

山下 淳 (Atsushi Yamashita, Ph.D.)

東京大学 大学院新領域創成科学研究科 人間環境学専攻 教授
大学院工学系研究科精密工学専攻／工学部精密工学科 (兼担)

E-mail: yamashita@robot.t.u-tokyo.ac.jp

研究室 URL: <https://www.robot.t.u-tokyo.ac.jp>

個人 URL: <https://www.robot.t.u-tokyo.ac.jp/~yamashita/>

【柏キャンパス】〒277-8563 千葉県柏市柏の葉 5-1-5 環境棟 2 階 266 号室

Tel: 04-7136-4621 Fax: 04-7136-4622

【本郷キャンパス】〒113-8656 東京都文京区本郷 7-3-1 工学部 14 号館 8 階 827 号室

Tel: 03-5841-6457 Fax: 03-5841-8548



略歴

1996 年 3 月 東京大学 工学部 精密機械工学科 卒業. 1998 年 3 月 東京大学 大学院工学系研究科 精密機械工学専攻 修士課程修了. 2001 年 3 月 同博士課程修了, 博士 (工学). 2001 年 4 月 静岡大学 工学部 機械工学科 助手, 2007 年 4 月 同助教, 2008 年 4 月 同准教授. 2011 年 10 月 東京大学 大学院工学系研究科 精密工学専攻 准教授, 2022 年 4 月 東京大学 大学院新領域創成科学研究科 人間環境学専攻 教授, 現在に至る. 2006 年 11 月～2007 年 12 月 カリフォルニア工科大学 客員研究員 (併任). ロボットの知能化, センサ情報処理, コンピュータビジョンなどの研究に従事. ACM, IEEE, 映像情報メディア学会, 計測自動制御学会, サービス学会, 自動車技術会, 情報処理学会, 精密工学会, 電気学会, 電子情報通信学会, 土木学会, 日本機械学会, 日本ロボット学会の会員.

経歴

1992 年 4 月 東京大学 教養学部 理科 I 類 入学
1994 年 4 月 東京大学 工学部 精密機械工学科 進学
1996 年 3 月 東京大学 工学部 精密機械工学科 卒業
1996 年 4 月 東京大学 大学院工学系研究科 精密機械工学専攻 修士課程 入学
1998 年 3 月 東京大学 大学院工学系研究科 精密機械工学専攻 修士課程 修了
1998 年 4 月 東京大学 大学院工学系研究科 精密機械工学専攻 博士課程 進学
1998 年 4 月～2001 年 3 月 理化学研究所 工学基盤技術部 ジュニア・リサーチ・アソシエイト
2001 年 3 月 東京大学 大学院工学系研究科 精密機械工学専攻 博士課程 修了, 博士 (工学)
2001 年 4 月 静岡大学 工学部 機械工学科 助手
2005 年 4 月～2006 年 9 月 静岡理工科大学 非常勤講師 (ロボット工学)
2006 年 11 月～2007 年 12 月 カリフォルニア工科大学 機械工学科 客員研究員 (併任)
2007 年 4 月 静岡大学 工学部 機械工学科 助教
2008 年 4 月 静岡大学 工学部 機械工学科 准教授
2008 年 4 月～現在 青山学院大学 非常勤講師 (画像処理特論)
2011 年 10 月～2012 年 3 月 静岡大学 工学部 機械工学科 客員准教授
2011 年 10 月 東京大学 大学院工学系研究科 精密工学専攻 准教授
2016 年 10 月 東京大学 大学院工学系研究科 インテリジェント施工システム 社会連携講座
特任准教授 (兼任)
2018 年 10 月 東京大学 大学院工学系研究科 i-Construction システム学 寄付講座 特任准教授 (兼任)
2022 年 4 月 東京大学 大学院新領域創成科学研究科 人間環境学専攻 教授 (現職)
2024 年 4 月 東京大学 大学院工学系研究科 i-Construction システム学 寄付講座 特任教授 (兼任)
2024 年 4 月 東京大学 大学院工学系研究科 統合廃炉工学 社会連携講座 特任教授 (兼任)

研究分野

ロボット工学，センサ情報処理，コンピュータビジョン，画像処理

受賞

- 1) 1996 年 03 月 日本機械学会 畠山賞 受賞
- 2) 2001 年 03 月 29 日 総合研究奨励会 石井学術奨励賞 受賞
- 3) 2002 年 12 月 21 日 SI2002 (第 3 回計測自動制御学会システムインテグレーション部門講演会) ベストセッション賞 受賞
- 4) 2004 年 12 月 21 日 映像情報メディア学会 研究奨励賞 受賞
- 5) 2005 年 06 月 10 日 日本機械学会 ロボティクス・メカトロニクス部門 ベストプレゼンテーション表彰 受賞
- 6) 2006 年 09 月 05 日 電気学会 優秀論文発表賞 受賞
- 7) 2006 年 09 月 15 日 日本ロボット学会 研究奨励賞 受賞
- 8) 2007 年 12 月 09 日 浜松電子工学奨励会 高柳研究奨励賞 受賞
- 9) 2009 年 01 月 15 日 第 4 回競基弘賞学術業績賞 受賞
- 10) 2010 年 03 月 15 日 第 15 回ロボティクスシンポジウム 最優秀論文賞 受賞
- 11) 2010 年 12 月 17 日 4th Asia International Symposium on Mechatronics (AISM2010), AISM2010 Best Paper Award 受賞
- 12) 2011 年 05 月 27 日 日本機械学会 ロボティクス・メカトロニクス部門 ROBOMECH 表彰 受賞
- 13) 2011 年 05 月 28 日 船井情報科学振興財団 船井学術賞 受賞
- 14) 2012 年 12 月 20 日 SI2012 (第 13 回計測自動制御学会システムインテグレーション部門講演会) 優秀講演 受賞
- 15) 2013 年 04 月 19 日 日本機械学会教育賞 受賞 (教科書ロボティクス出版委員会として)
- 16) 2013 年 12 月 20 日 SI2013 (第 14 回計測自動制御学会システムインテグレーション部門講演会) 優秀講演賞 受賞
- 17) 2014 年 12 月 12 日 FA 財団論文賞 受賞
- 18) 2015 年 10 月 27 日 2015 年度計測自動制御学会論文賞 受賞
- 19) 2015 年 11 月 25 日 MHS2015 (2015 International Symposium on Micro-Nano Mechatronics and Human Science) Best Poster Award 受賞
- 20) 2015 年 12 月 07 日 ICAM2015 (6th International Conference on Advanced Mechatronics) Best Paper 受賞
- 21) 2015 年 12 月 07 日 ICAM2015 (6th International Conference on Advanced Mechatronics) Honorable Mention 受賞
- 22) 2015 年 12 月 16 日 SI2015 (第 16 回計測自動制御学会システムインテグレーション部門講演会) 優秀講演賞 受賞
- 23) 2016 年 03 月 16 日 2015 年度精密工学会論文賞 受賞
- 24) 2016 年 07 月 05 日 14th International Conference on Intelligent Autonomous Systems (IAS-14), Best Conference Paper Award Finalist 受賞
- 25) 2016 年 11 月 30 日 MHS2016 (2016 International Symposium on Micro-Nano Mechatronics and Human Science) Best Poster Award 受賞
- 26) 2016 年 12 月 08 日 東京大学工学部 Best Teaching Award 受賞
- 27) 2016 年 12 月 09 日 FA 財団論文賞 受賞 (1 件目: 複光路単眼ステレオによる直方体容器中の水中物体の 3 次元計測)
- 28) 2016 年 12 月 09 日 FA 財団論文賞 受賞 (2 件目: 遠隔操作ロボットのための複数 RGB-D センサを用いた半隠消映像のオンライン生成)
- 29) 2016 年 12 月 18 日 SI2016 (第 17 回計測自動制御学会システムインテグレーション部門講演会) 優

秀講演賞 受賞

- 30) 2017 年 01 月 10 日 International Workshop on Advanced Image Technology 2017 (IWAIT2017), Best Paper Award 受賞
- 31) 2017 年 04 月 20 日 日本機械学会賞（論文） 受賞
- 32) 2017 年 12 月 21 日 計測自動制御学会 システムインテグレーション部門 部門研究奨励賞 受賞
- 33) 2018 年 04 月 19 日 日本機械学会賞（論文） 受賞
- 34) 2018 年 12 月 14 日 FA 財団論文賞 受賞
- 35) 2018 年 12 月 17 日 JRM Best Paper Award 受賞
- 36) 2019 年 2 月 21 日 東京大学大学院工学系研究科長表彰（研究） 受賞
- 37) 2019 年 03 月 05 日 SI2018（第 19 回計測自動制御学会システムインテグレーション部門講演会）優秀講演賞 受賞
- 38) 2020 年 01 月 14 日 2020 IEEE/SICE International Symposium on System Integration (SII2020), Best Paper Award 受賞
- 39) 2020 年 10 月 30 日 5th International Conference on NeuroRehabilitation (ICNR2020), Best Paper Award 受賞
- 40) 2021 年 02 月 19 日 スズキ財団 やらまいか特別賞 受賞
- 41) 2021 年 03 月 17 日 精密工学会高城賞 受賞
- 42) 2021 年 03 月 22 日 オンライン授業・ハイブリッド授業のグッドプラクティス 総長表彰 受賞
- 43) 2021 年 12 月 24 日 SI2021（第 22 回計測自動制御学会システムインテグレーション部門講演会）優秀講演賞 受賞
- 44) 2022 年 10 月 19 日 東急建設株式会社／東京大学／湘南工科大学／東京理科大学／株式会社小川優機製作所／株式会社菊池製作所，トンネル点検システム「iTOREL（アイトローレル）」，第 10 回ロボット大賞優秀賞（社会インフラ・災害対応・消防分野） 受賞
- 45) 2022 年 12 月 14 日 SI2022（第 23 回計測自動制御学会システムインテグレーション部門講演会）RSNP を活用したロボットサービスコンテスト ロボットサービスイニシアチブ 最優秀賞 RSi 賞 受賞
- 46) 2022 年 12 月 14 日 SI2022（第 23 回計測自動制御学会システムインテグレーション部門講演会）SICE システムインテグレーション部門賞優秀賞 受賞
- 47) 2022 年 12 月 23 日 SI2022（第 23 回計測自動制御学会システムインテグレーション部門講演会）優秀講演賞 受賞
- 48) 2023 年 01 月 20 日 2023 IEEE/SICE International Symposium on System Integration (SII2023), Best Paper Award Finalist 受賞
- 49) 2023 年 06 月 27 日 2023 20th International Conference on Ubiquitous Robots (UR2023), Candidate for Best Paper Award 受賞
- 50) 2023 年 07 月 06 日 18th International Conference on Intelligent Autonomous Systems (IAS-18), Best Paper Award 受賞
- 51) 2023 年 09 月 13 日 Advanced Robotics Excellent paper Award 受賞
- 52) 2023 年 12 月 15 日 SI2023（第 24 回計測自動制御学会システムインテグレーション部門講演会）優秀講演賞 受賞
- 53) 2024 年 3 月 14 日 2024 年度精密工学会春季大会学術講演会 ベストオーガナイザー賞 受賞
- 54) 2024 年 10 月 31 日 24th International Conference on Control, Automation and Systems (ICCAS2024), Best

Paper Award 受賞

- 55) 2024 年 11 月 14 日 計測自動制御学会システム・情報部門学術講演会 2024 (SSI2024), SSI 優秀論文賞 受賞
- 56) 2024 年 12 月 18 日 SI2024 (第 25 回計測自動制御学会システムインテグレーション部門講演会) RSNP を活用したロボットサービスコンテスト ロボットサービスイニシアチブ 審査員特別賞 受賞
- 57) 2025 年 02 月 17 日 SI2024 (第 25 回計測自動制御学会システムインテグレーション部門講演会) 優秀講演賞 受賞

学術論文

- 1) 山下 淳, 太田 順, 河野 功, 福地 正樹, 新井 民夫, 浅間 一: "複数移動ロボットによる協調物体操作計画", 電気学会論文誌 C, Vol. 121, No. 3, pp. 549-556, March 2001.
- 2) Atsushi Yamashita, Tatsuya Kanazawa, Hajime Asama, Hayato Kaetsu, Isao Endo, Tamio Arai and Kazumi Sato: "Development of a Holonomic Omni-Directional Mobile Robot with Step-Climbing Ability", Journal of Robotics and Mechatronics, Vol. 13, No. 2, pp. 160-167, March 2001. [doi:10.20965/jrm.2001.p0160]
- 3) 山下 淳, 福地 正樹, 太田 順, 新井 民夫, 浅間 一: "移動ロボット群による大型物体搬送計画", 日本機械学会論文集 (C 編), Vol. 68, No. 665, pp. 165-172, January 2002. [doi:10.1299/kikaic.68.165]
- 4) 蔵本 昌之, 山下 淳, 金子 透, 三浦 憲二郎: "画像中の視野妨害となる水滴の除去", 映像情報メディア学会誌, Vol. 56, No. 5, pp. 853-857, May 2002. [doi:10.3169/itej.56.853]
- 5) 川原子 淳, 山下 淳, 金子 透, 三浦 憲二郎: "ステレオビジョンシステムによる表面湾曲書籍の文字認識", 映像情報メディア学会誌, Vol. 56, No. 5, pp. 858-862, May 2002. [doi:10.3169/itej.56.858]
- 6) Kenjiro T. Miura, Junji Sone, Atsushi Yamashita, Toru Kaneko, Minoru Ueda and Minetada Osano: "Adaptive Refinement for B-spline Subdivision Curves", The Journal of Three Dimensional Images, Vol. 16, No. 4, pp. 74-78, December 2002.
- 7) Atsushi Yamashita, Tamio Arai, Jun Ota and Hajime Asama: "Motion Planning of Multiple Mobile Robots for Cooperative Manipulation and Transportation", IEEE Transactions on Robotics and Automation, Vol. 19, No. 2, pp. 223-237, April 2003. [doi:10.1109/TRA.2003.809592]
- 8) 山下 淳, 浅間 一, 新井 民夫, 太田 順, 金子 透: "ロボットの移動機構に関する研究動向", 日本ロボット学会誌, Vol. 21, No. 3, pp. 282-292, April 2003. [doi:10.7210/jrsj.21.282]
- 9) Atsushi Yamashita, Toru Kaneko, Shinya Matsushita, Kenjiro T. Miura and Suekichi Isogai: "Camera Calibration and 3-D Measurement with an Active Stereo Vision System for Handling Moving Objects", Journal of Robotics and Mechatronics, Vol. 15, No. 3, pp. 304-313, June 2003. [doi:10.20965/jrm.2003.p0304]
- 10) 山下 淳, 金子 透, 西村 正樹, 三浦 憲二郎: "カメラの方向変化を利用した悪天候時の視野明瞭化～首振りカメラを用いた画像中の視野妨害となる水滴の除去～", 映像情報メディア学会誌, Vol. 57, No. 10, pp. 1347-1353, October 2003. [doi:10.3169/itej.57.1347]
- 11) Kenjiro T. Miura, Masashi Adachi, Tsuneo Ikedo, Atsushi Yamashita and Toru Kaneko: "View-Dependent Refinement by Two-Stepped Catmull-Clark Subdivision", The Journal of Three Dimensional Images, Vol. 17, No. 4, pp. 33-38, December 2003.
- 12) Atsushi Yamashita, Toru Kaneko, Shinya Matsushita and Kenjiro T. Miura: "Region Extraction with Chromakey Using Stripe Backgrounds", IEICE Transactions on Information and Systems, Vol. 87-D, No. 1, pp. 66-73, January 2004.
- 13) Atsushi Yamashita, Toru Kaneko, Masaki Nishimura and Kenjiro T. Miura: "Removal of View-Disturbing Waterdrops in Images Using a Pan-Tilt Camera", The Journal of Three Dimensional Images, Vol. 18, No. 1, pp. 47-52, March 2004.

- 14) Atsushi Yamashita, Akihisa Nishimoto, Toru Kaneko and Kenjiro T. Miura: "Automatic Generation of Stereogram by Using Stripe Backgrounds", The Journal of Three Dimensional Images, Vol. 18, No. 1, pp. 53-58, March 2004.
- 15) Atsushi Yamashita, Tomoaki Harada, Toru Kaneko and Kenjiro T. Miura: "Virtual Wiper -Removal of Adherent Noises from Images of Dynamic Scenes by Using a Pan-Tilt Camera-", Advanced Robotics, Vol. 19, No. 3, pp. 295-310, March 2005. [doi:10.1163/1568553053583643]
- 16) Susumu Kato, Atsushi Yamashita, Toru Kaneko and Kenjiro T. Miura: "Three-dimensional Sensing in Underwater Environments with a Stereo Camera System", The Journal of Three Dimensional Images, Vol. 19, No. 4, pp. 102-107, December 2005.
- 17) 山下 淳, 原 隆浩, 金子 透: "画像処理と音響処理の融合による打音検査", 日本機械学会論文集 (C 編), Vol. 72, No. 715, pp. 772-779, March 2006. [doi:10.1299/kikaic.72.772]
- 18) 山下 淳, 林本 悦一, 金子 透: "レーザレンジファインダを用いた水中物体の 3 次元形状計測", 日本機械学会論文集 (C 編), Vol. 72, No. 717, pp. 1506-1513, May 2006. [doi:10.1299/kikaic.72.1506]
- 19) Yuu Tanaka, Atsushi Yamashita, Toru Kaneko and Kenjiro T. Miura: "Removal of Adherent Waterdrops from Images Acquired with a Stereo Camera System", IEICE Transactions on Information and Systems, Vol. 89-D, No. 7, pp. 2021-2027, July 2006. [doi:10.1093/ietisy/e89-d.7.2021]
- 20) Hiroki Agata, Atsushi Yamashita and Toru Kaneko: "Chroma Key Using a Checker Pattern Background", IEICE Transactions on Information and Systems, Vol. 90-D, No. 1, pp. 242-249, January 2007.
- 21) 山下 淳, 樋口 裕和, 金子透: "光切断法による水中物体の 3 次元計測", 精密工学会誌, Vol. 73, No. 2, pp. 265-269, February 2007. [doi:10.2493/jjspe.73.265]
- 22) 山下 淳, 原田 知明, 金子 透: "全方位カメラ搭載移動ロボットによる Structure from Motion を用いた 3 次元環境モデリング", 日本機械学会論文集 (C 編), Vol. 73, No. 726, pp. 512-519, February 2007. [doi:10.1299/kikaic.73.512]
- 23) 山下 淳, 縣 弘樹, 金子 透: "動的輪郭モデルを用いたストライプ状クロマキー", 映像情報メディア学会誌, Vol. 61, No. 2, pp. 189-197, February 2007. [doi:10.3169/itej.61.189]
- 24) 山下 淳, 蔵本 昌之, 金子 透: "複数カメラを用いた画像中の視野妨害ノイズ除去", 電気学会論文誌 C, Vol. 127, No. 4, pp. 480-488, April 2007. [doi:10.1541/ieej.127.480]
- 25) 福地 功, 山下 淳, 金子 透, 三浦 憲二郎: "時空間画像処理による雨天時画像からの視野妨害ノイズ除去", 映像情報メディア学会誌, Vol. 62, No. 5, pp. 771-777, May 2008. [doi:10.3169/itej.62.771]
- 26) Atsushi Yamashita, Masayuki Kuramoto and Toru Kaneko: "Removal of Adherent Noises in Images by Using Multiple Cameras", Electrical Engineering in Japan, Vol. 164, No. 3, pp. 50-59, August 2008. [doi:10.1002/eej.20697]
- 27) Atsushi Yamashita, Takahiro Hara and Toru Kaneko: "Hammering Test with Integration of Image and Sound Signal Processing", Journal of Environment and Engineering, Vol. 3, No. 2, pp. 363-373, 2008. [doi:10.1299/jee.3.363]
- 28) Ryosuke Kawanishi, Atsushi Yamashita and Toru Kaneko: "Three-Dimensional Environment Model Construction from an Omnidirectional Image Sequence", Journal of Robotics and Mechatronics, Vol. 21, No. 5, pp. 574-582, October 2009. [doi:10.20965/jrm.2009.p0574]
- 29) 川西 亮輔, 山下 淳, 金子 透: "全方位画像列からの特徴点および直線エッジ情報を併用した Structure from Motion による 3 次元環境モデル生成", 電気学会論文誌 C, Vol. 130, No. 9, pp. 1494-1503, September 2010. [doi:10.1541/ieej.130.1494]
- 30) 松井 建樹, 山下 淳, 金子 透: "全方位レーザ・全方位カメラからなるレンジファインダの自己位置推定と配管の 3 次元モデル生成", 電気学会論文誌 C, Vol. 130, No. 9, pp. 1504-1512, September 2010. [doi:10.1541/ieej.130.1504]
- 31) 長田 典子, 大城 英裕, 加藤 邦人, 興水 大和, 佐川 立昌, 藤原 孝幸, 山下 淳, 橋本 学: "メディ

- ア分野における多次元センシング技術の現状と動向", 電気学会論文誌 D, Vol. 131, No. 4, pp. 433-440, April 2011. [doi:10.1541/ieejias.131.433]
- 32) 久野 素有, 山下 淳, 金子 透: "ステレオカメラを用いたタッチパネル操作支援システムの構築", 電気学会論文誌 D, Vol. 131, No. 4, pp. 458-465, April 2011. [doi:10.1541/ieejias.131.458]
- 33) 宮木 理恵, 山下 淳, 金子 透: "プロジェクタ・カメラシステムを用いた色覚障害者への色情報提示", 電気学会論文誌 D, Vol. 131, No. 4, pp. 497-504, April 2011. [doi:10.1541/ieejias.131.497]
- 34) Atsushi Yamashita, Masaaki Kitaoka and Toru Kaneko: "Motion Planning of Biped Robot Equipped with Stereo Camera Using Grid Map", International Journal of Automation Technology, Vol. 5, No. 5, pp. 639-647, September 2011. [doi:10.20965/ijat.2011.p0639]
- 35) 川西 亮輔, 山下 淳, 金子 透: "全方位画像中の特徴点と直線エッジの同時拘束と基線長の自動決定に基づく Structure from Motion による三次元環境モデル生成", 日本ロボット学会誌, Vol. 30, No. 4, pp. 399-410, May 2012. [doi:10.7210/jrsj.30.399]
- 36) Guanghui Li, Yusuke Tamura, Atsushi Yamashita and Hajime Asama: "Moving Task Allocation and Reallocation Method Based on Body Expansion Behaviour for Distributed Multi-robot Coordination", International Journal of Mechatronics and Automation, Vol. 2, No. 4, pp. 240-261, 2012. [doi:10.1504/IJMA.2012.050495]
- 37) Ryosuke Kawanishi, Atsushi Yamashita, Toru Kaneko and Hajime Asama: "Parallel Line-based Structure from Motion by Using Omnidirectional Camera in Textureless Scene", Advanced Robotics, Vol. 27, No. 1, pp. 19-32, January 2013. (FA 財団論文賞受賞) [doi:10.1080/01691864.2013.751160]
- 38) 増山 岳人, 山下 淳, 浅間 一: "変換不変性を用いた経験の抽象化と内発的動機づけに基づく強化学習", 日本機械学会論文集 (C 編), Vol. 79, No. 798, pp. 289-303, February 2013. [doi:10.1299/kikaic.79.289]
- 39) 田村 雄介, 濱崎 峻資, 山下 淳, 浅間 一: "環境に応じた人間の移動予測に基づく移動ロボットの人物回避", 日本機械学会論文集 (C 編), Vol. 79, No. 799, pp. 617-628, March 2013. [doi:10.1299/kikaic.79.617]
- 40) 成瀬 達哉, 山下 淳, 金子 透, 小林 祐一: "魚眼ステレオカメラを用いた水中物体の 3 次元計測", 精密工学会誌, Vol. 79, No. 4, pp. 344-348, April 2013. [doi:10.2493/jjspe.79.344]
- 41) 熊原 渉, 増山 岳人, 田村 雄介, 山下 淳, 浅間 一: "局所経路情報と歩行者流情報を用いた移動ロボットナビゲーション手法", 精密工学会誌, Vol. 79, No. 4, pp. 349-355, April 2013. [doi:10.2493/jjspe.79.349]
- 42) Guanghui Li, Yusuke Tamura, Atsushi Yamashita and Hajime Asama: "Effective Improved Artificial Potential Field Based Regression Search Method for Autonomous Mobile Robot Path Planning", International Journal of Mechatronics and Automation, Vol. 3, No. 3, pp. 141-170, 2013. [doi:10.1504/IJMA.2013.055612]
- 43) Yusuke Tamura, Yoshitaka Terada, Atsushi Yamashita and Hajime Asama, "Modelling Behaviour Patterns of Pedestrians for Mobile Robot Trajectory Generation", International Journal of Advanced Robotic Systems, Vol. 10, 310, pp. 1-11, 2013. [doi:10.5772/56668]
- 44) Ryuho Kataoka, Yoshizumi Miyoshi, Kai Shigematsu, Donald Hampton, Yoshiki Mori, Takayuki Kubo, Atsushi Yamashita, Masayuki Tanaka, Toshiyuki Takahei, Taro Nakai, Hiroko Miyahara and Kazuo Shiokawa: "Stereoscopic Determination of All-sky Altitude Map of Aurora Using Two Ground-based Nikon DSLR Cameras", Annales Geophysicae, Vol. 31, No. 9, pp. 1543-1548, September 2013. [doi:10.5194/angeo-31-1543-2013]
- 45) 伊部 公紀, 山下 淳, 金子 透, 小林 祐一: "マニピュレータに搭載したレーザレンジファインダを用いた透明容器中の液中物体の 3 次元形状計測", 映像情報メディア学会誌, Vol. 67, No. 11, pp. J379-J387, November 2013. [doi:10.3169/itej.67.J379]
- 46) 熊原 渉, 増山 岳人, 田村 雄介, 山下 淳, 浅間 一: "動的環境下における歩行者流を利用した移動

ロボットナビゲーション", 計測自動制御学会論文集, Vol. 50, No. 1, pp. 58-67, January 2014. [doi:10.9746/sicetr.50.58]

- 47) Qi An, Yuki Ishikawa, Junki Nakagawa, Hiroyuki Oka, Hiroshi Yamakawa, Atsushi Yamashita and Hajime Asama: "Measurement of Just Noticeable Difference of Hip Joint for Implementation of Self-efficacy: In Active and Passive Sensation and in Different Speed", *Advanced Robotics*, Vol. 28, No. 7, pp. 505-511, January 2014. [doi:10.1080/01691864.2013.876938]
- 48) Masashi Awai, Atsushi Yamashita, Takahito Shimizu, Toru Kaneko, Yuichi Kobayashi and Hajime Asama: "Development of Mobile Robot System Equipped with Camera and Laser Range Finder Realizing HOG-Based Person Following and Autonomous Returning", *Journal of Robotics and Mechatronics*, Vol. 26, No. 1, pp. 68-77, February 2014. [doi:10.20965/jrm.2014.p0068]
- 49) 安 琪, 石川 雄己, 船戸 徹郎, 青井 伸也, 岡 敬之, 山川 博司, 山下 淳, 浅間 一: "座面高と速度の異なるヒト起立動作における筋シナジー解析", 計測自動制御学会論文集, Vol. 50, No. 8, pp. 560-568, August 2014. (2015 年度計測自動制御学会論文賞 受賞) [doi:10.9746/sicetr.50.560]
- 50) Kazuhiro Chayama, Akira Fujioka, Kenji Kawashima, Hiroshi Yamamoto, Yasushi Nitta, Chikao Ueki, Atsushi Yamashita and Hajime Asama: "Technology of Unmanned Construction System in Japan", *Journal of Robotics and Mechatronics*, Vol. 26, No. 4, pp. 403-417, August 2014. [doi:10.20965/jrm.2014.p0403]
- 51) 藤井 浩光, 山下 淳, 浅間 一: "打診検査のためのブースティングを用いた自動状態識別", 精密工学会誌, Vol. 80, No. 9, pp. 844-850, September 2014. (精密工学会研究奨励賞受賞) [doi:10.2493/jjspe.80.844]
- 52) 花谷 耕平, 山川 博司, 石川 雄己, Qi An, 山下 淳, 浅間 一: "膝関節実形状モデルを用いたヒトの起立動作時の負荷計測システムの開発", 精密工学会誌, Vol. 81, No. 1, pp. 99-104, January 2015. [doi:10.2493/jjspe.81.99]
- 53) Junki Nakagawa, Qi An, Yuki Ishikawa, Hiroyuki Oka, Kaoru Takakusaki, Hiroshi Yamakawa, Atsushi Yamashita and Hajime Asama: "Analysis of Human Motor Skill in Dart Throwing Motion at Different Distance", *SICE Journal of Control, Measurement, and System Integration*, Vol. 8, No. 1, pp. 79-85, January 2015. [doi:10.9746/jcmsi.8.79]
- 54) 伊部 直樹, 増山 岳人, 山下 淳, 浅間 一: "移動ロボットナビゲーションのための確率的意図を内包する歩行者行動モデルによる譲道行動生成", 日本機械学会論文集, Vol. 81, No. 821, 14-00330, pp. 1-14, January 2015. [doi:10.1299/transjsme.14-00330]
- 55) Tsukasa Suwazono, Norihito Nakamura and Atsushi Yamashita: "Development of the Remote-controlled Platform Truck for Handling Heavy Object and the Remote Control Human Interface for the Disaster Response", *Advanced Robotics*, Vol. 29, No. 3, pp. 165-169, February 2015. [doi:10.1080/01691864.2014.1001787]
- 56) 佐藤 貴亮, 藤井 浩光, Alessandro Moro, 杉本 和也, 野末 晃, 三村 洋一, 小幡 克実, 山下 淳, 浅間 一: "無人化施工用俯瞰映像提示システムの開発", 日本機械学会論文集, Vol. 81, No. 823, 14-00031, pp. 1-13, March 2015. [doi:10.1299/transjsme.14-00031]
- 57) Yonghoon Ji, Atsushi Yamashita and Hajime Asama: "RGB-D SLAM Using Vanishing Point and Door Plate Information in Corridor Environment", *Intelligent Service Robotics*, Vol. 8, No. 2, pp. 105-114, April 2015. [doi:10.1007/s11370-015-0166-1]
- 58) Wen Wen, Atsushi Yamashita and Hajime Asama: "The Sense of Agency during Continuous Action: Performance is More Important than Action-Feedback Association", *PLoS ONE*, Vol. 10, No. 4, e0125226, pp. 1-16, April 2015. [doi:10.1371/journal.pone.0125226]
- 59) Jonghoon Im, Hiromitsu Fujii, Atsushi Yamashita and Hajime Asama: "Correction of Over and Under Exposure Images Using Multiple Lighting System", *E-Journal of Advanced Maintenance*, Vol. 7, No. 1, pp. 50-58, May 2015.

- 60) 森下 壮一郎, 福田 一郎, 新井 義和, 山下 淳, 浅間 一: "UHF 帯 RFID を用いた動画像中の人物同定", 精密工学会誌, Vol. 81, No. 6, pp. 589-597, June 2015. [doi:10.2493/jjspe.81.589]
- 61) 辻 琢真, 濱崎 峻資, 前田 貴記, 加藤 元一郎, 岡 敬之, 山川 博司, 高草木 薫, 山下 淳, 浅間 一: "ラバーハンド錯覚における筋電位及び皮膚電位反応の解析", 計測自動制御学会論文集, Vol. 51, No. 6, pp. 440-447, June 2015. [doi:10.9746/sicetr.51.440]
- 62) 森下 壮一郎, 渡邊 岳大, 川端 邦明, 新井 義和, 山下 淳, 浅間 一, 三島 健稔: "アスベスト定性分析のための多重解像度解析を用いた自動粒子計数", 精密工学会誌, Vol. 81, No. 10, pp. 930-935, October 2015. [doi:10.2493/jjspe.81.930]
- 63) Wen Wen, Atsushi Yamashita and Hajime Asama: "The Influence of Action-Outcome Delay and Arousal on Sense of Agency and the Intentional Binding Effect", Consciousness and Cognition, Vol. 36, pp. 87-95, November 2015. [doi:10.1016/j.concog.2015.06.004]
- 64) 伊部 公紀, 小林 祐一, 金子 透, 山下 淳: "複光路単眼ステレオによる直方体容器中の水中物体の 3 次元計測", 精密工学会誌, Vol. 81, No. 12, pp. 1093-1101, December 2015. (精密工学会論文賞受賞) (FA 財団論文賞受賞) [doi:10.2493/jjspe.81.1093]
- 65) 田中 佑典, 池 勇勲, 山下 淳, 浅間 一: "移動ロボットの性能に応じた走行可能性推定が可能な不整地に対する走行可能性推定および行動生成手法", 精密工学会誌, Vol. 81, No. 12, pp. 1119-1126, December 2015. [doi:10.2493/jjspe.81.1119]
- 66) 藤井 浩光, 杉本 和也, 山下 淳, 浅間 一: "遠隔操作ロボットのための複数 RGB-D センサを用いた半隠消映像のオンライン生成", 精密工学会誌, Vol. 81, No. 12, pp. 1185-1192, December 2015. (FA 財団論文賞受賞) [doi:10.2493/jjspe.81.1185]
- 67) 小松 廉, 藤井 浩光, 山下 淳, 浅間 一: "カメラ配置設計による故障時に備えたロボット遠隔操作のための俯瞰映像提示システムの開発", 精密工学会誌, Vol. 81, No. 12, pp. 1206-1212, December 2015. [doi:10.2493/jjspe.81.1206]
- 68) Wen Wen, Atsushi Yamashita and Hajime Asama: "The Influence of Goals on Sense Control", Consciousness and Cognition, Vol. 37, pp. 83-90, December 2015. [doi:10.1016/j.concog.2015.08.012]
- 69) Daiki Kawakami, Kaito Makino, Yuichi Kobayashi, Toru Kaneko, Atsushi Yamashita and Hajime Asama: "Projector Camera System Presenting Color Information for the Color Vision Deficient", Journal of Advanced Computational Intelligence and Intelligent Informatics, Vol. 20, No. 1, pp. 26-32, January 2016. [doi:10.20965/jaciii.2016.p0026]
- 70) Wen Wen, Atsushi Yamashita and Hajime: "Divided Attention and Processes Underlying Sense of Agency", Frontiers in Psychology, Vol. 7, No. 35, pp. 1-8, January 2016. [doi:10.3389/fpsyg.2016.00035]
- 71) Qi An, 柳井 香史朗, 中川 純希, 温 文, 山川 博司, 山下 淳, 浅間 一: "実映像と筋活動の重畳表示によるローイング動作教育システム", 日本機械学会論文集, Vol. 82, No. 834, 15-00424, pp. 1-11, February 2016. [doi:10.1299/transjsme.15-00424]
- 72) 藤井 浩光, 山下 淳, 浅間 一: "打音検査のための自動校正機能を備えた自動変状診断アルゴリズム", 日本機械学会論文集, Vol. 82, No. 834, 15-00426, pp. 1-18, February 2016. (日本機械学会賞 (論文) 受賞) [doi:10.1299/transjsme.15-00426]
- 73) 竹内 彰, 藤井 浩光, 山下 淳, 田中 正行, 片岡 龍峰, 三好 由純, 奥富 正敏, 浅間 一: "魚眼ステレオカメラを用いた全天周時系列画像からのオーロラ 3 次元計測", 日本機械学会論文集, Vol. 82, No. 834, 15-00428, pp. 1-17, February 2016. [doi:10.1299/transjsme.15-00428]
- 74) Yuichi Kobayashi, Yutaro Ohshima, Toru Kaneko and Atsushi Yamashita: "Meal Support System with Spoon Using Laser Range Finder and Manipulator", International Journal of Robotics and Automation, Vol. 31, No. 3, pp. 1-10, May 2016. [doi:10.2316/Journal.206.2016.3.206-4342]
- 75) Wen Wen, Katsutoshi Muramatsu, Shunsuke Hamasaki, Qi An, Hiroshi Yamakawa, Yusuke Tamura, Atsushi Yamashita and Hajime Asama: "Goal-directed Movement Enhances Body Representation Updating", Frontiers

in Human Neuroscience, Vol. 10, Article 329, pp. 1-10, June 2016. [doi:10.3389/fnhum.2016.00329]

- 76) Rin Minohara, Wen Wen, Shunsuke Hamasaki, Takaki Maeda, Motoichiro Kato, Hiroshi Yamakawa, Atsushi Yamashita and Hajime Asama: "Strength of Intentional Effort Enhances the Sense of Agency", *Frontiers in Psychology*, Vol. 7, No. 1165, pp. 1-5, July 2016. [doi:10.3389/fpsyg.2016.01165]
- 77) Yonghoon Ji, Atsushi Yamashita and Hajime Asama, "Indoor Positioning System Based on Camera Sensor Network for Mobile Robot Localization in Indoor Environments", *Journal of Institute of Control, Robotics and Systems*, Vol. 22, No. 11, pp. 952-959, November 2016, (in Korean). [doi:10.5302/J.ICROS.2016.16.0079]
- 78) Hanwool Woo, Yonghoon Ji, Hitoshi Kono, Yusuke Tamura, Yasuhide Kuroda, Takashi Sugano, Yasunori Yamamoto, Atsushi Yamashita and Hajime Asama: "Automatic Detection Method of Lane-Changing Intentions Based on Relationship with Adjacent Vehicles Using Artificial Potential Fields", *International Journal of Automotive Engineering*, Vol. 7, No. 4, pp. 127-134, November 2016. [doi:10.20485/jsaeijae.7.4_127]
- 79) 柴田 彬, 藤井 浩光, 山下 淳, 浅間 一: "単眼カメラと透明平板による屈折を利用したスケール復元が可能な Structure from Motion", *精密工学会誌*, Vol. 82, No. 12, pp. 1045-1053, December 2016. [doi:10.2493/jjspe.82.1045]
- 80) Ningjia Yang, Qi An, Hiroshi Yamakawa, Yusuke Tamura, Atsushi Yamashita and Hajime Asama: "Muscle Synergy Structure using Different Strategies in Human Standing-up Motion", *Advanced Robotics*, Vol. 31, No. 1-2, pp. 40-54, January 2017. [doi:10.3389/10.1080/01691864.2016.1238781]
- 81) Yuki Ishikawa, Qi An, Junki Nakagawa, Hiroyuki Oka, Tetsuro Yasui, Michio Tojima, Haruhi Inokuchi, Nobuhiko Haga, Hiroshi Yamakawa, Yusuke Tamura, Atsushi Yamashita and Hajime Asama: "Gait Analysis of Patients with Knee Osteoarthritis by Using Elevation Angle: Confirmation of the Planar Law and Analysis of Angular Difference in the Approximate Plane", *Advanced Robotics*, Vol. 31, No. 1-2, pp. 68-79, January 2017. [doi:10.3389/10.1080/01691864.2016.1229217]
- 82) Yonghoon Ji, Atsushi Yamashita and Hajime Asama: "Automatic Calibration of Camera Sensor Networks Based on 3D Texture Map Information", *Robotics and Autonomous Systems*, Vol. 87, pp. 313-328, January 2017. [doi:10.1016/j.robot.2016.09.015]
- 83) 橘高 達也, 藤井 浩光, 山下 淳, 浅間 一: "移動可能な RGB-D センサを用いた任意視点からの遮蔽物透視システム", *精密工学会誌*, Vol. 83, No. 3, pp. 235-244, March 2017. [doi:10.2493/jjspe.83.235]
- 84) Hanwool Woo, Yonghoon Ji, Hitoshi Kono, Yusuke Tamura, Yasuhide Kuroda, Takashi Sugano, Yasunori Yamamoto, Atsushi Yamashita and Hajime Asama: "Lane-Change Detection Based on Vehicle-Trajectory Prediction", *IEEE Robotics and Automation Letters*, Vol. 2, No. 2, pp. 1109-1116, April 2017. [doi:10.1109/LRA.2017.2660543]
- 85) Hitoshi Kono, Musab Obaid Alhammadi, Yusuke Tamura, Atsushi Yamashita and Hajime Asama: "Distributed Cooperative Fault Diagnosis Method for Internal Components of Robot Systems", *International Journal of Intelligent Systems and Applications in Robotics*, Vol. 8, No. 1, pp. 1-11, April 2017.
- 86) Jun Younes Louhi Kasahara, Hiromitsu Fujii, Atsushi Yamashita and Hajime Asama: "Unsupervised Learning Approach to Automation of Hammering Test Using Topological Information", *ROBOMECH Journal*, Vol. 4, 13, pp. 1-10, May 2017. [doi:10.1186/s40648-017-0081-7]
- 87) Wen Wen, Daisuke Tomoi, Hiroshi Yamakawa, Shunsuke Hamasaki, Kaoru Takakusaki, Qi An, Yusuke Tamura, Atsushi Yamashita and Hajime Asama: "Continuous Estimation of Stress Using Physiological Signals during a Car Race", *Psychology*, Vol. 8, pp. 978-986, May 2017. [doi:10.4236/psych.2017.87064]
- 88) Yoshiro Hada, Manabu Nakao, Moyuru Yamada, Hiroki Kobayashi, Naoyuki Sawasaki, Katsunori Yokoji, Satoshi Kanai, Fumiki Tanaka, Hiroaki Date, Sarthak Pathak, Atsushi Yamashita, Manabu Yamada and Toshiya Sugawara: "Development of a Bridge Inspection Support System Using Two-Wheeled Multicopter and 3D

- Modeling Technology", *Journal of Disaster Research*, Vol. 12, No. 3, pp. 593-606, June 2017. [doi:10.20965/jdr.2017.p0593]
- 89) Sarthak Pathak, Alessandro Moro, Hiromitsu Fujii, Atsushi Yamashita and Hajime Asama: "Spherical Video Stabilization by Estimating Rotation from Dense Optical Flow Fields", *Journal of Robotics and Mechatronics*, Vol. 29, No. 3, pp. 566-579, June 2017. [doi:10.20965/jrm.2017.p0566]
- 90) Wen Wen, Atsushi Yamashita and Hajime Asama: "Measurement of the Perception of Control during Continuous Movement Using Electroencephalography", *Frontiers in Human Neuroscience*, Vol. 11, Article 392, pp. 1-7, July 2017. [doi:10.3389/fnhum.2017.00392]
- 91) Wen Wen, Atsushi Yamashita and Hajime Asama: "The Influence of Performance on Action-Effect Integration in Sense of Agency", *Consciousness and Cognition*, Vol. 53, pp. 89-98, August 2017. [doi:10.1016/j.concog.2017.06.008]
- 92) Doyeon Kim, Hanwool Woo, Yonghoon Ji, Yusuke Tamura, Atsushi Yamashita and Hajime Asama: "Effect of Detector Pose Uncertainty in Localization of Radiation Sources", *E-Journal of Advanced Maintenance*, Vol. 9, No. 2, pp. 97-103, August 2017.
- 93) Veerachart Srisamosorn, Noriaki Kuwahara, Atsushi Yamashita, Taiki Ogata and Jun Ota: "Human-tracking System Using Quadrotors and Multiple Environmental Cameras for Face-tracking Application", *International Journal of Advanced Robotic Systems*, Vol. 14, No. 5, pp. 1-18, September 2017. [doi:10.1177/1729881417727357]
- 94) Sarthak Pathak, Alessandro Moro, Atsushi Yamashita and Hajime Asama: "Optical Flow-based Epipolar Estimation of Spherical Image Pairs for 3D Reconstruction", *SICE Journal of Control, Measurement, and System Integration*, Vol. 10, No. 5, pp. 476-485, September 2017. [doi:10.9746/jcmsi.10.476]
- 95) Hitoshi Kono, Tsuyoshi Suzuki, Akiya Kamimura, Kohji Tomita, Yusuke Tamura, Atsushi Yamashita and Hajime Asama: "Automatic Convergence Estimation by Utilizing Fractal Dimensional Analysis for Reinforcement Learning", *Journal of Instrumentation, Automation and Systems*, Vol. 3, No. 3, pp. 58-70, September 2016. [doi:10.21535/jias.v3i3.934]
- 96) Binbin Xu, Sarthak Pathak, Hiromitsu Fujii, Atsushi Yamashita and Hajime Asama: "Spatio-temporal Video Completion in Spherical Image Sequences", *IEEE Robotics and Automation Letters*, Vol. 2, No. 4, pp. 2032-2039, October 2017. [doi:10.1109/LRA.2017.2718106]
- 97) Shunsuke Hamasaki, Qi An, Masataka Murabayashi, Yusuke Tamura, Hiroshi Yamakawa, Atsushi Yamashita and Hajime Asama: "Evaluation of the Effect of Prime Stimulus on Sense of Agency in Stop Operation of the Object in Circular Motion", *Journal of Advanced Computational Intelligence and Intelligent Informatics*, Vol. 21, No. 7, pp. 1161-1171, November 2017. [doi:10.20965/jaciii.2017.p1161]
- 98) 奥村 有加里, 藤井 浩光, 山下 淳, 浅間 一: "屈折を利用したスケール復元が可能な計測誤差に頑健な Structure from Motion", *精密工学会誌*, Vol. 83, No. 12, pp. 1201-1208, December 2017. [doi:10.2493/jjspe.83.1201]
- 99) 後藤 翼, Sarthak Pathak, 池 勇勲, 藤井 浩光, 山下 淳, 浅間 一: "人工物環境における全天球カメラの位置姿勢推定のための直線特徴に基づく 3D-2D マッチング", *精密工学会誌*, Vol. 83, No. 12, pp. 1209-1215, December 2017. [doi:10.2493/jjspe.83.1209]
- 100) 栗島 靖之, 小松 廉, 藤井 浩光, 田村 雄介, 山下 淳, 浅間 一: "ロボット遠隔操作のための LiDAR を用いた全方位 3 次元測距による俯瞰映像上での障害物提示", *精密工学会誌*, Vol. 83, No. 12, pp. 1216-1223, December 2017. [doi:10.2493/jjspe.83.1216]
- 101) Hanwool Woo, Yonghoon Ji, Yusuke Tamura, Yasuhide Kuroda, Takashi Sugano, Yasunori Yamamoto, Atsushi Yamashita and Hajime Asama: "Dynamic State Estimation of Driving Style Based on Driving Risk Feature", *International Journal of Automotive Engineering*, Vol. 9, No. 1, pp. 31-38, March 2018. [doi:10.20485/jsaeijae.9.1_31]

- 102) 伊部 公紀, 石川 諭, 小林 祐一, 金子 透, 石原 進, 山下 淳: "車々間通信カーナビシステムにおける2視点車載カメラ画像を用いた別視点画像生成", 精密工学会誌, Vol. 84, No. 4, pp. 356-363, April 2018. [doi:10.2493/jjspe.84.356]
- 103) 樋口 寛, 藤井 浩光, 谷口 敦史, 渡辺 正浩, 山下 淳, 浅間 一: "全周ラインレーザとカメラを用いた大型構造物内部の三次元計測", 日本ロボット学会誌, Vol. 36, No. 3, pp. 222-232, April 2018. [doi:10.7210/jrsj.36.222]
- 104) Renato Miyagusuku, Atsushi Yamashita and Hajime Asama: "Precise and Accurate Wireless Signal Strength Mappings Using Gaussian Processes and Path Loss Models", Robotics and Autonomous Systems, Vol. 103, pp. 134-150, May 2018. [doi:10.1016/j.robot.2018.02.011]
- 105) Hiroki Kogami, Qi An, Ningjia Yang, Hiroshi Yamakawa, Yusuke Tamura, Atsushi Yamashita, Hajime Asama, Shingo Shimoda, Hiroshi Yamasaki, Matti Itkonen, Fady Alnajjar, Noriaki Hattori, Makoto Kinomoto, Kouji Takahashi, Takanori Fujii, Hironori Otomune and Ichiro Miyai: "Effect of Physical Therapy on Muscle Synergy Structure during Standing-up Motion of Hemiplegic Patients", IEEE Robotics and Automation Letters, Vol. 3, No. 3, pp. 2229-2236, July 2018. [doi:10.1109/LRA.2018.2811050]
- 106) Jun Younes Louhi Kasahara, Hiromitsu Fujii, Atsushi Yamashita and Hajime Asama: "Fuzzy Clustering of Spatially Relevant Acoustic Data for Defect Detection", IEEE Robotics and Automation Letters, Vol. 3, No. 3, pp. 2616-2623, July 2018. [doi:10.1109/LRA.2018.2820178]
- 107) Qi An, Junki Nakagawa, Junko Yasuda, Wen Wen, Hiroshi Yamakawa, Atsushi Yamashita and Hajime Asama: "Skill Extraction from Nursing Care Service using Sliding Sheet", International Journal of Automation Technology, Vol. 12, No. 4, pp. 533-541, July 2018. [doi:10.20965/ijat.2018.p0533]
- 108) Wen Wen, Rin Minohara, Shunsuke Hamasaki, Takaki Maeda, Qi An, Yusuke Tamura, Hiroshi Yamakawa, Atsushi Yamashita and Hajime Asama: "The Readiness Potential Reflects the Reliability of Action Consequence", Scientific Reports, Vol. 8, Article number 11865, August 2018. [doi:10.1038/s41598-018-30410-z]
- 109) Akira Shibata, Yukari Okumura, Hiromitsu Fujii, Atsushi Yamashita and Hajime Asama: "Refraction-based Bundle Adjustment for Scale Reconstructible Structure from Motion", Journal of Robotics and Mechatronics, Vol. 30, No. 4, pp. 660-670, August 2018. [doi:10.20965/jrm.2018.p0660]
- 110) Xiaorui Qiao, Yonghoon Ji, Atsushi Yamashita and Hajime Asama: "Visibility Enhancement for Underwater Robot based on an Improved Underwater Light Model", Journal of Robotics and Mechatronics, Vol. 30, No. 5, pp. 781-790, October 2018. [doi:10.20965/jrm.2018.p0781]
- 111) 岩滝 宗一郎, 孫 蔚, 藤井 浩光, 淵田 正隆, アレッサンドロ モロ, 野田 隆司, 久禮 一樹, 中沢 浩一, 吉灘 裕, 山下 淳, 浅間 一: "ブルドーザの位置姿勢変化および周囲危険領域を提示可能な任意視点映像提示", 日本機械学会論文集, Vol. 84, No. 866, 18-00196, pp. 1-17, October 2018. [doi:10.1299/transjsme.18-00196]
- 112) 長野 樹, 藤井 浩光, 橘高 達也, 淵田 正隆, 深瀬 勇太郎, 青木 滋, 鳴海 智博, 山下 淳, 浅間 一: "遠隔操縦建機のための屋外環境における遮蔽物透視システム", 精密工学会誌, Vol. 84, No. 12, pp. 1085-1091, December 2018. [doi:10.2493/jjspe.84.1085]
- 113) Hanwool Woo, Yonghoon Ji, Yusuke Tamura, Yasuhide Kuroda, Takashi Sugano, Yasunori Yamamoto, Atsushi Yamashita and Hajime Asama: "Trajectory Prediction of Surrounding Vehicles Considering Individual Driving Characteristics", International Journal of Automotive Engineering, Vol. 9, No. 4, pp. 282-288, December 2018. [doi:10.20485/jsaeijae.9.4_282]
- 114) Yonghoon Ji, Yusuke Tanaka, Yusuke Tamura, Mai Kimura, Atsushi Umemura, Yoshiharu Kaneshima, Hiroki Murakami, Atsushi Yamashita and Hajime Asama: "Adaptive Motion Planning Based on Vehicle Characteristics and Regulations for Off-Road UGVs", IEEE Transactions on Industrial Informatics, Vol. 15, No. 1, pp. 599-611, January 2019. [doi:10.1109/TII.2018.2870662]

- 115) Kazunori Yoshida, Qi An, Arito Yozu, Ryosuke Chiba, Kaoru Takakusaki, Hiroshi Yamakawa, Yusuke Tamura, Atsushi Yamashita and Hajime Asama: "Visual and Vestibular Inputs Affect Muscle Synergies Responsible for Body Extension and Stabilization in Sit-to-Stand Motion", *Frontiers in Neuroscience*, Article 1042, pp. 1-12, January 2019. [doi:10.3389/fnins.2018.01042]
- 116) Qi An, Yuki Ishikawa, Wen Wen, Shu Ishiguro, Koji Ohata, Hiroshi Yamakawa, Yusuke Tamura, Atsushi Yamashita and Hajime Asama: "Skill Abstraction of Physical Therapist in Hemiplegia Patients Rehabilitation Using A Walking Assist Robot", *International Journal of Automation Technology*, Vol. 13, No. 2, pp. 271-278, March 2019. [doi:10.20965/ijat.2019.p0271]
- 117) Shunsuke Hamasaki, Qi An, Wen Wen, Yusuke Tamura, Hiroshi Yamakawa, Satoshi Unenaka, Satoshi Shibuya, Yukari Ohki, Atsushi Yamashita and Hajime Asama: "Changes in Body Representation of the Human Upper Limb as a Function of Movement and Visual Hand Position", *Journal of Advanced Computational Intelligence and Intelligent Informatics*, Vol. 23, No. 2, pp. 196-208, March 2019. [doi:10.20965/jaciii.2019.p0196]
- 118) Renato Miyagusuku, Atsushi Yamashita and Hajime Asama: "Data Information Fusion from Multiple Access Points for WiFi-based Self-localization", *IEEE Robotics and Automation Letters*, Vol. 4, No. 2, pp. 269-276, April 2019. [doi:10.1109/LRA.2018.2885583]
- 119) Hiroshi Higuchi, Hiromitsu Fujii, Atsushi Taniguchi, Masahiro Watanabe, Atsushi Yamashita and Hajime Asama: "3D Measurement of Large Structure by Multiple Cameras and a Ring Laser", *Journal of Robotics and Mechatronics*, Vol. 31, No. 2, pp. 251-262, April 2019. [doi:10.20965/jrm.2019.p0251]
- 120) Masataka Fuchida, Shota Chikushi, Alessandro Moro, Atsushi Yamashita and Hajime Asama: "Arbitrary Viewpoint Visualization for Teleoperation of Disaster Response Robots", *Journal of Advanced Simulation in Science and Engineering*, Vol. 6, No. 1, pp. 249-259, May 2019. [doi:10.15748/jasse.6.249]
- 121) 野田 純平, Sarthak Pathak, 藤井 浩光, 山下 淳, 浅間 一: "計測点の信頼度を考慮した全天球ステレオカメラの運動推定", *精密工学会誌*, Vol. 85, No. 6, pp. 568-576, June 2019. [doi:10.2493/jjspe.85.568]
- 122) Hiroshi R. Yamasaki, Qi An, Makoto Kinomoto, Koji Takahashi, Takanori Fujii, Hiroki Kogami, Ningjia Yang, Hiroshi Yamakawa, Yusuke Tamura, Matti Itkonen, Moeka Sonoo, Fady S.K. Alnajjar, Atsushi Yamashita, Hironori Otomune, Noriaki Hattori, Hajime Asama, Ichiro Miyai and Shingo Shimoda: "Organization of Functional Modularity in Sitting Balance Response and Gait Performance after Stroke", *Clinical Biomechanics*, Vol. 67, pp. 61-69, July 2019. [doi:10.1016/j.clinbiomech.2019.04.022]
- 123) Xiaorui Qiao, Atsushi Yamashita and Hajime Asama: "Underwater Structure from Motion for Cameras under Refractive Surfaces", *Journal of Robotics and Mechatronics*, Vol. 31, No. 4, pp. 603-611, August 2019. [doi:10.20965/jrm.2019.p0603]
- 124) Jiaxu Wu, Hanwool Woo, Yusuke Tamura, Alessandro Moro, Stefano Massaroli, Atsushi Yamashita and Hajime Asama: "Pedestrian Trajectory Prediction Using BiRNN Encoder-Decoder Framework ", *Advanced Robotics*, Vol. 33, No. 18, pp. 956-969, September 2019. [doi:10.1080/01691864.2019.1635910]
- 125) Hanwool Woo, Yonghoon Ji, Yusuke Tamura, Yasuhide Kuroda, Takashi Sugano, Yasunori Yamamoto, Atsushi Yamashita and Hajime Asama: "Lane-Change Detection Based on Individual Driving Style", *Advanced Robotics*, Vol. 33, No. 20, pp. 1087-1098, October 2019. [doi:10.1080/01691864.2019.1659179]
- 126) Ningjia Yang, Qi An, Hiroki Kogami, Hiroshi Yamakawa, Yusuke Tamura, Kouji Takahashi, Makoto Kinomoto, Hiroshi Yamasaki, Matti Itkonen, Fady Sshibata-Alnajjar, Shingo Shimoda, Noriaki Hattori, Takanori Fujii, Hironori Otomune, Ichiro Miyai, Atsushi Yamashita and Hajime Asama: "Temporal Features of Muscle Synergies in Sit-to-stand Motion Reflect the Motor Impairment of Post-Stroke Patients", *IEEE Transactions on Neural Systems and Rehabilitation Engineering*, Vol. 27, No. 10, pp. 2118-2127, October 2019. [doi:10.1109/TNSRE.2019.2939193]

- 127) Hanwool Woo, Hirokazu Madokoro, Kazuhito Sato, Yusuke Tamura, Atsushi Yamashita and Hajime Asama: "Advanced Adaptive Cruise Control Based on Operation Characteristic Estimation and Trajectory Prediction", *Applied Sciences*, Vol. 9, No. 22, 4875, pp. 1-18, November 2019. [doi:10.3390/app9224875]
- 128) 岩滝 宗一郎, 淵田 正隆, モロ アレッサンドロ, 野田 隆司, 矢津田 修, 中沢 浩一, 吉灘 裕, 山下 淳, 浅間 一: "レーザレーダと複数のカメラを用いた任意視点映像提示システムのセンサキャリブレーション", *精密工学会誌*, Vol. 85, No. 12, pp. 1110-1116, December 2019. [doi:10.2493/jjspe.85.1110]
- 129) Ren Komatsu, Hiromitsu Fujii, Yusuke Tamura, Atsushi Yamashita and Hajime Asama: "Octave Deep Plane-sweeping Network: Reducing Spatial Redundancy for Learning-based Plane-sweeping Stereo", *IEEE Access*, Vol. 7, pp. 150306-150317, December 2019. [doi:10.1109/ACCESS.2019.2947195]
- 130) Satoru Nakamura, Atsushi Yamashita, Fumihiro Inoue, Daisuke Inoue, Yusuke Takahashi, Nobukazu Kamimura and Takao Ueno: "Inspection Test of a Tunnel with the Inspection Vehicle for Tunnel Lining Concrete", *Journal of Robotics and Mechatronics*, Vol. 31, No. 6, pp. 762-771, December 2019. [doi:10.20965/jrm.2019.p0762]
- 131) 高橋 悠輔, 前原 聡, 藤井 浩光, 山下 淳: "人の音に近い打音装置を使った変状検出手法", *日本ロボット学会誌*, Vol. 38, No. 1, pp. 113-118, January 2020. [doi:10.7210/jrsj.38.113]
- 132) Jun Younes Louhi Kasahara, Atsushi Yamashita and Hajime Asama: "Acoustic Inspection of Concrete Structures Using Active Weak Supervision and Visual Information", *Sensors*, Vol. 20, No. 3, 629, pp. 1-15, February 2020. [doi:10.3390/s20030629]
- 133) 筑紫 彰太, 森山 湧志, 藤井 浩光, 田村 雄介, 山川 博司, 永谷 圭司, 坂井 郁也, 千葉 拓史, 山本 新吾, 茶山 和博, 山下 淳, 浅間 一: "遠隔操作オペレータの要求仕様に基づいたバックホウ盛土作業のための映像自動提示", *精密工学会誌*, Vol. 86, No. 2, pp. 164-170, February 2020. [doi:10.2493/jjspe.86.164]
- 134) 禹 ハンウル, 間所 洋和, 佐藤 和人, 田村 雄介, 山下 淳, 浅間 一: "先行車追従モデルに基づいた追従運転者の操作特性の推定", *自動車技術会論文集*, Vol. 51, No. 2, pp. 304-309, March 2020. [doi:10.11351/jsaeronbun.51.304]
- 135) Dabae Kim, Sarthak Pathak, Alessandro Moro, Atsushi Yamashita and Hajime Asama: "SelfSphNet: Motion Estimation of a Spherical Camera via Self-Supervised Learning", *IEEE Access*, Vol. 8, pp. 41847-41859, March 2020. [doi:10.1109/ACCESS.2020.2977109]
- 136) Ren Komatsu, Hiromitsu Fujii, Yusuke Tamura, Atsushi Yamashita and Hajime Asama: "Free Viewpoint Image Generation System Using Fisheye Cameras and a Laser Rangefinder for Indoor Robot Teleoperation", *ROBOMECH Journal*, Vol. 7, 15, pp. 1-10, March 2020. [doi:10.1186/s40648-020-00163-4]
- 137) Ningjia Yang, Qi An, Hiroki Kogami, Kazunori Yoshida, Hiroshi Yamakawa, Yusuke Tamura, Shingo Shimoda, Hiroshi Yamasaki, Moeka Sonoo, Matti Itkonen, Fady Alnajjar, Noriaki Hattori, Makoto Kinomoto, Kouji Takahashi, Takanori Fujii, Hironori Otomune, Ichiro Miyai, Atsushi Yamashita and Hajime Asama: "Temporal Muscle Synergy Features Estimate Effects of Short-term Rehabilitation in Sit-to-stand of Post-stroke Patients", *IEEE Robotics and Automation Letters*, Vol. 5, No. 2, pp. 1796-1802, April 2020. [doi:10.1109/LRA.2020.2969942]
- 138) Jiaxu Wu, Yusuke Tamura, Yusheng Wang, Hanwool Woo, Alessandro Moro, Atsushi Yamashita and Hajime Asama: "Smartphone Zombie Detection from LiDAR Point Cloud for Mobile Robot Safety", *IEEE Robotics and Automation Letters*, Vol. 5, No. 2, pp. 2256-2263, April 2020. [doi:10.1109/LRA.2020.2970570]
- 139) Veerachart Srisamosorn, Noriaki Kuwahara, Atsushi Yamashita, Taiki Ogata, Shouhei Shirafuji and Jun Ota: "Indoor Human Face Following with Environmental Fisheye Cameras and Blimp", *Advanced Robotics*, Vol. 34, No. 9, pp. 621-636, May 2020. [doi:10.1080/01691864.2020.1747537]
- 140) Wen Wen, Hiroshi Shibata, Ryu Ohata, Atsushi Yamashita, Hajime Asama and Hiroshi Imamizu: "The

- Active Sensing of Control Difference", *iScience*, Vol. 23, No. 5, 101112, pp. 1-11, May 2020. [doi:10.1016/j.isci.2020.101112]
- 141) Hanwool Woo, Mizuki Sugimoto, Hirokazu Madokoro, Kazuhito Sato, Yusuke Tamura, Atsushi Yamashita and Hajime Asama: "Goal Estimation of Mandatory Lane Changes Based on Interaction Between Drivers", *Applied Sciences*, Vol. 10, No. 9, 3289, pp. 1-12, May 2020. [doi:10.3390/app10093289]
- 142) Veerachart Srisamosorn, Noriaki Kuwahara, Atsushi Yamashita, Taiki Ogata, Shouhei Shirafuji and Jun Ota: "Human Position and Head Direction Tracking in Fisheye Camera Using Randomized Ferns and Fisheye Histograms of Oriented Gradients", *The Visual Computer*, Vol. 36, No. 7, pp. 1443-1456, July 2020. [doi:10.1007/s00371-019-01749-9]
- 143) Irem Uygur, Renato Miyagusuku, Sarthak Pathak, Alessandro Moro, Atsushi Yamashita and Hajime Asama: "Robust and Efficient Indoor Localization Using Sparse Semantic Information by a Spherical Camera", *Sensors*, Vol. 20, No. 15, 4128, pp. 1-20, August 2020. [doi:10.3390/s20154128]
- 144) Wen Wen, Naoto Shimazaki, Ryu Ohata, Atsushi Yamashita, Hajime Asama and Hiroshi Imamizu: "Categorical Perception of Control", *eNeuro*, Vol. 7, No. 5, pp. 1-11, September/October 2020. [doi:10.1523/ENEURO.0258-20.2020]
- 145) Stefano Massaroli, Federico Califano, Angela Faragasso, Atsushi Yamashita and Hajime Asama: "On the Extinction-Free Stabilization of Predator-Prey Dynamics", *IEEE Control Systems Letters*, Vol. 4, No. 4, pp. 964-969, October 2020. [doi:10.1109/LCSYS.2020.2997741]
- 146) Yusheng Wang, Yonghoon Ji, Dingyu Liu, Yusuke Tamura, Hiroshi Tsuchiya, Atsushi Yamashita and Hajime Asama: "ACMarker: Acoustic Camera-based Fiducial Marker System in Underwater Environment", *IEEE Robotics and Automation Letters*, Vol. 5, No. 4, pp. 5018-5025, October 2020. [doi:10.1109/LRA.2020.3005375]
- 147) 岩村 紀与彦, ルイ笠原 純ユネス, モロ アレッサンドロ, 山下 淳, 浅間 一: "アテンション機構を用いたクロップとマスクによるキャプション生成のためのデータ拡張", *精密工学会誌*, Vol. 86, No. 11, pp. 904-910, November 2020. [doi:10.2493/jjspe.86.904]
- 148) Jun Jiang, Renato Miyagusuku, Atsushi Yamashita and Hajime Asama: "Online Glass Confidence Map Building Using Laser Rangefinder for Mobile Robots", *Advanced Robotics*, Vol. 34, No. 23, pp. 1506-1521, December 2020. [doi:10.1080/01691864.2020.1819873]
- 149) ルイ笠原 純ユネス, 湊 真司, モロ アレッサンドロ, 禹 ハンウル, 山下 淳, 浅間 一: "力センサとカメラのセンサフュージョンに基づいたコンクリート構造物の欠陥検出", *精密工学会誌*, Vol. 86, No. 12, pp. 975-981, December 2020. [doi:10.2493/jjspe.86.975]
- 150) 陽 東旭, 樋口 寛, Sarthak Pathak, Alessandro Moro, 山下 淳, 浅間 一: "色情報と3次元距離情報に基づく全天球カメラの位置姿勢推定 ―キーフレーム毎のデプスマップ更新による連続位置姿勢推定―", *精密工学会誌*, Vol. 86, No. 12, pp. 1014-1019, December 2020. [doi:10.2493/jjspe.86.1014]
- 151) 後藤 拓矢, 中野 宏毅, 山下 淳, 浅間 一: "CT 画像における複数スライスを用いた小疾病領域検出", *精密工学会誌*, Vol. 86, No. 12, pp. 1020-1025, December 2020. [doi:10.2493/jjspe.86.1020]
- 152) 筑紫 彰太, 山内 統広, 田村 雄介, 山川 博司, 永谷 圭司, 藤井 浩光, 千葉 拓史, 山本 新吾, 茶山 和博, 山下 淳, 浅間 一: "スペクトル画像を用いた土質パラメータの推定に基づく建設機械の走破性判定", *精密工学会誌*, Vol. 86, No. 12, pp. 1057-1063, December 2020. (精密工学会高城賞受賞) [doi:10.2493/jjspe.86.1057]
- 153) Tatsuki Nagano, Ryosuke Yajima, Shunsuke Hamasaki, Keiji Nagatani, Alessandro Moro, Hiroyuki Okamoto, Genki Yamauchi, Takeshi Hashimoto, Atsushi Yamashita and Hajime Asama: "Arbitrary Viewpoint Visualization for Teleoperated Hydraulic Excavators", *Journal of Robotics and Mechatronics*, Vol. 32, No. 6, pp. 1233-1243, December 2020. [doi:10.20965/jrm.2020.p1233]
- 154) 山口 恵璃, 樋口 寛, 山下 淳, 浅間 一: "偏光カメラの偏光度とLRFの距離情報を用いたガラ

- ス環境対応 SLAM", 精密工学会誌, Vol. 87, No. 1, pp. 114-119, January 2021. [doi:10.2493/jjspe.87.114]
- 155) Dabae Kim, Sarthak Pathak, Alessandro Moro, Atsushi Yamashita and Hajime Asama: "Self-Supervised Optical Flow Derotation Network for Rotation Estimation of a Spherical Camera", *Advanced Robotics*, Vol. 35, No. 2, pp. 118-128, January 2021. [doi:10.1080/01691864.2020.1857305]
- 156) Kei Aoyagi, Wen Wen, Qi An, Shunsuke Hamasaki, Hiroshi Yamakawa, Yusuke Tamura, Atsushi Yamashita and Hajime Asama: "Modified Sensory Feedback Enhances the Sense of Agency during Continuous Body Movements in Virtual Reality", *Scientific Reports*, Vol. 11, Article Number 2553, January 2021. [doi:10.1038/s41598-021-82154-y]
- 157) Jun Younes Louhi Kasahara, Atsushi Yamashita and Hajime Asama: "Multiple Oracle Consensus for Weakly Supervised Defect Detection in Concrete Structures Using Audio Data", *Advanced Robotics*, Vol. 35, No. 3-4, pp. 219-227, February 2021. [doi:10.1080/01691864.2020.1861977]
- 158) Runqiu Bao, Ren Komatsu, Renato Miyagusuku, Masaki Chino, Atsushi Yamashita and Hajime Asama: "Stereo Camera Visual SLAM with Hierarchical Masking and Motion-state Classification at Outdoor Construction Sites Containing Large Dynamic Objects", *Advanced Robotics*, Vol. 35, No. 3-4, pp. 228-241, February 2021. [doi:10.1080/01691864.2020.1869586]
- 159) Dingyu Liu, Yusheng Wang, Yonghoon Ji, Hiroshi Tsuchiya, Atsushi Yamashita and Hajime Asama: "CycleGAN-based Realistic Image Dataset Generation for Forward-looking Sonar", *Advanced Robotics*, Vol. 35, No. 3-4, pp. 242-254, February 2021. (Advanced Robotics Excellent Paper Award) [doi:10.1080/01691864.2021.1873845]
- 160) Kiyohiko Iwamura, Jun Younes Louhi Kasahara, Alessandro Moro, Atsushi Yamashita and Hajime Asama: "Image Captioning Using Motion-CNN with Object Detection", *Sensors*, Vol. 21, No. 4, 1270, pp. 1-13, February 2021. [doi:10.3390/s21041270]
- 161) 後田 啓太朗, 樋口 寛, 山下 淳, 浅間 一: "屈折の大きさを考慮したスケール復元可能な Structure from Motion", 精密工学会誌, Vol. 87, No.3, pp. 301-306, March 2021. [doi:10.2493/jjspe.87.301]
- 162) Yusheng Wang, Yonghoon Ji, Dingyu Liu, Hiroshi Tsuchiya, Atsushi Yamashita and Hajime Asama: "Elevation Angle Estimation in 2D Acoustic Images Using Pseudo Front View", *IEEE Robotics and Automation Letters*, Vol. 6, No. 2, pp. 1535-1542, April 2021. [doi:10.1109/LRA.2021.3058911]
- 163) Takuya Kishimoto, Hanwool Woo, Ren Komatsu, Yusuke Tamura, Hideki Tomita, Kenji Shimazoe, Atsushi Yamashita and Hajime Asama: "Path Planning for Localization of Radiation Sources Based on Principal Component Analysis", *Applied Sciences*, Vol. 11, No. 10, 4707, pp. 1-22, May 2021. [doi:10.3390/app11104707]
- 164) Wen Wen, Sonmin Yun, Atsushi Yamashita, Brandon D. Northcutt and Hajime Asama: "Deceleration Assistance Mitigated the Trade-off between Sense of Agency and Driving Performance", *Frontiers in Psychology*, Vol. 12, Article 643516, pp. 1-9, June 2021. [doi:10.3389/fpsyg.2021.643516]
- 165) Yusheng Wang, Yonghoon Ji, Hanwool Woo, Yusuke Tamura, Hiroshi Tsuchiya, Atsushi Yamashita and Hajime Asama: "Acoustic Camera-based Pose Graph SLAM for Dense 3D Mapping in Underwater Environments", *IEEE Journal of Oceanic Engineering*, Vol. 46, No. 3, pp. 829-847, July 2021. [doi:10.1109/JOE.2020.3033036]
- 166) Kazunori Yoshida, Qi An, Hiroyuki Hamada, Hiroshi Yamakawa, Yusuke Tamura, Atsushi Yamashita and Hajime Asama: "Artificial Neural Network that Modifies Muscle Activity in Sit-to-Stand Motion Using Sensory Input", *Advanced Robotics*, Vol. 35, No. 13-14, pp. 858-866, July 2021. [doi:10.1080/01691864.2021.1917452]
- 167) Hiroki Kogami, Qi An, Ningjia Yang, Ruoxi Wang, Kazunori Yoshida, Hiroyuki Hamada, Hiroshi Yamakawa, Yusuke Tamura, Shingo Shimoda, Hiroshi Yamasaki, Moeka Sonoo, Fady Alnajjar, Noriaki Hattori, Koji Takahashi, Takanori Fujii, Hironori Otomune, Ichiro Miyai, Atsushi Yamashita and Hajime

- Asama: "Analysis of Muscle Synergy and Kinematics in Sit-to-stand Motion of Hemiplegic Patients in Subacute Period", *Advanced Robotics*, Vol. 35, No. 13-14, pp. 867-877, July 2021. [doi:10.1080/01691864.2021.1928547]
- 168) Hao Xu, Ren Komatsu, Hanwool Woo, Atsushi Yamashita and Hajime Asama: "Leakage Position Estimation of Cooling Water Using a Stereo Camera for Fukushima Daiichi Nuclear Power Plant", *Applied Sciences*, Vol. 11, No. 17, 7796, pp. 1-15, August 2021. [doi:10.3390/app11177796]
- 169) Wen Wen, Hikaru Ishii, Ryu Ohata, Atsushi Yamashita, Hajime Asama and Hiroshi Imamizu: "Perception and Control: Individual Difference in the Sense of Agency is Associated with Learnability in Sensorimotor Adaptation", *Scientific Reports*, Vol. 11, Article 20542, October 2021. [doi:10.1038/s41598-021-99969-4]
- 170) Mikihiro Ikura, Sarthak Pathak, Jun Younes Louhi Kasahara, Atsushi Yamashita and Hajime Asama: "AdjustSense: Adaptive 3D Sensing System with Adjustable Spatio-temporal Resolution and Measurement Range Using High-speed Omnidirectional Camera and Direct Drive Motor", *Sensors*, Vol. 21, No. 21, 6975, pp. 1-18, October 2021. [doi:10.3390/s21216975]
- 171) Daisuke Uchida, Atsushi Yamashita and Hajime Asama: "Data-Driven Koopman Controller Synthesis Based on the Extended H2 Norm Characterization", *IEEE Control Systems Letters*, Vol. 5, No. 5, pp. 1795-1800, November 2021. [doi:10.1109/LCSYS.2020.3042827]
- 172) Qi An, Ningjia Yang, Hiroshi Yamakawa, Hiroki Kogami, Kazunori Yoshida, Ruoxi Wang, Atsushi Yamashita, Hajime Asama, Shu Ishiguro, Shingo Shimoda, Hiroshi Yamasaki, Moeka Yokoyama, Fady Alnajjar, Noriaki Hattori, Kouji Takahashi, Takanori Fujii, Hironori Otomune, Ichiro Miyai and Ryo Kurazume: "Classification of Motor Impairments of Post-stroke Patients based on Force Applied to a Handrail", *IEEE Transactions on Neural Systems and Rehabilitation Engineering*, Vol. 29, pp. 2399-2406, November 2021. [doi:10.1109/TNSRE.2021.3127504]
- 173) 伊賀上 卓也, 樋口 寛, 井倉 幹大, 吉田 健一, 伊藤 哲, 谷口 信博, 山下 淳, 浅間 一: "リングレーザ照射光の 2D-3D マッチングに基づく光切断法によるトンネル内部の 3 次元計測", *精密工学会誌*, Vol. 87, No. 12, pp. 987-994, December 2021. [doi:10.2493/jjspe.87.987]
- 174) Jun Younes Louhi Kasahara, Hiromitsu Fujii, Atsushi Yamashita and Hajime Asama: "Weakly Supervised Acoustic Defect Detection in Concrete Structures Using Clustering-based Augmentation", *IEEE/ASME Transactions on Mechatronics*, Vol. 26, No. 6, pp. 2826-2834, December 2021. [doi:10.1109/TMECH.2021.3077496]
- 175) Ryosuke Yajima, Shinya Katsuma, Makoto Suzuki, Fumiya Matsushita, Shunsuke Hamasaki, Pang-jo Chun, Keiji Nagatani, Genki Yamauchi, Takeshi Hashimoto, Atsushi Yamashita, Hajime Asama and Kazumasa Ozawa: "Development of An Excavator-avoidance System for Buried Pipes", *Advanced Robotics*, Vol. 35, No. 23, pp. 1468-1483, December 2021. [doi:10.1080/01691864.2021.2007167]
- 176) Stefano Massaroli, Michael Poli, Stefano Peluchetti, Jinkyoo Park, Atsushi Yamashita and Hajime Asama: "Learning Stochastic Optimal Policies via Gradient Descent", *IEEE Control Systems Letters*, Vol. 6, pp. 1094-1099, 2022. [doi:10.1109/LCSYS.2021.3086672]
- 177) Wen Wen, Yuta Okon, Atsushi Yamashita and Hajime Asama: "Where is the Voice from? The Over-estimation of Distance for Self-voice Versus Other-voice", *Scientific Reports*, Vol. 12, Article 420, January 2022. [doi:10.1038/s41598-021-04437-8]
- 178) Ziheng Chao, Ren Komatsu, Hanwool Woo, Yusuke Tamura, Atsushi Yamashita and Hajime Asama: "Radiation Distribution Estimation with Non-directional Detector Using Plane Source Model", *Advanced Robotics*, Vol. 36, No. 4, pp. 182-191, February 2022. [doi:10.1080/01691864.2021.2016482]
- 179) ルイ笠原 純ユネス, 沈 鎮赫, 小松 廉, 筑紫 彰太, 永谷 圭司, 千葉 拓史, 山本 新吾, 茶山 和博, 山下 淳, 浅間 一: "シミュレータで作成された訓練データのデータ拡張による油圧ショベルの動作認識", *精密工学会誌*, Vol. 88, No. 2, pp. 162-167, February 2022. [doi:10.2493/jjspe.88.162]

- 180) 井倉 幹大, 宮下令央, 山下 淳, 石川 正俊, 浅間 一: "高速点滅 LED マーカと複数の RGB-D センサを用いた遮蔽領域を提示可能な任意視点重畳映像生成システム", 精密工学会誌, Vol. 88, No.3, pp. 282-290, March 2022. [doi:10.2493/jjspe.88.282]
- 181) Ruoxi Wang, Qi An, Ningjia Yang, Hiroki Kogami, Kazunori Yoshida, Hiroshi Yamakawa, Hiroyuki Hamada, Shingo Shimoda, Hiroshi R. Yamasaki, Moeka Yokoyama, Fady Alnajjar, Noriaki Hattori, Kouji Takahashi, Takanori Fujii, Hironori Otomune, Ichiro Miyai, Atsushi Yamashita and Hajime Asama: "Clarify Sit-to-Stand Muscle Synergy and Tension Changes in Subacute Stroke Rehabilitation by Musculoskeletal Modeling", *Frontiers in Systems Neuroscience*, Vol. 16, Article 785143, pp. 1-16, March 2022. [doi:10.3389/fnsys.2022.785143]
- 182) Xiaojun Lu, Hanwool Woo, Angela Faragasso, Atsushi Yamashita and Hajime Asama: "Socially Aware Robot Navigation in Crowds via Deep Reinforcement Learning with Resilient Reward Functions", *Advanced Robotics*, Vol. 36, No. 8, pp. 388-403, March 2022. [doi:10.1080/01691864.2022.2043184]
- 183) Kazunori Yoshida, Qi An, Hiroyuki Hamada, Hiroshi Yamakawa, Yusuke Tamura, Atsushi Yamashita and Hajime Asama: "Analysis of Muscle Activity of Sit-to-Stand Motion When Knee Movability is Disturbed", *Journal of Robotics and Mechatronics*, Vol. 34, No. 4, pp. 767-776, August 2022. [doi:10.20965/jrm.2022.p0767]
- 184) Stefano Massaroli, Michael Poli, Federico Califano, Jinkyoo Park, Atsushi Yamashita and Hajime Asama: "Optimal Energy Shaping via Neural Approximators", *SIAM Journal on Applied Dynamical Systems*, Vol. 21, No. 3, pp. 2126-2147, August 2022. [doi:10.1137/21M1414279]
- 185) 後藤 拓矢, 中野 宏毅, 浅間 一, 山下 淳: "不鮮明な疾患領域輪郭に対応した輪郭誤差を含むアノテーションにおける CT 画像からの疾患領域検出", 精密工学会誌, Vol. 88, No. 12, pp. 919-925, December 2022. (精密工学会研究奨励賞 受賞) [doi:10.2493/jjspe.88.919]
- 186) 林 鍾勳, ルイ笠原 純ユネス, 丸山 宏, 浅間 一, 山下 淳: "Advanced Random Mix Augmentation : 深層学習による画像分類の性能向上のための画像処理組み合わせの重複防止を用いたデータ拡張法", 精密工学会誌, Vol. 89, No. 1, pp. 105-112, January 2023. [doi:10.2493/jjspe.89.105]
- 187) 太田 薫平, ルイ笠原 純ユネス, 浅間 一, 山下 淳: "等間隔な配置を利用した画像からの作物検出", 精密工学会誌, Vol. 89, No. 2, pp. 190-200, February 2023. [doi:10.2493/jjspe.89.190]
- 188) Xiaojun Lu, Hanwool Woo, Angela Faragasso, Atsushi Yamashita and Hajime Asama: "Robot Navigation in Crowds via Deep Reinforcement Learning with Modeling of Obstacle Uni-action", *Advanced Robotics*, Vol. 37, No. 4, pp. 257-269, February 2023. [doi:10.1080/01691864.2022.2142068]
- 189) 速水 桃子, 伊賀上 卓也, 井倉 幹大, 樋口 寛, ルイ笠原 純ユネス, 伊藤 哲, 谷口 信博, 森野 弘之, 吉田 健一, 浅間 一, 山下 淳: "クロスラインレーザとカメラを併用したロックボルト孔の位置および方向計測", 精密工学会誌, Vol. 89, No. 4, pp. 328-335, April 2023. [doi:10.2493/jjspe.89.328]
- 190) Wanxin Bao, Ren Komatsu, Hajime Asama and Atsushi Yamashita: "Applying Albedo Estimation and Implicit Neural Representations to Well-posed Shape from Shading", *IEEE Access*, Vol. 11, pp. 40038-40048, April 2023. [doi:10.1109/ACCESS.2023.3269286]
- 191) Hiroyuki Hamada, Wen Wen, Tsubasa Kawasaki, Atsushi Yamashita and Hajime Asama: "Characteristics of EEG Power Spectra Involved in the Proficiency of Motor Learning", *Frontiers in Neuroscience*, pp.1-10, Vol. 17, July 2023. [doi:10.3389/fnins.2023.1094658]
- 192) Haoxiang Liu, Ren Komatsu, Shinsuke Nakashima, Hiroyuki Hamada, Nobuto Matsuhira, Hajime Asama and Atsushi Yamashita: "Viewpoint Selection for the Efficient Teleoperation of a Robot Arm Using Reinforcement Learning", *IEEE Access*, Vol. 11, pp. 119647-119658, October 2023. [doi:10.1109/ACCESS.2023.3327826]
- 193) Takuya Igaue, Toko Hayamizu, Hiroshi Higuchi, Mikihiro Ikura, Kenichi Yoshida, Satoshi Yamanaka,

- Takashi Yamaguchi, Hajime Asama and Atsushi Yamashita: "Cooperative 3D Tunnel Measurement Based on 2D-3D Registration of Omnidirectional Laser Light", *Journal of Field Robotics*, Vol. 40, No. 8, pp. 2042-2056, December 2023. [doi:10.1002/rob.22241]
- 194) 萩原 佑介, 樋口 寛, 伊賀上 卓也, 浅間 一, Qi An, 山下 淳: "屋内 SLAM のための LiDAR と偏光カメラを用いたガラスの 3 次元座標推定", *計測自動制御学会論文集*, Vol. 60, No. 1, pp. 27-34, January 2024. [doi:10.9746/sicetr.60.27]
- 195) Yusheng Wang, Yonghoon Ji, Hiroshi Tsuchiya, Jun Ota, Hajime Asama and Atsushi Yamashita: "Acoustic-n-point for Solving 2D Forward Looking Sonar Pose Estimation", *IEEE Robotics and Automation Letters*, Vol. 9, No. 2, pp. 1652-1659, February 2024. [doi:10.1109/LRA.2024.3349968]
- 196) Irem Uygur, Renato Miyagusuku, Sarthak Pathak, Hajime Asama and Atsushi Yamashita: "Data Fusion for Sparse Semantic Localization based on Object Detection", *Journal of Robotics and Mechatronics*, Vol. 36, No. 2, pp. 375-387, April 2024. [doi:10.20965/jrm.2024.p0375]
- 197) Jonghoon Im, Jun Younes Louhi Kasahara, Hiroshi Maruyama, Hajime Asama and Atsushi Yamashita: "Blend AutoAugment: Automatic Data Augmentation for Image Classification Using Linear Blending", *IEEE Access*, Vol. 12, pp. 68770-68784, May 2024. [doi:10.1109/ACCESS.2024.3401167]
- 198) Junwoon Lee, Ren Komatsu, Mitsuru Shinozaki, Toshihiro Kitajima, Hajime Asama, Qi An and Atsushi Yamashita: "Switch-SLAM: Switching-based LiDAR-Inertial-Visual SLAM for Degenerate Environments", *IEEE Robotics and Automation Letters*, Vol. 9, No. 8, pp. 7270-7277, August 2024. [doi:10.1109/LRA.2024.3421792]
- 199) Hidenori Takamiya, Ryosuke Yajima, Jun Younes Louhi Kasahara, Ren Komatsu, Keiji Nagatani, Atsushi Yamashita and Hajime Asama: "Motion Generation for a Tracked Robot Going Over an Unfixed Obstacle on a Slope Using Reinforcement Learning", *Advanced Robotics*, Vol. 38, No. 15, pp. 1024-1037, July 2024. [doi:10.1080/01691864.2024.2376029]
- 200) Qi An, Hiroyuki Hamada, Shigeki Maruta, Yuki Abe, Kenichi Takada, Ken Kikuchi, Hiroshi Yamakawa, Hajime Asama and Atsushi Yamashita: "Pneumatic Plantar Stimulation Device Replicating Manual Therapy Improves Lateral Stability in Standing Posture", *Journal of Robotics and Mechatronics*, Vol. 36, No. 4, pp. 813-822, August 2024. [doi:10.20965/jrm.2024.p0813]
- 201) Koki Shoda, Jun Younes Louhi Kasahara, Hajime Asama, Qi An and Atsushi Yamashita: "Defect Detection with Ego-noise Reduction Based on Multimodal Information in UAV Hammering Inspection", *Advanced Robotics*, Vol. 38, No. 17, pp. 1218-1230, September 2024. [doi:10.1080/01691864.2024.2388119]
- 202) Junwoon Lee, Taisei Ando, Mitsuru Shinozaki, Toshihiro Kitajima, Qi An and Atsushi Yamashita: "Self-TIO: Thermal-Inertial Odometry via Self-Supervised 16-bit Feature Extractor and Tracker", *IEEE Robotics and Automation Letters*, Vol. 10, No. 2, pp. 1003-1010, February 2025. [doi:10.1109/LRA.2024.3518303]
- 203) Koki Shoda, Jun Younes Louhi Kasahara, Qi An and Atsushi Yamashita: "Defect Detection in Concrete Structures Based on Characteristics of Hammer Reaction Force and Apparent Stiffness of Concrete", *IEEE Access*, Vol. 13, pp. 25325-25338, February 2025. [doi:10.1109/ACCESS.2025.3535927]
- 204) Xiaojun Lu, Angela Faragasso, Yongdong Wang, Atsushi Yamashita and Hajime Asama: "Group-Aware Robot Navigation in Crowds Using Spatio-Temporal Graph Attention Network with Deep Reinforcement Learning", *IEEE Robotics and Automation Letters*, Vol. 10, No. 4, pp. 4140-4147, April 2025. [doi:10.1109/LRA.2025.3549663]
- 205) Ryosuke Yajima, Tomohiro Katsura, Shunsuke Hamasaki, Keiji Nagatani, Genki Yamauchi, Daisuke Endo, Hirotaka Suzuki, Takeshi Hashimoto, Atsushi Yamashita and Hajime Asama: "Digging Motion Planning for Excavators to Reduce Soil Spillage", *ROBOMECH Journal*, Vol. 12, 8, pp. 1-15, April 2025. [doi:10.1186/s40648-025-00295-5]
- 206) Yusheng Wang, Yonghoon Ji, Hiroshi Tsuchiya, Jun Ota, Hajime Asama and Atsushi Yamashita:

- "ACSim: A Novel Acoustic Camera Simulator with Recursive Ray Tracing, Artifact Modeling and Ground Truthing", IEEE Transactions on Robotics, Vol. 41, 2025. [doi:10.1109/TRO.2025.3562048]
- 207) Jiaxu Wu, Yusheng Wang, Tong Chen, Jun Jiang, Yongdong Wang, Qi An and Atsushi Yamashita: "Diversity-aware Crowd Model for Robust Robot Navigation in Human Populated Environment", IEEE Robotics and Automation Letters, Vol. 10, 2025.
- 208) Susumu Shimizu, Takuya Igaue, Jun Younes Louhi Kasahara, Naoya Yamato, Seiji Kasahara, Hiroyuki Ito, Taizo Daito, Sunao Tamura, Akinobu Sasamura, Toshiya Kato, Fumihiko Nonaka, Shinji Kanda, Keiji Nagatani, Hajime Asama, Qi An and Atsushi Yamashita: "Change Detection in Image Pairs for Plant Inspection Using Mobile Robot", International Journal of Automation Technology, Vol. 19, No. 3, May 2025.
- 209) Taisei Ando, Junwoon Lee, Mitsuru Shinozaki, Toshihiro Kitajima, Qi An and Atsushi Yamashita: "Efficient Distortion Mitigation in Equirectangular Images for Two-View Pose Estimation", International Journal of Automation Technology, Vol. 19, No. 3, May 2025.
- 210) Yuki Yamaguchi, Shinsuke Nakashima, Hiroki Murakami, Tetsushi Nakai, Qi An and Atsushi Yamashita: "Generation of Reaching Motions for Flat Cable Insertion Task Using Simulation Learning and Domain Adaptation for Industrial Robots", International Journal of Automation Technology, Vol. 19, No. 3, May 2025.
- 211) Jun Younes Louhi Kasahara, Kentaro Tanaka, Koki Shoda, Masayoshi Kinoshita, Seiji Kasahara, Hiroyuki Ito, Risa Koda, Sunao Tamura, Hirokazu Tanaka, Toshiya Kato, Fumihiko Nonaka, Shinji Kanda, Keiji Nagatani, Hajime Asama, Qi An and Atsushi Yamashita: "Abnormal Sound Source Detection and Localization by Spatial Mapping of Normal Sounds for Robotic Inspection in Oil Refineries", International Journal of Automation Technology, Vol. 19, No. 3, May 2025.
- 212) Zixuan Liu, Shinsuke Nakashima, Ren Komatsu, Nobuto Matsuhira, Hajime Asama, Qi An and Atsushi Yamashita: "Automatic Viewpoint Selection by Rail-Mounted Observation Robots for Teleoperation Assistance in Unmanned Working Environments", International Journal of Automation Technology, Vol. 19, No. 4, July 2025.
- 213) Masaki Chino, Junwoon Lee, Qi An and Atsushi Yamashita: "Robot Localization by Data Integration of Multiple Thermal Cameras in Low-light Environment", International Journal of Automation Technology, Vol. 19, No. 4, July 2025.
- 214) 杉浦 鉄幸, 中島 慎介, 浅間 一, 安 琪, 山下 淳: "福島第一原子力発電所における燃料デブリ取り出し作業向け監視システム設計のためのリスク分析", 日本原子力学会和文論文誌, Vol. 24, No. 3, September 2025.

査読付き国際会議

- 1) Jun Sasaki, Gen Nishida, Atsushi Yamashita, Yasumichi Aiyama, Jun Ota and Tamio Arai: "Estimating the Center of Gravity of an Object Using Tilting by Multiple Mobile Robots", Proceedings of the 1997 IEEE/RSJ International Conference on Intelligent Robots and Systems (IROS1997), pp. 1748-1753, Grenoble (France), September 1997. [doi:10.1109/IROS.1997.656597]
- 2) Atsushi Yamashita, Jun Sasaki, Jun Ota and Tamio Arai: "Cooperative Manipulation of Objects by Multiple Mobile Robots with Tools", Proceedings of the 4th Japan-France / 2nd Asia-Europe Congress on Mechatronics (JFM1998), pp. 310-315, Kitakyushu (Japan), October 1998.
- 3) Jun Sasaki, Atsushi Yamashita, Natsuki Miyata, Yasumichi Aiyama, Jun Ota and Tamio Arai: "Constraint of Contacting Points in Cooperative Handling", Proceedings of the 1998 IEEE/RSJ International Conference on Intelligent Robots and Systems (IROS1998), pp. 1425-1430, Victoria (Canada), October, 1998. [doi:10.1109/IROS.1998.724789]
- 4) Atsushi Yamashita, Kou Kawano, Jun Ota, Tamio Arai, Masaki Fukuchi, Jun Sasaki and Yasumichi Aiyama: "Planning Method for Cooperative Manipulation by Multiple Mobile Robots using Tools with Motion Errors",

Proceedings of the 1999 IEEE/RSJ International Conference on Intelligent Robots and Systems (IROS1999), pp. 978-983, Kyongju (Korea), October 1999. [doi:10.1109/IROS.1999.812807]

- 5) Atsushi Yamashita, Masaki Fukuchi, Jun Ota, Tamio Arai and Hajime Asama: "Motion Planning for Cooperative Transportation of a Large Object by Multiple Mobile Robots in a 3D Environment", Proceedings of the 2000 IEEE International Conference on Robotics and Automation (ICRA2000), pp. 3144-3151, San Francisco (U.S.A.), April 2000. [doi:10.1109/ROBOT.2000.845147]
- 6) Atsushi Yamashita, Hajime Asama, Hayato Kaetsu, Isao Endo and Tamio Arai: "Development of Omni-Directional and Step-Climbing Mobile Robot", Proceedings of the 3rd International Conference on Field and Service Robotics (FSR2001), pp. 327-332, Espoo (Finland), June 2001.
- 7) Norikazu Tsunekawa, Atsushi Yamashita, Toru Kaneko and Kenjiro T. Miura: "Object Recognition Using Distributions of Edge Information on Gaussian Spheres", Proceedings of the Joint Symposium between Sister Universities in Mechanical Engineering (JSSUME2002), Kyongju (Korea), August 2002.
- 8) Atsushi Yamashita, Jun Ota, Tamio Arai, Keisuke Ichikawa, Kazuhiro Kamata and Hajime Asama: "Cooperative Manipulation and Transportation of a Large Object by Multiple Mobile Robots", Proceedings of the Fourth IFAC Symposium on Intelligent Autonomous Vehicles (IAV2001), pp. 400-403, Sapporo (Japan), September 2001.
- 9) Kenjiro T. Miura, Junji Sone, Atsushi Yamashita, Toru Kaneko, Minoru Ueda and Minetada Osano: "Adaptive Refinement for B-spline Subdivision Curves", Proceedings of the Fifth International Conference on Humans and Computers (HC-2002), pp. 57-61, Aizu (Japan), September 2002.
- 10) Norikazu Tsunekawa, Atsushi Yamashita, Toru Kaneko and Kenjiro T. Miura: "Edge-Based Recognition of Polyhedral Objects using Gaussian Spheres", Proceedings of the 7th Joint International Conference on Advanced Science and Technology (JICAST2002), pp. 507-510, Hamamatsu (Japan), October 2002.
- 11) Atsushi Yamashita, Shinya Matsushita, Takeshi Sonohara, Toru Kaneko, Kenjiro T. Miura and Suekichi Isogai: "3-D Measurement of Moving Objects with an Active Stereo Camera System", Proceedings of the 7th Joint International Conference on Advanced Science and Technology (JICAST2002), pp. 511-514, Hamamatsu (Japan), October 2002.
- 12) Masayuki Kuramoto, Atsushi Yamashita, Toru Kaneko and Kenjiro T. Miura: "Removal of Waterdrops in Images by Using Multiple Cameras", Proceedings of IAPR Workshop on Machine Vision Applications (MVA2002), pp. 80-83, Nara (Japan), December 2002.
- 13) Atsushi Kawarago, Atsushi Yamashita, Toru Kaneko and Kenjiro T. Miura: "Character Recognition of Thick Books Using a Stereo Vision System", Proceedings of IAPR Workshop on Machine Vision Applications (MVA2002), pp. 358-361, Nara (Japan), December 2002.
- 14) Atsushi Yamashita, Toru Kaneko, Shinya Matsushita and Kenjiro T. Miura: "Region Extraction with Chromakey Using Striped Backgrounds", Proceedings of IAPR Workshop on Machine Vision Applications (MVA2002), pp. 455-458, Nara (Japan), December 2002.
- 15) Kenjiro T. Miura, Masashi Adachi, Tsuneo Ikedo, Atsushi Yamashita and Toru Kaneko: "View-Dependent Refinement by Two-Stepped Catmull-Clark Subdivision", Proceedings of the 6th International Conference on Humans and Computers (HC-2003), pp. 30-35, Aizu-Wakamatsu (Japan), August 2003.
- 16) Kenjiro T. Miura, Junji Sone, Hiroshi Masuda, Atsushi Yamashita and Toru Kaneko : "An Octree-based Approach to Fast Reconstruction of 3D Objects with Radial Basis Functions", Proceedings of the 6th International Conference on Humans and Computers (HC-2003), pp. 36-41, Aizu-Wakamatsu (Japan), August 2003.
- 17) Atsushi Yamashita, Toru Kaneko, Masaki Nishimura and Kenjiro T. Miura: "Removal of View-Disturbing Waterdrops in Images Using a Pan-Tilt Camera", Proceedings of the 6th International Conference on Humans and Computers (HC-2003), pp. 76-81, Aizu-Wakamatsu (Japan), August 2003.

- 18) Atsushi Yamashita, Akihisa Nishimoto, Toru Kaneko and Kenjiro T. Miura: "Automatic Generation of Stereogram by Using Stripe Backgrounds", Proceedings of the 6th International Conference on Humans and Computers (HC-2003), pp. 253-258, Aizu-Wakamatsu (Japan), August 2003.
- 19) Kazutoshi Fujita, Atsushi Yamashita, Toru Kaneko, Hitotaka Asakura, Kenjiro T. Miura and Hajime Asama: "Navigation Planning of Autonomous Mobile Robots with Multiple Observation Strategies", Proceedings of the 6th Japan-France Congress on Mechatronics and 4th Asia-Europe Congress on Mechatronics, pp. 489-494, Saitama (Japan), September 2003.
- 20) Shingo Kinashi, Hiroyuki Kitazawa, Kenjiro T. Miura, Atsushi Yamashita and Toru Kaneko: "Development of a Geometric-Modeling Device with Force-Feedback", Proceedings of the 6th Japan-France Congress on Mechatronics and 4th Asia-Europe Congress on Mechatronics, pp. 591-596, Saitama (Japan), September 2003.
- 21) Takahiro Hara, Atsushi Yamashita, Toru Kaneko and Kenjiro T. Miura: "Hammering Test with Image and Sound Signal Processing", Proceedings of the 6th Japan-France Congress on Mechatronics and 4th Asia-Europe Congress on Mechatronics, pp. 603-608, Saitama (Japan), September 2003.
- 22) Atsushi Yamashita, Etsukazu Hayashimoto, Toru Kaneko and Yoshimasa Kawata: "3-D Measurement of Objects in a Cylindrical Glass Water Tank with a Laser Range Finder", Proceedings of the 2003 IEEE/RSJ International Conference on Intelligent Robots and Systems (IROS2003), pp. 1578-1583, Las Vegas (USA), October 2003. [doi:10.1109/IROS.2003.1248869]
- 23) Atsushi Yamashita, Masayuki Kuramoto, Toru Kaneko and Kenjiro T. Miura: "A Virtual Wiper -Restoration of Deteriorated Images by Using Multiple Cameras-", Proceedings of the 2003 IEEE/RSJ International Conference on Intelligent Robots and Systems (IROS2003), pp. 3126-3131, Las Vegas (USA), October 2003. [doi:10.1109/IROS.2003.1249637]
- 24) Atsushi Yamashita, Hirokazu Higuchi, Toru Kaneko and Yoshimasa Kawata: "Three Dimensional Measurement of Object's Surface in Water Using the Light Stripe Projection Method", Proceedings of the 2004 IEEE International Conference on Robotics and Automation (ICRA2004), pp. 2736-2741, New Orleans (USA), April 2004. [doi:10.1109/ROBOT.2004.1307474]
- 25) Atsushi Yamashita, Toru Kaneko and Kenjiro T. Miura: "A Virtual Wiper -Restoration of Deteriorated Images by Using a Pan-Tilt Camera-", Proceedings of the 2004 IEEE International Conference on Robotics and Automation (ICRA2004), pp. 4724-4729, New Orleans (USA), April 2004. [doi:10.1109/ROBOT.2004.1302464]
- 26) Atsushi Yamashita, Atsushi Kwarago, Toru Kaneko and Kenjiro T. Miura: "Shape Reconstruction and Image Restoration for Non-Flat Surfaces of Documents with a Stereo Vision System", Proceedings of the 17th International Conference on Pattern Recognition (ICPR2004), Vol. 1, pp. 482-485, Cambridge (UK), August 2004. [doi:10.1109/ICPR.2004.1334171]
- 27) Yuu Tanaka, Atsushi Yamashita, Toru Kaneko and Kenjiro T. Miura: "Removal of Waterdrops on a Protection Glass Surface from Parallel Stereo Images", Proceedings of the Joint Symposium between Sister Universities in Mechanical Engineering (JSSUME2004), pp. 103-106, Yokohama (Japan), August 2004.
- 28) Hirotaka Asakura, Atsushi Yamashita and Toru Kaneko: "3-D Measurement of an Object by a Mobile Robot Equipped with a Laser Range Finder", Proceedings of the Joint Symposium between Sister Universities in Mechanical Engineering (JSSUME2004), pp. 107-110, Yokohama (Japan), August 2004.
- 29) Shinsuke Ikeda, Atsushi Yamashita and Toru Kaneko: "3-D Shape Reconstruction of Objects in Water by a Laser Range Finder Held on a Manipulator", Proceedings of the Joint Symposium between Sister Universities in Mechanical Engineering (JSSUME2004), pp. 111-114, Yokohama (Japan), August 2004.
- 30) Atsushi Yamashita, Tomoaki Harada, Toru Kaneko and Kenjiro T. Miura: "Removal of Adherent Noises from Images of Dynamic Scenes by Using a Pan-Tilt Camera", Proceedings of the 2004 IEEE/RSJ International Conference on Intelligent Robots and Systems (IROS2004), pp. 437-442, Sendai (Japan), September 2004.

[doi:10.1109/IROS.2004.1389391]

- 31) Atsushi Yamashita, Kazutoshi Fujita, Toru Kaneko and Hajime Asama: "Path and Viewpoint Planning of Mobile Robots with Multiple Observation Strategies", Proceedings of the 2004 IEEE/RSJ International Conference on Intelligent Robots and Systems (IROS2004), pp. 3195-3200, Sendai (Japan), October 2004. [doi:10.1109/IROS.2004.1389909]
- 32) Yuu Tanaka, Atsushi Yamashita, Toru Kaneko and Kenjiro T. Miura: "Waterdrop Removal on a Protection Glass Surface in Stereo Images", Proceedings of the 8th Joint International Conference on Advanced Science and Technology (JICAST2004), pp. 137-140, Hangzhou (China), December 2004.
- 33) Atsushi Yamashita, Shinsuke Ikeda and Toru Kaneko: "3-D Measurement of Objects in Unknown Aquatic Environments with a Laser Range Finder", Proceedings of the 2005 IEEE International Conference on Robotics and Automation (ICRA2005), pp. 3923-3928, Barcelona (Spain), April 2005. [doi:10.1109/ROBOT.2005.1570718]
- 34) Yuu Tanaka, Atsushi Yamashita, Toru Kaneko and Kenjiro T. Miura: "Restoration of Images Stained with Waterdrops on a Protection Glass Surface by Using a Stereo Image Pair", Proceedings of IAPR Conference on Machine Vision Applications (MVA2005), pp. 152-155, Tsukuba (Japan), May 2005.
- 35) Atsushi Yamashita, Yuu Tanaka and Toru Kaneko: "Removal of Adherent Waterdrops from Images Acquired with Stereo Camera", Proceedings of the 2005 IEEE/RSJ International Conference on Intelligent Robots and Systems (IROS2005), pp. 953-958, Edmonton (Canada), August 2005. [doi:10.1109/IROS.2005.1545103]
- 36) Kenjiro T. Miura, Junji Sone, Atsushi Yamashita and Toru Kaneko: "Derivation of a General Formula of Aesthetic Curves", Proceedings of the Eighth International Conference on Humans and Computers (HC2005), pp. 166-171, Aizu-Wakamatsu (Japan), September 2005.
- 37) Susumu Kato, Atsushi Yamashita, Toru Kaneko and Kenjiro T. Miura: "Three-dimensional Sensing in Underwater Environments with a Stereo Camera System", Proceedings of the Eighth International Conference on Humans and Computers (HC2005), pp. 205-210, Tokyo (Japan), September 2005.
- 38) Takumi Nakamoto, Atsushi Yamashita, Toru Kaneko: "3-D Map Generation by a Mobile Robot Equipped with a Laser Range Finder", Proceedings of International Workshop on Advanced Image Technology 2006 (IWAIT2006), pp. 154-159, Okinawa (Japan), January 2006.
- 39) Tomoaki Harada, Atsushi Yamashita and Toru Kaneko: "Environment Observation by Structure from Motion with an Omni-directional Camera", Proceedings of International Workshop on Advanced Image Technology 2006 (IWAIT2006), pp. 169-174, Okinawa (Japan), January 2006.
- 40) Atsushi Yamashita, Susumu Kato and Toru Kaneko: "Robust Sensing against Bubble Noises in Aquatic Environments with a Stereo Vision System", Proceedings of the 2006 IEEE International Conference on Robotics and Automation (ICRA2006), pp. 928-933, Orlando (USA), May 2006. [doi:10.1109/ROBOT.2006.1641828]
- 41) Atsushi Yamashita, Takahiro Hara and Toru Kaneko: "Inspection of Visible and Invisible Features of Objects with Image and Sound Signal Processing", Proceedings of the 2006 IEEE/RSJ International Conference on Intelligent Robots and Systems (IROS2006), pp. 3837-3842, Beijing (China), October 2006. [doi:10.1109/IROS.2006.281790]
- 42) Hiroki Agata, Atsushi Yamashita and Toru Kaneko: "Region Extraction Using Chroma Key with a Checker Pattern Background", Proceedings of the 2nd Asia International Symposium on Mechatronics (AISM2006), B3-06, pp. 1-6, Hong Kong (China), December 2006.
- 43) Atsushi Yamashita, Megumi Fujii and Toru Kaneko: "Color Registration of Underwater Images for Underwater Sensing with Consideration of Light Attenuation", Proceedings of the 2007 IEEE International Conference on Robotics and Automation (ICRA2007), pp. 4570-4575, Rome (Italy), April 2007. [doi:10.1109/ROBOT.2007.364183]

- 44) Yusuke Suzuki, Atsushi Yamashita and Toru Kaneko: "Correction of Geometric and Photometric Distortion of Document Images Using a Stereo Camera System", Proceedings of IAPR Conference on Machine Vision Applications (MVA2007), pp. 215-218, Tokyo (Japan), May 2007.
- 45) Masahiko Onosato, Satoshi Tadokoro, Hiroaki Nakanishi, Kenzo Nonami, Hiroyuki Kawabata, Yasushi Hada, Hajime Asama, Fumiaki Takemura, Kiyoshi Maeda, Kenichiro Miura and Atsushi Yamashita: "Disaster Information Gathering by Aerial Robot Systems", IROS2007 Workshop on Rescue Robotics (MW-3) - DDT Project on Urban Search and Rescue, pp. 23-44, San Diego (USA), October 2007.
- 46) Toru Tsuchiya, Atsushi Yamashita, Toru Kaneko, Yasuhiro Kaneko and Hirokatsu Muramatsu: "Scheduling Optimization of Component Mounting in Printed Circuit Board Assembly by Prioritizing Simultaneous Pickup", Proceedings of the 2007 IEEE/RSJ International Conference on Intelligent Robots and Systems (IROS2007), pp. 2913-2918, San Diego (USA), November 2007. [doi:10.1109/IROS.2007.4399002]
- 47) Atsushi Yamashita, Akira Fujii and Toru Kaneko: "Three Dimensional Measurement of Objects in Liquid and Estimation of Refractive Index of Liquid by Using Images of Water Surface with a Stereo Vision System", Proceedings of the 2008 IEEE International Conference on Robotics and Automation (ICRA2008), pp. 974-979, Pasadena (USA), May 2008. [doi:10.1109/ROBOT.2008.4543331]
- 48) Atsushi Yamashita, Isao Fukuchi, Toru Kaneko and Kenjiro T. Miura: "Removal of Adherent Noises from Image Sequences by Spatio-Temporal Image Processing", Proceedings of the 2008 IEEE International Conference on Robotics and Automation (ICRA2008), pp. 2386-2391, Pasadena (USA), May 2008. [doi:10.1109/ROBOT.2008.4543570]
- 49) Yu Ito, Atsushi Yamashita and Toru Kaneko: "A Multi-Viewpoint Human Tracking Based on Face Detection Using Haar-like Features and a Mean-Shift Tracker", Proceedings of the 3rd Asia International Symposium on Mechatronics (AISM2008), TA1-1(2), pp. 1-4, Sapporo (Japan), August 2008.
- 50) Shinya Iwashina, Atsushi Yamashita and Toru Kaneko: "3-D Map Building in Dynamic Environments by a Mobile Robot Equipped with two Laser Range Finders", Proceedings of the 3rd Asia International Symposium on Mechatronics (AISM2008), Sapporo (Japan), TP1-3(1), pp. 1-5, August 2008.
- 51) Ryosuke Kawanishi, Atsushi Yamashita and Toru Kaneko: "Construction of 3D Environment Model from an Omni-Directional Image Sequence", Proceedings of the 3rd Asia International Symposium on Mechatronics (AISM2008), TP1-3(2), pp. 1-6, Sapporo (Japan), August 2008. (AISM2008 Best Student Paper Award)
- 52) Toru Tsuchiya, Atsushi Yamashita, Toru Kaneko, Yasuhiro Kaneko and Hirokatsu Muramatsu: "Scheduling and Feeder Arrangement for Simultaneous Pickup in Printed Circuit Board Assembly of Placement Machines", Proceedings of the 3rd Asia International Symposium on Mechatronics (AISM2008), TP2-1(3), pp. 1-6, Sapporo (Japan), August 2008.
- 53) Atsushi Yamashita, Hiroki Agata and Toru Kaneko: "Every Color Chromakey", Proceedings of the 19th International Conference on Pattern Recognition (ICPR2008), pp. 1-4, TuBCT9.40, Tampa (USA), December 2008. [doi:10.1109/ICPR.2008.4761643]
- 54) Ryohei Kawai, Atsushi Yamashita and Toru Kaneko: "Three-Dimensional Measurement of Objects in Water by Using Space Encoding Method", Proceedings of the 2009 IEEE International Conference on Robotics and Automation (ICRA2009), pp. 2830-2835, Kobe (Japan), May 2009. [doi:10.1109/ROBOT.2009.5152430]
- 55) Ryosuke Kawanishi, Atsushi Yamashita and Toru Kaneko: "Estimation of Camera Motion with Feature Flow Model for 3D Environment Modeling by Using Omni-Directional Camera", Proceedings of the 2009 IEEE/RSJ International Conference on Intelligent Robots and Systems (IROS2009), pp. 3089-3094, St. Louis (USA), October 2009. (IEEE Robotics and Automation Society Japan Chapter Young Award) [doi:10.1109/IROS.2009.5354671]
- 56) Atsushi Yamashita, Isao Fukuchi and Toru Kaneko: "Noises Removal from Image Sequences Acquired with Moving Camera by Estimating Camera Motion from Spatio-Temporal Information", Proceedings of the 2009

- IEEE/RSJ International Conference on Intelligent Robots and Systems (IROS2009), pp. 3794-3801, St. Louis (USA), October 2009. [doi:10.1109/IROS.2009.5354639]
- 57) Kenki Matsui, Atsushi Yamashita and Toru Kaneko: "3-D Shape Reconstruction of Pipe with Omni-Directional Laser and Omni-Directional Camera", Proceedings of the 3rd International Conference of Asian Society for Precision Engineering and Nanotechnology (ASPEN2009), 1A2-15, pp. 1-5, Kokura (Japan), November 2009.
- 58) Ryohei Kawai, Atsushi Yamashita and Toru Kaneko: "Shape Measurement of Underwater Objects by Using Space Encoding Method", Proceedings of the 3rd International Conference of Asian Society for Precision Engineering and Nanotechnology (ASPEN2009), 1A2-16, pp. 1-5, Kokura (Japan), November 2009.
- 59) Ryosuke Kawanishi, Atsushi Yamashita and Toru Kaneko: "Environment Measurement based on Structure from Motion with Feature Flow Model by Using Omni-Directional Camera", Proceedings of the 3rd International Conference of Asian Society for Precision Engineering and Nanotechnology (ASPEN2009), 2A2-7, pp. 1-5, Kokura (Japan), November 2009.
- 60) Akiyoshi Matsui, Atsushi Yamashita and Toru Kaneko: "Blurred Wire Netting Removal from an Image Using Multiple Focusing", Proceedings of the 12th International Conference on Humans and Computers (HC-2009), pp. 80-85, Hamamatsu (Japan), December 2009.
- 61) Kenki Matsui, Atsushi Yamashita and Toru Kaneko: "3-D Shape Measurement of Pipe by Range Finder Constructed with Omni-Directional Laser and Omni-Directional Camera", Proceedings of the 2010 IEEE International Conference on Robotics and Automation (ICRA2010), pp. 2537-2542, Anchorage (USA), May 2010. [doi:10.1109/ROBOT.2010.5509851]
- 62) Atsushi Yamashita, Akiyoshi Matsui and Toru Kaneko: "Fence Removal from Multi-Focus Images", Proceedings of the 20th International Conference on Pattern Recognition (ICPR2010), pp. 4532-4535, Istanbul (Turkey), August 2010. [doi:10.1109/ICPR.2010.1101]
- 63) Atsushi Yamashita, Shinya Iwashina and Toru Kaneko: "View Planning and 3D Map Building by a Mobile Robot Equipped with two Range Sensors", Proceedings of the 2010 IEEE/RSJ International Conference on Intelligent Robots and Systems (IROS2010), pp. 1545, Taipei (Taiwan), October 2010.
- 64) Atsushi Yamashita, Yudai Shirane and Toru Kaneko: "Monocular Underwater Stereo -3D Measurement Using Difference of Appearance Depending on Optical Paths-", Proceedings of the 2010 IEEE/RSJ International Conference on Intelligent Robots and Systems (IROS2010), pp. 3652-3657, Taipei (Taiwan), October 2010. [doi:10.1109/IROS.2010.5649444]
- 65) Atsushi Yamashita, Rie Miyaki and Toru Kaneko: "Color Information Presentation for Color Vision Defective by Using a Projector Camera System", Proceedings of the ACCV2010 Workshop on Application of Computer Vision for Mixed and Augmented Reality, Queenstown (New Zealand), November 2010. [doi:10.1007/978-3-642-22819-3_10]
- 66) Masaaki Kitaoka, Atsushi Yamashita and Toru Kaneko: "Obstacle Avoidance and Path Planning Using Color Information for a Biped Robot Equipped with a Stereo Camera System", Proceedings of the 4th Asia International Symposium on Mechatronics (AISM2010), pp. 38-43, Singapore (Singapore), December 2010. (AISM2010 Best Paper Award)
- 67) Atsushi Yamashita, So Kuno and Toru Kaneko: "Assisting System of Visually Impaired in Touch Panel Operation Using Stereo Camera", Proceedings of the 2011 IEEE International Conference on Image Processing (ICIP2011), pp. 1001-1004, Brussels (Belgium), September 2011. [doi:10.1109/ICIP.2011.6116728]
- 68) Daisuke Ishizuka, Atsushi Yamashita, Ryosuke Kawanishi, Toru Kaneko and Hajime Asama: "Self-localizaion of Mobile Robot Equipped with Omnidirectional Camera Using Image Matching and 3D-2D Edge Matching", Proceedings of the 2011 IEEE International Conference on Computer Vision Workshop (Proceedings of the

- 11th Workshop on Omnidirectional Vision, Camera Networks and Non-classical Cameras (OMNIVIS2011)), pp. 272-279, Barcelona (Spain), November 2011. [doi:10.1109/ICCVW.2011.6130253]
- 69) Shinichi Goto, Atsushi Yamashita, Ryosuke Kawanishi, Toru Kaneko and Hajime Asama: "3D Environment Measurement Using Binocular Stereo and Motion Stereo by Mobile Robot with Omnidirectional Stereo Camera", Proceedings of the 2011 IEEE International Conference on Computer Vision Workshop (Proceedings of the 11th Workshop on Omnidirectional Vision, Camera Networks and Non-classical Cameras (OMNIVIS2011)), pp. 296-303, Barcelona (Spain), November 2011. [doi:10.1109/ICCVW.2011.6130256]
- 70) Atsushi Yamashita, Ryosuke Kawanishi, Tadashi Koketsu, Toru Kaneko and Hajime Asama: "Underwater Sensing with Omni-Directional Stereo Camera", Proceedings of the 2011 IEEE International Conference on Computer Vision Workshop (Proceedings of the 11th Workshop on Omnidirectional Vision, Camera Networks and Non-classical Cameras (OMNIVIS2011)), pp. 304-311, Barcelona (Spain), November 2011. [doi:10.1109/ICCVW.2011.6130257]
- 71) Atsushi Yamashita, Kenki Matsui, Ryosuke Kawanishi, Toru Kaneko, Taro Murakami, Hayato Omori, Taro Nakamura and Hajime Asama: "Self-Localization and 3-D Model Construction of Pipe by Earthworm Robot Equipped with Omni-Directional Rangefinder", Proceedings of the 2011 IEEE International Conference on Robotics and Biomimetics (ROBIO2011), pp. 1017-1023, Phuket Island (Thailand), December 2011. [doi:10.1109/ROBIO.2011.6181421]
- 72) Gakuto Masuyama, Atsushi Yamashita and Hajime Asama: "Robot Motion Planning Utilizing Local Propagation of Information Based on Particle Swarm and Its Internal Parameters", Proceedings of the 2011 IEEE International Conference on Robotics and Biomimetics (ROBIO2011), pp. 1053-1058, Phuket Island (Thailand), December 2011.
- 73) Shunsuke Hamasaki, Yusuke Tamura, Atsushi Yamashita and Hajime Asama: "Prediction of Human's Movement for Collision Avoidance of Mobile Robot", Proceedings of the 2011 IEEE International Conference on Robotics and Biomimetics (ROBIO2011), pp. 1633-1638, Phuket Island (Thailand), December 2011.
- 74) Atsushi Yamashita, Yu Ito, Toru Kaneko and Hajime Asama: "Human Tracking with Multiple Cameras Based on Face Detection and Mean Shift", Proceedings of the 2011 IEEE International Conference on Robotics and Biomimetics (ROBIO2011), pp. 1664-1671, Phuket Island (Thailand), December 2011.
- 75) Takahito Shimizu, Masashi Awai, Atsushi Yamashita and Toru Kaneko: "Mobile Robot System Realizing Human Following and Autonomous Returning Using Laser Range Finder and Camera", Proceedings of the 18th Korea-Japan Joint Workshop on Frontiers of Computer Vision (FCV2012), pp. 97-102, Kawasaki (Japan), February 2012.
- 76) Ryosuke Kawanishi, Atsushi Yamashita, Toru Kaneko and Hajime Asama: "Line-based Camera Movement Estimation by Using Parallel Lines in Omnidirectional Video", Proceedings of the 2012 IEEE International Conference on Robotics and Automation (ICRA2012), pp. 3573-3579, Saint Paul (USA), May 2012. [doi:10.1109/ICRA.2012.6224816]
- 77) Atsushi Yamashita, Fumiya Tsurumi, Toru Kaneko and Hajime Asama: "Automatic Removal of Foreground Occluder From Multi-Focus Images", Proceedings of the 2012 IEEE International Conference on Robotics and Automation (ICRA2012), pp. 5410-5416, Saint Paul (USA), May 2012. [doi:10.1109/ICRA.2012.6224549]
- 78) Guanghui Li, Yusuke Tamura, Min Wu, Atsushi Yamashita and Hajime Asama: "Hybrid Dynamic Mobile Task Allocation and Reallocation Methodology for Distributed Multi-robot Coordination", Proceedings of the 2012 IEEE/ASME International Conference on Advanced Intelligent Mechatronics (AIM2012), KaoHsiung (Taiwan), pp. 190-195, July 2012.
- 79) Guanghui Li, Atsushi Yamashita, Hajime Asama and Yusuke Tamura: "An Efficient Improved Artificial Potential Field Based Regression Search Method for Robot Path Planning", Proceedings of the 2012 IEEE

International Conference on Mechatronics and Automation (ICMA2012), pp. 1227-1232, Sichuan (China), August 2012.

- 80) Qi An, Yuki Ishikawa, Junki Nakagawa, Atsushi Kuroda, Hiroyuki Oka, Hiroshi Yamakawa, Atsushi Yamashita and Hajime Asama: "Evaluation of Wearable Gyroscope and Accelerometer Sensor (PocketIMU2) during Walking and Sit-to-Stand Motions", Proceedings of the 21st IEEE International Symposium on Robot and Human Interactive Communication (Ro-Man2012), pp. 731-736, Paris (France), September 2012.
- 81) Tatsuya Naruse, Toru Kaneko, Atsushi Yamashita and Hajime Asama: "3-D Measurement of Objects in Water Using Fish-eye Stereo Camera", Proceedings of the 2012 IEEE International Conference on Image Processing (ICIP2012), pp. 2773-2776, Orlando (USA), October 2012. [doi:10.1109/ICIP.2012.6467474]
- 82) Yusuke Tamura, Phuoc Dai Le, Kentarou Hitomi, Naiwala P. Chandrasiri, Takashi Bando, Atsushi Yamashita and Hajime Asama: "Development of Pedestrian Behavior Model Taking Account of Intention", Proceedings of the 2012 IEEE/RSJ International Conference on Intelligent Robots and Systems (IROS2012), pp. 382-387, Vilamoura (Portugal), October 2012. [doi:10.1109/IROS.2012.6385599]
- 83) Gakuto Masuyama, Atsushi Yamashita and Hajime Asama: "Intrinsically Motivated Anticipatory Learning Utilizing Transformation Invariance", Proceedings of the IEEE Conference on Development and Learning / EpiRob 2012 (ICDL-EpiRob2012), San Diego (USA), November 2012.
- 84) Kazushi Watanabe, Ryosuke Kawanishi, Atsushi Yamashita, Yuichi Kobayashi, Toru Kaneko and Hajime Asama: "Mobile Robot Navigation in Textureless Unknown Environment Based on Plane Estimation by Using Single Omni-directional Camera", Proceedings of the 2012 IEEE/SICE International Symposium on System Integration (SII2012), pp. 37-42, Fukuoka (Japan), December 2012.
- 85) Min Wu, Atsushi Yamashita and Hajime Asama: "Rule Abstraction and Transfer in Reinforcement Learning by Decision Tree", Proceedings of the 2012 IEEE/SICE International Symposium on System Integration (SII2012), pp. 529-534, Fukuoka (Japan), December 2012.
- 86) Hirotoshi Ibe, Atsushi Yamashita, Toru Kaneko and Yuichi Kobayashi: "3D Measurement of Transparent Vessel and Submerged Object Using Laser Range Finder", Proceedings of the International Workshop on Advanced Image Technology 2013 (IWAIT2013), pp. 78-83, Nagoya (Japan), January 2013.
- 87) Fumiya Tsurumi, Yuichi Kobayashi, Toru Kaneko and Atsushi Yamashita: "Removal of Reflection from Nightscape Parallel Stereo Images of Distant View through Window", Proceedings of the International Workshop on Advanced Image Technology 2013 (IWAIT2013), pp. 626-631, Nagoya (Japan), January 2013.
- 88) Masato Kondo, Atsushi Yamashita, Toru Kaneko and Yuichi Kobayashi: "Control of Mobile Robot Equipped with Stereo Camera Using the Number of Fingers", Proceedings of the International Workshop on Advanced Image Technology 2013 (IWAIT2013), pp. 723-728, Nagoya (Japan), January 2013. (Candidate for Best Paper Award)
- 89) Yoshiki Mori, Atsushi Yamashita, Masayuki Tanaka, Ryuho Kataoka, Yoshizumi Miyoshi, Toru Kaneko, Masatoshi Okutomi and Hajime Asama: "Calibration of Fish-Eye Stereo Camera for Aurora Observation", Proceedings of the International Workshop on Advanced Image Technology 2013 (IWAIT2013), pp. 729-734, Nagoya (Japan), January 2013. (Candidate for Best Paper Award)
- 90) Yutaro Ohshima, Yuichi Kobayashi, Toru Kaneko, Atsushi Yamashita and Hajime Asama: "Meal Support System with Spoon Using Laser Range Finder and Manipulator", Proceedings of the 2013 IEEE Workshop on Robot Vision (WoRV2013), pp. 82-87, Clearwater Beach (USA), January 2013.
- 91) Naoki Ibe, Gakuto Masuyama, Atsushi Yamashita and Hajime Asama: "Humanlike Behavior Model with Probabilistic Intention", Proceedings of ACM SIGGRAPH2013 Posters, Article No. 7, Anaheim (USA), July 2013. [doi:10.1145/2503385.2503393]
- 92) Daiki Kawakami, Kaito Makino, Yuichi Kobayashi, Toru Kaneko, Atsushi Yamashita and Hajime Asama: "Projector Camera System Presenting Color Information for Color Vision Deficiency", Proceedings of the

32nd JSST Annual International Conference on Simulation Technology (JSST2013), Tokyo (Japan), September 2013. (JSST2013 Outstanding Presentation Award)

- 93) Junki Nakagawa, Qi An, Yuki Ishikawa, Hiroyuki Oka, Kaoru Takakusaki, Hiroshi Yamakawa, Atsushi Yamashita and Hajime Asama: "Analysis of Joint Correlation between Arm and Lower Body in Dart Throwing Motion", Proceedings of the 2013 IEEE International Conference on Systems, Man, and Cybernetics (SMC2013), pp. 1223-1228, Manchester (UK), October 2013. [doi:10.1109/SMC.2013.212]
- 94) Qi An, Yuki Ishikawa, Junki Nakagawa, Hiroyuki Oka, Hiroshi Yamakawa, Atsushi Yamashita and Hajime Asama: "Muscle Synergy Analysis of Human Standing-up Motion with Different Chair Heights and Different Motion Speeds", Proceedings of the 2013 IEEE International Conference on Systems, Man, and Cybernetics (SMC2013), pp. 3579-3584, Manchester (UK), October 2013. [doi:10.1109/SMC.2013.610]
- 95) Gakuto Masuyama, Atsushi Yamashita and Hajime Asama: "Selective Exploration Exploiting Skills in Hierarchical Reinforcement Learning Framework", Proceedings of the 2013 IEEE/RSJ International Conference on Intelligent Robots and Systems (IROS2013), pp. 692-697, Tokyo (Japan), November 2013. [doi:10.1109/IROS.2013.6696426]
- 96) Qi An, Yuki Ishikawa, Junki Nakagawa, Hiroyuki Oka, Hiroshi Yamakawa, Atsushi Yamashita and Hajime Asama: "Analysis of Contribution of Muscle Synergies on Sit-to-Stand Motion Using Musculoskeletal Model", Proceedings of the 2013 IEEE Workshop on Advanced Robotics and its Social Impacts (ARSO2013), pp. 13-18, Tokyo (Japan), November 2013.
- 97) Takuma Tsuji, Hiroshi Yamakawa, Atsushi Yamashita, Kaoru Takakusaki, Takaki Maeda, Motoichiro Kato, Hiroyuki Oka and Hajime Asama: "Analysis of Electromyography and Skin Conductance Response During Rubber Hand Illusion", Proceedings of the 2013 IEEE Workshop on Advanced Robotics and its Social Impacts (ARSO2013), pp. 88-93, Tokyo (Japan), November 2013.
- 98) Takaaki Sato, Alessandro Moro, Atsushi Sugahara, Tsuyoshi Tasaki, Atsushi Yamashita and Hajime Asama: "Spatio-Temporal Bird's-Eye View Images Using Multiple Fish-eye Cameras", Proceedings of the 2013 IEEE/SICE International Symposium on System Integration (SII2013), pp. 753-758, Kobe (Japan), December 2013. [doi:10.1109/SII.2013.6776674]
- 99) Yuki Ishikawa, Qi An, Junki Nakagawa, Hiroyuki Oka, Atsushi Yamashita and Hajime Asama: "Effect of Varus Gait on Anterior Cruciate Ligament: To Clarify Mechanism of Pathogenesis of Knee Osteoarthritis", Osteoarthritis and Cartilage, Vol. 22 Supplement (Abstracts from the 2014 World Congress on Osteoarthritis), pp. S113-S114, Paris (France), April 2014.
- 100) Qi An, Yuki Ishikawa, Tetsuro Funato, Shinya Aoi, Hiroyuki Oka, Hiroshi Yamakawa, Atsushi Yamashita and Hajime Asama: "Generation of Human Standing-up Motion with Muscle Synergies Using Forward Dynamic Simulation", Proceedings of the 2014 IEEE International Conference on Robotics and Automation (ICRA2014), pp. 730-735, Hong Kong (China), June 2014. [doi:10.1109/ICRA.2014.6906935]
- 101) Hiromitsu Fujii, Atsushi Yamashita and Hajime Asama: "Automated Diagnosis of Material Condition in Hammering Test Using a Boosting Algorithm", Proceedings of the 2014 IEEE Workshop on Advanced Robotics and its Social Impacts (ARSO2014), pp. 101-107, Evanston (USA), September 2014.
- 102) Koshiro Yanai, Qi An, Yuki Ishikawa, Junki Nakagawa, Wen Wen, Hiroshi Yamakawa, Atsushi Yamashita and Hajime Asama: "Visualization of Muscle Activity during Squat Motion for Skill Education", Proceedings of the 2nd International Conference on Serviceology (ICServ2014), pp. 86-90, Yokohama (Japan), September 2014.
- 103) Junki Nakagawa, Qi An, Yuki Ishikawa, Koshiro Yanai, Wen Wen, Hiroshi Yamakawa, Junko Yasuda, Atsushi Yamashita and Hajime Asama: "Extraction and Evaluation of Proficiency in Bed Care Motion for Education Service of Nursing Skill", Proceedings of the 2nd International Conference on Serviceology (ICServ2014), pp. 91-96, Yokohama (Japan), September 2014.

- 104) Kazuya Sugimoto, Hiromitsu Fujii, Atsushi Yamashita and Hajime Asama: "Half Diminished Reality Image Using Three RGB-D Sensors for Remote Control Robots", Proceedings of the 12th IEEE International Symposium on Safety, Security, and Rescue Robotics (SSRR2014), 43, Toyako (Japan), October 2014. [doi:10.1109/SSRR.2014.7017676]
- 105) Jonghoon Im, Atsushi Yamashita, Hiromitsu Fujii and Hajime Asama: "Correction of Over and Under Exposure Images Using Multiple Lighting System", Proceedings of the 2nd International Conference on Maintenance Science and Technology (ICMST2014), pp. 125-126, Kobe (Japan), November 2014.
- 106) Hiromitsu Fujii, Takayuki Kubo, Atsushi Yamashita, Akira Takeuchi, Masayuki Tanaka, Ryuho Kataoka, Yoshizumi Miyoshi, Masatoshi Okutomi and Hajime Asama: "Aurora 3D-Measurement and Visualization Using Fish-Eye Stereo Camera", Proceedings of ACM SIGGRAPH Asia 2014 Posters, Article No. 24, Shenzhen (China), December 2014. [doi:10.1145/2668975.2669011]
- 107) Veerachart Srisamosorn, Noriaki Kuwahara, Atsushi Yamashita, Taiki Ogata and Jun Ota: "Automatic Face Tracking System using Quadrotors: Control by Goal Position Thresholding", Proceedings of the 2014 IEEE International Conference on Robotics and Biomimetics (ROBIO2014), pp. 1314-1319, Bali (Indonesia), December 2014.
- 108) Jonghoon Im, Hiromitsu Fujii, Atsushi Yamashita and Hajime Asama: "Compensation of Over and Under Exposure Image Using Multiple Light Switching", Proceedings of the 2014 IEEE/SICE International Symposium on System Integration (SII2014), pp. 147-152, Tokyo (Japan), December 2014.
- 109) Kazuki Sakamoto, Alessandro Moro, Hiromitsu Fujii, Atsushi Yamashita and Hajime Asama: "Three-Dimensional Measurement of Objects in Liquid with an Unknown Refractive Index Using Fisheye Stereo Camera", Proceedings of the 2014 IEEE/SICE International Symposium on System Integration (SII2014), pp. 281-286, Tokyo (Japan), December 2014.
- 110) Satoshi Ishikawa, Yuichi Kobayashi, Toru Kaneko, Susumu Ishihara and Atsushi Yamashita: "A Study on Image Generation with Shifted Perspective Using Two In-vehicle Camera Images", Proceedings of the 2015 Joint Conference of the International Workshop on Advanced Image Technology (IWAIT) and the International Forum on Medical Imaging in Asia (IFMIA), Paper No. 461, pp. 1-3, Tainan (Taiwan), January 2015.
- 111) Naoki Ibe, Atsushi Yamashita and Hajime Asama: "Flexible Marker-based Augmented Reality Based on Estimation of Object Pose", Proceedings of the 2015 Joint Conference of the International Workshop on Advanced Image Technology (IWAIT) and the International Forum on Medical Imaging in Asia (IFMIA), Paper No. 111, pp. 1-4, Tainan (Taiwan), January 2015.
- 112) Yusuke Tanaka, Yonghoon Ji, Atsushi Yamashita and Hajime Asama: "Fuzzy Based Traversability Analysis for a Mobile Robot on Rough Terrain", Proceedings of the 2015 IEEE International Conference on Robotics and Automation (ICRA2015), pp. 3965-3970, Seattle (USA), May 2015. [doi:10.1109/ICRA.2015.7139753]
- 113) Akira Shibata, Hiromitsu Fujii, Atsushi Yamashita and Hajime Asama: "Scale-Reconstructable Structure from Motion Using Refraction with a Single Camera", Proceedings of the 2015 IEEE International Conference on Robotics and Automation (ICRA2015), pp. 5239-5244, Seattle (USA), May 2015. (IEEE Robotics and Automation Society Japan Chapter Young Award) [doi:10.1109/ICRA.2015.7139929]
- 114) Qi An, Yuki Ishikawa, Shinya Aoi, Tetsuro Funato, Hiroyuki Oka, Hiroshi Yamakawa, Atsushi Yamashita and Hajime Asama: "Analysis of Muscle Synergy Contribution on Human Standing-up Motion Using Human Neuro-Musculoskeletal Model", Proceedings of the 2015 IEEE International Conference on Robotics and Automation (ICRA2015), pp. 5885-5890, Seattle (USA), May 2015. [doi:10.1109/ICRA.2015.7140023]
- 115) Seungchul Kwak, Yonghoon Ji, Atsushi Yamashita and Hajime Asama: "Development of Acoustic Camera-Imaging Simulator Based on Novel Model", Proceedings of the 2015 IEEE 15th International Conference on Environment and Electrical Engineering (EEEIC2015), pp. 1719-1724, Rome (Italy), June 2015.

2015. [doi:10.1109/EEEIC.2015.7165431]

- 116) Xiaorui Qiao, Junki Nakagawa, Koshiro Yanai, Junko Yasuda, Wen Wen, Atsushi Yamashita and Hajime Asama: "Nurse Bed Care Activity Analysis for Intelligent Training Service", Proceedings of the 3rd International Conference on Serviceology (ICServ2015), T2-1-2, pp. 1-6, San Jose (USA), July 2015.
- 117) Hiroyuki Okamoto, Alessandro Moro, Atsushi Yamashita and Hajime Asama: "Toward Sports Training Service with the Interactive Learning Platform", Proceedings of the 3rd International Conference on Serviceology (ICServ2015), T2-1-3, pp. 1-4, San Jose (USA), July 2015.
- 118) Wen Wen, Xiaorui Qiao, Koshiro Yanai, Junki Nakagawa, Junko Yasuda, Atsushi Yamashita and Hajime Asama: "Skill Evaluation and Education Services for Bed-Care Nursing with Sliding Sheet with Regression Analysis", Proceedings of the 3rd International Conference on Serviceology (ICServ2015), T3-1-2, pp. 1-5, San Jose (USA), July 2015.
- 119) Guanghui Li, Shuiguang Tong, Yang Li, Feiyun Cong, Zheming Tong, Atsushi Yamashita and Hajime Asama: "Hybrid Dynamical Moving Task Allocation Methodology for Distributed Multi-robot Coordination System", Proceedings of the 2015 IEEE International Conference on Mechatronics and Automation (ICMA2015), pp. 1412-1417, Beijing (China), August 2015.
- 120) Yonghoon Ji, Atsushi Yamashita and Hajime Asama: "Automatic Calibration and Trajectory Reconstruction of Mobile Robot in Camera Sensor Network", Proceedings of the 11th Annual IEEE International Conference on Automation Science and Engineering (CASE2015), pp. 206-211, Gothenburg (Sweden), August 2015. [doi:10.1109/CoASE.2015.7294063]
- 121) Hiromitsu Fujii, Atsushi Yamashita and Hajime Asama: "Improvement of Environmental Adaptivity of Defect Detector for Hammering Test Using Boosting Algorithm", Proceedings of the 2015 IEEE/RSJ International Conference on Intelligent Robots and Systems (IROS2015), pp. 6507-6514, Hamburg (Germany), October 2015. [doi:10.1109/IROS.2015.7354307]
- 122) Renato Miyagusuku, Atsushi Yamashita and Hajime Asama: "Gaussian Processes with Input-dependent Noise Variance for Wireless Signal Strength-based Localization", Proceedings of the 13th IEEE International Symposium on Safety, Security, and Rescue Robotics (SSRR2015), West Lafayette (USA), October 2015. [doi:10.1109/SSRR.2015.7442993]
- 123) Guanghui Li, Shuiguang Tong, Gang Lv, Renyuan Xiao, Feiyun Cong, Zheming Tong, Atsushi Yamashita and Hajime Asama: "An Improved Artificial Potential Field-based Simultaneous Forward Search (Improved APF-based SIFORS) method for Robot Path Planning", Proceedings of the 12th International Conference on Ubiquitous Robots and Ambient Intelligence (URAI2015), Goyang (Korea), October 2015.
- 124) Akira Takeuchi, Hiromitsu Fujii, Atsushi Yamashita, Masayuki Tanaka, Ryuho Kataoka, Yoshizumi Miyoshi, Masatoshi Okutomi and Hajime Asama: "3D Visualization of Aurora from Optional Viewpoint at Optional Time", Proceedings of ACM SIGGRAPH Asia 2015 Posters, Article No. 9, Kobe (Japan), November 2015. [doi:10.1145/2820926.2820967]
- 125) Daisuke Tomoi, Wen Wen, Hiroshi Yamakawa, Shunsuke Hamasaki, Kaoru Takakusaki, Qi An, Yusuke Tamura, Atsushi Yamashita and Hajime Asama: "Estimation of Stress During Car Race with Factor Analysis", Proceedings of the 2015 International Symposium on Micro-Nano Mechatronics and Human Science (MHS2015), pp. 213-216, Nagoya (Japan), November 2015.
- 126) Shunsuke Hamasaki, Qi An, Wen Wen, Yusuke Tamura, Hiroshi Yamakawa, Atsushi Yamashita, Hajime Asama, Satoshi Shibuya and Yukari Ohki: "Evaluating Effect of Sense of Ownership and Sense of Agency on Body Representation Change of Human Upper Limb", Proceedings of the 2015 International Symposium on Micro-Nano Mechatronics and Human Science (MHS2015), pp. 254-257, Nagoya (Japan), November 2015. (Best Poster Award)
- 127) Tatsuya Kittaka, Hiromitsu Fujii, Atsushi Yamashita and Hajime Asama: "Seeing through Obstacles by

Using Movable RGB-D Sensors", Proceedings of the 6th International Conference on Advanced Mechatronics (ICAM2015), pp. 29-30, Tokyo (Japan), December 2015. (ICAM2015 Honorable Mention)

- 128) Binbin Xu, Sarthak Pathak, Hiromitsu Fujii, Atsushi Yamashita and Hajime Asama: "Robot Body Occlusion Removal in Omnidirectional Video Using Color and Shape Information", Proceedings of the 6th International Conference on Advanced Mechatronics (ICAM2015), pp. 49-50, Tokyo (Japan), December 2015. (ICAM2015 Honorable Mention)
- 129) Sarthak Pathak, Alessandro Moro, Atsushi Yamashita and Hajime Asama: "Rotation Removed Stabilization of Omnidirectional Videos Using Optical Flow", Proceedings of the 6th International Conference on Advanced Mechatronics (ICAM2015), pp. 51-52, Tokyo (Japan), December 2015.
- 130) Hiromitsu Fujii, Atsushi Yamashita and Hajime Asama: "Boosting-based Visualization of Concrete Defects for Hammering Inspection", Proceedings of the 6th International Conference on Advanced Mechatronics (ICAM2015), p. 55, Tokyo (Japan), December 2015. (ICAM2015 Best Paper)
- 131) Qi An, Hiroshi Yamakawa, Atsushi Yamashita and Hajime Asama: "Muscle Synergies of Sit-to-Stand and Walking Account for Sit-to-Walk Motion", Proceedings of the 6th International Conference on Advanced Mechatronics (ICAM2015), pp. 96-97, Tokyo (Japan), December 2015. (ICAM2015 Honorable Mention)
- 132) Yonghoon Ji, Atsushi Yamashita and Hajime Asama: "Automatic Camera Pose Estimation Based on Textured 3D Map Information", Proceedings of the 6th International Conference on Advanced Mechatronics (ICAM2015), pp. 100-101, Tokyo (Japan), December 2015. (ICAM2015 Honorable Mention)
- 133) Ren Komatsu, Hiromitsu Fujii, Hitoshi Kono, Yusuke Tamura, Atsushi Yamashita and Hajime Asama: "Bird's-eye View Image Generation with Camera Malfunction in Irradiation Environment", Proceedings of the 6th International Conference on Advanced Mechatronics (ICAM2015), pp. 177-178, Tokyo (Japan), December 2015.
- 134) Seungchul Kwak, Yonghoon Ji, Atsushi Yamashita and Hajime Asama: "3-D Reconstruction of Underwater Object: Analytical System for Extracting Feature Points Using Two Different Acoustic Views", Proceedings of the 6th International Conference on Advanced Mechatronics (ICAM2015), pp. 197-198, Tokyo (Japan), December 2015.
- 135) Hiroshi Higuchi, Hiromitsu Fujii, Atsushi Taniguchi, Masahiro Watanabe, Atsushi Yamashita and Hajime Asama: "3D Measurement of Large Structures with a Ring Laser and a Camera Using Structure from Motion for Integrating Cross Sections", Proceedings of the 6th International Conference on Advanced Mechatronics (ICAM2015), pp. 233-234, Tokyo (Japan), December 2015.
- 136) Hitoshi Kono, Yusuke Tamura, Atsushi Yamashita and Hajime Asama: "Distributed Cooperative Fault Diagnosis for Internal Electrical Components of Robot System", Proceedings of the 6th International Conference on Advanced Mechatronics (ICAM2015), pp. 235-236, Tokyo (Japan), December 2015.
- 137) Yusuke Tanaka, Yonghoon Ji, Yusuke Tamura, Atsushi Yamashita and Hajime Asama: "Course Detection from Integrated 3D Environment Measurement by Multiple Mobile Robots", Proceedings of the 6th International Conference on Advanced Mechatronics (ICAM2015), pp. 237-238, Tokyo (Japan), December 2015.
- 138) Hanwool Woo, Yonghoon Ji, Hitoshi Kono, Yusuke Tamura, Atsushi Yamashita and Hajime Asama: "Detection Method of Lane Change Intentions in Other Drivers Using Hidden Markov Models", Proceedings of the 6th International Conference on Advanced Mechatronics (ICAM2015), pp. 253-254, Tokyo (Japan), December 2015.
- 139) Renato Miyagusuku, Atsushi Yamashita and Hajime Asama: "Dual Monte Carlo Localization Algorithm for Localization Using Wireless Signal Strength Maps", Proceedings of the 6th International Conference on Advanced Mechatronics (ICAM2015), pp. 282-283, Tokyo (Japan), December 2015.
- 140) Jun Younes Louhi (Kasahara), Hiromitsu Fujii, Atsushi Yamashita and Hajime Asama: "Unsupervised

Learning Approach to Detection of Void-type Defects in Concrete Structure Using Hammering and Clustering", Proceedings of the 6th International Conference on Advanced Mechatronics (ICAM2015), pp. 319-320, Tokyo (Japan), December 2015.

- 141) Rin Minohara, Wen Wen, Shunsuke Hamasaki, Takaki Maeda, Hiroshi Yamakawa, Satoshi Shibuya, Yukari Ohki, Atsushi Yamashita and Hajime Asama: "Readiness Potential Reflects the Predictive Aspect of Sense of Agency", Proceedings of the 6th International Conference on Advanced Mechatronics (ICAM2015), pp. 353-354, Tokyo (Japan), December 2015.
- 142) Soichiro Iwataki, Hiromitsu Fujii, Alessandro Moro, Atsushi Yamashita, Hajime Asama and Hiroshi Yoshinada: "Visualization of the Surrounding Environment and Operational Part in a 3DCG Model for the Teleoperation of Construction Machines", Proceedings of the 2015 IEEE/SICE International Symposium on System Integration (SII2015), pp. 81-87, Nagoya (Japan), December 2015. [doi:10.1109/SII.2015.7404958]
- 143) Akira Shibata, Hiromitsu Fujii, Atsushi Yamashita and Hajime Asama: "Absolute Scale Structure from Motion Using a Refractive Plate", Proceedings of the 2015 IEEE/SICE International Symposium on System Integration (SII2015), pp. 540-545, Nagoya (Japan), December 2015. [doi:10.1109/SII.2015.7405037]
- 144) Guanghui Li, Shuiguang Tong, Feiyun Cong, Atsushi Yamashita and Hajime Asama: "Improved Artificial Potential Field-based Simultaneous Forward Search Method for Robot Path Planning in Complex Environment", Proceedings of the 2015 IEEE/SICE International Symposium on System Integration (SII2015), pp. 760-765, Nagoya (Japan), December 2015.
- 145) Shunsuke Hamasaki, Qi An, Wen Wen, Yusuke Tamura, Hiroshi Yamakawa, Atsushi Yamashita, Hajime Asama, Satoshi Unenaka, Satoshi Shibuya and Yukari Ohki: "Influence of Sense of Agency and Sense of Ownership on Body Representation Change of Human Upper Limb", Proceedings of the 1st International Symposium on Embodied-Brain Systems Science (EmboSS2016), p. 26, Tokyo (Japan), May 2016.
- 146) Wen Wen, Atsushi Yamashita and Hajime Asama: "How Agency Influences Ownership and Body Representation", Proceedings of the 1st International Symposium on Embodied-Brain Systems Science (EmboSS2016), p. 27, Tokyo (Japan), May 2016.
- 147) Ningjia Yang, Qi An, Hiroshi Yamakawa, Yusuke Tamura, Atsushi Yamashita and Hajime Asama: "Muscle Synergy Analysis in Human Standing-up Motion Using Different Strategies", Proceedings of the 1st International Symposium on Embodied-Brain Systems Science (EmboSS2016), p. 32, Tokyo (Japan), May 2016.
- 148) Hiromitsu Fujii, Atsushi Yamashita and Hajime Asama: "Defect Detection with Estimation of Material Condition Using Ensemble Learning for Hammering Test", Proceedings of the 2016 IEEE International Conference on Robotics and Automation (ICRA2016), pp. 3847-3854, Stockholm (Sweden), May 2016. (IEEE Robotics and Automation Society Japan Chapter Young Award) [doi:10.1109/ICRA.2016.7487573]
- 149) Wenzheng Chi, Hitoshi Kono, Yusuke Tamura, Atsushi Yamashita, Hajime Asama and Max Q.-H. Meng: "A Human-friendly Robot Navigation Algorithm Using the Risk-RRT Approach", Proceedings of the 2016 IEEE International Conference on Real-time Computing and Robotics (RCAR2016), pp. 227-232, Angkor Wat (Cambodia), June 2016. (Best Student Paper Award)
- 150) Seungchul Kwak, Yonghoon Ji, Atsushi Yamashita and Hajime Asama: "3-D Reconstruction of Underwater Objects Using Arbitrary Acoustic Views", Proceedings of the 11th France-Japan congress on Mechatronics / the 9th Europe-Asia congress on Mechatronics / the 17th International Conference on Research and Education in Mechatronics (MECATRONICS-REM2016), pp. 74-79, Compiègne (France), June 2016. [doi:10.1109/MECATRONICS.2016.7547119]
- 151) Tatsuya Kittaka, Hiromitsu Fujii, Atsushi Yamashita and Hajime Asama: "Creating See-through Image Using Two RGB-D Sensors for Remote Control Robot", Proceedings of the 11th France-Japan congress on Mechatronics / the 9th Europe-Asia congress on Mechatronics / the 17th International Conference on Research

and Education in Mechatronics (MECATRONICS-REM2016), pp. 86-91, Compiègne (France), June 2016. [doi:10.1109/MECATRONICS.2016.7547121]

- 152) Hiromasa Kume, Hiromitsu Fujii, Atsushi Yamashita and Hajime Asama: "Scale Reconstructable Structure from Motion Using Refraction with Omnidirectional Camera", Proceedings of the 11th France-Japan congress on Mechatronics / the 9th Europe-Asia congress on Mechatronics / the 17th International Conference on Research and Education in Mechatronics (MECATRONICS-REM2016), pp. 117-122, Compiègne (France), June 2016. [doi:10.1109/MECATRONICS.2016.7547126]
- 153) Veerachart Srisamosorn, Noriaki Kuwahara, Atsushi Yamashita, Taiki Ogata and Jun Ota: "Design of Face Tracking System Using Environmental Cameras and Flying Robot for Evaluation of Health Care", Proceedings of the 18th International Conference on Human-Computer Interaction (HCI2016), pp. 264-273, Toronto (Canada), July 2016.
- 154) Wen Wen, Atsushi Yamashita and Hajime Asama: "The Influence of Attention on Sense of Agency", The 31st International Congress of Psychology (ICP2016), OR25-32-4, Yokohama (Japan), July 2016.
- 155) Veerachart Srisamosorn, Noriaki Kuwahara, Atsushi Yamashita, Taigi Ogata and Jun Ota: "Design of Face Tracking System Using Fixed 360-Degree Cameras and Flying Blimp for Health Care Evaluation", Proceedings of the 4th International Conference on Serviceology (ICServ2016), pp. 63-66, Tokyo (Japan), September 2016.
- 156) Yuki Ishikawa, Qi An, Wen Wen, Shu Ishiguro, Koji Ohata, Hiroshi Yamakawa, Yusuke Tamura, Atsushi Yamashita and Hajime Asama: "Auxiliary System to Identify Patterns of Patients with Hemiplegia for Transferring Skill of Rehabilitation with Walking Assist Robot", Proceedings of the 4th International Conference on Serviceology (ICServ2016), pp. 154-157, Tokyo (Japan), September 2016.
- 157) Yonghoon Ji, Seungchul Kwak, Atsushi Yamashita and Hajime Asama: "Acoustic Camera-based 3D Measurement of Underwater Objects through Automated Extraction and Association of Feature Points", Proceedings of the 2016 IEEE International Conference on Multisensor Fusion and Integration for Intelligent Systems (MFI2016), pp. 224-230, Baden-Baden (Germany), September 2016. [doi:10.1109/MFI.2016.7849493]
- 158) Sarthak Pathak, Alessandro Moro, Atsushi Yamashita and Hajime Asama: "A Decoupled Virtual Camera Using Spherical Optical Flow", Proceedings of the 2016 IEEE International Conference on Image Processing (ICIP2016), pp. 4488-4492, Phoenix (USA), September 2016. [doi:10.1109/ICIP.2016.7533209]
- 159) Sarthak Pathak, Alessandro Moro, Atsushi Yamashita and Hajime Asama: "Dense 3D Reconstruction from Two Spherical Images via Optical Flow-based Equirectangular Epipolar Rectification", Proceedings of the 2016 IEEE International Conference on Imaging Systems and Techniques (IST2016), pp. 140-145, Crete Island (Greece), October 2016.
- 160) Hanwool Woo, Yonghoon Ji, Hitoshi Kono, Yusuke Tamura, Atsushi Yamashita, Hajime Asama, Yasuhide Kuroda, Takashi Sugano and Yasunori Yamamoto: "Dynamic Potential-Model-Based Feature for Lane Change Prediction", Proceedings of the 2016 IEEE International Conference on Systems, Man, and Cybernetics (SMC2016), pp. 838-843, Budapest (Hungary), October 2016. [doi:10.1109/SMC.2016.7844344]
- 161) Renato Miyagusuku, Atsushi Yamashita and Hajime Asama: "Gaussian Processes Mappings Improvements Using Path Loss Models for Wireless Signals-based Localization", Proceedings of the 2016 IEEE/RSJ International Conference on Intelligent Robots and Systems (IROS2016), pp. 4610-4615, Daejeon (Korea), October 2016. [doi:10.1109/IROS.2016.7759678]
- 162) Sarthak Pathak, Alessandro Moro, Hiromitsu Fujii, Atsushi Yamashita and Hajime Asama: "3D Reconstruction of Structures using Spherical Cameras with Small Motion", Proceedings of the 16th International Conference on Control, Automation and Systems (ICCAS2016), pp. 117-122, Gyeongju (Korea), October 2016. (Student Best Paper Award)

- 163) Hanwool Woo, Yonghoon Ji, Hitoshi Kong, Yusuke Tamura, Yasuhide Kuroda, Takashi Sugano, Yasunori Yamamoto, Atsushi Yamashita and Hajime Asama: "Lane-Changing Feature Extraction Using Multisensor Integration", Proceedings of the 16th International Conference on Control, Automation and Systems (ICCAS2016), pp. 1633-1636, Gyeongju (Korea), October 2016.
- 164) Qi An, Hiroshi Yamakawa, Atsushi Yamashita and Hajime Asama: "Different Temporal Structure of Muscle Synergy between Sit-to-Walk and Sit-to-Stand Motions in Human Standing Leg", Proceedings of the 3rd International Conference on NeuroRehabilitation (ICNR2016), pp. 933-937, Segovia (Spain), October 2016.
- 165) Doyeon Kim, Hanwool Woo, Yonghoon Ji, Yusuke Tamura, Atsushi Yamashita and Hajime Asama: "Localization of Radiation Sources Using Gamma-ray Detector in Simulated Environments", Proceedings of the 4th International Conference on Maintenance Science and Technology (ICMST2016), Shenzhen (China), November 2016.
- 166) Rin Minohara, Wen Wen, Shunsuke Hamasaki, Takaki Maeda, Qi An, Yusuke Tamura, Hiroshi Yamakawa, Atsushi Yamashita and Hajime Asama: "How Anticipation for the Sense of Agency Affects Readiness Potential", Proceedings of the 2016 International Symposium on Micro-Nano Mechatronics and Human Science (MHS2016), pp. 166-167, Nagoya (Japan), November 2016. (Best Poster Award)
- 167) Jonghoon Im, Hiromitsu Fujii, Atsushi Yamashita and Hajime Asama: "Correction of Over- and Underexposed Images Using Multiple Lighting System for Exploration Robot in Dark Environments", Proceedings of the 2016 IEEE International Conference on Robotics and Biomimetics (ROBIO2016), pp. 375-381, Qingdao (China), December 2016. [doi:10.1109/MFI.2016.7849493]
- 168) Wei Sun, Soichiro Iwataki, Ren Komatsu, Hiromitsu Fujii, Atsushi Yamashita and Hajime Asama: "Simultaneous Tele-visualization of Construction Machine and Environment Using Body Mounted Cameras", Proceedings of the 2016 IEEE International Conference on Robotics and Biomimetics (ROBIO2016), pp. 382-387, Qingdao (China), December 2016. [doi:10.1109/ROBIO.2016.7866352]
- 169) Binbin Xu, Sarthak Pathak, Hiromitsu Fujii, Atsushi Yamashita and Hajime Asama: "Optical Flow-based Video Completion in Spherical Image Sequences", Proceedings of the 2016 IEEE International Conference on Robotics and Biomimetics (ROBIO2016), pp. 388-395, Qingdao (China), December 2016. [doi:10.1109/ROBIO.2016.7866353]
- 170) Akira Takeuchi, Hiromitsu Fujii, Atsushi Yamashita, Masayuki Tanaka, Ryuho Kataoka, Yoshizumi Miyoshi, Masatoshi Okutomi and Hajime Asama: "3D Visualization of Aurora Considering the Physical Characteristics", Proceedings of ACM SIGGRAPH Asia 2016 Posters, Article No. 52, pp. 1-2, Macao (China), December 2016. [doi:10.1145/3005274.3005285]
- 171) Tsubasa Goto, Sarthak Pathak, Yonghoon Ji, Hiromitsu Fujii, Atsushi Yamashita and Hajime Asama: "Spherical Camera Localization in Man-made Environment Using 3D-2D Matching of Line Information", Proceedings of the International Workshop on Advanced Image Technology 2017 (IWAIT2017), Penang (Malaysia), January 2017. (Best Paper Award)
- 172) Yasuyuki Awashima, Ren Komatsu, Hiromitsu Fujii, Yusuke Tamura, Atsushi Yamashita and Hajime Asama: "Visualization of Obstacles on Bird's-eye View Using Depth Sensor for Remote Controlled Robot", Proceedings of the International Workshop on Advanced Image Technology 2017 (IWAIT2017), Penang (Malaysia), January 2017.
- 173) Yukari Okumura, Hiromitsu Fujii, Atsushi Yamashita and Hajime Asama: "Global Optimization with Viewpoint Selection for Scale-reconstructible Structure from Motion Using Refraction", Proceedings of the International Workshop on Advanced Image Technology 2017 (IWAIT2017), Penang (Malaysia), January 2017.
- 174) Hanwool Woo, Yonghoon Ji, Hitoshi Kono, Yusuke Tamura, Yasuhide Kuroda, Takashi Sugano, Yasunori

- Yamamoto, Atsushi Yamashita and Hajime Asama: "Lane-Change Detection Based on Vehicle-Trajectory Prediction", 2017 IEEE International Conference on Robotics and Automation (ICRA2017), Singapore, May-June 2017. (IEEE Robotics and Automation Letters, Vol. 2, No. 2, pp. 1109-1116, April 2017.)
- 175) Angela Faragasso, Atsushi Yamashita and Hajime Asama: "Versatile Visual-based Touch Sensor for Autonomous Search Robots", Proceedings of the 14th International Conference on Ubiquitous Robots and Ambient Intelligence (URAI2017), pp.282-283, Jeju (Korea), June 2017. [doi:10.1109/URAI.2017.7992730]
- 176) Jonghoon Im, Hiromitsu Fujii, Atsushi Yamashita and Hajime Asama: "Multi-Modal Diagnostic Method for Detection of Concrete Crack Direction Using Light-Section Method and Hammering Test", Proceedings of the 14th International Conference on Ubiquitous Robots and Ambient Intelligence (URAI2017), pp. 922-927, Jeju (Korea), June-July 2017. [doi:10.1109/URAI.2017.7992866]
- 177) Ngoc Trung Mai, Hanwool Woo, Yonghoon Ji, Yusuke Tamura, Atsushi Yamashita and Hajime Asama: "3-D Reconstruction of Underwater Object Based on Extended Kalman Filter by Using Acoustic Camera Images", Preprints of the 20th World Congress of the International Federation of Automatic Control, pp. 1066-1072, Toulouse (France), July 2017. (IFAC PaperOnLine, Vol. 50, No. 1, pp. 1043-1049, July 2017) [doi:10.1016/j.ifacol.2017.08.215]
- 178) Tasuku Ito, Hitoshi Kono, Yusuke Tamura, Atsushi Yamashita and Hajime Asama: "Recovery Motion Learning for Arm Mounted Mobile Crawler Robot in Drive System's Failure", Preprints of the 20th World Congress of the International Federation of Automatic Control, pp. 2365-2370, Toulouse (France), July 2017. (IFAC PaperOnLine, Vol. 50, No. 1, pp. 2329-2334, July 2017) [doi:10.1016/j.ifacol.2017.08.475]
- 179) Takao Sugimoto, Hiroshi Yamakawa, Qi An, Wen Wen, Yusuke Tamura, Koichi Ohtomi, Takayuki Kosaka, Hiromasa Suzuki, Atsushi Yamashita and Hajime Asama: "Estimation of Tension and Concentration Scenes during Crane Operation Using Physiological Indices for Skill Improvement Support", Proceedings of the 5th International Conference on Serviceology (ICServ2017), pp. 153-160, Vienna (Austria), July 2017.
- 180) Xiaojun Lu, Angela Faragasso, Yonghoon Ji, Hitoshi Kono, Atsushi Yamashita and Hajime Asama: "Multi-localization Methods for Fault Diagnosis in Autonomous Mobile Robots Systems", Proceedings of the 2017 IEEE International Conference on Real-time Computing and Robotics (RCAR2017), pp. 200-205, Okinawa (Japan), July 2017.
- 181) Yiploon Seow, Renato Miyagusuku, Atsushi Yamashita and Hajime Asama: "Detecting and Solving the Kidnapped Robot Problem Using Laser Range Finder and Wifi Signal", Proceedings of the 2017 IEEE International Conference on Real-time Computing and Robotics (RCAR2017), pp. 303-308, Okinawa (Japan), July 2017.
- 182) Ningjia Yang, Qi An, Hiroshi Yamakawa, Yusuke Tamura, Atsushi Yamashita, Matti Itkonen, Fady Alnajjar, Shingo Shimoda, Hajime Asama, Noriaki Hattori and Ichiro Miyai: "Clarification of Muscle Synergy Structure During Standing-Up Motion of Healthy Young, Elderly and Post-Stroke Patients", Proceedings of the 2017 International Conference on Rehabilitation Robotics (ICORR), pp. 19-24, London (UK), July 2017. [doi:10.1109/ICORR.2017.8009215]
- 183) Jun Jiang, Renato Miyagusuku, Atsushi Yamashita and Hajime Asama: "Glass and Non-Glass Objects Classification Using Laser Rangefinders for Mobile Robots in Indoor Environments", Proceedings of the 2017 IEEE/RSJ International Conference on Intelligent Robots and Systems (IROS2017), p. 5529, Vancouver (Canada), September 2017.
- 184) Hanwool Woo, Yonghoon Ji, Yusuke Tamura, Yasuhide Kuroda, Takashi Sugano, Yasunori Yamamoto, Atsushi Yamashita and Hajime Asama: "Driver Classification in Vehicle-Following Behavior by Using Dynamic Potential Field Method", Proceedings of the IEEE 20th International Conference on Intelligent Transportation Systems (ITSC2017), pp. 1101-1106, Yokohama (Japan), October 2017.
- 185) Keita Kurashiki, Hiroshi Yoshinada, Keiji Nagatani, Masayuki Tanaka, Atsushi Yamashita, Yasuyoshi

- Yokokohji and Masashi Konyo: "A Teleoperated Hydraulic Rescue Robot Integrated with Elemental Technologies", Proceedings of the 10th JFPS International Symposium on Fluid Power (JFPS2017), 1C12, pp. 1-4, Fukuoka (Japan), October 2017.
- 186) Masataka Fuchida, Hiroya Yatsuyanagi, Akio Nakamura, Atsushi Yamashita and Hajime Asama: "The Characters Extraction System by a Fingertip for Visually Handicapped People", Proceedings of the 36th JSST Annual International Conference on Simulation Technology (JSST2017), pp. 310-311, Tokyo (Japan), October 2017.
- 187) Renato Miyagusuku, Yiploon Seow, Atsushi Yamashita and Hajime Asama: "Fast and Robust Localization using Laser Rangefinder and WiFi Data", Proceedings of 2017 IEEE International Conference on Multisensor Fusion and Integration for Intelligent Systems (MFI2017), pp. 111-117, Daegu (Korea), November 2017.
- 188) Ngoc Trung Mai, Hanwool Woo, Yonghoon Ji, Yusuke Tamura, Atsushi Yamashita and Hajime Asama: "3D Reconstruction of Line Features Using Multi-view Acoustic Images in Underwater Environment", Proceedings of 2017 IEEE International Conference on Multisensor Fusion and Integration for Intelligent Systems (MFI2017), Daegu (Korea), pp. 312-317, November 2017.
- 189) Sonmin Yun, Wen Wen, Qi An, Shunsuke Hamasaki, Hiroshi Yamakawa, Yusuke Tamura, Atsushi Yamashita and Hajime Asama: "Investigating the Relationship between Driver's Sense of Agency and EEG: Mu-rhythm is More Suppressed in Higher SoA Case", Proceedings of the 2017 International Symposium on Micro-Nano Mechatronics and Human Science (MHS2017), pp. 272-276, Nagoya (Japan), December 2017.
- 190) Yasuyuki Awashima, Hiromitsu Fujii, Yusuke Tamura, Keiji Nagatani, Atsushi Yamashita and Hajime Asama: "Safeness Visualization of Terrain for Teleoperation of Mobile Robot Using 3D Environment Map and Dynamic Simulator", Proceedings of the 2017 IEEE/SICE International Symposium on System Integration (SII2017), pp. 194-200, Taipei (Taiwan), December 2017. [doi:10.1109/SII.2017.8279211]
- 191) Yuyang Shao, Yonghoon Ji, Hiromitsu Fujii, Keiji Nagatani, Atsushi Yamashita and Hajime Asama: "Estimation of Scale and Slope Information for Structure from Motion-based 3D Map", Proceedings of the 2017 IEEE/SICE International Symposium on System Integration (SII2017), pp. 208-213, Taipei (Taiwan), December 2017. [doi:10.1109/SII.2017.8279213]
- 192) Jun Jiang, Renato Miyagusuku, Atsushi Yamashita and Hajime Asama: "Glass Confidence Maps Building Based on Neural Networks Using Laser Range-finders for Mobile Robots", Proceedings of the 2017 IEEE/SICE International Symposium on System Integration (SII2017), pp. 405-410, Taipei (Taiwan), December 2017. [doi:10.1109/SII.2017.8279246]
- 193) Doyeon Kim, Hanwool Woo, Yonghoon Ji, Yusuke Tamura, Atsushi Yamashita and Hajime Asama: "3D Radiation Imaging Using Mobile Robot Equipped with Radiation Detector", Proceedings of the 2017 IEEE/SICE International Symposium on System Integration (SII2017), pp. 444-449, Taipei (Taiwan), December 2017. [doi:10.1109/SII.2017.8279253]
- 194) Jun Younes Louhi Kasahara, Hiromitsu Fujii, Atsushi Yamashita and Hajime Asama: "Clustering of Spatially Relevant Audio Data using Mel-Frequency Cepstrum for Diagnosis of Concrete Structure by Hammering Test", Proceedings of the 2017 IEEE/SICE International Symposium on System Integration (SII2017), pp. 787-792, Taipei (Taiwan), December 2017. [doi:10.1109/SII.2017.8279318]
- 195) Sarthak Pathak, Alessandro Moro, Hiromitsu Fujii, Atsushi Yamashita and Hajime Asama: "Virtual Reality with Motion Parallax by Dense Optical Flow-based Depth Generation from Two Spherical Images", Proceedings of the 2017 IEEE/SICE International Symposium on System Integration (SII2017), pp. 887-892, Taipei (Taiwan), December 2017. [doi:10.1109/SII.2017.8279335]
- 196) Hiroki Kogami, Qi An, Ningjia Yang, Hiroshi Yamakawa, Yusuke Tamura, Atsushi Yamashita, Hajime Asama, Shingo Shimoda, Hiroshi Yamasaki, Matti Itkonen, Fady Alnajjar, Noriaki Hattori, Makoto Kinomoto,

- Kouji Takahashi, Takanori Fujii, Hironori Otomune and Ichiro Miyai: "Effect of Physical Therapy on Muscle Synergy Structure during Standing-up Motion of Hemiplegic Patients", Proceedings of the 2018 IEEE International Conference on Robotics and Automation (ICRA2018), Brisbane (Australia), May 2018. (IEEE Robotics and Automation Letters, Vol. 3, No. 3, pp. 2229-2236, July 2018.)
- 197) Tsubasa Goto, Sarthak Pathak, Yonghoon Ji, Hiromitsu Fujii, Atsushi Yamashita and Hajime Asama: "Line-based Global Localization of a Spherical Camera in Manhattan Worlds", Proceedings of the 2018 IEEE International Conference on Robotics and Automation (ICRA2018), pp. 2296-2303, Brisbane (Australia), May 2018. [doi:10.1109/ICRA.2018.8460920]
- 198) Ngoc Trung Mai, Yonghoon Ji, Hanwool Woo, Yusuke Tamura, Atsushi Yamashita and Hajime Asama: "Acoustic Image Simulator Based on Active Sonar Model in Underwater Environment", Proceedings of the 15th International Conference on Ubiquitous Robots (UR2018), pp. 775-780, Honolulu (USA), June 2018. [doi:10.1109/URAI.2018.8441870]
- 199) Angela Faragasso, Joao Bimbo, Atsushi Yamashita and Hajime Asama: "Disposable Stiffness Sensor for Endoscopic Examination", Proceedings of the 40th Annual International Conference of the IEEE Engineering in Medicine and Biology Society (EMBC2018), pp. 4309-4312, Honolulu (USA), July 2018. [doi:10.1109/EMBC.2018.8513350]
- 200) Yusheng Wang, Yonghoon Ji, Hanwool Woo, Yusuke Tamura, Atsushi Yamashita and Hajime Asama: "3D Occupancy Mapping Framework Based on Acoustic Camera in Underwater Environment", Preprints of the 12th IFAC Symposium on Robot Control (SYROCO2018), Paper No. 055, pp. 1-7, Budapest (Hungary), August 2018.
- 201) Stefano Massaroli, Renato Myagusuku, Federico Califano, Claudio Melchiorri, Atsushi Yamashita and Hajime Asama: "Recursive Algebraic Frisch Scheme: a Particle-Based Approach", Preprints of the Joint 9th IFAC Symposium on Robust Control Design (ROCOND2018) and 2nd IFAC Workshop on Linear Parameter Varying Systems (LPVS2018), pp. 599-605, Florianopolis (Brazil), September 2018.
- 202) Masataka Fuchida, Shota Chikushi, Alessandro Moro, Atsushi Yamashita and Hajime Asama: "Arbitrary Viewpoint Visualization for Disaster Response Robots", Proceedings of the 37th JSST Annual International Conference on Simulation Technology (JSST2018), Muroran (Japan), September 2018.
- 203) Tatsuya Kittaka, Hiromitsu Fujii, Atsushi Yamashita and Hajime Asama: "Real-time Registration of RGB-D Image Pair for See-through System", Proceedings of the 2018 IEEE International Conference on Image Processing (ICIP2018), pp. 1233-1237, Athens (Greece), October 2018. [doi:10.1109/ICIP.2018.8451512]
- 204) Sarthak Pathak, Alessandro Moro, Hiromitsu Fujii, Atsushi Yamashita and Hajime Asama: "Distortion-Robust Spherical Camera Motion Estimation via Dense Optical Flow", Proceedings of the 2018 IEEE International Conference on Image Processing (ICIP2018), pp. 3358-3362, Athens (Greece), October 2018. [doi:10.1109/ICIP.2018.8451406]
- 205) Sonmin Yun, Wen Wen, Qi An, Shunsuke Hamasaki, Hiroshi Yamakawa, Yusuke Tamura, Atsushi Yamashita and Hajime Asama: "Investigating the Relationship between Assisted Driver's SoA and EEG", Proceedings of the 5th International Conference on NeuroRehabilitation (ICNR2018), pp. 1039-1043, Pisa (Italy), October 2018. [doi:10.1007/978-3-030-01845-0_208]
- 206) Hanwool Woo, Yonghoon Ji, Yusuke Tamura, Yasuhide Kuroda, Takashi Sugano, Yasunori Yamamoto, Atsushi Yamashita and Hajime Asama: "Advanced Adaptive Cruise Control Based on Collision Risk Assessment", Proceedings of the 21st IEEE International Conference on Intelligent Transportation Systems (ITSC2018), pp. 939-944, Maui (USA), November 2018. [doi:10.1109/ITSC.2018.8569759]
- 207) Ryu Ohata, Wen Wen, Atsushi Yamashita, Hajime Asama and Hiroshi Imamizu: "Dissociative Processes for Detecting Change in Control", Proceedings of the 2nd International Symposium on Embodied-Brain

Systems Science (EmboSS2018), P44, p. 1, Osaka (Japan), December 2018.

- 208) Qi An, Hiroki Kogami, Ningjia Yang, Hiroshi Yamakawa, Yusuke Tamura, Hiroshi Yamasaki, Matti Itkonen, Fady Shibata-Alnajjar, Shingo Shimoda, Noriaki Hattori, Makoto Kinomoto, Kouji Takahashi, Takanori Fujii, Hironori Otomune, Ichiro Miyai, Atsushi Yamashita and Hajime Asama: "Rehabilitation Intervention of Physical Therapists Improves Muscle Synergy during Standing-up Motion of Stroke Patients", Proceedings of the 2nd International Symposium on Embodied-Brain Systems Science (EmboSS2018), P49, p. 1, Osaka (Japan), December 2018.
- 209) Ningjia Yang, Qi An, Hiroshi Yamakawa, Yusuke Tamura, Kouji Takahashi, Makoto Kinomoto, Hiroshi Yamasaki, Matti Itkonen, Fady Shibata-Alnajjar, Shingo Shimoda, Noriaki Hattori, Takanori Fujii, Hironori Otomune, Ichiro Miyai, Atsushi Yamashita and Hajime Asama: "Clarification of Altered Muscle Synergies during Sit-to-stand Motion in Stroke Patients", Proceedings of the 2nd International Symposium on Embodied-Brain Systems Science (EmboSS2018), P50, p. 1, Osaka (Japan), December 2018.
- 210) Hiroki Kogami, Qi An, Ningjia Yang, Hiroshi Yamakawa, Yusuke Tamura, Hiroshi Yamasaki, Matti Itkonen, Fady Shibata-Alnajjar, Shingo Shimoda, Noriaki Hattori, Makoto Kinomoto, Kouji Takahashi, Takanori Fujii, Hironori Otomune, Ichiro Miyai, Atsushi Yamashita and Hajime Asama: "Effect of Physical Therapy on Joint Angle of Hemiplegic Patients during Standing-up Motion", Proceedings of the 2nd International Symposium on Embodied-Brain Systems Science (EmboSS2018), P51, p. 1, Osaka (Japan), December 2018.
- 211) Shunsuke Hamasaki, Atsushi Yamashita and Hajime Asama: "Investigation of the Influence of Sense of Ownership and Agency on Three-Dimensional Change of Body Representation of Upper Limb", Proceedings of the 2nd International Symposium on Embodied-Brain Systems Science (EmboSS2018), P57, p. 1, Osaka (Japan), December 2018.
- 212) Sonmin Yun, Wen Wen, Qi An, Shunsuke Hamasaki, Hiroshi Yamakawa, Yusuke Tamura, Atsushi Yamashita and Hajime Asama: "Investigating the Relationship between Assisted Driver's Sense of Agency and EEG Alpha Power", Proceedings of the 2nd International Symposium on Embodied-Brain Systems Science (EmboSS2018), P66, p. 1, Osaka (Japan), December 2018.
- 213) Kei Aoyagi, Wen Wen, Qi An, Shunsuke Hamasaki, Hiroshi Yamakawa, Yusuke Tamura, Atsushi Yamashita and Hajime Asama: "Improvement of Sense of Agency via Visual Intervention in Virtual Reality", Proceedings of the 2nd International Symposium on Embodied-Brain Systems Science (EmboSS2018), P73, p. 1, Osaka (Japan), December 2018.
- 214) Shunsuke Hamasaki, Atsushi Yamashita and Hajime Asama: "A Three-Dimensional Evaluation of Body Representation Change of Human Upper Limb Focused on Sense of Ownership and Sense of Agency", Proceedings of the 2018 International Symposium on Micro-Nano Mechatronics and Human Science (MHS2018), pp. 259-262, Nagoya (Japan), December 2018.
- 215) Sarthak Pathak, Alessandro Moro, Hiromitsu Fujii, Atsushi Yamashita and Hajime Asama: "Distortion-Resistant Spherical Visual Odometry for UAV-Based Bridge Inspection", Proceedings of SPIE, Vol. 11049 (Proceedings of the 2019 Joint Conference of the International Workshop on Advanced Image Technology (IWAIT2019) and the International Forum on Medical Imaging in Asia (IFMIA2019)), pp. 110491O-1-110491O-6, Singapore (Singapore), January 2019. [doi:10.1117/12.2520206]
- 216) Momoko Kawata, Hiroshi Higuchi, Hiromitsu Fujii, Atsushi Taniguchi, Masahiro Watanabe, Atsushi Yamashita and Hajime Asama: "Acceleration of 3D Measurement of Large Structures with Ring Laser and Camera via FFT-based Template Matching", Proceedings of the 2019 IEEE/SICE International Symposium on System Integration (SII2019), pp. 11-16, Paris (France), January 2019. [doi:10.1109/SII.2019.8700345]
- 217) Yusheng Wang, Yonghoon Ji, Hanwool Woo, Yusuke Tamura, Atsushi Yamashita and Hajime Asama: "Three-dimensional Underwater Environment Reconstruction with Graph Optimization Using Acoustic

- Camera", Proceedings of the 2019 IEEE/SICE International Symposium on System Integration (SII2019), pp. 28-33, Paris (France), January 2019. [doi:10.1109/SII.2019.8700464]
- 218) Irem Uygur, Renato Miyagusuku, Sarthak Pathak, Alessandro Moro, Atsushi Yamashita and Hajime Asama: "A Framework for Bearing-Only Sparse Semantic Self-Localization for Visually Impaired People", Proceedings of the 2019 IEEE/SICE International Symposium on System Integration (SII2019), pp. 319-324, Paris (France), January 2019. [doi:10.1109/SII.2019.8700370]
- 219) Momoko Kawata, Hiroshi Higuchi, Hiromitsu Fujii, Atsushi Taniguchi, Masahiro Watanabe, Atsushi Yamashita and Hajime Asama: "Acceleration of 3D Measurement of Large Structures with Ring Laser and Camera via FFT-based Template Matching", 2019 IEEE International Conference on Computational Photography (ICCP2019), May 2019.
- 220) Hiroshi Higuchi, Hiromitsu Fujii, Atsushi Taniguchi, Masahiro Watanabe, Atsushi Yamashita and Hajime Asama: "Speckle Based Pose Estimation Considering Depth Information for 3D Measurement of Texture-less Environment", 2019 IEEE International Conference on Computational Photography (ICCP2019), May 2019.
- 221) Dabae Kim, Sarthak Pathak, Alessandro Moro, Ren Komatsu, Atsushi Yamashita and Hajime Asama: "E-CNN: Accurate Spherical Camera Rotation Estimation via Uniformization of Distorted Optical Flow Fields", Proceedings of the 2019 IEEE International Conference on Acoustics, Speech, and Signal Processing (ICASSP2019), pp. 2232-2236, Brighton (UK), May 2019. [doi:10.1109/ICASSP.2019.8682203]
- 222) Yonghoon Ji, Atsushi Yamashita, Kazunori Umeda and Hajime Asama: "Automatic Camera Pose Estimation based on a Flat Surface Map", Proceedings of SPIE, Vol. 11172 (Proceedings of the 15th International Conference on Quality Control by Artificial Vision (QCAV2019)), pp. 111720X-1-111720X-6, Mulhouse (France), May 2019. [doi:10.1117/12.2521780]
- 223) Renato Miyagusuku, Atsushi Yamashita and Hajime Asama: "Data Information Fusion from Multiple Access Points for WiFi-based Self-localization", Proceedings of the 2019 IEEE International Conference on Robotics and Automation (ICRA2019), Montreal (Canada), May 2019. (IEEE Robotics and Automation Letters, Vol. 4, No. 2, pp. 269-276, April 2019.) (IEEE Robotics and Automation Society Japan Joint Chapter Young Award)
- 224) Xiaorui Qiao, Atsushi Yamashita and Hajime Asama: "3D Reconstruction for Underwater Investigation at Fukushima Daiichi Nuclear Power Station Using Refractive Structure from Motion", International Topical Workshop on Fukushima Decommissioning Research (FDR2019), FDR2019-1006, pp. 1-4, Fukushima (Japan), May 2019. (FDR2019 Selected Paper)
- 225) Stefano Massaroli, Renato Miyagusuku, Federico Califano, Angela Faragasso, Atsushi Yamashita and Hajime Asama: "A Novel Recursive Linear Estimator Based on the Frisch Scheme", Proceedings of the 2019 12th Asian Control Conference (ASCC2019), pp. 1101-1106, Kitakyushu (Japan), June 2019.
- 226) Wen Wen, Ryu Ohata, Masaru Tanaka, Atsushi Yamashita, Hajime Asama and Hiroshi Imamizu: "Two Dissociable Processes for Detecting Gaining and Losing Control in Human Brain", 23rd Annual Meeting of the Association for the Scientific Study of Consciousness (ASSC23), London Ontario (Canada), June 2019.
- 227) Jun Jiang, Renato Miyagusuku, Atsushi Yamashita and Hajime Asama: "Robust Map Registration for Building Online Glass Confidence Maps", Proceedings of the 10th IFAC Symposium on Intelligent Autonomous Vehicles (IAV2019), pp. 362-367, Gdansk (Poland), July 2019. (IFAC PaperOnLine, Vol. 52, No. 8, pp. 362-367, September 2019) [doi:10.1016/j.ifacol.2019.08.108]
- 228) Kei Aoyagi, Wen Wen, Qi An, Shunsuke Hamasaki, Hiroshi Yamakawa, Yusuke Tamura, Atsushi Yamashita and Hajime Asama: "Improvement of Sense of Agency During Upper-Limb Movement for Motor Rehabilitation Using Virtual Reality", Proceedings of the 41st Annual International Conference of the IEEE Engineering in Medicine and Biology Society (EMBC2019), pp. 118-121, Berlin (Germany), July 2019. [doi:10.1109/EMBC.2019.8856796]

- 229) Yusheng Wang, Yonghoon Ji, Hanwool Woo, Yusuke Tamura, Hiroshi Tsuchiya, Atsushi Yamashita and Hajime Asama: "Rotation Estimation of Acoustic Camera Based on Illuminated Area in Acoustic Image", Preprints of the Joint 12th IFAC Conference on Control Applications in Marine Systems, Robotics, and Vehicles (CAMS2019), pp. 217-222, Daejeon (Korea), September 2019.
- 230) Stefano Massaroli, Federico Califano, Angela Faragasso, Atsushi Yamashita and Hajime Asama: "Iterative Energy Shaping of a Ball-Dribbling Robot", Preprints of the 1st IFAC Workshop on Robot Control (WROCO2019), pp. 248-253, Daejeon (Korea), September 2019. (Young Author Award)
- 231) Xiaorui Qiao, Yonghoon Ji, Atsushi Yamashita and Hajime Asama: "Structure from Motion of Underwater Scenes Considering Image Degradation and Refraction", Preprints of the 1st IFAC Workshop on Robot Control (WROCO2019), pp. 455-459, Daejeon (Korea), September 2019.
- 232) Shinya Katsuma, Hanwool Woo, Yonghoon Ji, Yusuke Tamura, Atsushi Yamashita and Hajime Asama: "Efficient Motion Planning for Mobile Robots Dealing with Changes in Rough Terrain", Preprints of the 1st IFAC Workshop on Robot Control (WROCO2019), pp. 460-463, Daejeon (Korea), September 2019.
- 233) Hiroki Kogami, Qi An, Hiroshi Yamakawa, Ningjia Yang, Yusuke Tamura, Hiroshi Yamasaki, Fady Alnajjar, Shingo Shimoda, Makoto Kinomoto, Noriaki Hattori, Kouji Takahashi, Takanori Fujii, Hironori Otomune, Ichiro Miyai, Shu Ishiguro, Takashi Saigusa, Yoshikazu Nozaki, Haruhisa Maruyama, Atsushi Yamashita and Hajime Asama: "Assistive Chair to Support Hip Rising of Elderly People Improves Body Movement of Sit-To-Stand Motion", Preprints of the 1st IFAC Workshop on Robot Control (WROCO2019), pp. 480-483, Daejeon (Korea), September 2019.
- 234) Hanwool Woo, Hirokazu Madokoro, Kazuhito Sato, Yusuke Tamura, Atsushi Yamashita and Hajime Asama: "Advanced Adaptive Cruise Control Considering Reaction Time of Following Driver", Proceedings of the 2019 IEEE 8th Global Conference on Consumer Electronics (GCCE2019), pp. 995-996, Osaka (Japan), October 2019.
- 235) Jun Younes Louhi Kasahara, Hiromitsu Fujii, Atsushi Yamashita and Hajime Asama: "Weakly Supervised Approach to Defect Detection in Concrete Structures Using Hammering Test", Proceedings of the 2019 IEEE 8th Global Conference on Consumer Electronics (GCCE2019), pp. 997-998, Osaka (Japan), October 2019.
- 236) Norihiro Yamauchi, Shota Chikushi, Yusuke Tamura, Hiroshi Yamakawa, Keiji Nagatani, Hiromitsu Fujii, Yuya Sakai, Takumi Chiba, Shingo Yamamoto, Kazuhiro Chayama, Atsushi Yamashita and Hajime Asama: "Estimation of Cone Index from Water Content and Soil Types Obtained from Hyperspectral Images", Proceedings of the 2019 IEEE 8th Global Conference on Consumer Electronics (GCCE2019), pp. 999-1002, Osaka (Japan), October 2019.
- 237) Lei Jiang, Hiroshi Higuchi, Hiromitsu Fujii, Atsushi Yamashita and Hajime Asama: "Robust Reflection Removal Against Accumulated Error by Using Stereo Camera System", Proceedings of the 2019 IEEE 8th Global Conference on Consumer Electronics (GCCE2019), pp. 1003-1004, Osaka (Japan), October 2019.
- 238) Wanqi Yin, Sarthak Pathak, Alessandro Moro, Atsushi Yamashita and Hajime Asama: "Improving 3D Measurement Accuracy in Epipolar Directions via Trinocular Spherical Stereo", Proceedings of the 2019 IEEE 8th Global Conference on Consumer Electronics (GCCE2019), pp. 1005-1006, Osaka (Japan), October 2019.
- 239) Runqiu Bao, Ren Komatsu, Renato Miyagusuku, Masaki Chino, Atsushi Yamashita and Hajime Asama: "Cost-effective and Robust Visual Based Localization with Consumer-level Cameras at Construction Sites", Proceedings of the 2019 IEEE 8th Global Conference on Consumer Electronics (GCCE2019), pp. 1007-1009, Osaka (Japan), October 2019.
- 240) Stefano Massaroli, Federico Califano, Angela Faragasso, Atsushi Yamashita and Hajime Asama: "Energy-Based Hybrid Control of a Ball-Dribbling Robot", Proceedings of the 2019 IEEE/RSJ International Conference on Intelligent Robots and Systems (IROS2019), p. 3370, Macau (China), November 2019.

- 241) Stefano Massaroli, Federico Califano, Claudio Melchiorri, Atsushi Yamashita and Hajime Asama: "A Novel Identification Procedure for Dynamic Parameters of Robots: the Frisch Scheme Approach", Proceedings of the 15th European Workshop on Advanced Control and Diagnosis (ACD2019), FrD2.7, Bologna (Italy), November 2019.
- 242) Wanqi Yin, Sarthak Pathak, Alessandro Moro, Atsushi Yamashita and Hajime Asama: "Accurate All-round 3D Measurement Using Trinocular Spherical Stereo via Weighted Reprojection Error Minimization", Proceedings of the 21st IEEE International Symposium on Multimedia (ISM2019), pp. 86-93, San Diego (USA), December 2019. [doi:10.1109/ISM.2019.00021]
- 243) Stefano Massaroli, Michael Poli, Federico Califano, Angela Faragasso, Jinkyoo Park, Atsushi Yamashita and Hajime Asama: "Port-Hamiltonian Approach to Neural Network Training", Proceedings of the 2019 IEEE Conference on Decision and Control (CDC2019), pp. 6799-6806, Nice (France), December 2019.
- 244) Daisuke Uchida, Atsushi Yamashita and Hajime Asama: "Detecting Image Frames which Contain a Moving Object from a Severely Distorted Video Stream Using Dynamic Mode Decomposition", Proceedings of SPIE, Vol. 11515 (Proceedings of the International Workshop on Advanced Image Technology 2020 (IWAIT2020)), pp. 1151510-1-1151510-6, Yogyakarta (Indonesia), January 2020. [doi:10.1117/12.2566797]
- 245) Hiroshi Higuchi, Hiromitsu Fujii, Atsushi Taniguchi, Masahiro Watanabe, Atsushi Yamashita and Hajime Asama: "Speckle Based Pose Estimation for 3D Measurement of the Feature-less Environment by Two Cameras", Proceedings of SPIE, Vol. 11515 (Proceedings of the International Workshop on Advanced Image Technology 2020 (IWAIT2020)), pp. 115151P-1-115151P-6, Yogyakarta (Indonesia), January 2020. [doi:10.1117/12.2566908]
- 246) Weijie Chen, Sarthak Pathak, Alessandro Moro, Atsushi Yamashita and Hajime Asama: "Extrinsic Parameters Calibration of Multiple Fisheye Cameras in Manhattan Worlds", Proceedings of SPIE, Vol. 11515 (Proceedings of the International Workshop on Advanced Image Technology 2020 (IWAIT2020)), pp. 115151X-1-115151X-6, Yogyakarta (Indonesia), January 2020. [doi:10.1117/12.2566562]
- 247) Jun Younes Louhi Kasahara, Hiromitsu Fujii, Atsushi Yamashita and Hajime Asama: "Complementarity of Sensors and Weak Supervision for Defect Detection in Concrete Structures", Proceedings of the 2020 IEEE/SICE International Symposium on System Integration (SII2020), pp. 1-6, Honolulu (USA), January 2020. (Best Paper Award) [doi:10.1109/SII46433.2020.9026304]
- 248) Shota Chikushi, Yushi Moriyama, Hiromitsu Fujii, Yusuke Tamura, Hiroshi Yamakawa, Keiji Nagatani, Yuya Sakai, Takumi Chiba, Shingo Yamamoto, Kazuhiro Chayama, Atsushi Yamashita and Hajime Asama: "Automated Image Presentation for Backhoe Embankment Construction in Unmanned Construction Site", Proceedings of the 2020 IEEE/SICE International Symposium on System Integration (SII2020), pp. 22-27, Honolulu (USA), January 2020. [doi:10.1109/SII46433.2020.9026298]
- 249) Hanwool Woo, Hirokazu Madokoro, Sato Kazuhito, Yusuke Tamura, Atsushi Yamashita and Hajime Asama: "Prediction of Following Vehicle Trajectory Considering Operation Characteristics of a Human Driver", Proceedings of the 2020 IEEE/SICE International Symposium on System Integration (SII2020), pp. 712-717, Honolulu (USA), January 2020. [doi:10.1109/SII46433.2020.9026243]
- 250) Michael Poli, Stefano Massaroli, Junyoung Park, Atsushi Yamashita, Hajime Asama and Jinkyoo Park: "Graph Neural Ordinary Differential Equations", Proceedings of the 1st International Workshop on Deep Learning on Graphs: Methodologies and Applications (DLGMA2020), New York (USA), February 2020.
- 251) Stefano Massaroli, Michael Poli, Sanzhar Bakhtiyarov, Jinkyoo Park, Atsushi Yamashita and Hajime Asama: "Neural Ordinary Differential Equation Value Networks for Parametrized Action Spaces", Eighth International Conference on Learning Representations (ICLR2020) Workshop on Integration of Deep Neural Models and Differential Equations, Addis Ababa (Ethiopia), April 2020.
- 252) Michael Poli, Stefano Massaroli, Atsushi Yamashita, Hajime Asama and Jinkyoo Park: "Port-

Hamiltonian Gradient Flows", Eighth International Conference on Learning Representations (ICLR2020) Workshop on Integration of Deep Neural Models and Differential Equations, Addis Ababa (Ethiopia), April 2020.

- 253) Ningjia Yang, Qi An, Hiroki Kogami, Kazunori Yoshida, Hiroshi Yamakawa, Yusuke Tamura, Shingo Shimoda, Hiroshi Yamasaki, Moeka Sonoo, Matti Itkonen, Fady Alnajjar, Noriaki Hattori, Makoto Kinomoto, Kouji Takahashi, Takanori Fujii, Hironori Otomune, Ichiro Miyai, Atsushi Yamashita and Hajime Asama: "Temporal Muscle Synergy Features Estimate Effects of Short-term Rehabilitation in Sit-to-stand of Post-stroke Patients", Proceedings of the 2020 IEEE International Conference on Robotics and Automation (ICRA2020), Paris (France), May 2020. (IEEE Robotics and Automation Letters, Vol. 5, No. 2, pp. 1796-1802, April 2020.)
- 254) Stefano Massaroli, Federico Califano, Angela Faragasso, Mattia Risiglione, Atsushi Yamashita and Hajime Asama: "Identification of a Class of Hybrid Dynamical Systems", Preprints of the 21st World Congress of the International Federation of Automatic Control, pp. 893-900, Berlin (Germany), July 2020.
- 255) Stefano Massaroli, Federico Califano, Angela Faragasso, Atsushi Yamashita and Hajime Asama: "Multistable Energy Shaping of Passive Linear Systems with Hybrid Mode Selector", Preprints of the 21st World Congress of the International Federation of Automatic Control, pp. 9243-9249, Berlin (Germany), July 2020.
- 256) Yusheng Wang, Yonghoon Ji, Hanwool Woo, Yusuke Tamura, Hiroshi Tsuchiya, Atsushi Yamashita and Hajime Asama: "Planar AnP: A Solution to Acoustic-n-Point Problem on Planar Target", OCEANS2020, Singapore (Singapore), October 2020.
- 257) Ruoxi Wang, Qi An, Ningjia Yang, Hiroki Kogami, Kazunori Yoshida, Hiroyuki Hamada, Shingo Shimoda, Hiroshi Yamasaki, Moeka Sonoo, Fady Alnajjar, Noriaki Hattori, Kouji Takahashi, Takanori Fujii, Hironori Otomune, Ichiro Miyai, Atsushi Yamashita and Hajime Asama: "Muscle Tension Analysis in Stroke Patient Sit-to-Stand Motion by Joint Torque-Based Normalization", Proceedings of the 5th International Conference on NeuroRehabilitation (ICNR2020), October 2020. (Best Paper Award)
- 258) Ren Komatsu, Hiromitsu Fujii, Yusuke Tamura, Atsushi Yamashita and Hajime Asama: "360° Depth Estimation from Multiple Fisheye Images with Origami Crown Representation of Icosahedron", Proceedings of the 2020 IEEE/RSJ International Conference on Intelligent Robots and Systems (IROS2020), pp. 10092-10099, Las Vegas (USA), October 2020. [doi:10.1109/IROS45743.2020.9340981]
- 259) Yusheng Wang, Yonghoon Ji, Dingyu Liu, Yusuke Tamura, Hiroshi Tsuchiya, Atsushi Yamashita and Hajime Asama: "ACMarker: Acoustic Camera-based Fiducial Marker System in Underwater Environment", Proceedings of the 2020 IEEE/RSJ International Conference on Intelligent Robots and Systems (IROS2020), Las Vegas (USA), October 2020. (IEEE Robotics and Automation Letters, Vol. 5, No. 4, pp. 5018-5025, October 2020.) (SICE International Young Authors Award (SIYA-IROS2020))
- 260) Shinya Katsuma, Ryosuke Yajima, Shunsuke Hamasaki, Pang-Jo Chun, Keiji Nagatani, Genki Yamauchi, Takeshi Hashimoto, Atsushi Yamashita and Hajime Asama: "Excavation Path Generation for Autonomous Excavator Considering Bulking Factor of Soil", Proceedings of the 37th International Symposium on Automation and Robotics in Construction (ISARC2020), pp. 578-583, October 2020. [doi:10.22260/ISARC2020/0080]
- 261) Jinhyeok Sim, Jun Younes Louhi Kasahara, Shota Chikushi, Hiroshi Yamakawa, Yusuke Tamura, Keiji Nagatani, Takumi Chiba, Shingo Yamamoto, Kazuhiro Chayama, Atsushi Yamashita and Hajime Asama: "Action Recognition of Construction Machinery from Simulated Training Data Using Video Filters", Proceedings of the 37th International Symposium on Automation and Robotics in Construction (ISARC2020), pp. 595-599, October 2020. [doi:10.22260/ISARC2020/0083]
- 262) Mizuki Sugimoto, Shunsuke Hamasaki, Ryosuke Yajima, Hiroshi Yamakawa, Kaoru Takakusaki, Keiji

- Nagatani, Atsushi Yamashita and Hajime Asama: "Incident Detection at Construction Sites via Heart-Rate and EMG Signal of Facial Muscle", Proceedings of the 37th International Symposium on Automation and Robotics in Construction (ISARC2020), pp. 886-891, October 2020. [doi:10.22260/ISARC2020/0122]
- 263) Shunsuke Hamasaki, Mizuki Sugimoto, Ryosuke Yajima, Atsushi Yamashita, Keiji Nagatani and Hajime Asama: "Investigation of Changes in Eye-Blink Rate by VR Experiment for Incident Detection at Construction Sites", Proceedings of the 37th International Symposium on Automation and Robotics in Construction (ISARC2020), pp. 1191-1194, October 2020. [doi:10.22260/ISARC2020/0163]
- 264) Jun Younes Louhi Kasahara, Atsushi Yamashita and Hajime Asama: "Weakly Supervised Defect Detection using Acoustic Data based on Positive and Negative Constraints", Proceedings of the 37th International Symposium on Automation and Robotics in Construction (ISARC2020), pp. 1331-1336, October 2020. [doi:10.22260/ISARC2020/0183]
- 265) Shota Chikushi, Jun Younes Louhi Kasahara, Hiromitsu Fujii, Yusuke Tamura, Angela Faragasso, Hiroshi Yamakawa, Keiji Nagatani, Yonghoon Ji, Shinji Aoki, Takumi Chiba, Shingo Yamamoto, Kazuhiro Chayama, Atsushi Yamashita and Hajime ASAMA: "Construction Technology in Social Cooperation Program "Intelligent Construction System"", Proceedings of the 37th International Symposium on Automation and Robotics in Construction (ISARC2020), pp. 1536-1540, October 2020. [doi:10.22260/ISARC2020/0213]
- 266) Hao Xu, Ren Komatsu, Hanwool Woo, Angela Faragasso, Atsushi Yamashita and Hajime Asama: "Camera Orientation Estimation in Leaking Indoor Environment via Vanishing Point of Water Drops", Proceedings of the 2020 IEEE International Symposium on Safety, Security, and Rescue Robotics (SSRR2020), pp. 176-181, November 2020. [doi:10.1109/SSRR50563.2020.9292615]
- 267) Stefano Massaroli, Michael Poli, Jinkyoo Park, Atsushi Yamashita and Hajime Asama: "Dissecting Neural ODEs", Advances in Neural Information Processing Systems 33 (NeurIPS2020), December 2020. (Accepted for Oral Presentation, 105/9454 = 1%)
- 268) Michael Poli, Stefano Massaroli, Atsushi Yamashita, Hajime Asama and Jinkyoo Park: "Hypersolvers: Toward Fast Continuous-Depth Models", Advances in Neural Information Processing Systems 33 (NeurIPS2020), December 2020. (Acceptance ratio: 1900/9454 = 20%)
- 269) Stefano Massaroli, Federico Califano, Angela Faragasso, Atsushi Yamashita and Hajime Asama: "On the Extinction-Free Stabilization of Predator-Prey Dynamics", Proceedings of the 2020 IEEE Conference on Decision and Control (CDC2020), Jeju (Korea), December 2020. (IEEE Control Systems Letters, Vol. 4, No. 4, pp. 964-969, October 2020.)
- 270) Dongxu Yang, Hiroshi Higuchi, Sarthak Pathak, Alessandro Moro, Atsushi Yamashita and Hajime Asama: "Spherical Camera Localization by Color Difference Minimization Using 3D Model of the Environment", Proceedings of the 2020 21st International Conference on Research and Education in Mechatronics (REM2020), December 2020. [doi:10.1109/REM49740.2020.9313906]
- 271) Eri Yamaguchi, Hiroshi Higuchi, Atsushi Yamashita and Hajime Asama: "Glass Detection Using Polarization Camera and LRF for SLAM in Environment with Glass", Proceedings of the 2020 21st International Conference on Research and Education in Mechatronics (REM2020), December 2020. [doi:10.1109/REM49740.2020.9313933]
- 272) Jun Younes Louhi Kasahara, Atsushi Yamashita and Hajime Asama: "Positive Weak Supervision Quality Increase by Consolidation for Acoustic Defect Detection in Concrete Structures", Proceedings of the 2021 IEEE/SICE International Symposium on System Integration (SII2021), pp. 1-5, January 2021. [doi:10.1109/IEEECONF49454.2021.9382616]
- 273) Jinhyeok Sim, Jun Younes Louhi Kasahara, Shota Chikushi, Keiji Nagatani, Takumi Chiba, Kazuhiro Chayama, Atsushi Yamashita and Hajime Asama: "Effects of Video Filters for Learning an Action Recognition Model for Construction Machinery from Simulated Training Data", Proceedings of the 2021 IEEE/SICE

- International Symposium on System Integration (SII2021), pp. 12-16, January 2021. [doi:10.1109/IEEECONF49454.2021.9382735]
- 274) Kiyohiko Iwamura, Jun Younes Louhi Kasahara, Alessandro Moro, Atsushi Yamashita and Hajime Asama: "Potential of Incorporating Motion Estimation for Image Captioning", Proceedings of the 2021 IEEE/SICE International Symposium on System Integration (SII2021), pp. 23-28, January 2021. (SICE International Young Authors Award (SIYA-SII2021)) (Finalists for Best Paper Award) [doi:10.1109/IEEECONF49454.2021.9382725]
- 275) Ren Komatsu, Hanwool Woo, Yusuke Tamura, Atsushi Yamashita and Hajime Asama: "Gamma-ray Image Noise Generation Using Energy-Image Converter Based on Image Histogram", Proceedings of the 2021 IEEE/SICE International Symposium on System Integration (SII2021), pp. 93-99, January 2021. [doi:10.1109/IEEECONF49454.2021.9382733]
- 276) Sarthak Pathak, Irem Uygur, Shize Lin, Renato Miyagusuku, Alessandro Moro, Atsushi Yamashita and Hajime Asama: "Localization in a Semantic Map via Bounding Box Information and Feature Points", Proceedings of the 2021 IEEE/SICE International Symposium on System Integration (SII2021), pp. 126-131, January 2021. [doi:10.1109/IEEECONF49454.2021.9382719]
- 277) Hanwool Woo, Hirokazu Madokoro, Kazuhito Sato, Atsushi Yamashita and Hajime Asama: "Effect of Size of Preceding Vehicle on Behavior of Following Vehicle", Proceedings of the 2021 IEEE International Conference on Intelligence and Safety for Robotics (ISR2021), pp. 200-203, March 2021. [doi:10.1109/ISR50024.2021.9419535]
- 278) Dingyu Liu, Yusheng Wang, Yonghoon Ji, Hiroshi Tsuchiya, Atsushi Yamashita and Hajime Asama: "Development of Image Simulator for Forward-looking Sonar Using 3D Rendering", Proceedings of SPIE, Vol. 11794 (Proceedings of the Fifteenth International Conference on Quality Control by Artificial Vision (QCAV2021)), pp. 122-130, May 2021. [doi:10.1117/12.2590004]
- 279) Mikihiro Ikura, Sarthak Pathak, Atsushi Yamashita and Hajime Asama: "Polynomial-fitting Based Calibration for an Active 3D Sensing System Using Dynamic Light Section Method", Proceedings of SPIE, Vol. 11794 (Proceedings of the Fifteenth International Conference on Quality Control by Artificial Vision (QCAV2021)), pp. 131-137, May 2021. [doi:10.1117/12.2590827]
- 280) Daisuke Uchida, Atsushi Yamashita and Hajime Asama: "Data-Driven Koopman Controller Synthesis Based on the Extended H2 Norm Characterization", Proceedings of the 2021 American Control Conference (ACC2021), May 2021. (IEEE Control Systems Letters, Vol. 5, No. 5, pp. 1795-1800, November 2021.)
- 281) Yusheng Wang, Yonghoon Ji, Dingyu Liu, Hiroshi Tsuchiya, Atsushi Yamashita and Hajime Asama: "Elevation Angle Estimation in 2D Acoustic Images Using Pseudo Front View", Proceedings of the 2021 IEEE International Conference on Robotics and Automation (ICRA2021), Xi'an (China), May-June 2021. (IEEE Robotics and Automation Letters, Vol. 6, No. 2, pp. 1535-1542, April 2021.) (IEEE Robotics and Automation Society Japan Joint Chapter Young Award)
- 282) Momoko Kawata, Hiroshi Higuchi, Sarthak Pathak, Atsushi Yamashita and Hajime Asama: "Scale Optimization of Structure from Motion for Structured Light-based All-round 3D Measurement", Proceedings of the 2021 IEEE International Conference on Systems, Man, and Cybernetics (SMC2021), pp. 442-449, October 2021. [doi:10.1109/SMC52423.2021.9658793]
- 283) Stefano Massaroli, Michael Poli, Sho Sonoda, Taiji Suzuki, Jinkyoo Park, Atsushi Yamashita and Hajime Asama: "Differentiable Multiple Shooting Layers", Advances in Neural Information Processing Systems 34 (NeurIPS2021), December 2021.
- 284) Michael Poli, Stefano Massaroli, Luca Scimeca, Sanghyuk Chun, Seong Joon Oh, Atsushi Yamashita, Hajime Asama, Jinkyoo Park and Animesh Garg: "Neural Hybrid Automata: Learning Dynamics with Multiple Modes and Stochastic Transitions", Advances in Neural Information Processing Systems 34 (NeurIPS2021),

December 2021.

- 285) Stefano Massaroli, Michael Poli, Stefano Peluchetti, Jinkyoo Park, Atsushi Yamashita and Hajime Asama: "Learning Stochastic Optimal Policies via Gradient Descent", Proceedings of the 2021 IEEE Conference on Decision and Control (CDC2021), pp. 769-774, December 2021. (IEEE Control Systems Letters, Vol. 6, pp. 1094-1099, 2022.)
- 286) Kumpei Ota, Jun Younes Louhi Kasahara, Atsushi Yamashita and Hajime Asama: "Weed and Crop Detection by Combining Crop Row Detection and K-means Clustering in Weed Infested Agricultural Fields", Proceedings of the 2022 IEEE/SICE International Symposium on System Integration (SII2022), pp. 985-990, January 2022. [doi:10.1109/SII52469.2022.9708815]
- 287) Keitaro Ushiroda, Jun Younes Louhi Kasahara, Atsushi Yamashita and Hajime Asama: "Multi-modal Classification Using Domain Adaptation for Automated Defect Detection Based on the Hammering Test", Proceedings of the 2022 IEEE/SICE International Symposium on System Integration (SII2022), pp. 991-996, January 2022. [doi:10.1109/SII52469.2022.9708607]
- 288) Haoxiang Liu, Ren Komatsu, Hanwool Woo, Yusuke Tamura, Atsushi Yamashita and Hajime Asama: "Viewpoint Selection without Subject Experiments for Teleoperation of Robot Arm in Reaching Task Using Reinforcement Learning", Proceedings of the 2022 IEEE/SICE International Symposium on System Integration (SII2022), pp. 1015-1020, January 2022. [doi:10.1109/SII52469.2022.9708809]
- 289) Ziheng Chao, Ren Komatsu, Hanwool Woo, Yusuke Tamura, Atsushi Yamashita and Hajime Asama: "Estimation of Radiation Source Distribution Using Structure Information for Fukushima Daiichi Nuclear Power Plant Reactor", Proceedings of the 2022 IEEE/SICE International Symposium on System Integration (SII2022), pp. 1030-1035, January 2022. [doi:10.1109/SII52469.2022.9708811]
- 290) Yusheng Wang, Yonghoon Ji, Dingyu Liu, Hiroshi Tsuchiya, Atsushi Yamashita and Hajime Asama: "Simulator-aided Edge-based Acoustic Camera Pose Estimation", OCEANS 2022 Chennai, February 2022. [doi:10.1109/OCEANSSChennai45887.2022.9775502]
- 291) Wanxin Bao, Ren Komatsu, Atsushi Yamashita and Hajime Asama: "Solving Well-posed Shape from Shading Problem Using Implicit Neural Representations", Proceedings of the International Conference on Image Processing and Robotics 2022 (ICIPRoB2022), March 2022. (Best Student Paper Award) [doi:10.1109/ICIPRob54042.2022.9798718]
- 292) Yusheng Wang, Yonghoon Ji, Hiroshi Tsuchiya, Hajime Asama and Atsushi Yamashita: "Learning Pseudo Front Depth for 2D Forward-Looking Sonar-based Multi-view Stereo", Proceedings of the 2022 IEEE/RSJ International Conference on Intelligent Robots and Systems (IROS2022), pp. 8730-8737, Kyoto (Japan), October 2022. [doi:10.1109/IROS47612.2022.9982049]
- 293) Yutaro Fujino, Shinsuke Nakashima, Ren Komatsu, Hanwool Woo, Hajime Asama and Atsushi Yamashita: "Radiation Source Localization via a Mobile Robot by Integration of Filtered Back-projection", IROS2022 Workshop on Robotics for Nuclear Environments Exploration and Decommissioning: Challenges and Emerging Techniques, Kyoto (Japan), October 2022.
- 294) Haoxiang Liu, Ren Komatsu, Shinsuke Nakashima, Hanwool Woo, Nobuto Matsuhira, Hajime Asama and Atsushi Yamashita: "Viewpoint Presentation for Teleoperation of Robot Manipulation in Fuel Debris Removal Task with 3-Dimensional Obstacles", IROS2022 Workshop on Robotics for Nuclear Environments Exploration and Decommissioning: Challenges and Emerging Techniques, Kyoto (Japan), October 2022.
- 295) Stefano Massaroli, Michael Poli, Ren Komatsu, Alessandro Moro, Atsushi Yamashita and Hajime Asama: "Model-Based Policies in Continuous Time, States and Actions: Surrogate Models and Gradient Estimation", IROS2022 2nd RL-CONFORM Workshop (Reinforcement Learning meets HRI, Control, and Formal Methods), Kyoto (Japan), October 2022.
- 296) Yusheng Wang, Yunfan Lu, Ye Gao, Lin Wang, Zhihang Zhong, Yinqiang Zheng and Atsushi Yamashita:

"Efficient Video Deblurring Guided by Motion Magnitude", Proceedings of the 17th European Conference on Computer Vision (ECCV2022), pp. 413-429, Tel Aviv (Israel), October 2022. [doi:10.1007/978-3-031-19800-7_24]

- 297) Takuya Igaue, Toko Hayamizu, Kenichi Yoshida, Satoshi Yamanaka, Hajime Asama and Atsushi Yamashita: "Pose Adjustment Considering Linear Cross-Section Continuity of Line-Structured Light Based 3D Tunnel Measurements", Proceedings of the 2023 IEEE/SICE International Symposium on System Integration (SII2023), pp. 51-57, Atlanta (USA), January 2023. (Best Paper Award Finalist) [doi:10.1109/SII55687.2023.10039303]
- 298) Chujie Wu, Yusheng Wang, Yooghoon Ji, Hiroshi Tsuchiya, Hajime Asama and Atsushi Yamashita: "Acoustic Camera Pose Refinement Using Differentiable Rendering", Proceedings of the 2023 IEEE/SICE International Symposium on System Integration (SII2023), pp. 58-63, Atlanta (USA), January 2023. [doi:10.1109/SII55687.2023.10039267]
- 299) Ngoc Trung Mai, Ren Komatsu, Hajime Asama and Atsushi Yamashita: "Pose Estimation for Event Camera Using Charuco Board Based on Image Reconstruction", Proceedings of the 2023 IEEE/SICE International Symposium on System Integration (SII2023), pp. 70-75, Atlanta (USA), January 2023. [doi:10.1109/SII55687.2023.10039168]
- 300) Hidenori Takamiya, Ryosuke Yajima, Jun Younes Louhi Kasahara, Ren Komatsu, Keiji Nagatani, Atsushi Yamashita and Hajime Asama: "Reinforcement Learning-based Motion Generation for a Tracked Robot to Go Over a Sphere-shaped Non-fixed Obstacle", Proceedings of the 2023 IEEE/SICE International Symposium on System Integration (SII2023), pp. 642-647, Atlanta (USA), January 2023. [doi:10.1109/SII55687.2023.10039098]
- 301) Hayato Fujita, Jun Younes Louhi Kasahara, Shinji Kanda, Keiji Nagatani, Seiji Kasahara, Seigo Fukumoto, Sunao Tamura, Toshiya Kato, Masahiro Korenaga, Akinobu Sasamura, Misaki Hoshi, Hajime Asama and Atsushi Yamashita: "Acoustic Monitoring in Industrial Plants with Autoencoders and a Mobile Robot", Proceedings of the 2023 20th International Conference on Ubiquitous Robots (UR2023), pp. 510-514, Honolulu (USA), June 2023. (Candidate for Best Paper Award) [doi:10.1109/UR57808.2023.10202270]
- 302) Yusheng Wang, Chujie Wu, Yonghoon Ji, Hiroshi Tsuchiya, Hajime Asama and Atsushi Yamashita: "2D Forward Looking Sonar Simulation with Ground Echo Modeling", Proceedings of the 2023 20th International Conference on Ubiquitous Robots (UR2023), pp. 724-729, Honolulu (USA), June 2023. [doi:10.1109/UR57808.2023.10202279]
- 303) Xiaojun Lu, Angela Faragasso, Atsushi Yamashita and Hajime Asama: "All Aware Robot Navigation in Human Environments Using Deep Reinforcement Learning", Proceedings of the 2023 IEEE/RSJ International Conference on Intelligent Robots and Systems (IROS2023), pp. 5989-5996, Detroit (USA), October 2023. [doi:10.1109/IROS55552.2023.10341477]
- 304) Yusheng Wang, Yonghoon Ji, Chujie Wu, Hiroshi Tsuchiya, Hajime Asama and Atsushi Yamashita: "Motion Degeneracy in Self-supervised Learning of Elevation Angle Estimation for 2D Forward-Looking", Proceedings of the 2023 IEEE/RSJ International Conference on Intelligent Robots and Systems (IROS2023), pp. 6133-6140, Detroit (USA), October 2023. [doi:10.1109/IROS55552.2023.10341601]
- 305) Jiaxu Wu, Yusheng Wang, Hajime Asama, Qi An and Atsushi Yamashita: "Risk-Sensitive Mobile Robot Navigation in Crowded Environment via Offline Reinforcement Learning", Proceedings of the 2023 IEEE/RSJ International Conference on Intelligent Robots and Systems (IROS2023), pp. 7456-7462, Detroit (USA), October 2023. [doi:10.1109/IROS55552.2023.10341948]
- 306) Ayato Narikawa, Wen Wen, Hiroyuki Hamada, Acer Chang, Yukio Honda, Shinji Kanda, Hiroshi Mizoguchi, Erina Kakehashi, Masahiro Nishio, Koji Makino, Atsushi Yamashita and Hajime Asama: "Development of Emotion Estimator for Dynamic States Using Electroencephalogram and Galvanic Skin

Response", Neuroscience 2023 (SfN2023), Washington D.C. (USA), November 2023.

- 307) Hiroyuki Hamada, Yutaka Kikuchi, Wen Wen, Qi An, Atsushi Yamashita and Hajime Asama: "Characteristics of Structural Changes in the Cerebrum of Patients with Spinocerebellar Degeneration", Neuroscience 2023 (SfN2023), Washington D.C. (USA), November 2023.
- 308) Susumu Shimizu, Takuya Igaue, Jun Younes Louhi Kasahara, Naoya Yamato, Seiji Kasahara, Hiroyuki Ito, Taizo Daito, Sunao Tamura, Akinobu Sasamura, Toshiya Kato, Shinji Kanda, Keiji Nagatani, Hajime Asama, Qi An and Atsushi Yamashita: "Change Detection in Pipe Image Pairs Extracted from Inspection Videos by Sequential Filtering", Proceedings of the 2024 IEEE/SICE International Symposium on System Integration (SII2024), pp. 629-636, Ha Long (Vietnam), January 2024. [doi:10.1109/SII58957.2024.10417231]
- 309) Tomohiro Katsura, Ren Komatsu, Keiji Nagatani, Takumi Chiba, Kazuhiro Chayama, Atsushi Yamashita and Hajime Asama: "Action Recognition of Excavators Using Physical Simulator and Real Image Data with Class-Dependent Data Augmentation", Proceedings of the 2024 IEEE/SICE International Symposium on System Integration (SII2024), pp. 650-656, Ha Long (Vietnam), January 2024. [doi:10.1109/SII58957.2024.10417590]
- 310) Hayato Terao, Jiaxu Wu, Hajime Asama, Qi An and Atsushi Yamashita: "Detection of Texting while Walking in Occluded Scenarios Using Variational Autoencoder", Proceedings of the 2024 IEEE/SICE International Symposium on System Integration (SII2024), pp. 768-773, Ha Long (Vietnam), January 2024. [doi:10.1109/SII58957.2024.10417208]
- 311) Wakana Endo, Shota Chikushi, Yuichiro Sueoka, Yuki Kato, Kaito Kimura, Yusuke Ikemoto, Ren Komatsu, Keiji Nagatani, Atsushi Yamashita and Hajime Asama: "Performance-based Earthmoving Team Organization Algorithm Enabling Task Completion under Changing Conditions ", Proceedings of the 2024 IEEE/SICE International Symposium on System Integration (SII2024), pp. 780-785, Ha Long (Vietnam), January 2024. [doi:10.1109/SII58957.2024.10417582]
- 312) Koki Shoda, Jun Younes Louhi Kasahara, Hajime Asama, Qi An and Atsushi Yamashita: "Ego-noise Prediction Based on Multimodal Learning for Enhanced Discrimination in UAV Hammering Inspection", Proceedings of the 2024 IEEE/SICE International Symposium on System Integration (SII2024), pp. 792-797, Ha Long (Vietnam), January 2024. [doi:10.1109/SII58957.2024.10417712]
- 313) Rom Parnichkun, Stefano Massaroli, Alessandro Moro, Michael Poli, Jimmy T.H. Smith, Ramin Hasani, Mathias Lechner, Qi An, Christopher Re, Hajime Asama, Stefano Ermon, Taiji Suzuki and Atsushi Yamashita: "State-Free Inference of State-Space Models: The Transfer Function Approach", Proceedings of the 41st International Conference on Machine Learning (ICML2024), Vienna (Austria), July 2024.
- 314) Masaki Chino and Atsushi Yamashita: "Location Measurement System for Automated Operation of Construction Machinery Using Visual SLAM", Proceedings of the 10th International Conference on Construction Engineering and Project Management (ICCEPM2024), pp. 1011-1018 Sapporo (Japan), July-August 2024.
- 315) Junwoon Lee, Ren Komatsu, Mitsuru Shinozaki, Toshihiro Kitajima, Hajime Asama, Qi An and Atsushi Yamashita: "Switch-SLAM: Switching-based LiDAR-Inertial-Visual SLAM for Degenerate Environments", ICRA@40, Rotterdam (Netherlands), September 2024. (IEEE Robotics and Automation Letters, Vol. 9, No. 8, pp. 7270-7277, August 2024.)
- 316) Wanqi Yin, Zhongang Cai, Ruisi Wang, Fanzhou Wang, Chen Wei, Haiyi Mei, Weiye Xiao, Zhitao Yang, Qingping Sun, Atsushi Yamashita, Ziwei Liu and Lei Yang: "WHAC: World-grounded Humans and Cameras", Proceedings of the 18th European Conference on Computer Vision (ECCV2024) (Lecture Notes in Computer Science, Vol. 15092), pp. 20-37, Milan (Italy), September-October 2024. [doi:10.1007/978-3-031-72754-2_2]
- 317) Shinsuke Nakashima, Alessandro Moro, Ren Komatsu, Angela Faragasso, Nobuto Matsuhira, Hanwool

Woo, Kuniaki Kawabata, Atsushi Yamashita and Hajime Asama: "Decommissioning Robot Manipulator for Fuel Debris Retrieval", Proceedings of the International Topical Workshop on Fukushima Decommissioning Research 2024 (FDR2024), FDR2024-1011, pp. 1-4, Fukushima (Japan), October 2024. (FDR2024 Selected Paper)

- 318) Eiji Morita, Shinsuke Nakashima, Ren Komatsu, Qi An, Atsushi Yamashita: "Estimation of Radiation Distribution Using Shielding Attenuation by a Mobile Robot Equipped with Non-Directional Detectors and Lightweight Shielding", Proceedings of the International Topical Workshop on Fukushima Decommissioning Research 2024 (FDR2024), FDR2024-1065, pp. 1-4, Fukushima (Japan), October 2024.
- 319) Yusheng Wang, Yonghoon Ji, Hiroshi Tsuchiya, Jun Ota, Hajime Asama and Atsushi Yamashita: "Acoustic-n-point for Solving 2D Forward Looking Sonar Pose Estimation", Proceedings of the 2024 IEEE/RSJ International Conference on Intelligent Robots and Systems (IROS2024), Abu Dhabi (UAE), October 2024. (IEEE Robotics and Automation Letters, Vol. 9, No. 2, pp. 1652-1659, February 2024.)
- 320) Mikihiro Ikura, Cedric Le Gentil, Marcus G. Muller, Florian Schuler, Atsushi Yamashita and Wolfgang Sturzl: "RATE: Real-time Asynchronous Feature Tracking with Event Cameras", Proceedings of the 2024 IEEE/RSJ International Conference on Intelligent Robots and Systems (IROS2024), pp. 11661-11668, Abu Dhabi (UAE), October 2024. [doi:10.1109/IROS58592.2024.10802050]
- 321) Koki Shoda, Jun Younes Louhi Kasahara, Hajime Asama, Qi An and Atsushi Yamashita: "Clustering of Hammering Sounds and Identification of Defect Clusters Based on Acoustic Energy per Impact for Detection of Concrete Defects", Proceedings of the 24th International Conference on Control, Automation and Systems (ICCAS2024), pp. 614-619, Jeju (Korea), October-November 2024. [doi:10.23919/ICCAS63016.2024.10773044]
- 322) Junwoon Lee, Taisei Ando, Mitsuru Shinozaki, Toshihiro Kitajima, Qi An and Atsushi Yamashita: "TC-LTIO: Tightly-coupled LiDAR Thermal Inertial Odometry for LiDAR and Visual Odometry Degraded Environments", Proceedings of the 24th International Conference on Control, Automation and Systems (ICCAS2024), pp. 655-660, Jeju (Korea), October-November 2024. (Best Paper Award) [doi:10.23919/ICCAS63016.2024.10773102]
- 323) Taisei Ando, Junwoon Lee, Mitsuru Shinozaki, Toshihiro Kitajima, Qi An and Atsushi Yamashita: "Highly Accurate and Fast Two-view Pose Estimation by Fast Reduction of Spherical Image Distortion Effects", Proceedings of the 24th International Conference on Control, Automation and Systems (ICCAS2024), pp. 774-779, Jeju (Korea), October-November 2024.
- 324) Shinsuke Nakashima, Alessandro Moro, Ren Komatsu, Angela Faragasso, Nobuto Matsuhira, Hanwool Woo, Kuniaki Kawabata, Atsushi Yamashita and Hajime Asama: "Fuel Debris Simulants for The Gripper Design of Decommissioning Robot Manipulator in Fukushima Daiichi (1F)", Proceedings of the 2024 IEEE International Symposium on Safety, Security, and Rescue Robotics (SSRR2024), pp. 160-165, New York (USA), November 2024. [doi:10.1109/SSRR62954.2024.10770049]
- 325) Yusuke Takeuchi, Qi An and Atsushi Yamashita: "Boundary Conditioned Floor Layout Generation with Diffusion Model", Proceedings of ACM SIGGRAPH Asia 2024 Posters, Article 48, pp. 1-2, Tokyo (Japan), December 2024. [doi:10.1145/3681756.3697884]
- 326) Nobuto Matsuhira, Melissa Sandison, Minsung Sung, Keir Groves, Simon Watson, Son-Cheol Yu, Takeshi Sasaki, Atsushi Yamashita and Hajime Asama: "Development of A Remotely Operated Robot System for Movement in Narrow Areas Based on Workspace Characteristics", Proceedings of the 2025 IEEE/SICE International Symposium on System Integration (SII2025), pp. 1102-1106, Munich (Germany), January 2025. [doi:10.1109/SII59315.2025.10870888]
- 327) Yuichi Fujita, Jun Younes Louhi Kasahara and Atsushi Yamashita: "Development of Wire Breakage Detection Method Using Image Processing", Proceedings of the 2025 IEEE/SICE International Symposium

on System Integration (SII2025), pp. 1587-1592, Munich (Germany), January 2025. [doi:10.1109/SII59315.2025.10870940]

- 328) Yongdong Wang, Runze Xiao, Jun Younes Louhi Kasahara, Keiji Nagatani, Atsushi Yamashita and Hajime Asama: "ACRC-LLM: A Framework for Automated Construction Robotics Control Using Large Language Models", Proceedings of the Joint Symposium of the 13th International Symposium on Artificial Life and Robotics and the 10th International Symposium on BioComplexity (AROB-ISBC2025), pp. 486-490, Beppu (Japan), January 2025.
- 329) Shinsuke Nakashima, Qi An, Atsushi Yamashita and Tim C. Lueth: "Design and Prototyping of Bio-inspired Open Joint with Ligamentous Constraints", Proceedings of the 1st German Robotics Conference, pp. 589-591, Nuremberg (Germany), March 2025.
- 330) Shinsuke Nakashima, Yilun Sun, Qi An, Atsushi Yamashita and Tim C. Lueth: "Bio-inspired Open Ball Joint with Intra-Articular Force Sensors", Proceedings of the 12th International Symposium on Adaptive Motion of Animals and Machines and 2nd LokoAssist Symposium (AMAM/LokoAssist2025), Darmstadt (Germany), July 2025.

単行本掲載論文

- 1) Atsushi Yamashita, Jun Ota, Tamio Arai, Keisuke Ichikawa, Kazuhiro Kamata and Hajime Asama: "Cooperative Manipulation and Transportation of a Large Object by Multiple Mobile Robots", Intelligent Autonomous Vehicles 2001 (H. Asama and H. Inoue (Edt.)), Pergamon, UK, pp. 375-380, 2002.
- 2) Mitsuaki Kayawake, Atsushi Yamashita and Toru Kaneko: "Path and Observation Planning of Vision-based Mobile Robots with Multiple Sensing Strategies", Intelligent Autonomous Systems 9 (T. Arai et al. (Eds.)), IOS Press, pp. 75-84, 2006.
- 3) Masahiko Onosato, Satoshi Tadokoro, Hiroaki Nakanishi, Kenzo Nonami, Kuniaki Kawabata, Yasushi Hada, Hajime Asama, Fumiaki Takemura, Kiyoshi Maeda, Kenjiro Miura and Atsushi Yamashita: "Chapter 3: Disaster Information Gathering Aerial Robot Systems", Rescue Robotics - DDT Project on Robots and Systems for Urban Search and Rescue (Satoshi Tadokoro (Ed.)), Springer, pp. 33-55, 2009. [doi:10.1007/978-1-84882-474-4_3]
- 4) Atsushi Yamashita, Isao Fukuchi and Toru Kaneko: "Removal of Adherent Noises from Image Sequences by Spatio-Temporal Image Processing", Image Processing (Yung-Sheng Chen (Ed.)), INTECH, pp. 59-76, December 2009.
- 5) Atsushi Yamashita, Hiroki Agata and Toru Kaneko: "Every Color Chromakey", Pattern Recognition, Recent Advances (Adam Herout (Ed.)), INTECH, pp. 509-524, February 2010.
- 6) Atsushi Yamashita, Akira Fujii and Toru Kaneko: "Stereo Measurement of Objects in Liquid and Estimation of Refractive Index of Liquid by Using Images of Water Surface", Advances in Theory and Applications of Stereo Vision (Asim Bhatti (Ed.)), INTECH, pp. 189-202, January 2011.
- 7) Ryosuke Kawanishi, Atsushi Yamashita and Toru Kaneko: "Three-Dimensional Environment Modeling Based on Structure from Motion with Point and Line Features by Using Omnidirectional Camera", Recent Advances in Mobile Robotics (Andon Venelinov Topalov (Ed.)), INTECH, pp. 51-68, December 2011.
- 8) Kazushi Watanabe, Ryosuke Kawanishi, Toru Kaneko, Atsushi Yamashita and Hajime Asama: "Obstacle Avoidance Based on Plane Estimation from 3D Edge Points by Mobile Robot Equipped with Omni-directional Camera", Advances in Intelligent Systems and Computing 193, Intelligent Autonomous Systems 12 (Sukhan Lee, Hyungsuck Cho, Kwang-Joon Yoon and Jangmyung Lee (Eds.)) (Volume 1: Proceedings of the 12th International Conference IAS-12, Jeju Island (Korea), June 2012), Springer, pp. 15-24, 2013. [doi:10.1007/978-3-642-33932-5_6]
- 9) Masashi Awai, Takahito Shimizu, Toru Kaneko, Atsushi Yamashita and Hajime Asama: "HOG-Based Person

Following and Autonomous Returning Using Generated Map by Mobile Robot Equipped with Camera and Laser Range Finder", *Advances in Intelligent Systems and Computing* 194, *Intelligent Autonomous Systems* 12 (Sukhan Lee, Hyungsuck Cho, Kwang-Joon Yoon and Jangmyung Lee (Eds.)) (Volume 2: Proceedings of the 12th International Conference IAS-12, Jeju Island (Korea), June 2012), Springer, pp. 51-60, 2013. [doi:10.1007/978-3-642-33926-4]

- 10) Yuki Ishikawa, Qi An, Yusuke Tamura, Atsushi Yamashita, Hiroyuki Oka and Hajime Asama: "Effect of Mediolateral Knee Displacement on Ligaments and Muscles around Knee Joint: Quantitative Analysis with Three-dimensional Musculoskeletal Ligament Knee Model", *Advances in Intelligent Systems and Computing* 194, *Intelligent Autonomous Systems* 12 (Sukhan Lee, Hyungsuck Cho, Kwang-Joon Yoon and Jangmyung Lee (Eds.)) (Volume 2: Proceedings of the 12th International Conference IAS-12, Jeju Island (Korea), June 2012), Springer, pp. 447-456, 2013. [doi:10.1007/978-3-642-33932-5_41]
- 11) Renato Miyagusuku, Atsushi Yamashita and Hajime Asama: "Distributed Algorithm for Robotic Network Self-deployment in Indoor Environments Using Wireless Signal Strength", *Advances in Intelligent Systems and Computing* 302, *Intelligent Autonomous Systems* 13 (Emanuele Menegatti, Nathan Michael, Karsten Berns and Hiroaki Yamaguchi (Eds.)) (Proceedings of the 13th International Conference IAS-13, Padova (Italy), July 2014), Springer, pp. 1491-1502, September 2015. [doi:10.1007/978-3-319-08338-4_107]
- 12) Qi An, Yuki Ishikawa, Tetsuro Funato, Shinya Aoi, Hiroyuki Oka, Hiroshi Yamakawa, Atsushi Yamashita and Hajime Asama: "Muscle Synergy Analysis of Human Standing-up Motion Using Forward Dynamic Simulation with Four Body Segment Model", *Springer Tracts in Advanced Robotics* 112, *Distributed Autonomous Robotic Systems* (Nak-Young Chong and Young-Jo Cho (Eds.)) (Proceedings of 12th International Symposium on Distributed Autonomous Robotic Systems (DARS2014), Held November 2014, Daejeon (Korea)), Springer, pp. 459-471, January 2016. [doi:10.1007/978-4-431-55879-8_32]
- 13) Koshiro Yanai, Qi An, Yuki Ishikawa, Junki Nakagawa, Wen Wen, Hiroshi Yamakawa, Atsushi Yamashita and Hajime Asama: "Visualization of Muscle Activity during Squat Motion for Skill Education", *Serviceology for Designing the Future: Selected and Edited Papers of the 2nd International Conference on Serviceology* (Takashi Maeno, Yuriko Sawatani and Tatsunori Hara (Eds.)), Springer, pp. 205-215, September 2016. [doi:10.1007/978-4-431-55861-3_14]
- 14) Junki Nakagawa, Qi An, Yuki Ishikawa, Koshiro Yanai, Wen Wen, Hiroshi Yamakawa, Junko Yasuda, Atsushi Yamashita and Hajime Asama: "Extraction and Evaluation of Proficiency in Bed Care Motion for Education Service of Nursing Skill", *Serviceology for Designing the Future: Selected and Edited Papers of the 2nd International Conference on Serviceology* (Takashi Maeno, Yuriko Sawatani and Tatsunori Hara (Eds.)), Springer, pp. 217-227, September 2016. [doi:10.1007/978-4-431-55861-3_15]
- 15) Qi An, Hiroshi Yamakawa, Atsushi Yamashita and Hajime Asama: "Temporal Structure of Muscle Synergy of Human Stepping Leg During Sit-to-Walk Motion", *Advances in Intelligent Systems and Computing* 531, *Intelligent Autonomous Systems* 14 (Weidong Chen, Koh Hosoda, Emanuele Menegatti, Masahiro Shimizu and Hesheng Wang (Eds.)) (Proceedings of the 14th International Conference IAS-14, Shanghai (China), July 2016), Springer, pp. 91-102, February 2017. (Best Conference Paper Award Finalist) [doi:10.1007/978-3-319-48036-7_8]
- 16) Yonghoon Ji, Atsushi Yamashita and Hajime Asama: "Indoor Positioning System Based on Distributed Camera Sensor Networks for Mobile Robot", *Advances in Intelligent Systems and Computing* 531, *Intelligent Autonomous Systems* 14 (Weidong Chen, Koh Hosoda, Emanuele Menegatti, Masahiro Shimizu and Hesheng Wang (Eds.)) (Proceedings of the 14th International Conference IAS-14, Shanghai (China), July 2016), Springer, pp. 1089-1101, February 2017. [doi:10.1007/978-3-319-48036-7_80]
- 17) Xiaorui Qiao, Junki Nakagawa, Koshiro Yanai, Junko Yasuda, Wen Wen, Atsushi Yamashita and Hajime Asama: "Nurse Bed Care Activity Analysis for Intelligent Training Service", *Serviceology for Smart Service*

System: Selected papers of the 3rd International Conference of Serviceology (Yuriko Sawatani, James Spohrer, Stephen Kwan and Takeshi Takenaka (Eds.)), Springer, pp. 159-167, 2017. [doi:10.1007/978-4-431-56074-6_18]

- 18) Hiroyuki Okamoto, Alessandro Moro, Atsushi Yamashita and Hajime Asama: "Toward Sports Training Service with the Interactive Learning Platform", Serviceology for Smart Service System: Selected papers of the 3rd International Conference of Serviceology (Yuriko Sawatani, James Spohrer, Stephen Kwan and Takeshi Takenaka (Eds.)), Springer, pp. 231-236, 2017. [doi:10.1007/978-4-431-56074-6_25]
- 19) Wen Wen, Xiaorui Qiao, Koshiro Yanai, Junki Nakagawa, Junko Yasuda, Atsushi Yamashita and Hajime Asama: "Skill Evaluation and Education Services for Bed-Care Nursing with Sliding Sheet with Regression Analysis", Serviceology for Smart Service System: Selected papers of the 3rd International Conference of Serviceology (Yuriko Sawatani, James Spohrer, Stephen Kwan and Takeshi Takenaka (Eds.)), Springer, pp. 253-259, 2017. [doi:10.1007/978-4-431-56074-6_28]
- 20) Yuki Doi, Yonghoon Ji, Yusuke Tamura, Yuki Ikeda, Atsushi Umemura, Yoshiharu Kaneshima, Hiroki Murakami, Atsushi Yamashita and Hajime Asama: "Robust Path Planning against Pose Errors for Mobile Robots in Rough Terrain", Advances in Intelligent Systems and Computing 867, Intelligent Autonomous Systems 15 (Marcus Strand, Rudiger Dillmann, Emanuele Menegatti and Stefano Ghidoni (Eds.)) (Proceedings of the 15th International Conference IAS-15, Baden-Baden (Germany), June 2018), Springer, pp. 27-39, January 2019. [doi:10.1007/978-3-030-01370-7_3]
- 21) Hiroshi Yoshinada, Keita Kurashiki, Daisuke Kondo, Keiji Nagatani, Seiga Kiribayashi, Masataka Fuchida, Masayuki Tanaka, Atsushi Yamashita, Hajime Asama, Takashi Shibata, Masatoshi Okutomi, Yoko Sasaki, Yasuyoshi Yokokohji, Masashi Konyo, Hikaru Nagano, Fumio Kanehiro, Tomomichi Sugihara, Genya Ishigami, Shingo Ozaki, Koich Suzumori, Toru Ide, Akina Yamamoto, Kiyohiro Hioki, Takeo Oomichi, Satoshi Ashizawa, Kenjiro Tadakuma, Toshi Takamori, Tetsuya Kimura, Robin R. Murphy and Satoshi Tadokoro: "Dual-Arm Construction Robot with Remote-Control Function", Springer Tracts in Advanced Robotics 128, Disaster Robotics - Results from the ImPACT Tough Robotics Challenge, Springer, pp. 195-264, January 2019. [doi:10.1007/978-3-030-05321-5_5]
- 22) Kazunori Yoshida, Qi An, Hiroshi Yamakawa, Yusuke Tamura, Atsushi Yamashita and Hajime Asama: "Effect of Tilted Ground on Muscle Activity in Human Sit-to-Stand Motion: Preliminary Result", Lecture Notes in Networks and Systems 412, Intelligent Autonomous Systems 16 (Marcelo H. Ang Jr, Hajime Asama, Wei Lin and Shaohui Foong (Eds.)) (Proceedings of the 16th International Conference IAS-16, Singapore (Singapore), June 2021), Springer, pp. 341-350, April 2022. [doi:10.1007/978-3-030-95892-3_26]
- 23) Yuta Sugawara, Shota Chikushi, Ren Komatsu, Jun Younes Louhi Kasahara, Sarthak Pathak, Ryosuke Yajima, Shunsuke Hamasaki, Keiji Nagatani, Takumi Chiba, Kazuhiro Chayama, Atsushi Yamashita and Hajime Asama: "Visualization of Dump Truck and Excavator in Bird's-eye View by Fisheye Cameras and 3D Range Sensor", , Lecture Notes in Networks and Systems 412, Intelligent Autonomous Systems 16 (Marcelo H. Ang Jr, Hajime Asama, Wei Lin and Shaohui Foong (Eds.)) (Proceedings of the 16th International Conference IAS-16, Singapore (Singapore), June 2021), Springer, pp. 629-640, April 2022. [doi:10.1007/978-3-030-95892-3_47]
- 24) Jiaxu Wu, Hajime Asama, Qi An and Atsushi Yamashita: "Give Pedestrian More Choice: Socially Aware Navigation Using Reinforcement Learning with Human Action Entropy Maximization", Lecture Notes in Networks and Systems 794, Intelligent Autonomous Systems 18 (Soon-Geul Lee, Jinung An, Nak Young Chong, Marcus Strand and Joo H. Kim (Eds.)) (Eds.)), Springer, pp. 77-90, April 2024. (Proceedings of the 18th International Conference on Intelligent Autonomous Systems (IAS-18), Suwon (Korea), July 2023.) (Best Paper Award) [doi:10.1007/978-3-031-44981-9_7]
- 25) Yuki Uchiyama, Ken Kikuchi, Hiroyuki Hamada, Tadamitsu Matsuda, Atsushi Yamashita and Qi An: "Effects

of Manual Therapy on Joint Angle during Functional Reach Test in Children with Cerebral Palsy", Converging Clinical and Engineering Research on Neurorehabilitation V, Biosystems & Biorobotics, Vol. 32 (Jose L. Pons, Jesus Tornero and Metin Akay (Eds.)), Springer, pp. 94-98, December 2024. (Proceedings of the 6th International Conference on NeuroRehabilitation (ICNR2024), Segovia (Spain), November 2024.) [doi:10.1007/978-3-031-77584-0_19]

- 26) Ken Kikuchi, Tadamitsu Matsuda, Yuki Uchiyama, Kei Kakegawa, Mamiko Kii, Sayako Ueda, Shingo Shimoda, Hiroyuki Hamada, Atsushi Yamashita and Qi An: "Physical Therapy Intervention Effects Observed in Sit-to-Stand Motion and Balance Function in Cerebral Palsy: A Case Study", Converging Clinical and Engineering Research on Neurorehabilitation V, Biosystems & Biorobotics, Vol. 32 (Jose L. Pons, Jesus Tornero and Metin Akay (Eds.)), Springer, pp. 127-131, December 2024. (Proceedings of the 6th International Conference on NeuroRehabilitation (ICNR2024), Segovia (Spain), November 2024.) [doi:10.1007/978-3-031-77584-0_25]
- 27) Rukiye Aydin, Hiroyuki Hamada, Ken Kikuchi, Shingo Shimoda, Yoshihiro Kameyama, Kazunori Sato, Daiki Kamiyama, Eriko Kitahara, Atsushi Yamashita, Tomokazu Shimazu, Genko Oyama, Toshiyuki Fujiwara and Qi An: "Ground Reaction Forces in Parkinson's Disease OFF and ON States Reflect Changes in Muscle Synergies: A Pilot Study", Converging Clinical and Engineering Research on Neurorehabilitation V, Biosystems & Biorobotics, Vol. 32 (Jose L. Pons, Jesus Tornero and Metin Akay (Eds.)), Springer, pp. 188-192, December 2024. (Proceedings of the 6th International Conference on NeuroRehabilitation (ICNR2024), Segovia (Spain), November 2024.) [doi:10.1007/978-3-031-77584-0_37]

科学研究費補助金

- 1) 分担者（代表者：金子 透）,「コンピュータビジョンによる水中物体のセンシング」, 科学研究費補助金 基盤研究(C), 2002 年 4 月～2004 年 3 月
- 2) 代表者,「複数観測戦略を有する移動ロボットの行動設計」科学研究費補助金 若手研究(B), 2003 年 4 月～2005 年 3 月
- 3) 分担者（代表者：三浦 憲二郎）,「大規模点群データからのスケーラブルな形状生成法に関する研究」, 科学研究費補助金 基盤研究(C), 2003 年 4 月～2005 年 3 月
- 4) 代表者,「ステレオカメラを用いた歪曲文書の電子化」, 科学研究費補助金 若手研究(B), 2005 年 4 月～2007 年 3 月
- 5) 分担者（代表者：金子 透）,「ストライプ状背景を用いた立体画像合成」, 科学研究費補助金 基盤研究(C), 2005 年 4 月～2007 年 3 月
- 6) 分担者（代表者：海老澤 嘉伸）,「ALS 患者のための視線検出機能付 HMD の開発と双方向コミュニケーションの実現」, 科学研究費補助金 基盤研究(B), 2005 年 4 月～2007 年 3 月
- 7) 分担者（代表者：三浦 憲二郎）,「美しい曲線の一般式の空間曲線・曲面への拡張とその意匠デザインシステムへの応用」, 科学研究費補助金 基盤研究(C), 2006 年 4 月～2008 年 3 月
- 8) 分担者（代表者：金子 透）,「光の伝播特性を考慮した水中画像センシング」, 科学研究費補助金 基盤研究(C), 2007 年 4 月～2009 年 3 月
- 9) 代表者,「単眼全方位カメラを用いた移動ロボットによる環境センシング」, 科学研究費補助金 若手研究(B), 2008 年 4 月～2010 年 3 月
- 10) 分担者（代表者：金子 透）,「視覚障害者支援のためのコンピュータビジョン」, 科学研究費補助金 基盤研究(C), 2009 年 4 月～2012 年 3 月
- 11) 代表者,「光の屈折・減衰特性を考慮した水中センシング」, 科学研究費補助金 若手研究(A), 2010 年 4 月～2013 年 3 月
- 12) 分担者（代表者：金子 透）,「プロジェクタ・カメラシステムを用いた個人視覚特性適応色覚バリアフリーシステム」, 科学研究費補助金 挑戦的萌芽研究, 2012 年 4 月～2014 年 3 月

- 13) 分担者（代表者：石原 進）,「リアルタイム画像カーナビのための効率的車々間データ配信技術」, 科学研究費補助金 基盤研究(B), 2011 年 4 月～2015 年 3 月
- 14) 分担者（代表者：浅間 一）,「感覚器へのフィードバックを用いた起立不全の予防システムの構築」, 科学研究費補助金 基盤研究(B), 2012 年 4 月～2015 年 3 月
- 15) 代表者,「超広視野・超高精度オーロラ 3 次元ステレオ計測」, 科学研究費補助金 挑戦的萌芽研究, 2013 年 4 月～2015 年 3 月
- 16) 分担者（代表者：桑原 教彰）,「高齢者、介護スタッフの思いを記録し記憶へと繋ぐシステム」, 科学研究費補助金 基盤研究(A), 2015 年 4 月～2018 年 3 月
- 17) 分担者（代表者：浅間 一）,「片麻痺患者の起立動作における筋シナジー構造の同定とリハビリテーション手法の構築」, 科学研究費補助金 基盤研究(B), 2016 年 4 月～2019 年 3 月
- 18) 代表者,「スケール復元可能な Structure from Motion」, 科学研究費補助金 基盤研究(B), 2018 年 4 月～2021 年 3 月
- 19) 代表者,「ガラス存在環境における SLAM」, 科学研究費補助金 挑戦的研究（萌芽）, 2020 年 7 月～2022 年 3 月
- 20) 代表者,「LiDAR と偏光カメラを用いた透明物体存在環境における SLAM」, 科学研究費補助金 基盤研究(B), 2022 年 4 月～2025 年 3 月
- 21) 代表者,「全天球カメラと全周レーザを用いたリアルタイム大型構造物内部形状計測」, 科学研究費補助金 挑戦的研究（萌芽）, 2022 年 6 月～2024 年 3 月
- 22) 代表者,「光学カメラと音響カメラを用いた水中センシング」, 科学研究費補助金 基盤研究(A), 2025 年 4 月～2028 年 3 月
- 23) 分担者（代表者：安 琪）,「足底感覚刺激による脳性麻痺児の姿勢制御改善プラットフォーム」, 科学研究費補助金 基盤研究(B), 2016 年 4 月～2019 年 3 月

科学研究費補助金以外

- 1) 代表者, 1999 IEEE/RSJ International Conference on Intelligent Robots and Systems に参加・発表, 財団法人 高度自動化技術振興財団（現 財団法人 ファナック FA ロボット財団） 国際技術交流への助成, 1999 年 10 月
- 2) 代表者, 2000 IEEE International Conference on Robotics and Automation に参加・発表, 財団法人 情報科学国際交流財団 研究者海外派遣助成, 2000 年 4 月
- 3) 分担者（代表者：金子 透）,「3 次元カメラシステムを利用した高速加工座標計測システムの研究」, 財団法人はましん地域振興財団 財団法人はましん地域振興財団地域活動助成, 2001 年 4 月～2002 年 3 月
- 4) 代表者,「複数視点情報による悪天候時の視界明瞭化に関する研究」, 財団法人 日本科学協会 笹川科学研究助成, 2002 年 4 月～2003 年 2 月
- 5) 代表者,「位置決め精度向上のための自走機械の屋内ナビゲーション」, 工学振興基金 学術振興経費援助 奨励研究, 2002 年 4 月～2003 年 3 月
- 6) 代表者,「ステレオビジョンを用いた表面歪曲書籍の電子化」, 財団法人 浜松科学技術研究振興会 科学技術試験研究助成, 2002 年 10 月～2003 年 9 月
- 7) 分担者（代表者：三浦 憲二郎）,「地上移動ロボットのための震災時における建物・家屋等の倒壊・延焼状況認識システムの開発」, 大都市大震災軽減化特別プロジェクト 被害者救助等の災害対応戦略の最適化災害対応戦略研究（レスキューロボット等の高度な次世代防災インフラ構築）, 2002 年 8 月～2004 年 7 月
- 8) 代表者,「ストライプ状背景を用いたクロマキーに関する研究」, 財団法人 放送文化基金 技術開発助成, 2003 年 4 月～2004 年 3 月
- 9) 代表者,「視点移動を利用した悪天候時の視界明瞭化に関する研究」, 財団法人 日本科学協会 笹川

科学研究助成, 2003 年 4 月～2004 年 2 月

- 10) 代表者, 2003 IEEE/RSJ International Conference on Intelligent Robots and Systems に参加・発表, 財団法人 井上科学振興財団 国際研究集会出席旅費の援助, 2003 年 10 月
- 11) 代表者, 「コンピュータビジョンを用いた水中センシングに関する研究」, 財団法人 中部電力基礎技術研究所 第 15 期助成, 2004 年 4 月～2005 年 3 月
- 12) 代表者, 「コンピュータビジョンを用いた極限環境センシングに関する研究」, 学長裁量経費 静岡大学工学部若手萌芽研究, 2004 年 4 月～2005 年 3 月
- 13) 分担者 (代表者: 三浦 憲二郎), 「ナノヒューマンインターフェース実現のための AFM 用計測・加工フォースフィードバックデバイスの開発」, 学長裁量経費 静岡大学工学部先端工学研究, 2004 年 4 月～2006 年 3 月
- 14) 代表者, 「ステレオカメラを用いた悪天候時の視野明瞭化」, 財団法人 静岡総合研究機構 学術教育研究推進事業補助金 (一般研究助成), 2004 年 4 月～2005 年 3 月
- 15) 代表者, 17th IAPR International Conference on Pattern Recognition に参加・発表, 財団法人 日本科学協会 海外発表促進助成, 2004 年 8 月
- 16) 代表者, 「視覚障害者のためのウェアラブルビジョンシステムに関する研究」, 財団法人 浜松科学技術研究振興会 平成 16 年度山田亮三基金研究助成, 2004 年 12 月～2005 年 11 月
- 17) 代表者, 「複数センシング戦略を有する移動ロボットの自律ナビゲーションに関する研究」, 財団法人 カシオ科学振興財団 第 22 回研究助成, 2005 年 4 月～2006 年 3 月
- 18) 代表者, 「ネットワーク型生体モニタリングと自律ロボットを用いた災害救助支援システム」, 学長裁量経費 静岡大学工学部若手教員プロジェクト, 2005 年 9 月～2007 年 3 月
- 19) 代表者, 「画像処理と音響処理の融合による打音検査に関する研究」, 財団法人 浜松科学技術研究振興会 平成 17 年度村田基金研究助成, 2005 年 12 月～2006 年 11 月
- 20) 分担者 (代表者: 岩田 太), 「ボトムアップ・トップダウン融合型ナノファクトリーの実現」, 学長裁量経費 静岡大学工学部若手教員プロジェクト, 2006 年 9 月～2008 年 3 月
- 21) 代表者, California Institute of Technology における研修, 村川二郎基金, 2006 年 11 月～2007 年 12 月
- 22) 分担者 (代表者: 海老澤 嘉伸), 「運転支援と自動操縦用のための情報の車両間共有化システムの構築」, 平成 20 年度以降に申請する特別教育研究経費等のための準備 (シーズ発掘) 経費, 2007 年 12 月～2008 年 3 月
- 23) 代表者, 「単眼全方位カメラを用いた環境モデリングによる人間への任意視点映像提示の研究」, 財団法人 立石科学技術振興財団 第 19 回 (平成 20 年度) 研究助成, 2008 年 4 月～2009 年 3 月
- 24) 代表者, 「顔検出と色特徴抽出による複数視点リアルタイム人物追跡システムの開発」, 財団法人 スズキ財団 平成 19 年度科学技術研究助成, 2008 年 4 月～2009 年 3 月
- 25) 代表者, 「歪み補正ができる既存ドキュメントの電子化」, 科学技術振興機構 (JST) 地域イノベーション創出総合支援事業 シーズ発掘試験, 2008 年 7 月～2009 年 3 月
- 26) 代表者, 「光の伝播特性を考慮した複数媒質環境における画像センシング」, 財団法人 旭硝子財団 平成 20 年度募集 (平成 21 年度採択) 自然科学系 研究奨励, 2009 年 4 月～2011 年 3 月
- 27) 代表者, 「プロジェクタ・カメラシステムを用いた色覚障害者への色情報提示」, 財団法人 日揮・実吉奨学会 平成 21 年度研究助成, 2009 年 9 月～2010 年 9 月
- 28) 代表者, 2009 IEEE/RSJ International Conference on Intelligent Robots and Systems に参加・発表, 財団法人 日本科学協会 海外発表促進助成, 2009 年 10 月
- 29) 分担者 (代表者: 三浦 憲二郎), 「局在光エネルギーの動的空間分布制御による高解像力イメージング手法の開発と次世代半導体欠陥計測への応用」, 静岡大学工学部プロジェクト, 2009 年 10 月～2011 年 9 月
- 30) 代表者, 「複数媒質環境における光センシング」, 財団法人 旭硝子財団 平成 23 年度募集 (平成 24 年度採択) 若手継続グラント, 2012 年 4 月～2015 年 3 月

- 31) 代表者,「作業移動機構の開発 遠隔操作ヒューマンインタフェースの開発 (再委託)」,新エネルギー・産業技術総合開発機構 (NEDO) 災害対応無人化システム研究開発プロジェクト,2012 年 4 月～2013 年 2 月
- 32) 代表者,「計測・作業要素技術の開発 水陸両用モニタリングデバイスの開発 (再委託)」,新エネルギー・産業技術総合開発機構 (NEDO) 災害対応無人化システム研究開発プロジェクト,2012 年 4 月～2013 年 2 月
- 33) 代表者,「全方位カメラ搭載移動ロボットによる超精密・超広範囲 3 次元環境センシング」,公益財団法人 精密測定技術振興財団 平成 25 年度助成事業,2013 年 4 月～2014 年 3 月
- 34) 分担者 (代表者: 浅間 一),「経験価値の見える化を用いた共創的スキル e ラーニングサービスの研究と実証」,科学技術振興機構 (JST) 社会技術研究開発センター (RISTEX) 問題解決型サービス科学研究開発プログラム,2013 年 10 月～2016 年 9 月
- 35) 代表者,「ビルや建屋内における移動ロボットの遠隔操作性向上に関するセンサ情報処理技術の研究」,経済産業省 平成 25 年度発電用原子炉等廃炉・安全技術開発費補助金 原子炉建屋内の遠隔除染技術の開発 (再委託),2013 年 10 月～2014 年 2 月
- 36) 代表者,「医用画像を用いた精密膝関節モデルの作成および歩行時の膝関節負荷の解析」,公益財団法人 カシオ科学振興財団 第 31 回 (平成 25 年度) 研究助成,2013 年 12 月～2014 年 11 月
- 37) 代表者,「人間-ロボット共存環境下でのロボットの行動制御」,公益財団法人 栢森情報科学振興財団 第 18 回 (平成 25 年度) 研究助成,2014 年 1 月～2015 年 3 月
- 38) 分担者 (代表者: 岡本 孝司),「遠隔操作技術及び核種分析技術を基盤とする俯瞰的廃止措置人材育成研究」,平成 26 年度 国家課題対応型研究開発推進事業 (廃止措置等基盤研究・人材育成プログラム委託費),2014 年 10 月～2019 年 3 月
- 39) 分担者 (代表者: 東急建設株式会社),「トンネル全断面点検・診断システムの研究開発」, SIP (戦略的イノベーション創造プログラム) インフラ維持管理・更新・マネジメント技術 維持管理ロボット・災害対応ロボットの開発,2014 年 10 月～2019 年 3 月
- 40) 分担者 (代表者: 富士通株式会社),「二輪型マルチコプタを用いたジオタグ付近接画像を取得可能な橋梁点検支援ロボットシステムの研究開発」, SIP (戦略的イノベーション創造プログラム) インフラ維持管理・更新・マネジメント技術 維持管理ロボット・災害対応ロボットの開発,2014 年 10 月～2019 年 3 月
- 41) 分担者 (代表者: 田所 諭),「ロボットインテリジェンス 極限画像」,革新的研究開発推進プログラム (ImPACT) タフ・ロボティクス・チャレンジ,2014 年 10 月～2018 年 12 月
- 42) 代表者,「移動単眼カメラを用いた精密三次元計測」,公益財団法人 精密測定技術振興財団 平成 30 年度助成事業,2018 年 4 月～2019 年 3 月
- 43) 代表者,「透明物体存在環境での移動ロボットによる自己位置推定と地図生成」,公益財団法人 大川情報通信基金 2018 年度研究助成,2018 年 11 月～2019 年 10 月
- 44) 代表者,「複数広視野カメラを用いた建設機械周辺の安全性確保技術の開発」,国土交通省 令和元年度建設技術研究開発助成制度 政策課題解決型技術開発公募 (一般タイプ),2019 年 7 月～2020 年 3 月
- 45) 分担者 (代表者: 全 邦釘),「地中レーダーによる地下埋設物データベースの構築と油圧ショベルによる掘削時の埋設物損傷回避動作の実現」,国土交通省 令和元年度建設技術研究開発助成制度 政策課題解決型技術開発公募 (一般タイプ),2019 年 7 月～2020 年 3 月
- 46) 分担者 (代表者: 浅間 一),「燃料デブリ取り出し時における炉内状況把握のための遠隔技術に関する研究人材育成」,英知を結集した原子力科学技術・人材育成推進事業 (研究人材育成型廃炉研究プログラム),2019 年 10 月～2024 年 3 月
- 47) 代表者,「画像・音響信号マルチモーダル処理を用いたコンクリート構造物の自動点検」,一般財団法人 日本建設情報総合センター 平成 31 年度研究助成,2019 年 9 月～2020 年 11 月

- 48) 代表者,「複数広視野カメラを用いた建設機械周辺の安全性確保技術の開発」,国土交通省 令和 2 年度建設技術研究開発助成制度 政策課題解決型技術開発公募 (一般タイプ), 2020 年 6 月~2021 年 3 月
- 49) 分担者 (代表者: 全 邦釘),「地中レーダーによる地下埋設物データベースの構築と油圧ショベルによる掘削時の埋設物損傷回避動作の実現, 国土交通省 令和 2 年度建設技術研究開発助成制度 政策課題解決型技術開発公募 (一般タイプ), 2020 年 6 月~2021 年 3 月
- 50) 代表者,「光切断法を用いたトンネル 3 次元計測についての技術研究開発」, 国土交通省 関東地方整備局 令和 2 年度 技術シーズマッチング, 2020 年 10 月~2021 年 3 月
- 51) 代表者,「光切断法を用いたトンネル 3 次元計測についての技術研究開発」, 国土交通省 関東地方整備局 令和 3 年度 技術シーズマッチング, 2021 年 7 月~2022 年 3 月
- 52) 分担者,「国土交通省 中部地方整備局 安芸バイパス久井原トンネル工事 施工現場における技術 II: データを活用して土木工事における品質管理の高度化等を図る技術」, 2021 年度建設現場の生産性を飛躍的に向上するための革新的技術の導入・活用に関するプロジェクト, 2021 年 10 月~2022 年 3 月
- 53) 代表者,「光切断法を用いたトンネル 3 次元計測についての技術研究開発」, 国土交通省 関東地方整備局 令和 4 年度 技術シーズマッチング, 2022 年 5 月~2023 年 3 月
- 54) 分担者 (代表者: 斉藤 拓巳),「燃料デブリ取り出しに向けた遠隔ロボット-計測技術の統合のための研究教育人材育成」, 英知を結集した原子力科学技術・人材育成推進事業 (研究人材育成型廃炉研究プログラム), 2024 年 9 月~2029 年 3 月

(2025 年 4 月 1 日更新)