Paul Eugene Kinahan

List of Publications by Citations

271 papers	13,367 citations	54 h-index	112 g-index
307 ext. papers	16,057 ext. citations	4.9 avg, IF	6.78 L-index

#	Paper	IF	Citations
271	Radiomics: Images Are More than Pictures, They Are Data. *Radiology*, **2016**, 278, 563-77	20.5	3149
270	Attenuation correction for a combined 3D PET/CT scanner. *Medical Physics*, **1998**, 25, 2046-53	4.4	632
269	Amphetamine-induced dopamine release in human ventral striatum correlates with euphoria. *Biological Psychiatry*, **2001**, 49, 81-96	7.9	573
268	Exact and approximate rebinning algorithms for 3-D PET data. *IEEE Transactions on Medical Imaging*, **1997**, 16, 145-58	11.7	542
267	. *IEEE Transactions on Nuclear Science*, **1989**, 36, 964-968	1.7	524
266	X-ray-based attenuation correction for positron emission tomography/computed tomography scanners. *Seminars in Nuclear Medicine*, **2003**, 33, 166-79	5.4	366
265	Positron emission tomography-computed tomography standardized uptake values in clinical practice and assessing response to therapy. *Seminars in Ultrasound, CT and MRI*, **2010**, 31, 496-505	1.7	333
264	Characterization of PET/CT images using texture analysis: the past, the present… any future?. *European Journal of Nuclear Medicine and Molecular Imaging*, **2017**, 44, 151-165	8.8	297
263	FDG-PET/CT imaging for preradiotherapy staging of head-and-neck squamous cell carcinoma. *International Journal of Radiation Oncology Biology Physics*, **2005**, 61, 129-36	4	183
262	Brown Adipose Reporting Criteria in Imaging STudies (BARCIST 1.0): Recommendations for Standardized FDG-PET/CT Experiments in Humans. *Cell Metabolism*, **2016**, 24, 210-22	24.6	177
261	Clinically feasible reconstruction of 3D whole-body PET/CT data using blurred anatomical labels. *Physics in Medicine and Biology*, **2002**, 47, 1-20	3.8	174
260	The impact of respiratory motion on tumor quantification and delineation in static PET/CT imaging. *Physics in Medicine and Biology*, **2009**, 54, 7345-62	3.8	171
259	Combined PET/CT Imaging in Oncology. Impact on Patient Management. *Molecular Imaging and Biology*, **2000**, 3, 223-230		159
258	Application and evaluation of a measured spatially variant system model for PET image reconstruction. *IEEE Transactions on Medical Imaging*, **2010**, 29, 938-49	11.7	152
257	Positron Emission Tomography: Current Challenges and Opportunities for Technological Advances in Clinical and Preclinical Imaging Systems. *Annual Review of Biomedical Engineering*, **2015**, 17, 385-414	12	129
256	Noise and signal properties in PSF-based fully 3D PET image reconstruction: an experimental evaluation. *Physics in Medicine and Biology*, **2010**, 55, 1453-73	3.8	127
255	Modeling and incorporation of system response functions in 3-D whole body PET. *IEEE Transactions on Medical Imaging*, **2006**, 25, 828-37	11.7	127

254	Clinical imaging characteristics of the positron emission mammography camera: PEM Flex Solo II. *Journal of Nuclear Medicine*, **2009**, 50, 1666-75	8.9	119
253	Image analysis in patients with cancer studied with a combined PET and CT scanner. *Clinical Nuclear Medicine*, **2000**, 25, 905-10	1.7	119
252	The positron emission mammography/tomography breast imaging and biopsy system (PEM/PET): design, construction and phantom-based measurements. *Physics in Medicine and Biology*, **2008**, 53, 637-53	3.8	117
251	FDG-PET/CT-guided intensity modulated head and neck radiotherapy: a pilot investigation. *Head and Neck*, **2005**, 27, 478-87	4.2	103
250	Quantitative radiomics: impact of stochastic effects on textural feature analysis implies the need for standards. *Journal of Medical Imaging*, **2015**, 2, 041002	2.6	99
249	Quantitative imaging biomarkers: a review of statistical methods for computer algorithm comparisons. *Statistical Methods in Medical Research*, **2015**, 24, 68-106	2.3	99
248	Comparison of 3-D reconstruction with 3D-OSEM and with FORE+OSEM for PET. *IEEE Transactions on Medical Imaging*, **2001**, 20, 804-14	11.7	94
247	Variations of dynamic contrast-enhanced magnetic resonance imaging in evaluation of breast cancer therapy response: a multicenter data analysis challenge. *Translational Oncology*, **2014**, 7, 153-66	4.9	93
246	PET measures of amphetamine-induced dopamine release in ventral versus dorsal striatum. *Neuropsychopharmacology*, **1999**, 21, 694-709	8.7	93
245	Weight-based, low-dose pediatric whole-body PET/CT protocols. *Journal of Nuclear Medicine*, **2009**, 50, 1570-7	8.9	92
244	SUV varies with time after injection in (18)F-FDG PET of breast cancer: characterization and method to adjust for time differences. *Journal of Nuclear Medicine*, **2003**, 44, 1044-50	8.9	90
243	Tumor delineation using PET in head and neck cancers: threshold contouring and lesion volumes. *Medical Physics*, **2006**, 33, 4280-8	4.4	87
242	Quantitative Imaging in Cancer Clinical Trials. *Clinical Cancer Research*, **2016**, 22, 284-90	12.9	85
241	Evaluation of task-oriented performance of several fully 3D PET reconstruction algorithms. *Physics in Medicine and Biology*, **1994**, 39, 355-67	3.8	85
240	Variability in PET quantitation within a multicenter consortium. *Medical Physics*, **2010**, 37, 3660-6	4.4	83
239	Summary of the UPICT Protocol for 18F-FDG PET/CT Imaging in Oncology Clinical Trials. *Journal of Nuclear Medicine*, **2015**, 56, 955-61	8.9	80
238	Cine CT for attenuation correction in cardiac PET/CT. *Journal of Nuclear Medicine*, **2007**, 48, 794-801	8.9	80
237	PM-04IN SILICO ANALYSIS OF AVAglio AND RTOG 0825 PHASE III CLINICAL TRIALS SUGGESTS SIGNATURES OF PATIENTS TO RECEIVE BENEFIT FROM COMBINED BEVACIZUMAB AND RADIATION THERAPIES. *Neuro-Oncology*, **2014**, 16, v169-v169	1	78

236	Quiescent period respiratory gating for PET/CT. *Medical Physics*, **2010**, 37, 5037-43	4.4	78
235	[11C]WAY 100635: a radioligand for imaging 5-HT1A receptors with positron emission tomography. *Life Sciences*, **1994**, 55, PL403-7	6.8	75
234	Evaluation of strategies towards harmonization of FDG PET/CT studies in multicentre trials: comparison of scanner validation phantoms and data analysis procedures. *European Journal of Nuclear Medicine and Molecular Imaging*, **2013**, 40, 1507-15	8.8	71
233	Ultra-low dose CT attenuation correction for PET/CT. *Physics in Medicine and Biology*, **2012**, 57, 309-28	3.8	68
232	Quantitative imaging test approval and biomarker qualification: interrelated but distinct activities. *Radiology*, **2011**, 259, 875-84	20.5	65
231	[11C]metahydroxyephedrine and [18F]fluorodeoxyglucose positron emission tomography improve clinical decision making in suspected pheochromocytoma. *Annals of Surgical Oncology*, **2006**, 13, 187-97	3.1	65
230	Volumetric model and human observer comparisons of tumor detection for whole-body positron emission tomography. *Academic Radiology*, **2004**, 11, 637-48	4.3	65
229	Model-based iterative reconstruction versus adaptive statistical iterative reconstruction and filtered back projection in liver 64-MDCT: focal lesion detection, lesion conspicuity, and image noise. *American Journal of Roentgenology*, **2013**, 200, 1071-6	5.4	64
228	A methodology for testing for statistically significant differences between fully 3D PET reconstruction algorithms. *Physics in Medicine and Biology*, **1994**, 39, 341-54	3.8	64
227	Correction methods for random coincidences in fully 3D whole-body PET: impact on data and image quality. *Journal of Nuclear Medicine*, **2005**, 46, 859-67	8.9	63
226	Image reconstruction for PET/CT scanners: past achievements and future challenges. *Imaging in Medicine*, **2010**, 2, 529-545	1	60
225	Effects of MR surface coils on PET quantification. *Medical Physics*, **2011**, 38, 2948-56	4.4	59
224	Quantitative assessment of dynamic PET imaging data in cancer imaging. *Magnetic Resonance Imaging*, **2012**, 30, 1203-15	3.3	58
223	Comparison Between Pre-Log and Post-Log Statistical Models in Ultra-Low-Dose CT Reconstruction. *IEEE Transactions on Medical Imaging*, **2017**, 36, 707-720	11.7	57
222	Dynamic and static approaches to quantifying 18F-FDG uptake for measuring cancer response to therapy, including the effect of granulocyte CSF. *Journal of Nuclear Medicine*, **2007**, 48, 920-5	8.9	57
221	Optimization of injected dose based on noise equivalent count rates for 2- and 3-dimensional whole-body PET. *Journal of Nuclear Medicine*, **2002**, 43, 1268-78	8.9	57
220	Respiratory motion correction for quantitative PET/CT using all detected events with internal-external motion correlation. *Medical Physics*, **2011**, 38, 2715-23	4.4	56
219	Instrumentation factors affecting variance and bias of quantifying tracer uptake with PET/CT. *Medical Physics*, **2010**, 37, 6035-46	4.4	56

218	Tumor radiomic heterogeneity: Multiparametric functional imaging to characterize variability and predict response following cervical cancer radiation therapy. *Journal of Magnetic Resonance Imaging*, **2018**, 47, 1388-1396	5.6	55
217	Quantitative Imaging Network: Data Sharing and Competitive AlgorithmValidation Leveraging The Cancer Imaging Archive. *Translational Oncology*, **2014**, 7, 147-52	4.9	53
216	Figures of merit for comparing reconstruction algorithms with a volume-imaging PET scanner. *Physics in Medicine and Biology*, **1994**, 39, 631-42	3.8	53
215	Quantifying and reducing the effect of calibration error on variability of PET/CT standardized uptake value measurements. *Journal of Nuclear Medicine*, **2011**, 52, 218-24	8.9	52
214	PET/CT scanner instrumentation, challenges, and solutions. *Radiologic Clinics of North America*, **2004**, 42, 1017-32, vii	2.3	51
213	The Impact of Arterial Input Function Determination Variations on Prostate Dynamic Contrast-Enhanced Magnetic Resonance Imaging Pharmacokinetic Modeling: A Multicenter Data Analysis Challenge. *Tomography*, **2016**, 2, 56-66	3.1	51
212	A patient-specific computational model of hypoxia-modulated radiation resistance in glioblastoma using 18F-FMISO-PET. *Journal of the Royal Society Interface*, **2015**, 12,	4.1	50
211	Performance evaluation of the 5-Ring GE Discovery MI PET/CT system using the national electrical manufacturers association NU 2-2012 Standard. *Medical Physics*, **2019**, 46, 3025-3033	4.4	45
210	Improved quantitation for PET/CT image reconstruction with system modeling and anatomical priors. *Medical Physics*, **2006**, 33, 4095-103	4.4	45
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208	Quantitative imaging to assess tumor response to therapy: common themes of measurement, truth data, and error sources. *Translational Oncology*, **2009**, 2, 198-210	4.9	44
207	Dual energy CT attenuation correction methods for quantitative assessment of response to cancer therapy with PET/CT imaging. *Technology in Cancer Research and Treatment*, **2006**, 5, 319-27	2.7	44
206	Properties and Mitigation of Edge Artifacts in PSF-Based PET Reconstruction. *IEEE Transactions on Nuclear Science*, **2011**, 58, 2264-2275	1.7	43
205	Statistical sinogram restoration in dual-energy CT for PET attenuation correction. *IEEE Transactions on Medical Imaging*, **2009**, 28, 1688-702	11.7	40
204	PET/CT Assessment of Response to Therapy: Tumor Change Measurement, Truth Data, and Error. *Translational Oncology*, **2009**, 2, 223-30	4.9	40
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202	Evaluating image reconstruction methods for tumor detection in 3-dimensional whole-body PET oncology imaging. *Journal of Nuclear Medicine*, **2003**, 44, 276-90	8.9	39
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200	The Theory of Three-Dimensional Image Reconstruction for PET. *IEEE Transactions on Medical Imaging*, **1987**, 6, 239-43	11.7	38
199	Functional lung avoidance and response-adaptive escalation (FLARE) RT: Multimodality plan dosimetry of a precision radiation oncology strategy. *Medical Physics*, **2017**, 44, 3418-3429	4.4	36
198	Evaluation of Multiclass Model Observers in PET LROC Studies. *IEEE Transactions on Nuclear Science* , **2007**, 54, 116-123	1.7	35
197	Pragmatic fully 3D image reconstruction for the MiCES mouse imaging PET scanner. *Physics in Medicine and Biology*, **2004**, 49, 4563-78	3.8	34
196	A direct comparison between whole-brain PET and BOLD fMRI measurements of single-subject activation response. *NeuroImage*, **1999**, 9, 430-8	7.9	33
195	A comparison of transform and iterative reconstruction techniques for a volume-imaging PET scanner with a large axial acceptance angle. *IEEE Transactions on Nuclear Science*, **1995**, 42, 2281-2287	1.7	33
194	Resolution Properties of a Prototype Continuous Miniature Crystal Element (cMiCE) Scanner. *IEEE Transactions on Nuclear Science*, **2011**, 58,	1.7	32
193	. *IEEE Transactions on Nuclear Science*, **1988**, 35, 635-638	1.7	32
192	A lesion detection observer study comparing 2-dimensional versus fully 3-dimensional whole-body PET imaging protocols. *Journal of Nuclear Medicine*, **2004**, 45, 714-23	8.9	32
191	Accuracy of CT-based attenuation correction in PET/CT bone imaging. *Physics in Medicine and Biology*, **2012**, 57, 2477-90	3.8	30
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188	Data Acquisition and Image Reconstruction for 3D PET **1998**, 11-53		29
187	Meta-analysis of the technical performance of an imaging procedure: guidelines and statistical methodology. *Statistical Methods in Medical Research*, **2015**, 24, 141-74	2.3	28
186	Attenuation-emission alignment in cardiac PET/CT based on consistency conditions. *Medical Physics*, **2010**, 37, 1191-200	4.4	28
185	Measured count-rate performance of the Discovery STE PET/CT scanner in 2D, 3D and partial collimation acquisition modes. *Physics in Medicine and Biology*, **2008**, 53, 3723-38	3.8	28
184	Fast fully 3-D image reconstruction in PET using planograms. *IEEE Transactions on Medical Imaging*, **2004**, 23, 413-25	11.7	28
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182	Virtual clinical trials in medical imaging: a review. *Journal of Medical Imaging*, **2020**, 7, 042805	2.6	27
181	Comparison of prediction models with radiological semantic features and radiomics in lung cancer diagnosis of the pulmonary nodules: a case-control study. *European Radiology*, **2019**, 29, 6100-6108	8	26
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178	Statistical image reconstruction in PET with compensation for missing data. *IEEE Transactions on Nuclear Science*, **1997**, 44, 1552-1557	1.7	25
177	Multisite Concordance of DSC-MRI Analysis for Brain Tumors: Results of a National Cancer Institute Quantitative Imaging Network Collaborative Project. *American Journal of Neuroradiology*, **2018**, 39, 1008-1016	4.4	25
176	A Digital Reference Object to Analyze Calculation Accuracy of PET Standardized Uptake Value. *Radiology*, **2015**, 277, 538-45	20.5	24
175	Prospective Study of Serial F-FDG PET and F-Fluoride PET to Predict Time to Skeletal-Related Events, Time to Progression, and Survival in Patients with Bone-Dominant Metastatic Breast Cancer. *Journal of Nuclear Medicine*, **2018**, 59, 1823-1830	8.9	24
174	Biases in Multicenter Longitudinal PET Standardized Uptake Value Measurements. *Translational Oncology*, **2014**, 7, 48-54	4.9	24
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171	The QIBA Profile for FDG PET/CT as an Imaging Biomarker Measuring Response to Cancer Therapy. *Radiology*, **2020**, 294, 647-657	20.5	23
170	Statistical Issues in Testing Conformance with the Quantitative Imaging Biomarker Alliance (QIBA) Profile Claims. *Academic Radiology*, **2016**, 23, 496-506	4.3	22
169	Framework for radiation pneumonitis risk stratification based on anatomic and perfused lung dosimetry. *Strahlentherapie Und Onkologie*, **2017**, 193, 410-418	4.3	21
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167	Development of a Single Detector Ring Micro Crystal Element Scanner: QuickPET II. *Molecular Imaging*, **2005**, 4, 153535002005041	3.7	20
166	Measuring total liver function on sulfur colloid SPECT/CT for improved risk stratification and outcome prediction of hepatocellular carcinoma patients. *EJNMMI Research*, **2016**, 6, 57	3.6	19
165	Challenges and opportunities in patient-specific, motion-managed and PET/CT-guided radiation therapy of lung cancer: review and perspective. *Clinical and Translational Medicine*, **2012**, 1, 18	5.7	19

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163	. *IEEE Transactions on Nuclear Science*, **2004**, 51, 27-33	1.7	19
162	Multicenter Clinical Trials Using 18F-FDG PET to Measure Early Response to Oncologic Therapy: Effects of Injection-to-Acquisition Time Variability on Required Sample Size. *Journal of Nuclear Medicine*, **2016**, 57, 226-30	8.9	18
161	Image Reconstruction Algorithms in PET **2005**, 63-91		18
160	Development of a single detector ring micro crystal element scanner: QuickPET II. *Molecular Imaging*, **2005**, 4, 117-27	3.7	18
159	Multi-site quality and variability analysis of 3D FDG PET segmentations based on phantom and clinical image data. *Medical Physics*, **2017**, 44, 479-496	4.4	17
158	Performance assessment of a NaI(Tl) gamma counter for PET applications with methods for improved quantitative accuracy and greater standardization. *EJNMMI Physics*, **2015**, 2,	4.4	17
157	Dual energy CT for attenuation correction with PET/CT. *Medical Physics*, **2014**, 41, 012501	4.4	17
156	The Use of Quantitative Imaging in Radiation Oncology: A Quantitative Imaging Network (QIN) Perspective. *International Journal of Radiation Oncology Biology Physics*, **2018**, 102, 1219-1235	4	17
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151	Multiplexing strategies for monolithic crystal PET detector modules. *Physics in Medicine and Biology* , **2014**, 59, 5347-60	3.8	15
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146	Impact of CT attenuation correction method on quantitative respiratory-correlated (4D) PET/CT imaging. *Medical Physics*, **2015**, 42, 110-20	4.4	14
145	Measured spatially variant system response for PET image reconstruction		14
144	Evaluation of lesion detectability in positron emission tomography when using a convergent penalized likelihood image reconstruction method. *Journal of Medical Imaging*, **2017**, 4, 011002	2.6	14
143	Test-Retest Reproducibility of F-FDG PET/CT Uptake in Cancer Patients Within a Qualified and Calibrated Local Network. *Journal of Nuclear Medicine*, **2019**, 60, 608-614	8.9	14
142	Evaluation of event position reconstruction in monolithic crystals that are optically coupled. *Physics in Medicine and Biology*, **2016**, 61, 8298-8320	3.8	13
141	The performance of the single-slice rebinning technique for imaging the human striatum as evaluated by phantom studies. *Physics in Medicine and Biology*, **1994**, 39, 369-80	3.8	13
140	Evaluation of Cross-Calibrated Ge/Ga Phantoms for Assessing PET/CT Measurement Bias in Oncology Imaging for Single- and Multicenter Trials. *Tomography*, **2016**, 2, 353-360	3.1	13
139	Tumor-derived Autoantibodies Identify Malignant Pulmonary Nodules. *American Journal of Respiratory and Critical Care Medicine*, **2019**, 199, 1257-1266	10.2	13
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136	Morphology supporting function: attenuation correction for SPECT/CT, PET/CT, and PET/MR imaging. *Quarterly Journal of Nuclear Medicine and Molecular Imaging*, **2016**, 60, 25-39	1.4	12
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127	Task Group 174 Report: Utilization of [F]Fluorodeoxyglucose Positron Emission Tomography ([F]FDG-PET) in Radiation Therapy. *Medical Physics*, **2019**, 46, e706-e725	4.4	9
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110	Improving lesion detectability in PET imaging with a penalized likelihood reconstruction algorithm **2015**,		6
109	Comparison of regional lung perfusion response on longitudinal MAA SPECT/CT in lung cancer patients treated with and without functional tissue-avoidance radiation therapy. *British Journal of Radiology*, **2019**, 92, 20190174	3.4	6
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