

東京農工大学 大学院工学研究院
先端電気電子部門
田中 聡久

Toshihisa Tanaka
Department of Electrical and Electronic Engineering
Tokyo University of Agriculture and Technology

1 著書

1. 山下幸彦, 鷺澤嘉一, 田中聡久 「工学のためのフーリエ解析 (工学のための数学)」 (数理工学社), 2016 年 [[amazon.co.jp](#)]
2. 田中聡久 「書き込み式・工学系の微分方程式入門」 (コロナ社), 2014 年 [[amazon.co.jp](#)]
3. 鷺沢嘉一, 田中聡久 「機械学習によるパターン識別と画像認識への応用」 (トリケップス), 2013 年 [[amazon.co.jp](#)] [[amazon.co.jp](#)]
4. D. P. Mandic, A. Kuh, M. Goltz, D. Obradovic, and T. Tanaka, Eds., *Signal Processing for Knowledge Extraction and Information Fusion*, Springer, 2008 [[amazon.co.jp](#)] [[amazon.com](#)]

2 解説・総説

1. 東 広志, 田中聡久, “ [解説] 〈特集 ネットワーク上の制御と信号処理〉 信号構造を利用する脳波処理,” 計測と制御, vol.55, no.11, pp.960–965, 2016 年 11 月
2. 田中聡久, “ [リレー解説] 〈脳機能計測と生体信号入出力〉 第 6 回 : 脳波のための信号処理: PCA, ICA, そして EMD,” 計測と制御, vol.50, no.6, pp.418-423, 2011 年 6 月

3 Journal Papers

1. K. Suefusa and T. Tanaka, “A comparison study of visually stimulated brain–computer and eye tracking interfaces,” *Journal of Neural Engineering*, vol.14, no.2, 2017 (in press) [[doi:10.1088/1741-2552/aa6086](#)]
2. T. Uehara, M. Sartori, S. Fiori, T. Tanaka, “Robust averaging of covariances for EEG recordings classification in motor imagery brain computer interfaces,” *Neural Computation*, 2017 (in press)
3. Md R. Islam, Md K. I. Molla, M. Nakanishi, and T. Tanaka, “Unsupervised frequency-recognition method of SSVEPs using a filter bank implementation of binary subband CCA,” *Journal of Neural Engineering*, vol.14, no.2, 2017 (in press) [[doi:10.1088/1741-2552/aa5847](#)]
4. H. Higashi, T. M. Rutkowski, T. Tanaka, and Y. Tanaka, “Multilinear discriminant analysis with subspace constraints for single-trial classification of event-related potentials,” *IEEE Journal of Selected Topics in Signal Processing*, vol.10, no.7, pp.1295–1305, Oct. 2016 [[doi:10.1109/JSTSP.2016.2599297](#)]

5. N. Tomida, T. Tanaka, S. Ono, M. Yamagishi, and H. Higashi, "Active data selection for motor imagery EEG classification," *IEEE Trans. Biomedical Engineering*, vol.62, no.2, pp.458–467, Feb. 2015
[doi:10.1109/TBME.2014.2358536]
6. S. Fiori, T. Kaneko, and T. Tanaka, "Tangent-bundle maps on the Grassmann manifold: Application to empirical arithmetic averaging," *IEEE Trans. Signal Processing*, vol.63, no.1, pp.155–168, Jan. 2015
[doi:10.1109/TSP.2014.2365764]
7. Md S. Uddin, A. Kuh, A. Kavcic, and T. Tanaka, "Nested performance bounds and approximate solutions for the sensor placement problem," *APSIPA Trans. Signal and Information Processing*, Vol. 3, e4 (13 pages), 2014
[doi:10.1017/ATSIP.2014.3]
8. H. Higashi and T. Tanaka, "Common spatio-time-frequency patterns for motor-imagery-based brain machine interfaces," *Computational Intelligence and Neuroscience*, Vol.2013, Article ID 537218, 12 pages, 2013
[doi:10.1155/2013/537218]
9. Y. Kimura, T. Tanaka, H. Higashi, and N. Morikawa, "SSVEP-based brain-computer interfaces using FSK-modulated visual stimuli," *IEEE Trans. Biomedical Engineering*, vol.60, no.10, pp.2831–2818, Oct. 2013
[doi:10.1109/TBME.2013.2265260]
10. H. Higashi and T. Tanaka, "Simultaneous design of FIR filter banks and spatial patterns for EEG signal classification," *IEEE Trans. Biomedical Engineering*, vol.60, no.4, pp.1100–1110, Apr. 2013
[doi:10.1109/TBME.2012.2215960]
11. T. Kaneko, S. Fiori, and T. Tanaka, "Empirical arithmetic averaging over the compact Stiefel manifold," *IEEE Trans. Signal Processing*, vol.61, no.4, pp.883–894, Feb. 2013
[doi:10.1109/TSP.2012.2226167]
12. Md K. I. Molla, Md R. Islam, T. Tanaka, and T. M. Rutkowski, "Artifact suppression from EEG signals using data adaptive time domain filtering," *Neurocomputing*, Vol.97, pp.297–308, Nov. 2012.
[doi:10.1016/j.neucom.2012.05.009]
13. T. M. Rutkowski, T. Tanaka, A. Cichocki, D. Erickson, and D. P. Mandic, "Interactive components extraction from fEEG, fNIRS, and peripheral biosignals for affective brain-machine interfacing paradigms," *Computers in Human Behavior*, Vol.27, No.5, pp.1512–1518, Sept. 2011
[doi:10.1016/j.chb.2010.10.016]
14. O. A. Omer and T. Tanaka, "Region-based weighted-norm with adaptive regularization for resolution enhancement," *Digital Signal Processing*, vol.21, no.4, pp.508–516, July 2011
[doi:10.1016/j.dsp.2011.02.005]
15. R. M. Chong, and T. Tanaka, "Maxima exploitation for reference blurring function in motion deconvolution," *IEICE Trans. Fundamentals*, Vol.E94-A, No.3, pp.921–928, Mar. 2011.
[doi:10.1587/transfun.E94.A.921]
16. Q. Shi, J. Yang, J. Cao, T. Tanaka, and R. Wang, "EEG data analysis based on EMD for coma and quasi-brain-death patients," *J. Experimental & Theoretical Artificial Intelligence*, vol.23, no.1, pp.97–110,

Mar. 2011

[doi:10.1080/0952813X.2010.506289]

17. H. Bakardjian, T. Tanaka, and A. Cichocki, "Emotional faces boost up steady-state visual responses for brain-computer interface," *NeuroReport*, vol.22, no.3, pp.121–125, Feb. 16, 2011.
[doi:10.1097/WNR.0b013e32834308b0]
18. R. M. Chong, and T. Tanaka, "Motion blur identification using maxima locations for blind color image restoration," *FTRA Journal of Convergence*, Vol.1, No.1, pp.49–56, Dec. 15, 2010
[Online Journal]
19. Y. Washizawa, Y. Yamashita, T. Tanaka, and A. Cichocki, "Blind extraction of global signal from multi-channel noisy observations," *IEEE Trans. Neural Networks*, vol.21, no.9, pp.1472–1481, Sept. 2010.
[doi:10.1109/TNN.2010.2052828]
20. N. Zainal, T. Tanaka and Y. Yamashita, "Moving picture coding by lapped transform and edge adaptive deblocking filter with zero pruning SPIHT," *IEICE Trans. Information and Systems*, vol. E93-D, no. 6, pp.1608–1617, June 2010.
[doi:10.1587/transinf.E93.D.1608]
21. O. A. Omer and T. Tanaka, "Extraction of high-resolution frame from low-resolution video sequence using region-based motion estimation," *IEICE Trans. Fundamentals*, pp.742–751, vol.E93-A, no.4, Apr. 2010
[doi:10.1587/transfun.E93.A.742]
22. H. Bakardjian, T. Tanaka, and A. Cichocki, "Optimization of SSVEP brain responses with application to eight-command brain-computer interface," *Neuroscience Letters*, pp.34–38, vol.469, No.1, Jan. 2010.
[doi:10.1016/j.neulet.2009.11.039]
23. O. A. Omer and T. Tanaka, "Image super-resolution based on locally adaptive mixed-norm," *J. Electrical and Computer Engineering*, vol. 2010, Article ID 435194, 4 pages, 2010.
[doi:10.1155/2010/435194]
24. O. A. Omer and T. Tanaka, "Image restoration based on adaptive directional regularization," *IEICE Trans. Fundamentals*, pp.3344–3354, vol.E92-A, No.12, Dec. 2009.
[doi:10.1587/transfun.E92.A.3344]
25. R. M. Chong, and T. Tanaka, "Detection and classification of invariant blurs," *IEICE Trans. Fundamentals*, pp.3313–3320, vol.E92-A, No.12, Dec. 2009.
[doi:10.1587/transfun.E92.A.3344]
26. H. Fukai, H. Takimoto, Y. Mitsukura, T. Tanaka, and M. Fukumi, "A design of apparent-age estimation system by the empirical mode decomposition," *J. Circuits, Systems, and Computers*, pp.1481–1492, vol.18, No.8, Dec. 2009.
[doi:10.1142/S0218126609005800]
27. J. Yang, Y. Saito, J. Cao, T. Tanaka, and T. Takeda, "Empirical mode decomposition method for MEG phantom data analysis," *J. Circuits, Systems, and Computers*, pp.1467–1480, vol.18, No.8, Dec. 2009.
[doi:10.1142/S0218126609005794]

28. S. Fiori and T. Tanaka, "An algorithm to compute averages on matrix Lie groups," *IEEE Trans. Signal Processing*, pp.4734–4743, vol.57, no.12, Dec. 2009
[doi:10.1109/TSP.2009.2027754]
29. T. Tanaka, "Fast generalized eigenvector tracking based on the power method," *IEEE Signal Processing Letters*, pp.969–972, vol.16, no.11, Nov. 2009
[doi:10.1109/LSP.2009.2027667]
30. K. Yabuta, H. Kitazawa, and T. Tanaka, "Privacy protection by masking moving objects for security cameras," *IEICE Trans. Fundamentals*, vol. E92-A, no. 3, pp. 919–927, Mar. 2009.
31. T. Murakami, T. Tanaka, and Y. Ishida, "Measurement of similarity between latent variables," *IEICE Trans. Fundamentals*, vol. E92-A, no. 3, pp. 824–831, Mar. 2009.
32. T. Murakami, T. Tanaka, and Y. Ishida, "Time-domain blind signal separation of convolutive mixtures via multidimensional independent component analysis," *IEICE Trans. Fundamentals*, vol. E92-A, no. 3, pp. 733–744, Mar. 2009.
33. H. Fukai, H. Takimoto, Y. Mitsukura, T. Tanaka, and M. Fukumi, "Apparent age feature extraction by empirical mode decomposition," *J. Signal Processing*, vol. 12, no. 6, Nov. 2008.
34. O. A. Omer and T. Tanaka, "Demosaicking based on optimization and projection in different frequency bands," *EURASIP J. Image and Video Processing*, vol. 2008, Article ID 364142, 14 pages, 2008.
35. T. Tanaka and D. P. Mandic, "Complex empirical mode decomposition," *IEEE Signal Processing Letters*, vol. 14, no. 2, pp. 101–104, Feb. 2007.
36. T. Tanaka, "A direct design of oversampled perfect reconstruction FIR filter banks of 50%-overlapping filters," *IEEE Trans. Signal Processing*, vol. 54, no. 8, pp. 3011–3022, Aug. 2006
37. T. Tanaka, Y. Hirasawa, and Y. Yamashita, "Variable-length lapped transform with combination of multiple synthesis filter banks for image coding," *IEEE Trans. Image Processing*, vol. 15, no. 1, pp. 81–88, Jan. 2006
38. T. Hoya, T. Tanaka, A. Cichocki, G. Hori, T. Murakami, and J. A. Chambers, "Stereophonic noise reduction using a combined cascading subspace method and adaptive signal enhancement," *IEEE Trans. Speech and Audio Processing*, vol. 13, no. 3, pp. 309–320, May 2005.
39. T. Tanaka, "Generalized weighted rules for principal components tracking," *IEEE Trans. Signal Processing*, vol. 53, no. 4, pp. 1243-1253, Apr. 2005.
40. T. Tanaka and Y. Yamashita, "The generalized lapped pseudo-biorthogonal transform: Oversampled linear-phase perfect reconstruction filter banks with lattice structures," *IEEE Trans. Signal Processing*, vol. 52, no. 2, pp. 434–446, Feb. 2004
41. T. Tanaka, T. Saito and Y. Yamashita "A time-varying subband transform with projection-based reconstruction," *IEICE Trans. Fundamentals*, vol. E86-A, no. 8, pp. 1935–1941, Aug. 2003
42. T. Tanaka and Y. Yamashita, "A biorthogonal transform with overlapping and non-overlapping basis functions for image coding," *IEEE Trans. Signal Processing*, vol. 51, no. 3, pp. 732–743, Mar. 2003

43. T. Tanaka and Y. Yamashita, “An adaptive lapped biorthogonal transform and its application in orientation adaptive image coding,” *Signal Processing*, vol. 82, no. 11, pp. 1633–1647, Nov. 2002
44. T. Tanaka and Y. Yamashita, “Adaptive transforms with overlapping basis functions for image coding,” *J. Electronic Imaging*, pp. 706–719, July 2001
45. T. Tanaka and Y. Yamashita, “Vector-embedded Karhunen-Loève transform and its application in orientation adaptive coding of images,” *IEICE Trans. Fundamentals*, vol. E73-A, no. 6, pp. 1257–1266, Jun. 2000
46. H.-J. Choi, E.-S. Kang, T. Tanaka, and S.-J. Ko, “Progressive region of interest coding using the embedded coding technique,” *the Journal of the KICS (Korean Institute of Communication Sciences)*, vol. 25, no. 1B, pp. 148–155, Jan. 2000
47. E.-S. Kang, T. Tanaka, and S.-J. Ko, “Improved embedded zerotree wavelet coder,” *Electronics Letters*, vol. 35, no. 09, pp. 705–706, Apr. 1999
48. E.-S. Kang, T.-H. Lee, T. Tanaka, and S.-J. Ko, “Band-selective embedded wavelet coding using multi-threshold,” *the Journal of the KICS (Korean Institute of Communication Sciences)*, vol. 24, no. 4B, pp. 707–714, 1999

4 Book Chapters

1. 田中聡久 「聴覚刺激を用いたブレイン・コンピュータ・インタフェース」(「次世代ヒューマンインタフェース開発最前線」エヌ・ティー・エス) 2013年6月 [amazon.co.jp]
2. R. M. Chong and T. Tanaka, “Harnessing the potentials of image extrema for blind restoration,” *Image Restoration - Recent Advances and Applications*, Dr Aymeric Histace (Ed.), ISBN: 978-953-51-0388-2, InTech, 2012
[[doi:10.5772/35996](https://doi.org/10.5772/35996)]
3. 田中聡久 「デジタルフィルタ設計」「マルチレート信号処理」「多重解像度解析・ウェーブレット変換」「主成分・独立成分分析」(茨木俊秀・片山徹・藤重悟監修「数理工学事典」朝倉書店) 2011年
4. L. Li, Y. Saito, D. Looney, T. Tanaka, J. Cao, and D. Mandic, “Data fusion via fission for the analysis of brain death,” *Evolving Intelligent Systems: Methodology and Applications* (P. Angelov, D. P. Filev, and N. Kasabov, Eds.), Wiley-IEEE Press, Chapter 10, pp.229–245, 2010
5. D. P. Mandic, G. Souretis, W. Y. Leong, D. Looney, M. M. Van Hulle, and T. Tanaka, “Complex empirical mode decomposition for multichannel information fusion,” *Signal Processing for Knowledge Extraction and Information Fusion* (D. P. Mandic, A. Kuh, M. Goltz, D. Obradovic, and T. Tanaka, Eds.), Springer, Chapter 13, pp. 243–260, 2008

5 International Conference Papers

1. S. Ryu, H. Higashi, T. Tanaka, S. Nakauchi, and T. Minami, “Spatial smoothing of canonical correlation analysis for steady state evoked potential based brain computer interfaces,” in *Proceedings of 38th Annual International Conference of the IEEE Engineering in Medicine and Biology Society (EMBC 2016)*,

pp.1516–1519, Florida, USA, Aug. 2016.

[doi:10.1109/EMBC.2016.7590998]

2. K. Suefusa and T. Tanaka, “Decoding of responses to mixed frequency and phase coded visual stimuli using multiset canonical correlation analysis,” in *Engineering in Medicine and Biology Society (EMBC), 2016 38th Annual International Conference of the IEEE*, pp. 1492–1495, Orland, USA, 2016.
[doi:10.1109/EMBC.2016.7590992]
3. T. Wada and T. Tanaka, “Dictionary adaptation for adaptive filtering with multiple kernels in a dynamic environment,” in *Proc. of 6th International Conference on Signal Processing, Communications and Computing (ICSPCC 2016)*, Hongkong, Aug. 2016
4. D. Wang and T. Tanaka, “Sparse kernel principal component analysis based on elastic net regularization,” in *Proc. of 2016 International Joint Conference on Neural Networks (IJCNN 2016)*, Vancouver, Canada, July 2016
5. T. Tanaka, T. Uehara and Y. Tanaka, “Dimensionality reduction of sample covariance matrices by graph Fourier transform for motor imagery brain-machine interface,” in *2016 IEEE Statistical Signal Processing Workshop (SSP)*, Palma de Mallorca, Spain, June 2016, pp. 1–5.
[doi:10.1109/SSP.2016.7551798]
6. Md. R. Islam, T. Tanaka, M. Nakanishi, and Md. K. I. Molla, “Frequency recognition of steady-state visually evoked potentials using binary subband CCA with reduced dimension of reference signals” in *2016 IEEE International Conference on Acoustics, Speech and Signal Processing (ICASSP 2016)*, pp. 769–773, Shanghai, China, Apr. 19–24, 2016
[doi:10.1109/ICASSP.2016.7471779]
7. A. Sakiyama, Y. Tanaka, T. Tanaka, and A. Ortega, “Efficient sensor position selection using graph signal sampling theory,” in *2016 IEEE International Conference on Acoustics, Speech and Signal Processing (ICASSP 2016)*, pp. 6225–6229, Shanghai, China, Apr. 19–24, 2016
[doi:10.1109/ICASSP.2016.7472874]
8. Md. R. Islam, T. Tanaka, Md. K. I. Molla, and Most. S. Akter, “Frequency recognition for SSVEPBCI using reference signals with dominant stimulus frequency,” in *2015 APSIPA Annual Summit and Conference*, pp.971–974, Hong Kong, 16–19 Dec. 2015
[doi:10.1109/APSIPA.2015.7415416]
9. H. Higashi, T. M. Rutkowski, T. Tanaka, and Y. Tanaka, “Subspace-constrained multilinear discriminant analysis for ERP-based brain computer interface classification,” in *2015 APSIPA Annual Summit and Conference*, pp.934–940, Hong Kong, 16–19 Dec. 2015
[doi:10.1109/APSIPA.2015.7415409]
10. D. Zheng, G. Cui, T. Tanaka, and J. Cao, “Analysis of brain-death EEG data using 2T-EMD algorithm,” in *2015 IEEE International Conference on Signal Image Technology & Internet Based Systems*, Bangkok, Thailand, pp.528–531, Nov. 2015.
[doi:10.1109/SITIS.2015.84]
11. Y. Kamikawa and T. Tanaka, “Responses in posterior parietal cortex to movement intention task with visual and tactile cues,” in *Engineering in Medicine and Biology Society (EMBC), 2015 37th Annual International*

Conference of the IEEE, pp. 6654–6657, Milan, Italy, 2015.

[doi:10.1109/EMBC.2015.7319919]

12. Md. R. Islam, T. Tanaka, N. Morikawa, and Md. K. I. Molla, “Frequency recognition for SSVEP-based BCI with data adaptive reference signals,” in *2015 IEEE International Conference on Digital Signal Processing (DSP)*, pp.799–803, Singapore, 21–24 July 2015.
[doi:10.1109/ICDSP.2015.7251986]
13. T. Uehara, T. Tanaka, and S. Fiori, “Robust averaging of covariance matrices by Riemannian geometry for motor-imagery braincomputer interfacing,” in *Advances in Cognitive Neurodynamics (V): Proceedings of the Fifth International Conference on Cognitive Neurodynamics*, no. V, pp.347–353, 2016.
[doi:10.1007/978-981-10-0207-6]
14. S. Yasutomi and T. Tanaka, “Sparse convex clustering based on ℓ_2 -norm regularization on probability simplex,” in *ITC-CSCC 2015: International Technical Conference on Circuits Systems, Computers and Communications*, pp. 38–41, Seoul, Korea, June 4–7, 2015
15. T. Tanaka, “Dictionary-based online kernel principal subspace analysis with double orthogonality preservation,” in *Acoustics, Speech and Signal Processing (ICASSP), 2015 IEEE International Conference on*, pp. 4045–4049, South Brisbane, QLD, Apr. 19–24, 2015
[doi:10.1109/ICASSP.2015.7178731]
16. T. Ishida and T. Tanaka, “Efficient construction of dictionaries for kernel adaptive filtering in a dynamic environment,” in *Acoustics, Speech and Signal Processing (ICASSP), 2015 IEEE International Conference on*, pp. 3536–3540, South Brisbane, QLD, Apr. 19–24, 2015
[doi:10.1109/ICASSP.2015.7178629]
17. K. Suefusa and T. Tanaka, “Phase-based detection of intentional state for asynchronous brain–computer interface,” in *Acoustics, Speech and Signal Processing (ICASSP), 2015 IEEE International Conference on*, pp. 808–812, South Brisbane, QLD, Apr. 19–24, 2015
[doi:10.1109/ICASSP.2015.7178081]
18. H. Higashi, T. Tanaka, and Y. Tanaka, “Smoothing of spatial filter by graph Fourier transform for EEG signals,” in *2014 APSIPA Annual Summit and Conference*, pp.1–5, Siem Reap, Cambodia, 9–12 Dec. 2014
[doi:10.1109/APSIPA.2014.7041710]
19. S. Yasutomi and T. Tanaka, “Parameter estimation for von Mises-Fisher mixture model via Gaussian distribution,” in *2014 APSIPA Annual Summit and Conference*, pp.1–5, Siem Reap, Cambodia, 9–12 Dec. 2014
[doi:10.1109/APSIPA.2014.7041707]
20. K. Shimpo and T. Tanaka, “Phase detection of multi-channel SSVEPs via complex sparse spatial weighting,” in *2014 APSIPA Annual Summit and Conference*, pp.1–5, Siem Reap, Cambodia, 9–12 Dec. 2014
[doi:10.1109/APSIPA.2014.7041666]
21. N. Morikawa and T. Tanaka, “A brain-computer interface using binary phase-shift keying visual stimuli,” in *Control Automation Robotics and Vision (ICARCV), 2014 13th International Conference on*, pp.1-6, 10–12 Dec. 2014 [doi:10.1109/ICARCV.2014.7064269]

22. T. Tanaka and M. Shiono, "Acoustic beamforming with maximum SNR criterion and efficient generalized eigenvector tracking," *Advances in Multimedia Information Processing – PCM 2014 15th Pacific-Rim Conference on Multimedia, Kuching, Malaysia, December 1-4, 2014, Proceedings*, pp.373–382, Dec. 2014
[doi:10.1007/978-3-319-13168-9_41]
23. H. Higashi and T. Tanaka, "Band selection by distance of spatial patterns for brain machine interfacing," in *Proceedings of International Conference on Advanced Informatics: Concepts, Theory and Applications 2014*, pp. 63–68, Bandung, Indonesia, Aug. 2014
[doi:10.1109/ICAICTA.2014.7005916]
24. G. Cui, Y. Yin, T. Tanaka, and J. Cao, "EEG energy analysis for evaluating consciousness level using dynamic MEMD", in *Proc. of 2014 International Joint Conference on Neural Networks (IJCNN 2014)*, pp.3247–3250, Beijing, China, July 2014
[doi:10.1109/IJCNN.2014.6889716]
25. S. Fiori, T. Kaneko, and T. Tanaka, "Mixed maps for learning a Kolmogoroff-Nagumo-type average element on the compact Stiefel manifold," in *2014 IEEE International Conference on Acoustics, Speech and Signal Processing (ICASSP 2014)*, pp.4518–4522, Florence, Italy, May 2014
[doi:10.1109/ICASSP.2014.6854457]
26. Y. Yin, D. Zheng, J. Cao, T. Tanaka, "Dynamic approximate entropy with band filtering for patient's EEG consciousness analysis," in *Proc. of the IEEE International Conference on Bioinformatics and Biomedicine (BIBM 2013)*, pp.23–26, Shanghai, China, Dec, 2013
[doi:10.1109/BIBM.2013.6732617]
27. T. Ishida and T. Tanaka, "Multikernel adaptive filters with multiple dictionaries and regularization," in *Signal and Information Processing Association Annual Summit and Conference (APSIPA), 2013 Asia-Pacific, Kaohsiung, Taiwan, October 29 to November 1, 2013*
[doi:10.1109/APSIPA.2013.6694279]
28. H. Higashi and T. Tanaka, " Band selection by criterion of common spatial patterns for motor imagery based brain machine interfaces," in *Signal and Information Processing Association Annual Summit and Conference (APSIPA), 2013 Asia-Pacific, Kaohsiung, Taiwan, October 29 to November 1, 2013*
[doi:10.1109/APSIPA.2013.6694273]
29. K. Tanaka, Y. Mizuno, T. Tanaka, and K. Kitajo, "Detection of phase synchronization in EEG with bivariate empirical mode decomposition," in *Proc. of the 35th Annual International IEEE EMBS Conference (EMBC 2013)*, pp.973–976, Osaka, Japan, Jul. 3–7, 2013
[doi:10.1109/EMBC.2013.6609665]
30. K. Shimpo and T. Tanaka, "Asynchronous brain-computer interfacing based on intended movement direction," in *Proc. of the 35th Annual International IEEE EMBS Conference (EMBC 2013)*, pp.4251–4254, Osaka, Japan, Jul. 3–7, 2013
[doi:10.1109/EMBC.2013.6609665]
31. H. Higashi and T. Tanaka, "Regularization using similarities of signals observed in nearby sensors for feature extraction of brain signals," in *Proc. of the 35th Annual International IEEE EMBS Conference (EMBC 2013)*, pp.7420–7423, Osaka, Japan, Jul. 3–7, 2013
[doi:10.1109/EMBC.2013.6611273]

32. Md. K. I. Molla, T. Tanaka, T. M. Rutkowski, and K. Tanaka, "Phase synchronization analysis of EEG channels using bivariate empirical mode decomposition," in *Proc. of 2013 IEEE International Conference on Acoustics, Speech, and Signal Processing (ICASSP 2013)*, pp.1182–1186, Vancouver, Canada, May 2013
[doi:10.1109/ICASSP.2013.6637837]
33. N. Tomida, H. Higashi, and T. Tanaka, "A joint tensor diagonalization approach to active data selection for EEG classification," in *Proc. of 2013 IEEE International Conference on Acoustics, Speech, and Signal Processing (ICASSP 2013)*, pp.983–987, Vancouver, Canada, May 2013
[doi:10.1109/ICASSP.2013.6637796]
34. T. Tanaka, C. Zhang, and H. Higashi, "SSVEP frequency detection methods considering background EEG," in *Proc. of The 6th International Conference on Soft Computing and Intelligent Systems, and The 13th International Symposium on Advanced Intelligent Systems (SCIS-ISIS 2012)*, pp.1138–1143, Kobe, Japan, Nov. 20–24, 2012
[doi:10.1109/SCIS-ISIS.2012.6505369]
35. S. Yoshimoto, Y. Washizawa, T. Tanaka, H. Higashi, and J. Tamura, "Toward multi-command auditory brain computer interfacing using speech stimuli," in *Proc. of 2012 APSIPA Annual Summit and Conference*, Hollywood California, USA, December 3-6, 2012
36. Y. Yin, J. Cao, and T. Tanaka, "EEG energy analysis based on MEMD with ICA pre-processing," in *Proc. of 2012 APSIPA Annual Summit and Conference*, Hollywood California, USA, December 3-6, 2012
37. S. Fiori, T. Kaneko, and T. Tanaka, "A comparison of two algorithmic recipes to parametrize rectangular orthogonal matrices," in *Proc. of 2012 APSIPA Annual Summit and Conference*, Hollywood California, USA, December 3-6, 2012
38. S. Suwa, Y. Yin, G. Cui, T. Tanaka, and J. Cao, "A design method of an auditory P300 with P100 brain computer interface system," in *Proc. of 2012 International Conference on Signal Processing (ICSP 2012)*, pp.152–156, Beijing, China Oct. 21–25, 2012
[doi:10.1109/ICoSP.2012.6491623]
39. Y. Yin, H. Zhu, T. Tanaka, and J. Cao, "Analyzing the EEG energy of healthy human, comatose patient and brain death using multivariate empirical mode decomposition algorithm," in *Proc. of 2012 International Conference on Signal Processing (ICSP 2012)*, pp.148–151, Beijing, China Oct. 21–25, 2012
[doi:10.1109/ICoSP.2012.6491622]
40. H. Higashi and T. Tanaka "Time sparsification of EEG signals in motor-imagery based brain computer interfaces," in *Proc. of the 34th Annual International IEEE EMBS Conference (EMBC 2012)*, pp.4271–4274, San Diego, USA, Aug. 28–Sept. 1, 2012
[doi:10.1109/EMBC.2012.6346910]
41. D. Looney, C. Park, T. Tanaka, J. Cao, and D. P. Mandic, "Phase-based brain consciousness analysis," in *Proc. of the 34th Annual International IEEE EMBS Conference (EMBC 2012)*, pp.1032–1035, San Diego, USA, Aug. 28–Sept. 1, 2012
[doi:10.1109/EMBC.2012.6346110]
42. C. Zhang, Y. Kimura, H. Higashi, and T. Tanaka, "A simple platform of brain-controlled mobile robot and its implementation by SSVEP," in *Proc. of the 2012 International Joint Conference on Neural Networks*

- (*IJCNN 2012*), pp.1–7, Brisbane, Australia, June 2012
[doi:10.1109/IJCNN.2012.6252579]
43. S. Fiori, T. Kaneko, and T. Tanaka, “Learning on the compact Stiefel manifold by a Cayley-transform-based pseudo-retraction map,” in *Proc. of the 2012 International Joint Conference on Neural Networks (IJCNN 2012)*, pp.1–8, Brisbane, Australia, June 2012
[doi:10.1109/IJCNN.2012.6252841]
 44. T. Kaneko, T. Tanaka, and S. Fiori “A method to compute averages over the compact stiefel manifold,” in *Proc. of 2012 IEEE International Conference on Acoustics, Speech, and Signal Processing (ICASSP 2012)*, pp.3829–3832, Kyoto, Japan, March 2012
[doi:10.1109/ICASSP.2012.6288752]
 45. T. Tanaka, Y. Washizawa, and A. Kuh, “Adaptive kernel principal components tracking,” in *Proc. of 2012 IEEE International Conference on Acoustics, Speech, and Signal Processing (ICASSP 2012)*, pp.1905–1908, Kyoto, Japan, March 2012
[doi:10.1109/ICASSP.2012.6288276]
 46. H. Higashi, A. Cichocki, and T. Tanaka, “Regularization using geometric information between sensors capturing features from brain signals,” in *Proc. of 2012 IEEE International Conference on Acoustics, Speech, and Signal Processing (ICASSP 2012)*, pp.721–724, Kyoto, Japan, March 2012
[doi:10.1109/ICASSP.2012.6287985]
 47. Md. K. I. Molla, T. Tanaka, and T. M. Rutkowski, “Multivariate EMD based approach to EOG artifacts separation from EEG,” in *Proc. of 2012 IEEE International Conference on Acoustics, Speech, and Signal Processing (ICASSP 2012)*, pp.653–656, Kyoto, Japan, March 2012
[doi:10.1109/ICASSP.2012.6287968]
 48. R. M. Chong, and T. Tanaka, “An objective criterion for the comparison of reconstructed images,” in *Proc. of the 8th International Conference on Information, Communications and Signal Processing (ICICS 2011)*, Singapore, Dec. 2011
[doi:10.1109/ICICS.2011.6174216]
 49. Y. Yin, J. Cao, Q. Shi, D. P. Mandic, T. Tanaka, and R. Wang, “Analyzing the EEG energy of quasi brain death using MEMD,” in *Proc. the Third APSIPA Annual Summit and Conference*, Thu-AM.SS3 (6 pages), Xian, China, Oct. 2011.
 50. L. Zhang, C. Zhang, H. Higashi, J. Cao, and T. Tanaka, “Common spatial pattern using multivariate EMD for EEG classification,” in *Proc. the Third APSIPA Annual Summit and Conference*, Wed-PM.SS4 (5 pages), Xian, China, Oct. 2011.
 51. H. Higashi, T. Rutkowski, Y. Washizawa, A. Cichocki, and T. Tanaka, “EEG auditory steady state responses classification for the novel BCI,” in *Proc. of the 33rd Annual International Conference of the IEEE EMBS (EMBC 2011)*, pp.4576–4579, 2011
[doi:10.1109/IEMBS.2011.6091133]
 52. H. Higashi and T. Tanaka, “Optimal design of a bank of spatio-temporal filters for EEG signal classification,” in *Proc. of the 33rd Annual International Conference of the IEEE EMBS (EMBC 2011)*, pp.6100–6103, 2011
[doi:10.1109/IEMBS.2011.6091507]

53. Y. Tomita, Y. Mitsukura, T. Tanaka, and J. Cao, "Dimension reduction of RCE signal by PCA and LPP for stimulation of the sleeping," in *Proc. of International Symposium on Neural Networks (ISNN 2011)*, Part III, LNCS 6677, pp. 306-312, May 2011
[doi:10.1007/978-3-642-21111-9_34]
54. H. Higashi and T. Tanaka, "Classification by weighting for spatio-frequency components of EEG signal during motor imagery," in *Proc. of 2011 IEEE International Conference on Acoustics, Speech, and Signal Processing (ICASSP 2011)*, pp.585–588, May 2011
[doi:10.1109/ICASSP.2011.5946471]
55. S. Kon, T. Tanaka, H. Mizutani, and M. Wada, "A machine learning based approach to weather parameter estimation in Doppler weather radar," in *Proc. of 2011 IEEE International Conference on Acoustics, Speech, and Signal Processing (ICASSP 2011)*, pp.2152–2155, May 2011
[doi:10.1109/ICASSP.2011.5946753]
56. R. M. Chong and T. Tanaka, "Detection of motion blur direction based on maxima locations for blind deconvolution," in *Proc. SPIE 7870, Image Processing: Algorithms and Systems IX, 78700V*, San Francisco Airport, California, USA, Jan. 23, 2011
[doi:10.1117/12.872232]
57. F. B. Vialatte, M. Maurice, T. Tanaka, Y. Yamaguchi, and A. Cichocki, "Analyzing steady state visual evoked potentials using blind source separation," in *Proc. the Second APSIPA Annual Summit and Conference*, pp.578–582, Biopolis, Singapore, 14-17 Dec. 2010
58. T. M. Rutkowski, T. Tanaka, Q. Zhao, and A. Cichocki, "Spatial auditory BCI/BMI paradigm—Multichannel EMD approach to brain responses estimation," in *Proc. the Second APSIPA Annual Summit and Conference*, pp.197–202, Biopolis, Singapore, 14-17 Dec. 2010
59. G. Hori and T. Tanaka, "Pivoting in Cayley transform-based optimization on orthogonal groups," in *Proc. the Second APSIPA Annual Summit and Conference*, pp.181–184, Biopolis, Singapore, 14-17 Dec. 2010
60. T. M. Rutkowski, A. W. Przybyszewski, T. Tanaka, D. Mandic, A. Cichocki, "A new method of EEG analysis—data driven EMD," Program No.343.18/G49, Neuroscience 2010 Abstracts. San Diego, CA: Society for Neuroscience, Nov. 13–17, 2010.
61. Y. Washizawa, H. Higashi, T. M. Rutkowski, T. Tanaka, A. Cichocki, "Tensor based simultaneous feature extraction and sample weighting for EEG classification," in *Proc. of the 15th International Conference on Neural Information Processing (ICONIP 2010)*, vol.2, pp.26–33, Sydney, Australia, Nov. 2010
62. H. Bakardjian, T. Tanaka, and A. Cichocki, "Brain control of robotic arm using affective steady-state visual evoked potentials," in *Proc. IASTED International Conference on Human-Computer Interaction (IASTED-HCI 2010)*, pp.264–270, Maui, Hawaii, USA, Aug. 23–25, 2010
63. Q. Shi, W. Zhou, J. Cao, D. P. Mandic, T. Tanaka, T. M. Rutkowski, and R. Wang, "An auditory oddball based brain-computer interface system using multivariate EMD," in *Proc. 6th International Conference on Intelligent Computing (ICIC 2010)*, vol.6216 of *Lecture Notes in Computer Science*, Changsha, China, pp.140–148, Aug. 2010
64. R. M. Chong, and T. Tanaka, "Blur identification based on maxima locations for color image restoration," in *2010 4th International Conference on Multimedia and Ubiquitous Engineering*, no. 02–04, Aug. 2010

65. H. Higashi, T. Tanaka, and Y. Mitsukura, “Rhythmic component extraction considering phase alignment and the application to motor imagery-based brain computer interfacing,” in *Proc. of the 2010 International Joint Conference on Neural Networks (IJCNN 2010)*, pp.3508–3513, Barcelona, Spain, July 2010
66. Y. Tomita, S. Ito, Y. Mitsukura, T. Tanaka, J. Cao, “EEG frequency analysis for dozing detection system,” in *Proc. of the 2010 International Joint Conference on Neural Networks (IJCNN 2010)*, pp.1715–1718, Barcelona, Spain, July 2010
67. G. Hori and T. Tanaka, “Finding initial values for time-varying joint diagonalization,” *Proc. of 2010 IEEE International Conference on Acoustics, Speech, and Signal Processing (ICASSP 2010)*, pp.2018–2021, Dallas, USA, Mar. 2010.
68. Md. K. I. Molla, T. Tanaka, T. M. Rutkowski, and A. Cichocki, “Seperation of EOG artifacts from EEG signals using bivariate EMD,” in *Proc. of 2010 IEEE International Conference on Acoustics, Speech, and Signal Processing (ICASSP 2010)*, pp.562–565, Dallas, USA, Mar. 2010.
69. M. Nakanishi, Y. Mitsukura, T. Tanaka, S. Miwa, and H. Nakajo, “Extraction of horns in a noisy environment by EMD,” in *Proc. of 2010 RISP International Workshop on Nonlinear Circuits and Signal Processing (NCSP 2010)*, pp.333–336, Mar. 2010
70. H. Yoneda and T. Tanaka, “Smoke detection from images using Adaboost,” in *Proc. of 2010 RISP International Workshop on Nonlinear Circuits and Signal Processing (NCSP2010)*, pp.508–511, Mar. 2010
71. H. Tanouchi and T. Tanaka, “An adaptive algorithm for generalized eigen-decomposition using sliding window,” in *Proc. of 2010 RISP International Workshop on Nonlinear Circuits and Signal Processing (NCSP2010)*, pp.620–623, Mar. 2010
72. K. Iwamoto, H. Inoue, T. Matsubara, and T. Tanaka, “Cigarette smoke detection from captured image sequences,” in *Proc. of Electronic Imaging 2010*, vol. 7538, pp.753813-1–753813-10, San Jose, USA, Jan. 2006 [[doi:10.1117/12.840133](https://doi.org/10.1117/12.840133)] [[PDF](#)]
73. T. Tanaka, H. Higashi, and Y. Saito, “Rhythmic component extraction for EEG signals with reduced computational complexity,” in *Proc. of 2009 IEEE International Symposium on Biomedical Engineering (ISBME 2009)*, No.1054, Bangkok, Thailand, Dec. 2009
74. G. Hori and T. Tanaka, “Extension of joint diagonalization for moving targets,” in *The Third International Workshop on Computational Advances in Multi-Sensor Adaptive Processing (CAMSAP 2009)*, pp.309–311, Aruba, Dec. 2009
75. T. M. Rutkowski, Q. Zhao, A. Cichocki, T. Tanaka, and D. P. Mandic, “Towards affective BCI/BMI paradigms – analysis of fEEG and fNIRS brain responses to emotional speech and facial videos,” in *Advances in Cognitive Neurodynamics: Proc. of the International Conference on Cognitive Neurodynamics (ICCN 2009)*, Hangzhou, China, 2009
76. H. Higashi, T. Rutkowski, Y. Washizawa, T. Tanaka, and A. Cichocki, “Imagery movement paradigm user adaption improvement with quasi-movements phenomenon,” in *Advances in Cognitive Neurodynamics: Proc. of the International Conference on Cognitive Neurodynamics (ICCN 2009)*, Hangzhou, China, 2009 (in print)

77. Y. Tomita, S. Ito, Y. Mitsukura, T. Tanaka, J. Cao, “The extraction of sleep quality by using the multi-channel EEG signal,” in *Proc. of 2009 APSIPA Annual Summit and Conference*, pp.174–177, Sapporo, Japan, Oct. 2009
78. Y. Tomita, Y. Mitsukura, T. Tanaka, J. Cao, “Analysis of the EEG during the sleeping by the rhythmic component extraction,” in *Proc. of 18th IEEE International Symposium on Robot and Human Interactive Communication (RO-MAN 2009)*, pp.1054–1059, Toyama, Japan, Sept. 2009.
79. T. M. Rutkowski, T. Tanaka, A. Cichocki, D. Erickson, and D. P. Mandic, “Interactive components extraction from fEEG and fNIRS for affective brain machine interfacing paradigms,” in *Proc. 5th International Conference on Intelligent Computing (ICIC 2009)*, vol.5755 of *Lecture Notes in Computer Science*, Ulsan, Korea, Sept. 2009 (Best Paper Award)
80. Q. Shi, J. Yang, J. Cao, T. Tanaka, T. M. Rutkowski, R. Wang and H. Zhu, “EMD based power spectral pattern analysis for quasi-brain-death EEG,” in *Proc. 5th International Conference on Intelligent Computing (ICIC 2009)*, vol.5755 of *Lecture Notes in Computer Science*, Ulsan, Korea, Sept. 2009
81. H. Higashi, T. Tanaka, and A. Funase, “Classification of single trial EEG during imagined hand movement by rhythmic component extraction,” in *Proc. of the 31st Annual International IEEE EMBS Conference (EMBC 2009)*, pp.2482–2485, Minneapolis, USA, Sept. 2009
82. T. Tanaka, R. Miyamoto, and R. M. Chong, “Super-resolution based on blind deconvolution using similarity of power spectra,” in *Proc. of the third ACM/IEEE International Conference on Distributed Smart Cameras (ICDSC 2009)*, Como, Italy, 30 Aug.–2 Sept., 2009
83. S. Fiori and T. Tanaka, “Learning averages over the Lie group of symmetric positive-definite matrices,” in *Proc. of The 2009 International Joint Conference on Neural Networks (IJCNN 2009)*, Atlanta, USA, June 2009
84. S. Fiori and T. Tanaka, “Learning-machines-committee averages over the unitary group of matrices,” in *Proc. of the 2009 IEEE International Symposium on Circuits and Systems (ISCAS 2009)*, pp.2777–2781, Taipei, Taiwan, May 2009.
85. T. Rutkowski, A. Cichocki, T. Tanaka, D. P. Mandic, J. Cao, and A. L. Ralescu, “Multichannel spectral pattern separation—An EEG processing application,” in *Proc. of 2009 IEEE International Conference on Acoustics, Speech, and Signal Processing (ICASSP 2009)*, pp.373–376, Taipei, Taiwan, Apr. 2009. (採択率 44.7 %)
86. Y. Saito, T. Tanaka and H. Higashi, “Adaptive rhythmic component extraction with regularization for EEG data analysis,” in *Proc. of 2009 IEEE International Conference on Acoustics, Speech, and Signal Processing (ICASSP 2009)*, pp.353–356, Taipei, Taiwan, Apr. 2009. (採択率 44.7 %)
87. O. A. Omer and T. Tanaka, “Region-based weighted-norm approach to video super-resolution with adaptive regularization,” in *Proc. of 2009 IEEE International Conference on Acoustics, Speech, and Signal Processing (ICASSP 2009)*, pp.833–836, Taipei, Taiwan, Apr. 2009. (採択率 44.7 %)
88. Y. Tomita, S.-I. Ito, Y. Mitsukura, T. Tanaka, J. Cao, “Rhythmic component extraction for sleeping electroencephalogram analysis,” in *Proc. of 2009 RISP International Workshop on Nonlinear Circuits and Signal Processing (NCSP 2009)*, pp. 443–446, Hawaii, USA, Mar. 2009

89. T. Rutkowski, A. Cichocki, T. Tanaka, D. Mandic, J. Cao, "Multichannel spectral pattern separation – A nonlinear approach to EEG signals from interferences separation in frequency domain," in *Proc. of 2009 RISP International Workshop on Nonlinear Circuits and Signal Processing (NCSP 2009)*, pp. 439–442, Hawaii, USA, Mar. 2009
90. Y. Saito and T. Tanaka, "Rhythmic component extraction for phase shifted multi-channel signals," in *Proc. of 2009 RISP International Workshop on Nonlinear Circuits and Signal Processing (NCSP 2009)*, pp. 427–430, Hawaii, USA, Mar. 2009 (Student Paper Award)
91. H. Inoue and T. Tanaka, "Image-based smoke detection with k -subspaces clustering," in *Proc. of 2009 RISP International Workshop on Nonlinear Circuits and Signal Processing (NCSP 2009)*, pp. 321–324, Hawaii, USA, Mar. 2009
92. T. Tanaka, K. Makino, R. Miyamoto, and R. M. Chong, "Blind image deconvolution based on similarity measure of power spectra," in *Proc. of 2009 RISP International Workshop on Nonlinear Circuits and Signal Processing (NCSP 2009)*, pp. 273–276, Hawaii, USA, Mar. 2009
93. O. A. Omer and T. Tanaka, "Region-based super resolution for video sequences considering registration error," in *Proc. of the 3rd Pacific-Rim Symposium on Image and Video Technology*, Tokyo, Japan, pp.944–954, vol.5414 of *Lecture Notes in Computer Science*, Jan. 2009
94. N. Koshikawa, T. Murakami, and T. Tanaka, "Pitch shifting of music based on adaptive order estimation of linear predictor," in *Proc. of 9th Pacific-Rim Conference on Multimedia (PCM 2008)*, Tainan, Taiwan, vol. 5353 of *Lecture Notes in Computer Science*, Dec. 2008.
95. R. M. Chong, and T. Tanaka, "Image extrema analysis and blur detection with identification," in *Proc. of the Fourth International Conference on Signal-Image Technology and Internet-Based Systems (SITIS 2008)*, pp. 320–326, Bali, Indonesia, Dec. 2008
[\[doi:10.1109/SITIS.2008.38\]](https://doi.org/10.1109/SITIS.2008.38) [\[PDF\]](#)
96. T. M. Rutkowski, A. Cichocki, T. Tanaka, A. L. Ralescu, and D. P. Mandic, "Clustering of spectral patterns based on EMD components of EEG channels with applications to neurophysiological signals separation," in *Proc. of the 15th International Conference on Neural Information Processing (ICONIP 2008)*, Auckland, New Zealand, vol. 5506 of *Lecture Notes in Computer Science*, Nov. 2008
97. S. Fiori and T. Tanaka, "An averaging method for a committee of special-orthogonal-group machines," in *Proc. of the 2008 IEEE International Symposium on Circuits and Systems (ISCAS 2008)*, pp.2170–2173, Seattle, USA, May 2008. (採択率 46 %)
98. T. Tanaka and Y. Saito, "Rhythmic component extraction for multi-channel EEG data analysis," in *Proc. of 2008 IEEE International Conference on Acoustics, Speech, and Signal Processing (ICASSP 2008)*, pp. 425–428, Las Vegas, USA, Apr. 2008. (採択率 49.5 %)
99. O. A. Omer and T. Tanaka, "Joint blur identification and high-resolution image estimation based on weighted mixed-norm with outlier rejection," in *Proc. of 2008 IEEE International Conference on Acoustics, Speech, and Signal Processing (ICASSP 2008)*, pp. 1305–1308, Las Vegas, USA, Apr. 2008. (採択率 49.5 %)
100. O. A. Omer and T. Tanaka, "Multiframe image and video super-resolution algorithm with inaccurate motion registration errors rejection," in *Visual Communications and Image Processing (VCIP) 2008*, vol. 6822, pp. 682222-1–682222-9, San Jose, CA, Jan. 2008

101. O. A. Omer and T. Tanaka, "Image demosaicking based on chrominance regularization with region-adaptive weights," in *Proc. of the Sixth International Conference on Information, Communications and Signal Processing (ICICS 2007)*, P0474, Singapore, Dec. 2007
102. O. A. Omer and T. Tanaka, "Robust image registration based on local standard deviation and image intensity," in *Proc. of the Sixth International Conference on Information, Communications and Signal Processing (ICICS 2007)*, P0613, Singapore, Dec. 2007
103. Y. Saito, T. Tanaka, J. Cao, and D. P. Mandic, "Quasi-brain-death EEG data analysis by empirical mode decomposition," in *Advances in Cognitive Neurodynamics: Proc. of the International Conference on Cognitive Neurodynamics (ICCN 2007)*, Shanghai, China, 2007
104. Y. Washizawa, Y. Yamashita, T. Tanaka, and A. Cichocki, "Extraction of steady state visually evoked potential signal and estimation of distribution map from EEG data," in *Proc. of the 35th Annual International IEEE EMBS Conference (EMBC 2007)*, pp. 5449–5452, Lyon, France, 2007
105. G. Souretis, D. P. Mandic, M. Grisseli, T. Tanaka and M. V. Hulle, "Blood volume signal analysis with empirical mode decomposition," in *Proc. of the 15th International Conference on Digital Signal Processing (DSP2007)*, pp. 147–150, Cardiff, UK, July 2007
106. T. Tanaka and S. Fiori, "Least squares approximate joint diagonalization on the orthogonal group," in *Proc. of 2007 IEEE International Conference on Acoustics, Speech, and Signal Processing (ICASSP 2007)*, vol. II, pp. 649–652, Hawaii, USA, Apr. 2007
107. M. Altaf, T. Gautama, T. Tanaka and D. Mandic, "Rotation invariant complex empirical mode decomposition," in *Proc. of 2007 IEEE International Conference on Acoustics, Speech, and Signal Processing (ICASSP 2007)*, vol. III, pp. 1009–1012, Hawaii, USA, Apr. 2007
108. S. Komeiji and T. Tanaka, "A direct design of oversampled perfect reconstruction bandpass FIR filterbanks with real coefficients," in *Proc. of 2007 RISP International Workshop on Nonlinear Circuits and Signal Processing (NCSP 2007)*, pp. 611–614, Shanghai, China, Mar. 2007 (Student Paper Award)
109. O. A. Omer and T. Tanaka, "Super-resolution based on region-matching motion estimation," in *Visual Communications and Image Processing 2007*, vol. 6508, pp. 10-1–10-11, San Jose (CA), USA, Feb. 2007
110. O. A. Omer and T. Tanaka, "Region-based sub-pixel motion estimation from noisy, blurred, and down-sampled sequences," in *Proc. of the 2006 Pacific-Rim Conference on Multimedia (PCM 2006)*, vol. 4261 of *Lecture Notes in Computer Science*, pp.229–236, Hanzhou, China, 2006.
111. Y. Washizawa, T. Tanaka, D. P. Mandic, and A. Cichocki, "A flexible method for envelope estimation in empirical mode decomposition," in *10th International Conference on Knowledge-Based & Intelligent Information & Engineering Systems (KES 2006)*, vol. 4253 of *Lecture Notes in Artificial Intelligence*, pp. 1248–1255, Bournemouth, UK, Oct. 2006
112. T. Tanaka, Y. Murakami, and F. Theis, "A fast predictive lossless coder for fMRI data sets," in *2006 IEEE International Conference on Image Processing (ICIP 2006)*, pp. 2529–2532, Atlanta, USA, Oct. 2006
113. T. Murakami, T. Tanaka, and Y. Ishida, "A fast algorithm for ICA deduced from a closed-form solution of kurtosis maximization," in *Proc. of 2006 IEEE International Workshop on Machine Learning for Signal Processing (MLSP 2006)*, pp. 223–228, Maynooth, Ireland, Sept. 2006

114. Y. Wongsawat, S. Orintara, T. Tanaka, and K. R. Rao, "Lossless multi-channel EEG compression," in *Proc. of 2006 IEEE International Symposium on Circuits and Systems (ISCAS 2006)*, pp. 1611–1614, Island of Kos, Greece, May 2006
115. T. Tanaka and S. Fiori, "Simultaneous tracking of the best basis in reduced-rank Wiener filter," in *Proc. of 2006 IEEE International Conference on Acoustics, Speech, and Signal Processing (ICASSP 2006)*, vol. III, pp. 548–551, Toulouse, France, May 2006
116. F. J. Theis and T. Tanaka, "Sparseness by iterative projections onto spheres," in *Proc. of 2006 IEEE International Conference on Acoustics, Speech, and Signal Processing (ICASSP 2006)*, vol. V, pp. 709–712, Toulouse, France, May 2006
117. K. Yabuta, H. Kitazawa, and T. Tanaka, "A new concept of real-time security camera monitoring with privacy protection by masking moving objects," in *Proc. of Electronic Imaging 2006*, vol. 6063, San Jose, USA, Jan. 2006
118. K. Yabuta, H. Kitazawa, and T. Tanaka, "A new concept of security camera monitoring with privacy protection by masking moving objects," in *Proc. of the 2005 Pacific-Rim Conference on Multimedia (PCM 2005)*, vol. 3767 of *Lecture Notes in Computer Science*, pp. 831–842, Jeju, Korea, Nov. 2005
119. F. J. Theis, and T. Tanaka, "A fast and efficient method for compressing fMRI data sets," in *the Proc. of International Conference on Artificial Neural Networks (ICANN 2005)*, vol. 3697 of *Lecture Notes in Computer Science*, pp. 769–777, Warsaw, Poland, Sept. 2005
120. F. J. Theis, K. Stadlthanner, and T. Tanaka, "First results on uniqueness of sparse non-negative matrix factorization," in *the Proc. of 13th European Signal Processing Conference (EUSIPCO 2005)*, MonAmOR9, Antalya, Turkey, Sept. 2005
121. T. Tanaka, "Optimal design for synthesis filters of oversampled uniform perfect reconstruction filter banks with 50% overlapping," in *the Proc. of 2005 IEEE International Conference on Image Processing (ICIP 2005)*, vol. I, pp. 477–480, Genova, Italy, Sept. 2005
122. T. Tanaka and D. P. Mandic, "A direct design framework for a class of oversampled perfect reconstruction filter banks," in *the Proc. of International Symposium on Communications and Information Technologies 2004 (ISCIT 2004), Special Session: Filter Banks & Wavelets, 29AM2F-3 (CD-ROM)*, Sapporo, Japan, Oct. 2004
123. T. Tanaka and L. Duval, "Noise reduction of images with multiple subband transforms," in *the Proc. of 2004 IEEE International Conference on Image Processing (ICIP 2004)*, vol. II, pp. 1209–1212, Singapore, Oct. 2004
124. T. Tanaka, "Generalized subspace rules for on-line PCA and their application in signal and image compression," in *the Proc. of 2004 IEEE International Conference on Image Processing (ICIP 2004)*, vol. II, pp. 1895–1898, Singapore, Oct. 2004
125. S. L. Goh, Z. Babic, D. Popovic, T. Tanaka, and D. Mandic, "Complex-valued neural network schemes for online processing of wind signal," in *the Proc. Seventh Seminar on Neural Network Applications in Electrical Engineering (Neurel 2004)*, pp. 249–253, Belgrade, Yugoslavia, Sept. 23–25, 2004

126. J. Karvanen and T. Tanaka, “Temporal decorrelation as preprocessing for linear and post-nonlinear ICA,” in *Independent Component Analysis and Blind Signal Separation (Fifth International Conference, ICA2004, Granada, Spain, September 2004 Proc.)*, vol. 3195 of *Lecture Notes in Computer Science*, pp. 774–781, Sept. 22–24, 2004
127. Z. Leonowicz, J. Karvanen, T. Tanaka, and J. Rezmer, “Model order selection criteria: comparative study and applications,” in *the Proc. of the VIth International Workshop “Computational Problems of Electrical Engineering” (CPEE 2004)*, pp. 193–196, Zakopane, Poland, Sept. 2004
128. T. Tanaka and Y. Yamashita, “On perfect reconstruction with lost channel data in lapped pseudo-orthogonal transform,” in *the Proc. of 12th European Signal Processing Conference (EUSIPCO 2004)*, pp. 877–880, Vienna, Austria, Sept. 2004
129. T. Hoya, T. Tanaka, T. Murakami and A. Cichocki, “Stereophonic noise reduction by a combined multi-stage sliding subspace projection and adaptive signal enhancement,” in *the Proc. of IFAC Workshop on Adaptation and Learning in Control and Signal Processing (ALCOSP 04)*, pp. 421–426, Yokohama, Japan, Aug. 30–Sept. 1, 2004
130. Y. Washizawa, K. Hikida, T. Tanaka, and Y. Yamashita, “Kernel relative principal component analysis for pattern recognition,” in *Structural, Syntactic, and Statistical Pattern Recognition (Joint IAPR International Workshops, SSPR 2004 and SPR 2004)*, vol. 3138 of *Lecture Notes in Computer Science*, pp. 1105–1113, Lisbon, Portugal, August 18–20, 2004
131. T. Tanaka and A. Cichocki, “Subband decomposition independent component analysis and new performance criteria,” in *Proc. of 2004 IEEE International Conference on Acoustics, Speech, and Signal Processing (ICASSP 2004)*, vol. V, pp. 541–544, Montreal, Canada, May 2004 (採択率 49.1 %)
132. T. Tanaka, Y. Hirasawa and Y. Yamashita, “A novel class of variable-length lapped transform for image coding,” in *Proc. of 2003 IEEE International Conference on Image Processing (ICIP 2003)*, vol. I, pp. 649–652, Barcelona, Spain, Sept. 2003 (採択率 43.5 %)
133. T. Tanaka, T. Saito and Y. Yamashita, “Projection-based time-varying subband image coding,” in *Proc. of 2003 IEEE International Conference on Image Processing (ICIP 2003)*, vol. III, pp. 201–204, Barcelona, Spain, Sept. 2003 (採択率 43.5 %)
134. L. Duval and T. Tanaka, “Denoising of seismic signals with oversampled filter banks,” in *Proc. of 2003 IEEE International Conference on Acoustics, Speech, and Signal Processing (ICASSP 2003)*, vol. VI, pp. 189–192, Hong Kong, Apr. 2003 (採択率 54.3 %)
135. T. Hoya, A. Cichocki, T. Tanaka, G. Hori, T. Murakami, and J. A. Chambers, “A combined cascading subspace and adaptive signal enhancement method for stereophonic noise reduction,” in *Proc. of the Forth International Symposium on Independent Component Analysis and Blind Signal Separation (ICA 2003)*, pp. 573–578, Nara, Apr. 2003 (採択率 不明)
136. T. Tanaka and Y. Yamashita “Noise robust oversampled linear phase perfect reconstruction filter bank with a lattice structure,” in *Proc. of 2002 IEEE International Conference on Image Processing (ICIP 2002)*, vol. I, pp. 377–380, Rochester, NY, Sept. 2002 (採択率 58.3 %)

137. T. Tanaka and Y. Yamashita, “The generalized lapped pseudo-biorthogonal transform,” in *Proc. of 2002 IEEE International Conference on Acoustics, Speech, and Signal Processing (ICASSP 2002)*, vol. II, pp. 1273–1276, Orlando, May 2002 (採択率 56.9 %)
138. T. Tanaka and Y. Yamashita, “The orientation adaptive lapped biorthogonal transform for efficient image coding,” in *Proc. of 2001 IEEE International Conference on Image Processing (ICIP 2001)*, vol. III, pp. 214–217, Thessaloniki, Oct. 2001 (採択率 51.5 %)
139. T. Tanaka and Y. Yamashita, “A biorthogonal transform with overlapping and non-overlapping basis functions for image coding,” in *Proc. of 2001 IEEE International Conference on Acoustics, Speech, and Signal Processing (ICASSP 2001)*, vol. III, pp. 1705–1708, Salt Lake City, May 2001 (採択率 50.9 %)
140. T. Tanaka and Y. Yamashita, “The orientation adaptive lapped orthogonal transform for image coding,” in *Proc. of 2000 IEEE International Conference on Image Processing (ICIP 2000)*, vol. III, pp. 829–832, Vancouver, Sept. 10–13, 2000 (採択率 不明)
141. T. Tanaka and Y. Yamashita, “An iterative deblocking method using 2-D directional FIR filters,” in *Proc. of 2000 International Technical Conference on Circuits/Systems, Computers, and Communications (ITC-CSCC 2000)*, vol. 1, pp. 46–49, Pusan, July 11–13, 2000 (採択率 不明)
142. T. Tanaka and Y. Yamashita, “Image coding using vector-embedded Karhunen-Loeve transform,” in *Proc. of 1999 IEEE International Conference on Image Processing (ICIP '99)*, vol. 2, pp. 482–486, Kobe, Oct. 25–28, 1999
[doi:10.1109/ICIP.1999.821656]
143. E.-S. Kang, T. Tanaka, T.-H. Lee, and S.-J. Ko, “A multi-threshold embedded zerotree wavelet coder,” in *Proc. of International Technical Conference on Circuits/Systems, Computers, and Communications '98 (ITC-CSCC '98)*, pp. 117–120, Sokcho, Korea, July 1998 (採択率 不明)

6 国内講演発表/Domestic Conference Papers

6.1 査読あり/Refereed

1. T. Rutkowski, A. Cichocki, D. Erickson, T. Tanaka, and D. Mandic, “Multimodal fEEG and fNIRS analysis of human emotional responses,” in *Neuroscience Research*, vol. 65, no. Supplement 1, S130, (第 32 回日本神経科学大会 (Neuroscience 2009)), Sept. 2009
2. 岩本健太郎, 松原徹, 井上裕功, 田中聡久, “画像認識を用いた煙検出システム,” 第 15 回画像センシングシンポジウム講演論文集, IS2-28, 横浜, Jun. 2009
3. 井上裕功, 田中聡久, “固定カメラを用いた煙の検出,” 第 14 回画像センシングシンポジウム講演論文集, IN2-22, 横浜, Jun. 2008
4. 鷺澤嘉一, 疋田謙司, 田中聡久, 山下幸彦, “カーネル相対主成分分析による多クラスパターン認識,” 情報技術レターズ (2003 年情報科学技術フォーラム論文集), pp. 207–208, 札幌学院大学, Sept. 10–12 2003

6.2 査読無し/Not Refereed

1. 末房 佳小里, 森川 直樹, 田中聡久, “マルチセット正準相関分析による定常的視覚誘発電位の周波数と位相の識別,” 第 55 回日本生体医工学会大会 抄録集, Vol.54Annual, No. 27PM-Abstract, p.S198, 富山, 2016 年 4 月 26 日~28 日.
[doi:10.11239/jsmbe.54Annual.S198]
2. 伊知地敦大, 齊藤大志, 花房由香, 田中聡久, “運動療法介入前後における脳波の解析,” 第 55 回日本生体医工学会大会 抄録集, Vol.54Annual, No. Proc., pp.P2-M02-1-P2-M02-2, 富山, 2016 年 4 月 26 日~28 日.
[doi:10.11239/jsmbe.54Annual.P2-M02-1]
3. 中里優理, 田中聡久, “「ゆるキャラ」の画像と名前を用いた人気解析,” 信学技報, vol. 115, no. 522, SIP2015-185, pp. 391-396, 別府, 2016 年 3 月.
4. 小島惇史, 安富優, 田中聡久, “ノンパラメトリックベイズモデルに基づくスパースカーネル回帰,” 信学技報, vol. 115, no. 522, SIP2015-175, pp. 335-340, 別府, 2016 年 3 月.
5. 和田智也, 田中聡久, “マルチカーネル適応フィルタのための効果的な辞書学習,” 電子情報通信学会第 30 回信号処理シンポジウム論文集, pp. 105-110, いわき, 2015 年 11 月
6. 安富優, 田中聡久, “サンプルを中心とした混合分布モデルに基づいたクラスタリング,” 電子情報通信学会第 30 回信号処理シンポジウム論文集, pp. 74-79, いわき, 2015 年 11 月
7. 森川直樹, 田中聡久, “空間フィルタのスパース化による定常的視覚誘発電位の周波数・位相同時識別,” 電子情報通信学会第 30 回信号処理シンポジウム論文集, pp. 70-71, いわき, 2015 年 11 月
8. 末房佳小里, 田中聡久, “マルチセット正準相関分析による定常的視覚誘発電位の周波数識別,” 電子情報通信学会第 30 回信号処理シンポジウム論文集, pp. 68-69, いわき, 2015 年 11 月
9. 上原隆志, 田中聡久, “グラフスペクトル解析による次元削減と接空間による運動想像時脳波の識別,” 電子情報通信学会第 30 回信号処理シンポジウム論文集, pp. 66-67, いわき, 2015 年 11 月
10. 上川侑祐, 田中聡久, “後部頭頂皮質における運動意図に関連した脳活動の抽出に向けた一検討,” 生体医工学 (第 54 回日本生体医工学会大会 抄録集), vol.53, pp.S438-S439, 名古屋, 2015 年 5 月 7 日~9 日. [doi:10.11239/jsmbe.53.S438]
11. 末房佳小里, 田中聡久, “位相空間における正準相関分析を利用した非同期脳コンピュータインタフェース,” 信学技報, vol. 114, no. 474, SIP2014-141, pp. 151-156, ホテルミヤヒラ (石垣島) 2015 年 3 月.
12. 安富 優, 田中聡久, “Probability simplex の l_2 正則化に基づく凸クラスタリングのスパース化と高速化,” 信学技報, vol. 114, no. 474, SIP2014-137, pp. 127-132, ホテルミヤヒラ (石垣島) 2015 年 3 月.
13. 長 辰彦, 田中聡久, “選択的注意を用いた聴性脳コンピュータインタフェースにおける特徴抽出,” 信学技報, vol. 114, no. 474, SIP2014-135, pp. 115-120, ホテルミヤヒラ (石垣島) 2015 年 3 月.
14. 森川直樹, 田中聡久, “QPSK 視覚刺激を用いた脳コンピュータインタフェース,” 電子情報通信学会第 29 回信号処理シンポジウム論文集, pp. 302-305, 京都, 2014 年 11 月

15. 新保圭太, 田中聡久, “多チャンネル SSVEP の位相識別のためのスパースな空間フィルタ設計,” 電子情報通信学会第 29 回信号処理シンポジウム論文集, pp. 307–310, 京都, 2014 年 11 月
16. 富田尚規, 山岸昌夫, 山田功, 田中聡久, “Multi-class classification for motor-imagery EEG signals with a reduced rank estimation technique,” 電子情報通信学会第 29 回信号処理シンポジウム論文集, pp. 114–115, 京都, 2014 年 11 月
17. 石田泰一, 田中聡久, “Kernel adaptive filtering with efficient construction of dictionaries,” 電子情報通信学会第 29 回信号処理シンポジウム論文集, pp. 254–258, 京都, 2014 年 11 月
18. 石田泰一, 田中聡久, “カーネル適応フィルタにおける複数のカーネル辞書のスパース構成法,” 信学技報, vol. 114, no. 124, SIP2014-56, pp. 183-188, 北海道大学, 2014 年 7 月.
19. 末房佳小里, 新保圭太, 田中聡久, “非同期脳コンピュータインタフェースにおけるユーザ依存のパラメータ選択法,” 信学技報, vol. 114, no. 124, SIP2014-55, pp. 177-181, 北海道大学, 2014 年 7 月.
20. 森川直樹, 田中聡久, “位相偏移変調を用いた視覚刺激 BCI の復調方法における一検討,” 信学技報, vol. 114, no. 124, SIP2014-54, pp. 171-176, 北海道大学, 2014 年 7 月.
21. 前田修一, 平林 晃, 田中聡久, “単語音声刺激に対する P300 検出の雑音耐性に関する研究,” 信学技報, vol. 114, no. 39, SIP2014-10, pp. 49-54, 名古屋工業大学, 2014 年 5 月
22. 森川直樹, 田中聡久, “PSK 変調を用いた視覚刺激による脳コンピュータインタフェース,” 2014 年電子情報通信学会総合大会講演論文集, p.67, 新潟大学, Mar. 2014
23. 萩原貴弘, 森川直樹, 田中聡久, “2T-EMD による多チャンネル脳波からの事象関連電位の抽出,” 2014 年電子情報通信学会総合大会講演論文集, p.68, 新潟大学, Mar. 2014
24. 長辰彦, 田中聡久, “選択的注意を用いた聴性脳コンピュータインタフェース,” 信学技報, vol. 113, no. 464, SIP2013-176, pp.233–238, 2014 年 3 月
25. 安富優, 田中聡久, “混合 von Mises–Fisher モデルの Gauss 分布を介したパラメータ推定,” 信学技報, vol. 113, no. 464, SIP2013-175, pp.227–232, 2014 年 3 月.
26. 前田 修司, 村川 絵理奈, 平林 晃, 田中聡久, “聴覚刺激に対する P300 検出における雑音耐性評価,” 第 28 回信号処理シンポジウム論文集, pp.**-**, 下関, Nov. 2013
27. 東広志, 田中聡久, “運動想像脳波識別のための空間パターンの類似性による帯域選択,” 第 28 回信号処理シンポジウム論文集, pp.485–486, 下関, Nov. 2013
28. 末房佳小里, 田中聡久, “コマンド入力インタフェースにおける視線位置と脳波利用の性能評価,” 第 28 回信号処理シンポジウム論文集, pp. 100–105, 下関, Nov. 2013.
29. N. Tomida, M. Yamagishi, I. Yamada, and T. Tanaka, “A reduced rank estimation of covariance matrices for EEG classification,” 第 28 回信号処理シンポジウム論文集, pp.390–393, 下関, Nov. 2013.
30. 田中聡久, 富田尚規, 東広志, “脳波クラス分類のための疎性による能動的データ選択法” 信学技報, vol. 113, no. 191, SIP2013-84, pp. 97-102, 東京 2013 年 8 月.
31. 石田泰一, 田中聡久, “複数の辞書と正則化を用いた多カーネル適応フィルタ,” 信学技報, vol. 113, no. 27, SIP2013-19, pp.109–114, 2013 年 5 月.

32. 森川直樹, 木村陽介, 田中聡久, “位相偏移変調視覚刺激を用いた脳コンピュータインタフェース,” 2012年電子情報通信学会総合大会講演論文集, A-4-31, p.98, 2013年3月.
33. 富田尚規, 東広志, 田中聡久, “テンソル同時対角化によるサンプルの重み付けを用いた脳波識別,” 信学技報, vol. 112, no. 423, SIP2012-107, pp.153-158, 2013年2月.
34. 金子哲也, 田中聡久, Simone Fiori, “コンパクト Stiefel 多様体における混合 retraction/lifting を用いた平均演算,” 信学技報, vol. 112, no. 423, SIP2012-106, pp.147-152, 2013年2月.
35. 東広志, 田中聡久, “脳波識別のためのフィルタバンク・空間重み・時間窓の最適設計,” 第27回信号処理シンポジウム論文集, pp.235-240, 石垣市, Nov. 2012
36. 新保圭太, 田中聡久, “非線形回帰を用いた定常的視覚誘発電位のアイドル状態識別,” 第27回信号処理シンポジウム論文集, pp.229-234, 石垣市, Nov. 2012
37. 田中聡久, “カーネル部分空間追跡に関する一検討,” 信学技報, vol. 112, no. 115, SIP2012-38, pp.31-36, 2012年7月.
38. 東広志, 田中聡久, “運動想起中の脳波識別における時間窓のスパース化,” 信学技報, vol. 112, no. 115, SIP2012-34, pp.7-12, 2012年7月.
39. 根智志, 田中聡久, “変分ベイズ法を用いた混合フェージング信号の周波数推定,” 2012年電子情報通信学会総合大会 基礎・境界講演論文集, A-4-33, p.130, 2012年3月.
40. 田中聡久, 塩野光瑛, “減衰窓関数と重み対角行列を用いた一般化固有ベクトル追跡,” 2012年電子情報通信学会総合大会 基礎・境界講演論文集, A-4-14, p.111, 2012年3月.
41. 米田悠一郎, 田中聡久, “協調カーネル適応フィルタを用いた太陽光発電量の短時間先予測,” 信学技報, vol. 111, no. 466, SIP2011-182, pp. 309-314, 2012年3月.
42. 田村潤, 鷺沢嘉一, 東広志, 田中聡久, “音声刺激による聴覚ブレイン・コンピュータ・インタフェースの可能性,” 信学技報, vol. 111, no. 466, SIP2011-177, pp. 281-286, 2012年3月.
43. 田中聡久, “カーネル主成分追跡の適応アルゴリズム,” 信学技報, vol. 111, no. 403, SIP2011-101, pp.133-137, 2012年1月
44. 金子哲也, 田中聡久, Simone Fiori, “コンパクト Stiefel 多様体上の平均演算,” 信学技報, vol. 111, no. 403, SIP2011-91, pp. 79-84, 2012年1月
45. 木村陽介, 東広志, 田中聡久, “FSK 変調した視覚刺激による BCI,” 信学技報, vol. 111, no. 315, NC2011-80, pp. 47-52, 2011年11月.
46. 張誠, 木村陽介, 東広志, 田中聡久, “定常的視覚誘発電位に基づいたブレイン・コンピュータインタフェースにおける移動ロボットの制御,” 信学技報, vol. 111, no. 315, NC2011-79, pp. 41-46, 2011年11月.
47. 金子哲也, 田中聡久, Simone Fiori, “Stiefel 多様体における平均演算,” 第26回信号処理シンポジウム論文集, pp.216-221, 北海道, Nov. 2011
48. 小林正幸, 田中聡久, “複素適応フィルタを用いたドップラー気象レーダの干渉波除去,” 第26回信号処理シンポジウム論文集, pp.653-658, 北海道, Nov. 2011

49. 根智志, 田中聡久, “変分ベイズ法を用いた混合信号の周波数推定,” 第26回信号処理シンポジウム論文集, pp.602–607, 北海道, Nov. 2011
50. 張誠, 田中聡久, “Control of a mobile robot via wi-fi with an SSVEP-based BCI,” 第26回信号処理シンポジウム論文集, pp.471–476, 北海道, Nov. 2011
51. 東広志, Andrzej Cichocki, 田中聡久, “脳波電極間の距離情報を用いた正則化,” 第26回信号処理シンポジウム論文集, pp.497–502, 北海道, Nov. 2011
52. 東広志, 田中聡久, “脳波識別のための時空間フィルタバンクの最適設計,” 信学技報, vol. 111, no. 104, SIP2011-44, pp. 85-90, 2011年6月.
53. 根智志, 田中聡久, “ロバストな混合モデルによるドップラー気象レーダの気象データ推定,” 信学技報, vol. 111, no. 104, SIP2011-43, pp. 79-84, 2011年6月.
54. 吉岡瞬, 田中聡久, “JPEG符号器を用いた方向性適応画像符号化,” 2011年電子情報通信学会総合大会基礎・境界講演論文集, A-4-17, pp. 95, 2011年3月.
55. 木村陽介, 東広志, 田中聡久, “定常的視覚誘発電位を用いたデジタル通信,” 2011年電子情報通信学会総合大会基礎・境界講演論文集, A-4-27, pp. 105 2011年3月.
56. 東広志, 田中聡久, “運動想像時脳波識別のための FIR フィルタ設計法,” 2011年電子情報通信学会総合大会基礎・境界講演論文集, A-4-34, pp. 112, 2011年3月.
57. 金子哲也, 田中聡久, “Stiefel 多様体における平均演算,” 信学技報, vol. 110, no. 440, SIP2010-178, pp. 353-358, 2011年3月.
58. 東広志, 鷲沢嘉一, T. Rutkowski, 田中聡久, A. Cichocki, “定常的聴覚誘発電位を用いた脳コンピュータインターフェース,” 信学技報, vol.110, no.368, SIP2010-106, pp.221–226, 2011年1月
59. 東広志, 田中聡久, “運動想像時脳波の空間-周波数成分の重み付けによる識別,” 第25回信号処理シンポジウム論文集, pp.121–126, 奈良, Nov. 2010
60. 中西正樹, 満倉靖恵, 田中聡久, “二変量経験的モード分解を用いた時間周波数マスキングによる音源分離手法,” 第25回信号処理シンポジウム論文集, pp.410–413, 奈良, Nov. 2010
61. 根智志, 田中聡久, 水谷文彦, 和田将一, “観測信号の特徴を考慮した混合モデルによるドップラー気象レーダの気象データ推定,” 第25回信号処理シンポジウム論文集, pp.410–413, 奈良, Nov. 2010
62. 根智志, 大矢孟, 田中聡久, “混合モデルによるドップラー気象レーダの信号解析,” 信学技報, vol. 110, no. 88, SIP2010-35, pp.75-80, 2010年6月.
63. 田中聡久, 田内宏直, “減衰窓関数と射影近似による安定的な一般化固有ベクトル追跡,” 信学技報, vol. 110, no. 55, SIP2010-16, pp.91-96, 2010年5月.
64. 岩本健太郎, 田中聡久, “カーネル LMS アルゴリズムに基づく特徴量を用いた煙草の煙の検出,” 信学技報, vol. 109, no. 435, SIP2009-170, pp.247-248, 2010年3月.
65. 大矢孟, 水谷文彦, 和田将一, 田中聡久, “気象レーダにおける地形エコー除去装置の自動設計,” 信学技報, vol. 109, no. 435, SIP2009-171, pp.249-250, 2010年3月.

66. A. Sugiyama, O. Shimada, T. Nomura, and T. Tanaka, “A subjective evaluation method for two conflicting criteria,” 信学技報, vol. 109, no. 435, SIP2009-126, pp.17–22, 2010 年 3 月.
67. 石 奇衛, 曹 建庭, 田中聡久, “EMD technique for a motor imagery based BCI System,” 第 24 回信号処理シンポジウム論文集, pp.408–411, 鹿児島, Nov. 2009
68. 東 広志, 田中聡久, “脳コンピュータインターフェイスのための位相を用いた律動成分抽出法,” 第 24 回信号処理シンポジウム論文集, pp.402–407, 鹿児島, Nov. 2009
69. 木村陽介, 東 広志, 田中聡久, “BCI のための律動成分抽出を用いた定常的視覚誘発電位の観測法,” 信学技報, vol.109, no.280, NC2009–54, pp.23–28, 2009 年 11 月.
70. 岩淵奈穂子, 小田一之, 鈴木美穂, 田中聡久, 中村 俊, 小柴満美子, “個性的感性の神経工学的評価の試み ~ 脳波、心拍、体表温度計測と感情の相関解析 ~,” 信学技報, vol. 109, no. 253, TL2009–26, pp. 7–10, 2009 年 10 月
71. 富田洋平, 深井寛修, 満倉靖恵, 田中聡久, 曹建庭, “PCA と LPP を用いた睡眠脳波の律動成分の解析,” 電気学会 電子・情報・システム部門大会 講演論文集, pp.762–765, 2009 年 9 月
72. 田中聡久, 齊藤祐樹, 東 広志, “律動成分分析の適応高速アルゴリズムに関する一検討,” 信学技報, SIP2009–27, pp. 49–53, July 2009
73. 富田洋平, 伊藤伸一, 満倉靖恵, 田中聡久, 曹建庭, “適応律動成分抽出法を応用した睡眠脳波分析,” 電気学会産業計測制御研究会資料, IIC-09-154, pp.105–108, 2009
74. 深井寛修, 滝本裕則, 満倉靖恵, 田中聡久, 福見稔, “複数特徴に基づく見た目年齢推定,” 電気学会産業計測制御研究会資料, IIC-09-150, pp.85–89, 2009
75. 岩本健太郎, 井上裕功, 田中聡久, “画像認識による煙の検出のための特徴量に関する検討,” 信学技報, SIP2008–162, pp. 225–230, Jan. 2009
76. 大矢 孟, 田中聡久, “2 次元経験的モード分解を用いた照明効果の除去,” 信学技報, SIP2008–161, pp. 219–224, Jan. 2009
77. T. Tanaka, “A fast tracking algorithm for generalized eigenvectors of Hermitian matrices,” 信学技報, SIP2008–154, pp. 177–182, Jan. 2009
78. 村上隆啓, 越川尚樹, 大矢 孟, 田中聡久, 石田義久, “Subband decomposition based on a musical scale for a phase vocoder,” 第 23 回信号処理シンポジウム論文集, pp. 259–264, 金沢, Nov. 2008
79. 齊藤祐樹, 田中聡久, 東 広志, “適応律動成分抽出法と脳波解析への応用,” 第 23 回信号処理シンポジウム論文集, pp. 58–63, 金沢, Nov. 2008
80. T. Rutkowski, T. Tanaka, A. Cichocki, D. P. Mandic, “Clustering EMD components for muscular interference separation from EEG – A time/frequency approach with different distance measures,” 第 23 回信号処理シンポジウム論文集, pp. 52–57, 金沢, Nov. 2008
81. 楊 桔紅, 齊藤祐樹, 曹 建庭, 田中聡久, “Analysis of the real-measured MEG phantom data and EEG quasi-brain-death data using EMD method,” 第 23 回信号処理シンポジウム論文集, pp. 46–51, 金沢, Nov. 2008

82. O. A. Omer and T. Tanaka, "Blind super-resolution based on simultaneous registration and reconstruction," 信学技報, SIP2007-192, pp. 51-56, Mar. 2008
83. 高柳健生, 田中聡久, "固有値分解と次元削減による直交同時ブロック対角化," 信学技報, SIP2007-229, pp. 123-124, Mar. 2008
84. 深井寛修, 滝本裕則, 満倉靖恵, 田中聡久, 福見稔, "経験的モード分解を用いた見た目年齢推定," 信学技報, NC2007-108, Jan. 2008
85. 村上隆啓, 田中聡久, 石田義久, "擬似独立成分の分類によるブラインド信号分離," 第 22 回信号処理シンポジウム論文集, pp. 351-356, 仙台, Nov. 2007
86. 越川尚樹, 村上隆啓, 田中聡久, "線形予測による楽曲の音程変換のための適応的度数推定," 第 22 回信号処理シンポジウム論文集, pp. 304-309, 仙台, Nov. 2007
87. 斉藤佑樹, 田中聡久, 曹建庭, マンディッチ・ダニエロ, "ヒルベルト-ホワンスペクトルによる準脳死患者の多チャンネル脳波解析," 第 22 回信号処理シンポジウム論文集, pp. 155-160, 仙台, Nov. 2007
88. 畑山康治, 満倉靖恵, 田中聡久, "EMD と GA を用いた音声圧縮," 第 22 回信号処理シンポジウム論文集, pp. 145-148, 仙台, Nov. 2007
89. 深井寛修, 滝本裕則, 満倉靖恵, 田中聡久, 福見稔, "EMD を用いた顔画像からの年齢特徴抽出," 第 22 回信号処理シンポジウム論文集, pp. 141-144, 仙台, Nov. 2007
90. 鷲澤嘉一, 田中聡久, "経験的モード分解: チュートリアル," 第 22 回信号処理シンポジウム論文集, pp. 135-140, 仙台, Nov. 2007
91. 越川尚樹, 村上隆啓, 田中聡久, "楽曲信号生成モデルにおける曲数の適応推定と音程変換への応用," 信学技報, SIP2007-18, May 2007
92. 高柳健生, 田中聡久, 村上隆啓, "直交群上における同時ブロック対角化," 信学技報, SIP2007-17, May 2007
93. 藪田顕一, 北澤仁志, 田中聡久, "プライバシー保護のための動画処理におけるフレーム間相関の利用," 信学技報, Apr. 2007
94. 藪田顕一, 北澤仁志, 田中聡久, "プライバシー保護と監視を両立するための動画処理手法の検討," 情報処理学会第 69 回全国大会論文集, 分冊 (2), pp. 309-310, Mar. 2007
95. 斉藤佑樹, 田中聡久, "経験的モード分解を用いた準脳死患者の脳波解析," 2007 年電子情報通信学会総合大会論文集, A-4-7, 名城大学, Mar. 2007
96. T. Tanaka, T. Gautama, M. U. B. Altaf, and D. P. Mandic, "Extensions of empirical mode decomposition to complex-valued signals," 第 21 回信号処理シンポジウム論文集, 京都, Nov. 2006
97. 鷲澤嘉一, 田中聡久, D. P. Mandic, A. Cichocki, "経験的モード分解における帯域幅制御," 第 21 回信号処理シンポジウム論文集, 京都, Nov. 2006
98. 村上隆啓, 田中聡久, 石田義久, "DFT 基底関数を用いた重複周波数分割法によるブラインド信号分離," 第 21 回信号処理シンポジウム論文集, 京都, Nov. 2006

99. 藪田顕一, 北澤仁志, 田中聡久, “プライバシ保護と物体の識別を両立する固定モニタカメラ映像処理手法,” 第 8 回 DSPTS 教育者会議予稿集, 東京工業大学大岡山キャンパス, Aug. 30, 2006
100. 石田圭, 田中聡久, “空間・時間ウィナーフィルタによる多チャンネル音声信号の雑音除去,” 信学技報, 琉球大学, Mar. 2005
101. T. Tanaka and S. Fiori, “Joint learning of a basis for the subspace defined by a reduced-rank Wiener filter,” 第 20 回信号処理シンポジウム論文集, B6-3 (CD-ROM), 高知, Nov. 2005
102. 村上隆啓, 田中聡久, A. Cichocki, 石田義久, “固有値分解を用いた Kurtosis 最大化による独立成分分析,” 第 20 回信号処理シンポジウム論文集, C1-2 (CD-ROM), 高知, Nov. 2005
103. 藪田顕一, 北澤仁志, 田中聡久, “プライバシ保護と被写体の識別を両立させる固定モニタカメラ映像処理手法,” 信学技報, SIP2005-3 (IE2005-3), vol. 105, no. 29, pp. 13–18, Apr. 2005
104. 田中聡久, “50%シフトの場合の短時間フーリエ変換における最適逆変換,” 2005 年電子情報通信学会総合大会論文集, A-4-31, p.112, 大阪大学, Mar. 2005
105. 村上隆啓, 田中聡久, 石田義久, “ヒルベルト変換と低域通過フィルタを用いたブラインド信号分離,” 第 19 回信号処理シンポジウム論文集, B3-3 (CD-ROM), 大泉高原, Nov. 2004
106. 田中聡久, “重複疑似双直交変換の存在条件と直接設計法,” 第 19 回信号処理シンポジウム論文集, C1-2 (CD-ROM), 大泉高原, Nov. 2004
107. T. Tanaka “A unified framework of weighted subspace rule for principal components tracking,” 第 18 回デジタル信号処理シンポジウム論文集, B4-2 (CD-ROM), 伊勢志摩, Nov. 2003
108. 田中聡久, 平澤康孝, 山下幸彦, “不等長重複変換の新しい設計法と画像符号化への応用,” 2003 年電子情報通信学会総合大会論文集, A-4-5, p. 94, 東北大学, Mar. 2003
109. 平澤康孝, 田中聡久, 山下幸彦, “画像符号化のための繰り返し法を用いた不等長重複変換に関する検討,” 第 17 回画像符号化シンポジウム, pp. 101–102, Nov. 2002
110. 鷲澤嘉一, 疋田謙司, 田中聡久, 山下幸彦, “パターン認識のための相対 KL 変換法の高精度化,” 2002 年情報科学技術フォーラム論文集, 東京工業大学, Sept. 2002
111. 平澤康孝, 田中聡久, 山下幸彦, “繰り返し法を用いた不等長重複変換による画像符号化,” 2002 年情報科学技術フォーラム論文集, 東京工業大学, Sept. 2002
112. 齊藤高輝, 田中聡久, 山下幸彦, “射影法を用いた適応サブバンド画像符号化,” 2002 年情報科学技術フォーラム論文集, 東京工業大学, Sept. 2002
113. 田中聡久, 山下幸彦, “雑音に頑健な一般化重複疑似双直交変換,” 2002 年電子情報通信学会基礎・境界ソサイエティ大会論文集, 宮崎大学, Sept. 2002
114. 齊藤高輝, 田中聡久, 山下幸彦, “交互射影法に基づく適応サブバンド変換による画像符号化,” 2002 年電子情報通信学会総合大会論文集, D-11-35, p.35, 早稲田大学, Mar. 2002
115. 田中聡久, 山下幸彦, “画像符号化のための適応的重複変換,” 第 16 回画像符号化シンポジウム, pp. 97–98, Nov. 2001

116. T. Tanaka and Y. Yamashita, “Generalized lapped pseudo biorthogonal transforms,” 第 16 回デジタル信号処理シンポジウム論文集, pp. 289–294, Nov. 2001
117. T. Tanaka and Y. Yamashita, “A lapped biorthogonal transform adapted for local directionality of images and its applications in image coding,” 信学技報, DSP2001-1, vol. 101, no. 18, pp. 1–8, Apr. 2001
118. T. Tanaka and Y. Yamashita, “A lapped biorthogonal transform with the optimal non-overlapping basis functions,” 信学技報, IE2000-102, vol. 100, no. 499, pp. 31–36, Dec. 2000
119. 田中聡久, 山下幸彦, “重複関数を持った方向性適応変換による画像符号化,” 2000 年電子情報通信学会情報・システムソサイエティ大会論文集, p. 131, 名古屋工業大学, 2000
120. 橋本謙太郎, 田中聡久, 山下幸彦, “方向性適応画像符号化のためのブロック歪み低減法,” 信学技報, DSP2000-6, pp. 31–36, Apr. 2000
121. T. Tanaka and Y. Yamashita, “A lapped orthogonal transform adapted for local directionality of images and its applications in image coding,” 信学技報, DSP2000-7, pp. 37–42, Apr. 2000
122. 田中聡久, 山下幸彦, “方向性適応フィルタによるブロック歪みの低減,” 2000 年電子情報通信学会総合大会論文集, vol. 7, p. 27, 広島大学, 2000

7 外部資金獲得状況

7.1 科学研究費補助金

1. 平成 24～26 年度 科学研究費補助金 基盤研究 (B) 「脳インタフェース実現のためのテンソル同時対角化原理による信号処理の構築と応用」 (研究代表者)
2. 平成 23～24 年度 科学研究費補助金 挑戦的萌芽研究 「脳のデジタル通信:感覚刺激による変調と脳波からの復調」, 3,770 千円 (研究代表者)
3. 平成 21～23 年度 科学研究費補助金 基盤研究 (B) 「脳コンピュータインタフェースのためのデータ駆動型多チャンネル信号処理」, 13,900 千円 (研究代表者)
4. 平成 18～20 年度 科学研究費補助金 基盤研究 (B) 「信号空間の構造に基づいた学習理論の構築とその応用」, 14,500 千円 (研究分担者)
5. 平成 18～20 年度 科学研究費補助金 若手研究 (B) 「過標本化フィルタバンクに関する設計理論の構築と信号推定問題への応用」, 3,500 千円 (研究代表者)
6. 平成 17～18 年度 科学研究費補助金 基盤研究 (C)(一般) 「プライバシー保護と被写体の識別を両立させる固定モニタカメラ映像処理手法の研究」, 3,500 千円 (研究分担者)
7. 平成 15～17 年度 科学研究費補助金 基盤研究 (C)(2) 「カーネル相対主成分分析によるパターン認識」, 3,600 千円 (研究分担者)
8. 平成 15～17 年度 科学研究費補助金 基盤研究 (C)(2), 3,500 千円 「時変フィルタバンクとその応用に関する研究」 (研究代表者)
9. 平成 12～14 年度 科学研究費補助金 特別研究員奨励費, 3,000 千円 「画像符号化のための適応線形変換に関する研究」 (研究代表者)

7.2 民間財団等

1. 平成 24 年度 財団法人 電気通信普及財団 研究調査助成「フェージング環境下における正弦波パラメータ推定のベイズアプローチ」, 1,000 千円 (研究代表者)
2. 平成 20~22 年度 テレコム先端技術研究支援センター SCAT 研究費助成「ポケ種類の同定による高精度ブラインド画像復元」, 2,500 千円 (研究代表者)
3. 平成 20 年度 立石科学技術振興財団 助成事業「多チャンネル脳波からの効率的な律動信号抽出法」, 2,500 千円 (研究代表者)
4. 平成 19 年度 財団法人 電気通信普及財団 研究調査助成「超解像のための領域分割による動き検出法」, 1,000 千円 (研究代表者)
5. 平成 18~20 年度 財団法人 国際コミュニケーション基金 調査研究助成「ランク可変なアレイ信号処理の学習法」, 2,000 千円 (研究代表者)
6. 平成 17~19 年度 テレコム先端技術研究支援センター SCAT 研究費「フィルタバンクと画素単位動き予測補償を用いた動画像符号化」(研究分担者)
7. 平成 16 年度 財団法人 カシオ科学振興財団 第 22 回(平成 16 年度)研究助成「チャンネル欠損可能な完全再構成冗長 FIR フィルタバンクの構築」, 1,000 千円 (研究代表者)
8. 平成 15 年 8 月 財団法人 大川情報通信基金 2003 年度研究助成, 1,000 千円「画像符号化のための高い設計自由度を持つフィルタバンクに関する研究」(研究代表者)

7.3 共同研究・受託研究・その他

1. 平成 22 年度 共同研究「気象レーダにおける地形エコー除去技術の開発」(研究代表者)
2. 平成 21 年度 共同研究「気象レーダにおける地形エコー除去技術の開発」(研究代表者)
3. 平成 20 年度 共同研究「気象レーダにおける地形エコー除去技術の開発」(研究代表者)
4. 平成 19~20 年度 独立行政法人日本学術振興会 二国間事業共同研究英国との共同研究(王立協会)「多次元経験的モード分解の開発と脳波モダリティ解析への応用」, 5,000 千円 (研究代表者)
5. 平成 16 年 財団法人 井上科学振興財団 国際研究集会出席旅費, 200 千円

8 所属学協会・活動

- 電子情報通信学会 正員
 - *Senior Member*, The Institute of Electrical and Electronics Engineers (IEEE)
 - *Member*, Asia Pacific Signal and Information Processing Association (APSIPA)
1. *Guest Editor*, “Content-Centric Live Streaming of User-Generated Media Content,” The Scientific World Journal (Hindawi) (平成 27 年予定)
 2. *Tutorial Session Co-Chair*, APSIPA Summit and Conference (APSIPA ASC 2014) (平成 26 年)

3. *Past-Chair*, Technical Committee on Biomedical Signal Processing and Systems, APSIPA. (平成 25 年～現在)
4. 電子情報通信学会 第 28 回信号処理シンポジウム 幹事 (平成 25 年)
5. *Chair*, Technical Committee on Biomedical Signal Processing and Systems, APSIPA. (平成 22 年～25 年)
6. *Member*, Technical Committee on Signal and Information Processing Theory and Methods, APSIPA (平成 22 年～現在)
7. *Guest Associate Editor*, “Special Section on Advances in Adaptive Signal Processing and Applications,” IEICE Transactions on Fundamentals (平成 22 年～23 年)
8. 電子情報通信学会 信号処理研究専門委員会 委員 (平成 22 年 5 月～現在)
9. *Guest Associate Editor*, “Special Section on Recent Topics in Signal Processing”, IEICE Transactions on Fundamentals (平成 22 年)
10. *Associate Editor*, IEICE Transactions on Fundamentals (平成 21 年 5 月～平成 25 年 5 月) (平成 21 年)
11. *Guest Editor*, “Special Section on Signal Processing”, IEICE Transactions on Fundamentals (平成 21 年)
12. *Guest Associate Editor*, “Special Section on Fundamental Theories of Signal Processing”, IEICE Transactions on Fundamentals (平成 21 年)
13. 電子情報通信学会論文誌 (A) 「ブラインド信号処理の技術とその応用」特集号 編集委員 (平成 21 年)
14. 電子情報通信学会 学生会連絡会 委員 (平成 20 年 5 月～現在)
15. 電子情報通信学会 東京支部 評議員 (平成 20 年 5 月～現在)
16. 電子情報通信学会 信号処理研究専門委員会 幹事 (平成 20 年 5 月～平成 22 年 5 月)
17. *Guest Associate Editor*, “Special Section on Signal Processing”, IEICE Transactions on Fundamentals (平成 20 年)
18. 電子情報通信学会 信号処理研究専門委員会 委員 (平成 18 年 5 月～平成 20 年 4 月)
19. *Guest Editor*, “Special Issue on Advances in Blind Signal Processing,” *Neurocomputing* (Elsevier), (平成 20 年)
20. 映像情報メディア学会 査読委員 (平成 17 年～平成 21 年)
21. *Member*, Technical Committee on Blind Signal Processing, IEEE Circuits and Systems Society (平成 17 年～現在)
22. *International Program Committee Member*, International Conference on Independent Component Analysis and Blind Signal Separation (ICA 2004) (平成 16 年)
23. *Local Organizing Committee Member*, International Conference on Independent Component Analysis and Blind Signal Separation (ICA 2004) (平成 15 年)
 - Program Committee 委員を各種国際会議 (ICEIC 2014, SCIS-ISIS 2012, APSIPA ASC 2011, ISNN 2011, ISNN 2010, EEEIC 2010, ISBME 2009, APSIPA ASC 2009, CIP 2008, ICA 2006, VISAPP 2006) で歴任.
 - 国内外の学術集会における座長, IEEE などの主要論文誌における査読多数.

9 Invited Talks and Seminars

9.1 Invited Talks

1. 「ブレイン・マシン・インタフェースが拓く脳信号処理の展望」平成27年度第三回ブレインウェア工学研究会, 東北大学電気通信研究所, 2015年12月10日
2. “Two types of data shrinkage for brain-computer interfaces — Toward small data processing,” Germany-Japan Adaptive BCI Workshop, Kyoto University, Japan, Oct. 28–129, 2015
3. “A Direct Design of Oversampled FIR Filterbanks With Half-Overlapping Yielding Perfect Reconstruction,” Sophia Symposium “Modern Mathematics and Modern Technologies,” 上智大学, Nov. 2008
4. “Principal Wiener Components and Learning on the Stiefel Manifold,” Structural Dynamical Systems (SDS 2006), Monopoli, Bari (Italy)

9.2 会議におけるチュートリアル講演

1. “多様体上における最適化と信号処理,” 電子情報通信学会ソサイエティ大会 基礎・境界ソサイエティパネル討論「次世代信号処理を切り拓く新しい計算技法」, 2006

9.3 大学等における講演

1. “Rhythmic Component Extraction (RCE): Theory, Algorithm, and Adaptation for EEG Signal Processing,” East China University of Science and Technology (華東理工大学), May 2009
2. “Oversampled Perfect Reconstruction FIR Filter Banks Consisting of 50%-Overlapping Filters: Direct Design Theory and Applications to Blind Signal Separation,” University of Texas, Arlington (USA), Jan. 2006
3. “A Direct Optimal Design of a Class of Oversampled Perfect Reconstruction FIR Filter Banks,” University of Regensburg (Germany), Sept. 2005 (招待講演)
4. “A Direct Design of Oversampled 50% Overlapping Filter Banks Yielding Perfect Reconstruction,” Shanghai Jiao Tong University (上海交通大学) (China), June 2005
5. “Denoising of Images With Multiple Subband Transforms,” Korea University (高麗大学) (South Korea), Dec. 2004 (招待講演)
6. “On Perfect Reconstruction With Lost Channel Data in a Class of Oversampled Filter Banks,” Korea University (高麗大学) (South Korea), Dec. 2004 (招待講演)
7. “Generalized subspace rules for on-line PCA,” Korea University (高麗大学) (South Korea), Dec. 2004 (招待講演)
8. “Adaptive Lapped Transforms for Image Coding,” Korea University (高麗大学) (South Korea), July 2003 (招待講演)
9. “Orientation Adaptive Lapped Transforms for Image Coding,” 理化学研究所 脳科学総合研究センター, July 2002