List of Publications by Year in descending order

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#	Article	IF	CITATIONS
1	Role of layered structure in ductility improvement of layered Ti-Al metal composite. Acta Materialia, 2018, 153, 235-249.	3.8	244
2	Microstructure and mechanical properties of the Mg/Al laminated composite fabricated by accumulative roll bonding (ARB). Materials Science & Engineering A: Structural Materials: Properties, Microstructure and Processing, 2010, 527, 3073-3078.	2.6	201
3	Effect of Mn addition on microstructure, texture and mechanical properties of Mg–Zn–Ca alloy. Materials Science & Engineering A: Structural Materials: Properties, Microstructure and Processing, 2011, 528, 3741-3747.	2.6	98
4	Effect of particle size on microstructure and mechanical properties of SiCp/AZ91 magnesium matrix composite. Materials Science & Engineering A: Structural Materials: Properties, Microstructure and Processing, 2012, 543, 158-163.	2.6	94
5	Texture evolution of the Mg/Al laminated composite fabricated by the accumulative roll bonding. Scripta Materialia, 2009, 61, 717-720.	2.6	93
6	Microstructure and tensile property of the ECAPed pure magnesium. Journal of Alloys and Compounds, 2009, 470, 256-262.	2.8	89
7	Low frequency damping capacities and mechanical properties of Mg–Si alloys. Materials Science & Engineering A: Structural Materials: Properties, Microstructure and Processing, 2007, 452-453, 374-379.	2.6	81
8	Composite structure of α phase in metastable β Ti alloys induced by lattice strain during β to α phase transformation. Acta Materialia, 2017, 132, 307-326.	3.8	80
9	Microstructure evolution and mechanical properties of a particulate reinforced magnesium matrix composites forged at elevated temperatures. Materials Science & Engineering A: Structural Materials: Properties, Microstructure and Processing, 2010, 527, 1630-1635.	2.6	78
10	Effect of hot extrusion on the microstructure of a particulate reinforced magnesium matrix composite. Materials Science & Engineering A: Structural Materials: Properties, Microstructure and Processing, 2007, 465, 78-84.	2.6	77
11	Reverse tension/compression asymmetry of a Mg–Y–Zn alloys containing LPSO phases. Materials Science & Engineering A: Structural Materials: Properties, Microstructure and Processing, 2015, 647, 287-293.	2.6	75
12	Role of multi-microalloying by rare earth elements in ductilization of magnesium alloys. Journal of Magnesium and Alloys, 2014, 2, 1-7.	5.5	74
13	Microstructure evolution and mechanical properties of nano-SiCp/AZ91 composite processed by extrusion and equal channel angular pressing (ECAP). Materials Characterization, 2016, 121, 222-230.	1.9	70
14	Texture analysis at neutron diffractometer STRESS-SPEC. Nuclear Instruments and Methods in Physics Research, Section A: Accelerators, Spectrometers, Detectors and Associated Equipment, 2011, 642, 87-92.	0.7	66
15	Hardening mechanism of commercially pure Mg processed by high pressure torsion at room temperature. Materials Science & Engineering A: Structural Materials: Properties, Microstructure and Processing, 2014, 619, 95-106.	2.6	62
16	Dislocation density evolution of AA 7020-T6 investigated by in-situ synchrotron diffraction under tensile load. Materials Characterization, 2015, 108, 124-131.	1.9	56
17	Determination of macroscopic and microscopic residual stresses in friction stir welded metal matrix composites via neutron diffraction. Acta Materialia, 2015, 87, 161-173.	3.8	55
18	Combined caloric effects in a multiferroic Ni–Mn–Ga alloy with broad refrigeration temperature region. APL Materials, 2017, 5, .	2.2	53

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19	Isothermal forging of AZ91 reinforced with 10vol.% silicon carbon particles. Materials Science & Engineering A: Structural Materials: Properties, Microstructure and Processing, 2011, 528, 1707-1712.	2.6	50
20	Microstructures and mechanical properties of pure Mg processed by rotary swaging. Materials & Design, 2014, 63, 83-88.	5.1	47
21	Evolution of microscopic strains, stresses, and dislocation density during in-situ tensile loading of additively manufactured AlSi10Mg alloy. International Journal of Plasticity, 2021, 139, 102946.	4.1	46
22	Microstructure and mechanical property of the ECAPed Mg2Si/Mg composite. Materials Science & Engineering A: Structural Materials: Properties, Microstructure and Processing, 2009, 516, 283-289.	2.6	44
23	Microstructure and mechanical properties of the accumulative roll bonded (ARBed) pure magnesium sheet. Materials Science & Engineering A: Structural Materials: Properties, Microstructure and Processing, 2010, 527, 7176-7183.	2.6	43
24	Microstructures and mechanical properties of SiCp/AZ91 magnesium matrix nanocomposites processed by multidirectional forging. Journal of Alloys and Compounds, 2015, 622, 1018-1026.	2.8	43
25	Influence of the amount of intermetallics on the degradation of Mg-Nd alloys under physiological conditions. Acta Biomaterialia, 2021, 121, 695-712.	4.1	39
26	Internal friction and microplastic deformation behavior of pure magnesium processed by equal channel angular pressing. Materials Science & Engineering A: Structural Materials: Properties, Microstructure and Processing, 2013, 561, 100-108.	2.6	38
27	Rotatable multifunctional load frames for neutron diffractometers at FRM II—design, specifications and applications. Nuclear Instruments and Methods in Physics Research, Section A: Accelerators, Spectrometers, Detectors and Associated Equipment, 2013, 711, 101-105.	0.7	37
28	Unexpected formation of hydrides in heavy rare earth containing magnesium alloys. Journal of Magnesium and Alloys, 2016, 4, 173-180.	5.5	37
29	Hot deformation behavior of SiCp/AZ91 magnesium matrix composite fabricated by stir casting. Materials Science & Engineering A: Structural Materials: Properties, Microstructure and Processing, 2008, 492, 481-485.	2.6	36
30	Enhanced tensile plasticity of a CuZr-based bulk metallic glass composite induced by ion irradiation. Journal of Materials Science and Technology, 2019, 35, 2221-2226.	5.6	36
31	Development and strengthening mechanisms of a hybrid CNTs@SiCp/Mg-6Zn composite fabricated by a novel method. Journal of Magnesium and Alloys, 2021, 9, 1363-1372.	5.5	36
32	Inhomogeneity and relaxation phenomena in the graphite anode of a lithium-ion battery probed by in situ neutron diffraction. Journal of Power Sources, 2017, 361, 54-60.	4.0	34
33	Heat-treatment induced defect formation in α-Al matrix in Sr-modified eutectic Al–Si alloy. Journal of Alloys and Compounds, 2018, 730, 208-218.	2.8	34
34	Correlation between imposed deformation and transformation lattice strain on \hat{I}_{\pm} variant selection in a metastable \hat{I}^2 -Ti alloy under isothermal compression. Acta Materialia, 2018, 161, 150-160.	3.8	32
35	Work hardening and softening behavior of pure Mg influenced by Zn addition investigated via in-situ neutron diffraction. Materials Science & Engineering A: Structural Materials: Properties, Microstructure and Processing, 2020, 772, 138827.	2.6	31
36	Microstructure and mechanical behavior of Mg-5Zn matrix influenced by particle deformation zone. Journal of Materials Science and Technology, 2021, 60, 8-20.	5.6	30

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37	Verification of Structural Simulation Results of Metal-based Additive Manufacturing by Means of Neutron Diffraction. Physics Procedia, 2013, 41, 849-857.	1.2	29
38	Energy-Efficient Elastocaloric Cooling by Flexibly and Reversibly Transferring Interface in Magnetic Shape-Memory Alloys. ACS Applied Materials & amp; Interfaces, 2018, 10, 25438-25445.	4.0	28
39	Hot deformation behavior originated from dislocation activity and β to α phase transformation in a metastable β titanium alloy. International Journal of Plasticity, 2019, 119, 200-214.	4.1	28
40	Hot extrusion approach to enhance the cyclic stability of elastocaloric effect in polycrystalline Ni-Mn-Ga alloys. Scripta Materialia, 2019, 168, 28-32.	2.6	27
41	Influence of crystallographic texture on the microstructure, tensile properties and residual stress state of laser-welded titanium joints. Materials and Design, 2016, 101, 137-145.	3.3	25
42	Impact of the B2 ordering behavior on the mechanical properties of a FeCoMo alloy. Materials Science & Engineering A: Structural Materials: Properties, Microstructure and Processing, 2016, 662, 511-518.	2.6	25
43	Effects of extrusion ratio and annealing treatment on the mechanical properties and microstructure of a Mg–11Gd–4.5Y–1Nd–1.5Zn–0.5Zr (wt%) alloy. Journal of Materials Science, 2017, 52, 6670-6686	.1.7	24
44	Microstructure, texture and hardness of a metastable β-titanium alloy after bar-rolling and annealing. Journal of Alloys and Compounds, 2020, 825, 154082.	2.8	24
45	Microscopic stresses in carbon nanotube reinforced aluminum matrix composites determined by in-situ neutron diffraction. Journal of Materials Science and Technology, 2020, 54, 58-68.	5.6	23
46	Impact fatigue behavior of superelastic NiTi shape memory alloy wires. Materials Science & Engineering A: Structural Materials: Properties, Microstructure and Processing, 2010, 528, 764-769.	2.6	21
47	Microstructural evolution and delayed hydride cracking of FSW-AZ31 magnesium alloy during SSRT. Transactions of Nonferrous Metals Society of China, 2014, 24, 3060-3069.	1.7	21
48	Effect of Extrusion Temperature on the Plastic Deformation of an Mg-Y-Zn Alloy Containing LPSO Phase Using In Situ Neutron Diffraction. Metallurgical and Materials Transactions A: Physical Metallurgy and Materials Science, 2017, 48, 5332-5343.	1.1	21
49	Enhanced multiscale modeling of macroscopic and microscopic residual stresses evolution during multi-thermo-mechanical processes. Materials and Design, 2017, 115, 364-378.	3.3	21
50	Effects of welding speed on the multiscale residual stresses in friction stir welded metal matrix composites. Journal of Materials Science and Technology, 2019, 35, 824-832.	5.6	21
51	Over 2% magnetic-field-induced strain in a polycrystalline Ni50Mn28.5Ga21.5 alloy prepared by directional solidification. Materials Science & Engineering A: Structural Materials: Properties, Microstructure and Processing, 2020, 780, 139170.	2.6	21
52	Magnetic properties and crystallographic textures of Fe 2.6% Si after 90% cold rolling plus different annealing. Journal of Magnetism and Magnetic Materials, 2014, 354, 105-111.	1.0	20
53	The origin of striation in the metastable β phase of titanium alloys observed by transmission electron microscopy. Journal of Applied Crystallography, 2017, 50, 795-804.	1.9	20
54	Crystallographic Characterization on Polycrystalline Ni-Mn-Ga Alloys with Strong Preferred Orientation. Materials, 2017, 10, 463.	1.3	20

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55	STRESS-SPEC: Materials science diffractometer. Journal of Large-scale Research Facilities JLSRF, 0, 1, A6.	0.0	20
56	Bulk and local textures of pure magnesium processed by rotary swaging. Journal of Magnesium and Alloys, 2013, 1, 341-345.	5.5	19
57	An additively manufactured and direct-aged AlSi3.5Mg2.5 alloy with superior strength and ductility: micromechanical mechanisms. International Journal of Plasticity, 2021, 146, 103083.	4.1	18
58	Identification of unexpected hydrides in Mg–20 wt% Dy alloy by high-brilliance synchrotron radiation. Journal of Applied Crystallography, 2012, 45, 17-21.	1.9	17
59	Microstructure evolution of Mg–11Gd–4.5Y–1Nd–1.5Zn–0.5Zr (wt%) alloy during deformation and its effect on strengthening. Materials Science & Engineering A: Structural Materials: Properties, Microstructure and Processing, 2016, 657, 259-268.	2.6	16
60	Elastic strain induced abnormal grain growth in graphene nanosheets (GNSs) reinforced copper (Cu) matrix composites. Acta Materialia, 2020, 200, 338-350.	3.8	16
61	Texture Evolution of the Mg/Al Laminated Composite by Accumulative Roll Bonding at Ambient Temperature. Rare Metal Materials and Engineering, 2013, 42, 441-446.	0.8	15
62	Deformation of Ni–Mn-Ga 7M modulated martensite through detwinning/twinning and forward/reverse intermartensitic transformation studied by in-situ neutron diffraction and interrupted in-situ EBSD. Acta Materialia, 2019, 174, 319-331.	3.8	15
63	Strain-Induced Martensitic Transformation Kinetic in Austempered Ductile Iron (ADI). Metallurgical and Materials Transactions A: Physical Metallurgy and Materials Science, 2018, 49, 94-104.	1.1	14
64	Diffraction-based determination of single-crystal elastic constants of polycrystalline titanium alloys. Journal of Applied Crystallography, 2019, 52, 1144-1156.	1.9	14
65	Evolution of twinning in extruded AZ31 alloy with bimodal grain structure. Materials Characterization, 2017, 126, 116-124.	1.9	12
66	Direct volumetric measurement of crystallographic texture using acoustic waves. Acta Materialia, 2018, 159, 384-394.	3.8	12
67	Effect of compressive load on the martensitic transformation from austenite to 5M martensite in a polycrystalline Ni–Mn-Ga alloy studied by in-situ neutron diffraction. Journal of Alloys and Compounds, 2016, 666, 1-9.	2.8	11
68	Large rotating magnetocaloric effects in polycrystalline Ni-Mn-Ga alloys. Journal of Alloys and Compounds, 2021, 874, 159755.	2.8	11
69	Effect of grain boundary segregation on microstructure and mechanical properties of ultra-fine grained Mg–Al–Ca–Mn alloy wires. Materials Science & Engineering A: Structural Materials: Properties, Microstructure and Processing, 2022, 848, 143423.	2.6	11
70	Rapid measurement of volumetric texture using resonant ultrasoundÂspectroscopy. Scripta Materialia, 2018, 157, 44-48.	2.6	10
71	Investigation into the influence of carbon nanotubes addition on residual stresses and mechanical properties in the CNTs@SiCp/Mg-6Zn hybrid composite using neutron diffraction method. Materials Science & amp; Engineering A: Structural Materials: Properties, Microstructure and Processing, 2020,	2.6	10
72	<i>In-situ</i> neutron diffraction study of martensitic variant redistribution in polycrystalline Ni-Mn-Ga alloy under cyclic thermo-mechanical treatment. Applied Physics Letters, 2014, 105, .	1.5	9

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73	The effect of intermediate annealing between cold rolled steps on crystallographic texture and magnetic properties of Fe–2.6% Si. Journal of Magnetism and Magnetic Materials, 2014, 362, 141-149.	1.0	9
74	Improved sample manipulation at the STRESS-SPEC neutron diffractometer using an industrial 6-axis robot for texture and strain analyses. Nuclear Instruments and Methods in Physics Research, Section A: Accelerators, Spectrometers, Detectors and Associated Equipment, 2015, 794, 67-75.	0.7	9
75	Neutron diffraction measurement of residual stresses in an ITER-like tungsten-monoblock type plasma-facing component. Fusion Engineering and Design, 2019, 146, 701-704.	1.0	9
76	Fabrication, microstructure and mechanical properties of the as-rolled ZW31/PMMCs laminate. Materials Science & Engineering A: Structural Materials: Properties, Microstructure and Processing, 2019, 761, 138043.	2.6	9
77	In situ compressive investigations on the effects of solid solution Gd on the texture and lattice strain evolution of Mg. Materials Science & Engineering A: Structural Materials: Properties, Microstructure and Processing, 2020, 774, 138938.	2.6	9
78	Carbon Redistribution Process in Austempered Ductile Iron (ADI) During Heat Treatment—APT and Synchrotron Diffraction Study. Metals, 2019, 9, 789.	1.0	8
79	Unconventional twin deformation of Ni-Mn-Ga 7M martensite under tension mediated by the collective lattice reorientation from a-c twin to b-c twin. Acta Materialia, 2022, 227, 117729.	3.8	8
80	Materials science at the diffractometer STRESS-SPEC at FRM II. Neutron News, 2013, 24, 14-17.	0.1	7
81	Compressive deformation behavior of Mg–Zn–Ca alloy at elevated temperature. Materials Science & Engineering A: Structural Materials: Properties, Microstructure and Processing, 2013, 586, 71-77.	2.6	7
82	The effect of magnetic annealing on crystallographic texture and magnetic properties of Fe-2.6% Si. Journal of Magnetism and Magnetic Materials, 2015, 381, 350-359.	1.0	7
83	Ordering and disordering of β/βo-phase in γ-TiAl based alloys investigated by neutron diffraction. MRS Advances, 2017, 2, 1399-1404.	0.5	7
84	Crystallographic texture gradient along the wall thickness of an SF-copper tube. Materials Characterization, 2018, 139, 125-133.	1.9	7
85	Evolution of texture in precision seamless tubes investigated by synchrotron and neutron radiation measurement. Materials Characterization, 2019, 151, 582-589.	1.9	7
86	Correlation Between the Microstructural Defects and Residual Stress in a Single Crystal Nickel-Based Superalloy During Different Creep Stages. Metals and Materials International, 2018, 24, 1002-1011.	1.8	6
87	Multi-scale phase analyses of strain-induced martensite in austempered ductile iron (ADI) using neutron diffraction and transmission techniques. Journal of Materials Science, 2021, 56, 5296-5306.	1.7	6
88	Reply to comments on "composite structure of α phase in metastable β Ti alloys induced by lattice strain during β to α phase transformation―by prof. D. Banerjee. Scripta Materialia, 2017, 141, 148-150.	2.6	5
89	Effect of Applied Compressive Stress and Impregnation Material on Internal Strain and Stress State in Nb ₃ Sn Rutherford Cable Stacks. IEEE Transactions on Applied Superconductivity, 2019, 29, 1-5.	1.1	5
90	Microstructure and mechanical properties of M40/AZ91 composites fabricated by pressure infiltration method. Composites Communications, 2021, 24, 100640.	3.3	5

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91	Strain Induced Martensitic Transformation in Austempered Ductile Iron (ADI). Journal of Physics: Conference Series, 2016, 746, 012055.	0.3	5
92	The Robot Concept at STRESS-SPEC for the Characterisation or Semi-Finished Products. Materials Science Forum, 2010, 652, 197-201.	0.3	4
93	Investigation of Texture Gradients of Semi-Finished Products by Neutrons and Photons. Materials Science Forum, 0, 702-703, 499-506.	0.3	4
94	Effect of grain size on cyclic microplasticity of ECAP processed commercial pure magnesium. Journal of Materials Science, 2013, 48, 1239-1248.	1.7	4
95	Tube Drawing with Tilted Die: Texture, Dislocation Density and Mechanical Properties. Metals, 2021, 11, 638.	1.0	4
96	Effects of Y Additions on the Microstructures and Mechanical Behaviours of as Cast Mg– <i>x</i> Y–0.5Zr Alloys. Advanced Engineering Materials, 2022, 24, .	1.6	4
97	Microstructure and Properties of Pure Mg/ZK60 Laminate Processed by Accumulative Roll Bonding. Materials Science Forum, 0, 650, 343-346.	0.3	3
98	Peak broadening and peak shift pole figures investigations by STRESS-SPEC diffractometer at FRM II. Journal of Physics: Conference Series, 2012, 340, 012100.	0.3	3
99	Modified twinning behaviour induced by texture evolution in hot rolled Mg–3Al–1Zn alloy. Materials Science and Technology, 2014, 30, 694-699.	0.8	3
100	Texture gradient studies of a Cuâ€ŧube by the robot at STRESSâ€5PEC. Crystal Research and Technology, 2014, 49, 888-898.	0.6	3
101	Processing, microstructure and mechanical properties of a novel mg matrix composites reinforced with urchin-like CNTs@SiCp. Diamond and Related Materials, 2020, 109, 108087.	1.8	3
102	Effects of finish turning on an austenitic weld investigated using diffraction methods. International Journal of Advanced Manufacturing Technology, 2020, 108, 635-645.	1.5	3
103	New insight into deformation induced α variant selection in a metastable β titanium alloy during isothermal compression at 600Â °C. Progress in Natural Science: Materials International, 2021, 31, 471-476.	1.8	3
104	Crystallographic texture and lattice strain evolution during tensile load of swaged brass. Materials Science & Engineering A: Structural Materials: Properties, Microstructure and Processing, 2018, 711, 149-155.	2.6	3
105	Development of Extrusion and Rolling Textures during ECAP of Mg-Alloys. Materials Science Forum, 0, 584-586, 748-753.	0.3	2
106	Texture development of ARB processed Mg/Al multilayers. Journal of Physics: Conference Series, 2010, 240, 012125.	0.3	2
107	Effect of Texture on Damping Behaviour in an AZ80 Alloy. Solid State Phenomena, 2010, 160, 117-121.	0.3	2
108	B2 order transformation in a Fe – 25 at% Co – 9 at% Mo alloy. Materials Research Society Symposia Proceedings, 2015, 1760, 175.	0.1	2

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109	Strengthening and ductilizing of magnesium alloying with heavy rare earth elements. MATEC Web of Conferences, 2018, 188, 03021.	0.1	2
110	Unexpected Expansion Behavior of Mg-Al Alloys During Isothermal Ageing. Jom, 2019, 71, 2906-2912.	0.9	2
111	Quantification of Residual Stress Relief by Heat Treatments in Austenitic Cladded Layers. Materials, 2022, 15, 1364.	1.3	2
112	Texture Gradient in a Single Pass ECAPed Pure Mg by Neutron Radiation. Materials Science Forum, 0, 584-586, 513-517.	0.3	1
113	Textures in Multi-Directional Forged Mg by Neutron Diffraction. Advanced Materials Research, 0, 146-147, 879-882.	0.3	1
114	Non-destructive residual stress evaluation in mechanically surface treated Ti–2.5Cu by diffraction techniques. NDT and E International, 2014, 61, 67-70.	1.7	1
115	Non-destructive Neutron Surface Residual Stress Analysis. Journal of Nondestructive Evaluation, 2019, 38, 1.	1.1	1
116	Texture in Superconducting Magnet Constituent Materials and Its Effect on Elastic Anisotropy. IEEE Transactions on Applied Superconductivity, 2019, 29, 1-5.	1.1	1
117	A Unique Quenching and Deformation Dilatometer for Combined In Situ Neutron Diffraction Analysis of Engineering Materials. Advanced Engineering Materials, 0, , 2100163.	1.6	1
118	A Unique Quenching and Deformation Dilatometer for Combined In Situ Neutron Diffraction Analysis of Engineering Materials. Advanced Engineering Materials, 2021, 23, 2170046.	1.6	1
119	On the impact of nanometric γ' precipitates on the tensile deformation of superelastic Co49Ni21Ga30. Acta Materialia, 2022, 230, 117835.	3.8	1
120	Compressive Behavior of Ultrafine-Grained Mg-Zn-Y-Zr Alloy Containing Quasicrystalline Phase. Materials Science Forum, 2008, 584-586, 287-292.	0.3	0
121	Residual Stresses in the Hot Sprues of as-cast Mg-Zn Alloys Investigated by STRESS-SPEC Neutron Diffractometer. Materials Science Forum, 2013, 768-769, 428-432.	0.3	0
122	Residual Stresses of the As-Cast Mg-xCa Alloys with Hot Sprues by Neutron Diffraction. Advanced Materials Research, 0, 996, 592-597.	0.3	0
123	Diffraction on heavy samples at STRESS-SPEC using a robot system. IOP Conference Series: Materials Science and Engineering, 2015, 82, 012105.	0.3	Ο
124	The metallurgical texture of gold artefacts found at the Bronze Age rampart of Bernstorf (Bavaria) studied by neutron diffraction. Journal of Archaeological Science: Reports, 2018, 20, 338-346.	0.2	0
125	The Role of Second Phases on the Creep Behavior of As-Cast and Hot-Extruded Mg-Ca-Zr Alloys. Jom, 2019, 71, 2227-2234.	0.9	0
126	2D/3D local strain analysis of layered metal composites with a strength-ductility synergy. IOP Conference Series: Materials Science and Engineering, 2019, 580, 012038.	0.3	0

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127	In situneutron diffraction on ferroelectrics under electric field. Acta Crystallographica Section A: Foundations and Advances, 2013, 69, s214-s214.	0.3	0