

VII. LITERATURVERZEICHNIS

1. Maximilian Reiser, F.-P.K., Jürgen Debus, *Radiologie*. 1 ed. 2004, Stuttgart: Thieme.
2. Hien, P., *Echokardiographie Handbuch*. Vol. 1. 1996, Heidelberg: Springer. 196.
3. Flachskampf, F.A., *Praxis der Echokardiographie. Das Referenzwerk zur echokardiographischen Diagnostik*. 2002, Stuttgart: Thieme. 569.
4. Strohm, O., Heinemann, S., Kleinertz, K., Sechtem, U., *Aktueller Stand der kardiovaskulären MRT und CT*. Herz, 2004. **29**(6): p. 223-228.
5. Helbing, W.A., et al., *Comparison of echocardiographic methods with magnetic resonance imaging for assessment of right ventricular function in children*. Am J Cardiol, 1995. **76**(8): p. 589-94.
6. Strohm O., et al., *Aktueller Stand der kardiovaskulären MRT und CT*. Herz, 2004. **29**(2): p. 223-228.
7. Gutberlet, M., et al., [Evaluation of left ventricular volumes in patients with congenital heart disease and abnormal left ventricular geometry. Comparison of MRI and transthoracic 3-dimensional echocardiography]. Rofo, 2003. **175**(7): p. 942-51.
8. Noutsias, M., et al., *Images in cardiovascular medicine. Parvovirus-B19-associated active myocarditis with biventricular thrombi. Results of endomyocardial biopsy investigations and cardiac magnetic resonance imaging*. Circulation, 2007. **115**(13): p. e378-80.
9. Johnson, L.W. and R. Krone, *Cardiac catheterization 1991: a report of the Registry of the Society for Cardiac Angiography and Interventions (SCA&I)*. Cathet Cardiovasc Diagn, 1993. **28**(3): p. 219-20.
10. Gallowitz H.J., et al., *PET in der Kardiologie*. Journal für Kardiologie, 2003. **10**(5): p. 183-188.
11. Thelen, M., et al., *Bilgebende Kardiadiagnostik*. Vol. 1. 2007, Stuttgart: Thieme. 301.
12. Enzweiler, C.N., et al., [Diagnostic value of electron-beam computed tomography (EBT). I. Cardiac applications]. Rofo, 2004. **176**(1): p. 27-36.
13. Sandstede, J., et al., [Primary diagnosis of coronary artery disease by MRI and CT]. Rofo, 2003. **175**(4): p. 477-83.
14. Rominger, M.B., et al., [Comparison between biventricular cine MRI and MR flow quantification in ascending aorta and pulmonary outflow tract for the assessment of intracardial shunt volumes]. Rofo, 2002. **174**(11): p. 1380-6.
15. Ohnesorge, B., et al., [The technical bases and uses of multi-slice CT]. Radiologe, 1999. **39**(11): p. 923-31.
16. Nikolaou, K., et al., *Advances in cardiac CT imaging: 64-slice scanner*. Int J Cardiovasc Imaging, 2004. **20**(6): p. 535-40.
17. Mahnken, A.H., et al., *Flat-panel detector computed tomography for the assessment of coronary artery stents: phantom study in comparison with 16-slice spiral computed tomography*. Invest Radiol, 2005. **40**(1): p. 8-13.
18. Flohr, T.G., et al., *First performance evaluation of a dual-source CT (DSCT) system*. Eur Radiol, 2006. **16**(2): p. 256-68.
19. Morin, R.L., T.C. Gerber, and C.H. McCollough, *Radiation dose in computed tomography of the heart*. Circulation, 2003. **107**(6): p. 917-22.
20. Poll, L.W., et al., *Dose reduction in multi-slice CT of the heart by use of ECG-controlled tube current modulation ("ECG pulsing"): phantom measurements*. Rofo, 2002. **174**(12): p. 1500-5.
21. Zavoisky, E., *Spin-magnetic resonance in paramagnetics*. J. Phys, 1945. **9**: p. 245.
22. Purcell, E.M., H.C. Torrey, and R.V. Pound, *Resonance Absorption by nuclear magnetic moments in a solid*. Phys. Rev., 1946. **69**: p. 37-38.

23. Bloch, F., W.W. Hansen, and M. Packard, *Nuclear induction*. Phys. Rev., 1946. **69**: p. 127-127.
24. Singer, J.R., *Blood Flow Rates by Nuclear Magnetic Resonance Measurements*. Science, 1959. **130**(3389): p. 1652-1653.
25. Damadian, R., *Tumor Detection by Nuclear Magnetic Resonance*. Science, 1971. **171**(3976): p. 1151-1153.
26. Lauterbur, P.C., *Image Formation by Induced Local Interactions: Examples Employing Nuclear Magnetic Resonance*. Nature, 1973. **242**: p. 190-191.
27. Hawkes, R.C., et al., *Nuclear magnetic resonance (NMR) tomography of the normal heart*. J Comput Assist Tomogr, 1981. **5**(5): p. 605-12.
28. Sandstede, J., R. Fischbach, and M. Gutberlet, *Radiologische Diagnostik des Herzens. Ein Leitfaden für die Praxis*. Vol. 1. 2004, Bremen: Uni-Med. 140.
29. Kim RJ., et al., *Relationship of MRI delayed contrast enhancement to irreversible injury, infarct age, and contractile function*. Circulation, 1999. **100**: p. 1992-2002.
30. Kim RJ., et al., *The use of contrast-enhanced magnetic resonance imaging to identify reversible myocardial dysfunction*. N Engl J Med, 2000. **345**: p. 1863-1869.
31. Gutberlet, M., et al., *Myocardial viability assessment in patients with highly impaired left ventricular function: comparison of delayed enhancement, dobutamine stress MRI, end-diastolic wall thickness, and TI201-SPECT with functional recovery after revascularization*. Eur Radiol, 2005. **15**(5): p. 872-80.
32. Mahrholdt H., et al., *Assessment of myocardial viability by cardiovascular magnetic resonance imaging*. Eur Heart J, 2002. **23**: p. 602-619.
33. Schreiber WG., et al., *Perfusion MR imaging of the heart with TrueFISP*. Rofo, 2001. **173**: p. 205-210.
34. Horstick G., et al., *Kardio-MRT - Die multimodale Funktionsanalyse der Zukunft*. Z Kardiol, 2004. **93**(4): p. IV/36-IV/47.
35. Kim WY., et al., *Impact of bulk cardiac motion on right coronary MR angiography and vessel wall imaging*. J Magn Reson Imaging, 2001. **14**: p. 383-390.
36. Catherine Westbrook, C.K.R., John Talbot, *MRI IN PRACTICE*. 3 ed. 2005: Blackwell. 403.
37. Hombach V., Grebe O., and B. RM., *Kardiovaskuläre Magnetresonanztomographie*. 1 ed. 2005: Schattauer Verlag. 453.
38. Hashemi, R.H., W.G. Bradley, and C.J. Lisanti, *MRI: The Basics*. 2 ed. 2003: Lippincott Williams & Wilkins. 368.
39. Zhuo, J. and R.P. Gullapalli, *AAPM/RSNA physics tutorial for residents: MR artifacts, safety, and quality control*. Radiographics, 2006. **26**(1): p. 275-97.
40. Weishaupt, D., V.D. Köchli, and B. Marincek, *Wie funktioniert MRI?* 4 ed. 2003: Springer. 137.
41. Taber, K.H., et al., *Pitfalls and artifacts encountered in clinical MR imaging of the spine*. Radiographics, 1998. **18**(6): p. 1499-521.
42. Jones, R.W. and R.J. Witte, *Signal intensity artifacts in clinical MR imaging*. Radiographics, 2000. **20**(3): p. 893-901.
43. Westbrook, C., C. Kauth Roth, and J. Talbot, *MRI IN PRACTICE*. 3 ed. 2005: Blackwell. 403.
44. Botnar RM., et al., *Improved Coronary Artery Definition With T2-Weighted, Free-Breathing, Three-Dimensional Coronary MRA*. Circulation, 1999. **99**: p. 3139-3148.
45. Nagel E., Rossum v A.C., and F. E., *Kardiovaskuläre Magnetresonanztomographie*. 1 ed. 2002: Steinkopff Verlag Darmstadt. 218.
46. Boxt, L.M., *Cardiac MR imaging: a guide for the beginner*. Radiographics, 1999. **19**(4): p. 1009-25; discussion 1026-8.

47. Schar, M., et al., *Cardiac SSFP imaging at 3 Tesla*. Magn Reson Med, 2004. **51**(4): p. 799-806.
48. Fuchs, F., G. Laub, and K. Othomo, *TrueFISP--technical considerations and cardiovascular applications*. Eur J Radiol, 2003. **46**(1): p. 28-32.
49. Reeder, S.B., D.A. Herzka, and E.R. McVeigh, *Signal-to-noise ratio behavior of steady-state free precession*. Magn Reson Med, 2004. **52**(1): p. 123-30.
50. Scheffler, K. and S. Lehnhardt, *Principles and applications of balanced SSFP techniques*. Eur Radiol, 2003. **13**(11): p. 2409-18.
51. Dominik Weishaupt, V.D.K., Borut Marineck, *Wie funktioniert MRI?* 4 ed. 2002, Zürich: Springer.
52. Simonetti, O.P., et al., "Black blood" T2-weighted inversion-recovery MR imaging of the heart. Radiology, 1996. **199**(1): p. 49-57.
53. Sodickson DK. and Manning WJ., *Simultaneous acquisition of spatial harmonics (SMASH): ultra-fast imaging with radiofrequency coil arrays*. Magn Reson Med, 1997. **38**: p. 591-603.
54. Pruessmann, K.P., et al., *SENSE: sensitivity encoding for fast MRI*. Magn Reson Med, 1999. **42**(5): p. 952-62.
55. Pruessmann, K.P., *Parallel imaging at high field strength: synergies and joint potential*. Top Magn Reson Imaging, 2004. **15**(4): p. 237-44.
56. Wintersperger BJ. and B. C., *CT und MRT des Herzens*. 1 ed. 2005. 200.
57. Maderwald, S. and M.E. Ladd, *Parallele Bildgebung in der Magnetresonanztomographie*. Radiologie up2date, 2005. **2**(5): p. 113-136.
58. Dietrich O., N.K., Wintersperger B.J., Flatz W., Nittka M., Petsch R., Kiefer B., Schoenberg S.O., *iPAT:Applikationen für schnelle und kardiovaskuläre MRT*. e-lectromedica, 2002. **70**(2): p. 149-162.
59. Weiger, M., K.P. Pruessmann, and P. Boesiger, *Cardiac real-time imaging using SENSE. SENStivity Encoding scheme*. Magn Reson Med, 2000. **43**(2): p. 177-84.
60. Weiger, M., et al., *Specific coil design for SENSE: a six-element cardiac array*. Magn Reson Med, 2001. **45**(3): p. 495-504.
61. Gutberlet, M., et al., *Comparison of different cardiac MRI sequences at 1.5 T/3.0 T with respect to signal-to-noise and contrast-to-noise ratios - initial experience*. Rofo, 2004. **176**(6): p. 801-8.
62. Greenman, R.L., et al., *Double inversion black-blood fast spin-echo imaging of the human heart: a comparison between 1.5T and 3.0T*. J Magn Reson Imaging, 2003. **17**(6): p. 648-55.
63. McGee, K.P., et al., *Cardiac magnetic resonance parallel imaging at 3.0 Tesla: technical feasibility and advantages*. J Magn Reson Imaging, 2004. **19**(3): p. 291-7.
64. Wen, H., et al., *The intrinsic signal-to-noise ratio in human cardiac imaging at 1.5, 3, and 4 T*. J Magn Reson, 1997. **125**(1): p. 65-71.
65. Glockner, J.F., et al., *Parallel MR imaging: a user's guide*. Radiographics, 2005. **25**(5): p. 1279-97.
66. Niendorf, T. and D. Sodickson, [Acceleration of cardiovascular MRI using parallel imaging: basic principles, practical considerations, clinical applications and future directions]. Rofo, 2006. **178**(1): p. 15-30.
67. Noeske, R., et al., *Human cardiac imaging at 3 T using phased array coils*. Magn Reson Med, 2000. **44**(6): p. 978-82.
68. Ohliger, M.A. and D.K. Sodickson, *An introduction to coil array design for parallel MRI*. NMR Biomed, 2006. **19**(3): p. 300-15.
69. Dietrich, O., et al., *Measurement of signal-to-noise ratios in MR images: Influence of multichannel coils, parallel imaging, and reconstruction filters*. J Magn Reson Imaging, 2007. **26**(2): p. 375-85.

70. Brix, G., O. Schulz, and J. Griebel, *[Restriction of high-frequency exposure of patients in MR examinations]*. Radiologe, 2002. **42**(1): p. 51-9; quiz 60-1.
71. Baudendistel, K.T., J.T. Heverhagen, and M.V. Knopp, *[Clinical MR at 3 Tesla: current status]*. Radiologe, 2004. **44**(1): p. 11-8.
72. Hinton, D.P., et al., *Comparison of cardiac MRI on 1.5 and 3.0 Tesla clinical whole body systems*. Invest Radiol, 2003. **38**(7): p. 436-42.
73. Schär, M., et al., *Cardiac SSFP imaging at 3 Tesla*. Magn Reson Med, 2004. **51**(4): p. 799-806.
74. Michaely, H.J., et al., *Analysis of cardiac function--comparison between 1.5 Tesla and 3.0 Tesla cardiac cine magnetic resonance imaging: preliminary experience*. Invest Radiol, 2006. **41**(2): p. 133-40.
75. Hoffmann KT, H.N., Ehrenstein T et al., *The T2-weighted half-Fourier acquired single-shot turbo-spin-echo technic compared to the conventional T2-weighted turbo-spin-echo technic for cerebral magnetic resonance tomography. A sequence comparison*. Fortschr Röntgenstr, 2000. **172**: p. 521-526.
76. Gutberlet, M., et al., *Influence of high magnetic field strengths and parallel acquisition strategies on image quality in cardiac 2D CINE magnetic resonance imaging: comparison of 1.5 T vs. 3.0 T*. Eur Radiol, 2005. **15**(8): p. 1586-97.
77. Shellock, F.G. and J.V. Crues, *MR Procedures: Biologic Effects, Safety, and Patient Care*. Radiology, 2004. **232**: p. 635-652.
78. Anumula, S., et al., *High Resolution Black-Blood MRI of the Carotid Vessel Wall Using Phased-Array Coils at 1.5 and 3 Tesla*. Academic Radiology, 2005. **12**(12): p. 1521-1526.
79. Atalay, M.K., et al., *Cardiac susceptibility artifacts arising from the heart-lung interface*. Magn Reson Med, 2001. **45**(2): p. 341-5.
80. Miller, S., et al., *MR Imaging of the heart with cine true fast imaging with steady-state precession: influence of spatial and temporal resolutions on left ventricular functional parameters*. Radiology, 2002. **223**(1): p. 263-9.
81. Li, W., et al. *Dark flow artifacts in steady-state free precession (SSFP) cardiac cine imaging*. in *Proceedings of the 11th Annual Meeting of ISMRM, Toronto, Canada*. 2003.
82. Deshpande, V.S., S.M. Shea, and D. Li, *Artifact reduction in true-FISP imaging of the coronary arteries by adjusting imaging frequency*. Magn Reson Med, 2003. **49**(5): p. 803-9.
83. Gutberlet, M., et al., *Comprehensive cardiac magnetic resonance imaging at 3.0 Tesla: feasibility and implications for clinical applications*. Invest Radiol, 2006. **41**(2): p. 154-67.
84. Wintersperger, B.J., et al., *Cardiac steady-state free precession CINE magnetic resonance imaging at 3.0 tesla: impact of parallel imaging acceleration on volumetric accuracy and signal parameters*. Invest Radiol, 2006. **41**(2): p. 141-7.
85. Weiger, M., et al., *Sensitivity encoding as a means of enhancing the SNR efficiency in steady-state MRI*. Magn Reson Med, 2005. **53**(1): p. 177-85.
86. Larkman, D.J., D. Atkinson, and J.V. Hajnal, *Artifact reduction using parallel imaging methods*. Top Magn Reson Imaging, 2004. **15**(4): p. 267-75.
87. McKenzie, C.A., et al., *Self-calibrating parallel imaging with automatic coil sensitivity extraction*. Magn Reson Med, 2002. **47**(3): p. 529-38.
88. Roschmann, P., *Radiofrequency penetration and absorption in the human body: limitations to high-field whole-body nuclear magnetic resonance imaging*. Med Phys, 1987. **14**(6): p. 922-31.
89. Kangarlu, A., et al., *Dielectric resonance phenomena in ultra high field MRI*. J Comput Assist Tomogr, 1999. **23**(6): p. 821-31.

90. Lunati, E., P. Cofrancesco, and M. Villa, *New adiabatic inversion pulses for magnetic resonance imaging*. Phys Med Biol, 1999. **44**(6): p. N99-105.
91. Nezafat, R., et al., *B1-insensitive T2 preparation for improved coronary magnetic resonance angiography at 3 T*. Magn Reson Med, 2006. **55**(4): p. 858-64.
92. Bodurka, J., et al., *Scalable multichannel MRI data acquisition system*. Magn Reson Med, 2004. **51**(1): p. 165-71.
93. Zhu, Y., et al., *Highly parallel volumetric imaging with a 32-element RF coil array*. Magn Reson Med, 2004. **52**(4): p. 869-77.
94. Hardy, C.J., et al., *32-element receiver-coil array for cardiac imaging*. Magn Reson Med, 2006. **55**(5): p. 1142-9.
95. McDougall, M.P. and S.M. Wright, *64-channel array coil for single echo acquisition magnetic resonance imaging*. Magn Reson Med, 2005. **54**(2): p. 386-92.
96. Weiger, M., K.P. Pruessmann, and P. Boesiger, *2D SENSE for faster 3D MRI*. Magma, 2002. **14**(1): p. 10-9.
97. Ohliger, M.A., A.K. Grant, and D.K. Sodickson, *Ultimate intrinsic signal-to-noise ratio for parallel MRI: electromagnetic field considerations*. Magn Reson Med, 2003. **50**(5): p. 1018-30.
98. Sodickson, D.K., et al., *Rapid volumetric MRI using parallel imaging with order-of-magnitude accelerations and a 32-element RF coil array: feasibility and implications*. Acad Radiol, 2005. **12**(5): p. 626-35.
99. Weber, O.M., A.J. Martin, and C.B. Higgins, *Whole-heart steady-state free precession coronary artery magnetic resonance angiography*. Magn Reson Med, 2003. **50**(6): p. 1223-8.
100. Niendorf, T., et al., *Toward single breath-hold whole-heart coverage coronary MRA using highly accelerated parallel imaging with a 32-channel MR system*. Magn Reson Med, 2006. **56**(1): p. 167-76.