

# Tim J Senden

## List of Publications by Year in descending order

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98  
papers

7,994  
citations

76196

40  
h-index

48187

88  
g-index

99  
all docs

99  
docs citations

99  
times ranked

6705  
citing authors

#	ARTICLE	IF	CITATIONS
1	In vivo tumour imaging employing regional delivery of novel gallium radiolabelled polymer composites. <i>Biomaterials Research</i> , 2021, 25, 7.	3.2	0
2	<sup>99m</sup> Tc-radiolabeled composites enabling in vivo imaging of arterial dispersal and retention of microspheres in the vascular network of rabbit lungs, liver, and liver tumors. <i>International Journal of Nanomedicine</i> , 2019, Volume 14, 889-900.	3.3	11
3	Regional analysis techniques for integrating experimental and numerical measurements of transport properties of reservoir rocks. <i>Advances in Water Resources</i> , 2017, 100, 48-61.	1.7	6
4	Visualising scales of process: Multi-scalar geoarchaeological investigations of microstratigraphy and diagenesis at hominin bearing sites in South African karst. <i>Journal of Archaeological Science</i> , 2017, 83, 1-11.	1.2	11
5	Questioning hagfish affinities of the enigmatic Devonian vertebrate <i>Palaeospondylus</i> . <i>Royal Society Open Science</i> , 2017, 4, 170214.	1.1	7
6	MicroCT reveals domesticated rice ( <i>Oryza sativa</i> ) within pottery sherds from early Neolithic sites (4150â€“3265â€‰cal BP) in Southeast Asia. <i>Scientific Reports</i> , 2017, 7, 7410.	1.6	25
7	The mandible and dentition of the Early Cretaceous monotreme <i>Teinolophos trusleri</i> . <i>Alcheringa</i> , 2016, 40, 475-501.	0.5	29
8	First Shark from the Late Devonian (Frasnian) Gogo Formation, Western Australia Sheds New Light on the Development of Tessellated Calcified Cartilage. <i>PLoS ONE</i> , 2015, 10, e0126066.	1.1	27
9	The uptake of soluble and nanoparticulate imaging isotope in model liver tumours after intra-venous and intra-arterial administration. <i>Biomaterials</i> , 2015, 39, 218-224.	5.7	2
10	Mechanical Characterization of Partially Crystallized Sphere Packings. <i>Physical Review Letters</i> , 2014, 113, 148001.	2.9	25
11	Techniques in helical scanning, dynamic imaging and image segmentation for improved quantitative analysis with X-ray micro-CT. <i>Nuclear Instruments &amp; Methods in Physics Research B</i> , 2014, 324, 49-56.	0.6	121
12	Experimental investigation of the mechanical stiffness of periodic framework-patterned elastomers. <i>Philosophical Transactions Series A, Mathematical, Physical, and Engineering Sciences</i> , 2014, 372, 20120035.	1.6	5
13	Microdistribution of Copper in Southern Pine Treated with Particulate Wood Preservatives. <i>ACS Symposium Series</i> , 2014, , 227-238.	0.5	3
14	Micro-CT Analysis of Pores and Organics in Unconventionals Using Novel Contrast Strategies. , 2014, , .		17
15	Laser Actuation of Cantilevers for Picometre Amplitude Dynamic Force Microscopy. <i>Scientific Reports</i> , 2014, 4, 5567.	1.6	25
16	The accumulation of circulating histones on heparan sulphate in the capillary glycocalyx of the lungs. <i>Biomaterials</i> , 2013, 34, 5670-5676.	5.7	34
17	Fossil Musculature of the Most Primitive Jawed Vertebrates. <i>Science</i> , 2013, 341, 160-164.	6.0	57
18	3D characterisation of potential CO <sub>2</sub> reservoir and seal rocks. <i>Australian Journal of Earth Sciences</i> , 2013, 60, 111-123.	0.4	26

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19	Cationised radiolabelled nanoparticles for perfusion imaging of the lungs. <i>Biomaterials</i> , 2013, 34, 1732-1738.	5.7	13
20	Minkowski tensors and local structure metrics: Amorphous and crystalline sphere packings. , 2013, , .		6
21	Grain-based characterisation and acoustic wave propagation in a sand packing subject to triaxial compression. <i>AIP Conference Proceedings</i> , 2013, , .	0.3	2
22	A Gigantic Sarcopterygian (Tetrapodomorph Lobe-Finned Fish) from the Upper Devonian of Gondwana (Eden, New South Wales, Australia). <i>PLoS ONE</i> , 2013, 8, e53871.	1.1	18
23	Investigation of Pore-Scale Mixed Wettability. <i>SPE Journal</i> , 2012, 17, 20-30.	1.7	33
24	3D mapping of deformation in an unconsolidated sand: A micro mechanical study. , 2012, , .		3
25	Qualitative and Quantitative Analyses of the Three-Phase Distribution of Oil, Water, and Gas in Bentheimer Sandstone by Use of Micro-CT Imaging. <i>SPE Reservoir Evaluation and Engineering</i> , 2012, 15, 706-711.	1.1	48
26	The earliest known stem-tetrapod from the Lower Devonian of China. <i>Nature Communications</i> , 2012, 3, 1160.	5.8	60
27	Development of the posterior endocranium of the Devonian dipnoan <i>Griphognathus whitei</i> . <i>Journal of Vertebrate Paleontology</i> , 2012, 32, 781-798.	0.4	3
28	New morphological information on the ptyctodontid fishes (Placodermi, Ptyctodontida) from Western Australia. <i>Journal of Vertebrate Paleontology</i> , 2012, 32, 757-780.	0.4	25
29	Mapping forces in a 3D elastic assembly of grains. <i>Journal of the Mechanics and Physics of Solids</i> , 2012, 60, 55-66.	2.3	65
30	Remobilization of Residual Non-Aqueous Phase Liquid in Porous Media by Freeze-Thaw Cycles. <i>Environmental Science &amp; Technology</i> , 2011, 45, 3473-3478.	4.6	33
31	An elasto-hydrodynamical model of friction for the locomotion of <i>Caenorhabditis elegans</i> . <i>Journal of Biomechanics</i> , 2011, 44, 1117-1122.	0.9	25
32	Disordered spherical bead packs are anisotropic. <i>Europhysics Letters</i> , 2010, 90, 34001.	0.7	70
33	Visualization and numerical analysis of adhesive distribution in particleboard using X-ray micro-computed tomography. <i>International Journal of Adhesion and Adhesives</i> , 2010, 30, 754-762.	1.4	42
34	Stress- and fluid-driven failure during fracture array growth: Implications for coupled deformation and fluid flow in the crust. <i>Geology</i> , 2010, 38, 779-782.	2.0	36
35	3D porosity and mineralogy characterization in tight gas sandstones. <i>The Leading Edge</i> , 2010, 29, 1476-1483.	0.4	95
36	Tomographic image analysis and processing to simulate micro-petrophysical experiments. , 2010, , .		1

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37	Dilatancy in Slow Granular Flows. <i>Physical Review Letters</i> , 2009, 102, 228301.	2.9	49
38	Evolution of dipnoans (lungfish) in the Early Devonian of southeastern Australia. <i>Alcheringa</i> , 2009, 33, 59-78.	0.5	9
39	Imaging honey bee brain anatomy with micro-X-ray-computed tomography. <i>Journal of Neuroscience Methods</i> , 2008, 171, 93-97.	1.3	80
40	Live birth in the Devonian period. <i>Nature</i> , 2008, 453, 650-652.	13.7	97
41	Onset of Mechanical Stability in Random Packings of Frictional Spheres. <i>Physical Review Letters</i> , 2008, 101, 018301.	2.9	150
42	Use of gamma emission computed tomography to study the effect of electrolyte concentration on regions of preferred flow and hydraulic conductivity in deep regolith materials. <i>Soil Research</i> , 2008, 46, 101.	0.6	5
43	Focus on Visualization in Physics. <i>New Journal of Physics</i> , 2008, 10, 125001.	1.2	0
44	X-Ray Micro-Tomography Applications Of Relevance To The Petroleum Industry. <i>AIP Conference Proceedings</i> , 2007, , .	0.3	1
45	(U <sup>235</sup> Th)/He thermochronometry: Mapping 3D geometry using micro-X-ray tomography and solving the associated production-diffusion equation. <i>Chemical Geology</i> , 2007, 242, 126-136.	1.4	36
46	An invariant distribution in static granular media. <i>Europhysics Letters</i> , 2007, 79, 24003.	0.7	74
47	Developing a virtual materials laboratory. <i>Materials Today</i> , 2007, 10, 44-51.	8.3	160
48	Wetting of Fibers. , 2006, , 223-237.		7
49	Elastic and transport properties of cellular solids derived from three-dimensional tomographic images. <i>Proceedings of the Royal Society A: Mathematical, Physical and Engineering Sciences</i> , 2006, 462, 2833-2862.	1.0	48
50	Local and global relations between the number of contacts and density in monodisperse sphere packs. <i>Journal of Statistical Mechanics: Theory and Experiment</i> , 2006, 2006, P07010-P07010.	0.9	49
51	An exceptional Devonian fish from Australia sheds light on tetrapod origins. <i>Nature</i> , 2006, 444, 199-202.	13.7	98
52	Structure and properties of clinical coralline implants measured via 3D imaging and analysis. <i>Biomaterials</i> , 2006, 27, 2776-2786.	5.7	66
53	Quantitative properties of complex porous materials calculated from x-ray $\mu$ CT images. , 2006, , .		6
54	A Forecast of Developments in Scanned Probe Microscopy. <i>Australian Journal of Chemistry</i> , 2006, 59, 355.	0.5	1

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55	Pore Scale Characterization of Carbonates Using X-Ray Microtomography. SPE Journal, 2005, 10, 475-484.	1.7	194
56	Automated measurement of checks at wood surfaces. Measurement: Journal of the International Measurement Confederation, 2005, 37, 109-118.	2.5	28
57	Mechanical and transport properties of polymeric foams derived from 3D images. Colloids and Surfaces A: Physicochemical and Engineering Aspects, 2005, 263, 284-289.	2.3	34
58	Virtual Materials Design: Properties of Cellular Solids Derived from 3D Tomographic Images. Advanced Engineering Materials, 2005, 7, 238-243.	1.6	20
59	X-ray observation of micro-failures in granular piles approaching an avalanche. Europhysics Letters, 2005, 71, 932-937.	0.7	29
60	Geometrical structure of disordered sphere packings. Physical Review E, 2005, 71, 061302.	0.8	280
61	An x-ray tomography facility for quantitative prediction of mechanical and transport properties in geological, biological, and synthetic systems. , 2004, , .		15
62	Investigation of microstructural features in regenerating bone using micro computed tomography. Journal of Materials Science: Materials in Medicine, 2004, 15, 529-532.	1.7	22
63	Analysis of 3D bone ingrowth into polymer scaffolds via micro-computed tomography imaging. Biomaterials, 2004, 25, 4947-4954.	5.7	162
64	Polymeric foam properties derived from 3D images. Physica A: Statistical Mechanics and Its Applications, 2004, 339, 131-136.	1.2	17
65	Three-dimensional imaging of multiphase flow in porous media. Physica A: Statistical Mechanics and Its Applications, 2004, 339, 166-172.	1.2	89
66	Investigating the geometrical structure of disordered sphere packings. Physica A: Statistical Mechanics and Its Applications, 2004, 339, 16-23.	1.2	115
67	The hydrophobic force: nanobubbles or polymeric contaminant?. Physica A: Statistical Mechanics and Its Applications, 2004, 339, 101-105.	1.2	48
68	X-ray tomography for mesoscale physics applications. Physica A: Statistical Mechanics and Its Applications, 2004, 339, 152-158.	1.2	108
69	Three-dimensional analysis of cortical bone structure using X-ray micro-computed tomography. Physica A: Statistical Mechanics and Its Applications, 2004, 339, 125-130.	1.2	31
70	Virtual core laboratory: Properties of reservoir rock derived from X-ray CT images. , 2003, , .		4
71	Micro-CT facility for imaging reservoir rocks at pore scales. , 2003, , .		8
72	AFM Evidence of Rayleigh Instability in Single Polymer Chains. Langmuir, 2002, 18, 2174-2182.	1.6	105

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73	Micromanipulation of phospholipid bilayers by atomic force microscopy. <i>Biochimica Et Biophysica Acta - Biomembranes</i> , 2002, 1564, 165-172.	1.4	31
74	Contact Angles of Aqueous Solutions on Copper Surfaces Bearing Self-Assembled Monolayers. <i>Journal of Chemical Education</i> , 2001, 78, 345.	1.1	14
75	Force microscopy and surface interactions. <i>Current Opinion in Colloid and Interface Science</i> , 2001, 6, 95-101.	3.4	121
76	Atomic force microscopy imaging of DNA-cationic liposome complexes optimised for gene transfection into neuronal cells. <i>Journal of Gene Medicine</i> , 2001, 3, 72-81.	1.4	25
77	Supramolecular structure and nuclear targeting efficiency determine the enhancement of transfection by modified polylysines. <i>Gene Therapy</i> , 2000, 7, 1690-1697.	2.3	73
78	The conformation of adsorbed polyacrylamide and derived polymers. <i>Comptes Rendus Physique</i> , 2000, 1, 1143-1152.	0.1	3
79	Droplet penetration into porous networks: Role of pore morphology. <i>Nordic Pulp and Paper Research Journal</i> , 2000, 15, 554-563.	0.3	26
80	A Method for the Calibration of Force Microscopy Cantilevers via Hydrodynamic Drag. <i>Langmuir</i> , 2000, 16, 9282-9286.	1.6	38
81	Anomalous adhesion in adsorbed polymer layers. <i>European Physical Journal B</i> , 1998, 3, 211-216.	0.6	96
82	Detachment of a single polyelectrolyte chain adsorbed on a charged surface. <i>Europhysics Letters</i> , 1998, 41, 303-308.	0.7	113
83	Nucleation Transitions for InGaAs Islands on Vicinal (100) GaAs. <i>Physical Review Letters</i> , 1997, 78, 4942-4945.	2.9	92
84	Transport in fractured porous solids. <i>Geophysical Research Letters</i> , 1997, 24, 495-498.	1.5	12
85	Surface chemistry and tip-sample interactions in atomic force microscopy. <i>Colloids and Surfaces A: Physicochemical and Engineering Aspects</i> , 1995, 94, 29-51.	2.3	223
86	A new electrochemical cell for atomic force microscopy. <i>Review of Scientific Instruments</i> , 1994, 65, 1019-1020.	0.6	17
87	Evidence for perpendicular n-alkane orientation at the liquid/graphite interface. <i>Chemical Physics Letters</i> , 1994, 227, 443-446.	1.2	14
88	Examination of the geometry of long-range tip-sample interaction in atomic force microscopy. <i>Colloids and Surfaces A: Physicochemical and Engineering Aspects</i> , 1994, 87, 217-234.	2.3	90
89	Effect of side wall roughness in buried channel waveguides. <i>IEE Proceedings: Optoelectronics</i> , 1994, 141, 242-248.	0.8	66
90	Alluvial gold in Kalimantan, Indonesia: A colloidal origin?. <i>Journal of Geochemical Exploration</i> , 1994, 50, 457-478.	1.5	15

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91	Experimental Determination of Spring Constants in Atomic Force Microscopy. Langmuir, 1994, 10, 1003-1004.	1.6	189
92	Atomic Force Microscopy: Imaging with Electrical Double Layer Interactions. Langmuir, 1994, 10, 358-362.	1.6	141
93	Adsorption of the poly(oxyethylene) nonionic surfactant C12E5 to silica: a study using atomic force microscopy. Langmuir, 1993, 9, 412-418.	1.6	143
94	Charge reversal seen in electrical double layer interaction of surfaces immersed in 2:1 calcium electrolyte. Journal of Chemical Physics, 1993, 99, 6098-6113.	1.2	186
95	Measurement of surface roughness in buried channel waveguides. Electronics Letters, 1992, 28, 1321.	0.5	38
96	Surface roughness of plasma-treated mica. Langmuir, 1992, 8, 733-735.	1.6	20
97	Measurement of forces in liquids using a force microscope. Langmuir, 1992, 8, 1831-1836.	1.6	1,040
98	Direct measurement of colloidal forces using an atomic force microscope. Nature, 1991, 353, 239-241.	13.7	1,912