

Alessandra Bertoldo

List of Publications by Year in descending order

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128
papers

3,475
citations

126858

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all docs

132
docs citations

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times ranked

5198
citing authors

#	ARTICLE	IF	CITATIONS
1	Microglial Activity in People at Ultra High Risk of Psychosis and in Schizophrenia: An [¹¹ C]PBR28 PET Brain Imaging Study. <i>American Journal of Psychiatry</i> , 2016, 173, 44-52.	4.0	382
2	Inflammatory intrathecal profiles and cortical damage in multiple sclerosis. <i>Annals of Neurology</i> , 2018, 83, 739-755.	2.8	219
3	The methodology of TSPO imaging with positron emission tomography. <i>Biochemical Society Transactions</i> , 2015, 43, 586-592.	1.6	186
4	Kinetic Modeling without Accounting for the Vascular Component Impairs the Quantification of [¹¹ C]PBR28 Brain PET Data. <i>Journal of Cerebral Blood Flow and Metabolism</i> , 2014, 34, 1060-1069.	2.4	112
5	Novel Reference Region Model Reveals Increased Microglial and Reduced Vascular Binding of [¹¹ C]-(<i>R</i>)-PK11195 in Patients with Alzheimer's Disease. <i>Journal of Nuclear Medicine</i> , 2008, 49, 1249-1256.	2.8	81
6	Cortical Diffusion-Tensor Imaging Abnormalities in Multiple Sclerosis: A 3-year Longitudinal Study. <i>Radiology</i> , 2011, 261, 891-898.	3.6	78
7	Muscle glucose transport and phosphorylation in type 2 diabetic, obese nondiabetic, and genetically predisposed individuals. <i>American Journal of Physiology - Endocrinology and Metabolism</i> , 2007, 292, E92-E100.	1.8	72
8	Dynamic [¹¹ C]-PiB PET Shows Cerebrospinal Fluid Flow Alterations in Alzheimer Disease and Multiple Sclerosis. <i>Journal of Nuclear Medicine</i> , 2019, 60, 1452-1460.	2.8	64
9	Similar white matter changes in schizophrenia and bipolar disorder: A tract-based spatial statistics study. <i>PLoS ONE</i> , 2017, 12, e0178089.	1.1	63
10	MENGA: A New Comprehensive Tool for the Integration of Neuroimaging Data and the Allen Human Brain Transcriptome Atlas. <i>PLoS ONE</i> , 2016, 11, e0148744.	1.1	62
11	Evaluation of compartmental and spectral analysis models of [¹⁸ F]FDG kinetics for heart and brain studies with PET. <i>IEEE Transactions on Biomedical Engineering</i> , 1998, 45, 1429-1448.	2.5	55
12	Automatic selection of arterial input function on dynamic contrast-enhanced MR images. <i>Computer Methods and Programs in Biomedicine</i> , 2011, 104, e148-e157.	2.6	51
13	Kinetic modelling of [¹¹ C]PBR28 for 18 ⁰ kDa translocator protein PET data: A validation study of vascular modelling in the brain using XBD173 and tissue analysis. <i>Journal of Cerebral Blood Flow and Metabolism</i> , 2018, 38, 1227-1242.	2.4	51
14	Interactions Between Delivery, Transport, and Phosphorylation of Glucose in Governing Uptake Into Human Skeletal Muscle. <i>Diabetes</i> , 2006, 55, 3028-3037.	0.3	50
15	A multi-element psychosocial intervention for early psychosis (GET UP PIANO TRIAL) conducted in a catchment area of 10 million inhabitants: study protocol for a pragmatic cluster randomized controlled trial. <i>Trials</i> , 2012, 13, 73.	0.7	47
16	Integrating EEG and fMRI in epilepsy. <i>NeuroImage</i> , 2011, 54, 2719-2731.	2.1	46
17	The Predictive Power of Brain mRNA Mappings for <i>in vivo</i> Protein Density: A Positron Emission Tomography Correlation Study. <i>Journal of Cerebral Blood Flow and Metabolism</i> , 2014, 34, 827-835.	2.4	44
18	Covariance statistics and network analysis of brain PET imaging studies. <i>Scientific Reports</i> , 2019, 9, 2496.	1.6	42

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19	[11C]-MP4A PET Cholinergic Measurements in Amnestic Mild Cognitive Impairment, Probable Alzheimer's Disease, and Dementia with Lewy Bodies: A Bayesian Method and Voxel-Based Analysis. <i>Journal of Alzheimer's Disease</i> , 2012, 31, 387-399.	1.2	41
20	TMS-evoked long-lasting artefacts: A new adaptive algorithm for EEG signal correction. <i>Clinical Neurophysiology</i> , 2017, 128, 1563-1574.	0.7	41
21	A robust method for investigating thalamic white matter tracts after traumatic brain injury. <i>NeuroImage</i> , 2012, 63, 779-788.	2.1	40
22	SigMate: A Matlab-based automated tool for extracellular neuronal signal processing and analysis. <i>Journal of Neuroscience Methods</i> , 2012, 207, 97-112.	1.3	40
23	Interactions Among Glucose Delivery, Transport, and Phosphorylation That Underlie Skeletal Muscle Insulin Resistance in Obesity and Type 2 Diabetes: Studies With Dynamic PET Imaging. <i>Diabetes</i> , 2014, 63, 1058-1068.	0.3	39
24	Estimation of Component and Parameter Distributions in Spectral Analysis. <i>Journal of Cerebral Blood Flow and Metabolism</i> , 1998, 18, 1211-1222.	2.4	38
25	Automatic selection of resting-state networks with functional magnetic resonance imaging. <i>Frontiers in Neuroscience</i> , 2013, 7, 72.	1.4	38
26	Advancing Our Understanding of the Glucose System via Modeling: A Perspective. <i>IEEE Transactions on Biomedical Engineering</i> , 2014, 61, 1577-1592.	2.5	38
27	Deriving physiological information from PET images: from SUV to compartmental modelling. <i>Clinical and Translational Imaging</i> , 2014, 2, 239-251.	1.1	38
28	Generalization of endothelial modelling of TSPO PET imaging: Considerations on tracer affinities. <i>Journal of Cerebral Blood Flow and Metabolism</i> , 2019, 39, 874-885.	2.4	38
29	Multiparametric quantitative MRI assessment of thigh muscles in limb-girdle muscular dystrophy 2A and 2B. <i>Muscle and Nerve</i> , 2018, 58, 550-558.	1.0	37
30	Glucose Transport and Phosphorylation in Skeletal Muscle in Obesity: Insight from a Muscle-Specific Positron Emission Tomography Model. <i>Journal of Clinical Endocrinology and Metabolism</i> , 2003, 88, 1271-1279.	1.8	36
31	Nonlinear Stochastic Regularization to Characterize Tissue Residue Function in Bolus-Tracking MRI: Assessment and Comparison With SVD, Block-Circulant SVD, and Tikhonov. <i>IEEE Transactions on Biomedical Engineering</i> , 2009, 56, 1287-1297.	2.5	36
32	Heterogeneity of Cortical Lesions in Multiple Sclerosis: An MRI Perfusion Study. <i>Journal of Cerebral Blood Flow and Metabolism</i> , 2013, 33, 457-463.	2.4	36
33	Plasma radiometabolite correction in dynamic PET studies: Insights on the available modeling approaches. <i>Journal of Cerebral Blood Flow and Metabolism</i> , 2016, 36, 326-339.	2.4	36
34	Effects of perfusion on DTI and DKI estimates in the skeletal muscle. <i>Magnetic Resonance in Medicine</i> , 2017, 78, 233-246.	1.9	36
35	Sparse DCM for whole-brain effective connectivity from resting-state fMRI data. <i>NeuroImage</i> , 2020, 208, 116367.	2.1	35
36	Weight Loss-Induced Plasticity of Glucose Transport and Phosphorylation in the Insulin Resistance of Obesity and Type 2 Diabetes. <i>Diabetes</i> , 2003, 52, 1619-1626.	0.3	34

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37	Investigation of brain hemodynamic changes induced by active and passive movements: A combined arterial spin labeling“BOLD fMRI study. <i>Journal of Magnetic Resonance Imaging</i> , 2014, 40, 937-948.	1.9	32
38	White matter metabolism differentiates schizophrenia and bipolar disorder: a preliminary PET study. <i>Psychiatry Research - Neuroimaging</i> , 2013, 214, 410-414.	0.9	31
39	Insulin Resistance Is Associated With Enhanced Brain Glucose Uptake During Euglycemic Hyperinsulinemia: A Large-Scale PET Cohort. <i>Diabetes Care</i> , 2021, 44, 788-794.	4.3	31
40	Time-frequency analysis of short-lasting modulation of EEG induced by TMS during wake, sleep deprivation and sleep. <i>Frontiers in Human Neuroscience</i> , 2013, 7, 767.	1.0	29
41	A Spectral Analysis Approach for Determination of Regional Rates of Cerebral Protein Synthesis with the L-[1- ¹¹ C]leucine PET Method. <i>Journal of Cerebral Blood Flow and Metabolism</i> , 2010, 30, 1460-1476.	2.4	28
42	Spectral Analysis of Dynamic PET Studies: A Review of 20 Years of Method Developments and Applications. <i>Computational and Mathematical Methods in Medicine</i> , 2016, 2016, 1-15.	0.7	28
43	Time-frequency analysis of short-lasting modulation of EEG induced by intracortical and transcallosal paired TMS over motor areas. <i>Journal of Neurophysiology</i> , 2012, 107, 2475-2484.	0.9	27
44	“Population” Approach Improves Parameter Estimation of Kinetic Models From Dynamic PET Data. <i>IEEE Transactions on Medical Imaging</i> , 2004, 23, 297-306.	5.4	26
45	Voxel-Based Estimation of Kinetic Model Parameters of the ^{11}C -Leucine PET Method for Determination of Regional Rates of Cerebral Protein Synthesis: Validation and Comparison with Region-of-Interest-Based Methods. <i>Journal of Cerebral Blood Flow and Metabolism</i> , 2009, 29, 1317-1331.	2.4	26
46	Serum ferritin is associated with non-alcoholic fatty liver disease and decreased β -cell function in non-diabetic men and women. <i>Journal of Diabetes and Its Complications</i> , 2014, 28, 177-184.	1.2	26
47	An automated method for detection of layer activation order in information processing pathway of rat barrel cortex under mechanical whisker stimulation. <i>Journal of Neuroscience Methods</i> , 2011, 196, 141-150.	1.3	25
48	Effect of median-nerve electrical stimulation on BOLD activity in acute ischemic stroke patients. <i>Clinical Neurophysiology</i> , 2012, 123, 142-153.	0.7	25
49	Modelling hemodynamic response function in epilepsy. <i>Clinical Neurophysiology</i> , 2013, 124, 2108-2118.	0.7	23
50	A robust deconvolution method to disentangle multiple water pools in diffusion MRI. <i>NMR in Biomedicine</i> , 2018, 31, e3965.	1.6	23
51	Frequency and time-frequency analysis of intraoperative ECoG during awake brain stimulation. <i>Frontiers in Neuroengineering</i> , 2013, 6, 1.	4.8	22
52	Quantitative Assessment of Glucose Transport in Human Skeletal Muscle: Dynamic Positron Emission Tomography Imaging of [O-Methyl- ¹¹ C]3-O-Methyl-d-Glucose. <i>Journal of Clinical Endocrinology and Metabolism</i> , 2005, 90, 1752-1759.	1.8	21
53	Measuring specific receptor binding of a PET radioligand in human brain without pharmacological blockade: The genomic plot. <i>NeuroImage</i> , 2016, 130, 1-12.	2.1	21
54	Brain PET and functional MRI: why simultaneously using hybrid PET/MR systems?. <i>Quarterly Journal of Nuclear Medicine and Molecular Imaging</i> , 2017, 61, 345-359.	0.4	21

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55	SigMate: A MATLAB-based neuronal signal processing tool. , 2010, 2010, 1352-5.		20
56	EEG based brain-machine interface for navigation of robotic device. , 2010, , .		20
57	IVGTT glucose minimal model covariate selection by nonlinear mixed-effects approach. American Journal of Physiology - Endocrinology and Metabolism, 2010, 298, E950-E960.	1.8	19
58	Use of Spectral Analysis with Iterative Filter for Voxelwise Determination of Regional Rates of Cerebral Protein Synthesis with $[1\text{-}^{11}\text{C}]$ leucine PET. Journal of Cerebral Blood Flow and Metabolism, 2012, 32, 1073-1085.	2.4	18
59	Dynamic PET Imaging Reveals Heterogeneity of Skeletal Muscle Insulin Resistance. Journal of Clinical Endocrinology and Metabolism, 2014, 99, E102-E106.	1.8	18
60	Modelling arterial input functions in positron emission tomography dynamic studies. , 2015, 2015, 2247-50.		18
61	Test-retest reproducibility of quantitative binding measures of $[11\text{C}]\text{Ro15-4513}$, a PET ligand for GABA A receptors containing alpha5 subunits. NeuroImage, 2017, 152, 270-282.	2.1	17
62	The contribution of beta-amyloid to dementia in Lewy body diseases: a 1-year follow-up study. Brain Communications, 2021, 3, fcab180.	1.5	17
63	Widespread cortical functional disconnection in gliomas: an individual network mapping approach. Brain Communications, 2022, 4, fcac082.	1.5	17
64	The impact of schizophrenia on frontal perfusion parameters: a DSC-MRI study. Journal of Neural Transmission, 2011, 118, 563-570.	1.4	16
65	Heterogeneity of Cortical Lesion Susceptibility Mapping in Multiple Sclerosis. American Journal of Neuroradiology, 2017, 38, 1087-1095.	1.2	16
66	White matter and task-switching in young adults: A Diffusion Tensor Imaging study. Neuroscience, 2016, 329, 349-362.	1.1	15
67	Archetypes of human cognition defined by time preference for reward and their brain correlates: An evolutionary trade-off approach. NeuroImage, 2019, 185, 322-334.	2.1	15
68	Dose-responsive insulin regulation of glucose transport in human skeletal muscle. American Journal of Physiology - Endocrinology and Metabolism, 2006, 290, E1124-E1130.	1.8	14
69	Nonlinear Mixed Effects to Improve Glucose Minimal Model Parameter Estimation: A Simulation Study in Intensive and Sparse Sampling. IEEE Transactions on Biomedical Engineering, 2009, 56, 2156-2166.	2.5	14
70	Empirical Bayesian estimation in graphical analysis: a voxel-based approach for the determination of the volume of distribution in PET studies. Nuclear Medicine and Biology, 2010, 37, 443-451.	0.3	14
71	SAKE: A new quantification tool for positron emission tomography studies. Computer Methods and Programs in Biomedicine, 2013, 111, 199-213.	2.6	14
72	Improved Models for Plasma Radiometabolite Correction and their Impact on Kinetic Quantification in PET Studies. Journal of Cerebral Blood Flow and Metabolism, 2015, 35, 1462-1469.	2.4	14

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73	A Unified Framework for Plasma Data Modeling in Dynamic Positron Emission Tomography Studies. IEEE Transactions on Biomedical Engineering, 2019, 66, 1447-1455.	2.5	14
74	Direct measurement of the lumped constant for 2-deoxy-[1-14C]glucose in vivo in human skeletal muscle. American Journal of Physiology - Endocrinology and Metabolism, 2000, 279, E228-E233.	1.8	13
75	Multi-Scale hierarchical generation of PET parametric maps: Application and testing on a [11C]DPN study. NeuroImage, 2012, 59, 2485-2493.	2.1	13
76	Multi-scale hierarchical approach for parametric mapping: Assessment on multi-compartmental models. NeuroImage, 2013, 67, 344-353.	2.1	13
77	Quantification of Dynamic [18F]FDG Pet Studies in Acute Lung Injury. Molecular Imaging and Biology, 2016, 18, 143-152.	1.3	13
78	On the Role of the Inferior Intraparietal Sulcus in Visual Working Memory for Lateralized Single-feature Objects. Journal of Cognitive Neuroscience, 2017, 29, 337-351.	1.1	13
79	Title is missing!. Journal of Medical and Biological Engineering, 2012, 32, 397.	1.0	13
80	Voxelwise Quantification of [¹¹ C]-Risperidone PET Data: A Comparison Between Model-Based and Data-Driven Methods. Journal of Cerebral Blood Flow and Metabolism, 2013, 33, 1032-1040.	2.4	12
81	Preoperative Prediction of Facial Nerve in Patients with Vestibular Schwannomas: The Role of Diffusion Tensor Imaging—A Systematic Review. World Neurosurgery, 2019, 125, 24-31.	0.7	12
82	Automatic detection of layer activation order in information processing pathways of rat barrel cortex under mechanical whisker stimulation. , 2010, 2010, 6095-8.		11
83	A contour based automatic method to classify Local Field Potentials recorded from rat barrel cortex. , 2010, , .		10
84	SigMate: A comprehensive software package for extracellular neuronal signal processing and analysis. , 2011, , .		10
85	Cerebellar and lobar blood flow in schizophrenia: A perfusion weighted imaging study. Psychiatry Research - Neuroimaging, 2011, 193, 46-52.	0.9	10
86	Effects of shortened scanning intervals on calculated regional rates of cerebral protein synthesis determined with the L-[1-11C]leucine PET method. PLoS ONE, 2018, 13, e0195580.	1.1	10
87	Unveiling whole-brain dynamics in normal aging through Hidden Markov Models. Human Brain Mapping, 2022, 43, 1129-1144.	1.9	10
88	Impact of tissue kinetic heterogeneity on PET quantification: case study with the L-[1-11C]leucine PET method for cerebral protein synthesis rates. Scientific Reports, 2018, 8, 931.	1.6	9
89	PET Parametric Imaging Improved by Global-Two-Stage Method. Annals of Biomedical Engineering, 2009, 37, 419-427.	1.3	8
90	Global-two-stage filtering of clinical PET parametric maps: Application to [11C]-(R)-PK11195. NeuroImage, 2011, 55, 942-953.	2.1	8

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91	Multishell Diffusion MRI-Based Tractography of the Facial Nerve in Vestibular Schwannoma. American Journal of Neuroradiology, 2020, 41, 1480-1486.	1.2	8
92	A non-linear mixed effect modelling approach for metabolite correction of the arterial input function in PET studies. NeuroImage, 2013, 66, 611-622.	2.1	7
93	Protein synthesis is associated with high-speed dynamics and broad-band stability of functional hubs in the brain. NeuroImage, 2017, 155, 209-216.	2.1	7
94	Variability of regional glucose metabolism and the topology of functional networks in the human brain. NeuroImage, 2022, 257, 119280.	2.1	7
95	Assessment of clinical data of nonlinear stochastic deconvolution versus block-circulant singular value decomposition for quantitative dynamic susceptibility contrast magnetic resonance imaging. Magnetic Resonance Imaging, 2011, 29, 927-936.	1.0	6
96	Structural hemispheric asymmetries underlie verbal Stroop performance. Behavioural Brain Research, 2017, 335, 167-173.	1.2	6
97	Quantification of normal-appearing white matter damage in early relapse-onset multiple sclerosis through neurite orientation dispersion and density imaging. Multiple Sclerosis and Related Disorders, 2022, 58, 103396.	0.9	6
98	Substitution of venous for arterial blood sampling in the determination of regional rates of cerebral protein synthesis with L-[1- ¹¹ C]leucine PET: A validation study. Journal of Cerebral Blood Flow and Metabolism, 2019, 39, 1849-1863.	2.4	5
99	Magnetic Resonance Imaging Correlates of Immune Microenvironment in Glioblastoma. Frontiers in Oncology, 2022, 12, 823812.	1.3	5
100	Assessment of structural disconnections in gliomas: comparison of indirect and direct approaches. Brain Structure and Function, 2022, 227, 3109-3120.	1.2	5
101	Identification of IVGTT minimal glucose model by nonlinear mixed-effects approaches. , 2006, 2006, 5049-52.		4
102	An automated method for clustering single sweep local field potentials recorded from rat barrel cortex. , 2011, , .		4
103	Effect of voluntary repetitive long-lasting muscle contraction activity on the BOLD signal as assessed by optimal hemodynamic response function. Magnetic Resonance Materials in Physics, Biology, and Medicine, 2014, 27, 171-184.	1.1	4
104	Parametric Mapping for TSPO PET Imaging with Spectral Analysis Impulsive Response Function. Molecular Imaging and Biology, 2021, 23, 560-571.	1.3	4
105	Quantification of Brain β -Amyloid Load in Parkinson's Disease With Mild Cognitive Impairment: A PET/MRI Study. Frontiers in Neurology, 2021, 12, 760518.	1.1	4
106	Quantitative in vivo imaging of microglia activation using [11C]PK11195 and two reference tissue models. NeuroImage, 2006, 31, T79.	2.1	3
107	Glucose Minimal Model population analysis: Likelihood function profiling via Monte Carlo sampling. , 2008, 2008, 4932-5.		3
108	Processing of neuronal signals recorded by brain-chip interface from surface of the S1 brain cortex. , 2010, , .		3

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109	Supervised classification of brain tissues through local multi-scale texture analysis by coupling DIR and FLAIR MR sequences. , 2012, , .		3
110	Visual Predictive Check in Models with Time-Varying Input Function. AAPS Journal, 2015, 17, 1455-1463.	2.2	3
111	Stable spline deconvolution for dynamic susceptibility contrast MRI. Magnetic Resonance in Medicine, 2017, 78, 1801-1811.	1.9	3
112	The kinetics of 18F-FDG in lung cancer: compartmental models and voxel analysis. EJNMMI Research, 2018, 8, 88.	1.1	3
113	Multicenter Validation Of Population-Based Input Function With Non-Linear Mixed Effect Modeling For Voxel-Wise Quantification Of [¹⁸ F]Fdg Metabolic Rate. , 2019, , .		3
114	Kinetic modeling of the adenosine A2A subtype receptor radioligand [11C]SCH442416 in humans. NeuroImage, 2010, 52, S178.	2.1	2
115	Identification of the glucose minimal model by stochastic nonlinear-mixed effects methods. , 2012, 2012, 5482-5.		2
116	Estimation of arterial arrival time and cerebral blood flow from QUASAR arterial spin labeling using stable spline. Magnetic Resonance in Medicine, 2015, 74, 1758-1767.	1.9	2
117	Neurite orientation dispersion and density imaging discloses early changes in the normal-appearing white matter in paediatric multiple sclerosis. Journal of Neurology, Neurosurgery and Psychiatry, 2022, 93, 332-334.	0.9	2
118	Physiological Modelling of Positron Emission Tomography Images. , 2014, , 417-448.		1
119	A spectral analysis approach for voxelwise determination of regional rates of cerebral protein synthesis with the L-[1-11C]leucine PET method. NeuroImage, 2010, 52, S212.	2.1	0
120	Use of the global-two-stage algorithm to improve parametric maps in PET imaging: Application to [11C](R)-PK11195. NeuroImage, 2010, 52, S215.	2.1	0
121	NODDI discloses early changes in the normal appearing white matter in paediatric multiple sclerosis. Journal of the Neurological Sciences, 2021, 429, 118881.	0.3	0
122	Impact of unmetabolized tracer function modeling on quantification of [carbonyl-11C]WAY-100635 PET images. Journal of Cerebral Blood Flow and Metabolism, 2005, 25, S630-S630.	2.4	0
123	Binding potential underestimation with reference tissue models: Insight from [carbonyl-11C]WAY-100635 simulation studies. Journal of Cerebral Blood Flow and Metabolism, 2005, 25, S641-S641.	2.4	0
124	Data Modeling and Simulation. , 2008, , 115-136.		0
125	Unsupervised Segmentation of Brain Tissues using Multiphase Level Sets on Multiple MRI Sequences. , 2011, , .		0
126	Diffusion-based microstructure models in brain tumours: Fitting in presence of a model-microstructure mismatch. NeuroImage: Clinical, 2022, 34, 102968.	1.4	0

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127	Impaired cognitive control in patients with brain tumors. <i>Neuropsychologia</i> , 2022, 169, 108187.	0.7	0
128	Identification of IVGTT minimal glucose model by nonlinear mixed-effects approaches. Annual International Conference of the IEEE Engineering in Medicine and Biology Society, 2006, , .	0.5	0