

## List of Publications (Dr. Anke Henning)

**Citation report** ([Scopus: Author = Henning A; 2004-2015; articles only; author ID: 22835171300](#))

- h-index: 15
- average citations per item: 25.72
- times cited (36 articles listed in Scopus): 926
- cumulative impact factor: 224.5

### Peer-reviewed articles (\* equal contribution):

1. Fillmer A, Vannesjo SJ, Pavan M, Scheidegger M, Pruessmann KP, Henning A. *Fast Iterative Pre-Emphasis Calibration Method Enabling Third-Order Dynamic Shim Updated fMRI*. **Magnetic Resonance in Medicine**: in press.
2. Hoffmann J\*, Henning A\*, Giapitzakis IA, Scheffler K, Shajan G, Pohmann R, Avdievich NI\*. *Safety testing and operational procedures for selfdeveloped radiofrequency coils*. **NMR in Biomedicine**: in press.
3. Hulka LM, Scheidegger M, Vonmoos M, Preller KH, Baumgartner MR, Herdener M, Seifritz E, Henning A, Quednow BB. *Glutamergic and neurometabolic alterations in chronic cocaine users measured with 1H magnetic resonance spectroscopy*. **Addiction Biology**: Epub 2015 (IF 5.92).
4. Dawson DK, Neil CJ, Henning A, Cameron D, Jagpal B, Horowitz J, Frenneaux MP. *Tako-tsubo Cardiomyopathy: A Heart Stressed out of Energy?* **Journal of the American College of Cardiology – Cardiovascular Imaging**: Epub 2014 (IF 6.98).
5. Riese F, Gietl A, Zölch N, Henning A, O’Gorman R, Kälin AM, Leh SE, Buck A, Warnock G, Edden RA, Luechinger R, Hock C, Kollias SS, Michels L. *Posterior cingulate GABA and glutamate+glutamine are reduced in amnesic mild cognitive impairment and are unrelated to amyloid deposition and APOE genotype*. **Neurobiology of Aging**: Epub 2014. (IF 4.85)
6. Fillmer A, Kirchner T, Scheidegger M, Henning A. *Constrained image-based Bo shimming accounting for "local minimum traps" in the optimization and field inhomogeneities outside the region of interest*. **Magnetic Resonance in Medicine**: Epub 2014. (IF 3.27)
7. Kirchner T, Fillmer A, Tsao J, Pruessmann KP, Henning A. *Reduction of Voxel Bleeding in Highly Accelerated Parallel 1H MRSI by Direct Control of the Spatial Response Function*. **Magnetic Resonance in Medicine**: Epub 2014. (IF 3.27)
8. Hock A, Valkovic L, Geier A, Kuntzen T, Boesiger P, Henning A. *Navigator Based Respiratory Gating During Acquisition and Preparation Phases for Proton Liver Spectroscopy at 3 T*. **NMR in Biomedicine**: 27(3) 348–355, 2014. (IF 3.44)
9. Öz G, Alger JR, Barker PB, Bartha R, Bizzi A, Boesch C, Bolan PJ, Brindle KM, Cudalbu C, Dincer A, Dydak U, Emir UE, Frahm J, González RG, Gruber S, Gruetter R, Gupta RK, Heerschap A, Henning A, Hetherington HP, Howe FA, Hüppi PS, Hurd RE, Kantarci K, Klomp DWJ, Kreis R, Kruiskamp MJ, Leach MO, Lin AP, Luijten PR, Marjańska M, Maudsley AA, Meyerhoff DJ, Mountford CE, Nelson SJ, Özduman K, Necmettin PM, Pan JW, Peet AC, Poptani H, Posse S, Pouwels PJW, Ratai EM, Ross BD, Scheenen TWJ, Schuster C, Soher BJ, Tkáč I, Vigneron DB, Kauppinen RA. *Clinical Proton MR Spectroscopy in Central Nervous System Disorders - The MRS Consensus Group*. **Radiology**: 270(3) 658-679, 2014. (IF 6.34)
10. Fuchs A, Schulte RF, Boesiger P, Henning A. *ProFit revisited*. **Magnetic Resonance Medicine**: 71(2) 458–468, 2014. (IF 3.27)
11. Chen X, Boesiger P, Henning A. *J-refocused 1H PRESS DEPT for localized 13C MR Spectroscopy*. **NMR in Biomedicine**: 26(9) 1113–1124, 2013. (IF 3.44)

12. Hock A, Fuchs A, Boesiger P, Kollias SS, [Henning A](#). ECG-triggered, higher-order, projection-based B<sub>0</sub>-shimming allows for fast and reproducible shim convergence in spinal cord 1H magnetic resonance spectroscopy. **NMR in Biomedicine**: 26(3):329-35, 2013. (IF 3.44)
13. Hock A, [Henning A](#), Boesiger P, Kollias SS. MR spectroscopy in the human spinal cord. **American Journal of Neuroradiology** 34(9) 1682-1689, 2013. (IF 3.16)
14. Hock A, MacMillan E, Fuchs A, Kreis R, Boesiger P, Kollias SS, [Henning A](#). Non-water-suppressed proton MR spectroscopy allows spectral quality improvement in the human spinal cord. **Magnetic Resonance Medicine**: 69(5) 1253-1260, 2013. (IF 3.27)
15. Fuchs A, Luttje M, Boesiger P, [Henning A](#). SPECIAL semi-LASER with lipid artifact compensation for 1H MRS at 7T. **Magnetic Resonance in Medicine**: 69(3) 603-612, 2013. (IF 3.27)
16. Scheidegger M, Walter M, Lehmann M, Metzger C, Grimm S, Boeker H, Boesiger P, [Henning A](#), Seifritz E. Ketamine decreases resting state functional network connectivity in healthy subjects: implications for antidepressant drug action. **PLOS ONE**:7(9):e44799, 2012. (3.73)
17. Chen X, Pavan M, Heinzer-Schweizer S, Boesiger P, [Henning A](#). Optically transmitted and inductively coupled electric reference to access in vivo concentrations (ERETIC) for quantitative proton-decoupled <sup>13</sup>C magnetic resonance spectroscopy. **Magnetic Resonance in Medicine** 67(1), 1-7, 2012 (IF 3.27)
18. Kelm BM, Kaster FO, [Henning A](#), Weber MA, Bachert P, Boesiger P, Hamprecht FA, Menze BH. Using Spatial Prior Knowledge in the Spectral Fitting of Magnetic Resonance Spectroscopic Images. **NMR in Biomedicine** 25(1), 1-13, 2012 (IF 3.44)
19. MacMillan EL, Chong DGQ, Dreher W, [Henning A](#), Boesch C, Kreis R. Magnetization exchange with water and T<sub>2</sub> relaxation of the downfield resonances in human brain spectra at 3.0 T. **Magnetic Resonance in Medicine** 65(5):1239-46, 2011. (IF 3.27)
20. Item F, Heinzer-Schweizer S, Wyss M, Fontana P, Lehmann R, [Henning A](#), Weber M, Boesiger P, Boutellier U, Toigo M. Mitochondrial capacity is affected by glycemic status in young untrained women with type 1 diabetes but is not impaired relative to healthy untrained women. **American Journal of Physiology - Regulatory, Integrative and Comparative Physiology** 301(1):R60-6, 2011. (IF 3.28)
21. Abozguia K, Elliott P, McKenna W, Phan TT, Shivu GN, Ahmed I, Maher AR, [Henning A](#), Nightingale P, Ashrafian H, Watkins H, Frenneaux M. The metabolic modulator Perhexiline Corrects Energy Deficiency and Improves Exercise Capacity in Symptomatic Hypertrophic Cardiomyopathy. **Circulation** 122(16), 1562-1569, 2010 (IF 15.20)
22. Heinzer-Schweizer S, De Zanche N, Pavan M, Mens G, Sturzenegger U, [Henning A](#), Boesiger P. In-vivo assessment of tissue metabolite levels using 1H MRS and the Electric Reference To access In vivo Concentrations (ERETIC) method. **NMR in Biomedicine** 23(4), 406-413, 2010. (IF 3.44)
23. Shivu GN, Phan TT, Abozguia K, Ahmed I, Wagenmakers A, [Henning A](#), Narendran P, Stevens M, Frenneaux M. Relationship between coronary microvascular dysfunction and cardiac energetics impairment in type 1 diabetes mellitus **Circulation** 121(10):1209-1215, 2010. (IF 15.20)
24. [Henning A](#)\*, Akhvlediani T\* , Sandor PS, Boesiger P, Jung H. Adaptive metabolic changes in CADASIL white matter. **Journal of Neurology** 257: 171-177, 2010. (3.85)
25. Shivu GN, Abozguia K, Phan TT, Ahmed I, [Henning A](#), Frenneaux M. <sup>31</sup>P magnetic resonance spectroscopy to measure in vivo cardiac energetics in normal myocardium and hypertrophic cardiomyopathy: Experiences at 3T. **European Journal of Radiology** 73(2):255-259, 2010. (IF 2.51)
26. [Henning A](#), Fuchs A, Murdoch JB, Boesiger P. Slice-selective FID acquisition, localized by outer volume suppression (FIDLOVS) for 1H-MRSI of the human brain at 7T with minimal signal loss. **NMR in Biomedicine** 22(7):683-696, 2009. (IF 3.44)
27. Phan TT, Abozguia K, Nallur Shivu G, Mahadevan G, Ahmed I, Williams L, Dwivedi G, Patel K, Steendijk P, Ashrafian H, [Henning A](#), Frenneaux M. Heart failure with preserved ejection fraction is characterized by dynamic impairment of active relaxation and contraction of the left ventricle on exercise and associated

with myocardial energy deficiency. **Journal of the American College of Cardiology** 54(5):402-9, 2009. (IF 14.08)

28. Henning A\*, Walter M\*, Grimm S\*, Schulte RF, Beck J, Dydak U, Schnepf B, Boeker H, Boesiger P, Northoff G. *The Relationship Between Aberrant Neuronal Activation in the Pregenuar Anterior Cingulate, Altered Glutamatergic Metabolism, and Anhedonia in Major Depression.* **Archives of General Psychiatry** 66(5):478-486, 2009 (IF 13.772)
29. Wilm BJ, Gamper U, Henning A, Pruessmann KP, Kollias SS, Boesiger P. *Diffusion-weighted imaging of the entire spinal cord.* **NMR in Biomedicine** 22(2):174-181, 2009. (IF 3.44)
30. Henning A, Schär M, Kollias SS, Boesiger P, Dydak U. *Quantitative magnetic resonance spectroscopy in the entire human cervical spinal cord and beyond at 3T.* **Magnetic Resonance in Medicine** 59(6):1250-1258, 2008. (IF 3.27)
31. Henning A, Schär M, Schulte RF, Wilm B, Pruessmann KP, Boesiger P. *SELOVS: Brain MRSI localization based on highly selective T<sub>1</sub>- and B<sub>1</sub>-insensitive outer-volume suppression at 3T.* **Magnetic Resonance in Medicine** 59(1): 40-51, 2008. (IF 3.27)
32. Akhvediani T, Sandor PS, Henning A, Schaller A, Jauslin M, Gallati S, Boesiger P, Jung HH. *Mitochondrial Encephalopathy with CADASIL-like MRI.* **European Neurology** 58(3):185-188, 2007. (IF 1.51)
33. Northoff G, Walter M, Schulte RF, Beck J, Dydak U, Henning A, Boeker H, Grimm S, Boesiger P. *GABA concentrations in the human anterior cingulate cortex predict negative BOLD responses in fMRI.* **Nature Neuroscience** 10(12):1515-7, 2007. (IF 15.25)
34. Schulte RF, Henning A, Tsao J, Boesiger P, Pruessmann KP. *Design of broadband RF pulses with polynomial-phase response.* **Journal of Magnetic Resonance** 186:167-175, 2007. (IF 2.37)
35. Wilm BJ, Svensson J, Henning A, Pruessmann KP, Boesiger P, Kollias SS. *Reduced field-of-view MRI using outer volume suppression for spinal cord diffusion imaging.* **Magnetic Resonance in Medicine** 57(3):625-630, 2007. (IF 3.27)
36. Vitali F, Henning A, Oberstrass FC, Hargous Y, Auweter SD, Erat M and Allain FHT. *Structure of the two most C-terminal RNA Recognition Motifs of PTB using segmental isotope labeling.* **The EMBO Journal**, 25:150-162; 2006. (IF 9.82)
37. Oberstrass FC\*, Auweter SD\*, Erat M\*, Hargous Y, Henning A, Wenter P, Raymond L, Amir-Ahmady B, Pitsch S, Black D and Allain FHT. *Structure of PTB Bound to RNA: Specific Binding and Implications for Splicing Regulation.* **Science**, 309(5743):2054-2057; 2005. (IF 31.02)
38. Filonenko O, Falke M, Hortenbach H, Henning A, Beddies G, Hinneberg HJ. *Structure of thin CrSi<sub>2</sub> films on Si (001).* **Applied Surface Science**, 227:341-34; 2004. (IF 2.12)

#### Submitted:

39. Henning A, Koning W, Fuchs A, Bluemink JJ, Luijten P, van den Berg CAT, Klomp D. *<sup>1</sup>H MRS in the human spinal cord at 7T using a dielectric waveguide transmitter, RF shimming and a high-density receive array.* **NMR in Biomedicine**: revision submitted.
40. Chen X, Boesiger P, Henning A. *Quantification of Fatty Acids in Human Calf Adipose Tissue and Muscle by <sup>13</sup>C MRS using J-refocused PRESS DEPT and ERETIC.* **NMR in Biomedicine**: submitted.
41. Scheidegger M, Fuchs A, Ametamey S, Kuhn F, Giapitzakis I, Johayem A, Buck A, Seifritz E, Henning A. *Observation of synaptic plasticity in the healthy human brain upon Ketamine infusion by <sup>13</sup>C-ABP688-PET and 2D J-resolved <sup>1</sup>H MRS.* **Biological Psychiatry**: submitted.
42. Soeiro-de-Souza MG, Machado-Vieira R, Moreno RA, Bio DS, Chile T, Monteiro RO, Fraccini Pastorello B, da Costa Leite C, Henning A, Concepcion Garcia Otaduy M, Vallada Filho HP. *GAD1 polymorphisms are associated with glutamatergic activity in the anterior cingulate in bipolar I disorder.* **Neuropsychopharmacology**: submitted.

43. Fillmer A, [Henning A](#). *Expected B<sub>0</sub> Homogeneity Gains and Hardware Requirements for Third-Order Dynamic Shim Updating in the Human Brain at 7T*. **Magnetic Resonance in Medicine**: submitted
44. Kircher T, Eisenring L, Pruessmann KP, [Henning A](#). *Spatially Selective Reconstruction for 1H MRSI*. **Magnetic Resonance in Medicine**: submitted.
45. Hock A, Wilm B, Zandomenighi G, Ampanozi G, Franckenberg S, De Zanche N, Nordmeyer-Maßner J, Kraemer T, Thali M, Ernst M, Kollias S, Henning A. *Metabolite Profile of the Human Spinal Cord determined by Magnetic Resonance Spectroscopy in vivo, in situ and ex vivo*. **NMR in Biomedicine**: submitted.
46. Kirchner T, Pruessmann KP, [Henning A](#). *B<sub>0</sub> Correction in Overdiscrete MRSI Reconstruction*. **Magnetic Resonance in Medicine**: under preparation.
47. Avdievich NI, Giapitzakis IA, [Henning A](#). *Novel Splittable N-Tx/2N-Rx Transceiver Phased Array to Optimize both SNR and Transmit Efficiency at 9.4 T*. **Magnetic Resonance in Medicine**: under preparation.
48. Avdievich NI, Giapitzakis IA, [Henning A](#). *Asymmetric Transceiver Phased Array for Functional Imaging and Spectroscopy of the Visual Cortex at 9.4 T*. **Journal of Magnetic Resonance Imaging**: under preparation.
49. Hock A, Kollias S, [Henning A](#). *Motion detection and dual retrospective correction for MR spectroscopy of the human spinal cord*. **Magnetic Resonance in Medicine**: under preparation.
50. Heinzer-Schweizer S, Item F, Wyss M, Denking J, Kreis R, Boutellier U, Boesiger P, Toigo M, [Henning A](#). *Increase of free phosphate levels in the human calf muscles after resistance exercise under ischemia and vibration*. **Journal of Applied Physiology**: under preparation.

## Book chapters:

1. [Henning A](#). *In Vivo H MRS Applications*. **Encyclopedia of Spectroscopy and Spectrometry, 2<sup>nd</sup> edition, Vol 2**. **Oxford: Elsevier**; John Lindon, George Tranter and David Koppelaar, editors , pp. 1077–1084, 2010
2. [Henning A](#). *In Vivo H MRS Methods*. **Encyclopedia of Spectroscopy and Spectrometry, 2<sup>nd</sup> edition, Vol 2**. **Oxford: Elsevier**; John Lindon, George Tranter and David Koppelaar, editors , pp. 1085–1098, 2010

## Conference contributions (awards; extended conference papers)

- total: 202 contributions: 73 oral and 129 poster; **4 extended conference papers**
- as first author: 30 contributions: 13 oral and 17 poster
- as group leader: 123 contributions: 37 oral and 87 poster contributions

2015

Oral:

1. Pfrommer A, [Henning A](#). *Optimal Arrangement of Finite Element Loop Arrays for Parallel magnetic Resonance Imaging in the human head at 400 MHz*. 2015 **IEEE MTT-S International Microwave Symposium (IMS 2015)**, Phoenix, Arizona, US, 16-22 Mai 2015. (**conference paper**)
2. Scheidegger M, Fuchs A, Ametamey S, Kuhn F, Giapitzakis IA, Johayem A, Buck A, Seifritz E, [Henning A](#). *Observation of synaptic plasticity in the healthy human brain upon Ketamine infusion by <sup>11</sup>C-ABP688-PET and 2D J-resolved 1H MRS*. **European Molecular Imaging Meeting**, Tuebingen, Germany, 18-20 March 2015
3. Pfrommer A, [Henning A](#). *On the Contribution of Electric-Type Current Patterns to UISNR for a Spherical Geometry at 9.4T*. Proceedings of the 23rd annual scientific meeting of **ISMRM**, Toronto, Canada, May 30th – June 5th 2015

4. Shao T, Zhang Y, Avdievich N, Glaser N, [Henning A](#). *A parallel transmit spectral-spatial pulse design method for ultra-high field MRS combining LSQR and optimal control based optimization*. Proceedings of the 23rd annual scientific meeting of **ISMRM**, Toronto, Canada, May 30th – June 5th 2015
5. Wyss PO, Hock A, Scheidegger M, Zoelch N, Rudin M, Kollias S, [Henning A](#). *About differences of the transverse relaxation time ( $T_2$ ) of 18 brain metabolites in gray and white matter at 3T*. Proceedings of the 23rd annual scientific meeting of **ISMRM**, Toronto, Canada, May 30th – June 5th 2015
6. Kirchner T, Fillmer A, Pruessmann KP, [Henning A](#). *Mechanisms of SNR Enhancement and Line Shape Improvement in B<sub>0</sub> Correction for Overdiscrete MRSI Reconstruction*. Proceedings of the 23rd annual scientific meeting of **ISMRM**, Toronto, Canada, May 30th – June 5th 2015

Poster:

7. Pfrommer A, [Henning A](#). *Optimal Arrangement of Finite Element Loop Arrays for Parallel Imaging in a Spherical Geometry at 9.4 T*. Proceedings of the 23rd annual scientific meeting of **ISMRM**, Toronto, Canada, May 30th – June 5th 2015
8. Kuehne A, Laistler E, [Henning A](#), Moser E, Avdievich NI. *Analytical Performance Evaluation and Optimization of Resonant Inductive Decoupling (RID)*. Proceedings of the 23rd annual scientific meeting of **ISMRM**, Toronto, Canada, May 30th – June 5th 2015
9. [Henning A](#), Grimm S, Seifritz E, Scheidegger M. *Choline – a differential marker of glutamatergic neurotransmission ?* Proceedings of the 23rd annual scientific meeting of **ISMRM**, Toronto, Canada, May 30th – June 5th 2015
10. Fillmer A, [Henning A](#). *Requirements for Optimal B<sub>0</sub> Shimming for a Spectroscopy Voxel in the Frontal Cortex at Ultra-High Fields*. Proceedings of the 23rd annual scientific meeting of **ISMRM**, Toronto, Canada, May 30th – June 5th 2015
11. Fillmer A, [Henning A](#). *Expected Homogeneity Gain and Hardware Requirements for Slice-Wise 3rd Order Dynamic Shim Updating for fMRI*. Proceedings of the 23rd annual scientific meeting of **ISMRM**, Toronto, Canada, May 30th – June 5th 2015
12. Giapitzakis IA, [Henning A](#). *Comparison of different methods for combination of multichannel spectroscopy data*. Proceedings of the 23rd annual scientific meeting of **ISMRM**, Toronto, Canada, May 30th – June 5th 2015
13. Giapitzakis IA, Nassirpour S, Avdievich N, Kreis R, [Henning A](#). *Metabolite cycled single voxel <sup>1</sup>H spectroscopy at 9.4T*. Proceedings of the 23rd annual scientific meeting of **ISMRM**, Toronto, Canada, May 30th – June 5th 2015
14. Hoffmann J, Shajan G, Mirkes C, Shao T, [Henning A](#), Pohmann R, Scheffler K. *Towards routine application of dynamic parallel transmission for whole-brain imaging at 9.4 Tesla*. Proceedings of the 23rd annual scientific meeting of **ISMRM**, Toronto, Canada, May 30th – June 5th 2015
15. Eschelbach M, Chang YC, Handwerker J, Anders J, [Henning A](#), Scheffler K. *Tracking Motion and Resulting Field Fluctuations Using 19F NMR Field Probes*. Proceedings of the 23rd annual scientific meeting of **ISMRM**, Toronto, Canada, May 30th – June 5th 2015
16. Fichtner ND, [Henning A](#), Zoelch N, Boesch C, Kreis R. *T<sub>2</sub> estimation of downfield metabolites in human brain at 7T*. Proceedings of the 23rd annual scientific meeting of **ISMRM**, Toronto, Canada, May 30th – June 5th 2015
17. Zoelch N, Hock A, Scheidegger M, Hulka L, Quednow B, [Henning A](#). *Necessity of tissue volume composition correction for internal referencing*. Proceedings of the 23rd annual scientific meeting of **ISMRM**, Toronto, Canada, May 30th – June 5th 2015

18. Avdievich NI, Giapitzakis IA, [Henning A](#). *Asymmetric Transceiver Phased Array for Functional Imaging and Spectroscopy of the Visual Cortex at 9.4 T*. Proceedings of the 23rd annual scientific meeting of **ISMRM**, Toronto, Canada, May 30th – June 5th 2015
19. Avdievich NI, Giapitzakis IA, [Henning A](#). *Novel Splittable N-Tx/2N-Rx Transceiver Phased Array to Optimize both SNR and Transmit Efficiency at 9.4 T*. Proceedings of the 23rd annual scientific meeting of **ISMRM**, Toronto, Canada, May 30th – June 5th 2015
20. Chang P, Eschelbach M, Syha R, Scheffler K, [Henning A](#). *Impact of Gradient Nonlinearity on the Accuracy of NMR Field Camera Readouts*. Proceedings of the 23rd annual scientific meeting of **ISMRM**, Toronto, Canada, May 30th – June 5th 2015
21. Nassirpour S, Kirchner T, Giapitzakis IA, [Henning A](#). *Accelerated Multi-slice 1H FID-MRSI in the human brain at 9.4 T*. Proceedings of the 23rd annual scientific meeting of **ISMRM**, Toronto, Canada, May 30th – June 5th 2015
22. Shao T, Avdievich N, Chang P, Hoffmann J, Scheffler K, [Henning A](#). *Systematic investigation of influence factor on parallel transmit pulse performance at 9.4 Tesla*. Proceedings of the 23rd annual scientific meeting of **ISMRM**, Toronto, Canada, May 30th – June 5th 2015
23. Kirchner T, Fillmer A, Pruessmann KP, [Henning A](#). *SNR and Line Shape Improvement in Overdiscrete MRSI Reconstruction*. **European Molecular Imaging Meeting**, Tuebingen, Germany, 18-20 March 2015
24. Hock A, Fillmer A, [Henning A](#). *Investigation of Intramyocellular and Extramyocellular Lipids in the Human Heart using Non-water-suppressed in vivo MR Spectroscopy*. **European Molecular Imaging Meeting**, Tuebingen, Germany, 18-20 March 2015
25. Giapitzakis IA, Nassirpour S, Kreis R, Avdievich N, [Henning A](#). *Metabolite cycled proton magnetic resonance spectroscopy at 9.4T*. **European Molecular Imaging Meeting**, Tuebingen, Germany, 18-20 March 2015

## 2014

### Oral:

26. Chang YC, Avdievich N, [Henning A](#). *System Identification and Signal Processing for PID Control of Bo Shim Systems in Ultra-High Field Magnetic Resonance Applications*. 19th **IFAC World Congress**, Cape Town, South Africa, 24-29 August 2014. ([conference paper](#))
27. Zoelch N, Hock A, [Henning A](#). *Absolute Quantification of Brain Metabolites in Small MRS Voxels*. Proceedings of the joint 22th annual scientific meeting of **ISMRM** and the 31th annual scientific meeting of ESMRMB, Milano, Italy, May 10st – 16th 2014. ([Magna Cum Laude ISMRM Merit Award](#))
28. Fillmer A, Scheidegger M, Vannesjo SJ, Pavan M, Pruessmann KP, [Henning A](#). *Resting-State fMRI with 3rd-Order Dynamic Shim Updating (DSU) and Dynamic Fo Determination*. Proceedings of the joint 22th annual scientific meeting of **ISMRM** and the 31th annual scientific meeting of ESMRMB, Milano, Italy, May 10st – 16th 2014. ([Magna Cum Laude ISMRM Merit Award](#))
29. Scheidegger M, Fuchs A, Ametamey S, Kuhn F, Johayem A, Buck A, Seifritz E, [Henning A](#). *Multimodal PET-MRS investigation of Glutamate-dependent neuroreceptor plasticity in the healthy human brain*. Proceedings of the joint 22th annual scientific meeting of **ISMRM** and the 31th annual scientific meeting of ESMRMB, Milano, Italy, May 10st – 16th 2014. ([Summa Cum Laude ISMRM Merit Award](#))
30. Scheidegger M, Fuchs A, [Henning A](#). *Accuracy and precision analysis in spectral fitting - a lesson learned from ProFit*. Proceedings of the joint 22<sup>nd</sup> annual scientific meeting of **ISMRM** and the 31<sup>st</sup> annual scientific meeting of ESMRMB, Milano, Italy, May 10<sup>th</sup> – 16<sup>th</sup> 2014 ([Magna Cum Laude ISMRM Award](#))
31. Avdievich NI, Pfrommer A, Hoffmann J, Chadzynski GL, Scheffler K, [Henning A](#). *Tranceive Phased Array with high Transmit Performance for Human Brain Application at 9.4 T*. Proceedings of the joint 22<sup>nd</sup>

annual scientific meeting of **ISMRM** and the 31<sup>st</sup> annual scientific meeting of ESMRMB, Milano, Italy, May 10<sup>th</sup> – 16<sup>th</sup> 2014.

Posters:

32. Kirchner T, Fillmer A, Pruessmann P, [Henning A](#). *Optimization strategies for magnetic resonance spectroscopic imaging at ultra-high field strength*. Annual meeting of **NCCBI**, Lausanne August 2014.
33. Kirchner T, Fillmer A, Pruessmann P, [Henning A](#). *Overdiscrete Correction of B<sub>0</sub> Inhomogeneity in Accelerated 1H FID-MRSI at 7T*. Proceedings of the joint 22th annual scientific meeting of **ISMRM** and the 31th annual scientific meeting of ESMRMB, Milano, Italy, May 10<sup>st</sup> – 16<sup>th</sup> 2014.
34. Chang YC, Eschelbach M, Scheffler K, [Henning A](#). *Hybrid Digital Phase-Locked Loop and Moving Average Filtering Improves SNR in Spatio-Temporal Field Monitoring*. Proceedings of the joint 22th annual scientific meeting of **ISMRM** and the 31th annual scientific meeting of ESMRMB, Milano, Italy, May 10<sup>st</sup> – 16<sup>th</sup> 2014.
35. Chang YC, Eschelbach M, Avdievitch N, Scheffler K, [Henning A](#). *Fast Method for Parametric System Identification of Gradient Systems*. Proceedings of the joint 22th annual scientific meeting of **ISMRM** and the 31th annual scientific meeting of ESMRMB, Milano, Italy, May 10<sup>st</sup> – 16<sup>th</sup> 2014.
36. Scheidegger M, Hock A, Fuchs A, [Henning A](#). *T<sub>2</sub> relaxation times of 18 brain metabolites determined in 83 healthy volunteers in vivo*. Proceedings of the joint 22th annual scientific meeting of **ISMRM** and the 31th annual scientific meeting of ESMRMB, Milano, Italy, May 10<sup>st</sup> – 16<sup>th</sup> 2014.
37. Giapitzakis IA, Shao T, Avdievich N, Kreis R, [Henning A](#). *Optimisation of asymmetric adiabatic pulses for single voxel metabolite cycled 1H-MRS in the human brain at 9.4 Tesla*. Proceedings of the joint 22th annual scientific meeting of **ISMRM** and the 31th annual scientific meeting of ESMRMB, Milano, Italy, May 10<sup>st</sup> – 16<sup>th</sup> 2014.
38. Chadzynski GL, [Henning A](#), Ehses P, Hoffmann J, Shajan G, Scheffler K. *High-resolution free induction decay proton MRSI in the human brain at 9.4 T*. Proceedings of the joint 22th annual scientific meeting of **ISMRM** and the 31th annual scientific meeting of ESMRMB, Milano, Italy, May 10<sup>st</sup> – 16<sup>th</sup> 2014.
39. Pfrommer A, Avdievich N, [Henning A](#). *Four Channel Transceiver Array for Functional Magnetic Resonance Spectroscopy in the Human Visual Cortex at 9.4 T*. Proceedings of the joint 22th annual scientific meeting of **ISMRM** and the 31th annual scientific meeting of ESMRMB, Milano, Italy, May 10<sup>st</sup> – 16<sup>th</sup> 2014.
40. Hock A, Wilm B, Zandomenighi G, Ampanozi G, Franckenberg S, De Zanche N, Nordmeyer-Maßner J, Kollias SS, Kraemer T, Thali M, Ernst M, [Henning A](#). *Detection of GABA, Aspartate and Glutathione in the Human Spinal Cord*. Proceedings of the joint 22th annual scientific meeting of **ISMRM** and the 31th annual scientific meeting of ESMRMB, Milano, Italy, May 10<sup>st</sup> – 16<sup>th</sup> 2014.
41. Hock A, Zoelch N, Scheidegger M, Herdener M, Seifritz E, [Henning A](#). *Towards metabolic profiling of the neurocircuitry of mood: small-voxel, non-water-suppressed 1H-MRS in the nucleus accumbens, amygdala and cingulate cortex at 3T*. Proceedings of the joint 22th annual scientific meeting of **ISMRM** and the 31th annual scientific meeting of ESMRMB, Milano, Italy, May 10<sup>st</sup> – 16<sup>th</sup> 2014.
42. Scheidegger M, Fuchs A, Ametamey S, Kuhn F, Johayem A, Buck A, [Henning A](#), Seifritz E. *The Role of Metabotropic Glutamate Receptors in Ketamine-induced Altered States of Consciousness: A Multimodal PET-MRS Approach*. **Society of Biological Psychiatry** 69th Annual Scientific Convention and Program, New York, US, May 8-10, 2014.
43. Schreiner SJ, Kirchner T, Gietl A, Steininger SC, Wyss M, Buck F, Leh SE, Nitsch RM, Pruessmann KP, Hock C, Henning A, Unschuld P. *Investigating the Metabolic Signature of asymptomatic  $\beta$ -Amyloidosis of the Brain using 7 t Magnetic Resonance Spectroscopic Imaging*. **2nd Transact Workshop - Quality Issues in Clinical MR Spectroscopy**, University and Inselspital Bern, Switzerland, June 16 - 18, 2014.

44. Schreiner SJ, Kirchner T, Gietl A, Steininger SC, Wyss M, Buck F, Leh SE, Nitsch RM, Pruessmann KP, Hock C, Henning A, Unschuld P. *Investigating the metabolic signature of aging-related brain amyloidosis using 7 Tesla Magnetic resonance spectroscopic imaging*. **Geneva Springfield Symposium**, Genf, Schweiz, 26.-29.03.2014.
45. Schreiner SJ, Kirchner T, Gietl A, Steininger SC, Wyss M, Buck F, Leh SE, Nitsch RM, Pruessmann KP, Hock C, Henning A, Unschuld P. *Investigating the Metabolic Signature of asymptomatic  $\beta$ -Amyloidosis of the Brain using 7 T Magnetic Resonance Spectroscopic Imaging*. **EXCITE Opening Symposium**, 6. September 2014
46. Schreiner SJ, Kirchner T, Gietl A, Steininger SC, Wyss M, Buck F, Leh SE, Nitsch RM, Pruessmann KP, Hock C, Henning A, Unschuld P. *Investigating the Metabolic Signature of asymptomatic  $\beta$ -Amyloidosis of the Brain using 7 T Magnetic Resonance Spectroscopic Imaging*. **ZNZ Symposium** 2014, 11. September 2014

## 2013

### Oral:

47. Handwerker J, Ortmanns M, Anders J, Eschelbach M, Chang P, [Henning A](#), Scheffler K. (November-2013) *An active TX/RX NMR probe for real-time monitoring of MRI field imperfections*. **IEEE Biomedical Circuits and Systems Conference (BioCAS 2013)**, IEEE, Piscataway, NJ, USA, 194-197 ([conference paper](#))
48. Kirchner T, Eisenring I, Prüssmann KP und [Henning A](#). *Spatially Selective SRF Optimization for Improved Reduction of Residual Lipid Aliasing in SENSE-accelerated  $^1\text{H}$  MRSI at 7T*. 30th Annual Scientific Meeting **ESMRMB** October 2013, Toulouse, France.
49. Fillmer A, Cameron D, Hock A, Redpath T, Frenneaux M, Dawson D, [Henning A](#). *Improving Spectral Quality in the Myocardium at 3T Using ECG-Triggered, Navigator-Gated Metabolite-Cycling along with Image-Based Bo-Shimming*. 30th Annual Scientific Meeting **ESMRMB** October 2013, Toulouse, France.
50. Yazdanbakhsh P, Resmer F, Cavusoglu M, [Henning A](#), Lanz T. *An 8-Channel Transceive Head Coil Array for 7T*. 30th Annual Scientific Meeting **ESMRMB** October 2013, Toulouse, France.
51. Scheidegger M, Fuchs A, Lehmann M, Kuhn F, Ametamey S, Buck A, Seifritz E, [Henning A](#). *The role of glutamate-dependent neuroreceptor plasticity in the antidepressant action of ketamine: A multimodal PET-MR imaging approach*. 11th **World Congress of Biological Psychiatry**, Kyoto, Japan, June 23-27, 2013.
52. Scheidegger M, Fuchs A, Lehmann M, Grimm S, Boeker H, Seifritz E, [Henning A](#). *Effect of an antidepressant dose of Ketamine on prefrontal aspartate, glutamine and GABA levels in healthy subjects: assessing the post-infusion interval with  $^1\text{H}$  MRS*. Proceedings of the 21th annual scientific meeting of **ISMRM**, Salt Lake City, USA, April 2013. ([Magna Cum Laude ISMRM Merit Award](#))
53. Kirchner T, Fillmer A, Pruessmann KP, Boesiger P, [Henning A](#). *T. Overdiscrete Reconstruction for Highly Accelerated Parallel  $^1\text{H}$  MRSI at 7T with Efficient Control of Voxel Bleeding*. 3rd **NCCBI Annual Meeting**, Villigen, February 2013, #1.

### Poster:

54. Zoelch N, Fuchs A, [Henning A](#). *Localization Profile Correction for in vivo  $^1\text{H}$  MRSI quantification*. 30th Annual Scientific Meeting **ESMRMB** October 2013, Toulouse, France.
55. Wyss M, Kirchner T, Ringenbach A, Prüssmann K und [Henning A](#). *Relaxation Parameter Mapping Adapted for 7T and Validation against Optimized Single Voxel MRS*. 30th Annual Scientific Meeting **ESMRMB** October 2013 Toulouse, France.



56. Fillmer A , Cameron D , Frenneaux M , Dawson D, [Henning A](#). *Optimizing the Bo-Shimming for Single Voxel Spectroscopy in the Myocardium at 3T*. 30th Annual Scientific Meeting **ESMRMB** October 2013, Toulouse, France.
57. Kirchner T, Fillmer A, Tsao J, Boesiger P, Pruessmann KP, [Henning A](#). *Reduction of Voxel Bleeding in Highly Accelerated Parallel 1H MRSI at 7T*. **ISMRM Workshop Ultra High Field MRI**, Noordwijk aan Zee, March 2013, #46
58. Fillmer A, Vannesjö SJ, Pavan M, Pruessmann KP, [Henning A](#). *Bo-Shimming at 7T – Approaches to Tackle a Major Source of Artifacts*. **ISMRM Workshop Ultra High Field MRI**, Noordwijk aan Zee, March 2013.
59. Scheidegger M, [Henning A](#), Fuchs A, Lehmann M, Grimm S, Boeker H, Seifritz E. *Effects of an antidepressant dose of ketamine on prefrontal aspartate, glutamine and GABA levels in healthy subjects: assessing the post-infusion interval with 1H-MRS*. **Society of Biological Psychiatry**, 68th Annual Scientific Convention & Program, San Francisco (USA), May 16-18, 2013.
60. Unschuld PG, Gietl A, Kirchner T, Wyss M, Buck A, Leh-Seal S, Nitsch RM, [Henning A](#), Prussmann K, Hock C. *Probing 7 Tesla High Field Strength Magnetic Resonance Imaging (MRI) as Potential Biomarker for Beta-Amyloid Associated Neuronal Stress*. **Society of Biological Psychiatry**, 68th Annual Scientific Convention & Program, San Francisco (USA), May 16-18, 2013.
61. Unschuld R , Gietl A , Kirchner T , Wyss M , Buck A , Leh-Seal S , Nitsch RM , [Henning A](#), Prüssmann K, Hock C. *Probing 7 Tesla High Field Strength Magnetic Resonance Imaging (MRI) as Potential Biomarker for Beta-amyloid Associated Neuronal Stress*, 11th **International Conference on Alzheimer's & Parkinson's Diseases** (AP/PD 2013), Firenze, Italy
62. Scheidegger M, [Henning A](#), Fuchs A, Lehmann M, Grimm S, Boeker H, Seifritz E. *Effects of an antidepressant dose of ketamine on prefrontal aspartate, glutamine and GABA levels in healthy subjects: assessing the post-infusion interval with 1H-MRS*. 11th **World Congress of Biological Psychiatry**, Kyoto (Japan), June 23-27, 2013.
63. Hock A, Wilm B, MacMillan EL, Kreis R, Kollias SS, Boesiger P, [Henning A](#). *Extended metabolite profile of the human spinal cord*. Proceedings of the 21th annual scientific meeting of **ISMRM**, Salt Lake City, USA, April 2013.
64. Hock A, Kollias SS, Boesiger P, [Henning A](#). *Motion detection and dual retrospective correction for MR spectroscopy in the human spinal cord*. Proceedings of the 21th annual scientific meeting of **ISMRM**, Salt Lake City, USA, April 2013.
65. Fillmer A, Cameron D, Redpath TW, Frenneaux MP, Dawson D, [Henning A](#). *ECG-Triggered and Respiratory Gated Image Based Bo Shimming for Single Voxel Spectroscopy of the Myocardium at 3T*. Proceedings of the 21th annual scientific meeting of **ISMRM**, Salt Lake City, USA, April 2013.
66. Fuchs A, Boesiger P, [Henning A](#). *Simultaneous Detection of 17 Brain Metabolites at 3T by JPRESS & ProFit*. Proceedings of the 21th annual scientific meeting of **ISMRM**, Salt Lake City, USA, April 2013.
67. Zoelch N, Fuchs A, [Henning A](#). *Localization Profile Correction for ERETIC based in vivo 1H MRSI quantification*. Proceedings of the 21th annual scientific meeting of **ISMRM**, Salt Lake City, USA, April 2013.
68. Chen X, Boesiger P, [Henning A](#). *Quantification of Fatty Acids in Human Calf Adipose Tissue and Muscle by 13C MRS using J-refocused PRESS DEPT and ERETIC*. Proceedings of the 21th annual scientific meeting of **ISMRM**, Salt Lake City, USA, April 2013.
69. Kirchner T, Eisenring L, Pruessmann KP, [Henning A](#). *Inherent Reduction of Residual Lipid Aliasing in SENSE-accelerated 1H MRSI at 7T by Spatially Selective SRF Optimization*. Proceedings of the 21th annual scientific meeting of **ISMRM**, Salt Lake City, USA, April 2013.
70. Wyss M, Kirchner T, Ringenbach A, Prüssmann KP, [Henning A](#). *Relaxation Parameter Mapping Adapted for 7T and Validation against Optimized Single Voxel MRS*. Proceedings of the 21th annual scientific meeting of **ISMRM**, Salt Lake City, USA, April 2013.

71. Wyss P, Malik SJ, Boer VO, Bluemink JJ, Raaijmakers A, Cavusoglu M, Luijten P, Hoogduin JJ, Mens G, Henning A. *Interferometric Bloch-Siegert B1+ mapping at 7T*. Proceedings of the 21th annual scientific meeting of **ISMRM**, Salt Lake City, USA, April 2013.
72. Cameron D, Fillmer A, Hock A, Redpath TW, Frenneaux MP, Dawson D, Henning A. *Metabolite-Cycled, ECG-Triggered and Navigator-Gated 1H MRS With Optimised Image-Based B0 Shimming Achieves High Spectral Quality In the Myocardium at 3*. Proceedings of the 21th annual scientific meeting of **ISMRM**, Salt Lake City, USA, April 2013.

## 2012

### Oral:

73. Chen X, Boesiger P, Henning A. *Cholesterol detection with J-refocused H PRESS DEPT by in vivo C MRS*. Proceedings of the 29<sup>th</sup> annual scientific meeting of **ESMRMB**: 94, Lisbon, Portugal, Oct 4<sup>th</sup>-6<sup>th</sup> 2012.
74. Fillmer A, Vannesjo SJ, Pavan M, Pruessmann KP, Boesiger P, Henning A. *Full Eddy-Current Compensated (ECC) Dynamic Shim Updated (DSU) Echo Planar Imaging (EPI)*. Proceedings of the 29<sup>th</sup> annual scientific meeting of **ESMRMB**: 291, Lisbon, Portugal, Oct 4<sup>th</sup>-6<sup>th</sup> 2012.
75. Hock A, Kollias SS, Boesiger P, Henning A. *Real-time motion detection for MR spectroscopy in the spinal cord*. Proceedings of the 29<sup>th</sup> annual scientific meeting of **ESMRMB**: 359, Lisbon, Portugal, Oct 4<sup>th</sup>-6<sup>th</sup> 2012.
76. Hock A, Macmillan EL, Kreis R, Kollias SS, Boesiger P, Henning A. *High spectral quality for a reliable detection of an extended metabolite profile in the human spinal cord*. Proceedings of the 29<sup>th</sup> annual scientific meeting of **ESMRMB**: 360, Lisbon, Portugal, Oct 4<sup>th</sup>-6<sup>th</sup> 2012.
77. Kirchner T, Fillmer A, Boesiger P, Prüssmann KP, Henning A. *Overdiscrete Reconstruction for Highly Accelerated Parallel H MRSI at 7T with Efficient Control of Voxel Bleeding*. Proceedings of the 29<sup>th</sup> annual scientific meeting of **ESMRMB**: 391, Lisbon, Portugal, Oct 4<sup>th</sup>-6<sup>th</sup> 2012.
78. Zoelch N, Fuchs A, Boesiger P, Henning A. *ERETIC with automatic phase adjustment and eddy current correction compensation*. Proceedings of the 29<sup>th</sup> annual scientific meeting of **ESMRMB**: 395, Lisbon, Portugal, Oct 4<sup>th</sup>-6<sup>th</sup> 2012.
79. Henning A, Koning W, Fuchs A, Raaijmakers A, Bluemink JJ, MacMillan EL, van den Berg CAT, Luijten P, Boesiger P, Klomp DWJ. *H MRS in the human spinal cord at 7T using a combined RF shimming and travelling wave transmit approach*. Proceedings of the 20<sup>th</sup> annual scientific meeting of **ISMRM**, Melbourne, Australia, May 2012.
80. Scheidegger M, Walter M, Lehmann M, Metzger C, Grimm S, Boeker H, Boesiger P, Seifritz E, Henning A. *Ketamine decreases resting state functional connectivity between networks via the dorsal nexus: implications for major depression*. Proceedings of the 20<sup>th</sup> annual scientific meeting of **ISMRM**, Melbourne, Australia, May 2012. ([Summa Cum Laude ISMRM Merit Award](#))
81. Scheidegger M, Grimm S, Walter M, Boeker H, Boesiger P, Seifritz E, Henning A. *Ketamine administration reduces limbic reactivity during emotional stimulation – An fMRI study in healthy subjects*. Proceedings of the 20<sup>th</sup> annual scientific meeting of **ISMRM**, Melbourne, Australia, May 2012. ([Magna Cum Laude ISMRM Merit Award](#))
82. Bluemink JJ, Koning W, Klomp DWJ, Kroeze H, Maderwald S, Henning A, Luijten PR, Lagendijk JJW, van den Berg CAT. *Torus-shaped dielectric resonator for 7T musculoskeletal imaging*. Proceedings of the 20<sup>th</sup> annual scientific meeting of **ISMRM**, Melbourne, Australia, May 2012.
83. Koning W, Bluemink JJ, Boer VO, Raaijmakers A, Henning A, Zwanenburg JJM, van den Berg CAT, Luijten PR, Klomp DWJ. *RF shimming of the neck using a 2 and a 4 channel travelling wave neck array at 7T MRI*. Proceedings of the 20<sup>th</sup> annual scientific meeting of **ISMRM**, Melbourne, Australia, May 2012.

84. Scheidegger M, Walter M, Lehmann M, Metzger C, Grimm S, Boeker H, Boesiger P, [Henning A](#), Seifritz E. Ketamine decreases resting state functional connectivity between networks via the dorsal nexus: implications for major depression. 3rd Biennial **Conference on Resting State Brain Connectivity**, Magdeburg, Germany, 2012.

Poster:

85. Fuchs A, Boesiger P, [Henning A](#). *ProFit revised*. Proceedings of the 20<sup>th</sup> annual scientific meeting of **ISMRM**, Melbourne, Australia, May 2012.
86. Fuchs A, [Henning A](#), Boesiger P. *Downsampling Strategies for MRS data*. Proceedings of the 20<sup>th</sup> annual scientific meeting of **ISMRM**, Melbourne, Australia, May 2012.
87. Hock A, Fuchs A, MacMillan EL, Kreis R, Kollias SS, Boesiger P, [Henning A](#). *Scyllo-Inositol detection in the human spinal cord*. Proceedings of the 20<sup>th</sup> annual scientific meeting of **ISMRM**, Melbourne, Australia, May 2012.
88. Hock A, Petrou N, Zweers P, MacMillan EL, Kreis R, Boesiger P, [Henning A](#). *MR spectroscopy in the spinal cord of patients with traumatic injuries*. Proceedings of the 20<sup>th</sup> annual scientific meeting of **ISMRM**, Melbourne, Australia, May 2012.
89. Hock A, Fuchs A, Boesiger P, [Henning A](#), Kollias SS. *Spinal cord MR spectroscopy in neoplastic lesions*. Proceedings of the 20<sup>th</sup> annual scientific meeting of **ISMRM**, Melbourne, Australia, May 2012.
90. Fillmer A, Vannesjo SJ, Pavan M, Pruessmann KP, Boesiger P, [Henning A](#). *Echo Planar Imaging at 7T with 3rd Order Slice-Wise Dynamic Shim Update (DSU) and Full Eddy-Current Compensation (ECC)*. Proceedings of the 20<sup>th</sup> annual scientific meeting of **ISMRM**, Melbourne, Australia, May 2012.
91. Fillmer A, Scheidegger M, Boesiger P, [Henning A](#). *Frontal Cortex fMRI at 7T: Escaping Flat Minimum Traps in Higher-Order Bo Shimming Algorithms*. Proceedings of the 20<sup>th</sup> annual scientific meeting of **ISMRM**, Melbourne, Australia, May 2012.
92. Zoelch N, Fuchs A, Boesiger P, [Henning A](#). *ERETIC with automatic phase adjustment and eddy current correction compensation*. Proceedings of the 20<sup>th</sup> annual scientific meeting of **ISMRM**, Melbourne, Australia, May 2012.
93. Dokumaci AS, Zölch N, Wyss M, Fuchs A, Bösigler P, [Henning A](#). *Correlation-based cross validation of PRESS, MEGA PRESS editing and 2D JPRESS at 3T*. Proceedings of the 20<sup>th</sup> annual scientific meeting of **ISMRM**, Melbourne, Australia, May 2012.
94. Kirchner TA, [Henning A](#), Boesiger P. *Localized Filtering for Optimal Fat Suppression in Parallel H MRSI*. Proceedings of the 20<sup>th</sup> annual scientific meeting of **ISMRM**, Melbourne, Australia, May 2012. ([Magna Cum Laude ISMRM Merit Award](#))
95. Kirchner TA, Fillmer A, Boesiger P, Pruessmann KP, [Henning A](#). *Highly Accelerated Parallel H MRSI at 7T with Simultaneous Suppression of Near- and Far-Reaching Signal Leakage*. Proceedings of the 20<sup>th</sup> annual scientific meeting of **ISMRM**, Melbourne, Australia, May 2012. ([Poster Prize of the ISMRM Dynamic MRS Study Group](#))
96. Chen X, Boesiger P, [Henning A](#). *J-refocused 1H PRESS combined with DEPT for localized saturated fatty acids detection by in vivo 13C MRS*. Proceedings of the 20<sup>th</sup> annual scientific meeting of **ISMRM**, Melbourne, Australia, May 2012. ([Magna Cum Laude ISMRM Merit Award](#))
97. Chen X, Boesiger P, [Henning A](#). *Cholesterol detection in adipose tissue by natural abundance in vivo 13C MRS at 7T*. Proceedings of the 20<sup>th</sup> annual scientific meeting of **ISMRM**, Melbourne, Australia, May 2012.
98. Koning W, Bluemink JJ, Petersen E, Raaijmakers A, [Henning A](#), van den Berg CAT, Zwanenburg JJM, Luijten PR, Klomp DWJ. *A setup for continuous arterial spin labeling with a 4 channel radiative labeling coil*

*allowing for high duty cycle labeling at 7T*. Proceedings of the 20<sup>th</sup> annual scientific meeting of **ISMRM**, Melbourne, Australia, May 2012

99. Scheidegger M, Walter M, Lehmann M, Metzger C, Grimm S, Boeker H, Boesiger P, Henning A, Seifritz E. Ketamine decreases resting state functional connectivity between networks via the dorsal nexus: implications for major depression. Joint **NCCR Neuro and ZNZ Symposium**, Zurich, 2012.
100. Hulka LM, Scheidegger M, Henning A, Preller KH, Vonmoos M, Ametamey S, Buck A, Seifritz E, Quednow BB. Metabotropic glutamate receptor 5 densities and free glutamate concentrations in occasional and dependent cocaine users. 28th **CINP Congress**, Stockholm, Sweden, 2012.
101. Grimm S, Scheidegger M, Lehmann M, Henning A, Walter M, Boeker H, Weigand A, Bajbouj M, Seifritz E. Acute and Delayed Effects of Ketamine On Brain Activation and Glutamatergic Neurotransmission. 18th Annual Meeting of the Organization for **Human Brain Mapping**, Beijing, China, 2012.
102. Scheidegger M, Walter M, Lehmann M, Metzger C, Grimm S, Boeker H, Boesiger P, Henning A, Seifritz E. Ketamine decreases resting state functional connectivity between networks via the dorsal nexus: implications for major depression. **ESF FENS Stressa Conferences in Neurobiology**: The Neurobiology of Emotion, Stressa, Italy, November 11-15, 2012

## 2011

### Oral:

103. Fuchs A, Henning A, Boesiger P. *MT compensated SPECIAL semi-LASER at 7T*. Proceedings of the 28<sup>th</sup> annual scientific meeting of **ESMRMB**: 244, Leipzig, Germany, Oct 2011.
104. Kirchner T, Henning A, Pruessmann KP, Boesiger P. *Target-driven SENSE reconstruction for artifact reduction in accelerated 1H-MRSI*. Proceedings of the 28<sup>th</sup> annual scientific meeting of **ESMRMB**: 246, Leipzig, Germany, Oct 2011.
105. Henning A, Luttje MP, Wyss M, Zoelch N, Fuchs A, Edden R, Heinzer-Schweizer S, Boesiger P. *ERETIC-normalized JPRESS and MEGA-PRESS editing for reliable quantification of GABA, Glu, Gln and GSH at 3T*. Proceedings of the 28<sup>th</sup> annual scientific meeting of **ESMRMB**: 248, Leipzig, Germany, Oct 2011.
106. Chen X, Boesiger P, Henning A. *Quantification of unsaturated fatty acids by PRESS localized-DEPT enhanced 13C MRS and ERETIC in human skeletal muscle*. Proceedings of the 28<sup>th</sup> annual scientific meeting of **ESMRMB**: 265, Leipzig, Germany, Oct 2011.
107. Fuchs A, Henning A, Luttje MP, Versluis MJ, Kreis R, Boesiger P. *Simultaneous up- and downfield spectroscopy using SPECIAL at 7T*. Proceedings of the 28<sup>th</sup> annual scientific meeting of **ESMRMB**: 269, Leipzig, Germany, Oct 2011.
108. Hock A, MacMillan E, Fuchs A, Kreis R, Boesiger P, Kollias SS, Henning A. *Non-water suppressed proton MR spectroscopy allows spectral quality improvement in the human cervical spinal cord*. Proceedings of the 19<sup>th</sup> annual scientific meeting of **ISMRM**, Montréal, Canada, May 2011.
109. Chen X, Henning A, Boesiger P. *Combination of DEPT and PRESS for detection of UFA in posterior and medial thigh muscle by 13C MRS at 7T*. Proceedings of the 19<sup>th</sup> annual scientific meeting of **ISMRM**, Montréal, Canada, May 2011.
110. Vannesjoe J, Fillmer A, Barmet C, Boesiger P, Henning A, Pruessmann KP. *Fast characterization of higher-order shim dynamics by impulse response measurements with a dynamic field camera*. Proceedings of the 19<sup>th</sup> annual scientific meeting of **ISMRM**, Montréal, Canada, May 2011.
111. Henning A, Fuchs A, Kirchner T, Murdoch JE, Boesiger P. *Mapping of an extended neurochemical profile by H FIDLOVS MRSI at 7T*. **Workshop on Methods in Proton MR Spectroscopy** – Data Acquisition and Evaluation. Eberhard-Karls-University, Tübingen, Sep 9<sup>th</sup> 2011.

112. Fuchs A, Scheidegger M, Schulte RF, Grimm S, Walter M, P. Boesiger P, [Henning A](#). *Advances in prior-knowledge fitting of 2D JPRESS data and implications for psychiatric research. Workshop on Methods in Proton MR Spectroscopy* – Data Acquisition and Evaluation. Eberhard-Karls-University, Tübingen, Sep 9<sup>th</sup> 2011.
113. Zoelch N, Heinzer S, Pavan M, Luttje M, Wyss M, Fuchs A, Chen X, Boesiger P, [Henning A](#). *ERETIC reference standard for reliable quantification of H MRS and MRSI. Workshop on Methods in Proton MR Spectroscopy* – Data Acquisition and Evaluation. Eberhard-Karls-University, Tübingen, Sep 9<sup>th</sup> 2011.
114. Scheidegger M, [Henning A](#), Walter M, Fuchs A, Kraehenmann R, Boeker H, Boesiger P, Seifritz E, Grimm S. *Acute ketamine administration modulates glutamatergic neurotransmission and functional brain activation in prefrontal cortex - Implications for major depression. 25th AGNP Symposium*, Munich, Germany, 2011 (1<sup>st</sup> poster award & upgrade for an oral presentation)
115. Scheidegger M, [Henning A](#), Walter M, Fuchs A, Kraehenmann R, Boeker H, Boesiger P, Seifritz E, Grimm S. *Emotional Processing And Brain Metabolism After Pharmacological Stimulation With Ketamine - Implications For Major Depression. Swiss Society of Biological Psychiatry 31<sup>st</sup> Annual Meeting*, Lausanne, Switzerland, 2011. (2<sup>nd</sup> poster award & upgrade for an oral presentation)
116. Scheidegger M, [Henning A](#), Walter M, Lehmann M, Fuchs A, Kraehenmann R, Boeker H, Boesiger P, Seifritz E, Grimm S. *Emotional-cognitive processing and brain metabolism after ketamine challenge. DGPPN Congress*, Berlin, Germany, 2011.
117. Lehmann M, Scheidegger M, [Henning A](#), Martin W, Fuchs A, Boeker H, Boesiger P, Seifritz E, Grimm S. *Long-term effects of a single intravenous ketamine infusion on emotional processing and brain metabolism: A randomized, double blind, placebo controlled, crossover fMRI/MRS study. DGPPN Congress*, Berlin, Germany, 2011.
118. Scheidegger M, [Henning A](#), Walter M, Fuchs A, Kraehenmann R, Boeker H, Boesiger P, Seifritz E, Grimm S. *The neurodynamics of emotional processing and its pharmacological modulation by ketamine - implications for major depression. International Neuropsychanalysis Society Meeting*, Berlin 2011

Poster:

119. Hock A, MacMillan EL, Fuchs A, Kreis R, Boesiger P, Kollias SS, [Henning A](#). *Metabolite cycled proton MR spectroscopy enables coherent signal averaging in the human spinal cord at 3T*. Proceedings of the 28<sup>th</sup> annual scientific meeting of **ESMRMB**: 453, Leipzig, Germany, Oct 2011.
120. Fillmer A, Vannesjö SJ, Barmet C, Boesiger P, Pruessmann KP, [Henning A](#). *3rd order DSU pre-emphasis calibration using spatio-temporal field monitoring*. Proceedings of the 28<sup>th</sup> annual scientific meeting of **ESMRMB**: 528, Leipzig, Germany, Oct 2011.
121. Hock A, Valkovic L, Boesiger P, [Henning A](#). *Navigator based respiratory gating during acquisition and preparation phases for proton liver spectroscopy at 3T*. Proceedings of the 28<sup>th</sup> annual scientific meeting of **ESMRMB**: 639, Leipzig, Germany, Oct 2011.
122. Zoelch N, Heinzer-Schweizer S, Boesiger P, [Henning A](#). *ERETIC based in vivo 1H MRSI quantification*. Proceedings of the 28<sup>th</sup> annual scientific meeting of **ESMRMB**: 723, Leipzig, Germany, Oct 2011.
123. Scheidegger M, Grimm S, Fuchs A, Kraehenmann R, Boeker H, Seifritz E, Boesiger P, Walter M, Henning A. *Emotional Processing And Brain Metabolism After Pharmacological Stimulation With Ketamine*. Proceedings of the 19<sup>th</sup> annual scientific meeting of **ISMRM**, Montréal, Canada, May 2011. ([ISMRM 2<sup>nd</sup> poster award](#))
124. Fillmer A, Vannesjoe J, Barmet C, Boesiger P, Pruessmann KP, [Henning A](#). *Using Spatio-Temporal Field Monitoring for Iterative Higher Order DSU Pre-Emphasis Calibration*. Proceedings of the 19<sup>th</sup> annual scientific meeting of **ISMRM**, Montréal, Canada, May 2011.

125. Fuchs A, [Henning A](#), Luttje MP, Versluis MJ, Kreis R, Boesiger P. *Simultaneous up- and downfield spectroscopy using SPECIAL at 7T*. Proceedings of the 19<sup>th</sup> annual scientific meeting of **ISMRM**, Montréal, Canada, May 2011.
126. Hock A, Valkovic L, Frollo I, Boesiger P, [Henning A](#), Kollias S. *Real-time navigator gating in proton liver spectroscopy at 3T*. Proceedings of the 19<sup>th</sup> annual scientific meeting of **ISMRM**, Montréal, Canada, May 2011.
127. Luttje MP, Wyss M, Zoelch N, Fuchs A, Edden RA, Heinzer S, Boesiger P, [Henning A](#). *Cross-validation of PRESS, MEGA-PRESS editing and 2D JPRESS for neurotransmitter and antioxidant detection at 3T using the ERETIC reference standard*. Proceedings of the 19<sup>th</sup> annual scientific meeting of **ISMRM**, Montréal, Canada, May 2011.
128. Zoelch N, Heinzer-Schweizer S, Boesiger P, [Henning A](#). *ERETIC based in vivo H MRSI quantification*. Proceedings of the 19<sup>th</sup> annual scientific meeting of **ISMRM**, Montréal, Canada, May 2011.
129. Kirchner T, [Henning A](#), Pruessmann KP, Boesiger P. *Accelerated 1H-MRSI: Artifact Reduction by Target-Driven Reconstruction*. Proceedings of the 19<sup>th</sup> annual scientific meeting of **ISMRM**, Montréal, Canada, May 2011.
130. MacMillan EL, Kreis R, Fuchs A, Versluis MJ, Boesch C, Boesiger P, [Henning A](#). *New Technique for Metabolite Cycled Non-Water-Suppressed Proton Spectroscopy in the Human Brain at 7T*. Proceedings of the 19<sup>th</sup> annual scientific meeting of **ISMRM**, Montréal, Canada, May 2011
131. Scheidegger M, Boeker H, Seifritz E, Boesiger P, Bajbouj M, Walter M, [Henning A](#), Grimm S. *The effect of a pharmacological ketamine challenge on working memory and brain metabolism*. **Society of Biological Psychiatry** 66th Annual Meeting, San Francisco, CA, USA, May 2011.
132. Scheidegger M, [Henning A](#), Fuchs A, Kraehenmann R, Boeker H, Boesiger P, Seifritz E, Walter M, Grimm S. *Emotional Processing And Brain Metabolism After Pharmacological Stimulation With Ketamine - Implications For Major Depression*. **Annual Meeting Society of Biological Psychiatry** 66<sup>th</sup>, San Francisco, CA, USA, May 12<sup>th</sup>-14<sup>th</sup> 2011.
133. Walter M, Scheidegger M, Metzger C, Fuchs A, Boeker H, Seifritz E, Boesiger P, [Henning A](#), Grimm S. *Cingulate histology and glutamate MRS predict ketamine effects on its functional resting-state connectivity*. **Human Brain Mapping** 17th Annual Meeting, Québec City, Canada, June 2011.
134. Grimm S, Scheidegger M, Boeker H, Seifritz E, Boesiger P, Bajbouj M, Walter M, [Henning A](#). *The effect of a pharmacological ketamine challenge on working memory and brain metabolism*. **Swiss Society of Biological Psychiatry** 31<sup>st</sup> Annual Meeting, Lausanne, Switzerland, January 28<sup>th</sup> 2011.
135. Scheidegger M, Holst S, [Henning A](#), Hefti K, Fuchs A, Ametamey S, Buck F, Boesiger P, Landolt HP, Seifritz E. *Glutamate-dependent mGlu5-receptor plasticity after acute sleep deprivation - A novel multimodal PET-MRS imaging approach*. **NCCR Neural Plasticity and Repair** Symposium, Ittingen, Switzerland, February 4<sup>th</sup>-5<sup>th</sup> 2011.
136. Hock A, MacMillan E, Fuchs A, Kreis R, Boesiger P, [Henning A](#), Kollias S. *Non-water suppressed proton MR spectroscopy allows spectral quality improvement in the human cervical spinal cord*. **NCCR Neural Plasticity and Repair** Symposium, Ittingen, Switzerland, February 4<sup>th</sup>-5<sup>th</sup> 2011.
137. Kirchner T, Pruessmann KP, Boesiger P, [Henning A](#). *Accelerated H-MRSI: Artifact Reduction by Target-Driven Reconstruction*. **NCCBI annual meeting**, Zürich, Switzerland, August 29<sup>th</sup> 2011.
138. Hock A, MacMillan E, Fuchs A, Kreis R, Boesiger P, Kollias S, [Henning A](#). *Metabolite cycled proton MR spectroscopy in the human spinal cord*. **Magnetic Moments in Central Europe**, Tatranska Lomnica, Slovakia, March 16<sup>th</sup>-20<sup>th</sup> 2011.
139. Kirchner T, [Henning A](#), Pruessmann KP, Boesiger P. *Accelerated H-MRSI: Artifact Reduction by Target-Driven Reconstruction*. **Magnetic Moments in Central Europe**, Tatranska Lomnica, Slovakia, March 16<sup>th</sup>-20<sup>th</sup> 2011

140. Lehmann M, Scheidegger M, Henning A, Boeker H, Boesiger P, Seifritz E, Grimm S. *Long-term effects of a single intravenous ketamine infusion on emotional processing and brain metabolism - A placebo-controlled, crossover fMRI/MRS-study in healthy volunteers*. **ZNZ** Symposium, Zurich, Switzerland, 2011.

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141. MacMillan EL, Chong DG, Dreher W, Henning A, Boesch C, Kreis R. *MR Spectroscopy without Water Suppression for the Determination of Proton Exchange Rates in the Human Brain*. Proceedings of the joint 18<sup>th</sup> annual scientific meeting of **ISMRM** and the 27<sup>th</sup> annual scientific meeting of **ESMRMB**, Stockholm, Sweden, May 1<sup>st</sup> – 7<sup>th</sup> 2010: 316.
142. Chen X, Henning A, Pavan M, Heinzer-Schweizer S, Boesiger P. *Muscle group specific quantification of unsaturated fatty acids by localized DEPT-enhanced <sup>13</sup>C MRS and ERETIC*. Proceedings of the joint annual meeting of **SSBE** (Swiss Society for Biomedical Engineering), ÖGBT (Österreichische Gesellschaft für Biomedizinische Technik) and DGBMT (Deutsche Gesellschaft für Biomedizinische Technik), Rostock, Germany, October 5<sup>th</sup>-8<sup>th</sup> 2010: Track A.
143. Henning A, Fuchs A, Boesiger P. *Quantitative mapping of neurotransmitters by H FIDLOVS-MRSI at 7T in vivo*. Proceedings of the joint annual meeting of **SSBE** (Swiss Society for Biomedical Engineering), ÖGBT (Österreichische Gesellschaft für Biomedizinische Technik) and DGBT (Deutsche Gesellschaft für Biomedizinische Technik), Rostock, Germany, October 5<sup>th</sup>-8<sup>th</sup> 2010: Track A.
144. Walter M, Scheidegger M, Grimm S, Henning A. *Acute changes in resting state fMRI measures following subanaesthetic ketamine infusion*. **DGPPN**, Berlin, Germany, November 24<sup>th</sup>-27<sup>th</sup> 2010: F3.
145. Grimm S, Scheidegger M, Henning A, Walter M, Boeker H, Boesiger P, Seifritz E. *Der Effekt von Ketamin auf neuronale Aktivierungsmuster und verbale Arbeitsgedächtnisleistungen*. **DGPPN**, Berlin; Germany, November 24<sup>th</sup>-27<sup>th</sup> 2010: FV-009.

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146. Hock A, Henning A, Fuchs A, Schar M, Kollias S, Boesiger P. *ECG-triggered FASTERMAP Shimming Allows for Reproducible Shim Convergence in Spinal Cord MR Spectroscopy*. Proceedings of the joint annual meeting of **SSBE** (Swiss Society for Biomedical Engineering), ÖGBT (Österreichische Gesellschaft für Biomedizinische Technik) and DGBT (Deutsche Gesellschaft für Biomedizinische Technik), Rostock, Germany, October 5<sup>th</sup>-8<sup>th</sup> 2010: Track A / P09.
147. Item F, Heinzer-Schweizer S, Wyss M, Fontana P, Lehmann R, Henning A, Weber M, Bösigler Peter, Boutellier Urs, Marco Toigo. *Exercise capacity is not reduced in young untrained women with type 1 diabetes*. **ACSM** conference on integrative physiology of exercise, Miami, Florida, USA, September 22<sup>nd</sup>-25<sup>th</sup> 2010.
148. Heinzer-Schweizer S, Item F, Henning A, Wyss M, Denkinger J, Kreis R, Toigo M, Boutellier U, Boesiger P. *Changes in oxidative metabolism of skeletal muscle induced by loaded vibration exercise under vascular occlusion*. Proceedings of the joint 18<sup>th</sup> annual scientific meeting of **ISMRM** and the 27<sup>th</sup> annual scientific meeting of **ESMRMB**, Stockholm, Sweden, May 1<sup>st</sup> – 7<sup>th</sup> 2010: 3229.
149. Henning A, Barmet C, Fuchs A, Vannesjö J, Boesiger P, Pruessmann KP. *Characterization and correction of modulation sidebands in <sup>1</sup>H MRS without water suppression by spatiotemporal field monitoring*. Proceedings of the joint 18<sup>th</sup> annual scientific meeting of **ISMRM** and the 27<sup>th</sup> annual scientific meeting of **ESMRMB**, Stockholm, Sweden, May 1<sup>st</sup> – 7<sup>th</sup> 2010: 3311.

150. Hock A, [Henning A](#), Schar M, Fuchs A, Kollias S, Boesiger P. *ECG-triggered FASTERMAP Shimming Allows for Reproducible Shim Convergence in Spinal Cord Spectroscopy*. Proceedings of the joint 18<sup>th</sup> annual scientific meeting of **ISMRM** and the 27<sup>th</sup> annual scientific meeting of **ESMRMB**, Stockholm, Sweden, May 1<sup>st</sup> – 7<sup>th</sup> 2010: 5042.
151. Fuchs A, [Henning A](#), Boesiger P. *SPECIAL-COSY at 7T*. Proceedings of the joint 18<sup>th</sup> annual scientific meeting of **ISMRM** and the 27<sup>th</sup> annual scientific meeting of **ESMRMB**, Stockholm, Sweden, May 1<sup>st</sup> – 7<sup>th</sup> 2010: 929.
152. Fuchs A, [Henning A](#), Brunner D, Boesiger P. *Compensation of offresonance magnetization transfer artifact in SPECIAL at 7T*. Proceedings of the joint 18<sup>th</sup> annual scientific meeting of **ISMRM** and the 27<sup>th</sup> annual scientific meeting of **ESMRMB**, Stockholm, Sweden, May 1<sup>st</sup> – 7<sup>th</sup> 2010: 3383.
153. Fuchs A, [Henning A](#), Boesiger P. *SPECIAL-j-resolved spectroscopy at 7T*. Proceedings of the joint 18<sup>th</sup> annual scientific meeting of **ISMRM** and the 27<sup>th</sup> annual scientific meeting of **ESMRMB**, Stockholm, Sweden, May 1<sup>st</sup> – 7<sup>th</sup> 2010: 930.
154. Chen X, [Henning A](#), Pavan M, Heinzer-Schweizer S, Toigo M, Boesiger P. *ERETIC-based glycogen quantification using SNR-enhanced and localized 13 C MRS*. Proceedings of the joint 18<sup>th</sup> annual scientific meeting of **ISMRM** and the 27<sup>th</sup> annual scientific meeting of **ESMRMB**, Stockholm, Sweden, May 1<sup>st</sup> – 7<sup>th</sup> 2010: 3350.
155. Chen X, [Henning A](#), Heinzer-Schweizer S, Pavan M, Boesiger P. *Muscle group specific quantification of unsaturated fatty acids by localized DEPT-enhanced 13 C MRS and ERETIC*. Proceedings of the joint 18<sup>th</sup> annual scientific meeting of **ISMRM** and the 27<sup>th</sup> annual scientific meeting of **ESMRMB**, Stockholm, Sweden May 1<sup>st</sup> – 7<sup>th</sup> 2010: 3293.
156. Jauslin M, [Henning A](#), Dydak U, Sprott H, Meier D, Jung HH, Sandor PS, and Boesiger P. *Exercise protocol and muscular fiber type composition dependent phosphocreatine recovery in health and disease*. Proceedings of the joint 18<sup>th</sup> annual scientific meeting of **ISMRM** and the 27<sup>th</sup> annual scientific meeting of **ESMRMB**, Stockholm, Sweden, May 1<sup>st</sup> – 7<sup>th</sup> 2010: 861.
157. Hock A, [Henning A](#), Fuchs A, Boesiger P, Kollias SS. *Improvement of Spectral Quality using Interleaved VAPOR and Outer Volume Suppression in the Cervical Spinal Cord*. **NCCR Neuro** annual meeting, Berlingen, Switzerland, February 26<sup>th</sup> 2010.

## 2009

### Oral:

158. S. Heinzer-Schweizer, N. De Zanche, M. Pavan, G. Mens, U. Sturzenegger, [Henning A](#), Boesiger P. *In-vivo measurement of absolute metabolite concentrations using the ERETIC method*. Proceedings of the 17<sup>th</sup> annual scientific meeting of **ISMRM**, Honolulu / Hawaii, USA, April 18<sup>th</sup> -24<sup>th</sup> 2009: 232.
159. Abozguia K, Elliott P, McKenna W, Phan T, Nallur-Shivu G, Ahmed I, Maher AR, [Henning A](#), Ashrafian H, Watkins H, Frenneaux M. *Metabolic Modulation With Perhexiline Corrects Energy Deficiency and Improves Exercise Capacity in Symptomatic Hypertrophic Cardiomyopathy*. Annual meeting of the **American Heart Association**, Fort Lauderdale, USA, 14<sup>th</sup> -18<sup>th</sup> Nov 2009.

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160. Heinzer-Schweizer S, Item F, [Henning A](#), Toigo M, Boesiger P. *Advanced Exercise Ergometer Setup for In Vivo MRS Studies of Skeletal Muscle Metabolism*. Proceedings of the 17<sup>th</sup> annual scientific meeting of **ISMRM**, Honolulu / Hawaii, USA, April 18<sup>th</sup> -24<sup>th</sup> 2009: 1935.



161. Pavan M, Heinzer-Schweizer S, De Zanche N, [Henning A](#), Boesiger P, Pruessmann KP. *An RF-over-fiber system for reliable signal injection in ERETIC spectroscopy*. Proceedings of the 17<sup>th</sup> annual scientific meeting of **ISMRM**, Honolulu / Hawaii, USA, April 18<sup>th</sup> -24<sup>th</sup> 2009: 4293.
162. Fuchs A, [Henning A](#), Boesiger P. *Comparison of Metabolite Correlations in 1D and 2D Quantitative Spectroscopy*. Proceedings of the 17<sup>th</sup> annual scientific meeting of **ISMRM**, Honolulu / Hawaii, USA, April 18<sup>th</sup> -24<sup>th</sup> 2009: 2406.
163. Fuchs A, Heinzer-Schweizer S, [Henning A](#), and Boesiger P. *Quantitative 2D in-vivo spectroscopy using the ERETIC method*. Proceedings of the 17<sup>th</sup> annual scientific meeting of **ISMRM**, Honolulu / Hawaii, USA, April 18<sup>th</sup> -24<sup>th</sup> 2009: 2405.
164. Walter M, [Henning A](#), Grimm S, Kauffmann J, Buchmann J , Horn D, Eckert U, Northoff G, Kim Y, Biswal B, Bogerts B. *Glutamatergic Deficiencies in Major Depression are Related to Impaired Functional Responses and Brain Activity at Rest*. 64<sup>th</sup> Annual Convention of the **Society-of-Biological-Psychiatry**. Vancouver, Canada, May 2009: 109. Abstract: Biological Psychiatry 65(8): p. 33S, 2009.

## 2008

### Oral:

165. Schweizer S, DeZanche N, Mens G, [Henning A](#), Boesiger P. *Advances in the ERETIC method for the quantification of in-vivo H and P spectra*. Proceedings of the 16<sup>th</sup> annual scientific meeting of **ISMRM**, Toronto, Canada, May 3<sup>rd</sup>-9<sup>th</sup> 2008: 193.
166. [Henning A](#), Fuchs A, Murdoch J, Boesiger P. *Sensitivity encoded VAPOR-FIDLOVS at 7T: mapping the hidden metabolites*. Proceedings of the 16<sup>th</sup> annual scientific meeting of **ISMRM**, Toronto, Canada, May 3<sup>rd</sup>-9<sup>th</sup> 2008: 594.
167. [Henning A](#), Fuchs A, Boesch C, Boesiger P, Kreis R. *Downfield Spectra at Ultrahigh Field*. Proceedings of the 16<sup>th</sup> annual scientific meeting of **ISMRM**, Toronto, Canada, May 3<sup>rd</sup>-9<sup>th</sup> 2008: 777.

### Poster:

168. [Henning A\\*](#), Walter M\*, Grimm S\*, Schulte RF, Beck J, Dydak U, Schnepf B, Böker H, Boesiger P, Northoff G. *Alterations in BOLD Response and Metabolite Concentrations Support Decreased Glial Enzyme Activity in Major Depression: A Quantitative JPRESS and FMRI Study*. Proceedings of the 16<sup>th</sup> annual scientific meeting of **ISMRM**, Toronto, Canada, May 3<sup>rd</sup>-9<sup>th</sup> 2008: 3552. ([ISMRM 1<sup>st</sup> poster award](#)).

## 2007

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169. [Henning A](#), Murdoch JB, Boesiger P. *MRSI localization at 7T based on frequency modulated RF pulses*. Proceedings of the joint 15<sup>th</sup> annual scientific meeting of **ISMRM** and the 24<sup>th</sup> annual scientific meeting of **ESMRMB**, Berlin, Germany, 19<sup>th</sup>-25<sup>th</sup> 2007: 776.

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170. [Henning A](#), Murdoch JB, Boesiger P. *RF pulse and sequence development for in-vivo magnetic resonance spectroscopy at 7T. MRZ Symposium – from molecular imaging to system neuroscience*, Tübingen, Germany, July 13<sup>th</sup>-14<sup>th</sup> 2007.

171. Henning A, Murdoch JB, Boesiger P. *RF pulse and sequence development for in-vivo magnetic resonance spectroscopy at 7T*. **Gordon Research Conference** on Magnetic Resonance, Biddeford, Maine, USA, June 17<sup>th</sup> – 22<sup>nd</sup> 2007.
172. Henning A, Lange T, Boesiger P. *2D J-resolved spectroscopy at 7T*. Proceedings of the joint 15<sup>th</sup> annual scientific meeting of **ISMRM** and the 24<sup>th</sup> annual scientific meeting of **ESMRMB**, Berlin, Germany, May 19<sup>th</sup>-25<sup>th</sup> 2007:2930.
173. Henning A, Murdoch JB, Boesiger P. *MRSI and 2D JPRESS localization at 7T based on frequency modulated RF pulses*. **ISMRM workshop on advances in high field MR**, Asilomar, California, USA, March 25<sup>th</sup> -28<sup>th</sup> 2007.
174. Schweizer S, de Zanche N, Henning A, Boesiger P. *External reference calibration for absolute quantification of metabolites using in-vivo MR spectroscopy*. Proceedings of the annual scientific meeting of **SPS** (swiss physical society), Zürich, Schweiz, February 20<sup>th</sup>-21<sup>st</sup> 2007:688.

## 2006

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175. Henning A, Schär M., Schulte R.F., Pruessmann K.P., Boesiger P. *T and B insensitive outer volume suppression for slice selective MRSI*. Proceedings of the 23<sup>rd</sup> annual scientific meeting of **ESMRMB**, Warsaw, Poland, September 21<sup>st</sup>-23<sup>rd</sup> 2006:206.
176. Henning A, Schär M, Kollias SS, Dydak U, Boesiger P. *Spinal cord MRS in and beyond the cervical spine*. Proceedings of the joint annual meeting of **SSBE** (Swiss Society for Biomedical Engineering), ÖGBT (Österreichische Gesellschaft für Biomedizinische Technik) and DGBT (Deutsche Gesellschaft für Biomedizinische Technik), Zürich, Schweiz, September 6<sup>th</sup>-9<sup>th</sup> 2006:V6.
177. Wilm B, Gamper U, Henning A, Svensson J, Kollias SS, Boesiger P. *Inner volume MRI for spinal cord diffusion imaging*. Proceedings of the joint annual meeting of **SSBE** (Swiss Society for Biomedical Engineering), ÖGBT (Österreichische Gesellschaft für Biomedizinische Technik) and DGBT (Deutsche Gesellschaft für Biomedizinische Technik), Zürich, Schweiz, September 6<sup>th</sup>-9<sup>th</sup> 2006:V5.
178. Henning A, Schär M, Schulte RF, Pruessmann KP, Boesiger P. *Optimized outer volume suppression for slice selective MRSI*. Proceedings of the 14<sup>th</sup> annual scientific meeting of **ISMRM**, Seattle, Washington, USA, May 6<sup>th</sup>-12<sup>th</sup> 2006:66.
179. Henning A, Schär A, Kollias SS, Meier D, Boesiger P, Dydak U. *Spinal cord MRS in and beyond the cervical spine*. Proceedings of the 14<sup>th</sup> annual scientific meeting of **ISMRM**, Seattle, Washington, USA, May 6<sup>th</sup>-12<sup>th</sup> 2006:889.
180. Wilm BJ, Svensson J, Gamper U, Henning A, Boesiger P, Kollias SS; *Multislice Inner Volume MRI for Spinal Cord Diffusion Imaging*. Proceedings of the 14<sup>th</sup> annual scientific meeting of **ISMRM**, Seattle, Washington, USA, May 6<sup>th</sup>-12<sup>th</sup> 2006:850.
181. Akhvediani T, Henning A, Dydak U, Boesiger P, Sandor PS, Jung HH. *MRS changes in CADASIL: preliminary results*. Proceedings of the 16<sup>th</sup> annual meeting of the **European Neurological Society** published in Journal of Neurology 2006;253:35.
182. Akhvediani T, Henning A, Dydak U, Boesiger P, Jung HH, Sandor PS. *Lactate in the healthy brain. 5<sup>th</sup> day of clinical research*, Zurich, Switzerland. 2006.

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183. Henning A, Schär M, Schulte RF, Kollias S, Boesiger P, Dydak U. *Improved MR spectroscopy of the spinal cord*. Proceedings of the 44<sup>th</sup> annual scientific meeting of **ASNR**, San Diego, CA, USA, 2006: 1530 / 204.
184. Akhvediani T, Henning A, Dydak U, Boesiger P, Jung HH, Sandor PS. *Lactate in the healthy Brain. SSN-SGMR Meeting*, Basel January 28<sup>th</sup>, 2006

185. Jauslin M, Dydak U, Henning A, Sprott H, Boesiger P, Sandor PS. *P-31 magnetic resonance spectroscopy (MRS) to detect abnormalities in energy metabolism of muscle tissue in mitochondrial encephalomyopathies and migraine?* Proceedings of the **16<sup>th</sup> Migraine Trust International Symposium** published in Cephalalgia 2006;26(11):1387.

## 2005

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186. Wilm BJ, Svensson J, Henning A, Stämpfli P, Boesiger P, Kollias SS. *Susceptibility artefact reduction in single-shot EPI diffusion imaging of the cervical spinal cord.* Proceedings of 22<sup>nd</sup> annual meeting of **ESMRMB**, Basel, Switzerland, September 15<sup>th</sup>-18<sup>th</sup> 2005: 222.
187. Henning A, Schär M, Schulte RF, Meier D, Dydak U, Boesiger P. *Outer volume suppression in MRSI using equi-ripple designed quadratic-phase RF pulses.* Proceedings of the 13<sup>th</sup> annual scientific meeting of **ISMRM**, Miami, Florida, USA, May 7<sup>th</sup>-13<sup>th</sup> 2005:729.

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188. Henning A, Dydak U, Boesiger P. *Advanced processing of MR spectra recorded using "Maximum Echo Acquisition".* Proceedings of the 13<sup>th</sup> annual scientific meeting of **ISMRM**, Miami, Florida, USA, May 7<sup>th</sup>-13<sup>th</sup> 2005:2468.
189. Henning A, Schär M, Schulte RF, Pruessmann KP, Dydak U, Boesiger P. *Outer Volume Suppression in MRSI using equi-ripple designed quadratic phase RF pulses.* Proceedings of 22<sup>nd</sup> annual meeting of **ESMRMB**, Basel, Switzerland, September 15<sup>th</sup>-18<sup>th</sup> 2005: 370 ([ESMRMB poster award: certificate of merit](#)).
190. Henning A, Dydak U, M. Schär, R.F. Schulte, K.P. Pruessmann, P. Boesiger. *Improved outer volume suppression in magnetic resonance spectroscopy.* Annual Meeting of **SSBE** (Swiss Society for Biomedical Engineering), Lausanne, Switzerland, September 1<sup>st</sup> -2<sup>nd</sup> 2005:F09.

## 2004

### Oral:

191. Jauslin M, Lange T, Henning A, Sandor PS, Dydak U, Boesiger P. *Functional spectroscopic imaging at 3.0 T to assess lactate changes during visual stimulation in migraine.* **3<sup>rd</sup> International Symposium on Highfield MR in Clinical Applications**, Bonn, Germany, September 17<sup>th</sup> -18<sup>th</sup> 2004.
192. Morris JE, Wu F, Radehaus C, Hietschold M, Henning A, Hofmann K, Kiesow A. *Single electron transistors: modeling and fabrication.* Proceedings of the 7<sup>th</sup> **ICSICT** (International Conference on Solid State & Integrated Circuit Technology), Beijing, 2004:634-639. ([conference paper](#))

### Poster:

193. Henning A, Jauslin M, Lange T, Nadig K, Sandor P, Boesiger P, Dydak U. *fMRI and fMRSI at 3T to study habituation in the primary visual cortex of migraine patients: optimization of the methods.* Proceedings of the annual **ZNZ** (Zentrum für Neurowissenschaften Zürich) symposium, Zürich, Schweiz, October 15<sup>th</sup> 2004.

194. Lange T, Dydak U, Jauslin M, Henning A, Sandor P, Boesiger P. *Functional spectroscopic imaging at 3 tesla to assess lactate changes in healthy brain during visual stimulation*. Proceedings of the annual **ZNZ** (Zentrum für Neurowissenschaften Zürich) symposium, Zürich, Schweiz, October 15<sup>th</sup> 2004.

### 2003

Oral:

195. Falke M, Mogilatenko A, Filonenko O, Henning A, Teichert T, Beddies G, Hinneberg HJ, Humphreys C. *Epitaxial silicide growth on Si(001)*. Proceedings of the 15<sup>th</sup> **ICEM**, Durban, South Africa, 2002:771.
196. Henning A, Erat M, Esteve V, Black DL, Allain FHT. *Structure determination of nPTB as free protein and in complex with its target RNA*. **Summer school** on Biomolecular Structure and Dynamics – advances in NMR and computational methods, Otocec, Slovenia, June 22<sup>nd</sup> – 29<sup>th</sup> 2003.

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197. Erat M, Henning A, Esteve V, Black DL, Allain FHT. *NMR structure of PTB and nPTB in complex with CUCUCU – RNA*. 8<sup>th</sup> annual meeting of the **RNA** society, Vienna, Austria, 2003.
198. Henning A, Erat M, Esteve V, Black DL, Allain F. *NMR studies of PTB- and nPTB-RNA complexes*. **Swiss RNA meeting**, Bern, Switzerland, October 17<sup>th</sup> 2003.
199. Henning A, Erat M, Esteve V, Black DL, Allain F. *NMR studies of PTB- and nPTB-RNA complexes*. **EMBO summer school** on solution NMR spectroscopy. EMBL, Heidelberg, Germany, September 2003.

### 2002

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200. Henning A, Reichel R, Filonenko O, Hortenbach H, Falke M, Beddies G, Hinneberg HJ. *Strukturuntersuchung von epitaktischen CrSi Schichten auf Si(001) mittels TEM*. Frühjahrstagung des Arbeitskreises Festkörperphysik (AKF) der **DPG**, Regensburg, 2002:DS27.36.
201. Reichel R, Henning A, Filonenko O, Hortenbach H, Beddies G, Falke M, Hinneberg HJ. *Leitfähigkeits- und Hall-Effektmessungen an dünnen CrSi Schichten*. Frühjahrstagung des Arbeitskreises Festkörperphysik (AKF) der **DPG**, Regensburg, 2002:DS27.37.

### 2000

Oral:

202. Morris JE, Radehaus C, Hietschold M, Henning A, Kiesow A, Wu F. *Discontinuous metal thin films and the single electron transistor*. **Conference on Novel Materials for Electronics Miniaturization** (The Knowledge Foundation), San Francisco, 2000.