilot investigation. <i>Arthritis and Rheumatism</i> , <b>2013</b> , 65, 1282-9		29
64	Fine tuning total knee replacement contact force prediction algorithms using blinded model validation. <i>Journal of Biomechanical Engineering</i> , <b>2013</b> , 135, 021015	2.1	16
63	Key Pathways to Prevent Posttraumatic Arthritis for Future Molecule-Based Therapy. <i>Cartilage</i> , <b>2013</b> , 4, 13S-21S	3	26
62	Wear measurement of highly cross-linked UHMWPE using a 7Be tracer implantation technique. Journal of Biomedical Materials Research - Part B Applied Biomaterials, <b>2013</b> , 101, 423-9	3.5	
61	Does hip implant positioning affect the peak external adduction moments of the healthy knees of subjects with total hip replacements?. <i>Journal of Orthopaedic Research</i> , <b>2013</b> , 31, 1187-94	3.8	4
60	Microstructure of Retrievals Made from Standard Cast HC-CoCrMo Alloys <b>2013</b> , 251-267		9
59	Tribochemical Reactions in Metal-on-Metal Hip Joints Influence Wear and Corrosion <b>2013</b> , 292-309		8
58	What is the role of lipopolysaccharide on the tribocorrosive behavior of titanium?. <i>Journal of the Mechanical Behavior of Biomedical Materials</i> , <b>2012</b> , 8, 71-85	4.1	61
57	The tribological difference between biomedical steels and CoCrMo-alloys. <i>Journal of the Mechanical Behavior of Biomedical Materials</i> , <b>2012</b> , 9, 50-62	4.1	60

### (2010-2012)

56	The relationship of vibratory perception to dynamic joint loading, radiographic severity, and pain in knee osteoarthritis. <i>Arthritis and Rheumatism</i> , <b>2012</b> , 64, 181-6		24
55	Direct comparison of measured and calculated total knee replacement force envelopes during walking in the presence of normal and abnormal gait patterns. <i>Journal of Biomechanics</i> , <b>2012</b> , 45, 990-6	2.9	31
54	Sagittal plane hip motion reversals during walking are associated with disease severity and poorer function in subjects with hip osteoarthritis. <i>Journal of Biomechanics</i> , <b>2012</b> , 45, 1360-5	2.9	44
53	Contralateral hip and knee gait biomechanics are unchanged by total hip replacement for unilateral hip osteoarthritis. <i>Gait and Posture</i> , <b>2012</b> , 35, 61-5	2.6	53
52	Wear-corrosion synergism in a CoCrMo hip bearing alloy is influenced by proteins. <i>Clinical Orthopaedics and Related Research</i> , <b>2012</b> , 470, 3109-17	2.2	53
51	Metal-on-Metal: Ion Levels as an Intervention Strategy. <i>Seminars in Arthroplasty</i> , <b>2012</b> , 23, 283-285	0.4	1
50	Influence of pH on the tribocorrosion behavior of CpTi in the oral environment: synergistic interactions of wear and corrosion. <i>Journal of Biomedical Materials Research - Part B Applied Biomaterials</i> , <b>2012</b> , 100, 1662-71	3.5	62
49	Surface damage versus tibial polyethylene insert conformity: a retrieval study. <i>Clinical Orthopaedics and Related Research</i> , <b>2012</b> , 470, 1814-25	2.2	23
48	Stability of cp-Ti and Ti-6Al-4V alloy for dental implants as a function of saliva pH - an electrochemical study. <i>Clinical Oral Implants Research</i> , <b>2012</b> , 23, 1055-62	4.8	105
47	Comparison of ISO standard and TKR patient axial force profiles during the stance phase of gait. <i>Proceedings of the Institution of Mechanical Engineers, Part H: Journal of Engineering in Medicine</i> , <b>2012</b> , 226, 227-34	1.7	9
46	Grand Challenge Competition: A Parametric Numerical Model to Predict In Vivo Medial and Lateral Knee Forces in Walking Gaits <b>2012</b> ,		3
45	New insights into wear and biological effects of metal-on-metal bearings. <i>Journal of Bone and Joint Surgery - Series A</i> , <b>2011</b> , 93 Suppl 2, 76-83	5.6	66
44	Polyethylene and metal wear particles: characteristics and biological effects. <i>Seminars in Immunopathology</i> , <b>2011</b> , 33, 257-71	12	64
43	Asymmetric loading and bone mineral density at the asymptomatic knees of patients with unilateral hip osteoarthritis. <i>Arthritis and Rheumatism</i> , <b>2011</b> , 63, 3853-8		34
42	Effect of europium(II) stearate on the mechanical properties and the oxidation resistance of UHMWPE. <i>Journal of the Mechanical Behavior of Biomedical Materials</i> , <b>2011</b> , 4, 821-6	4.1	3
41	Time course and extent of functional recovery during the first postoperative year after minimally invasive total hip arthroplasty with two different surgical approachesa randomized controlled trial. <i>Journal of Biomechanics</i> , <b>2011</b> , 44, 372-8	2.9	47
40	Effect of impaction sequence on osteochondral graft damage: the role of repeated and varying loads. <i>American Journal of Sports Medicine</i> , <b>2010</b> , 38, 105-13	6.8	36
39	Osteochondral Tissue Cell Viability Is Affected by Total Impulse during Impaction Grafting. <i>Cartilage</i> , <b>2010</b> , 1, 270-5	3	3

38	The Effect of the Tibiofemoral Contact Path Centroid Location on TKR Contact Forces 2010,		1
37	Differences in preferred walking speeds in a gait laboratory compared with the real world after total hip replacement. <i>Archives of Physical Medicine and Rehabilitation</i> , <b>2010</b> , 91, 1390-5	2.8	19
36	Wear mechanisms in metal-on-metal bearings: the importance of tribochemical reaction layers. Journal of Orthopaedic Research, <b>2010</b> , 28, 436-43	3.8	100
35	Protective effect of P188 in the model of acute trauma to human ankle cartilage: the mechanism of action. <i>Journal of Orthopaedic Trauma</i> , <b>2010</b> , 24, 571-6	3.1	33
34	Spinal kinematics and facet load transmission after total disc replacement. <i>Spine</i> , <b>2010</b> , 35, E1160-6	3.3	13
33	Effects of common footwear on joint loading in osteoarthritis of the knee. <i>Arthritis Care and Research</i> , <b>2010</b> , 62, 917-23	4.7	57
32	Determination of the temperature rise within UHMWPE tibial components during tribological loading. <i>Acta Biomaterialia</i> , <b>2010</b> , 6, 552-62	10.8	9
31	Relative importance of gait vs. joint positioning on hip contact forces after total hip replacement. Journal of Orthopaedic Research, <b>2009</b> , 27, 1576-82	3.8	38
30	Rare earth stearates for wear determination of UHMWPE bearings. Wear, 2009, 267, 679-682	3.5	9
29	Differences in wear between load and displacement control tested total knee replacements. <i>Wear</i> , <b>2009</b> , 267, 757-762	3.5	19
28	A parametric approach to numerical modeling of TKR contact forces. <i>Journal of Biomechanics</i> , <b>2009</b> , 42, 541-5	2.9	18
27	The effect of sliding velocity on chondrocytes activity in 3D scaffolds. <i>Journal of Biomechanics</i> , <b>2009</b> , 42, 424-9	2.9	20
26	Kinematic evaluation of cruciate-retaining total knee replacement patients during level walking: a comparison with the displacement-controlled ISO standard. <i>Journal of Biomechanics</i> , <b>2009</b> , 42, 2363-8	2.9	30
25	Biceps activity during windmill softball pitching: injury implications and comparison with overhand throwing. <i>American Journal of Sports Medicine</i> , <b>2009</b> , 37, 558-65	6.8	68
24	Comparison of Numerically Modeled Knee Joint Contact Forces to Instrumented Total Knee Prosthesis Forces <b>2009</b> ,		1
23	Do gait adaptations during stair climbing result in changes in implant forces in subjects with total hip replacements compared to normal subjects?. <i>Clinical Biomechanics</i> , <b>2008</b> , 23, 754-61	2.2	33
22	Characterizing the Surface Topography of Viable Cartilage Explants: A Novel Application of the Scanning White Light Interferometer <b>2008</b> ,		2
21	Relationship between pain and medial knee joint loading in mild radiographic knee osteoarthritis. <i>Arthritis and Rheumatism</i> , <b>2007</b> , 57, 1254-60		147

### (2003-2007)

20	Preoperative gait adaptations persist one year after surgery in clinically well-functioning total hip replacement patients. <i>Journal of Biomechanics</i> , <b>2007</b> , 40, 3432-7	2.9	133
19	Microvasculatory reaction of skeletal muscle to Ti-15Mo in comparison to well-established titanium alloys. <i>Journal of Materials Science: Materials in Medicine</i> , <b>2007</b> , 18, 2053-60	4.5	10
18	Impaction affects cell viability in osteochondral tissues during transplantation. <i>Journal of Knee Surgery</i> , <b>2007</b> , 20, 105-10	2.4	32
17	Analysis of the Tibio-Femoral Contact Point in Total Knee Replacement Using a Marker Based Motion Analysis System <b>2007</b> , 39		3
16	Knee joint loading differs in individuals with mild compared with moderate medial knee osteoarthritis. <i>Arthritis and Rheumatism</i> , <b>2006</b> , 54, 3842-9		208
15	Short-term microvascular response of striated muscle to cp-Ti, Ti-6Al-4V, and Ti-6Al-7Nb. <i>Journal of Orthopaedic Research</i> , <b>2006</b> , 24, 531-40	3.8	23
14	Effects of simple and complex motion patterns on gene expression of chondrocytes seeded in 3D scaffolds. <i>Tissue Engineering</i> , <b>2006</b> , 12, 3171-9		72
13	Clinical performance of contemporary tibial polyethylene components. <i>Journal of Arthroplasty</i> , <b>2006</b> , 21, 754-61	4.4	24
12	A case of disassociation of a modular femoral neck trunion after total hip arthroplasty. <i>Journal of Arthroplasty</i> , <b>2006</b> , 21, 918-21	4.4	66
11	Europium as a Candidate Staining Material to Determine Polyethylene Wear 2006,		1
10	Effects of Simple and Complex Motion Patterns on Gene Expression of Chondrocytes Seeded in 3D Scaffolds. <i>Tissue Engineering</i> , <b>2006</b> , 061004065151001		
9	Chondrocyte gene expression under applied surface motion. <i>Biorheology</i> , <b>2006</b> , 43, 259-69	1.7	50
8	The influence of slip velocity on wear of total knee arthroplasty. Wear, 2005, 259, 926-932	3.5	21
7	Surface motion upregulates superficial zone protein and hyaluronan production in chondrocyte-seeded three-dimensional scaffolds. <i>Tissue Engineering</i> , <b>2005</b> , 11, 249-56		118
6	The Influence of Sliding Velocity on Wear of Total Knee Arthroplasties <b>2004</b> , 245		1
5	Tribology approach to the engineering and study of articular cartilage. <i>Tissue Engineering</i> , <b>2004</b> , 10, 14	136-45	88
4	Tribology Approach to the Engineering and Study of Articular Cartilage. <i>Tissue Engineering</i> , <b>2004</b> , 10, 1436-1445		4
3	Disentangled State in Polymer Melts; a Route to Ultimate Physical and Mechanical Properties.  Macromolecular Materials and Engineering, 2003, 288, 964-970	3.9	32

A striated pattern of wear in ultrahigh-molecular-weight polyethylene components of Miller-Galante total knee arthroplasty. *Journal of Arthroplasty*, **1998**, 13, 8-16

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Tractive forces during rolling motion of the knee: implications for wear in total knee replacement. *Journal of Biomechanics*, **1997**, 30, 131-7

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