

Bibliography from ADS file: toriumi.bib
September 14, 2022

- Toriumi, S., "Flux emergence and generation of flare-productive active regions", 2022AdSpR...70.1549T ADS
- Toriumi, S., Airapetian, V. S., Namekata, K., & Notsu, Y., "Universal Scaling Laws for Solar and Stellar Atmospheric Heating: Catalog of Power-law Index between Solar Activity Proxies and Various Spectral Irradiances", 2022arXiv220810511T ADS
- Namekata, K., Watanabe, K., Toriumi, S., et al., "XUV Spectra of Active Solar-like Stars: Extension of Empirical Laws from Solar Observations", 2022cosp...44.2480N ADS
- Toriumi, S. & Airapetian, V., "Response of solar and stellar atmospheric heating to the surface magnetic flux", 2022cosp...44.2475T ADS
- Kusano, K., Toriumi, S., Hotta, H., & Kaneko, T., "Integrated simulation study on the formation of flare-productive regions and the onset of solar flares", 2022cosp...44.2466K ADS
- Toriumi, S. & Park, S.-H., "Solar Flares and Magnetic Helicity", 2022arXiv220406010T ADS
- Hou, Y., Li, T., Yang, S., et al., "Various Activities above Sunspot Light Bridges in IRIS Observations: Classification and Comparison", 2022ApJ...929...12H ADS
- Toriumi, S. & Airapetian, V. S., "Universal Scaling Laws for Solar and Stellar Atmospheric Heating", 2022ApJ...927...179T ADS
- Kusano, K., Ichimoto, K., Ishii, M., et al., "PSTEP: project for solar-terrestrial environment prediction", 2021EP&S...73...159K ADS
- Toriumi, S., Airapetian, V., Hudson, H., et al., "Sun-as-a-star Spectral Irradiance Observations of Transiting Active Regions: a Milestone for Characterization of Stellar Active Regions", 2021AGUFM.U43B...05T ADS
- Toriumi, S., Airapetian, V., Hudson, H., et al., "Sun-as-a-star Spectral Irradiance Observations: Milestone For Characterizing The Stellar Active Regions", 2021AAS...23820503T ADS
- Toriumi, S., Airapetian, V. S., Hudson, H. S., et al., "Sun-as-a-star Multi-wavelength Observations: A Milestone for Characterization of Stellar Active Regions", 2021ccss.confE.46T ADS
- Toriumi, S., "Flux Emergence and Generation of Flare-productive Active Regions", 2021cosp...43E1731T ADS
- Shimizu, T., Imada, S., Kawate, T., et al., "The Solar-C (EUVST) mission: the latest status", 2020SPIE11444E..0NS ADS
- Imada, S., Shimizu, T., Kawate, T., et al., "Current Status of the Solar-CEUVST Mission", 2020AGUFM5056...05I ADS
- Toriumi, S. & Hotta, H., "Delta-sunspot Formation in Realistic Magnetic Flux Emergence Simulations", 2020AGUFM5006...04T ADS
- Jiang, C. & Toriumi, S., "Testing a Data-driven Active Region Evolution Model with Boundary Data at Different Heights from a Solar Magnetic Flux Emergence Simulation", 2020ApJ...903...11J ADS
- Hotta, H. & Toriumi, S., "Formation of superstrong horizontal magnetic field in delta-type sunspot in radiation magnetohydrodynamic simulations", 2020MNRAS.498.2925H ADS
- Toriumi, S., Airapetian, V. S., Hudson, H. S., et al., "Sun-as-a-star Spectral Irradiance Observations of Transiting Active Regions", 2020ApJ...902...36T ADS
- Duan, A., Jiang, C., Toriumi, S., & Syntelis, P., "On the Lorentz Force and Torque of Solar Photospheric Emerging Magnetic Fields", 2020ApJ...896L...9D ADS
- Namekata, K., Maehara, H., Notsu, Y., et al., "VizieR Online Data Catalog: Spot parameters on KIC solar-type stars (Namekata+, 2019)", 2020yCat...18710187N ADS
- Ishikawa, R. T., Katsukawa, Y., Antolin, P., & Toriumi, S., "Temporal and Spatial Scales in Coronal Rain Revealed by UV Imaging and Spectroscopic Observations", 2020SoPh...295...53I ADS
- Namekata, K., Davenport, J. R. A., Morris, B. M., et al., "Temporal Evolution of Spatially Resolved Individual Star Spots on a Planet-hosting Solar-type Star: Kepler-17", 2020ApJ...891...103N ADS
- Toriumi, S., Takasao, S., Cheung, M. C. M., et al., "Comparative Study of Data-driven Solar Coronal Field Models Using a Flux Emergence Simulation as a Ground-truth Data Set", 2020ApJ...890...103T ADS
- Namekata, K., Shibata, K., Maehara, H., et al., "Lifetimes and emergence/decay rates of star spots on solar-type stars estimated by Kepler data in comparison with those of sunspots", 2020AAS...23514805N ADS
- Oliveira, D. M., Hayakawa, H., Ebihara, Y., et al., "Revisiting Carrington event with archival materials: Spatiotemporal Evolutions of a Large Sunspot Group and Great Auroral Storms", 2019AGUFM13E33530 ADS
- Toriumi, S., Takasao, S., Cheung, C. M. M., et al., "Comparative Study of Data-driven Coronal Field Models with a Ground-truth Flux Emergence Simulation", 2019AGUFM5H34B...04T ADS
- Hayakawa, H., Ebihara, Y., Willis, D. M., et al., "Temporal and Spatial Evolutions of a Large Sunspot Group and Great Auroral Storms Around the Carrington Event in 1859", 2019SpWea...17.1553H ADS
- Toriumi, S. & Hotta, H., "Spontaneous Generation of δ -sunspots in Convective Magnetohydrodynamic Simulation of Magnetic Flux Emergence", 2019ApJ...886L...21T ADS
- Hinode Review Team, Al-Janabi, K., Antolin, P., et al., "Achievements of Hinode in the first eleven years", 2019PASJ...71R...1H ADS
- Shimizu, T., Imada, S., Kawate, T., et al., "The Solar-CEUVST mission", 2019SPIE11118E..07S ADS
- Wang, H., Chen, B., Jing, J., et al., "Multi-wavelength Multi-height Study of Super Strong Surface and Coronal Magnetic Fields in Active Region 12673", 2019AAS...23440205W ADS
- Namekata, K., Maehara, H., Davenport, J., et al., "Lifetimes and emergence/decay rates of star spots on solar-type stars estimated by Kepler data in comparison with those of sunspots", 2019shin.confE..42N ADS
- Toriumi, S. & Wang, H., "Flare-productive active regions", 2019LRSP...16...3T ADS
- Fujiyama, M., Hayakawa, H., Iju, T., et al., "Revisiting Kunitomo's Sunspot Drawings During 1835 - 1836 in Japan", 2019SoPh...294...43F ADS
- Hayakawa, H., Ebihara, Y., Cliver, E. W., et al., "The extreme space weather event in September 1909", 2019MNRAS.484.4083H ADS
- Namekata, K., Maehara, H., Notsu, Y., et al., "Lifetimes and Emergence/Decay Rates of Star Spots on Solar-type Stars Estimated by Kepler Data in Comparison with Those of Sunspots", 2019ApJ...871...187N ADS
- Young, P. R., Tian, H., Peter, H., et al., "Solar Ultraviolet Bursts", 2018SSRv...214...120Y ADS
- Hayakawa, H., Iwahashi, K., Fujiyama, M., et al., "Sunspot drawings by Japanese official astronomers in 1749-1750", 2018PASJ...70...63H ADS
- Toriumi, S., "Flare-productive Active Regions: Observations, Modeling, and their Applications", 2018cosp...42E3413T ADS
- Hayakawa, H., Ebihara, Y., Willis, D. M., et al., "The Great Space Weather Event during 1872 February Recorded in East Asia", 2018ApJ...862...15H ADS
- Wang, H., Yurchyshyn, V., Liu, C., et al., "Study of 3D magnetic Structure Corresponding to Extremely Strong Photospheric Magnetic Fields in Active Region 12673", 2018teess.conf31902W ADS
- Hayakawa, H., Iwahashi, K., Tamazawa, H., Toriumi, S., & Shibata, K., "Iwahashi Zenbei's Sunspot Drawings in 1793 in Japan", 2018SoPh...293...8H ADS
- Wang, H., Yurchyshyn, V., Liu, C., et al., "Strong Transverse Photosphere Magnetic Fields and Twist in Light Bridge Dividing Delta Sunspot of Active Region 12673", 2018RNAS...2...8W ADS
- Reep, J. W. & Toriumi, S., "The Direct Relation between the Duration of Magnetic Reconnection and the Evolution of GOES Light Curves in Solar Flares", 2017ApJ...851...4R ADS
- Toriumi, S. & Takasao, S., "Numerical Modeling of Flare-productive Active Regions of the Sun", 2017AGUFM5H43C..07T ADS
- Toriumi, S. & Takasao, S., "Numerical Simulations of Flare-productive Active Regions: δ -sunspots, Sheared Polarity Inversion Lines, Energy Storage, and Predictions", 2017ApJ...850...39T ADS
- Yokoyama, T., Oi, Y., & Toriumi, S., "MHD simulations of formation and eruption of a magnetic flux rope in an active region with a delta-sunspot", 2017SPD...4840002Y ADS
- Toriumi, S., Schrijver, C. J., Harra, L., Hudson, H. S., & Nagashima, K., "Magnetic Properties of Solar Active Regions that Govern Large Solar Flares and Eruptions", 2017SPD...4820001T ADS
- Khlystova, A. & Toriumi, S., "Photospheric Velocity Structures during the Emergence of Small Active Regions on the Sun", 2017ApJ...839...63K ADS
- Toriumi, S., Katsukawa, Y., & Cheung, M. C. M., "Various Local Heating Events in the Earliest Phase of Flux Emergence", 2017ApJ...836...63T ADS
- Toriumi, S., "Flare-productive active regions: magnetic properties and evolutions", 2017psio.confE..41T ADS
- Toriumi, S., Schrijver, C. J., Harra, L. K., Hudson, H., & Nagashima, K., "Magnetic Properties of Solar Active Regions That Govern Large Solar Flares and Eruptions", 2017ApJ...834...56T ADS
- Toriumi, S., Schrijver, C. J., Harra, L. K., Hudson, H., & Nagashima, K., "Properties and Developments of Flaring Active Regions", 2016usc.confE..15T ADS
- Harra, L. K., Schrijver, C. J., Janvier, M., et al., "The Characteristics of Solar X-Class Flares and CMEs: A Paradigm for Stellar Superflares and Eruptions?", 2016SoPh...291.1761H ADS
- Toriumi, S., Cheung, M. C. M., & Katsukawa, Y., "Light Bridge in a Developing Active Region. II. Numerical Simulation of Flux Emergence and Light Bridge Formation", 2015ApJ...811...138T ADS

- Toriumi, S., Katsukawa, Y., & Cheung, M. C. M., “*Light Bridge in a Developing Active Region. I. Observation of Light Bridge and its Dynamic Activity Phenomena*”, 2015ApJ...811..137T [ADS](#)
- Toriumi, S., “*Observations and modeling of the solar flux emergence*”, 2014PASJ...66S...6T [ADS](#)
- Toriumi, S., Hayashi, K., & Yokoyama, T., “*Statistical Analysis of the Horizontal Divergent Flow in Emerging Solar Active Regions*”, 2014ApJ...794...19T [ADS](#)
- Toriumi, S., Iida, Y., Kusano, K., Bamba, Y., & Imada, S., “*Formation of a Flare-Productive Active Region: Observation and Numerical Simulation of NOAA AR 11158*”, 2014SoPh...289.3351T [ADS](#)
- Toriumi, S., Kusano, K., Bamba, Y., Imada, S., & Iida, Y., “*Flux emergence and formation of a flare-productive active region*”, 2014cosp...40E3375T [ADS](#)
- Toriumi, S., Iida, Y., Bamba, Y., et al., “*The Magnetic Systems Triggering the M6.6 Class Solar Flare in NOAA Active Region 11158*”, 2013ApJ...773...128T [ADS](#)
- Toriumi, S., Ilonidis, S., Sekii, T., & Yokoyama, T., “*Probing the Shallow Convection Zone: Rising Motion of Subsurface Magnetic Fields in the Solar Active Region*”, 2013ApJ...770L..11T [ADS](#)
- Toriumi, S. & Yokoyama, T., “*Three-dimensional magnetohydrodynamic simulation of the solar magnetic flux emergence. Parametric study on the horizontal divergent flow*”, 2013A&A...553A..55T [ADS](#)
- Toriumi, S., Iida, Y., Bamba, Y., Kusano, K., & Inoue, S., “*M6.6 Flare in NOAA AR 11158: Formation of the Flare-triggering Region*”, 2013enss.confE...26T [ADS](#)
- Toriumi, S., Ilonidis, S., Sekii, T., & Yokoyama, T., “*Helioseismic Detection of the Pre-emerging Magnetic Flux in the Shallow Convection Zone*”, 2013enss.confE...25T [ADS](#)
- Kusano, K., Bamba, Y., Yamamoto, T. T., et al., “*Magnetic Field Structures Triggering Solar Eruptions*”, 2012AGUFM53B...04K [ADS](#)
- Toriumi, S., Iida, Y., Bamba, Y., Kusano, K., & Inoue, S., “*Flare Triggering Region of NOAA AR11158*”, 2012AGUFM51A2205T [ADS](#)
- Kusano, K., Bamba, Y., Yamamoto, T. T., et al., “*Magnetic Field Structures Triggering Solar Flares and Coronal Mass Ejections*”, 2012ApJ...760...31K [ADS](#)
- Toriumi, S. & Yokoyama, T., “*Numerical Experiments on the Two-Step Emergence of Solar Magnetic Fields from the Convective Layer*”, 2012ASPC...454...259T [ADS](#)
- Toriumi, S., Hayashi, K., & Yokoyama, T., “*Detection of the Horizontal Divergent Flow Prior to the Solar Flux Emergence*”, 2012ApJ...751...154T [ADS](#)
- Toriumi, S. & Yokoyama, T., “*Numerical Simulation and SOT Magnetogram Analysis of the Small-scale Magnetic Elements in a Solar Emerging Flux Region*”, 2012ASPC...456...33T [ADS](#)
- Toriumi, S., Hayashi, K., & Yokoyama, T., “*Detection of the Horizontal Divergent Flow (HDF) as a Precursor of Sunspot Emergence*”, 2012AAS...22052103T [ADS](#)
- Toriumi, S. & Yokoyama, T., “*Large-scale 3D MHD simulation on the solar flux emergence and the small-scale dynamic features in an active region*”, 2012A&A...539A..22T [ADS](#)
- Toriumi, S. & Yokoyama, T., “*Numerical Experiments on the Two-step Emergence of Twisted Magnetic Flux Tubes in the Sun*”, 2011ApJ...735...126T [ADS](#)
- Toriumi, S., Miyagoshi, T., Yokoyama, T., Isobe, H., & Shibata, K., “*Dependence of the Magnetic Energy of Solar Active Regions on the Twist Intensity of the Initial Flux Tubes*”, 2011PASJ...63..407T [ADS](#)
- Toriumi, S. & Yokoyama, T., “*Two-step Emergence of the Magnetic Flux Sheet from the Solar Convection Zone*”, 2010ApJ...714...505T [ADS](#)