

Marc-André Tétrault

List of Publications by Year in descending order

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citing authors

#	ARTICLE	IF	CITATIONS
1	Performance Evaluation of the LabPET APD-Based Digital PET Scanner. IEEE Transactions on Nuclear Science, 2009, 56, 10-16.	2.0	134
2	The Hardware and Signal Processing Architecture of LabPET _{II} , a Small Animal APD-Based Digital PET Scanner. IEEE Transactions on Nuclear Science, 2009, 56, 3-9.	2.0	100
3	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
4	System Architecture of the LabPET Small Animal PET Scanner. IEEE Transactions on Nuclear Science, 2008, 55, 2546-2550.	2.0	47
5	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
6	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
7	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
8	Real Time Implementation of a Wiener Filter Based Crystal Identification Algorithm. IEEE Transactions on Nuclear Science, 2008, 55, 925-929.	2.0	27
9	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
10	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
11	Performance evaluation of the LabPET _{II} APD-based digital PET scanner. , 2007, , .		23
12	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
13	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
14	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
15	High Rate Photon Counting CT Using Parallel Digital PET Electronics. IEEE Transactions on Nuclear Science, 2008, 55, 40-47.	2.0	14
16	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
17	LabPET II, an APD-based PET detector module with counting CT imaging capability. , 2011, , .		12
18	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

#	ARTICLE	IF	CITATIONS
19	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
20	Real Time Imaging of Vaccine Biodistribution Using Zwitterionic NIR Nanoparticles. Advanced Healthcare Materials, 2019, 8, 1900035.	7.6	10
21	Time Discrimination Techniques Using Artificial Neural Networks for Positron Emission Tomography. IEEE Transactions on Nuclear Science, 2009, 56, 588-595.	2.0	9
22	Performance evaluation of a dual-crystal APD-based detector modules for positron emission tomography. , 2006, 6142, 243.		8
23	A Fast Crystal Identification Algorithm Applied to the LabPET, Phoswich Detectors. IEEE Transactions on Nuclear Science, 2008, 55, 1644-1651.	2.0	8
24	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
25	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
26	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
27	Roadmap to fully-digital PET/CT scanners. , 2007, , .		5
28	LabPET II, a novel 64-channel APD-based PET detector module with individual pixel readout achieving submillimetric spatial resolution. , 2008, , .		5
29	Imaging performance of the LabPET; APD-based digital PET scanner. , 2008, , .		5
30	Firmware architecture of the data acquisition system for the LabPET II mouse scanner. , 2016, , .		5
31	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
32	Low dead time digital SPAD readout architecture for realtime small animal PET. , 2013, , .		4
33	Optimization of Single Photon Avalanche Diode array detectors with a custom simulator. , 2015, , .		4
34	Timing improvement by low-pass filtering and linear interpolation for the LabPET; scanner. , 2007, , .		3
35	Digital SPAD scintillation detector simulation flow to evaluate and minimize real-time requirements. , 2016, , .		2
36	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

#	ARTICLE	IF	CITATIONS
37	ULTRA-Fast wiener filter based crystal identification algorithm applied to the LabPET TM ; phoswich detectors. , 2007, , .		1
38	High Rate Photon Counting CT Using Parallel Digital PET Electronics. , 2007, , .		1
39	Signal deconvolution concept combined with Cubic Spline interpolation to improve timing with phoswich pet detectors. , 2008, , .		1
40	A Sub-Nanosecond Edge Detection System using embedded FPGA fabrics. , 2009, , .		1
41	Calibration process for improving Crystal Identification rate in the LabPET TM ; phoswich detectors. , 2010, , .		1
42	System architecture of a fully combined PET/CT scanner using LabPET TM electronics with an upgraded analog front-end optimized for PET and CT counting mode operation. , 2015, , .		1
43	Improved LabPET detectors using Lu ^{1.8} ;Gd ^{0.2} ;SiO ⁵ ;Ce (LGSO) scintillator blocks. , 2010, , .		0