

ARIHHP SCHOLARLY ACTIVITIES 2024

◆ Research Articles: 198

◆ Books: 13◆ Awards: 33

A. *Kokoro* Division

Research Articles

Amemiya R. Acute psychological and physical effects of transient exercise with rest on Japanese university students with high sensory processing sensitivity. *The Japanese Journal of Personality*, 33(2), 139-152, 2024.

Bamford AR, Adams JN, Kim S, McMillan LC, Malhas R, Mapstone M, Hitt BD, Yassa MA, Thomas EA. The amyloid beta 42/38 ratio as a plasma biomarker of early memory deficits in cognitively unimpaired older adults. *Neurobiology of Aging*, 144, 12-18, 2024.

Byun K, Hyodo K, Suwabe K, Fukuie T, Ha M, Damrongthai C, Kuwamizu R, Koizumi H, Yassa MA, Soya H. Mild exercise improves executive function with increasing neural efficiency in the prefrontal cortex of older adults. *Geroscience*, 46(1), 309-325, 2024.

Chappel-Farley MG, Berisha DE, Dave A, Sanders RM, Kline CE, Janecek JT, Sattari N, Lui KK, Chen IY, Neikrug AB, Benca RM, Yassa MA, Mander BA. Engagement in moderate-intensity physical activity supports overnight memory retention in older adults. *Scientific Reports*, 14(1), 31873, 2024.

Damrongthai C, Kuwamizu R, Yamazaki Y, Lee D, Byun K, Torma F, Churdchomjan W, Yassa MA, Adachi K, Soya H. *bioRxiv*, 2024.

Dobashi S, Funabashi D, Sameshima K, Tsuruoka N, Matsui T. Exercise intensity-dependent lactate elevation in skin interstitial fluid and its long-lasting effect. *bioRxiv*, 2024.

Edwards NC, Lao PJ, Alshikho MJ, Ericsson OM, Rizvi B, Petersen ME, O'Bryant S, Aguilar LF, Simoes S, Mapstone M, Tudorascu DL, Janelidze S, Hansson O, Handen BL,

Christian BT, Lee JH, Lai F, Rosas HD, Zaman S, Lott IT, Yassa MA, Gutierrez J, Wilcock DM, Head E, Brickman AM. Cerebrovascular disease is associated with Alzheimer's plasma biomarker concentrations in adults with Down syndrome. *Brain Communications*, 6(5), fcae331, 2024.

Fukuie T, Suwabe K, Kawase S, Inoue K, Yamaguchi A, Soya H. Effect of clapping movement with groove rhythm on executive function: focusing on audiomotor entrainment. *The Journal of Sports Medicine and Physical Fitness*, 65(5), 606-613, 2025.

Funabashi D, Dobashi S, Sameshima K, Sagayama H, Nishijima T, Matsui T. Acute vigorous exercise decreases subsequent non-exercise physical activity and body temperature linked to weight gain. *Medicine and Science in Sports and Exercise*, 56(10), 1964-1975, 2024.

Hassan M, Kennard M, Yoshitake S, Ishac K, Takahashi S, Kim S, Matsui T, Hirokawa M, Suzuki K. Augmenting the sense of social presence in online video games through the sharing of biosignals. *IEEE Access*, 12, 98977-98989, 2024.

Hata T, Grenier F, Hiraga T, Soya M, Okamoto M, Soya H. Promoting arousal associated with physical activity with the vitamin B1 derivative TTFD. The Journal of Physiological Sciences, 75(1), 100001, 2024.

Hiraga T, Hata T, Soya S, Shimoda R, Takahashi K, Soya M, Inoue K, Johansen JP, Okamoto M, Soya H. Light-exercise induced dopaminergic and noradrenergic stimulation in the dorsal hippocampus: using a rat physiological exercise model. *The FASEB Journal*, 38(24), e70215, 2024.

Hiraga T, Miyoshi K, Shimizu R, Yook JS, Okamoto M, Soya H. Very-light-intensity exercise as minimal intensity threshold for activating dorsal hippocampal neurons: evidence from rat physiological exercise model. *Biochemical and Biophysical Research Communications*, 746, 151243, 2025.

Inoue K, Soya H, Murakumo K, Araki Y, Hiraga T, Soya S, Okamoto M. Setting treadmill intensity for rat aerobic training using lactate and gas exchange thresholds. *Medicine & Science in Sports & Exercise*, 57(2), 434-446, 2025.

Hyodo K, Dan I, Jindo T, Niioka K, Naganawa S, Mukoyama A, Soya H, Arao T. Neural mechanisms of the relationship between aerobic fitness and working memory in older adults: an fNIRS study. *Imaging Neuroscience*, 2, imag-2-00167, 2024.

Kojima T, Kokubu M. Role of gaze behaviors, body movements, and bicycle movements during cycling on a straight and narrow path. *Human Movement Science*, 98, 103290, 2024.

Kokubu M, Komatsu Y, Kojima T. Interocular timing differences in horizontal saccades of ball game players. *Vision (Basel)*, 9(1), 9, 2025.

Komine S, Miura I, Hu T, Ogata A, Tamai S, Tokinoya K, Oh S, Wada S, Takekoshi K, Ito G, Isobe T, Matsui T, Ohmori H. Effect of electroacupuncture on delayed-onset muscle soreness induced by eccentric exercise in young untrained men: randomized controlled trial. *American Journal of Physical Medicine & Rehabilitation*, 104(8), 693-701, 2025.

Lee DM, Yamazaki Y, Kuwamizu R, Aoike N, Okamoto M, Kato S, Soya H. Enhanced cardiac vagal activity and mood after low-dose hypoxic gas inhalation in healthy young adults. *The Journal of Physiological Sciences*, 75(1), 100002, 2024.

Lee DM, Yamazaki Y, Kuwamizu R, Okamoto M, Soya H. Prefrontal executive function enhanced by prior acute inhalation of low-dose hypoxic gas: modulation via cardiac vagal activity. *Neuroimage*, 310, 121139, 2025.

Leonard BT, Kark SM, Granger SJ, Adams JG, McMillan L, Yassa MA. Anhedonia is associated with higher functional connectivity between the nucleus accumbens and paraventricular nucleus of thalamus. *Journal of Affective Disorders*, 366, 1-7, 2024.

Matsui T, Mine Y, Takahashi S, Funabashi D, Yoshitake S, Matsuoka H, Yamaguchi T, Dobashi S, Sakairi Y, Yoshimoto H, Takagi H, Morita M, Shiodera A, Mineno A, Asada H. Postural influence on cognitive dynamics during esports play: a randomized crossover study. *JMIR Preprints*, 2024.

Matsui T, Takahashi S, Ochi G, Yoshitake S, Funabashi D, Matsuoka H, Kagesawa J, Dobashi S, Yoshimoto H, Sakairi Y, Takagi H. Cognitive decline with pupil constriction independent of subjective fatigue during prolonged esports across player expertise levels.

Computers in Human Behavior, 156, 108219, 2024.

Mieda T, Kokubu M. Head movements affect skill acquisition for ball trapping in blind football. *PLoS One*, 19(11), e0313336, 2024.

Monma T, Matsui T, Koyama S, Ueno H, Kagesawa J, Oba C, Nakamura K, Takagi H, Takeda F. Prevalence and associated factors of physical complaints among Japanese esports players: a cross-sectional study. *Cureus*, 16(8), e66496, 2024.

Ochi G, Ohno K, Kuwamizu R, Yamashiro K, Fujimoto T, Ikarashi K, Kodama N, Onishi H, Sato D. Exercising with virtual reality is potentially better for the working memory and positive mood than cycling alone. *Mental Health and Physical Activity*, 27, 100641, 2024.

Ojio Y, Amemiya R, Oliffie JL, Rice SM. Mental health help-seeking knowledge, attitudes and behaviour among male elite rugby players: the role of masculine health-related values. *BMJ Open Sport & Exercise Medicine*, 11(1), e002275, 2025.

Rizvi B, Lao PJ, Sathishkumar M, Taylor L, Queder N, McMillan L, Edwards NC, Keator DB, Doran E, Hom C, Nguyen D, Rosas HD, Lai F, Schupf N, Gutierrez J, Silverman W, Lott IT, Mapstone M, Wilcock DM, Head E, Yassa MA, Brickman AM. A pathway linking pulse pressure to dementia in adults with Down syndrome. *Brain Communications*, 6(3), fcae157, 2024.

Shimoda R, Amaya Y, Okamoto M, Soya S, Soya M, Koizumi H, Nakamura K, Hiraga T, Torma F, Soya H. Accelerated fear extinction by regular light-intensity exercise: a possible role of hippocampal BDNF-TrkB signaling. *Medicine and Science in Sports and Exercise*, 56(2), 221-229, 2024.

Suwabe K, Kuwamizu R, Hyodo K, Yoshikawa T, Otsuki T, Zempo-Miyaki A, Yassa MA, Soya H. Improvement of mnemonic discrimination with acute light exercise is mediated by pupil-linked arousal in healthy older adults. *Neurobiology of Aging*, 133, 107-114, 2024.

Ueno Y, Amemiya R. Mediating effects of resilience between mindfulness, self-compassion, and psychological distress in a longitudinal study. *Journal of Rational*-

Emotive & Cognitive-Behavior Therapy, 42, 896-906, 2024.

Vanderlip CR, Taylor L, Kim S, Harris AL, Tuteja N, Meza N, Escalante YY, McMillan L, Yassa MA, Adams JN. Amyloid-beta deposition in basal frontotemporal cortex is associated with selective disruption of temporal mnemonic discrimination. *Journal of Neuroscience*, 45(10), e1605242025, 2025.

Yamamoto N, Kuwamizu R, Moriguchi Y. Hostile cognitions and emotions following social exclusion in Japanese adults and young children. *Journal of Experimental Child Psychology*, 253, 106200, 2025.

+8 research articles

Books

Matsui T: Chapter 8. Physical and Physiological Implications of Esports. Critical Perspectives on Esports - 1st Edition: Hofmann A and Camara P (Eds.), Routledge, 99-113, 2024.

Soya H: Brain and antiaging medicine: Antiaging of cognitive function: Exercise: Yamada H, Naito Y (Eds.): Anti-Aging Medicine. Springer Nature, 151-153, 2025.

Yamazaki Y, Soya H: Physical Activity and Anti-Aging: Improvement of Brain Function (Cognitive Impairment, Depression) by Exercise: Yamada H, Naito Y (Eds.): Anti-Aging Medicine. Springer Nature, 347-350, 2025.

+3 books

Awards

7 awards

B. Waza Division

Research Articles

Apibantaweesakul S, Omura S, Qi W, Sado N, Shiotani H, Tanaka F, Suttanon P, Kawakami Y. Ankle muscle strength and activation are associated with walking patterns in preschool and school-age children. *PLoS One*, 20(1), e0316826, 2025.

Fujii N, Ishii Y, Moriyama S, Matsutake R, Sengoku Y, Nishiyasu T. Fast Competitive Swimmers Demonstrate a Diminished Diving Reflex. *Scandinavian Journal of Medicine & Science in Sports*, 34(10), e14745, 2024.

Fujimori T, Tobe N, Sado N. Joint kinetic demand for performance in high jump. *Sports Biomechanics*, 1-15, 2024.

Hasegawa T, Muratomi K, Furuhashi Y, Mizushima J, Maemura H. Effects of high-intensity sprint exercise on neuromuscular function in sprinters: the countermovement jump as a fatigue assessment tool. *PeerJ*, 12, e17443, 2024.

Hashimoto S, Tominaga T, Ohyama-Byun K, Sado N. Distal joint kinetics are associated with shot put performance. *International Society of Biomechanics in Sports-Conference Proceedings Archive*, 42(1), 374-377, 2024.

Hobo A, Tominaga T, Sado N. Non-invasive evaluation of plantar fascia strain during locomotion considering its insertion site by motion capture-ultrasound combination. *IEEE 2024 International Symposium on 3D Analysis of Human Movement (3DAHM)*, 1-6, 2024.

Homoto K, Gonjo T, Takagi H, Kudo S, Sengoku Y, Tsunokawa T, Koga D, Homma M. Does the flutter kick increase hand propulsion in front crawl swimming? *Sports Biomechanics*, 1-14, 2024.

Huang D, Wang X, Gonjo T, Takagi H, Huang B, Huang W, Shan Q, Chow DHK. Effects of Creatine Supplementation on the Performance, Physiological Response, and Body Composition Among Swimmers: A Systematic Review and Meta-Analysis of Randomized Controlled Trials. *Sports Medicine-Open*, 10(1), 115, 2024.

Huang D, Wang X, Takagi H, Mo S, Wang Z, Chow DHK, Huang B. Effects of Different

Dietary Supplements on Swimming Performance: A Systematic Review and Network Meta-Analysis. *Nutrients*, 17(1), 33, 2024.

Ichinose H, Tanaka F, Yamagishi T, Sado N, Shiotani H, Evangelidis PE, Naito M, Shibata S, Kawakami Y. Age- and sex-dependence of muscle quality: Influence of intramuscular non-contractile tissues. *Experimental gerontology*, 196, 112574, 2024.

Ikeda S, Muratomi K, Furuhashi Y, Maemura H. Effects of sex differences on energy providing capacities during short duration high-intensity exercise: focusing on changes in exercise duration. *The Journal of Sports Medicine and Physical Fitness*, 65(3), 347-353, 2025.

Koga D, Nakazono Y, Tsunokawa T, Sengoku Y, Kudo S, Takagi H. Comparison of foot pressure distribution and foot kinematics in undulatory underwater swimming between performance levels. *Sports Biomechanics*, 1-17, 2024.

Koga D, Gonjo T, Kawai E, Tsunokawa T, Sakai S, Sengoku Y, Homma M, Takagi H. Effects of exceeding stroke frequency of maximal effort on hand kinematics and hand propulsive force in front crawl. *Sports Biomechanics*, 23(1), 15-27, 2024.

Konno K, Itaya A, Kizuka T, Ono S. The effects of pressure on anticipatory postural adjustments during a jump shot in basketball. *Gait & Posture*, 114, 215-221, 2024.

Nakazono Y, Shimojo H, Sakakibara J, Sengoku Y, Takagi H, Tsunokawa T. Variations in vortex structure with changes in swimming velocity during human underwater undulatory swimming. *Experiments in Fluids*, 66(2), 23, 2025.

Nakazono Y, Shimojo H, Sengoku Y, Takagi H, *Tsunokawa T. Impact of variations in swimming velocity on wake flow dynamics in human underwater undulatory swimming. *Journal of Biomechanics*, 165, 112020, 2024.

Numasawa K, Miyamoto T, Kizuka T, Ono S. Prediction error in implicit adaptation during visually- and memory-guided reaching tasks. *Scientific Reports*, 14(1), 8582, 2024.

Matsui T, Mine Y, Takahashi S, Funabashi D, Yoshitake S, Matsuoka H, Yamaguchi T, Dobashi S, Sakairi Y, Yoshimoto H, Takagi H, Morita M, Shiodera A, Mineno A, Asada

H. Postural influence on cognitive dynamics during esports play: a randomized crossover study. *JMIR Preprints*, 2024.

Matsui T, Takahashi S, Ochi G, Yoshitake S, Funabashi D, Matsuoka H, Kagesawa J, Dobashi S, Yoshimoto H, Sakairi Y, Takagi H. Cognitive decline with pupil constriction independent of subjective fatigue during prolonged esports across player expertise levels. *Computers in Human Behavior*, 156, 108219, 2024.

Miyamoto T, Numasawa K, Hirano R, Yoshimura Y, Ono S. Reduced latency in manual interception with anticipatory smooth eye movements. *iScience*, 28(2), 111849, 2025.

Monma T, Matsui T, Koyama S, Ueno H, Kagesawa J, Oba C, Nakamura K, Takagi H, Takeda F. Prevalence and associated factors of physical complaints among Japanese esports players: a cross-sectional study. *Cureus*, 16(8), e66496, 2024.

Muratomi K, Tarumi T, Furuhashi Y, Ushirooka N, Hasegawa A, Sugawara J, Tanigawa S, Takahashi H, Maemura H. Effectiveness index of mechanical energy utilisation in male 400-m sprinters and the relation between muscle cross-sectional area of the trunk and the lower limb. *Scandinavian Journal of Medicine & Science in Sports*, 35(2), e70023, 2025.

Kazuki O, Takuya Y, Masanao K, Kotaro M, Kyoya O, Hirohiko M, Satoru T. Three-Dimensional Kinematic and Kinetic behavior of the Pelvic Rotation in Mini-Hurdle Sprint: Comparisons to Normal Sprint. *International Journal of Sport and Health Science*, 22, 76-85, 2024.

Ono S, Yoshimura Y, Shinkai R, Kizuka T. Properties of Gaze Strategies Based on Eye-Head Coordination in a Ball-Catching Task. *Vision (Basel)*, 8(2), 20, 2024.

Ota K, Yoshida T, Furuhashi Y, Muratomi K, Maemura H, Tanigawa S. A longitudinal study of three-dimensional pelvic behaviour in maximal sprint running. *Scientific Journal of Sport and Performance*, 3(3), 370-382, 2024.

Sado N, Tominaga T, Okuyama H, Hobo A, Shinabe Y. Asymmetric kinematic responses to verbal gait instructions: stooped posture induces shorter steps, but not vice versa. *IEEE 2024 International Symposium on 3D Analysis of Human Movement (3DAHM)*,

Sado N, Fujimori T, Tobe N. Discrepancy between 'contributing to' and 'sharing variance with' the effective energy for height in high jump. *Journal of Sports Sciences*, 42(5), 425-433, 2024.

Sado N, Yazawa M, Tominaga T, Akutsu K. Inter-individual variability in elliptical and diagonal error distributions potentially relevant to optimal motor planning in football instep kicking. *Human Movement Science*, 97, 103272, 2024.

Sengoku Y, Nakamura K, Ando K. Relationship between blood glucose response and respiratory exchange ratio during intermittent incremental swimming test in well trained swimmers. *Japanese Journal of Sciences in Swimming and Water Exercise*, 27, 9-15, 2024.

Sengoku Y, Shinno A, Kim J, Nakazono Y, Homoto K, Tsunokawa T, Hirai N, Nobue A, Ishikawa M. The relationship between maximal lactate accumulation rate and sprint performance parameters in male competitive swimmers. *Frontiers in Sports and Active Living*, 6, 1483659, 2024.

Shinkai R, Ando S, Nonaka Y, Kizuka T, Ono S. Visuomotor coordination with gaze, head and arm movements during table tennis forehand rallies. *European Journal of Sport Science*, 24(6), 750-757, 2024.

Takahashi K, Sado N, Wakahara T. Unique enlargement of human soleus muscle for bipedalism at the expense of the ease of leg swing. *Journal of biomechanics*, 174, 112263, 2024.

Tominaga T, Tasaki Y, Sado N. Speed-dependent increase in lumbar lordosis is inconsistent with speed-independent pelvic tilt during treadmill running. *International Society of Biomechanics in Sports-Conference Proceedings Archive*, 42(1), 930-933, 2024.

Uchizawa A, Osumi H, Zhang S, Yajima K, Funayama A, Kondo E, Suzuki Y, Tanaka Y, Park I, Enomoto Y, Omi N, Tokuyama K, Sagayama H. Energy expenditure and slowwave sleep in runners: Focusing on reproductive function, chronic training, and sex. *iScience*, 28(2), 111717, 2025.

Yamakawa KK, Homoto K, Nakashima M, Shimojo H, Nakazono Y, Sengoku Y, Takagi H. Differences in kinematics, kinetics, and muscle activity between underwater dolphin kicking and flutter kicking: multiple approaches using three-dimensional motion analysis, electromyography, and hydrodynamic simulation. *Sports Biomechanics*, 1-16, 2025.

Yamakawa KK, Nishiwaki R, Sengoku Y. Fatigue-related changes of muscle coordination during a maximal 100-m butterfly stroke swimming: a case study. *ISBS Proceedings Archive*, 42(1), 1034-1037, 2024.

Yamakawa K, Nishiwaki R, Sengoku Y. Muscle coordination during maximal butterfly stroke swimming: Comparison between competitive and recreational swimmers. *Journal of Applied Biomechanics*, 40, 296-305, 2024.

Yoshida T, Zushi A, Yoshida Y, Maemura H, Ono S, Tanigawa S. Acute effects of an instructional movie on drop jump performance and lower limb kinematic and kinetic variables. *Frontiers in Virtual Reality*, 4, 2024.

Yoshida T, Zushi A, Zushi K, Hayashi R, Maemura H, Tanigawa S. Kinetic variables of the lower limb joint that affect the drop jump index at different drop heights. *Frontiers in Sports and Active Living*, 6, 1458722, 2024.

Zhang S, Sado N, Fujii N. Adjustment of segmental rotations to achieve both racket speed and accuracy at various impact heights during a two-handed backhand stroke. *Sports biomechanics*, 1-16, 2024.

Yoshimura Y, Kizuka T, Ono S. Motion in the depth direction appears faster when the target is closer to the observer. *Psychological Research*, 89(1), 25, 2024.

+ 9 research articles

Awards

Sado N: Hans Gros Emerging Researcher Award, International Society of Biomechanics in Sports, 2024.

Sado N: International Symposium on 3D Analysis of Human Movement, ISB BEST STUDENT PAPER AWARD (Hobo A, Tominaga T, Sado N: Non-invasive evaluation of plantar fascia strain during locomotion considering its insertion site by motion capture-ultrasound combination), 2024.

Sado N: International Society of Biomechanics in Sports, New Investigator Award (Poster) Bronze Medal (3rd Place) (Tominaga T, Tasaki Y, Sado N: Speed-dependent increase in lumbar lordosis is inconsistent with speed-independent pelvic tilt during treadmill running), 2024.

Sado N: Journal of Anatomy, Top Cited Article 2022-2023 (Takahashi K, Shiotani H, Evangelidis PE, Sado N, Kawakami Y: Three-dimensional architecture of human medial gastrocnemius fascicles in vivo: Regional variation and its dependence on muscle size), 2024.

Sado N: Journal of Anatomy, Top Downloaded Article 2022-2023 (Takahashi K, Shiotani H, Evangelidis PE, Sado N, Kawakami Y: Three-dimensional architecture of human medial gastrocnemius fascicles in vivo: Regional variation and its dependence on muscle size), 2024.

Sado N: International Society of Biomechanics, World Athletic Award for Biomechanics (Hashimoto S, Tominaga T, Ohyama-Byun K, Sado N: Distal joint kinetics are associated with shot put performance), 2024.

+5 award

C. *Karada* Divison

Research Articles

Amano T, Fujii N, Kenny GP, Mündel T, Inoue Y, Yokoyama S, Kondo N. Separate and combined blockades of α- and β-adrenergic receptors in forearm sweating induced by adrenergic agents and exercise in the heat in young adults. *The American Journal of Physiology - Regulatory, Integrative and Comparative Physiology*, 328(2), R181-R194, 2025.

Amano T, Fujii N, Kenny GP, Mündel T, Yokoyama S, Yamashita H, Quan YS. Pretreatment of microneedles enhances passive transdermal administration of pilocarpine and pilocarpine-induced sweat production in humans. *International Journal of Pharmaceutics*, 662, 124497, 2024.

Amano T, Sato K, Otsuka J, Okamoto Y, Takada S, Kato H, Yokoyama S, Oshima S, Hosokawa Y, Fujii N, Mündel T, Kenny G, Hiwa T, Inoue Y. Seasonal changes in hydration in free-living Japanese children and adolescents. *Applied Physiology Nutrition and Metabolism*, 49(10), 1387-1393, 2024.

Asano Y, Tsunoda K, Nagata K, Lim N, Tsuji T, Shibuya K, Okura T. Segmental phase angle and the extracellular to intracellular water ratio are associated with functional disability in community-dwelling older adults: A follow-up study of up to 12 years. *Nutrition*, 112709, 2025.

Bajunaid R, Niu C, Hambly C, Liu Z, Yamada Y, Aleman-Mateo H, Anderson LJ, Arab L, Baddou I, Bandini L, Bedu-Addo K, Blaak EE, Bouten CVC, Brage S, Buchowski MS, Butte NF, Camps SGJA, Casper R, Close GL, Cooper JA, Cooper R, Das SK, Davies PSW, Dabare P, Dugas LR, Eaton S, Ekelund U, Entringer S, Forrester T, Fudge BW, Gillingham M, Goris AH, Gurven M, El Hamdouchi A, Haisma HH, Hoffman D, Hoos MB, Hu S, Joonas N, Joosen AM, Katzmarzyk P, Kimura M, Kraus WE, Kriengsinyos W, Kuriyan R, Kushner RF, Lambert EV, Lanerolle P, Larsson CL, Leonard WR, Lessan N, Löf M, Martin CK, Matsiko E, Medin AC, Morehen JC, Morton JP, Must A, Neuhouser ML, Nicklas TA, Nyström CD, Ojiambo RM, Pietiläinen KH, Pitsiladis YP, Plange-Rhule J, Plasqui G, Prentice RL, Racette SB, Raichlen DA, Ravussin E, Redman LM, Reilly JJ, Reynolds R, Roberts SB, Samaranayakem D, Sardinha LB, Silva AM, Sjödin AM, Stamatiou M, Stice E, Urlacher SS, Van Etten LM, van Mil EGAH, Wilson G, Yanovski JA, Yoshida T, Zhang X, Murphy-Alford AJ, Sinha S, Loechl CU, Luke AH, Pontzer H,

Rood J, Sagayama H, Schoeller DA, Westerterp KR, Wong WW, Speakman JR. Predictive equation derived from 6,497 doubly labelled water measurements enables the detection of erroneous self-reported energy intake. *Nature Food*, 6(1), 58-71, 2025.

Choi Y, Kosaki K, Akazawa N, Tanahashi K, Maeda S. Combined effects of sleep and objectively-measured daily physical activity on arterial stiffness in middle-aged and older adults. *Experimental Gerontology*, 188, 112397, 2024.

Fujii N, Igarashi Y, Ishii Y, Ito E, Lai YF, Tanabe Y, Fujimoto T, Ogawa K, Nabekura Y, Hiroyama T, Nishiyasu T. Menthol alleviates post-race elevations in muscle soreness and metabolic and respiratory stress during running. *European Journal of Applied Physiology*, 124(8), 2473-2487, 2024.

Fujii N, Ishii Y, Moriyama S, Matsutake R, Sengoku Y, Nishiyasu T. Fast Competitive Swimmers Demonstrate a Diminished Diving Reflex. *Scandinavian Journal of Medicine & Science in Sports*, 34(10), e14745, 2024.

Fujii N, Omori S, Kataoka Y, Nishiyasu T, Omi N. Nitrate and Nitrite Concentrations in Fingertip Serum Following Beetroot Juice Ingestion Correlate with Those in Venous Plasma. *Journal of Nutritional Science and Vitaminology*, 70(5), 441-444, 2024.

Fujii N. Does hydration status affect ventilation during prolonged exercise? *Experimental Physiology*, 110(4), 529-531, 2025.

Funabashi D, Dobashi S, Sameshima K, Sagayama H, Nishijima T, Matsui T. Acute vigorous exercise decreases subsequent non-exercise physical activity and body temperature linked to weight gain. *Medicine and Science in Sports and Exercise*, 56(10), 1964-1975, 2024.

Hattori R, Kajiki M, Fujimoto T, Amano T, Kenny GP, Watanabe K, Nishiyasu T, Fujii N. TRPA1 channels modulate cutaneous vasodilation during exercise in the heat in young adults when NOS is inhibited. *The American Journal of Physiology - Regulatory, Integrative and Comparative Physiology*, 328(3), R319-R328, 2025.

Hayase A, Onoue T, Nishida K, Nakata Y, Hayashi F, Marutani M, Sakane N, Okamura T, Matsuzaki K, Kawamura T, Tsushita K. Influence of previous health guidance history:

impact and limitations of a single health guidance session. *Environmental and Occupational Health Practice*, 6(1), 2024-0011-OA, 2024.

Hitomi Ogata, Yutaro Negishi, Nao Koizumi, Hisashi Nagayama, Miki Kaneko, Ken Kiyono, Naomi Omi. Individually optimized estimation of energy expenditure in rescue workers using a tri-axial accelerometer and heart rate monitor. *Frontiers in Physiology*, 15, 1322881, 2024.

Homma T, Suzuki Y, Takahashi H. Skeletal muscle energy metabolism in relation to performance during intense constant-load intermittent dynamic knee-extension exercise. Journal of international exercise science, 3(3), 71-81, 2024.

Hotoge S, Abe M, Monma T, Ozawa S, Takeda F. Health problems of company employees with cancer in Japan: a cross-sectional study. *Cureus*, 17(3), e81502, 2025.

Hotoge S, Monma T, Sawamura S, Yoshida G, Fujita E, Miyazawa T, Ebine N, Matsukura K, Takeda S, Matamura M, Yamane M, Ando K, Omi N, Sagayama H, *Takeda F. Differences in mental health, psychosocial factors, and its relationships in Japanese collegiate athletes before and during the first and second years of the COVID-19 pandemic. *The bulletin of Faculty of Health and Sport Sciences, University of Tsukuba*, 47, 9-17, 2024.

Hou Y, Monma T, Kataoka C, Takeda F.Dietary knowledge, attitudes, and behaviors related to obesity and highly underweight among urban Chinese high school students: a cross-sectional study. *International Journal of Public Health*, 69, 1606840, 2024.

Kajiki M, Katagiri A, Matsutake R, Lai YF, Hashimoto H, Nishiyasu T, Fujii N. Ingesting carbonated water post-exercise in the heat transiently ameliorates hypotension and enhances mood state. *Experimental Physiology*, 109(10), 1683-1697, 2024.

Kakutani Y, Ono M, Sasahara I, Omi N. Adequacy of usual intake of Japanese college athletes in various sports clubs. *Nutrition and Health*, 2601060241273553, 2024.

Kaneko T, Yoshioka M, Kawahara F, Nishitani N, Mori S, Park J, Kosaki K, Maeda S. Effect of plant- and animal-based meals on serum nitric oxide and peroxynitrite levels

after high-intensity eccentric exercise: A randomized crossover study. Advances in exercise and sport physiology, 29(3), 37-47, 2024.

Kaneko T, Yoshioka M, Kawahara F, Nishitani N, Mori S, Park J, Tarumi T, *Kosaki K, Maeda S. Effects of plant- and animal-based-protein meals for a day on serum nitric oxide and peroxynitrite levels in healthy young men. *Endocrine Journal*, 71(2), 119-127, 2024.

Kasahara J, Ozaki H, Matsubayashi T, Takahashi H, Nakayama R.Semantic segmentation for individual thigh skeletal muscles of athletes on magnetic resonance images. *Radiological Physics and Technology*, 18(2), 496-504, 2025.

Katagiri A, Fujii N, Dobashi K, Lai YF, Tsuji B, Nishiyasu T. Effects of sodium bicarbonate ingestion on ventilatory and cerebrovascular responses in resting heated humans. *American Journal of Physiology - Regulatory, Integrative and Comparative Physiology*, 327(4), R400-R409, 2024.

Katagiri A, Kawai S, Nishiyasu T, Fujii N. Ice Slurry Mitigates Hyperventilation and Cerebral Hypoperfusion, and May Enhance Endurance Performance in the Heat. *Medicine & Science in Sports & Exercise*, 57(7), 1488-1500, 2025.

Khatun S, Ogawa M, Uchizawa A, Hoshi D, Tamai S, Momma R, Kondo E, Watanabe K, Sagayama H. Glycated hemoglobin (HbA1c) is independently associated with the bioelectrical impedance phase angle in junior sumo wrestlers: A pilot study. *Physiological Reports*, 12(9), e16045, 2024.

Kim HK, Sagayama H, Yoshida T, Oishi K, Nakayama Y, Kimura M, Ono R, Yamada Y; Kyoto-Kameoka Study Group. Predictors of Water Turnover in Older Adults: A Doubly Labeled Water- and Triaxial Accelerometer-Based Study. *Journal of Nutrition*, 154(6), 1750-1757, 2024.

Kim J, Mizushima R, Morimoto M, Fujita Y, Shibuichi S, Kato M, Gosho M, Nakata Y. Effectiveness of a multicomponent intervention to promote physical activity among Japanese remote workers: a pilot open-label randomized controlled trial. *Journal of Occupational Health*, 66(1), uiae052, 2024.

Kitahara A, Tamai S, Sagayama H, Nomura S, Kagawa R, Suzuki H, Tsurushima H, Watanabe K. Exercise intensity at RPE13 in female Kendo practitioners: A pilot study exploring the detection of mental fortitude. *Sports Psychiatry*, 3(2), 57–61, 2024.

Kondo E, Saito M, Uchizawa A, Tamai S, Watanabe K, Sagayama H. Nutritional and Training Strategies for Actual Competition in World-Class Japanese Female Wrestler: A Case Report. *Journal of Nutritional Science and Vitaminology*, 70(1), 72-75, 2024.

Kosaki K, Mori S, Kon K, Kawamura T, Maeda S. Brachial arterial adaptations in college baseball players: a difference between pitchers and fielders. *Journal of Science and Medicine in Sport*, 28(4), 331-336, 2024.

Lee BJ, Flood TR, Russell SL, McCormick JJ, Fujii N, Kenny GP. Impacts of age, type 2 diabetes, and hypertension on circulating neutrophil gelatinase-associated lipocalin and kidney injury molecule-1 after prolonged work in the heat in men. *European Journal of Applied Physiology*, 124(10), 2923-2939, 2024.

Lee BJ, Flood TR, Russell SL, McCormick JJ, King KE, Fujii N, Amano T, Notley S, Kenny GP. Intestinal epithelial injury and inflammation after physical work in temperate and hot environments in older men with hypertension or type 2 diabetes. *Experimental Physiology*, 2025.

Lee J, Nagata K, Seol J, Park I, Tokuyama K, Yanagisawa M, Okura T. Multi-task exercise increases delta power in non-rapid eye movement sleep among older female adults: A randomized crossover trial. *Neuroimage*, 310, 121105, 2025.

Lei TH, Wei X, Wang F, Chen J, Goulding R, Cotter J, Lee JKW, Tan B, Amano T, Fujimoto T, Fujii N, Kondo N, Mündel T. The effect of hypohydration before and different rehydration strategies after severe intensity exercise on post-exercise hypotension in men. *European Journal of Applied Physiology*, 125(7), 1971-1982, 2025.

Lim N, Tsunoda K, Nagata K, Asano Y, Seol J, Jindo T, Tsuji T, Okura T. Developing a battery of physical performance tests to predict functional disability in Japanese older adults: A longitudinal study from the Kasama study. *Geriatrics & Gerontology International*, 24(12), 1343-1349, 2024.

Lu X, Goulding RP, Mündel T, Schlader ZJ, Cotter JD, Koga S, Fujii N, Wang IL, Liu Z, Li HY, Wang H, Zheng H, Kondo N, Gu CY, Lei TH, Wang F. Interactive effects of exercise intensity and recovery posture on postexercise hypotension. *American Journal of Physiology - Regulatory Integrative and Comparative Physiology*, 326(6), R567-R577, 2024.

Matsui M, Kosaki K, Kawamatsu N, Nozaki Y, Machino-Otsuka T, Nakata Y, Maeda S, Ishizu T. Sedentary behavior and physical activity on exercise capacity in adult patients with congenital heart disease. *International Journal of Cardiology Congenital Heart Disease*, 19, 100569, 2025.

Matsutake R, Fujimoto T, Ichinose M, Watanabe K, Fujii N, Nishiyasu T. The blood flow and vascular responses in dynamically exercising skeletal muscles evoked by combination of cold stimulation and voluntary apnea in humans. *European Journal of Applied Physiology*, 125(4), 1179-1190, 2024.

McCormick JJ, Goulet N, King KE, Fujii N, Amano T, Kenny GP. The effect of high-intensity exercise in temperate and hot ambient conditions on autophagy and the cellular stress response in young and older females. *The American Journal of Physiology - Regulatory, Integrative and Comparative Physiology*, 328(1), R90-R101, 2024.

McCormick JJ, King KE, Goulet N, Carrillo AE, Fujii N, Amano T, Boulay P, Kenny GP. The effect of an exercise- and passive-induced heat stress on autophagy in young and older males. *The American Journal of Physiology - Regulatory, Integrative and Comparative Physiology*, 328(3), R289-R299, 2025.

McGarr GW, Li-Maloney C, King KE, Janetos KT, Fujii N, Amano T, Kenny GP. Modulation of cutaneous vasodilation by reactive oxygen species during local and whole body heating in young and older adults. *The American Journal of Physiology - Regulatory, Integrative and Comparative Physiology*, 327(6), R543-R552, 2024.

Minamikawa Y, Nakayama SF, Zhang S, Lai Y, Monma T, Takeda F. Association between the existence of neonatal congenital anomalies and maternal postpartum depression up to 6 months after delivery: The Japan Environment and Children's Study. *Journal of Affective Disorders*, 374, 598-605, 2025.

Mitsuhashi R, Mizushima R, Natsui H, Machida S, Nakata Y. Comparison of factors associated with the occurrence of menstruation-related symptoms in Japanese women without exercise habits and female soccer players: a cross-sectional study. *BMC Womens Health*, 25(1), 139, 2025.

Monma T, Matsui T, Koyama S, Ueno H, Kagesawa J, Oba C, Nakamura K, Takagi H, Takeda F. Prevalence and associated factors of physical complaints among Japanese esports players: a cross-sectional study. *Cureus*, 16(8), e66496, 2024.

Monma T, Yamashita K, Yoshida G, Fujita E, Miyazawa T, Ebine N, Matsukura K, Takeda S, Matamura M, Yamane M, Ando K, Omi N, Sagayama H, Takeda F. Prevalence of Poor Sleep Quality and its Association with Lifestyle Habits, Competition-Based Activities, and Psychological Distress in Japanese Student-Athletes during the COVID-19 Pandemic. *Sleep Science*, 17(01), e26-e36, 2024.

Mori S, Kosaki K, Matsui M, Tanahashi K, Sugaya T, Iwazu Y, Kuro-o M, Saito C, Yamagata K, Maeda S. Estimated proximal tubule fluid phosphate concentration and renal tubular damage biomarkers in early stages of chronic kidney disease. *Journal of Renal Nutrition*, 35(1), 81-89, 2025.

Moyen NE, Barnes MJ, Perry BG, Fujii N, Amano T, Kondo N, Mündel T. Nicotine exacerbates exertional heat strain in trained men: a randomized, placebo-controlled, double-blind study. *The Journal of Applied Physiology (1985)*, 137(2), 421-428, 2024.

Nagata K, Shibuya K, Fujii Y, Seol J, Jindo T, Okura T.Cross-sectional study of the optimal types of physical exercise for cognitive function in older Japanese adults. *Geriatrics & Gerontology International*, 24(11), 1173-1180, 2024.

Ogawa M, Uchizawa A, Tamai S, Momma R, Hoshi D, Kondo E, Sagayama H, Watanabe K. Evaluation of Energy Balance Estimated From Total Energy Expenditure and Body Composition Changes in Junior Sumo Wrestlers: An Observational Study Over Six Months. *Cureus*, 16(5), e61158, 2024.

Muratomi K, Tarumi T, Furuhashi Y, Ushirooka N, Hasegawa A, Sugawara J, Tanigawa S, Takahashi H, Maemura H. Effectiveness index of mechanical energy utilisation in

male 400-m sprinters and the relation between muscle cross-sectional area of the trunk and the lower limb. *Scandinavian Journal of Medicine & Science in Sports*, 35(2), e70023, 2025.

Oharazawa A, Maimaituxun G, Watanabe K, Nishiyasu T, Fujii N. Metabolome analyses of skin dialysate: Insights into skin interstitial fluid biomarkers. *Journal of Dermatological Science*, 114(3), 141-147, 2024.

Otsuka J, Okamoto Y, Enoki Y, Maejima D, Fujii N, Kenny GP, Mündel T, Cotter JD, Amano T. Effects of ingesting beverages containing glycerol and sodium with isomaltulose or sucrose on fluid retention in young adults: a single-blind, randomized crossover trial. *Applied Physiology Nutrition and Metabolism*, 49(5), 667-679, 2024.

Ozawa S, Monma T, Tsuchida M, Kikuchi A, *Takeda F. Health problems related to presenteeism among Japanese employees. *Journal of Occupational and Environmental Medicine*, 66(1), e1-e7, 2024.

Rikako Yoshitake, Hitomi Ogata, *Naomi Omi. Blood Glucose Levels during Decathlon Competition: An Observational Study in Timing of Intake and Competing Time. *Metabolites*, 14, 47, 2024.

Rowland SN, O'Donnell E, James LJ, Da Boit M, Fujii N, Arnold JT, Lloyd AB, Eglin CM, Shepherd AI, Bailey SJ. Nitrate ingestion blunts the increase in blood pressure during cool air exposure: a double-blind, placebo-controlled, randomized, crossover trial. *The Journal of Applied Physiology (1985)*, 136(6), 1364-1375, 2024.

Sagayama H, Toguchi M, Yasukata J, Tomiga-Takae R, Kose Y, Ikenaga M, Komiyama T, Ichikawa M, Lakicevic N, Higaki Y, Tanaka H, Nunome H. Effect of 1-Week Weight Loss While Maintaining Total Body Water on Jump Performance. *Translational Sports Medicine*, 6458445, 2024.

Sagayama H, Yamasaki S, Uchizawa A, Ahagon Y, Shimasaki T. Trends in body mass between finalist teams in the Japanese collegiate rugby union championship: a 15-year analysis. Frontier in Sports and Active Living, 7, 1496093, 2025.

Shi Y, Sasaki Y, Ishimura K, Mizuno S, Nakata Y. Exploring Determinants of Successful Weight Loss with the Use of a Smartphone Healthcare Application: Secondary Analysis of a Randomized Clinical Trial. *Nutrients*, 16(13), 2108, 2024.

Shimamura Y, Takemura R, Iwanami K, Yamamoto D, Sagayama H, Iwayama K. Comparison of energy requirement estimation using activity record or accelerometer with doubly labeled water method in collegiate male sprinters. *Clinical Nutrition ESPEN*, 61, 295-301, 2024.

Shoji T, Kogure K, Toda N, Hakoshima M, Katsuyama H, Yanai H, Tokunaga S, Tateoka K, Tsuji T, Okura T. Association between comorbidities associated with diabetes and higher-level functional status in older patients with type 2 diabetes mellitus: a cross sectional study. *European Geriatric Medicine*, 15(4), 1101-1110, 2024.

Sofue T, Matsuzawa R, Nishiwaki H, Tsuchida Y, Kosaki K, Hoshino J, Narita I, Yamagata Y.Exercise instruction during haemodialysis treatment after changes to the insurance regime: a nationwide questionnaire survey in Japan. *Scientific Reports*, 14(1), 9171, 2024.

Tanabe Y, Kondo E, Sagayama H, Shimizu K, Yasumatsu M, Nakamura D, Fujii N, Takahashi H.Impact of curcumin supplementation on exercise performance and muscle damage after a soccer match: a double-blind placebo-controlled cross-over study. *European Journal of Applied Physiology*, 124(7), 2161-2171, 2024.

Tateoka K, Tsuji T, Shoji T, Tokunaga S, *Okura T. The relationship between acceleration in sit-to-stand and falls in community-dwelling older adults: cross-sectional study. *The Journal of Physical Therapy Science*, 36(2), 74-80, 2024.

Tomita Y, Tagawa K, Nishiyasu T, Fujii N. Alternate local skin cooling and heating ameliorates impaired forearm skin vasodilation function mediated by prolonged sitting. *Microvascular Research*, 159, 104795, 2025.

Tsuchida M, Monma T, Ozawa S, Kikuchi A, Takeda F. Lifestyle habit change related to presenteeism change among Japanese employees. *AIMS Public Health*, 11(3), 729-746, 2024.

Tsuji K, Sasai H, Kiyohara K, Nakata Y, Nishiwaki H, Ohta T, Ochi E, Takano T, Tatematsu N, Matsuoka YJ. Japan's cancer survivorship guidelines for exercise and physical activity. *Japanese Journal of Clinical Oncology*, 55(1), 12-20, 2024.

Tsuyuki T, Asai T, Kurosaki E, Nakamura A, Kishi K, Takeda F. Challenges faced by family caregivers of individuals living with dementia in Japan during the COVID-19 pandemic. *Nursing Reports*, 14(4), 3907-3918, 2024.

Uchizawa A, Osumi H, Zhang S, Yajima K, Funayama A, Kondo E, Suzuki Y, Tanaka Y, Park I, Enomoto Y, Omi N, Tokuyama K, Sagayama H. Energy expenditure and slowwave sleep in runners: Focusing on reproductive function, chronic training, and sex. *iScience*, 28(2), 111717, 2025.

Wada A, Kim J, Kanamori S, Yoshimoto T, Tsukinoki R, Kagi N, Umishio W, Asaoka R, Shiomitsu T, Kawamata K, Yoshioka N, Yoshiba K, Gosho M, Nakata Y, Kai Y. Multicomponent occupational lifestyle intervention to improve physical activity, musculoskeletal health, and work environment among Japanese teleworkers (TELEWORK study): protocol for a cluster randomized controlled trial. *Journal of Occupational Health*, 67(1), uiaf014, 2025.

Wan J, Kim J, Tsujimoto T, Mizushima R, Shi Y, Kiyohara K, Nakata Y. Effectiveness and Components of Health Behavior Interventions on Increasing Physical Activity Among Healthy Young and Middle-Aged Adults: A Systematic Review with Meta-Analyses. *Behavioral Sciences*, 14(12), 1224, 2024.

Wan J, Wakaba K, Onoue T, Tsushita K, Nakata Y. Factors associated with acquiring exercise habits through health guidance for metabolic syndrome among middle-aged Japanese workers: A machine learning approach. *Preventive Medicine Reports*, 48, 102915, 2024.

Wang H, Schlader ZJ, Lei TH, Mündel T, Amano T, Fujii N, Nishiyasu T, Cotter J, Kondo N. The effect of seasonal heat acclimatization on cool-seeking behaviour during passive heat stress in young adults. *Experimental Physiology*, 110(7), 992-1004, 2024.

Wang H, Schlader ZJ, Lei TH, Mündel T, Amano T, Fujii N, Nishiyasu T, Kondo N. The effect of biological sex on cool seeking behavior during passive heat stress in young adults. *European Journal of Applied Physiology*, 125(6), 1577-1589, 2025.

Watanabe M, Hikigara Y, Aoyama T, Wakabayashi H, Hanawa S, Omi N, Tanaka S, Lubans DR. Associations among motor competence, health-related fitness, and physical activity in children: A comparison of gold standard and field-based measures. *Journal of Sciences*, 42(17), 1644-1650, 2024.

Wong WW, Speakman JR, Ainslie PN, Anderson LJ, Arab L, Baddou I, Bedu-Addo K, Blaak EE, Blanc S, Bonomi AG, Bouten CV, Bovet P, Buchowski MS, Butte NF, Camps SG, Casper R, Close GL, Colbert LH, Cooper JA, Das SK, Davies PS, Eaton S, Ekelund U, Hambly C, El Hamdouchi A, Entringer S, Fudge BW, Gillingham M, Goris AH, Gurven M, Hoos MB, Hu S, Joosen A, Katzmarzyk PT, Kempen KP, Kimura M, Kraus WE, Kushner RF, Larsson CL, Morehen JC, Morton JP, Neuhouser ML, Nicklas TA, Ojiambo RM, Pietilainen KH, Pitsiladis YP, Plasqui G, Prentice RL, Rabinovich R, Racette SB, Raichen DA, Redman L, Ravussin E, Reilly JJ, Roberts S, Scuitt AJ, Sjödin AM, Stice E, Urlacher SS, Valenti G, van Etten LM, Van Mil EA, Verbunt JA, Wells JC, Wilson G, Yoshida T, Zhang X, Loechl CU, Luke A, Murphy-Alford AJ, Pontzer H, Sagayama H, Rood JC, Schoeller DA, Westerterp KR, Yamada Y; IAEA DLW Database Consortium. Decline in Isotope Dilution Space Ratio Above Age 60 Could Affect Energy Estimates Using the Doubly Labeled Water Method. *Journal of Nutrition*, 154(12), 3824-3831, 2024.

Yoshiko A, Shiozawa K, Niwa S, Takahashi H, Koike T, Watanabe K, Katayama K, Akima H. Skeletal muscle oxidative capacity related to intramyocellular lipid in young but not in older individuals. *Applied Physiology, Nutrition, and Metabolism*, 50, 45666, 2025.

Yoshioka M, Kosaki K, Kaneko T, Kawahara F, Nishitani N, Mori S, Park J, Kuro-O M, Maeda S. Impact of Plant and Animal Protein-Based Meals on Serum Fibroblast Growth Factor-23 Levels in Healthy Young Men: A Randomized Crossover Trial. *Journal of Nutritional Science and Vitaminology*, 70(3), 237-247, 2024.

Yoshitake R, Yamagami A, Obayashi T, Ogata H, Omi N. Measurement of Energy Expenditure Using a Triaxial Accelerometer and Estimation of Energy Intake from Dietary Records During Decathlon Competition Days. American Journal of Sports Science, 12(3), 28-36, 2024.

Zhai X, Sawada SS, Kurosawa S, Koriyama S, Dimitroff SA, Sato S, Oguma Y, Nakata Y, Maruo K, Miyachi M, Gando Y, Oka K, Lee DC. Cardiorespiratory fitness and body mass index on metabolic syndrome in middle-aged Japanese adults under national health guidance cross-sectional study. *BMC Public Health*, 24(1), 2050, 2024.

Zhang S, Sado N, Fujii N. Adjustment of segmental rotations to achieve both racket speed and accuracy at various impact heights during a two-handed backhand stroke. *Sports biomechanics*, 1-16, 2024.

+ 14 research articles

Books

6 books

Awards

11 awards

D. Computational Sport Sciences Divison

Research Articles

Araki K, Gifari MW, Hassan M, Suzuki K. Pneumatic Relaxation Oscillator with Passive Components for Continuous Toes Movement. *Proc. of 2024 46th Annual International Conference of the IEEE Engineering in Medicine and Biology Society (EMBC)*, 1-4, 2024.

Chen Y, Paez-Granados D, Hassan M, Suzuki K. Torso-Based Control Interface for Standing Mobility-Assistive Devices. *IEEE/ASME Transactions on Mechatronics*, 1-12, 2024.

Endo K, Kadone H, Hassan M, Hirokawa M, Suzuki K. Wearable Vibration Device for Supporting Postural Stability based on Proprioceptive Stimulation. *Proc. of 2024 46th Annual International Conference of the IEEE Engineering in Medicine and Biology Society (EMBC)*, 1-4, 2024.

Fuji W, Xie C, Kitahara I. A Pseudo Optical-Axis-Matching Projector-Camera System by Using Intermediate Viewpoint Image Generation. *Proceedings of International Workshop on Frontiers of Computer Vision (IW-FCV2025)*, 15, 2025.

Galindo-Leon S, Eriks-Hoogland I, Suzuki K, Paez-Granados D. Validation of the estimated Effect of Ankle Foot Orthoses on Spinal Cord Injury Gait Using Subject-Adjusted Musculoskeletal Models. *Proc. of 2024 46th Annual International Conference of the IEEE Engineering in Medicine and Biology Society (EMBC)*, 1-7, 2024.

Gifari MW, Machino-Ohtsuka T, Machino T, Hassan M, Suzuki K. On the feasibility of a robotic probe manipulator for echocardiography in the prone position. *Frontier in Robotics and AI*, 11, 1474077, 2024.

Kano K, Xie C, Kitahara I. Multi-View Images Acquisition for Digital Content Creation of Cultural Heritage. *Proceedings of International Workshop on Frontiers of Computer Vision (IW-FCV2025)*, 2025.

Koizumi K, Hassa M, Hirokawa M, Suzuki K. Passive Add-On Mechanism for Electric Wheelchairs to Support Step Climbing Using Rider Motion. *IEEE Robotics and Automation Letters*, 9(4), 3355-3362. 2024.

Kennard M, Hassan M, Shimizu Y, Suzuki K. Max Well-Being: a modular platform for the gamification of rehabilitation. *Frontier in Robotics and AI*, 11, 1382157, 2024.

Kondo Y, Bando K, Suzuki I, Miyazaki Y, Nishida D, Hara T, Kadone H, Suzuki K. Videobased Detection of Freezing of Gait in Daily Clinical Practice in Patients with Parkinsonism. *IEEE Transactions on Neural Systems and Rehabilitation Engineering*, 32, 2250-2260, 2024.

Xie C, Fujiwara M, Shishido H, Kitahara I. Table Tennis Stroke Recognition Based on Player Motions. 2024 IEEE 13th Global Conference on Consumer Electronics (GCCE), 324-328, 2024.

Li X, Matsuda A. Modeling of Porous Hyperelastic Materials Containing Compressible Voids. *Proceedings of the IUTAM Symposium on Nonlinear Dynamics for Design of Mechanical Systems Across Different Length/Time Scales*, 312-320, 2025.

Matsuda A. Application of anisotropic hyperelastic model considering distributed fibers to artificial sports materials. *Proceedings of XIII European Conference on Constitutive Models for Rubbers (ECCMR 2024)*, 2024.

Matsuda A, Nagao K, Mashito H. Contact analysis of trail running shoe lugs and sandy surfaces using finite element method. *Engineering of Sport 15 - Proceedings from the 15th International Conference on the Engineering of Sport (ISEA 2024)*, 2024.

Miyajima Y, Xie C, Kitahara I. Video generation method unconsciously gaze-guiding for a passenger on autonomous vehicle with controlling color and resolution. *Proceedings of 15th International Conference on Applied Human Factors and Ergonomics (AHFE 2024)*, 9-18, 2024.

Miyamoto T, Mikhailov A, Hassan M, Puentes S, Hiraga T, Soya H, Suzuki K. Robotic exoskeleton with mechanically implemented kinematic synergy for quadrupedal gait of rats. *IEEE Robotics and Automation Letters*, 10(4), 3620-3627.

Nakajima Y, Hirokawa M, Hassan M, Suzuki K. Augmenting the Perceptual Experience of Being Faced Using Gaze Modeling during Online Video Viewing. *Proc. of 2024 IEEE*

International Conference on Systems, Man, and Cybernetics (SMC), 4219-4224, 2024.

Noguchi T, Hirokawa M, Doki S, Suzuki K. Computational Modeling of Mental Health Checkup with Response-Based Characterization Using a Smart Mirror. *Proc. of 2024 IEEE International Conference on Systems, Man, and Cybernetics (SMC)*, 2549-2554, 2024.

Ochiai H, Inoue S, Masuda G, Amagasa S, Sugishita T, Ochiai T, Yanagisawa N, Nakata Y, Imai M. Randomized controlled trial on the efficacy of forest walking compared to urban walking in enhancing mucosal immunity. *Scientific Reports*, 15(1), 3272, 2025.

Pedrazzini EF, Torrendell SP, Kadone H, Hassan M, Suzuki K. An EMG-Modulated Asymmetric Arm Bike for Stroke Rehabilitation. *Proc. of 2024 46th Annual International Conference of the IEEE Engineering in Medicine and Biology Society (EMBC)*, 1-4, 2024.

Pragyan S, Chun X, Yuichi Y, Itaru K. RayEmb: Arbitrary Landmark Detection in X-Ray Images Using Ray Embedding Subspace. *Proceedings of the Asian Conference on Computer Vision*, 665-681, 2024.

QU T, Matsuda A. Structure-based modeling of artificial leather used in sports with non-symmetric fiber distribution. *Bulletin of the JSME Mechanical Engineering Journal*, 12, 1, 2024.

Sawada S, Kim S, Hirokawa M, Suzuki, K. MirrorCampus: A Synchronous Hybrid Learning Environment That Supports Spatial Localization of Learners for Facilitating Discussion-Oriented Behaviors. *Multimodal Technologies and Interaction*, 8(4), 31, 2024.

Sheresta P, Xie C, Yoshii Y, Kitahara I. 2D-3D Registration Method for X-Ray Image Using 3D Reconstruction Based on Deep Neural Network. *IIEEJ Transactions on Image Electronics and Visual Computing*, 12(2), 60-67, 2024.

Shimazu A, Xie C, Tanigawa S, Kitahara I. A Human Pose Estimation Method from Pseudo-Captured Two-Viewpoints Video. *Proceedings of 12th International Conference on Sport Sciences Research and Technology Support (icSPORTS2024)*, 148-154, 2024.

Suzuki S, Imaoka N, Ando T, Uchida M, Suzuki K. The effect of empathy on remote social

connections via paired robots. PLoS One, 20(1), e0316240, 2025.

Takahashi H, Suzuki K, Nishino T, Shibao Y, Noguchi H, Kanamori A, Yoshioka T, Kikuchi N, Nozawa D, Mishima H, Koda M, Yamazaki M. Safety and feasibility of inhospital autonomous transportation using a driverless mobility for patients with musculoskeletal disorders: preliminary clinical study to achieve mobility as a service in medical care. *BMC Musculoskeletal Disorders*, 25(1), 352, 2024.

Takizawa M, Kabashina H, Matsuda A. Electrical insulation performance of flameretardant electrical cables with thermoplastic and thermosetting materials for nuclear power plants. *Journal of Physics: Conference Series*, 2885, 012018, 2024.

Tian D, Yamagiwa S, Wada K. Heuristic Compression Method for CNN Model Applying Quantization to a Combination of Structured and Unstructured Pruning Techniques. *IEEE Access*, 12, 66680-66689, 2024.

Torrendell SP, Kadone H, Hassan M, Chen Y, Miura K, Suzuki K. A Neck Orthosis With Multi-Directional Variable Stiffness for Persons With Dropped Head Syndrome. *IEEE Robotics and Automation Letters*, 9(7), 6224-6231, 2024.

Torrendell SP, Kadone H, Hassan M, Chen Y, Suzuki K. A Neck Orthosis with Multi-Directional Stiffness for Resistance Training. *Proc. of 2024 46th Annual International* Conference of the IEEE Engineering in Medicine and Biology Society (EMBC), 1-4, 2024.

Tomotaka H, Akihiro M. Nonlinear material modeling of human skeletal muscle with muscle contraction. *Proceedings of the IUTAM Symposium on Nonlinear Dynamics for Design of Mechanical Systems Across Different Length/Time Scales*, 335-342, 2025.

Wallace L, Hassan M, Shimizu Y, Kikuchi A, Suzuki K. Functional 3D-Printed Finger Prosthesis with Compliant Fingertips for Support of iADLs. *Proc. of 2024 IEEE International Conference on Systems, Man, and Cybernetics (SMC)*, 279-284, 2024.

Wangsuekul P, Hassan M, Suzuki K. Single Joint Orthosis With a Compact Magnetorheological Damper Module for Resistance Training. *Proc. of 2024 46th Annual International Conference of the IEEE Engineering in Medicine and Biology Society (EMBC)*, 1-4, 2024.

Xie C, Niisato Y, Shishido H, Kitahara I. Pitch and Stride Estimation Using Skeletal Data From Track and Field Video Analysis. *IEEE 13th Global Conference on Consumer Electronics (GCCE)*, 168-171, 2024.

Yamagishi S, Xie C, Shishido H, Kitahara I. A Player Position Tracking Method Based on a Wide-Area Pan-Tilt-Zoom Video. *Proceedings of 12th International Conference on Sport Sciences*, 46-53, 2024.

Shinichi Y, Taiki K. Universal Adaptive Stream-Based Entropy Coding. *IEEE Access*, 12, 98768-98786, 2024.

Yamamoto E, Hirokawa M, Nunez E, Hakuno Y, Sekine K, Miyahara S, Suzuki K, Minagawa Y. Neural and Physiological Correlates of Prosocial Behavior: Temporoparietal Junction Activity in 3-year-old Children. *Journal of Cognitive Neuroscience*, 36 (9), 1977–1994, 2024.

Yoshimura K, Tsuchida S, Asanuma N, Iwasaki S, Yamagiwa S. Comparative Evaluation of Super-Resolution Processed Image Quality of Lingual Mucosal Images by Generative Adversarial Network. *Journal of Hard Tissue Biology*, 33(4), 219-232, 2024.

Zhang L, Xie C, Kitahara I. A 3D Model Generation From a Single Snapshot in Outdoor Scene. *Proceedings of IEEE 13th Global Conference on Consumer Electronics (GCCE 2024)*, 1-5, 2024.

Zhang X, Chen Y, Hassan M, Suzuki K. Peer-to-Peer Ultra-Wideband Localization for Hands-Free Control of a Human-Guided Smart Stroller. *Sensors*, 24(15), 4828, 2024.

Zhang X, Kadone H, Konishi T, Chen Y, Hassan M, Suzuki K. Biosignal-based Control of a Robotic Gait Training Lifter. *Proc. of 2024 46th Annual International Conference of the IEEE Engineering in Medicine and Biology Society (EMBC)*, 1-4, 2024.

+10 research articles

Books

Matsuda A: Soft materials in sport, Routledge Handbook of Sports Technology and Engineering, Routledge International Handbooks, ISBN 9781032301426, 2025.

Awards

Kitahara I: icSPORTS2024, Best Student Paper Honorable Mention (Yamagishi S, Xie C, Shishido H, Kitahara I: A Player Position Tracking Method Based on a Wide-Area Pan-Tilt-Zoom Video), 2024.

Kitahara I: IEEE 13th Global Conference on Consumer Electronics (GCCE 2024), Presentation Award (Xie C, Fujiwara M, Shishido H, Kitahara I: Table Tennis Stroke Recognition Based on Player Motions), 2024.

+ 2 awards