## Martin M Nielsen

List of Publications by Year in descending order

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		38742	21540
133	13,190	50	114
papers	citations	h-index	g-index
134	134	134	12888
all docs	docs citations	times ranked	citing authors

#	Article	IF	CITATIONS
1	Two-dimensional charge transport in self-organized, high-mobility conjugated polymers. Nature, 1999, 401, 685-688.	27.8	4,364
2	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
3	Highâ€Performance Ambipolar Diketopyrrolopyrroleâ€Thieno[3,2â€≺i>b]thiophene Copolymer Fieldâ€Effect Transistors with Balanced Hole and Electron Mobilities. Advanced Materials, 2012, 24, 647-652.	21.0	521
4	Meso-Epitaxial Solution-Growth of Self-Organizing Discotic Liquid-Crystalline Semiconductors. Advanced Materials, 2003, 15, 495-499.	21.0	453
5	Tracking excited-state charge and spin dynamics in iron coordination complexes. Nature, 2014, 509, 345-348.	27.8	382
6	The negative piezoelectric effect of the ferroelectric polymer poly(vinylidene fluoride). Nature Materials, 2016, 15, 78-84.	27.5	329
7	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
8	Multicomponent semiconducting polymer systems with low crystallization-induced percolation threshold. Nature Materials, 2006, 5, 950-956.	27.5	302
9	Molecular-weight dependence of interchain polaron delocalization and exciton bandwidth in high-mobility conjugated polymers. Physical Review B, 2006, 74, .	3.2	262
10	Tough, Semiconducting Polyethyleneâ€poly(3â€hexylthiophene) Diblock Copolymers. Advanced Functional Materials, 2007, 17, 2674-2679.	14.9	201
11	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
12	High Mobility Ambipolar Charge Transport in Polyselenophene Conjugated Polymers. Advanced Materials, 2010, 22, 2371-2375.	21.0	178
13	Visualizing a protein quake with time-resolved X-ray scattering at a free-electron laser. Nature Methods, 2014, 11, 923-926.	19.0	173
14	Ultrathin Regioregular Poly(3-hexyl thiophene) Field-Effect Transistors. Langmuir, 2002, 18, 10176-10182.	3.5	156
15	Coherent structural trapping through wave packet dispersion during photoinduced spin state switching. Nature Communications, 2017, 8, 15342.	12.8	149
16	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
17	Visualizing the non-equilibrium dynamics of photoinduced intramolecular electron transfer with femtosecond X-ray pulses. Nature Communications, 2015, 6, 6359.	12.8	134
18	Time-Resolved X-ray Scattering of an Electronically Excited State in Solution. Structure of the <sup>3</sup> A <sub>2u</sub> State of Tetrakis-1¼-pyrophosphitodiplatinate(II). Journal of the American Chemical Society, 2009, 131, 502-508.	13.7	118

#	Article	IF	CITATIONS
19	Field-Effect Transistors Based on Self-Organized Molecular Nanostripes. Nano Letters, 2005, 5, 2422-2425.	9.1	114
20	Simulating X-ray diffraction of textured films. Journal of Applied Crystallography, 2008, 41, 262-271.	4.5	114
21	Guest–Host Interactions Investigated by Time-Resolved X-ray Spectroscopies and Scattering at MHz Rates: Solvation Dynamics and Photoinduced Spin Transition in Aqueous Fe(bipy) <sub>3</sub> <sup>2+</sup> . Journal of Physical Chemistry A, 2012, 116, 9878-9887.	2.5	112
22	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
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	Enhancement of Charge-Transport Characteristics in Polymeric Films Using Polymer Brushes. Nano Letters, 2006, 6, 573-578.	9.1	92
25	High-Mobility Aligned Pentacene Films Grown by Zone-Casting. Chemistry of Materials, 2008, 20, 7252-7259.	6.7	90
26	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
27	Spin-state studies with XES and RIXS: From static to ultrafast. Journal of Electron Spectroscopy and Related Phenomena, 2013, 188, 166-171. Femtosecond X-Ray Scattering Study of Ultrafast Photoinduced Structural Dynamics in	1.7	87
28	Solvated <mml:math <br="" xmlns:mml="http://www.w3.org/1998/Math/MathML">display="inline"&gt;<mml:mrow><mml:mo stretchy="false">[</mml:mo><mml:mi>Co</mml:mi><mml:mo stretchy="false"&gt;(<mml:mtext) (mathvariant="bold" 0="" 10="" 372="" 50="" etqq0="" overlock="" rgbt="" td="" tf="" tj="">te</mml:mtext)></mml:mo </mml:mrow></mml:math>	rpy mml</td <td>:mtext&gt;<mml< td=""></mml<></td>	:mtext> <mml< td=""></mml<>
29	Structural and magnetic properties of coreÂshell ironÂiron oxide nanoparticles. Journal of Physics Condensed Matter, 2002, 14, 13551-13567.	1.8	85
30	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
31	Vibrational wavepacket dynamics in Fe carbene photosensitizer determined with femtosecond X-ray emission and scattering. Nature Communications, 2020, 11, 634.	12.8	75
32	LEED structural analysis of Al(111)-K-(â^š3 × â^š3 )R30º: Identification of stable and metastable adsorption sites. Physical Review B, 1994, 49, 4959-4972.	3.2	74
33	Homeotropic Alignment of a Discotic Liquid Crystal Induced by a Sacrificial Layer. Journal of Physical Chemistry C, 2009, 113, 14398-14406.	3.1	74
34	Atomistic characterization of the active-site solvation dynamics of a model photocatalyst. Nature Communications, 2016, 7, 13678.	12.8	74
35	Detailed Characterization of a Nanosecond-Lived Excited State: X-ray and Theoretical Investigation of the Quintet State in Photoexcited [Fe(terpy) <sub>2</sub> ] <sup>2+</sup> . Journal of Physical Chemistry C, 2015, 119, 5888-5902.	3.1	72
36	Structure of Al(111)-(â^š3 × â^š3 )R30°-Na: A LEED study. Physical Review B, 1994, 50, 4718-4724.	3.2	70

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37	High-Performance Solution-Deposited Ambipolar Organic Transistors Based on Terrylene Diimides. Chemistry of Materials, 2010, 22, 2120-2124.	6.7	69
38	<i>McXtrace</i> : a Monte Carlo software package for simulating X-ray optics, beamlines and experiments. Journal of Applied Crystallography, 2013, 46, 679-696.	4.5	68
39	Phase Transitions in Two Dimensions: The Case of Sn Adsorbed on Ge(111) Surfaces. Physical Review Letters, 1999, 83, 2226-2229.	7.8	66
40	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
41	Structure of Zone-Cast HBCâ^'C12H25Films. Journal of the American Chemical Society, 2005, 127, 11288-11293.	13.7	63
42	Interaction of hydrogen with an Mg–Al alloy. Journal of Alloys and Compounds, 2005, 404-406, 323-326.	5.5	63
43	Enhanced surface vibrations and reconstruction of the Al(111) surface induced by Rb adsorption. Physical Review Letters, 1994, 72, 3370-3373.	7.8	62
44	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
45	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
46	Molecular scale structure and dynamics at an ionic liquid/electrode interface. Faraday Discussions, 2017, 206, 141-157.	3.2	57
47	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
48	Bond Shortening (1.4 Ã) in the Singlet and Triplet Excited States of [Ir <sub>2</sub> (dimen) <sub>4</sub> ] <sup>2+</sup> in Solution Determined by Time-Resolved X-ray Scattering. Inorganic Chemistry, 2011, 50, 9329-9336.	4.0	53
49	Solvent control of charge transfer excited state relaxation pathways in [Fe(2,2′-bipyridine)(CN) <sub>4</sub> ] <sup>2â~²</sup> . Physical Chemistry Chemical Physics, 2018, 20, 4238-4249.	2.8	52
50	Formation and Structural Analysis of a Surface Alloy: Al(111)-(2 × 2)-Na. Physical Review Letters, 1995, 74, 1617-1620.	7.8	51
51	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
52	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
53	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
54	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

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55	Temperature-dependent local geometries in the system Al(100)-c(2×2)-Na: A surface extended x-ray-absorption fine-structure study. Physical Review B, 1992, 46, 15594-15597.	3.2	47
56	Structural study of the commensurate–incommensurate low-temperature phase transition of Pb on Si(111). Surface Science, 2000, 448, L213-L219.	1.9	47
57	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
58	Macroscopic Alignment of Graphene Stacks by Langmuirâ^'Blodgett Deposition of Amphiphilic Hexabenzocoronenes. Langmuir, 2004, 20, 4139-4146.	3.5	46
59	Molecular Ordering of Ethanol at the Calcite Surface. Langmuir, 2012, 28, 2545-2550.	3.5	45
60	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
61	Ligand manipulation of charge transfer excited state relaxation and spin crossover in [Fe(2,2′-bipyridine)2(CN)2]. Structural Dynamics, 2017, 4, 044030.	2.3	41
62	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
63	Direct Observation of Acoustic Oscillations in InAs Nanowires. Nano Letters, 2010, 10, 2461-2465.	9.1	39
64	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
65	Structure of Al(100)-c(2×2)-Li: A binary surface alloy. Physical Review B, 1999, 60, 5963-5968.	3.2	37
66	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
67	Molecular Weight Dependence of Exciton Diffusion in Poly(3â€hexylthiophene). Advanced Energy Materials, 2013, 3, 1445-1453.	19.5	36
68	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
69	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
70	Structural Surprises in Friction-Deposited Films of Poly(tetrafluoroethylene). Macromolecules, 2005, 38, 2383-2390.	4.8	33
71	Anisotropy enhanced X-ray scattering from solvated transition metal complexes. Journal of Synchrotron Radiation, 2018, 25, 306-315.	2.4	33
72	In Situ Studies of Phase Transitions in Thin Discotic Films. Journal of Physical Chemistry B, 2005, 109, 22319-22325.	2.6	31

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73	Structure of Ni(100)-c(2×2)-Na: A LEED analysis. Physical Review B, 1994, 50, 7851-7859.	3.2	29
74	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
75	Activation of a Cu/ZnO catalyst for methanol synthesis. Journal of Applied Crystallography, 2006, 39, 209-221.	4.5	28
76	Formation of Surface Ternary Alloys by Coadsorption of Alkali Metals on Al(111). Physical Review Letters, 1996, 76, 1892-1895.	7.8	25
77	Core-shell iron–iron oxide nanoparticles: magnetic properties and interactions. Journal of Magnetism and Magnetic Materials, 2004, 272-276, 1485-1486.	2.3	25
78	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
79	Substitutional adsorption of Li on Al: The structure of the Al(111)-(3×3)R30°-Li phase. Physical Review B, 1996, 54, 17902-17909.	3.2	22
80	Disentangling detector data in XFEL studies of temporally resolved solution state chemistry. Faraday Discussions, 2015, 177, 443-465.	3.2	22
81	Unique Crystal Orientation of Poly(ethylene oxide) Thin Films by Crystallization Using a Thermal Gradient. Macromolecules, 2017, 50, 5877-5891.	4.8	22
82	Observing the Structural Evolution in the Photodissociation of Diiodomethane with Femtosecond Solution X-Ray Scattering. Physical Review Letters, 2020, 125, 226001.	7.8	20
83	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
84	Angle calculations for az-axis/(2S+2D) hybrid diffractometer. Journal of Applied Crystallography, 2004, 37, 216-222.	4.5	18
85	Structure of a short-lived excited state trinuclear Ag–Pt–Pt complex in aqueous solution by time resolved X-ray scattering. Physical Chemistry Chemical Physics, 2010, 12, 6921.	2.8	18
86	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
87	Solvation dynamics monitored by combined X-ray spectroscopies and scattering: photoinduced spin transition in aqueous [Fe(bpy) <sub>3</sub> ] <sup>2+</sup> . Faraday Discussions, 2014, 171, 169-178.	3.2	17
88	Electronic Conductivity of Polypyrroleâ^'Dodecyl Benzene Sulfonate Complexes. Journal of Physical Chemistry B, 2004, 108, 15001-15008.	2.6	16
89	Structure of the Buried Metalâ~'Molecule Interface in Organic Thin Film Devices. Nano Letters, 2009, 9, 1052-1057.	9.1	16
90	Electron Transfer and Solvent-Mediated Electronic Localization in Molecular Photocatalysis. Inorganic Chemistry, 2016, 55, 10637-10644.	4.0	16

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91	Oriented Poly(dialkylstannane)s. Advanced Functional Materials, 2008, 18, 2301-2308.	14.9	14
92	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
93	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
94	Surface structure ofAu3Cu(001). Physical Review B, 1999, 60, 8321-8325.	3.2	13
95	Interface stress in Au/Ni multilayers. Journal of Applied Physics, 2000, 88, 1401-1406.	2.5	13
96	Initial metal–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
97	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
98	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
99	Ultrafast structural dynamics of photo-reactions observed by time-resolved x-ray cross-correlation analysis. Structural Dynamics, 2019, 6, 024301.	2.3	10
100	Structure of theAl(111)â^'(3×3)R30°â^'Csphase. Physical Review B, 1998, 58, 12655-12658.	3.2	9
101	Correction of complex nonlinear signal response from a pixel array detector. Journal of Synchrotron Radiation, 2015, 22, 584-591.	2.4	9
102	Dynamics of chemical bond: general discussion. Faraday Discussions, 2015, 177, 121-154.	3.2	8
103	Air-stable π-conjugated amorphous copolymer field-effect transistors with high mobility of 0.3 cm2/Vs. Applied Physics Letters, 2012, 101, 213305.	3.3	6
104	Ge(001)-matrix-Pb ↔ matrix-Pb: low-temperature two-dimensional phase transition. New Journal of Physics, 2001, 3, 13-13.	2.9	5
105	X-ray Diffraction Study of Directionally Grown Perylene Crystallites. Journal of Physical Chemistry C, 2008, 112, 4569-4572.	3.1	5
106	Windowless microfluidic platform based on capillary burst valves for high intensity x-ray measurements. Review of Scientific Instruments, 2009, 80, 115114.	1.3	5
107	Atomic modifications by synchrotron radiation at the calcite–ethanol interface. Journal of Synchrotron Radiation, 2012, 19, 530-535.	2.4	5
108	Trajectory surface-hopping photoinduced dynamics from Rydberg states of trimethylamine. Physical Chemistry Chemical Physics, 2021, 23, 10964-10977.	2.8	5

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109	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
110	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
111	Crystallization of Organic Semiconductor Molecules in Nanosized Cavities: Mechanism of Polymorphs Formation Studied by <i>in Situ</i> XRD. Journal of Physical Chemistry C, 2008, 112, 12177-12183.	3.1	4
112	Tuning and Tracking of Coherent Shear Waves in Molecular Films. ACS Omega, 2018, 3, 9929-9933.	3.5	4
113	Structure ofAl(111)â^'(2×2)â^'Rb. Physical Review B, 1999, 60, 11078-11083.	3.2	3
114	Future challenges: general discussion. Faraday Discussions, 2015, 177, 517-545.	3.2	3
115	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
116	Excited state kinetics of anthracene-bridge-aniline intramolecular exciplexes. Photochemical and Photobiological Sciences, 2014, 13, 1093.	2.9	2
117	X-ray tracking of structural changes during a subnanosecond solid-solid phase transition in cobalt nanoparticles. Physical Review B, 2019, 100, .	3.2	2
118	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
119	Novel micro-reactor flow cell for investigation ofÂmodel catalysts using <i>in situ</i> grazing-incidence X-ray scattering. Journal of Synchrotron Radiation, 2016, 23, 455-463.	2.4	2
120	(TMTSF) <sub>2</sub> 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
121	Self-assembled liquid crystalline solution processable semiconductors. , 2004, , .		1
122	Structural Tracking of Chemical Reactions in Solution by Time-Resolved X-Ray Scattering. , 2009, , .		1
123	Time and Space resolved Methods: general discussion. Faraday Discussions, 2015, 177, 263-292.	3.2	1
124	Element-specific investigations of ultrafast dynamics in photoexcited Cu2ZnSnS4 nanoparticles in solution. Structural Dynamics, 2021, 8, 024501.	2.3	1
125	High density bis-azo copolymers: influence of dipole-dipole interaction on electrical poling processes and realization of a Fabry-Perot modulator. , 2005, ,		0
126	Using coplanar wave guides to excite molecular motions in the frequency range of		0

<sup>&</sup>lt;sup>6</sup> 10&amp;#x2013;1000GHz., 2008, , .

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127	Novel applications of the x-ray tracing software package McXtrace. Proceedings of SPIE, 2014, , .	0.8	0
128	Structural dynamics of the competing forces of light and matter. Acta Crystallographica Section A: Foundations and Advances, 2005, 61, c113-c114.	0.3	0
129	High-performance organic field-effect transistors, textured by self-assembly. Acta Crystallographica Section A: Foundations and Advances, 2009, 65, s260-s260.	0.3	0
130	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
131	S3-2 Mechanism and regulation of enzymes degrading amylopectin and α-limit dextrins(Overseas Invited) Tj ETQ	2q1_10.78	34314 rgBT
132	Bromosubstituted norbornadienes and their reversible photolytic transformation to quadricyclanes. ScienceOpen Research, 2014, .	0.6	0
133	Femtosecond X-ray Absorption and Emission Spectroscopy on ZnO Nanoparticles in Solution. , 2016, , .		Ο