

11 研究成果報告

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11.1 出版

2017 年に出版された査読論文 30 編

- (1) Anan, T.¹, Ichimoto, K.¹, Hillier, A.³⁴
Differences between Doppler velocities of ions and neutral atoms in a solar prominence, 2017/05 A&A, 601, A103.
- (2) Cabezas, D. P.^{1,37}, Martinez, L. M.³⁵, Buleje, Y. J.³⁵, Ishitsuka, M.³⁷, Ishitsuka, J. K.³⁷, Morita, S.¹⁸, Asai, A.^{1,8}, UeNo, S.¹, Ishii, T. T.¹, Kitai, R.^{1,25}, Takasao, S.¹, Yoshinaga, Y.¹⁴, Otsuji, K.¹, Shibata, K.¹
"Dandelion" Filament Eruption and Coronal Waves Associated with a Solar Flare on 2011 February 16, 2017/02, ApJ, 836, 33.
- (3) Giono, G.¹⁸ and 28 coauthors including Ichimoto, K.¹
Polarization Calibration of the Chromospheric Lyman-Alpha Spectro Polarimeter for a 0.1% Polarization Sensitivity in the VUV Range. Part II: In-Flight Calibration Authors, 2017/04, Solar Physics, 292, 57.
- (4) Hayakawa, H.¹², Tamazawa, H.¹, Uchiyama, Y.²⁰, Ebihara, Y.^{8,10}, Miyahara, H.²⁷, Kosaka, T.²¹, Iwahashi, K.¹⁷, Isobe, H.^{8,11}
Historical Auroras in the 990s: Evidence for Great Magnetic Storms 2017/01, Solar Physics, 292, 12.
- (5) Hayakawa, H.¹², Mitsuma, Y.²⁰, Fujiwara, Y.¹⁶, Kawamura, A. D.¹, Kataoka, R.¹⁶, Ebihara, Y.^{10,8}, Kosaka, T.²¹, Iwahashi, K.¹⁷, Tamazawa, H.¹, Isobe, H.^{8,11}
The earliest drawings of datable auroras and a two-tail comet from the Syriac Chronicle of Zūqnīn 2017/04, PASJ, 69, 17.

- (6) Hayakawa, H.¹², Iwahashi, K.¹⁷, Tamazawa, H.¹, Ebihara, Y.^{10,8}, Kawamura, A. D.¹, Isobe, H.^{8,11}, Namiki, K., Shibata, K.¹
Records of auroral candidates and sunspots in Rikkokushi, chronicles of ancient Japan from early 7th century to 887, 2017/12, PASJ, 69, 86.
- (7) Hayakawa, H.¹², Iwahashi, K.¹⁷, Ebihara, Y.^{10,8}, Tamazawa, H.¹, Shibata, K.¹, Knipp, Delores J., Kawamura, A. D.¹, Hattori, K., Mase, K., Nakanishi, I., Isobe, H.¹
Long-lasting Extreme Magnetic Storm Activities in 1770 Found in Historical Documents, 2017/12, ApJL, 850, L31.
- (8) Hillier, A.³⁴, Matsumoto, T.¹³, Ichimoto, K.¹
Investigating prominence turbulence with Hinode SOT Dopplergrams 2017/01, A&A, 597, A111.
- (9) Ichimoto, K.¹, Ishii, T. T.¹, Otsuji, K.¹, Kimura, G.¹, Nakatani, K.¹, Kaneda, N.¹, Nagata, S.¹, Ueno, S.¹, Hirose, K.¹, Cabezas, D.¹, Morita, S.¹⁸
A New Solar Imaging System for Observing High Speed Eruptions: Solar Dynamics Doppler Imager (SDDI), 2017/04, Solar Phys, 292, 63.
- (10) Ishikawa, R.¹⁸ and 28 coauthors including Ichimoto, K.¹
Indication of the Hanle Effect by Comparing the Scattering Polarization Observed by CLASP in the Ly α and Si iii 120.65 nm Lines, 2017/05, ApJ, 841, 31.
- (11) Kano, R.¹⁸ and 27 coauthors including Ichimoto, K.¹
Discovery of Scattering Polarization in the Hydrogen Ly α Line of the Solar Disk Radiation, 2017/04, ApJL, 839, L10.
- (12) Maehara, H.¹⁸, Notsu, Y.¹, Notsu, S.¹⁴, Namekata, K.¹, Honda, S.²⁴, Ishii, T. T.¹, Nogami, D.¹⁴, Shibata, K.¹
Starspot activity and superflares on solar-type stars, 2017/06, PASJ, 69, 41.
- (13) Namekata, K.¹⁴, Sakaue, T.¹⁴, Watanabe, K.²⁶, Asai, A.¹, Shibata, K.¹
Validation of a Scaling Law for the Coronal Magnetic Field Strengths and Loop Lengths of Solar and Stellar Flares, 2017/02, PASJ, 69, 7.
- (14) Namekata, K.¹⁴, Sakaue, T.¹⁴, Watanabe, K.²⁶, Asai, A.¹, Maehara, H.¹⁸, Notsu, Y.¹, Notsu, S.¹⁴, Honda, S.²⁴, Ishii, T. T.¹, Ikuta, K.¹⁴, Nogami, D.¹⁴, Shibata, K.¹
Statistical Studies of Solar White-Light Flares and Comparisons with Superflares on Solar-type Stars, 2017/12, ApJ, 851, 91.

- (15) Notsu, Y.¹, Honda, S.²⁴, Maehara, H.¹⁸, Notsu, S.¹⁴, Namekata K.¹⁴, Nogami, D.¹⁴, Shibata, K.¹
Spectroscopic observations of active solar-analog stars having high X-ray luminosity, as a proxy of superflare stars, 2017/01, PASJ, 69, 12. (arXiv:1611.03659)
- (16) Quintero Noda, C.³ and 8 coauthors including Anan, T.¹ and Ichimoto, K.¹
Chromospheric polarimetry through multiline observations of the 850-nm spectral region, 2017/02, MNRAS, 464, 4534Q.
- (17) Quintero Noda, C.³ and 11 coauthors including Anan, T.¹ and Ichimoto, K.¹
Solar polarimetry through the KI lines at 770 nm, 2017/09 MNRAS, 470, 1453Q
- (18) Quintero Noda, C.³, and 12 coauthors including Anan, T.¹ and Ichimoto, K.¹
Chromospheric polarimetry through multi-line observations of the 850 nm spectral region II: A magnetic flux tube scenario, 2017/11 MNRAS, 472, 727Q
- (19) Sakaue, T.¹, Tei, A.¹, Asai, A.¹, Ueno, S.¹, Ichimoto, K.¹, Shibata, K.¹
Observational study on the fine structure and dynamics of a solar jet. I. Energy build-up process around a satellite spot, 2017/10, PASJ, 69, id.80
- (20) Seki, D.^{1,11}, Otsuji, K.¹, Isobe, H.¹¹, Ishii, T.T.¹, Sakaue, T.¹, Hirose, K.¹
Increase in the Amplitude of Line-of-sight Velocities of the Small-scale Motions in a Solar Filament before Eruption, 2017/07, ApJL, 843, L24.
- (21) Shimojo, M.¹⁸, Iwai, K.²³, Asai, A.¹, Nozawa, S.², Minamidani, T.¹⁸, Saito, M.¹⁸
Variation of the Solar Microwave Spectrum in the Last Half Century, 2017/10, ApJ, 848, 62.
- (22) Suematsu, Y.¹⁸, Katsukawa, Y.¹⁸, Shimizu, T.³, Ichimoto, K.¹
Instrument design of 1.5-m aperture solar optical telescope for the Solar-C Mission, 2017/11, SPIE, 10564, id. 105640T 9 pp.
- (23) Suematsu, Y.¹⁸, Katsukawa, Y.¹⁸, Shimizu, T.³, Ichimoto, K.¹, Horiuchi, T., Matsumoto, Y., Takeyama, N.
Optical and thermal design of 1.5-m aperture solar UV visible and IR observing telescope for Solar-C mission, 2017/11, SPIE, 10565, id. 105650R 5 pp.
- (24) Suematsu, Y.¹⁸, Ichimoto, K.¹, Katsukawa, Y.¹⁸, Tsuneta, S.¹⁸, Shimizu, T.³
Instrument design and on-orbit performance of the solar optical telescope aboard hinode (Solar-B), 2017/11, SPIE, 10566, id. 105662Z 8 pp.

- (25) Takahashi, T.¹, Shibata, K.¹
Sheath-accumulating Propagation of Interplanetary Coronal Mass Ejection, 2017/03, ApJL, 837, L17.
- (26) Takahashi, T.¹, Qiu, J.³⁶, Shiabta, K.¹
Quasi-periodic Oscillations in Flares and Coronal Mass Ejections Associated with Magnetic Reconnection, 2017/10, ApJ, 848, 102.
- (27) Takasao, S.²², Suzuki, T.K.²⁰, Shiabta, K.¹
A Theoretical Model of X-Ray Jets from Young Stellar Objects, 2017/09, ApJ, 847, 46.
- (28) Takeda, Y.¹⁸, UeNo, S.¹
Does the radial-tangential macroturbulence model adequately describe the spectral line broadening of solar-type stars?, 2017/06, PASJ, 69, 46.
- (29) Takeda, Y.¹⁸, UeNo, S.¹
Toward Spectroscopically Detecting the Global Latitudinal Temperature Variation on the Solar Surface, 2017/09, Solar Physics, 292, 123.
- (30) Tamazawa, H.¹, Kawamura, A.¹, Hayakawa, H.¹², Tsukamoto, A.⁶, Isobe, H.^{uss,gsais}, Ebihara, Y.^{RISH,uss}
Records of sunspot and aurora activity during 581-959 CE in Chinese official histories in the periods of Sui, Tang, and the Five Dynasties and Ten Kingdoms, 2017/04, PASJ, 69, 22.

2017年に受理された査読論文 3編

- (1) Hayakawa, H.¹², Iwahashi, K., Tamazawa, H.¹, Toriumi, S.¹⁸, Shibata, K.¹
Iwahashi Zenbei's Sunspot Drawings in 1793 in Japan, 2018/01, Solar Physics, 293, 8.
- (2) Quintero Noda, C.³, and 11 coauthors including Anan, T.¹ and Ichimoto, K.¹
Solar polarimetry in K I D₂ line: A novel possibility for a stratospheric balloon, 2018/03, A&A, 610, A79.
- (3) Sakaue, T.¹, Tei, A.¹ Asai, A.¹ Ueno, S.¹ Ichimoto, K.¹ Shibata, K.¹
Observational study on the fine structure and dynamics of a solar jet. II. Energy release process revealed by spectral analysis, 2018/12 PASJ, 70, 99.