

# Barbara Sylwester

## List of Publications by Year in descending order

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papers

853  
citations

471509

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h-index

552781

26  
g-index

72  
all docs

72  
docs citations

72  
times ranked

587  
citing authors

#	ARTICLE	IF	CITATIONS
1	Resik: A Bent Crystal X-ray Spectrometer for Studies of Solar Coronal Plasma Composition. Solar Physics, 2005, 226, 45-72.	2.5	84
2	Nonequilibrium Processes in the Solar Corona, Transition Region, Flares, and Solar Wind (Invited) Tj ETQq0 0 0 rgBT/Overlock 10 Tf 50 7	2.5	60
3	Solar Flare Abundances of Potassium, Argon, and Sulphur. Astrophysical Journal, 2003, 589, L113-L116.	4.5	42
4	Soft X-ray coronal spectra at low activity levels observed by RESIK. Astronomy and Astrophysics, 2010, 514, A82.	5.1	36
5	Flare Characteristics from X-ray Light Curves. Solar Physics, 2017, 292, 1.	2.5	33
6	SphinX soft X-ray spectrophotometer: Science objectives, design and performance. Solar System Research, 2011, 45, 189-199.	0.7	30
7	SOLAR FLARE COMPOSITION AND THERMODYNAMICS FROM RESIK X-RAY SPECTRA. Astrophysical Journal, 2014, 787, 122.	4.5	24
8	SphinX MEASUREMENTS OF THE 2009 SOLAR MINIMUM X-RAY EMISSION. Astrophysical Journal, 2012, 751, 111.	4.5	23
9	SphinX: The Solar Photometer in X-Rays. Solar Physics, 2013, 283, 631-649.	2.5	23
10	HIGHLY IONIZED POTASSIUM LINES IN SOLAR X-RAY SPECTRA AND THE ABUNDANCE OF POTASSIUM. Astrophysical Journal, 2010, 710, 804-809.	4.5	22
11	Diagnostics of non-thermal distributions in solar flare spectra observed by RESIK and RHESSI. Astronomy and Astrophysics, 2011, 533, A81.	5.1	22
12	A benchmark study for CHIANTI based on RESIK solar flare spectra. Astronomy and Astrophysics, 2007, 462, 323-330.	5.1	21
13	THE X-RAY LINE FEATURE AT 3.5 KeV IN GALAXY CLUSTER SPECTRA. Astrophysical Journal, 2015, 809, 50.	4.5	21
14	SixiiXâ€Ray Satellite Lines in Solar Flare Spectra. Astrophysical Journal, 2006, 638, 1154-1161.	4.5	20
15	RESIK SOLAR X-RAY FLARE ELEMENT ABUNDANCES ON A NON-ISOTHERMAL ASSUMPTION. Astrophysical Journal, 2015, 805, 49.	4.5	20
16	Nonthermal and thermal diagnostics of a solar flare observed with RESIK and RHESSI. Astronomy and Astrophysics, 2008, 488, 311-321.	5.1	19
17	STELLAR CORONAE, SOLAR FLARES: A DETAILED COMPARISON OF ĩf GEM, HR 1099, AND THE SUN IN HIGH-RESOLUTION X-RAYS. Astrophysical Journal, 2013, 768, 135.	4.5	18
18	THE SOLAR FLARE CHLORINE ABUNDANCE FROM RESIK X-RAY SPECTRA. Astrophysical Journal, 2011, 738, 49.	4.5	17

#	ARTICLE	IF	CITATIONS
19	Investigation of flare heating based on X-ray observations. <i>Advances in Space Research</i> , 1986, 6, 237-240.	2.6	16
20	Evolution of White-Light Flares Observed by YOHKOH. <i>Solar Physics</i> , 2000, 194, 305-325.	2.5	16
21	A SOLAR SPECTROSCOPIC ABSOLUTE ABUNDANCE OF ARGON FROM RESIK. <i>Astrophysical Journal</i> , 2010, 720, 1721-1726.	4.5	16
22	X-ray Flare Spectra from the DIOGENESS Spectrometer and Its Concept Applied to ChemiX on the Interhelioprobe Spacecraft. <i>Solar Physics</i> , 2015, 290, 3683-3697.	2.5	16
23	RESIK Observations of Helium-like Argon X-Ray Line Emission in Solar Flares. <i>Astrophysical Journal</i> , 2008, 681, L117-L120.	4.5	14
24	THE SOLAR FLARE SULFUR ABUNDANCE FROM RESIK OBSERVATIONS. <i>Astrophysical Journal</i> , 2012, 751, 103.	4.5	14
25	Observations of $1s^2\text{â€}1snp$ and $1s\text{â€}np$ lines in RESIK soft X-ray spectra. <i>Advances in Space Research</i> , 2006, 38, 1538-1542.	2.6	13
26	THE SOLAR X-RAY CONTINUUM MEASURED BY RESIK. <i>Astrophysical Journal</i> , 2010, 711, 179-184.	4.5	13
27	Investigation of the Mg XII 8.42 $\text{Å}$ doublet in solar flare spectra. <i>Solar Physics</i> , 1986, 103, 67-87.	2.5	12
28	Determination of differential emission measure from X-ray solar spectra registered by RESIK aboard CORONAS-F. <i>Solar System Research</i> , 2006, 40, 294-301.	0.7	12
29	Soft X-ray variability over the present minimum of solar activity as observed by SphinX. <i>Solar System Research</i> , 2011, 45, 182-187.	0.7	12
30	Determination of K, Ar, Cl, S, Si and Al flare abundances from RESIK soft X-ray spectra. <i>Advances in Space Research</i> , 2008, 42, 838-843.	2.6	10
31	Silicon Abundance from RESIK Solar Flare Observations. <i>Solar Physics</i> , 2013, 283, 453-461.	2.5	10
32	Solar flare X-ray spectra. <i>Solar Physics</i> , 1979, 63, 319-327.	2.5	9
33	Investigation of non-uniform heating during the decay phase of solar flares. <i>Solar Physics</i> , 1990, 126, 177-184.	2.5	9
34	Detection of H- and He-like resonance lines of chlorine in solar flare spectra. <i>Proceedings of the International Astronomical Union</i> , 2004, 2004, 671-674.	0.0	8
35	ChemiX: a Bragg crystal spectrometer for the Interhelioprobe interplanetary mission. <i>Experimental Astronomy</i> , 2016, 41, 327-350.	3.7	8
36	The thermal X-ray spectrum of the 2003 April 26 solar flare. <i>Advances in Space Research</i> , 2005, 35, 1723-1727.	2.6	7

#	ARTICLE	IF	CITATIONS
37	THERMAL CHARACTERISTICS AND THE DIFFERENTIAL EMISSION MEASURE DISTRIBUTION DURING A B8.3 FLARE ON 2009 JULY 4. <i>Astrophysical Journal</i> , 2016, 823, 126.	4.5	7
38	Highly Ionized Calcium and Argon X-Ray Spectra from a Large Solar Flare. <i>Astrophysical Journal</i> , 2018, 863, 10.	4.5	7
39	Analysis of Quiescent Corona X-ray Spectra from SphinX During the 2009 Solar Minimum. <i>Solar Physics</i> , 2019, 294, 1.	2.5	7
40	Analysis of the intensities and profiles of the spectral line Mg xii 8.42 Å in the solar X-ray spectrum. <i>Solar Physics</i> , 1975, 44, 391-401.	2.5	6
41	Estimation of equivalent flaring loop geometry based on broadband soft x-ray observations. <i>Advances in Space Research</i> , 1993, 13, 307-310.	2.6	6
42	Differential emission measure distributions in X-ray solar flares. <i>Advances in Space Research</i> , 2008, 42, 828-832.	2.6	6
43	Analysis of the physical conditions in a strong X-ray flare. <i>Advances in Space Research</i> , 1981, 1, 239-242.	2.6	5
44	The analysis of energy release in solar flares based on X-ray observations. <i>Space Science Reviews</i> , 1996, 76, 319.	8.1	5
45	Observations of Solar X-ray Spectra by the DIOGENESS and RESIK Spectrometers Onboard the CORONAS-F Satellite. <i>Solar System Research</i> , 2005, 39, 479-488.	0.7	5
46	Lines in the range 3.2–6.1 Å... observed in RESIK spectra. <i>Advances in Space Research</i> , 2006, 38, 1534-1537.	2.6	5
47	Temperature-sensitive line ratio diagnostics based on Si satellite-to-resonance line ratios for 1s–1snp transitions. <i>Advances in Space Research</i> , 2006, 38, 1543-1546.	2.6	5
48	Analysis of potassium abundance in a large number of flares. <i>Advances in Space Research</i> , 2006, 38, 1490-1493.	2.6	4
49	Thermodynamics of selected solar flares as determined from the analysis of the spectra obtained with the RESIK instrument. <i>Solar System Research</i> , 2006, 40, 125-132.	0.7	4
50	A Unique Resource for Solar Flare Diagnostic Studies: The SMM Bent Crystal Spectrometer. <i>Astrophysical Journal</i> , 2020, 894, 137.	4.5	4
51	X-ray studies of flaring plasma. <i>Journal of Astrophysics and Astronomy</i> , 2008, 29, 147-150.	1.0	3
52	The soft X-ray spectrometer polarimeter SolpeX. <i>Experimental Astronomy</i> , 2019, 47, 199-223.	3.7	3
53	On the Application of Differential Evolution to the Analysis of X-Ray Spectra*. <i>Astrophysical Journal</i> , 2022, 927, 19.	4.5	3
54	Multi-wavelength study of a strong impulsive solar limb flare on 2002 August 3. <i>Advances in Space Research</i> , 2005, 35, 1728-1731.	2.6	2

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55	Analysis of the differential emission measure distributions for solar flares observed by RESIK. Journal of Atmospheric and Solar-Terrestrial Physics, 2018, 179, 545-552.	1.6	2
56	Solar Microflares Observed by SphinX and RHESSI. Solar Physics, 2018, 293, 1.	2.5	2
57	A Multiwavelength Analysis of the Long-duration Flare Observed on 15 April 2002. Solar Physics, 2020, 295, 1.	2.5	2
58	New Solar Flare Calcium Abundances with No Surprises: Results from the Solar Maximum Mission Bent Crystal Spectrometer. Astrophysical Journal, 2022, 930, 77.	4.5	2
59	Influence of the energy calibration of broad-band X-ray detectors on determination of the plasma parameters. Advances in Space Research, 1988, 8, 267-270.	2.6	1
60	Physical conditions within flare kernels. Advances in Space Research, 2002, 30, 617-622.	2.6	1
61	Determination of flaring plasma characteristics from RESIK X-ray spectra. Proceedings of the International Astronomical Union, 2006, 2, 165.	0.0	1
62	Solar flares observed simultaneously with SphinX, GOES and RHESSI. Proceedings of the International Astronomical Union, 2012, 8, 571-572.	0.0	1
63	Solar X-rays from 0.3 <math>a.u.</math>: the ChemiX Bragg Spectrometer on Interhelioprobe. Proceedings of the International Astronomical Union, 2015, 11, 442-446.	0.0	1
64	Multitemperature analysis of solar flare observed on 2003 March 29. Proceedings of the International Astronomical Union, 2015, 11, 86-88.	0.0	1
65	Analysis of Intensity Ratio for MgXII Ly $\beta$ Components from Intercosmos 7 Observations. International Astronomical Union Colloquium, 1984, 86, 154-154.	0.1	0
66	High resolution observations of solar flares. COSPAR Colloquia Series, 2002, 13, 209-220.	0.2	0
67	He-like Ar xvii triplet observed by RESIK. Advances in Space Research, 2008, 42, 833-837.	2.6	0
68	Solar flare soft X-ray spectra from Diogenes observations. Proceedings of the International Astronomical Union, 2015, 11, 109-111.	0.0	0
69	Thermal characteristics of a B8.3 flare observed on July 04, 2009. Proceedings of the International Astronomical Union, 2015, 11, 112-115.	0.0	0
70	High-temperature solar flare plasma behaviour from crystal spectrometer observations. Proceedings of the International Astronomical Union, 2015, 11, 80-85.	0.0	0
71	Investigations of Physical Processes in Solar Flare Plasma on the Basis of RESIK Spectrometer Observations. Astrophysics and Space Science Library, 2014, , 157-174.	2.7	0