

Alec R Sandy

List of Publications by Year in descending order

Source: <https://exaly.com/author-pdf/2082337/publications.pdf>

Version: 2024-02-01

112
papers

3,454
citations

201658

27
h-index

149686

56
g-index

114
all docs

114
docs citations

114
times ranked

3753
citing authors

#	ARTICLE	IF	CITATIONS
1	<i>pyXPCSviewer</i> : an open-source interactive tool for X-ray photon correlation spectroscopy visualization and analysis. <i>Journal of Synchrotron Radiation</i> , 2022, 29, 1122-1129.	2.4	6
2	20-Å-resolved high-throughput X-ray photon correlation spectroscopy on a 500k pixel detector enabled by data-management workflow. <i>Journal of Synchrotron Radiation</i> , 2021, 28, 259-265.	2.4	17
3	Evolution of single gyroid photonic crystals in bird feathers. <i>Proceedings of the National Academy of Sciences of the United States of America</i> , 2021, 118, .	7.1	26
4	Nanoscale Critical Phenomena in a Complex Fluid Studied by X-Ray Photon Correlation Spectroscopy. <i>Physical Review Letters</i> , 2020, 125, 125504.	7.8	16
5	Brilliant angle-independent structural colours preserved in weevil scales from the Swiss Pleistocene. <i>Biology Letters</i> , 2020, 16, 20200063.	2.3	4
6	Focusing a round coherent beam by spatial filtering the horizontal source. <i>Journal of Synchrotron Radiation</i> , 2020, 27, 1528-1538.	2.4	4
7	Characterization of Droplet Nucleation Inside Supercritical Ethylene Jets Using Small-Angle X-Ray Scattering Technique. , 2020, , 333-363.		2
8	Evolution of structure and dynamics of thermo-reversible nanoparticle gels—A combined XPCS and rheology study. <i>Journal of Chemical Physics</i> , 2019, 151, 104902.	3.0	6
9	Hard-sphere-like dynamics in highly concentrated alpha-crystallin suspensions. <i>Physical Review E</i> , 2018, 97, 020601.	2.1	24
10	Unraveling the Role of Order-to-Disorder Transition in Shear Thickening Suspensions. <i>Physical Review Letters</i> , 2018, 120, 028002.	7.8	24
11	A Printing-Centric Approach to the Electrostatic Modification of Polymer/Clay Composites for Use in 3D Direct Ink Writing. <i>Advanced Materials Interfaces</i> , 2018, 5, 1701579.	3.7	8
12	Hard X-Ray Photon Correlation Spectroscopy Methods for Materials Studies. <i>Annual Review of Materials Research</i> , 2018, 48, 167-190.	9.3	47
13	Structural Dynamics of Strongly Segregated Block Copolymer Electrolytes. <i>Macromolecules</i> , 2018, 51, 2591-2603.	4.8	26
14	Sub-microsecond-resolved multi-speckle X-ray photon correlation spectroscopy with a pixel array detector. <i>Journal of Synchrotron Radiation</i> , 2018, 25, 1408-1416.	2.4	41
15	Stress relaxation in quasi-two-dimensional self-assembled nanoparticle monolayers. <i>Physical Review E</i> , 2018, 97, 052803.	2.1	8
16	Universal aging characteristics of macroscopically and microscopically dissimilar metallic glasses. <i>Acta Materialia</i> , 2018, 155, 35-42.	7.9	5
17	Distributed X-ray photon correlation spectroscopy data reduction using Hadoop <i>MapReduce</i> . <i>Journal of Synchrotron Radiation</i> , 2018, 25, 1135-1143.	2.4	17
18	Dynamics in hard condensed matter probed by X-ray photon correlation spectroscopy: Present and beyond. <i>Current Opinion in Solid State and Materials Science</i> , 2018, 22, 202-212.	11.5	16

#	ARTICLE	IF	CITATIONS
55	X-ray near-field speckle: implementation and critical analysis. Journal of Synchrotron Radiation, 2011, 18, 823-834.	2.4	6
56	Measurement of hard x-ray lens wavefront aberrations using phase retrieval. Applied Physics Letters, 2011, 98, 111108.	3.3	50
57	Firmware lower-level discrimination and compression applied to streaming x-ray photon correlation spectroscopy area-detector data. Review of Scientific Instruments, 2011, 82, 075109.	1.3	4
58	Substrate suppression of thermal roughness in stacked supported bilayers. Physical Review E, 2011, 84, 041914.	2.1	6
59	Depletion-Induced Structure and Dynamics in Bimodal Colloidal Suspensions. Physical Review Letters, 2011, 106, 188301.	7.8	26
60	Persistent oscillations of x-ray speckles: Pt (001) step flow. Applied Physics Letters, 2011, 99, 121910.	3.3	15
61	In Situ Coherent X-ray Scattering and Scanning Tunneling Microscopy Studies of Hexagonally Reconstructed Au(001) in Electrolytes. ECS Transactions, 2011, 35, 71-81.	0.5	4
62	Re-entrant behavior in dynamics of binary mixtures of soft hybrid nanocolloids and homopolymers. Journal of Chemical Physics, 2011, 135, 134901.	3.0	8
63	Kinoform optics applied to X-ray photon correlation spectroscopy. Journal of Synchrotron Radiation, 2010, 17, 314-320.	2.4	12
64	A bi-prism interferometer for hard X-ray photons. Journal of Synchrotron Radiation, 2010, 17, 451-455.	2.4	10
65	FPGA-based compression of streaming x-ray photon correlation spectroscopy data. , 2010, , .		4
66	Structure, function, and self-assembly of single network gyroid (χ 4 ₁ 32) photonic crystals in butterfly wing scales. Proceedings of the National Academy of Sciences of the United States of America, 2010, 107, 11676-11681.	7.1	428
67	Coherent hard x-ray diffractive imaging of nonisolated objects confined by an aperture. Physical Review B, 2010, 81, .	3.2	5
68	Communication: Unusual dynamics of hybrid nanoparticles and their binary mixtures. Journal of Chemical Physics, 2010, 133, 151105.	3.0	10
69	Dynamic Signatures of Microphase Separation in a Block Copolymer Melt Determined by X-ray Photon Correlation Spectroscopy and Rheology. Macromolecules, 2010, 43, 1515-1523.	4.8	24
70	“Gel-like” Mechanical Reinforcement in Polymer Nanocomposite Melts. Macromolecules, 2010, 43, 1003-1010.	4.8	209
71	One-dimensional hard x-ray field retrieval using a moveable structure. Optics Express, 2010, 18, 18374.	3.4	21
72	Investigation of Droplet Nucleation Inside Supercritical Ethylene Jets Using Small Angle X-Ray Scattering (SAXS) Technique. , 2010, , .		3

#	ARTICLE	IF	CITATIONS
73	Dynamic and Static Measurements of A Single and Double Phospholipid Bilayer System. Biophysical Journal, 2010, 98, 220a.	0.5	0
74	Temperature-dependent structural arrest of silica colloids in a water-lutidine binary mixture. Soft Matter, 2010, 6, 6160.	2.7	15
75	Surface X-Ray Speckles: Coherent Surface Diffraction from Au(001). Physical Review Letters, 2009, 103, 165501.	7.8	41
76	Diamond kinoform hard X-ray refractive lenses: design, nanofabrication and testing. Journal of Synchrotron Radiation, 2009, 16, 8-13.	2.4	40
77	Design and performance of an ultra-high-vacuum-compatible artificial channel-cut monochromator. Journal of Synchrotron Radiation, 2008, 15, 12-18.	2.4	16
78	Thickness Induced Structural Changes in Polystyrene Films. Physical Review Letters, 2008, 101, 115501.	7.8	39
79	How a Liquid Becomes a Glass Both on Cooling and on Heating. Physical Review Letters, 2008, 100, 045701.	7.8	62
80	Contrast and Stability Improvements for XPCS Measurements at Beamline 8-ID-I at the APS. AIP Conference Proceedings, 2007, , .	0.4	5
81	Initial Characterization and Design of an UHV-Compatible Artificial Channel-Cut Monochromator. AIP Conference Proceedings, 2007, , .	0.4	3
82	Developing a Dedicated GISAXS Beamline at the APS. AIP Conference Proceedings, 2007, , .	0.4	3
83	Precision mechanical design of an UHV-compatible artificial channel-cut x-ray monochromator. , 2007, , .		1
84	Adaptation of a Commercial Optical CMOS Image Sensor for Direct-Detection Fast X-ray Imaging. AIP Conference Proceedings, 2007, , .	0.4	1
85	Nanoparticle suspensions studied by x-ray photon correlation spectroscopy. Materials Research Society Symposia Proceedings, 2007, 1027, 1.	0.1	0
86	Effect of x-ray beamline optics on x-ray photon correlation spectroscopy experiments. , 2007, , .		1
87	Structure and dynamics of thin polymer films using synchrotron X-ray scattering. Journal of Applied Crystallography, 2007, 40, s18-s22.	4.5	3
88	Windows for small-angle X-ray scattering cryostats. Journal of Synchrotron Radiation, 2007, 14, 527-531.	2.4	12
89	Direct measurement of antiferromagnetic domain fluctuations. Nature, 2007, 447, 68-71.	27.8	152
90	Orientalional order parameter of the nematic liquid crystalline phase off-actin. Physical Review E, 2006, 73, 061901.	2.1	19

#	ARTICLE	IF	CITATIONS
91	Crossover from Stretched to Compressed Exponential Relaxations in a Polymer-Based Sponge Phase. <i>Physical Review Letters</i> , 2006, 97, 066102.	7.8	77
92	Condensed Exponential Correlation Functions in Multicomponent Polymer Blends Measured by X-ray Photon Correlation Spectroscopy. <i>Macromolecules</i> , 2006, 39, 8822-8831.	4.8	18
93	Windows for X-ray Cryostats. <i>AIP Conference Proceedings</i> , 2006, , .	0.4	0
94	Design and characterization of an UHV compatible artificial channel cut monochromator. , 2006, 6317, 351.		0
95	Observation of a low-viscosity interface between immiscible polymer layers. <i>Physical Review E</i> , 2006, 74, 010602.	2.1	29
96	Relationship between Structural and Stress Relaxation in a Block-Copolymer Melt. <i>Physical Review Letters</i> , 2006, 96, 257801.	7.8	23
97	Structure and Phase Behavior of Block Copolymer Melts near the Sphere-Cylinder Boundary. <i>Macromolecules</i> , 2005, 38, 7090-7097.	4.8	20
98	Absence of Scaling for the Intermediate Scattering Function of a Hard-Sphere Suspension: Static and Dynamic X-Ray Scattering from Concentrated Polystyrene Latex Spheres. <i>Physical Review Letters</i> , 2000, 84, 785-788.	7.8	82
99	Design and characterization of an undulator beamline optimized for small-angle coherent X-ray scattering at the Advanced Photon Source. <i>Journal of Synchrotron Radiation</i> , 1999, 6, 1174-1184.	2.4	66
100	Small-Angle X-ray Scattering Using Coherent Undulator Radiation at the ESRF. <i>Journal of Synchrotron Radiation</i> , 1998, 5, 37-47.	2.4	102
101	Coherent X-Ray Study of Fluctuations during Domain Coarsening. <i>Physical Review Letters</i> , 1998, 81, 5832-5835.	7.8	102
102	Dynamics of Block Copolymer Micelles Revealed by X-Ray Intensity Fluctuation Spectroscopy. <i>Physical Review Letters</i> , 1997, 78, 1275-1278.	7.8	123
103	<title>Production and characterization of x-ray speckle at Sector 8 of the advanced photon source</title>. , 1997, 3154, 27.		1
104	Faceting and reconstruction of stepped Au(111). <i>Physical Review B</i> , 1995, 52, 12329-12344.	3.2	34
105	Au(111) and Pt(111) surface phase behavior. <i>Surface Science</i> , 1993, 287-288, 321-324.	1.9	9
106	Reconstruction of the (111) and (001) surfaces of Au and Pt: thermal behavior. <i>Surface Science</i> , 1993, 283, 260-276.	1.9	40
107	Phase behavior of Au and Pt surfaces. <i>Surface Science</i> , 1993, 287-288, 842-846.	1.9	4
108	X-ray-scattering determination of the Cu(110)-(2 $\sqrt{3}$)N structure. <i>Physical Review B</i> , 1993, 48, 9013-9020.	3.2	37

#	ARTICLE	IF	CITATIONS
109	Reconstruction of the Pt(111) surface: X-ray-scattering measurements. Physical Review B, 1993, 48, 18119-18139.	3.2	57
110	Reconstruction of the Pt(111) surface. Physical Review Letters, 1992, 68, 2192-2195.	7.8	129
111	Structure and phases of the Au(111) surface: X-ray-scattering measurements. Physical Review B, 1991, 43, 4667-4687.	3.2	246
112	Phase behavior of the Au(111) surface: Discommensurations and kinks. Physical Review Letters, 1990, 65, 3313-3316.	7.8	138