

# Kirsten Marie Årnsbjerg Jensen

## List of Publications by Year in descending order

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72  
papers

2,622  
citations

159585

30  
h-index

197818

49  
g-index

82  
all docs

82  
docs citations

82  
times ranked

3016  
citing authors

#	ARTICLE	IF	CITATIONS
1	Revealing the Mechanisms behind SnO <sub>2</sub> Nanoparticle Formation and Growth during Hydrothermal Synthesis: An In Situ Total Scattering Study. <i>Journal of the American Chemical Society</i> , 2012, 134, 6785-6792.	13.7	180
2	Polymorphism in magic-sized Au <sub>144</sub> (SR) <sub>60</sub> clusters. <i>Nature Communications</i> , 2016, 7, 11859.	12.8	167
3	Self-supported Pt@CoO networks combining high specific activity with high surface area for oxygen reduction. <i>Nature Materials</i> , 2021, 20, 208-213.	27.5	139
4	Experimental setup for in situ X-ray SAXS/WAXS/PDF studies of the formation and growth of nanoparticles in near- and supercritical fluids. <i>Journal of Applied Crystallography</i> , 2010, 43, 729-736.	4.5	132
5	In Situ Studies of Solvothermal Synthesis of Energy Materials. <i>ChemSusChem</i> , 2014, 7, 1594-1611.	6.8	128
6	Investigating Particle Size Effects in Catalysis by Applying a Size-Controlled and Surfactant-Free Synthesis of Colloidal Nanoparticles in Alkaline Ethylene Glycol: Case Study of the Oxygen Reduction Reaction on Pt. <i>ACS Catalysis</i> , 2018, 8, 6627-6635.	11.2	119
7	Understanding the Formation and Evolution of Ceria Nanoparticles Under Hydrothermal Conditions. <i>Angewandte Chemie - International Edition</i> , 2012, 51, 9030-9033.	13.8	88
8	Defects in Hydrothermally Synthesized LiFePO <sub>4</sub> and LiFe <sub>1-x</sub> Mn <sub>x</sub> PO <sub>4</sub> Cathode Materials. <i>Chemistry of Materials</i> , 2013, 25, 2282-2290.	6.7	88
9	Mechanisms for Iron Oxide Formation under Hydrothermal Conditions: An In Situ Total Scattering Study. <i>ACS Nano</i> , 2014, 8, 10704-10714.	14.6	75
10	There's no place like real-space: elucidating size-dependent atomic structure of nanomaterials using pair distribution function analysis. <i>Nanoscale Advances</i> , 2020, 2, 2234-2254.	4.6	71
11	In Situ Total X-Ray Scattering Study of WO <sub>3</sub> Nanoparticle Formation under Hydrothermal Conditions. <i>Angewandte Chemie - International Edition</i> , 2014, 53, 3667-3670.	13.8	59
12	From platinum atoms in molecules to colloidal nanoparticles: A review on reduction, nucleation and growth mechanisms. <i>Advances in Colloid and Interface Science</i> , 2020, 286, 102300.	14.7	57
13	Lattice dynamics reveals a local symmetry breaking in the emergent dipole phase of PbTe. <i>Physical Review B</i> , 2012, 86, .	3.2	55
14	In situ total X-ray scattering study of the formation mechanism and structural defects in anatase TiO <sub>2</sub> nanoparticles under hydrothermal conditions. <i>CrystEngComm</i> , 2015, 17, 6868-6877.	2.6	52
15	Demonstration of thin film pair distribution function analysis (tfPDF) for the study of local structure in amorphous and crystalline thin films. <i>IUCr</i> , 2015, 2, 481-489.	2.2	50
16	X-Ray Diffraction Computed Tomography for Structural Analysis of Electrode Materials in Batteries. <i>Journal of the Electrochemical Society</i> , 2015, 162, A1310-A1314.	2.9	50
17	Coupling in situ synchrotron radiation with ex situ spectroscopy characterizations to study the formation of Ba <sub>1-x</sub> Sr <sub>x</sub> TiO <sub>3</sub> nanoparticles in supercritical fluids. <i>Journal of Supercritical Fluids</i> , 2014, 87, 111-117.	3.2	47
18	Evolution of atomic structure during nanoparticle formation. <i>IUCr</i> , 2014, 1, 165-171.	2.2	46

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19	<i>In Situ</i> Powder Diffraction Study of the Hydrothermal Synthesis of ZnO Nanoparticles. <i>Crystal Growth and Design</i> , 2014, 14, 2803-2810.	3.0	46
20	Rapid Hydrothermal Preparation of Rutile TiO <sub>2</sub> Nanoparticles by Simultaneous Transformation of Primary Brookite and Anatase: An <i>In Situ</i> Synchrotron PXRD Study. <i>Crystal Growth and Design</i> , 2012, 12, 6092-6097.	3.0	42
21	Towards atomistic understanding of polymorphism in the solvothermal synthesis of ZrO <sub>2</sub> nanoparticles. <i>Acta Crystallographica Section A: Foundations and Advances</i> , 2016, 72, 645-650.	0.1	41
22	Watching Nanoparticles Form: An <i>In Situ</i> (Small-Angle X-ray Scattering/Total Scattering) Study of the Growth of Yttria-Stabilised Zirconia in Supercritical Fluids. <i>Chemistry - A European Journal</i> , 2012, 18, 5759-5766.	3.3	38
23	Pulsed supercritical synthesis of anatase TiO <sub>2</sub> nanoparticles in a water-isopropanol mixture studied by <i>in situ</i> powder X-ray diffraction. <i>Nanoscale</i> , 2013, 5, 2372.	5.6	38
24	Formation Mechanisms of Pt and Pt <sub>3</sub> Gd Nanoparticles under Solvothermal Conditions: An <i>In Situ</i> Total X-ray Scattering Study. <i>Journal of Physical Chemistry C</i> , 2015, 119, 13357-13362.	3.1	37
25	<i>In situ</i> Synchrotron X-ray Diffraction Study of the Formation of Cubic Li <sub>2</sub> TiO <sub>3</sub> Under Hydrothermal Conditions. <i>European Journal of Inorganic Chemistry</i> , 2011, 2011, 2221-2226.	2.0	35
26	The chemistry of ZnWO <sub>4</sub> nanoparticle formation. <i>Chemical Science</i> , 2016, 7, 6394-6406.	7.4	35
27	<i>Cluster-mining</i> : an approach for determining core structures of metallic nanoparticles from atomic pair distribution function data. <i>Acta Crystallographica Section A: Foundations and Advances</i> , 2020, 76, 24-31.	0.1	34
28	Size and Size Distribution Control of <sup>57</sup> Fe <sub>2</sub> O <sub>3</sub> Nanocrystallites: An <i>In Situ</i> Study. <i>Crystal Growth and Design</i> , 2014, 14, 1307-1313.	3.0	33
29	Mechanisms for Tungsten Oxide Nanoparticle Formation in Solvothermal Synthesis: From Polyoxometalates to Crystalline Materials. <i>Journal of Physical Chemistry C</i> , 2019, 123, 5110-5119.	3.1	33
30	Real-time synchrotron powder X-ray diffraction study of the antisite defect formation during sub- and supercritical synthesis of LiFePO <sub>4</sub> and LiFe <sub>1-x</sub> MnxPO <sub>4</sub> nanoparticles. <i>Journal of Applied Crystallography</i> , 2011, 44, 287-294.	4.5	32
31	Unraveling structural and magnetic information during growth of nanocrystalline SrFe <sub>12</sub> O <sub>19</sub> . <i>Journal of Materials Chemistry C</i> , 2016, 4, 10903-10913.	5.5	30
32	The effect of weighted averages when determining the speciation and structure-property relationships of europium(III) dipicolinate complexes. <i>Physical Chemistry Chemical Physics</i> , 2020, 22, 12794-12805.	2.8	29
33	Following the in-plane disorder of sodiated hard carbon through <i>operando</i> total scattering. <i>Journal of Materials Chemistry A</i> , 2019, 7, 11709-11717.	10.3	28
34	Formation and Growth of Bi <sub>2</sub> Te <sub>3</sub> in Biomolecule-Assisted Near-Critical Water: <i>In Situ</i> Synchrotron Radiation Study. <i>Journal of Physical Chemistry C</i> , 2010, 114, 12133-12138.	3.1	27
35	Rapid One-Step Low-Temperature Synthesis of Nanocrystalline <sup>57</sup> Al <sub>2</sub> O <sub>3</sub> . <i>Angewandte Chemie - International Edition</i> , 2011, 50, 7045-7047.	13.8	25
36	Structure, Size, and Morphology Control of Nanocrystalline Lithium Cobalt Oxide. <i>Crystal Growth and Design</i> , 2011, 11, 753-758.	3.0	24

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37	Size Induced Structural Changes in Molybdenum Oxide Nanoparticles. ACS Nano, 2019, 13, 8725-8735.	14.6	23
38	A cloud platform for atomic pair distribution function analysis: <i>PDFfit</i> . Acta Crystallographica Section A: Foundations and Advances, 2021, 77, 2-6.	0.1	23
39	Structure-property insights into nanostructured electrodes for Li-ion batteries from local structural and diffusional probes. Journal of Materials Chemistry A, 2018, 6, 127-137.	10.3	22
40	Evolution of Atomic-Level Structure in Sub-10 Nanometer Iron Oxide Nanocrystals: Influence on Cation Occupancy and Growth Rates. ACS Nano, 2020, 14, 5480-5490.	14.6	22
41	Solution Structure, Electronic Energy Levels, and Photophysical Properties of [Eu(MeOH) <sub>2</sub> (NO <sub>3</sub> ) <sub>3</sub> ] <sup>+</sup> ·nH <sub>2</sub> O Complexes. Inorganic Chemistry, 2020, 59, 10409-10421.		20
42	Structural Changes during the Growth of Atomically Precise Metal Oxide Nanoclusters from Combined Pair Distribution Function and Small-Angle X-ray Scattering Analysis. Angewandte Chemie - International Edition, 2021, 60, 20407-20416.	13.8	20
43	Characterization of Cu <sub>2</sub> ZnSnS <sub>4</sub> Particles Obtained by the Hot-Injection Method. ACS Omega, 2020, 5, 10501-10509.	3.5	19
44	Durable Multimetal Oxychloride Intergrowths for Visible Light-Driven Water Splitting. Chemistry of Materials, 2021, 33, 347-358.	6.7	19
45	Structural Evolution of Iron Antimonides from Amorphous Precursors to Crystalline Products Studied by Total Scattering Techniques. Journal of the American Chemical Society, 2015, 137, 9652-9658.	13.7	18
46	Local and long-range atomic/magnetic structure of non-stoichiometric spinel iron oxide nanocrystallites. IUCr, 2021, 8, 33-45.	2.2	18
47	Structure analysis of supported disordered molybdenum oxides using pair distribution function analysis and automated cluster modelling. Journal of Applied Crystallography, 2020, 53, 148-158.	4.5	18
48	In situ synchrotron powder X-ray diffraction study of formation and growth of yttrium and ytterbium aluminum garnet nanoparticles in sub- and supercritical water. RSC Advances, 2013, 3, 15368.	3.6	15
49	Reducing Transformation Strains during Na Intercalation in Olivine FePO <sub>4</sub> Cathodes by Mn Substitution. ACS Applied Energy Materials, 2019, 2, 8060-8067.	5.1	15
50	Same Precursor, Two Different Products: Comparing the Structural Evolution of In-Ga-O Gel-Derived Powders and Solution-Cast Films Using Pair Distribution Function Analysis. Journal of the American Chemical Society, 2017, 139, 5607-5613.	13.7	13
51	Spatially Localized Synthesis and Structural Characterization of Platinum Nanocrystals Obtained Using UV Light. ACS Omega, 2018, 3, 10351-10356.	3.5	13
52	Insights from <i>In Situ</i> Studies on the Early Stages of Platinum Nanoparticle Formation. Journal of Physical Chemistry Letters, 2021, 12, 3224-3231.	4.6	11
53	Size-induced amorphous structure in tungsten oxide nanoparticles. Nanoscale, 2021, 13, 20144-20156.	5.6	11
54	In situ powder X-ray diffraction study of the hydro-thermal formation of LiMn <sub>2</sub> O <sub>4</sub> nanocrystallites. Dalton Transactions, 2014, 43, 15075-15084.	3.3	9

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55	Continuous Flow Supercritical Water Synthesis and Temperature-Dependent Defect Structure Analysis of YAG and YbAG Nanoparticles. <i>Crystal Growth and Design</i> , 2016, 16, 2646-2652.	3.0	9
56	Formation and growth mechanism for niobium oxide nanoparticles: atomistic insight from <i>in situ</i> X-ray total scattering. <i>Nanoscale</i> , 2021, 13, 8087-8097.	5.6	8
57	Cubes on a string: a series of linear coordination polymers with cubane-like nodes and dicarboxylate linkers. <i>Nanoscale</i> , 2020, 12, 11601-11611.	5.6	6
58	Large exchange bias in Cr substituted Fe <sub>3</sub> O <sub>4</sub> nanoparticles with FeO subdomains. <i>Nanoscale</i> , 2021, 13, 15844-15852.	5.6	6
59	Structural changes during water-mediated amorphization of semiconducting two-dimensional thiostannates. <i>IUCr</i> , 2019, 6, 804-814.	2.2	6
60	Highly Stable Apatite Supported Molybdenum Oxide Catalysts for Selective Oxidation of Methanol to Formaldehyde: Structure, Activity and Stability. <i>ChemCatChem</i> , 2021, 13, 4954-4975.	3.7	6
61	Simple Setup Miniaturization with Multiple Benefits for Green Chemistry in Nanoparticle Synthesis. <i>ACS Omega</i> , 2022, 7, 4714-4721.	3.5	6
62	Mechanistic Insight into the Precursor Chemistry of ZrO <sub>2</sub> and HfO <sub>2</sub> Nanocrystals; towards Size-Tunable Syntheses. <i>Jacs Au</i> , 2022, 2, 827-838.	7.9	6
63	Surfactant-free syntheses and pair distribution function analysis of osmium nanoparticles. <i>Beilstein Journal of Nanotechnology</i> , 2022, 13, 230-235.	2.8	5
64	Breaking with the Principles of Coreduction to Form Stoichiometric Intermetallic PdCu Nanoparticles. <i>Small Methods</i> , 2022, 6, e2200420.	8.6	5
65	Monoalkyl Phosphinic Acids as Ligands in Nanocrystal Synthesis. <i>ACS Nano</i> , 2022, 16, 7361-7372.	14.6	5
66	Characterization of Nanomaterials with Total Scattering and Pair Distribution Function Analysis: Examples from Metal Oxide Nanochemistry. <i>Chimia</i> , 2021, 75, 368.	0.6	4
67	Structural Changes during the Growth of Atomically Precise Metal Oxide Nanoclusters from Combined Pair Distribution Function and Small-Angle X-ray Scattering Analysis. <i>Angewandte Chemie</i> , 2021, 133, 20570-20579.	2.0	4
68	Structural characterization and magnetic properties of chromium jarosite KCr <sub>3</sub> (OH) <sub>6</sub> (SO <sub>4</sub> ) <sub>2</sub> . <i>Physical Chemistry Chemical Physics</i> , 2020, 22, 25001-25010.	2.8	3
69	Order and Disorder in Layered Double Hydroxides: Lessons Learned from the Green Rust Sulfate-Nikischerite Series. <i>ACS Earth and Space Chemistry</i> , 2022, 6, 322-332.	2.7	3
70	Structural evolution in thermoelectric zinc antimonide thin films studied by <i>in situ</i> X-ray scattering techniques. <i>IUCr</i> , 2021, 8, 444-454.	2.2	2
71	Spectroscopy and scattering for chemistry: new possibilities and challenges with large scale facilities. <i>Nanoscale</i> , 2020, 12, 17968-17970.	5.6	1
72	Structural Changes during the Growth of Atomically Precise Metal Oxide Nanoclusters from Combined Pair Distribution Function and Small-Angle X-ray Scattering Analysis ( <i>Angew. Chem.</i> 37/2021). <i>Angewandte Chemie</i> , 2021, 133, 20732-20732.	2.0	0