Marc-AndrÃ© TÃ©trault

List of Publications by Year
in descending order

43 papers	730 citations	623734 14 h-index	610901 24 g-index
43 all docs	43 docs citations	43 times ranked	532 citing authors

#	Article	IF	Citations
1	Novel Quantification of Real-Time Lymphatic Clearance: Immediate Lymphatic Reconstruction in a Large-Animal Model. Plastic and Reconstructive Surgery, 2022, 149, 130-141.	1.4	2
2	Dependence of fluorodeoxyglucose (FDG) uptake on cell cycle and dry mass: a single-cell study using a multi-modal radiography platform. Scientific Reports, 2020, 10, 4280.	3.3	7
3	Realâ€Time Imaging of Vaccine Biodistribution Using Zwitterionic NIR Nanoparticles. Advanced Healthcare Materials, 2019, 8, 1900035.	7.6	10
4	TDC Array Tradeoffs in Current and Upcoming Digital SiPM Detectors for Time-of-Flight PET. IEEE Transactions on Nuclear Science, 2017, 64, 925-932.	2.0	19
5	Firmware architecture of the data acquisition system for the LabPET II mouse scanner. , 2016, , .		5
6	Digital SPAD scintillation detector simulation flow to evaluate and minimize real-time requirements. , 2016, , .		2
7	System architecture of a fully combined PET/CT scanner using LabPETâ„¢ electronics with an upgraded analog front-end optimized for PET and CT counting mode operation. , 2015, , .		1
8	Optimization of Single Photon Avalanche Diode array detectors with a custom simulator. , 2015, , .		4
9	Sensitivity Increase Through a Neural Network Method for LOR Recovery of ICS Triple Coincidences in High-Resolution Pixelated- Detectors PET Scanners. IEEE Transactions on Nuclear Science, 2015, 62, 82-94.	2.0	25
10	Real Time Artificial Neural Network FPGA Implementation for Triple Coincidences Recovery in PET. IEEE Transactions on Nuclear Science, 2015, 62, 824-831.	2.0	10
11	Dark Count Impact for First Photon Discriminators for SPAD Digital Arrays in PET. IEEE Transactions on Nuclear Science, 2015, 62, 719-726.	2.0	11
12	LabPET II, an APD-based Detector Module with PET and Counting CT Imaging Capabilities. IEEE Transactions on Nuclear Science, 2015, 62, 756-765.	2.0	32
13	Imaging performance of LabPET APD-based digital PET scanners for pre-clinical research. Physics in Medicine and Biology, 2014, 59, 661-678.	3.0	48
14	Design of a Real-Time FPGA-Based Data Acquisition Architecture for the LabPET II: An APD-Based Scanner Dedicated to Small Animal PET Imaging. IEEE Transactions on Nuclear Science, 2013, 60, 3633-3638.	2.0	29
15	Low dead time digital SPAD readout architecture for realtime small animal PET. , 2013, , .		4
16	Toward truly combined PET/CT imaging using PET detectors and photon counting CT with iterative reconstruction implementing physical detector response. Medical Physics, 2012, 39, 5697-5707.	3.0	6
17	Design of a real-time FPGA-based DAQ architecture for the LabPET II, an APD-based scanner dedicated to small animal PET imaging. , 2012, , .		4
18	LabPET II, an APD-based PET detector module with counting CT imaging capability. , 2011, , .		12

#	Article	IF	Citations
19	Calibration process for improving Crystal Identification rate in the LabPET™ phoswich detectors. , 2010, , .		1
20	Improved LabPET detectors using Lu<inf>1.8</inf>Gd<inf>0.2</inf>SiO<inf>5</inf>:Ce (LGSO) scintillator blocks. , 2010, , .		0
21	A Sub-Nanosecond Time Interval Detection System Using FPGA Embedded I/O Resources. IEEE Transactions on Nuclear Science, 2010, 57, 519-524.	2.0	13
22	A handy time alignment probe for timing calibration of PET scanners. Nuclear Instruments and Methods in Physics Research, Section A: Accelerators, Spectrometers, Detectors and Associated Equipment, 2009, 599, 113-117.	1.6	15
23	Development of a 64-channel APD detector module with individual pixel readout for submillimetre spatial resolution in PET. Nuclear Instruments and Methods in Physics Research, Section A: Accelerators, Spectrometers, Detectors and Associated Equipment, 2009, 610, 20-23.	1.6	29
24	Time Discrimination Techniques Using Artificial Neural Networks for Positron Emission Tomography. IEEE Transactions on Nuclear Science, 2009, 56, 588-595.	2.0	9
25	A Sub-Nanosecond Edge Detection System using embedded FPGA fabrics. , 2009, , .		1
26	Performance Evaluation of the LabPET APD-Based Digital PET Scanner. IEEE Transactions on Nuclear Science, 2009, 56, 10-16.	2.0	134
27	Signal Deconvolution Concept Combined With Cubic Spline Interpolation to Improve Timing With Phoswich PET Detectors. IEEE Transactions on Nuclear Science, 2009, 56, 581-587.	2.0	7
28	The Hardware and Signal Processing Architecture of LabPETâ„¢, a Small Animal APD-Based Digital PET Scanner. IEEE Transactions on Nuclear Science, 2009, 56, 3-9.	2.0	100
29	System Architecture of the LabPET Small Animal PET Scanner. IEEE Transactions on Nuclear Science, 2008, 55, 2546-2550.	2.0	47
30	Real Time Implementation of a Wiener Filter Based Crystal Identification Algorithm. IEEE Transactions on Nuclear Science, 2008, 55, 925-929.	2.0	27
31	LabPET II, a novel 64-channel APD-based PET detector module with individual pixel readout achieving submillimetric spatial resolution. , 2008, , .		5
32	A Fast Crystal Identification Algorithm Applied to the LabPETâ„¢ Phoswich Detectors. IEEE Transactions on Nuclear Science, 2008, 55, 1644-1651.	2.0	8
33	Timing Improvement by Low-Pass Filtering and Linear Interpolation for the LabPET Scanner. IEEE Transactions on Nuclear Science, 2008, 55, 34-39.	2.0	25
34	High Rate Photon Counting CT Using Parallel Digital PET Electronics. IEEE Transactions on Nuclear Science, 2008, 55, 40-47.	2.0	14
35	Signal deconvolution concept combined with Cubic Spline interpolation to improve timing with phoswich pet detectors. , 2008, , .		1
36	Imaging performance of the LabPET™ APD-based digital PET scanner. , 2008, , .		5

#	Article	IF	Citations
37	Roadmap to fully-digital PET/CT scanners. , 2007, , .		5
38	ULTRA-Fast wiener filter based crystal identification algorithm applied to the LabPET^{TM} phoswich detectors. , 2007, , .		1
39	Performance evaluation of the LabPET™ APD-based digital PET scanner. , 2007, , .		23
40	High Rate Photon Counting CT Using Parallel Digital PET Electronics. , 2007, , .		1
41	Timing improvement by low-pass filtering and linear interpolation for the LabPET^{TM} scanner. , 2007, , .		3
42	Digital signal processing applied to crystal identification in Positron Emission Tomography dedicated to small animals. Nuclear Instruments and Methods in Physics Research, Section A: Accelerators, Spectrometers, Detectors and Associated Equipment, 2007, 571, 385-388.	1.6	17
43	Performance evaluation of a dual-crystal APD-based detector modules for positron emission tomography. , 2006, 6142, 243.		8