Sol Gruner

List of Publications by Year
in descending order

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335 papers	20,031 citations	9756 73 h-index	13338 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. Science, 2012, 337, 362-364.	6.0	758
2	Biomimetic Pathways for Assembling Inorganic Thin Films. Science, 1996, 273, 892-898.	6.0	740
3	The Gyroid: A New Equilibrium Morphology in Weakly Segregated Diblock Copolymers. Macromolecules, 1994, 27, 4063-4075.	2.2	710
4	Intrinsic curvature hypothesis for biomembrane lipid composition: a role for nonbilayer lipids.. Proceedings of the National Academy of Sciences of the United States of America, 1985, 82, 3665-3669.	3.3	605
5	Ordered Mesoporous Materials from Metal Nanoparticleâ€“Block Copolymer Self-Assembly. Science, 2008, 320, 1748-1752.	6.0	553
6	Electron ptychography of 2D materials to deep sub-Ã¥ngstrÃ¶m resolution. Nature, 2018, 559, 343-349.	13.7	431
7	Mesophase Structure-Mechanical and Ionic Transport Correlations in Extended Amphiphilic Dendrons. Science, 2004, 305, 1598-1601.	6.0	384
8	Stability of lyotropic phases with curved interfaces. The Journal of Physical Chemistry, 1989, 93, 7562-7570.	2.9	370
9	High Dynamic Range Pixel Array Detector for Scanning Transmission Electron Microscopy. Microscopy and Microanalysis, 2016, 22, 237-249.	0.2	334
10	Membrane curvature, lipid segregation, and structural transitions for phospholipids under dual-solvent stress. Biochemistry, 1990, 29, 76-87.	1.2	302
11	X-ray diffraction study of the polymorphic behavior of N-methylated dioleoylphosphatidylethanolamine. Biochemistry, 1988, 27, 2853-2866.	1.2	280
12	Compactness of the denatured state of a fast-folding protein measured by submillisecond small-angle x-ray scattering. Proceedings of the National Academy of Sciences of the United States of America, 1999, 96, 10115-10117.	3.3	280
13	Lipid Polymorphism:The Molecular Basis of Nonbilayer Phases. Annual Review of Biophysics and Biophysical Chemistry, 1985, 14, 211-238.	12.2	266
14	Hierarchical Porous Polymer Scaffolds from Block Copolymers. Science, 2013, 341, 530-534.	6.0	257
15	Probability of alamethicin conductance states varies with nonlamellar tendency of bilayer phospholipids. Biophysical Journal, 1993, 65, 23-27.	0.2	256
16	A thermodynamic model of the lamellar to inverse hexagonal phase transition of lipid membrane-water systems. Biochemistry, 1984, 23, 1093-1102.	1.2	227
17	Charge-coupled device area x-ray detectors. Review of Scientific Instruments, 2002, 73, 2815-2842.	0.6	227
18	Doxorubicin physical state in solution and inside liposomes loaded via a pH gradient. Biochimica Et Biophysica Acta - Biomembranes, 1998, 1415, 23-40.	1.4	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.	3.3	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.	3.3	219
21	Rapid compaction during RNA folding. Proceedings of the National Academy of Sciences of the United States of America, 2002, 99, 4266-4271.	3.3	207
22	Entrapment of Carbon Dioxide in the Active Site of Carbonic Anhydrase II. Journal of Biological Chemistry, 2008, 283, 30766-30771.	1.6	197
23	Capsaicin Regulates Voltage-Dependent Sodium Channels by Altering Lipid Bilayer Elasticity. Molecular Pharmacology, 2005, 68, 680-689.	1.0	196
24	Nonbilayer phases of membrane lipids. Chemistry and Physics of Lipids, 1991, 57, 147-164.	1.5	194
25	Phase Behavior of Pure Diblocks and Binary Diblock Blends of Poly(ethylene)â^'Poly(ethylethylene). Macromolecules, 1996, 29, 1204-1215.	2.2	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.	3.3	186
27	Phase Behavior of Polystyreneâ^'Poly(2-vinylpyridine) Diblock Copolymers. Macromolecules, 1996, 29, 2857-2867.	2.2	182
28	Novel multilayered lipid vesicles: comparison of physical characteristics of multilamellar liposomes and stable plurilamellar vesicles. Biochemistry, 1985, 24, 2833-2842.	1.2	178
29	Time Resolved Collapse of a Folding Protein Observed with Small Angle X-Ray Scattering. Physical Review Letters, 2001, 86, 4962-4965.	2.9	154
30	Energetics of a hexagonal-lamellar-hexagonal-phase transition sequence in dioleoylphosphatidylethanolamine membranes. Biochemistry, 1992, 31, 2856-2864.	1.2	153
31	Multicompartment Mesoporous Silica Nanoparticles with Branched Shapes: An Epitaxial Growth Mechanism. Science, 2013, 340, 337-341.	6.0	151
32	Observation of a reversible thermotropic order-order transition in a diblock copolymer. Macromolecules, 1994, 27, 490-501.	2.2	147
33	Phase Behavior of Ordered Diblock Copolymer Blends:Â Effect of Compositional Heterogeneity. Macromolecules, 1996, 29, 4494-4507.	2.2	144
34	Observation of inverted cubic phase in hydrated dioleoylphosphatidylethanolamine membranes. Biochemistry, 1988, 27, 2332-2336.	1.2	143
35	Probing Substates in Sperm Whale Myoglobin Using High-Pressure Crystallography. Structure, 2002, 10, 51-60.	1.6	143
36	Lipid polymorphism of mixtures of dioleoylphosphatidylethanolamine and saturated and monounsaturated phosphatidylcholines of various chain lengths. Biochemistry, 1987, 26, 231-236.	1.2	141

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37	Formation of a Silicate L3 Phase with Continuously Adjustable Pore Sizes. Science, 1997, 277, 552-556.	6.0	140
38	A Reevaluation of Bicontinuous Cubic Phases in Starblock Copolymers. Macromolecules, 1995, 28, 2570-2573.	2.2	138
39	A Short, Strong Hydrogen Bond in the Active Site of Human Carbonic Anhydrase II. Biochemistry, 2010, 49, 249-251.	1.2	138
40	Temperature dependence of the structural dimensions of the inverted hexagonal (HII) phase of phosphatidylethanolamine-containing membranes. Biochemistry, 1989, 28, 4245-4253.	1.2	136
41	Nonlamellar Phases Induced by the Interaction of Gramicidin S with Lipid Bilayers. A Possible Relationship to Membrane-Disrupting Activityâ€. Biochemistry, 1997, 36, 7906-7916.	1.2	135
42	X-ray diffraction reconstruction of the inverted hexagonal (HII) phase in lipid-water systems. Biochemistry, 1992, 31, 1340-1355.	1.2	132
43	X-ray Imaging of Shock Waves Generated by High-Pressure Fuel Sprays. Science, 2002, 295, 1261-1263.	6.0	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. Biochemistry, 1989, 28, 541-548.	1.2	125
45	The Plumber's Nightmare:1A New Morphology in Block Copolymerâ^'Ceramic Nanocomposites and Mesoporous Aluminosilicates. Journal of the American Chemical Society, 2003, 125, 13084-13093.	6.6	122
46	X-Ray Diffraction Structures of Some Phosphatidylethanolamine Lamellar and Inverted Hexagonal Phases*. Biophysical Journal, 2001, 81, 2693-2706.	0.2	117
47	Highly Aminated Mesoporous Silica Nanoparticles with Cubic Pore Structure. Journal of the American Chemical Society, 2011, 133, 172-175.	6.6	115
48	Development of confocal X-ray fluorescence (XRF) microscopy at the Cornell high energy synchrotron source. Applied Physics A: Materials Science and Processing, 2006, 83, 235-238.	1.1	114
49	Titanium Dioxideâ^'Surfactant Mesophases and Ti-TMS1. Chemistry of Materials, 1997, 9, 2690-2693.	3.2	113
50	Energy recovery linacs as synchrotron radiation sources (invited). Review of Scientific Instruments, 2002, 73, 1402-1406.	0.6	111
51	Block copolymer self-assemblyâ€“directed synthesis of mesoporous gyroidal superconductors. Science Advances, 2016, 2, e1501119.	4.7	104
52	High-pressure cooling of protein crystals without cryoprotectants. Acta Crystallographica Section D: Biological Crystallography, 2005, 61, 881-890.	2.5	103
53	Phase transformations during rapid heating of Al/Ni multilayer foils. Applied Physics Letters, 2008, 93, .	1.5	103
54	Directly measured deformation energy of phospholipid HII hexagonal phases. Faraday Discussions of the Chemical Society, 1986, 81, 29.	2.2	102

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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.	0.7	102
56	Gating of an organic transistor through a bilayer lipid membrane with ion channels. Applied Physics Letters, 2006, 89, 053505.	1.5	101
57	Polymerization of Nonlamellar Lipid Assemblies. Journal of the American Chemical Society, 1995, 117, 5573-5578.	6.6	100
58	Microstructural Analysis of a Cubic Bicontinuous Morphology in a Neat SIS Triblock Copolymer. Macromolecules, 1997, 30, 3938-3941.	2.2	98
59	Additive-Driven Phase-Selective Chemistry in Block Copolymer Thin Films: The Convergence of Topâ€“Down and Bottomâ€“Up Approaches. Advanced Materials, 2004, 16, 953-957.	11.1	97
60	Metal Oxide Containing Mesoporous Silica with Bicontinuous â€œPlumber's Nightmareâ€•Morphology from a Block Copolymer-Hybrid Mesophase. Angewandte Chemie - International Edition, 2001, 40, 1207-1211.	7.2	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, .	1.1	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.	1.2	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.	1.9	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.	1.8	87
65	Structure of a pseudokinase-domain switch that controls oncogenic activation of Jak kinases. Nature Structural and Molecular Biology, 2013, 20, 1221-1223.	3.6	87
66	Room-temperature serial crystallography using a kinetically optimized microfluidic device for protein crystallization and on-chip X-ray diffraction. IUCrJ, 2014, 1, 349-360.	1.0	87
67	Small concentrations of alamethicin induce a cubic phase in bulk phosphatidylethanolamine mixtures. Biochimica Et Biophysica Acta - Biomembranes, 1996, 1278, 241-246.	1.4	85
68	Perpendicular Deformation of a Near-Single-Crystal Triblock Copolymer with a Cylindrical Morphology. 1. Synchrotron SAXS. Macromolecules, 2000, 33, 9395-9406.	2.2	85
69	Quantitative analysis of highly transient fuel sprays by time-resolved x-radiography. Applied Physics Letters, 2003, 83, 1671-1673.	1.5	84
70	Strain Mapping of Two-Dimensional Heterostructures with Subpicometer Precision. Nano Letters, 2018, 18, 3746-3751.	4.5	82
71	High-Pressure Effects on the Orderâ^'Disorder Transition in Block Copolymer Melts. Macromolecules, 1996, 29, 1473-1481.	2.2	81
72	The RCK Domain of the KtrAB K+ Transporter: Multiple Conformations of an Octameric Ring. Cell, 2006, 126, 1147-1159.	13.5	78

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73	Energy recovery linac (ERL) coherent hard x-ray sources. New Journal of Physics, 2010, 12, 035011.	1.2	75
74	Role of Lipid Polymorphism in Pulmonary Surfactant. Science, 1996, 273, 330-332.	6.0	74
75	Evidence for liquid water during the high-density to low-density amorphous ice transition. Proceedings of the National Academy of Sciences of the United States of America, 2009, 106, 4596-4600.	3.3	74
76	Ordered mesoporous silica nanoparticles with and without embedded iron oxide nanoparticles: structure evolution during synthesis. Journal of Materials Chemistry, 2010, 20, 7807.	6.7	74
77	Time-resolved x-ray diffraction of biological materials. Science, 1987, 238, 305-312.	6.0	73
78	Alteration of citrine structure by hydrostatic pressure explains the accompanying spectral shift. Proceedings of the National Academy of Sciences of the United States of America, 2008, 105, 13362-13366.	3.3	73
79	Polymerization of the Inverted Hexagonal Phase. Journal of the American Chemical Society, 1997, 119, 4866-4873.	6.6	72
80	Comparison of the Lamellar Morphology of Microphase-Separated Cyclic Block Copolymers and Their Linear Precursors. Macromolecules, 1995, 28, 3485-3489.	2.2	70
81	Structural Rigidity of a Large Cavity-containing Protein Revealed by High-pressure Crystallography. Journal of Molecular Biology, 2007, 367, 752-763.	2.0	69
82	Morphology Diagram of a Diblock Copolymerâ˜Aluminosilicate Nanoparticle System. Chemistry of Materials, 2009, 21, 5397-5405.	3.2	68
83	Structural study of the inverted cubic phases of di-dodecyl alkyl-?-D-glucopyranosyl-rac-glycerol. Journal De Physique II, 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. Chemistry of Materials, 2009, 21, 5466-5473.	3.2	64
85	Integrating Structure Control over Multiple Length Scales in Porous High Temperature Ceramics with Functional Platinum Nanoparticles. Nano Letters, 2009, 9, 2756-2762.	4.5	63
86	Nanohybrids from Liquid Crystalline Extended Amphiphilic Dendrimers. Journal of the American Chemical Society, 2004, 126, 4070-4071.	6.6	61
87	Synthesis and Formation Mechanism of Aminated Mesoporous Silica Nanoparticles. Chemistry of Materials, 2012, 24, 3895-3905.	3.2	61
88	Direct Access to Bicontinuous Skeletal Inorganic Plumber's Nightmare Networks from Block Copolymers. Angewandte Chemie - International Edition, 2005, 44, 1226-1229.	7.2	60
89	On the validity of 31P-NMR determinations of phospholipid polymorphic phase behaviour. Chemistry and Physics of Lipids, 1986, 40, 47-56.	1.5	59
90	Orientation of triblock copolymers in planar extension. Polymer Engineering and Science, 1996, 36, 1414-1424.	1.5	59

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91	Shear-Stabilized Bi-axial Texture and Lamellar Contraction in both Diblock Copolymer and Diblock Copolymer/Homopolymer Blends. Macromolecules, 1996, 29, 1482-1489.	2.2	58
92	High-Pressure Protein Crystallography and NMR to Explore Protein Conformations. Annual Review of Biophysics, 2011, 40, 81-98.	4.5	58
93	Networked and chiral nanocomposites from ABC triblock terpolymer coassembly with transition metal oxide nanoparticles. Journal of Materials Chemistry, 2012, 22, 1078-1087.	6.7	58
94	Linking experiment and theory for three-dimensional networked binary metal nanoparticleâ€“triblock terpolymer superstructures. Nature Communications, 2014, 5, 3247.	5.8	58
95	Three-dimensional diffuse x-ray scattering from crystals of Staphylococcal nuclease. Proceedings of the National Academy of Sciences of the United States of America, 1997, 94, 6180-6184.	3.3	57
96	High sensitivity image intensifierâ€TV detector for xâ€ray diffraction studies. Review of Scientific Instruments, 1978, 49, 1241-1249.	0.6	56
97	Correlation between lipid plane curvature and lipid chain order. Biophysical Journal, 1996, 70, 2747-2757.	0.2	56
98	Structural and Thermodynamic Characterization of T4 Lysozyme Mutants and the Contribution of Internal Cavities to Pressure Denaturation. Biochemistry, 2008, 47, 11097-11109.	1.2	55
99	Lipid extracts from membranes of Acholeplasma laidlawii A grown with different fatty acids have a nearly constant spontaneous curvature. Lipids and Lipid Metabolism, 1995, 1257, 18-24.	2.6	54
100	Pressure-induced topological phase transitions in membranes. Physical Review Letters, 1993, 70, 3455-3458.	2.9	53
101	Determination of L â€“HII Phase Transition Temperature for 1,2-Dioleoyl-sn-Glycero-3-Phosphatidylethanolamine. Biophysical Journal, 2002, 82, 2504-2510.	0.2	53
102	Calibration procedures for charge-coupled device x-ray detectors. Review of Scientific Instruments, 1999, 70, 2927-2934.	0.6	52
103	Imaging Density Disturbances in Water with a 41.3-Attosecond Time Resolution. Physical Review Letters, 2004, 92, 237401.	2.9	52
104	Diastereoselective Alkylation of Î²-Amino Esters:â€‰ Structural and Rate Studies Reveal Alkylations of Hexameric Lithium Enolates. Journal of the American Chemical Society, 2004, 126, 16559-16568.	6.6	52
105	Curvature dependent induction of the interdigitated gel phase in DPPC vesicles. Biochimica Et Biophysica Acta - Biomembranes, 1993, 1146, 247-257.	1.4	51
106	Synthesis and Self-Assembly of Amphiphilic Dendrimers Based on Aliphatic Polyether-Type Dendritic Cores. Macromolecules, 2004, 37, 4227-4234.	2.2	51
107	Metal Nanoparticleâˆ’Block Copolymer Composite Assembly and Disassembly. Chemistry of Materials, 2009, 21, 5578-5584.	3.2	50
108	High hydrostatic pressure small-angle X-ray scattering cell for protein solution studies featuring diamond windows and disposable sample cells. Journal of Applied Crystallography, 2008, 41, 167-175.	1.9	49

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109	Tests of a prototype pixel array detector for microsecond time-resolved X-ray diffraction. Journal of Synchrotron Radiation, 1999, 6, 1096-1105.	1.0	48
110	X-ray diffraction and electron microscope study of phase separation in rod outer segment photoreceptor membrane multilayers. Biophysical Journal, 1982, 39, 241-251.	0.2	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. Biophysical Journal, 1994, 66, 1088-1103.	0.2	47
112	Monolithic Gyroidal Mesoporous Mixed Titaniumâ€“Niobium Nitrides. ACS Nano, 2014, 8, 8217-8223.	7.3	47
113	CCD and vidicon xâ€ray detectors: Theory and practice (invited). Review of Scientific Instruments, 1989, 60, 1545-1551.	0.6	46
114	Graphene as a protein crystal mounting material to reduce background scatter. Journal of Applied Crystallography, 2013, 46, 1501-1507.	1.9	46
115	Multilayer X-ray optics at CHESS. Journal of Synchrotron Radiation, 2006, 13, 204-210.	1.0	45
116	A Re-Evaluation of the Morphology of a Bicontinuous Block Copolymerâ^'Ceramic Material. Macromolecules, 2007, 40, 8974-8982.	2.2	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-(Î²-d-galactopyranosyl)-sn-glycerols. Chemistry and Physics of Lipids, 2001, 111, 139-161.	1.5	44
118	Kinetics of the lamellar-inverse hexagonal phase transition determined by time-resolved x-ray diffraction. Biochemistry, 1992, 31, 1081-1092.	1.2	43
119	Coupling format variations in x-ray detectors based on charge coupled devices. Review of Scientific Instruments, 1997, 68, 47-54.	0.6	43
120	Surface Induced Tilt Propagation in Thin Films of Semifluorinated Liquid Crystalline Side Chain Block Copolymers. Macromolecules, 2007, 40, 81-89.	2.2	43
121	Microfabrication cellular phosphors. Journal of Vacuum Science & Technology an Official Journal of the American Vacuum Society B, Microelectronics Processing and Phenomena, 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. Biochemistry, 1992, 31, 1356-1363.	1.2	42
123	High-Pressure Effects on the Disordered Phase of Block Copolymer Melts. Macromolecules, 1995, 28, 7148-7156.	2.2	42
124	Synthesis and Characterization of Amphiphilic Poly(ethylene oxide)-block-poly(hexyl methacrylate) Copolymers. Macromolecular Chemistry and Physics, 2003, 204, 1047-1055.	1.1	42
125	Freezing and melting water in lamellar structures. Biophysical Journal, 1994, 67, 706-712.	0.2	40
126	X-ray tests of a Pixel Array Detector for coherent x-ray imaging at the Linac Coherent Light Source. Journal of Instrumentation, 2009, 4, P03001-P03001.	0.5	40

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127	A Medium-Format, Mixed-Mode Pixel Array Detector for Kilohertz X-ray Imaging. Journal of Physics: Conference Series, 2013, 425, 062004.	0.3	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.	1.2	39
129	Calcium-induced phase separation phenomena in multicomponent unsaturated lipid mixtures. Biochemistry, 1988, 27, 1415-1420.	1.2	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.	0.2	39
131	Real-Space x-ray tomographic reconstruction of randomly oriented objects with sparse data frames. Optics Express, 2014, 22, 2403.	1.7	39
132	A direct-coupled detector for synchrotron X-radiation using a large format CCD. IEEE Transactions on Nuclear Science, 1991, 38, 110-118.	1.2	38
133	High-Speed in Situ X-ray Scattering of Carbon Nanotube Film Nucleation and Self-Organization. ACS Nano, 2012, 6, 5091-5101.	7.3	38
134	Slowâ€scan siliconâ€intensified targetâ€TV xâ€ray detector for quantitative recording of weak xâ€ray images. Review of Scientific Instruments, 1982, 53, 1770-1778.	0.6	37
135	Enigmatic thermotropic phase behavior of highly asymmetric mixed-chain phosphatidylcholines that form mixed-interdigitated gel phases. Biophysical Journal, 1994, 66, 207-216.	0.2	37
136	Silica Gels with Tunable Nanopores through Templating of the L3Phase. Langmuir, 2000, 16, 398-406.	1.6	37
137	High Dynamic Range X-Ray Detector Pixel Architectures Utilizing Charge Removal. IEEE Transactions on Nuclear Science, 2017, 64, 1101-1107.	1.2	37
138	Experimental 3D coherent diffractive imaging from photon-sparse random projections. IUCrJ, 2019, 6, 357-365.	1.0	37
139	Solving structure with sparse, randomly-oriented x-ray data. Optics Express, 2012, 20, 13129.	1.7	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.	1.2	35
141	The thermotropic phase behaviour and phase structure of a homologous series of racemic Î²-d-galactosyl dialkylglycerols studied by differential scanning calorimetry and X-ray diffraction. Chemistry and Physics of Lipids, 2007, 148, 26-50.	1.5	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.	5.2	35
143	Effect of Filler Dimensionality on the Orderâ^'Disorder Transition of a Model Block Copolymer Nanocomposite. Macromolecules, 2002, 35, 4862-4865.	2.2	34
144	Survey of two-dimensional electro-optical X-ray detectors. Nuclear Instruments & Methods in Physics Research, 1982, 195, 287-297.	0.9	33

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145	Coupling of Pressure-Induced Structural Shifts to Spectral Changes in a Yellow Fluorescent Protein. Biophysical Journal, 2009, 97, 1719-1727.	0.2	32
146	A high-pressure cryocooling method for protein crystals and biological samples with reduced background X-ray scatter. Journal of Applied Crystallography, 2013, 46, 234-241.	1.9	32
147	High-dynamic-range coherent diffractive imaging: ptychography using the mixed-mode pixel array detector. Journal of Synchrotron Radiation, 2014, 21, 1167-1174.	1.0	32
148	Three-Component Porousâ^'Carbonâ^'Titania Nanocomposites through Self-Assembly of ABCBA Block Terpolymers with Titania Sols. Macromolecules, 2009, 42, 6682-6687.	2.2	31
149	High-resolution macromolecular structure determination using CCD detectors and synchrotron radiation. Structure, 1995, 3, 835-844.	1.6	30
150	Pressure-induced high-density amorphous ice in protein crystals. Journal of Applied Crystallography, 2008, 41, 1-7.	1.9	30
151	Hexagonally Patterned Lamellar Morphology in ABC Triblock Copolymer/Aluminosilicate Nanocomposites. Chemistry of Materials, 2008, 20, 3278-3287.	3.2	30
152	Four dimensional visualization of highly transient fuel sprays by microsecond quantitative x-ray tomography. Applied Physics Letters, 2009, 94, .	1.5	30
153	Tracking solvent and protein movement during CO ₂ release in carbonic anhydrase II crystals. Proceedings of the National Academy of Sciences of the United States of America, 2016, 113, 5257-5262.	3.3	30
154	Format alterations in CCD based electro-optic X-ray detectors. Nuclear Instruments and Methods in Physics Research, Section A: Accelerators, Spectrometers, Detectors and Associated Equipment, 1986, 246, 527-533.	0.7	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. Biophysical Journal, 1994, 66, 734-740.	0.2	29
156	Analog pixel array detectors. Journal of Synchrotron Radiation, 2006, 13, 110-119.	1.0	29
157	Protein dynamical transition at 110 K. Proceedings of the National Academy of Sciences of the United States of America, 2011, 108, 20897-20901.	3.3	29
158	Polymorphic phase behavior of unsaturated lysophosphatidylethanolamines: A phosphorus-31 NMR and x-ray diffraction study. Biochemistry, 1986, 25, 816-822.	1.2	28
159	Self-Assembly of Four-Layer Woodpile Structure from Zigzag ABC Copolymer/Aluminosilicate Concertinas. Macromolecules, 2008, 41, 852-859.	2.2	28
160	Interaction between Supersonic Disintegrating Liquid Jets and Their Shock Waves. Physical Review Letters, 2009, 102, 074501.	2.9	28
161	Time-resolved x-ray diffraction techniques for bulk polycrystalline materials under dynamic loading. Review of Scientific Instruments, 2014, 85, 093901.	0.6	28
162	Physical studies on the membranes and lipids of plasmalogen-deficient Megasphaera elsdenii. Chemistry and Physics of Lipids, 1990, 55, 41-48.	1.5	27

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163	Study of afterglow in x-ray phosphors for use on fast-framing charge-coupled device detectors. Optical Engineering, 1997, 36, 3212.	0.5	27
164	Periodic faceting of a Si(113) surface miscut towards [110]. Surface Science, 1998, 411, 70-85.	0.8	27
165	Pixel array detectors for time resolved radiography (invited). Review of Scientific Instruments, 2002, 73, 1621-1624.	0.6	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.	1.1	27
167	Characterization of Î²-Amino Ester Enolates as Hexamers via6Li NMR Spectroscopy. Journal of the American Chemical Society, 2004, 126, 5938-5939.	6.6	27
168	Solution of protein crystallographic structures by high-pressure cryocooling and noble-gas phasing. Acta Crystallographica Section D: Biological Crystallography, 2006, 62, 687-694.	2.5	26
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