# Michael L F Lerch

## List of Publications by Citations

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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.

241 papers

3,026 citations

29 h-index 40 g-index

274 ext. papers

3,495 ext. citations

2.7 avg, IF

4.87 L-index

#	Paper	IF	Citations
241	A Simple Colloidal Route to Nanocrystalline ZnO/CuInS2 Bilayers. <i>Advanced Materials</i> , <b>1999</b> , 11, 643-64	624	96
240	MOSFET dosimetry for microbeam radiation therapy at the European Synchrotron Radiation Facility. <i>Medical Physics</i> , <b>2003</b> , 30, 583-9	4.4	85
239	Medical physics aspects of the synchrotron radiation therapies: Microbeam radiation therapy (MRT) and synchrotron stereotactic radiotherapy (SSRT). <i>Physica Medica</i> , <b>2015</b> , 31, 568-83	2.7	71
238	Skin dosimetry with new MOSFET detectors. <i>Radiation Measurements</i> , <b>2008</b> , 43, 929-932	1.5	62
237	Observation of intrinsic tristability in a resonant tunneling structure. <i>Applied Physics Letters</i> , <b>1994</b> , 64, 1248-1250	3.4	60
236	Characterization of a novel two dimensional diode array the "magic plate" as a radiation detector for radiation therapy treatment. <i>Medical Physics</i> , <b>2012</b> , 39, 2544-58	4.4	58
235	A lectin affinity workflow targeting glycosite-specific, cancer-related carbohydrate structures in trypsin-digested human plasma. <i>Analytical Biochemistry</i> , <b>2011</b> , 408, 71-85	3.1	58
234	In vivo real-time rectal wall dosimetry for prostate radiotherapy. <i>Physics in Medicine and Biology</i> , <b>2010</b> , 55, 3859-71	3.8	50
233	Verification of the plan dosimetry for high dose rate brachytherapy using metal-oxide-semiconductor field effect transistor detectors. <i>Medical Physics</i> , <b>2007</b> , 34, 2007-13	4.4	46
232	Feasibility study of online high-spatial-resolution MOSFET dosimetry in static and pulsed x-ray radiation fields. <i>IEEE Transactions on Nuclear Science</i> , <b>2001</b> , 48, 2061-2068	1.7	44
231	FILIB++, a fast interval library supporting containment computations. <i>ACM Transactions on Mathematical Software</i> , <b>2006</b> , 32, 299-324	2.3	42
230	Correction factors to convert microdosimetry measurements in silicon to tissue in C ion therapy. <i>Physics in Medicine and Biology</i> , <b>2017</b> , 62, 2055-2069	3.8	41
229	A two dimensional silicon detectors array for quality assurance in stereotactic radiotherapy: MagicPlate-512. <i>Medical Physics</i> , <b>2014</b> , 41, 091707	4.4	41
228	Cerium oxide nanoparticles: influence of the high-Z component revealed on radioresistant 9L cell survival under X-ray irradiation. <i>Nanomedicine: Nanotechnology, Biology, and Medicine</i> , <b>2013</b> , 9, 1098-10	15 <sup>6</sup>	40
227	In vivo verification of superficial dose for head and neck treatments using intensity-modulated techniques. <i>Medical Physics</i> , <b>2009</b> , 36, 59-70	4.4	39
226	First proof of bismuth oxide nanoparticles as efficient radiosensitisers on highly radioresistant cancer cells. <i>Physica Medica</i> , <b>2016</b> , 32, 1444-1452	2.7	37
225	Investigation of track structure and condensed history physics models for applications in radiation dosimetry on a micro and nano scale in Geant4. <i>Biomedical Physics and Engineering Express</i> , <b>2018</b> , 4, 024	4005	36

## (2010-2016)

224	Synthesis-Dependent Surface Defects and Morphology of Hematite Nanoparticles and Their Effect on Cytotoxicity in Vitro. <i>ACS Applied Materials &amp; Amp; Interfaces</i> , <b>2016</b> , 8, 5867-76	9.5	35	
223	Synthesis of potential theranostic system consisting of methotrexate-immobilized (3-aminopropyl)trimethoxysilane coated Bi2O3 nanoparticles for cancer treatment. <i>RSC Advances</i> , <b>2014</b> , 4, 24412	3.7	33	
222	Characterization of proton pencil beam scanning and passive beam using a high spatial resolution solid-state microdosimeter. <i>Medical Physics</i> , <b>2017</b> , 44, 6085-6095	4.4	33	
221	High-Z Nanostructured Ceramics in Radiotherapy: First Evidence of Ta2O5-Induced Dose Enhancement on Radioresistant Cancer Cells in an MV Photon Field. <i>Particle and Particle Systems Characterization</i> , <b>2014</b> , 31, 500-505	3.1	33	
220	Microbeam radiation therapy: a Monte Carlo study of the influence of the source, multislit collimator, and beam divergence on microbeams. <i>Medical Physics</i> , <b>2009</b> , 36, 447-56	4.4	33	
219	MOSFET dosimetry with high spatial resolution in intense synchrotron-generated x-ray microbeams. <i>Medical Physics</i> , <b>2009</b> , 36, 1128-37	4.4	33	
218	The effect of rectal heterogeneity on wall dose in high dose rate brachytherapy. <i>Medical Physics</i> , <b>2009</b> , 36, 224-32	4.4	33	
217	Plasmon assisted resonant tunneling in a double barrier heterostructure. <i>Physical Review Letters</i> , <b>1994</b> , 72, 3397-3400	7.4	33	
216	Radiation Monitoring in Mixed Environments at CERN: From the IRRAD6 Facility to the LHC Experiments. <i>IEEE Transactions on Nuclear Science</i> , <b>2007</b> , 54, 1170-1177	1.7	32	
215	MOSFET dosimetry of an X-ray microbeam. <i>IEEE Transactions on Nuclear Science</i> , <b>1999</b> , 46, 1774-1780	1.7	32	
214	3D-Mesa <b>B</b> ridge <b></b> ilicon Microdosimeter: Charge Collection Study and Application to RBE Studies in \$^{12}{rm C}\$ Radiation Therapy. <i>IEEE Transactions on Nuclear Science</i> , <b>2015</b> , 62, 504-511	1.7	30	
213	X-Tream: a novel dosimetry system for Synchrotron Microbeam Radiation Therapy. <i>Journal of Instrumentation</i> , <b>2012</b> , 7, P07022-P07022	1	29	
212	3D Silicon Microdosimetry and RBE Study Using \$^{12}{rm C}\$ Ion of Different Energies. <i>IEEE Transactions on Nuclear Science</i> , <b>2015</b> , 62, 3027-3033	1.7	28	
211	A real-time in vivo dosimetric verification method for high-dose rate intracavitary brachytherapy of nasopharyngeal carcinoma. <i>Medical Physics</i> , <b>2012</b> , 39, 6757-63	4.4	27	
<b>2</b> 10	In vivo rectal wall measurements during HDR prostate brachytherapy with MOSkin dosimeters integrated on a trans-rectal US probe: Comparison with planned and reconstructed doses. <i>Radiotherapy and Oncology</i> , <b>2016</b> , 118, 148-53	5.3	27	
209	Absorbed dose-to-water protocol applied to synchrotron-generated x-rays at very high dose rates. <i>Physics in Medicine and Biology</i> , <b>2016</b> , 61, N349-61	3.8	27	
208	Multichannel Data Acquisition System comparison for Quality Assurance in external beam radiation therapy. <i>Radiation Measurements</i> , <b>2014</b> , 71, 338-341	1.5	26	
207	A silicon strip detector dose magnifying glass for IMRT dosimetry. <i>Medical Physics</i> , <b>2010</b> , 37, 427-39	4.4	26	

206	Edge-on face-to-face MOSFET for synchrotron microbeam dosimetry: MC modeling. <i>IEEE Transactions on Nuclear Science</i> , <b>2005</b> , 52, 2562-2569	1.7	26
205	Unusual polyoxygenated sterols from a Philippines sponge Xestospongia sp <i>Tetrahedron</i> , <b>2001</b> , 57, 40	9 <del>1.4</del> 09	1425
204	The feasibility study and characterization of a two-dimensional diode array in "magic phantom" for high dose rate brachytherapy quality assurance. <i>Medical Physics</i> , <b>2013</b> , 40, 111702	4.4	24
203	Synthesis of methotrexate-loaded tantalum pentoxide-poly(acrylic acid) nanoparticles for controlled drug release applications. <i>Journal of Colloid and Interface Science</i> , <b>2019</b> , 538, 286-296	9.3	24
202	Benchmarking and validation of a Geant4-SHADOW Monte Carlo simulation for dose calculations in microbeam radiation therapy. <i>Journal of Synchrotron Radiation</i> , <b>2014</b> , 21, 518-28	2.4	23
201	Dosimetry of intensive synchrotron microbeams. <i>Radiation Measurements</i> , <b>2011</b> , 46, 1560-1565	1.5	23
200	Neutron dosimetry with planar silicon p-i-n diodes. <i>IEEE Transactions on Nuclear Science</i> , <b>2003</b> , 50, 2367-	-2:372	23
199	Chemical stability of Sb 2 Te 3 back contacts to CdS/CdTe solar cells. <i>Thin Solid Films</i> , <b>2000</b> , 361-362, 38.	3:3:87	23
198	Local dose enhancement of proton therapy by ceramic oxide nanoparticles investigated with Geant4 simulations. <i>Physica Medica</i> , <b>2016</b> , 32, 1584-1593	2.7	23
197	The relative biological effectiveness for carbon, nitrogen, and oxygen ion beams using passive and scanning techniques evaluated with fully 3D silicon microdosimeters. <i>Medical Physics</i> , <b>2018</b> , 45, 2299-23	so <del>l84</del>	22
196	Online in vivo dosimetry in high dose rate prostate brchytherapy with MOSkin detectors: in phantom feasibility study. <i>Applied Radiation and Isotopes</i> , <b>2014</b> , 83 Pt C, 222-6	1.7	22
195	Real-time in vivo dosimetry with MOSFET detectors in serial tomotherapy for head and neck cancer patients. <i>International Journal of Radiation Oncology Biology Physics</i> , <b>2011</b> , 80, 1581-8	4	22
194	The use of a silicon strip detector dose magnifying glass in stereotactic radiotherapy QA and dosimetry. <i>Medical Physics</i> , <b>2011</b> , 38, 1226-38	4.4	22
193	A 2D silicon detector array for quality assurance in small field dosimetry: DUO. <i>Medical Physics</i> , <b>2017</b> , 44, 628-636	4.4	20
192	ZnO/CeO2 nanocomposite with low photocatalytic activity as efficient UV filters. <i>Journal of Materials Science</i> , <b>2020</b> , 55, 6834-6847	4.3	20
191	Influence of polarization and a source model for dose calculation in MRT. <i>Medical Physics</i> , <b>2014</b> , 41, 041	7.ф.3 <sub>4</sub>	20
190	MagicPlate-512: A 2D silicon detector array for quality assurance of stereotactic motion adaptive radiotherapy. <i>Medical Physics</i> , <b>2015</b> , 42, 2992-3004	4.4	20
189	Potential High Resolution Dosimeters For MRT <b>2010</b> ,		20

## (2017-2017)

18	88	Clinical application of MOSkin dosimeters to rectal wall in vivo dosimetry in gynecological HDR brachytherapy. <i>Physica Medica</i> , <b>2017</b> , 41, 5-12	19	
18	87	Thin Silicon Microdosimeter Utilizing 3-D MEMS Fabrication Technology: Charge Collection Study and Its Application in Mixed Radiation Fields. <i>IEEE Transactions on Nuclear Science</i> , <b>2018</b> , 65, 467-472	19	
18	86	Large Area Silicon Microdosimeter for Dosimetry in High LET Space Radiation Fields: Charge Collection Study. <i>IEEE Transactions on Nuclear Science</i> , <b>2012</b> , 59, 3126-3132	19	
18	85	X-Tream dosimetry of highly brilliant X-ray microbeams in the MRT hutch of the Australian Synchrotron. <i>Radiation Measurements</i> , <b>2017</b> , 106, 405-411	18	
18	84	Thulium Oxide Nanoparticles: A new candidate for image-guided radiotherapy. <i>Biomedical Physics and Engineering Express</i> , <b>2018</b> , 4, 044001	17	
18	83	The evaluation of a 2D diode array in hagic phantom[for use in high dose rate brachytherapy pretreatment quality assurance. <i>Medical Physics</i> , <b>2015</b> , 42, 663-73	17	
18	82	BrachyView, a novel in-body imaging system for HDR prostate brachytherapy: Experimental evaluation. <i>Medical Physics</i> , <b>2015</b> , 42, 7098-107	17	
18	81	Experimental investigation of the 100 keV X-ray dose response of the high-temperature thermoluminescence in LiF:Mg,Ti (TLD-100): theoretical interpretation using the unified interaction 0.9 model. <i>Radiation Protection Dosimetry</i> , <b>2010</b> , 138, 320-33	17	
18	80	X-Tream quality assurance in synchrotron X-ray microbeam radiation therapy. <i>Journal of Synchrotron Radiation</i> , <b>2016</b> , 23, 1180-90	17	
17	79	Optimizing dose enhancement with TaO nanoparticles for synchrotron microbeam activated radiation therapy. <i>Physica Medica</i> , <b>2016</b> , 32, 1852-1861	16	
17	78	. IEEE Transactions on Nuclear Science, 2013, 60, 4705-4712	16	
17	77	Microdosimetric measurements of a clinical proton beam with micrometer-sized solid-state detector. <i>Medical Physics</i> , <b>2017</b> , 44, 6029-6037	16	
17	76	Study of the effect of ceramic TaO nanoparticle distribution on cellular dose enhancement in a kilovoltage photon field. <i>Physica Medica</i> , <b>2016</b> , 32, 1216-1224	16	
17	75	X-ray microbeam measurements with a high resolution scintillator fibre-optic dosimeter. <i>Scientific Reports</i> , <b>2017</b> , 7, 12450	15	
17	74	Real-time eye lens dose monitoring during cerebral angiography procedures. <i>European Radiology</i> , <b>2016</b> , 26, 79-86	15	
17	73	Highly porous hematite nanorods prepared via direct spray precipitation method. <i>Materials Letters</i> , <b>2014</b> , 117, 279-282	15	
1,	72	Technical advances in x-ray microbeam radiation therapy. <i>Physics in Medicine and Biology</i> , <b>2020</b> , 65, 02TR <b>9</b> . <b>8</b>	15	
17	71	High-resolution fiber-optic dosimeters for microbeam radiation therapy. <i>Medical Physics</i> , <b>2017</b> , 44, 1965- <u>4</u> . <u>9</u> 68	14	

170	A comparative analysis of multichannel Data Acquisition Systems for quality assurance in external beam radiation therapy. <i>Journal of Instrumentation</i> , <b>2014</b> , 9, T06003-T06003	1	14
169	BrachyView: proof-of-principle of a novel in-body gamma camera for low dose-rate prostate brachytherapy. <i>Medical Physics</i> , <b>2013</b> , 40, 041709	4.4	14
168	A new technique for directly probing the intrinsic tristability and its temperature dependence in a resonant tunneling diode. <i>Solid-State Electronics</i> , <b>1994</b> , 37, 961-964	1.7	14
167	RBE study using solid state microdosimetry in heavy ion therapy. <i>Radiation Measurements</i> , <b>2017</b> , 106, 512-518	1.5	13
166	High spatial resolution scintillator dosimetry of synchrotron microbeams. <i>Scientific Reports</i> , <b>2019</b> , 9, 687	<b>'3</b> .9	13
165	Semiconductor dosimetry in modern external-beam radiation therapy. <i>Physics in Medicine and Biology</i> , <b>2020</b> , 65, 16TR01	3.8	13
164	Characterisation and evaluation of a PNP strip detector for synchrotron microbeam radiation therapy. <i>Biomedical Physics and Engineering Express</i> , <b>2018</b> , 4, 044002	1.5	13
163	Comparison of phantom materials for use in quality assurance of microbeam radiation therapy. Journal of Synchrotron Radiation, <b>2017</b> , 24, 866-876	2.4	13
162	Characterization of a Novel Diamond-Based Microdosimeter Prototype for Radioprotection Applications in Space Environments. <i>IEEE Transactions on Nuclear Science</i> , <b>2012</b> , 59, 3110-3116	1.7	13
161	Design and simulation of continuous scintillator with pixellated photodetector. <i>IEEE Transactions on Nuclear Science</i> , <b>2001</b> , 48, 1412-1417	1.7	13
160	A 3D lateral electrode structure for diamond based microdosimetry. <i>Applied Physics Letters</i> , <b>2017</b> , 110, 013503	3.4	12
159	Synchrotron X-ray microbeam dosimetry with a 20 micrometre resolution scintillator fibre-optic dosimeter. <i>Journal of Synchrotron Radiation</i> , <b>2018</b> , 25, 826-832	2.4	12
158	TRUS-probe integrated MOSkin detectors for rectal wall in vivo dosimetry in HDR brachytherapy: In phantom feasibility study. <i>Radiation Measurements</i> , <b>2014</b> , 71, 379-383	1.5	12
157	BrachyView, a novel inbody imaging system for HDR prostate brachytherapy: design and Monte Carlo feasibility study. <i>Medical Physics</i> , <b>2013</b> , 40, 071715	4.4	12
156	"Characterization of ELEKTA SRS cone collimator using high spatial resolution monolithic silicon detector array". <i>Journal of Applied Clinical Medical Physics</i> , <b>2018</b> , 19, 114-124	2.3	12
155	Nano-sunscreens - a double-edged sword in protecting consumers from harm: viewing Australian regulatory policies through the lenses of the European Union. <i>Critical Reviews in Toxicology</i> , <b>2019</b> , 49, 122-139	5.7	11
154	Toward personalized synchrotron microbeam radiation therapy. Scientific Reports, 2020, 10, 8833	4.9	11
153	Semiconductor real-time quality assurance dosimetry in brachytherapy. <i>Brachytherapy</i> , <b>2018</b> , 17, 133-14	<b>.5</b> 4	11

152	In-field and out-of-file application in 12C ion therapy using fully 3D silicon microdosimeters. <i>Radiation Measurements</i> , <b>2018</b> , 115, 55-59	1.5	11
151	3D Radiation Detectors: Charge Collection Characterisation and Applicability of Technology for Microdosimetry. <i>IEEE Transactions on Nuclear Science</i> , <b>2014</b> , 61, 1537-1543	1.7	11
150	Engineering of Bismuth Oxide Nanoparticles to Induce Differential Biochemical Activity in Malignant and Nonmalignant Cells. <i>Particle and Particle Systems Characterization</i> , <b>2014</b> , 31, 960-964	3.1	11
149	Direct and pulsed current annealing of p-MOSFET based dosimeter: the "MOSkin". <i>Australasian Physical and Engineering Sciences in Medicine</i> , <b>2014</b> , 37, 311-9	1.9	11
148	In vitro investigation of the dose-rate effect on the biological effectiveness of megavoltage X-ray radiation doses. <i>Applied Radiation and Isotopes</i> , <b>2017</b> , 128, 114-119	1.7	11
147	Angular independent silicon detector for dosimetry in external beam radiotherapy. <i>Medical Physics</i> , <b>2015</b> , 42, 4708-18	4.4	11
146	Thin silicon strip detectors for beam monitoring in Micro-beam Radiation Therapy. <i>Journal of Instrumentation</i> , <b>2015</b> , 10, P11007-P11007	1	11
145	TiO2/(BiO)2CO3 nanocomposites for ultraviolet filtration with reduced photocatalytic activity. <i>Journal of Materials Chemistry C</i> , <b>2018</b> , 6, 5639-5650	7.1	11
144	BrachyView: Combining LDR seed positions with transrectal ultrasound imaging in a prostate gel phantom. <i>Physica Medica</i> , <b>2017</b> , 34, 55-64	2.7	10
143	A Novel Silicon Microdosimeter Using 3D Sensitive Volumes: Modeling the Response in Neutron Fields Typical of Aviation. <i>IEEE Transactions on Nuclear Science</i> , <b>2014</b> , 61, 1552-1557	1.7	10
142	Tissue Equivalence Study of a Novel Diamond-Based Microdosimeter for Galactic Cosmic Rays and Solar Particle Events. <i>IEEE Transactions on Nuclear Science</i> , <b>2014</b> , 61, 1544-1551	1.7	10
141	Miniature semiconductor detectors for in vivo dosimetry. <i>Radiation Protection Dosimetry</i> , <b>2006</b> , 120, 48-55	0.9	10
140	In vivo dosimetry and seed localization in prostate brachytherapy with permanent implants. <i>IEEE Transactions on Nuclear Science</i> , <b>2004</b> , 51, 3013-3018	1.7	10
139	First in vitro evidence of modulated electro-hyperthermia treatment performance in combination with megavoltage radiation by clonogenic assay. <i>Scientific Reports</i> , <b>2018</b> , 8, 16608	4.9	10
138	High toxicity of Bi(OH) and BiO nanoparticles towards malignant 9L and MCF-7 cells. <i>Materials Science and Engineering C</i> , <b>2018</b> , 93, 958-967	8.3	10
137	Technical Note: Angular dependence of a 2D monolithic silicon diode array for small field dosimetry. <i>Medical Physics</i> , <b>2017</b> , 44, 4313-4321	4.4	9
136	Radiation dose enhancement at tissue-tungsten interfaces in HDR brachytherapy. <i>Physics in Medicine and Biology</i> , <b>2014</b> , 59, 6659	3.8	9
135	A system for radiation damage monitoring. <i>IEEE Transactions on Nuclear Science</i> , <b>1999</b> , 46, 1766-1773	1.7	9

134	A Liquid Chromatography System for Measurement of Organic Acids in Precipitation. <i>International Journal of Environmental Analytical Chemistry</i> , <b>1989</b> , 35, 149-159	1.8	9
133	Na-doped ZnO UV filters with reduced photocatalytic activity for sunscreen applications. <i>Journal of Materials Science</i> , <b>2020</b> , 55, 2772-2786	4.3	9
132	A convenient verification method of the entrance photo-neutron dose for an 18 MV medical linac using silicon p-i-n diodes. <i>Radiation Measurements</i> , <b>2017</b> , 106, 391-398	1.5	8
131	On the Combined Effect of Silicon Oxide Thickness and Boron Implantation Under the Gate in MOSFET Dosimeters. <i>IEEE Transactions on Nuclear Science</i> , <b>2020</b> , 67, 534-540	1.7	8
130	High spatial resolution microdosimetry with monolithic <b>E</b> -E detector on 12C beam: Monte Carlo simulations and experiment. <i>Nuclear Instruments and Methods in Physics Research, Section A: Accelerators, Spectrometers, Detectors and Associated Equipment, <b>2018</b>, 887, 70-80</i>	1.2	8
129	Experimental characterization of magnetically focused electron contamination at the surface of a high-field inline MRI-linac. <i>Medical Physics</i> , <b>2019</b> , 46, 5780-5789	4.4	8
128	Studies of the Characteristics of a Silicon Neutron Sensor. <i>IEEE Transactions on Nuclear Science</i> , <b>2009</b> , 56, 2290-2293	1.7	8
127	SOI Thin Microdosimeter Detectors for Low-Energy lons and Radiation Damage Studies. <i>IEEE Transactions on Nuclear Science</i> , <b>2019</b> , 66, 320-326	1.7	8
126	A Solid-State Microdosimeter for Dose and Radiation Quality Monitoring for Astronauts in Space. <i>IEEE Transactions on Nuclear Science</i> , <b>2020</b> , 67, 169-174	1.7	7
125	Nanostructures, concentrations and energies: an ideal equation to extend therapeutic efficiency on radioresistant 9L tumor cells using \${{rm{Ta}}}_{2}{{rm{O}}}_{5}\$ ceramic nanostructured particles. Biomedical Physics and Engineering Express, 2017, 3, 015018	1.5	7
124	New 3D Silicon detectors for dosimetry in Microbeam Radiation Therapy. <i>Journal of Physics: Conference Series</i> , <b>2017</b> , 777, 012009	0.3	7
123	Independent quality assurance of a helical tomotherapy machine using the dose magnifying glass. <i>Medical Physics</i> , <b>2011</b> , 38, 2256-64	4.4	7
122	Fe-Al interface intermixing and the role of Ti, V, and Zr as a stabilizing interlayer at the interface. <i>Journal of Applied Physics</i> , <b>2009</b> , 105, 053504	2.5	7
121	Three-dimensional dosimetry imaging of I-125 plaque for eye cancer treatment. <i>Nuclear Instruments and Methods in Physics Research, Section A: Accelerators, Spectrometers, Detectors and Associated Equipment</i> , <b>2011</b> , 633, S276-S278	1.2	7
120	From imaging to dosimetry: GEANT4-based study on the application of Medipix to neutron dosimetry. <i>Radiation Measurements</i> , <b>2010</b> , 45, 1355-1358	1.5	7
119	Structure of ultra-thin Ti film on the Al(001) surface. Surface Science, 2010, 604, 988-995	1.8	7
118	Evaluation of pixellated, back-sided planar photodetectors for high-resolution imaging instrumentation. <i>Nuclear Instruments and Methods in Physics Research, Section A: Accelerators, Spectrometers, Detectors and Associated Equipment</i> , <b>2008</b> , 589, 259-267	1.2	7
117	First experimental measurement of the effect of cardio-synchronous brain motion on the dose distribution during microbeam radiation therapy. <i>Medical Physics</i> , <b>2020</b> , 47, 213-222	4.4	7

116	SOI Thin Microdosimeters for High LET Single-Event Upset Studies in Fe, O, Xe, and Cocktail Ion Beam Fields. <i>IEEE Transactions on Nuclear Science</i> , <b>2020</b> , 67, 146-153	1.7	7
115	Evaluation of the PTW microDiamond in edge-on orientation for dosimetry in small fields. <i>Journal of Applied Clinical Medical Physics</i> , <b>2020</b> , 21, 278-288	2.3	7
114	Beam perturbation characteristics of a 2D transmission silicon diode array, Magic Plate. <i>Journal of Applied Clinical Medical Physics</i> , <b>2016</b> , 17, 85-98	2.3	7
113	Validation of a Monte Carlo simulation for Microbeam Radiation Therapy on the Imaging and Medical Beamline at the Australian Synchrotron. <i>Scientific Reports</i> , <b>2019</b> , 9, 17696	4.9	7
112	Thermoluminescence dose response of photon irradiated NaCl: Unified interaction model analysis of the dependence of the supralinearity on photon energy. <i>Radiation Measurements</i> , <b>2017</b> , 106, 455-458	3 <sup>1.5</sup>	6
111	A new virtual ring-based system matrix generator for iterative image reconstruction in high resolution small volume PET systems. <i>Physics in Medicine and Biology</i> , <b>2015</b> , 60, 6949-73	3.8	6
110	Characterization of an organic semiconductor diode for dosimetry in radiotherapy. <i>Medical Physics</i> , <b>2020</b> , 47, 3658-3668	4.4	6
109	Characterization of a plastic dosimeter based on organic semiconductor photodiodes and scintillator. <i>Physics and Imaging in Radiation Oncology</i> , <b>2020</b> , 14, 48-52	3.1	6
108	2D mapping of the MV photon fluence and 3D dose reconstruction in real time for quality assurance during radiotherapy treatment. <i>Journal of Instrumentation</i> , <b>2015</b> , 10, P09019-P09019	1	6
107	Characterization of an Alternative Diamond Based Microdosimeter Prototype. <i>IEEE Transactions on Nuclear Science</i> , <b>2014</b> , 61, 3479-3484	1.7	6
106	Dosimetry verification in eye brachytherapy using silicon pixelated detectors. <i>Radiation Measurements</i> , <b>2011</b> , 46, 2010-2013	1.5	6
105	A lectin HPLC method to enrich selectively-glycosylated peptides from complex biological samples. Journal of Visualized Experiments, 2009,	1.6	6
104	Intraoperative solid-state based urethral dosimetry in low dose rate prostate brachytherapy. <i>IEEE Transactions on Nuclear Science</i> , <b>2006</b> , 53, 1408-1412	1.7	6
103	Spectral characterization of a blue-enhanced silicon photodetector. <i>IEEE Transactions on Nuclear Science</i> , <b>2001</b> , 48, 1220-1224	1.7	6
102	Advances in modelling gold nanoparticle radiosensitization using new Geant4-DNA physics models. <i>Physics in Medicine and Biology</i> , <b>2020</b> , 65, 225017	3.8	6
101	Analytical Modelling and Simulation of Single and Double Cone Pinholes for Real-Time In-Body Tracking of an HDR Brachytherapy Source. <i>IEEE Transactions on Nuclear Science</i> , <b>2016</b> , 63, 1375-1385	1.7	6
100	Optimisation of output factor measurements using the Magic Plate 512 silicon dosimeter array in small megavoltage photon fields. <i>Journal of Physics: Conference Series</i> , <b>2017</b> , 777, 012022	0.3	5
99	Tissue equivalence of diamond for heavy charged particles. <i>Radiation Measurements</i> , <b>2019</b> , 122, 1-9	1.5	5

98	The effect of an air gap on a 2D monolithic silicon detector for relative dosimetry. <i>Journal of Instrumentation</i> , <b>2019</b> , 14, P06018-P06018	1	5
97	Multi-strip silicon sensors for beam array monitoring in micro-beam radiation therapy. <i>Physica Medica</i> , <b>2016</b> , 32, 1795-1800	2.7	5
96	Initial experiments with gel-water: towards MRI-linac dosimetry and imaging. <i>Australasian Physical and Engineering Sciences in Medicine</i> , <b>2016</b> , 39, 921-932	1.9	5
95	Characterisation of Silicon Diode Arrays for Dosimetry in External Beam Radiation Therapy. <i>IEEE Transactions on Nuclear Science</i> , <b>2016</b> , 63, 1808-1817	1.7	5
94	Real-time high spatial resolution dose verification in stereotactic motion adaptive arc radiotherapy. Journal of Applied Clinical Medical Physics, 2018, 19, 173-184	2.3	5
93	Structural Insights into the Dynamic Process of <b>2</b> -Adrenergic Receptor Signaling. <i>Cell</i> , <b>2015</b> , 162, 1431	56.2	5
92	Initial testing of a pixelated silicon detector prototype in proton therapy. <i>Journal of Applied Clinical Medical Physics</i> , <b>2017</b> , 18, 315-324	2.3	5
91	Pretreatment verification of high dose rate brachytherapy plans using the hagic phantomlystem. Biomedical Physics and Engineering Express, <b>2015</b> , 1, 025201	1.5	5
90	Ultra-Thin 3-D Detector: Charge Collection Characterization and Application for Microdosimetry. <i>IEEE Transactions on Nuclear Science</i> , <b>2014</b> , 61, 3472-3478	1.7	5
89	Characterisation of a <b>HE</b> particle telescope using the ANSTO heavy ion microprobe. <i>Nuclear Instruments &amp; Methods in Physics Research B</i> , <b>2007</b> , 260, 270-275	1.2	5
88	Application of semiconductors for dosimetry of fast-neutron therapy beam. <i>Radiation Protection Dosimetry</i> , <b>2004</b> , 110, 573-8	0.9	5
87	Validation of Geant4 for silicon microdosimetry in heavy ion therapy. <i>Physics in Medicine and Biology</i> , <b>2020</b> , 65, 045014	3.8	5
86	First extensive study of silver-doped lanthanum manganite nanoparticles for inducing selective chemotherapy and radio-toxicity enhancement. <i>Materials Science and Engineering C</i> , <b>2021</b> , 123, 111970	8.3	5
85	Synchrotron activation radiotherapy: Effects of dose-rate and energy spectra to tantalum oxide nanoparticles selective tumour cell radiosentization enhancement. <i>Journal of Physics: Conference Series</i> , <b>2017</b> , 777, 012011	0.3	4
84	Feasibility study of a novel multi-strip silicon detector for use in proton therapy range verification quality assurance. <i>Radiation Measurements</i> , <b>2017</b> , 106, 378-384	1.5	4
83	IBIC microscopy IThe powerful tool for testing micron ISized sensitive volumes in segmented radiation detectors used in synchrotron microbeam radiation and hadron therapies. <i>Nuclear Instruments &amp; Methods in Physics Research B</i> , <b>2019</b> , 458, 90-96	1.2	4
82	2D monolithic silicon-diode array detectors in megavoltage photon beams: does the fabrication technology matter? A medical physicist's perspective. <i>Australasian Physical and Engineering Sciences in Medicine</i> , <b>2019</b> , 42, 443-451	1.9	4
81	Radiosensitisation enhancement effect of BrUdR and Ta 2 O 5 NSPs in combination with 5-Fluorouracil antimetabolite in kilovoltage and megavoltage radiation. <i>Biomedical Physics and Engineering Express</i> , <b>2018</b> , 4, 034001	1.5	4

80	Measurement of multi-slice computed tomography dose profile with the Dose Magnifying Glass and the MOSkin radiation dosimeter. <i>Radiation Measurements</i> , <b>2013</b> , 55, 51-55	1.5	4
79	Development of a silicon diode detector for skin dosimetry in radiotherapy. <i>Medical Physics</i> , <b>2017</b> , 44, 5402-5412	4.4	4
78	Indirect radio-chemo-beta therapy: a targeted approach to increase biological efficiency of x-rays based on energy. <i>Physics in Medicine and Biology</i> , <b>2015</b> , 60, 7847-59	3.8	4
77	Monte Carlo modelling of a silicon strip detector for microbeam radiation therapy. <i>Radiation Measurements</i> , <b>2011</b> , 46, 1646-1649	1.5	4
76	Evaluation of a thin microstrip detector for high spatial resolution dosimetry. <i>Radiation Measurements</i> , <b>2011</b> , 46, 1643-1645	1.5	4
75	Evaluation of Silicon Detectors With Integrated JFET for Biomedical Applications. <i>IEEE Transactions on Nuclear Science</i> , <b>2009</b> , 56, 1051-1055	1.7	4
74	Measurement of Rectal Dose during HDR Brachytherapy using the new MOSkin Dosimeter. <i>Journal of Nuclear Science and Technology</i> , <b>2008</b> , 45, 481-484	1	4
73	2003,		4
<del>72</del>	Polymer Photodetectors for Printable, Flexible, and Fully Tissue Equivalent X-Ray Detection with Zero-Bias Operation and Ultrafast Temporal Responses. <i>Advanced Materials Technologies</i> , <b>2021</b> , 6, 2001	298	4
71	BrachyView: multiple seed position reconstruction and comparison with CT post-implant dosimetry. Journal of Instrumentation, <b>2016</b> , 11, P05002-P05002	1	4
7º	Evolution of Diamond based Microdosimetry. <i>Journal of Physics: Conference Series</i> , <b>2019</b> , 1154, 012007	0.3	3
69	Charge Collection in n-SOI Planar Microdosimeters. <i>IEEE Transactions on Nuclear Science</i> , <b>2013</b> , 60, 4289	- <b>4</b> <i>7</i> 96	3
68	Impact of a monolithic silicon detector operating in transmission mode on clinical photon beams. <i>Physica Medica</i> , <b>2017</b> , 43, 114-119	2.7	3
67	Thermal Modeling and Mechanical Integrity Based Design of a Heat Shield on a High Pressure Module Solar Steam Turbine Inner Casing With Focus on Lifetime <b>2014</b> ,		3
66	Review of four novel dosimeters developed for use in radiotherapy. <i>Journal of Physics: Conference Series</i> , <b>2013</b> , 444, 012008	0.3	3
65	Comparison of the New MOSkin Detector and Fiber Optic Dosimetry System for Radiotherapy. Journal of Nuclear Science and Technology, <b>2008</b> , 45, 518-521	1	3
64	CoALA-SPECT: a coded aperture laboratory animal SPECT system for pre clinical imaging		3
63	Determination of uranium in urine samples of fuel element fabrication workers by beta-delayed neutron counting. <i>Nuclear Instruments &amp; Methods in Physics Research</i> , <b>1984</b> , 223, 544-548		3

62	Characterization of 3-D-Mesa Silicon Single Strip Detectors for Use in Synchrotron Microbeam Radiation Therapy. <i>IEEE Transactions on Radiation and Plasma Medical Sciences</i> , <b>2020</b> , 4, 470-478	4.2	3
61	Fabrication and First Characterization of Silicon-Based Full 3-D Microdosimeters. <i>IEEE Transactions on Nuclear Science</i> , <b>2020</b> , 67, 2490-2500	1.7	3
60	Towards high spatial resolution tissue-equivalent dosimetry for microbeam radiation therapy using organic semiconductors. <i>Journal of Synchrotron Radiation</i> , <b>2021</b> , 28, 1444-1454	2.4	3
59	Study of the X-ray radiation interaction with a multislit collimator for the creation of microbeams in radiation therapy. <i>Journal of Synchrotron Radiation</i> , <b>2021</b> , 28, 392-403	2.4	3
58	Time-of-flight spectrometry of ultra-short, polyenergetic proton bunches. <i>Review of Scientific Instruments</i> , <b>2018</b> , 89, 123302	1.7	3
57	Applications of MO Skin dosimeters for quality assurance in gynecological HDR brachytherapy: An in-phantom feasibility study. <i>Radiation Measurements</i> , <b>2017</b> , 106, 399-404	1.5	2
56	New silicon microdosimetry probes for RBE and biological dose studies using stationary and movable targets in 12C ion therapy. <i>Journal of Physics: Conference Series</i> , <b>2017</b> , 777, 012019	0.3	2
55	Study of the correlation between rectal wall in vivo dosimetry performed with MOSkins and implant modification during TRUS-guided HDR prostate brachytherapy. <i>Radiation Measurements</i> , <b>2017</b> , 106, 385-390	1.5	2
54	INVESTIGATING VARIABLE RBE IN A 12C MINIBEAM FIELD WITH MICRODOSIMETRY AND GEANT4. <i>Radiation Protection Dosimetry</i> , <b>2019</b> , 183, 160-166	0.9	2
53	Dose verification of eye plaque brachytherapy using spectroscopic dosimetry. <i>Australasian Physical and Engineering Sciences in Medicine</i> , <b>2016</b> , 39, 627-32	1.9	2
52	Characterization of an <b>E</b> dgelessiDosimeter for Angular Independent Measurements in Advanced Radiotherapy Treatments. <i>IEEE Transactions on Radiation and Plasma Medical Sciences</i> , <b>2019</b> , 3, 579-587	4.2	2
51	Two-dimensional solid-state array detectors: A technique for in vivo dose verification in a variable effective area. <i>Journal of Applied Clinical Medical Physics</i> , <b>2019</b> , 20, 88-94	2.3	2
50	Panoptes: Calibration of a dosimetry system for eye brachytherapy. <i>Radiation Measurements</i> , <b>2014</b> , 71, 310-314	1.5	2
49	From HEP to medical radiation dosimetry IThe silicon strip detector dose magnifying glass. <i>Radiation Measurements</i> , <b>2011</b> , 46, 1615-1618	1.5	2
48	Preclinical studies using a prototype high-resolution PET system with Depth of Interaction 2011,		2
47	Application of an SOI Microdosimeter for Monitoring of Neutrons in Various Mixed Radiation Field Environments. <i>IEEE Transactions on Nuclear Science</i> , <b>2021</b> , 1-1	1.7	2
46	Medipix detectors in radiation therapy for advanced quality-assurance. <i>Radiation Measurements</i> , <b>2020</b> , 130, 106211	1.5	2
45	X-TREAM protocol for in vitro microbeam radiation therapy at the Australian Synchrotron. <i>Journal of Applied Physics</i> , <b>2021</b> , 129, 244902	2.5	2

44	Development of a large-area silicon Eparticle detector. Applied Radiation and Isotopes, 2014, 92, 96-101	1.7	1
43	Introducing dynamic dosimaging: potential applications for MRI-linac. <i>Journal of Physics: Conference Series</i> , <b>2017</b> , 777, 012007	0.3	1
42	The angular dependence of a two dimensional monolithic detector array for dosimetry in small radiation fields. <i>Journal of Physics: Conference Series</i> , <b>2017</b> , 777, 012020	0.3	1
41	Experimental studies with two novel silicon detectors for the development of time-of-flight spectrometry of laser-accelerated proton beams. <i>Journal of Physics: Conference Series</i> , <b>2017</b> , 777, 01201	8.3	1
40	Effect of scattered electrons on the Magic Platell ransmission array detector response. <i>Journal of Physics: Conference Series</i> , <b>2017</b> , 777, 012033	0.3	1
39	Characterization of a Large Area Thinned Silicon Microdosimeter for Space and Particle Therapy. <i>IEEE Transactions on Nuclear Science</i> , <b>2015</b> , 62, 3003-3011	1.7	1
38	A feasibility study of PETiPIX: an ultra high resolution small animal PET scanner. <i>Journal of Instrumentation</i> , <b>2013</b> , 8, P12004-P12004	1	1
37	Performance comparison of two compact multiplexed readouts with SensL's SPMArray4 for high-resolution detector module <b>2012</b> ,		1
36	Performance uniformity evaluation of two SensL's SiPM modules 2013,		1
35	Solid state diode Ilonization chamber method for measuring out-of-field neutron dose in proton therapy. <i>Radiation Measurements</i> , <b>2011</b> , 46, 1638-1642	1.5	1
34	Neutron Dosimeter Development Based on Medipix2. IEEE Transactions on Nuclear Science, 2010,	1.7	1
33	SiPM based detector module and digital data acquisition system for PET: Initial results 2009,		1
32	BrachyView: A novel in-body imaging system for prostate brachytherapy <b>2011</b> ,		1
31	Spatial resolution of a small cubic LYSO scintillator crystal detector with depth-of-interaction capabilities in a small animal PET scanner <b>2007</b> ,		1
30	Readout of LYSO using a new silicon photodetector for positron emission tomography 2003,		1
29	In vivo dosimetry and seed localization in prostate brachytherapy with permanent implants 2003,		1
28	Expression Templates for Dot Product Expressions. <i>Reliable Computing</i> , <b>1999</b> , 5, 69-80		1
27	Flexible Polymer X-ray Detectors with Non-fullerene Acceptors for Enhanced Stability: Toward Printable Tissue Equivalent Devices for Medical Applications. <i>ACS Applied Materials &amp; amp; Interfaces</i> , <b>2021</b> , 13, 57703-57712	9.5	1

26	Characterization of a novel large area microdosimeter system for low dose rate radiation environments. <i>Nuclear Instruments and Methods in Physics Research, Section A: Accelerators, Spectrometers, Detectors and Associated Equipment</i> , <b>2021</b> , 1002, 165238	1.2	1
25	Radiation Shielding Evaluation of Spacecraft Walls Against Heavy Ions Using Microdosimetry. <i>IEEE Transactions on Nuclear Science</i> , <b>2021</b> , 68, 897-905	1.7	1
24	Silicon 3D Microdosimeters for Advanced Quality Assurance in Particle Therapy. <i>Applied Sciences</i> (Switzerland), <b>2022</b> , 12, 328	2.6	1
23	Polo-like kinase 1 inhibitor BI6727 sensitizes 9L gliosarcoma cells to ionizing irradiation. <i>Biomedical Physics and Engineering Express</i> , <b>2019</b> , 5, 067003	1.5	0
22	In-field and out-of-field microdosimetric characterisation of a 62 MeV proton beam at CATANA. <i>Medical Physics</i> , <b>2021</b> , 48, 4532-4541	4.4	О
21	Incorporating Clinical Imaging into the Delivery of Microbeam Radiation Therapy. <i>Applied Sciences</i> (Switzerland), <b>2021</b> , 11, 9101	2.6	O
20	3D silicon microdosimetry and RBE study using 12C ion of different energies. <i>Journal of Physics: Conference Series</i> , <b>2017</b> , 777, 012037	0.3	
19	Abstract ID: 21 Simulation of synchrotron-based microbeam radiation therapy using Geant4. <i>Physica Medica</i> , <b>2017</b> , 42, 3-4	2.7	
18	Real-time in-vivo dosimetry for DaRT. Journal of Physics: Conference Series, 2020, 1662, 012031	0.3	
17	Electronic Current Distribution Calculation for a Ni-YSZ Solid Oxide Fuel Cell Anode. <i>Fuel Cells</i> , <b>2013</b> , 13, 298-303	2.9	
16	Innovative detectors for quality assurance dosimetry in SBRT of stationary and movable targets. Journal of Physics: Conference Series, 2017, 777, 012014	0.3	
15	Radiation response and basic dosimetric characterisation of the Magic Plate Journal of Physics: Conference Series, 2017, 777, 012034	0.3	
14	Effiziente Komponenten fil Wissenschaftliches Rechnen. ZAMM Zeitschrift Fur Angewandte Mathematik Und Mechanik, <b>1998</b> , 78, 993-994	1	
13	A Dual Scintillator - Dual Silicon Photodiode Detector Module for Intraoperative GammaBeta Probe and Portable Anti-Compton Spectrometer. <i>Journal of Nuclear Science and Technology</i> , <b>2008</b> , 45, 458-461	1	
12	Urethral Alarm Probe for Permanent Prostate Implants. <i>Journal of Nuclear Science and Technology</i> , <b>2008</b> , 45, 455-457	1	
11	Charge accumulation over a region of electrical multistability in a double barrier structure. <i>Surface Science</i> , <b>1996</b> , 361-362, 226-230	1.8	
10	Evaluation of silicon strip detectors in transmission mode for online beam monitoring in microbeam radiation therapy at the Australian Synchrotron <i>Journal of Synchrotron Radiation</i> , <b>2022</b> , 29, 125-137	2.4	
9	Objektorientierte Entwurfsmuster fildie Wiederverwendung numerischer Softwarekomponenten <b>1996</b> , 51-62		

#### LIST OF PUBLICATIONS

8 Plasmon Satellites of Resonantly Tunnelling Holes **1996**, 535-537

7	Expression Concepts in Scientific Computing <b>1999</b> , 119-130	
6	Multiaspect Interval Types <b>1999</b> , 365-372	
5	TH-A-137-03: Application of the Dose Magnifying Glass to Proton Radiosurgery. <i>Medical Physics</i> , <b>2013</b> , 40, 517-517	4.4
4	BrachyView: initial preclinical results for a real-time in-body HDR PBT source tracking system with simultaneous TRUS image fusion. <i>Physics in Medicine and Biology</i> , <b>2019</b> , 64, 085002	3.8
3	Measuring the excitations in a new S = 1/2 quantum spin chain material with competing interactions. <i>Journal of Physics Condensed Matter</i> , <b>2018</b> , 30, 215602	1.8
2	Characterisation of MOSFET dosimeters for alpha particle therapy. <i>IEEE Transactions on Nuclear Science</i> , <b>2022</b> , 1-1	1.7
1	The dynamic behaviour of sunscreens under in-service conditions <i>Journal of Photochemistry and Photobiology B: Biology</i> , <b>2022</b> , 230, 112435	6.7