

Michael L F Lerch

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.

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	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> , 2022 , 29, 125-137	2.4	
240	Characterisation of MOSFET dosimeters for alpha particle therapy. <i>IEEE Transactions on Nuclear Science</i> , 2022 , 1-1	1.7	
239	The dynamic behaviour of sunscreens under in-service conditions.. <i>Journal of Photochemistry and Photobiology B: Biology</i> , 2022 , 230, 112435	6.7	
238	Silicon 3D Microdosimeters for Advanced Quality Assurance in Particle Therapy. <i>Applied Sciences (Switzerland)</i> , 2022 , 12, 328	2.6	1
237	Flexible Polymer X-ray Detectors with Non-fullerene Acceptors for Enhanced Stability: Toward Printable Tissue Equivalent Devices for Medical Applications. <i>ACS Applied Materials & Interfaces</i> , 2021 , 13, 57703-57712	9.5	1
236	Application of an SOI Microdosimeter for Monitoring of Neutrons in Various Mixed Radiation Field Environments. <i>IEEE Transactions on Nuclear Science</i> , 2021 , 1-1	1.7	2
235	First extensive study of silver-doped lanthanum manganite nanoparticles for inducing selective chemotherapy and radio-toxicity enhancement. <i>Materials Science and Engineering C</i> , 2021 , 123, 111970	8.3	5
234	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> , 2021 , 6, 2001298	6.8	4
233	In-field and out-of-field microdosimetric characterisation of a 62 MeV proton beam at CATANA. <i>Medical Physics</i> , 2021 , 48, 4532-4541	4.4	0
232	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> , 2021 , 1002, 165238	1.2	1
231	X-TREAM protocol for in vitro microbeam radiation therapy at the Australian Synchrotron. <i>Journal of Applied Physics</i> , 2021 , 129, 244902	2.5	2
230	Towards high spatial resolution tissue-equivalent dosimetry for microbeam radiation therapy using organic semiconductors. <i>Journal of Synchrotron Radiation</i> , 2021 , 28, 1444-1454	2.4	3
229	Radiation Shielding Evaluation of Spacecraft Walls Against Heavy Ions Using Microdosimetry. <i>IEEE Transactions on Nuclear Science</i> , 2021 , 68, 897-905	1.7	1
228	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> , 2021 , 28, 392-403	2.4	3
227	Incorporating Clinical Imaging into the Delivery of Microbeam Radiation Therapy. <i>Applied Sciences (Switzerland)</i> , 2021 , 11, 9101	2.6	0
226	Real-time in-vivo dosimetry for DaRT. <i>Journal of Physics: Conference Series</i> , 2020 , 1662, 012031	0.3	
225	Characterization of an organic semiconductor diode for dosimetry in radiotherapy. <i>Medical Physics</i> , 2020 , 47, 3658-3668	4.4	6

224	Toward personalized synchrotron microbeam radiation therapy. <i>Scientific Reports</i> , 2020 , 10, 8833	4.9	11
223	Characterization of a plastic dosimeter based on organic semiconductor photodiodes and scintillator. <i>Physics and Imaging in Radiation Oncology</i> , 2020 , 14, 48-52	3.1	6
222	Semiconductor dosimetry in modern external-beam radiation therapy. <i>Physics in Medicine and Biology</i> , 2020 , 65, 16TR01	3.8	13
221	On the Combined Effect of Silicon Oxide Thickness and Boron Implantation Under the Gate in MOSFET Dosimeters. <i>IEEE Transactions on Nuclear Science</i> , 2020 , 67, 534-540	1.7	8
220	ZnO/CeO ₂ nanocomposite with low photocatalytic activity as efficient UV filters. <i>Journal of Materials Science</i> , 2020 , 55, 6834-6847	4.3	20
219	A Solid-State Microdosimeter for Dose and Radiation Quality Monitoring for Astronauts in Space. <i>IEEE Transactions on Nuclear Science</i> , 2020 , 67, 169-174	1.7	7
218	Advances in modelling gold nanoparticle radiosensitization using new Geant4-DNA physics models. <i>Physics in Medicine and Biology</i> , 2020 , 65, 225017	3.8	6
217	First experimental measurement of the effect of cardio-synchronous brain motion on the dose distribution during microbeam radiation therapy. <i>Medical Physics</i> , 2020 , 47, 213-222	4.4	7
216	Validation of Geant4 for silicon microdosimetry in heavy ion therapy. <i>Physics in Medicine and Biology</i> , 2020 , 65, 045014	3.8	5
215	Medipix detectors in radiation therapy for advanced quality-assurance. <i>Radiation Measurements</i> , 2020 , 130, 106211	1.5	2
214	Technical advances in x-ray microbeam radiation therapy. <i>Physics in Medicine and Biology</i> , 2020 , 65, 02TR018	3.8	15
213	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> , 2020 , 67, 146-153	1.7	7
212	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> , 2020 , 4, 470-478	4.2	3
211	Evaluation of the PTW microDiamond in edge-on orientation for dosimetry in small fields. <i>Journal of Applied Clinical Medical Physics</i> , 2020 , 21, 278-288	2.3	7
210	Fabrication and First Characterization of Silicon-Based Full 3-D Microdosimeters. <i>IEEE Transactions on Nuclear Science</i> , 2020 , 67, 2490-2500	1.7	3
209	Na-doped ZnO UV filters with reduced photocatalytic activity for sunscreen applications. <i>Journal of Materials Science</i> , 2020 , 55, 2772-2786	4.3	9
208	IBIC microscopy – The powerful tool for testing micron sized sensitive volumes in segmented radiation detectors used in synchrotron microbeam radiation and hadron therapies. <i>Nuclear Instruments & Methods in Physics Research B</i> , 2019 , 458, 90-96	1.2	4
207	Tissue equivalence of diamond for heavy charged particles. <i>Radiation Measurements</i> , 2019 , 122, 1-9	1.5	5

206	INVESTIGATING VARIABLE RBE IN A 12C MINIBEAM FIELD WITH MICRODOSIMETRY AND GEANT4. <i>Radiation Protection Dosimetry</i> , 2019 , 183, 160-166	0.9	2
205	High spatial resolution scintillator dosimetry of synchrotron microbeams. <i>Scientific Reports</i> , 2019 , 9, 6873	4.9	13
204	The effect of an air gap on a 2D monolithic silicon detector for relative dosimetry. <i>Journal of Instrumentation</i> , 2019 , 14, P06018-P06018	1	5
203	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> , 2019 , 49, 122-139	5.7	11
202	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> , 2019 , 42, 443-451	1.9	4
201	Evolution of Diamond based Microdosimetry. <i>Journal of Physics: Conference Series</i> , 2019 , 1154, 012007	0.3	3
200	Characterization of an Edgeless Dosimeter for Angular Independent Measurements in Advanced Radiotherapy Treatments. <i>IEEE Transactions on Radiation and Plasma Medical Sciences</i> , 2019 , 3, 579-587	4.2	2
199	Experimental characterization of magnetically focused electron contamination at the surface of a high-field inline MRI-linac. <i>Medical Physics</i> , 2019 , 46, 5780-5789	4.4	8
198	Polo-like kinase 1 inhibitor BI6727 sensitizes 9L gliosarcoma cells to ionizing irradiation. <i>Biomedical Physics and Engineering Express</i> , 2019 , 5, 067003	1.5	0
197	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> , 2019 , 20, 88-94	2.3	2
196	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> , 2019 , 64, 085002	3.8	
195	Validation of a Monte Carlo simulation for Microbeam Radiation Therapy on the Imaging and Medical Beamline at the Australian Synchrotron. <i>Scientific Reports</i> , 2019 , 9, 17696	4.9	7
194	SOI Thin Microdosimeter Detectors for Low-Energy Ions and Radiation Damage Studies. <i>IEEE Transactions on Nuclear Science</i> , 2019 , 66, 320-326	1.7	8
193	Synthesis of methotrexate-loaded tantalum pentoxide-poly(acrylic acid) nanoparticles for controlled drug release applications. <i>Journal of Colloid and Interface Science</i> , 2019 , 538, 286-296	9.3	24
192	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> , 2018 , 65, 467-472	1.7	19
191	Characterisation and evaluation of a PNP strip detector for synchrotron microbeam radiation therapy. <i>Biomedical Physics and Engineering Express</i> , 2018 , 4, 044002	1.5	13
190	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> , 2018 , 45, 2299-2308	4.4	22
189	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> , 2018 , 4, 024001	1.5	36

188	High spatial resolution microdosimetry with monolithic E-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</i> , 2018 , 887, 70-80	1.2	8
187	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> , 2018 , 4, 034001	1.5	4
186	Semiconductor real-time quality assurance dosimetry in brachytherapy. <i>Brachytherapy</i> , 2018 , 17, 133-145.	4	11
185	Synchrotron X-ray microbeam dosimetry with a 20 micrometre resolution scintillator fibre-optic dosimeter. <i>Journal of Synchrotron Radiation</i> , 2018 , 25, 826-832	2.4	12
184	In-field and out-of-file application in 12C ion therapy using fully 3D silicon microdosimeters. <i>Radiation Measurements</i> , 2018 , 115, 55-59	1.5	11
183	Thulium Oxide Nanoparticles: A new candidate for image-guided radiotherapy. <i>Biomedical Physics and Engineering Express</i> , 2018 , 4, 044001	1.5	17
182	Real-time high spatial resolution dose verification in stereotactic motion adaptive arc radiotherapy. <i>Journal of Applied Clinical Medical Physics</i> , 2018 , 19, 173-184	2.3	5
181	First in vitro evidence of modulated electro-hyperthermia treatment performance in combination with megavoltage radiation by clonogenic assay. <i>Scientific Reports</i> , 2018 , 8, 16608	4.9	10
180	Time-of-flight spectrometry of ultra-short, polyenergetic proton bunches. <i>Review of Scientific Instruments</i> , 2018 , 89, 123302	1.7	3
179	High toxicity of Bi(OH) and BiO nanoparticles towards malignant 9L and MCF-7 cells. <i>Materials Science and Engineering C</i> , 2018 , 93, 958-967	8.3	10
178	Measuring the excitations in a new $S = 1/2$ quantum spin chain material with competing interactions. <i>Journal of Physics Condensed Matter</i> , 2018 , 30, 215602	1.8	
177	TiO ₂ /(BiO) ₂ CO ₃ nanocomposites for ultraviolet filtration with reduced photocatalytic activity. <i>Journal of Materials Chemistry C</i> , 2018 , 6, 5639-5650	7.1	11
176	"Characterization of ELEKTA SRS cone collimator using high spatial resolution monolithic silicon detector array". <i>Journal of Applied Clinical Medical Physics</i> , 2018 , 19, 114-124	2.3	12
175	Applications of MO Skin dosimeters for quality assurance in gynecological HDR brachytherapy: An in-phantom feasibility study. <i>Radiation Measurements</i> , 2017 , 106, 399-404	1.5	2
174	X-Tream dosimetry of highly brilliant X-ray microbeams in the MRT hutch of the Australian Synchrotron. <i>Radiation Measurements</i> , 2017 , 106, 405-411	1.5	18
173	Correction factors to convert microdosimetry measurements in silicon to tissue in C ion therapy. <i>Physics in Medicine and Biology</i> , 2017 , 62, 2055-2069	3.8	41
172	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> , 2017 , 777, 012019	0.3	2
171	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> , 2017 , 106, 391-398	1.5	8

170	A 3D lateral electrode structure for diamond based microdosimetry. <i>Applied Physics Letters</i> , 2017 , 110, 013503	3.4	12
169	3D silicon microdosimetry and RBE study using 12C ion of different energies. <i>Journal of Physics: Conference Series</i> , 2017 , 777, 012037	0.3	
168	RBE study using solid state microdosimetry in heavy ion therapy. <i>Radiation Measurements</i> , 2017 , 106, 512-518	1.5	13
167	Synchrotron activation radiotherapy: Effects of dose-rate and energy spectra to tantalum oxide nanoparticles selective tumour cell radiosensitization enhancement. <i>Journal of Physics: Conference Series</i> , 2017 , 777, 012011	0.3	4
166	Clinical application of MOSkin dosimeters to rectal wall in vivo dosimetry in gynecological HDR brachytherapy. <i>Physica Medica</i> , 2017 , 41, 5-12	2.7	19
165	High-resolution fiber-optic dosimeters for microbeam radiation therapy. <i>Medical Physics</i> , 2017 , 44, 1965-1968	4.968	14
164	BrachyView: Combining LDR seed positions with transrectal ultrasound imaging in a prostate gel phantom. <i>Physica Medica</i> , 2017 , 34, 55-64	2.7	10
163	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> , 2017 , 106, 385-390	1.5	2
162	Thermoluminescence dose response of photon irradiated NaCl: Unified interaction model analysis of the dependence of the supralinearity on photon energy. <i>Radiation Measurements</i> , 2017 , 106, 455-458	1.5	6
161	Feasibility study of a novel multi-strip silicon detector for use in proton therapy range verification quality assurance. <i>Radiation Measurements</i> , 2017 , 106, 378-384	1.5	4
160	A 2D silicon detector array for quality assurance in small field dosimetry: DUO. <i>Medical Physics</i> , 2017 , 44, 628-636	4.4	20
159	Abstract ID: 21 Simulation of synchrotron-based microbeam radiation therapy using Geant4. <i>Physica Medica</i> , 2017 , 42, 3-4	2.7	
158	X-ray microbeam measurements with a high resolution scintillator fibre-optic dosimeter. <i>Scientific Reports</i> , 2017 , 7, 12450	4.9	15
157	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> , 2017 , 777, 012022	0.3	5
156	Microdosimetric measurements of a clinical proton beam with micrometer-sized solid-state detector. <i>Medical Physics</i> , 2017 , 44, 6029-6037	4.4	16
155	Characterization of proton pencil beam scanning and passive beam using a high spatial resolution solid-state microdosimeter. <i>Medical Physics</i> , 2017 , 44, 6085-6095	4.4	33
154	Introducing dynamic dosimaging: potential applications for MRI-linac. <i>Journal of Physics: Conference Series</i> , 2017 , 777, 012007	0.3	1
153	Initial testing of a pixelated silicon detector prototype in proton therapy. <i>Journal of Applied Clinical Medical Physics</i> , 2017 , 18, 315-324	2.3	5

152	Technical Note: Angular dependence of a 2D monolithic silicon diode array for small field dosimetry. <i>Medical Physics</i> , 2017 , 44, 4313-4321	4.4	9
151	Comparison of phantom materials for use in quality assurance of microbeam radiation therapy. <i>Journal of Synchrotron Radiation</i> , 2017 , 24, 866-876	2.4	13
150	Nanostructures, concentrations and energies: an ideal equation to extend therapeutic efficiency on radioresistant 9L tumor cells using Ta_2O_5 ceramic nanostructured particles. <i>Biomedical Physics and Engineering Express</i> , 2017 , 3, 015018	1.5	7
149	Development of a silicon diode detector for skin dosimetry in radiotherapy. <i>Medical Physics</i> , 2017 , 44, 5402-5412	4.4	4
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> , 2017 , 128, 114-119	1.7	11
147	The angular dependence of a two dimensional monolithic detector array for dosimetry in small radiation fields. <i>Journal of Physics: Conference Series</i> , 2017 , 777, 012020	0.3	1
146	New 3D Silicon detectors for dosimetry in Microbeam Radiation Therapy. <i>Journal of Physics: Conference Series</i> , 2017 , 777, 012009	0.3	7
145	Impact of a monolithic silicon detector operating in transmission mode on clinical photon beams. <i>Physica Medica</i> , 2017 , 43, 114-119	2.7	3
144	Innovative detectors for quality assurance dosimetry in SBRT of stationary and movable targets. <i>Journal of Physics: Conference Series</i> , 2017 , 777, 012014	0.3	
143	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> , 2017 , 777, 012018	0.3	1
142	Effect of scattered electrons on the Magic Plate transmission array detector response. <i>Journal of Physics: Conference Series</i> , 2017 , 777, 012033	0.3	1
141	Radiation response and basic dosimetric characterisation of the Magic Plate. <i>Journal of Physics: Conference Series</i> , 2017 , 777, 012034	0.3	
140	Multi-strip silicon sensors for beam array monitoring in micro-beam radiation therapy. <i>Physica Medica</i> , 2016 , 32, 1795-1800	2.7	5
139	Initial experiments with gel-water: towards MRI-linac dosimetry and imaging. <i>Australasian Physical and Engineering Sciences in Medicine</i> , 2016 , 39, 921-932	1.9	5
138	Dose verification of eye plaque brachytherapy using spectroscopic dosimetry. <i>Australasian Physical and Engineering Sciences in Medicine</i> , 2016 , 39, 627-32	1.9	2
137	Optimizing dose enhancement with TaO nanoparticles for synchrotron microbeam activated radiation therapy. <i>Physica Medica</i> , 2016 , 32, 1852-1861	2.7	16
136	Characterisation of Silicon Diode Arrays for Dosimetry in External Beam Radiation Therapy. <i>IEEE Transactions on Nuclear Science</i> , 2016 , 63, 1808-1817	1.7	5
135	Synthesis-Dependent Surface Defects and Morphology of Hematite Nanoparticles and Their Effect on Cytotoxicity in Vitro. <i>ACS Applied Materials & Interfaces</i> , 2016 , 8, 5867-76	9.5	35

134	Real-time eye lens dose monitoring during cerebral angiography procedures. <i>European Radiology</i> , 2016 , 26, 79-86	8	15
133	X-Tream quality assurance in synchrotron X-ray microbeam radiation therapy. <i>Journal of Synchrotron Radiation</i> , 2016 , 23, 1180-90	2.4	17
132	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> , 2016 , 63, 1375-1385	1.7	6
131	Beam perturbation characteristics of a 2D transmission silicon diode array, Magic Plate. <i>Journal of Applied Clinical Medical Physics</i> , 2016 , 17, 85-98	2.3	7
130	BrachyView: multiple seed position reconstruction and comparison with CT post-implant dosimetry. <i>Journal of Instrumentation</i> , 2016 , 11, P05002-P05002	1	4
129	Local dose enhancement of proton therapy by ceramic oxide nanoparticles investigated with Geant4 simulations. <i>Physica Medica</i> , 2016 , 32, 1584-1593	2.7	23
128	First proof of bismuth oxide nanoparticles as efficient radiosensitisers on highly radioresistant cancer cells. <i>Physica Medica</i> , 2016 , 32, 1444-1452	2.7	37
127	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> , 2016 , 118, 148-53	5.3	27
126	Study of the effect of ceramic TaO nanoparticle distribution on cellular dose enhancement in a kilovoltage photon field. <i>Physica Medica</i> , 2016 , 32, 1216-1224	2.7	16
125	Absorbed dose-to-water protocol applied to synchrotron-generated x-rays at very high dose rates. <i>Physics in Medicine and Biology</i> , 2016 , 61, N349-61	3.8	27
124	3D-Mesa BridgeSilicon Microdosimeter: Charge Collection Study and Application to RBE Studies in ^{12}C Radiation Therapy. <i>IEEE Transactions on Nuclear Science</i> , 2015 , 62, 504-511	1.7	30
123	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> , 2015 , 60, 6949-73	3.8	6
122	Structural Insights into the Dynamic Process of β -Adrenergic Receptor Signaling. <i>Cell</i> , 2015 , 162, 1431	56.2	5
121	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> , 2015 , 60, 7847-59	3.8	4
120	Angular independent silicon detector for dosimetry in external beam radiotherapy. <i>Medical Physics</i> , 2015 , 42, 4708-18	4.4	11
119	The evaluation of a 2D diode array in Magic phantom for use in high dose rate brachytherapy pretreatment quality assurance. <i>Medical Physics</i> , 2015 , 42, 663-73	4.4	17
118	BrachyView, a novel in-body imaging system for HDR prostate brachytherapy: Experimental evaluation. <i>Medical Physics</i> , 2015 , 42, 7098-107	4.4	17
117	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> , 2015 , 10, P09019-P09019	1	6

116	Thin silicon strip detectors for beam monitoring in Micro-beam Radiation Therapy. <i>Journal of Instrumentation</i> , 2015 , 10, P11007-P11007	1	11
115	Pretreatment verification of high dose rate brachytherapy plans using the Magic phantom system. <i>Biomedical Physics and Engineering Express</i> , 2015 , 1, 025201	1.5	5
114	Medical physics aspects of the synchrotron radiation therapies: Microbeam radiation therapy (MRT) and synchrotron stereotactic radiotherapy (SSRT). <i>Physica Medica</i> , 2015 , 31, 568-83	2.7	71
113	MagicPlate-512: A 2D silicon detector array for quality assurance of stereotactic motion adaptive radiotherapy. <i>Medical Physics</i> , 2015 , 42, 2992-3004	4.4	20
112	3D Silicon Microdosimetry and RBE Study Using ^{12}C Ion of Different Energies. <i>IEEE Transactions on Nuclear Science</i> , 2015 , 62, 3027-3033	1.7	28
111	Characterization of a Large Area Thinned Silicon Microdosimeter for Space and Particle Therapy. <i>IEEE Transactions on Nuclear Science</i> , 2015 , 62, 3003-3011	1.7	1
110	Influence of polarization and a source model for dose calculation in MRT. <i>Medical Physics</i> , 2014 , 41, 041703	1.4	20
109	Development of a large-area silicon particle detector. <i>Applied Radiation and Isotopes</i> , 2014 , 92, 96-101	1.7	1
108	3D Radiation Detectors: Charge Collection Characterisation and Applicability of Technology for Microdosimetry. <i>IEEE Transactions on Nuclear Science</i> , 2014 , 61, 1537-1543	1.7	11
107	A Novel Silicon Microdosimeter Using 3D Sensitive Volumes: Modeling the Response in Neutron Fields Typical of Aviation. <i>IEEE Transactions on Nuclear Science</i> , 2014 , 61, 1552-1557	1.7	10
106	Tissue Equivalence Study of a Novel Diamond-Based Microdosimeter for Galactic Cosmic Rays and Solar Particle Events. <i>IEEE Transactions on Nuclear Science</i> , 2014 , 61, 1544-1551	1.7	10
105	Synthesis of potential theranostic system consisting of methotrexate-immobilized (3-aminopropyl)trimethoxysilane coated Bi ₂ O ₃ nanoparticles for cancer treatment. <i>RSC Advances</i> , 2014 , 4, 24412	3.7	33
104	Engineering of Bismuth Oxide Nanoparticles to Induce Differential Biochemical Activity in Malignant and Nonmalignant Cells. <i>Particle and Particle Systems Characterization</i> , 2014 , 31, 960-964	3.1	11
103	Direct and pulsed current annealing of p-MOSFET based dosimeter: the "MOSkin". <i>Australasian Physical and Engineering Sciences in Medicine</i> , 2014 , 37, 311-9	1.9	11
102	Panoptes: Calibration of a dosimetry system for eye brachytherapy. <i>Radiation Measurements</i> , 2014 , 71, 310-314	1.5	2
101	Highly porous hematite nanorods prepared via direct spray precipitation method. <i>Materials Letters</i> , 2014 , 117, 279-282	3.3	15
100	Online in vivo dosimetry in high dose rate prostate brachytherapy with MOSkin detectors: in phantom feasibility study. <i>Applied Radiation and Isotopes</i> , 2014 , 83 Pt C, 222-6	1.7	22
99	Multichannel Data Acquisition System comparison for Quality Assurance in external beam radiation therapy. <i>Radiation Measurements</i> , 2014 , 71, 338-341	1.5	26

98	TRUS-probe integrated MOSkin detectors for rectal wall <i>in vivo</i> dosimetry in HDR brachytherapy: In phantom feasibility study. <i>Radiation Measurements</i> , 2014 , 71, 379-383	1.5	12
97	A comparative analysis of multichannel Data Acquisition Systems for quality assurance in external beam radiation therapy. <i>Journal of Instrumentation</i> , 2014 , 9, T06003-T06003	1	14
96	Benchmarking and validation of a Geant4-SHADOW Monte Carlo simulation for dose calculations in microbeam radiation therapy. <i>Journal of Synchrotron Radiation</i> , 2014 , 21, 518-28	2.4	23
95	Radiation dose enhancement at tissue-tungsten interfaces in HDR brachytherapy. <i>Physics in Medicine and Biology</i> , 2014 , 59, 6659	3.8	9
94	Ultra-Thin 3-D Detector: Charge Collection Characterization and Application for Microdosimetry. <i>IEEE Transactions on Nuclear Science</i> , 2014 , 61, 3472-3478	1.7	5
93	Characterization of an Alternative Diamond Based Microdosimeter Prototype. <i>IEEE Transactions on Nuclear Science</i> , 2014 , 61, 3479-3484	1.7	6
92	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 2014 ,		3
91	High-Z Nanostructured Ceramics in Radiotherapy: First Evidence of Ta ₂ O ₅ -Induced Dose Enhancement on Radioresistant Cancer Cells in an MV Photon Field. <i>Particle and Particle Systems Characterization</i> , 2014 , 31, 500-505	3.1	33
90	A two dimensional silicon detectors array for quality assurance in stereotactic radiotherapy: MagicPlate-512. <i>Medical Physics</i> , 2014 , 41, 091707	4.4	41
89	Electronic Current Distribution Calculation for a Ni-YSZ Solid Oxide Fuel Cell Anode. <i>Fuel Cells</i> , 2013 , 13, 298-303	2.9	
88	. <i>IEEE Transactions on Nuclear Science</i> , 2013 , 60, 4705-4712	1.7	16
87	BrachyView, a novel inbody imaging system for HDR prostate brachytherapy: design and Monte Carlo feasibility study. <i>Medical Physics</i> , 2013 , 40, 071715	4.4	12
86	Charge Collection in n-SOI Planar Microdosimeters. <i>IEEE Transactions on Nuclear Science</i> , 2013 , 60, 4289-4296	1.7	3
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