

9. 研究成果

査読論文および著書

■ 査読論文 (2018年4月–2019年3月)

- Aartsen, M. G., M. Ackermann, J. Adams, J. A. Aguilar, M. Ahlers, M. Ahrens, I. Al Samarai, D. Altmann, K. Andeen, T. Anderson et al. (**H. Tajima**), Multimessenger observations of a flaring blazar coincident with high-energy neutrino IceCube-170922A. *Science*, **361(6398)**, 1378, Jul. 13, 2018 (10.1126/science.aat1378).
- Abdellaoui, G., S. Abe, J. H. Adams, A. Ahriche, D. Allard, L. Allen, G. Alonso, L. Anchordoqui, A. Anzalone, Y. Arai et al. (**Y. Itow**), EUSO-TA – First results from a ground-based EUSO telescope. *Astropart. Phys.*, **102**, 98–111, Nov. 2018 (10.1016/j.astropartphys.2018.05.007).
- Abdellaoui, G., S. Abe, J. H. Adams, A. Ahriche, D. Allard, L. Allen, G. Alonso, L. Anchordoqui, A. Anzalone, Y. Arai et al. (**Y. Itow**), First observations of speed of light tracks by a fluorescence detector looking down on the atmosphere. *J. Instrum.*, **13(5)**, P05023, May 2018 (10.1088/1748-0221/13/05/P05023).
- Abdollahi, S., M. Ackermann, M. Ajello, W. B. Atwood, L. Baldini, J. Ballet, G. Barbiellini, D. Bastieri, J. Becerra Gonzalez, R. Bellazzini et al. (**H. Tajima**), A gamma-ray determination of the Universe's star formation history. *Science*, **362(6418)**, 1031–1034, Nov. 11, 2018 (10.1126/science.aat8123).
- Abe, K., C. Bronner, Y. Haga, Y. Hayato, M. Ikeda, K. Iyog, J. Kameda, Y. Kato, Y. Kishimoto, Ll. Marti et al. (**Y. Itow**, **G. Mitsuka**, **M. Murase**, **F. Muto**, **T. Suzuki**), Atmospheric neutrino oscillation analysis with external constraints in Super-Kamiokande I-IV. *Phys. Rev. D*, **97(7)**, 72001, Apr. 3, 2018 (10.1103/PhysRevD.97.072001).
- Abe, K., S. H. Ahn, H. Aihara, A. Aimi, R. Akutsu, C. Andreopoulos, I. Anghel, L. H. V. Anthony, M. Antonova, Y. Ashida et al. (**Y. Itow**) Physics potentials with the second Hyper-Kamiokande detector in Korea. *Prog. Theor. Exp. Phys.*, **2018(6)**, 063C01, Jun. 20, 2018 (10.1093/ptep/pty044).
- Abe, K., K. Hiraide, K. Ichimura, Y. Kishimoto, K. Kobayashi, M. Kobayashi, S. Moriyama, M. Nakahata, T. Norita, H. Gawa et al. (**Y. Itow**, **K. Kanzawa**, **R. Kegasa**, **K. Masuda**, **H. Takiya**), Improved search for two-neutrino double electron capture on ^{124}Xe and ^{126}Xe using particle identification in XMASS-I. *Prog. Theor. Exp. Phys.*, **2018(5)**, 053D03, May 30, 2018 (10.1093/ptep/pty053).
- Abe, K., K. Hiraide, K. Ichimura, Y. Kishimoto, K. Kobayashi, M. Kobayashi, S. Moriyama, M. Nakahata, H. Ogawa, K. Sato et al. (**Y. Itow**, **K. Kanzawa**, **K. Masuda**), Search for dark matter in the form of hidden photons and axion-like particles in the XMASS detector. *Phys. Lett. B*, **787**, 153–158, Dec. 10, 2018 (10.1016/j.physletb.2018.10.050).
- Abe, K., K. Hiraide, K. Ichimura, Y. Kishimoto, K. Kobayashi, M. Kobayashi, S. Moriyama, M. Nakahata, T. Norita, H. Ogawa et al. (**Y. Itow**, **K. Kanzawa**, **R. Kegasa**, **K. Masuda**, **H. Takiya**), Direct dark matter search by annual modulation with 2.7 years of XMASS-I data. *Phys. Rev. D*, **97(10)**, 102006, May 21, 2018 (10.1103/PhysRevD.97.102006).
- Abe, K., C. Bronner, Y. Hayato, M. Ikeda, K. Iyogi, J. Kameda, Y. Kato, Y. Kishimoto, Ll. Marti, M. Miura et al. (**Y. Itow**, **M. Murase**, **F. Muto**), Search for Neutrinos in Super-Kamiokande associated with the GW170817 neutron-star merger. *Astrophys. J. Lett.*, **857(1)**, L4, Apr. 9, 2018 (0.3847/2041-8213/aabaca).
- Abe, K., K. Hiraide, K. Ichimura, Y. Kishimoto, K. Kobayashi, M. Kobayashi, S. Moriyama, M. Nakahata, T. Norita, H. Ogawa et al. (**Y. Itow**, **K. Kanzawa**, **R. Kegasa**, **K. Masuda**, **H. Takiya**), A direct dark matter search in XMASS-I. *Phys. Lett. B*, **789**, 45–53, Feb. 10, 2019 (10.1016/j.physletb.2018.10.070).
- Abe, K., K. Hiraide, K. Ichimura, Y. Kishimoto, K. Kobayashi, M. Kobayashi, S. Moriyama, M. Nakahata, H. Ogawa, K. Sato et al. (**Y. Itow**, **K. Kanzawa**, **K. Masuda**), A measurement of the scintillation decay time constant of nuclear recoils in liquid xenon with the XMASS-I detector. *J. Instrum.*, **13**, P12032, Dec. 20, 2018 (10.1088/1748-0221/13/12/P12032).
- Abe, K., K. Hiraide, K. Ichimura, Y. Kishimoto, K. Kobayashi, M. Kobayashi, S. Moriyama, M. Nakahata, T. Norita, H. Ogawa, K. Sato et al. (**Y. Itow**, **K. Kanzawa**, **R. Kegasa**, **K. Masuda**, **H. Takiya**), Development of low

- radioactivity photomultiplier tubes for the XMASS-I detector. *Nucl. Instrum. Methods Phys. Res. Sect. A-Accel. Spectrom. Dect. Assoc. Equip.*, in press (10.1016/j.nima.2018.12.083).
- Abeyssekara, A. U., A. Archer, W. Benbow, R. Bird, R. Brose, M. Buchovecky, J. H. Buckley, V. Bugaev, A. J. Chromey, M. P. Connolly et al. (**H. Tajima**), VERITAS and *Fermi*-LAT Observations of TeV Gamma-Ray Sources Discovered by HAWC in the 2HWC Catalog. *Astrophys. J.*, **866(1)**, 24, Oct. 10, 2018 (10.3847/1538-4357/aade4e).
- Ackermann, M., W. B. Atwood, L. Baldini, J. Ballet, G. Barbiellini, D. Bastieri, R. Bellazzini, B. Berenji, E. Bissaldi, R. D. Blandford et al. (**H. Tajima**), Search for Gamma-Ray Emission from Local Primordial Black Holes with the *Fermi* Large Area Telescope. *Astrophys. J.*, **857(1)**, 49, Apr. 10, 2018 (10.3847/1538-4357/aaac7b).
- Ackermann, M., M. Ajello, L. Baldini, J. Ballet, G. Barbiellini, D. Bastieri, R. Bellazzini, E. Bissaldi, R. D. Blandford, E. D. Bloom et al. (**H. Tajima**), The Search for Spatial Extension in High-latitude Sources Detected by the *Fermi* Large Area Telescope. *Astrophys. J. Suppl. Ser.*, **237(2)**, 32, Aug. 7., 2018 (10.3847/1538-4365/aacdf7).
- Ackermann, M., M. Ajello, L. Baldini, J. Ballet, G. Barbiellini, D. Bastieri, R. Bellazzini, E. Bissaldi, R. D. Blandford, R. Bonino et al. (**H. Tajima**), The unresolved gamma-ray sky through its angular power spectrum. *Phys. Rev. Lett.* **121(24)**, 241101, Dec. 12, 2018 (10.1103/PhysRevLett.121.241101).
- Adriani, O., E. Berti, L. Bonechi, M. Bongi, R. D'Alessandro, S. Detti, M. Haguenaue, **Y. Itow**, K. Kasahara, **Y. Makino**, **K. Masuda** et al. (**Y. Muraki**, **K. Ohashi**, **K. Sato**, **M. Shinoda**, **M. Ueno**, **Q. D. Zhou**), Measurement of inclusive forward neutron production cross section in proton-proton collisions at $\sqrt{s}=13$ TeV with the LHCf Arm2 detector. *J. High Energy Phys.*, **2018(11)**, 73, Nov. 12, 2018 (10.1007/JHEP11(2018)073).
- Aharonian, F., H. Akamatsu, **F. Akimoto**, S. W. Allen, L. Angelini, M. Audard, H. Awaki, M. Axelsson, A. Bamba, M. W. Bautz et al. (**H. Tajima**, **K. Yamaoka**), Atmospheric gas dynamics in the Perseus cluster observed with Hitomi. *Publ. Astron. Soc. Japan*, **70(2)**, 9, Apr. 11, 2018 (10.1093/pasj/psx138).
- Aharonian, F., H. Akamatsu, **F. Akimoto**, S. W. Allen, L. Angelini, M. Audard, H. Awaki, M. Axelsson, A. Bamba, M. W. Bautz et al. (**H. Tajima**, **K. Yamaoka**), Measurements of resonant scattering in the Perseus cluster core with Hitomi SXS. *Publ. Astron. Soc. Japan*, **70(2)**, 10, Apr. 11, 2018 (10.1093/pasj/psx127).
- Aharonian, F., H. Akamatsu, **F. Akimoto**, S. W. Allen, L. Angelini, M. Audard, H. Awaki, M. Axelsson, A. Bamba, M. W. Bautz et al. (**H. Tajima**, **K. Yamaoka**), Temperature structure in the Perseus cluster core observed with Hitomi. *Publ. Astron. Soc. Japan*, **70(2)**, 11, Apr. 11, 2018 (10.1093/pasj/psy004).
- Aharonian, F., H. Akamatsu, **F. Akimoto**, S. W. Allen, L. Angelini, M. Audard, H. Awaki, M. Axelsson, A. Bamba, M. W. Bautz et al. (**H. Tajima**, **K. Yamaoka**), Atomic data and spectral modeling constraints from high-resolution X-ray observations of the Perseus cluster with Hitomi. *Publ. Astron. Soc. Japan*, **70(2)**, 12, Apr. 11, 2018 (10.1093/pasj/psx156).
- Aharonian, F., H. Akamatsu, **F. Akimoto**, S. W. Allen, L. Angelini, M. Audard, H. Awaki, M. Axelsson, A. Bamba, M. W. Bautz et al. (**H. Tajima**), Hitomi observation of radio galaxy NGC 1275: The first X-ray microcalorimeter spectroscopy of Fe-K α line emission from an Active Galactic Nucleus. *Publ. Astron. Soc. Japan*, **70(2)**, 13, Apr. 11, 2018 (10.1093/pasj/psx147).
- Aharonian, F., H. Akamatsu, **F. Akimoto**, S. W. Allen, L. Angelini, M. Audard, H. Awaki, M. Axelsson, A. Bamba, M. W. Bautz, et al. (**H. Tajima**), Search for thermal X-ray features from the Crab nebula with Hitomi Soft X-ray Spectrometer. *Publ. Astron. Soc. Japan*, **70(2)**, 14, Apr. 11, 2018 (10.1093/pasj/psx072).
- Aharonian, F., H. Akamatsu, **F. Akimoto**, S. W. Allen, L. Angelini, M. Audard, H. Awaki, M. Axelsson, A. Bamba, M. W. Bautz et al. (**H. Tajima**, **K. Yamaoka**), Hitomi X-ray studies of Giant Radio Pulses from the Crab pulsar. *Publ. Astron. Soc. Japan*, **70(2)**, 15, Apr. 11, 2018 (10.1093/pasj/psx083).
- Aharonian, F., H. Akamatsu, **F. Akimoto**, S. W. Allen, L. Angelini, M. Audard, H. Awaki, M. Axelsson, A. Bamba, M. W. Bautz et al. (**H. Tajima**, **K. Yamaoka**), Hitomi observations of the LMC SNR N 132 D: Highly redshifted

- X-ray emission from iron ejecta. *Publ. Astron. Soc. Japan*, **70(2)**, 16, Apr. 11, 2018 (10.1093/pasj/psx151).
- Aharonian, F., H. Akamatsu, **F. Akimoto**, S. W. Allen, L. Angelini, M. Audard, H. Awaki, M. Axelsson, A. Bamba, M. W. Bautz et al. (**H. Tajima, K. Yamaoka**), Glimpse of the highly obscured HMXB IGR J16318-4848 with Hitomi. *Publ. Astron. Soc. Japan*, **70(2)**, 17, Apr. 11, 2018 (10.1093/pasj/psx154).
- Aharonian, F., H. Akamatsu, **F. Akimoto**, S. W. Allen, L. Angelini, M. Audard, H. Awaki, M. Axelsson, A. Bamba, M. W. Bautz et al. (**H. Tajima, K. Yamaoka**), Hitomi X-ray observation of the pulsar wind nebula G21.5–0.9. *Publ. Astron. Soc. Jpn*, **70(3)**, 38, Apr. 3, 2018 (10.1093/pasj/psy027).
- Aharonian, F., H. Akamatsu, **F. Akimoto**, S. W. Allen, L. Angelini, M. Audard, H. Awaki, M. Axelsson, A. Bamba, M. W. Bautz et al. (**H. Tajima, K. Yamaoka**), Detection of polarized gamma-ray emission from the Crab nebula with the Hitomi Soft Gamma-ray Detector. *Publ. Astron. Soc. Japan*, **70(6)**, 113, Nov. 9, 2018 (10.1093/pasj/psy118).
- Ahnen, M. L., S. Ansoldi, L. A. Antonelli, C. Arcaro, D. Baack, A. Babić, B. Banerjee, P. Bangale, U. Barres de Almeida, J. A. Barrio et al. (**H. Tajima**), MAGIC and Fermi-LAT gamma-ray results on unassociated HAWC sources. *Mon. Not. Roy. Astron. Soc.*, in press (10.1093/mnras/stz089).
- Ajello, M., A. Allafort, M. Axelsson, L. Baldini, G. Barbiellini, M. G. Baring, D. Bastieri, R. Bellazzini, B. Berenji, E. Bissaldi et al. (**H. Tajima**), Fermi-LAT Observations of LIGO/Virgo Event GW170817. *Agric. For. Meteorol.*, **861(2)**, 85, Jul. 10, 2018 (10.3847/1538-4357/aac515).
- Akiyoshi, H., M. Kadowaki, H. Nakamura, T. Sugita, T. Hirooka, Y. Harada, and **A. Mizuno**, Analysis of the ozonereduction event over the southern tip of South America in November 2009. *J. Geophys. Res. Atmos.*, **123(22)**, 12523–12542, Nov. 27, 2018 (10.1029/2017JD028096).
- Angelopoulos, V., P. Cruce, A. Drozdov, E. W. Grimes, N. Hatzigeorgiu, D. A. King, D. Larson, J. W. Lewis, J. M. McTiernan, D. A. Roberts et al. (**T. Hori, Y. Miyoshi, M. Teramoto, T. F. Chang, S. Matsuda, T. Segawa, M. Shoji, N. Umemura, M. Nose, A. Shinbori**), The Space Physics Environment Data Analysis System (SPEDAS). *Space Sci. Rev.*, **215(1)**, 9, Feb. 2019 (10.1007/s11214-018-0576-4).
- Asamura, K., Y. Kazama, S. Yokota, S. Kasahara, and **Y. Miyoshi**, Low-energy particle experiments—ion mass analyzer (LEPi) onboard the ERG (Arase) satellite. *Earth Planets Space*, **70**, 70, May 3, 2018 (10.1186/s40623-018-0846-0).
- Asano, A.**, D. Berge, G. Bonanno, M. Bryan, B. Gebhardt, A. Grillo, **N. Hidaka**, P. Kachru J. Lapington, S. Leach et al. (**Y. Nakamura, A. Okumura, H. Tajima, N. Yamane**), Evaluation of silicon photomultipliers for dual-mirror Small-Sized Telescopes of Cherenkov Telescope Array. *Nucl. Instrum. Methods Phys. Res. Sect. A-Accel. Spectrom. Dect. Assoc. Equip.*, **912**, 177–181, Dec. 21, 2018 (10.1016/j.nima.2017.11.017).
- Bachelet, E., V. Bozza, C. Han, A. Udalski, I. A. Bond, J.-P. Beaulieu, R. A. Street, H.-I. Kim, D. M. Bramich, A. Cassan et al. (**F. Abe, Y. Itow, Y. Matsubara, Y. Muraki**), First assessment of the binary lens OGLE-2015-BLG-0232. *Astrophys. J.*, **870(1)**, 11, Jan. 1, 2019 (10.3847/1538-4357/aaedb9).
- Bamba, Y., **S. Inoue**, and **K. Hayashi**, The Role of a Tiny Brightening in a Huge Geoeffective Solar Eruption Leading to the St. Patrick’s Day Storm. *Astrophys. J.*, **874(1)**, 73, Mar. 26, 2019 (10.3847/1538-4357/ab06ff).
- Bennett, D. P., A. Udalski, I. A. Bond, D. Suzuki, Y.-H. Ryu, **F. Abe**, R. K. Barry, A. Bhattacharya, M. Donachie, A. Fukui et al. (**Y. Matsubara, Y. Muraki**), A planetary microlensing event with an unusually red source star: MOA-2011-BLG-291. *Astron. J.*, **156(3)**, 113, Sep. 2018 (10.3847/1538-3881/aad59c).
- Berngardt, O. I., J. M. Ruohoniemi, **N. Nishitani**, S. G. Shepherd, W. A. Bristow, and E. S. Miller, Attenuation of decameter wavelength sky noise during x-ray solar flares in 2013–2017 based on the observations of midlatitude HF radars. *J. Atmos. Sol.-Terr. Phys.*, **173**, 1–13, Aug. 2018 (10.1016/j.jastp.2018.03.022).
- Bi, R., X. Chen, J. Zhang, **J. Ishizaka**, Y. Zhuang, H. Jin, H. Zhang, and M. Zhao, Water-mass control on phytoplankton spatiotemporal variations in the northeastern East China Sea and the western Tsushima Strait revealed by lipid

- biomarkers. *J. Geophys. Res. Biogeosci.*, **123(4)**, 1318–1332, Apr. 2018 (10.1002/2017JG004340).
- Büntgen, U., L. Wacker, J. D. Galván, S. Arnold, D. Arseneault, M. Baillie, J. Beer, M. Bernabei, N. Bleicher, G. Boswijk et al. (**F. Miyake**), Tree rings reveal globally coherent signature of cosmogenic radiocarbon events in 774 and 993 CE. *Nat. Commun.*, **9(1)**, 3605, Sep. 6, 2018 (10.1038/s41467-018-06036-0).
- Calchi Novati, S., D. Suzuki, A. Udalski, A. Gould, Y. Shvartzvald, V. Bozza, D. P. Bennett, C. Beichman, G. Bryden, S. Carey et al. (**F. Abe, Y. Asakura, Y. Itow, Y. Matsubara, Y. Muraki**), Spitzer microlensing parallax for OGLE-2016-BLG-1067: A sub-jupiter orbiting an M dwarf in the disk. *Astron. J.*, **157(3)**, 121, Mar. 2019, (10.3847/1538-3881/ab0106).
- Camuera, J., G. Jiménez-Moreno, M. J. Ramos-Román, A. García-Alix, J. L. Toney, S. R. Anderson, F. Jiménez-Espejo, D. S. Kaufman, J. Bright, C. Webster et al. (**M. Yamame**), Orbital-scale environmental and climatic changes recorded in a new ~200,000-year-long multiproxy sedimentary record from Padul, southern Iberian Peninsula. *Quat. Sci. Rev.*, **198**, 91–114, Oct. 15, 2018 (10.1016/j.quascirev.2018.08.014).
- Chakraborty, S., J. M. Ruohoniemi, J. B. M. Baker, and **N. Nishitani**, Characterization of short-wave fadeout seen in daytime SuperDARN ground scatter observations. *Radio Sci.*, **53(4)**, 472–484, Apr. 2018 (10.1002/2017RS006488).
- Chang, T.-F.**, C.-Z. Cheng, S. W.-Y. Tam, C.-Y. Chiang, **Y. Miyoshi, T. Hori**, T. Mitani, T. Takashima, A. Matsuoka, **M. Teramoto**, and I. Shinohara, ERG observations of drift echoes during a unique period of the satellite mission. *Earth Planets Space*, **71**, 18, Feb. 19, 2019 (10.1186/s40623-019-0999-5).
- Chauvin, M., H.-G. Florén, M. Friis, M. Jackson, T. Kamae, J. Kataoka, T. Kawano, M. Kiss, V. Mikhalev, T. Mizuno et al. (**H. Tajima**), Accretion geometry of the black-hole binary Cygnus X-1 from X-ray polarimetry. *Nat. Astron.*, **2(8)**, 652–655, Aug. 2018 (10.1038/s41550-018-0489-x).
- Chauvin, M., H.-G. Florén, M. Friis, M. Jackson, T. Kamae, J. Kataoka, T. Kawano, M. Kiss, V. Mikhalev, T. Mizuno et al. (**H. Tajima**), The *PoGO*⁺ view on Crab off-pulse hard X-ray polarization. *Mon. Not. Roy. Astron. Soc.*, **477(1)**, L45–L49, Jun. 2018 (10.1093/mnrasl/sly027).
- Chung, S.-J., A. Gould, J. Skowron, I. A. Bond, W. Zhu, M. D. Albrow, Y. K. Jung, C. Han, K.-U. Hwang, Y.-H. Ryu et al. (**F. Abe, Y. Itow, Y. Matsubara, Y. Muraki**), Spitzer microlensing of MOA-2016-BLG-231L: A counter-rotating brown dwarf binary in the galactic disk. *Astrophys. J.*, **871(2)**, 179, Feb. 1, 2019 (10.3847/1538-4357/aaf861).
- Deng, Y., S. Kagami, S. Ogawa, K. Kawana, **T. Nakayama**, R. Kubodera, K. Adachi, T. Hussein, Y. Miyazaki, and **M. Mochida**, Hygroscopicity of organic aerosols and their contributions to CCN concentrations over a midlatitude forest in Japan. *J. Geophys. Res. Atmos.*, **123(17)**, 9703–9723, Sep. 16, 2018 (10.1029/2017JD027292).
- Enami, M.**, J.-I. Kimura, M. Tsuboi, Y. Kouketsu, T. Nagaya, and **S. Huang**, Coexisting different types of zoned garnet in kyanite-quartz eclogites from the Sanbagawa metamorphic belt: Evidence of deformation-induced lithological mixing during prograde metamorphism. *Isl. Arc.*, **28(1)**, e12274, Jan. 2019 (10.1111/iar.12274).
- Engebretson, M., J. Posch, D. Braun, W. Li, Q. Ma, A. Kellerman, C.-L. Huang, S. Kanekal, C. Kletzing, J. Wygant et al. (**K. Shiokawa**), EMIC wave events during the four GEM QARBM challenge intervals. *J. Geophys. Res. Space Physics*, **123(8)**, 6394–6423, Aug. 16, 2018 (10.1029/2018JA025505).
- Exner, W., D. Heyner, L. Liuzzo, U. Motschmann, **D. Shiota, K. Kusano**, and **T. Shibayama**, Coronal mass ejection hits mercury: A.I.K.E.F. hybrid-code results compared to MESSENGER data. *Planet Space Sci.*, **153**, 89–99, Apr. 2018 (10.1016/j.pss.2017.12.016).
- Ezoe, Y., T. Kimura, S. Kasahara, **Y. Miyoshi**, A. Yamazaki, T. Ohashi, K. Mitsuda, and M. Fujimoto, X-ray observations of Jupiter and beyond. *Proceedings of the International Symposium on Planetary Science 2012*, 59–68, Jan. 2019 (10.5047/pisps.059).
- Ezoe, Y., **Y. Miyoshi**, S. Kasahara, T. Kimura, K. Ishikawa, M. Fujimoto, K. Mitsuda, H. Sahara, N. Isobe, H. Nakajima et al., Ultralightweight x-ray telescope missions: ORBIS and GEO-X. *J. Astron. Telesc. Instrum. Syst.*, **4(4)**, 046001, Oct. 4, 2018 (10.1117/1.JATIS.4.4.046001).

- Ezoe, Y., **Y. Miyoshi**, S. Kasahara, T. Kimura, K. Ishikawa, M. Fujimoto, K. Mitsuda, H. Sahara, N. Isobe, H. Nakajima et al., Small satellites with MEMS x-ray telescopes for x-ray astronomy and solar system exploration. *Proc. SPIE*, **10699**, 106990V, Aug. 20, 2018 (10.1117/12.2311422).
- Figueiredo, C. A. O. B., H. Takahashi, C. M. Wrasse, **Y. Otsuka**, **K. Shiokawa**, and D. Barros, Investigation of nighttime MSTIDs observed by optical thermosphere imagers at low latitudes: Morphology, propagation direction, and wind filtering. *J. Geophys. Res. Space Physics*, **123(9)**, 7843–7857, Sep. 19, 2018 (10.1029/2018JA025438).
- Fujiki, K.**, K. Shibasaki, S. Yashiro, **M. Tokumaru**, **K. Iwai**, and **S. Masuda**, Comparative Study of Microwave Polar Brightening, Coronal Holes, and Solar Wind over the Solar Poles. *Sol. Phys.* **294(3)**, 30, Mar. 2019 (10.1007/s11207-019-1418-6).
- Fukazawa, K., M. Ueda, Y. Inadomi, M. Aoyagi, **T. Umeda**, and K. Inoue, Performance Analysis of CPU and DRAM Power Constrained Systems with Magnetohydrodynamic Simulation Code. *Proceedings of 2018 IEEE 20th International Conference on High Performance Computing and Communications; IEEE 16th International Conference on Smart City; IEEE 4th International Conference on Data Science and Systems (HPCC/SmartCity/DSS)*, 626–631, Jan. 25, 2019 (10.1109/HPCC/SmartCity/DSS.2018.00113).
- Fukizawa, M., T. Sakanoi, **Y. Miyoshi**, K. Hosokawa, **K. Shiokawa**, Y. Katoh, Y. Kazama, A. Kumamoto, F. Tsuchiya, Y. Miyashita et al. (**S. Oyama**, **S. Kurita**, **R. Fujii**), Electrostatic electroncyclotron harmonic waves as a candidate to cause pulsating auroras. *Geophys. Res. Lett.*, **45(23)**, 12661–12668, Dec. 16, 2018 (10.1029/2018GL080145).
- Fukushima, A., **H. Kanamori**, and J. Matsumoto, Regionality of long-term trends and interannual variation of seasonal precipitation over India. *Prog. Earth. Planet. Sci.*, **6**, 20, Feb. 15, 2019 (10.1186/s40645-019-0255-4).
- Gomes, H. R., Q. Xu, **J. Ishizaka**, E. J. Carpenter, P. L. Yager, and J. I. Goes, The influence of Riverine Nutrients in Niche Partitioning of phytoplankton Communities-A contrast between the Amazon River Plume and the Changjiang (Yangtze) River Diluted Water of the East China Sea. *Front. Mar. Sci.*, **5**, 343, Sep. 25, 2018 (10.3389/fmars.2018.00343).
- Hagino, K., K. Nakazawa, G. Sato, M. Kokubun, T. Enoto, Y. Fukazawa, K. Hayashi, J. Kataoka, J. Katsuta, S. B. Kobayashi et al. (**H. Tajima**, **K. Yamaoka**), In-orbit performance and calibration of the Hard X-ray Imager onboard Hitomi (ASTRO-H). *J. Astron. Telesc. Instrum. Syst.*, **4(2)**, 021409, Apr. 2018 (10.1117/1.JATIS.4.2.021409).
- Han, C., I. A. Bond, A. Gould, M. D. Albrow, S.-J. Chung, Y. K. Jung, K.-H. Hwang, C.-U. Lee, Y.-H. Ryu, I.-G. Shin et al. (**F. Abe**, **Y. Itow**, **Y. Matsubara**, **Y. Muraki**), MOA-2016-BLG-319Lb: microlensing planet subject to rare minor-image perturbation degeneracy in determining planet parameters. *Astron. J.*, **156(5)**, 226, Nov. 2018 (10.3847/1538-3881/aae38e).
- Han, C., Y. K. Jung, A. Udalski, I. Bond, V. Bozza, M. D. Albrow, S.-J. Chung, A. Gould, K.-H. Hwang, D. Kim et al. (**F. Abe**, **Y. Itow**, **Y. Matsubara**, **H. Munakata**, **Y. Muraki**), OGLE-2017-BLG-0039: microlensing event with light from a lens identified from mass measurement, *Astrophys. J.*, **867(2)**, 136, Nov. 10, 2018 (10.3847/1538-4357/aae536).
- Han, C., Y. Hirao, A. Udalski, C.-U. Lee, V. Bozza, A. Gould, **F. Abe**, R. Barry, I. A. Bond, D. P. Bennett et al. (**Y. Itow**, **Y. Matsubara**, **H. Munakata**, **Y. Muraki**), OGLE-2017-BLG-0482Lb: a microlensing super-Earth orbiting a low-mass host star. *Astron. J.*, **155(5)**, 211, May 2018 (10.3847/1538-3881/aabad2).
- Hariharan, B., A. Chandra, S. R. Dugad, S. K. Gupta, P. Jagadeesan, A. Jain, P. K. Mohanty, S. D. Morris, P. K. Nayak, P. S. Rakshe et al. (**Y. Muraki**), Measurement of the electrical properties of a thundercloud through muon Imaging by the GRAPES-3 experiment. *Phys. Rev. Lett.*, **122(10)**, 105101, Mar. 15, 2019 (10.1103/PhysRevLett.122.105101).
- Hayakawa, H., K. Iwahashi, **M. Fujiyama**, **T. Kawai**, S. Toriumi, H. Hotta, **H. Iijima**, **S. Imada**, H. Tamazawa, and K. Shibata, Sunspot drawings by Japanese official astronomers in 1749–1750. *Publ. Astron. Soc. Japan*, **70(4)**, 63, Aug. 2018 (10.1093/pasj/psy066).
- Hengjan, Y., N. Sae-Koo, T. Phichitrasilp, Y. Ohmori, **H. Fujinami**, and E. Hondo, Seasonal variation in the number of deaths in *Pteropus lylei* at Wat Pho Bang Khla temple, Thailand. *J. Vet. Med. Sci.*, **80(8)**, 1364–1367, Aug. 2018

(10.1292/jvms.17-0719).

- Hikishima, M., H. Kojima, Y. Katoh, Y. Kasahara, S. Kasahara, T. Mitani, N. Higashio, A. Matsuoka, **Y. Miyoshi**, K. Asamura, et al. (**S. Matsuda**), Data processing in Software-type wave-particle interaction analyzer on board the Arase satellite. *Earth Planets Space*, **70**, 80, May 12, 2018 (10.1186/s40623-018-0817-5).
- Hirai, A., F. Tsuchiya, T. Obara, Y. Kasaba, Y. Katoh, H. Misawa, **K. Shiokawa**, **Y. Miyoshi**, **S. Kurita**, S. Matsuda et al. (**M. Shoji**), Temporal and spatial correspondence of Pc1/EMIC waves and relativistic electronprecipitations observed withground-based multi-instruments on 27 March 2017. *Geophys. Res. Lett.*, **45(24)**, 13182–13191, Dec. 28, 2018 (10.1029/2018GL080126).
- Hisamochi, R., Y. Watanabe, M. Sano, T. Nakatsuka, **N. Kurita**, M. Matsuo-Ueda, H. Yamamoto, S. Tazuru, J. Sugiyama, B. Subiyanto et al, Cellulose oxygen isotopic composition of teak (*Tectona grandis*) collected from Java Island: a tool for dendrochronological and dendroclimatological analysis. *Dendrochronologia*, **52**, 80–86, Dec. 2018 (10.1016/j.dendro.2018.09.010).
- Honda, M. C., Y. Sasai, E. Siswanto, A. Kuwano-Yoshida, **H. Aiki**, and M. F. Cronin, Impact of cyclonic eddies and typhoons on biogeochemistry in the oligotrophic ocean based on biogeochemical/physical/meteorological time-series at station KEO. *Prog. Earth. Planet. Sci.*, **5**, 42, Aug. 20, 2018 (10.1186/s40645-018-0196-3).
- Hori, T.**, **N. Nishitani**, S. G. Shepherd, J. M. Ruohoniemi, M. Connors, **M. Teramoto**, S. Nakano, K. Seki, N. Takahashi, S. Kasahara et al. (**T.-F. Chang**, **Y. Miyoshi**), Substorm-associated ionospheric flow fluctuations during the 27 March 2017 magnetic storm: SuperDARN-Arase conjunction. *Geophys. Res. Lett.*, **45(18)**, 9441–9449, Sep. 28, 2018 (10.1029/2018GL079777).
- Hotta, H., **H. Iijima**, and **K. Kusano**, Weak influence of near-surface layer on solar deep convection zone revealed by comprehensive simulation from base to surface. *Sci. Adv.*, **5(1)**, eaau2307, Jan. 2, 2019 (10.1126/sciadv.aau2307).
- Huang, S.**, **M. Enami**, M. Tsuboi, and Y. Wakasugi, Geochemical interaction at lithologic boundary deduced from Tonaru epidote-amphibolite and surrounding schists of the Sanbagawa metamorphic belt. *Geochem. J.*, **52(6)**, 509–529, Dec. 2018 (10.2343/geochemj.2.0539).
- Hwang, K.-H., A. Udalski, I. A. Bond, M. D. Albrow, S.-J. Chung, A. Gould, C. Han, Y. K. Jung, Y.-H. Ryu, I.-G. Shin et al. (**F. Abe**, **Y. Asakura**, **Y. Itow**, **K. Masuda**, **Y. Matsubara**, **Y. Muraki**), OGLE-2015-BLG-1459L: the challenges of exo-moon microlensing. *Astron. J.*, **155(6)**, 259, Jun. 2018 (10.3847/1538-3881/aac2cb).
- Ieda, A.**, K. Kauristie, Y. Nishimura, Y. Miyashita, H. U. Frey, L. Juusola, D. Whiter, M. Nosé, M. O. Fillingim, F. Honary, N. C. Rogers, **Y. Miyoshi**, **T. Miura**, **T. Kawashima**, and **S. Machida**, Simultaneous observation of auroral substorm onset in Polar satellite global images and ground-based all-sky images. *Earth Planets Space*, **70**, 73, May 5, 2018 (10.1186/s40623-018-0843-3).
- Iijima, H.**, H. Hotta, and **S. Imada**, Semiconservative reduced speed of sound technique for low Mach number flows with large density variations. *Astron. Astrophys.*, **622**, A157, Feb. 13, 2019 (10.1051/0004-6361/201834031).
- Imada, S.**, and **M. Fujiyama**, Effect of magnetic field strength on solar differential rotation and meridional circulation. *Astrophys. J. Lett.*, **864(1)**, L5, Sep. 2018 (10.3847/2041-8213/aad904).
- Imajo, S.**, **M. Nosé**, A. Matsuoka, S. Kasahara, S. Yokota, **M. Teramoto**, K. Keika, T. Motoba, B. Anderson, R. Nomura et al. (**Y. Miyoshi**), Magnetosphere-ionosphereconnection of storm-time region-2field-aligned current and ring current: Arase and AMPERE observations. *J. Geophys. Res. Space Physics*, **123(11)**, 9545–9559, Nov. 29, 2018 (10.1029/2018JA025865).
- Inai, Y., S. Aoki, H. Honda, H. Furutani, **Y. Matsumi**, **M. Ouchi**, S. Sugawara, F. Hasebe, M. Uematsu, and M. Fujiwara, Balloon-borne tropospheric CO₂ observations over the equatorial eastern and western Pacific. *Atmos. Environ.*, **184**, 24–36, Jul. 2018 (10.1016/j.atmosenv.2018.04.016).
- Inoue, S.**, Y. Bamba, and **K. Kusano**, Onset mechanism of solar eruptions. *J. Atmos. Sol.-Terr. Phys.*, **180**, 3–8, Nov. 2018 (10.1016/j.jastp.2017.08.035).

- Inoue, S.**, D. Shiota, Y. Bamba, and **S.-H. Park**, Magnetohydrodynamic modeling of a solar eruption associated with an X9.3 flare observed in the active region 12673. *Astrophys. J.*, **867(1)**, 83, Nov. 2018 (10.3847/1538-4357/aae079).
- Ishi, D., K. Ishikawa, M. Numazawa, **Y. Miyoshi**, N. Terada, K. Mitsuda, T. Ohashi, and Y. Ezoe, Suzaku detection of enigmatic geocoronal solar wind charge exchange event associated with coronal mass ejection. *Publ. Astron. Soc. Japan*, **71(1)**, 23, Nov. 9, 2019 (10.1093/pasj/psy142).
- Ishikawa, K., Y. Ezoe, T. Ohashi, T. Kimura, and **Y. Miyoshi**, Optical loading study of X-ray imaging spectrometer for Jupiter exploration mission. *Proceedings of the International Symposium on Planetary Science 2012*, 66–78, Jan. 9, 2019 (10.5047/pisps.069).
- Ishikawa, N. F., Y. Itahashi, T. M. Blattmann, Y. Takano, N. O. Ogawa, **M. Yamane**, Y. Yokoyama, T. Nagata, M. Yoneda, N. Haghypour et al., Improved method for isolation and purification of underivatized amino acids for radiocarbon analysis. *Anal. Chem.*, **90(20)**, 12035–12041, Oct. 16, 2018 (10.1021/acs.analchem.8b02693).
- Ito, K., H. Yamada, M. Yamaguchi, T. Nakazawa, N. Nagahama, K. Shimizu, T. Ohigashi, **T. Shinoda**, and **K. Tsuboki**, Analysis and forecast using dropsonde data from the inner-core region of Tropical Cyclone Lan (2017) obtained during the first aircraft missions of T-PARCII. *SOLA*, **14**, 105–110, Jul. 29, 2018 (10.2151/sola.2018-018).
- Janardhan, P., **K. Fujiki**, M. Ingale, S. K. Bisoi, and D. Rout, Solar cycle 24: An unusual polar field reversal. *Astron. Astrophys.*, **618**, A148, Oct. 2018 (10.1051/0004-6361/201832981).
- Jull, A. J. T., I. Panyushkina, **F. Miyake**, **K. Masuda**, **T. Nakamura**, T. Mitsutani, T. E. Lange, R. J. Cruz, C. Baisan, R. Janovics et al., More rapid ^{14}C excursions in the tree-ring record: A record of different kind of solar activity at about 800 BC?. *Radiocarbon*, **60(4)**, 1237–1248, Aug. 2018 (10.1017/RDC.2018.53).
- Joshi, N. C., X. Zhu, B. Schmieder, G. Aulanier, M. Janvier, B. Joshi, T. Magara, R. Chandra, and **S. Inoue**, Generalisation of the Magnetic Field Configuration of typical and atypical Confined Flares. *Astrophys. J.*, **871(2)**, 165, Feb. 2019 (10.3847/1538-4357/aaf3b5).
- Jung, Y. K., C. Han, I. A. Bond, A. Udalski, A. Gould, M. D. Albrow, S.-J. Chung, K.-H. Hwang, C.-U. Lee, Y.-H. Ryu et al. (**F. Abe**, **Y. Itow**, **Y. Matsubara**, **Y. Muraki**), OGLE-2016-BLG-0156: Microlensing Event with Pronounced Microlens-parallax Effects Yielding a Precise Lens Mass Measurement. *Astrophys. J.*, **872(2)**, 175, Feb. 20, 2019 (10.3847/1538-4357/ab001f).
- Jung, W.**, **M. Murakami**, **T. Shinoda**, and **M. Kato**, Optimization of land surface parameters for weather simulations over arid and semi-arid regions. *SOLA*, **14**, 197–202, Dec. 22, 2018 (10.2151/sola.2018-035).
- Kachulis, C., K. Abe C. Bronner Y. Hayato, M. Ikeda, K. Iyogi, J. Kameda, Y. Kato, Y. Kishimoto, Ll. Marti et al. (**Y. Itow**, **M. Murase**, **F. Muto**), Search for boosted dark matter interacting with electrons in Super-Kamiokande. *Phys. Rev. Lett.*, **120(22)**, 221301, May 30, 2018 (10.1103/PhysRevLett.120.221301).
- Kadoya, T.**, and **H. Masunaga**, New observational metrics of convective self-aggregation: Methodology and a case study. *J. Meteorol. Soc. Japan*. **96(6)**, 535–548, Nov. 16, 2018 (10.2151/jmsj.2018-054).
- Kamiya, K.**, K. Seki, S. Saito, T. Amano, and **Y. Miyoshi**, Formation of butterfly pitch angledistributions of relativistic electrons in the outer radiation belt with a monochromatic Pc5 wave. *J. Geophys. Res. Space Physics*, **123(6)**, 4679–4691, Jun. 15, 2018 (10.1002/2017JA024764).
- Kanamori, H.**, T. Kumagai, **H. Fujinami**, **T. Hiyama**, and T. Yasunari, Effects of long- and short-term atmospheric water cycles on the water balance over the Maritime Continent. *J. Hydrometeorol.*, **19(9)**, 1413–1427, Sep. 2018 (10.1175/JHM-D-18-0052.1).
- Kaneko, T.**, and T. Yokoyama, Impact of dynamic state on the mass condensation rate of solar prominences. *Astrophys. J.*, **869(2)**, 136, Dec. 19, 2018 (10.3847/1538-4357/aaee6f).
- Kanno, Y.**, J. E. Walsh, M. R. Abdillah, J. Yamaguchi, and T. Iwasaki, Indicators and trends of polar cold airmass. *Environ. Res. Lett.*, **14(2)**, 025006, Feb. 11, 2019 (10.1088/1748-9326/aaf42b).
- Kasahara, S., S. Yokota, T. Mitani, K. Asamura, **M. Hirahara**, Y. Shibano, and T. Takashima, Medium-energy particle

- experiments-electron analyzer (MEP-e) for the exploration of energization and radiation in geospace (ERG) mission. *Earth Planets Space*, **70**, 69, May 2, 2018 (10.1186/s40623-018-0847-z).
- Kasahara Y., Y. Kasaba, H. Kojima, S. Yagitani, K. Ishisaka, A. Kumamoto, F. Tsuchiya, M. Ozaki, **S. Matsuda**, T. Imachi et al. (**Y. Miyoshi**, **M. Shoji**), The Plasma Wave Experiment (PWE) on board the Arase (ERG) satellite. *Earth Planets Space*, **70**, 86, May 21, 2018 (10.1186/s40623-017-0759-3).
- Kataoka, R., T. Nishiyama, Y. Tanaka, A. Kadokura, H. A. Uchida, Y. Ebihara, M. K. Ejiri, Y. Tomikawa, M. Tsutsumi, K. Sato, **Y. Miyoshi**, **K. Shiokawa**, **S. Kurita et al. (T. Hori)**, Transient ionization of the mesosphere during auroral breakup: Arase satellite and ground-based conjugate observations at Syowa Station. *Earth Planets Space*, **71(1)**, 9, Jan. 23, 2019 (10.1186/s40623-019-0989-7).
- Kato, T.**, **K. Suzuki**, M.-J. Jeon, and **M. Minami**, Pseudo-fixed dead time circuit for designing and implementation of JEOL-type X-ray counting systems. *Chem. Geol.*, **484**, 16–21, May 5, 2018 (10.1016/j.chemgeo.2017.12.030).
- Katsuta, N., Y. Miyata, T. Murakami, **Y. Mino**, S. Naito, K. Yasuda, S. Ochiai, O. Abe, A. Yasuda, M. Morimoto et al., Interannual changes in radiocesium concentrations in annually laminated tufa following the Fukushima Daiichi Nuclear Power Plant accident. *Appl. Geochem.*, **102**, 34–43, Mar. 2019 (10.1016/j.apgeochem.2019.01.002).
- Katsuta, N., H. Ikeda, K. Shibata, Y. Saito-Kokubu, T. Murakami, Y. Tani, M. Takano, **T. Nakamura**, A. Tanaka, S. Naito et al., Hydrological and climate changes in southeast Siberia over the last 33 kyr. *Glob. Planet. Change*, **164**, 11–26, May 2018 (10.1016/j.gloplacha.2018.02.012).
- Kazama, Y., H. Kojima, **Y. Miyoshi**, Y. Kasahara, H. Usui, B.-J. Wang, S.-Y. Wang, S. W. Y. Tam, **T.-F. Chang**, P. T. P. Ho et al. (**M. Shoji**, **M. Teramoto**), Density depletions associated with enhancements of electron cyclotron harmonic emissions: An ERG observation. *Geophys. Res. Lett.* **45(19)**, 10075–10083, Oct. 16, 2018 (10.1029/2018GL080117).
- Keika, K., S. Kasahara, S. Yokota, M. Hoshino, K. Seki, **M. Nosé**, T. Amano, **Y. Miyoshi**, and I. Shinohara, Ion energies dominating energy density in the inner magnetosphere: Spatial distributions and composition, observed by Arase/MEP-i. *Geophys. Res. Lett.*, **45(22)**, 12153–12162, Nov. 28, 2018 (10.1029/2018GL080047).
- Kim, H., J. Hwang, J. Park, Y. Miyashita, **K. Shiokawa**, I. R. Mann, T. Raita, and J. Lee, Large-scale ducting of Pc1 pulsations observed by Swarm satellites and multiple ground networks. *Geophys. Res. Lett.*, **45(23)**, 12703–12712, Dec. 16, 2018 (10.1029/2018GL080693).
- Kitamura, N., M. Kitahara, **M. Shoji**, **Y. Miyoshi**, H. Hasegawa, S. Nakamura, Y. Katoh, Y. Saito, S. Yokot, D. J. Gershman et al., Direct measurements of two-way wave-particle energy transfer in a collisionless space plasma. *Science*, **361(6406)**, 1000–1003, Sep. 7, 2018 (10.1126/science.aap8730).
- Kojima, H., K. P. Arunbabu, S. R. Dugad, S. K. Gupta, B. Hariharan, P. Jagadeesan, A. Jain, P. K. Mohanty, P. S. Rakshe, K. Ramesh et al. (**M. Tokumar**), Measurement of the radial diffusion coefficient of galactic cosmic rays near the Earth by the GRAPES-3 experiment. *Phys. Rev. D*, **98(2)**, 022004, Jul. 15, 2018 (10.1103/PhysRevD.98.022004).
- Kontogiannis, I., M. K. Georgoulis, **S.-H. Park**, and J. A. Guerra, Testing and improving a set of morphological predictors of flaring activity. *Sol. Phys.*, **293(6)**, 96, Jun. 2018 (10.1007/s11207-018-1317-2).
- Kotov, D. V., P. G. Richards, V. Truhlik, O. V. Bogomaz, M. O. Shulha, N. Maruyama, M. Hairston, **Y. Miyoshi**, Y. Kasahara, A. Kumamoto et al., Coincident observations by the Kharkiv IS radar and ionosonde, DMSP and Arase (ERG) satellites, and FLIP model simulations: Implications for the NRLMSISE-00 hydrogen density, plasmasphere, and ionosphere. *Geophys. Res. Lett.*, **45(16)**, 8062–8071, Aug. 28, 2018 (10.1029/2018GL079206).
- Kouketsu, Y., A. Miyake, Y. Igami, T. Taguchi, H. Kagi, and **M. Enami**, Drastic effect of shearing on graphite microtexture: attention and application to Earth science. *Prog. Earth. Planet. Sci.*, **6**, 23, Mar. 5, 2019 (10.1186/s40645-019-0271-4).
- Kubota, K., K. Shirai, N. Murakami-Sugihara, K. Seike, **M. Minami**, **T. Nakamura**, and K. Tanabe, Bomb-¹⁴C peak in the North Pacific recorded in long-lived bivalve shells (*Mercenaria stimpsoni*). *J. Geophys. Res. Oceans*, **123**, 2867–2881, Apr. 25, 2018 (10.1002/2017JC013678).
- Kumamoto, A., F. Tsuchiya, Y. Kasahara, Y. Kasaba, H. Kojima, S. Yagitani, K. Ishisaka, T. Imachi, M. Ozaki, **S. Matsuda** et

- al (**Y. Miyoshi**), High Frequency Analyzer (HFA) of Plasma Wave Experiment (PWE) onboard the Arase spacecraft. *Earth Planets Space*, **70**, 82, May 17, 2018 (10.1186/s40623-018-0854-0).
- Kunduri, B. S. R., **J. B. H. Baker**, J. M. Ruohoniemi, **N. Nishitani**, K. Oksavik, P. J. Erickson, A. J. Coster, S. G. Shepherd, W. A. Bristow, and E. S. Miller, A new empirical model of the subauroral polarization stream. *J. Geophys. Res. Space Physics*, **123(9)**, 7342–7357, Sep. 8, 2018 (10.1029/2018JA025690).
- Kurita, N.**, M. Horikawa, **H. Kanamori**, **H. Fujinami**, **T. Kumagai**, T. Kume, and T. Yasunari, Interpretation of El Niño–Southern Oscillation-related precipitation anomalies in north-western Borneo using isotopic tracers. *Hydrol. Process.*, **32(14)**, 2176–2186, Jul. 2018 (10.1002/hyp.13164).
- Kurita, S.**, **Y. Miyoshi**, J. B. Blake, and R. H. W. Friedel, Response of relativistic electron microbursts to the arrival of high speed solar wind streams and its relation to flux variation of trapped radiation belt electrons. *J. Geophys. Res. Space Physics*, **123(9)**, 7452–7461, Sep. 15, 2018 (10.1029/2018JA025675).
- Kurita, S.**, **Y. Miyoshi**, S. Kasahara, S. Yokota, Y. Kasahara, S. Matsuda, A. Kumamoto, A. Matsuoka, and I. Shinohara, Deformation of electron pitchangle distributions caused by upperband chorus observed by the Arase satellite. *Geophys. Res. Lett.*, **45(16)**, 7996–8004, Aug. 28, 2018 (10.1029/2018GL079104).
- Kurita, S.**, **Y. Miyoshi**, **K. Shiokawa**, N. Higashio, T. Mitani, T. Takashima, A. Matsuoka, I. Shinohara, C. A. Kletzing, J. B. Blake et al. (**S. Oyama**, **Y. Otsuka**), Rapid loss of relativistic electrons by EMIC waves in the outerradiation belt observed by Arase, Van Allen Probes, and the PWING groundstations. *Geophys. Res. Lett.*, **45(23)**, 12720–12729, Feb. 16, 2018 (10.1029/2018GL080262).
- Lakshmi Mallika, I., D. V. Ratnam, **Y. Ostuka**, G. Sivavaraprasad, and S. Raman, Implementation of hybrid ionospheric TEC forecasting algorithm using PCA-NN method. *IEEE J. Sel. Top. Appl. Earth Observ. Remote Sens.*, **12(1)**, 371–381, Jan. 2019 (10.1109/JSTARS.2018.2877445).
- Lee, E.-J., **S.-H. Park**, and Y.-J. Moon, Flare productivity of major flaring solar active regions: A time-series study of photospheric magnetic properties. *Sol. Phys.*, **293(12)**, 159, Dec. 2018 (10.1007/s11207-018-1381-7).
- Li, G., B. Ning, C. Wang, M. A. Abdu, **Y. Otsuka**, M. Yamamoto, J. Wu, and J. Chen, Storm-enhanced development of postsunset equatorial plasma bubbles around the meridian 120°E/60°W on 7–8 September 2017. *J. Geophys. Res. Space Physics*, **123(9)**, 6841–6860, Sep. 28, 2018 (10.1029/2018JA025871).
- Li, M. C. A., N. J. Rattenbury, I. A. Bond, T. Sumi, D. P. Bennett, N. Koshimoto, **F. Abe**, **Y. Asakura**, R. Barry, A. Bhattacharya et al. (**Y. Itow**, **K. Masuda**, **Y. Matsubara**, **Y. Muraki**), A study of the light travel time effect in short-period MOA eclipsing binaries via eclipse timing. *Mon. Not. Roy. Astron. Soc.*, **480(4)**, 4557–4577, Nov. 11, 2018 (10.1093/MNRAS/STY2104).
- Li, Z., K. Abe, C. Bronner, Y. Hayato, M. Ikeda, K. Iyogi, J. Kameda, Y. Kato, Y. Kishimoto, L. Marti et al. (**Y. Itow**, **M. Murase**, **F. Muto**), Measurement of the tau neutrino cross section in atmospheric neutrino oscillations with Super-Kamiokande. *Phys. Rev. D*, **98(5)**, 052006, Sep. 13, 2018 (10.1103/PhysRevD.98.052006).
- Ly, B.-T.**, **Y. Matsumi**, **T. Nakayama**, Y. Sakamoto, Y. Kajii, and T.-D. Nghiem, Characterizing PM2.5 in Hanoi with new high temporal resolution sensor. *Aerosol Air Qual. Res.*, **18(9)**, 2487–2497, Sep. 2018 (10.4209/aaqr.2017.10.0435).
- Lyons, L. R., B. Gallardo-Lacourt, Y. Zou, Y. Nishimura, P. Anderson, V. Angelopoulos, E. F. Donovan, J. M. Ruohoniemi, E. Mitchell, L. J. Paxton, and **N. Nishitani**, Driving of strong nightside reconnection and geomagnetic activity by polar cap flows: Application to CME shocks and possibly other situations. *J. Atmos. Sol.-Terr. Phys.*, **177**, 73–83, Oct. 2018 (10.1016/j.jastp.2017.09.013).
- Masunaga, H.**, and S. Bony, Radiative invigoration of tropical convection by preceding cirrus clouds. *J. Atmos. Sci.*, **75(4)**, 1327–1342, Apr. 2018 (10.1175/JAS-D-17-0355.1).
- Matsuda, S.**, Y. Kasahara, H. Kojima, Y. Kasaba, S. Yagitani, M. Ozaki, T. Imachi, K. Ishisaka, A. Kumamoto, F. Tsuchiya, M. Ota, **S. Kurita**, **Y. Miyoshi** et al., Onboard software of Plasma Wave Experiment aboard Arase: instrument management and signal processing of Waveform Capture/Onboard Frequency Analyzer. *Earth Planets Space*, **70**,

- 75, May 5, 2018 (10.1186/s40623-018-0838-0).
- Matsuda, S., Y. Kasahara, **Y. Miyoshi**, R. Nomura, **M. Shoji**, A. Matsuoka, Y. Kasaba, **S. Kurita**, **M. Teramoto**, and K. Ishisaka, Spatial distribution of fine-structured and unstructured EMIC waves observed by the Arase satellite. *Geophys. Res. Lett.*, **45(21)**, 11530–11538, Nov. 16, 2018 (10.1029/2018GL080109).
- Matsumoto, T.**, Thermal responses in a coronal loop maintained by wave heating mechanisms. *Mon. Not. Roy. Astron. Soc.*, **476(3)**, 3328–3335, May 21, 2018 (10.1093/mnras/sty490).
- Maúre, E. R., J. Ishizaka, H. Aiki, Y. Mino**, N. Yoshie, **J. I. Goes, H. R. Gomes**, and **H. Tomita**, One-dimensional turbulence-ecosystem model reveals the triggers of the spring bloom in mesoscale eddies. *J. Geophys. Res. Oceans*, **123(9)**, 6841–6860, Sep. 18, 2018 (10.1029/2018JC014089).
- McComas, D. J., E. R. Christian, N. A. Schwadron, N. Fox, J. Westlake, F. Allegrini, D. N. Baker, D. Biesecker, M. Bzowski, G. Clark et al. (**M. Tokumaru**), Interstellar Mapping and Acceleration Probe (IMAP): A New NASA Mission. *Space Sci. Rev.*, **214(8)**, 116, Dec. 2018 (10.1007/s11214-018-0550-1).
- Minami, M.**, and **K. Suzuki**, $^{87}\text{Sr}/^{86}\text{Sr}$ compositional linkage between geological and biological materials: A case study from the Toyota granite region of Japan. *Chem. Geol.*, **484**, 224–232, May 5, 2018 (10.1016/j.chemgeo.2018.03.013).
- Mitani, T., T. Takashima, S. Kasahara, W. Miyake, and **M. Hirahara**, High-energy electron experiments (HEP) aboard the ERG (Arase) satellite. *Earth Planets Space*, **70**, 77, May 9, 2018 (10.1186/s40623-018-0853-1).
- Miyake, F.**, K. Horiuchi, Y. Motizuki, Y. Nakai, K. Takahashi, **K. Masuda**, H. Motoyama, and H. Matsuzaki, ^{10}Be signature of the cosmic ray event in the 10th century CE in both hemispheres, as confirmed by quasi-annual ^{10}Be data from the Antarctic Dome Fuji ice core. *Geophys. Res. Lett.*, **46(1)**, 11–18, Jan. 16, 2019 (10.1029/2018GL080475).
- Miyashita, Y., and **A. Ieda**, Revisiting substorm events with preonset aurora. *Ann. Geophysicae*, **36(5)**, 1419–1438, Oct. 19, 2018 (10.5194/angeo-36-1419-2018).
- Miyashita, Y., V. Angelopoulos, **K. Fukui**, and **S. Machida**, A case study of magnetotail conditions at substorm and pseudosubstorm onsets. *Geophys. Res. Lett.*, **45(13)**, 6353–6361, Jul. 16, 2018 (10.1029/2018GL078589).
- Miyazaki, S., T. Sumi, D. P. Bennett, A. Gould, A. Udalski, I. A. Bond, N. Koshimoto, M. Nagakane, N. Rattenbury, **F. Abe** et al. (**Y. Itow, Y. Matsubara, Y. Muraki**), MOA-2015-BLG-337: A planetary system with a low-mass brown dwarf/planetary boundary host, or a brown dwarf binary. *Astron. J.*, **156(3)**, 136, Sep. 2018, (10.3847/1538-3881/aad5ee).
- Miyazaki, Y., Y. Yamashita, K. Kawana, E. Tachibana, S. Kagami, **M. Mochida**, K. Suzuki, and J. Nishioka, Chemical transfer of dissolved organic matter from surface seawater to sea spray water-soluble organic aerosol in the marine atmosphere. *Sci Rep.*, **8**, 14861, Oct. 5, 2018 (10.1038/s41598-018-32864-7).
- Miyoshi, Y., T. Hori, M., Shoji, M. Teramoto, T. F. Chang, T. Segawa, N. Umemura**, S. Matsuda, **S. Kurita**, K. Keika et al. (**N. Nishitani**), The ERG Science Center. *Earth Planets Space*, **70**, 96, Jun. 15, 2018 (10.1186/s40623-018-0867-8).
- Miyoshi, Y.**, I. Shinohara, T. Takashima, K. Asamura, N. Higashio, T. Mitani, S. Kasahara, S. Yokota, Y. Kazama, S.-Y. Wang et al. (**K. Shiokawa**), Geospace exploration project ERG. *Earth Planets Space*, **70**, 101, Jun. 26, 2018 (10.1186/s40623-018-0862-0).
- Montel, J.-M., **T. Kato, M. Enami**, A. Cocherie, F. Finger, M. Williams, and M. Jercinovic, Electron-microprobe dating of monazite: The story. *Chem. Geol.*, **484**, 4–15, May 5, 2018 (10.1016/j.chemgeo.2017.11.001).
- Moteki, N., T. Mori, H. Matsui, and **S. Ohata**, Observational constraint of in-cloud supersaturation for simulations of aerosol rainout in atmospheric models. *npj Climate and Atmospheric Science*, **2**, 6, Feb. 8, 2019 (10.1038/s41612-019-0063-y).
- Mróz, P., A. Udalski, D. P. Bennett, Y.-H. Ryu, T. Sumi, Y. Shvartzvald, J. Skowron, R. Poleski, P. Pietrukowicz, S. Kozłowski et al. (**F. Abe, Y. Itow, Y. Matsubara, Y. Muraki**), Two new free-floating or wide-orbit planets from microlensing. *Astron. Astrophys.*, **622**, 201, Feb. 21, 2018 (10.1051/0004-6361/201834557).
- Muhamad, J., K. Kusano, S. Inoue**, and Y. Bamba, A study of magnetic field characteristics of the flaring active region based on nonlinear force-free field extrapolation. *Astrophys. J.*, **863(2)**, 162, Aug. 20, 2018 (10.3847/1538-4357/aad181).
- Munakata, K., M. Kozai, P. Evenson, T. Kuwabara, C. Kato, **M. Tokumaru**, M. Rockenbach, A. Dal Lago,

- R. R. S. de Mendonca, C. R. Braga et al., Cosmic ray short burst observed with the Global Muon Detector Network (GMDN) on 2015 June 22. *Astrophys. J.*, **862(2)**, 170, Aug. 13, 2018 (10.3847/1538-4357/aacdfe).
- Muraki, Y.**, Application of a Coupled Harmonic Oscillator Model to Solar Activity and El Nino Phenomena. *Journal of Astronomy and Space Sciences*, **35**, 75–81, Jun. 15, 2018 (10.5140/JASS.2018.35.2.75).
- Murray, S. A., J. A. Guerra, P. Zucca, **S.-H. Park**, E. P. Carley, P. T. Gallagher, N. Vilmer, and V. Bothmer, Connecting Coronal Mass Ejections to their solar active region sources: Combining results from the HELCATS and FLARECAST projects. *Sol. Phys.*, **293(4)**, 60, Apr. 2018 (10.1007/s11207-018-1287-4).
- Nagai, A., C. Alispach, T. Berghöfer, G. Bonanno, V. Coco, D. della Volpe, A. Haungs, M. Heller, K. Henjes-Kunst, R. Mirzoyan et al. (**H. Tajima**), SENSE: A comparison of photon detection efficiency and optical crosstalk of various SiPM devices. *Nucl. Instrum. Methods Phys. Res. Sect. A-Accel. Spectrom. Dect. Assoc. Equip.*, **912**, 182–185, Dec. 21, 2018 (10.1016/j.nima.2017.11.018).
- Nakada, S., S. Kobayashi, M. Hayashi, **J. Ishizaka**, S. Akiyama, M. Fuchi, and M. Nakajima, High-resolution sea surface salinity maps in coastal seas based on geostationary ocean color images: quantitative analysis of river plume dynamics. *J. Oceanogr.*, **74(3)**, 287–304, Jun. 2018 (10.1007/s10872-017-0459-4).
- Nakagawa, Y., S. Nozawa, and **A. Shinbori**, Relationship between the low-latitude coronal hole area, solar wind velocity, and geomagnetic activity during solar cycles 23 and 24. *Earth Planets Space*, **71**, 24, Mar. 2019 (10.1186/s40623-019-1005-y).
- Nakazawa, K., G. Sato, M. Kokubun, T. Enoto, Y. Fukazawa, K. Hagino, K. Hayashi, J. Kataoka, J. Katsuta, S. B. Kobayashi et al. (**H. Tajima, K. Yamaoka**), Hard x-ray imager onboard Hitomi (ASTRO-H). *J. Astron. Telesc. Instrum. Syst.*, **4(2)**, 021410, Apr. 2018 (10.1117/1.JATIS.4.2.021410).
- Narayanan, V. L., **K. Shiokawa, Y. Otsuka**, and D. Neudegg, On the role of thermospheric winds and sporadic E layers in the formation and evolution of Electrified Medium-Scale Traveling Ionospheric Disturbances (EMSTIDs) in geomagnetic conjugate regions. *J. Atmos. Sol.-Terr. Phys.*, **123(8)**, 6957–6980, Aug. 25, 2018 (10.1029/2018JA025261).
- Nishi, K., K. Shiokawa**, and H. Spence, Magnetospheric source region of auroral finger-like structures observed by the RBSP-A satellite. *J. Geophys. Res. Space Physics*, **123(9)**, 7513–7522, Sep. 22, 2018 (10.1029/2018JA025480).
- Nishi, K., K. Shiokawa**, K.-H. Glassmeier, and J. Z. D. Mieth, Statistical study of phase relationship between magnetic and plasma pressures in the near-Earth nightside magnetosphere using the THEMIS-E satellite. *J. Geophys. Res. Space Physics*, **123(11)**, 9517–9531, Nov. 28, 2018 (10.1029/2018JA025846).
- Nishitani, N.**, J. M. Ruohoniemi, M. Lester, J. B. H. Baker, A. V. Koustov, S. G. Shepherd, G. Chisham, **T. Hori**, E. G. Thomas, R. A. Makarevich et al. (**T. Kikuchi**), Review of the accomplishments of mid-latitude Super Dual Auroral Radar Network (SuperDARN) HF Radars. *Prog. Earth. Planet. Sci.*, **6**, 27, Mar. 18, 2019 (10.1186/s40645-019-0270-5).
- Noguchi, M., T. Fujiki, M. Okuno, L. Gualtieri, V. Hatfield, B. Sarata, M. Torii, K. Wada, **T. Nakamura**, and D. West, Vegetation changes around Haven Lake, Adak Island, central Aleutians, Alaska, determined from pollen analysis. *Radiocarbon*, **60(5)**, 1483–1492, Nov. 19, 2018 (10.1017/RDC.2018.103).
- Nozawa, S., T. Kawabata**, K. Hosokawa, Y. Ogawa, T. Tsuda, **A. Mizuno, R. Fujii**, and C. Hall, A new five-wavelength photometer operated in Tromsø (69.6°N, 19.2°E). *Earth Planets Space*, **70(1)**, 193, Dec. 12, 2018 (10.1186/s40623-018-0962-x).
- Nosé, M., A. Matsuoka, S. Kasahara, S. Yokota, **M. Teramoto**, K. Keika, K. Yamamoto, R. Nomura, A. Fujimoto, N. Higashio et al. (**Y. Miyoshi**), Magnetic field dipolarization and its associated ion flux variations in the dawnside deep inner magnetosphere: Arase observations. *Geophys. Res. Lett.*, **45(16)**, 7942–7950, Aug. 28, 2018 (10.1029/2018GL078825).
- Nosé, M.**, A. Matsuoka, A. Kumamoto, Y. Kasahara, J. Goldstein, **M. Teramoto**, F. Tsuchiya, S. Matsuda, **M. Shoji, S. Imajo** et al. (**Y. Miyoshi**), Longitudinal structure of oxygen torus in the inner magnetosphere: Simultaneous observations by Arase and Van Allen Probe A. *Geophys. Res. Lett.*, **45(19)**, 10177–10184, Oct. 16, 2018 (10.1029/2018GL080122).

- Odaka, H., M. Asai, K. Hagino, T. Koi, G. Madejski, T. Mizuno, M. Ohno, S. Saito, T. Sato, D. H. Wright et al. (**H. Tajima, K. Yamaoka**), Modeling of proton-induced radioactivation background in hard X-ray telescopes: Geant4-based simulation and its demonstration by Hitomi's measurement in a low Earth orbit. *Nucl. Instrum. Methods Phys. Res. Sect. A-Accel. Spectrom. Dect. Assoc. Equip.*, **891**, 92–105, May 21, 2018 (10.1016/j.nima.2018.02.071).
- Ohno, M., Y. Fukazawa, T. Mizuno, H. Takahashi, Y. Tanaka, J. Katsuta, T. Kawano, S. Habata, C. Okada, N. Ohashi et al. (**H. Tajima, K. Yamaoka**), Event-selection technique for the multi-layer Si–CdTe Compton camera onboard Hitomi. *Nucl. Instrum. Methods Phys. Res. Sect. A-Accel. Spectrom. Dect. Assoc. Equip.*, in press (10.1016/j.nima.2018.09.114).
- Ohya, H., F. Tsuchiya, Y. Takishita, H. Shinagawa, K. Nozaki, and **K. Shiokawa**, Periodic oscillations in the Dregion ionosphere after the 2011 Tohoku earthquake using LF standardradio waves. *J. Geophys. Res. Space Physics*, **123(6)**, 5261–5270, Jun. 2018 (10.1029/2018JA025289). *Nucl. Instrum. Methods Phys. Res. Sect. A-Accel. Spectrom. Dect. Assoc. Equip.*, in press (10.1016/j.nima.2018.09.114).
- Ohyama, H., A. Mizuno**, F. Zamorano, T. Sugita, H. Akiyoshi, K. Noguchi, E. Wolfram, J. Salvador, and G. C. Benitez, Characteristics of atmosphericwave-induced laminae observed byozonesondes at the southern tip of South America. *J. Geophys. Res. Atmos.*, **123(21)**, 11811–11829, Nov. 16, 2018 (10.1029/2018JD028707).
- Oimatsu, S., K. Yamamoto, **M. Nosé**, A. Matsuoka, **M. Teramoto**, and **S. Imajo**, DC component of spacecraft-origin magnetic field noise at the Arase/MGF sensor: (2) Evaluation with Tsyganenko-Sitnov 04 model. *JAXA Research and Development Report*, **JAXA-RR-18-005E**, 29–34, Mar. 7, 2019 (10.20637/JAXA-RR-18-005E/0005).
- Oimatsu, S., **M. Nosé, M. Teramoto**, K. Yamamoto, A. Matsuoka, S. Kasahara, S. Yokota, K. Keika, G. Le, R. Nomura et al. (**Y. Miyoshi**), Drift-bounce resonance between Pc5 pulsations and ions at multiple energies in the nihtside magnetosphere: Arase and MMS observations. *Geophys. Res. Lett.*, **45(15)**, 7277–7286, Aug. 16, 2018 (10.1029/2018GL078961).
- Oka, M., J. Birn, M. Battaglia, C. C. Chaston, S. M. Hatch, G. Livadiotis, **S. Imada, Y. Miyoshi**, M. Kuhar, F. Effenberger et al. Electron power-law spectra in solar and space plasmas. *Space Sci. Rev.*, **214(5)**, 82, Aug. 2018 (10.1007/s11214-018-0515-4).
- Othman, M., M. T. Latif, and **Y. Matsumi**, The exposure of children to PM2.5 and dust in indoor and outdoor school classrooms in Kuala Lumpur City Centre. *Ecotox. Environ. Safe.*, in press (10.1016/j.ecoenv.2018.12.042).
- Otsuka, Y.**, Review of the generation mechanisms of post-midnight irregularities in the equatorial and low-latitude ionosphere. *Prog. Earth. Planet. Sci.*, **2018(5)**, 57, Sep. 20, 2018 (10.1186/s40645-018-0212-7).
- Oyama, S.-I.**, T. T. Tsuda, K. Hosokawa, Y. Ogawa, **Y. Miyoshi, S. Kurita**, A. E. Kero, R. Fujii, Y. Tanaka, **A. Mizuno, T. Kawabata** et al., Auroral molecular-emission effects on the atomic oxygen line at 777.4 nm. *Earth Planets Space*, **70**, 166, Oct. 16, 2018 (10.1186/s40623-018-0936-z).
- Ozaki, M., S. Yagitani, Y. Kasahara, H. Kojima, Y. Kasaba, A. Kumamoto, F. Tsuchiya, **S. Matsuda**, A. Matsuoka, T. Sasaki, and T. Yumoto, Magnetic Search Coil (MSC) of Plasma Wave Experiment (PWE) aboard the Arase (ERG) satellite. *Earth Planets Space*, **70**, 76, May 4, 2018 (10.1186/s40623-017-0770-8).
- Ozaki, M., **Y. Miyoshi, K. Shiokawa**, K. Hosokawa, **S.-I. Oyama**, R. Kataoka, Y. Ebihara, Y. Ogawa, Y. Kasahara, S. Yagitani et al. (**S. Kurita, Y. Otsuka, M. Nosé, N. Nishitani**), Visualization of rapid electron precipitation via chorus element wave–particle interactions. *Nat. Commun.*, **10(1)**, 257, Jan. 16, 2019 (10.1038/s41467-018-07996-z).
- Ozaki, M., **K. Shiokawa, Y. Miyoshi**, K. Hosokawa, **S. Oyama**, S. Yagitani, Y. Kasahara, Y. Kasaba, S. Matsuda, R. Kataoka, et al. (**Y. Otsuka, S. Kurita, M. Nosé, N. Nishitani, M. Hikishima**), Microscopic observationsof pulsating aurora associated with chorus element structures: Coordinated Arase satellite-PWING observations. *Geophys. Res. Lett.*, **45(22)**, 12125–12134, Nov. 28, 2018 (10.1029/2018GL079812).
- Papandrea, S., Y. Jin, E. Collini, L. Mingari, H. Ciminari, J. L. Bali, M. A. Salles, A. Barbero, P. Ristori, L. Otero et al. (**A. Mizuno**), Aerosol monitoring with a lidar observation network in the southern South America. *Proc. SPIE*,

- 10779, 1077912, Oct. 24, 2018 (10.1117/12.2324774).
- Park, S.-H.**, J. A. Guerra, P. T. Gallagher, M. K. Georgoulis, and D. S. Bloomfield, Photospheric shear flows in solar active regions and their relation to flare occurrence. *Sol. Phys.*, **293(8)**, 114, Aug. 2018 (10.1007/s11207-018-1336-z).
- Pavan Chaitanya, P., A. K. Patra, **Y. Otsuka**, T. Yokoyama, and M. Yamamoto, On the solstice maxima and azimuth-dependent characteristics of the 150-km echoes observed using the Equatorial Atmosphere Radar. *J. Geophys. Res. Space Physics*, **123(8)**, 6752–6759, Aug. 11, 2018 (10.1029/2018JA025491).
- Perwitasari, S., T. Nakamura, M. Kogure, Y. Tomikawa, M. K. Ejiri, and **K. Shiokawa**, Comparison of gravity wave propagation directions observed by mesospheric airglow imaging at three different latitudes using the M-transform. *Ann. Geophysicae*, **36(6)**, 1597–1605, Nov. 30, 2018 (10.5194/angeo-36-1597-2018).
- Qin, X.-C.**, **T. Nakayama**, **Y. Matsumi**, M. Kawasaki, R. Imasu, I. Morino, Y. Tanaka, S. Ishidoya, K. Sato, and M. Ohashi, Observation of column-averaged molar mixing ratios of carbon dioxide in Tokyo. *Atmospheric Environment*, in press (10.1016/j.aeoa.2019.100022).
- Raak, F., Y. Susuki, **K. Tsuboki**, **M. Kato**, S. Eguchi, and T. Hikiyama, Assessment of offshore wind farm characteristics with the cloud resolving storm simulator: A case study in Japan. *Wind Energy*, **21(7)**, 531–543, Jul. 2018 (10.1002/we.2176).
- Ratnam, D. V., **Y. Otsuka**, G. Sivavaraprasad, and J. R. K. K. Dabbakuti, Development of multivariate ionospheric TEC forecasting algorithm using linear time series model and ARMA over low-latitude GNSS station. *Adv. Space Res.*, in press (10.1016/j.asr.2018.03.024).
- Ren, J.**, Q. G. Zong, **Y. Miyoshi**, R. Rankin, H. E. Spence, H. O. Funsten, J. R. Wygant, and C. A. Kletzing, A comparative study of ULF waves' role in the dynamics of charged particles in the plasmasphere: Van Allen Probes observation. *J. Geophys. Res. Space Physics*, **123(7)**, 5334–5343, Jul. 2018 (10.1029/2018JA025255).
- Ristori, P., L. Otero, Y. Jin, B. Barja, A. Shimizu, A. Barbero, J. Salvador, J. L. Bali, M. Herrera, P. Etala et al (**A. Mizuno**), Saver.net lidar network in southern South America. *EPJ Web of Conferences*, **176**, 09011, Apr. 14, 2018 (10.1051/epjconf/201817609011).
- Saito, S., Y. Nariyuki, and **T. Umeda**, Magnetosonic/whistler mode turbulence influences on ion dynamics. *Phys. Plasmas*, **25(12)**, 122301, Dec. 2018 (10.1063/1.5053760).
- 佐藤興平、**南雅代**、武者巖、柴田賢、高崎の烏川に産する巨石「聖石」の起源. 群馬県立自然史博物館研究報告、**23**、49–56、2019年3月。
- 佐藤興平、**南雅代**、**中村俊夫**、柴田賢、安部久、武者巖、池田信二、火山泥流に含まれる木片の¹⁴C不一致年代：前橋泥流と塚原泥流の例. 群馬県立自然史博物館研究報告、**23**、57–64、2019年3月。
- Sato, T., R. Kataoka, D. Shiota, Y. Kubo, M. Ishii, H. Yasuda, S. Miyake, **I. C. Park**, and **Y. Miyoshi**, Real time and automatic analysis program for WASAVIES: warning system for aviation exposure to solar energetic particles. *Space Weather*, **16(7)**, 924–936, Jul. 2018 (10.1029/2018SW001873).
- Sekaranom, A. B., and **H. Masunaga**, Origins of heavy precipitation biases in the TRMM PR and TMI products assessed with CloudSat and reanalysis data. *J. Appl. Meteorol. Climatol.*, **58(1)**, 37–54, Jan. 2019 (10.1175/JAMC-D-18-0011.1).
- Selhorst, C. L., P. J. A. Simões, R. Brajša, A. Valio, C. G. Giménez de Castro, J. E. R. Costa, F. Menezes, J. P. Rozelot, A. S. Hales, **K. Iwai**, and S. White, Solar polar brightening and radius at 100 and 230 GHz observed by ALMA. *Astrophys. J.*, **871(1)**, 45, Jan. 21, 2019 (10.3847/1538-4357/aaf4f2).
- Shan, Y., J. C. Yee, A. Udalski, I. A. Bond, Y. Shvartzvald, I.-G. Shin, Y.-K. Jung, S. Calchi Novati, C. A. Beichman, A. Charles et al. (**F. Abe**, **Y. Itow**, **Y. Matsubara**, **Y. Muraki**), OGLE-2014-BLG-0962 and a Comparison of Galactic Model Priors to Microlensing Data. *Astrophys. J.*, **873(1)**, 30, Mar. 2019 (10.3847/1538-4357/ab0021).
- Shen, A., **J. Ishizaka**, **M. Yang**, L. Ouyang, Y. Yin, and Z. Ma, Changes in community structure and photosynthetic activities of total phytoplankton species during the growth, maintenance, and dissipation phases of a *Prorocentrum donghaiense* bloom. *Harmful Algae*, **82**, 35–43, Feb. 2019 (10.1016/j.hal.2018.12.007).

- Shibayama, T., K. Kusano**, T. Miyoshi, and A. Bhattacharjee, Mechanism of non-steady Petschek-type reconnection with uniform resistivity. *Phys. Plasmas*, **26(3)**, 032903, Mar. 2019 (10.1063/1.5084771).
- Shinbori, A., Y. Otsuka**, T. Tsugawa, M. Nishioka, A. Kumamoto, F. Tsuchiya, S. Matsuda, Y. Kasahara, A. Matsuoka, J. M. Ruohoniemi, S. G. Shepherd, and **N. Nishitani**, Temporal and spatial variations of storm time midlatitude ionospheric trough based on global GNSS-TEC and Arase satellite observations. *Geophys. Res. Lett.*, **45(15)**, 7362–7370, Aug. 16, 2018 (10.1029/2018GL078723).
- Shiokawa, K.**, M. Ozaki, A. Kadokura, Y. Endo, T. Sakanoi, **S. Kurita, Y. Miyoshi, S.-I. Oyama**, M. Connors, I. Schofield et al. (**M. Noše**), Purple auroral rays and global Pc1 pulsations observed at the CIR-associated solar wind density enhancement on March 21, 2017. *Geophys. Res. Lett.*, **45(20)**, 10819–10828, Oct. 28, 2018 (10.1029/2018GL079103).
- Shoji, M., Y. Miyoshi**, Y. Omura, **L. M. Kistler**, Y. Kasaba, S. Matsuda, Y. Kasahara, A. Matsuoka, R. Nomura, K. Ishisaka et al. (**M. Teramoto**), Instantaneous frequency analysis on nonlinear EMIC emissions: Arase observation. *Geophys. Res. Lett.*, **45(24)**, 13199–13205, Dec. 28, 2018 (10.1029/2018GL079765).
- Sibeck, D. G., R. Allen, H. Aryan, D. Bodewits, P. Brandt, G. Branduardi-Raymont, G. Brown, J. A. Carter, Y. M. Collado-Vega, M. R. Collier et al. (**Y. Miyoshi**), Imaging plasma density structures in the soft x-rays generated by solar wind charge exchange with neutrals. *Space Sci. Rev.*, **214(4)**, 79, Jun 2018 (10.1007/s11214-018-0504-7).
- Siswanto, E., Y. Xu, and **J. Ishizaka**, A rare dispersion of low-salinity, high-Gelbstoff, high-primary production water in the East China Sea during the summer of 2010: Possible influence of the ENSO. *J. Geophys. Res.-Oceans*, **123(4)**, 2757–2767, Apr. 2018 (10.1002/2017JC013319).
- Sivavaraprasad, G., D. V. Ratnam, and **Y. Otsuka**, Multicomponent Analysis of Ionospheric Scintillation Effects Using the Synchrosqueezing Technique for Monitoring and Mitigating their Impact on GNSS Signals. *J. Navig.*, in press (10.1017/S0373463318000929).
- Skrzypek, E., **T. Kato**, T. Kawakami, S. Sakata, K. Hattori, T. Hirata, and T. Ikeda, Monazite behaviour and time-scale of metamorphic processes along a low-pressure/ high-temperature field gradient (Ryoke belt, SW Japan). *J. Petrol.*, **59(6)**, 1109–1144, Jun. 2018 (10.1093/petrology/egy056).
- Sokol, J. M., M. Bzowski, and **M. Tokumaru**, Interstellar neutral gas species and their pickup ions inside the heliospheric termination shock. Ionization rates for H, O, Ne, and He. *Astrophys. J.*, **872(1)**, 57, Feb. 11, 2019 (10.3847/1538-4357/aafdaf).
- Sugita, S., N. Kawai, S. Nakahira, H. Negoro, M. Serino, T. Mihara, **K. Yamaoka**, and M. Nakajima, MAXI upper limits of the electromagnetic counterpart of GW170817. *Publ. Astron. Soc. Japan*, **70(4)**, 81, Aug. 2018 (10.1093/pasj/psy076).
- Sukigara, C., **Y. Mino**, H. Kawakami, M. C. Honda, T. Fujiki, K. Matsumoto, M. Wakita, and T. Saino, Sinking dynamics of particulate matter in the subarctic and subtropical regions of the western North Pacific. *Deep-Sea Res. Part II-Top. Stud. Oceanogr.*, **144**, 17–27, Feb, 2019 (10.1016/j.dsr.2018.11.004).
- Suzuki, D., D. P. Bennett, A. Udalski, I. A. Bond, T. Sumi, C. Han, H.-I. Kim, **F. Abe, Y. Asakura**, R. K. Barry et al. (**Y. Itow, K. Masuda, Y. Matsubara, Y. Muraki, H. Oyokawa**), A likely detection of a two-planet system in a low-magnification microlensing event. *Astron. J.*, **155(6)**, 263, Jun. 2018 (10.3847/1538-3881/aabd7a).
- Tadokoro, H., **Y. Miyoshi**, H. Yamagishi, H. Miyaoka, Y. Tanaka, and Y. Katoh, Whistler mode waves and related energetic electron precipitations in the planetary magnetospheres. *Proceedings of the International Symposium on Planetary Science 2012*, 93–102, Jan. 2019 (10.5047/pisps.093).
- Taguchi, T., M. Enami**, and Y. Kouketsu, Metamorphic record of the Asemi-gawa eclogite unit in the Sanbagawa belt, southwest Japan: Constraints from inclusions study in garnet porphyroblasts. *J. Metamorph. Geol.*, **37(2)**, 181–201, Feb. 2019 (10.1111/jmg.12456).
- Taguchi, T.**, A. Miyake, **M. Enami**, and Y. Igami, Significance of an amorphous SiO₂ phase in a pseudomorph after coesite enclosed in garnet from ultrahigh-pressure eclogite, Su–Lu Belt, eastern China. *J. Metamorph. Geol.*, **36(7)**, 843–

- 854, Sep. 2018 (10.1111/jmg.12315).
- Taguchi, T., Y. Igami, A. Miyake, and **M. Enami**, Factors affecting preservation of coesite in ultrahigh-pressure metamorphic rocks: Insights from TEM observations of dislocations within kyanite, *J. Metamorph. Geol.*, in press (10.1111/jmg.12470).
- Tajima, H.**, S. Watanabe, Y. Fukazawa, R. Blandford, T. Enoto, A. Goldwurm, K. Hagino, K. Hayashi, Y. Ichinohe, J. Kataoka et al. (**K. Yamaoka**), Design and performance of Soft Gamma-ray Detector onboard the Hitomi (ASTRO-H) satellite. *J. Astron. Telesc. Instrum. Syst.*, **4(2)**, 021411, Apr. 2018 (10.1117/1.JATIS.4.2.021411).
- Takagi, Y.**, **K. Shiokawa**, **Y. Otsuka**, M. Connors, and I. Schofield, Statistical analysis of SAR arc detachment from the main oval based on 11-Year, all-sky imaging observation at Athabasca, Canada. *Geophys. Res. Lett.*, **45(21)**, 11539–11546, Nov. 16, 2018 (10.1029/2018GL079615).
- Takahashi, H., C. M. Wrasse, C. A. O. B. Figueiredo, D. Barros, M. A. Abdu, **Y. Otsuka**, and **K. Shiokawa**, Equatorial plasma bubble seeding by MSTIDs in the ionosphere. *Prog. Earth. Planet. Sci.*, **5(1)**, 32, Dec. 2018 (10.1186/s40645-018-0189-2).
- Takahashi, K., R. E. Denton, T. Motoba, A. Matsuoka, Y. Kasaba, Y. Kasahara, **M. Teramoto**, **M. Shoji**, N. Takahashi, **Y. Miyoshi** et al., Impulsively excited nightside ultralow frequency waves simultaneously observed on and off the magnetic equator. *Geophys. Res. Lett.*, **45(16)**, 7918–7926, Aug. 28, 2018 (10.1029/2018GL078731).
- Takahashi, N.**, T. Ushio, K. Nakagawa, F. Mizutani, K. Iwanami, A. Yamaji, T. Kawagoe, M. Osada, T. Ohta, and M. Kawasaki, Development of multi-parameter phased array weather radar (MP-PAWR) and the early detection/mitigation of torrential rainfall and tornado risks. *Journal of Disaster Research*, **14(2)**, 235–247, Mar. 2019 (10.20965/jdr.2019.p0235).
- Takahashi, N., K. Seki, **M. Teramoto**, M.-C. Fok, Y. Zheng, A. Matsuoka, N. Higashio, **K. Shiokawa**, D. Baishev, A. Yoshikawa, and T. Nagatsuma, Global distribution of ULF waves during magnetic storms: Comparison of Arase, ground observations and BATSRUS+CRCM simulation. *Geophys. Res. Lett.*, **45(18)**, 9390–9397, Sep. 28, 2018 (10.1029/2018GL078857).
- Takahashi, T., M. Kokubun, K. Mitsuda, R. L. Kelley, T. Ohashi, F. Aharonian, H. Akamatsu, **F. Akimoto**, S. W. Allen, N. Anabuki et al. (**H. Tajima**, **K. Yamaoka**), Hitomi (ASTRO-H) X-ray Astronomy Satellite. *J. Astron. Telesc. Instrum. Syst.*, **4(2)**, 021402, Apr. 2018 (10.1117/1.JATIS.4.2.021402).
- Tanabe, Y., M. Hori, **A. N. Mizuno**, T. Osono, M. Uchida, S. Kudoh, and M. Yamamuro, Light quality determines primary production in nutrient-poor small lakes. *Sci Rep.*, **9**, 4639, Mar. 15, 2019 (10.1038/s41598-019-41003-9).
- Teh, W.-L., T. Nakamura, R. Nakamura, and **T. Umeda**, Oblique ion - scale magnetotail flux ropes generated by secondary tearing modes. *J. Geophys. Res. Space Physics*, **123(10)**, 8122–8130, Oct. 8, 2018 (10.1029/2018JA025775).
- Terauchi, G., E. D. R. Maúre, Z. Yu, Z. Wu, C. Lee, V. Kachur, and **J. Ishizaka**, Assessment of eutrophication using remotely sensed chlorophyll-a in the Northwest Pacific region. *Proceedings of SPIE - The International Society for Optical Engineering*, **10788**, 107780H, Oct. 24, 2018 (10.1117/12.2324641).
- Tobo, Y., K. Adachi, P. J. DeMott, T. C. J. Hill, D. S. Hamilton, N. M. Mahowald, N. Nagatsuka, **S. Ohata**, J. Uetake, Y. Kondo, and M. Koike, Glacially sourced dust as a potentially significant source of ice nucleating particles. *Nat. Geosci.*, in press (10.1038/s41561-019-0314-x).
- Toda, H., W. Miyake, **Y. Miyoshi**, H. Toyota, Y. Miyazawa, I. Shinohara, and A. Matsuoka, Spatial distribution of radiation belt protons deduced from solar cell degradation of the Arase satellite. *International Journal of Astronomy and Astrophysics*, **8(4)**, 306–322, Nov. 14, 2018 (10.4236/ijaa.2018.84022).
- Toda, M., **T. Nakai**, Y. Kodama, and T. Hara, Using digital cover photography to track the canopy recovery process following a typhoon disturbance in a cool-temperate deciduous forest. *Can. J. For. Res.*, **48(7)**, 740–748, Jul. 2018 (10.1139/cjfr-2018-0005).
- Tokumar, M.**, T. Shimoyama, **K. Fujiki**, and K. Hakamada, Rarefaction of the very slow (<350 km/s) solar wind in Cycle

- 24 compared with Cycle 23. *J. Geophys. Res. Space Physics*, **123(4)**, 2520–2534, Apr. 26, 2018 (10.1002/2017JA025014).
- Tozuka, T., **S. Ohishi**, and M. F. Cronin, A metric for surface heat flux effect on horizontal sea surface temperature gradients. *Clim. Dyn.*, **51(1–2)**, 547–561, Jul. 2018 (10.1007/s00382-017-3940-2).
- Tsuchiya, F., A. Hirai, T. Obara, H. Misawa, **S. Kurita**, **Y. Miyoshi**, **K. Shiokawa**, M. Connors, M. Ozaki, Y. Kasahara et al. (**M. Shoji**), Energetic electron precipitation associated with pulsating aurora observed by VLF radio propagation during the recovery phase of a substorm on 27 March 2017. *Geophys. Res. Lett.*, **45(23)**, 12651–12660, Dec. 16, 2018 (10.1029/2018GL080222).
- Tsuchiya, S.**, **K. Shiokawa**, **H. Fujinami**, **Y. Otsuka**, T. Nakamura, and M. Yamamoto, Statistical analysis of the phase velocity distribution of mesospheric and ionospheric waves observed in airglow images over a 16-year period: comparison between Rikubetsu and Shigaraki, Japan. *J. Geophys. Res. Space Physics*, **123(8)**, 6930–6947, Aug. 25, 2018 (10.1029/2018JA025585).
- Tsuda, T. T., M. T. Rietveld, M. J. Kosch, **S. Oyama**, Y. Ogawa, K. Hosokawa, **S. Nozawa**, **T. Kawabata**, and **A. Mizuno**, Survey of conditions for artificial aurora experiments by the second electron gyro-harmonic at EISCAT Tromsø using dynasonde data. *Earth Planets Space*, **70**, 94, Jun. 6, 2018 (10.1186/s40623-018-0864-y).
- Tsugawa, T., M. Nishioka, M. Ishii, K. Hozumi, S. Saito, **A. Shinbori**, **Y. Otsuka**, A. Saito, S. M. Buhari, M. Abdullah, and P. Supnithi, Total electron content observations by dense regional and worldwide international networks of GNSS. *Journal of Disaster Research*, **13(3)**, 535–545, Jun. 2018 (10.20965/jdr.2018.p0535).
- Umeda, T.**, A three-step Boris integrator for Lorentz force equation of charged particles. *Comput. Phys. Commun.*, **228**, 1–4, Jul. 2018 (10.1016/j.cpc.2018.03.019).
- Umeda, T.**, Multi-step Boris rotation schemes for Lorentz force equation of charged particles. *Comput. Phys. Commun.*, in press (10.1016/j.cpc.2018.11.001).
- Umeda T.**, and Y. Daicho, Periodic self-reformation of rippled perpendicular collisionless shocks in two dimensions. *Ann. Geophysicae*, **36(4)**, 1047–1055, Aug. 2018 (10.5194/angeo-36-1047-2018).
- Umeda, T.**, and T. K. M. Nakamura, Electromagnetic linear dispersion relation for plasma with a drift across magnetic field revisited. *Phys. Plasmas*, **25(10)**, 102109, Oct. 12, 2018 (10.1063/1.5050542).
- Umeda, T.**, **S. Saito**, and Y. Nariyuki, Decay of nonlinear whistler mode waves: 1D versus 2D. *Phys. Plasmas*, **25(7)**, 072118, Jul. 2018 (10.1063/1.5031483).
- Umeda, T.**, and K. Fukazawa, Performance comparison of Eulerian kinetic Vlasov code between Xeon Phi KNL and Xeon Broadwell. *19th Asia Simulation Conference, AsiaSim 2018, Proceedings: Methods and Applications for Modeling and Simulation of Complex Systems/Communications in Computer and Information Science*, **946**, 143–150, Oct. 18, 2018 (10.1007/978-981-13-2853-4_12).
- Umeda, T.**, R. Yamazaki, Y. Ohira, N. Ishizaka, S. Kakuchi, Y. Kuramitsu, S. Matsukiyo, I. Miyata, T. Morita, Y. Sakawa et al., Full particle-in-cell simulation of the interaction between two plasmas for laboratory experiments on the generation of magnetized collisionless shocks with high-power lasers. *Phys. Plasmas*, **26(3)**, 032303, Mar 2019 (10.1063/1.5079906).
- Vichare, G., **N. Thomas**, **K. Shiokawa**, A. Bhaskar, and A. Kumar Sinha, Spatial gradients in geomagnetic storm-time currents observed by Swarm multi-spacecraft mission. *J. Geophys. Res. Space Physics*, **124(2)**, 982–995, Feb. 2019 (10.1029/2018JA025692).
- Wada, A., **S. Kanada**, and H. Yamada, Effect of air-sea environmental conditions and interfacial processes on extremely intense Typhoon Haiyan (2013). *J. Geophys. Res. Atmos.*, **123**, 10379–10405, Sep. 27, 2018 (10.1029/2017JD028139).
- Wada, R., Y. Sadanaga, S. Kato, N. Katsumi, H. Okochi, Y. Iwamoto, K. Miura, H. Kobayashi, M. Kamogawa, J. Matsumoto et al. (**Y. Matsumi**), Development of an analytical method for the detection of NO₂ and its application to the atmospheric analysis at a mountain site. *Bunseki Kagaku*, **67(6)**, 333–340, Jun. 5, 2018

(10.2116/bunsekikagaku.67.333).

- Wan, L., K. Abe, C. Bronner, Y. Hayato, M. Ikeda, K. Iyogi, J. Kameda, Y. Kato, Y. Kishimoto, Ll. Marti et al. (**Y. Itow**, **M. Murase**), Measurement of the neutrino-oxygen neutral-current quasielastic cross section using atmospheric neutrinos at Super-Kamiokande. *Phys. Rev. D*, **99(3)**, 032005, Feb. 15, 2019 (10.1103/PhysRevD.99.032005).
- Wang, C.-C., G. T.-J. Chen, C.-H. Ngai, and **K. Tsuboki**, Case study of a morning convective rainfall event over southwestern Taiwan in the mei-yu season under weak synoptic conditions. *J. Meteorol. Soc. Japan*, **96(5)**, 461–484, Oct.11, 2018 (10.2151/jmsj.2018-051).
- Wei, Z., X. Lee, F. Aemisegger, M. Benetti, M. Berkelhammer, M. Casado, K. Caylor, E. Christner, C. Dyroff, O. García et al. (**N. Kurita**), A global database of water vapor isotopes measured with high temporal resolution infrared laser spectroscopy. *Sci. Data*, **6**, 180302, Jan. 22, 2019 (10.1038/sdata.2018.302).
- Woods, M. M., **S. Inoue**, L. K. Harra, S. A. Matthews, **K. Kusano**, and N. M. E. Kalmoni, The triggering of the 2014 March 29 filament eruption. *Astrophys. J.*, **860(2)**, 163, Jun. 25, 2018 (10.3847/1538-4357/aac5e1).
- Xu, Q.**, C. Sukigara, **J. I. Goes**, **H. d. R. Gomes**, **Y. Zhu**, S. Wang, A. Shen, E. R. Maúre, T. Matsuno, Y. Watanabe, S. Yoo, and **J. Ishizaka**, Interannual changes in summer phytoplankton community composition in relation to water mass variability in the East China Sea. *J. Oceanogr.*, **75(1)**, 61–79, Feb. 2019 (10.1007/s10872-018-0484-y).
- Yamaguchi, J., **Y. Kanno**, G. Chen, and T. Iwasaki, Cold air mass analysis of the record-breaking cold surge event over East Asia in January 2016. *J. Meteorol. Soc. Japan.*, **97(1)**, 275–293, Feb. 9, 2019 (10.2151/jmsj.2019-015).
- Yamakawa, T., K. Seki, T. Amano, N. Takahashi, and **Y. Miyoshi**, Excitation of storm-time Pc5 ULF waves by ring current ions based on the drift-kinetic simulation. *Geophys. Res. Lett.*, **46(4)**, 1911–1918, Feb. 28, 2019 (10.1029/2018GL081573).
- Yamamoto, K., S. Oimatsu, **M. Nosé**, A. Matsuoka, **M. Teramoto**, and **S. Imajo**, DC component of spacecraft-origin magnetic field noise at the Arase/MGF sensor: (1) Evaluation with Tsyganenko 89 model. *JAXA Research and Development Report*, **JAXA-RR-18-005E**, 23–28, Mar. 7, 2019 (10.20637/JAXA-RR-18-005E/0004).
- Yamamoto, K., K. Furukawa, **N. Takahashi**, T. Kubota, R. Oki, and K. Kanemaru, Analysis of the GPM/DPR wide swath experiment assuming future spaceborne precipitation radar. *Proceedings of SPIE*, **10785**, 107850O, Sep. 25, 2018 (10.1117/12.2325273).
- Yamamoto, K., M. Nosé, S. Kasahara, S. Yokota, K. Keika, A. Matsuoka, **M. Teramoto**, K. Takahashi, S. Oimatsu, R. Nomura et al. (**Y. Miyoshi**), Giant pulsations excited by a steep earthward gradient of proton phase space density: Arase observation. *Geophys. Res. Lett.*, **45(14)**, 6773–6781, Jul. 28, 2018 (10.1029/2018GL078293).
- Yamamoto, M., **Y. Otsuka**, H. Jin, and Y. Miyoshi, Relationship between day-to-day variability of equatorial plasma bubble activity from GPS scintillation and atmospheric properties from GAIA assimilation. *Prog. Earth Planet Sci.*, **5(1)**, 26, Dec. 2018 (10.1186/s40645-018-0184-7).
- Yamaoka, K.**, **H. Tajima**, **Y. Itow**, **H. Fujii**, Y. Nakanishi, **Y. Kamei**, **T. Yamakawa**, **T. Niwa**, **I. Okui**, K. Miyata, and T. Inamori, Solar neutron and gamma-ray spectrometer for a small satellite. *Proceedings of SPIE*, **10762**, 107620J, Sep. 18, 2018 (10.1117/12.2323451).
- Yang, M. M.**, **J. Ishizaka**, J. I. Goes, H. d. R. Gomes, E. R. Maúre, M. Hayashi, T. Katano, N. Fujii, K. Saitoh, T. Mine et al. (**A. Mizuno**), Improved MODIS-Aqua chlorophyll-a retrievals in the turbid semi-enclosed Ariake Bay, Japan. *Remote Sens.*, **10(9)**, 1335, Sep. 2018 (10.3390/rs10091335).
- Ye Kyaw Thu**, and **M. Enami**, Evolution of metamorphic fluid recorded in granulite facies metacarbonate rocks from the middle segment of the Mogok metamorphic belt in central Myanmar. *J. Metamorph. Geol.*, **36(7)**, 905–931, Sep. 2018 (10.1111/jmg.12419).
- Yokoyama, T., M. Shimojo, T. J. Okamoto, and **H. Iijima**, ALMA observations of the solar chromosphere on the polar limb. *Astrophys. J.*, **863(1)**, 96, Aug. 14, 2018 (10.3847/1538-4357/aad27e).
- Yoshida, H., Y. Asahara, K. Yamamoto, N. Katsuta, **M. Minami**, and R. Metcalfe, $^{87}\text{Sr}/^{86}\text{Sr}$ age determination by rapidly

- formed spherical carbonate concretions. *Sci Rep.*, **9**, 1003, Jan. 30, 2019 (10.1038/s41598-019-38593-9).
- Yoshida, H., K. Yamamoto, **M. Minami**, N. Katsuta, S.-I. Sirono, and R. Metcalfe, Generalized conditions of spherical carbonate concretion formation around decaying organic matter in early diagenesis. *Sci Rep.*, **8**, 6308, Apr. 20, 2018 (10.1038/s41598-018-24205-5).
- Yoshida, H., H. Hasegawa, N. Katsuta, I. Maruyama, S. Sirono, **M. Minami**, Y. Asahara, S. Nishimoto, Y. Yamaguchi, N. Ichinnorov, and R. Metcalfe, Fe-oxide concretions formed by interacting carbonate and acidic waters on Earth and Mars. *Sci. Adv.*, **4(12)**, eaau0872, Dec. 5, 2018 (10.1126/sciadv.aau0872).
- Zenitani, S., and **T. Umeda**, On the Boris solver in particle-in-cell simulation. *Phys. Plasmas*, **25(11)**, 112110, Nov. 16, 2018 (10.1063/1.5051077).
- Zhang, H., S. Wang, Z. Qiu, D. Sun, **J. Ishizaka**, S. Sun, and Y. He, Phytoplankton size class in the East China Sea derived from MODIS satellite data. *Biogeosciences*, **15(13)**, 4271–4289, Jul. 13, 2018 (10.5194/bg-15-4271-2018).
- Zorn, J., R. White, J. J. Watson, T. P. Armstrong, A. Balzer, M. Barcelo, D. Berge, R. Bose, A. M. Brown, M. Bryan et al. (**A. Okumura**, **H. Tajima**), Characterisation and testing of CHEC-M—A camera prototype for the small-sized telescopes of the Cherenkov telescope array. *Nucl. Instrum. Methods Phys. Res. Sect. A-Accel. Spectrom. Dect. Assoc. Equip.*, **904**, 44–63, Oct. 1, 2018 (10.1016/j.nima.2018.06.078).

■ 著書（2018年4月–2019年3月）

- 榎並 正樹**、地殻の超高圧・超高温極限. *図説地球科学の事典*、鳥海光弘、入舩徹男、岩森光、ウォリスサイモン、小平秀一、小宮剛、阪口秀、鷺谷威、末次大輔、中川貴司、宮本英昭編、248pp、朝倉書店、東京、Apr. 25, 2018 (ISBN978-4-254-16072-7).
- 檜山 哲哉**、第4節 陸域の水・物質循環へのインパクト. *これからの北極*、42–46、北極域研究推進プロジェクト事務局編、56pp、北極域研究推進プロジェクト事務局、東京、Mar. 25, 2019.
- Ishizaka, Joji**, and K. Yamada, Phytoplankton and Primary Production in the Japan Sea, *Remote Sensing of the Asian Seas*, 177–189, edited by V. Barale, and M. Gade, 565pp, Springer International Publishing, Switzerland, Sep. 7, 2018 (ISBN978-3-319-94065-6).
- 加藤 文典**、第4章 電子プローブマイクロアナリシス (EPMA)、175–208、*X線分光法*、辻幸一、村松康司編著、364pp、講談社、東京、Sep. 27, 2018 (ISBN978-4-06-513038-4).

学会および研究集会発表

■ 国際学会・研究集会・シンポジウム等（2018年4月–2019年3月）

*セッションコンピナー

学会等の名前	開催場所	開催期間	会議運営 コンピナー・ SOC・ LOC等	発表数				
				教員	客員・ 特任教 員・研 究員等	学生	計	招待 講演
European Geosciences Union General Assembly	Vienna, Austria	H30.4.8–4.13	0	2	0	0	2	0
33th Conference on Hurricanes and Tropical Meteorology	Florida, USA	H30.4.16–4.20	0	1	0	0	1	0
EISCAT_3D User Meeting 2018	Uppsala, Sweden	H30.5.8–5.9	0	1	0	0	1	0
14th International Workshop on Greenhouse Gas Measurements from Space (IWGGMS-14)	Toronto, Canada	H30.5.8–5.10	0	0	0	1	1	0
The 3rd PSTEP International Symposium (PSTEP-3) “Toward the Solar-Terrestrial Environment Prediction as Science and Social Infrastructure”	Tokyo, Japan	H30.5.16–5.18	2	6	3	0	9	2
20th International Symposium on Very High Energy Cosmic Ray Interactions (ISVHECRI 2018)	Nagoya, Japan	H30.5.21–5.25	4	1	2	2	5	1
12th International Conference on High Energy Density Laboratory Astrophysics (HEDLA)	Kurashiki, Japan	H30.5.27–6.1	0	1	0	0	1	1
2nd URSI Atlantic Radio Science Conference (URSI AT-RASC 2018)	Gran Canaria, Spain	H30.5.28–6.1	0	0	5	0	5	1
AOGS 2018	Hawaii, USA	H30.6.3–6.8	6*	9	5	3	17	5
SuperDARN 2018 Workshop	Banyuls-sur-Mer, France	H30.6.4–6.8	0	3	0	0	3	0
19th International Science Team Meeting (GHRSS XIX)	Darmstadt, Germany	H30.6.4–6.8	0	0	1	0	1	0
7th International HEPPA-SOLARIS Workshop	Virginia, USA	H30.6.11–6.14	0	1	0	0	1	1
International Conference on the Advancement of Silicon Photomultipliers	Schwetzingen, Germany	H30.6.11–6.15	0	1	0	0	1	0
NDACC-IRWG and TCCON Annual Meeting 2018	Cocoyoc, Mexico	H30.6.11–6.15	0	2	0	0	2	0
Planetary Atmospheric Erosion Europlanet Workshop 2018	Murighiol, Romania	H30.6.11–6.15	0	1	0	0	1	1
The 23rd International Radiocarbon Conference	Trondheim, Norway	H30.6.17–6.22	0	3	2	0	5	1
17th RHESSI workshop	Dublin, Ireland	H30.6.18–6.23	0	0	1	0	1	0
10th International Workshop on Modeling the Ocean (IWMO2018)	Santos, Brazil	H30.6.25–6.28	0	0	2	0	2	0
ASTRONUM-2018: 13th International Meeting on Numerical Modeling of Space Plasma Flows	Florida, USA	H30.6.25–6.29	0	0	2	0	2	0
The 10th European Conference on Radar in Meteorology and Hydrology (ERAD2018)	Ede, Netherland	H30.7.1–7.6	0	2	0	0	2	0
The Joint WCRP Grand Challenge on Weather and Climate Extremes/GEWEX Global Data and Analysis Panel workshop on Precipitation Extremes	Offenbach, Germany	H30.7.9–7.11	0	1	0	0	1	0
15th Conference on Cloud Physics/15th Conference on Atmospheric Radiation	Vancouver, Canada	H30.7.9–7.13	0	0	1	0	1	0
The Fourteenth Edition of the Solar-Terrestrial Physics Symposium (STP14)	Toronto, Canada	H30.7.9–7.13	0	4	0	1	5	1
The 8th Space Weather Conference	Seoul, Korea	H30.7.10–7.11	0	1	0	0	1	1
42nd COSPAR Scientific Assembly	California, USA	H30.7.14–7.22	0	9	3	2	14	9

学会等の名前	開催場所	開催期間	会議運営 コンピー ナ・ SOC・ LOC等	発表数				
				教員	客員・ 特任教 員・研 究員等	学生	計	招待 講演
2018 International Geoscience and Remote Sensing Symposium (IGARSS)	Valencia, Spain	H30.7.22-7.27	0	1	0	0	1	0
NOEMA/30m Workshop	Tokyo, Japan	H30.7.24-7.25	0	1	0	0	1	0
8th East-Asia School and Workshop on Laboratory, Space, and Astrophysical Plasmas	Daejeon, Korea	H30.7.30-8.3	1	1	1	0	2	2
HAO Summer Workshop “Model Coupling and Data Driven Simulations of Solar Eruptions”	Colorado, USA	H30.8.13-8.16	0	1	0	0	1	0
45th Annual European Meeting on Atmospheric Studies by Optical Methods (45AM)	Kiruna, Sweden	H30.8.27-8.31	0	2	0	0	2	1
10th International Aerosol Conference (IAC 2018)	Missouri, USA	H30.9.2-9.7	0	0	1	0	1	1
MR2018	New Jersey, USA	H30.9.4-9.8	0	1	0	1	2	2
13th International Symposium for Space Simulations (ISSS-13)	California, USA	H30.9.6-9.14	1	0	1	0	1	0
Hinode-12	Granada, Spain	H30.9.10-9.13	0	1	1	1	3	1
4th International Workshop on Heterogeneous Kinetics Related to Atmospheric Aerosols	Takamatsu, Japan	H30.9.24	1	0	0	0	0	0
2018 joint 14th iCACGP Quadrennial Symposium/15th IGAC Science Conference	Takamatsu, Japan	H30.9.25-9.29	1	2	1	1	4	0
Stratosphere-troposphere Processes And their Role in Climate (SPARC) 2018 General Assembly	Kyoto, Japan	H30.10.1-10.5	0	1	0	0	1	0
2nd Nordic Observatory Meeting	Abisko, Sweden	H30.10.2-10.3	0	1	0	0	1	0
ISEE International workshop “Extreme solar events: How hostile can the Sun be?”	Nagoya, Japan	H30.10.2-10.6	1	2	0	0	2	1
Ultra High Energy Cosmic Rays 2018	Paris, France	H30.10.8-10.12	0	1	0	0	1	0
The extreme Universe viewed in very-high-energy gamma rays 2018	La Palma, Spain	H30.10.12	0	1	0	0	1	1
Eighth International Fermi Symposium	Maryland, USA	H30.10.14-10.19	0	1	0	0	1	0
The Workshop on Solar Radio and IPS Data Analysis	Inner Mongolia, China	H30.10.15-10.18	0	2	0	0	2	0
15th International Symposium on Equatorial Aeronomy (ISEA-15)	Ahmedabad, India	H30.10.22-10.26	0	1	1	0	2	0
11th GEOSS Asia-Pacific Symposium	Kyoto, Japan	H30.10.24-10.26	0	2	0	0	2	2
18th Asia Simulation Conference (AsiaSim2018)	Kyoto, Japan	H30.10.27-10.29	0	1	0	0	1	0
2018 Korean Meteorological Society Autumn Meeting	Jeju, Korea	H30.10.29-10.31	0	0	0	1	1	0
2018 Solar Dynamics Observatory Workshop	Ghent, Belgium	H30.10.29-11.2	0	1	0	0	1	0
International School for AstroParticle Physics 2018-LHC meets Cosmic Rays	Geneve, Switherland	H30.10.29-11.2	0	1	0	2	3	1
2nd International Symposium “Ocean Mixing Processes: Impact on Biogeochemistry, Climate and Ecosystem”	Kashiwa, Japan	H30.11.4	0	1	0	0	1	0
International Workshop on GNSS Ionosphere (IWGI2018)	Shanghai, China	H30.11.4-11.6	0	1	0	0	1	0
9th Workshop of the International Precipitation Working Group (IPWG)	Seol, Korea	H30.11.5-11.9	0	1	0	0	1	0
ISEE Internaitonal Workshop “Data-Driven Models of the Solar Progenitors of Space Weather and Space Climate”	Nagoya, Japan	H30.11.6-11.9	1	0	0	0	0	0

学会等の名前	開催場所	開催期間	会議運営 コンピー ナ・ SOC・ LOC等	発表数				
				教員	客員・ 特任教 員・研 究員等	学生	計	招待 講演
3rd Korea-Japan Joint Workshop on Iotope-Ratio Mass Spectrometry	Daejeon, Korea	H30.11.8-11.10	1*	1	1	0	2	0
International Workshop on Data Science 2018 - Present & Future of Open Data & Open Science -	Mishima, Japan	H30.11.12-11.15	0	1	0	0	1	1
THE 11TH annual ACRE meeting, ACRE Japan, ACRE SE Asia-2, ACRE China-3, and C3S data rescue service (DRS) workshops	Tokyo, Japan	H30.11.12-11.16	0	0	1	0	1	0
2nd Asia-Pacific Conference on Plasma Physics (AAPPS-DPP2018)	Kanazawa, Japan	H30.11.12-11.17	0	3	0	0	3	0
8th International Conference on Quarks and Nuclear Physics	Tsukuba, Japan	H30.11.13-11.17	0	1	0	0	1	1
Workshop on Interstellar Matter 2018	Sapporo, Japan	H30.11.14-11.16	0	1	0	0	1	0
ISSI-BJ Forum on “The Next Scientific Program of SCOSTEP	Beijing, China	H30.11.14-11.16	0	2	0	0	2	1
The Second annual symposium of the innovative area “Gravitational Wave Physics and Astronomy: Genesis”	Kyoto, Japan	H30.11.26-11.28	0	1	0	1	2	0
2018 GEWEX Data and Analysis Panel (GDAP) Meeting	Lisboa, Portugal	H30.11.26-11.29	0	1	0	0	1	0
5th International Workshop on New Photon-Detectors	Tokyo, Japan	H30.11.27-11.29	1	1	0	2	3	0
MWA project meeting	Naogoya, Japan	H30.12.3	0	1	0	0	1	1
The 6th Asian / 15th Korea-Japan Workshop on Ocean Color (6th AWOC/ 15th KJWOC)	Yokohama, Japan	H30.12.3-12.5	0	1	1	6	8	0
Science at Low Frequency V (SALF V) at Nagoya	Nagoya, Japan	H30.12.4-12.6	0	1	0	0	1	0
The Ninth Symposium on Polar Science	Tokyo, Japan	H30.12.4-12.7	0	2	2	1	5	0
Partnership between Norway and Japan for excellent Education and Research in Weather and Climate Dynamics (NORPAN) Workshop on Air-Sea Interaction Processes	Bergen, Norway	H30.12.5-12.7	0	0	1	0	1	0
AGU fall meeting 2018	California, USA	H30.12.10-12.14	2*	9	10	8	27	2
19th East Asia Sub-mm-wave Receiver Technology Workshop	Nishinomiya, Japan	H30.12.11-12.13	1	1	0	1	2	0
East Asian ALMA Development Workshop 2018	Sakai, Japan	H30.12.14-12.15	0	1	0	0	1	0
PaleoAsia International Workshop 2018	Kyoto, Japan	H30.12.16-12.18	0	1	1	0	2	0
East Asian ALMA Science Workshop 2018	Osaka, Japan	H30.12.17-12.19	0	1	0	0	1	0
International workshop on “extreme severe storms and disaster mitigation strategies”	Bandarsindri, India	H30.12.24-12.26	0	1	0	1	2	0
Observatory Days 2019	Sodankyla, Finland	H31.1.9-1.11	0	1	0	1	2	0
The Joint PI Meeting of JAXA Earth Observation Missions FY2018	Tokyo, Japan	H31.1.21-1.25	0	0	1	0	1	0
23rd International Microlensing Conference	New York, USA	H31.1.28-1.30	0	1	0	0	1	0
Chapman Conference on Scientific Challenges Pertaining to Space Weather Forecasting Including Extremes	California, USA	H31.2.11-2.15	1	2	0	0	2	1
NORPAN Closing Workshop	Hakone, Japan	H31.2.12-2.15	0	0	1	0	1	0

学会等の名前	開催場所	開催期間	会議運営 コンピ ナ・ SOC・ LOC等	発表数				
				教員	客員・ 特任教 員・研 究員等	学生	計	招待 講演
The 10th International workshop on Very High Energy Particle Astronomy (VHEPA2019)	Kashiwa, Japan	H31.2.18-2.20	0	1	0	0	1	1
The 4th KMI international Symposium	Nagoya, Japan	H31.2.18-2.20	1	1	0	1	2	0
Max-Planck/Princeton Center for Plasma Physics (MPPC) Workshop 2019	Tokyo, Japan	H31.2.18-2.21	0	1	0	0	1	1
Symposium on Planetary Science 2019	Sendai, Japan	H31.2.18-2.21	2	0	2	0	2	1
15th Vienna Conference on Instrumentation	Vienna, Austria	H31.2.18-2.22	1	0	0	0	0	0
PSTEP A04 International Workshop	Kyoto, Japan	H31.2.19-2.20	0	1	0	0	1	1
ASLO 2019 Aquatic Science Meeting	San Juan, Puerto Rico	H31.2.23-3.2	0	1	0	0	1	0
IBS brainstorm meeting	Muju, Korea	H31.2.25-2.26	0	1	0	0	1	1
Recent progress in heliospheric physics by direct measurements of unexplored space plasmas	Nagoya, Japan	H31.2.25-2.28	2	2	1	0	3	1
4th International Joint Workshop on Computationally-Intensive Modelling of the Climate System and 9th OFES International Workshop	Kasuga, Japan	H31.2.28-3.1	0	1	3	1	5	0
Conference on Mesoscale Convective System and High Impact Weather (ICMCS-XIII)	Naha, Japan	H31.3.6-3.8	2	2	1	2	5	1
International Workshop on Forward Physics and Forward Calorimeter Upgrade in ALICE	Tsukuba, Japan	H31.3.7-3.9	0	1	0	0	1	0
2019 URSI Asia-Pacific Radio Science Conference	New Delhi, India	H31.3.9-3.15	0	1	0	0	1	1
Mesospheric Dust – Project Meeting	Tromsø, Norway	H31.3.14-3.15	0	2	0	0	2	0
Flux Emergence Workshop 2019	Tokyo, Japan	H31.3.18-3.22	0	1	2	0	3	0
20th Pacific Asian Marginal Seas (PAMS 2019)	Kaohsiung, Taiwan	H31.3.19-3.22	0	0	2	0	2	0
Workshop for Atmospheric Neutrino Production in the MeV to PeV range	Naogyu, Japan	H31.3.20-3.22	2	2	0	0	2	1
Second CEARAC Expert Meeting on Eutrophication Assessment in the NOWPAP Region	Vladivostok, Russia	H31.3.22	0	1	0	0	1	1
International Workshop on Relations Between Solar Evolution and Atmospheric Escape from Terrestrial Planets	Nagoya, Japan	H31.3.26-3.29	1	0	0	0	0	0
合 計			35	131	63	40	234	53

■ 国内学会

学会等の名前	開催場所	開催期間	セッション コンピ ナ等	発表数				
				教員	客員・ 特任教 員・研 究員等	学生	計	招待 講演
日本気象学会 2018 年度春季大会	つくば国際会議場 (つくば市)	H30.5.16-5.19	10	3	5	4	12	0
日本地球惑星科学連合 2018 年大会 (JpGU2018)	幕張メッセ国際会議場ほか (千葉市)	H30.5.20-5.24	0	30	25	30	85	15
日本シベリア学会第 4 回研究大会	三重大学 (津市)	H30.6.16-6.17	0	1	0	0	1	0
日本文化財科学会第 35 回大会・2018 年度総会	奈良女子大学 (奈良市)	H30.7.6-7.8	0	1	3	0	4	0

学会等の名前	開催場所	開催期間	セッション コンピュータ等	発表数				
				教員	客員・ 特任教 員・研 究員等	学生	計	招待 講演
第35回エアロゾル科学・技術研究討論会	名古屋大学（名古屋市）	H30.7.31-8.2	1	1	2	0	3	0
日本流体力学会年会2018	大阪大学（大阪府豊中市）	H30.9.3-9.6	0	0	1	0	1	0
2018年度日本地球化学会年会	琉球大学（沖縄県中頭郡）	H30.9.11-9.13	0	2	1	0	3	0
第59回大気環境学会年会	九州大学（福岡県春日市）	H30.9.12-9.14	0	0	2	0	2	0
水文・水資源学会 2018年度総会・研究発表会・創立30周年記念学術シンポジウム	三重大学（津市）	H30.9.12-9.14	1	2	0	0	2	1
日本物理学会 2018年秋季大会	信州大学（松本市）	H30.9.14-9.17	0	2	0	4	6	0
2018日本放射化学会年会・第62回放射化学討論会	京都大学（京都市）	H30.9.18-9.20	0	2	0	0	2	0
第79回応用物理学会秋季学術講演会	名古屋国際会議場（名古屋市）	H30.9.18-9.21	0	1	0	1	2	1
日本鉱物科学会2018年年会	山形大学（山形市）	H30.9.19-9.21	0	1	0	0	1	0
日本天文学会2018年秋季年会	兵庫県立大学（姫路市）	H30.9.19-9.21	0	6	4	4	14	0
日本海洋学会2018年度秋季大会	東京海洋大学（東京都）	H30.9.25-9.29	2	1	2	2	5	0
第62回宇宙科学技術連合講演会	久留米シティプラザ（久留米市）	H30.10.24-10.26	0	1	1	0	2	0
日本気象学会2018年度秋季大会	仙台国際センター（仙台市）	H30.10.29-11.1	0	3	6	1	10	0
地球電磁気・地球惑星圏学会 第144回総会及び講演会	名古屋大学（名古屋市）	H30.11.23-11.27	16	16	16	19	51	8
日本地質学会第125年学術大会（2018年つくば特別大会）	産業技術総合研究所（つくば市）	H30.12.17-12.18	0	1	0	0	1	0
日本天文学会2019年春季年会	法政大学（小金井市）	H31.3.14-3.17	0	1	2	2	5	0
日本物理学会第74回年次大会	九州大学（福岡市）	H31.3.14-3.17	0	4	0	7	11	0
日本生態学会 第66回大会	神戸国際展示場（神戸市）	H31.3.15-3.19	1	0	1	0	1	0
合 計			31	79	71	74	224	25

■ 国内研究集会・シンポジウム等

学会等の名前	開催場所	開催期間	会議室 コンピ ナ・世話 人・SOC・ LOC等	発表数				
				教員	客員・ 特任教 員・研 究員等	学生	計	招待 講演
第1回JCAR北極域研究計画ワークショップ	国立極地研究所（立川市）	H30.4.12	0	4	0	0	4	0
大気と海洋に関する研究集会	東京大学（東京都）	H30.4.21	0	1	0	0	1	0
宇宙プラズマにおける粒子加速ワークショップ	名古屋大学（名古屋市）	H30.4.23-4.24	2	2	1	0	3	3
極域における宙空間観測・研究の将来構想に関する研究集会	国立極地研究所（立川市）	H30.5.8	0	5	0	0	5	0
「パレオアジア文化史学」第5回研究大会	名古屋大学（名古屋市）	H30.5.19	0	1	0	0	1	0
ISEE研究集会「東シナ海の物質循環ならびに基礎生産に関わる物理・化学・生物過程」	名古屋大学（名古屋市）	H30.5.12-5.13	1	1	1	0	2	0

学会等の名前	開催場所	開催期間	会議運営 コンピー ナ・世話 人・SOC・ LOC等	発表数				
				教員	客員・ 特任教 員・研 究員等	学生	計	招待 講演
九州大学応用力学研究所フォーラム	九州大学（春日市）	H30.6.7-6.8	0	1	0	0	1	1
第31回タンデム加速器及びその周辺技術の研究会	東京都市大学（東京都）	H30.7.13-7.14	0	0	1	0	1	0
国際火山噴火史情報研究集会	ふじのくに地球環境史ミュージアム（静岡市）	H30.7.14-7.22	0	0	1	0	1	0
雷雲ガンマ線ミニ研究会	名古屋大学（名古屋市）	H30.8.8	1	3	0	0	3	0
第5回マッデン・ジュリアン振動研究会	富山大学（富山市）	H30.8.10-8.11	0	1	0	0	1	0
第22回データ同化夏の学校	JAMSTEC むつ研究所（むつ市）	H30.8.21-8.24	0	1	0	0	1	0
2018年度大槌シンポジウム	東京大学大気海洋研究所（岩手県上閉伊郡大槌町）	H30.8.28-8.29	0	0	0	1	1	0
STEシミュレーション研究会ープラズマ-大気複合システムのシミュレーション研究ー	成蹊大学（武蔵野市）	H30.9.3-9.5	1	1	0	0	1	0
平成30年度海洋・湖沼リモートセンシング勉強会	ふじのくに地球環境史ミュージアム（静岡市）	H30.9.5	0	1	0	0	1	0
第12回MUレーダー・赤道大気レーダーシンポジウム 第379回生存圏シンポジウム	京都大学（宇治市）	H30.9.5-9.6	0	1	0	1	2	0
ISEE研究集会「小型飛翔体による海象観測（その3）ー海洋科学は小型衛星のパートナーをどう選ぶかー」	名古屋大学（名古屋市）	H30.9.7-9.8	2	0	1	0	1	1
平成30年度「STE現象報告会」「MTI研究集会」「IUGONET研究集会」「宇宙空間からの地球超高層大気観測に関する研究会」「科学とデータ研究集会」合同研究集会	情報通信研究機構（小金井市）	H30.9.10-9.14	5	4	3	6	13	1
ISEE研究集会「インド洋/太平洋域における海洋循環/環境応用に関する研究集会」	名古屋大学（名古屋市）	H30.9.13-9.14	1	0	2	0	2	0
第2回JCAR北極域研究計画ワークショップ	国立極地研究所（立川市）	H30.9.19	0	1	0	0	1	0
iLEAPS-Japan研究集会2018「大気-陸面プロセスの研究の進展：観測とモデルによる統合的理解」（ISEE研究集会）	名古屋大学（名古屋市）	H30.9.21-9.22	1	1	0	1	2	0
極域磁場・オーロラ変動のグローバルメカニズム研究会	国立極地研究所（立川市）	H30.9.21	0	1	0	0	1	1
第10回熱帯気象研究会	名古屋大学（名古屋市）	H30.9.25-9.26	1	1	0	1	2	0
第166回ハイパフォーマンスコンピューティング研究会	北海道立道民活動センター（札幌市）	H30.9.27-9.28	0	1	0	0	1	0
第3回宇宙素粒子若手の会秋の研究会	東京大学（柏市）	H30.10.4-10.6	0	0	0	1	1	0
第1回京都大学研究データマネジメントワークショップ	京都大学（京都市）	H30.10.6	0	0	1	0	1	0
ISEE研究集会「極域・中緯度 SuperDARN 研究集会」	名古屋大学（名古屋市）	H30.10.16-10.17	1	3	2	0	5	0
MIMS勉強会「AI vs. 数理モデリング」	明治大学（東京都）	H30.10.20	0	1	0	0	1	1
ISEE研究集会「大気・雪氷・海洋間の物質交換・循環と極域への物質輸送」	名古屋大学（名古屋市）	H30.10.22-10.23	1	0	0	0	0	0
第54回X線分析討論会	東京理科大学（東京都）	H30.10.24-10.26	0	1	0	0	1	0
ISEE研究集会「台風セミナー2018」	JAMSTEC 東京事務所（東京都）	H30.10.26-10.27	1	0	1	0	1	0

9. 研究成果

学会等の名前	開催場所	開催期間	会議室 コンピ ナ・世話 人・SOC LOC等	発表数				
				教員	客員・ 特任教 員・研 究員等	学生	計	招待 講演
ISEE 研究集会「脈動オーロラ研究集会」	名古屋大学（名古屋市）	H30.10.30-10.31	1	2	0	0	2	0
低温科学研究所 平成 30 年度共同利用研究集会 「寒冷圏大気－海洋間の生物地球化学相互作用 に関する研究集会」	北海道大学（札幌市）	H30.11.1-11.2	0	1	0	0	1	0
ISEE 研究集会「水圏クロロフィル蛍光に関する 知識統合と研究戦略」	名古屋大学（名古屋市）	H30.11.6-11.7	2	2	0	0	2	0
研究会：ミュオンによる非破壊分析の可能性 －考古学・文化財への応用を考える－	大阪大学（豊中市）	H30.11.12-11.13	0	1	0	0	1	0
「パレオアジア文化史学」第 6 回研究大会	東京大学（東京都）	H30.11.17-11.18	0	2	1	0	3	0
第 6 回 応用物理学会 名古屋大学スチューデント チャプター東海地区学術講演会	名古屋大学（名古屋市）	H30.11.25	0	0	0	1	1	0
宇治リコネクションワークショップ 2018 （兼 太陽圏物理研究会 第 4 回研究集会）	名古屋大学（名古屋市）	H30.11.28	1	0	1	0	1	1
宇宙プラズマにおける粒子加速ワークショップ	名古屋大学（名古屋市）	H30.11.29-11.30	2	2	2	0	4	0
2018 年度先端 ICT デバイスラボ成果報告会	情報通信研究機構（小金井 市）	H30.12.14	0	1	0	0	1	0
2018 年度大気海洋相互作用に関する研究集会	京都大学（京都市）	H30.12.15-12.16	1	0	3	2	5	0
第 21 回 AMS シンポジウム	日本大学（東京都）	H30.12.17-12.18	0	2	3	0	5	0
第 167 回 ハイパフォーマンスコンピューティン グ研究会	沖縄産業支援センター（那 覇市）	H30.12.17-12.18	0	1	0	0	1	0
「航空機観測による気候・地球システム科学研 究の推進」研究集会	東京大学（東京都）	H30.12.19	0	1	0	0	1	0
ワークショップ：EUVST-SUNRISE-DKIST への展望	国立天文台（三鷹市）	H30.12.26-12.27	0	0	2	0	2	1
CFCA User's Meeting	国立天文台（三鷹市）	H31.1.15-1.16	0	0	1	0	1	0
ISEE・PSTEP 研究集会「太陽地球圏環境予測の ためのモデル研究の展望」第 3 回	情報通信研究機構（小金井 市）	H31.1.17-1.18	3	3	1	0	4	1
平成 30 年度愛媛大学研究集会「赤潮の予測に向 けた観測とモデリング」	愛媛大学（松山市）	H31.1.17-1.18	1	1	1	0	2	0
NoRH, MUSER, and IPS workshop	名古屋大学（名古屋市）	H31.1.24	0	1	0	0	1	0
九州大学応用力学研究所 共同利用研究集会「東 シナ海と日本海の海水循環と生物化学過程」	九州大学（春日市）	H30.1.26	1	1	0	0	1	0
第 6 回 PSTEP 領域会議	名古屋大学（名古屋市）	H31.1.28-1.30	0	1	0	0	1	0
ISEE 研究集会「第 31 回名古屋大学宇宙地球環境 研究所年代測定研究シンポジウム」	名古屋大学（名古屋市）	H31.1.31-2.1	1	9	2	1	12	0
陸別ユーザーズミーティング	陸別町役場会議室（北海道）	H31.2.15	0	3	0	0	3	0
太陽研究者連絡会シンポジウム「太陽研究の現状 と将来展望」（ISEE 研究集会）	名古屋大学（名古屋市）	H31.2.18-2.20	3	8	4	1	13	3
SLATS 共同研究報告会	神戸大学（神戸市）	H31.2.20	0	1	0	0	1	0
第 2 回月着陸探査研究会	奥州宇宙遊学館（岩手県奥州市）	H31.2.22-2.23	0	0	1	0	1	1
新学術「西アジア都市」2018 年度年次報告会	名古屋大学（名古屋市）	H31.2.23	0	1	0	0	1	0
ブラックホール降着流ミニワークショップ	千葉大学（千葉市）	H31.2.28-3.1	0	0	1	0	1	0

学会等の名前	開催場所	開催期間	会議運営 コンピー ナ・世話 人・SOC・ LOC等	発表数				
				教員	客員・ 特任教 員・研 究員等	学生	計	招待 講演
2018年度 EISCAT 研究集会	国立極地研究所（立川市）	H31.3.1	0	3	0	0	3	0
ISEE 研究集会「海洋波および大気海洋相互作用に関するワークショップ」	名古屋大学（名古屋市）	H31.3.4-3.5	1	1	0	0	1	0
第11回 ERG サイエンス会議/あらせ衛星の電場・プラズマ波動観測データを用いた解析ワークショップ	名古屋大学（名古屋市）	H31.3.5-3.6	1	0	1	1	2	0
超高層大気・電磁気圏研究の成果公表のための論文執筆ワークショップ	伊良湖シーパーク&スパ （田原市）	H31.3.7-3.9	1	0	0	0	0	0
ISEE 研究集会「平成30年度第二回現象報告会」	九州大学（福岡市）	H31.3.11	1	0	0	1	1	0
実験室・宇宙プラズマ研究会「乱流・輸送・粒子加速」	名古屋大学（名古屋市）	H31.3.11-3.12	1	0	1	0	1	1
ISEE 研究集会「電磁圏物理学シンポジウム」および「地域ネットワークによる宇宙天気観測・教育活動に関する研究集会」	九州大学（福岡市）	H31.3.12-3.13	1	2	2	2	6	0
新学術領域「新海洋混合学」平成30年度全体会議	定山溪ビューホテル（札幌市）	H31.3.13-3.15	0	1	0	0	1	0
自然電磁環境情報学研究集会	京都大学（京都市）	H31.3.15	0	1	0	0	1	1
変成岩などシンポジウム2019	ホテル竹島（蒲郡市）	H31.3.17-3.19	0	1	0	0	1	0
ISEE 研究集会「GPM および衛星シミュレータ合同研究集会」	名古屋大学（名古屋市）	H31.3.18-3.19	1	0	1	1	2	0
ISEE 研究集会「第2回 地上赤外分光観測による大気組成変動検出に関する研究集会」	名古屋大学（名古屋市）	H31.3.18-3.19	1	3	1	0	4	0
アクティブ媒質 TPC 開発座談会	神戸大学（神戸市）	H31.3.21-3.22	0	0	1	0	1	0
第三回 空気シャワー観測による宇宙線の起源探索勉強会	東京大学（柏市）	H31.3.25	0	1	0	1	2	0
南極ドームふじ氷床深層コア全層詳細解析および「最古のアイスコア」についての研究討論集会	国立極地研究所（立川市）	H31.3.27-3.28	0	1	0	1	2	0
低気圧と暴風雨に係るワークショップ2019	九州大学（福岡市）	H31.3.27-3.28	0	0	1	0	1	0
電離圏・磁気圏探査衛星検討リサーチグループ最終会合	名古屋大学（名古屋市）	H31.3.29	0	0	1	0	1	0
ISEE 研究集会「宇宙惑星結合系の包括的理解と将来探査計画：地球、系内・系外惑星における超高層大気・外気圏の融合的研究の創設に向けて」	名古屋大学（名古屋市）	H31.3.29	1	1	0	0	1	0
大阪電気通信大学エレクトロニクス基礎研究所ワークショップ「あらせ衛星が拓く宇宙プラズマ研究」	大阪電気通信大学（寝屋川市）	H31.3.30	1	2	0	0	2	1
ISEE 研究集会「プラズマ圏の観測とモデリング」	大阪電気通信大学（寝屋川市）	H31.3.30	1	0	1	0	1	0
合 計			45	98	47	23	168	18

受賞

■ 教員

受賞日	受賞名	受賞者の所属・職名	受賞者	受賞対象となった研究課題名等
H30.4.17	平成 30 年度科学技術分野の文部科学大臣表彰「若手科学者賞」	推薦時：気象大気研究部・講師 (現：長崎大学)	中山 智喜	レーザー分光法を用いた大気微小粒子の光学特性の研究
H30.4.19	2017 年度日本機械学会賞(論文)	統合データサイエンスセンター・教授	三好 由純 (竹内彰他との共同受賞)	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
H30.5.21	EPS Excellent Paper Award 2017	電磁気圏研究部・特任講師	西野 真木 (斉藤義文他との共同受賞)	Y. Saito, M. N. Nishino, M. Fujimoto, T. Yamamoto, S. Yokota, et al. (2012), Simultaneous observation of the electron acceleration and ion deceleration over lunar magnetic anomalies, Earth Planets Space, 64:4, 83-92, doi:10.5047/eps.2011.07.011
H30.7.8	日本文化財科学会第 12 回論文賞	年代測定研究部・助教	小田 寛貴 (中村和之との共同受賞)	小田寛貴・中村和之(2018) 加速器質量分析法による蝦夷錦の放射性炭素年代測定ー「北東アジアのシルクロード」の起源を求めてー・考古学と自然科学, 75, 41-58.
H30.7.31	平成 29 年度日本学術振興会特別研究員等審査会専門委員(書面担当) 表彰	統合データサイエンスセンター・教授	坪木 和久	書面審査において有意義な審査意見を付した専門委員を表彰
H30.8	Top Reviewers of 2017	電磁気圏研究部・准教授	大塚 雄一	Advances in Space Research
H30.11.16	2nd Asia-Pacific Conference on Plasma Physics (AAPPs-DPP2018) Poster Prize	統合データサイエンスセンター・准教授	梅田 隆行(和田泰尚(修了生)との連名)	Non-MHD effects in the nonlinear development of the MHD-scale Rayleigh-Taylor instability
H30.11.26	地球電磁気・地球惑星圏学会「フロンティア賞」	太陽圏研究部・名誉教授	小島 正宜	惑星間空間シンチレーションによる太陽風グローバル観測システムの整備
		太陽圏研究部・教授	徳丸 宗利	
		太陽圏研究部・助教	藤木 謙一	
H31.1.9	米国気象学会優秀査読者賞・AMS Editor's Award 2019	陸域海洋圏生態研究部・准教授	相木 秀則	Journal of Physical Oceanography

■ 研究員

受賞日	受賞名	受賞者の所属・職名	受賞者	受賞対象となった研究課題名等
H30.5.29	URSI AT-RASC 2018 Young Scientist Award	元総合解析研究部・日本学術振興会特別研究員(PD)(現：JAXA)	松田 昇也	Strategy of EMIC Wave Observation by Arase/PWE and its Initial Results

■ 学生

受賞日	受賞名	受賞者の所属・学年 (担当教員名)	受賞者	受賞対象となった研究課題名等
H30.5.19	第 13 回(2019 年)日本物理学会若手奨励賞(Young Scientist Award of the Physical Society of Japan)	理学研究科素粒子宇宙物理学専攻・博士後期課程 H29 年度卒(担当：伊藤好孝)	周 啓東	ATLAS-LHCf検出器による $\sqrt{s}=13$ TeV 陽子-陽子衝突での超前方中性粒子生成への回折事象の寄与の研究(博士論文)

研究者向け講演会（共同利用研究会を除く）

ISEE あるいは研究部、グループが主催または共催したもの

開催期間	企画名称	会場	主催・共催	登壇者・講師 など	参加 人数
H30.4.5 H30.5.15 H30.7.24 H30.8.28 H30.9.26 H30.11.5 H30.11.29 H31.1.8 H31.2.15 H31.3.12	PSTEP セミナー	ネットワーク会議システム システムを利用し、インターネット で相互に接続した仮想会議室 上で実施	新学術領域研究「太陽地球 圏環境予測：我々が生きる 宇宙の理解とその変動に対 応する社会基盤の形成」	加藤雄人（東北 大学）、上野悟 （京都大学）、清 水敏文（JAXA）、 海老原祐輔（京 都大学）、宮原 ひろ子（武蔵野 美術大学）、岩 井一正ほか	各 回 約 60
H30.5.1 H30.5.8 H30.5.14 H30.7.5 H30.10.3 H30.10.12 H30.11.2 H30.11.20 H30.11.30 H30.12.25 H31.1.16 H31.3.1	ISEE/CICR colloquium (34th -45th)	名古屋大学研究所共 同館 I（名古屋市）	ISEE 国際連携センター	Z. P. Lee S. M. Playfer S. Krucker K.-H. Kim M. Zupanski A.V. Koustov D. Yang T. Yamaguchi M. J. Kosch B. Stevens V. Zharkova H. Takahashi	各 回 約 20
H30.4.26 H30.5.10 H30.5.24 H30.5.31 H30.6.7	ROOT 講習会 2018	名古屋大学研究所共 同館 I（名古屋市）	宇宙素粒子若手の会、ISEE 宇宙線研究部	奥村暁	100
H30.8.2-8.10	衛星海洋学に関するトレーニン グコース	名古屋大学研究所共 同館 I（名古屋市）	中国・浙江海洋大学、ISEE	Xu Yongjiu (浙 江海洋大学)、石 坂丞二、相木秀 則、富田裕之	31
H30.8.8	ISEE セミナー：雷雲ガンマ線研 究会	名古屋大学研究所共 同館 I（名古屋市）	ISEE 宇宙線研究室	榎戸輝揚（京都 大学）、中澤知 洋（名古屋大 学）、佐藤陽祐 （名古屋大学）、 伊藤好孝、坪木 和久、三宅美沙 三好由純	30
H30.8.31-9.2	気象夏の学校 2018 名古屋	愛知県民の森	名古屋大学気象夏の学校実 行委員会	吉野純（岐阜大 学）、岡田桂子 （日本 IBM）、増 永浩彦	84
H31.2.12	ISEE 技術部と JAXA ISAS 先端 工作技術グループの合同報告会	名古屋大学研究所共 同館 I（名古屋市）	ISEE 技術部、JAXA ISAS 先 端工作技術グループ	鈴木和司（JAX A）、中坪俊一 （JAXA）、岡本 渉、山崎高幸、足 立匠、久島萌人	30

9. 研究成果

開催期間	企画名称	会場	主催・共催	登壇者・講師 など	参加 人数
H31.3.14	“Australian-Japanese Comparative Analysis of Urban Water-Food-Energy Security Nexus” MLFP project workshop	National Centre for Groundwater Research & Training, Flinders University, Adelaide, Australia	Flinders University, Australia, ISEE	檜山哲哉	12
H31.3.15	台風内部の雷構造に関する数値実験～ライフサイクルごとのは雷頻度とエアロゾルの影響についての考察～	名古屋大学研究所共同館 I (名古屋市)	名古屋大学宇宙地球環境研究所雲降水気候学研究室	佐藤陽祐 (名古屋大学工学研究科)	15
H31.3.18-3.22	1st International School on Equatorial Atmosphere 2019	Auditorium LAPAN Bandung - Indonesia	インドネシア国立航空宇宙研究所 (LAPAN)、京都大学生存圏研究所、ISEE	山本衛 (京都大学)、山中大学 (総合地球環境学研究所)、S. Sridharan (NARL, ISRO)、橋口浩之 (京都大学)、塩川和夫、新堀淳 ほか	170
H31.3.26	ArCS「北極気候に関わる大気物質」温室効果気体課題会合	名古屋大学東京オフィス	ISEE 飛翔体観測推進センター地球水循環観測推進室	檜山哲哉	22