

## Scientific Literature and Bibliography

### Literature

- [1] L. J. Erasmus et al., A short overview of MRI artefacts, SA Journal of radiology, August 2004, Review article 13-17.
- [2] Alfred Stadler et al., Artifacts in body MR imaging: their appearance and how to eliminate them, Magnetic Resonance, Eur Radiol 2007; 17:1242-1255.
- [3] Katarzyna Krupa et al., Artifacts in magnetic resonance imaging, Pol J Radiol, 2015; 80:93-106
- [4] Susie Y. Huang et al., Body MR imaging: Artifacts, K-space, and solutions, RadioGraphics 2015; 35:1439-1460.
- [5] A.L.C. Duarte et al., Common MRI artifacts : A practical approach, ESR 2015; Poster ECR 2015 n° C-2297.
- [6] R. Javan et al., Fundamentals Behind the 10 most common magnetic resonance imaging artifacts with correction strategies and 10 high-yield points, ESR 2011; Poster ECR 2011 n° C-1248.
- [7] D. Moratal et al., K-space tutorial : an MRI educational tool for a better understanding of K-space, biiJ March 2008; 4(1):e15.
- [8] Fiachen Zhuo et al., MR artifacts, safety, and quality control, RadioGraphics 2006; 26:275-297.
- [9] Travis B Smith et al., MRI artifacts and correction strategies, Future medicine Ltd, Imaging Med 2010; 2(4): 445-457.
- [10] Puneet S Sharma et al., The appearance and origin of common magnetic resonance imaging artifacts, and solutions for alleviating their effects, Medical physics international journal 2017; Vol.5 No.1.
- [11] Christopher Lisanti et al., Normal MRI appearance and motion-related phenomena of CSF, AJR 2007; 188:716-725.
- [12] Leo F. Czervionke et al., Characteristic features of MR truncation artifacts, AJR 1988; 151:1219-1228.
- [13] Errol M. Bellon et al., MR artifacts : a review, AJR 147: 1271-1281, December 1986.
- [14] Wenchuan Wu et al., Image formation in diffusion MRI : a review of recent technical developments, JMRI 2017 ; 46 :646-662.
- [15] Javier Sánchez-González., How to identify and avoid artifacts on DWI, ©Springer 2012.
- [16] Denis Le Bihan., Artifacts and pitfalls in diffusion MRI, JMRI (2006) 24:478-488.
- [17] Stefan Skare., Clinical multishot DW-EPI through parallel imaging with considerations of susceptibility, motion and noise, MRM 57:881-890 (2007).
- [18] Khashayar Rafat Zand et al., Artifacts and pitfalls in MR imaging of the pelvis, JMRI 26:480-497 (2007).
- [19] Jennifer A. Harvey et al., Breast MR imaging artifacts: how to recognize and fix them, RadioGraphics 2007; 27:s131-s145.
- [20] Haydee Ojeda-Fournier et al., Recognizing and interpreting artifacts and pitfalls in MR imaging of the breast, RadioGraphics 2007; 27:s147-s163.
- [21] Gustavo Felix Marconi et al., Artifacts and pitfalls in shoulder magnetic resonance imaging, Radiol Bras. 2015; 48(4):242-248.

- [22] Brian A. Hargreaves et al., Metal-induced artifacts in MRI, *AJR* 2011; 197:547-555.
- [23] A.Neroladaki et al., Advanced mri artifact reduction technique: utility in every practice, *ESSR* 2016, poster P-0018.
- [24] M.I. Vargas et al., (Review) Brain and spine MRI artifacts at 3 Tesla, ©Elsevier Masson SAS 2008.
- [25] Wenmiao Lu et al., SEMAC: slice encoding for metal artifact correction in MRI, *MRM* 2009; 62(1):66-76.
- [26] Brett S. Talbot et al., MR imaging with metal-suppression sequences for evaluation of total joint arthroplasty, *RadioGraphics* 2016; 36:209-225.
- [27] Michael Hakky et al., Application of basic physics principles to clinical neuroradiology: differentiating artifacts from true pathology on MRI, *AJR* 2013; 201:369-377.
- [28] Somasundraram K. et al., Analysis of imaging artifacts in MR brain images, *Orient. J. Comp. Sci. Technol*, Vol 5(1): 135-141 (2012).
- [29] T.A. Macedo et al., Artifacts and pitfalls of musculoskeletal magnetic resonance imaging, *ESR* 2011; poster No: C-2168.
- [30] Krishna S. Nayak et al., Wideband SSFP: alternating repetition time balanced steady state free precession with increase band spacing, *MRM* 58: 931-938 (2007).
- [31] Nathan E. Yanasak et al., MR imaging artifacts and parallel imaging techniques with calibration scanning: a new twist on old problems, *RadioGraphics* 2014; 34:532-548.
- [32] David J. Larkman et al., Artifact reduction using parallel imaging methods, *MRI* 2004;15:267-275.
- [33] Mark A. Griswold., Field-of-view limitation in parallel imaging, *MRM* 2004; 52:1118-1126.
- [34] Peter Hunold et al., Parallel acquisition techniques in cardiac cine magnetic resonance imaging using truefisp sequence: comparison of imaging quality and artifacts, *JMRI* 2004; 20:506-511.
- [35] Patricia Noel et al., Parallel imaging artifacts in body magnetic resonance imaging, *Can Assoc Radiol J*. 2009 April ; 60(2): 91–98.
- [36] Anagha Deshmane et al., Parallel MR imaging, *JMRI* 2012; 36:55-72-
- [37] Allen D. Elster et al., Pseudolayering of Gd-DTPA in the urinary bladder, *Radiology* 1990; 174:379-381.
- [38] W C G PEH et al., The magic angle phenomenon in tendons: effect of varying the MR echo time, *the british journal of radiology* 1998; 71:31-36.
- [39] Cynthia B. Paschal et al., K-space in the clinic, *JMRI* 2004; Vol. 19 No. 2: 145-159.
- [40] Sarah K. Patch, K-space data processing for artifact reduction in MR imaging, *RSNA Radiology physics* 2005: 73-77.
- [41] James G. Pipe., Motion correction with PROPELLER MRI: application to head motion and free-breathing cardiac imaging, *MRM* 1999; 42:963-969.
- [42] Dana C. Peters et al., Characterizing radial undersampling artifacts for cardiac applications, *MRM* 2006; 5:396-403.
- [43] John Pauly., Dixon Reconstruction, October 11, 2005.
- [44] Henri Guerini et al., Fat suppression with Dixon techniques in musculoskeletal magnetic resonance imaging: a pictorial review, *Semin musculoskeletal radiol* 2015;19:335-347.
- [45] Morelli JN, Runge VM, Ai F, et al. An image-based approach to understanding the physics of MR artifacts. *RadioGraphics* 2011.

- [46] Graves MJ, Mitchell DG. Body MRI artifacts in clinical practice: a physicist's and radiologist's perspective. *J Magn Reson Imaging* 2013.
- [47] Chavhan GB, Babyn PS, Thomas B, Shroff MM, Haacke EM. Principles, techniques, and applications of T2\*-based MR imaging and its special applications. *RadioGraphics* 2009 .
- [48] Hood MN, Ho VB, Smirniotopoulos JG, Szumowski J. Chemical shift: the artifact and clinical tool revisited. *Radiographics* 1999
- [49] Dietrich O, Reiser MF, Schoenberg SO. Artifacts in 3-T MRI: physical background and reduction strategies. *Eur J Radiol* 2008 [SEP]
- [50] Meacham, Kenneth S. – The MRI study guide for technologists – 1995.
- [51] B. A. Hargreaves, P. W. Worters, K. Butts Pauly, J. M. Pauly, K. M. Koch, G. E. Gold – Review. Metal Induced Artifact in MRI - *American Journal of Roentgenology* –
- [52] M. Coriasco, O. Rampado, G.B. Bradac; “Elementi di Risonanza Magnetica –Dal protone alle sequenze per le principali applicazioni diagnostiche”, Springer Edition.
- [53] Mitchell DG, Crovello M, Matteucci T, Petersen RO, Miettinen MM. Benign adrenocortical masses: diagnosis with chemical shift MR imaging. *Radiology* 1992
- [54] Outwater EK, Siegelman ES, Radecki PD, Piccoli CW, Mitchell DG. Distinction between benign and malignant adrenal masses: value of T1-weighted chemical-shift MR imaging. *AJR* 1995
- [55] Stables LA, Kennan RP, Anderson AW, Gore JC. Density matrix simulations of the effects of Jcoupling in spin echo and fast spin echo imaging. *J. Magnetic Resonance* 1999
- [56] Poon CS, Henkelman RM. Practical T2 quantitation for clinical-applications. *JMRI-J Magn Reson Imag* 1992.
- [57] Henkelman RM, Hardy PA, Bishop JE, Poon CS, Plewes DB. Why fat is bright in rare and fast spin-echo imaging. *JMRI-J Magn Reson Imag* 1992
- [58] Scheffler K, Lehnhardt S. Principles and applications of balanced SSFP techniques. *Eur Radiol* 2003
- [59] Bernstein MA, Huston J 3rd, Ward HA. Imaging artifacts at 3.0T. *J Magn Reson Imaging* 2006 [SEP]
- [60] Yang RK, Roth CG, Ward RJ, deJesus JO, Mitchell DG. Optimizing abdominal MR imaging: approaches to common problems. *RNSA RadioGraphics* 2010
- [61] Susie Y. et al., *Body MR Imaging: Artifacts, k-Space, and Solutions*. RNSA RadioGraphics, 2015
- [62] Haacke EM, Masaryk T J , Wielopolski PA, et al. Optimizing blood vessel contrast in fast three-dimensional MRI. *Magn Reson* 1990.
- [63] Corfield L, Speirs A, McCormack DJ, Waltham M; Time of Flight Magnetic Resonance Angiography: A Trap for the Unwary. *European Journal of Vascular & Endovascular surgery*. 2010
- [64] Woo Choi j, Hong Gee Roh, Won-Jin Moon, Young Il Chun, Chung Hwan Kang. Optimization of MR Parameters of 3D TOF-MRA for Various Intracranial Stents at 3.0T MR. *Neurointervention* 2011
- [65] Tsuruda J, Saloner D, Norman D. Artifacts Associated with MR Neuroangiography. *AJNR* 1992
- [66] Wall A, Kugel H, Bachman R, Matuszewski L, Krämer S, Heindel W, et al. 3.0 t vs. 1.5 t MR angiography: in vitro comparison of intravascular stent artifacts. *J Magn Reson Imaging*. 2005
- [67] Lovblad KO, Yilmaz H, Chouiter A, San Millan Ruiz D, Abdo G, Bijlenga P, et al.

- Intracranial aneurysm stenting: follow-up with MR angiography. *J Magn Reson Imaging*. 2006
- [68] Heiland S, From A as in Aliasing to Z as in Zipper: Artifacts in MRI. *Clinical Neuroradiology* 2008
- [69] Lee VS, Martin DJ, Krinsky GA, Rofsky NM. Gadolinium-enhanced MR angiography: artifacts and pitfalls. *AJR Am J Roentgenol* 2000
- [70] Preibisch C, Pilatus U, Bunke J, Hoogenraad F, Zanella F, Lanfermann H Functional MRI using sensitivity- encoded echo planar imaging (SENSE-EPI) 2003
- [71] Ogawa S, Menon RS, Tank DW, Kim SG, Merkle H, Ellermann JM, Ugurbil K. Functional brain mapping by blood oxygenation level-dependent contrast magnetic-resonance-imaging – a comparison of signal characteristics with a biophysical model. *Biophys J* 1993
- [72] Windischberger C, Langenberger H, Sycha T, Tschernko EA, Fuchsjäger-Mayerl G, Schmetterer L, Moser E On the origin of respiratory artifacts in BOLD-EPI of the human brain. *Magn Reson Imaging* 2002
- [73] Thesen S, Heid O, Mueller E, Schad LR Prospective acquisition correction for head motion with image-based tracking for real-time fMRI. *Magn Reson Med* 2000
- [74] Schreiber A, Hubbe U, Ziyeh S, Hennig J. The influence of gliomas and nonglial space-occupying lesions on blood-oxygen-level-dependent contrast enhancement. *AJNR Am J Neuroradiol* 2000.
- [75] Holodny AI, Schulder M, Liu WC, Wolko J, Maldjian JA, Kalnin . The effect of brain tumors on BOLD functional MR imaging activation in the adjacent motor cortex: implications for image-guided neurosurgery. *AJNR* 2000
- [76] Seto E, Sela G, McIlroy WE, Black SE, Staines WR, Bronskill MJ, McIntosh AR, Graham SJ Quantifying head motion associated with motor tasks used in fMRI. *Neuroimage* 2001

## Bibliography

- [B1] Val M. Runge, Wolfgang R. Mitz, Stuart H. Schmeets., *The physics of clinical MR taught through images second edition*, ©Thieme, 2007.
- [B2] Mark A. Brown, Richard C. Semelka., *MRI basic principles and applications third edition*, ©Wiley-Liss, 2003.
- [B3] Matt A. Bernstein, Kevin F. King, Xiaohong J. Zhou., *Handbook of MRI pulse sequences*, ©Elsevier Academic Press, 2004
- [B4] T. Moritani, S. Ekholm, P.-L. Westesson., *Diffusion-weighted MR imaging of the brain*, ©Springer, 2005.
- [B5] David D. Stark, William G. Bradley., *Magnetic Resonance Imaging*, 1999.
- [B6] Slichter CP. *Principles of magnetic resonance*. New York: SpringerVerlag; 1990
- [B7] Forneris A, *Angiografia in risonanza magnetica per il tecnico di radiologia*. Aitasit Learning Project. 2016.
- [B8] M. Coriasco, O. Rampado, G.B. Bradac; “Elementi di Risonanza Magnetica –Dal protone alle sequenze per le principali applicazioni diagnostiche”, Springer Edition.
- [B9] Christoph Stippich. *Clinical Functional MRI, presurgical functional neuroimaging*. 2nd Edition. Springer Edition, 2015.