

Maurice A Leutenegger

List of Publications by Year in descending order

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83
papers

2,091
citations

257357

24
h-index

265120

42
g-index

86
all docs

86
docs citations

86
times ranked

1766
citing authors

#	ARTICLE	IF	CITATIONS
1	A new benchmark of soft X-ray transition energies of Ne , CO_2 , and SF_6 : paving a pathway towards ppm accuracy. <i>European Physical Journal D</i> , 2022, 76, 38.	0.6	1
2	Helium-like X-ray line complexes show that the hottest plasma on the O supergiant $\hat{\eta}$ Puppis is in its wind. <i>Monthly Notices of the Royal Astronomical Society</i> , 2022, 513, 1609-1622.	1.6	2
3	<i>Chandra</i> grating spectroscopy of embedded wind shock X-ray emission from O stars shows low plasma temperatures and significant wind absorption. <i>Monthly Notices of the Royal Astronomical Society</i> , 2021, 503, 715-725.	1.6	9
4	High-resolution Laboratory Measurements of K-shell X-Ray Line Polarization and Excitation Cross Sections in Helium-like S XV Ions. <i>Astrophysical Journal</i> , 2021, 914, 34.	1.6	9
5	Fe xvii 2p \rightarrow 3s Line Ratio Diagnostic of Shock Formation Radius in O Stars. <i>Astrophysical Journal</i> , 2021, 917, 105.	1.6	2
6	Highly charged ions in a new era of high resolution X-ray astrophysics. <i>X-Ray Spectrometry</i> , 2020, 49, 218-233.	0.9	8
7	Simple, compact, high-resolution monochromatic x-ray source for characterization of x-ray calorimeter arrays. <i>Review of Scientific Instruments</i> , 2020, 91, 083110.	0.6	8
8	High-Precision Determination of Oxygen $\langle \text{math display="inline">\frac{K}{K} \rangle$ Transition Energy Excludes Incongruent Motion of Interstellar Oxygen. <i>Physical Review Letters</i> , 2020, 125, 243001.	2.9	8
9	High Resolution Photoexcitation Measurements Exacerbate the Long-Standing Fe XVII Oscillator Strength Problem. <i>Physical Review Letters</i> , 2020, 124, 225001.	2.9	25
10	Charge exchange, from the sky to the laboratory: A method to determine state-selective cross-sections for improved modeling. <i>Astronomische Nachrichten</i> , 2020, 341, 197-202.	0.6	3
11	Radiography in high mass X-ray binaries. <i>Astronomy and Astrophysics</i> , 2020, 643, A9.	2.1	14
12	Status of x-ray imaging and spectroscopy mission (XRISM). , 2020, , .		36
13	<i>Chandra</i> spectral measurements of the O supergiant $\hat{\eta}$ Puppis indicate a surprising increase in the wind mass-loss rate over 18 $\hat{\text{A}}$ yr. <i>Monthly Notices of the Royal Astronomical Society</i> , 2020, 499, 6044-6052.	1.6	8
14	Poisson vs. Gaussian statistics for sparse X-ray data: Application to the soft X-ray spectrometer. <i>Publication of the Astronomical Society of Japan</i> , 2019, 71, .	1.0	4
15	Extended Line Spread Function of TES Microcalorimeters With Au/Bi Absorbers. <i>IEEE Transactions on Applied Superconductivity</i> , 2019, 29, 1-5.	1.1	11
16	Resolve Instrument on X-ray Astronomy Recovery Mission (XARM). <i>Journal of Low Temperature Physics</i> , 2018, 193, 991-995.	0.6	31
17	Atomic data and spectral modeling constraints from high-resolution X-ray observations of the Perseus cluster with Hitomi. <i>Publication of the Astronomical Society of Japan</i> , 2018, 70, .	1.0	46
18	High-resolution Charge Exchange Spectra with L-shell Nickel Show Striking Differences from Models. <i>Astrophysical Journal Letters</i> , 2018, 868, L17.	3.0	8

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19	Search for thermal X-ray features from the Crab nebula with the Hitomi soft X-ray spectrometer. Publication of the Astronomical Society of Japan, 2018, 70, .	1.0	8
20	In-flight calibration of Hitomi Soft X-ray Spectrometer. (1) Background. Publication of the Astronomical Society of Japan, 2018, 70, .	1.0	10
21	Hitomi observations of the LMC SNR Nâ€™%132â€™%D: Highly redshifted X-ray emission from iron ejecta. Publication of the Astronomical Society of Japan, 2018, 70, .	1.0	5
22	In-flight calibration of Hitomi Soft X-ray Spectrometer. (3) Effective area. Publication of the Astronomical Society of Japan, 2018, 70, .	1.0	7
23	Measurements of resonant scattering in the Perseus Cluster core with Hitomi SXS. Publication of the Astronomical Society of Japan, 2018, 70, .	1.0	29
24	Atmospheric gas dynamics in the Perseus cluster observed with Hitomi. Publication of the Astronomical Society of Japan, 2018, 70, .	1.0	57
25	Hitomi observation of radio galaxy NGCâ€™%1275: The first X-ray microcalorimeter spectroscopy of Fe-KÎ± line emission from an active galactic nucleus. Publication of the Astronomical Society of Japan, 2018, 70, .	1.0	27
26	In-Orbit Performance of the Digital Electronics for the X-Ray Microcalorimeter Onboard the Hitomi Satellite. Journal of Low Temperature Physics, 2018, 193, 505-511.	0.6	2
27	Ground calibration of the Astro-H (Hitomi) soft x-ray spectrometer. Journal of Astronomical Telescopes, Instruments, and Systems, 2018, 4, 1.	1.0	21
28	In-flight verification of the calibration and performance of the ASTRO-H (Hitomi) Soft X-ray Spectrometer. Journal of Astronomical Telescopes, Instruments, and Systems, 2018, 4, 1.	1.0	7
29	Concept of the X-ray Astronomy Recovery Mission. , 2018, , .		85
30	Design, implementation, and performance of the Astro-H soft x-ray spectrometer aperture assembly and blocking filters. Journal of Astronomical Telescopes, Instruments, and Systems, 2018, 4, 1.	1.0	6
31	In-flight performance of the soft x-ray spectrometer detector system on Astro-H. Journal of Astronomical Telescopes, Instruments, and Systems, 2018, 4, 1.	1.0	4
32	Energy scale calibration and drift correction of the X-IFU. , 2018, , .		5
33	Hitomi Constraints on the 3.5 keV Line in the Perseus Galaxy Cluster. Astrophysical Journal Letters, 2017, 837, L15.	3.0	84
34	Parametric Characterization of TES Detectors Under DC Bias. IEEE Transactions on Applied Superconductivity, 2017, 27, 1-5.	1.1	1
35	Feeding and Feedback in the Powerful Radio Galaxy 3C 120. Astrophysical Journal, 2017, 838, 16.	1.6	10
36	Calibration sources and filters of the soft x-ray spectrometer instrument on the Hitomi spacecraft. Journal of Astronomical Telescopes, Instruments, and Systems, 2017, 4, 1.	1.0	16

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37	The quiescent intracluster medium in the core of the Perseus cluster. <i>Nature</i> , 2016, 535, 117-121.	13.7	348
38	Characterization of an atomic hydrogen source for charge exchange experiments. <i>Review of Scientific Instruments</i> , 2016, 87, 11E516.	0.6	2
39	In-orbit operation of the ASTRO-H SXS. , 2016, , .		15
40	Calibration of the microcalorimeter spectrometer on-board the Hitomi (Astro-H) observatory (invited). <i>Review of Scientific Instruments</i> , 2016, 87, 11D503.	0.6	0
41	In-flight performance of the Soft X-ray Spectrometer detector system on Astro-H. , 2016, , .		10
42	The Astro-H high resolution soft x-ray spectrometer. <i>Proceedings of SPIE</i> , 2016, , .	0.8	51
43	In-flight verification of the calibration and performance of the ASTRO-H (Hitomi) Soft X-Ray Spectrometer. <i>Proceedings of SPIE</i> , 2016, , .	0.8	10
44	Ground calibration of the Astro-H (Hitomi) soft x-ray spectrometer. , 2016, , .		8
45	The ASTRO-H (Hitomi) x-ray astronomy satellite. <i>Proceedings of SPIE</i> , 2016, , .	0.8	47
46	THE COMPLEX CIRCUMNUCLEAR ENVIRONMENT OF THE BROAD-LINE RADIO GALAXY 3C 390.3 REVEALED BY CHANDRA HETG. <i>Astrophysical Journal</i> , 2016, 830, 98.	1.6	9
47	X-ray, UV and optical analysis of supergiants: Υ Ori. <i>Monthly Notices of the Royal Astronomical Society</i> , 2016, 456, 2907-2936.	1.6	22
48	Temporal Gain Correction for X-ray Calorimeter Spectrometers. <i>Journal of Low Temperature Physics</i> , 2016, 184, 498-504.	0.6	16
49	The design, implementation, and performance of the Astro-H SXS calorimeter array and anti-coincidence detector. , 2016, , .		15
50	The design, implementation, and performance of the Astro-H SXS aperture assembly and blocking filters. , 2016, , .		9
51	In-flight performance of pulse processing system of the ASTRO-H soft x-ray spectrometer. , 2016, , .		9
52	A COORDINATED X-RAY AND OPTICAL CAMPAIGN OF THE NEAREST MASSIVE ECLIPSING BINARY, γ ORIONIS Aa. III. ANALYSIS OF OPTICAL PHOTOMETRIC (<i>MOST</i>) AND SPECTROSCOPIC (GROUND-BASED) VARIATIONS. <i>Astrophysical Journal</i> , 2015, 809, 134.	1.6	18
53	Long term variability of Cygnus X-1. <i>Astronomy and Astrophysics</i> , 2015, 576, A117.	2.1	38
54	The ASTRO-H X-ray astronomy satellite. <i>Proceedings of SPIE</i> , 2014, , .	0.8	45

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55	Soft x-ray spectrometer (SXS): the high-resolution cryogenic spectrometer onboard ASTRO-H. Proceedings of SPIE, 2014, , .	0.8	29
56	Measuring the shock-heating rate in the winds of O stars using X-ray line spectra. Monthly Notices of the Royal Astronomical Society, 2014, 444, 3729-3737.	1.6	21
57	Observation of highly disparate K -shell x-ray spectra produced by charge exchange with bare mid- Z ions. Physical Review A, 2014, 90, .	1.0	12
58	The transition-edge EBIT microcalorimeter spectrometer. , 2014, , .		7
59	Measuring mass-loss rates and constraining shock physics using X-ray line profiles of O stars from the Chandra archive. Monthly Notices of the Royal Astronomical Society, 2014, 439, 908-923.	1.6	65
60	Unresolved puzzles in the x-ray emission produced by charge exchange measured on electron beam ion traps. , 2013, , .		0
61	CONSTRAINTS ON POROSITY AND MASS LOSS IN O-STAR WINDS FROM THE MODELING OF X-RAY EMISSION LINE PROFILE SHAPES. Astrophysical Journal, 2013, 770, 80.	1.6	28
62	Studies of highly charged iron ions using electron beam ion traps for interpreting astrophysical spectra. Physica Scripta, 2013, T156, 014001.	1.2	2
63	Charge exchange measurements with an x-ray calorimeter at an electron beam ion trap. Physica Scripta, 2013, T156, 014006.	1.2	3
64	X-rays from magnetic massive OB stars. Proceedings of the International Astronomical Union, 2013, 9, 330-333.	0.0	0
65	Rest-wavelength fiducials for the ITER core imaging x-ray spectrometer. Review of Scientific Instruments, 2012, 83, 10E111.	0.6	11
66	Atomic physics of shocked plasma in winds of massive stars. , 2012, , .		0
67	Accelerator experiments with soft protons and hyper-velocity dust particles: application to ongoing projects of future x-ray missions. , 2012, , .		0
68	The ASTRO-H X-ray Observatory. Proceedings of SPIE, 2012, , .	0.8	63
69	A generalized porosity formalism for isotropic and anisotropic effective opacity and its effects on X-ray line attenuation in clumped O star winds. Monthly Notices of the Royal Astronomical Society, 2012, 420, 1553-1561.	1.6	36
70	Chandra X-ray spectroscopy of the very early O supergiant HD 93129A: constraints on wind shocks and the mass-loss rate. Monthly Notices of the Royal Astronomical Society, 2011, 415, 3354-3364.	1.6	36
71	X-ray spectral diagnostics of activity in massive stars. Proceedings of the International Astronomical Union, 2010, 6, 348-353.	0.0	1
72	MODELING BROADBAND X-RAY ABSORPTION OF MASSIVE STAR WINDS. Astrophysical Journal, 2010, 719, 1767-1774.	1.6	29

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73	A mass-loss rate determination for $\hat{\iota}$ Puppis from the quantitative analysis of X-ray emission-line profiles. Monthly Notices of the Royal Astronomical Society, 2010, , no-no. Measurement of Anomalously Strong Emission from the	1.6	20
74	$1 < \text{Transition in the Spectrum of H-Like Phosphorus Following Charge Exchange with Molecular Hydrogen. Physical Review Letters, 2010, 105, 063201.}$	2.9	16
75	On the Importance of the Interclump Medium for Superionization: O $\langle \text{sc} \rangle \text{vi} \langle \text{sc} \rangle$ Formation in the Wind of $\hat{\iota}$ Puppis. Astrophysical Journal, 2008, 685, L149-L152.	1.6	33
76	Evidence for the Importance of Resonance Scattering in X-ray Emission Line Profiles of the O Star $\hat{\iota}$ Puppis. Astrophysical Journal, 2007, 659, 642-649.	1.6	25
77	Measurements and Analysis of Helium-Like Triplet Ratios in the X-ray Spectra of O-type Stars. Astrophysical Journal, 2006, 650, 1096-1110.	1.6	65
78	Wind signatures in the X-ray emission-line profiles of the late-O supergiant \hat{A} Orionis. Monthly Notices of the Royal Astronomical Society, 2006, 368, 1905-1916.	1.6	44
79	Wind clumping and the wind-wind collision zone in the Wolf-Rayet binary $\hat{3}2$ % Velorum. Astronomy and Astrophysics, 2004, 422, 177-191.	2.1	55
80	Resolving X-Ray Sources from B Stars Spectroscopically: The Example of $\hat{1}4$ Leporis. Astrophysical Journal, 2004, 612, L65-L68.	1.6	8
81	X-ray Spectroscopy of $\hat{1}$ Carinae with XMM-Newton. Astrophysical Journal, 2003, 585, 1015-1023.	1.6	21
82	Performance and results of the reflection grating spectrometers onboard XMM-Newton. , 2003, 4851, 196.		2
83	High resolution X-ray spectroscopy of $\hat{\iota}$ Puppis with the XMM-Newton reflection grating spectrometer. Astronomy and Astrophysics, 2001, 365, L312-L317.	2.1	170