Rickmer F Braren

List of Publications by Year
in descending order

114 papers	4,143 citations	136885 32 h-index	133188 59 g-index
128 all docs	128 docs citations	128 times ranked	6877 citing authors

#	Article	IF	Citations
1	Secure, privacy-preserving and federated machine learning in medical imaging. Nature Machine Intelligence, 2020, 2, 305-311.	8.3	473
2	Combined inhibition of BET family proteins and histone deacetylases as a potential epigenetics-based therapy for pancreatic ductal adenocarcinoma. Nature Medicine, 2015, 21, 1163-1171.	15.2	349
3	Endothelial FAK is essential for vascular network stability, cell survival, and lamellipodial formation. Journal of Cell Biology, 2006, 172, 151-162.	2.3	214
4	CRISPR/Cas9 somatic multiplex-mutagenesis for high-throughput functional cancer genomics in mice. Proceedings of the National Academy of Sciences of the United States of America, 2015, 112, 13982-13987.	3.3	172
5	End-to-end privacy preserving deep learning on multi-institutional medical imaging. Nature Machine Intelligence, 2021, 3, 473-484.	8.3	157
6	The family of toxin-related ecto-ADP-ribosyltransferases in humans and the mouse. Protein Science, 2009, 11, 1657-1670.	3.1	147
7	Multiplexed pancreatic genome engineering and cancer induction by transfection-based CRISPR/Cas9 delivery in mice. Nature Communications, 2016, 7, 10770.	5.8	145
8	Cell-autonomous requirement for $\beta 1$ integrin in endothelial cell adhesion, migration and survival during angiogenesis in mice. Development (Cambridge), 2008, 135, 2193-2202.	1.2	139
9	Federated deep learning for detecting COVID-19 lung abnormalities in CT: a privacy-preserving multinational validation study. Npj Digital Medicine, 2021, 4, 60.	5.7	134
10	Dual-layer spectral computed tomography: Virtual non-contrast in comparison to true non-contrast images. European Journal of Radiology, 2018, 104, 108-114.	1.2	83
11	Resectability After First-Line FOLFIRINOX in Initially Unresectable Locally Advanced Pancreatic Cancer: A Single-Center Experience. Annals of Surgical Oncology, 2015, 22, 1212-1220.	0.7	77
12	Opposing role of Notch1 and Notch2 in a KrasG12D-driven murine non-small cell lung cancer model. Oncogene, 2015, 34, 578-588.	2.6	67
13	*c-myc* in the hematopoietic lineage is crucial for its angiogenic function in the mouse embryo. Development (Cambridge), 2008, 135, 2467-2477.	1.2	66
14	Assessment of quantification accuracy and image quality of a full‐body dual‐layer spectral CT system. Journal of Applied Clinical Medical Physics, 2018, 19, 204-217.	0.8	65
15	Two Novel Human Members of an Emerging Mammalian Gene Family Related to Mono-ADP-Ribosylating Bacterial Toxins. Genomics, 1997, 39, 370-376.	1.3	61
16	Co-clinical Assessment of Tumor Cellularity in Pancreatic Cancer. Clinical Cancer Research, 2017, 23, 1461-1470.	3.2	60
17	Intensive Care Risk Estimation in COVID-19 Pneumonia Based on Clinical and Imaging Parameters: Experiences from the Munich Cohort. Journal of Clinical Medicine, 2020, 9, 1514.	1.0	60
18	Targeting PI3K/mTOR Signaling Displays Potent Antitumor Efficacy against Nonfunctioning Pituitary Adenomas. Clinical Cancer Research, 2015, 21, 3204-3215.	3.2	59

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19	Proteomic Characterization of the Heart and Skeletal Muscle Reveals Widespread Arginine ADP-Ribosylation by the ARTC1 Ectoenzyme. Cell Reports, 2018, 24, 1916-1929.e5.	2.9	55
20	A machine learning model for the prediction of survival and tumor subtype in pancreatic ductal adenocarcinoma from preoperative diffusion-weighted imaging. European Radiology Experimental, 2019, 3, 41.	1.7	55
21	Accuracy of iodine quantification in dual-layer spectral CT: Influence of iterative reconstruction, patient habitus and tube parameters. European Journal of Radiology, 2018, 102, 83-88.	1.2	53
22	Medical imaging deep learning with differential privacy. Scientific Reports, 2021, 11, 13524.	1.6	52
23	A machine learning algorithm predicts molecular subtypes in pancreatic ductal adenocarcinoma with differential response to gemcitabine-based versus FOLFIRINOX chemotherapy. PLoS ONE, 2019, 14, e0218642.	1.1	48
24	Silica-Iron Oxide Magnetic Nanoparticles Modified for Gene Delivery: A Search for Optimum and Quantitative Criteria. Pharmaceutical Research, 2012, 29, 1344-1365.	1.7	47
25	Multimodal Molecular Imaging of Integrin $\alpha_v\beta_3$ for In Vivo Detection of Pancreatic Cancer. Journal of Nuclear Medicine, 2014, 55, 446-451.	2.8	43
26	Characterization of Magnetic Viral Complexes for Targeted Delivery in Oncology. Theranostics, 2015, 5, 667-685.	4.6	40
27	Joint Imaging Platform for Federated Clinical Data Analytics. JCO Clinical Cancer Informatics, 2020, 4, 1027-1038.	1.0	39
28	Synergistic antitumor effects of transarterial viroembolization for multifocal hepatocellular carcinoma in rats. Hepatology, 2008, 48, 1864-1873.	3.6	38
29	Different Capacity of Monocyte Subsets to Phagocytose Iron-Oxide Nanoparticles. PLoS ONE, 2011, 6, e25197.	1.1	38
30	Validation of preclinical multiparametric imaging for prediction of necrosis in hepatocellular carcinoma after embolization. Journal of Hepatology, 2011, 55, 1034-1040.	1.8	37
31	Structure, chromosomal localization, and expression of the gene for mouse ecto-mono(ADP-ribosyl)transferase ART5. Gene, 2001, 275, 267-277.	1.0	35
32	Image-Based Molecular Phenotyping of Pancreatic Ductal Adenocarcinoma. Journal of Clinical Medicine, 2020, 9, 724.	1.0	35
33	Imaging and targeted therapy of pancreatic ductal adenocarcinoma using the theranostic sodium iodide symporter (NIS) gene. Oncotarget, 2017, 8, 33393-33404.	0.8	33
34	MCL-1 gains occur with high frequency in lung adenocarcinoma and can be targeted therapeutically. Nature Communications, 2020, 11, 4527.	5.8	32
35	Deep Convolutional Neural Network-Assisted Feature Extraction for Diagnostic Discrimination and Feature Visualization in Pancreatic Ductal Adenocarcinoma (PDAC) versus Autoimmune Pancreatitis (AIP). Journal of Clinical Medicine, 2020, 9, 4013.	1.0	32
36	Implementing cell-free DNA of pancreatic cancer patient–derived organoids for personalized oncology. JCI Insight, 2020, 5, .	2.3	30

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37	Multiparametric human hepatocellular carcinoma characterization and therapy response evaluation by hyperpolarized^{13}C MRSI. NMR in Biomedicine, 2016, 29, 952-960.	1.6	28
38	X-Ray Phase-Contrast CT of a Pancreatic Ductal Adenocarcinoma Mouse Model. PLoS ONE, 2013, 8, e58439.	1.1	28
39	Modeling Therapy Response and Spatial Tissue Distribution of Erlotinib in Pancreatic Cancer. Molecular Cancer Therapeutics, 2016, 15, 1145-1152.	1.9	27
40	Apparent Diffusion Coefficient (ADC) predicts therapy response in pancreatic ductal adenocarcinoma. Scientific Reports, 2017, 7, 17038.	1.6	26
41	Adversarial interference and its mitigations in privacy-preserving collaborative machine learning. Nature Machine Intelligence, 2021, 3, 749-758.	8.3	26
42	Microvascular dysfunction in the course of metabolic syndrome induced by high-fat diet. Cardiovascular Diabetology, 2014, 13, 31.	2.7	25
43	Model Matters: Differences in Orthotopic Rat Hepatocellular Carcinoma Physiology Determine Therapy Response to Sorafenib. Clinical Cancer Research, 2015, 21, 4440-4450.	3.2	25
44	Magnetic resonance cholangiopancreatography at 3 Tesla: Image quality comparison between 3D compressed sensing and 2D single-shot acquisitions. European Journal of Radiology, 2019, 115, 53-58.	1.2	24
45	Molecular characterization and expression of the gene for mouse NAD+:arginine ecto-mono(ADP-ribosyl)transferase, Art1. Biochemical Journal, 1998, 336, 561-568.	1.7	23
46	Comparison of definite chemoradiation therapy with carboplatin/paclitaxel or cisplatin/5-fluoruracil in patients with squamous cell carcinoma of the esophagus. Radiation Oncology, 2018, 13, 139.	1.2	23
47	Oncogenic Akt-FOXO3 loop favors tumor-promoting modes and enhances oxidative damage-associated hepatocellular carcinogenesis. BMC Cancer, 2019, 19, 887.	1.1	22
48	A computed tomography vertebral segmentation dataset with anatomical variations and multi-vendor scanner data. Scientific Data, 2021, 8, 284.	2.4	22
49	Cardioprotective C-kit+ Bone Marrow Cells Attenuate Apoptosis after Acute Myocardial Infarction in Mice - In-vivo Assessment with Fluorescence Molecular Imaging. Theranostics, 2013, 3, 903-913.	4.6	21
50	Identification of treatment-induced vulnerabilities in pancreatic cancer patients using functional model systems. EMBO Molecular Medicine, 2022, 14, e14876.	3.3	20
51	Progression after Immunotherapy for Fibrolamellar Carcinoma. Visceral Medicine, 2019, 35, 39-42.	0.5	19
52	Differential Diagnosis for Pancreatic Cysts in CT Scans Using Densely-Connected Convolutional Networks. , 2019, 2019, 2095-2098.		19
53	Membranous CD24 drives the epithelial phenotype of pancreatic cancer. Oncotarget, 2016, 7, 49156-49168.	0.8	19
54	Improved detection rates and treatment planning of head and neck cancer using dual-layer spectral CT. European Radiology, 2018, 28, 4925-4931.	2.3	18

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55	Dual layer computed tomography: Reduction of metal artefacts from posterior spinal fusion using virtual monoenergetic imaging. European Journal of Radiology, 2018, 105, 195-203.	1.2	18
56	Free-Breathing Quantitative Dynamic Contrast-Enhanced Magnetic Resonance Imaging in a Rat Liver Tumor Model Using Dynamic Radial T1 Mapping. Investigative Radiology, 2011, 46, 624-631.	3.5	17
57	Integrin-Targeted Hybrid Fluorescence Molecular Tomography/X-ray Computed Tomography for Imaging Tumor Progression and Early Response in Non-Small Cell Lung Cancer. Neoplasia, 2017, 19, 8-16.	2.3	17
58	Tumor Uptake of Anti-CD20 Fabs Depends on Tumor Perfusion. Journal of Nuclear Medicine, 2016, 57, 1971-1977.	2.8	15
59	Targeting PI3K/mTOR signaling exerts potent antitumor activity in pheochromocytoma in vivo. Endocrine-Related Cancer, 2017, 24, 1-15.	1.6	14
60	Pancreatic cancer detection and characterizationâ€"state of the art cross-sectional imaging and imaging data analysis. Translational Gastroenterology and Hepatology, 2019, 4, 35-35.	1.5	14
61	Multimodality Multiparametric Imaging of Early Tumor Response to a Novel Antiangiogenic Therapy Based on Anticalins. PLoS ONE, 2014, 9, e94972.	1.1	13
62	Multiparametric Modelling of Survival in Pancreatic Ductal Adenocarcinoma Using Clinical, Histomorphological, Genetic and Image-Derived Parameters. Journal of Clinical Medicine, 2020, 9, 1250.	1.0	13
63	Use of the EST Database Resource to Identify and Clone Novel Mono(ADP-Ribosyl)Transferase Gene Family Members. Advances in Experimental Medicine and Biology, 1997, 419, 163-168.	0.8	12
64	Acceleration of chemical shift encoding-based water fat MRI for liver proton density fat fraction and T2* mapping using compressed sensing. PLoS ONE, 2019, 14, e0224988.	1.1	12
65	Proposed diagnostic volumetric bone mineral density thresholds for osteoporosis and osteopenia at the cervicothoracic spine in correlation to the lumbar spine. European Radiology, 2022, 32, 6207-6214.	2.3	12
66	SurvivalNet: Predicting patient survival from diffusion weighted magnetic resonance images using cascaded fully convolutional and 3D Convolutional Neural Networks. , 2017, , .		11
67	Hyperpolarized 13C pyruvate magnetic resonance spectroscopy for in vivo metabolic phenotyping of rat HCC. Scientific Reports, 2021, 11, 1191.	1.6	11
68	[18F]FDG PET/MRI enables early chemotherapy response prediction in pancreatic ductal adenocarcinoma. EJNMMI Research, 2021, 11, 70.	1.1	11
69	Automated detection of the contrast phase in MDCT by an artificial neural network improves the accuracy of opportunistic bone mineral density measurements. European Radiology, 2022, 32, 1465-1474.	2.3	11
70	Reference regionâ€based pharmacokinetic modeling in quantitative dynamic contractâ€enhanced MRI allows robust treatment monitoring in a rat liver tumor model despite cardiovascular changes. Magnetic Resonance in Medicine, 2011, 65, 229-238.	1.9	10
71	Spectral Computed Tomography Angiography With a Gadolinium-based Contrast Agent. Journal of Thoracic Imaging, 2018, 33, 246-253.	0.8	10
72	Strongyloides stercoralis hyperinfection syndrome presenting as mechanical ileus after short-course oral steroids for chronic obstructive pulmonary disease (COPD) exacerbation. Parasitology International, 2020, 76, 102087.	0.6	10

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73	Prediction of Tumor Cellularity in Resectable PDAC from Preoperative Computed Tomography Imaging. Cancers, 2021, 13, 2069.	1.7	10
74	Outcomes of resections for pancreatic adenocarcinoma with suspected venous involvement: a single center experience. BMC Surgery, 2015, 15, 100.	0.6	9
75	Camera-based respiratory triggering improves the image quality of 3D magnetic resonance cholangiopancreatography. European Journal of Radiology, 2019, 120, 108675.	1.2	9
76	Neoadjuvant versus definitive chemoradiation in patients with squamous cell carcinoma of the esophagus. Radiation Oncology, 2019, 14, 66.	1.2	9
77	Efficient, high-performance semantic segmentation using multi-scale feature extraction. PLoS ONE, 2021, 16, e0255397.	1.1	9
78	Assessing Antiangiogenic Therapy Response by DCE-MRI: Development of a Physiology Driven Multi-Compartment Model Using Population Pharmacometrics. PLoS ONE, 2011, 6, e26366.	1.1	8
79	Borderline-resectable pancreatic adenocarcinoma: Contour irregularity of the venous confluence in pre-operative computed tomography predicts histopathological infiltration. PLoS ONE, 2019, 14, e0208717.	1.1	8
80	Combined DCE-MRI- and FDG-PET enable histopathological grading prediction in a rat model of hepatocellular carcinoma. European Journal of Radiology, 2020, 124, 108848.	1.2	7
81	AI reflections in 2020. Nature Machine Intelligence, 2021, 3, 2-8.	8.3	7
82	Bcl3 Couples Cancer Stem Cell Enrichment With Pancreatic Cancer Molecular Subtypes. Gastroenterology, 2021, 161, 318-332.e9.	0.6	7
83	MRI-Determined Psoas Muscle Fat Infiltration Correlates with Severity of Weight Loss during Cancer Cachexia. Cancers, 2021, 13, 4433.	1.7	7
84	Qualitative and Quantitative Comparison of Respiratory Triggered Reduced Field-of-View (FOV) Versus Full FOV Diffusion Weighted Imaging (DWI) in Pancreatic Pathologies. Academic Radiology, 2021, 28, S234-S243.	1.3	7
85	Angpt2/Tie2 autostimulatory loop controls tumorigenesis. EMBO Molecular Medicine, 2022, 14, e14364.	3.3	7
86	Gradient nonlinearity correction in liver DWI using motion-compensated diffusion encoding waveforms. Magnetic Resonance Materials in Physics, Biology, and Medicine, 2021, , 1.	1.1	7
87	Impact of 18F-FDG-PET/CT on the identification of regional lymph node metastases and delineation of the primary tumor in esophageal squamous cell carcinoma patients. Strahlentherapie Und Onkologie, 2020, 196, 787-794.	1.0	6
88	High rate of complete histopathological response in hepatocellular carcinoma patients after combined transarterial chemoembolization and stereotactic body radiation therapy. World Journal of Gastroenterology, 2021, 27, 3630-3642.	1.4	6
89	Noise reduction in diffusion weighted MRI of the pancreas using an L1-regularized iterative SENSE reconstruction. Magnetic Resonance Imaging, 2022, 87, 1-6.	1.0	6
90	High-Resolution, High b-Value Computed Diffusion-Weighted Imaging Improves Detection of Pancreatic Ductal Adenocarcinoma. Cancers, 2022, 14, 470.	1.7	6

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91	Two Novel Human Members of an Emerging Mammalian Gene Family Related to Mono-ADP-Ribosylating Bacterial Toxins. Genomics, 1999, 55, 130.	1.3	5
92	Arterial Pseudoaneurysm within a Pancreatic Pseudocyst. Case Reports in Gastroenterology, 2018, 12, 513-518.	0.3	5
93	Prognostic factors in hepatocellular carcinoma patients undergoing transarterial chemoembolization and radioembolization: a retrospective study. European Journal of Gastroenterology and Hepatology, 2020, 32, 1036-1041.	0.8	5
94	Hyperpolarized 13C Spectroscopy with Simple Slice-and-Frequency-Selective Excitation. Biomedicines, 2021, 9, 121.	1.4	5
95	Longitudinal Assessment of Health and Quality of Life of COVID-19 Patients Requiring Intensive Careâ€"An Observational Study. Journal of Clinical Medicine, 2021, 10, 5469.	1.0	5
96	SARS-CoV-2 serology increases diagnostic accuracy in CT-suspected, PCR-negative COVID-19 patients during pandemic. Respiratory Research, 2021, 22, 119.	1.4	4
97	Transarterial Administration of Oncolytic Viruses for Locoregional Therapy of Orthotopic HCC in Rats. Journal of Visualized Experiments, 2016, , .	0.2	3
98	Correlation of in vivo imaging to morphomolecular pathology in translational research: challenge accepted. EJNMMI Research, 2021, 11, 83.	1.1	3
99	Privacy: An Axiomatic Approach. Entropy, 2022, 24, 714.	1.1	3
100	Next-generation metabolic imaging in pancreatic cancer. Gut, 2016, 65, 367-369.	6.1	2
101	Artificial Intelligence in Medicine and Privacy Preservation. , 2021, , 1-14.		1
102	Segmentation of Peripancreatic Arteries in Multispectral Computed Tomography Imaging. Lecture Notes in Computer Science, 2021, , 596-605.	1.0	1
103	Proof of concept of a multimodal intravital molecular imaging system for tumour transpathology investigation. European Journal of Nuclear Medicine and Molecular Imaging, 2022, 49, 1157-1165.	3.3	1
104	How heterogeneous is the liver? A cluster analysis of DCE-MRI time series. , 2011, , .		0
105	Magnetic particle spectroscopy characterization of the assemblies of magnetic nanoparticles. , 2015, , .		0
106	A Novel Predictive Organoid Culture System from Pancreatic Cancer Patients - Personalized Medicine in Realtime. Gastroenterology, 2017, 152, S18.	0.6	0
107	Autoimmune Pancreatitis Type 1 Associated with a Pancreatic Pseudocyst. Case Reports in Gastroenterology, 2019, 13, 195-199.	0.3	0
108	Hepatic activation of FOXO3 triggers positive feedback-loop for mTORC2-Akt and enhances oxidative damage-associated hepatocellular carcinogenesis. Journal of Hepatology, 2020, 73, S652.	1.8	0

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109	Abstract A234: Targeting Rasâ€dependent pathways in murine models of pancreatic cancer. , 2009, , .		0
110	Abstract C14: Optical imaging of integrin Î±VÎ²3 detects pancreatic cancer in endogenous mouse models.. , 2011, , .		0
111	Abstract C8: Endogenous mouse models of pancreatic adenocarcinoma as a preclinical trial platform characterized by multiparametric magnetic resonance imaging. , 2011, , .		0
112	Abstract C267: Sequential combination of the novel allosteric MEK1/2 inhibitor BAY 86-9766 (RDEA119) with the mTOR inhibitor rapamycin decelerates relapse of pancreatic tumors.. , 2013, , .		0
113	Artificial Intelligence in Medicine and Privacy Preservation. , 2022, , 145-158.		0
114	Artificial Intelligence Will Improve Molecular Imaging, Therapy and Theranostics. Which Are the Biggest Advantages for Therapy?. , 2022, , 159-170.		0