

- 著書
 - (1)Remote Sensing Society of Japan Edt. Kohei Arai, et al., Remote Sensing -An Introductory Textbook-, Maruzen Planet Publishing Co. Ltd., Chapter 9 Radiometric Correction and Cloud Detection, 155-172, p.301, ISBN978-4-86345-185-8, 2013.
 - (2)J. Kaprzy Edt., Kohei Arai, Rescue System for Elderly and Disabled Persons Using Wearable Physical and Psychological Monitoring System, Studies in Computer Intelligence, 542, 45-64, Springer Publishing Co. Ltd., 2014.
- 査読付き学術論文
 - (1)Kohei Arai Prediction method for time series of imagery data in eigen space, International Journal of Advanced Research in Artificial Intelligence, 2, 1, 12-19, (2013)
 - (2)Kohei Arai Image prediction method with non-linear control lines derived from Kriging method with extracted feature points based on morphing, International Journal of Advanced Research in Artificial Intelligence, 2, 1, 20-24, (2013)
 - (3)Kohei Arai Method for object motion characteristics estimation based on wavelet Multi-Resolution Analysis: MRA, International Journal of Advanced Research in Artificial Intelligence, 2, 1, 25-32, (2013)
 - (4)Kohei Arai, Indra Nugraha Abdulah, Hiroshi Okumura, Identification of ornamental plant functioned as medicinal plant based on redundant discrete wavelet transformation, International Journal of Computer applications, 61, 1, 1-5, (2013)
 - (5)Hiroshi Okumura, Shoichiro Takubo, Shoichi Ozaki, Takeru Kawasaki, Indra Nugraha Abdulah, Kohei Arai, Osamu Fukuda, Development of a human vision simulation camera and its application: Implementation of specific color perception, Proceedings of the SPIE Electronic Imaging Conference (2013)
 - (6)Hiroshi Okumura, Shoichiro Takubo, Takeru Kawasaki, Indra Nugraha Abdulah, Osamu Uchino, Isamu Morino, Tatsuya Yokota, Tomohiro Nagai, Tetu Sakai, Takashi Maki, Kohei Arai, Improvement of web-based data acquisition and management system for GOSAT validation Lidar data analysis, Proceedings of the SPIE Electronic Imaging Conference (2013)
 - (7)Kohei Arai, Comparative study on discrimination methods for identifying dangerous red tide species based on wavelet utilized classification methods, International Journal of Advanced Computer Science and Applications, 4, 1, 95-102, 2013.
 - (8)Kohei Arai, Nonlinear mixing model in remote sensing satellite images taking into account landscape, International Journal of Advanced Computer Science and Applications, 4, 1, 103-109, 2013.
 - (9)Kohei Arai, Monte Carlo ray tracing based nonlinear mixture model of mixed pixels in Earth observation satellite imagery data, International Journal of Advanced Computer Science and Applications, 4, 1, 148-152, 2013.
 - (10)Kohei Arai, Spatial-Temporal variations of turbidity and ocean current velocity of the Ariake Sea areas, Kyushu, Japan through regression analysis with remote sensing satellite data, International Journal of Advanced Computer Science and Applications, 4, 1, 95-102, 2013.
 - (11)Yeni Herdiyeni, Kohei Arai, Ellyn Danayanti, Ervizal A.M. Zaherdi, A computer aided system for tropical leaf medicinal plant identification, Proceedings of the 1st International Conference on Sustainable Agriculture, Food and Energy, SAFE 2013.
 - (12)Kohei Arai, Moving domestic robot control method based on creating and sharing maps with shortest path finding and obstacle avoidance, International Journal of Advanced Research in Artificial Intelligence, 2, 2, 23-28, 2013.
 - (13)Kohei Arai, Ronny Mardiyanto, Eye-based domestic robot allowing patient to be self-services and communications remotely, International Journal of Advanced Research in Artificial Intelligence, 2, 2, 29-33, 2013.
 - (14)Kohei Arai, Voice recognition method with mouth movement videos based on forward and backward optical flow, International Journal of Advanced Research in Artificial Intelligence, 2, 2, 48-52, 2013.
 - (15)Shuji Kawakamim Hirofumi Ohyama, Kei Shiomin Takuya Fukamachi, Choyo, Taura, Kohei Arai, Hiroshi Okumura, Observations of carbon dioxide and methane column amount at Saga with high resolution FTIR in 2011-2012, Proceedings of the International Symposium on Remote Sensing, ISRS 2013.
 - (16)Kohei Arai, Method for image portion retrieval and display for comparatively large scale of imagery data onto relatively small size of screen which is suitable to block coding of image data compression, International Journal of Advanced Computer Science and Applications, 4, 2, 218-222, 2013.
 - (17)Kohei Arai, Method for estimation of aerosol parameters based on ground based atmospheric polarization irradiance measurements, International Journal of Advanced Computer Science and Applications, 4, 2, 226-233, 2013.
 - (18)Kohei Arai, Visualization of learning process for back propagation Neural Network clustering,

- International Journal of Advanced Computer Science and Applications, 4, 2, 234-238, 2013.
- (19)Kohei Arai, Data fusion between microwave and thermal infrared radiometer data and its application to skin sea surface temperature, wind speed and salinity retrievals, International Journal of Advanced Computer Science and Applications, 4, 2, 239-244, 2013.
- (20)Kohei Arai, Sensitivity analysis and validation of refractive index estimation method with ground based atmospheric polarized radiance measurement data, International Journal of Advanced Computer Science and Applications, 4, 3, 1-6, 2013.
- (21)Kohei Arai, Vicarious calibration based cross calibration of solar reflective channels of radiometers onboard remote sensing satellite and evaluation of cross calibration accuracy through band-to-band data comparisons, International Journal of Advanced Computer Science and Applications, 4, 3, 7-14, 2013.
- (22)Kohei Arai, Yuichi Sarusawa, Spatial-Temporal variations of turbidity and ocean current velocity of the Ariake Sea areas, Kyushu, Japan through regression analysis with remote sensing satellite data, International Journal of Advanced Computer Science and Applications, 4, 3, 20-25, 2013.
- (23)Kohei Arai, Ronny Mardiyanto, Camera mouse including "Ctl-Alt-Del" key operation using gaze blink and mouth shape, International Journal of Advanced Computer Science and Applications, 4, 3, 83-91, 2013.
- (24)Kohei Arai, Ronny Mardiyanto, Method for psychological status estimation by gaze location monitoring using eye-based Human-Computer Interaction, International Journal of Advanced Computer Science and Applications, 4, 3, 199-206, 2013.
- (25)Kohei Arai, Cell based GIS as cellular automata for disaster spreading predictions and required data systems, Advanced Publication, Data Science Journal, Vol.12, WDS 154-158, 2013.
- (26)T. Sakai, O. Uchino, I. Morino, T. Nagai, S. Kawakami, H. Ohyama, A. Uchiyama, A. Yamazaki, K.Arai, H. Okumura, Y. Takubo, T. Kawasaki, T. Akaho, T. Shibata, T. Nagahama, Y. Yoshida, N. Kikuchi, B. Liley, V. Sharlock, J. Robinson, T. Yokota, Impact of aerosol and cirrus clouds on the GOSAT observed CO₂ and CH₄ inferred from ground based lidar, skyradiometer and FTS data at prioritized observation sites, Proceedings of the 9th International Workshop on Greenhouse Gas measurements from Space, IWGGMS-9, 2013.
- (27)Hiroshi Okumura, Kohei Arai, Observation of aerosol properties at Saga using GOSAT product validation lidar, Proceeding of the SPIE Conference on Image and Signal Processing for Remote Sensing, SPIE #ERS13-RS-107-38, 2013.
- (28)Kohei Arai, Indra Nugraha Abdullah, Hiroshi Okumura, Identification of ornamental plant functioned as medicinal plant based on redundant discrete wavelet transformation, International Journal of Advanced Research in Artificial Intelligence, 2, 3, 60-64, 2013.
- (29)Kohei Arai, Herman Tolle, Color radio-map interpolation for efficient fingerprint WiFi-based indoor location estimation, International Journal of Advanced Research in Artificial Intelligence, 2, 3, 10-15, 2013.
- (30)Kohei Arai, Cahya Rahmad, Content based image retrieval by using multi-layer centroid contour distance, International Journal of Advanced Research in Artificial Intelligence, 2, 3, 16-20, 2013.
- (31)Kohei Arai, Anik Nur Handayani, Predicting quality of answer in collaborative Q/A community, International Journal of Advanced Research in Artificial Intelligence, 2, 3, 21-25, 2013.
- (32)Kohei Arai, Osamu Shigetomi, Yuko Miura, Hideaki Munemoto, Rice crop field monitoring system with radio controlled helicopter based near infrared cameras through nitrogen content estimation and its distribution monitoring, International Journal of Advanced Research in Artificial Intelligence, 2, 3, 26-37, 2013.
- (33)Kohei Arai, Sadayuki Akaishi, Hideo Miyazaki, Yasuyuki Watabe, Takaki Yoshida, Regressive analysis on leaf nitrogen content and near infrared reflectance and its application to agricultural farm monitoring with helicopter mounted near infrared camera, International Journal of Advanced Research in Artificial Intelligence, 2, 3, 38-43, 2013.
- (34)Kohei Arai, Tran Xuan Sang, Decision making and emergency communication system in rescue simulation for people with disabilities, International Journal of Advanced Research in Artificial Intelligence, 2, 3, 77-85, 2013.
- (35)Kohei Arai, Comparison between linear and nonlinear models of mixed pixels in remote sensing satellite images based on Cierniewski surface BRDF model by means of Monte Carlo ray tracing simulation, International Journal of Advanced Research in Artificial Intelligence, 2, 4, 1-7, 2013.
- (36)Kohei Arai, Anik Nur Handayani, E-learning system utilizing learners' characteristics recognized through learning process with Open Simulator, International Journal of Advanced Research in Artificial Intelligence, 2, 4, 8-12, 2013.
- (37)Kohei Arai, Tomoko Nishikawa, Method for car in dangerous action detection by means of wavelet Multi-Resolution Analysis based on appropriate support length of base function, International Journal of Advanced Research in Artificial Intelligence, 2, 4, 13-17, 2013.

- (38)Kohei Arai, Geography Markup Language: GML based representation of time series of assimilation data and its application to animation content creation and representations, *International Journal of Advanced Research in Artificial Intelligence*, 2, 4, 18-22, 2013.
- (39)Kohei Arai, Indra Nugraha Abdullah, Hiroshi Okumura, Rie Kawakami, Improvement of automated detection method for clustered micro calcification base on wavelet transformation and support vector machine, *International Journal of Advanced Research in Artificial Intelligence*, 2, 4, 23-28, 2013.
- (40)Kohei Arai, Category decomposition method for un-mixing of mixels acquired with spaceborne based visible and near infrared radiometers by means of Maximum Entropy Method with parameter estimation based on Simulated Annealing, *International Journal of Advanced Research in Artificial Intelligence*, 2, 4 64-69, 2013.
- (41)Kohei Arai, Anik Nur Handayani, Question answering for collaborative learning with answer quality predictor, *International Journal of Modern Education and Computer Science*, 5, 5, 12-17, 2013.
- (42)Kohei Arai, Rice crop quality evaluation method through regressive analysis between nitrogen content and near infrared reflectance of rice leaves measured from near field radio controlled helicopter, *International Journal of Advanced Research in Artificial Intelligence*, 2, 5, 1-6, 2013.
- (43)Kohei Arai, Sea ice concentration estimation method with satellite based visible to near infrared radiometer data based on category decomposition, *International Journal of Advanced Research in Artificial Intelligence*, 2, 5, 7-13, 2013.
- (44)Kohei Arai, Sensitivity analysis on sea surface temperature estimation method with thermal infrared radiometer data through simulations, *International Journal of Advanced Research in Artificial Intelligence*, 2, 5, 14-21, 2013.
- (45)Kohei Arai, Image clustering method based on Self-Organization Mapping: SOM derived density maps and its application for Landsat Thematic Mapper image clustering, *International Journal of Advanced Research in Artificial Intelligence*, 2, 5, 22-31, 2013.
- (46)Kohei Arai, Remote sensing satellite image database system allowing image portion retrievals utilizing principal component which consists spectral and spatial features extracted from imagery data, *International Journal of Advanced Research in Artificial Intelligence*, 2, 5, 32038, 2013.
- (47)Kohei Arai, Mash-up based content search engine for mobile devices, *International Journal of Advanced Research in Artificial Intelligence*, 2, 5, 39-43, 2013.
- (48)Yeni Herdiyeni, Elvira Nurfahilah, Ervival A., M.Zuhud, Ellyn K. Danayanti, Kohei Arai, Hiroshi Okumura, A computer aided system for tropical leaf medicinal plant identification, *International Journal on Advanced Science, Engineering and Information Technology*, 3, 1, 23-27, 2013.
- (49)Kohei Arai, Category decomposition method based on matched filter for un-mixing of mixed pixels acquired with space borne based hyper-spectral radiometers, *International Journal of Advanced Research in Artificial Intelligence*, 2, 6, 20-26, 2013.
- (50)Kohei Arai, Lecture's e-Table (server terminal) which allows monitoring the location at which each student is looking during lessons with e-learning contents through client terminals, *International Journal of Advanced Research in Artificial Intelligence*, 2, 6, 40-45, 2013.
- (51)Kohei Arai, Method for 3D rendering based on intersection image display which allows representation of internal structure of 3D objects, *International Journal of Advanced Research in Artificial Intelligence*, 2, 6, 46-50, 2013.
- (52)Kohei Arai, Monte Carlo Ray Tracing: MCRT based knowledge base system for texture mapping together with height estimation using objects' shadow with high spatial resolution remote sensing satellite imagery data, *International Journal of Advanced Research in Artificial Intelligence*, 2, 6, 51-55, 2013.
- (53)Kohei Arai, Monte Carlo ray tracing based adjacency effect and nonlinear mixture model for remote sensing satellite image data analysis, *International Journal of Advanced Research in Artificial Intelligence*, 2, 6, 56-64, 2013.
- (54)Kohei Arai, Kiyoshi Hasegawa, Method for psychological status monitoring with line of sight vector changes (Human eyes movements) detected with wearing glass, *International Journal of Advanced Research in Artificial Intelligence*, 2, 6, 65-70, 2013.
- (55)Kohei Arai, Herman Tolle, Akihiro Serita, Mobile devices based 3D image display depending on users' actions and movements, *International Journal of Advanced Research in Artificial Intelligence*, 2, 6, 71-78, 2013.
- (56)Kohei Arai, Cahya Rahmad, Comparative study between the proposed shape independent clustering method and the conventional method (k-means and the others), *International Journal of Advanced Research in Artificial Intelligence*, 2, 7, 1-5, 2013.
- (57)Kohei Arai, Steven Ray Sentinuwo, Effect of drivers' scope of awareness with lane changing maneuvers using cellular automaton method, *International Journal of Advanced Research in Artificial Intelligence*, 2, 7, 6-12, 2013.

- (58)Kohei Arai, Steven Ray Sentinuwo, Validity of spontaneous braking and lane changing with scope of awareness by using measured traffic flow, *International Journal of Advanced Research in Artificial Intelligence*, 2, 7, 13-17, 2013.
- (59)Kohei Arai, Recovering method of missing data based on the proposed modified Kalman filter when time series of mean data is known, *International Journal of Advanced Research in Artificial Intelligence*, 2, 7, 18-23, 2013.
- (60)Kohei Arai, Rosa Andrie Asmara, 3D skeleton model derived from Kinect depth sensor camera and its application to walking style quality evaluations, *International Journal of Advanced Research in Artificial Intelligence*, 2, 7, 24-28, 2013.
- (61)O.Uchino, T.Sakai, T.Nagai, I.Morino, T.Maki, M.Deushi, K.Shibata, M.Kajino, T.Kawasaki, T. Akaho, S.Takubo, H.Okumura, Kohei Arai, M.Nazato, T.Matsunaga, T.Yokota, Y.Sasano, DIAL measurement of lower tropospheric ozone over Saga (33.24N, 130.29E) in Japan and comparison with a chemical climate model, *Journal of Atmospheric Measurement Technology*, to appear.
- (62)Kohei Arai, Indra Nugraha Abdullah, Hiroshi Okumura, Image identification based on shape and color descriptors and its application to ornamental leaf, *International Journal of Image, Graphics and Signal Processing*, 5, 10, 1-8, 2013.
- (63)Kohei Arai, Steven Ray Sentinuwo, Mobile robot motion using cellular automaton model to avoid transient obstacles, *International Journal of Information Technology and Computer Science*, 8, 73-80, 2013.
- (64)Kohei Arai, Comparison between Rayleigh and Mie scattering assumptions for Z-R relation and rainfall rate estimation with TRMM/PR data, *International Journal of Advanced Research in Artificial Intelligence*, 2, 8, 1-6, 2013.
- (65)Kohei Arai, Comparative study on sea surface temperature estimation with thermal infrared radiometer data among conventional MCSST, split window and conjugate gradient based methods, *International Journal of Advanced Research in Artificial Intelligence*, 2, 8, 7-15, 2013.
- (66)Kohei Arai, Prediction method of El Nino Southern Oscillation event by means of wavelet based data compression with appropriate support length of base function, *International Journal of Advanced Research in Artificial Intelligence*, 2, 8, 16-20, 2013.
- (67)Kohei Arai, Multi spectral image classification method with selection of independent spectral features through correlation analysis, *International Journal of Advanced Research in Artificial Intelligence*, 2, 8, 21-27, 2013.
- (68)Kohei Arai, Access fee charging system for information contents sharing through P2P communications, *International Journal of Advanced Research in Artificial Intelligence*, 2, 8, 28-33, 2013.
- (69)Kohei Arai, Wearable computing system with input output devices based on eye-based Human Computer Interaction: HCI allowing location based web services, *International Journal of Advanced Research in Artificial Intelligence*, 2, 8, 34-39, 2013.
- (70)Kohei Arai, Method for data hiding based on Legall 5/2 (Cohen-Daubechies-Feauveau: CDF 5/3) wavelet with data compression and random scanning of secret imagery data, *International Journal of Wavelets Multi Solution and Information Processing*, 11, 4, 1-18, B60006 World Scientific Publishing Company, DOI: I01142/SO219691313600060, 1360006-1, 2013.
- (71)Kotaro Taguchi, Mariko Oda, Ou Kouno Seio Oda, Kohei Arai, Development of learning support software with CG animations for intellectually disabled children, *Journal of Education System and Information Society of Japan*, to appear
- (72)Kohei Arai, Genetic Algorithm utilizing image clustering with merge and split processes which allows minimizing Fisher distance between clusters, *International Journal of Advanced Research in Artificial Intelligence*, 2, 9, 7-13, 2013.
- (73)Kohei Arai, Secure copier which allows reuse copied documents with sorting capability in accordance with document types, *International Journal of Advanced Research in Artificial Intelligence*, 2, 9, 14-18, 2013.
- (74)Kohei Arai, Bi-directional reflectance distribution function: BRDF effect on un-mixing, category decomposition of the mixed pixel (MIXEL) of remote sensing satellite imagery data, *International Journal of Advanced Research in Artificial Intelligence*, 2, 9, 19-23, 2013.
- (75)Kohei Arai, Visualization of 5D assimilation data for meteorological forecasting and its related disaster mitigation utilizing VIS5D of software tool, *International Journal of Advanced Research in Artificial Intelligence*, 2, 9, 24-29, 2013.
- (76)Kohei Arai, Comparative study among least square method, steepest descent method, and conjugate gradient method for atmospheric sounder data analysis, *International Journal of Advanced Research in Artificial Intelligence*, 2, 9, 30-37, 2013.

- (77)Kohei Arai, Cheap and effective system for parking avoidance of the car without permission at disabled parking permit spaces, *International Journal of Advanced Research in Artificial Intelligence*, 2, 10, 1-6, 2013.
- (78)Kohei Arai, Noise suppressing edge enhancement based on Genetic Algorithm taking into account complexity of target image measured with Fractal dimension, *International Journal of Advanced Research in Artificial Intelligence*, 2, 10, 7-13, 2013.
- (79)Kohei Arai, Comparison among cross, onboard, and vicarious calibration for Terra/ASTER/VNIR, *International Journal of Advanced Research in Artificial Intelligence*, 2, 10, 14-18, 2013.
- (80)Kohei Arai, Image retrieval and classification method based on Euclidian distance between normalized features including wavelet descriptor, *International Journal of Advanced Research in Artificial Intelligence*, 2, 10, 19-25, 2013.
- (81)Kohei Arai, Numerical representation of web sites of remote sensing satellite data providers and its application to knowledge based information retrievals with natural language, *International Journal of Advanced Research in Artificial Intelligence*, 2, 10, 26-31, 2013.
- (82)Kohei Arai, Anik Nur Handayani, Question Answering for collaborative learning with answer quality prediction, *International Journal of Modern Education and Computer Science*, 5, 5, 12-17, 2013.
- (83)Kohei Arai, Youm Jong Sun, Case study on effectiveness evaluation of Business Procedure Re-Engineering: BPR for Local Government in Saga Prefecture, Japan, *International Journal of Advanced Research in Artificial Intelligence*, 2, 11, 1-8, 2013.
- (84)Kohei Arai, Free Open Source Software: FOSS based e-learning system together with blended learning system, *International Journal of Advanced Research in Artificial Intelligence*, 2, 11, 9-16, 2013.
- (85)Kohei Arai, Method for tealeaves quality estimation through measurements of degree of polarization, leaf area index, photosynthesis available radiance and normalized difference vegetation index for characterization of tealeaves, *International Journal of Advanced Research in Artificial Intelligence*, 2, 11, 17-24, 2013.
- (86)Kohei Arai, Frequent physical health monitoring as vital sign with psychological status monitoring for search and rescue of handicapped, disabled and elderly persons, *International Journal of Advanced Research in Artificial Intelligence*, 2, 11, 25-31, 2013.
- (87)Kohei Arai, Fisher distance based GA clustering taking into account overlapped space among probability density functions of clusters in feature space, *International Journal of Advanced Research in Artificial Intelligence*, 2, 11, 32-37, 2013.
- (88)Kohei Arai, Rosa Andrie Asmara, Gender classification method based on gait energy motion derived from silhouettes through wavelet analysis of human gait moving pictures, *International Journal of Information Technology and Computer Science*, to appear.
- (89)Kohei Arai, Anik Nur Handayani, Collaborative question answering system using domain knowledge and answer quality predictor, *International Journal of Modern Education and Computer Science*, 5, 11, 21-27, 2013.
- (90)Kohei Arai, Method for aureole estimation refinement through comparisons between observed aureole and estimated aureole based on Monte Carlo Ray Tracing, *International Journal of Advanced Research in Artificial Intelligence*, 2, 12, 1-8, 2013.
- (91)Kohei Arai, Multifidus muscle volume estimation based on three dimensional wavelet Multi Resolution Analysis: MRA with buttocks Computer Tomography: CT images, *International Journal of Advanced Research in Artificial Intelligence*, 2, 12, 9-15, 2013.
- (92)Kohei Arai, Discrimination method between prolate and oblate shapes of leaves based on polarization characteristics measured with polarization film attached cameras, *International Journal of Advanced Research in Artificial Intelligence*, 2, 12, 22-34, 2013.
- (93)Kohei Arai, Sensitivity analysis and error analysis of reflectance based vicarious calibration with estimated aerosol refractive index and size distribution derived from measured solar direct and diffuse irradiance as well as measured surface reflectance, *International Journal of Advanced Research in Artificial Intelligence*, 2, 12, 35-41, 2013.
- (94)Kohei Arai, Rosa Andrie Asmara, Human gait skeleton model acquired with single side video camera and its application and implementation for gender classification, *Journal of the Image Electronics and Engineering Society of Japan, Transaction of Image Electronics and Visual Computing*, 1, 1, 78-87, 2013.
- (95)Yeni Herdiyeni, Elvira Nurfahilah, Ervival A., M.Zuhud, Ellyn K. Danayanti, Kohei Arai, Hiroshi Okumura, *International Journal on Advanced Science, Engineering and Information Technology*, 3, 1, 23-27, 2013.(2013)
- (96)Kohei Arai, Method for object motion characteristics estimation based on wavelet Multi resolution Analysis: MRA, *International Journal of information Technology and Computer Science*, 1, 41-49, DOI: 10.5815/ijitcs, 2014.01.05, 2014.

- (97)Kohei Arai Ronny Mardiyanto, Speed and vibration performance as well as obstacle avoidance performance of electric wheel chair controlled by human eyes only, *International Journal of Advanced Research in Artificial Intelligence*, 3, 1, 8-15, 2014.
- (98)Kohei Arai, Sensitivity analysis for aerosol refractive index and size distribution estimation methods based on polarized atmospheric irradiance measurements, *International Journal of Advanced Research in Artificial Intelligence*, 3, 1, 16-23, 2014.
- (99)Kohei Arai, Vital sign and location/attitude monitoring with sensor networks for the proposed rescue system for disabled and elderly persons who need a help in evacuation from disaster areas, *International Journal of Advanced Research in Artificial Intelligence*, 3, 1, 24-33, 2014.
- (100)Kohei Arai, Method and system for human action detection with acceleration sensors for the proposed rescue system for disabled and elderly persons who need a help in evacuation from disaster areas, *International Journal of Advanced Research in Artificial Intelligence*, 3, 1, 34-40, 2014.
- (101)O.Uchino, T.Sakai, T.Nagai, I.Morino, T.Maki, M.Deushi, K.Shibata, M.Kajino, T.Kawasaki, T. Akaho, S.Takubo, H.Okumura, Kohei Arai, M.Nazato, T.Matsunaga, T.Yokota, Y.Sasano, DIAL measurement of lower tropospheric ozone over Saga (33.24N, 130.29E) in Japan and comparison with a chemical climate model, *Journal of Atmospheric Measurement Technology*, to appear.(2014)
- (102)酒井哲、内野修、森野勇、永井智広、赤穂大河、川崎鍵、奥村浩、新井康平、内山明博、山崎明宏、松永恒雄、横田達也、佐賀のライザーとスカイラジオメータによって検出された桜島の火山灰の高度分布と光学特性、*日本リモートセンシング学会誌*、to appear
- (103)田口浩太郎、小田まり子、河野央、小田誠雄、新井康平、知的障害児のための CG アニメーションを用いた教育支援ソフトウェアの開発、*教育システム情報学会誌*、30,1,48-56、2014.
 - (104)K.Arai,Anik Nur Handayani, Collaborative question answering system using domain knowledge and answer quality predictor, *International Journal of Modern Education and Computer Science*, 5,5,12-17, 2013.
 - (105)K.Arai, Rosa Andrie Asmara, Gender classification method based on gait energy motion derived from silhouette through wavelet analysis of human gait moving pictures, *International Journal of Information technology and Computer Science*, 5,5,12-17, 2013.
 - (106)K.Arai, Anik Nur Handayani, Collaborative question answering system using domain knowledge and answer quality predictor, *International Journal of Modern Education and Computer Science*, 5,11,21-27, 2013.
 - (107)K.Arai, Rosa Andrie Asmara, Human gait skeleton model acquired with single side video camera and its application and implementation for gender classification, *IEEEJ Transaction on Image Electronics and Visual Computing*, 1, 1, 78-87, 2013.
- 査読付き発表論文(Conference Paper)
 - (1) Hiroshi Okumura, Shoichiro Takubo, Shoichi Ozaki, Takeru Kawasaki, Indra Nugraha Abdulah, Kohei Arai, Osamu Fukuda, Development of a human vision simulation camera and its application: Implementation of specific color perception(2013), *SPIE Electronic Imaging Conference*
 - (2) Hiroshi Okumura, Shoichiro Takubo, Takeru Kawasaki, Indra Nugraha Abdulah, Osamu Uchino, Isamu Morino, Tatsuya Yokota, Tomohiro Nagai, Tetu Sakai, Takashi Maki, Kohei Arai, Improvement of web-based data acquisition and management system for GOSAT validation Lidar data analysis(2013), *SPIE Electronic Imaging Conference*
 - (3) Yeni Herdiyeni, Kohei Arai, Ellyn Danayanti, Ervizal A.M. Zaherdi, A computer aided system for tropical leaf medicinal plant identification,(2013), *Proceedings of the 1st International Conference on Sustainable Agriculture, Food and Energy, SAFE 2013*
 - (4) Shuji Kawakami Hirofumi Ohyama, Kei Shiomin Takuya Fukamachi, Choyo, Taura, Kohei Arai, Hiroshi Okumura, Observations of carbon dioxide and methane column amount at Saga with high resolution FTIR in 2011-2012(2013), *Proceedings of the International Symposium on Remote Sensing, ISRS 2013.*
 - (5) T. Sakai, O. Uchino, I. Morino, T. Nagai, S. Kawakami, H. Ohyama, A. Uchiyama, A. Yamazaki, K.Arai, H. Okumura, Y. Takubo, T. Kawasaki, T. Akaho, T. Shibata, T. Nagahama, Y. Yoshida, N. Kikuchi, B. Liley, V. Sharlock, J. Robinson, T. Yokota, Impact of aerosol and cirrus clouds on the GOSAT observed CO₂ and CH₄ inferred from ground based lidar, skyradiometer and FTS data at prioritized observation sites,(2013), *Proceedings of the 9th International Workshop on Greenhouse Gas measurements from Space, IWGGMS-9, 2013*

- (6) Shuji Kawakami, Hirofumi Ohyama, Kei Shiomi, T.Fukamachi, Kohei Arai, C.Taura, H.Okumura, Observations of carbon dioxide and methane column amounts measured by high resolution of FTIR at Saga in 2011-2012, Proceedings of the International Symposium on Remote Sensing, ISRS-TCCOC 2013.(2013)
- (7) Osamu Uchino, T.Sakai, T.nagai, I.Morino, H.Ohyama, S.Kawakami, K.Shiomi, T Kawasaki, T.Akaho, H.Okumura, Kohei Arai, T.matsunaga, T.Yokota, Comparison of lower tropospheric ozone column observed by DIAL and GOSAT TANSO-FTS TIR, Proceedings of the AGU Fall Meeting 2013.(2013)
- (8) I Morino, T Sakai, T.Nagai, A.Uchiyama, A.Yamazaki, S Kawakami, H.Ohyama, Kohei Arai, H.Okumura, T.Shibata, T.Nagahama, N.Kikuchi, Y.Yoshida, Ben Liley, Vanessa Sherlock, John Robinson, O. Uchino, T.Yokota, Impact of aerosols and cirrus on the GOSAT onboard CO₂ and CH₄ inferred from ground based Lidar, skyradiometer and FTS data at prioritized observation sites, Proceedings of the AGU Fall Meeting 2013.(2013)
- (9)T.sakai,O.Uchino,I.Morino,T.Nagai,S.Kawakami,H.Ohyama,A.Yamazaki,K.Arai,H.Okumura,Y.Takubo,K.Kawasaki,T.Shibata,T.Nagahama,Y.Yoshida,N.Kikuchi,B.Liley,V.Sherlock,J.Robinson,T.Yokota, Impact of aerosol and cirrus clouds on the GOSAT observed CO₂, and CH₄, inferred from ground-based lidar, skyradiometer and FTS at prioritized observation sites, Proceedings of IWGGM S-9, to appear
 - (10)H.Okumura, K.Arai, et al.,Observation of aerosol properties at Saga using GOSAT product validation lidar, Proceedings of the Conference on Image and Signal Processing for Remote Sensing, SPIE #ERS13-RS107-38,
 - (11)K.Arai, Rosa Andrie Asmara, Gender classification with human gait based on skeleton model, Proceedings of the 10th International Conference on Information Technology, New Generations, 113-118, 2013.
 - (12)S.Kawakami,H.Ohyama,K.ShiomiT.Fukamachi,K.Arai,C.Taura,H.Okumura, Observation of carbon dioxide and methane column amounts measured by high resolution of FTIR at Saga in 2011-2012, Proceedings of the ISRS-TCCON 2013.
 - (13)O.Uchino,T.Sakai,T.Nagai,I.Morino,H.Ohyama,S.Kawakami,K.Shiomi,T.Kawasaki,T.Akaho,H.Okumura,K.Arai,T.Matsunaga,T.Yokota, Comparison of lower tropospheric ozone column observed by DIAL and GOSAT TANSO-FTS TIR, Proceedings of the AGU Fall Meeting 2013.
 - (14)S.Kawakami,H.Ohyama,K.Shiomi,A.Kuze,T.Fukamachi,K.Arai,H.Okumura, The total column of CO₂ and CH₄ with a grating-based desktop optical spectrum analyzer at Railroad Valley , Nevada, USA, Proceedings of the AGU Fall Meeting 2013.
 - (15)I.Morino,T.Sakai,T.Nagai,A.Uchiyama,A.Yamazaki,S.Kawakami,H.Ohyama,K.Arai,H.Okumura,T.Shibata,T.Nagahama,N.kikuchi,Y.Yoshida,B.Liley,V.Sherlock,J.Robinson,O.Uchino,T.Yokota, Impact of aerosols and cirrus on the GOSAT-observed CO₂ and CH₄ inferred from ground-based lidar, skyradiometer and FTS data at prioritized observation sites, Proceedings of the AGU Fall Meeting 2013.
 - (16)H.Okumura,K.Arai, Development of a color perception support application on mobile devices for persons with specific sense of color, Proceedings of the Conference on Human Vision and Electronic Imaging, XIX, IS&T/SPIE Electronic Imaging, 2013.
 - (17)H.Tolle, K.Arai, Manga content extraction method for automatic mobile comic content creation, Proceedings of the ICACIS 2013, 640, International Conference on Advanced Computer Science and Information Systems, 2013.
 - (18)O.Uchino,I.Morino,M.Inoue,Y.Yoshida,N.Kikuyuchi,K.Nakamae,T.Yokota,Debra Welch, Coleen M.Roehl,Paul O.Wanberg,Goffery C.Toen, Nicholas M. Dentscher,Thorton Weneke, Justus Notholt, David W.TGriffith,Venesa Sherlock, John Robinson, Brian Connor, Ralf Sussmann, Markus rettinger, Petteri Ahonen, Paul Heikkinen, Esko Kiro, Joseph Mendonka, kimbely Strong, Frank Hase, Susanne Dohe, S.Kawakami, H.Ohyama, T.Nagahama, T.Machida, Y.Sawa,H.Matsueda,T.Tsuboi,Colun Sweeney, Wofsy, Pieter Tang, Arlyn E.Andrews,Sebastien C.Biraad, Steven C.Wofsy,T.Sakai, T.Nagai, A.Yamazaki, A.Uchiyama,T.Akaho,T.Kawasaki,H.Okumura,K.Arai,Ben liley, T.Shibata, On the validation results of five year GOSAT SWIR XO₂ and XCH₄ data, Proceedings of the IWGGMS-10, 2014.