Natalka Suchowerska

List of Publications by Year
in descending order

65	1,373	331670 21	345221 36
papers	citations	h-index	g-index

65	65	65	1148
all docs	docs citations	times ranked	citing authors

#	Article	IF	Citations
1	In vivodosimeters for HDR brachytherapy: A comparison of a diamond detector, MOSFET, TLD, and scintillation detector. Medical Physics, 2007, 34, 1759-1765.	3.0	108
2	Small field diode correction factors derived using an air core fibre optic scintillation dosimeter and EBT2 film. Physics in Medicine and Biology, 2012, 57, 2587-2602.	3.0	106
3	Irradiation Enhances the Efficiency of Testicular Germ Cell Transplantation in Sheep. Biology of Reproduction, 2009, 81, 898-905.	2.7	104
4	A fibre optic dosimeter customised for brachytherapy. Radiation Measurements, 2007, 42, 929-932.	1.4	90
5	Directional dependence in film dosimetry: radiographic and radiochromic film. Physics in Medicine and Biology, 2001, 46, 1391-1397.	3.0	79
6	Over-response of synthetic microDiamond detectors in small radiation fields. Physics in Medicine and Biology, 2014, 59, 5873-5881.	3.0	76
7	Plastic scintillation dosimetry: optimization of light collection efficiency. Physics in Medicine and Biology, 2003, 48, 1141-1152.	3.0	54
8	A prototype scintillation dosimeter customized for small and dynamic megavoltage radiation fields. Physics in Medicine and Biology, 2010, 55, 1115-1126.	3.0	53
9	Clinical Trials of a Urethral Dose Measurement System in Brachytherapy Using Scintillation Detectors. International Journal of Radiation Oncology Biology Physics, 2011, 79, 609-615.	0.8	46
10	Characterization of small-field stereotactic radiosurgery beams with modern detectors. Physics in Medicine and Biology, 2013, 58, 7595-7608.	3.0	45
11	Cancer treatment with gas plasma and with gas plasmaâ€“activated liquid: positives, potentials and problems of clinical translation. Biophysical Reviews, 2020, 12, 989-1006.	3.2	40
12	Plastic scintillation dosimetry for radiation therapy: minimizing capture of Cerenkov radiation noise. Physics in Medicine and Biology, 2004, 49, 783-790.	3.0	38
13	Dose mapping of the rectal wall during brachytherapy with an array of scintillation dosimeters. Medical Physics, 2010, 37, 2247-2255.	3.0	38
14	Transmission of ÄŒerenkov radiation in optical fibers. Optics Letters, 2007, 32, 1205.	3.3	37
15	A mathematical framework for separating the direct and bystander components of cellular radiation response. Acta OncolÃ³gica, 2010, 49, 1334-1343.	1.8	35
16	Cerenkov light spectrum in an optical fiber exposed to a photon or electron radiation therapy beam. Applied Optics, 2009, 48, 3362.	2.1	27
17	Realâ€time scintillation array dosimetry for radiotherapy: The advantages of photomultiplier detectors. Medical Physics, 2012, 39, 1688-1695.	3.0	24
18	Dose enhancement and cytotoxicity of gold nanoparticles in colon cancer cells when irradiated with kiloâ€•and megaâ€voltage radiation. Bioengineering and Translational Medicine, 2016, 1, 94-102.	7.1	24

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19	Small field detector correction factors: effects of the flattening filter for Elekta and Varian linear accelerators. Journal of Applied Clinical Medical Physics, 2016, 17, 223-235.	1.9	22
20	Characterization of a new unshielded diode for small field dosimetry under flattening filter free beams. Physica Medica, 2016, 32, 408-413.	0.7	22
21	Grid therapy using high definition multileaf collimators: realizing benefits of the bystander effect. Acta OncolÃ³gica, 2017, 56, 1048-1059.	1.8	22
22	Can small field diode correction factors be applied universally?. Radiotherapy and Oncology, 2014, 112, 442-446.	0.6	21
23	Optimal coupling of light from a cylindrical scintillator into an optical fiber. Applied Optics, 2007, 46, 397.	2.1	19
24	Dosimetric consequences of gold nanoparticle clustering during photon irradiation. Medical Physics, 2017, 44, 6560-6569.	3.0	18
25	Optimisation of exposure conditions for in vitro radiobiology experiments. Australasian Physical and Engineering Sciences in Medicine, 2012, 35, 151-157.	1.3	17
26	Single Step Plasma Process for Covalent Binding of Antimicrobial Peptides on Catheters To Suppress Bacterial Adhesion. ACS Applied Bio Materials, 2019, 2, 5739-5748.	4.6	17
27	Transcriptional regulation of G2/M regulatory proteins and perturbation of G2/M Cell cycle transition by a traditional Chinese medicine recipe. Journal of Ethnopharmacology, 2020, 251, 112526.	4.1	16
28	Scintillation dosimeter arrays using air core light guides: simulation and experiment. Physics in Medicine and Biology, 2010, 55, 3401-3415.	3.0	13
29	Small field correction factors for the IBA Razor. Physica Medica, 2016, 32, 1025-1029.	0.7	13
30	Plasma ion implantation of 3Dâ€printed PEEK creates optimal host conditions for bone ongrowth and mineralisation. Plasma Processes and Polymers, 2021, 18, 2000219.	3.0	13
31	Sensitization of prostate cancer to radiation therapy: Molecules and pathways to target. Radiotherapy and Oncology, 2018, 128, 283-300.	0.6	12
32	Plasma immersion ionâ€implanted 3Dâ€printed PEEK bone implants: In vivo sheep study shows strong osseointegration. Plasma Processes and Polymers, 2022, 19, .	3.0	11
33	A review ofin vitroexperimental evidence for the effect of spatial and temporal modulation of radiation dose on response. Acta OncolÃ³gica, 2010, 49, 1344-1353.	1.8	10
34	A shorter interval between irradiation of recipient testis and germ cell transplantation is detrimental to recovery of fertility in rams. Journal of Developmental and Physical Disabilities, 2011, 34, 501-512.	3.6	10
35	Models for the bystander effect in gradient radiation fields: Range and signalling type. Journal of Theoretical Biology, 2018, 455, 16-25.	1.7	10
36	Radiation Recall Dermatitis After Pre-Sensitization With Pegylated Liposomal Doxorubicin. Cancer Investigation, 2009, 27, 397-401.	1.3	8

#	Article	IF	Citations
37	Quantification of dose in plasma immersion ion implantation of polymer bone scaffolds: Probe diagnostics of a pulsed dielectric barrier discharge. Plasma Processes and Polymers, 2020, 17, 2000113.	3.0	8
38	Hidden stressors in the clonogenic assay used in radiobiology experiments. Australasian Physical and Engineering Sciences in Medicine, 2011, 34, 345-350.	1.3	7
39	Optimization of temporal dose modulation: Comparison of theory and experiment. Medical Physics, 2012, 39, 3181-3188.	3.0	7
40	Small field inâ€air output factors: The role of miniphantom design and dosimeter type. Medical Physics, 2014, 41, 021723.	3.0	7
41	Radiation dosimetry in cell biology: comparison of calculated and measured absorbed dose for a range of culture vessels and clinical beam qualities. International Journal of Radiation Biology, 2018, 94, 150-156.	1.8	7
42	Spermatogonia survival in young ram lambs following irradiation, Busulfan or thermal treatment. Small Ruminant Research, 2018, 166, 22-27.	1.2	6
43	Profiling of the secretome of human cancer cells: Preparation of supernatant for proteomic analysis. Electrophoresis, 2014, 35, 2626-2633.	2.4	5
44	Women and men in the Australasian College of Physical Scientists and Engineers in Medicine: workforce survey. Australasian Physical and Engineering Sciences in Medicine, 2019, 42, 33-41.	1.3	4
45	Signal versus noise in fiber-coupled radiation dosimeters for medical applications. , 2004, 5317, 105.		3
46	Breathing as a low frequency wave propagation in nonlinear elastic permeable medium. Physica B: Condensed Matter, 2007, 394, 311-314.	2.7	3
47	Monte Carlo calculations of radiotherapy dose distributions within and around orthopaedic implants. Physics and Imaging in Radiation Oncology, 2022, 22, 123-130.	2.9	3
48	On the measurement of dose in-air for small radiation fields: choice of mini-phantom material. Physics in Medicine and Biology, 2015, 60, 2391-2402.	3.0	2
49	Sensitivity of spermatogonia to irradiation varies with age in pre-pubertal ram lambs. Animal Reproduction Science, 2018, 193, 58-67.	1.5	2
50	Applying the Hashinâ€“Shtrikman bounds to predict stiffness of multicomponent 3D printed structures: Towards regenerative orthopaedic medicine. Journal of Composite Materials, 2020, 54, 2173-2183.	2.4	2
51	Imaging prior to radiotherapy impacts in-vitro survival. Physics and Imaging in Radiation Oncology, 2020, 16, 138-143.	2.9	2
52	A selfâ€checking fiber optic dosimeter for monitoring common errors in brachytherapy applications. Medical Physics, 2009, 36, 2985-2991.	3.0	1
53	The international arena of medical physics: where is Australasia?. Australasian Physical and Engineering Sciences in Medicine, 2010, 33, 125-127.	1.3	1
54	Imaging dose affects in vitro survival following subsequent therapeutic irradiation. Biomedical Physics and Engineering Express, 2015, 1, 045016.	1.2	1

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55	Covalent binding of molecules to plasma immersion ion implantationâ€activated microparticles for delivery into cells. Engineering Reports, 2020, 2, e12087.	1.7	1
56	Optical properties of plasmaâ€treated PEEK: Monitoring colour and crystallinity for applications in medicine and dentistry using ellipsometry. Plasma Processes and Polymers, 0, , .	3.0	1
57	Plasma activated liquid synergistically enhances response to radiation for improved cancer therapy. Plasma Processes and Polymers, 2022, 19, .	3.0	1
58	Radiation dose perturbation at the tissue interface with PEEK and Titanium bone implants: Monte Carlo simulation, treatment planning and film dosimetry. Radiation Physics and Chemistry, 2022, 199, 110398.	2.8	1
59	How to become a life-saver. Physics World, 2003, 16, 47-47.	0.0	0
60	A fibre optic dosimeter for prostate cancer therapy. , 2006, , .		0
61	Large Core Fibers for Short-Distance Communication in Radiation Fields. , 2007, , .		0
62	Air core metallic light guides for scintillation dosimetery in radiotherapy. , 2010, , .		0
63	Light propagation in multimoded square hollow waveguides. Journal of Optics (United Kingdom), 2012, 14, 105703.	2.2	0
64	Is There More to Radiotherapy than Hitting the Target?. Journal of Nursing and Health Studies, 2017, 02, .	0.1	0
65	Radiation responses of cancer and normal cells to split dose fractions with uniform and grid fields: increasing the therapeutic ratio. International Journal of Radiation Biology, 2022, , 1-8.	1.8	0