

# Satoru Katsuda

## List of Publications by Year in descending order

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92  
papers

3,465  
citations

201674

27  
h-index

144013

57  
g-index

97  
all docs

97  
docs citations

97  
times ranked

2248  
citing authors

| #  | ARTICLE  | IF   | CITATIONS |
|----|--|------|-----------|
| 1  | X-Ray Imaging Spectrometer (XIS) on Board Suzaku. Publication of the Astronomical Society of Japan, 2007, 59, S23-S33.   | 2.5  | 857       |
| 2  | Monte Carlo Simulator and Ancillary Response Generator of Suzaku XRT/XIS System for Spatially Extended Source Analysis. Publication of the Astronomical Society of Japan, 2007, 59, S113-S132. | 2.5  | 380       |
| 3  | The quiescent intracluster medium in the core of the Perseus cluster. Nature, 2016, 535, 117-121.  | 27.8 | 348       |
| 4  | EXPANSION VELOCITY OF EJECTA IN TYCHO'S SUPERNOVA REMNANT MEASURED BY DOPPLER BROADENED X-RAY LINE EMISSION. Astrophysical Journal, 2010, 725, 894-903.  | 4.5  | 95        |
| 5  | X-RAY MEASURED DYNAMICS OF TYCHO'S SUPERNOVA REMNANT. Astrophysical Journal, 2010, 709, 1387-1395.   | 4.5  | 86        |
| 6  | Concept of the X-ray Astronomy Recovery Mission. , 2018, , .   |      | 85        |
| 7  | A HIGH-RESOLUTION X-RAY AND OPTICAL STUDY OF SN 1006: ASYMMETRIC EXPANSION AND SMALL-SCALE STRUCTURE IN A TYPE IA SUPERNOVA REMNANT. Astrophysical Journal, 2014, 781, 65.                     | 4.5  | 73        |
| 8  | Performance of the Charge-Injection Capability of Suzaku XIS. Publication of the Astronomical Society of Japan, 2008, 60, S1-S9.   | 2.5  | 62        |
| 9  | Intermediate-mass Elements in Young Supernova Remnants Reveal Neutron Star Kicks by Asymmetric Explosions. Astrophysical Journal, 2018, 856, 18.   | 4.5  | 62        |
| 10 | POSSIBLE CHARGE-EXCHANGE X-RAY EMISSION IN THE CYGNUS LOOP DETECTED WITH SUZAKU. Astrophysical Journal, 2011, 730, 24.   | 4.5  | 57        |
| 11 | Atmospheric gas dynamics in the Perseus cluster observed with Hitomi. Publication of the Astronomical Society of Japan, 2018, 70, .  | 2.5  | 57        |
| 12 | X-Ray Spectroscopy of SN 1006 with Suzaku. Publication of the Astronomical Society of Japan, 2008, 60, S141-S151.  | 2.5  | 56        |
| 13 | THE FIRST X-RAY PROPER-MOTION MEASUREMENTS OF THE FORWARD SHOCK IN THE NORTHEASTERN LIMB OF SN 1006. Astrophysical Journal, 2009, 692, L105-L108.  | 4.5  | 50        |
| 14 | EVIDENCE FOR THERMAL X-RAY LINE EMISSION FROM THE SYNCHROTRON-DOMINATED SUPERNOVA REMNANT RX J1713.7-3946. Astrophysical Journal, 2015, 814, 29.   | 4.5  | 47        |
| 15 | Atomic data and spectral modeling constraints from high-resolution X-ray observations of the Perseus cluster with Hitomi. Publication of the Astronomical Society of Japan, 2018, 70, .        | 2.5  | 46        |
| 16 | X-Ray Measurements of the Particle Acceleration Properties at Inward Shocks in Cassiopeia A. Astrophysical Journal, 2018, 853, 46.   | 4.5  | 45        |
| 17 | KEPLERâ€™S SUPERNOVA: AN OVERLUMINOUS TYPE Ia EVENT INTERACTING WITH A MASSIVE CIRCUMSTELLAR MEDIUM AT A VERY LATE PHASE. Astrophysical Journal, 2015, 808, 49.                                | 4.5  | 43        |
| 18 | MAGNETIC FIELD AMPLIFICATION IN THE THIN X-RAY RIMS OF SN 1006. Astrophysical Journal, 2014, 790, 85.  | 4.5  | 42        |

| #  | ARTICLE   | IF  | CITATIONS |
|----|---|-----|-----------|
| 19 | STEADY X-RAY SYNCHROTRON EMISSION IN THE NORTHEASTERN LIMB OF SN 1006. <i>Astrophysical Journal</i> , 2010, 723, 383-392.   | 4.5 | 41        |
| 20 | Suzaku Observations of the North Polar Spur: Evidence for Nitrogen Enhancement. <i>Publication of the Astronomical Society of Japan</i> , 2008, 60, S95-S106.   | 2.5 | 39        |
| 21 | Data-Oriented Diagnostics of Pileup Effects on the Suzaku XIS. <i>Publication of the Astronomical Society of Japan</i> , 2012, 64, .  | 2.5 | 37        |
| 22 | HIGH-RESOLUTION X-RAY SPECTROSCOPY OF THE GALACTIC SUPERNOVA REMNANT PUPPIS A WITH XMM-NEWTON/RGS. <i>Astrophysical Journal</i> , 2012, 756, 49.  | 4.5 | 36        |
| 23 | The Plasma Structure of the Cygnus Loop from the Northeastern Rim to the Southwestern Rim. <i>Astrophysical Journal</i> , 2007, 671, 1717-1725.   | 4.5 | 32        |
| 24 | LONG-LASTING X-RAY EMISSION FROM TYPE IIb SUPERNOVA 2011dh AND MASS-LOSS HISTORY OF THE YELLOW SUPERGIANT PROGENITOR. <i>Astrophysical Journal</i> , 2014, 785, 95.   | 4.5 | 31        |
| 25 | Detection of Highly-Ionized Carbon and Nitrogen Emission Lines from the Cygnus Loop Supernova Remnant with the Suzaku Observatory. <i>Publication of the Astronomical Society of Japan</i> , 2007, 59, S163-S170.             | 2.5 | 30        |
| 26 | DISCOVERY OF X-RAY-EMITTING O-Ne-Mg-RICH EJECTA IN THE GALACTIC SUPERNOVA REMNANT PUPPIS A. <i>Astrophysical Journal</i> , 2010, 714, 1725-1732.  | 4.5 | 29        |
| 27 | Measurements of resonant scattering in the Perseus Cluster core with Hitomi SXS. <i>Publication of the Astronomical Society of Japan</i> , 2018, 70, .  | 2.5 | 29        |
| 28 | TWO DISTINCT-ABSORPTION X-RAY COMPONENTS FROM TYPE II <sub>n</sub> SUPERNOVAE: EVIDENCE FOR ASPHERICITY IN THE CIRCUMSTELLAR MEDIUM. <i>Astrophysical Journal</i> , 2016, 832, 194.   | 4.5 | 27        |
| 29 | Hitomi observation of radio galaxy NGC 1275: The first X-ray microcalorimeter spectroscopy of Fe-K $\pm$ line emission from an active galactic nucleus. <i>Publication of the Astronomical Society of Japan</i> , 2018, 70, . | 2.5 | 27        |
| 30 | The Transition from Young to Middle-aged Supernova Remnants: Thermal and Nonthermal Aspects of SNR N132D. <i>Astrophysical Journal</i> , 2018, 854, 71.   | 4.5 | 26        |
| 31 | SN 2005ip: A LUMINOUS TYPE II <sub>n</sub> SUPERNOVA EMERGING FROM A DENSE CIRCUMSTELLAR MEDIUM AS REVEALED BY X-RAY OBSERVATIONS. <i>Astrophysical Journal</i> , 2014, 780, 184.   | 4.5 | 25        |
| 32 | X-RAY PROPER MOTIONS AND SHOCK SPEEDS ALONG THE NORTHWEST RIM OF SN 1006. <i>Astrophysical Journal</i> , 2013, 763, 85.   | 4.5 | 23        |
| 33 | Progenitor Mass Distribution of Core-collapse Supernova Remnants in Our Galaxy and Magellanic Clouds Based on Elemental Abundances. <i>Astrophysical Journal</i> , 2018, 863, 127.  | 4.5 | 23        |
| 34 | Detection of polarized gamma-ray emission from the Crab nebula with the Hitomi Soft Gamma-ray Detector. <i>Publication of the Astronomical Society of Japan</i> , 2018, 70, .   | 2.5 | 21        |
| 35 | Chandra Observations of the Northeastern Rim of the Cygnus Loop. <i>Astrophysical Journal</i> , 2008, 680, 1198-1205.   | 4.5 | 21        |
| 36 | THE REFINED SHOCK VELOCITY OF THE X-RAY FILAMENTS IN THE RCW 86 NORTHEAST RIM. <i>Astrophysical Journal Letters</i> , 2016, 820, L3.  | 8.3 | 20        |

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|----|---|-----|-----------|
| 37 | Temperature structure in the Perseus cluster core observed with Hitomi. Publication of the Astronomical Society of Japan, 2018, 70, .   | 2.5 | 20        |
| 38 | Spatially Resolved Spectral Analysis of Vela Shrapnel D. Publication of the Astronomical Society of Japan, 2005, 57, 621-628.   | 2.5 | 18        |
| 39 | Suzaku Observations of Thermal and Non-Thermal X-Ray Emission from the Middle-Aged Supernova Remnant G156.2+5.7. Publication of the Astronomical Society of Japan, 2009, 61, S155-S165. | 2.5 | 18        |
| 40 | Inverse First Ionization Potential Effects in Giant Solar Flares Found from Earth X-Ray Albedo with Suzaku/XIS. Astrophysical Journal, 2020, 891, 126.                                  | 4.5 | 17        |
| 41 | The Plasma Structure of the Southwestern Region of the Cygnus Loop with the XMM-Newton Observatory. Astrophysical Journal, 2008, 688, 1102-1111.  | 4.5 | 16        |
| 42 | SPATIALLY RESOLVED SPECTROSCOPY OF A BALMER-DOMINATED SHOCK IN THE CYGNUS LOOP: AN EXTREMELY THIN COSMIC-RAY PRECURSOR?. Astrophysical Journal Letters, 2016, 819, L32.                 | 8.3 | 16        |
| 43 | Ejecta Distributions of Heavy Elements in the Cygnus Loop. Publication of the Astronomical Society of Japan, 2009, 61, 301-308.   | 2.5 | 15        |
| 44 | Global distribution of ionizing and recombining plasmas in the supernova remnant G290.1+0.8. Publication of the Astronomical Society of Japan, 2015, 67, .                              | 2.5 | 15        |
| 45 | Abundance Inhomogeneity in the Northeastern Rim of the Cygnus Loop Revealed by the Suzaku Observatory. Publication of the Astronomical Society of Japan, 2008, 60, S115-S122.           | 2.5 | 14        |
| 46 | DYNAMICS OF X-RAY-EMITTING EJECTA IN THE OXYGEN-RICH SUPERNOVA REMNANT PUPPIS A REVEALED BY THE XMM-NEWTON REFLECTION GRATING SPECTROMETER. Astrophysical Journal, 2013, 768, 182.      | 4.5 | 14        |
| 47 | High Forbidden-to-resonance Line Ratio of O vii Discovered from the Cygnus Loop. Astrophysical Journal, 2019, 871, 234.   | 4.5 | 14        |
| 48 | Suzaku study on the ejecta of the supernova remnant G272.2+3.2. Publication of the Astronomical Society of Japan, 2016, 68, .   | 2.5 | 13        |
| 49 | Measurement of the X-ray proper motion in the south-east rim of RX J1713.7+3946. Astronomy and Astrophysics, 2017, 597, A106.   | 5.1 | 12        |
| 50 | LINE-OF-SIGHT SHELL STRUCTURE OF THE CYGNUS LOOP. Astrophysical Journal, 2009, 705, 1152-1159.  | 4.5 | 12        |
| 51 | Asymmetric Ejecta Distribution of the Cygnus Loop Revealed with Suzaku. Publication of the Astronomical Society of Japan, 2008, 60, S107-S114.  | 2.5 | 11        |
| 52 | Suzaku Detection of Diffuse Hard X-Ray Emission outside Vela X. Publication of the Astronomical Society of Japan, 2011, 63, S827-S836.  | 2.5 | 11        |
| 53 | Suzaku observations of the hard X-ray spectrum of Vela Jr. (SNR RX J0852.0+4622). Publication of the Astronomical Society of Japan, 2016, 68, .   | 2.5 | 11        |
| 54 | Suzaku Observations across the Cygnus Loop from the Northeastern to the Southwestern Rim. Publication of the Astronomical Society of Japan, 2009, 61, S137-S145.                        | 2.5 | 10        |

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| 55 | A SYSTEMATIC STUDY OF THE THERMAL AND NONTHERMAL EMISSION IN THE SUPERNOVA REMNANT RCW 86 WITH SUZAKU. <i>Astrophysical Journal</i> , 2017, 835, 34.  | 4.5 | 10        |
| 56 | Multi-year X-Ray Variations of Iron-K and Continuum Emissions in the Young Supernova Remnant Cassiopeia A. <i>Astrophysical Journal</i> , 2017, 836, 225.   | 4.5 | 10        |
| 57 | Abundance Inhomogeneity in the Northern Rim of the Cygnus Loop. <i>Publication of the Astronomical Society of Japan</i> , 2009, 61, 503-510.  | 2.5 | 9         |
| 58 | A Suzaku Study of Ejecta Structure and Origin of Hard X-Ray Emission in the Supernova Remnant G 156.2+5.7. <i>Publication of the Astronomical Society of Japan</i> , 2012, 64, .  | 2.5 | 9         |
| 59 | DISCOVERY OF A PULSAR WIND NEBULA CANDIDATE IN THE CYGNUS LOOP. <i>Astrophysical Journal Letters</i> , 2012, 754, L7.   | 8.3 | 9         |
| 60 | Supernova of 1006 (G327.6+14.6). , 2017, , 63-81.   |     | 9         |
| 61 | Spatially Resolved RGS Analysis of Keplerâ€™s Supernova Remnant. <i>Astrophysical Journal</i> , 2021, 915, 42.  | 4.5 | 9         |
| 62 | CONSTRAINING THE AGE AND DISTANCE OF THE GALACTIC SUPERNOVA REMNANT G156.2+5.7 BY H $\beta$ EXPANSION MEASUREMENTS. <i>Astrophysical Journal</i> , 2016, 826, 108.  | 4.5 | 8         |
| 63 | Search for thermal X-ray features from the Crab nebula with the Hitomi soft X-ray spectrometer. <i>Publication of the Astronomical Society of Japan</i> , 2018, 70, .   | 2.5 | 8         |
| 64 | Hitomi X-ray studies of giant radio pulses from the Crab pulsar. <i>Publication of the Astronomical Society of Japan</i> , 2018, 70, .  | 2.5 | 8         |
| 65 | Hitomi X-ray observation of the pulsar wind nebula G21.5â€™0.9. <i>Publication of the Astronomical Society of Japan</i> , 2018, 70, .   | 2.5 | 8         |
| 66 | Polarized Balmer line emission from supernova remnant shock waves efficiently accelerating cosmic rays. <i>Monthly Notices of the Royal Astronomical Society</i> , 2018, 473, 1394-1406.  | 4.4 | 7         |
| 67 | New Measurement of the Vertical Atmospheric Density Profile From Occultations of the Crab Nebula With X-ray Astronomy Satellites Suzaku and Hitomi. <i>Journal of Geophysical Research: Space Physics</i> , 2021, 126, e2020JA028886. | 2.4 | 7         |
| 68 | XMM-Newton observations across the Cygnus Loop from northeastern rim to southwestern rim. <i>Advances in Space Research</i> , 2008, 41, 383-389.  | 2.6 | 6         |
| 69 | Another Abundance Inhomogeneity in the South East Limb of the Cygnus Loop. <i>Publication of the Astronomical Society of Japan</i> , 2009, 61, S147-S153.   | 2.5 | 6         |
| 70 | Is Vela Jr. a young supernova remnant?. <i>Advances in Space Research</i> , 2009, 43, 895-899.  | 2.6 | 6         |
| 71 | Suzaku Observation of the Southeastern Rim of the Cygnus Loop. <i>Publication of the Astronomical Society of Japan</i> , 2010, 62, 1035-1044.   | 2.5 | 6         |
| 72 | Detection of the hard X-ray non-thermal emission from Keplerâ€™s supernova remnant. <i>Publication of the Astronomical Society of Japan</i> , 2021, 73, 302-312.  | 2.5 | 6         |

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|----|--|-----|-----------|
| 73 | RGS Observations of Ejecta Knots in Tycho's Supernova Remnant. <i>Astrophysical Journal Letters</i> , 2020, 898, L51.  | 8.3 | 6         |
| 74 | A Third-epoch Proper Motion Study of the Forward Shock in Kepler's Supernova Remnant. <i>Astrophysical Journal</i> , 2022, 926, 84.  | 4.5 | 6         |
| 75 | Hitomi observations of the LMC SNR N132D: Highly redshifted X-ray emission from iron ejecta. <i>Publication of the Astronomical Society of Japan</i> , 2018, 70, .   | 2.5 | 5         |
| 76 | Suzaku detection of solar wind charge exchange emission from a variety of highly ionized ions in an interplanetary coronal mass ejection. <i>Publication of the Astronomical Society of Japan</i> , 2021, 73, 504-518. | 2.5 | 5         |
| 77 | Detailed design of the science operations for the XRISM mission. <i>Journal of Astronomical Telescopes, Instruments, and Systems</i> , 2021, 7, .  | 1.8 | 5         |
| 78 | Element Stratification in the Middle-aged SN Ia Remnant G344.7-0.1. <i>Astrophysical Journal</i> , 2020, 897, 62.  | 4.5 | 5         |
| 79 | First Detection of Ar-K Line Emission from the Cygnus Loop. <i>Publication of the Astronomical Society of Japan</i> , 2011, 63, 199-208.   | 2.5 | 4         |
| 80 | Glimpse of the highly obscured HMXB IGR J16318-4848 with Hitomi. <i>Publication of the Astronomical Society of Japan</i> , 2018, 70, .   | 2.5 | 4         |
| 81 | First detection of X-ray line emission from Type II supernova 1978K with XMM-Newton's RGS. <i>Publication of the Astronomical Society of Japan</i> , 2020, 72, .   | 2.5 | 4         |
| 82 | Gamma-Ray Diagnostics of r-process Nucleosynthesis in the Remnants of Galactic Binary Neutron-star Mergers. <i>Astrophysical Journal</i> , 2022, 933, 111.   | 4.5 | 4         |
| 83 | Oxygen line mapping of SN 1006 with Suzaku. <i>Advances in Space Research</i> , 2008, 41, 411-415.   | 2.6 | 3         |
| 84 | X-ray/H $\alpha$ scaling relationships in stellar flares. <i>Publication of the Astronomical Society of Japan</i> , 2022, 74, 477-487.   | 2.5 | 3         |
| 85 | NuSTAR discovery of the hard X-ray emission and a wide-band X-ray spectrum from the Pictor's western hotspot. <i>Publication of the Astronomical Society of Japan</i> , 2022, 74, 602-611.                             | 2.5 | 2         |
| 86 | Detecting Thermal X-Ray Emission and Proper Motions in RX J1713.7-3946. <i>Proceedings of the International Astronomical Union</i> , 2017, 12, 206-212.  | 0.0 | 1         |
| 87 | Possible Detection of X-Ray Emitting Circumstellar Material in the Synchrotron-dominated Supernova Remnant RX J1713.7-3946. <i>Astrophysical Journal</i> , 2021, 923, 187.   | 4.5 | 1         |
| 88 | XMM-Newton observation of Vela shrapnel D. <i>Advances in Space Research</i> , 2005, 35, 996-1002.   | 2.6 | 0         |
| 89 | Orbital Calibration of the XIS. <i>Progress of Theoretical Physics Supplement</i> , 2007, 169, 316-321.  | 0.1 | 0         |
| 90 | A detailed Suzaku study of an evolved SNR, the Cygnus Loop. , 2012, , .  |     | 0         |

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|----|--|-----|-----------|
| 91 | Chandra and NuSTAR observations of supernova remnant RX J1713.7 <sup>h</sup> 3946. AIP Conference Proceedings, 2017, , . | 0.4 | 0         |
| 92 | High-Resolution X-Ray Spectroscopy of Galactic Supernova Remnants. Acta Polytechnica CTU Proceedings, 2014, 1, 200-204.  | 0.3 | 0         |