Michael L F Lerch

List of Publications by Year
in descending order

272 papers	3,892 citations	126907 33 h-index	233421 45 g-index
274 all docs	274 docs citations	274 times ranked	2986 citing authors

#	Article	IF	Citations
1	Application of an SOI Microdosimeter for Monitoring of Neutrons in Various Mixed Radiation Field Environments. IEEE Transactions on Nuclear Science, 2022, 69, 491-500.	2.0	2
2	Evaluation of silicon strip detectors in transmission mode for online beam monitoring in microbeam radiation therapy at the Australian Synchrotron. Journal of Synchrotron Radiation, 2022, 29, 125-137.	2.4	1
3	Characterization of MOSFET Dosimeters for Alpha Particle Therapy. IEEE Transactions on Nuclear Science, 2022, 69, 925-931.	2.0	0
4	Fast and accurate dose predictions for novel radiotherapy treatments in heterogeneous phantoms using conditional 3Dâ€UNet generative adversarial networks. Medical Physics, 2022, 49, 3389-3404.	3.0	9
5	The dynamic behaviour of sunscreens under in-service conditions.. Journal of Photochemistry and Photobiology B: Biology, 2022, 230, 112435.	3.8	0
6	Silicon 3D Microdosimeters for Advanced Quality Assurance in Particle Therapy. Applied Sciences (Switzerland), 2022, 12, 328.	2.5	9
7	Microbeam Irradiation of the Beating Rodent Heart: An Ex Vivo Study of Acute and Subacute Effects on Cardiac Function. International Journal of Radiation Oncology Biology Physics, 2022, 114, 143-152.	0.8	2
8	Radiation Shielding Evaluation of Spacecraft Walls Against Heavy Ions Using Microdosimetry. IEEE Transactions on Nuclear Science, 2021, 68, 897-905.	2.0	11
9	Study of the X-ray radiation interaction with a multislit collimator for the creation of microbeams in radiation therapy. Journal of Synchrotron Radiation, 2021, 28, 392-403.	2.4	8
10	First extensive study of silver-doped lanthanum manganite nanoparticles for inducing selective chemotherapy and radio-toxicity enhancement. Materials Science and Engineering C, 2021, 123, 111970.	7.3	7
11	Polymer Photodetectors for Printable, Flexible, and Fully Tissue Equivalent Xâ€Ray Detection with Zeroâ€Bias Operation and Ultrafast Temporal Responses. Advanced Materials Technologies, 2021, 6, 2001298.	5.8	15
12	Inâ€field and outâ€ofâ€field microdosimetric characterisation of a 62 MeV proton beam at CATANA. Medical Physics, 2021, 48, 4532-4541.	3.0	4
13	Characterization of a novel large area microdosimeter system for low dose rate radiation environments. Nuclear Instruments and Methods in Physics Research, Section A: Accelerators, Spectrometers, Detectors and Associated Equipment, 2021, 1002, 165238.	1.6	3
14	X-TREAM protocol for in vitro microbeam radiation therapy at the Australian Synchrotron. Journal of Applied Physics, 2021, 129, .	2.5	5
15	Towards high spatial resolution tissue-equivalent dosimetry for microbeam radiation therapy using organic semiconductors. Journal of Synchrotron Radiation, 2021, 28, 1444-1454.	2.4	7
16	Incorporating Clinical Imaging into the Delivery of Microbeam Radiation Therapy. Applied Sciences (Switzerland), 2021, 11, 9101.	2.5	4
17	Monte Carlo Studies for Microbeam Radiation Therapy. , 2021, , 161-172.		0
18	Flexible Polymer X-ray Detectors with Non-fullerene Acceptors for Enhanced Stability: Toward Printable Tissue Equivalent Devices for Medical Applications. ACS Applied Materials & Interfaces, 2021, 13, 57703-57712.	8.0	12

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19	Na-doped ZnO UV filters with reduced photocatalytic activity for sunscreen applications. Journal of Materials Science, 2020, 55, 2772-2786.	3.7	19
20	First experimental measurement of the effect of cardioâ€synchronous brain motion on the dose distribution during microbeam radiation therapy. Medical Physics, 2020, 47, 213-222.	3.0	14
21	Validation of Geant4 for silicon microdosimetry in heavy ion therapy. Physics in Medicine and Biology, 2020, 65, 045014.	3.0	11
22	Medipix detectors in radiation therapy for advanced quality-assurance. Radiation Measurements, 2020, 130, 106211.	1.4	12
23	Technical advances in x-ray microbeam radiation therapy. Physics in Medicine and Biology, 2020, 65, 02TR01.	3.0	38
24	SOI Thin Microdosimeters for High LET Single-Event Upset Studies in Fe, O, Xe, and Cocktail Ion Beam Fields. IEEE Transactions on Nuclear Science, 2020, 67, 146-153.	2.0	11
25	Characterization of 3-D-Mesa Silicon Single Strip Detectors for Use in Synchrotron Microbeam Radiation Therapy. IEEE Transactions on Radiation and Plasma Medical Sciences, 2020, 4, 470-478.	3.7	3
26	Evaluation of the PTW microDiamond in edgeâ€on orientation for dosimetry in small fields. Journal of Applied Clinical Medical Physics, 2020, 21, 278-288.	1.9	19
27	Fabrication and First Characterization of Silicon-Based Full 3-D Microdosimeters. IEEE Transactions on Nuclear Science, 2020, 67, 2490-2500.	2.0	5
28	Real-time in-vivo dosimetry for DaRT. Journal of Physics: Conference Series, 2020, 1662, 012031.	0.4	0
29	Characterization of an organic semiconductor diode for dosimetry in radiotherapy. Medical Physics, 2020, 47, 3658-3668.	3.0	15
30	Toward personalized synchrotron microbeam radiation therapy. Scientific Reports, 2020, 10, 8833.	3.3	31
31	Characterization of a plastic dosimeter based on organic semiconductor photodiodes and scintillator. Physics and Imaging in Radiation Oncology, 2020, 14, 48-52.	2.9	13
32	Semiconductor dosimetry in modern external-beam radiation therapy. Physics in Medicine and Biology, 2020, 65, 16TR01.	3.0	23
33	On the Combined Effect of Silicon Oxide Thickness and Boron Implantation Under the Gate in MOSFET Dosimeters. IEEE Transactions on Nuclear Science, 2020, 67, 534-540.	2.0	9
34	ZnO/CeO2 nanocomposite with low photocatalytic activity as efficient UV filters. Journal of Materials Science, 2020, 55, 6834-6847.	3.7	31
35	A Solid-State Microdosimeter for Dose and Radiation Quality Monitoring for Astronauts in Space. IEEE Transactions on Nuclear Science, 2020, 67, 169-174.	2.0	9
36	Advances in modelling gold nanoparticle radiosensitization using new Geant4-DNA physics models. Physics in Medicine and Biology, 2020, 65, 225017.	3.0	18

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37	Evolution of Diamond based Microdosimetry. Journal of Physics: Conference Series, 2019, 1154, 012007.	0.4	6
38	Characterization of an â€œEdgelessâ€•Dosimeter for Angular Independent Measurements in Advanced Radiotherapy Treatments. IEEE Transactions on Radiation and Plasma Medical Sciences, 2019, 3, 579-587.	3.7	3
39	EP-1753 A dual detector system for in-vivo dosimetry: transit dose verification and error identification. Radiotherapy and Oncology, 2019, 133, S945-S946.	0.6	0
40	Experimental characterization of magnetically focused electron contamination at the surface of a highâ€field inline MRIâ€linac. Medical Physics, 2019, 46, 5780-5789.	3.0	16
41	Polo-like kinase 1 inhibitor BI6727 sensitizes 9L gliosarcoma cells to ionizing irradiation. Biomedical Physics and Engineering Express, 2019, 5, 067003.	1.2	1
42	Twoâ€dimensional solidâ€state array detectors: A technique for in vivo dose verification in a variable effective area. Journal of Applied Clinical Medical Physics, 2019, 20, 88-94.	1.9	2
43	PV-0481 IMRT/VMAT QA in heterogeneous media: first experience with a 2D solid-state detector prototype. Radiotherapy and Oncology, 2019, 133, S247-S248.	0.6	0
44	EP-2091 How to measure high dose in functional disorder treatment: an innovative silicon diode detector. Radiotherapy and Oncology, 2019, 133, S1155-S1156.	0.6	0
45	PO-0901 2D solid-state array detectors: a technique for in-vivo dose verification at varying effective area. Radiotherapy and Oncology, 2019, 133, S477-S478.	0.6	0
46	OC-0073 BrachyView: A Real-time In-body HDR Source Tracking System with Simultaneous TRUS Image Fusion. Radiotherapy and Oncology, 2019, 133, S34.	0.6	0
47	IBIC microscopy â€“ The powerful tool for testing micron â€“ Sized sensitive volumes in segmented radiation detectors used in synchrotron microbeam radiation and hadron therapies. Nuclear Instruments & Methods in Physics Research B, 2019, 458, 90-96.	1.4	5
48	Tissue equivalence of diamond for heavy charged particles. Radiation Measurements, 2019, 122, 1-9.	1.4	8
49	INVESTIGATING VARIABLE RBE IN A 12C MINIBEAM FIELD WITH MICRODOSIMETRY AND GEANT4. Radiation Protection Dosimetry, 2019, 183, 160-166.	0.8	3
50	High spatial resolution scintillator dosimetry of synchrotron microbeams. Scientific Reports, 2019, 9, 6873.	3.3	24
51	The effect of an air gap on a 2D monolithic silicon detector for relative dosimetry. Journal of Instrumentation, 2019, 14, P06018-P06018.	1.2	6
52	Nano-sunscreens â€“ a double-edged sword in protecting consumers from harm: viewing Australian regulatory policies through the lenses of the European Union. Critical Reviews in Toxicology, 2019, 49, 122-139.	3.9	12
53	2D monolithic silicon-diode array detectors in megavoltage photon beams: does the fabrication technology matter? A medical physicistâ€™s perspective. Australasian Physical and Engineering Sciences in Medicine, 2019, 42, 443-451.	1.3	6
54	BrachyView: initial preclinical results for a real-time in-body HDR PBT source tracking system with simultaneous TRUS image fusion. Physics in Medicine and Biology, 2019, 64, 085002.	3.0	0

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55	Validation of a Monte Carlo simulation for Microbeam Radiation Therapy on the Imaging and Medical Beamline at the Australian Synchrotron. Scientific Reports, 2019, 9, 17696.	3.3	17
56	SOI Thin Microdosimeter Detectors for Low-Energy Ions and Radiation Damage Studies. IEEE Transactions on Nuclear Science, 2019, 66, 320-326.	2.0	13
57	Synthesis of methotrexate-loaded tantalum pentoxideâ€“poly(acrylic acid) nanoparticles for controlled drug release applications. Journal of Colloid and Interface Science, 2019, 538, 286-296.	9.4	34
58	Thin Silicon Microdosimeter Utilizing 3-D MEMS Fabrication Technology: Charge Collection Study and Its Application in Mixed Radiation Fields. IEEE Transactions on Nuclear Science, 2018, 65, 467-472.	2.0	27
59	Characterisation and evaluation of a PNP strip detector for synchrotron microbeam radiation therapy. Biomedical Physics and Engineering Express, 2018, 4, 044002.	1.2	16
60	The relative biological effectiveness for carbon, nitrogen, and oxygen ion beams using passive and scanning techniques evaluated with fully 3D silicon microdosimeters. Medical Physics, 2018, 45, 2299-2308.	3.0	38
61	Investigation of track structure and condensed history physics models for applications in radiation dosimetry on a micro and nano scale in Geant4. Biomedical Physics and Engineering Express, 2018, 4, 024001.	1.2	47
62	High spatial resolution microdosimetry with monolithic <mml:math xmlns:mml="http://www.w3.org/1998/Math/MathML" id="mml13" display="inline" overflow="scroll" altimg="si1.gif"><mml:mi>Î”</mml:mi></mml:math>E-E detector on Â12C beam: Monte Carlo simulations and experiment. Nuclear Instruments and Methods in Physics Research, Section A: Accelerators, Spectrometers, Detectors and Associated Equipment, 2018, 887, 70-80.	1.6	11
63	Radiosensitisation enhancement effect of BrUdR and Ta ₂ O ₅ NSPs in combination with 5-Fluorouracil antimetabolite in kilovoltage and megavoltage radiation. Biomedical Physics and Engineering Express, 2018, 4, 034001.	1.2	4
64	Semiconductor real-time quality assurance dosimetry in brachytherapy. Brachytherapy, 2018, 17, 133-145.	0.5	12
65	Supporting Physics Teachers to Deliver the New High School Certificate Syllabus: What are the Priorities?. , 2018, , .		2
66	Protonation State of Glutamate 73 Regulates the Formation of a Unique Dimeric Association of VDAC1. Biophysical Journal, 2018, 114, 378a.	0.5	0
67	First in vitro evidence of modulated electro-hyperthermia treatment performance in combination with megavoltage radiation by clonogenic assay. Scientific Reports, 2018, 8, 16608.	3.3	11
68	Time-of-flight spectrometry of ultra-short, polyenergetic proton bunches. Review of Scientific Instruments, 2018, 89, 123302.	1.3	8
69	High toxicity of Bi(OH)3 and Î±-Bi2O3 nanoparticles towards malignant 9L and MCF-7 cells. Materials Science and Engineering C, 2018, 93, 958-967.	7.3	15
70	Measuring the excitations in a new Sâ€‰â€‰=â€‰â€‰1/2 quantum spin chain material with competing interactions. Journal of Physics Condensed Matter, 2018, 30, 215602.	1.8	0
71	TiO₂/(BiO)₂CO₃ nanocomposites for ultraviolet filtration with reduced photocatalytic activity. Journal of Materials Chemistry C, 2018, 6, 5639-5650.	5.5	12
72	â€œCharacterization of <scp>ELEKTA SRS</scp> cone collimator using high spatial resolution monolithic silicon detector arrayâ€• Journal of Applied Clinical Medical Physics, 2018, 19, 114-124.	1.9	15

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73	OC-0407: Real-time dose verification of dynamic MLC tracking using a monolithic 2D silicon diode array. Radiotherapy and Oncology, 2018, 127, S208-S209.	0.6	0
74	EP-1773: Dual detector prototype for on line dose verification during patient radiotherapy treatment. Radiotherapy and Oncology, 2018, 127, S951-S952.	0.6	0
75	Synchrotron X-ray microbeam dosimetry with a 20â€...micrometre resolution scintillator fibre-optic dosimeter. Journal of Synchrotron Radiation, 2018, 25, 826-832.	2.4	15
76	In-field and out-of-file application in 12C ion therapy using fully 3D silicon microdosimeters. Radiation Measurements, 2018, 115, 55-59.	1.4	15
77	Thulium Oxide Nanoparticles: A new candidate for image-guided radiotherapy. Biomedical Physics and Engineering Express, 2018, 4, 044001.	1.2	19
78	Realâ€time high spatial resolution dose verification in stereotactic motion adaptive arc radiotherapy. Journal of Applied Clinical Medical Physics, 2018, 19, 173-184.	1.9	5
79	Applications of MO Skin dosimeters for quality assurance in gynecological HDR brachytherapy: An in-phantom feasibility study. Radiation Measurements, 2017, 106, 399-404.	1.4	3
80	X-Tream dosimetry of highly brilliant X-ray microbeams in the MRT hutch of the Australian Synchrotron. Radiation Measurements, 2017, 106, 405-411.	1.4	20
81	Correction factors to convert microdosimetry measurements in silicon to tissue in ¹²C ion therapy. Physics in Medicine and Biology, 2017, 62, 2055-2069.	3.0	61
82	New silicon microdosimetry probes for RBE and biological dose studies using stationary and movable targets in12C ion therapy. Journal of Physics: Conference Series, 2017, 777, 012019.	0.4	3
83	A convenient verification method of the entrance photo-neutron dose for an 18ÂMV medical linac using silicon p-i-n diodes. Radiation Measurements, 2017, 106, 391-398.	1.4	9
84	A 3D lateral electrode structure for diamond based microdosimetry. Applied Physics Letters, 2017, 110, .	3.3	15
85	3D silicon microdosimetry and RBE study using 12C ion of different energies. Journal of Physics: Conference Series, 2017, 777, 012037.	0.4	1
86	RBE study using solid state microdosimetry in heavy ion therapy. Radiation Measurements, 2017, 106, 512-518.	1.4	14
87	Synchrotron activation radiotherapy: Effects of dose-rate and energy spectra to tantalum oxide nanoparticles selective tumour cell radiosentization enhancement. Journal of Physics: Conference Series, 2017, 777, 012011.	0.4	7
88	Clinical application of MOSkin dosimeters to rectal wall in vivo dosimetry in gynecological HDR brachytherapy. Physica Medica, 2017, 41, 5-12.	0.7	27
89	Highâ€resolution fiberâ€optic dosimeters for microbeam radiation therapy. Medical Physics, 2017, 44, 1965-1968.	3.0	16
90	Ph-Induced Oligomerization of the Voltage Dependent Anion Channel. Biophysical Journal, 2017, 112, 184a.	0.5	0

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91	BrachyView: Combining LDR seed positions with transrectal ultrasound imaging in a prostate gel phantom. Physica Medica, 2017, 34, 55-64.	0.7	12
92	Study of the correlation between rectal wall inÂvivo dosimetry performed with MOSkins and implant modification during TRUS-guided HDR prostate brachytherapy. Radiation Measurements, 2017, 106, 385-390.	1.4	2
93	Thermoluminescence dose response of photon irradiated NaCl: Unified interaction model analysis of the dependence of the supralinearity on photon energy. Radiation Measurements, 2017, 106, 455-458.	1.4	8
94	Feasibility study of a novel multi-strip silicon detector for use in proton therapy range verification quality assurance. Radiation Measurements, 2017, 106, 378-384.	1.4	4
95	A 2D silicon detector array for quality assurance in small field dosimetry: <scp>DUO</scp>. Medical Physics, 2017, 44, 628-636.	3.0	24
96	Abstract ID: 21 Simulation of synchrotron-based microbeam radiation therapy using Geant4. Physica Medica, 2017, 42, 3-4.	0.7	0
97	X-ray microbeam measurements with a high resolution scintillator fibre-optic dosimeter. Scientific Reports, 2017, 7, 12450.	3.3	17
98	Optimisation of output factor measurements using the Magic Plate 512 silicon dosimeter array in small megavoltage photon fields. Journal of Physics: Conference Series, 2017, 777, 012022.	0.4	7
99	Microdosimetric measurements of a clinical proton beam with micrometerâ€sized solidâ€state detector. Medical Physics, 2017, 44, 6029-6037.	3.0	28
100	Characterization of proton pencil beam scanning and passive beam using a high spatial resolution solidâ€state microdosimeter. Medical Physics, 2017, 44, 6085-6095.	3.0	53
101	Introducing dynamic dosimaging: potential applications for MRI-linac. Journal of Physics: Conference Series, 2017, 777, 012007.	0.4	1
102	Initial testing of a pixelated silicon detector prototype in proton therapy. Journal of Applied Clinical Medical Physics, 2017, 18, 315-324.	1.9	6
103	OC-0152: Innovative solid state microdosimeters for Radiobiological effect evaluation in particle therapy. Radiotherapy and Oncology, 2017, 123, S75-S76.	0.6	0
104	OC-0532: QA of stereotactic radiotherapy combined with electromagnetic MLC tracking by a silicon detector. Radiotherapy and Oncology, 2017, 123, S282.	0.6	0
105	Technical Note: Angular dependence of a 2D monolithic silicon diode array for small field dosimetry. Medical Physics, 2017, 44, 4313-4321.	3.0	12
106	Comparison of phantom materials for use in quality assurance of microbeam radiation therapy. Journal of Synchrotron Radiation, 2017, 24, 866-876.	2.4	22
107	Nanostructures, concentrations and energies: an ideal equation to extend therapeutic efficiency on radioresistant 9L tumor cells using ${{m{Ta}}}_{2}{{m{O}}}_{5}$ ceramic nanostructured particles. Biomedical Physics and Engineering Express, 2017, 3, 015018.	1.2	7
108	Development of a silicon diode detector for skin dosimetry in radiotherapy. Medical Physics, 2017, 44, 5402-5412.	3.0	6

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109	PO-0759: Validation of the influence of M512 substrate resistivity on sensitivity degradation of radiation. Radiotherapy and Oncology, 2017, 123, S400-S401.	0.6	0
110	PO-0766: The effect of air gaps on Magic Plate (MP512) for small field dosimetry. Radiotherapy and Oncology, 2017, 123, S405.	0.6	0
111	In vitro investigation of the dose-rate effect on the biological effectiveness of megavoltage X-ray radiation doses. Applied Radiation and Isotopes, 2017, 128, 114-119.	1.5	18
112	The angular dependence of a two dimensional monolithic detector array for dosimetry in small radiation fields. Journal of Physics: Conference Series, 2017, 777, 012020.	0.4	1
113	New 3D Silicon detectors for dosimetry in Microbeam Radiation Therapy. Journal of Physics: Conference Series, 2017, 777, 012009.	0.4	8
114	Impact of a monolithic silicon detector operating in transmission mode on clinical photon beams. Physica Medica, 2017, 43, 114-119.	0.7	3
115	Innovative detectors for quality assurance dosimetry in SBRT of stationary and movable targets. Journal of Physics: Conference Series, 2017, 777, 012014.	0.4	0
116	Experimental studies with two novel silicon detectors for the development of time-of-flight spectrometry of laser-accelerated proton beams. Journal of Physics: Conference Series, 2017, 777, 012018.	0.4	0
117	Effect of scattered electrons on the â€˜Magic Plateâ€™ transmission array detector response. Journal of Physics: Conference Series, 2017, 777, 012033.	0.4	1
118	Radiation response and basic dosimetric characterisation of the â€˜Magic Plateâ€™. Journal of Physics: Conference Series, 2017, 777, 012034.	0.4	0
119	Development of TOF-spectrometry of laser-accelerated proton pulses using silicon microdosimeters. , 2017, , .		0
120	Analytical Modelling and Simulation of Single and Double Cone Pinholes for Real-Time In-Body Tracking of an HDR Brachytherapy Source. IEEE Transactions on Nuclear Science, 2016, 63, 1375-1385.	2.0	6
121	Beam perturbation characteristics of a 2D transmission silicon diode array, Magic Plate. Journal of Applied Clinical Medical Physics, 2016, 17, 85-98.	1.9	8
122	BrachyView: multiple seed position reconstruction and comparison with CT post-implant dosimetry. Journal of Instrumentation, 2016, 11, P05002-P05002.	1.2	4
123	Local dose enhancement of proton therapy by ceramic oxide nanoparticles investigated with Geant4 simulations. Physica Medica, 2016, 32, 1584-1593.	0.7	28
124	First proof of bismuth oxide nanoparticles as efficient radiosensitisers on highly radioresistant cancer cells. Physica Medica, 2016, 32, 1444-1452.	0.7	61
125	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. Radiotherapy and Oncology, 2016, 118, 148-153.	0.6	33
126	Study of the effect of ceramic Ta2O5 nanoparticle distribution on cellular dose enhancement in a kilovoltage photon field. Physica Medica, 2016, 32, 1216-1224.	0.7	22

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127	Absorbed dose-to-water protocol applied to synchrotron-generated x-rays at very high dose rates. Physics in Medicine and Biology, 2016, 61, N349-N361.	3.0	36
128	Multi-strip silicon sensors for beam array monitoring in micro-beam radiation therapy. Physica Medica, 2016, 32, 1795-1800.	0.7	6
129	Initial experiments with gel-water: towards MRI-linac dosimetry and imaging. Australasian Physical and Engineering Sciences in Medicine, 2016, 39, 921-932.	1.3	7
130	Dose verification of eye plaque brachytherapy using spectroscopic dosimetry. Australasian Physical and Engineering Sciences in Medicine, 2016, 39, 627-632.	1.3	3
131	EP-1996: Post IVD verification and recalibration of MOSkins using a certified low dose emitting Sr-90 source. Radiotherapy and Oncology, 2016, 119, S944.	0.6	0
132	OC-0252: BrachyView: A novel technique for seed localisation and real-time quality assurance. Radiotherapy and Oncology, 2016, 119, S115-S116.	0.6	0
133	OC-0255: Correction function for MOSkin readings in realtime in vivo dosimetry in HDR prostate brachytherapy. Radiotherapy and Oncology, 2016, 119, S117-S118.	0.6	0
134	Optimizing dose enhancement with Ta 2 O 5 nanoparticles for synchrotron microbeam activated radiation therapy. Physica Medica, 2016, 32, 1852-1861.	0.7	21
135	Characterisation of Silicon Diode Arrays for Dosimetry in External Beam Radiation Therapy. IEEE Transactions on Nuclear Science, 2016, 63, 1808-1817.	2.0	7
136	Synthesis-Dependent Surface Defects and Morphology of Hematite Nanoparticles and Their Effect on Cytotoxicity in Vitro. ACS Applied Materials & Interfaces, 2016, 8, 5867-5876.	8.0	41
137	Real-time eye lens dose monitoring during cerebral angiography procedures. European Radiology, 2016, 26, 79-86.	4.5	21
138	X-Tream quality assurance in synchrotron X-ray microbeam radiation therapy. Journal of Synchrotron Radiation, 2016, 23, 1180-1190.	2.4	21
139	Structural Insights into the Dynamic Process of Î²2-Adrenergic Receptor Signaling. Cell, 2015, 162, 1431.	28.9	8
140	Indirect radio-chemo-beta therapy: a targeted approach to increase biological efficiency of x-rays based on energy. Physics in Medicine and Biology, 2015, 60, 7847-7859.	3.0	4
141	Functional characterisation of novel silicon beam monitors for the micro-beam radiation therapy. , 2015, , .		0
142	Angular independent silicon detector for dosimetry in external beam radiotherapy. Medical Physics, 2015, 42, 4708-4718.	3.0	16
143	The evaluation of a 2D diode array in â€œmagic phantomâ€•for use in high dose rate brachytherapy pretreatment quality assurance. Medical Physics, 2015, 42, 663-673.	3.0	20
144	BrachyView, a novel inâ€•body imaging system for HDR prostate brachytherapy: Experimental evaluation. Medical Physics, 2015, 42, 7098-7107.	3.0	29

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145	2D mapping of the MV photon fluence and 3D dose reconstruction in real time for quality assurance during radiotherapy treatment. Journal of Instrumentation, 2015, 10, P09019-P09019.	1.2	6
146	Thin silicon strip detectors for beam monitoring in Micro-beam Radiation Therapy. Journal of Instrumentation, 2015, 10, P11007-P11007.	1.2	11
147	Pretreatment verification of high dose rate brachytherapy plans using the â€˜magic phantomâ€™ system. Biomedical Physics and Engineering Express, 2015, 1, 025201.	1.2	5
148	Medical physics aspects of the synchrotron radiation therapies: Microbeam radiation therapy (MRT) and synchrotron stereotactic radiotherapy (SSRT). Physica Medica, 2015, 31, 568-583.	0.7	83
149	MagicPlate-512: A 2D silicon detector array for quality assurance of stereotactic motion adaptive radiotherapy. Medical Physics, 2015, 42, 2992-3004.	3.0	21
150	3D Silicon Microdosimetry and RBE Study Using <formula formulatype="inline"><tex Notation="TeX">$^{12}{m C}$</tex></formula> Ion of Different Energies. IEEE Transactions on Nuclear Science, 2015, 62, 3027-3033.	2.0	34
151	Characterization of a Large Area Thinned Silicon Microdosimeter for Space and Particle Therapy. IEEE Transactions on Nuclear Science, 2015, 62, 3003-3011.	2.0	1
152	3D-Mesa â€œBridgeâ€•Silicon Microdosimeter: Charge Collection Study and Application to RBE Studies in $^{12}{m C}$ Radiation Therapy. IEEE Transactions on Nuclear Science, 2015, 62, 504-511.	2.0	37
153	A new virtual ring-based system matrix generator for iterative image reconstruction in high resolution small volume PET systems. Physics in Medicine and Biology, 2015, 60, 6949-6973.	3.0	12
154	Benchmarking and validation of aGeant4â€“SHADOWMonte Carlo simulation for dose calculations in microbeam radiation therapy. Journal of Synchrotron Radiation, 2014, 21, 518-528.	2.4	28
155	Radiation dose enhancement at tissue-tungsten interfaces in HDR brachytherapy. Physics in Medicine and Biology, 2014, 59, 6659-6659.	3.0	10
156	Ultra-Thin 3-D Detector: Charge Collection Characterization and Application for Microdosimetry. IEEE Transactions on Nuclear Science, 2014, 61, 3472-3478.	2.0	6
157	Characterization of an Alternative Diamond Based Microdosimeter Prototype. IEEE Transactions on Nuclear Science, 2014, 61, 3479-3484.	2.0	7
158	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, , .		6
159	Highâ€Z Nanostructured Ceramics in Radiotherapy: First Evidence of Ta₂O₅â€Induced Dose Enhancement on Radioresistant Cancer Cells in an MV Photon Field. Particle and Particle Systems Characterization, 2014, 31, 500-505.	2.3	38
160	A two dimensional silicon detectors array for quality assurance in stereotactic radiotherapy: MagicPlateâ€512. Medical Physics, 2014, 41, 091707.	3.0	45
161	Influence of polarization and a source model for dose calculation in MRT. Medical Physics, 2014, 41, 041703.	3.0	23
162	Development of a large-area silicon Î±-particle detector. Applied Radiation and Isotopes, 2014, 92, 96-101.	1.5	1

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163	3D Radiation Detectors: Charge Collection Characterisation and Applicability of Technology for Microdosimetry. IEEE Transactions on Nuclear Science, 2014, 61, 1537-1543.	2.0	15
164	A Novel Silicon Microdosimeter Using 3D Sensitive Volumes: Modeling the Response in Neutron Fields Typical of Aviation. IEEE Transactions on Nuclear Science, 2014, 61, 1552-1557.	2.0	13
165	Tissue Equivalence Study of a Novel Diamond-Based Microdosimeter for Galactic Cosmic Rays and Solar Particle Events. IEEE Transactions on Nuclear Science, 2014, 61, 1544-1551.	2.0	13
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