

# Suleman Surti

## List of Publications by Year in descending order

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Version: 2024-02-01

104  
papers

4,408  
citations

117571

34  
h-index

118793

62  
g-index

104  
all docs

104  
docs citations

104  
times ranked

2688  
citing authors

#	ARTICLE	IF	CITATIONS
1	Data-driven, energy-based method for estimation of scattered events in positron emission tomography. <i>Physics in Medicine and Biology</i> , 2022, 67, 095010.	1.6	5
2	Investigating Low-Dose Image Quality in Whole-Body Pediatric <sup>18</sup> F-FDG Scans Using Time-of-Flight PET/MRI. <i>Journal of Nuclear Medicine</i> , 2021, 62, 123-130.	2.8	22
3	Total-body PET is ready for prime time. <i>Medical Physics</i> , 2021, 48, 3-6.	1.6	3
4	PET/MRI for Primary Breast Cancer: A Match Made Better by PET Quantification?. <i>Radiology Imaging Cancer</i> , 2021, 3, e200150.	0.7	1
5	Quantitative PET in the 2020s: a roadmap. <i>Physics in Medicine and Biology</i> , 2021, 66, 06RM01.	1.6	36
6	Time of Flight in Perspective: Instrumental and Computational Aspects of Time Resolution in Positron Emission Tomography. <i>IEEE Transactions on Radiation and Plasma Medical Sciences</i> , 2021, 5, 598-618.	2.7	18
7	A Proof-of-Concept Study of an In-Situ Partial-Ring Time-of-Flight PET Scanner for Proton Beam Verification. <i>IEEE Transactions on Radiation and Plasma Medical Sciences</i> , 2021, 5, 694-702.	2.7	3
8	Reconstruction-free positron emission imaging. <i>Nature Photonics</i> , 2021, 15, 873-874.	15.6	1
9	Numerical observer study of lesion detectability for a long axial field-of-view whole-body PET imager using the PennPET Explorer. <i>Physics in Medicine and Biology</i> , 2020, 65, 035002.	1.6	11
10	Update on latest advances in time-of-flight PET. <i>Physica Medica</i> , 2020, 80, 251-258.	0.4	47
11	Roadmap toward the 10 ps time-of-flight PET challenge. <i>Physics in Medicine and Biology</i> , 2020, 65, 21RM01.	1.6	136
12	Benefit of Improved Performance with State-of-the Art Digital PET/CT for Lesion Detection in Oncology. <i>Journal of Nuclear Medicine</i> , 2020, 61, 1684-1690.	2.8	53
13	Total Body PET: Why, How, What for?. <i>IEEE Transactions on Radiation and Plasma Medical Sciences</i> , 2020, 4, 283-292.	2.7	75
14	Current Status of PET Technology. , 2020, , 3-14.		2
15	Characterization of Monolithic Scintillation Detectors Etched With Laser Induced Optical Barriers. <i>IEEE Transactions on Radiation and Plasma Medical Sciences</i> , 2019, 3, 531-537.	2.7	8
16	Impact of event positioning algorithm on performance of a whole-body PET scanner using one-to-one coupled detectors. <i>Physics in Medicine and Biology</i> , 2018, 63, 055008.	1.6	18
17	A modular waveform-sampling data acquisition system for time-of-flight PET. , 2018, , .		3
18	Spatially-Variant Image-Based Modeling of PSF Deformations with Application to Limited Angle Dual-Panel Breast-PET Data. , 2018, , .		1

#	ARTICLE	IF	CITATIONS
19	Attenuation correction in a combined, single-gantry breast PET-Tomosynthesis scanner. , 2018, , .		5
20	Improved image quality using monolithic scintillator detectors with dual-sided readout in a whole-body TOF-PET ring: a simulation study. Physics in Medicine and Biology, 2017, 62, 2018-2032.	1.6	12
21	GATE simulations to study extended axial FOVs for the PennPET Explorer scanner. , 2017, , .		5
22	Evaluation of the imaging performance of continuous detectors etched with laser induced optical barriers. , 2016, , .		1
23	Image-Based Modeling of PSF Deformation With Application to Limited Angle PET Data. IEEE Transactions on Nuclear Science, 2016, 63, 2599-2606.	1.2	17
24	Advances in time-of-flight PET. Physica Medica, 2016, 32, 12-22.	0.4	124
25	Image-based modeling of PSF deformation with application to limited angle PET data. , 2015, , .		0
26	Update on Time-of-Flight PET Imaging. Journal of Nuclear Medicine, 2015, 56, 98-105.	2.8	212
27	Impact of detector design on imaging performance of a long axial field-of-view, whole-body PET scanner. Physics in Medicine and Biology, 2015, 60, 5343-5358.	1.6	45
28	Timing and Energy Resolution of New Near-UV SiPMs Coupled to ${}^3\text{LaBr}_3$ :Ce for TOF-PET. IEEE Transactions on Nuclear Science, 2014, 61, 2426-2432.	1.2	12
29	Determination of Accuracy and Precision of Lesion Uptake Measurements in Human Subjects with Time-of-Flight PET. Journal of Nuclear Medicine, 2014, 55, 602-607.	2.8	45
30	Design and Performance of a High Spatial Resolution, Time-of-Flight PET Detector. IEEE Transactions on Nuclear Science, 2014, 61, 1092-1098.	1.2	20
31	ROCSTAR: Data acquisition electronics for TOF PET. , 2014, , .		0
32	Combining Surface Treatments With Shallow Slots to Improve the Spatial Resolution Performance of Continuous, Thick LYSO Detectors for PET. IEEE Transactions on Nuclear Science, 2013, 60, 44-52.	1.2	28
33	Design Optimization of a Time-Of-Flight, Breast PET Scanner. IEEE Transactions on Nuclear Science, 2013, 60, 1645-1652.	1.2	37
34	Design Study of a Whole-Body PET Scanner With Improved Spatial and Timing Resolution. IEEE Transactions on Nuclear Science, 2013, 60, 3220-3226.	1.2	27
35	DOI Determination by Rise Time Discrimination in Single-Ended Readout for TOF PET Imaging. IEEE Transactions on Nuclear Science, 2013, 60, 1478-1486.	1.2	29
36	Radionuclide Methods and Instrumentation for Breast Cancer Detection and Diagnosis. Seminars in Nuclear Medicine, 2013, 43, 271-280.	2.5	37

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37	Initial imaging results from a high spatial-resolution time-of-flight PET detector designed for dedicated breast imaging. , 2013, , .		2
38	Study of PET scanner designs using clinical metrics to optimize the scanner axial FOV and crystal thickness. Physics in Medicine and Biology, 2013, 58, 3995-4012.	1.6	37
39	NEMA NU 4-2008 Comparison of Preclinical PET Imaging Systems. Journal of Nuclear Medicine, 2012, 53, 1300-1309.	2.8	191
40	Comparison of List-Mode and DIRECT Approaches for Time-of-Flight PET Reconstruction. IEEE Transactions on Medical Imaging, 2012, 31, 1461-1471.	5.4	21
41	Application of a Generalized Scan Statistic Model to Evaluate TOF PET Images. IEEE Transactions on Nuclear Science, 2011, 58, 99-104.	1.2	7
42	Development of a high-resolution and depth-of-interaction capable detector for time-of-flight PET. , 2011, , .		5
43	Fundamentals of PET and PET/CT imaging. Annals of the New York Academy of Sciences, 2011, 1228, 1-18.	1.8	116
44	Design study of an<i>in situ</i>PET scanner for use in proton beam therapy. Physics in Medicine and Biology, 2011, 56, 2667-2685.	1.6	53
45	Characterizing the spatial resolution performance of continuous &amp; thick LYSO crystals. , 2011, , .		1
46	Impact of Time-of-Flight PET on Whole-Body Oncologic Studies: A Human Observer Lesion Detection and Localization Study. Journal of Nuclear Medicine, 2011, 52, 712-719.	2.8	94
47	Fast List-Mode Reconstruction for Time-of-Flight PET Using Graphics Hardware. IEEE Transactions on Nuclear Science, 2011, 58, 105-109.	1.2	28
48	Design optimization of a dedicated breast PET scanner using TOF imaging in a partial ring geometry. , 2011, , .		5
49	Evaluation of image Signal-to-Noise Ratio in Time-of-Flight PET. , 2011, , .		2
50	Continuous LYSO-SSPM array based PET detectors for clinical and small volume imaging studies. , 2011, , .		0
51	Improvement in Lesion Detection with Whole-Body Oncologic Time-of-Flight PET. Journal of Nuclear Medicine, 2011, 52, 347-353.	2.8	167
52	Comparison of image Signal-to-Noise Ratio and Noise Equivalent Counts in Time-of-Flight PET. , 2010, , .		1
53	Comparison of list-mode and DIRECT approaches for time-of-flight PET reconstruction. , 2010, , .		5
54	The imaging performance of a LaBr<sub>3</sub>-based PET scanner. Physics in Medicine and Biology, 2010, 55, 45-64.	1.6	120

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55	Signal analysis for improved timing resolution with scintillation detectors for TOF PET imaging. , 2010, , .		11
56	Reduction in variability of clinical lesion quantification with TOF-PET imaging. , 2010, , .		2
57	Improved Dose Regimen in Pediatric PET. Journal of Nuclear Medicine, 2010, 51, 293-300.	2.8	44
58	Imaging Studies for Evaluating Impact of Position Sampling Techniques in PET Scanners. IEEE Transactions on Nuclear Science, 2010, 57, 2497-2503.	1.2	0
59	SU-GG-J-145: PET Image Simulation of Isotopes Produced in Patient during Proton Therapy. Medical Physics, 2010, 37, 3179-3179.	1.6	0
60	Evaluation of a fully 3D, big bore TOF PET scanner with reduced scatter shields. , 2009, , .		1
61	Experimental evaluation of a simple lesion detection task with time-of-flight PET. Physics in Medicine and Biology, 2009, 54, 373-384.	1.6	76
62	Efficient 3-D TOF PET Reconstruction Using View-Grouped Histo-Images: DIRECTâ€™Direct Image Reconstruction for TOF. IEEE Transactions on Medical Imaging, 2009, 28, 739-751.	5.4	78
63	A recovery coefficient method for partial volume correction of PET images. Annals of Nuclear Medicine, 2009, 23, 341-348.	1.2	89
64	Improved Spatial Resolution in PET Scanners Using Sampling Techniques. IEEE Transactions on Nuclear Science, 2009, 56, 596-601.	1.2	8
65	Correction Technique for Cascade Gammas in I-124 Imaging on a Fully-3D, Time-of-Flight PET Scanner. IEEE Transactions on Nuclear Science, 2009, 56, 653-660.	1.2	29
66	Benefit of Time-of-Flight in PET: Experimental and Clinical Results. Journal of Nuclear Medicine, 2008, 49, 462-470.	2.8	530
67	Evaluation of local PMT triggering electronics for a TOF-PET scanner. , 2008, , .		7
68	Design considerations for a limited angle, dedicated breast, TOF PET scanner. Physics in Medicine and Biology, 2008, 53, 2911-2921.	1.6	108
69	Thick continuous crystal design for PET. , 2008, , .		2
70	An investigation of waveform sampling for improved signal processing in TOF PET. , 2008, , .		8
71	Performance of Philips Gemini TF PET/CT scanner with special consideration for its time-of-flight imaging capabilities. Journal of Nuclear Medicine, 2007, 48, 471-80.	2.8	400
72	Performance assessment of pixelated LaBr/sub 3/ detector modules for time-of-flight PET. IEEE Transactions on Nuclear Science, 2006, 53, 1090-1095.	1.2	63

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73	Investigation of time-of-flight benefit for fully 3-DPET. IEEE Transactions on Medical Imaging, 2006, 25, 529-538.	5.4	157
74	Efficient 3D TOF PET Reconstruction Using View-Grouped Histo-Images: DIRECT - Direct Image Reconstruction for TOF. , 2006, , .		5
75	Implementation and Evaluation of a 3D PET Single Scatter Simulation with TOF Modeling. , 2006, , .		54
76	A count-rate model for PET scanners using pixelated Anger-logic detectors with different scintillators. Physics in Medicine and Biology, 2005, 50, 5697-5715.	1.6	9
77	Imaging performance of a-PET: a small animal PET camera. IEEE Transactions on Medical Imaging, 2005, 24, 844-852.	5.4	91
78	Image quality assessment of LaBr3-based whole-body 3D PET scanners: a Monte Carlo evaluation. Physics in Medicine and Biology, 2004, 49, 4593-4610.	1.6	59
79	Count-Rate Dependent Event Mispositioning and NEC in PET. IEEE Transactions on Nuclear Science, 2004, 51, 41-45.	1.2	17
80	PET instrumentation. Radiologic Clinics of North America, 2004, 42, 1003-1016.	0.9	13
81	Design of a lanthanum bromide detector for time-of-flight PET. IEEE Transactions on Nuclear Science, 2004, 51, 2550-2557.	1.2	115
82	Imaging characteristics of a 3-dimensional GSO whole-body PET camera. Journal of Nuclear Medicine, 2004, 45, 1040-9.	2.8	67
83	Evaluation of pixelated NaI(Tl) detectors for PET. IEEE Transactions on Nuclear Science, 2003, 50, 24-31.	1.2	16
84	Design evaluation of A-PET: A high sensitivity animal PET camera. IEEE Transactions on Nuclear Science, 2003, 50, 1357-1363.	1.2	90
85	Investigation of lanthanum scintillators for 3-D PET. IEEE Transactions on Nuclear Science, 2003, 50, 348-354.	1.2	50
86	Performance of a brain PET camera based on anger-logic gadolinium oxyorthosilicate detectors. Journal of Nuclear Medicine, 2003, 44, 1340-9.	2.8	65
87	Slotted surface treatment of position-sensitive NaI(Tl) detectors to improve detector performance. IEEE Transactions on Nuclear Science, 2001, 48, 2418-2423.	1.2	10
88	Optimizing the performance of a PET detector using discrete GSO crystals on a continuous lightguide. IEEE Transactions on Nuclear Science, 2000, 47, 1030-1036.	1.2	76
89	Comparison of multi-pole shaping and delay line clipping pre-amplifiers for position sensitive NaI(Tl) detectors. IEEE Transactions on Nuclear Science, 1998, 45, 1138-1143.	1.2	5
90	Slotted surface treatment on position-sensitive NaI(Tl) detectors to improve spatial resolution. , 0, , .		1

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91	Performance of a GSO brain PET camera. , 0, , .		12
92	Performance measurements for the GSO-based brain PET camera (G-PET). , 0, , .		7
93	Development of pixelated NaI(Tl) detectors for PET. , 0, , .		2
94	Investigation of lanthanum scintillators for 3D PET. , 0, , .		5
95	Performance measurements of a pixelated NaI(Tl) PET scanner. , 0, , .		1
96	A-PET: a high sensitivity animal PET camera. , 0, , .		0
97	Count-rate dependent event mispositioning and NEC in PET. , 0, , .		7
98	Performance Assessment of Pixelated LaBr3 Detector Modules for TOF PET. , 0, , .		8
99	The effects of pulse pile-up on point-source measurements performed on different PET scanning devices. , 0, , .		3
100	Image quality assessment of LaBr/sub 3/ based 3D PET scanners. , 0, , .		2
101	Investigation of a High-Resolution Detector for Whole-Body PET Imaging. , 0, , .		0
102	Investigation of LaBr/sub 3/ Detector Timing Resolution. , 0, , .		5
103	Characterization of TOF PET Scanner Based on Lanthanum Bromide. , 0, , .		27
104	Time of Flight Coincidence Timing Calibration Techniques Using Radioactive Sources. , 0, , .		19