

著書 : 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

査読付き学術誌論文

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 Techniques, 7, 171-194, 2014.

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, 30,1, 48-56, 2014

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, 6, 3, 1-11, 2014.

Kohei Arai, Method for object motion characteristics estimation based on wavelet Multi resolution Analysis: MRA, International Journal of information Technology and Computer Science, 6, 1, 41-49, DOI: 10.5815/ijitcs, 2014.01.05, 2014.

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.

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.

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.

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.

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, 7, 1385-1394, 2014

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, 2014.

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.

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.

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.

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.

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.

K.Arai, Indra Nugraha Abudullar, Hirososhi Okumura, Image retrieval based on color, shape and texture for ornamental leaf with medicinal functionality, International journal of Image, Graphics and Signal Processing, Vol.6, No.7, June 2014

K.Arai, Indra Nugraha Abdullar, H.Okumura, Comparative study of feature extraction components for several wavelet transformations for ornamental plants, International Journal of Advanced Research in Artificial Intelligence, 3, 2, 5-11, 2014.

K.Arai, Rosa Andrie Asmara, Human gait gender classification using 3D discrete wavelet transformation feature extraction, International Journal of Advanced Research in Artificial Intelligence, 3, 2, 12-17, 2014.

K.Arai, Steven Ray Sentinuwo, Method for traffic flow estimation using on-dashboard camera image, International Journal of Advanced Research in Artificial Intelligence, 3, 2, 18-22, 2014.

K.Arai, Anik Nur Handayani, Predicting quality of answer in collaborative question answer learning, International Journal of Advanced Research in Artificial Intelligence, 3, 2, 23-26, 2014.

K.Arai, Toshiya Katano, Preliminary study on phytoplankton distribution changes monitoring for the intensive study area of the Ariake sea, Japan based on remote sensing satellite data, International Journal of Advanced Research in Artificial Intelligence, 3, 2, 27-32, 2014.

K.Arai, Takuya Fukamachi, H.Okumura, Shuji Kawakami, Hirofumi Ohyama, Numerical deviation based optimization method for estimation of total column CO<sub>2</sub> measured with ground based Fourier Transformation Spectrometer: FTS data, International Journal of Advanced Research in Artificial Intelligence, 3, 3, 1-6, 2014.

K.Arai, Masanori Sakashita, Osamu Shigetomi, Yuko Miura, Estimation of protein content in rice crop and nitrogen content in rice leaves through regressive analysis with NDVI derived from camera mounted radio-control helicopter, International Journal of Advanced Research in Artificial Intelligence, 3, 3, 7-14, 2014.

K.Arai, Optimum band and band combination for retrieving total nitrogen, water, and fiber in tealeaves through remote sensing based on regressive analysis, International Journal of Advanced Research in Artificial Intelligence, 3, 3, 20-24, 2014.

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 Techniques, 7, 171-194, (2014)

酒井哲、内野修、森野勇、永井智広、赤穂大河、川崎健、奥村浩、新井康平、内山明博、山崎明宏、松永恒雄、横田達也、佐賀のライダ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、34,3,197-204,2014  
新井康平、産学官連携による九州発超小型衛星と衛星の恵み「うれしの茶」、計測自動制御学会誌「計測と制御」、53,11,988-996,2014

Ali Ridho Barakbah, K.Arai, Centronit: Initial Centroid Designation Algorithm for K-Means Clustering, EMITTER: International Journal of Engineering Technology, 2, 1, 50-62, 2014.

田口浩太郎、小田まり子、河野央、小田誠雄、新井康平、知的障害時のための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

#### 査読付き発表論文

O.Uchino, I.Morino, M.Inoue, Y.Yoshida, N.Kikuchi, K.Nakane, T.Yokota, D.Welchi, C.M.Roehl, P.O.Wanberg, G.C.Toon, N.M.Deutscher, T.Waneke, J.Notholt, D.W.Griffido, V.Sherlock, T.J.Robinson, B.Heikkinen, E.Kiro, J.Mendonka, K.Strong, F.Hase, S.Dohe, S.Kawakami, H.Ohyama, T.Nagahama, T.Machida, Y.Sawa, H.Matsueda, K.Tsuboi, C.Suney, P.Tang, A.E.Andrews, S.C.Birand, S.C.Wofsy, T.Sakai, N.Nagai, A.Yamazaki, A.Uchiyama, T.Akaho, T.Kawasaki, H.Okumura, K.Arai, B.Liley, T.Shibata, On the validation results of five year GOSAT SWIR XO<sub>2</sub> and XCH<sub>4</sub> data, Annual Joint NDACC-IRWG and TCCON Workshop, Proceedings of the IWGGMS-10, 2014.

H.Okumura, T. Akaho, Y. Kojiro, O. Uchiyama, I.Morino, T.Yokota, T.Nagai, T.Sakai, T.Maki,

A.Yamasaki, K.Arai, Development of PM2.5 density distribution visualization system using ground-level sensor network and Mie-Lidar, Proc. of the SPIE European Remote Sensing Conference, ERS 14-RS107-97, 2014.

356 K.Arai, Product amount and quality monitoring in agricultural fields with remote sensing satellite and radio-control helicopter, Proc. of the 40<sup>th</sup> Science Assembly of the COSPAR (Solicited), Advanced RS Methods and Technics, ID12566, A3.1-0041,2014

357 K.Arai, Vicarious calibration of Terra/ASTER/VNIR with desert scenes together with cross calibration, Proc. of the SPIE 9218-26, Session 6 EOS Terra II, Track OP140-OP401-2, 2014.

358 K. Arai, Computer input by human eyes only and its applications, Proc. of the 2<sup>nd</sup> Science and Information SAI Conference, Invited paper, 2014.

Tri Harsono, Ali Ridho Barakbah, K.Arai, Muriffin, Human behavior based evaluation in a large room using cellular automata model for pedestrian dynamics, Proceedings of the 3rd Indonesian Japanese Conference on Knowledge Creation and Intelligent Computing, 96-101, 2014

#### 解説

新井康平、視線による走行制御に基づく会話支援を伴うサービスロボット、画像ラボ、25,6,24-29,2014

新井康平、Kinect センサによる安価な 3 次元施工管理システム-モーションキャプチャー、拡張現実(AR)-、軟弱地盤、11,81-91,2014

新井康平、視覚正常障がい者のための視線による情報収集支援、日刊工業新聞、月刊画像ラボ、11月号、25,13,1-7,2014

#### 講演

内野修、森野勇、北島俊行、小林昭典、川波英里、酒井哲、永井智広、山崎明宏、内山明博、菊池信弘、吉田幸生、奥村浩、新井康平、松永恒雄、横田達也、GOSAT SWIR から導出されたエアロゾル光学特性と地上観測との比較、日本気象学会 2014 年度春季大会、260、2014

内野修、森野勇、酒井哲、永井智広、川崎健、赤穂大河、奥村浩、新井康平、眞木貴史、出牛真、松永恒雄、横田達也、差分吸収法ライダーによる対流圏オゾン観測と化学気候モデル(MRI-COM2)との比較、第 18 回ライダー研究会、2014

川上修司、大山博史、塩見優、深町拓也、坂下真規、奥村浩、新井康平、森野勇、内野修、GOSA データ検証のための地上高分解能 FTS による二酸化炭素およびメタンの気柱量の長期観測(その 2)、日本気象学会秋季大会、2014

酒井哲、内野修、森野勇、永井智広、赤穂大河、川崎健、奥村浩、新井康平、内山明博、山崎明宏、松永恒雄、横田達也、佐賀のライダ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、日本気象学会秋季大会、2014

内野修、酒井哲、永井智広、森野勇、赤穂大河、川崎健、奥村浩、新井康平、泉敏治、松永恒雄、横田達也、オゾン DIAL の連続観測によってみられた下部対流圏オゾンの変動、日本気象学会秋季大会、2014

新井康平、地球観測衛星および地上計測システムによる防災、佐賀県建設技術支援機構主催第1回研修会、2014

新井康平、2015年度国プロ応募に向けた事業提案、茶業コンソーシアム主催第1回研究会、2014

新井康平、人工衛星データの使い方、武雄市教委員会、日本宇宙少年団武雄分団9月定例会、2014

内野修、森野勇、酒井哲、永井智広、赤穂大河、奥村浩、新井康平、泉敏治、松永恒雄、横田達也、横田達也、GOSAT 検証用可搬型ライダーによる最近の観測成果、第32回レーザーセンシングシンポジウム、4,5,2015

新井康平、2015年度国プロ応募に向けた事業提案および茶業コンソーシアムの進め方、茶業コンソーシアム主催第2回研究会、2014

新井康平、地球環境を見守る人工衛星、無期マテリアル学会、第129回学術講演会講演要旨集100-103,2014

K.Arai, I.N.Abdulah, H.Okumura, Identification of ornamental leaf which possess medicinal function through its shape, texture and color features, 日本リモートセンシング学会第57回学術講演会、2014

新井康平、I.N.Abdulah,奥村浩、薬草識別のためのウェーブレット、ウェーブレット理論と工学への応用ワークショップ、平成26年度文部科学省数学協働プログラム,2014

新井康平、2015年度国プロ応募に向けた事業提案および茶業コンソーシアムの進め方、茶業コンソーシアム主催第3回研究会、2014

新井康平、ウェーブレット解析による薬草識別、豊橋技科大学主催、平成26年度ウェーブレット研究会、2014

新井康平、宇宙で暮らそう、JST主催サイエンスパートナーシッププログラム：SPP,学校連携事業講演会、唐津東中高、2014

#### テレビ報道

新井康平、8月19日、日本テレビ NEWS EVERY,農業や漁業を宇宙から支援する人工衛星、

新井康平、8月4日、NHK あさいち、衛星目線でおいしいお茶を探し出せ!