Martin M Nielsen

List of Publications by Year
in descending order

133	13,190	38742 50	21540 114
papers	citations	h-index	g-index

134	134	134	12888
all docs	docs citations	times ranked	citing authors

#	Article	IF	Citations
1	X-ray free-electron laser based dark-field X-ray microscopy: a simulation-based study. Journal of Applied Crystallography, 2022, 55, 112-121.	4.5	5
2	Resolving Femtosecond Solvent Reorganization Dynamics in an Iron Complex by Nonadiabatic Dynamics Simulations. Journal of the American Chemical Society, 2022, 144, 12861-12873.	13.7	11
3	Trajectory surface-hopping photoinduced dynamics from Rydberg states of trimethylamine. Physical Chemistry Chemical Physics, 2021, 23, 10964-10977.	2.8	5
4	Element-specific investigations of ultrafast dynamics in photoexcited Cu2ZnSnS4 nanoparticles in solution. Structural Dynamics, 2021, 8, 024501.	2.3	1
5	Hot Branching Dynamics in a Lightâ€Harvesting Iron Carbene Complex Revealed by Ultrafast Xâ€ray Emission Spectroscopy. Angewandte Chemie, 2020, 132, 372-380.	2.0	14
6	Hot Branching Dynamics in a Lightâ€Harvesting Iron Carbene Complex Revealed by Ultrafast Xâ€ray Emission Spectroscopy. Angewandte Chemie - International Edition, 2020, 59, 364-372.	13.8	41
7	Observing the Structural Evolution in the Photodissociation of Diiodomethane with Femtosecond Solution X-Ray Scattering. Physical Review Letters, 2020, 125, 226001.	7.8	20
8	Vibrational wavepacket dynamics in Fe carbene photosensitizer determined with femtosecond X-ray emission and scattering. Nature Communications, 2020, 11, 634.	12.8	75
9	Simulation of ultrafast excited-state dynamics and elastic x-ray scattering by quantum wavepacket dynamics. Journal of Chemical Physics, 2019, 151, 104307.	3.0	19
10	Initial metalâ€“metal bond breakage detected by fs X-ray scattering in the photolysis of Ru3(CO)12 in cyclohexane at 400 nm. Photochemical and Photobiological Sciences, 2019, 18, 319-327.	2.9	13
11	Finding intersections between electronic excited state potential energy surfaces with simultaneous ultrafast X-ray scattering and spectroscopy. Chemical Science, 2019, 10, 5749-5760.	7.4	90
12	Ultrafast structural dynamics of photo-reactions observed by time-resolved x-ray cross-correlation analysis. Structural Dynamics, 2019, 6, 024301.	2.3	10
13	Ultrafast X-Ray Scattering Measurements of Coherent Structural Dynamics on the Ground-State Potential Energy Surface of a Diplatinum Molecule. Physical Review Letters, 2019, 122, 063001.	7.8	64
14	X-ray tracking of structural changes during a subnanosecond solid-solid phase transition in cobalt nanoparticles. Physical Review B, 2019, 100, .	3.2	2
15	Theoretical Evidence of Solvent-Mediated Excited-State Dynamics in a Functionalized Iron Sensitizer. Journal of Physical Chemistry C, 2019, 123, 2056-2065.	3.1	29
16	Solvent control of charge transfer excited state relaxation pathways in [Fe(2,2â€²-bipyridine)(CN)₄]^{2â^’}. Physical Chemistry Chemical Physics, 2018, 20, 4238-4249.	2.8	52
17	Tracking the picosecond deactivation dynamics of a photoexcited iron carbene complex by time-resolved X-ray scattering. Chemical Science, 2018, 9, 405-414.	7.4	49
18	Tuning and Tracking of Coherent Shear Waves in Molecular Films. ACS Omega, 2018, 3, 9929-9933.	3.5	4

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19	Anisotropy enhanced X-ray scattering from solvated transition metal complexes. Journal of Synchrotron Radiation, 2018, 25, 306-315.	2.4	33
20	Coherent structural trapping through wave packet dispersion during photoinduced spin state switching. Nature Communications, 2017, 8, 15342.	12.8	149
21	Ligand manipulation of charge transfer excited state relaxation and spin crossover in [Fe(2,2â€²-bipyridine)2(CN)2]. Structural Dynamics, 2017, 4, 044030.	2.3	41
22	Unique Crystal Orientation of Poly(ethylene oxide) Thin Films by Crystallization Using a Thermal Gradient. Macromolecules, 2017, 50, 5877-5891.	4.8	22
23	Manipulating charge transfer excited state relaxation and spin crossover in iron coordination complexes with ligand substitution. Chemical Science, 2017, 8, 515-523.	7.4	102
24	Molecular scale structure and dynamics at an ionic liquid/electrode interface. Faraday Discussions, 2017, 206, 141-157.	3.2	57
25	Atomistic characterization of the active-site solvation dynamics of a model photocatalyst. Nature Communications, 2016, 7, 13678.	12.8	74
26	Electron Transfer and Solvent-Mediated Electronic Localization in Molecular Photocatalysis. Inorganic Chemistry, 2016, 55, 10637-10644.	4.0	16
27	Femtosecond X-Ray Scattering Study of Ultrafast Photoinduced Structural Dynamics in Solvated<mml:math xmlns:mml="http://www.w3.org/1998/Math/MathML" display="inline"><mml:mrow><mml:mo stretchy="false">[</mml:mo><mml:mi>Co</mml:mi><mml:mo stretchy="false">(</mml:mo><mml:mtext) Tj ETQq1 1 0.784314 rgBT /Overlock 10 Tf 50 412 Td (mathvariant="bold">terpy</mml:mtex	7.8	86
28	Observing Solvation Dynamics with Simultaneous Femtosecond X-ray Emission Spectroscopy and X-ray Scattering. Journal of Physical Chemistry B, 2016, 120, 1158-1168.	2.6	85
29	The negative piezoelectric effect of the ferroelectric polymer poly(vinylidene fluoride). Nature Materials, 2016, 15, 78-84.	27.5	329
30	Novel micro-reactor flow cell for investigation ofÂmodel catalysts usingin situgrazing-incidence X-ray scattering. Journal of Synchrotron Radiation, 2016, 23, 455-463.	2.4	2
31	Femtosecond X-ray Absorption and Emission Spectroscopy on ZnO Nanoparticles in Solution. , 2016, , .		0
32	Visualizing the non-equilibrium dynamics of photoinduced intramolecular electron transfer with femtosecond X-ray pulses. Nature Communications, 2015, 6, 6359.	12.8	134
33	Dynamics of chemical bond: general discussion. Faraday Discussions, 2015, 177, 121-154.	3.2	8
34	Correction of complex nonlinear signal response from a pixel array detector. Journal of Synchrotron Radiation, 2015, 22, 584-591.	2.4	9
35	Disentangling detector data in XFEL studies of temporally resolved solution state chemistry. Faraday Discussions, 2015, 177, 443-465.	3.2	22
36	On the calculation of x-ray scattering signals from pairwise radial distribution functions. Journal of Physics B: Atomic, Molecular and Optical Physics, 2015, 48, 244010.	1.5	34

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37	Time and Space resolved Methods: general discussion. Faraday Discussions, 2015, 177, 263-292.	3.2	1
38	Detailed Characterization of a Nanosecond-Lived Excited State: X-ray and Theoretical Investigation of the Quintet State in Photoexcited [Fe(terpy)₂]²⁺. Journal of Physical Chemistry C, 2015, 119, 5888-5902.	3.1	72
39	Future challenges: general discussion. Faraday Discussions, 2015, 177, 517-545.	3.2	3
40	Novel applications of the x-ray tracing software package McXtrace. Proceedings of SPIE, 2014, , .	0.8	0
41	Solvation dynamics monitored by combined X-ray spectroscopies and scattering: photoinduced spin transition in aqueous [Fe(bpy)₃]²⁺. Faraday Discussions, 2014, 171, 169-178.	3.2	17
42	Tracking excited-state charge and spin dynamics in iron coordination complexes. Nature, 2014, 509, 345-348.	27.8	382
43	Visualizing a protein quake with time-resolved X-ray scattering at a free-electron laser. Nature Methods, 2014, 11, 923-926.	19.0	173
44	Direct Dynamics Studies of a Binuclear Metal Complex in Solution: The Interplay Between Vibrational Relaxation, Coherence, and Solvent Effects. Journal of Physical Chemistry Letters, 2014, 5, 2414-2418.	4.6	39
45	Excited state kinetics of anthracene-bridge-aniline intramolecular exciplexes. Photochemical and Photobiological Sciences, 2014, 13, 1093.	2.9	2
46	Measuring and Understanding Ultrafast Phenomena Using X-Rays. NATO Science for Peace and Security Series A: Chemistry and Biology, 2014, , 91-113.	0.5	3
47	The benefit of the European User Community from transnational access to national radiation facilities. Journal of Synchrotron Radiation, 2014, 21, 638-639.	2.4	2
48	Bromosubstituted norbornadienes and their reversible photolytic transformation to quadricyclanes. ScienceOpen Research, 2014, .	0.6	0
49	Molecular Weight Dependence of Exciton Diffusion in Poly(3â€hexylthiophene). Advanced Energy Materials, 2013, 3, 1445-1453.	19.5	36
50	Spin-state studies with XES and RIXS: From static to ultrafast. Journal of Electron Spectroscopy and Related Phenomena, 2013, 188, 166-171.	1.7	87
51	Introducing a standard method for experimental determination of the solvent response in laser pump, X-ray probe time-resolved wide-angle X-ray scattering experiments on systems in solution. Physical Chemistry Chemical Physics, 2013, 15, 15003-15016.	2.8	62
52	Femtosecond X-ray Absorption Spectroscopy at a Hard X-ray Free Electron Laser: Application to Spin Crossover Dynamics. Journal of Physical Chemistry A, 2013, 117, 735-740.	2.5	183
53	McXtrace: a Monte Carlo software package for simulating X-ray optics, beamlines and experiments. Journal of Applied Crystallography, 2013, 46, 679-696.	4.5	68
54	Toward Highlighting the Ultrafast Electron Transfer Dynamics at the Optically Dark Sites of Photocatalysts. Journal of Physical Chemistry Letters, 2013, 4, 1972-1976.	4.6	49

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55	Molecular Ordering of Ethanol at the Calcite Surface. Langmuir, 2012, 28, 2545-2550.	3.5	45
56	Air-stable Ï€-conjugated amorphous copolymer field-effect transistors with high mobility of 0.3â€‰cm2/Vs. Applied Physics Letters, 2012, 101, 213305.	3.3	6
57	Guestâ€“Host Interactions Investigated by Time-Resolved X-ray Spectroscopies and Scattering at MHz Rates: Solvation Dynamics and Photoinduced Spin Transition in Aqueous Fe(bipy)₃²⁺. Journal of Physical Chemistry A, 2012, 116, 9878-9887.	2.5	112
58	Theoretical study of the triplet excited state of PtPOP and the exciplexes M-PtPOP (M=Tl, Ag) in solution and comparison with ultrafast X-ray scattering results. Chemical Physics, 2012, 393, 117-122.	1.9	14
59	Atomic modifications by synchrotron radiation at the calciteâ€“ethanol interface. Journal of Synchrotron Radiation, 2012, 19, 530-535.	2.4	5
60	Highâ€Performance Ambipolar Diketopyrrolopyrroleâ€Thieno[3,2â€b]thiophene Copolymer Fieldâ€Effect Transistors with Balanced Hole and Electron Mobilities. Advanced Materials, 2012, 24, 647-652.	21.0	521
61	S3-2 Mechanism and regulation of enzymes degrading amylopectin and Î±-limit dextrins(Overseas Invited) Tj ETQq1 1 0.784314 rgBT	0.0	0
62	Bond Shortening (1.4 Ã…) in the Singlet and Triplet Excited States of [Ir₂(dimen)₄]²⁺ in Solution Determined by Time-Resolved X-ray Scattering. Inorganic Chemistry, 2011, 50, 9329-9336.	4.0	53
63	High Mobility Ambipolar Charge Transport in Polyselenophene Conjugated Polymers. Advanced Materials, 2010, 22, 2371-2375.	21.0	178
64	Analysis of time-resolved X-ray scattering data from solution-state systems. Acta Crystallographica Section A: Foundations and Advances, 2010, 66, 261-269.	0.3	53
65	Direct Observation of Acoustic Oscillations in InAs Nanowires. Nano Letters, 2010, 10, 2461-2465.	9.1	39
66	High-Performance Solution-Deposited Ambipolar Organic Transistors Based on Terrylene Diimides. Chemistry of Materials, 2010, 22, 2120-2124.	6.7	69
67	Structure of a short-lived excited state trinuclear Agâ€“Ptâ€“Pt complex in aqueous solution by time resolved X-ray scattering. Physical Chemistry Chemical Physics, 2010, 12, 6921.	2.8	18
68	Tracking chemical reactions in solution by time-resolved X-ray scattering. Acta Crystallographica Section A: Foundations and Advances, 2010, 66, s105-s105.	0.3	0
69	Structural Tracking of Chemical Reactions in Solution by Time-Resolved X-Ray Scattering. , 2009, , .		1
70	Windowless microfluidic platform based on capillary burst valves for high intensity x-ray measurements. Review of Scientific Instruments, 2009, 80, 115114.	1.3	5
71	Structural Tracking of a Bimolecular Reaction in Solution by Timeâ€Resolved Xâ€Ray Scattering. Angewandte Chemie - International Edition, 2009, 48, 4180-4184.	13.8	43
72	Picosecond time-resolved laser pump/X-ray probe experiments using a gated single-photon-counting area detector. Journal of Synchrotron Radiation, 2009, 16, 387-390.	2.4	58

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73	Time-Resolved X-ray Scattering of an Electronically Excited State in Solution. Structure of the ³A_{2u} State of Tetrakis-Ì¼-pyrophosphitodiplatinate(II). Journal of the American Chemical Society, 2009, 131, 502-508.	13.7	118
74	Structure of the Buried Metalâ"Molecule Interface in Organic Thin Film Devices. Nano Letters, 2009, 9, 1052-1057.	9.1	16
75	Homeotropic Alignment of a Discotic Liquid Crystal Induced by a Sacrificial Layer. Journal of Physical Chemistry C, 2009, 113, 14398-14406.	3.1	74
76	High-performance organic field-effect transistors, textured by self-assembly. Acta Crystallographica Section A: Foundations and Advances, 2009, 65, s260-s260.	0.3	0
77	Simulating X-ray diffraction of textured films. Journal of Applied Crystallography, 2008, 41, 262-271.	4.5	114
78	Organic Thin Film Transistors with Polymer Brush Gate Dielectrics Synthesized by Atom Transfer Radical Polymerization. Advanced Functional Materials, 2008, 18, 36-43.	14.9	51
79	Oriented Poly(dialkylstannane)s. Advanced Functional Materials, 2008, 18, 2301-2308.	14.9	14
80	High-Mobility Aligned Pentacene Films Grown by Zone-Casting. Chemistry of Materials, 2008, 20, 7252-7259.	6.7	90
81	Roles of multiple surface sites, long substrate binding clefts, and carbohydrate binding modules in the action of amylolytic enzymes on polysaccharide substrates. Biocatalysis and Biotransformation, 2008, 26, 59-67.	2.0	4
82	Crystallization of Organic Semiconductor Molecules in Nanosized Cavities: Mechanism of Polymorphs Formation Studied by in Situ XRD. Journal of Physical Chemistry C, 2008, 112, 12177-12183.	3.1	4
83	Theoretical Investigation of Perylene Dimers and Excimers and Their Signatures in X-Ray Diffraction. Journal of Physical Chemistry A, 2008, 112, 8179-8187.	2.5	17
84	X-ray Diffraction Study of Directionally Grown Perylene Crystallites. Journal of Physical Chemistry C, 2008, 112, 4569-4572.	3.1	5
85	Using coplanar wave guides to excite molecular motions in the frequency range of 10–1000GHz. , 2008, , .		0
86	Tough, Semiconducting Polyethyleneâ€poly(3â€hexylthiophene) Diblock Copolymers. Advanced Functional Materials, 2007, 17, 2674-2679.	14.9	201
87	Nanoscale structural characterization of Mg(NH3)6Cl2 during NH3 desorption: An in situ small angle X-ray scattering study. Chemical Physics Letters, 2007, 441, 255-260.	2.6	35
88	Molecular-weight dependence of interchain polaron delocalization and exciton bandwidth in high-mobility conjugated polymers. Physical Review B, 2006, 74, .	3.2	262
89	Enhancement of Charge-Transport Characteristics in Polymeric Films Using Polymer Brushes. Nano Letters, 2006, 6, 573-578.	9.1	92
90	Designing solution-processable air-stable liquid crystalline crosslinkable semiconductors. Philosophical Transactions Series A, Mathematical, Physical, and Engineering Sciences, 2006, 364, 2779-2787.	3.4	11

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91	Activation of a Cu/ZnO catalyst for methanol synthesis. Journal of Applied Crystallography, 2006, 39, 209-221.	4.5	28
92	Multicomponent semiconducting polymer systems with low crystallization-induced percolation threshold. Nature Materials, 2006, 5, 950-956.	27.5	302
93	Dehydrogenation kinetics of pure and nickel-doped magnesium hydride investigated by in situ time-resolved powder X-ray diffraction. International Journal of Hydrogen Energy, 2006, 31, 2052-2062.	7.1	138
94	High density bis-azo copolymers: influence of dipole-dipole interaction on electrical poling processes and realization of a Fabry-Perot modulator. , 2005, , .		0
95	Effects of Packing Structure on the Optoelectronic and Charge Transport Properties in Poly(9,9-di-n-octylfluorene-alt-benzothiadiazole). Journal of the American Chemical Society, 2005, 127, 12890-12899.	13.7	320
96	Investigation of chromophore-chromophore interaction by electro-optic measurements, linear dichroism, x-ray scattering, and density-functional calculations. Physical Review E, 2005, 72, 036610.	2.1	36
97	Structure of Zone-Cast HBCâ^'C12H25Films. Journal of the American Chemical Society, 2005, 127, 11288-11293.	13.7	63
98	In Situ Studies of Phase Transitions in Thin Discotic Films. Journal of Physical Chemistry B, 2005, 109, 22319-22325.	2.6	31
99	Structural Surprises in Friction-Deposited Films of Poly(tetrafluoroethylene). Macromolecules, 2005, 38, 2383-2390.	4.8	33
100	Field-Effect Transistors Based on Self-Organized Molecular Nanostripes. Nano Letters, 2005, 5, 2422-2425.	9.1	114
101	Interaction of hydrogen with an Mgâ€“Al alloy. Journal of Alloys and Compounds, 2005, 404-406, 323-326.	5.5	63
102	Structural dynamics of the competing forces of light and matter. Acta Crystallographica Section A: Foundations and Advances, 2005, 61, c113-c114.	0.3	0
103	Enhanced Mobility of Poly(3-hexylthiophene) Transistors by Spin-Coating from High-Boiling-Point Solvents. Chemistry of Materials, 2004, 16, 4772-4776.	6.7	878
104	Angle calculations for az-axis/(2S+2D) hybrid diffractometer. Journal of Applied Crystallography, 2004, 37, 216-222.	4.5	18
105	Core-shell ironâ€“iron oxide nanoparticles: magnetic properties and interactions. Journal of Magnetism and Magnetic Materials, 2004, 272-276, 1485-1486.	2.3	25
106	Macroscopic Alignment of Graphene Stacks by Langmuirâ^'Blodgett Deposition of Amphiphilic Hexabenzocoronenes. Langmuir, 2004, 20, 4139-4146.	3.5	46
107	Electronic Conductivity of Polypyrroleâ^'Dodecyl Benzene Sulfonate Complexes. Journal of Physical Chemistry B, 2004, 108, 15001-15008.	2.6	16
108	Self-assembled liquid crystalline solution processable semiconductors. , 2004, , .		1

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109	Induced Alignment of a Solution-Cast Discotic Hexabenzocoronene Derivative for Electronic Devices Investigated by Surface X-ray Diffraction. Journal of the American Chemical Society, 2003, 125, 2252-2258.	13.7	109
110	Meso-Epitaxial Solution-Growth of Self-Organizing Discotic Liquid-Crystalline Semiconductors. Advanced Materials, 2003, 15, 495-499.	21.0	453
111	A Small-Angle X-ray Scattering Study of Complexes Formed in Mixtures of a Cationic Polyelectrolyte and an Anionic Surfactant. Journal of Physical Chemistry B, 2002, 106, 11412-11419.	2.6	46
112	Ultrathin Regioregular Poly(3-hexyl thiophene) Field-Effect Transistors. Langmuir, 2002, 18, 10176-10182.	3.5	156
113	Structural and magnetic properties of coreÂshell ironÂiron oxide nanoparticles. Journal of Physics Condensed Matter, 2002, 14, 13551-13567.	1.8	85
114	Deposition and characterization of ITO films produced by laser ablation at 355 nm. Applied Physics A: Materials Science and Processing, 2002, 74, 147-152.	2.3	23
115	Ge(001)-matrix-Pb â†" matrix-Pb: low-temperature two-dimensional phase transition. New Journal of Physics, 2001, 3, 13-13.	2.9	5
116	Doping in Solution as an Order-Inducing Tool Prior to Film Formation of Regio-Irregular Polyalkylthiophenes. Advanced Materials, 2000, 12, 1594-1597.	21.0	51
117	(TMTSF)₂ X materials and structural implications for low-dimensional polymeric and disordered molecular semiconductors. European Physical Journal Special Topics, 2000, 10, Pr3-11-Pr3-17.	0.2	1
118	Interface stress in Au/Ni multilayers. Journal of Applied Physics, 2000, 88, 1401-1406.	2.5	13
119	Structural study of the commensurateâ€"incommensurate low-temperature phase transition of Pb on Si(111). Surface Science, 2000, 448, L213-L219.	1.9	47
120	Phase Transitions in Two Dimensions: The Case of Sn Adsorbed on Ge(111) Surfaces. Physical Review Letters, 1999, 83, 2226-2229.	7.8	66
121	Structure of Al(100)-c(2Ã—2)-Li: A binary surface alloy. Physical Review B, 1999, 60, 5963-5968.	3.2	37
122	Surface structure ofAu3Cu(001). Physical Review B, 1999, 60, 8321-8325.	3.2	13
123	Structure ofAl(111)â^'(2Ã—2)â^'Rb. Physical Review B, 1999, 60, 11078-11083.	3.2	3
124	Two-dimensional charge transport in self-organized, high-mobility conjugated polymers. Nature, 1999, 401, 685-688.	27.8	4,364
125	Structure of theAl(111)â^'(3Ã—3)R30Â°â^'Csphase. Physical Review B, 1998, 58, 12655-12658.	3.2	9
126	Substitutional adsorption of Li on Al: The structure of the Al(111)-(3Ã—3)R30Â°-Li phase. Physical Review B, 1996, 54, 17902-17909.	3.2	22

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127	Formation of Surface Ternary Alloys by Coadsorption of Alkali Metals on Al(111). Physical Review Letters, 1996, 76, 1892-1895.	7.8	25
128	Formation and Structural Analysis of a Surface Alloy: Al(111)-(2 Ã— 2)-Na. Physical Review Letters, 1995, 74, 1617-1620.	7.8	51
129	LEED structural analysis of Al(111)-K-(âˆš3 Ã— âˆš3)R30Â°: Identification of stable and metastable adsorption sites. Physical Review B, 1994, 49, 4959-4972.	3.2	74
130	Structure of Al(111)-(âˆš3 Ã— âˆš3)R30Â°-Na: A LEED study. Physical Review B, 1994, 50, 4718-4724.	3.2	70
131	Enhanced surface vibrations and reconstruction of the Al(111) surface induced by Rb adsorption. Physical Review Letters, 1994, 72, 3370-3373.	7.8	62
132	Structure of Ni(100)-c(2Ã—2)-Na: A LEED analysis. Physical Review B, 1994, 50, 7851-7859.	3.2	29
133	Temperature-dependent local geometries in the system Al(100)-c(2Ã—2)-Na: A surface extended x-ray-absorption fine-structure study. Physical Review B, 1992, 46, 15594-15597.	3.2	47