HervÃ Seznec

List of Publications by Year
in descending order

47 papers	1,703 citations	394421 19 h-index	276875 41 g-index
48 all docs	48 docs citations	48 times ranked	1925 citing authors

#	Article	IF	Citations
1	A Geant4 simulation of X-ray emission for three-dimensional proton imaging of microscopic samples. Physica Medica, 2022, 94, 85-93.	0.7	1
2	Implementation of the EPICS2017 database for photons in Geant4. Physica Medica, 2022, 95, 94-115.	0.7	1
3	Changes in intra-nuclear mechanics in response to DNA damaging agents revealed by time-domain Brillouin micro-spectroscopy. Photoacoustics, 2022, 27, 100385.	7.8	6
4	Monte-Carlo dosimetry and real-time imaging of targeted irradiation consequences in 2-cell stage Caenorhabditis elegans embryo. Scientific Reports, 2019, 9, 10568.	3.3	7
5	A Geant4 simulation for three-dimensional proton imaging of microscopic samples. Physica Medica, 2019, 65, 172-180.	0.7	5
6	Remote imaging of single cell 3D morphology with ultrafast coherent phonons and their resonance harmonics. Scientific Reports, 2019, 9, 6409.	3.3	13
7	In Situ Detection and Single Cell Quantification of Metal Oxide Nanoparticles Using Nuclear Microprobe Analysis. Journal of Visualized Experiments, 2018, , .	0.3	1
8	Single Î±-particle irradiation permits real-time visualization of RNF8 accumulation at DNA damaged sites. Scientific Reports, 2017, 7, 41764.	3.3	9
9	Live cell imaging of mitochondria following targeted irradiation in situ reveals rapid and highly localized loss of membrane potential. Scientific Reports, 2017, 7, 46684.	3.3	46
10	An implementation of the NiftyRec medical imaging library for PIXE-tomography reconstruction. Nuclear Instruments & Methods in Physics Research B, 2017, 404, 131-139.	1.4	4
11	In situquantification of diverse titanium dioxide nanoparticles unveils selective endoplasmic reticulum stress-dependent toxicity. Nanotoxicology, 2017, 11, 134-145.	3.0	32
12	Cell micro-irradiation with MeV protons counted by an ultra-thin diamond membrane. Applied Physics Letters, 2017, 111, .	3.3	6
13	Simulating the Impact of the Natural Radiation Background on Bacterial Systems: Implications for Very Low Radiation Biological Experiments. PLoS ONE, 2016, 11, e0166364.	2.5	18
14	Comparison of experimental proton-induced fluorescence spectra for a selection of thin high-Z samples with Geant4 Monte Carlo simulations. Nuclear Instruments & Methods in Physics Research B, 2015, 358, 210-222.	1.4	16
15	An ImageJ plugin for ion beam imaging and data processing at AIFIRA facility. Nuclear Instruments & Methods in Physics Research B, 2015, 348, 62-67.	1.4	5
16	Quantitative reconstruction of PIXE-tomography data for thin samples using GUPIX X-ray emission yields. Nuclear Instruments & Methods in Physics Research B, 2015, 348, 92-99.	1.4	12
17	Multimodal correlative microscopy for in situ detection and quantification of chemical elements in biological specimens. Applications to nanotoxicology. Journal of Chemical Biology, 2015, 8, 159-167.	2.2	2
18	Advances in microbeam technologies and applications to radiation biology: Table 1.. Radiation Protection Dosimetry, 2015, 166, 182-187.	0.8	21

#	Article	IF	Citations
19	Development and applications of STIM- and PIXE-tomography: A review. Nuclear Instruments & Methods in Physics Research B, 2015, 363, 55-60.	1.4	14
20	In situ titanium dioxide nanoparticles quantitative microscopy in cells and in C. elegans using nuclear microprobe analysis. Nuclear Instruments & Methods in Physics Research B, 2014, 341, 58-64.	1.4	13
21	Fluorescence time-lapse imaging of single cells targeted with a focused scanning charged-particle microbeam. Nuclear Instruments & Methods in Physics Research B, 2014, 325, 27-34.	1.4	25
22	Single Cell In Situ Detection and Quantification of Metal Oxide Nanoparticles Using Multimodal Correlative Microscopy. Analytical Chemistry, 2014, 86, 7311-7319.	6.5	28
23	Simulating radial dose of ion tracks in liquid water simulated with Geant4-DNA: A comparative study. Nuclear Instruments & Methods in Physics Research B, 2014, 333, 92-98.	1.4	38
24	A comparison of quantitative reconstruction techniques for PIXE-tomography analysis applied to biological samples. Nuclear Instruments & Methods in Physics Research B, 2014, 331, 248-252.	1.4	12
25	Beyond filtered backprojection: A reconstruction software package for ion beam microtomography data. Nuclear Instruments & Methods in Physics Research B, 2013, 295, 42-49.	1.4	11
26	Functionalized nanomaterials: their use as contrast agents in bioimaging: mono- and multimodal approaches. Nanotechnology Reviews, 2013, 2, 125-169.	5.8	59
27	Monte-Carlo dosimetry on a realistic cell monolayer geometry exposed to alpha particles. Physics in Medicine and Biology, 2012, 57, 2189-2207.	3.0	38
28	Titanium dioxide nanoparticles induced intracellular calcium homeostasis modification in primary human keratinocytes. Towards anin vitroexplanation of titanium dioxide nanoparticles toxicity. Nanotoxicology, 2011, 5, 125-139.	3.0	46
29	Technical developments for computed tomography on the CENBG nanobeam line. Nuclear Instruments & Methods in Physics Research B, 2011, 269, 2206-2209.	1.4	8
30	First results obtained using the CENBG nanobeam line: Performances and applications. Nuclear Instruments & Methods in Physics Research B, 2011, 269, 2163-2167.	1.4	29
31	Limitations in a frataxin knockdown cell model for Friedreich ataxia in a high-throughput drug screen. BMC Neurology, 2009, 9, 46.	1.8	12
32	The skin barrier function: a microâ€PIXE study. X-Ray Spectrometry, 2009, 38, 132-137.	1.4	6
33	Reconstruction of 3D ion beam micro-tomography data for applications in Cell Biology. Nuclear Instruments & Methods in Physics Research B, 2009, 267, 2107-2112.	1.4	13
34	Cobalt distribution in keratinocyte cells indicates nuclear and perinuclear accumulation and interaction with magnesium and zinc homeostasis. Toxicology Letters, 2009, 188, 26-32.	0.8	62
35	Monte Carlo dosimetry for targeted irradiation of individual cells using a microbeam facility. Radiation Protection Dosimetry, 2009, 133, 2-11.	0.8	46
36	Microdosimetry in high-resolution cellular phantoms using the very low energy electromagnetic extension of the Geant4 toolkit. , 2007, , .		0

#	Article	IF	Citations
37	Monte Carlo simulation of the CENBG microbeam and nanobeam lines with the Geant4 toolkit. Nuclear Instruments & Methods in Physics Research B, 2007, 260, 20-27.	1.4	33
38	A comparison of cellular irradiation techniques with alpha particles using the Geant4 Monte Carlo simulation toolkit. Radiation Protection Dosimetry, 2006, 122, 327-329.	0.8	19
39	An interdisciplinary approach toÂinvestigate theÂimpact ofÂcobalt inÂaÂhuman keratinocyte cell line. Biochimie, 2006, 88, 1619-1629.	2.6	18
40	Three-dimensional densitometry imaging of diatom cells using STIM tomography. Nuclear Instruments & Methods in Physics Research B, 2006, 249, 653-659.	1.4	15
41	Geant4 simulation of the new CENBG micro and nanoprobes facility. Nuclear Instruments & Methods in Physics Research B, 2006, 249, 738-742.	1.4	19
42	Friedreich ataxia: the oxidative stress paradox. Human Molecular Genetics, 2005, 14, 463-474.	2.9	205
43	Idebenone delays the onset of cardiac functional alteration without correction of Fe-S enzymes deficit in a mouse model for Friedreich ataxia. Human Molecular Genetics, 2004, 13, 1017-1024.	2.9	128
44	Friedreich Ataxia Mouse Models with Progressive Cerebellar and Sensory Ataxia Reveal Autophagic Neurodegeneration in Dorsal Root Ganglia. Journal of Neuroscience, 2004, 24, 1987-1995.	3.6	189
45	Mice transgenic for the human myotonic dystrophy region with expanded CTG repeats display muscular and brain abnormalities. Human Molecular Genetics, 2001, 10, 2717-2726.	2.9	197
46	Transgenic mice carrying large human genomic sequences with expanded CTG repeat mimic closely the DM CTG repeat intergenerational and somatic instability. Human Molecular Genetics, 2000, 9, 1185-1194.	2.9	140
47	Somatic instability of the CTG repeat in mice transgenic for the myotonic dystrophy region is age dependent but not correlated to the relative intertissue transcription levels and proliferative capacities. Human Molecular Genetics, 1998, 7, 1285-1291.	2.9	70