

# David W Holdsworth

## List of Publications by Citations

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220  
papers

6,801  
citations

47  
h-index

74  
g-index

230  
ext. papers

7,692  
ext. citations

4.7  
avg, IF

5.59  
L-index

#	Paper	IF	Citations
220	Image-based computational simulation of flow dynamics in a giant intracranial aneurysm. <i>American Journal of Neuroradiology</i> , <b>2003</b> , 24, 559-66	4.4	239
219	Characterization of common carotid artery blood-flow waveforms in normal human subjects. <i>Physiological Measurement</i> , <b>1999</b> , 20, 219-40	2.9	236
218	Characterization of volumetric flow rate waveforms in the normal internal carotid and vertebral arteries. <i>Physiological Measurement</i> , <b>2005</b> , 26, 477-88	2.9	226
217	Micro-CT in small animal and specimen imaging. <i>Trends in Biotechnology</i> , <b>2002</b> , 20, S34-S39	15.1	225
216	In vivo small-animal imaging using micro-CT and digital subtraction angiography. <i>Physics in Medicine and Biology</i> , <b>2008</b> , 53, R319-50	3.8	206
215	Characterisation of mammographic parenchymal pattern by fractal dimension. <i>Physics in Medicine and Biology</i> , <b>1990</b> , 35, 235-47	3.8	197
214	Fundamental image quality limits for microcomputed tomography in small animals. <i>Medical Physics</i> , <b>2003</b> , 30, 2869-77	4.4	157
213	PIV-measured versus CFD-predicted flow dynamics in anatomically realistic cerebral aneurysm models. <i>Journal of Biomechanical Engineering</i> , <b>2008</b> , 130, 021015	2.1	148
212	Ex vivo characterization of articular cartilage and bone lesions in a rabbit ACL transection model of osteoarthritis using MRI and micro-CT. <i>Osteoarthritis and Cartilage</i> , <b>2004</b> , 12, 986-96	6.2	122
211	A quality assurance phantom for the performance evaluation of volumetric micro-CT systems. <i>Physics in Medicine and Biology</i> , <b>2007</b> , 52, 7087-108	3.8	110
210	Three-dimensional computed tomographic reconstruction using a C-arm mounted XRII: correction of image intensifier distortion. <i>Medical Physics</i> , <b>1997</b> , 24, 1097-106	4.4	102
209	Forced mobilization accelerates pathogenesis: characterization of a preclinical surgical model of osteoarthritis. <i>Arthritis Research and Therapy</i> , <b>2007</b> , 9, R13	5.7	98
208	Accuracy of computational hemodynamics in complex arterial geometries reconstructed from magnetic resonance imaging. <i>Annals of Biomedical Engineering</i> , <b>1999</b> , 27, 32-41	4.7	96
207	Design and performance evaluation of a remote catheter navigation system. <i>IEEE Transactions on Biomedical Engineering</i> , <b>2009</b> , 56, 1901-8	5	94
206	Geometric characterization of stenosed human carotid arteries. <i>Academic Radiology</i> , <b>1996</b> , 3, 898-911	4.3	94
205	Further comments on the measurement of carotid stenosis from angiograms. North American Symptomatic Carotid Endarterectomy Trial (NASCET) Group. <i>Stroke</i> , <b>1994</b> , 25, 2445-9	6.7	91
204	Computer-controlled positive displacement pump for physiological flow simulation. <i>Medical and Biological Engineering and Computing</i> , <b>1991</b> , 29, 565-70	3.1	91

203	Three-dimensional computed tomographic reconstruction using a C-arm mounted XRII: image-based correction of gantry motion nonidealities. <i>Medical Physics</i> , <b>2000</b> , 27, 30-8	4.4	89
202	A bony connection signals laryngeal echolocation in bats. <i>Nature</i> , <b>2010</b> , 463, 939-42	50.4	86
201	Implementation of dual- and triple-energy cone-beam micro-CT for postreconstruction material decomposition. <i>Medical Physics</i> , <b>2008</b> , 35, 5030-42	4.4	82
200	An in vitro system for Doppler ultrasound flow studies in the stenosed carotid artery bifurcation. <i>Ultrasound in Medicine and Biology</i> , <b>2002</b> , 28, 495-506	3.5	82
199	Early Changes of Articular Cartilage and Subchondral Bone in The DMM Mouse Model of Osteoarthritis. <i>Scientific Reports</i> , <b>2018</b> , 8, 2855	4.9	76
198	A blood-mimicking fluid for particle image velocimetry with silicone vascular models. <i>Experiments in Fluids</i> , <b>2011</b> , 50, 769-774	2.5	76
197	The role of Akt1 in terminal stages of endochondral bone formation: angiogenesis and ossification. <i>Bone</i> , <b>2009</b> , 45, 1133-45	4.7	76
196	Virtual angiography for visualization and validation of computational models of aneurysm hemodynamics. <i>IEEE Transactions on Medical Imaging</i> , <b>2005</b> , 24, 1586-92	11.7	76
195	High-resolution MRI and micro-CT in an ex vivo rabbit anterior cruciate ligament transection model of osteoarthritis. <i>Osteoarthritis and Cartilage</i> , <b>2004</b> , 12, 614-26	6.2	75
194	A thin-walled carotid vessel phantom for Doppler ultrasound flow studies. <i>Ultrasound in Medicine and Biology</i> , <b>2004</b> , 30, 1067-78	3.5	75
193	Prospective respiratory-gated micro-CT of free breathing rodents. <i>Medical Physics</i> , <b>2005</b> , 32, 2888-98	4.4	73
192	Fast retrospectively gated quantitative four-dimensional (4D) cardiac micro computed tomography imaging of free-breathing mice. <i>Investigative Radiology</i> , <b>2007</b> , 42, 85-94	10.1	70
191	Computer-controlled flow simulator for MR flow studies. <i>Journal of Magnetic Resonance Imaging</i> , <b>1992</b> , 2, 605-12	5.6	70
190	Flow patterns at the stenosed carotid bifurcation: effect of concentric versus eccentric stenosis. <i>Annals of Biomedical Engineering</i> , <b>2000</b> , 28, 415-23	4.7	69
189	Flow patterns in carotid bifurcation models using pulsed Doppler ultrasound: effect of concentric vs. eccentric stenosis on turbulence and recirculation. <i>Ultrasound in Medicine and Biology</i> , <b>2010</b> , 36, 1125-34	3.5	65
188	In vivo micro-CT analysis of bone remodeling in a rat calvarial defect model. <i>Physics in Medicine and Biology</i> , <b>2009</b> , 54, 2147-61	3.8	64
187	The effect of the density-modulus relationship selected to apply material properties in a finite element model of long bone. <i>Journal of Biomechanics</i> , <b>2008</b> , 41, 3171-6	2.9	64
186	A three-dimensional cerebrovascular flow phantom. <i>Medical Physics</i> , <b>1999</b> , 26, 1589-99	4.4	64

185	Deficiency in acellular cementum and periodontal attachment in bsp null mice. <i>Journal of Dental Research</i> , <b>2013</b> , 92, 166-72	8.1	62
184	Loss of equilibrative nucleoside transporter 1 in mice leads to progressive ectopic mineralization of spinal tissues resembling diffuse idiopathic skeletal hyperostosis in humans. <i>Journal of Bone and Mineral Research</i> , <b>2013</b> , 28, 1135-49	6.3	61
183	Functional neoangiogenesis imaging of genetically engineered mouse prostate cancer using three-dimensional power Doppler ultrasound. <i>Cancer Research</i> , <b>2007</b> , 67, 2830-9	10.1	59
182	A high-resolution XRII-based quantitative volume CT scanner. <i>Medical Physics</i> , <b>1993</b> , 20, 449-62	4.4	59
181	Turbulence intensity measurements using particle image velocimetry in diseased carotid artery models: effect of stenosis severity, plaque eccentricity, and ulceration. <i>Journal of Biomechanics</i> , <b>2014</b> , 47, 253-63	2.9	58
180	Study of subchondral bone adaptations in a rodent surgical model of OA using in vivo micro-computed tomography. <i>Osteoarthritis and Cartilage</i> , <b>2008</b> , 16, 458-69	6.2	58
179	Time-course characterization of the computed tomography contrast enhancement of an iodinated blood-pool contrast agent in mice using a volumetric flat-panel equipped computed tomography scanner. <i>Investigative Radiology</i> , <b>2006</b> , 41, 384-90	10.1	58
178	In vivo characterization of lung morphology and function in anesthetized free-breathing mice using micro-computed tomography. <i>Journal of Applied Physiology</i> , <b>2007</b> , 102, 2046-55	3.7	55
177	Loss of P2X7 nucleotide receptor function leads to abnormal fat distribution in mice. <i>Purinergic Signalling</i> , <b>2014</b> , 10, 291-304	3.8	54
176	2D-3D registration of coronary angiograms for cardiac procedure planning and guidance. <i>Medical Physics</i> , <b>2005</b> , 32, 3737-49	4.4	54
175	An in vivo investigation of the initiation and progression of subchondral cysts in a rodent model of secondary osteoarthritis. <i>Arthritis Research and Therapy</i> , <b>2012</b> , 14, R26	5.7	51
174	Subchondral cysts create increased intra-osseous stress in early knee OA: A finite element analysis using simulated lesions. <i>Bone</i> , <b>2011</b> , 48, 639-46	4.7	47
173	Clinical Doppler ultrasound for the assessment of plaque ulceration in the stenosed carotid bifurcation by detection of distal turbulence intensity: a matched model study. <i>European Radiology</i> , <b>2009</b> , 19, 2739-49	8	47
172	On the effect of parent-aneurysm angle on flow patterns in basilar tip aneurysms: towards a surrogate geometric marker of intra-aneurysmal hemodynamics. <i>Journal of Biomechanics</i> , <b>2008</b> , 41, 241-8.9	4.7	47
171	A geometrically accurate vascular phantom for comparative studies of x-ray, ultrasound, and magnetic resonance vascular imaging: construction and geometrical verification. <i>Medical Physics</i> , <b>1993</b> , 20, 415-25	4.4	47
170	Anthropomorphic carotid bifurcation phantom for MRI applications. <i>Journal of Magnetic Resonance Imaging</i> , <b>1999</b> , 10, 533-44	5.6	46
169	Collagenase-resistant collagen promotes mouse aging and vascular cell senescence. <i>Aging Cell</i> , <b>2014</b> , 13, 121-30	9.9	41
168	Doppler ultrasound compatible plastic material for use in rigid flow models. <i>Ultrasound in Medicine and Biology</i> , <b>2008</b> , 34, 1846-56	3.5	41

167	Repeated exposure to high-frequency low-amplitude vibration induces degeneration of murine intervertebral discs and knee joints. <i>Arthritis and Rheumatology</i> , <b>2015</b> , 67, 2164-75	9.5	40
166	Cone-beam reprojction using projection-matrices. <i>IEEE Transactions on Medical Imaging</i> , <b>2003</b> , 22, 1202-1147		40
165	A time-delay integration charge-coupled device camera for slot-scanned digital radiography. <i>Medical Physics</i> , <b>1990</b> , 17, 876-86	4.4	39
164	Activation of cancer-associated fibroblasts is required for tumor neovascularization in a murine model of melanoma. <i>Matrix Biology</i> , <b>2018</b> , 74, 52-61	11.4	38
163	In vitro quantification of wear in tibial inserts using microcomputed tomography. <i>Clinical Orthopaedics and Related Research</i> , <b>2011</b> , 469, 107-12	2.2	38
162	Dynamic geometrical calibration for 3D cerebral angiography <b>1996</b> ,		37
161	Elasticity and geometry measurements of vascular specimens using a high-resolution laboratory CT scanner. <i>Physiological Measurement</i> , <b>1993</b> , 14, 277-90	2.9	37
160	Optimization of a retrospective technique for respiratory-gated high speed micro-CT of free-breathing rodents. <i>Physics in Medicine and Biology</i> , <b>2007</b> , 52, 5749-69	3.8	36
159	Adventitial microvessel formation after coronary stenting and the effects of SU11218, a tyrosine kinase inhibitor. <i>Journal of the American College of Cardiology</i> , <b>2006</b> , 47, 1067-75	15.1	35
158	Micro-CT imaging of rat lung ventilation using continuous image acquisition during xenon gas contrast enhancement. <i>Journal of Applied Physiology</i> , <b>2007</b> , 103, 1848-56	3.7	34
157	Validation of a 40 MHz B-scan ultrasound biomicroscope for the evaluation of osteoarthritis lesions in an animal model. <i>Osteoarthritis and Cartilage</i> , <b>2005</b> , 13, 171-9	6.2	33
156	Quantifying lung morphology with respiratory-gated micro-CT in a murine model of emphysema. <i>Physics in Medicine and Biology</i> , <b>2009</b> , 54, 2121-30	3.8	31
155	Molecular and histological analysis of a new rat model of experimental knee osteoarthritis. <i>Annals of the New York Academy of Sciences</i> , <b>2007</b> , 1117, 165-74	6.5	31
154	Internal carotid artery stenosis measurement: comparison of 3D computed rotational angiography and conventional digital subtraction angiography. <i>Stroke</i> , <b>2004</b> , 35, 2776-81	6.7	30
153	Experimental and theoretical x-ray imaging performance comparison of iodine and lanthanide contrast agents. <i>Medical Physics</i> , <b>1993</b> , 20, 15-31	4.4	30
152	Characterization of catheter dynamics during percutaneous transluminal catheter procedures. <i>IEEE Transactions on Biomedical Engineering</i> , <b>2009</b> , 56, 2140-3	5	29
151	Three-dimensional surface deviation maps for analysis of retrieved polyethylene acetabular liners using micro-computed tomography. <i>Journal of Arthroplasty</i> , <b>2010</b> , 25, 330-2	4.4	29
150	Noninvasive quantification of tumor volume in preclinical liver metastasis models using contrast-enhanced x-ray computed tomography. <i>Investigative Radiology</i> , <b>2008</b> , 43, 92-9	10.1	29

149	Damage of an Oxinium femoral head and polyethylene liner following 'routine' total hip replacement. <i>Journal of Bone and Joint Surgery: British Volume</i> , <b>2011</b> , 93, 409-13		28
148	A real vessel phantom for imaging experimentation. <i>Medical Physics</i> , <b>1997</b> , 24, 687-93	4.4	28
147	Digital X-ray Imaging Technique to Study the Horizontal Injection of Gas-Liquid Jets into Fluidized Beds. <i>International Journal of Chemical Reactor Engineering</i> , <b>2003</b> , 1,	1.2	27
146	In vitro shear stress measurements using particle image velocimetry in a family of carotid artery models: effect of stenosis severity, plaque eccentricity, and ulceration. <i>PLoS ONE</i> , <b>2014</b> , 9, e98209	3.7	26
145	Finite-element modeling of viscoelastic cells during high-frequency cyclic strain. <i>Journal of Functional Biomaterials</i> , <b>2012</b> , 3, 209-24	4.8	25
144	Preliminary radiological assessment of age-related change in the trabecular structure of the human os pubis. <i>Journal of Forensic Sciences</i> , <b>2011</b> , 56, 312-9	1.8	25
143	Interactions of coronary artery smooth muscle cells with 3D porous polyurethane scaffolds. <i>Journal of Biomedical Materials Research - Part A</i> , <b>2009</b> , 89, 293-303	5.4	25
142	An investigation of the flow dependence of temperature gradients near large vessels during steady state and transient tissue heating. <i>Physics in Medicine and Biology</i> , <b>1999</b> , 44, 1479-97	3.8	25
141	Implementation and commissioning of an integrated micro-CTBT system with computerized independent jaw collimation. <i>Medical Physics</i> , <b>2013</b> , 40, 081706	4.4	24
140	4 T MRI of chondrocalcinosis in combination with three-dimensional CT, radiography, and arthroscopy: a report of three cases. <i>Skeletal Radiology</i> , <b>2005</b> , 34, 714-21	2.7	24
139	Techniques to alleviate the effects of view aliasing artifacts in computed tomography. <i>Medical Physics</i> , <b>1999</b> , 26, 896-904	4.4	24
138	Rapid in vivo whole body composition of rats using cone beam CT. <i>Journal of Applied Physiology</i> , <b>2010</b> , 109, 1162-9	3.7	23
137	Development of a customized density-modulus relationship for use in subject-specific finite element models of the ulna. <i>Proceedings of the Institution of Mechanical Engineers, Part H: Journal of Engineering in Medicine</i> , <b>2009</b> , 223, 787-94	1.7	22
136	Whole-body vibration of mice induces progressive degeneration of intervertebral discs associated with increased expression of IL-1 $\beta$ and multiple matrix degrading enzymes. <i>Osteoarthritis and Cartilage</i> , <b>2017</b> , 25, 779-789	6.2	21
135	A randomized trial comparing acetabular component fixation of two porous ingrowth surfaces using RSA. <i>Journal of Arthroplasty</i> , <b>2013</b> , 28, 48-52	4.4	21
134	Bone mineral measurement of phalanges: comparison of radiographic absorptiometry and area dual X-ray absorptiometry. <i>Radiology</i> , <b>2000</b> , 216, 586-91	20.5	21
133	The addition of a raloxifene analog (LY117018) allows for reduced PTH(1-34) dosing during reversal of osteopenia in ovariectomized rats. <i>Journal of Bone and Mineral Research</i> , <b>1999</b> , 14, 675-9	6.3	21
132	Loss of the mammalian DREAM complex deregulates chondrocyte proliferation. <i>Molecular and Cellular Biology</i> , <b>2014</b> , 34, 2221-34	4.8	20

131	Effects of physiologic waveform variability in triggered MR imaging: theoretical analysis. <i>Journal of Magnetic Resonance Imaging</i> , <b>1994</b> , 4, 853-67	5.6	20
130	Varus tibial alignment is associated with greater tibial baseplate migration at 10 years following total knee arthroplasty. <i>Knee Surgery, Sports Traumatology, Arthroscopy</i> , <b>2018</b> , 26, 1610-1617	5.5	20
129	Characterization of weathering and heterogeneous mineral phase distribution in brachinite Northwest Africa 4872. <i>Meteoritics and Planetary Science</i> , <b>2014</b> , 49, 1141-1156	2.8	19
128	Development of an RSA calibration system with improved accuracy and precision. <i>Journal of Biomechanics</i> , <b>2008</b> , 41, 907-11	2.9	19
127	Use of an ultrasound blood-mimicking fluid for Doppler investigations of turbulence in vitro. <i>Ultrasound in Medicine and Biology</i> , <b>2008</b> , 34, 1163-73	3.5	19
126	Prediction of local proximal tibial subchondral bone structural stiffness using subject-specific finite element modeling: Effect of selected density-modulus relationship. <i>Clinical Biomechanics</i> , <b>2015</b> , 30, 703-712	4.2	18
125	Determination of reference geometry for polyethylene tibial insert wear analysis. <i>Journal of Arthroplasty</i> , <b>2011</b> , 26, 497-503	4.4	18
124	Assessment of maintenance therapy with reduced doses of PTH(1-34) in combination with a raloxifene analogue (LY117018) following anabolic therapy in the ovariectomized rat. <i>Bone</i> , <b>1999</b> , 24, 451-5	4.7	18
123	In-vitro comparison of different palatal sites for orthodontic miniscrew insertion: Effect of bone quality and quantity on primary stability. <i>American Journal of Orthodontics and Dentofacial Orthopedics</i> , <b>2018</b> , 154, 809-819	2.1	18
122	Receptor for hyaluronan mediated motility (RHAMM/HMMR) is a novel target for promoting subcutaneous adipogenesis. <i>Integrative Biology (United Kingdom)</i> , <b>2017</b> , 9, 223-237	3.7	17
121	Optimizing finite element predictions of local subchondral bone structural stiffness using neural network-derived density-modulus relationships for proximal tibial subchondral cortical and trabecular bone. <i>Clinical Biomechanics</i> , <b>2017</b> , 41, 1-8	2.2	17
120	Acute vibration induces transient expression of anabolic genes in the murine intervertebral disc. <i>Arthritis and Rheumatism</i> , <b>2013</b> , 65, 1853-64		17
119	Finite-Element Analysis of Bone Stresses on Primary Impact in a Large-Animal Model: The Distal End of the Equine Third Metacarpal. <i>PLoS ONE</i> , <b>2016</b> , 11, e0159541	3.7	17
118	Study of the effect of stenosis severity and non-Newtonian viscosity on multidirectional wall shear stress and flow disturbances in the carotid artery using particle image velocimetry. <i>Medical Engineering and Physics</i> , <b>2019</b> , 65, 8-23	2.4	16
117	Mechanical Forces Exacerbate Periodontal Defects in Bsp-null Mice. <i>Journal of Dental Research</i> , <b>2015</b> , 94, 1276-85	8.1	16
116	Contrast-enhanced microcomputed tomography using intraperitoneal contrast injection for the assessment of tumor-burden in liver metastasis models. <i>Investigative Radiology</i> , <b>2008</b> , 43, 488-95	10.1	16
115	Moment patterns in the Radon space. <i>Optical Engineering</i> , <b>2000</b> , 39, 1088	1.1	16
114	How do CAD models compare with reverse engineered manufactured components for use in wear analysis?. <i>Clinical Orthopaedics and Related Research</i> , <b>2012</b> , 470, 1847-54	2.2	15

113	Deriving a blood-mimicking fluid for particle image velocimetry in Sylgard-184 vascular models. <i>Annual International Conference of the IEEE Engineering in Medicine and Biology Society IEEE Engineering in Medicine and Biology Society Annual International Conference, 2009, 2009, 1412-5</i>	0.9	15
112	Multisite trial of MR flow measurement: phantom and protocol design. <i>Journal of Magnetic Resonance Imaging, 2005, 21, 620-31</i>	5.6	15
111	Metrology test object for dimensional verification in additive manufacturing of metals for biomedical applications. <i>Proceedings of the Institution of Mechanical Engineers, Part H: Journal of Engineering in Medicine, 2015, 229, 20-7</i>	1.7	14
110	Real-time numerical simulation of Doppler ultrasound in the presence of nonaxial flow. <i>Ultrasound in Medicine and Biology, 2005, 31, 519-28</i>	3.5	14
109	Accounting for spatial variation of trabecular anisotropy with subject-specific finite element modeling moderately improves predictions of local subchondral bone stiffness at the proximal tibia. <i>Journal of Biomechanics, 2017, 59, 101-108</i>	2.9	13
108	Rapid small-animal dual-energy X-ray absorptiometry using digital radiography. <i>Journal of Bone and Mineral Research, 2000, 15, 2451-7</i>	6.3	13
107	Assessing the local mechanical environment in medial opening wedge high tibial osteotomy using finite element analysis. <i>Journal of Biomechanical Engineering, 2015, 137,</i>	2.1	12
106	Micro-CT imaging of live insects using carbon dioxide gas-induced hypoxia as anesthetic with minimal impact on certain subsequent life history traits. <i>BMC Zoology, 2017, 2,</i>	1.8	12
105	The stimulation of vertebral and tibial bone growth by the parathyroid hormone fragments, hPTH-(1-31)NH <sub>2</sub> , [Leu27]cyclo(Glu22-Lys26)hPTH-(1-31)NH <sub>2</sub> , and hPTH-(1-30)NH <sub>2</sub> . <i>Calcified Tissue International, 2000, 66, 307-12</i>	3.9	12
104	Technique to quantify subsurface cracks in retrieved polyethylene components using micro-CT. <i>Journal of Long-Term Effects of Medical Implants, 2010, 20, 27-34</i>	0.2	12
103	Disruption of biomineralization pathways in spinal tissues of a mouse model of diffuse idiopathic skeletal hyperostosis. <i>Bone, 2016, 90, 37-49</i>	4.7	12
102	Timing of failed parasitoid development in <i>Halyomorpha halys</i> eggs. <i>Biological Control, 2020, 141, 1041248</i>	3.8	12
101	The role of bone sialoprotein in the tendon-bone insertion. <i>Matrix Biology, 2016, 52-54, 325-338</i>	11.4	11
100	Whole-body vibration of mice induces articular cartilage degeneration with minimal changes in subchondral bone. <i>Osteoarthritis and Cartilage, 2017, 25, 770-778</i>	6.2	11
99	C57BL/6 mice are resistant to joint degeneration induced by whole-body vibration. <i>Osteoarthritis and Cartilage, 2017, 25, 421-425</i>	6.2	11
98	Sensory and vascular changes in a rat monoarthritis model: prophylactic and therapeutic effects of meloxicam. <i>Inflammation Research, 2010, 59, 667-78</i>	7.2	11
97	Intrinsic microvasculature of the sciatic nerve in the rat. <i>Journal of the Peripheral Nervous System, 2012, 17, 377-84</i>	4.7	10
96	Comparison of hyperpolarized (3)He MRI with Xe-enhanced computed tomography imaging for ventilation mapping of rat lung. <i>NMR in Biomedicine, 2011, 24, 1073-80</i>	4.4	10



95	CT and micro-CT analysis of a case of Paget's disease (osteitis deformans) in the Grant skeletal collection. <i>International Journal of Osteoarchaeology</i> , <b>2011</b> , 21, 127-135	1.1	10
94	Computed tomography (CT) bone segmentation of an ancient Egyptian mummy: a comparison of automated and semiautomated threshold and dual-energy techniques. <i>Journal of Computer Assisted Tomography</i> , <b>2012</b> , 36, 616-22	2.2	10
93	In vivo Doppler ultrasound quantification of turbulence intensity using a high-pass frequency filter method. <i>Ultrasound in Medicine and Biology</i> , <b>2010</b> , 36, 761-71	3.5	10
92	Correction of XR11 geometric distortion using a liquid-filled grid and image subtraction. <i>Medical Physics</i> , <b>2005</b> , 32, 55-64	4.4	10
91	Dual-energy x-ray imaging technique for in vitro tissue composition measurement. <i>Medical Physics</i> , <b>1994</b> , 21, 1807-15	4.4	10
90	Quantitative micro-computed tomography for assessment of age-dependent changes in murine whole-body composition. <i>Bone Reports</i> , <b>2016</b> , 5, 70-80	2.6	9
89	Effect of confinement on the rheology of a yield-stress fluid. <i>Journal of Non-Newtonian Fluid Mechanics</i> , <b>2018</b> , 261, 25-32	2.7	9
88	Comparison of micro-computed tomography and laser scanning for reverse engineering orthopaedic component geometries. <i>Proceedings of the Institution of Mechanical Engineers, Part H: Journal of Engineering in Medicine</i> , <b>2012</b> , 226, 263-7	1.7	9
87	Integration and evaluation of a needle-positioning robot with volumetric microcomputed tomography image guidance for small animal stereotactic interventions. <i>Medical Physics</i> , <b>2010</b> , 37, 1647-59	4.4	9
86	Comparison of hyperpolarized (3)He MRI rat lung volume measurement with micro-computed tomography. <i>NMR in Biomedicine</i> , <b>2010</b> , 23, 359-67	4.4	9
85	Polymer Assembly Encapsulation of Lanthanide Nanoparticles as Contrast Agents for In Vivo Micro-CT. <i>Biomacromolecules</i> , <b>2018</b> , 19, 896-905	6.9	8
84	Oral administration of hyaluronan reduces bone turnover in ovariectomized rats. <i>Journal of Agricultural and Food Chemistry</i> , <b>2013</b> , 61, 339-45	5.7	8
83	The effects of nonvascularized versus vascularized bone grafting on calvarial defect healing. <i>Journal of Craniofacial Surgery</i> , <b>2015</b> , 26, 290-5	1.2	8
82	In vitro Doppler ultrasound investigation of turbulence intensity in pulsatile flow with simulated cardiac variability. <i>Ultrasound in Medicine and Biology</i> , <b>2009</b> , 35, 120-8	3.5	8
81	Angle-independent measure of motion for image-based gating in 3D coronary angiography. <i>Medical Physics</i> , <b>2006</b> , 33, 1311-20	4.4	8
80	Quantitative angiographic blood-flow measurement using pulsed intra-arterial injection. <i>Medical Physics</i> , <b>1999</b> , 26, 2168-75	4.4	8
79	Application of dynamic computed tomography for measurements of local aortic elastic modulus. <i>Medical and Biological Engineering and Computing</i> , <b>1999</b> , 37, 13-24	3.1	8
78	Positron polarization from the decay of <sup>25</sup> Al relative to <sup>26</sup> Alm. <i>Physical Review C</i> , <b>1989</b> , 39, 986-991	2.7	8

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