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Publication List

34. H. Watanabe and R.A. Waggoner, **About 7 T MRI in MRI Safety - Principles, Standards, and Clinical Concerns (second edition)**, Gakken Medical Shujunsha Co., Ltd. Publishers, Tokyo, Japan, 40-45, 2014.
33. P. Sun, J.L. Gardner, M. Costagli, K. Ueno, R.A. Waggoner, K. Tanaka, and K. Cheng, **Demonstration of tuning to stimulus orientation in human visual cortex: a high-resolution fMRI study with a novel continuous and periodic stimulation paradigm**, *Cerebral Cortex*, **23**(7), 1618-1629, 2013.
32. Y. Matsuda, K. Ueno, R.A. Waggoner, D. Erickson, Y. Shimura, K. Tanaka, K. Cheng, and R. Mazuka, **Processing of infant-directed speech by adults**, *NeuroImage*, **54**(1), 611-621, 2011.
31. R.A. Waggoner, K. Tanaka, and K. Cheng, **Exploring the Origins of the DfMRI Signal at 4 Tesla**, *NeuroImage*, **47**(S1), S186, 2009.
30. M. Costagli, R.A. Waggoner, K. Ueno, K. Tanaka, and K. Cheng, **Correction of 3D rigid body motion in fMRI time series by independent estimation of rotational and translational effects in k-space**, *NeuroImage*, **45**(3), 749-757, 2009.
29. P. Sun, K. Ueno, R.A. Waggoner, J.L. Gardner, K. Tanaka, and K. Cheng, **A temporal frequency-dependent functional architecture in human V1 revealed by high-resolution fMRI**, *Nature Neuroscience*, **10**(11), 1404-1406, 2007.
28. Y. Matsuda, K. Ueno, R.A. Waggoner, D. Erickson, Y. Shimura, K. Tanaka, K. Cheng, and R. Mazuka, **Processing of infant-directed speech in adults**, *NeuroImage*, **36**(S1), S38, 2007.
27. R.A. Waggoner, M. Costagli, K. Ueno, K. Tanaka, K. Cheng, **SENSE or TSENSE for fMRI, Which is Better?** *NeuroImage*, **31**(S1), S173, 2006.
26. M. Costagli, R.A. Waggoner, K. Ueno, K. Tanaka, K. Cheng, **3D Motion Correction in the Fourier Domain for fMRI Time Series**, *NeuroImage*, **31**(S1), S152, 2006.
25. Y. Tanaka, R.A. Waggoner, K. Ueno, K. Tanaka, K. Cheng, **The left parieto-occipital cortex is critically involved in the object completion with degraded image information**, *NeuroImage*, **31**(S1), S119, 2006.
24. P. Sun, J.L. Gardner, M. Costagli, K. Ueno, R.A. Waggoner, K. Tanaka, K. Cheng, **Direct demonstration of tuning to stimulus orientation in human V1: a high-resolution fMRI study with a continuous stimulation paradigm and a differential mapping method**, *NeuroImage*, **31**(S1), S112, 2006.
23. R.A. Waggoner, K. Ueno, K. Tanaka, K. Cheng, **The Significance of Physiological Noise with increasing R in SENSE-EPI**, *NeuroImage*, **26**(S1), S43, 2005.

- 22.** K. Ueno, R.A. Waggoner, K. Tanaka, K. Cheng, **Spatial precision of BOLD-fMRI in human V1: point spread function measured at 4T with spatially localized and size-varied stimuli**, *NeuroImage*, **26(S1)**, S23, 2005.
- 21.** R. Horie, C. Hirata, R.A. Waggoner, K. Ueno, K. Tanaka, K. Cheng, J. Tani, **Functional Mapping of State-dependent Activity in a Learned Artificial Grammar**, *NeuroImage*, **26(S1)**, S30, 2005.
- 20.** J.L. Gardner, P. Sun, R.A. Waggoner, K. Ueno, K. Tanaka, and K. Cheng, **Contrast Adaptation and Representation in Human Early Visual Cortex**, *Neuron*, **47(4)**, 607-620, 2005.
- 19.** C. Hirata, R. Horie, R.A. Waggoner, K. Ueno, K. Cheng, K. Tanaka, J. Tani, **Neural substrates of learned abstract motor sequence: a high-field fMRI study**, *NeuroImage*, **22(S1)**, e1238, 2004.
- 18.** P. Sun, K. Ueno, R. Waggoner, K. Tanaka, K. Cheng, **Temporal frequency dominance domains in human primary visual cortex: a high resolution fMRI study**, *NeuroImage*, **22(S1)**, e1104, 2004.
- 17.** J. L. Gardner, P. Sun, R.A. Waggoner, K. Ueno, K. Tanaka, K. Cheng, **Adaptation causes horizontal shifts of contrast response curves in early human visual cortex: an event-related fMRI study**, *NeuroImage*, **22(S1)**, e969, 2004.
- 16.** F. Moradi, L.C. Liu, K. Cheng, R.A. Waggoner, K. Tanaka, and A.A. Ioannides, **Consistent and precise localization of brain activity in human primary visual cortex by MEG and fMRI**, *NeuroImage*, **18(3)**, 595-609, 2003.
- 15.** K. Tanaka, K. Ueno, K. Cheng and R.A. Waggoner, **Recent development in noninvasive brain activity measurement by functional magnetic resonance imaging (fMRI)**, *Oyo Buturi*, **72(8)**, 1033-1038, 2003.
- 14.** 上野賢一, 程康, R.A. Waggoner, 田中啓治, **4テスラfMRIによる大脳コラムのイメージング**, *脳* **21**, **5(4)** : 363-367, 2002.
- 13.** K. Cheng, R.A. Waggoner, and K. Tanaka, **Human Ocular Dominance Columns as Revealed by High-Field Functional Magnetic Resonance Imaging**, *Neuron*, **32(2)**, 359–374, 2001.
- 12.** R.A. Waggoner, K. Cheng, and K. Tanaka, **A Comparison of the BOLD Response in V1, MT, and M1**, *NeuroImage*, **11(5)**, S782, 2000.
- 11.** K. Cheng, R.A. Waggoner, and K. Tanaka, **Mapping Human Ocular Dominance Columns with High-Field (4T) fMRI**, *NeuroImage*, **11(5)**, S705, 2000.
- 10.** K. Tanaka, K. Cheng, H. Takeichi, T. Ong, R.A. Waggoner, E. Yoshitome, S. Mizuta, and K. Ueno, **Using functional Magnetic Resonance Imaging to study Human Brain Functions**. *RIKEN Review*, **24**, 64-66, 1999.
- 9.** M. Nakagawa, R.A. Waggoner, and E. Fukushima, **Non-Invasive measurement of Fabric Particle Packing by NMR** in *Introduction to Mechanics of Granular Flow*, M. Oda, ed., A.A.Balkema Publishers, Rotterdam, Netherlands, 240-247, 1999.
- 8.** R.A. Waggoner, M. Nakagawa, J. Glass, M. Reece and E. Fukushima, **Particle Compaction as Observed by MRI** in *Spatially Resolved Magnetic Resonance: Methods and Applications in Materials Science, Agriculture and Biomedicine*, B. Blümich, P. Blümler, R. Botto, and E. Fukushima ed., M. Bauschulte, Quirinusstr Publishers, Roetgen Germany, 299-304, 1998.

7. E. Yoshitome, R.A. Waggoner, and K. Tanaka, **Contrast Decrease in EPI with Centric Order Phase Encoding**, *NeuroImage*, **7(4)**, S539, 1998.
6. D.O. Kuethe, A. Caprihan, E. Fukushima, and R.A. Waggoner, **Imaging Lungs Using Inert Fluorinated Gases**, *Magnetic Resonance in Medicine*, **39(1)**, 85-88, 1998.
5. R.A. Waggoner and E. Fukushima, **Velocity Distribution of Slow Fluid Flows in Bentheimer Sandstone: An NMRI and Propagator Study**, *Magnetic Resonance Imaging*, **14(9)**, 1085-1092 (1996).
4. R.A. Waggoner, F.D. Blum, and John Lang, **Diffusion in Aqueous Solutions of Poly(ethylene glycol)**, *Macromolecules*, **28(8)**, 2658-2664 (1995).
3. R.A. Waggoner, F.D. Blum, and J.M.D. MacElroy, **Dependence of the Solvent Diffusion Coefficient on Concentration in Polymer Solutions**, *Macromolecules*, **26(25)**, 6841-6848 (1993).
2. F. D. Blum, S. Pickup, R. A. Waggoner, **NMR Measurements of Solvent Self-Diffusion Coefficients in Polymer Solutions**, *Polymer Preprints*, **31(1)**, 125-126 (1990).
1. R.A. Waggoner and F.D. Blum, **Solvent-Diffusion and Drying of Coatings**, *J. Coat. Tech.*, **61(768)**, 51-56 (1989). (Finalist in the Roon Award Competition of the Federation of Coatings Societies).