

# Bert Mller

## 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.

253  
papers

4,629  
citations

37  
h-index

59  
g-index

299  
ext. papers

5,302  
ext. citations

4.4  
avg, IF

5.21  
L-index

#	Paper	IF	Citations
253	Virtual histology of an entire mouse brain from formalin fixation to paraffin embedding. Part 2: Volumetric strain fields and local contrast changes. <i>Journal of Neuroscience Methods</i> , <b>2022</b> , 365, 109385 <sup>3</sup>		0
252	Comparative hard x-ray tomography for virtual histology of zebrafish larva, human tooth cementum, and porcine nerve.. <i>Journal of Medical Imaging</i> , <b>2022</b> , 9, 031507	2.6	1
251	Accuracy of commercial intraoral scanners. <i>Journal of Medical Imaging</i> , <b>2021</b> , 8, 035501	2.6	0
250	Mechanistic Illustration: How Newly-Formed Blood Vessels Stopped by the Mineral Blocks of Bone Substitutes Can Be Avoided by Using Innovative Combined Therapeutics. <i>Biomedicines</i> , <b>2021</b> , 9,	4.8	1
249	Virtual histology of an entire mouse brain from formalin fixation to paraffin embedding. Part 1: Data acquisition, anatomical feature segmentation, tracking global volume and density changes. <i>Journal of Neuroscience Methods</i> , <b>2021</b> , 364, 109354	3	5
248	Hierarchically structured polydimethylsiloxane films for ultra-soft neural interfaces. <i>Micro and Nano Engineering</i> , <b>2020</b> , 7, 100051	3.4	2
247	Shedding Light on Metal-Based Nanoparticles in Zebrafish by Computed Tomography with Micrometer Resolution. <i>Small</i> , <b>2020</b> , 16, e2000746	11	3
246	Simultaneous Three-Dimensional Vascular and Tubular Imaging of Whole Mouse Kidneys With X-ray CT. <i>Microscopy and Microanalysis</i> , <b>2020</b> , 26, 731-740	0.5	1
245	Optimizing contrast and spatial resolution in hard x-ray tomography of medically relevant tissues. <i>Applied Physics Letters</i> , <b>2020</b> , 116, 023702	3.4	1
244	Crosslinkable polymeric contrast agent for high-resolution X-ray imaging of the vascular system. <i>Chemical Communications</i> , <b>2020</b> , 56, 5885-5888	5.8	3
243	Scavenging of Dickkopf-1 by macromer-based biomaterials covalently decorated with sulfated hyaluronan displays pro-osteogenic effects. <i>Acta Biomaterialia</i> , <b>2020</b> , 114, 76-89	10.8	9
242	Sensitivity comparison of absorption and grating-based phase tomography of paraffin-embedded human brain tissue. <i>Applied Physics Letters</i> , <b>2019</b> , 114, 083702	3.4	6
241	PDE10A mutation in two sisters with a hyperkinetic movement disorder - Response to levodopa. <i>Parkinsonism and Related Disorders</i> , <b>2019</b> , 63, 240-242	3.6	3
240	Small-Angle Neutron Scattering Study of Temperature-Induced Structural Changes in Liposomes. <i>Langmuir</i> , <b>2019</b> , 35, 11210-11216	4	3
239	Spatially resolved small-angle X-ray scattering for characterizing mechanoresponsive liposomes using microfluidics. <i>Materials Today Bio</i> , <b>2019</b> , 1, 100003	9.9	8
238	Ex vivo evaluation of an atherosclerotic human coronary artery via histology and high-resolution hard X-ray tomography. <i>Scientific Reports</i> , <b>2019</b> , 9, 14348	4.9	5
237	Recent trends in high-resolution hard x-ray tomography <b>2019</b> ,		2

236	Observations on the scaling relationship between bony labyrinth, skull size and body mass in ruminants <b>2019</b> ,		1
235	Comparing the accuracy of intraoral scanners, using advanced micro computed tomography <b>2019</b> ,		3
234	Toward genome editing in X-linked RP-development of a mouse model with specific treatment relevant features. <i>Translational Research</i> , <b>2019</b> , 203, 57-72	11	3
233	Polydimethylsiloxane films engineered for smart nanostructures. <i>Microelectronic Engineering</i> , <b>2018</b> , 194, 1-7	2.5	2
232	Implementation of a double-grating interferometer for phase-contrast computed tomography in a conventional system nanotom m. <i>APL Bioengineering</i> , <b>2018</b> , 2, 016106	6.6	8
231	Automatic deformable registration of histological slides to CT volume data. <i>Journal of Microscopy</i> , <b>2018</b> , 271, 49-61	1.9	6
230	Volumetric Nanoscale Imaging: Hard X-Ray Nanoholotomography: Large-Scale, Label-Free, 3D Neuroimaging beyond Optical Limit (Adv. Sci. 6/2018). <i>Advanced Science</i> , <b>2018</b> , 5, 1870036	13.6	78
229	Automated Analysis of Spatially Resolved X-ray Scattering and Micro Computed Tomography of Artificial and Natural Enamel Carious Lesions. <i>Journal of Imaging</i> , <b>2018</b> , 4, 81	3.1	3
228	Visualization and Segmentation of Cells in Unstained Paraffin-Embedded Cerebral Tissue. <i>Microscopy and Microanalysis</i> , <b>2018</b> , 24, 408-409	0.5	0
227	Hard X-Ray Nanoholotomography: Large-Scale, Label-Free, 3D Neuroimaging beyond Optical Limit. <i>Advanced Science</i> , <b>2018</b> , 5, 1700694	13.6	30
226	Conducting and stretchable nanometer-thin gold/thiol-functionalized polydimethylsiloxane films. <i>Journal of Nanophotonics</i> , <b>2018</b> , 12, 1	1.1	5
225	Immunocompatibility of Rad-PC-Rad liposomes in vitro, based on human complement activation and cytokine release. <i>Precision Nanomedicine</i> , <b>2018</b> , 1, 43-62	1.2	3
224	Special Section Guest Editorial: Nanoscience and Biomaterials in Photonics. <i>Journal of Nanophotonics</i> , <b>2018</b> , 12, 1	1.1	
223	Three-dimensional imaging and analysis of entire peripheral nerves after repair and reconstruction. <i>Journal of Neuroscience Methods</i> , <b>2018</b> , 295, 37-44	3	9
222	Three-dimensional and non-destructive characterization of nerves inside conduits using laboratory-based micro computed tomography. <i>Journal of Neuroscience Methods</i> , <b>2018</b> , 294, 59-66	3	9
221	Propagation-based X-ray Phase Contrast Microtomography of Zebrafish Embryos to Understand Drug Delivery. <i>Microscopy and Microanalysis</i> , <b>2018</b> , 24, 406-407	0.5	
220	Hard X-ray Nano-Holotomography of Formalin-Fixated and Paraffin-Embedded Human Brain Tissue. <i>Microscopy and Microanalysis</i> , <b>2018</b> , 24, 354-355	0.5	2
219	Double Grating Interferometry in a Commercial Micro Computed Tomography System for Biomedical Imaging. <i>Microscopy and Microanalysis</i> , <b>2018</b> , 24, 388-389	0.5	

218	A quantitative correction for phase wrapping artifacts in hard X-ray grating interferometry. <i>Applied Physics Letters</i> , <b>2018</b> , 113, 093702	3.4	4
217	1. Nanomedicine at a glance <b>2018</b> , 3-15		
216	The bony labyrinth of toothed whales reflects both phylogeny and habitat preferences. <i>Scientific Reports</i> , <b>2018</b> , 8, 7841	4.9	20
215	Single and double grating-based X-ray microtomography using synchrotron radiation. <i>Applied Physics Letters</i> , <b>2017</b> , 110, 061103	3.4	8
214	Liposomes: bio-inspired nano-containers for physically triggered targeted drug delivery <b>2017</b> ,		1
213	Leakage current, self-clearing and actuation efficiency of nanometer-thin, low-voltage dielectric elastomer transducers tailored by thermal evaporation <b>2017</b> ,		3
212	Electrospraying and ultraviolet light curing of nanometer-thin polydimethylsiloxane membranes for low-voltage dielectric elastomer transducers <b>2017</b> ,		2
211	Time-Resolved Plasmonics used to On-Line Monitor Metal/Elastomer Deposition for Low-Voltage Dielectric Elastomer Transducers. <i>Advanced Electronic Materials</i> , <b>2017</b> , 3, 1700073	6.4	6
210	Biomimetic nanostructures for the silicone-biosystem interface: tuning oxygen-plasma treatments of polydimethylsiloxane. <i>European Journal of Nanomedicine</i> , <b>2017</b> , 9,		4
209	Biomimetic Remineralization of Carious Lesions by Self-Assembling Peptide. <i>Journal of Dental Research</i> , <b>2017</b> , 96, 790-797	8.1	65
208	Nanomechanical probing of thin-film dielectric elastomer transducers. <i>Applied Physics Letters</i> , <b>2017</b> , 111, 093104	3.4	4
207	Bony labyrinth morphology clarifies the origin and evolution of deer. <i>Scientific Reports</i> , <b>2017</b> , 7, 13176	4.9	33
206	X-ray micro computed tomography for the visualization of an atherosclerotic human coronary artery. <i>Journal of Physics: Conference Series</i> , <b>2017</b> , 849, 012002	0.3	
205	Gold Layers on Elastomers near the Critical Stress Regime. <i>Advanced Materials Technologies</i> , <b>2017</b> , 2, 1700105	6.8	10
204	Immunological response to nitroglycerin-loaded shear-responsive liposomes in vitro and in vivo. <i>Journal of Controlled Release</i> , <b>2017</b> , 264, 14-23	11.7	11
203	Prenatal growth stages show the development of the ruminant bony labyrinth and petrosal bone. <i>Journal of Anatomy</i> , <b>2017</b> , 230, 347-353	2.9	20
202	Hard X-ray submicrometer tomography of human brain tissue at Diamond Light Source. <i>Journal of Physics: Conference Series</i> , <b>2017</b> , 849, 012030	0.3	0
201	Multimodal imaging of the human knee down to the cellular level. <i>Journal of Physics: Conference Series</i> , <b>2017</b> , 849, 012026	0.3	4

200	Grating-based tomography applications in biomedical engineering <b>2017</b> ,		1
199	<b>2017</b> ,		3
198	Characterization of mechano-sensitive nano-containers for targeted vasodilation <b>2016</b> ,		1
197	X-ray micro-tomography for investigations of brain tissues on cellular level <b>2016</b> ,		2
196	Hard x-ray micro-tomography of a human head post-mortem as a gold standard to compare x-ray modalities <b>2016</b> ,		1
195	Automatic histology registration in application to x-ray modalities <b>2016</b> ,		1
194	Non-destructive phase contrast hard x-ray imaging to reveal the three-dimensional microstructure of soft and hard tissues <b>2016</b> ,		1
193	Characterization of ultraviolet light cured polydimethylsiloxane films for low-voltage, dielectric elastomer actuators <b>2016</b> ,		1
192	Molecular beam deposition of high-permittivity polydimethylsiloxane for nanometer-thin elastomer films in dielectric actuators. <i>Materials and Design</i> , <b>2016</b> , 105, 106-113	8.1	11
191	Biomimetic artificial sphincter muscles: status and challenges <b>2016</b> ,		3
190	Thin Film Formation and Morphology of Electrospayed Polydimethylsiloxane. <i>Langmuir</i> , <b>2016</b> , 32, 3276-33	8.3	10
189	Artificial Muscle Devices: Innovations and Prospects for Fecal Incontinence Treatment. <i>Annals of Biomedical Engineering</i> , <b>2016</b> , 44, 1355-69	4.7	36
188	Surprising lack of liposome-induced complement activation by artificial 1,3-diamidophospholipids in vitro. <i>Nanomedicine: Nanotechnology, Biology, and Medicine</i> , <b>2016</b> , 12, 845-849	6	14
187	Imaging the Human Body Down to the Molecular Level <b>2016</b> , 1501-1510		
186	X-ray microscopy of soft and hard human tissues <b>2016</b> ,		1
185	Electrospaying Nanometer-Thin Elastomer Films for Low-Voltage Dielectric Actuators. <i>Advanced Electronic Materials</i> , <b>2016</b> , 2, 1500476	6.4	31
184	Stress measurements of planar dielectric elastomer actuators. <i>Review of Scientific Instruments</i> , <b>2016</b> , 87, 053901	1.7	7
183	Tomographic brain imaging with nucleolar detail and automatic cell counting. <i>Scientific Reports</i> , <b>2016</b> , 6, 32156	4.9	41

182	Tailoring the mass distribution and functional group density of dimethylsiloxane-based films by thermal evaporation. <i>APL Materials</i> , <b>2016</b> , 4, 056101	5-7	8
181	Hierarchical imaging of the human knee <b>2016</b> ,		2
180	Comparing natural and artificial carious lesions in human crowns by means of conventional hard x-ray micro-tomography and two-dimensional x-ray scattering with synchrotron radiation <b>2016</b> ,		2
179	Nanostructured Polymers for Medical Applications <b>2016</b> , 293-314		1
178	Self-Organization on a Chip: From Nanoscale Actin Assemblies to Tumor Spheroids <b>2016</b> , 191-208		
177	The Nanomechanical Signature of Tissues in Health and Disease <b>2016</b> , 209-240		1
176	Regenerative Dentistry Using Stem Cells and Nanotechnology <b>2016</b> , 263-292		1
175	Challenges in Cardiovascular Treatments Using Nanotechnology-Based Approaches <b>2016</b> , 51-70		1
174	Revealing the Nano-Architecture of Human Hard and Soft Tissues by Spatially Resolved Hard X-Ray Scattering <b>2016</b> , 241-262		
173	Nanotechnology in the Treatment of Incontinence <b>2016</b> , 315-328		
172	Nanomedicine in Dermatology: Nanotechnology in Prevention, Diagnosis, and Therapy <b>2016</b> , 329-356		1
171	Therapeutic Development and the Evolution of Precision Medicine <b>2016</b> , 357-378		
170	Nanoscience and Nanotechnology and the Armory for the Twenty-First Century Health Care <b>2016</b> , 9-20		
169	Nanomedicine Activities in the United States and Worldwide <b>2016</b> , 21-50		
168	Smart Container for Targeted Drug Delivery <b>2016</b> , 71-82		
167	Human Nano-Vesicles in Physiology and Pathology <b>2016</b> , 83-96		
166	Challenges and Risks of Nanotechnology in Medicine: An Immunologist's Point of View <b>2016</b> , 97-124		1
165	Challenges of Applying Targeted Nanostructures with Multifunctional Properties in Cancer Treatments <b>2016</b> , 125-156		

164	Highly Conformal Radiotherapy Using Protons <b>2016</b> , 157-190		
163	Morphology and conductivity of Au films on polydimethylsiloxane using (3-mercaptopropyl)trimethoxysilane (MPTMS) as an adhesion promoter <b>2016</b> ,		8
162	Comparing the accuracy of master models based on digital intra-oral scanners with conventional plaster casts. <i>Physics in Medicine</i> , <b>2016</b> , 1, 20-26	2.7	19
161	Middle ear bones of a mid-gestation ruminant foetus extracted from x-ray computed tomography <b>2016</b> ,		1
160	The petrosal bone and bony labyrinth of early to middle Miocene European deer (Mammalia, Cervidae) reveal their phylogeny. <i>Journal of Morphology</i> , <b>2016</b> , 277, 1329-38	1.6	15
159	Extending two-dimensional histology into the third dimension through conventional micro computed tomography. <i>NeuroImage</i> , <b>2016</b> , 139, 26-36	7.9	44
158	Siloxane-based thin films for biomimetic low-voltage dielectric actuators. <i>Sensors and Actuators A: Physical</i> , <b>2015</b> , 233, 32-41	3.9	34
157	Strain-dependent characterization of electrode and polymer network of electrically activated polymer actuators <b>2015</b> ,		1
156	Micro- and nanostructured electro-active polymer actuators as smart muscles for incontinence treatment <b>2015</b> ,		5
155	Mid-regional pro-atrial natriuretic peptide and the assessment of volaemic status and differential diagnosis of profound hyponatraemia. <i>Journal of Internal Medicine</i> , <b>2015</b> , 278, 29-37	10.8	6
154	Mineralization of Early Stage Carious Lesions In Vitro-A Quantitative Approach. <i>Dentistry Journal</i> , <b>2015</b> , 3, 111-122	3.1	14
153	Translational Medicine: Nanoscience and Nanotechnology to Improve Patient Care <b>2015</b> , 289-310		1
152	Ultraviolet $\lambda$ zone surface cleaning of injection-molded, thermoplastic microcantilevers. <i>Journal of Applied Polymer Science</i> , <b>2015</b> , 132, n/a-n/a	2.9	3
151	Differentiation of human mesenchymal stem cells on plasma-treated polyetheretherketone. <i>Journal of Materials Science: Materials in Medicine</i> , <b>2014</b> , 25, 515-25	4.5	55
150	Damping of Selective-Laser-Melted NiTi for Medical Implants. <i>Journal of Materials Engineering and Performance</i> , <b>2014</b> , 23, 2614-2619	1.6	17
149	Nanostructure of carious tooth enamel lesion. <i>Acta Biomaterialia</i> , <b>2014</b> , 10, 355-64	10.8	23
148	Complementary X-ray tomography techniques for histology-validated 3D imaging of soft and hard tissues using plaque-containing blood vessels as examples. <i>Nature Protocols</i> , <b>2014</b> , 9, 1401-15	18.8	46
147	Combined use of micro computed tomography and histology to evaluate the regenerative capacity of bone grafting materials. <i>International Journal of Materials Research</i> , <b>2014</b> , 105, 679-691	0.5	31

146	Microstructure of selective laser melted nickel-titanium. <i>Materials Characterization</i> , <b>2014</b> , 94, 189-202	3.9	125
145	Tailoring surface nanostructures on polyaryletherketones for load-bearing implants. <i>European Journal of Nanomedicine</i> , <b>2014</b> , 6,		6
144	Rapid prototyped porous nickel-titanium scaffolds as bone substitutes. <i>Journal of Tissue Engineering</i> , <b>2014</b> , 5, 2041731414540674	7.5	28
143	High-resolution x-ray computed tomography to understand ruminant phylogeny <b>2014</b> ,		1
142	Characterization of a human tooth with carious lesions using conventional and synchrotron radiation-based micro computed tomography <b>2014</b> ,		2
141	Grating interferometry-based phase microtomography of atherosclerotic human arteries <b>2014</b> ,		3
140	Three-dimensional registration of synchrotron radiation-based micro-computed tomography images with advanced laboratory micro-computed tomography data from murine kidney casts <b>2014</b> ,		1
139	Assessing the grain structure of highly X-ray absorbing metallic alloys. <i>International Journal of Materials Research</i> , <b>2014</b> , 105, 692-701	0.5	2
138	Experimental comparison of grating- and propagation-based hard X-ray phase tomography of soft tissue. <i>Journal of Applied Physics</i> , <b>2014</b> , 116, 154903	2.5	34
137	Impact of electrode preparation on the bending of asymmetric planar electro-active polymer microstructures <b>2014</b> ,		2
136	Position paper from the IBRA Symposium on Surgery of the Head--the 2nd International Symposium for Condylar Fracture Osteosynthesis, Marseille, France 2012. <i>Journal of Cranio-Maxillo-Facial Surgery</i> , <b>2014</b> , 42, 1234-49	3.6	47
135	Combining micro computed tomography and three-dimensional registration to evaluate local strains in shape memory scaffolds. <i>Acta Biomaterialia</i> , <b>2014</b> , 10, 1024-34	10.8	19
134	Histology to microCT data matching using landmarks and a density biased RANSAC. <i>Lecture Notes in Computer Science</i> , <b>2014</b> , 17, 243-50	0.9	6
133	Mechanical and chemical stability of injection-molded microcantilevers used for sensing. <i>Journal of Applied Polymer Science</i> , <b>2013</b> , 127, 2363-2370	2.9	7
132	The use of shear stress for targeted drug delivery. <i>Cardiovascular Research</i> , <b>2013</b> , 99, 328-33	9.9	54
131	Measuring the bending of asymmetric planar EAP structures <b>2013</b> ,		1
130	Holotomography versus X-ray grating interferometry: A comparative study. <i>Applied Physics Letters</i> , <b>2013</b> , 103, 244105	3.4	27
129	Assessing the morphology of selective laser melted NiTi-scaffolds for a three-dimensional quantification of the one-way shape memory effect <b>2013</b> ,		11



128	Cracks in dentin and enamel after cryopreservation. <i>Oral Surgery, Oral Medicine, Oral Pathology and Oral Radiology</i> , <b>2012</b> , 113, e5-e10	2	9
127	Understanding nano-anatomy of healthy and carious human teeth: a prerequisite for nanodentistry. <i>Biointerphases</i> , <b>2012</b> , 7, 4	1.8	22
126	Nano-mechanical transduction of polymer micro-cantilevers to detect bio-molecular interactions. <i>Biointerphases</i> , <b>2012</b> , 7, 6	1.8	6
125	Automatic selection of a representative trial from multiple measurements using Principle Component Analysis. <i>Journal of Biomechanics</i> , <b>2012</b> , 45, 2306-9	2.9	25
124	Three-dimensional quantification of capillary networks in healthy and cancerous tissues of two mice. <i>Microvascular Research</i> , <b>2012</b> , 84, 314-22	3.7	36
123	Tailoring Selective Laser Melting Process Parameters for NiTi Implants. <i>Journal of Materials Engineering and Performance</i> , <b>2012</b> , 21, 2519-2524	1.6	132
122	Micro- and nanostructured polymer substrates for biomedical applications <b>2012</b> ,		10
121	Global and local hard X-ray tomography of a centimeter-size tumor vessel tree. <i>Journal of Synchrotron Radiation</i> , <b>2012</b> , 19, 114-25	2.4	4
120	Shear-stress sensitive lenticular vesicles for targeted drug delivery. <i>Nature Nanotechnology</i> , <b>2012</b> , 7, 536-43	28.7	208
119	Nanodentistry. <i>Nanoscience and Technology</i> , <b>2012</b> , 95-107	0.6	3
118	Multimodal imaging of human cerebellum - merging X-ray phase microtomography, magnetic resonance microscopy and histology. <i>Scientific Reports</i> , <b>2012</b> , 2, 826	4.9	49
117	Anisotropy in polyetheretherketone films. <i>Journal of Nanophotonics</i> , <b>2012</b> , 6, 063510	1.1	1
116	Three-dimensional registration of tomography data for quantification in biomaterials science. <i>International Journal of Materials Research</i> , <b>2012</b> , 103, 242-249	0.5	24
115	Grating-based tomography of human tissues <b>2012</b> ,		3
114	Nanometer-size anisotropy of injection-molded polymer micro-cantilever arrays. <i>Journal of Applied Physics</i> , <b>2012</b> , 111, 103530	2.5	1
113	Comparison of propagation-based phase-contrast tomography approaches for the evaluation of dentin microstructure <b>2012</b> ,		3
112	Morphology of atherosclerotic coronary arteries <b>2012</b> ,		6
111	Comparison of denture models by means of micro computed tomography <b>2012</b> ,		4

110	Comparing the micro-vascular structure of cancerous and healthy tissues <b>2012</b> ,		2
109	Nanostructuring polyetheretherketone for medical implants. <i>European Journal of Nanomedicine</i> , <b>2012</b> , 4,		9
108	Designing micro- and nanostructures for artificial urinary sphincters <b>2012</b> ,		5
107	Shear Stress as Drug Delivery Trigger. <i>Chimia</i> , <b>2012</b> , 66, 715	1.3	1
106	Asymmetric rotational axis reconstruction of grating-based x-ray phase contrast tomography of the human cerebellum <b>2012</b> ,		3
105	Combined micro computed tomography and histology study of bone augmentation and distraction osteogenesis <b>2012</b> ,		2
104	Controlling Mechanical Properties of NiTi Scaffolds built by Selective Laser Melting. <i>Biomedizinische Technik</i> , <b>2012</b> , 57,	1.3	1
103	Minipig urethra: a suitable animal model in vitro. <i>Technology and Health Care</i> , <b>2012</b> , 20, 329-36	1.1	4
102	Three-dimensional morphology and mechanics of bone scaffolds fabricated by rapid prototyping. <i>International Journal of Materials Research</i> , <b>2012</b> , 103, 200-206	0.5	6
101	Imaging the Human Body: Micro- and Nanostructure of Human Tissues. <i>Nanoscience and Technology</i> , <b>2012</b> , 69-94	0.6	1
100	Tilting the jaw to improve the image quality or to reduce the dose in cone-beam computed tomography. <i>European Journal of Radiology</i> , <b>2011</b> , 80, e389-93	4.7	16
99	Impact of adhesive surface and volume of luting resin on fracture resistance of root filled teeth. <i>International Endodontic Journal</i> , <b>2011</b> , 44, 432-9	5.4	14
98	Nanostructure of healthy and caries-affected human teeth. <i>Nanomedicine: Nanotechnology, Biology, and Medicine</i> , <b>2011</b> , 7, 694-701	6	53
97	Three-dimensional strain fields in human brain resulting from formalin fixation. <i>Journal of Neuroscience Methods</i> , <b>2011</b> , 202, 17-27	3	49
96	Surface patterned polymer micro-cantilever arrays for sensing. <i>Sensors and Actuators A: Physical</i> , <b>2011</b> , 172, 2-8	3.9	26
95	Nanomedizin. <i>Der MKG-Chirurg</i> , <b>2011</b> , 4, 7-15	0.2	
94	Real-time measurements of human chondrocyte heat production during in vitro proliferation. <i>Biotechnology and Bioengineering</i> , <b>2011</b> , 108, 3019-24	4.9	7
93	Contractile cell forces exerted on rigid substrates. <i>European Cells and Materials</i> , <b>2011</b> , 21, 479-86; discussion 486-7	4.3	14

92	Nanomethods: Scanning X-ray scattering: Evaluating the nanostructure of human tissues. <i>European Journal of Nanomedicine</i> , <b>2010</b> , 3,		16
91	Evaluating tooth restorations: micro-computed tomography in practical training for students in dentistry <b>2010</b> ,		2
90	The morphology of amputated human teeth and its relation to mechanical properties after restoration treatment <b>2010</b> ,		1
89	Morphology of urethral tissues <b>2010</b> ,		5
88	Computed tomography to quantify tooth abrasion <b>2010</b> ,		1
87	Determination of strain fields in porous shape memory alloys using micro-computed tomography <b>2010</b> ,		10
86	Mikro-Computertomographie für die dreidimensionale Charakterisierung von Implantaten und Geweben. <i>Sports Orthopaedics and Traumatology</i> , <b>2010</b> , 26, 145-151	0.4	1
85	High-resolution tomographic imaging of a human cerebellum: comparison of absorption and grating-based phase contrast. <i>Journal of the Royal Society Interface</i> , <b>2010</b> , 7, 1665-76	4.1	114
84	Evaluating the microstructure of human brain tissues using synchrotron radiation-based micro-computed tomography <b>2010</b> ,		8
83	Recent developments in x-ray Talbot interferometry at ESRF-ID19 <b>2010</b> ,		29
82	X-ray grating interferometer for imaging at a second-generation synchrotron radiation source <b>2010</b> ,		5
81	Disposable polymeric micro-cantilever arrays for sensing. <i>Procedia Engineering</i> , <b>2010</b> , 5, 347-350		8
80	Tailoring biocompatibility: Benefitting patients. <i>Materials Today</i> , <b>2010</b> , 13, 58	21.8	13
79	Bio-inspired dental fillings <b>2009</b> ,		6
78	Bio-mimetic hollow scaffolds for long bone replacement <b>2009</b> ,		4
77	High-resolution X-ray tomography of the human inner ear: synchrotron radiation-based study of nerve fibre bundles, membranes and ganglion cells. <i>Journal of Microscopy</i> , <b>2009</b> , 234, 95-102	1.9	56
76	Systemic allergic dermatitis reaction to nickel released from an eyelet in an intravenous catheter. <i>Contact Dermatitis</i> , <b>2009</b> , 61, 180-2	2.7	6
75	The cochlea in fetuses with neural tube defects. <i>International Journal of Developmental Neuroscience</i> , <b>2009</b> , 27, 669-76	2.7	4

74	Pelizaeus Merzbacher disease: morphological analysis of the vestibulo-cochlear system. <i>Acta Oto-Laryngologica</i> , <b>2009</b> , 129, 1395-9	1.6	4
73	High-sensitivity phase-contrast tomography of rat brain in phosphate buffered saline. <i>Journal of Physics: Conference Series</i> , <b>2009</b> , 186, 012046	0.3	8
72	Visualization of tumor vessels using synchrotron radiation-based micro computed tomography. <i>Journal of Physics: Conference Series</i> , <b>2009</b> , 186, 012088	0.3	1
71	High density resolution in synchrotron-radiation-based attenuation-contrast microtomography <b>2008</b> ,		38
70	Angiofil: a novel radio-contrast agent for post-mortem micro-angiography <b>2008</b> ,		2
69	Internal structures of scaffold-free 3D cell cultures visualized by synchrotron radiation-based micro-computed tomography <b>2008</b> ,		1
68	High-resolution tomographic imaging of microvessels <b>2008</b> ,		23
67	Quality assessment of clinical computed tomography <b>2008</b> ,		2
66	Comparative study of desktop- and synchrotron radiation-based micro computed tomography analyzing cell-seeded scaffolds in tissue engineering of bone <b>2008</b> ,		4
65	Comparative micro computed tomography study of a vertebral body <b>2008</b> ,		7
64	Comparison between x-ray tube-based and synchrotron radiation-based CT <b>2008</b> ,		28
63	Simulation of stress urinary incontinence for in-vitro studies. <i>Technology and Health Care</i> , <b>2008</b> , 16, 77-83.	1.1	
62	Strain fields in histological slices of brain tissue determined by synchrotron radiation-based micro computed tomography. <i>Journal of Neuroscience Methods</i> , <b>2008</b> , 170, 149-55	3	24
61	The morphology of anisotropic 3D-printed hydroxyapatite scaffolds. <i>Biomaterials</i> , <b>2008</b> , 29, 3799-806	15.6	167
60	Circulating levels of copeptin, a novel biomarker, in lower respiratory tract infections. <i>European Journal of Clinical Investigation</i> , <b>2007</b> , 37, 145-52	4.6	146
59	Morphology of bony tissues and implants uncovered by high-resolution tomographic imaging. <i>International Journal of Materials Research</i> , <b>2007</b> , 98, 613-621	0.5	28
58	Image Based Analysis of Bone Graft Samples made by 3D Printing Using Conventional and Synchrotron-Radiation-Based Micro-Computed Tomography <b>2007</b> , 121-126		2
57	Bone marrow derived mesenchymal stem cells isolated from patients with diabetes mellitus type 1 are able to induce a pancreatic endocrine genes in vitro. <i>Journal of Stem Cells and Regenerative Medicine</i> , <b>2007</b> , 2, 102-3	0.8	1

56	Three-dimensional assessment of brain tissue morphology <b>2006</b> , 6318, 9		3
55	Optimization of the artificial urinary sphincter: modelling and experimental validation. <i>Physics in Medicine and Biology</i> , <b>2006</b> , 51, 1361-75	3.8	17
54	Anatomy of the murine and human cochlea visualized at the cellular level by synchrotron-radiation-based micro-computed tomography <b>2006</b> ,		5
53	Visualising complex morphology of fatigue cracks in voxel based 3D datasets. <i>Materials Science and Technology</i> , <b>2006</b> , 22, 1038-1044	1.5	8
52	Image-based analysis of the internal microstructure of bone replacement scaffolds fabricated by 3D printing <b>2006</b> , 6318, 64		1
51	3D analysis of bone formation around titanium implants using micro computed tomography (CT) <b>2006</b> ,		3
50	Three-dimensional characterization of cell clusters using synchrotron-radiation-based micro-computed tomography. <i>Microscopy and Microanalysis</i> , <b>2006</b> , 12, 97-105	0.5	21
49	Circulating levels of pro-atrial natriuretic peptide in lower respiratory tract infections. <i>Journal of Internal Medicine</i> , <b>2006</b> , 260, 568-76	10.8	51
48	Blood vessel staining in the myocardium for 3D visualization down to the smallest capillaries. <i>Nuclear Instruments &amp; Methods in Physics Research B</i> , <b>2006</b> , 246, 254-261	1.2	16
47	Tomography studies of biological cells on polymer scaffolds. <i>Journal of Physics Condensed Matter</i> , <b>2004</b> , 16, S3499-S3510	1.8	7
46	An optimization procedure for spatial and density resolution in hard X-ray micro-computed tomography. <i>Nuclear Instruments &amp; Methods in Physics Research B</i> , <b>2004</b> , 225, 599-603	1.2	37
45	Functional micro-imaging of soft and hard tissue using synchrotron light <b>2004</b> ,		3
44	Comparison of microfocus- and synchrotron X-ray tomography for the analysis of osteointegration around Ti6Al4V implants. <i>European Cells and Materials</i> , <b>2004</b> , 7, 42-51; discussion 51	4.3	84
43	Tomography studies of human foreskin fibroblasts on polymer yarns. <i>Nuclear Instruments &amp; Methods in Physics Research B</i> , <b>2003</b> , 200, 397-405	1.2	20
42	Wood-Derived Porous Ceramics via Infiltration of SiO <sub>2</sub> -Sol and Carbothermal Reduction. <i>Holzforschung</i> , <b>2003</b> , 57, 440-446	2	19
41	Resorbable defect analog PLGA scaffolds using CO <sub>2</sub> as solvent: structural characterization. <i>Journal of Biomedical Materials Research Part B</i> , <b>2002</b> , 62, 89-98		55
40	Non-destructive three-dimensional evaluation of a polymer sponge by micro-tomography using synchrotron radiation. <i>New Biotechnology</i> , <b>2002</b> , 19, 73-8		60
39	Nondestructive three-dimensional evaluation of biocompatible materials by microtomography using synchrotron radiation <b>2002</b> ,		23

38	Haemostatic profile in hypothyroidism as potential risk factor for vascular or thrombotic disease. <i>European Journal of Clinical Investigation</i> , <b>2001</b> , 31, 131-7	4.6	93
37	Protein adsorption and monocyte activation on germanium nanopyrramids. <i>Biomaterials</i> , <b>2001</b> , 22, 2307-16	5.6	77
36	The stiffness of bone marrow cell-knit composites is increased during mechanical load. <i>Biomaterials</i> , <b>2001</b> , 22, 3169-78	15.6	22
35	Impact of nanometer-scale roughness on contact-angle hysteresis and globulin adsorption. <i>Journal of Vacuum Science &amp; Technology an Official Journal of the American Vacuum Society B, Microelectronics Processing and Phenomena</i> , <b>2001</b> , 19, 1715		81
34	NATURAL FORMATION OF NANOSTRUCTURES: FROM FUNDAMENTALS IN METAL HETEROEPITAXY TO APPLICATIONS IN OPTICS AND BIOMATERIALS SCIENCE. <i>Surface Review and Letters</i> , <b>2001</b> , 08, 169-228	1.1	28
33	Molecular beam epitaxy of p-hexaphenyl on GaAs(111). <i>Surface and Interface Analysis</i> , <b>2000</b> , 30, 518-521	1.5	10
32	Degradation Kinetics of Biodegradable Fiber Composites. <i>Journal of Polymers and the Environment</i> , <b>2000</b> , 8, 91-96	4.5	7
31	Amino acid neurotransmitter metabolism in neurones and glia following kainate injection in rats. <i>Neuroscience Letters</i> , <b>2000</b> , 279, 169-72	3.3	18
30	Reduction of the bacterial load by the silver-coated endotracheal tube (SCET), a laboratory investigation. <i>Technology and Health Care</i> , <b>1999</b> , 7, 359-370	1.1	35
29	Dimer Pairing on the C-Alloyed Si(001) Surface. <i>Physical Review Letters</i> , <b>1999</b> , 82, 972-975	7.4	72
28	In-plane alignment of noncentrosymmetric molecules by oblique-incidence molecular beam deposition. <i>Applied Physics Letters</i> , <b>1999</b> , 74, 3110-3112	3.4	9
27	Film thickness measurement and linear dichroism of organic thin films prepared by molecular beam deposition at oblique incidence. <i>Optical Materials</i> , <b>1999</b> , 12, 345-350	3.3	6
26	Ordering of PVBA on amorphous SiO <sub>2</sub> and Pd(110). <i>Thin Solid Films</i> , <b>1999</b> , 343-344, 171-174	2.2	4
25	Oblique Incidence Organic Molecular Beam Deposition and Nonlinear Optical Properties of Organic Thin Films with a Stable In-Plane Directional Order. <i>Advanced Materials</i> , <b>1999</b> , 11, 745-749	24	30
24	In situ scanning tunneling microscopy study of C-induced Ge quantum dot formation on Si(100). <i>Applied Physics Letters</i> , <b>1999</b> , 74, 994-996	3.4	39
23	Binding and ordering of large organic molecules on an anisotropic metal surface: PVBA on Pd(110). <i>Surface Science</i> , <b>1999</b> , 431, 168-173	1.8	24
22	Epitaxial growth of para-hexaphenyl on GaAs(001)-2 $\times$ 8. <i>Surface Science</i> , <b>1999</b> , 437, 191-197	1.8	19
21	A UHV STM for in situ characterization of MBE/CVD growth on 4-inch wafers. <i>Applied Physics A: Materials Science and Processing</i> , <b>1998</b> , 66, S993-S997	2.6	14

20	MBE growth of para-hexaphenyl on GaAs(001)-2 $\times$ 8. <i>Surface Science</i> , <b>1998</b> , 418, 256-266	1.8	41
19	Self-Assembly in Ultrahigh Vacuum: Growth of Organic Thin Films with a Stable In-Plane Directional Order. <i>Journal of the American Chemical Society</i> , <b>1998</b> , 120, 8563-8564	16.4	41
18	Strain Relief via Island Ramification in Submonolayer Heteroepitaxy. <i>Surface Review and Letters</i> , <b>1998</b> , 05, 769-781	1.1	16
17	Island Shape Transition in Heteroepitaxial Metal Growth on Square Lattices. <i>Physical Review Letters</i> , <b>1998</b> , 80, 2642-2645	7.4	50
16	Ge-Quantum Dots on Si(001) Tailored by Carbon Predeposition. <i>Materials Research Society Symposia Proceedings</i> , <b>1998</b> , 533, 183		7
15	Inelastic Scattering in Reflection High-Energy Electron Diffraction from Si(111). <i>Physical Review Letters</i> , <b>1997</b> , 79, 4393-4396	7.4	3
14	NUCLEATION AND GROWTH OF Cu/Ni(100): A VARIABLE TEMPERATURE STM STUDY. <i>Surface Review and Letters</i> , <b>1997</b> , 04, 1161-1165	1.1	3
13	A comparative STM and SPA-LEED study on the evolution of strain induced stripe pattern on Cu/Ni(100). <i>Surface Science</i> , <b>1997</b> , 376, 113-122	1.8	11
12	Comparison of reflection high-energy electron diffraction and low-energy electron diffraction using high-resolution instrumentation. <i>Surface Science</i> , <b>1997</b> , 389, 338-348	1.8	9
11	Submonolayer Nucleation and Growth of Copper on Ni(100). <i>NATO ASI Series Series B: Physics</i> , <b>1997</b> , 151-159		2
10	Initial stages of Cu epitaxy on Ni(100): Postnucleation and a well-defined transition in critical island size. <i>Physical Review B</i> , <b>1996</b> , 54, 17858-17865	3.3	83
9	Strain relief in metal heteroepitaxy on face-centered-cubic(100): Cu/Ni(100). <i>Journal of Vacuum Science and Technology A: Vacuum, Surfaces and Films</i> , <b>1996</b> , 14, 1878-1881	2.9	19
8	Strain relief at metal interfaces with square symmetry. <i>Physical Review Letters</i> , <b>1996</b> , 76, 2358-2361	7.4	54
7	SPA-RHEED: a novel method in reflection high-energy electron diffraction with extremely high angular and energy resolution. <i>Review of Scientific Instruments</i> , <b>1995</b> , 66, 5232-5235	1.7	18
6	Impaired action of thyroid hormone associated with smoking in women with hypothyroidism. <i>New England Journal of Medicine</i> , <b>1995</b> , 333, 964-9	59.2	120
5	Strain-induced dimer adatom stacking fault structures of germanium on Si(111)-(1 $\times$ 1)R30 $^\circ$ observed by scanning tunneling microscopy. <i>Journal of Vacuum Science &amp; Technology an Official Journal of the American Vacuum Society B, Microelectronics Processing and Phenomena</i> , <b>1992</b> , 10, 16		7
4	Trench formation in surfactant mediated epitaxial film growth of Ge on Si(100). <i>Applied Physics A: Solids and Surfaces</i> , <b>1992</b> , 54, 265-269		11
3	Layer-by-layer growth of germanium on Si(100): strain-induced morphology and the influence of surfactants. <i>Ultramicroscopy</i> , <b>1992</b> , 42-44, 832-837	3.1	108

- 2 Strained-layer growth and islanding of germanium on Si(111)-(7 × 7) studied with STM. *Surface Science*, **1991**, 248, 321-331 1.8 162
- 1 On the thermal behaviour of molecular beam effusion sources. *Crystal Research and Technology*, **1990**, 25, 1087-1095 1.3 2