Dominik Nickel

List of Publications by Year in Descending Order

110 papers	**2,047** citations	**26** h-index	**41** g-index
121 ext. papers	**2,634** ext. citations	**5.7** avg, IF	**5.34** L-index

#	Paper	IF	Citations
110	Quantitative analysis of liver function: 3D variable-flip-angle versus Look-Locker T1 relaxometry in hepatocyte-specific contrast-enhanced liver MRI.. *Quantitative Imaging in Medicine and Surgery*, **2022**, 12, 2509-2522	3.6	0
109	CS-VIBE accelerates cranial nerve MR imaging for the diagnosis of facial neuritis: comparison of the diagnostic performance of post-contrast MPRAGE and CS-VIBE. *European Radiology*, **2022**, 32, 223-233	8	0
108	Accelerated k-space shift calibration for free-breathing stack-of-radial MRI quantification of liver fat and. *Magnetic Resonance in Medicine*, **2022**, 87, 281-291	4.4	0
107	Feasibility of an accelerated 2D-multi-contrast knee MRI protocol using deep-learning image reconstruction: a prospective intraindividual comparison with a standard MRI protocol.. *European Radiology*, **2022**, 1	8	1
106	Evaluation of liver tumor identification rate of volumetric-interpolated breath-hold images using the compressed sensing method and qualitative evaluation of tumor contrast effect via visual evaluation.. *Quantitative Imaging in Medicine and Surgery*, **2022**, 12, 2649-2657	3.6	
105	Application of a Novel Iterative Denoising and Image Enhancement Technique in T1-Weighted Precontrast and Postcontrast Gradient Echo Imaging of the Abdomen: Improvement of Image Quality and Diagnostic Confidence. *Investigative Radiology*, **2021**, 56, 328-334	10.1	7
104	Quantification of contrast agent uptake in the hepatobiliary phase helps to differentiate hepatocellular carcinoma grade. *Scientific Reports*, **2021**, 11, 22991	4.9	1
103	Deep Learning Applications in Magnetic Resonance Imaging: Has the Future Become Present?. *Diagnostics*, **2021**, 11,	3.8	2
102	Deep learning-accelerated T2-weighted imaging of the prostate: Impact of further acceleration with lower spatial resolution on image quality. *European Journal of Radiology*, **2021**, 145, 110012	4.7	0
101	Diagnostic Confidence and Feasibility of a Deep Learning Accelerated HASTE Sequence of the Abdomen in a Single Breath-Hold. *Investigative Radiology*, **2021**, 56, 313-319	10.1	11
100	Impact of Chronic Prostatitis on the PI-RADS Score 3: Proposal for the Addition of a Novel Binary Suffix. *Diagnostics*, **2021**, 11,	3.8	1
99	T2 mapping in gadoxetic acid-enhanced MRI: utility for predicting decompensation and death in cirrhosis. *European Radiology*, **2021**, 31, 8376-8387	8	1
98	High-resolution three-dimensional T1-weighted hepatobiliary MR cholangiography using Gd-EOB-DTPA for assessment of biliary tree anatomy: Parallel imaging versus compressed sensing. *European Journal of Radiology*, **2021**, 136, 109515	4.7	1
97	Deep learning-accelerated T2-weighted imaging of the prostate: Reduction of acquisition time and improvement of image quality. *European Journal of Radiology*, **2021**, 137, 109600	4.7	17
96	Ultrafast Dynamic Contrast-Enhanced MRI Using Compressed Sensing: Associations of Early Kinetic Parameters With Prognostic Factors of Breast Cancer. *American Journal of Roentgenology*, **2021**, 217, 56-63	5.4	0
95	Accelerated single-shot T2-weighted fat-suppressed (FS) MRI of the liver with deep learning-based image reconstruction: qualitative and quantitative comparison of image quality with conventional T2-weighted FS sequence. *European Radiology*, **2021**, 31, 8447-8457	8	2
94	Development and Evaluation of Deep Learning-Accelerated Single-Breath-Hold Abdominal HASTE at 3 T Using Variable Refocusing Flip Angles. *Investigative Radiology*, **2021**, 56, 645-652	10.1	3

93	Accelerated T2-Weighted TSE Imaging of the Prostate Using Deep Learning Image Reconstruction: A Prospective Comparison with Standard T2-Weighted TSE Imaging. *Cancers*, **2021**, 13,	6.6	8
92	Effect of hepatic steatosis on native T1 mapping of 3T magnetic resonance imaging in the assessment of T1 values for patients with non-alcoholic fatty liver disease. *Magnetic Resonance Imaging*, **2021**, 80, 1-8	3.3	2
91	Free-Breathing Volumetric Liver and Proton Density Fat Fraction Quantification in Pediatric Patients Using Stack-of-Radial MRI With Self-Gating Motion Compensation. *Journal of Magnetic Resonance Imaging*, **2021**, 53, 118-129	5.6	6
90	Morphological and functional assessment of the uterus: "one-stop shop imaging" using a compressed-sensing accelerated, free-breathing T1-VIBE sequence. *Acta Radiologica*, **2021**, 62, 695-704	2	3
89	Simultaneous multi-slice accelerated diffusion-weighted imaging with higher spatial resolution for patients with liver metastases from neuroendocrine tumours. *Clinical Radiology*, **2021**, 76, 81.e11-81.e19	2.9	3
88	Can Dynamic Contrast-enhanced MRI Contribute to Improved Assessment of Rectosigmoid Involvement in Deep Infiltrating Endometriosis?. *In Vivo*, **2021**, 35, 2217-2226	2.3	
87	Deep Learning-Based Superresolution Reconstruction for Upper Abdominal Magnetic Resonance Imaging: An Analysis of Image Quality, Diagnostic Confidence, and Lesion Conspicuity. *Investigative Radiology*, **2021**, 56, 509-516	10.1	7
86	Image Quality Improvement of Dynamic Contrast-Enhanced Gradient Echo Magnetic Resonance Imaging by Iterative Denoising and Edge Enhancement. *Investigative Radiology*, **2021**, 56, 465-470	10.1	2
85	Intraindividual Comparison of Compressed Sensing-Accelerated Cartesian and Radial Arterial Phase Imaging of the Liver in an Experimental Tumor Model. *Investigative Radiology*, **2021**, 56, 433-441	10.1	
84	Feasibility and Implementation of a Deep Learning MR Reconstruction for TSE Sequences in Musculoskeletal Imaging. *Diagnostics*, **2021**, 11,	3.8	5
83	Results of the 2020 fastMRI Challenge for Machine Learning MR Image Reconstruction. *IEEE Transactions on Medical Imaging*, **2021**, 40, 2306-2317	11.7	25
82	Analysis of a Deep Learning-Based Superresolution Algorithm Tailored to Partial Fourier Gradient Echo Sequences of the Abdomen at 1.5 T: Reduction of Breath-Hold Time and Improvement of Image Quality. *Investigative Radiology*, **2021**,	10.1	1
81	Evaluation of abdominal hemodynamics through compressed sensing accelerated functional imaging. *Magnetic Resonance Imaging*, **2020**, 73, 186-191	3.3	1
80	Simultaneous Multislice Diffusion-Weighted Imaging of the Kidneys at 3 T. *Investigative Radiology*, **2020**, 55, 233-238	10.1	13
79	Quantitative pharmacokinetic analysis of high-temporal-resolution dynamic contrast-enhanced MRI to differentiate the normal-appearing pituitary gland from pituitary macroadenoma. *Japanese Journal of Radiology*, **2020**, 38, 649-657	2.9	3
78	Free-breathing fat and R * quantification in the liver using a stack-of-stars multi-echo acquisition with respiratory-resolved model-based reconstruction. *Magnetic Resonance in Medicine*, **2020**, 84, 2592-2605	4.4	9
77	Background parenchymal enhancement and its effect on lesion detectability in ultrafast dynamic contrast-enhanced MRI. *European Journal of Radiology*, **2020**, 129, 108984	4.7	4
76	Effect of respiratory motion on free-breathing 3D stack-of-radial liver relaxometry and improved quantification accuracy using self-gating. *Magnetic Resonance in Medicine*, **2020**, 83, 1964-1978	4.4	9

75	T1 mapping, T2 mapping and MR elastography of the liver for detection and staging of liver fibrosis. *Abdominal Radiology*, **2020**, 45, 692-700	3	26
74	Usefulness of breath-hold compressed sensing accelerated three-dimensional magnetic resonance cholangiopancreatography (MRCP) added to respiratory-gating conventional MRCP. *European Journal of Radiology*, **2020**, 122, 108765	4.7	8
73	A prospective analysis of the diagnostic accuracy of 3 T MRI, CT and endoscopic ultrasound for preoperative T staging of potentially resectable esophageal cancer. *Cancer Imaging*, **2020**, 20, 64	5.6	4
72	New parameters of ultrafast dynamic contrast-enhanced breast MRI using compressed sensing. *Journal of Magnetic Resonance Imaging*, **2020**, 51, 164-174	5.6	19
71	Whole-lesion histogram and texture analyses of breast lesions on inline quantitative DCE mapping with CAIPIRINHA-Dixon-TWIST-VIBE. *European Radiology*, **2020**, 30, 57-65	8	14
70	MR elastography, T1 and T2 relaxometry of liver: role in noninvasive assessment of liver function and portal hypertension. *Abdominal Radiology*, **2020**, 45, 2680-2687	3	8
69	A multiparametric approach to diagnosing breast lesions using diffusion-weighted imaging and ultrafast dynamic contrast-enhanced MRI. *Magnetic Resonance Imaging*, **2020**, 71, 154-160	3.3	5
68	Evaluation of variable flip angle, MOLLI, SASHA, and IR-SNAPSHOT pulse sequences for T relaxometry and extracellular volume imaging of the pancreas and liver. *Magnetic Resonance Materials in Physics, Biology, and Medicine*, **2019**, 32, 559-566	2.8	14
67	Improved accuracy of apparent diffusion coefficient quantification using a fully automatic noise bias compensation method: Preliminary evaluation in prostate diffusion weighted imaging. *Journal of Magnetic Resonance*, **2019**, 305, 22-30	3	1
66	Image quality and diagnostic accuracy of complex-averaged high b value images in diffusion-weighted MRI of prostate cancer. *Abdominal Radiology*, **2019**, 44, 2244-2253	3	5
65	Feasibility of Dixon magnetic resonance imaging to quantify effects of physical training on muscle composition-A pilot study in young and healthy men. *European Journal of Radiology*, **2019**, 114, 160-166	4.7	7
64	T1 mapping for liver function evaluation in gadoxetic acid-enhanced MR imaging: comparison of look-locker inversion recovery and B inhomogeneity-corrected variable flip angle method. *European Radiology*, **2019**, 29, 3584-3594	8	23
63	Rapid Imaging: Recent Advances in Abdominal MRI for Reducing Acquisition Time and Its Clinical Applications. *Korean Journal of Radiology*, **2019**, 20, 1597-1615	6.9	14
62	Native T1 mapping of autoimmune pancreatitis as a quantitative outcome surrogate. *European Radiology*, **2019**, 29, 4436-4446	8	5
61	Improved Liver Diffusion-Weighted Imaging at 3 T Using Respiratory Triggering in Combination With Simultaneous Multislice Acceleration. *Investigative Radiology*, **2019**, 54, 744-751	10.1	18
60	Modulating Diffusion-Weighted Magnetic Resonance Imaging for Screening in Oncologic Tertiary Prevention: A Prospective Ex Vivo and In Vivo Study. *Investigative Radiology*, **2019**, 54, 704-711	10.1	3
59	Free-Breathing Dynamic Contrast-Enhanced Imaging of the Upper Abdomen Using a Cartesian Compressed-Sensing Sequence With Hard-Gated and Motion-State-Resolved Reconstruction. *Investigative Radiology*, **2019**, 54, 728-736	10.1	14
58	Impact of the Number of Iterations in Compressed Sensing Reconstruction on Ultrafast Dynamic Contrast-enhanced Breast MR Imaging. *Magnetic Resonance in Medical Sciences*, **2019**, 18, 200-207	2.9	10

57 Accurate fatty acid composition estimation of adipose tissue in the abdomen based on bipolar multi-echo MRI. *Magnetic Resonance in Medicine*, **2019**, 81, 2330-2346   4.4   8

56 Continuous Hepatic Arterial Multiphase Magnetic Resonance Imaging During Free-Breathing. *Investigative Radiology*, **2018**, 53, 596-601   10.1   11

55 Evaluation of 2-point, 3-point, and 6-point Dixon magnetic resonance imaging with flexible echo timing for muscle fat quantification. *European Journal of Radiology*, **2018**, 103, 57-64   4.7   40

54 Evaluation of hemodynamic imaging findings of hypervascular hepatocellular carcinoma: comparison between dynamic contrast-enhanced magnetic resonance imaging using radial volumetric imaging breath-hold examination with k-space-weighted image contrast reconstruction and dynamic computed tomography during hepatic arteriography. *Japanese Journal of Radiology,*   2.9   2

53 Gd-EOB-DTPA-enhanced T1 relaxometry for assessment of liver function determined by real-time C-methacetin breath test. *European Radiology*, **2018**, 28, 3591-3600   8   11

52 Ultrafast dynamic contrast-enhanced mri of the breast using compressed sensing: breast cancer diagnosis based on separate visualization of breast arteries and veins. *Journal of Magnetic Resonance Imaging*, **2018**, 47, 97-104   5.6   28

51 Application of whole-lesion histogram analysis of pharmacokinetic parameters in dynamic contrast-enhanced MRI of breast lesions with the CAIPIRINHA-Dixon-TWIST-VIBE technique. *Journal of Magnetic Resonance Imaging*, **2018**, 47, 91-96   5.6   17

50 Self-gated 4D-MRI of the liver: Initial clinical results of continuous multiphase imaging of hepatic enhancement. *Journal of Magnetic Resonance Imaging*, **2018**, 47, 459-467   5.6   11

49 A novel framework for evaluating the image accuracy of dynamic MRI and the application on accelerated breast DCE MRI. *Magnetic Resonance Materials in Physics, Biology, and Medicine*, **2018**, 31, 309-320   2.8   1

48 Evaluation of two-point Dixon water-fat separation for liver specific contrast-enhanced assessment of liver maximum capacity. *Scientific Reports*, **2018**, 8, 13863   4.9   2

47 Repeatability of Dixon magnetic resonance imaging and magnetic resonance spectroscopy for quantitative muscle fat assessments in the thigh. *Journal of Cachexia, Sarcopenia and Muscle*, **2018**, 9, 1093-1100   10.3   38

46 Single-breath-hold abdominal [Formula: see text]mapping using 3D Cartesian Look-Locker with spatiotemporal sparsity constraints. *Magnetic Resonance Materials in Physics, Biology, and Medicine*, **2018**, 31, 399-414   2.8   1

45 Gd-EOB-DTPA-enhanced MRI for evaluation of liver function: Comparison between signal-intensity-based indices and T1 relaxometry. *Scientific Reports*, **2017**, 7, 43347   4.9   38

44 Accelerating multi-echo water-fat MRI with a joint locally low-rank and spatial sparsity-promoting reconstruction. *Magnetic Resonance Materials in Physics, Biology, and Medicine*, **2017**, 30, 189-202   2.8   9

43 Dynamic Liver Magnetic Resonance Imaging in Free-Breathing: Feasibility of a Cartesian T1-Weighted Acquisition Technique With Compressed Sensing and Additional Self-Navigation Signal for Hard-Gated and Motion-Resolved Reconstruction. *Investigative Radiology*, **2017**, 52, 708-714   10.1   16

42 Compressed Sensing for Breast MRI: Resolving the Trade-Off Between Spatial and Temporal Resolution. *Investigative Radiology*, **2017**, 52, 574-582   10.1   30

41 Effect of a Low-Rank Denoising Algorithm on Quantitative Magnetic Resonance Imaging-Based Measures of Liver Fat and Iron. *Journal of Computer Assisted Tomography*, **2017**, 41, 412-416   2.2   2

40 Gd-EOB-DTPA-enhanced MR relaxometry for the detection and staging of liver fibrosis. *Scientific Reports*, **2017**, 7, 41429   4.9   17

39	The Effects of Breathing Motion on DCE-MRI Images: Phantom Studies Simulating Respiratory Motion to Compare CAIPIRINHA-VIBE, Radial-VIBE, and Conventional VIBE. *Korean Journal of Radiology*, **2017**, 18, 289-298	6.9	5
38	Clinical Feasibility of Free-Breathing Dynamic T1-Weighted Imaging With Gadoxetic Acid-Enhanced Liver Magnetic Resonance Imaging Using a Combination of Variable Density Sampling and Compressed Sensing. *Investigative Radiology*, **2017**, 52, 596-604	10.1	22
37	Volume-assisted estimation of liver function based on Gd-EOB-DTPA-enhanced MR relaxometry. *European Radiology*, **2016**, 26, 1125-33	8	41
36	Feasibility of free-breathing dynamic contrast-enhanced MRI of the abdomen: a comparison between CAIPIRINHA-VIBE, Radial-VIBE with KWIC reconstruction and conventional VIBE. *British Journal of Radiology*, **2016**, 89, 20160150	3.4	4
35	Optimized Fast Dynamic Contrast-Enhanced Magnetic Resonance Imaging of the Prostate: Effect of Sampling Duration on Pharmacokinetic Parameters. *Investigative Radiology*, **2016**, 51, 106-12	10.1	21
34	Comparison of CAIPIRINHA-VIBE, Radial-VIBE, and conventional VIBE sequences for dynamic contrast-enhanced (DCE) MRI: A validation study using a DCE-MRI phantom. *Magnetic Resonance Imaging*, **2016**, 34, 638-44	3.3	5
33	Stability of liver proton density fat fraction and changes in R 2* measurements induced by administering gadoxetic acid at 3T MRI. *Abdominal Radiology*, **2016**, 41, 1555-64	3	3
32	Feasibility of test-bolus DCE-MRI using CAIPIRINHA-VIBE for the evaluation of pancreatic malignancies. *European Radiology*, **2016**, 26, 3949-3956	8	12
31	Initial Experience of Applying TWIST-Dixon With Flexible View Sharing in Breast DCE-MRI. *Clinical Breast Cancer*, **2016**, 16, 202-6	3	4
30	Advantages of radial volumetric breath-hold examination (VIBE) with k-space weighted image contrast reconstruction (KWIC) over Cartesian VIBE in liver imaging of volunteers simulating inadequate or no breath-holding ability. *European Radiology*, **2016**, 26, 2790-7	8	11
29	Novel Dynamic Hepatic Magnetic Resonance Imaging Strategy Using Advanced Parallel Acquisition, Rhythmic Breath-Hold Technique, and Gadoxetate Disodium Enhancement. *Investigative Radiology*, **2016**, 51, 33-40	10.1	3
28	Identification of Water and Fat Images in Dixon MRI Using Aggregated Patch-Based Convolutional Neural Networks. *Lecture Notes in Computer Science*, **2016**, 125-132	0.9	2
27	Feasibility of CAIPIRINHA-Dixon-TWIST-VIBE for dynamic contrast-enhanced MRI of the prostate. *European Journal of Radiology*, **2015**, 84, 2110-6	4.7	13
26	Quantification of hepatic steatosis with a multistep adaptive fitting MRI approach: prospective validation against MR spectroscopy. *American Journal of Roentgenology*, **2015**, 204, 297-306	5.4	65
25	Robust Spectral Denoising for Water-Fat Separation in Magnetic Resonance Imaging. *Lecture Notes in Computer Science*, **2015**, 667-674	0.9	5
24	Radial volumetric imaging breath-hold examination (VIBE) with k-space weighted image contrast (KWIC) for dynamic gadoxetic acid (Gd-EOB-DTPA)-enhanced MRI of the liver: advantages over Cartesian VIBE in the arterial phase. *European Radiology*, **2014**, 24, 1290-9	8	33
23	Clinical evaluation of CAIPIRINHA: comparison against a GRAPPA standard. *Journal of Magnetic Resonance Imaging*, **2014**, 39, 189-94	5.6	31
22	Liver fat quantification using a multi-step adaptive fitting approach with multi-echo GRE imaging. *Magnetic Resonance in Medicine*, **2014**, 72, 1353-65	4.4	138

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21	Intravoxel incoherent motion diffusion-weighted imaging of pancreatic neuroendocrine tumors: prediction of the histologic grade using pure diffusion coefficient and tumor size. *Investigative Radiology*, **2014**, 49, 396-402	10.1	40
20	CAIPIRINHA-Dixon-TWIST (CDT)-volume-interpolated breath-hold examination (VIBE): a new technique for fast time-resolved dynamic 3-dimensional imaging of the abdomen with high spatial resolution. *Investigative Radiology*, **2013**, 48, 590-7	10.1	71
19	Highly accelerated T1-weighted abdominal imaging using 2-dimensional controlled aliasing in parallel imaging results in higher acceleration: a comparison with generalized autocalibrating partially parallel acquisitions parallel imaging. *Investigative Radiology*, **2013**, 48, 554-61	10.1	38
18	Inhomogeneous chiral symmetry breaking phases. *Physics of Atomic Nuclei*, **2012**, 75, 732-734	0.4	
17	Deconstructing holographic liquids. *New Journal of Physics*, **2011**, 13, 075010	2.9	73
16	Synchrotron radiation in strongly coupled conformal field theories. *Physical Review D*, **2010**, 81,	4.9	32
15	Influence of vector interaction and Polyakov loop dynamics on inhomogeneous chiral symmetry breaking phases. *Physical Review D*, **2010**, 82,	4.9	118
14	Quark spectral properties above T c from Dyson–Schwinger equations. *European Physical Journal C*, **2010**, 70, 1037-1049	4.2	42
13	How many phases meet at the chiral critical point?. *Physical Review Letters*, **2009**, 103, 072301	7.4	102
12	Black holes and nonrelativistic quantum systems. *Physical Review Letters*, **2009**, 102, 011602	7.4	38
11	Solitonic ground states in (color) superconductivity. *Physical Review D*, **2009**, 79,	4.9	40
10	On Gribov's supercriticality picture of quark confinement. *European Physical Journal C*, **2009**, 60, 47-61	4.2	44
9	Inhomogeneous phases in the Nambu–Jona-Lasinio and quark-meson model. *Physical Review D*, **2009**, 80,	4.9	148
8	Neutrality of the color-flavor-locked phase in a Dyson-Schwinger approach. *Physical Review D*, **2008**, 77,	4.9	7
7	Studying pion effects in the quark propagator. *Progress in Particle and Nuclear Physics*, **2008**, 61, 81-83	10.6	1
6	Color-spin locking in a self-consistent Dyson-Schwinger approach. *Physical Review D*, **2007**, 75,	4.9	21
5	Extraction of spectral functions from Dyson–Schwinger studies via the maximum entropy method. *Annals of Physics*, **2007**, 322, 1949-1960	2.5	28
4	Hadronic unquenching effects in the quark propagator. *Physical Review D*, **2007**, 76,	4.9	58

3	Pseudoscalar Goldstone bosons in the color-flavor locked phase at moderate densities. *Physical Review D*, **2007**, 76,	4.9	12
2	Color superconductivity in the strong-coupling regime of Landau gauge QCD. *Physical Review D*, **2006**, 73,	4.9	49
1	Unlocking of color and flavor in color-superconducting quark matter. *Physical Review D*, **2006**, 74,	4.9	33