

Sol Gruner

List of Publications by Year in descending order

Source: <https://exaly.com/author-pdf/2955755/publications.pdf>

Version: 2024-02-01

335
papers

20,031
citations

9786

73
h-index

13379

130
g-index

342
all docs

342
docs citations

342
times ranked

15808
citing authors

#	ARTICLE	IF	CITATIONS
1	High-Resolution Protein Structure Determination by Serial Femtosecond Crystallography. <i>Science</i> , 2012, 337, 362-364.	12.6	758
2	Biomimetic Pathways for Assembling Inorganic Thin Films. <i>Science</i> , 1996, 273, 892-898.	12.6	740
3	The Gyroid: A New Equilibrium Morphology in Weakly Segregated Diblock Copolymers. <i>Macromolecules</i> , 1994, 27, 4063-4075.	4.8	710
4	Intrinsic curvature hypothesis for biomembrane lipid composition: a role for nonbilayer lipids.. <i>Proceedings of the National Academy of Sciences of the United States of America</i> , 1985, 82, 3665-3669.	7.1	605
5	Ordered Mesoporous Materials from Metal Nanoparticle-Block Copolymer Self-Assembly. <i>Science</i> , 2008, 320, 1748-1752.	12.6	553
6	Electron ptychography of 2D materials to deep sub-Ångström resolution. <i>Nature</i> , 2018, 559, 343-349.	27.8	431
7	Mesophase Structure-Mechanical and Ionic Transport Correlations in Extended Amphiphilic Dendrons. <i>Science</i> , 2004, 305, 1598-1601.	12.6	384
8	Stability of lyotropic phases with curved interfaces. <i>The Journal of Physical Chemistry</i> , 1989, 93, 7562-7570.	2.9	370
9	High Dynamic Range Pixel Array Detector for Scanning Transmission Electron Microscopy. <i>Microscopy and Microanalysis</i> , 2016, 22, 237-249.	0.4	334
10	Membrane curvature, lipid segregation, and structural transitions for phospholipids under dual-solvent stress. <i>Biochemistry</i> , 1990, 29, 76-87.	2.5	302
11	X-ray diffraction study of the polymorphic behavior of N-methylated dioleoylphosphatidylethanolamine. <i>Biochemistry</i> , 1988, 27, 2853-2866.	2.5	280
12	Compactness of the denatured state of a fast-folding protein measured by submillisecond small-angle x-ray scattering. <i>Proceedings of the National Academy of Sciences of the United States of America</i> , 1999, 96, 10115-10117.	7.1	280
13	Lipid Polymorphism: The Molecular Basis of Nonbilayer Phases. <i>Annual Review of Biophysics and Biophysical Chemistry</i> , 1985, 14, 211-238.	12.2	266
14	Hierarchical Porous Polymer Scaffolds from Block Copolymers. <i>Science</i> , 2013, 341, 530-534.	12.6	257
15	Probability of alamethicin conductance states varies with nonlamellar tendency of bilayer phospholipids. <i>Biophysical Journal</i> , 1993, 65, 23-27.	0.5	256
16	A thermodynamic model of the lamellar to inverse hexagonal phase transition of lipid membrane-water systems. <i>Biochemistry</i> , 1984, 23, 1093-1102.	2.5	227
17	Charge-coupled device area x-ray detectors. <i>Review of Scientific Instruments</i> , 2002, 73, 2815-2842.	1.3	227
18	Doxorubicin physical state in solution and inside liposomes loaded via a pH gradient. <i>Biochimica Et Biophysica Acta - Biomembranes</i> , 1998, 1415, 23-40.	2.6	223

#	ARTICLE	IF	CITATIONS
19	Unusual lipid structures selectively reduce the toxicity of amphotericin B.. Proceedings of the National Academy of Sciences of the United States of America, 1988, 85, 6122-6126.	7.1	222
20	Geometrical aspects of the frustration in the cubic phases of lyotropic liquid crystals.. Proceedings of the National Academy of Sciences of the United States of America, 1988, 85, 5364-5368.	7.1	219
21	Rapid compaction during RNA folding. Proceedings of the National Academy of Sciences of the United States of America, 2002, 99, 4266-4271.	7.1	207
22	Entrapment of Carbon Dioxide in the Active Site of Carbonic Anhydrase II. Journal of Biological Chemistry, 2008, 283, 30766-30771.	3.4	197
23	Capsaicin Regulates Voltage-Dependent Sodium Channels by Altering Lipid Bilayer Elasticity. Molecular Pharmacology, 2005, 68, 680-689.	2.3	196
24	Nonbilayer phases of membrane lipids. Chemistry and Physics of Lipids, 1991, 57, 147-164.	3.2	194
25	Phase Behavior of Pure Diblocks and Binary Diblock Blends of Poly(ethylene)~Poly(ethylene). Macromolecules, 1996, 29, 1204-1215.	4.8	193
26	Cooperative water filling of a nonpolar protein cavity observed by high-pressure crystallography and simulation. Proceedings of the National Academy of Sciences of the United States of America, 2005, 102, 16668-16671.	7.1	186
27	Phase Behavior of Polystyrene~Poly(2-vinylpyridine) Diblock Copolymers. Macromolecules, 1996, 29, 2857-2867.	4.8	182
28	Novel multilayered lipid vesicles: comparison of physical characteristics of multilamellar liposomes and stable plurilamellar vesicles. Biochemistry, 1985, 24, 2833-2842.	2.5	178
29	Time Resolved Collapse of a Folding Protein Observed with Small Angle X-Ray Scattering. Physical Review Letters, 2001, 86, 4962-4965.	7.8	154
30	Energetics of a hexagonal-lamellar-hexagonal-phase transition sequence in dioleoylphosphatidylethanolamine membranes. Biochemistry, 1992, 31, 2856-2864.	2.5	153
31	Multicompartement Mesoporous Silica Nanoparticles with Branched Shapes: An Epitaxial Growth Mechanism. Science, 2013, 340, 337-341.	12.6	151
32	Observation of a reversible thermotropic order-order transition in a diblock copolymer. Macromolecules, 1994, 27, 490-501.	4.8	147
33	Phase Behavior of Ordered Diblock Copolymer Blends:~Effect of Compositional Heterogeneity. Macromolecules, 1996, 29, 4494-4507.	4.8	144
34	Observation of inverted cubic phase in hydrated dioleoylphosphatidylethanolamine membranes. Biochemistry, 1988, 27, 2332-2336.	2.5	143
35	Probing Substates in Sperm Whale Myoglobin Using High-Pressure Crystallography. Structure, 2002, 10, 51-60.	3.3	143
36	Lipid polymorphism of mixtures of dioleoylphosphatidylethanolamine and saturated and monounsaturated phosphatidylcholines of various chain lengths. Biochemistry, 1987, 26, 231-236.	2.5	141

#	ARTICLE	IF	CITATIONS
37	Formation of a Silicate L3 Phase with Continuously Adjustable Pore Sizes. <i>Science</i> , 1997, 277, 552-556.	12.6	140
38	A Reevaluation of Bicontinuous Cubic Phases in Starblock Copolymers. <i>Macromolecules</i> , 1995, 28, 2570-2573.	4.8	138
39	A Short, Strong Hydrogen Bond in the Active Site of Human Carbonic Anhydrase II. <i>Biochemistry</i> , 2010, 49, 249-251.	2.5	138
40	Temperature dependence of the structural dimensions of the inverted hexagonal (HII) phase of phosphatidylethanolamine-containing membranes. <i>Biochemistry</i> , 1989, 28, 4245-4253.	2.5	136
41	Nonlamellar Phases Induced by the Interaction of Gramicidin S with Lipid Bilayers. A Possible Relationship to Membrane-Disrupting Activity. <i>Biochemistry</i> , 1997, 36, 7906-7916.	2.5	135
42	X-ray diffraction reconstruction of the inverted hexagonal (HII) phase in lipid-water systems. <i>Biochemistry</i> , 1992, 31, 1340-1355.	2.5	132
43	X-ray Imaging of Shock Waves Generated by High-Pressure Fuel Sprays. <i>Science</i> , 2002, 295, 1261-1263.	12.6	128
44	Effect of fatty acyl chain length and structure on the lamellar gel to liquid-crystalline and lamellar to reversed hexagonal phase transitions of aqueous phosphatidylethanolamine dispersions. <i>Biochemistry</i> , 1989, 28, 541-548.	2.5	125
45	The Plumber's Nightmare: A New Morphology in Block Copolymer-Ceramic Nanocomposites and Mesoporous Aluminosilicates. <i>Journal of the American Chemical Society</i> , 2003, 125, 13084-13093.	13.7	122
46	X-Ray Diffraction Structures of Some Phosphatidylethanolamine Lamellar and Inverted Hexagonal Phases*. <i>Biophysical Journal</i> , 2001, 81, 2693-2706.	0.5	117
47	Highly Aminated Mesoporous Silica Nanoparticles with Cubic Pore Structure. <i>Journal of the American Chemical Society</i> , 2011, 133, 172-175.	13.7	115
48	Development of confocal X-ray fluorescence (XRF) microscopy at the Cornell high energy synchrotron source. <i>Applied Physics A: Materials Science and Processing</i> , 2006, 83, 235-238.	2.3	114
49	Titanium Dioxide-Surfactant Mesophases and Ti-TMS1. <i>Chemistry of Materials</i> , 1997, 9, 2690-2693.	6.7	113
50	Energy recovery linacs as synchrotron radiation sources (invited). <i>Review of Scientific Instruments</i> , 2002, 73, 1402-1406.	1.3	111
51	Block copolymer self-assembly-directed synthesis of mesoporous gyroidal superconductors. <i>Science Advances</i> , 2016, 2, e1501119.	10.3	104
52	High-pressure cooling of protein crystals without cryoprotectants. <i>Acta Crystallographica Section D: Biological Crystallography</i> , 2005, 61, 881-890.	2.5	103
53	Phase transformations during rapid heating of Al/Ni multilayer foils. <i>Applied Physics Letters</i> , 2008, 93, .	3.3	103
54	Directly measured deformation energy of phospholipid HII hexagonal phases. <i>Faraday Discussions of the Chemical Society</i> , 1986, 81, 29.	2.2	102

#	ARTICLE	IF	CITATIONS
55	Pixel array detector for X-ray free electron laser experiments. Nuclear Instruments and Methods in Physics Research, Section A: Accelerators, Spectrometers, Detectors and Associated Equipment, 2011, 649, 67-69.	1.6	102
56	Gating of an organic transistor through a bilayer lipid membrane with ion channels. Applied Physics Letters, 2006, 89, 053505.	3.3	101
57	Polymerization of Nonlamellar Lipid Assemblies. Journal of the American Chemical Society, 1995, 117, 5573-5578.	13.7	100
58	Microstructural Analysis of a Cubic Bicontinuous Morphology in a Neat SIS Triblock Copolymer. Macromolecules, 1997, 30, 3938-3941.	4.8	98
59	Additive-Driven Phase-Selective Chemistry in Block Copolymer Thin Films: The Convergence of Top-Down and Bottom-Up Approaches. Advanced Materials, 2004, 16, 953-957.	21.0	97
60	Metal Oxide Containing Mesoporous Silica with Bicontinuous "Plumber's Nightmare" Morphology from a Block Copolymer-Hybrid Mesophase. Angewandte Chemie - International Edition, 2001, 40, 1207-1211.	13.8	93
61	Time-resolved x-ray microdiffraction studies of phase transformations during rapidly propagating reactions in Al/Ni and Zr/Ni multilayer foils. Journal of Applied Physics, 2010, 107, .	2.5	92
62	Cation-dependent segregation phenomena and phase behavior in model membrane systems containing phosphatidylserine: influence of cholesterol and acyl chain composition. Biochemistry, 1984, 23, 2696-2703.	2.5	90
63	A Large-Format High-Resolution Area X-ray Detector Based on a Fiber-Optically Bonded Charge-Coupled Device (CCD). Journal of Applied Crystallography, 1995, 28, 196-205.	4.5	88
64	Is the Mechanism of General Anesthesia Related to Lipid Membrane Spontaneous Curvature?. Annals of the New York Academy of Sciences, 1991, 625, 685-697.	3.8	87
65	Structure of a pseudokinase-domain switch that controls oncogenic activation of Jak kinases. Nature Structural and Molecular Biology, 2013, 20, 1221-1223.	8.2	87
66	Room-temperature serial crystallography using a kinetically optimized microfluidic device for protein crystallization and on-chip X-ray diffraction. IUCr, 2014, 1, 349-360.	2.2	87
67	Small concentrations of alamethicin induce a cubic phase in bulk phosphatidylethanolamine mixtures. Biochimica Et Biophysica Acta - Biomembranes, 1996, 1278, 241-246.	2.6	85
68	Perpendicular Deformation of a Near-Single-Crystal Triblock Copolymer with a Cylindrical Morphology. 1. Synchrotron SAXS. Macromolecules, 2000, 33, 9395-9406.	4.8	85
69	Quantitative analysis of highly transient fuel sprays by time-resolved x-radiography. Applied Physics Letters, 2003, 83, 1671-1673.	3.3	84
70	Strain Mapping of Two-Dimensional Heterostructures with Subpicometer Precision. Nano Letters, 2018, 18, 3746-3751.	9.1	82
71	High-Pressure Effects on the Order-Disorder Transition in Block Copolymer Melts. Macromolecules, 1996, 29, 1473-1481.	4.8	81
72	The RCK Domain of the KtrAB K+ Transporter: Multiple Conformations of an Octameric Ring. Cell, 2006, 126, 1147-1159.	28.9	78

#	ARTICLE	IF	CITATIONS
73	Energy recovery linac (ERL) coherent hard x-ray sources. <i>New Journal of Physics</i> , 2010, 12, 035011.	2.9	75
74	Role of Lipid Polymorphism in Pulmonary Surfactant. <i>Science</i> , 1996, 273, 330-332.	12.6	74
75	Evidence for liquid water during the high-density to low-density amorphous ice transition. <i>Proceedings of the National Academy of Sciences of the United States of America</i> , 2009, 106, 4596-4600.	7.1	74
76	Ordered mesoporous silica nanoparticles with and without embedded iron oxide nanoparticles: structure evolution during synthesis. <i>Journal of Materials Chemistry</i> , 2010, 20, 7807.	6.7	74
77	Time-resolved x-ray diffraction of biological materials. <i>Science</i> , 1987, 238, 305-312.	12.6	73
78	Alteration of citrine structure by hydrostatic pressure explains the accompanying spectral shift. <i>Proceedings of the National Academy of Sciences of the United States of America</i> , 2008, 105, 13362-13366.	7.1	73
79	Polymerization of the Inverted Hexagonal Phase. <i>Journal of the American Chemical Society</i> , 1997, 119, 4866-4873.	13.7	72
80	Comparison of the Lamellar Morphology of Microphase-Separated Cyclic Block Copolymers and Their Linear Precursors. <i>Macromolecules</i> , 1995, 28, 3485-3489.	4.8	70
81	Structural Rigidity of a Large Cavity-containing Protein Revealed by High-pressure Crystallography. <i>Journal of Molecular Biology</i> , 2007, 367, 752-763.	4.2	69
82	Morphology Diagram of a Diblock Copolymer-Aluminosilicate Nanoparticle System. <i>Chemistry of Materials</i> , 2009, 21, 5397-5405.	6.7	68
83	Structural study of the inverted cubic phases of di-dodecyl alkyl- β -D-glucopyranosyl-rac-glycerol. <i>Journal De Physique II</i> , 1992, 2, 2039-2063.	0.9	68
84	Ordered Three- and Five-ply Nanocomposites from ABC Block Terpolymer Microphase Separation with Niobia and Aluminosilicate Sols. <i>Chemistry of Materials</i> , 2009, 21, 5466-5473.	6.7	64
85	Integrating Structure Control over Multiple Length Scales in Porous High Temperature Ceramics with Functional Platinum Nanoparticles. <i>Nano Letters</i> , 2009, 9, 2756-2762.	9.1	63
86	Nanohybrids from Liquid Crystalline Extended Amphiphilic Dendrimers. <i>Journal of the American Chemical Society</i> , 2004, 126, 4070-4071.	13.7	61
87	Synthesis and Formation Mechanism of Aminated Mesoporous Silica Nanoparticles. <i>Chemistry of Materials</i> , 2012, 24, 3895-3905.	6.7	61
88	Direct Access to Bicontinuous Skeletal Inorganic Plumber's Nightmare Networks from Block Copolymers. <i>Angewandte Chemie - International Edition</i> , 2005, 44, 1226-1229.	13.8	60
89	On the validity of ^{31}P -NMR determinations of phospholipid polymorphic phase behaviour. <i>Chemistry and Physics of Lipids</i> , 1986, 40, 47-56.	3.2	59
90	Orientation of triblock copolymers in planar extension. <i>Polymer Engineering and Science</i> , 1996, 36, 1414-1424.	3.1	59

#	ARTICLE	IF	CITATIONS
91	Shear-Stabilized Bi-axial Texture and Lamellar Contraction in both Diblock Copolymer and Diblock Copolymer/Homopolymer Blends. <i>Macromolecules</i> , 1996, 29, 1482-1489.	4.8	58
92	High-Pressure Protein Crystallography and NMR to Explore Protein Conformations. <i>Annual Review of Biophysics</i> , 2011, 40, 81-98.	10.0	58
93	Networked and chiral nanocomposites from ABC triblock terpolymer coassembly with transition metal oxide nanoparticles. <i>Journal of Materials Chemistry</i> , 2012, 22, 1078-1087.	6.7	58
94	Linking experiment and theory for three-dimensional networked binary metal nanoparticle-triblock terpolymer superstructures. <i>Nature Communications</i> , 2014, 5, 3247.	12.8	58
95	Three-dimensional diffuse x-ray scattering from crystals of Staphylococcal nuclease. <i>Proceedings of the National Academy of Sciences of the United States of America</i> , 1997, 94, 6180-6184.	7.1	57
96	High sensitivity image intensifier-TV detector for x-ray diffraction studies. <i>Review of Scientific Instruments</i> , 1978, 49, 1241-1249.	1.3	56
97	Correlation between lipid plane curvature and lipid chain order. <i>Biophysical Journal</i> , 1996, 70, 2747-2757.	0.5	56
98	Structural and Thermodynamic Characterization of T4 Lysozyme Mutants and the Contribution of Internal Cavities to Pressure Denaturation. <i>Biochemistry</i> , 2008, 47, 11097-11109.	2.5	55
99	Lipid extracts from membranes of <i>Acholeplasma laidlawii</i> A grown with different fatty acids have a nearly constant spontaneous curvature. <i>Lipids and Lipid Metabolism</i> , 1995, 1257, 18-24.	2.6	54
100	Pressure-induced topological phase transitions in membranes. <i>Physical Review Letters</i> , 1993, 70, 3455-3458.	7.8	53
101	Determination of L- α -HII Phase Transition Temperature for 1,2-Dioleoyl-sn-Glycero-3-Phosphatidylethanolamine. <i>Biophysical Journal</i> , 2002, 82, 2504-2510.	0.5	53
102	Calibration procedures for charge-coupled device x-ray detectors. <i>Review of Scientific Instruments</i> , 1999, 70, 2927-2934.	1.3	52
103	Imaging Density Disturbances in Water with a 41.3-Attosecond Time Resolution. <i>Physical Review Letters</i> , 2004, 92, 237401.	7.8	52
104	Diastereoselective Alkylation of $\hat{\text{I}}^2$ -Amino Esters: Structural and Rate Studies Reveal Alkylations of Hexameric Lithium Enolates. <i>Journal of the American Chemical Society</i> , 2004, 126, 16559-16568.	13.7	52
105	Curvature dependent induction of the interdigitated gel phase in DPPC vesicles. <i>Biochimica Et Biophysica Acta - Biomembranes</i> , 1993, 1146, 247-257.	2.6	51
106	Synthesis and Self-Assembly of Amphiphilic Dendrimers Based on Aliphatic Polyether-Type Dendritic Cores. <i>Macromolecules</i> , 2004, 37, 4227-4234.	4.8	51
107	Metal Nanoparticle-Block Copolymer Composite Assembly and Disassembly. <i>Chemistry of Materials</i> , 2009, 21, 5578-5584.	6.7	50
108	High hydrostatic pressure small-angle X-ray scattering cell for protein solution studies featuring diamond windows and disposable sample cells. <i>Journal of Applied Crystallography</i> , 2008, 41, 167-175.	4.5	49

#	ARTICLE	IF	CITATIONS
109	Tests of a prototype pixel array detector for microsecond time-resolved X-ray diffraction. <i>Journal of Synchrotron Radiation</i> , 1999, 6, 1096-1105.	2.4	48
110	X-ray diffraction and electron microscope study of phase separation in rod outer segment photoreceptor membrane multilayers. <i>Biophysical Journal</i> , 1982, 39, 241-251.	0.5	47
111	Studies of the thermotropic phase behavior of phosphatidylcholines containing 2-alkyl substituted fatty acyl chains: a new class of phosphatidylcholines forming inverted nonlamellar phases. <i>Biophysical Journal</i> , 1994, 66, 1088-1103.	0.5	47
112	Monolithic Gyroidal Mesoporous Mixed Titanium–Niobium Nitrides. <i>ACS Nano</i> , 2014, 8, 8217-8223.	14.6	47
113	CCD and vidicon x-ray detectors: Theory and practice (invited). <i>Review of Scientific Instruments</i> , 1989, 60, 1545-1551.	1.3	46
114	Graphene as a protein crystal mounting material to reduce background scatter. <i>Journal of Applied Crystallography</i> , 2013, 46, 1501-1507.	4.5	46
115	Multilayer X-ray optics at CHESS. <i>Journal of Synchrotron Radiation</i> , 2006, 13, 204-210.	2.4	45
116	A Re-Evaluation of the Morphology of a Bicontinuous Block Copolymer–Ceramic Material. <i>Macromolecules</i> , 2007, 40, 8974-8982.	4.8	45
117	The physical properties of glycosyl diacylglycerols. Calorimetric, X-ray diffraction and Fourier transform spectroscopic studies of a homologous series of 1,2-di-O-acyl-3-O-(β -D-galactopyranosyl)-sn-glycerols. <i>Chemistry and Physics of Lipids</i> , 2001, 111, 139-161.	3.2	44
118	Kinetics of the lamellar-inverse hexagonal phase transition determined by time-resolved x-ray diffraction. <i>Biochemistry</i> , 1992, 31, 1081-1092.	2.5	43
119	Coupling format variations in x-ray detectors based on charge coupled devices. <i>Review of Scientific Instruments</i> , 1997, 68, 47-54.	1.3	43
120	Surface Induced Tilt Propagation in Thin Films of Semifluorinated Liquid Crystalline Side Chain Block Copolymers. <i>Macromolecules</i> , 2007, 40, 81-89.	4.8	43
121	Microfabrication cellular phosphors. <i>Journal of Vacuum Science & Technology an Official Journal of the American Vacuum Society B, Microelectronics Processing and Phenomena</i> , 1989, 7, 1832.	1.6	42
122	Distribution of decane within the unit cell of the inverted hexagonal (HII) phase of lipid-water-decane systems determined by neutron diffraction. <i>Biochemistry</i> , 1992, 31, 1356-1363.	2.5	42
123	High-Pressure Effects on the Disordered Phase of Block Copolymer Melts. <i>Macromolecules</i> , 1995, 28, 7148-7156.	4.8	42
124	Synthesis and Characterization of Amphiphilic Poly(ethylene oxide)-block-poly(hexyl methacrylate) Copolymers. <i>Macromolecular Chemistry and Physics</i> , 2003, 204, 1047-1055.	2.2	42
125	Freezing and melting water in lamellar structures. <i>Biophysical Journal</i> , 1994, 67, 706-712.	0.5	40
126	X-ray tests of a Pixel Array Detector for coherent x-ray imaging at the Linac Coherent Light Source. <i>Journal of Instrumentation</i> , 2009, 4, P03001-P03001.	1.2	40

#	ARTICLE	IF	CITATIONS
127	A Medium-Format, Mixed-Mode Pixel Array Detector for KiloHertz X-ray Imaging. Journal of Physics: Conference Series, 2013, 425, 062004.	0.4	40
128	Evaluation of Area Photon Detectors by a Method Based on Detective Quantum Efficiency (DQE). IEEE Transactions on Nuclear Science, 1978, 25, 562-565.	2.0	39
129	Calcium-induced phase separation phenomena in multicomponent unsaturated lipid mixtures. Biochemistry, 1988, 27, 1415-1420.	2.5	39
130	Effect of the chirality of the glycerol backbone on the bilayer and nonbilayer phase transitions in the diastereomers of di-dodecyl-beta-D-glucopyranosyl glycerol. Biophysical Journal, 1992, 63, 1355-1368.	0.5	39
131	Real-Space x-ray tomographic reconstruction of randomly oriented objects with sparse data frames. Optics Express, 2014, 22, 2403.	3.4	39
132	A direct-coupled detector for synchrotron X-radiation using a large format CCD. IEEE Transactions on Nuclear Science, 1991, 38, 110-118.	2.0	38
133	High-Speed <i>in Situ</i> X-ray Scattering of Carbon Nanotube Film Nucleation and Self-Organization. ACS Nano, 2012, 6, 5091-5101.	14.6	38
134	Slow-scan silicon-intensified target TV x-ray detector for quantitative recording of weak x-ray images. Review of Scientific Instruments, 1982, 53, 1770-1778.	1.3	37
135	Enigmatic thermotropic phase behavior of highly asymmetric mixed-chain phosphatidylcholines that form mixed-interdigitated gel phases. Biophysical Journal, 1994, 66, 207-216.	0.5	37
136	Silica Gels with Tunable Nanopores through Templating of the L3Phase. Langmuir, 2000, 16, 398-406.	3.5	37
137	High Dynamic Range X-Ray Detector Pixel Architectures Utilizing Charge Removal. IEEE Transactions on Nuclear Science, 2017, 64, 1101-1107.	2.0	37
138	Experimental 3D coherent diffractive imaging from photon-sparse random projections. IUCrJ, 2019, 6, 357-365.	2.2	37
139	Solving structure with sparse, randomly-oriented x-ray data. Optics Express, 2012, 20, 13129.	3.4	36
140	Characterization of a prototype pixel array detector (PAD) for use in microsecond framing time-resolved X-ray diffraction studies. IEEE Transactions on Nuclear Science, 1997, 44, 950-956.	2.0	35
141	The thermotropic phase behaviour and phase structure of a homologous series of racemic 1,2-d-galactosyl dialkylglycerols studied by differential scanning calorimetry and X-ray diffraction. Chemistry and Physics of Lipids, 2007, 148, 26-50.	3.2	35
142	Ordered mesoporous titania from highly amphiphilic block copolymers: tuned solution conditions enable highly ordered morphologies and ultra-large mesopores. Journal of Materials Chemistry A, 2015, 3, 11478-11492.	10.3	35
143	Effect of Filler Dimensionality on the Order-Disorder Transition of a Model Block Copolymer Nanocomposite. Macromolecules, 2002, 35, 4862-4865.	4.8	34
144	Survey of two-dimensional electro-optical X-ray detectors. Nuclear Instruments & Methods in Physics Research, 1982, 195, 287-297.	0.9	33

#	ARTICLE	IF	CITATIONS
145	Coupling of Pressure-Induced Structural Shifts to Spectral Changes in a Yellow Fluorescent Protein. <i>Biophysical Journal</i> , 2009, 97, 1719-1727.	0.5	32
146	A high-pressure cryocooling method for protein crystals and biological samples with reduced background X-ray scatter. <i>Journal of Applied Crystallography</i> , 2013, 46, 234-241.	4.5	32
147	High-dynamic-range coherent diffractive imaging: ptychography using the mixed-mode pixel array detector. <i>Journal of Synchrotron Radiation</i> , 2014, 21, 1167-1174.	2.4	32
148	Three-Component Porous Carbon-Titania Nanocomposites through Self-Assembly of ABCBA Block Terpolymers with Titania Sols. <i>Macromolecules</i> , 2009, 42, 6682-6687.	4.8	31
149	High-resolution macromolecular structure determination using CCD detectors and synchrotron radiation. <i>Structure</i> , 1995, 3, 835-844.	3.3	30
150	Pressure-induced high-density amorphous ice in protein crystals. <i>Journal of Applied Crystallography</i> , 2008, 41, 1-7.	4.5	30
151	Hexagonally Patterned Lamellar Morphology in ABC Triblock Copolymer/Aluminosilicate Nanocomposites. <i>Chemistry of Materials</i> , 2008, 20, 3278-3287.	6.7	30
152	Four dimensional visualization of highly transient fuel sprays by microsecond quantitative x-ray tomography. <i>Applied Physics Letters</i> , 2009, 94, .	3.3	30
153	Tracking solvent and protein movement during CO ₂ release in carbonic anhydrase II crystals. <i>Proceedings of the National Academy of Sciences of the United States of America</i> , 2016, 113, 5257-5262.	7.1	30
154	Format alterations in CCD based electro-optic X-ray detectors. <i>Nuclear Instruments and Methods in Physics Research, Section A: Accelerators, Spectrometers, Detectors and Associated Equipment</i> , 1986, 246, 527-533.	1.6	29
155	Differential scanning calorimetry and X-ray diffraction studies of the thermotropic phase behavior of the diastereomeric di-tetradecyl-beta-D-galactosyl glycerols and their mixture. <i>Biophysical Journal</i> , 1994, 66, 734-740.	0.5	29
156	Analog pixel array detectors. <i>Journal of Synchrotron Radiation</i> , 2006, 13, 110-119.	2.4	29
157	Protein dynamical transition at 110 K. <i>Proceedings of the National Academy of Sciences of the United States of America</i> , 2011, 108, 20897-20901.	7.1	29
158	Polymorphic phase behavior of unsaturated lysophosphatidylethanolamines: A phosphorus-31 NMR and x-ray diffraction study. <i>Biochemistry</i> , 1986, 25, 816-822.	2.5	28
159	Self-Assembly of Four-Layer Woodpile Structure from Zigzag ABC Copolymer/Aluminosilicate Concertinas. <i>Macromolecules</i> , 2008, 41, 852-859.	4.8	28
160	Interaction between Supersonic Disintegrating Liquid Jets and Their Shock Waves. <i>Physical Review Letters</i> , 2009, 102, 074501.	7.8	28
161	Time-resolved x-ray diffraction techniques for bulk polycrystalline materials under dynamic loading. <i>Review of Scientific Instruments</i> , 2014, 85, 093901.	1.3	28
162	Physical studies on the membranes and lipids of plasmalogen-deficient <i>Megasphaera elsdenii</i> . <i>Chemistry and Physics of Lipids</i> , 1990, 55, 41-48.	3.2	27

#	ARTICLE	IF	CITATIONS
163	Study of afterglow in x-ray phosphors for use on fast-framing charge-coupled device detectors. <i>Optical Engineering</i> , 1997, 36, 3212.	1.0	27
164	Periodic faceting of a Si(113) surface miscut towards [110]. <i>Surface Science</i> , 1998, 411, 70-85.	1.9	27
165	Pixel array detectors for time resolved radiography (invited). <i>Review of Scientific Instruments</i> , 2002, 73, 1621-1624.	1.3	27
166	Nanostructure and Shape Control in Polymer-Ceramic Hybrids from Poly(ethylene) Tj ETQq0 0 0 rgBT /Overlock 10 Tf 50 627 Td (oxide)-Chemistry and Physics, 2004, 205, 1021-1030.	2.2	27
167	Characterization of \hat{I}^2 -Amino Ester Enolates as Hexamers via ^6Li NMR Spectroscopy. <i>Journal of the American Chemical Society</i> , 2004, 126, 5938-5939.	13.7	27
168	Solution of protein crystallographic structures by high-pressure cryocooling and noble-gas phasing. <i>Acta Crystallographica Section D: Biological Crystallography</i> , 2006, 62, 687-694.	2.5	26
169	A high-speed area detector for novel imaging techniques in a scanning transmission electron microscope. <i>Ultramicroscopy</i> , 2009, 109, 304-311.	1.9	26
170	Stimuli-Responsive Shapeshifting Mesoporous Silica Nanoparticles. <i>Nano Letters</i> , 2016, 16, 651-655.	9.1	26
171	Fixed-target serial oscillation crystallography at room temperature. <i>IUCr</i> , 2019, 6, 305-316.	2.2	26
172	Biostructural Science Inspired by Next-Generation X-Ray Sources. <i>Annual Review of Biophysics</i> , 2015, 44, 33-51.	10.0	25
173	Role of phosphatidylethanolamine lipids in the stabilization of protein-lipid contacts. <i>Biophysical Chemistry</i> , 1997, 67, 269-279.	2.8	24
174	High-pressure cryocooling for capillary sample cryoprotection and diffraction phasing at long wavelengths. <i>Acta Crystallographica Section D: Biological Crystallography</i> , 2007, 63, 653-659.	2.5	23
175	High-pressure small-angle X-ray scattering cell for biological solutions and soft materials. <i>Journal of Applied Crystallography</i> , 2021, 54, 111-122.	4.5	23
176	Lipid Membrane Curvature Elasticity and Protein Function. <i>NATO ASI Series Series B: Physics</i> , 1991, , 127-135.	0.2	23
177	Formation of homogeneous unilamellar liposomes from an interdigitated matrix. <i>Biochimica Et Biophysica Acta - Biomembranes</i> , 2005, 1668, 117-125.	2.6	22
178	Flow-Induced Alignment of Block Copolymer-Sol Nanoparticle Coassemblies toward Oriented Bulk Polymer-Silica Hybrids. <i>Macromolecules</i> , 2005, 38, 10095-10100.	4.8	22
179	Reduction of lattice disorder in protein crystals by high-pressure cryocooling. <i>Journal of Applied Crystallography</i> , 2016, 49, 149-157.	4.5	22
180	An analysis of the relationship between fatty acid composition and the lamellar gel to liquid-crystalline and the lamellar to inverted nonlamellar phase transition temperatures of phosphatidylethanolamines and diacyl- \hat{I}^{\pm} -D-glucosyl glycerols. <i>European Biophysics Journal</i> , 2001, 30, 537-554.	2.2	21

#	ARTICLE	IF	CITATIONS
181	Six-circle diffractometer with atmosphere- and temperature-controlled sample stage and area and line detectors for use in the G2 experimental station at CHESS. <i>Review of Scientific Instruments</i> , 2006, 77, 113301.	1.3	21
182	X-ray analog pixel array detector for single synchrotron bunch time-resolved imaging. <i>Journal of Synchrotron Radiation</i> , 2011, 18, 157-164.	2.4	21
183	X-ray imaging detectors. <i>Physics Today</i> , 2012, 65, 29-34.	0.3	21
184	Determination of crystallographic intensities from sparse data. <i>IUCrJ</i> , 2015, 2, 29-34.	2.2	21
185	Very-High Dynamic Range, 10,000 Frames/Second Pixel Array Detector for Electron Microscopy. <i>Microscopy and Microanalysis</i> , 2022, 28, 425-440.	0.4	21
186	A Two-Dimensional X-Ray Detector with a Slow-Scan Charge-Coupled Device Readout. <i>IEEE Transactions on Nuclear Science</i> , 1986, 33, 542-545.	2.0	20
187	Charge coupled device X-ray detectors for macromolecular crystallography. <i>Structure</i> , 1995, 3, 13-15.	3.3	20
188	Structural and Kinetic Effects on Changes in the CO ₂ Binding Pocket of Human Carbonic Anhydrase II. <i>Biochemistry</i> , 2012, 51, 9156-9163.	2.5	20
189	Cryogenic x-ray diffraction microscopy utilizing high-pressure cryopreservation. <i>Physical Review E</i> , 2014, 90, 042713.	2.1	20
190	Phase properties of the aqueous dispersions of n-octadecylphosphocholine. <i>Biochimica Et Biophysica Acta - Biomembranes</i> , 1985, 813, 68-76.	2.6	19
191	X-ray detectors for macromolecular crystallography. <i>Current Opinion in Structural Biology</i> , 1994, 4, 765-769.	5.7	19
192	New energy recovery linac source of synchrotron X-rays. <i>Synchrotron Radiation News</i> , 2001, 14, 12-21.	0.8	19
193	Intermittent plasticity in individual grains: A study using high energy x-ray diffraction. <i>Structural Dynamics</i> , 2019, 6, 014501.	2.3	19
194	High-speed X-ray imaging pixel array detector for synchrotron bunch isolation. <i>Journal of Synchrotron Radiation</i> , 2016, 23, 395-403.	2.4	19
195	Characterization of cholesterol hemisuccinate and α -tocopherol hemisuccinate vesicles. <i>Biochimica Et Biophysica Acta - Biomembranes</i> , 1988, 941, 165-175.	2.6	18
196	Anisotropic Coarsening of Periodic Grooves: Time-Resolved X-Ray Scattering. <i>Physical Review Letters</i> , 1998, 80, 337-340.	7.8	18
197	Small-Angle Neutron Scattering Investigation of the Q-Dependence of the Flory-Huggins Interaction Parameter in a Binary Polymer Blend. <i>Macromolecules</i> , 2002, 35, 7375-7386.	4.8	18
198	An Accumulating Pixel Array Detector for Single-Bunch Synchrotron Experiments. <i>IEEE Transactions on Nuclear Science</i> , 2009, 56, 2835-2842.	2.0	18

#	ARTICLE	IF	CITATIONS
199	Low-flux measurements with Cornell's LCLS integrating pixel array detector. Journal of Instrumentation, 2011, 6, C11006-C11006.	1.2	18
200	Preparation of Macroscopic Block-Copolymer-Based Gyroidal Mesoscale Single Crystals by Solvent Evaporation. Advanced Materials, 2019, 31, e1902565.	21.0	18
201	First results from the 128x128 pixel mixed-mode Si x-ray detector chip. Proceedings of SPIE, 2007, , .	0.8	17
202	The consequences of cavity creation on the folding landscape of a repeat protein depend upon context. Proceedings of the National Academy of Sciences of the United States of America, 2018, 115, E8153-E8161.	7.1	17
203	A High Gain Image Intensifier - Spectroscopy System for in Vivo Spectral Studies of Bioluminescence. IEEE Transactions on Nuclear Science, 1975, 22, 404-411.	2.0	16
204	Solute-induced shift of phase transition temperature in Di-saturated PC liposomes: adoption of ripple phase creates osmotic stress. Biochimica Et Biophysica Acta - Biomembranes, 1997, 1327, 41-51.	2.6	16
205	Area x-ray detector based on a lens-coupled charge-coupled device. Review of Scientific Instruments, 2005, 76, 081301.	1.3	16
206	Fast X-ray microdiffraction techniques for studying irreversible transformations in materials. Journal of Synchrotron Radiation, 2011, 18, 464-474.	2.4	16
207	Use of a polymeric counter ion to induce bilayer formation from a single-chain surfactant. Journal of the American Chemical Society, 1988, 110, 5221-5222.	13.7	15
208	Volume constriction in a lipid-water liquid crystal using high-pressure x-ray diffraction. Physical Review A, 1990, 42, 7479-7482.	2.5	15
209	Automated pressure and temperature control apparatus for x-ray powder diffraction studies. Review of Scientific Instruments, 1992, 63, 1763-1770.	1.3	15
210	<title>Characterization of polycrystalline phosphors for area x-ray detectors</title>. , 1993, 2009, 98.		15
211	What Future Will We Choose for Physics?. Physics Today, 1995, 48, 25-30.	0.3	15
212	Nanoparticle-Induced Packing Transition in Mesostructured Block Dendron-Silica Hybrids. Chemistry of Materials, 2007, 19, 3611-3614.	6.7	15
213	X-ray reflectivity measurement of interdiffusion in metallic multilayers during rapid heating. Journal of Synchrotron Radiation, 2017, 24, 796-801.	2.4	15
214	Development of a fast pixel array detector for use in microsecond time-resolved x-ray diffraction. , 1995, 2521, 301.		14
215	X-ray diffraction demonstrates that phosphatidylglycerol and phosphatidylcholesterol are not lamellar above the main transition temperature. Biochimica Et Biophysica Acta - Biomembranes, 1985, 818, 352-355.	2.6	13
216	Single-crystal CVD diamonds as small-angle X-ray scattering windows for high-pressure research. Journal of Applied Crystallography, 2012, 45, 453-457.	4.5	13

#	ARTICLE	IF	CITATIONS
217	Ordered mesoporous crystalline aluminas from self-assembly of ABC triblock terpolymer- α -butanol- γ -alumina sols. RSC Advances, 2015, 5, 49287-49294.	3.6	13
218	Solving protein structure from sparse serial microcrystal diffraction data at a storage-ring synchrotron source. IUCr, 2018, 5, 548-558.	2.2	13
219	Area detectors capable of recording X-ray diffraction patterns at high count-rates. Nuclear Instruments & Methods in Physics Research, 1982, 201, 43-52.	0.9	12
220	Formation of Periodically-Ordered Calcium Phosphate Nanostructures by Block Copolymer-Directed Self-Assembly. Chemistry of Materials, 2016, 28, 838-847.	6.7	12
221	Discovering Synthesis Routes to Hexagonally Ordered Mesoporous Niobium Nitrides Using Pluronic/Pluronic Block Copolymers. Chemistry of Materials, 2017, 29, 8973-8977.	6.7	12
222	A method for rapid, continuous monitoring of solute uptake and binding. Biochemistry, 1982, 21, 3239-3243.	2.5	11
223	A 12 Å... resolution X-ray diffraction study of the profile structure of isolated bovine retinal rod outer segment disk membranes. Biochimica Et Biophysica Acta - Biomembranes, 1984, 777, 9-20.	2.6	11
224	Hydrocarbon chain conformation in the HII phase. Biophysical Journal, 1989, 56, 1045-1046.	0.5	11
225	Comment on: X-ray diffraction study of the effects of pressure on bilayer to nonbilayer lipid membrane phase transitions. Journal of Chemical Physics, 1989, 90, 1293-1295.	3.0	11
226	Thermotropic characterization of the 2-O-acyl, polyprenyl β -D-glucopyranoside isolated from palmitate-enriched <i>Acholeplasma laidlawii</i> B membranes. Biochimica Et Biophysica Acta - Biomembranes, 1990, 1026, 21-28.	2.6	11
227	Pressure induced hydration dynamics of membranes. Physical Review Letters, 1994, 72, 2967-2970.	7.8	11
228	A Pixel-Array Detector for Time-Resolved X-ray Diffraction. Journal of Synchrotron Radiation, 1998, 5, 252-255.	2.4	11
229	MEMBRANE FUSION: Caught in the Act. Science, 2002, 297, 1817-1818.	12.6	11
230	Energy-recovery linac project at Cornell University. Journal of Synchrotron Radiation, 2003, 10, 346-348.	2.4	11
231	Development of ultrafast computed tomography of highly transient fuel sprays. , 2004, , .		11
232	Comparison of X-ray detectors. , 2006, , 143-147.		11
233	Femtosecond Radiation Experiment Detector for X-Ray Free-Electron Laser (XFEL) Coherent X-Ray Imaging. IEEE Transactions on Nuclear Science, 2010, , .	2.0	11
234	Microcrystallography, high-pressure cryocooling and BioSAXS at MacCHESS. Journal of Synchrotron Radiation, 2011, 18, 70-73.	2.4	11

#	ARTICLE	IF	CITATIONS
235	Integrating Hybrid Area Detectors for Storage Ring and Free-Electron Laser Applications. , 2015, , 1-24.		11
236	Freeze-fracture study of vesicle disruption and inversion in isolated bovine rod outer segment disks. Experimental Eye Research, 1980, 30, 501-510.	2.6	10
237	Coupling between Bilayer Curvature Elasticity and Membrane Protein Activity. Advances in Chemistry Series, 1994, , 129-149.	0.6	10
238	Macromolecular crystallographic results obtained using a 2048Å—2048 CCD detector at CHESS. Review of Scientific Instruments, 1996, 67, 3361-3361.	1.3	10
239	Energy recovery linacs as synchrotron light sources. Nuclear Instruments and Methods in Physics Research, Section A: Accelerators, Spectrometers, Detectors and Associated Equipment, 2003, 500, 25-32.	1.6	10
240	Macromolecular phasing. Physics Today, 2006, 59, 46-52.	0.3	10
241	Protein crowding impedes pressure-induced unfolding of staphylococcal nuclease. Biochimica Et Biophysica Acta - General Subjects, 2012, 1820, 957-961.	2.4	10
242	Glass-to-cryogenic-liquid transitions in aqueous solutions suggested by crack healing. Proceedings of the National Academy of Sciences of the United States of America, 2015, 112, 11765-11770.	7.1	10
243	Polymorphic phase behavior of alpha-tocopherol hemisuccinate. Chemistry and Physics of Lipids, 1990, 54, 193-203.	3.2	9
244	Calibration and post-processing for photon-integrating pixel array detectors. Journal of Physics: Conference Series, 2013, 425, 062009.	0.4	9
245	Mechanisms of oxide growth during the combustion of Al:Zr nanolaminate foils. Combustion and Flame, 2018, 191, 442-452.	5.2	9
246	In Situ Time-Resolved Measurements of Extension Twinning During Dynamic Compression of Polycrystalline Magnesium. Journal of Dynamic Behavior of Materials, 2018, 4, 222-230.	1.7	9
247	Piezomagnetic switching and complex phase equilibria in uranium dioxide. Communications Materials, 2021, 2, .	6.9	9
248	Superconducting Quantum Metamaterials from Convergence of Soft and Hard Condensed Matter Science. Advanced Materials, 2021, 33, e2006975.	21.0	9
249	Image Intensification of X-Ray Diffraction Patterns from Biological Structures. IEEE Transactions on Nuclear Science, 1977, 24, 501-510.	2.0	8
250	Controlled humidity gas circulators. Review of Scientific Instruments, 1981, 52, 134-136.	1.3	8
251	Confocal X-ray Fluorescence (XRF) Microscopy: A New Technique for the Nondestructive Compositional Depth Profiling of Paintings. Materials Research Society Symposia Proceedings, 2004, 852, 65.	0.1	8
252	Crystallographic data collection using a 0.22% bandwidth multilayer. Journal of Synchrotron Radiation, 2005, 12, 345-348.	2.4	8

#	ARTICLE	IF	CITATIONS
253	Pixel array detector for the capture of femtosecond duration x-ray images. , 2007, 6703, 156.		8
254	Facilitating protein crystal cryoprotection in thick-walled plastic capillaries by high-pressure cryocooling. Journal of Applied Crystallography, 2009, 42, 525-530.	4.5	8
255	X-ray diffraction analysis of wet isolated bovine rod outer segment disks. A dehydration study. Biochimica Et Biophysica Acta - Biomembranes, 1982, 690, 187-198.	2.6	7
256	Macromolecular crystallographic results obtained at CHESS using a detector incorporating a charge-coupled device. Review of Scientific Instruments, 1995, 66, 1477-1479.	1.3	7
257	Pressure Induced Fusion (Pif) Liposomes: A Solventless Sterilizing Method for Producing Large Phospholipid Vesicles. Journal of Liposome Research, 1995, 5, 605-626.	3.3	7
258	Quantitative Characterization of Near-Field Fuel Sprays by Multi-Orifice Direct Injection Using Ultrafast X-Tomography Technique. , 0, , .		7
259	Reconstruction of Polarization Vortices by Diffraction Mapping of Ferroelectric PbTiO ₃ / SrTiO ₃ Superlattice Using a High Dynamic Range Pixelated Detector. Microscopy and Microanalysis, 2016, 22, 472-473.	0.4	7
260	Superconducting Quantum Metamaterials from High Pressure Melt Infiltration of Metals into Block Copolymer Double Gyroid Derived Ceramic Templates. Advanced Functional Materials, 2021, 31, 2100469.	14.9	7
261	Synthesis of mesoscopic structures by co-assembly. Proceedings Annual Meeting Electron Microscopy Society of America, 1994, 52, 448-449.	0.0	7
262	Study of persistence in gadolinium oxysulfide x-ray phosphors. , 1995, , .		6
263	Technical Report: The Status of the Energy Recovery Linac Source of Coherent Hard X-rays at Cornell University. Synchrotron Radiation News, 2006, 19, 30-35.	0.8	6
264	Small-angle solution scattering using the mixed-mode pixel array detector. Journal of Synchrotron Radiation, 2011, 18, 148-156.	2.4	6
265	The FPGA Pixel Array Detector. Nuclear Instruments and Methods in Physics Research, Section A: Accelerators, Spectrometers, Detectors and Associated Equipment, 2013, 701, 7-16.	1.6	6
266	Protein crystal structure from non-oriented, single-axis sparse X-ray data. IUCrJ, 2016, 3, 43-50.	2.2	6
267	An Electron Microscope Pixel Array Detector as a Universal STEM Detector. Microscopy and Microanalysis, 2016, 22, 478-479.	0.4	6
268	Energy recovery LINAC: A next generation source for inelastic X-ray scattering. Journal of Physics and Chemistry of Solids, 2005, 66, 2310-2312.	4.0	5
269	Comparison of X-ray detectors. , 0, , 177-182.		5
270	Reconstructing three-dimensional protein crystal intensities from sparse unoriented two-axis X-ray diffraction patterns. Journal of Applied Crystallography, 2017, 50, 985-993.	4.5	5

#	ARTICLE	IF	CITATIONS
271	Soft Materials and Biomaterials under Pressure. , 2004, , 543-556.		5
272	Observations of sonoluminescence using image intensification. Review of Scientific Instruments, 1982, 53, 1673-1676.	1.3	4
273	Encapsulated Scintillators Monitor 3H-Solute Concentrations. IEEE Transactions on Nuclear Science, 1982, 29, 769-772.	2.0	4
274	Data acquisition and control for the LCLS pixel array detector. , 2007, , .		4
275	R&D Toward an Energy Recovery Linac at Synchrotron Light Source. Synchrotron Radiation News, 2010, 23, 32-41.	0.8	4
276	High-speed x-ray imaging with the Keck pixel array detector (Keck PAD) for time-resolved experiments at synchrotron sources. AIP Conference Proceedings, 2016, , .	0.4	4
277	Development of a Fast-Framing X-Ray Camera With Wide Dynamic Range for High-Energy Imaging. , 2018, , .		4
278	Patternable Mesoporous Thin Film Quantum Materials via Block Copolymer Self-Assembly: An Emergent Technology?. ACS Applied Materials & Interfaces, 2021, 13, 34732-34741.	8.0	4
279	The Role of the Lipid Bilayer in Amphiphile-Membrane/Receptor Interactions: A Unifying Hypothesis. Developments in Cardiovascular Medicine, 1987, , 353-365.	0.1	4
280	Integrating Hybrid Area Detectors for Storage Ring and Free-Electron Laser Applications. , 2020, , 1225-1255.		4
281	Coherent X-ray imaging and microscopy opportunities with a diffraction-limited Energy Recovery Linac (ERL) synchrotron source. European Physical Journal Special Topics, 2003, 104, 21-26.	0.2	4
282	Diamagnetic anisotropy as a probe of electron delocalisation in polymers: application to polydiacetylenes, polyethylene, and polyethylene terephthalate. Journal of Physics C: Solid State Physics, 1982, 15, L631-L636.	1.5	3
283	High-pressure dilatometer. Review of Scientific Instruments, 1992, 63, 5426-5431.	1.3	3
284	Ordered nanostructured ceramic-metal composites through multifunctional block copolymer-metal nanoparticle self-assembly. Journal of Sol-Gel Science and Technology, 2014, 70, 286-291.	2.4	3
285	The high dynamic range pixel array detector (HDR-PAD): Concept and design. AIP Conference Proceedings, 2016, , .	0.4	3
286	4D-STEM for Quantitative Imaging of Magnetic Materials with Enhanced Contrast and Resolution. Microscopy and Microanalysis, 2016, 22, 1718-1719.	0.4	3
287	Electron Diffraction from a Single Atom and Optimal Signal Detection. Microscopy and Microanalysis, 2016, 22, 846-847.	0.4	3
288	Integrating Hybrid Area Detectors for Storage Ring and Free-Electron Laser Applications. , 2016, , 1029-1054.		3

#	ARTICLE	IF	CITATIONS
289	Time-Resolved and Quantitative Characterization of Highly Transient Gasoline Sprays by X-Radiography. , 0, , .		2
290	Generation dependent mesophase behavior in extended amphiphilic dendrons in the shape of macromolecular dumbbells. Chemical Communications, 2005, , 2143.	4.1	2
291	Ultrafast and Quantitative X-Tomography and Simulation of Hollow-Cone Gasoline Direct-Injection Sprays. , 0, , .		2
292	A High Frame Rate Hybrid X-Ray Image Sensor. IEEE Sensors Journal, 2015, 15, 1523-1531.	4.7	2
293	Potential beneficial effects of electron-hole plasmas created in silicon sensors by XFEL-like high intensity pulses for detector development. AIP Conference Proceedings, 2016, , .	0.4	2
294	Theory and Practice of Diffractometry on Single Tungsten Atoms using Electron Microscope Pixel Array Detectors. Microscopy and Microanalysis, 2017, 23, 444-445.	0.4	2
295	Mapping Polarity, Toroidal Order, and the Local Energy Landscape by 4D-STEM. Microscopy and Microanalysis, 2018, 24, 176-177.	0.4	2
296	Characterization of a Fast-Framing X-Ray Camera With Wide Dynamic Range for High-Energy Imaging. , 2019, , .		2
297	Wide Dynamic Range, 10 kHz Framing Detector for 4D-STEM. Microscopy and Microanalysis, 2021, 27, 992-993.	0.4	2
298	Characterization of a Small-Scale Prototype Detector With Wide Dynamic Range for Time-Resolved High-Energy X-Ray Applications. IEEE Transactions on Nuclear Science, 2021, , 1-1.	2.0	2
299	Electrophoretic mobility of isolated retinal rod outer segment disk by Laser Doppler Spectroscopy. Biochemical and Biophysical Research Communications, 1982, 109, 402-407.	2.1	1
300	Spatial, Temporal and Spectral Observations of Sonoluminescence by Means of Image Intensification. IEEE Transactions on Nuclear Science, 1983, 30, 440-444.	2.0	1
301	Structure of Phospholipid Suspensions under Negative Pressure. Journal of Colloid and Interface Science, 1993, 156, 430-432.	9.4	1
302	Time-resolved x-ray studies of pressure-jump-induced topological transitions in biological membranes. , 1995, 2521, 188.		1
303	Xâ€ray detectors for macromolecular crystallography. Synchrotron Radiation News, 1996, 9, 19-23.	0.8	1
304	Pixel array detector for timeâ€resolved xâ€ray scattering (invited). Review of Scientific Instruments, 1996, 67, 3360-3360.	1.3	1
305	Concepts and Applications of Energy Recovery Linacs (ERLs). AIP Conference Proceedings, 2004, , .	0.4	1
306	Femtosecond radiation experiment detector for X-ray Free-Electron Laser (XFEL) coherent x-ray imaging. , 2008, , .		1

#	ARTICLE	IF	CITATIONS
307	Status of CHESS facility and research programs: 2010. Nuclear Instruments and Methods in Physics Research, Section A: Accelerators, Spectrometers, Detectors and Associated Equipment, 2011, 649, 3-5.	1.6	1
308	Asynchronous and synchronous implementations of the autocorrelation function for the FPGA X-ray pixel array detector. , 2012, , .		1
309	A prototype direct-detection CCD for protein crystallography. Journal of Applied Crystallography, 2013, 46, 1038-1048.	4.5	1
310	Expanding the femtosecond crystallography toolkit. Proceedings of the National Academy of Sciences of the United States of America, 2014, 111, 16986-16987.	7.1	1
311	Lorentz-STEM imaging of Fields and Domains using a High-Speed, High-Dynamic Range Pixel Array Detector at Atomic Resolution. Microscopy and Microanalysis, 2015, 21, 2309-2310.	0.4	1
312	High-speed imaging at high x-ray energy: CdTe sensors coupled to charge-integrating pixel array detectors. AIP Conference Proceedings, 2016, , .	0.4	1
313	Picometer-Precision Strain Mapping of Two-Dimensional Heterostructures using an Electron Microscope Pixel Array Detector (EMPAD). Microscopy and Microanalysis, 2017, 23, 1712-1713.	0.4	1
314	Measuring Orbital Angular Momentum (OAM) and Torque Transfer from Polarization Vortices with the Electron Microscopy Pixel Array Detector. Microscopy and Microanalysis, 2017, 23, 1634-1635.	0.4	1
315	Phase Imaging beyond the Diffraction Limit with Electron Ptychography. Microscopy and Microanalysis, 2019, 25, 6-7.	0.4	1
316	Integrating Hybrid Area Detectors for Storage Ring and Free-Electron Laser Applications. , 2018, , 1-31.		1
317	The MM-PAD-2.1: A Wide-Dynamic-Range Detector For High-Energy X-ray Imaging. , 2020, , .		1
318	Evaluation of a Linear Self-Scanned Photodiode Array Detector for Direct Detection of 6-8 Kev X-Rays. Instrumentation Science and Technology, 1989, 18, 197-212.	1.8	0
319	Choosing a Future for Physics Proves to Be Highly Debatable. Physics Today, 1996, 49, 11-89.	0.3	0
320	Comment on "A Monte Carlo study of x-ray fluorescence in x-ray detectors" [Med. Phys. 26 , 905-916 (1999)]. Medical Physics, 1999, 26, 2706-2706.	3.0	0
321	Commentary: Liposomes or Lipid Science?. Journal of Liposome Research, 1999, 9, ix-xii.	3.3	0
322	Development of a pixel array detector for time resolved x-ray imaging. AIP Conference Proceedings, 2000, , .	0.4	0
323	CHESS 2002 users'™ meeting. Synchrotron Radiation News, 2002, 15, 2-6.	0.8	0
324	Another Question for Bush and Kerry. Science, 2004, 306, 609b-609b.	12.6	0

#	ARTICLE	IF	CITATIONS
325	CCD detectors. , 2006, , 148-153.		0
326	Macchess: Unique Opportunities for Structural Biology at a Synchrotron Source. Biophysical Journal, 2013, 104, 184a.	0.5	0
327	Protein Dynamical Transition at Cryogenic Temperatures. Biophysical Journal, 2013, 104, 223a-224a.	0.5	0
328	A high-spatial-resolution fiber-optic-coupled CMOS imager with novel scintillator for high-energy x-ray applications. Journal of Physics: Conference Series, 2013, 425, 062012.	0.4	0
329	Real-space Demonstration of 0.4 Angstrom Resolution at 80 keV via Electron Ptychography with a High Dynamic Range Pixel Array Detector. Microscopy and Microanalysis, 2018, 24, 194-195.	0.4	0
330	Mapping Strain and Relaxation in 2D Heterojunctions with Sub-picometer Precision. Microscopy and Microanalysis, 2018, 24, 1588-1589.	0.4	0
331	Low-noise, low-power, event-driven read-out of counting Pixel Array Detectors. , 2019, , .		0
332	Superconducting Quantum Metamaterials: Superconducting Quantum Metamaterials from High Pressure Melt Infiltration of Metals into Block Copolymer Double Gyroid Derived Ceramic Templates (Adv. Funct. Mater. 23/2021). Advanced Functional Materials, 2021, 31, 2170166.	14.9	0
333	Mesoporous Superconductors: Superconducting Quantum Metamaterials from Convergence of Soft and Hard Condensed Matter Science (Adv. Mater. 26/2021). Advanced Materials, 2021, 33, 2170203.	21.0	0
334	10.1063/1.5068756.1., 2019, , .		0
335	The Princeton slow-scan TV area detectors: seven years experience of continuous operation. Acta Crystallographica Section A: Foundations and Advances, 1984, 40, C402-C402.	0.3	0