

# Tianxi Sun

## List of Publications by Year in descending order

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docs citations

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times ranked

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#	ARTICLE	IF	CITATIONS
1	Determination of Hepatic Iron Deposition in Drug-Induced Liver Fibrosis in Rats by Confocal Micro-XRF Spectrometry. ACS Omega, 2022, 7, 3738-3745.	3.5	3
2	A Procedure for the Characterization of Monocapillary X-Ray Lenses as Condensers for Full-Field Transmission X-Ray Microscopes. Frontiers in Physics, 2022, 10, .	2.1	0
3	First experimental constraints on WIMP couplings in the effective field theory framework from CDEX. Science China: Physics, Mechanics and Astronomy, 2021, 64, 1.	5.1	8
4	Simulation of optical properties of ellipsoidal monocapillary X-ray optics with inner-surface imperfections. Optics Communications, 2021, 493, 127028.	2.1	3
5	A passive characterization method of the single-bounce ellipsoidal capillary for the full field transmission X-ray microscopy. Nuclear Instruments and Methods in Physics Research, Section A: Accelerators, Spectrometers, Detectors and Associated Equipment, 2021, 1014, 165735.	1.6	1
6	Confocal three-dimensional micro-X-ray fluorescence spectroscopy used to retrieve the information covered in printed paper. X-Ray Spectrometry, 2020, 49, 267-273.	1.4	3
7	Depth-sensitive analysis of metals to investigate the corrosion process in oil pipelines by confocal 3D-XRF and SEM-EDS. Nuclear Instruments & Methods in Physics Research B, 2020, 464, 111-116.	1.4	0
8	Application of particle swarm optimization in the design of a mono-capillary X-ray lens. Nuclear Instruments and Methods in Physics Research, Section A: Accelerators, Spectrometers, Detectors and Associated Equipment, 2020, 953, 163077.	1.6	9
9	Development of a new X-ray scattering instrument based on two polycapillary X-ray optics. Nuclear Instruments and Methods in Physics Research, Section A: Accelerators, Spectrometers, Detectors and Associated Equipment, 2020, 984, 164647.	1.6	1
10	Characterizing the inner surface of parabolic monocapillary with contrast-enhanced micro-CT technology and ray-tracing computing method. Optics Communications, 2020, 475, 126182.	2.1	5
11	Enhancement of properties of high-density material coated glass monocapillary X-ray condenser based on atomic layer deposition. Optics Communications, 2020, 464, 125544.	2.1	4
12	Performance of assembled X-ray optics consisted of a polycapillary X-ray optics and a monocapillary X-ray optics for micro X-ray fluorescence spectrometry. Spectrochimica Acta, Part B: Atomic Spectroscopy, 2020, 165, 105770.	2.9	7
13	Poly-capillary x-ray collimating lens composed with channels of different diameters for medical imaging. , 2020, , .		0
14	Quantitative analysis of the elemental composition of ion liquid with confocal X-ray fluorescence based on peak to background ratio. Radiation Physics and Chemistry, 2019, 162, 168-171.	2.8	4
15	Measuring the average slope error of a single-bounce ellipsoidal glass monocapillary X-ray condenser based on an X-ray source with an adjustable source size. Nuclear Instruments and Methods in Physics Research, Section A: Accelerators, Spectrometers, Detectors and Associated Equipment, 2019, 934, 36-40.	1.6	4
16	Study on the X-ray transmission characteristics of monolithic poly-capillary quasi-parallel lens composed with different diameter tubes. Optics Communications, 2019, 439, 295-303.	2.1	5
17	Application of confocal X-ray fluorescence based on capillary X-ray optics in nondestructively measuring the inner diameter of monocapillary optics. Optics Communications, 2019, 436, 38-41.	2.1	3
18	Performances of a prototype point-contact germanium detector immersed in liquid nitrogen for light dark matter search. Science China: Physics, Mechanics and Astronomy, 2019, 62, 1.	5.1	11

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19	Measurement of the inner diameter of monocapillary with confocal x-ray scattering technology based on capillary x-ray optics. <i>Applied Optics</i> , 2019, 58, 1291.	1.8	6
20	Confocal total reflection X-ray fluorescence technology based on an elliptical monocapillary and a parallel polycapillary X-ray optics. <i>Applied Radiation and Isotopes</i> , 2018, 137, 172-176.	1.5	5
21	13.1 micrometers hard X-ray focusing by a new type monocapillary X-ray optic designed for common laboratory X-ray source. <i>Nuclear Instruments and Methods in Physics Research, Section A: Accelerators, Spectrometers, Detectors and Associated Equipment</i> , 2018, 888, 13-17.	1.6	6
22	Simulation of X-ray transmission and spatial imaging of polycapillary lenses with square cross-sections. <i>Optics Communications</i> , 2018, 420, 205-210.	2.1	4
23	Full-field X-ray Nano-scope Developed at SSRF. <i>Microscopy and Microanalysis</i> , 2018, 24, 1012-1013.	0.4	0
24	Single-bounce Ellipsoidal Capillary for X-ray microscopes: Design and Measurements. <i>Microscopy and Microanalysis</i> , 2018, 24, 284-287.	0.4	3
25	Single bounce ellipsoidal glass monocapillary condenser for X-ray nano-imaging. <i>Optics Communications</i> , 2017, 398, 91-94.	2.1	22
26	Confocal three-dimensional micro X-ray fluorescence based on synchrotron radiation for mineral analysis. <i>Spectroscopy Letters</i> , 2017, 50, 545-549.	1.0	1
27	Confocal depth-resolved fluorescence micro-X-ray absorption spectroscopy for the study of cultural heritage materials: a new mobile endstation at the Beijing Synchrotron Radiation Facility. <i>Journal of Synchrotron Radiation</i> , 2017, 24, 1000-1005.	2.4	11
28	Energy-dispersive small-angle X-ray scattering with cone collimation using X-ray capillary optics. <i>Review of Scientific Instruments</i> , 2016, 87, 093106.	1.3	6
29	Focal construct geometry for high intensity energy dispersive x-ray diffraction based on x-ray capillary optics. <i>Journal of Chemical Physics</i> , 2016, 144, 104201.	3.0	6
30	Authentication of vegetable oils by confocal X-ray scattering analysis with coherent/incoherent scattered X-rays. <i>Food Chemistry</i> , 2016, 210, 435-441.	8.2	9
31	The three-dimensional elemental distribution based on the surface topography by confocal 3D-XRF analysis. <i>Applied Physics A: Materials Science and Processing</i> , 2016, 122, 1.	2.3	5
32	The surface morphology analysis based on progressive approximation method using confocal three-dimensional micro X-ray fluorescence. <i>Spectrochimica Acta, Part B: Atomic Spectroscopy</i> , 2016, 122, 127-131.	2.9	4
33	High temperature monitoring of silicon carbide ceramics by confocal energy dispersive X-ray fluorescence spectrometry. <i>Nuclear Instruments &amp; Methods in Physics Research B</i> , 2016, 373, 91-97.	1.4	6
34	Annular beam high-intensity X-ray diffraction based on an ellipsoidal single-bounce monocapillary. <i>Journal of Applied Crystallography</i> , 2016, 49, 627-631.	4.5	9
35	Combined optic system based on polycapillary X-ray optics and single-bounce monocapillary optics for focusing X-rays from a conventional laboratory X-ray source. <i>Nuclear Instruments and Methods in Physics Research, Section A: Accelerators, Spectrometers, Detectors and Associated Equipment</i> , 2015, 802, 5-9.	1.6	6
36	Confocal three-dimensional micro X-ray scatter imaging for non-destructive detecting foreign bodies with low density and low-Z materials in food products. <i>Food Control</i> , 2015, 54, 120-125.	5.5	22

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37	Monochromatic X-ray imaging using a combination of doubly curved crystal and polycapillary X-ray lens. <i>Journal of X-Ray Science and Technology</i> , 2015, 23, 141-146.	1.0	3
38	Numerical design of polycapillary X-ray optics as both a focusing X-ray lens and a vacuum window. <i>Vacuum</i> , 2015, 121, 1-4.	3.5	1
39	Confocal X-ray technology based on capillary X-ray optics. <i>Reviews in Analytical Chemistry</i> , 2015, 34, .	3.2	14
40	Simulation of transmitted X-rays in a polycapillary X-ray lens. <i>Nuclear Instruments and Methods in Physics Research, Section A: Accelerators, Spectrometers, Detectors and Associated Equipment</i> , 2015, 795, 186-191.	1.6	18
41	A confocal three-dimensional micro X-ray scattering technology based on Rayleigh to Compton ratio for identifying materials with similar density and different weight percentages of low-Z elements. <i>Radiation Physics and Chemistry</i> , 2015, 112, 163-168.	2.8	9
42	In situ analysis of electrocrystallization process of metal electrodeposition with confocal energy dispersive X-ray diffraction based on polycapillary X-ray optics. <i>Nuclear Instruments and Methods in Physics Research, Section A: Accelerators, Spectrometers, Detectors and Associated Equipment</i> , 2015, 785, 201-205.	1.6	7
43	Numerical design of X-ray tabletop Talbot interferometer using polycapillary optics as two-dimensional gratings with high aspect ratio. <i>Optics Communications</i> , 2015, 356, 202-207.	2.1	5
44	In-situ and elementally resolved determination of the thickness uniformity of multi-ply films by confocal micro XRF. <i>Applied Radiation and Isotopes</i> , 2014, 90, 84-88.	1.5	9
45	Application of a conic glass monicapillary in Beijing synchrotron radiation facility. <i>Nuclear Instruments and Methods in Physics Research, Section A: Accelerators, Spectrometers, Detectors and Associated Equipment</i> , 2014, 754, 42-45.	1.6	1
46	Application of confocal technology based on polycapillary X-ray optics in three-dimensional diffraction scanning analysis. <i>Nuclear Instruments &amp; Methods in Physics Research B</i> , 2014, 323, 25-29.	1.4	22
47	Application of confocal X-ray fluorescence micro-spectroscopy to the investigation of paint layers. <i>Applied Radiation and Isotopes</i> , 2014, 94, 109-112.	1.5	12
48	Spatially Resolved In Situ Measurements of the Ion Distribution Near the Surface of Electrode in a Steady-State Diffusion in an Electrolytic Tank with Confocal Micro X-ray Fluorescence. <i>Analytical Chemistry</i> , 2014, 86, 362-366.	6.5	31
49	Measurement of grain size of polycrystalline materials with confocal energy dispersive micro-X-ray diffraction technology based on polycapillary X-ray optics. <i>Nuclear Instruments and Methods in Physics Research, Section A: Accelerators, Spectrometers, Detectors and Associated Equipment</i> , 2014, 764, 1-6.	1.6	5
50	Numerical design of in-line X-ray phase-contrast imaging based on ellipsoidal single-bounce monicapillary. <i>Nuclear Instruments and Methods in Physics Research, Section A: Accelerators, Spectrometers, Detectors and Associated Equipment</i> , 2014, 746, 33-38.	1.6	2
51	Performances for confocal X-ray diffraction technology based on polycapillary slightly focusing X-ray optics. <i>Nuclear Instruments and Methods in Physics Research, Section A: Accelerators, Spectrometers, Detectors and Associated Equipment</i> , 2013, 723, 1-4.	1.6	11
52	Adjustment of confocal configuration for capillary X-ray optics with a liquid secondary target. <i>Nuclear Instruments and Methods in Physics Research, Section A: Accelerators, Spectrometers, Detectors and Associated Equipment</i> , 2013, 729, 565-568.	1.6	10
53	The application of confocal technology based on polycapillary X-ray optics in surface topography. <i>Nuclear Instruments and Methods in Physics Research, Section A: Accelerators, Spectrometers, Detectors and Associated Equipment</i> , 2013, 721, 73-75.	1.6	7
54	Performance of polycapillary X-ray optics for confocal energy-dispersive small-angle X-ray scattering. <i>Journal of Applied Crystallography</i> , 2013, 46, 1880-1883.	4.5	15

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55	Full-field transmission x-ray imaging with confocal polycapillary x-ray optics. <i>Journal of Applied Physics</i> , 2013, 113, 053104.	2.5	27
56	Size-Resolved Source Apportionment of Aerosol Particles with a Confocal Micro X-Ray Fluorescence Spectrometer. <i>Applied Spectroscopy</i> , 2011, 65, 1398-1402.	2.2	9
57	Fine structures of divergence of polycapillary X-ray optics. <i>Nuclear Instruments &amp; Methods in Physics Research B</i> , 2011, 269, 2758-2761.	1.4	11
58	Quantitative analysis of single aerosol particles with confocal micro-X-ray fluorescence spectrometer. <i>Nuclear Instruments and Methods in Physics Research, Section A: Accelerators, Spectrometers, Detectors and Associated Equipment</i> , 2010, 622, 295-297.	1.6	23
59	Size-resolved source apportionment of aerosol particles using polycapillary X-ray lens with a plateau in its focal spot. <i>Nuclear Instruments &amp; Methods in Physics Research B</i> , 2010, 268, 3554-3560.	1.4	4
60	Source apportionment of aerosol particles using polycapillary slightly focusing X-ray lens. <i>Nuclear Instruments and Methods in Physics Research, Section A: Accelerators, Spectrometers, Detectors and Associated Equipment</i> , 2009, 604, 755-759.	1.6	5
61	Identification of origin of single aerosol particles using polycapillary X-ray lens. <i>Nuclear Instruments &amp; Methods in Physics Research B</i> , 2009, 267, 171-174.	1.4	5
62	Focusing synchrotron radiation using a polycapillary half-focusing X-ray lens for imaging. <i>Journal of Synchrotron Radiation</i> , 2009, 16, 116-118.	2.4	18
63	Performances of capillary X-ray optics for confocal three-dimensional micro-X-ray fluorescence technology. <i>Nuclear Instruments and Methods in Physics Research, Section A: Accelerators, Spectrometers, Detectors and Associated Equipment</i> , 2009, 606, 829-832.	1.6	9
64	Quantitative analysis of single aerosol particles using polycapillary X-ray optics. <i>Spectrochimica Acta, Part B: Atomic Spectroscopy</i> , 2009, 64, 1194-1197.	2.9	11
65	Elemental depth profile of faux bamboo paint in Forbidden City studied by synchrotron radiation confocal $\mu$ -XRF. <i>X-Ray Spectrometry</i> , 2008, 37, 595-598.	1.4	26
66	Characterization of a confocal three-dimensional micro X-ray fluorescence facility based on polycapillary X-ray optics and Kirkpatrick-Baez mirrors. <i>Spectrochimica Acta, Part B: Atomic Spectroscopy</i> , 2008, 63, 76-80.	2.9	25
67	Characterization and applications of a new tabletop confocal micro X-ray fluorescence setup. <i>Nuclear Instruments &amp; Methods in Physics Research B</i> , 2008, 266, 2638-2642.	1.4	24
68	Characterization of a polycapillary focusing X-ray lens for application in spatially resolved EXAFS experiments. <i>Chemical Physics Letters</i> , 2007, 439, 412-414.	2.6	14
69	Quasi-parallel X-ray microbeam obtained using a combined system of polycapillary optics. <i>Nuclear Instruments and Methods in Physics Research, Section A: Accelerators, Spectrometers, Detectors and Associated Equipment</i> , 2007, 577, 437-439.	1.6	4
70	Characterization of polycapillary X-ray lens for application in confocal three-dimensional energy-dispersive micro X-ray diffraction experiments. <i>Journal of Applied Crystallography</i> , 2007, 40, 1169-1173.	4.5	19
71	Performance of polycapillary x-ray lens for x-ray sources with various spot sizes. <i>X-Ray Spectrometry</i> , 2007, 36, 377-380.	1.4	4
72	An energy dispersive micro X-ray diffractometer based on a combined system of polycapillary optics. <i>Nuclear Instruments &amp; Methods in Physics Research B</i> , 2007, 262, 153-156.	1.4	12

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73	Determination of the properties of a polycapillary x-ray lens. X-Ray Spectrometry, 2006, 35, 120-124.	1.4	13
74	Application of a combined system of polycapillary x-ray lens and toroidal mirror in micro-x-ray-absorption fine-structure facility. Journal of Applied Physics, 2006, 99, 094907.	2.5	16
75	Measurements of energy dependence of properties of polycapillary x-ray lens by using organic glass as a scatterer. Journal of Applied Physics, 2005, 97, 124904.	2.5	62
76	Study on the measurement of properties of polycapillary X-ray lens. Nuclear Instruments & Methods in Physics Research B, 2004, 226, 651-658.	1.4	23
77	Detailed Simulation of Single-Bounce Capillaries for Various X-Ray Sources. Frontiers in Physics, 0, 10, .	2.1	0