

Marco Petasecca

List of Publications by Year in descending order

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259
papers

2,421
citations

236925

25
h-index

377865

34
g-index

260
all docs

260
docs citations

260
times ranked

1563
citing authors

#	ARTICLE	IF	CITATIONS
1	Medical physics aspects of the synchrotron radiation therapies: Microbeam radiation therapy (MRT) and synchrotron stereotactic radiotherapy (SSRT). <i>Physica Medica</i> , 2015, 31, 568-583.	0.7	83
2	Numerical Simulation of Radiation Damage Effects in p-Type and n-Type FZ Silicon Detectors. <i>IEEE Transactions on Nuclear Science</i> , 2006, 53, 2971-2976.	2.0	63
3	Characterization of a novel two dimensional diode array the "magic plate" as a radiation detector for radiation therapy treatment. <i>Medical Physics</i> , 2012, 39, 2544-2558.	3.0	63
4	Radiation-hard semiconductor detectors for SuperLHC. <i>Nuclear Instruments and Methods in Physics Research, Section A: Accelerators, Spectrometers, Detectors and Associated Equipment</i> , 2005, 541, 189-201.	1.6	55
5	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.	3.0	53
6	A two dimensional silicon detectors array for quality assurance in stereotactic radiotherapy: MagicPlate 512. <i>Medical Physics</i> , 2014, 41, 091707.	3.0	45
7	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.	3.0	38
8	3D-Mesa "Bridge" Silicon 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.	2.0	37
9	X-Tream: a novel dosimetry system for Synchrotron Microbeam Radiation Therapy. <i>Journal of Instrumentation</i> , 2012, 7, P07022-P07022.	1.2	36
10	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-N361.	3.0	36
11	3D Silicon Microdosimetry and RBE Study Using ^{12}C Ion of Different Energies. <i>IEEE Transactions on Nuclear Science</i> , 2015, 62, 3027-3033.	2.0	34
12	Recent advancements in the development of radiation hard semiconductor detectors for S-LHC. <i>Nuclear Instruments and Methods in Physics Research, Section A: Accelerators, Spectrometers, Detectors and Associated Equipment</i> , 2005, 552, 7-19.	1.6	33
13	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, 148-153.	0.6	33
14	A silicon strip detector dose magnifying glass for IMRT dosimetry. <i>Medical Physics</i> , 2010, 37, 427-439.	3.0	30
15	Development of radiation tolerant semiconductor detectors for the Super-LHC. <i>Nuclear Instruments and Methods in Physics Research, Section A: Accelerators, Spectrometers, Detectors and Associated Equipment</i> , 2005, 546, 99-107.	1.6	29
16	Dosimetry of intensive synchrotron microbeams. <i>Radiation Measurements</i> , 2011, 46, 1560-1565.	1.4	29
17	Online in vivo dosimetry in high dose rate prostate brchytherapy with MOSkin detectors: In phantom feasibility study. <i>Applied Radiation and Isotopes</i> , 2014, 83, 222-226.	1.5	29
18	Multichannel Data Acquisition System comparison for Quality Assurance in external beam radiation therapy. <i>Radiation Measurements</i> , 2014, 71, 338-341.	1.4	29

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19	BrachyView, a novel in-body imaging system for HDR prostate brachytherapy: Experimental evaluation. <i>Medical Physics</i> , 2015, 42, 7098-7107.	3.0	29
20	Processing and first characterization of detectors made with high resistivity n- and p-type Czochralski silicon. <i>Nuclear Instruments and Methods in Physics Research, Section A: Accelerators, Spectrometers, Detectors and Associated Equipment</i> , 2005, 552, 20-26.	1.6	28
21	The feasibility study and characterization of a two-dimensional diode array in a magnetic phantom for high dose rate brachytherapy quality assurance. <i>Medical Physics</i> , 2013, 40, 111702.	3.0	28
22	Microdosimetric measurements of a clinical proton beam with micrometer-sized solid-state detector. <i>Medical Physics</i> , 2017, 44, 6029-6037.	3.0	28
23	Printable Organic Semiconductors for Radiation Detection: From Fundamentals to Fabrication and Functionality. <i>Frontiers in Physics</i> , 2020, 8, .	2.1	28
24	Clinical application of MOSkin dosimeters to rectal wall in vivo dosimetry in gynecological HDR brachytherapy. <i>Physica Medica</i> , 2017, 41, 5-12.	0.7	27
25	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.	2.0	27
26	Potential High Resolution Dosimeters For MRT. <i>AIP Conference Proceedings</i> , 2010, , .	0.4	25
27	The use of a silicon strip detector dose magnifying glass in stereotactic radiotherapy QA and dosimetry. <i>Medical Physics</i> , 2011, 38, 1226-1238.	3.0	24
28	A 2D silicon detector array for quality assurance in small field dosimetry: <scp>DUO</scp>. <i>Medical Physics</i> , 2017, 44, 628-636.	3.0	24
29	A novel high-resolution 2D silicon array detector for small field dosimetry with FFF photon beams. <i>Physica Medica</i> , 2018, 45, 117-126.	0.7	24
30	Influence of polarization and a source model for dose calculation in MRT. <i>Medical Physics</i> , 2014, 41, 041703.	3.0	23
31	Semiconductor dosimetry in modern external-beam radiation therapy. <i>Physics in Medicine and Biology</i> , 2020, 65, 16TR01.	3.0	23
32	Thermal and Electrical Characterization of Silicon Photomultiplier. <i>IEEE Transactions on Nuclear Science</i> , 2008, 55, 1686-1690.	2.0	22
33	CyberKnife [®] fixed cone and Iris [®] defined small radiation fields: Assessment with a high-resolution solid-state detector array. <i>Journal of Applied Clinical Medical Physics</i> , 2018, 19, 547-557.	1.9	22
34	Numerical simulation of radiation damage effects in p-type silicon detectors. <i>Nuclear Instruments and Methods in Physics Research, Section A: Accelerators, Spectrometers, Detectors and Associated Equipment</i> , 2006, 563, 192-195.	1.6	21
35	Silicon detectors for the sLHC. <i>Nuclear Instruments and Methods in Physics Research, Section A: Accelerators, Spectrometers, Detectors and Associated Equipment</i> , 2011, 658, 11-16.	1.6	21
36	MagicPlate-512: A 2D silicon detector array for quality assurance of stereotactic motion adaptive radiotherapy. <i>Medical Physics</i> , 2015, 42, 2992-3004.	3.0	21

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37	Real-time eye lens dose monitoring during cerebral angiography procedures. <i>European Radiology</i> , 2016, 26, 79-86.	4.5	21
38	X-Tream quality assurance in synchrotron X-ray microbeam radiation therapy. <i>Journal of Synchrotron Radiation</i> , 2016, 23, 1180-1190.	2.4	21
39	Large Area Silicon Microdosimeter for Dosimetry in High LET Space Radiation Fields: Charge Collection Study. <i>IEEE Transactions on Nuclear Science</i> , 2012, 59, 3126-3132.	2.0	20
40	The evaluation of a 2D diode array in a magnetic phantom for use in high dose rate brachytherapy pretreatment quality assurance. <i>Medical Physics</i> , 2015, 42, 663-673.	3.0	20
41	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.	1.4	20
42	SPICE modelling and design optimization of micropumps. <i>International Journal of Environmental Analytical Chemistry</i> , 2005, 85, 687-698.	3.3	19
43	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.	1.2	19
44	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.	1.9	19
45	Characterization of an Innovative p-type Epitaxial Diode for Dosimetry in Modern External Beam Radiotherapy. <i>IEEE Transactions on Nuclear Science</i> , 2013, 60, 4705-4712.	2.0	18
46	Characterization of a Novel Diamond-Based Microdosimeter Prototype for Radioprotection Applications in Space Environments. <i>IEEE Transactions on Nuclear Science</i> , 2012, 59, 3110-3116.	2.0	17
47	BrachyView: Proof-of-principle of a novel in-body gamma camera for low dose-rate prostate brachytherapy. <i>Medical Physics</i> , 2013, 40, 041709.	3.0	17
48	Direct and pulsed current annealing of p-MOSFET based dosimeter: the MOSkin. <i>Australasian Physical and Engineering Sciences in Medicine</i> , 2014, 37, 311-319.	1.3	17
49	X-ray microbeam measurements with a high resolution scintillator fibre-optic dosimeter. <i>Scientific Reports</i> , 2017, 7, 12450.	3.3	17
50	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.	3.3	17
51	Angular independent silicon detector for dosimetry in external beam radiotherapy. <i>Medical Physics</i> , 2015, 42, 4708-4718.	3.0	16
52	High-resolution fiber-optic dosimeters for microbeam radiation therapy. <i>Medical Physics</i> , 2017, 44, 1965-1968.	3.0	16
53	Characterisation and evaluation of a PNP strip detector for synchrotron microbeam radiation therapy. <i>Biomedical Physics and Engineering Express</i> , 2018, 4, 044002.	1.2	16
54	3D Radiation Detectors: Charge Collection Characterisation and Applicability of Technology for Microdosimetry. <i>IEEE Transactions on Nuclear Science</i> , 2014, 61, 1537-1543.	2.0	15

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55	A 3D lateral electrode structure for diamond based microdosimetry. Applied Physics Letters, 2017, 110, .	3.3	15
56	Characterization of <sc>ELEKTA SRS</sc> cone collimator using high spatial resolution monolithic silicon detector array. Journal of Applied Clinical Medical Physics, 2018, 19, 114-124.	1.9	15
57	Synchrotron X-ray microbeam dosimetry with a 20µm resolution scintillator fibre-optic dosimeter. Journal of Synchrotron Radiation, 2018, 25, 826-832.	2.4	15
58	In-field and out-of-field application in 12C ion therapy using fully 3D silicon microdosimeters. Radiation Measurements, 2018, 115, 55-59.	1.4	15
59	Characterization of an organic semiconductor diode for dosimetry in radiotherapy. Medical Physics, 2020, 47, 3658-3668.	3.0	15
60	Polymer Photodetectors for Printable, Flexible, and Fully Tissue Equivalent X-Ray Detection with Zero-Bias Operation and Ultrafast Temporal Responses. Advanced Materials Technologies, 2021, 6, 2001298.	5.8	15
61	RBE study using solid state microdosimetry in heavy ion therapy. Radiation Measurements, 2017, 106, 512-518.	1.4	14
62	First experimental measurement of the effect of cardio-synchronous brain motion on the dose distribution during microbeam radiation therapy. Medical Physics, 2020, 47, 213-222.	3.0	14
63	BrachyView, A novel inbody imaging system for HDR prostate brachytherapy: Design and Monte Carlo feasibility study. Medical Physics, 2013, 40, 071715.	3.0	13
64	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
65	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
66	SOI Thin Microdosimeter Detectors for Low-Energy Ions and Radiation Damage Studies. IEEE Transactions on Nuclear Science, 2019, 66, 320-326.	2.0	13
67	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
68	TRUS-probe integrated MOSkin detectors for rectal wall in vivo dosimetry in HDR brachytherapy: In phantom feasibility study. Radiation Measurements, 2014, 71, 379-383.	1.4	12
69	BrachyView: Combining LDR seed positions with transrectal ultrasound imaging in a prostate gel phantom. Physica Medica, 2017, 34, 55-64.	0.7	12
70	Technical Note: Angular dependence of a 2D monolithic silicon diode array for small field dosimetry. Medical Physics, 2017, 44, 4313-4321.	3.0	12
71	Semiconductor real-time quality assurance dosimetry in brachytherapy. Brachytherapy, 2018, 17, 133-145.	0.5	12
72	<sc>HDR</sc> brachytherapy in vivo source position verification using a 2D diode array: A Monte Carlo study. Journal of Applied Clinical Medical Physics, 2018, 19, 163-172.	1.9	12

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73	Medipix detectors in radiation therapy for advanced quality-assurance. Radiation Measurements, 2020, 130, 106211.	1.4	12
74	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
75	Thin silicon strip detectors for beam monitoring in Micro-beam Radiation Therapy. Journal of Instrumentation, 2015, 10, P11007-P11007.	1.2	11
76	High spatial resolution microdosimetry with monolithic $\langle \text{mml:math xmlns:mml="http://www.w3.org/1998/Math/MathML" id="mml13" display="inline" overflow="scroll" altimg="si1.gif" \rangle \langle \text{mml:mi} \rangle \hat{I} \langle \text{mml:mi} \rangle \langle \text{mml:math} \rangle$ E-E detector on $\hat{A}12C$ 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
77	X-Tream dosimetry of synchrotron radiation with the PTW microDiamond. Journal of Instrumentation, 2019, 14, P10037-P10037.	1.2	11
78	Validation of Geant4 for silicon microdosimetry in heavy ion therapy. Physics in Medicine and Biology, 2020, 65, 045014.	3.0	11
79	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
80	Radiation Shielding Evaluation of Spacecraft Walls Against Heavy Ions Using Microdosimetry. IEEE Transactions on Nuclear Science, 2021, 68, 897-905.	2.0	11
81	Three-dimensional dosimetry imaging of I-125 plaque for eye cancer treatment. Nuclear Instruments and Methods in Physics Research, Section A: Accelerators, Spectrometers, Detectors and Associated Equipment, 2011, 633, S276-S278.	1.6	10
82	Radiation dose enhancement at tissue-tungsten interfaces in HDR brachytherapy. Physics in Medicine and Biology, 2014, 59, 6659-6659.	3.0	10
83	Temporally separating Cherenkov radiation in a scintillator probe exposed to a pulsed X-ray beam. Physica Medica, 2017, 42, 185-188.	0.7	10
84	Deriving spatially resolved beta dose rates in sediment using the Timepix pixelated detector. Radiation Measurements, 2017, 106, 483-490.	1.4	10
85	On Monolithic Silicon Array Detectors for Small-Field Photon Beam Dosimetry. IEEE Transactions on Nuclear Science, 2018, 65, 2640-2649.	2.0	10
86	HDR prostate brachytherapy plan robustness and its effect on $\text{in}\hat{a} \text{vivo}$ source tracking error thresholds: A multi- $\text{in}\hat{a} \text{stitutional}$ study. Medical Physics, 2022, 49, 3529-3537.	3.0	10
87	Design, fabrication, and test of CMOS active-pixel radiation sensors. IEEE Transactions on Nuclear Science, 2004, 51, 1144-1149.	2.0	9
88	Studies of the Characteristics of a Silicon Neutron Sensor. IEEE Transactions on Nuclear Science, 2009, 56, 2290-2293.	2.0	9
89	A convenient verification method of the entrance photo-neutron dose for an $18\hat{A} \text{MV}$ medical linac using silicon p-i-n diodes. Radiation Measurements, 2017, 106, 391-398.	1.4	9
90	A Monte Carlo study on the feasibility of real-time in vivo source tracking during ultrasound based HDR prostate brachytherapy treatments. Physica Medica, 2019, 59, 30-36.	0.7	9

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91	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
92	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
93	Silicon 3D Microdosimeters for Advanced Quality Assurance in Particle Therapy. Applied Sciences (Switzerland), 2022, 12, 328.	2.5	9
94	Comprehensive device Simulation modeling of heavily irradiated silicon detectors at cryogenic temperatures. IEEE Transactions on Nuclear Science, 2004, 51, 1759-1765.	2.0	8
95	Analysis and simulation of charge collection efficiency in silicon thin detectors. Nuclear Instruments and Methods in Physics Research, Section A: Accelerators, Spectrometers, Detectors and Associated Equipment, 2005, 546, 291-295.	1.6	8
96	From imaging to dosimetry: GEANT4-based study on the application of Medipix to neutron dosimetry. Radiation Measurements, 2010, 45, 1355-1358.	1.4	8
97	Independent quality assurance of a helical tomotherapy machine using the dose magnifying glass. Medical Physics, 2011, 38, 2256-2264.	3.0	8
98	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
99	New 3D Silicon detectors for dosimetry in Microbeam Radiation Therapy. Journal of Physics: Conference Series, 2017, 777, 012009.	0.4	8
100	A silicon strip detector array for energy verification and quality assurance in heavy ion therapy. Medical Physics, 2018, 45, 953-962.	3.0	8
101	Time-of-flight spectrometry of ultra-short, polyenergetic proton bunches. Review of Scientific Instruments, 2018, 89, 123302.	1.3	8
102	Tissue equivalence of diamond for heavy charged particles. Radiation Measurements, 2019, 122, 1-9.	1.4	8
103	Quality assurance of Cyberknife robotic stereotactic radiosurgery using an angularly independent silicon detector. Journal of Applied Clinical Medical Physics, 2019, 20, 76-88.	1.9	8
104	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
105	Fabrication of a Hydrogenated Amorphous Silicon Detector in 3-D Geometry and Preliminary Test on Planar Prototypes. Instruments, 2021, 5, 32.	1.8	8
106	Development of a prototype detector for use in scintimammography imaging. Microelectronics Journal, 2006, 37, 1598-1609.	2.0	7
107	Evaluation of pixellated, back-sided planar photodetectors for high-resolution imaging instrumentation. Nuclear Instruments and Methods in Physics Research, Section A: Accelerators, Spectrometers, Detectors and Associated Equipment, 2008, 589, 259-267.	1.6	7
108	Dosimetry verification in eye brachytherapy using silicon pixelated detectors. Radiation Measurements, 2011, 46, 2010-2013.	1.4	7

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109	Characterization of an Alternative Diamond Based Microdosimeter Prototype. IEEE Transactions on Nuclear Science, 2014, 61, 3479-3484.	2.0	7
110	BrachyView: Feasibility study into the application of Timepix detectors for soft tissue thickness imaging in prostate brachytherapy treatment. Radiation Measurements, 2014, 71, 329-332.	1.4	7
111	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
112	Characterisation of Silicon Diode Arrays for Dosimetry in External Beam Radiation Therapy. IEEE Transactions on Nuclear Science, 2016, 63, 1808-1817.	2.0	7
113	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
114	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
115	A laser test system for characterizing CMOS active pixel sensors. Nuclear Instruments and Methods in Physics Research, Section A: Accelerators, Spectrometers, Detectors and Associated Equipment, 2006, 565, 144-147.	1.6	6
116	BrachyView: A novel in-body imaging system for prostate brachytherapy. , 2011, , .		6
117	Ultra-Thin 3-D Detector: Charge Collection Characterization and Application for Microdosimetry. IEEE Transactions on Nuclear Science, 2014, 61, 3472-3478.	2.0	6
118	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
119	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
120	Multi-strip silicon sensors for beam array monitoring in micro-beam radiation therapy. Physica Medica, 2016, 32, 1795-1800.	0.7	6
121	Initial testing of a pixelated silicon detector prototype in proton therapy. Journal of Applied Clinical Medical Physics, 2017, 18, 315-324.	1.9	6
122	Development of a silicon diode detector for skin dosimetry in radiotherapy. Medical Physics, 2017, 44, 5402-5412.	3.0	6
123	A high resolution 2D array detector system for small-field MRI-linac applications. Biomedical Physics and Engineering Express, 2018, 4, 035041.	1.2	6
124	Evolution of Diamond based Microdosimetry. Journal of Physics: Conference Series, 2019, 1154, 012007.	0.4	6
125	An innovative gynecological HDR brachytherapy applicator system for treatment delivery and real-time verification. Physica Medica, 2019, 59, 151-157.	0.7	6
126	2D monolithic silicon-diode array detectors in megavoltage photon beams: does the fabrication technology matter? A medical physicist's perspective. Australasian Physical and Engineering Sciences in Medicine, 2019, 42, 443-451.	1.3	6

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127	On the Instantaneous Dose Rate and Angular Dependence of Monolithic Silicon Array Detectors. IEEE Transactions on Nuclear Science, 2019, 66, 519-527.	2.0	6
128	Modelling ICRP110 Adult Reference Voxel Phantoms for dosimetric applications: Development of a new Geant4 Advanced Example. Journal of Physics: Conference Series, 2020, 1662, 012021.	0.4	6
129	Modeling a Thick Hydrogenated Amorphous Silicon Substrate for Ionizing Radiation Detectors. Frontiers in Physics, 2020, 8, .	2.1	6
130	A review of printable, flexible and tissue equivalent materials for ionizing radiation detection. Flexible and Printed Electronics, 2021, 6, 043005.	2.7	6
131	Advanced active pixel architectures in standard CMOS technology. IEEE Transactions on Nuclear Science, 2005, 52, 1869-1872.	2.0	5
132	Pretreatment verification of high dose rate brachytherapy plans using the "magic phantom"™ system. Biomedical Physics and Engineering Express, 2015, 1, 025201.	1.2	5
133	Real-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
134	IBIC microscopy "The powerful tool for testing micron 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
135	Fabrication and First Characterization of Silicon-Based Full 3-D Microdosimeters. IEEE Transactions on Nuclear Science, 2020, 67, 2490-2500.	2.0	5
136	Consistency of small-field dosimetry, on and off axis, in beam-matched linacs used for stereotactic radiosurgery. Journal of Applied Clinical Medical Physics, 2021, 22, 185-193.	1.9	5
137	X-TREAM protocol for <i>in vitro</i> microbeam radiation therapy at the Australian Synchrotron. Journal of Applied Physics, 2021, 129, .	2.5	5
138	On the evaluation of edgeless diode detectors for patient-specific QA in high-dose stereotactic radiosurgery. Physica Medica, 2021, 89, 20-28.	0.7	5
139	The radiation sensitivity mapping of ICs using an IR pulsed laser system. Microelectronics Reliability, 2003, 43, 981-984.	1.7	4
140	Evaluation of Silicon Detectors With Integrated JFET for Biomedical Applications. IEEE Transactions on Nuclear Science, 2009, 56, 1051-1055.	2.0	4
141	Monte Carlo modelling of a silicon strip detector for microbeam radiation therapy. Radiation Measurements, 2011, 46, 1646-1649.	1.4	4
142	Evaluation of a thin microstrip detector for high spatial resolution dosimetry. Radiation Measurements, 2011, 46, 1643-1645.	1.4	4
143	Charge Collection in n-SOI Planar Microdosimeters. IEEE Transactions on Nuclear Science, 2013, 60, 4289-4296.	2.0	4
144	Measurement of multi-slice computed tomography dose profile with the Dose Magnifying Glass and the MOSkin radiation dosimeter. Radiation Measurements, 2013, 55, 51-55.	1.4	4

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145	BrachyView: multiple seed position reconstruction and comparison with CT post-implant dosimetry. Journal of Instrumentation, 2016, 11, P05002-P05002.	1.2	4
146	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
147	Feasibility of a dual detector system to perform transit dosimetry and MV imaging in-vivo. Journal of Instrumentation, 2019, 14, P01019-P01019.	1.2	4
148	First application of a high-resolution silicon detector for proton beam Bragg peak detection in a 0.95 T magnetic field. Medical Physics, 2020, 47, 181-189.	3.0	4
149	Hydrogenated amorphous silicon detectors for particle detection, beam flux monitoring and dosimetry in high-dose radiation environment. Journal of Instrumentation, 2020, 15, C04005-C04005.	1.2	4
150	In-field and out-of-field microdosimetric characterisation of a 62 MeV proton beam at CATANA. Medical Physics, 2021, 48, 4532-4541.	3.0	4
151	A novel add-on collimator for preclinical radiotherapy applications using a standard cell irradiator: design, construction, and validation. Medical Physics, 2020, 47, 2461-2471.	3.0	4
152	A Comprehensive Numerical Simulation of Heavily Irradiated p-type and n-type Silicon Detectors. , 0, , .		3
153	Preclinical studies using a prototype high-resolution PET system with Depth of Interaction. , 2011, , .		3
154	Review of four novel dosimeters developed for use in radiotherapy. Journal of Physics: Conference Series, 2013, 444, 012008.	0.4	3
155	Dose verification of eye plaque brachytherapy using spectroscopic dosimetry. Australasian Physical and Engineering Sciences in Medicine, 2016, 39, 627-632.	1.3	3
156	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
157	New silicon microdosimetry probes for RBE and biological dose studies using stationary and movable targets in ^{12}C ion therapy. Journal of Physics: Conference Series, 2017, 777, 012019.	0.4	3
158	Impact of a monolithic silicon detector operating in transmission mode on clinical photon beams. Physica Medica, 2017, 43, 114-119.	0.7	3
159	3D sensitive volume microdosimeter with improved tissue equivalency: charge collection study and its application in ^{12}C ion therapy. Journal of Physics: Conference Series, 2019, 1154, 012012.	0.4	3
160	Characterization of an "Edgeless" Dosimeter for Angular Independent Measurements in Advanced Radiotherapy Treatments. IEEE Transactions on Radiation and Plasma Medical Sciences, 2019, 3, 579-587.	3.7	3
161	INVESTIGATING VARIABLE RBE IN A ^{12}C MINIBEAM FIELD WITH MICRODOSIMETRY AND GEANT4. Radiation Protection Dosimetry, 2019, 183, 160-166.	0.8	3
162	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

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