

Yoichi Miyawaki

Journal papers:

- [1] Yoichi Miyawaki "Multivariate analysis of magnetic resonance imaging signals of the human brain," *Current Topics in Medicinal Chemistry*, vol.16, pp.2685 - 2693 (2016).
- [2] Kentaro Yamada, Yoichi Miyawaki, Yukiyasu Kamitani "Inter-subject neural code converter for visual image representation," *NeuroImage*, vol.113, pp.289 - 297 (2015).
- [3] Tomoyasu Horikawa, Masako Tamaki, Yoichi Miyawaki, and Yukiyasu Kamitani, "Neural decoding of visual imagery during sleep," *Science*, vol.340, pp.639 - 642 (2013).
- [4] Yusuke Fujiwara, Yoichi Miyawaki, and Yukiyasu Kamitani, "Modular encoding and decoding models derived from Bayesian canonical correlation analysis," *Neural Computation*, vol.25, pp.979 - 1005 (2013).
- [5] Yoichi Miyawaki, Takashi Shinozaki, and Masato Okada, "Spike suppression in a local cortical circuit induced by transcranial magnetic stimulation," *Journal of Computational Neuroscience*, 33, 405-419 (2012).
- [6] Yusuke Fujiwara, Yoichi Miyawaki, Yukiyasu Kamitani, "Estimating image bases for visual image reconstruction from human brain activity," *Advances in Neural Information Processing Systems*, vol. 22, pp. 576 – 584 (2010).
- [7] Naruse Yasushi, Ayumu Matani, Yoichi Miyawaki, Masato Okada, "Influence of coherence between multiple cortical columns on alpha rhythm: A computational modeling study," *Human Brain Mapping*, vol. 31, pp. 703 - 15 (2010).
- [8] Yoichi Miyawaki, Hajime Uchida, Okito Yamashita, Masa-aki Sato, Yusuke Morito, Hiroki C. Tanabe, Norihiro Sadato, Yukiyasu Kamitani, "Visual image reconstruction from human brain activity using a combination of multiscale local image decoders," *Neuron*, vol.60, pp. 915-29 (2008)
*Selected for cover illustration
*Reviewed at New and Views in Nature Neuroscience (Kay and Gallant, "I can see what you see," *Nat Neurosci*, vol. 12, 245-246 (2009))
- [9] Masafumi Oizumi, Yoichi Miyawaki, and Masato Okada, "Rate reduction for an associative memory model in a Hodgkin-Huxley type network," *Journal of Physical Society of Japan*, vol.77, no.6, pp.064802:1-6 (2008)
- [10] Masafumi Oizumi, Yoichi Miyawaki, and Masato Okada, "Higher order effects on rate reduction for networks of Hodgkin-Huxley neurons", *Journal of Physical Society of Japan*, vol.76, no.4, pp.044803:1-6 (2007)
- [11] Yoichi Miyawaki, and Masato Okada, "Mechanisms of spike inhibition in a cortical network induced by transcranial magnetic stimulation," *Neurocomputing*, vol.65-66, pp.463-468 (2005).
- [12] Yoichi Miyawaki, and Masato Okada, "Mechanism of neural interference by transcranial magnetic stimulation: network or single neuron?," *Advances in Neural Information Processing Systems*, vol.16, pp.1295-1302 (2004).
- [13] Yoichi Miyawaki, and Masato Okada, "A network model of perceptual suppression induced by transcranial magnetic stimulation," *Neural Computation*, vol.16, pp.309-331 (2004).
*Selected for cover illustration
- [14] Yoichi Miyawaki, and Masato Okada, "A network model of inhibitory effect induced by transcranial magnetic stimulation," *Neurocomputing*, vol.52-54, pp.837-842 (2003).
- [15] Ryusuke Hayashi, Yoichi Miyawaki, Taro Maeda, Susumu Tachi, "Unconscious adaptation: a new illusion

- of depth induced by stimulus features without depth,” *Vision Research*, vol.43, pp.2773-2782 (2003).
- [16] Yoichi Miyawaki, Ryusuke Hayashi, Taro Maeda, and Susumu Tachi, "The time course of stereopsis: the delayed VEP component correlate of figure-ground processes," *The Transactions of the Institute of Electronics, Information and Communication Engineers D-II*, vol.J85-D-II, no.2, pp.337-350 (2002). [in Japanese]
- [17] Ryusuke Hayashi, Yoichi Miyawaki, Taro Maeda, Susumu Tachi, "Probing the neural mechanism of binocular information processing with VEPs," *The Transactions of the Institute of Electronics, Information and Communication Engineers D-II*, vol.J84-D-II, no.3, pp.559-570 (2001). [in Japanese]
- [18] Yoichi Miyawaki, Yasuyuki Yanagida, Taro Maeda, Susumu Tachi, "The characteristics of two negative peaks on visual evoked potentials with depth perception," *The Transactions of the Institute of Electronics, Information and Communication Engineers D-II*, vol.J82-D-II, no.5, pp.961-972 (1999). [in Japanese]

Review papers:

- [1] Yoichi Miyawaki, "Analysis of human brain activity using sparse modeling," *System, control, and information*, vol.61, no.4, pp.138 - 145 (2017). [in Japanese]
- [2] Yoichi Miyawaki, "Deciphering neural code by functional magnetic resonance imaging," *System, control, and information*, vol.59, no.9, pp.353 - 359 (2015). [in Japanese]
- [3] Tomoyasu Horikawa, Yoichi Miyawaki, Yukiyasu Kamitani, "Visualization of mind from brain activity," *Japanese Journal of Optics*, vol.43, no. 3 pp.104 – 110 (2014). [in Japanese]
- [4] Yoichi Miyawaki, Yukiyasu Kamitani, "Neural decoding and its application," *Journal of the Society of Instrument and Control Engineers*, vol.50, pp.888-894 (2011). [in Japanese]
- [5] Yoichi Miyawaki, "Neural Mechanism of visual suppression induced by transcranial magnetic stimulation," *Journal of Japanese Neural Network Society*, vol.14, no.1, pp.44 - 57 (2007). [in Japanese]
- [6] Hirokazu Tanaka and Yoichi Miyawaki, "Lecture note in ASCONE 2006 – Cerebellar learning theory, a system biology model of LTD, and manipulative neuroscience," *Journal of Japanese Neural Network Society*, vol.14, no.2, pp.104 - 140 (2007). [in Japanese]

Invited talks:

- [1] Yoichi Miyawaki, "Deciphering visual information represented by human brain activity patterns," LIRMM/CNRS, Montpellier, France, June 2016.
- [2] Yoichi Miyawaki, "Temporal structure of object image representation in human visual systems," The 31st Psychology seminar, Department of Psychology, The University of Tokyo, January 2016.
- [3] Masashi Sato, Yoichi Miyawaki, "Temporal structure of object image representation in human visual systems," Pre-symposium workshop: Brain, Mind, and Life Support Technology, UEC Tokyo, November 2015.
- [4] Yoichi Miyawaki and Masashi Sato, "Neural dynamics of object representation in the human brain," International Symposium on Object Vision in Human, Monkey, and Machine, UEC Tokyo, Japan, November 2015.
- [5] Yoichi Miyawaki, Masashi Sato, "Temporal relationship between object category representation and the level of category abstraction," Symposium of Center for System Vision Science, Ritsumeikan university: new approach of visual information processing- from local circuit to recognition, Ritsumeikan university, March 2014.
- [6] Yoichi Miyawaki, "Neural decoding approach toward mechanism of sensation and perception," Human science promotion foundation research resource seminar, The University of Electro-Communications,

- September 2013.
- [7] Yoichi Miyawaki, "Image representation basis of the visual cortex," The Japanese Psychological Association, Sapporo convention center, September 2013.
 - [8] Yoichi Miyawaki, "Decoding of sensation and perceptual information from human brain activity," The 2nd Special Interest Group of Telexistence, Keio university, July 2013.
 - [9] Yoichi Miyawaki, "Neural representation of sensation and perceptual information in the human brain," Brain Science Inspired Life Support Seminar, The University of Electro-Communications, July 2013.
 - [10] Yoichi Miyawaki, "Approach toward neural mechanisms of sensation and perception using neural decoding," Toyota Central R&D Labs., December 2012.
 - [11] Yoichi Miyawaki, "Mechanism of sensation and perception revealed by neural decoding," Center for Life Support Technology symposium 2012 - integration of brain science and life support technology -, Shibaura Institute of Technology, December 2012.
 - [12] Yoichi Miyawaki, "Approach toward elucidation of neural representation using neural decoding," The fourth IS symposium: Perception, Action and Brain 2012, The University of Electro-Communications, November 2012.
 - [13] Yoichi Miyawaki, "Encoding and decoding model toward prediction of arbitrary states," INP workshop: Multivariate analysis of fMRI data, University of Glasgow, U.K., September, 2012.
 - [14] Yoichi Miyawaki, "Neural decoding technique and sparse representation of visual information," The 40th Japanese Society for Magnetic Resonance in Medicine, Kyoto International Conference Center, September 2012.
 - [15] Yoichi Miyawaki, "Neural decoding and visualization of sensation and perception," Tokyo Metropolitan Institute of Medical Science, July 2012.
 - [16] Yoichi Miyawaki, "Approach toward higher visual perception using neural decoding," The 14th Japan Human Brain Mapping Society, Sapporo, July 2012.
 - [17] Yoichi Miyawaki, "Neural decoding and visual image reconstruction from human brain activity," Brain Inspired Computing 2012, National Institute for Material Science, June, 2012.
 - [18] Yoichi Miyawaki, "Neural decoding and visualization of sensation and perception," Human welfare technology research station seminar, The University of Electro-Communications, April 2012.
 - [19] Yoichi Miyawaki, "Analyses on neural representation of material and surface information using data mining techniques," Research meeting on visual perception of material and surface and generic object recognition, Toyohashi Institute of Technology, April 2012.
 - [20] Yoichi Miyawaki, "Reading out visual image from the brain: visualization of sensation and perception using neural decoding," Information Physics and Computing Seminar, Graduate School of Information Science and Technology, The University of Tokyo, September 2011.
 - [21] Yoichi Miyawaki, "Approach toward higher visual perception using neural decoding," MEXT Comprehensive Brain Science Network Summer Workshop, Kobe, International Conference Center, Hyogo, August 2011.
 - [22] Yoichi Miyawaki, "Visual image reconstruction from human brain activity," Japan-Germany Joint Workshop on "Computational Neuroscience," Okinawa, March, 2011.
 - [23] Yoichi Miyawaki, "Visual image reconstruction and local cortical circuit properties," Functional principles of local circuits of cerebral cortex, NIPS, December 2010.
 - [24] Yoichi Miyawaki, "Visual image reconstruction from human brain activity," Japanese-German Frontiers of Science Symposium (JGFoS), Germany, November 2010.
 - [25] Yoichi Miyawaki, Hajime Uchida, Okito Yamashita, Masa-aki Sato, Hiroki C. Tanabe, Norihiro Sadato, Yukiyasu Kamitani, "Visual image reconstruction from human cortical activity by combination of multi-resolution local image decoders," International Workshop on Statistical-Mechanical Informatics 2009

(IW-SMI2009), Kyoto, Japan, September 2009.

* Selected for cover illustration

- [26] Yoichi Miyawaki, Hajime Uchida, Okito Yamashita, Masa-aki Sato, Hiroki C. Tanabe, Norihiro Sadato, Yukiyasu Kamitani, "Visual image reconstruction from human brain activity," Human information processing research meeting, The Institute of Electronics, Information, and Communication Engineering, Hokkaido University, June 2009.
- [27] Yoichi Miyawaki, "Reading visual perception from the brain," Open House of The Institute of Statistical Mathematics 2009, The Institute of Statistical Mathematics, June 2009.
- [28] Yoichi Miyawaki, Hajime Uchida, Okito Yamashita, Masa-aki Sato, Hiroki C. Tanabe, Norihiro Sadato, Yukiyasu Kamitani, "Visual image reconstruction from human cortical activity by combination of multi-resolution local image decoders," The second Brain-Bio communication research meeting, Tokyo Institute of Technology, April 2009.
- [29] Yoichi Miyawaki, "Reading visual perception from the brain," Imaging and biological science - Commemoration symposium of foundation of Bioimaging Center of Graduate School of Frontier Sciences, The University of Tokyo, March 2009.
- [30] Yoichi Miyawaki, "Visual image reconstruction from human brain activity," CS Colloquium, Department of Computer Science, Graduate School of Systems and Information Engineering, University of Tsukuba, January 2009.
- [31] Yoichi Miyawaki, "Visual image reconstruction from human brain activity," RIKEN Brain Science Institute Forum (BSI Forum), RIKEN BSI, Saitama, Japan, January 2009.
- [32] Yoichi Miyawaki, Hajime Uchida, Okito Yamashita, Masa-aki Sato, Yusuke Morito, Hiroki C. Tanabe, Norihiro Sadato, Yukiyasu Kamitani, "Visual image reconstruction from human cortical activity by combination of multi-resolution local image decoders," fMRI - a tool for neuroscience research, NIPS, Okazaki, November, 2007.
- [33] "Neural mechanism of perceptual interference induced by transcranial magnetic stimulation and functional role of feedback signals", Multiple approach to vision sciences – physiology, psychophysics, and theory, NIPS, Okazaki, June 2006.
- [34] "Neural mechanism of functional interference induced by transcranial magnetic stimulation," Kisarazu National College of Technology, Kisarazu, April 2006.
- [35] Yoichi Miyawaki, "Measurement and stimulation of the brain function – probing functional architecture by neural perturbation," Diagnostic Engineering of the 21st century, Collaborative Research meeting of The Institute of Statistical Mathematics, The Institute of Statistical Mathematics, November 2005.
- [36] Yoichi Miyawaki, "Measurement and stimulation of the brain function – probing functional architecture by neural perturbation," The 15th Complexity Engineering lecture series, National Institute of Advanced Industrial Science and Technology (AIST), Tsukuba, Japan, July 2005.
- [37] Yoichi Miyawaki, and Masato Okada, "Neural Mechanism of functional interference induced by transcranial magnetic stimulation," Neural Computation workshop, MIT Picower center, Boston, USA, June 2005.
- [38] Yoichi Miyawaki, "Neural mechanism of transcranial magnetic stimulation," ATR Computational Neuroscience Laboratories, Kyoto, Japan, April 2005.
- [39] Yoichi Miyawaki and Masato Okada, "Magnetic stimulation of neuron and mechanisms of suppression of cortical functions," NEURON research seminar, Tokyo Institute of Technology, Tokyo, September 2004.
- [40] Yoichi Miyawaki and Masato Okada, "Neural mechanism of transcranial magnetic stimulation: from a computational view point," National Institute for Physiological Sciences, Cerebral Integration Division Seminar, Okazaki, Japan, January 2004.
- [41] Yoichi Miyawaki and Masato Okada, "Mechanism of neural interference induced by transcranial magnetic stimulation," NTT Communication Science Laboratories seminar, Atsugi, Japan, August 2003.

- [42] Yoichi Miyawaki, Ryusuke Hayashi, Yasuyuki Yanagida, Taro Maeda, Susumu Tachi, "The characteristics of two negative peaks on visual evoked potentials with depth perception and their source localization," The 20th Event Related Potential Conference, Eisai hall, Tokyo, Japan, January, 1999.
- [43] Yoichi Miyawaki, Ryusuke Hayashi, Yasuyuki Yanagida, Taro Maeda, Susumu Tachi, "Depth perception and visual evoked potentials," Audio and Visual Information Processing Research Group Conference (AVIRG), The University of Tokyo, Tokyo, Japan, January 1999.

Conference papers (international):

- [1] Sosuke Tanaka, Tomohiro Nishino, Masahito Nitta, Takuma Sugashi, Kazuto Masamoto, Yoichi miyawaki, "Analysis of astrocyte morphology during hypoxia adaptation using higher-order image features extracted by deep convolutional neural network," Society for Neuroscience 2017, Washington D.C., USA, November 2017 (accepted).
- [2] Masashi Sato, Yoichi Miyawaki, "Spatial Spreading of Representational Geometry through Source Estimation of Magnetoencephalography Signals," IEEE International Workshop on Pattern Recognition in NeuroImaging 2017 (PRNI2017), Toronto, Canada, June 2017.
- [3] Masashi Sato, Okito Yamashita, Masa-aki Sato, Yoichi Miyawaki, "Information spreading through magnetoencephalography source localization and its effect on pattern classification analysis," The 22nd Annual Meeting of the Organization for Human Brain Mapping, Geneva, Switzerland, June 2016.
- [4] Masashi Sato, Okito Yamashita, Masa-aki Sato, Yoichi Miyawaki, "Information spreading of magnetoencephalography source localization and its effect on neural decoding," International Meeting on "High-Dimensional Data Driven Science, Kyoto, Japan, Dec. 2015.
- [1] Masashi Sato, and Yoichi Miyawaki, "Relationship between timing of object category representation and the level of category abstraction in the human visual cortex," 2014 Asia-Pacific Conference on Vision, Takamatsu, Japan, July 2014.
- [2] Tomoyasu Horikawa, Masako Tamaki, Yoichi Miyawaki, and Yukiyasu Kamitani, "Decoding visual dream contents from the human brain," Society for Neuroscience, New Orleans, USA, October, 2012.
- [3] Kentaro Yamada, Yoichi Miyawaki, Yukiyasu Kamitani, "Neural Code Converter for Visual Image Representation," IEEE International Workshop on Pattern Recognition in NeuroImaging, Korea, Seoul, May, 2011.
- [4] Yusuke Fujiwara, Yoichi Miyawaki, Yukiyasu Kamitani, "Estimating image bases for visual image reconstruction from human brain activity," Neural Information Processing Systems 2009, Vancouver, Canada, Decenmber, 2009.
- [5] Yusuke Fujiwara, Yoichi Miyawaki, Yukiyasu Kamitani, "Visual image reconstruction using automatically determined image bases," Vision Sciences Society, Naples, USA, May, 2009.
- [6] Yasushi Naruse, Ayumu Matani, Yoichi Miyawaki, and Masato Okada, "Multiple alpha generators model for MEG/EEG: mechanism of ERS/ERD," BIOMAG2008, Sapporo, Japan, August, 2008.
- [7] Yasushi Naruse, Ayumu Matani, Yoichi Miyawaki, and Masato Okada, "Influence of visual stimulus size on phase resetting of alpha rhythm - EEG/MEG modeling study," Society for Neuroscience 2008, Washington, DC, USA November, 2008.
- [8] Hiroaki Shigemasa, Yoichi Miyawaki, Yukiyasu Kamitani, Michiteru Kitazaki, "Decoding depth order and three-dimensional shape perception from human cortical activity of dorsal and ventral areas," Vision Sciences Society 8th Annual Meeting, Naples, Florida, USA, May, 2008.
- [9] Yasushi Naruse, Ayumu Matani, Yoichi Miyawaki, and Masato Okada, "Role for horizontal connection in multiple alpha generators model for MEG/EEG", Society for Neuroscience 2007, San Diego, USA, November, 2007.

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- [10] Yoichi Miyawaki, Hajime Uchida, Okito Yamashita, Masa-aki Sato, Hiroki C. Tanabe, Norihiro Sadato, Yukiyasu Kamitani, "Visual image reconstruction from human cortical activity by combination of multi-resolution local image decoders," Society for Neuroscience 2007, San Diego, USA, November, 2007 (selected oral presentation).
- [11] Yoichi Miyawaki, Hajime Uchida, Okito Yamashita, Masa-aki Sato, Hiroki C. Tanabe, Norihiro Sadato, Yukiyasu Kamitani, "Reconstruction of arbitrary visual images from fMRI signals by the combination of local image decoders," HBM2007, vol.36, S97, 156 W-PM, Chicago, USA, June, 2007 (scored and highlighted as a within-top-65 abstract out of 1600 abstracts).
- [12] Masafumi Oizumi, Yoichi Miyawaki, Masato Okada, "Higher order effects by shunting inhibition in reduction of conductance-based network models to rate models," Cosyne 2007, Salt Lake City, USA, February, 2007.
- [13] Takashi Shinozaki, Yoichi Miyawaki, Tsunehiro Takeda, "Hierarchical processes of motion perception in binocular rivalry," Society for Neuroscience 2006, Atlanta, USA, October, 2006.
- [14] Takashi Shinozaki, Yoichi Miyawaki, Tsunehiro Takeda, "Comparison between reaction times and MEG responses of binocular rivalry," Biomag 2006, Vancouver, Canada, August, 2006.
- [15] Yoichi Miyawaki, and Masato Okada, "Neural mechanisms of spike inhibition induced by transcranial magnetic stimulation," Society for Neuroscience (SFN 2004), San Diego, USA, October, 2004.
- [16] Yasushi Naruse, Ayumu Matani, Yoichi Miyawaki, Tomoe Hayakawa, and Norio Fujimaki, "Analysis of Phase-sorted single trials at peak alpha frequency," BIOMAG 2004, Boston, USA, August, 2004.
- [17] Yoichi Miyawaki, and Masato Okada, "Mechanisms of spike inhibition in a cortical network induced by transcranial magnetic stimulation," Computational Neuroscience Meeting (CNS 2004), Baltimore, USA, July, 2004.
- [18] Yoichi Miyawaki, "Signal model of latency delay in visual evoked potential by binocular disparity," Vision Sciences Society (VSS 2004), Sarasota, USA, May, 2004 (selected oral presentation).
- [19] Yoichi Miyawaki, Masato Okada, "Mechanism of neural interference by transcranial magnetic stimulation: network or single neuron?," Neural Information Processing Systems 2003, (NIPS 2003), Vancouver and Whistler, Canada, December, 2003.
- [20] Yoichi Miyawaki, Masato Okada, "Computational Model of Transcranial Magnetic Stimulation: Temporal Property and Subthreshold Prolongation of Visual Suppression Induced by Neural Population," Vision Sciences Society (VSS 2003), Sarasota, USA, May, 2003.
- [21] Tetsuya Hoya, Gen Hori, Hovagim Bakardjian, Tomoaki Nishimura, Taiji Suzuki, Yoichi Miyawaki, Aro Funase, Jianting Cao, "Classification of Single Trial EEG Signals by a Combined Principal + Independent Component Analysis and Probabilistic Neural Network Approach," Fourth International Symposium on Independent Component Analysis and Blind Signal Separation (ICA 2003), Nara, JAPAN, March, 2003.
- [22] Yoichi Miyawaki, Masato Okada, "A Network Model of Inhibitory Effect Induced by Transcranial Magnetic Stimulation," Computational Neuroscience Meeting (CNS 2002), Chicago, USA, July, 2002.
- [23] Yoichi Miyawaki, Ryusuke Hayashi, Taro Maeda, Susumu Tachi, Hovagim Bakardjian and Andrzej Cichocki, "The time course of binocular stereopsis and figure-ground segregation revealed by visual evoked potential measurements," Joint France-Japan Symposium on Cognitive Neurosciences, RIKEN, Saitama, Japan, September, 2001.
- [24] Yoichi Miyawaki, Ryusuke Hayashi, Taro Maeda, Susumu Tachi, "The Late Negative Figure-Ground VEP Modulated by Focal Attention", 24th European Conference on Visual Perception (ECPV 2001), Kusadasi, Turkey, August, 2001.
- [25] Yoichi Miyawaki, Ryusuke Hayashi, Taro Maeda, Susumu Tachi, "The VEP Component Related to Figure-Ground Processes in the Time Course of Stereopsis", Annual Meeting of the Association for Research in Vision and Ophthalmology (ARVO 2001), Fort Lauderdale, USA, May, 2001.
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- [26] Ryusuke Hayashi, Yoichi Miyawaki, Taro Maeda, and Susumu Tachi, "The illusion of depth induced by adaptation to anticorrelated RDS," Annual Meeting of the Association for Research in Vision and Ophthalmology (ARVO2001), Fort Lauderdale, Florida, USA, May, 2001.
- [27] Ryusuke Hayashi, Yoichi Miyawaki, Taro Maeda, Susumu Tachi, "Probing the Time Course of Disparity Processing with Visual Evoked Potentials," Annual Meeting of the Association for Research in Vision and Ophthalmology (ARVO 2001), Fort Lauderdale, USA., May, 2000.
- [28] Yoichi Miyawaki, Ryusuke Hayashi, Taro Maeda, Susumu Tachi, "The Lower and Higher Level Responses in Visual Evoked Potentials with Depth Perception," 29th Annual Meeting Society for Neuroscience (SFN 1999), Miami, USA, October, 1999.
- [29] Ryusuke Hayashi, Yoichi Miyawaki, Taro Maeda, Susumu Tachi, "Visual Evoked Potentials to Dynamic Random-Dot Stereograms—The influence of Visual Field Location, Disparity and Interocular Correlation on Latency," IEEE BMES/EMBS '99, Orlando, USA, October, 1999.
- [30] Yoichi Miyawaki, Ryusuke Hayashi, Yasuyuki Yanagida, Taro Maeda, Susumu Tachi, "The Characteristics of Two Negative Peaks on Visual Evoked Potentials with Depth Perception," The 9th World Congress of the International Society for Brain Electromagnetic Topography, New Orleans, USA, October, 1998.

Conference paper (domestic):

- [1] Yoichi Miyawaki, Noriki Ito, Masashi Sato, Yoshiyuki Kabashima, "Inferring informative brain areas by sparse feature selection," Symposium of the 40th annual meeting of Japan Neuroscience Society: Revisiting reverse inference problem in functional MRI, Makuhari Messe, Chiba, July 2017.
- [2] Tomohiro Nishino, Sosuke Tanaka, Tomohiro Nitta, Takuma Sugashi, Kazuto Masamoto, Yoichi Miyawaki, "Analysis of temporal change of astrocyte morphology under hypoxial adaptation using higher-order image features, " Neurocomputing workshop, Japan Society for the Promotion of Machine Industry, Tokyo, March 2017.
- [3] Nozaki Megumi, Shun Nakatani, Shota Eto, Haruka Takahashi, Naoya Aoki, Motofumi Sumiya, Ryo Kitada, Norihiro Sadato, Yukiyasu Kamitani, Yoichi Miyawaki, "Analysis of information representation and activity in the primary visual cortex for tactile stimulation," 2017 winter meeting of vision society of Japan, NHK Science & Technology Research Laboratories, Tokyo, January 2017.
- [4] Nozaki Megumi, Shun Nakatani, Shota Eto, Haruka Takahashi, Naoya Aoki, Motofumi Sumiya, Ryo Kitada, Norihiro Sadato, Yukiyasu Kamitani, Yoichi Miyawaki, "Analysis of information representation and activity in the primary visual cortex for tactile stimulation," The 8th multisensory research meeting, Waseda University, Tokyo, November 2016.
- [5] Noriki Ito, Masashi Sato, Yoshiyuki Kabashima, Yoichi Miyawaki, "Development of classification method based on L0-norm optimization and its application to high-dimensional data," The 14th Information-Based Induction Sciences Workshop, Kyoto University, Kyoto, November 2016.
- [6] Sosuke Tanka, Masahito Nitta, Kazuto Masamoto, Yoichi Miyawaki, "Classification of astrocyte images for pre- and post-hypoxia adaptation using higher-order features extracted by deep convolutional neural network," The 39th annual meeting of the Japan Neuroscience Society, Pacifico Yokohama, July 2016.
- [7] Noriki Ito, Masashi Sato, Yoshiyuki Kabashima, Yoichi Miyawaki, "Classification analysis of high-dimensional data based on L0-norm optimization," Neurocomputing workshop, OIST, Okinawa, June 2016.
- [8] Sosuke Tanka, Masahito Nitta, Kazuto Masamoto, Yoichi Miyawaki, "Image classification of astrocytes for pre- and post-hypoxia adaptation using deep convolutional neural network," Neurocomputing workshop, Tamagawa university, Tokyo, March 2016.
- [9] Kazuaki Akamatsu, Yoichi Miyawaki, "Gaze sequence dependency on object category in natural scene,"

- 2016 winter meeting of vision society of Japan, Kogakuin University, Tokyo, January 2016.
- [10]Shun Nakatani, Haruka Takahashi, Naoya Aoki, Ryo Kitada, Norihiro Sadato, Yukiyasu Kamitani, Yoichi Miyawaki, "Tactile information representation and activity in human visual cortex for tactile stimulation," The 7th multisensory research meeting, Tokyo Women's Christian University, Tokyo, November 2015.
- [11]Shun Nakatani, Haruka Takahashi, Naoya Aoki, Ryo Kitada, Norihiro Sadato, Yukiyasu Kamitani, Yoichi Miyawaki, "Tactile information representation and activity in human visual cortex for tactile stimulation," The 25th Japanese Neural Network Society, The University of Electro-Communications, Tokyo, September 2015.
- [12]Masashi Sato, Okito Yamashita, Masa-aki Sato, Yoichi Miyawaki, "Information leakage of magnetoencephalography source estimation and its effect on neural decoding," The 25th Japanese Neural Network Society, The University of Electro-Communications, Tokyo, September 2015.
- [13]Masashi Sato, Yoichi Miyawaki, "Temporal relationship between object category representation and the level of category abstraction in the human visual cortex," Neurocomputing Workshop, Tamagawa University, Tokyo, March 2014.
- [14]Tomoyasu Horikawa, Masako Tamaki, Yoichi Miyawaki, Yukiyasu Kamitani, "Neural decoding of visual dream contents," The 36th annual meeting of the Japan Neuroscience Society, Kyoto International Conference Center, June 2013.
- [15]Yusuke Fujiwara, Yoichi Miyawaki, Yukiyasu Kamitani, "Extraction of visual image bases from fMRI activity patterns," The 3rd Brain-Bio-Communication research meeting, Osaka University, November 2009.
- [16]Yusuke Fujiwara, Yoichi Miyawaki, Yukiyasu Kamitani, "Automatic extraction of visual image bases from fMRI response," Japan Neuroscience Society 2007, P1-h06, Nagoya, September 2009.
- [17]Hiroaki Shigemasa, Yoichi Miyawaki, Yukiyasu Kamitani, Michiteru Kitazaki, "Visual processing of depth order and three-dimensional shape using brain decoding technique," The Japanese Psychonomics Society 2008, Sendai International Center, Miyagi, December 2008.
- [18]Yasushi Naruse, Ayumu Matani, Yoichi Miyawaki, and Masato Okada, "Influence of interaction between columns on electroencephalogram," JNNS 2004, pp.166-167, AIST, September 2008.
- [19]Yasushi Naruse, Ayumu Matani, Yoichi Miyawaki, and Masato Okada, "Mechanism of ERS/ERD: A modeling study," The 23rd Japan Magnetism and Biomagnetics Society, vol.21, no.1, pp.62-63, Waseda Univ, June 2008.
- [20]Yoichi Miyawaki, Hajime Uchida, Okito Yamashita, Masa-aki Sato, Yusuke Morito, Hiroki C. Tanabe, Norihiro Sadato, Yukiyasu Kamitani, "Visual image reconstruction from fMRI signals by combination of local image decoders of multiple resolutions," The 47th Annual Conference of Japanese Society for Medical and Biological Engineering, p.76, OS-10-3, Kobe, May 2008.
- [21]Hiroaki Shigemasa, Yoichi Miyawaki, Yukiyasu Kamitani, Michiteru Kitazaki, "Decoding heading directions from fMRI," The Japanese Psychonomics Society 2007, Sofia Univ, December 2007.
- [22]Yasushi Naruse, Ayumu Matani, Yoichi Miyawaki, and Masato Okada, "Multiple generators model based on neural mass model for MEG/EEG," Japan Neuroscience Society 2007, vol.36, S215, P3-f10, Yokohama, September 2007.
- [23]Yasushi Naruse, Ayumu Matani, Yoichi Miyawaki, and Masato Okada, "A neural mass model with multiple alpha generators for MEG/EEG," The 22nd Japan Magnetism and Biomagnetics Society, vol.20, no.1, pp132-133, Aichi, June 2007.
- [24]Yoichi Miyawaki, Hajime Uchida, Okito Yamashita, Masa-aki Sato, Hiroki C. Tanabe, Norihiro Sadato, Yukiyasu Kamitani, "Reconstruction of visual images from fMRI signals by combination of multi-resolution local image decoders," Japan Neuroscience Society 2007, vol.58, S55, O2P-C12, Yokohama, September, 2007.
- [25]Hajime Uchida, Yoichi Miyawaki, Okito Yamashita, Masa-aki Sato, Hiroki C. Tanabe, Norihiro Sadato, Yukiyasu Kamitani, "Visual image reconstruction by combination of local image decoders of multiple

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