Jan Ilavsky

List of Publications by Year
in descending order

250 papers	10,448 citations	50276 46 h-index	39675 94 g-index
253 all docs	253 docs citations	253 times ranked	11625 citing authors

#	Article	IF	Citations
1	X-Ray Characterization of Real Fuel Sprays for Gasoline Direct Injection. Journal of Energy Resources Technology, Transactions of the ASME, 2022, 144, .	2.3	6
2	Heat accelerates degradation of Î²-lactoglobulin fibrils at neutral pH. Food Hydrocolloids, 2022, 124, 107291.	10.7	18
3	Structural evolution during gelation of pea and whey proteins envisaged by time-resolved ultra-small-angle x-ray scattering (USAXS). Food Hydrocolloids, 2022, 126, 107449.	10.7	10
4	Development of Nanocrystalline Graphite from Lignin Sources. ACS Sustainable Chemistry and Engineering, 2022, 10, 1786-1794.	6.7	6
5	Aerosol-Assisted Deposition for TiO2 Immobilization on Photocatalytic Fibrous Filters for VOC Degradation. Frontiers in Chemistry, 2022, 10, .	3.6	1
6	Ultra-high gamma irradiation of calcium silicate hydrates: Impact on mechanical properties, nanostructure, and atomic environments. Cement and Concrete Research, 2022, 158, 106855.	11.0	5
7	A novel SAXS model for multi-texture systems: application to CaCO3 calcination using in-situ USAXS-SAXS-WAXS. Applied Materials Today, 2022, 29, 101568.	4.3	1
8	In situ mechanical reinforcement of polymer hydrogels via metal-coordinated crosslink mineralization. Nature Communications, 2021, 12, 667.	12.8	60
9	Polyphenols Weaken Pea Protein Gel by Formation of Large Aggregates with Diminished Noncovalent Interactions. Biomacromolecules, 2021, 22, 1001-1014.	5.4	33
10	Extending synchrotron SAXS instrument ranges through addition of a portable, inexpensive USAXS module with vertical rotation axes. Journal of Synchrotron Radiation, 2021, 28, 824-833.	2.4	6
11	Timeâ€“connectivity superposition and the gel/glass duality of weak colloidal gels. Proceedings of the National Academy of Sciences of the United States of America, 2021, 118, .	7.1	30
12	Mechanisms of Ti<mml:math xmlns:mml="http://www.w3.org/1998/Math/MathML" altimg="si9.svg"><mml:msub><mml:mrow /><mml:mn>3</mml:mn></mml:msub></mml:math>Al precipitation in hcp <mml:math xmlns:mml="http://www.w3.org/1998/Math/MathML" altimg="si1.svg"><mml:mi>Î±</mml:mi></mml:math>-Ti. Acta Materialia, 2021, 212, 116811.	7.9	19
13	Fast nanoparticle rotational and translational diffusion in synovial fluid and hyaluronic acid solutions. Science Advances, 2021, 7, .	10.3	18
14	Influence of microstructure on replacement and porosity generation during experimental dolomitization of limestones. Geochimica Et Cosmochimica Acta, 2021, 303, 137-158.	3.9	14
15	Effects of Ink Formulation on Construction of Catalyst Layers for High-Performance Polymer Electrolyte Membrane Fuel Cells. ACS Applied Materials & Interfaces, 2021, 13, 37004-37013.	8.0	28
16	Diversifying Composition Leads to Hierarchical Composites with Design Flexibility and Structural Fidelity. ACS Nano, 2021, 15, 14095-14104.	14.6	9
17	Manipulating meso-scale solvent structure from Pd nanoparticle deposits in deep eutectic solvents. Journal of Chemical Physics, 2021, 155, 074505.	3.0	7
18	Engineering Calcium-Bearing Mineral/Hydrogel Composites for Effective Phosphate Recovery. ACS ES&T Engineering, 2021, 1, 1553-1564.	7.6	5

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19	Solid-State Transformation of an Additive Manufactured Inconel 625 Alloy at 700 Â°C. Applied Sciences (Switzerland), 2021, 11, 8643.	2.5	6
20	Multiscale operando X-ray investigations provide insights into electro-chemo-mechanical behavior of lithium intercalation cathodes. Applied Energy, 2021, 299, 117315.	10.1	17
21	Spatial heterogeneity analyses of pore structure and mineral composition of Barnett Shale using X-ray scattering techniques. Marine and Petroleum Geology, 2021, 134, 105354.	3.3	16
22	Small-angle X-ray and neutron scattering. Nature Reviews Methods Primers, 2021, 1, .	21.2	77
23	Application of Ce for scavenging Cu impurities in A356 Al alloys. European Journal of Materials, 2021, 1, 3-18.	2.6	6
24	Extended range X-ray pair distribution functions. Nuclear Instruments and Methods in Physics Research, Section A: Accelerators, Spectrometers, Detectors and Associated Equipment, 2020, 955, 163318.	1.6	15
25	Parametric Analysis and Modeling for the Porosity Prediction in Suspension Plasma-Sprayed Coatings. Journal of Thermal Spray Technology, 2020, 29, 51-59.	3.1	8
26	Formation and Characterization of Zein-Based Oleogels. Journal of Agricultural and Food Chemistry, 2020, 68, 13276-13281.	5.2	13
27	Pressure-Thresholded Response in Cylindrically Shocked Cyclotrimethylene Trinitramine (RDX). Journal of Physical Chemistry A, 2020, 124, 3301-3313.	2.5	7
28	High-Resolution Comonomer Sequencing of Blocky Brominated Syndiotactic Polystyrene Copolymers Using ¹³C NMR Spectroscopy and Computer Simulations. Macromolecules, 2020, 53, 9539-9552.	4.8	4
29	Influence of Silane Coupling Agents on Filler Network Structure and Stress-Induced Particle Rearrangement in Elastomer Nanocomposites. ACS Applied Materials & Interfaces, 2020, 12, 47891-47901.	8.0	15
30	Femtosecond quantification of void evolution during rapid material failure. Science Advances, 2020, 6, .	10.3	22
31	Programmable Anisotropy and Percolation in Supramolecular Patchy Particle Gels. ACS Nano, 2020, 14, 17018-17027.	14.6	21
32	Anomalous Anisotropic Nanoparticle Aggregation in Cu₂(OH)₃Br Gels. Langmuir, 2020, 36, 8311-8321.	3.5	0
33	Quantification of Dispersion for Weakly and Strongly Correlated Nanofillers in Polymer Nanocomposites. Macromolecules, 2020, 53, 2235-2248.	4.8	16
34	Crystallization Mechanism in Spark Plasma Sintered Bulk Metallic Glass Analyzed using Small Angle Neutron Scattering. Scientific Reports, 2020, 10, 2033.	3.3	11
35	Comparative structural investigations of nuclear waste glass alteration layers and sol-gel synthesized aerogels. Npj Materials Degradation, 2020, 4, .	5.8	5
36	Porous architecture and thermal properties of thermal barrier coatings deposited by suspension plasma spray. Surface and Coatings Technology, 2020, 386, 125462.	4.8	27

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37	Particle size analysis and characterization of nanodiamond dispersions in water and dimethylformamide by various scattering and diffraction methods. Journal of Nanoparticle Research, 2020, 22, 1.	1.9	15
38	3D Volumetric Structural Hierarchy Induced by Colloidal Polymerization of a Quantum-Dot Ionic Liquid Monomer Conjugate. Macromolecules, 2020, 53, 2822-2833.	4.8	3
39	Correlating inter-particle forces and particle shape to shear-induced aggregation/fragmentation and rheology for dilute anisotropic particle suspensions: A complementary study via capillary rheometry and in-situ small and ultra-small angle X-ray scattering. Journal of Colloid and Interface Science, 2020, 576, 47-58.	9.4	18
40	Evolution of Î± phase in metastable Î² titanium alloys studied by small-angle X-ray scattering. MATEC Web of Conferences, 2020, 321, 12039.	0.2	0
41	Phase Fraction and Evolution of Additively Manufactured (AM) 15-5 Stainless Steel and Inconel 625 AM-Bench Artifacts. Integrating Materials and Manufacturing Innovation, 2019, 8, 362-377.	2.6	14
42	Controls of Microstructure and Chemical Reactivity on the Replacement of Limestone by Fluorite Studied Using Spatially Resolved Small Angle X-ray and Neutron Scattering. ACS Earth and Space Chemistry, 2019, 3, 1998-2016.	2.7	10
43	Resolving Detonation Nanodiamond Size Evolution and Morphology at Sub-Microsecond Timescales during High-Explosive Detonations. Journal of Physical Chemistry C, 2019, 123, 19153-19164.	3.1	18
44	Designing CO₂-Responsive Multifunctional Nanoscale Fluids with Tunable Hydrogel Behavior for Subsurface Energy Recovery. Energy & Fuels, 2019, 33, 5988-5995.	5.1	7
45	The effects of staged mixing on the dispersion of reinforcing fillers in elastomer compounds. Polymer, 2019, 181, 121765.	3.8	7
46	Quantification of Thermal Oxidation in Metallic Glass Powder using Ultra-small Angle X-ray Scattering. Scientific Reports, 2019, 9, 6836.	3.3	1
47	Effect of post annealing on microstructure and mechanical properties in Ni-free N-containing ODS steel. Materials Characterization, 2019, 153, 339-347.	4.4	2
48	Synthesis and characterization of polylactideâ€PAMAM â€œJanusâ€typeâ€•linearâ€dendritic hybrids. Journal of Polymer Science Part A, 2019, 57, 1448-1459.	2.3	7
49	Nanostructured Thermoset/Thermoset Blends Compatibilized with an Amphiphilic Block Copolymer. Macromolecules, 2019, 52, 3104-3114.	4.8	11
50	A thermal model to describe kinetic dispersion in rubber nanocomposites: The effect of mixing time on dispersion. Polymer, 2019, 175, 272-282.	3.8	19
51	Mitigation of PEM Fuel Cell Catalyst Degradation with Porous Carbon Supports. Journal of the Electrochemical Society, 2019, 166, F198-F207.	2.9	126
52	X-RAY MEASUREMENTS OF FUEL SPRAY SPECIFIC SURFACE AREA AND SAUTER MEAN DIAMETER FOR CAVITATING AND NON-CAVITATING DIESEL SPRAYS. Atomization and Sprays, 2019, 29, 199-216.	0.8	8
53	Evaluation of nano/submicro pores in suspension plasma sprayed YSZ coatings. Surface and Coatings Technology, 2019, 378, 125001.	4.8	7
54	Analysis of textural properties of CaO-based CO2 sorbents by ex situ USAXS. Chemical Engineering Journal, 2019, 355, 760-776.	12.7	22

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55	Ultrasound-based formation of nano-Pickering emulsions investigated via in-situ SAXS. Journal of Colloid and Interface Science, 2019, 536, 281-290.	9.4	23
56	In situ study of aggregate topology during growth of pyrolytic silica. Journal of Aerosol Science, 2018, 118, 34-44.	3.8	14
57	Manufacturing and characterization of Ni-free N-containing ODS austenitic alloy. Journal of Nuclear Materials, 2018, 501, 72-81.	2.7	6
58	The effects of burial diagenesis on multiscale porosity in the St. Peter Sandstone: An imaging, small-angle, and ultra-small-angle neutron scattering analysis. Marine and Petroleum Geology, 2018, 92, 352-371.	3.3	17
59	CONTIN XPCS: software for inverse transform analysis of X-ray photon correlation spectroscopy dynamics. Journal of Applied Crystallography, 2018, 51, 205-209.	4.5	8
60	Extended hierarchical solvent perturbations from curved surfaces of mesoporous silica particles in a deep eutectic solvent. Journal of Colloid and Interface Science, 2018, 520, 81-90.	9.4	15
61	Probing He bubbles in naturally aged and annealed Î´-Pu alloys using ultra-small-angle x-ray scattering. Journal of Nuclear Materials, 2018, 498, 505-510.	2.7	4
62	Hydration kinetics and morphology of cement pastes with pozzolanic volcanic ash studied via synchrotron-based techniques. Journal of Materials Science, 2018, 53, 1743-1757.	3.7	26
63	Effect of nanoparticles size and polyelectrolyte on nanoparticles aggregation in a cellulose fibrous matrix. Journal of Colloid and Interface Science, 2018, 510, 190-198.	9.4	13
64	Inverse transformation: unleashing spatially heterogeneous dynamics with an alternative approach to XPCS data analysis. Journal of Applied Crystallography, 2018, 51, 35-46.	4.5	10
65	Impact of an Emergent Hierarchical Filler Network on Nanocomposite Dynamics. Macromolecules, 2018, 51, 7893-7904.	4.8	37
66	Effects of Ionic Strength, Salt, and pH on Aggregation of Boehmite Nanocrystals: Tumbler Small-Angle Neutron and X-ray Scattering and Imaging Analysis. Langmuir, 2018, 34, 15839-15853.	3.5	25
67	High-efficiency coherence-preserving harmonic rejection with crystal optics. Journal of Synchrotron Radiation, 2018, 25, 1354-1361.	2.4	2
68	Development of combined microstructure and structure characterization facility for in situ and operando studies at the Advanced Photon Source. Journal of Applied Crystallography, 2018, 51, 867-882.	4.5	129
69	Synthesis and synchrotron characterisation of novel dual-template of hydroxyapatite scaffolds with controlled size porous distribution. Materials Letters, 2017, 190, 107-110.	2.6	3
70	Investigation of the Interaction between Nafion Ionomer and Surface Functionalized Carbon Black Using Both Ultrasmall Angle X-ray Scattering and Cryo-TEM. ACS Applied Materials & Interfaces, 2017, 9, 6530-6538.	8.0	89
71	Surface Pb Nanoparticle Aggregation, Coalescence and Differential Capacitance in a Deep Eutectic Solvent Using a Simultaneous Sample-Rotated Small Angle X-ray Scattering and Electrochemical Methods Approach. Electrochimica Acta, 2017, 228, 462-473.	5.2	11
72	Structure and Dynamics of Bimodal Colloidal Dispersions in a Low-Molecular-Weight Polymer Solution. Langmuir, 2017, 33, 2817-2828.	3.5	7

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73	BSMV as a Biotemplate for Palladium Nanomaterial Synthesis. Langmuir, 2017, 33, 1716-1724.	3.5	13
74	Fast-responding bio-based shape memory thermoplastic polyurethanes. Polymer, 2017, 121, 26-37.	3.8	53
75	Characterization of zein assemblies by ultra-small-angle X-ray scattering. Soft Matter, 2017, 13, 3053-3060.	2.7	24
76	NIST Standard Reference Material 3600: Absolute Intensity Calibration Standard for Small-Angle X-ray Scattering. Journal of Applied Crystallography, 2017, 50, 462-474.	4.5	57
77	Measurements of droplet size in shear-driven atomization using ultra-small angle x-ray scattering. International Journal of Multiphase Flow, 2017, 92, 131-139.	3.4	53
78	Wellbore Cement Porosity Evolution in Response to Mineral Alteration during CO2 Flooding. Environmental Science & Technology, 2017, 51, 692-698.	10.0	17
79	A pseudo-thermodynamic description of dispersion for nanocomposites. Polymer, 2017, 129, 32-43.	3.8	14
80	Noninvasive detection of nanoparticle clustering by water proton NMR. Translational Materials Research, 2017, 4, 025002.	1.2	7
81	Synchrotron X-ray studies of model SOFC cathodes, part I: Thin film cathodes. Solid State Ionics, 2017, 311, 118-126.	2.7	9
82	Synchrotron X-ray studies of model SOFC cathodes, part II: Porous powder cathodes. Solid State Ionics, 2017, 311, 127-131.	2.7	3
83	Mechanisms for Lithium Nucleation and Dendrite Growth in Selected Carbon Allotropes. Chemistry of Materials, 2017, 29, 6205-6213.	6.7	42
84	An in situ USAXSâ€“SAXSâ€“WAXS study of precipitate size distribution evolution in a model Ni-based alloy. Journal of Applied Crystallography, 2017, 50, 734-740.	4.5	23
85	Investigation of Solvent Effects on the Dispersion of Carbon Agglomerates and Nafion Ionomer Particles in Catalyst Inks Using Ultra Small Angle X-Ray Scattering Method. ECS Transactions, 2016, 75, 361-371.	0.5	11
86	Use of small-angle X-ray scattering to resolve intracellular structure changes of Escherichia coli cells induced by antibiotic treatment. Journal of Applied Crystallography, 2016, 49, 2210-2216.	4.5	18
87	In situ structural characterization of ageing kinetics in aluminum alloy 2024 across angstrom-to-micrometer length scales. Acta Materialia, 2016, 111, 385-398.	7.9	49
88	Ultrahigh Molecular Weight Linear Block Copolymers: Rapid Access by Reversible-Deactivation Radical Polymerization and Self-Assembly into Large Domain Nanostructures. Macromolecules, 2016, 49, 3733-3738.	4.8	70
89	A SAXS-WAXS study of the endothermic transitions in amorphous or supercooled liquid itraconazole. Thermochimica Acta, 2016, 644, 1-5.	2.7	11
90	Dispersed SiC nanoparticles in Ni observed by ultra-small-angle X-ray scattering. Journal of Applied Crystallography, 2016, 49, 2155-2160.	4.5	3

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91	Supported Silver Nanoparticle and Near-Interface Solution Dynamics in a Deep Eutectic Solvent. Journal of Physical Chemistry C, 2016, 120, 1534-1545.	3.1	23
92	Structural characterization of solid lipoproteic colloid gels by ultra-small-angle X-ray scattering and the relation with sodium release. Food Hydrocolloids, 2016, 56, 325-333.	10.7	10
93	Nano-sized precipitate stability and its controlling factors in a NiAl-strengthened ferritic alloy. Scientific Reports, 2015, 5, 16081.	3.3	37
94	Mesoscale evolution of voids and microstructural changes in HMX-based explosives during heating through the Î²-Î´ phase transition. Journal of Applied Physics, 2015, 118, .	2.5	52
95	Mapping of Microbial Habitats in Organic-Rich Shale. , 2015, , .		0
96	Thermoplastic polyurethanes with controlled morphology based on methylenediphenyldiisocyanate/isosorbide/butanediol hard segments. Polymer International, 2015, 64, 1607-1616.	3.1	27
97	Thermoplastic polyurethanes with isosorbide chain extender. Journal of Applied Polymer Science, 2015, 132, .	2.6	18
98	Nanoparticle scaffolds for syngas-fed solid oxide fuel cells. Journal of Materials Chemistry A, 2015, 3, 3011-3018.	10.3	12
99	Duplex Precipitates and Their Effects on the Room-temperature Fracture Behaviour of a NiAl-Strengthened Ferritic Alloy. Materials Research Letters, 2015, 3, 128-134.	8.7	31
100	Atomic Structure of Au₃₂₉(SR)₈₄ Faradaurate Plasmonic Nanomolecules. Journal of Physical Chemistry C, 2015, 119, 11260-11266.	3.1	23
101	Simultaneous multiplexed materials characterization using a high-precision hard X-ray micro-slit array. Journal of Synchrotron Radiation, 2015, 22, 653-660.	2.4	4
102	Small-Angle X-Ray Scattering of Ionic Liquids. , 2015, , 169-213.		1
103	Measurement of carbon condensates using small-angle x-ray scattering during detonation of the high explosive hexanitrostilbene. Journal of Applied Physics, 2015, 117, .	2.5	55
104	Ultra-small-angle X-ray scattering study of second-phase particles in heat-treated Zircaloy-4. Journal of Applied Crystallography, 2015, 48, 52-60.	4.5	1
105	Reference diffraction patterns, microstructure, and pore-size distribution for the copper (II) benzene-1,3,5-tricarboxylate metal organic framework (Cu-BTC) compounds. Powder Diffraction, 2015, 30, 2-13.	0.2	23
106	Explorations and 3D models of Atmospheric and Suspension Plasma Spraying coating microstructure. Surface and Coatings Technology, 2015, 268, 266-271.	4.8	2
107	Reference diffraction patterns, microstructure, and pore-size distribution for the copper (II) benzene-1,3,5-tricarboxylate metal organic framework (Cu-BTC) compounds â€“ CORRIGENDUM. Powder Diffraction, 2015, 30, 323-323.	0.2	3
108	An Assessment of Milling Time on the Structure and Properties of a Nanostructured Ferritic Alloy (NFA). Metallurgical and Materials Transactions A: Physical Metallurgy and Materials Science, 2014, 45, 5409-5418.	2.2	14

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109	Characterization of porosity in sulfide ore minerals: A USANS/SANS study. American Mineralogist, 2014, 99, 2398-2404.	1.9	18
110	Dehydration Effect on the Pore Size, Porosity, and Fractal Parameters of Shale Rocks: Ultrasmall-Angle X-ray Scattering Study. Energy & Fuels, 2014, 28, 6772-6779.	5.1	84
111	Quantification of the physical structure of fats in 20 minutes: Implications for formulation. Lipid Technology, 2014, 26, 223-226.	0.3	24
112	Robust nanoporous alumina monoliths by atomic layer deposition on low-density carbon-nanotube scaffolds. Carbon, 2014, 73, 443-447.	10.3	5
113	Evolution of electrochemical interfaces in solid oxide fuel cells (SOFC): a Ni and Zr resonant anomalous ultra-small-angle X-ray scattering study with elemental and spatial resolution across the cell assembly. RSC Advances, 2014, 4, 4676-4690.	3.6	10
114	Understanding Solvothermal Crystallization of Mesoporous Anatase Beads by In Situ Synchrotron PXRD and SAXS. Chemistry of Materials, 2014, 26, 4563-4571.	6.7	37
115	Mesoscale Effects in Electrochemical Conversion: Coupling of Chemistry to Atomic- and Nanoscale Structure in Iron-Based Electrodes. Journal of the American Chemical Society, 2014, 136, 6211-6214.	13.7	32
116	Structural and dynamical studies of acid-mediated conversion in amorphous-calcium-phosphate based dental composites. Dental Materials, 2014, 30, 1113-1125.	3.5	21
117	Ordered array of <mml:math xmlns:mml="http://www.w3.org/1998/Math/MathML" altimg="si18.gif" overflow="scroll"><mml:mrow><mml:mi>Ï‰</mml:mi></mml:mrow></mml:math> particles in <mml:math xmlns:mml="http://www.w3.org/1998/Math/MathML" altimg="si2.gif" overflow="scroll"><mml:mrow><mml:mi>Î²</mml:mi></mml:mrow></mml:math>-Ti matrix studied by small-angle X-ray scattering. Acta Materialia, 2014, 81, 71-82.	7.9	30
118	Super-Stable, Highly Monodisperse Plasmonic Faradaurate-500 Nanocrystals with 500 Gold Atoms: Au_{â‰¼500}(SR)_{â‰¼120}. Journal of the American Chemical Society, 2014, 136, 7410-7417.	13.7	67
119	Magnetic-field-dependent assembly of silica-coated magnetite nanoclusters probed by Ultra-Small-Angle X-ray Scattering (USAXS). Journal of Magnetism and Magnetic Materials, 2014, 354, 70-75.	2.3	5
120	High-temperature multifunctional magnetoactive nickel graphene polyimide nanocomposites. Polymer, 2013, 54, 2776-2784.	3.8	16
121	Phase structure in segmented polyurethanes having fatty acid-based soft segments. Polymer, 2013, 54, 372-380.	3.8	47
122	Enhancement of scattering and reflectance properties of plasma-sprayed alumina coatings by controlling the porosity. Surface and Coatings Technology, 2013, 220, 80-84.	4.8	21
123	Ultra-Small-Angle X-ray Scattering Instrument at the Advanced Photon Source: History, Recent Development, and Current Status. Metallurgical and Materials Transactions A: Physical Metallurgy and Materials Science, 2013, 44, 68-76.	2.2	139
124	Dispersing Grafted Nanoparticle Assemblies into Polymer Melts through Flow Fields. ACS Macro Letters, 2013, 2, 1051-1055.	4.8	32
125	Structure and Dynamics Studies of Concentrated Micrometer-Sized Colloidal Suspensions. Langmuir, 2013, 29, 1379-1387.	3.5	13
126	Particle size distribution in ferrofluid macro-clusters. Journal of Magnetism and Magnetic Materials, 2013, 330, 31-36.	2.3	14

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127	Edible oil structures at low and intermediate concentrations. II. Ultra-small angle X-ray scattering of in situ tristearin solids in triolein. Journal of Applied Physics, 2013, 114, .	2.5	59
128	Ultra Small Angle X-ray Scattering Studies of Solid Oxide Fuel Cell Cathode Powders. ECS Transactions, 2013, 50, 111-115.	0.5	2
129	Ultra Small Angle X-Ray Scattering Characterization of Temperature-Sensitive Ferrogels Prepared Using Magnetic Nanoparticles. Materials Research Society Symposia Proceedings, 2013, 1453, 40.	0.1	0
130	High-Performance Pt Catalysts Supported on High-Surface-Area Graphene Composites for PEFCs. ECS Transactions, 2013, 50, 1453-1459.	0.5	0
131	Nanocrystallization in spark plasma sintered Fe48Cr15Mo14Y2C15B6 bulk amorphous alloy. Journal of Applied Physics, 2013, 114, .	2.5	18
132	A multi-length-scale USAXS/SAXS facility: 10â€“50â€…keV small-angle X-ray scattering instrument. Journal of Applied Crystallography, 2013, 46, 1508-1512.	4.5	13
133	Structural Characterization of RDX-Based Explosive Nanocomposites. Propellants, Explosives, Pyrotechnics, 2013, 38, 386-393.	1.6	25
134	Characterization of Fe3O4 and Fe2O3 ferrogels prepared under uniform magnetic field. Materials Research Society Symposia Proceedings, 2012, 1403, 214.	0.1	0
135	Kinetic transition in the growth of Al nanocrystals in Al-Sm alloys. Journal of Applied Physics, 2012, 111, 063525.	2.5	12
136	Topological investigation of electronic silicon nanoparticulate aggregates using ultra-small-angle X-ray scattering. Journal of Nanoparticle Research, 2012, 14, 1.	1.9	12
137	High-energy ultra-small-angle X-ray scattering instrument at the Advanced Photon Source. Journal of Applied Crystallography, 2012, 45, 1318-1320.	4.5	39
138	Effect of Al on the NiAl-Type B2 Precipitates in Ferritic Superalloys. Metallurgical and Materials Transactions A: Physical Metallurgy and Materials Science, 2012, 43, 3423-3427.	2.2	10
139	A Phase Diagram for Polymer-Grafted Nanoparticles in Homopolymer Matrices. Macromolecules, 2012, 45, 4007-4011.	4.8	135
140	Ultraâ€smallâ€angle Xâ€ray scatteringâ€“Xâ€ray photon correlation spectroscopy studies of incipient structural changes in amorphous calcium phosphateâ€based dental composites. Journal of Biomedical Materials Research - Part A, 2012, 100A, 1293-1306.	4.0	9
141	Ultra-Small-Angle X-ray Scatteringâ€”X-ray Photon Correlation Spectroscopy: A New Measurement Technique for In-Situ Studies of Equilibrium and Nonequilibrium Dynamics. Metallurgical and Materials Transactions A: Physical Metallurgy and Materials Science, 2012, 43, 1445-1453.	2.2	13
142	Location and distribution of inorganic material in a low ash yield, subbituminous coal. International Journal of Coal Geology, 2012, 94, 173-181.	5.0	30
143	Nika: software for two-dimensional data reduction. Journal of Applied Crystallography, 2012, 45, 324-328.	4.5	757
144	Mechanical reinforcement of polymer nanocomposites: theory and ultra-small angle X-ray scattering (USAXS) studies. Soft Matter, 2011, 7, 2725.	2.7	26

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145	Effects of Back Pressure on Condensed-Phase Properties Within Supercritical Ethylene Jets. , 2011, , .		1
146	In-Flight Alloying of Nanocrystalline Yttria-Stabilized Zirconia Using Suspension Spray to Produce Ultra-Low Thermal Conductivity Thermal Barriers. International Journal of Applied Ceramic Technology, 2011, 8, 1382-1392.	2.1	9
147	Investigation of condensed supercritical ethylene jets using Small Angle X-ray Scattering (SAXS) technique. Nuclear Instruments and Methods in Physics Research, Section A: Accelerators, Spectrometers, Detectors and Associated Equipment, 2011, 649, 219-221.	1.6	6
148	Effect of Aging Treatment on the Microstructure and Resistivity of a Nickel-Base Superalloy. Metallurgical and Materials Transactions A: Physical Metallurgy and Materials Science, 2011, 42, 1362-1372.	2.2	14
149	Column Formation in Suspension Plasma-Sprayed Coatings and Resultant Thermal Properties. Journal of Thermal Spray Technology, 2011, 20, 817-828.	3.1	194
150	Development of ultra-small-angle X-ray scatteringâ€“X-ray photon correlation spectroscopy. Journal of Applied Crystallography, 2011, 44, 200-212.	4.5	21
151	Phase behavior of SEBS triblock copolymer gels. Journal of Polymer Science, Part B: Polymer Physics, 2011, 49, 1479-1491.	2.1	20
152	The Absolute Calibration of a Small-Angle Scattering Instrument with a Laboratory X-ray Source. Journal of Physics: Conference Series, 2010, 247, 012005.	0.4	34
153	Microstructural evolution of 7wt.% Y2O3â€“ZrO2 thermal barrier coatings due to stress relaxation at elevated temperatures and the concomitant changes in thermal conductivity. Surface and Coatings Technology, 2010, 205, 57-65.	4.8	17
154	Glassy Carbon as an Absolute Intensity Calibration Standard for Small-Angle Scattering. Metallurgical and Materials Transactions A: Physical Metallurgy and Materials Science, 2010, 41, 1151-1158.	2.2	350
155	Characterization of Complex Thermal Barrier Deposits Pore Microstructures by a Combination of Imaging, Scattering, and Intrusion Techniques. Journal of Thermal Spray Technology, 2010, 19, 178-189.	3.1	13
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