

Stephen L O'dell

List of Publications by Year in descending order

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83
papers

1,172
citations

1040056

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83
docs citations

83
times ranked

1435
citing authors

#	ARTICLE	IF	CITATIONS
1	Full-shell x-ray optics development at NASA Marshall Space Flight Center. Journal of Astronomical Telescopes, Instruments, and Systems, 2019, 5, 1.	1.8	17
2	Achieving zero stress in iridium, chromium, and nickel thin films. , 2015, , .		9
3	X-ray optics at NASA Marshall Space Flight Center. Proceedings of SPIE, 2015, , .	0.8	5
4	HIGH-TIME-RESOLUTION MEASUREMENTS OF THE POLARIZATION OF THE CRAB PULSAR AT 1.38 GHz. Astrophysical Journal, 2015, 799, 70.	4.5	9
5	Technology requirements for a square meter, arcsecond resolution telescope for x-rays: the SMART-X mission. Proceedings of SPIE, 2014, , .	0.8	7
6	Toward large-area sub-arcsecond x-ray telescopes. , 2014, , .		2
7	Development status of adjustable grazing incidence optics for 0.5 arcsecond x-ray imaging. Proceedings of SPIE, 2014, , .	0.8	7
8	Active figure control effects on mounting strategy for x-ray optics. , 2014, , .		0
9	A small mission featuring an imaging x-ray polarimeter with high sensitivity. Proceedings of SPIE, 2013, , .	0.8	9
10	Pushing the boundaries of X-ray grating spectroscopy in a suborbital rocket. , 2013, , .		5
11	Modeling contamination migration on the Chandra X-ray Observatory II. Proceedings of SPIE, 2013, , .	0.8	10
12	Opto-mechanical analyses for performance optimization of lightweight grazing-incidence mirrors. Proceedings of SPIE, 2013, , .	0.8	0
13	<i>CHANDRA</i>, KECK, AND VLA OBSERVATIONS OF THE CRAB NEBULA DURING THE 2011-APRIL GAMMA-RAY FLARE. Astrophysical Journal, 2013, 765, 56.	4.5	40
14	Toward active x-ray telescopes II. , 2012, , .		4
15	UNRAVELING THE GEOMETRY OF THE CRAB NEBULA's "INNER RING". Astrophysical Journal, 2012, 746, 41.	4.5	23
16	Measuring x-ray polarization in the presence of systematic effects: known background. Proceedings of SPIE, 2012, , .	0.8	15
17	<i>CHANDRA</i> PHASE-RESOLVED X-RAY SPECTROSCOPY OF THE CRAB PULSAR. Astrophysical Journal, 2011, 743, 139.	4.5	33
18	Mathematical formalism for designing wide-field x-ray telescopes: mirror nodal positions and detector tilts. , 2011, , .		0

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19	The Warm-Hot Intergalactic Medium Explorer (WHIMex) mission. , 2011, , .		2
20	Toward active x-ray telescopes. Proceedings of SPIE, 2011, , .	0.8	5
21	Differential deposition to correct surface figure deviations in astronomical grazing-incidence x-ray optics. Proceedings of SPIE, 2011, , .	0.8	3
22	THE IDENTIFICATION OF THE X-RAY COUNTERPART TO PSR J2021+4026. Astrophysical Journal, 2011, 743, 74.	4.5	13
23	Methods of optimizing x-ray optical prescriptions for wide-field applications. Proceedings of SPIE, 2010, , .	0.8	5
24	On understanding the figures of merit for detection and measurement of x-ray polarization. Proceedings of SPIE, 2010, , .	0.8	91
25	Effects of contamination upon the performance of x-ray telescopes. , 2010, , .		3
26	High-resolution x-ray telescopes. , 2010, , .		12
27	X-Ray Focusing: Techniques and Applications. X-Ray Optics and Instrumentation, 2010, 2010, 1-1.	0.7	0
28	On the design of wide-field x-ray telescopes. Proceedings of SPIE, 2009, , .	0.8	1
29	A stainless-steel mandrel for slumping glass x-ray mirrors. , 2009, , .		2
30	An imaging x-ray polarimeter for the study of galactic and extragalactic x-ray sources. Proceedings of SPIE, 2008, , .	0.8	10
31	On-orbit adjustment calculation for the Generation-X x-ray mirror figure. Proceedings of SPIE, 2008, , .	0.8	4
32	Science with Generation-X. , 2008, , .		2
33	Managing radiation degradation of CCDs on the Chandra X-ray Observatory III. Proceedings of SPIE, 2007, , .	0.8	12
34	Development of lightweight x-ray mirrors for the Constellation-X mission. Proceedings of SPIE, 2007, , .	0.8	2
35	Alignment and test of a Constellation-X SXT mirror segment pair. , 2006, 6266, 535.		0
36	The role of project science in the Chandra X-ray Observatory. , 2006, , .		0

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37	Development of lightweight x-ray mirrors for the Constellation-X mission. , 2006, , .		0
38	Modeling contamination migration on the Chandra X-ray Observatory. , 2005, , .		1
39	Development of lightweight x-ray mirrors for the Constellation-X mission. , 2005, , .		2
40	Managing radiation degradation of CCDs on the Chandra X-ray Observatory II. , 2005, , .		4
41	Recent progress on the Constellation-X spectroscopy x-ray telescope (SXT). , 2004, , .		3
42	The development of hard x-ray optics at MSFC. , 2004, 5168, 129.		20
43	Composition of the Chandra ACIS contaminant. , 2004, , .		57
44	Development of a prototype nickel optic for the Constellation-X hard x-ray telescope. , 2004, 5168, 112.		5
45	Development of x-ray reflectors for the Constellation-X observatory. , 2004, 5168, 168.		3
46	Development of lightweight x-ray mirrors for the Constellation-X mission. , 2004, , .		18
47	The Constellation-X Spectroscopy X-ray Telescope. , 2004, , .		2
48	A study of the seasonal variations of the Chandra X-ray Observatory radiation model. , 2004, , .		1
49	Improving the science observing efficiency of the Chandra X-ray Observatory via the Chandra radiation model. , 2004, , .		2
50	An evaluation of a bake-out of the ACIS instrument on the Chandra X-Ray Observatory. , 2004, , .		9
51	X-ray testing Constellation-X optics at MSFC's 100-m facility. , 2004, , .		6
52	Managing radiation degradation of CCDs on the Chandra X-ray Observatory. , 2003, , .		5
53	HERO: program status and first images from a balloon-borne focusing hard x-ray telescope. , 2002, , .		4
54	Ion transmission to the focal plane of the Chandra X-Ray Observatory. , 2000, , .		11

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55	Radiation environment of the Chandra X-Ray Observatory. , 2000, 4140, 99.		23
56	<title>Development of Constellation-X optics technologies at MSFC</title>. , 2000, , .		2
57	<title>Absolute effective area of the Chandra high-resolution mirror assembly (HRMA)</title>. , 2000, 4012, 28.		16
58	New alloys for electroformed replicated x-ray optics. , 2000, 4138, 154.		4
59	HERO: high-energy replicated optics for a hard-x-ray balloon payload. , 2000, 4138, 147.		12
60	Measurements with the Chandra X-Ray Observatory's flight contamination monitor. , 2000, 4138, 1.		1
61	Modeling the Chandra space environment. , 2000, , .		11
62	<title>Chandra X-ray Observatory (CXO): overview</title>. , 2000, 4012, 2.		313
63	<title>Constellation-X Spectroscopy X-ray Telescope requirements and development program: MSFC research program</title>. , 1999, , .		0
64	<title>HERO program: high-energy replicated optics for a hard-x-ray balloon payload</title>. , 1999, , .		6
65	<title>X-ray measurements of a prototype WFXT SiC mirror at the MSFC X-Ray Calibration Facility</title>. , 1999, 3766, 207.		2
66	Advanced X-ray Astrophysics Facility (AXAF): calibration overview. , 1998, , .		14
67	Calibration results for the AXAF flight contamination monitor. , 1998, , .		5
68	AXAF-mirror effective area calibration using the C-continuum source and solid state detectors. , 1998, , .		3
69	Simulating AXAF Grating Spectra of Accreting White Dwarfs. Publications of the Astronomical Society of Australia, 1998, 15, 339-347.	3.4	5
70	<title>AXAF HXDS germanium solid state detectors</title>. , 1997, , .		4
71	<title>Calibration of the AXAF observatory: overview</title>. , 1997, , .		24
72	<title>Absolute calibration of the AXAF telescope effective area</title>. , 1997, , .		3

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73	<title>Uses of continuum radiation in the AXAF calibration</title>. , 1997, 3113, 65.		3
74	<title>Advanced X-Ray Astrophysics Facility (AXAF)</title>. , 1996, , .		129
75	Advanced X-ray Astrophysics Facility (AXAF): an overview. , 1995, 2515, 312.		35
76	<title>Molecular contamination study of iridium-coated x-ray mirrors</title>. , 1994, 2279, 12.		5
77	<title>Ground-to-orbit transfer of the AXAF-I flux scale: in-situ contamination monitoring of x-ray telescopes</title>. , 1994, , .		7
78	<title>Importance of electron tracking in understanding the response of proportional counters</title>. , 1994, , .		1
79	Evidence for dust contamination on the VETA-1 mirror surface. , 1993, 1742, 162.		4
80	X-ray evidence for particulate contamination on the AXAF VETA-1 mirrors. , 1993, 1742, 171.		14
81	Molecular contamination and the calibration of AXAF. , 1993, , .		2
82	X-ray reflectivity of the AXAF VETA-I optics. , 1993, , .		1
83	Low-Frequency Cutoffs in Synchrotron Spectra. Astrophysical Journal, 1970, 162, L37.	4.5	8