

# Nobumichi Tamura

## List of Publications by Year in descending order

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306  
papers

10,603  
citations

31902

53  
h-index

46693

89  
g-index

317  
all docs

317  
docs citations

317  
times ranked

11586  
citing authors

#	ARTICLE	IF	CITATIONS
1	Reactive binder and aggregate interfacial zones in the mortar of Tomb of Caecilia Metella concrete, 1C BCE, Rome. <i>Journal of the American Ceramic Society</i> , 2022, 105, 1503-1518.	1.9	10
2	Scaling of the strange-metal scattering in unconventional superconductors. <i>Nature</i> , 2022, 602, 431-436.	13.7	42
3	Impact of processing conditions on the film formation of lead-free halide double perovskite Cs <sub>2</sub> AgBiBr <sub>6</sub> . <i>Journal of Materials Chemistry A</i> , 2022, 10, 19868-19880.	5.2	12
4	Spatiotemporal mapping of microscopic strains and defects to reveal Li-dendrite-induced failure in all-solid-state batteries. <i>Materials Today</i> , 2022, 57, 180-191.	8.3	12
5	Quantification of room temperature strengthening of laser shock peened Ni-based superalloy using synchrotron microdiffraction. <i>Materials and Design</i> , 2022, 221, 110948.	3.3	5
6	Crystal nucleation and growth of spherulites demonstrated by coral skeletons and phase-field simulations. <i>Acta Biomaterialia</i> , 2021, 120, 277-292.	4.1	21
7	On the Pressure Generated by Thermite Reactions Using Stress-Altered Aluminum Particles. <i>Propellants, Explosives, Pyrotechnics</i> , 2021, 46, 99-106.	1.0	6
8	Antiphase resonance at X-ray irradiated microregions in amorphous Fe <sub>80</sub> B <sub>20</sub> stripes. <i>Journal of Magnetism and Magnetic Materials</i> , 2021, 520, 167017.	1.0	3
9	Influence of dislocations and twin walls in BaTiO <sub>3</sub> on the voltage-controlled switching of perpendicular magnetization. <i>Physical Review Materials</i> , 2021, 5, .	0.9	3
10	Fleetite, Cu <sub>2</sub> RhIrSb <sub>2</sub> , a New Species of Platinum-Group Mineral from the Miass Placer Zone, Southern Urals, Russia. <i>Canadian Mineralogist</i> , 2021, 59, 423-430.	0.3	1
11	Twinning-mediated anomalous alignment of rutile films revealed by synchrotron X-ray nanodiffraction. <i>IScience</i> , 2021, 24, 102278.	1.9	1
12	Localized strain profile in surface electrode array for programmable composite multiferroic devices. <i>Applied Physics Letters</i> , 2021, 118, .	1.5	5
13	Energy Conversion from Heat to Electricity by Highly Reversible Phase-Transforming Ferroelectrics. <i>Physical Review Applied</i> , 2021, 16, .	1.5	4
14	Spin waves excitation at micron-sized, anisotropy modified regions in amorphous Fe <sub>80</sub> B <sub>20</sub> stripes: Local properties and inter-regions coupling. <i>Materials Science and Engineering B: Solid-State Materials for Advanced Technology</i> , 2021, 271, 115258.	1.7	6
15	Out-of-equilibrium processes in crystallization of organic-inorganic perovskites during spin coating. <i>Nature Communications</i> , 2021, 12, 5624.	5.8	53
16	Pressure-induced suppression of Jahn-Teller distortions and enhanced electronic properties in high-entropy oxide (Mg <sub>0.2</sub> Ni <sub>0.2</sub> Co <sub>0.2</sub> Zn <sub>0.2</sub> Cu <sub>0.2</sub> )O. <i>Applied Physics Letters</i> , 2021, 119, .	1.5	4
17	Unnamed Pt(Cu <sub>0.67</sub> Sn <sub>0.33</sub> ) from the Bolshoy Khailyk River, Western Sayans, Russia, and a Review of Related Compounds and Solid Solutions. <i>Minerals (Basel, Switzerland)</i> , 2021, 11, 1240.	0.8	0
18	Ferrotorryweiserite, Rh <sub>5</sub> Fe <sub>10</sub> S <sub>16</sub> , a New Mineral Species from the Sisim Placer Zone, Eastern Sayans, Russia, and the Torryweiserite-Ferrotorryweiserite Series. <i>Minerals (Basel, Switzerland)</i> , 2021, 11, 1420.	0.8	2

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19	Scalable Freeze-Tape-Casting Fabrication and Pore Structure Analysis of 3D LLZO Solid-State Electrolytes. <i>ACS Applied Materials &amp; Interfaces</i> , 2020, 12, 3494-3501.	4.0	52
20	In situ study of rotating lattice single-crystal formation in Sb <sub>2</sub> S <sub>3</sub> glass by Laue $\mu$ XRD. <i>Journal of the American Ceramic Society</i> , 2020, 103, 3954-3961.	1.9	1
21	Revealing the Dynamics of Hybrid Metal Halide Perovskite Formation via Multimodal In Situ Probes. <i>Advanced Functional Materials</i> , 2020, 30, 1908337.	7.8	40
22	In-situ, microscale characterization of heterogeneous deformation around notch in martensitic Shape Memory Alloy. <i>Materials Science &amp; Engineering A: Structural Materials: Properties, Microstructure and Processing</i> , 2020, 771, 138605.	2.6	1
23	<i>XtalCAMP</i> : a comprehensive program for the analysis and visualization of scanning Laue X-ray micro-/nanodiffraction data. <i>Journal of Applied Crystallography</i> , 2020, 53, 1392-1403.	1.9	7
24	Two-Tier Compatibility of Superelastic Bicrystal Micropillar at Grain Boundary. <i>Nano Letters</i> , 2020, 20, 8332-8338.	4.5	8
25	Derived crystal structure of martensitic materials by solid-solid phase transformation. <i>Acta Crystallographica Section A: Foundations and Advances</i> , 2020, 76, 521-533.	0.0	3
26	Residual lattice strain in quartzites as a potential palaeo-piezometer. <i>Geophysical Journal International</i> , 2020, 222, 1363-1378.	1.0	7
27	Synthesis and characterization of Pt(Cu <sub>0.67</sub> Sn <sub>0.33</sub> ). <i>Solid State Sciences</i> , 2020, 105, 106282.	1.5	1
28	Potential Control of Oxygen Non-Stoichiometry in Cerium Oxide and Phase Transition Away from Equilibrium. <i>ACS Applied Materials &amp; Interfaces</i> , 2020, 12, 31514-31521.	4.0	12
29	Mapping of Heterogeneous Catalyst Degradation in Polymer Electrolyte Fuel Cells. <i>Advanced Energy Materials</i> , 2020, 10, 2000623.	10.2	24
30	X-ray Laue Microdiffraction and Raman Spectroscopic Investigation of Natural Silicon and Moissanite. <i>Minerals (Basel, Switzerland)</i> , 2020, 10, 204.	0.8	2
31	Highly Enhanced Curie Temperature in Ga-implanted Fe <sub>3</sub> GeTe <sub>2</sub> van der Waals Material. <i>Advanced Quantum Technologies</i> , 2020, 3, 2000017.	1.8	34
32	Rafting-Enabled Recovery Avoids Recrystallization in 3D-Printing-Repaired Single-Crystal Superalloys. <i>Advanced Materials</i> , 2020, 32, e1907164.	11.1	28
33	High-pressure strengthening in ultrafine-grained metals. <i>Nature</i> , 2020, 579, 67-72.	13.7	96
34	Multi-scale microstructural investigation of a laser 3D printed Ni-based superalloy. <i>Additive Manufacturing</i> , 2020, 34, 101220.	1.7	12
35	Black carbon enriches short-range-order ferrihydrite in Amazonian Dark Earth: Interplay mechanism and environmental implications. <i>Science of the Total Environment</i> , 2020, 725, 138195.	3.9	6
36	Resistive contribution in electrical-switching experiments with antiferromagnets. <i>Physical Review Research</i> , 2020, 2, .	1.3	25

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37	Pattern-matching indexing of Laue and monochromatic serial crystallography data for applications in materials science. <i>Journal of Applied Crystallography</i> , 2020, 53, 824-836.	1.9	5
38	Oriented porous LLZO 3D structures obtained by freeze casting for battery applications. <i>Journal of Materials Chemistry A</i> , 2019, 7, 20861-20870.	5.2	65
39	Authigenic Mineral Texture in Submarine 1979 Basalt Drill Core, Surtsey Volcano, Iceland. <i>Geochemistry, Geophysics, Geosystems</i> , 2019, 20, 3751-3773.	1.0	10
40	Volcanoes Erupt Stressed Quartz Crystals. <i>Geophysical Research Letters</i> , 2019, 46, 8791-8800.	1.5	2
41	Stability and Compressibility of Cation-Doped High-Entropy Oxide MgCoNiCuZnO <sub>5</sub> . <i>Journal of Physical Chemistry C</i> , 2019, 123, 17735-17744.	1.5	50
42	Stress and Fracture of Crystalline Silicon Cells in Solar Photovoltaic Modules – A Synchrotron X-ray Microdiffraction based Investigation. <i>MRS Advances</i> , 2019, 4, 2319-2335.	0.5	5
43	Lattice strain causes non-radiative losses in halide perovskites. <i>Energy and Environmental Science</i> , 2019, 12, 596-606.	15.6	343
44	Thermomechanical residual stress evaluation in multi-crystalline silicon solar cells of photovoltaic modules with different encapsulation polymers using synchrotron X-ray microdiffraction. <i>Solar Energy Materials and Solar Cells</i> , 2019, 193, 387-402.	3.0	21
45	Slags as Evidence for Copper Mining above Casaccia, Val Bregaglia (Central Alps). <i>Minerals (Basel)</i> Tj ETQq1 1 0.784314 rgBT <sub>2</sub> /Overlo	0.8	0
46	Helical van der Waals crystals with discretized Eshelby twist. <i>Nature</i> , 2019, 570, 358-362.	13.7	91
47	Platiniferous Tetra-Auricupride: A Case Study from the Bolshoy Khailyk Placer Deposit, Western Sayans, Russia. <i>Minerals (Basel, Switzerland)</i> , 2019, 9, 160.	0.8	5
48	Stress evolution in silicon nanowires during electrochemical lithiation using in situ synchrotron X-ray microdiffraction. <i>Journal of Materials Research</i> , 2019, 34, 1622-1631.	1.2	10
49	Stress Relaxation Related to Spontaneous Thin Film Buckling: Correlation between Finite Element Calculations and Micro Diffraction Analysis. <i>Quantum Beam Science</i> , 2019, 3, 1.	0.6	4
50	Fallout melt debris and aerodynamically-shaped glasses in beach sands of Hiroshima Bay, Japan. <i>Anthropocene</i> , 2019, 25, 100196.	1.6	8
51	Thermal stability of laser shock peening processed Ni-based superalloy DZ17G. <i>IOP Conference Series: Materials Science and Engineering</i> , 2019, 580, 012059.	0.3	0
52	Data-driven approach for synchrotron X-ray Laue microdiffraction scan analysis. <i>Acta Crystallographica Section A: Foundations and Advances</i> , 2019, 75, 876-888.	0.0	10
53	Light-driven anaerobic microbial oxidation of manganese. <i>Nature</i> , 2019, 576, 311-314.	13.7	90
54	Highly reactive energetic films by pre-stressing nano-aluminum particles. <i>RSC Advances</i> , 2019, 9, 40607-40617.	1.7	5

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55	Probing the <i>in situ</i> dynamics of structure–property evolution in hybrid perovskite thin films spincoated from complex fluids by a custom-designed beamline-compatible multimodal measurement chamber. <i>Acta Crystallographica Section A: Foundations and Advances</i> , 2019, 75, a155-a156.	0.0	6
56	Influence of Nonuniform Micron-Scale Strain Distributions on the Electrical Reorientation of Magnetic Microstructures in a Composite Multiferroic Heterostructure. <i>Nano Letters</i> , 2018, 18, 1952-1961.	4.5	44
57	Mechanism of heat affected zone cracking in Ni-based superalloy DZ125L fabricated by laser 3D printing technique. <i>Materials and Design</i> , 2018, 150, 171-181.	3.3	57
58	A study of deformation and strain induced in bulk by the oxide layers formation on a Fe-Cr-Al alloy in high-temperature liquid Pb-Bi eutectic. <i>Acta Materialia</i> , 2018, 151, 301-309.	3.8	25
59	Cation-Dependent Light-Induced Halide Demixing in Hybrid Organic–Inorganic Perovskites. <i>Nano Letters</i> , 2018, 18, 3473-3480.	4.5	65
60	A peak position comparison method for high-speed quantitative Laue microdiffraction data processing. <i>Scripta Materialia</i> , 2018, 143, 49-53.	2.6	18
61	Fabrication of single crystal architecture in Sb-S-I glass: Transition from dot to line. <i>Journal of Non-Crystalline Solids</i> , 2018, 501, 43-48.	1.5	4
62	Ferroelastic domain structure and phase transition in single-crystalline $[\text{PbZn}_{1/3}\text{Nb}_{2/3}\text{O}_3]_{1-x}[\text{PbTiO}_3]_x$ observed via <i>in situ</i> x-ray microbeam. <i>Journal of the European Ceramic Society</i> , 2018, 38, 1488-1497.	2.8	4
63	Probing Plasticity and Strain-Rate Effects of Indium Submicron Pillars Using Synchrotron Laue X-Ray Microdiffraction. <i>IEEE Transactions on Device and Materials Reliability</i> , 2018, 18, 490-497.	1.5	6
64	X-ray diffraction and heterogeneous materials: An adaptive crystallography approach. <i>Comptes Rendus Physique</i> , 2018, 19, 553-560.	0.3	3
65	Molecular Weaving of Covalent Organic Frameworks for Adaptive Guest Inclusion. <i>Journal of the American Chemical Society</i> , 2018, 140, 16015-16019.	6.6	107
66	Impact ignition and combustion of micron-scale aluminum particles pre-stressed with different quenching rates. <i>Journal of Applied Physics</i> , 2018, 124, .	1.1	14
67	New Structural Insight into Interface-Controlled $\lambda$ - $\beta$ Phase Transformation in Fe-Cr Alloys. <i>Quantum Beam Science</i> , 2018, 2, 27.	0.6	2
68	Synchrotron X-ray Microdiffraction and Fluorescence Imaging of Mineral and Rock Samples. <i>Journal of Visualized Experiments</i> , 2018, .	0.2	3
69	Probing Stress States in Silicon Nanowires During Electrochemical Lithiation Using <i>In Situ</i> Synchrotron X-Ray Microdiffraction. <i>Frontiers in Energy Research</i> , 2018, 6, .	1.2	17
70	Quantitative Scanning Laue Diffraction Microscopy: Application to the Study of 3D Printed Nickel-Based Superalloys. <i>Quantum Beam Science</i> , 2018, 2, 13.	0.6	12
71	Imaging Anomalous Nematic Order and Strain in Optimally Doped $\text{BaFe}_2\text{As}_2$ $T_{\text{c}} = 30$ K Superconductor. <i>Physical Review Letters</i> , 2018, 120, 167201.	5.9	30
72	X-Ray Diffraction under Extreme Conditions at the Advanced Light Source. <i>Quantum Beam Science</i> , 2018, 2, 4.	0.6	18

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73	Reversal in the Size Dependence of Grain Rotation. <i>Physical Review Letters</i> , 2017, 118, 096101.	2.9	26
74	Probing stress and fracture mechanism in encapsulated thin silicon solar cells by synchrotron X-ray microdiffraction. <i>Solar Energy Materials and Solar Cells</i> , 2017, 162, 30-40.	3.0	39
75	From cells to laminate: probing and modeling residual stress evolution in thin silicon photovoltaic modules using synchrotron X-ray microdiffraction experiments and finite element simulations. <i>Progress in Photovoltaics: Research and Applications</i> , 2017, 25, 791-809.	4.4	47
76	Statistical study of ductility-dip cracking induced plastic deformation in polycrystalline laser 3D printed Ni-based superalloy. <i>Scientific Reports</i> , 2017, 7, 2859.	1.6	19
77	In-situ studies on martensitic transformation and high-temperature shape memory in small volume zirconia. <i>Acta Materialia</i> , 2017, 134, 257-266.	3.8	26
78	Measuring grain rotation at the nanoscale. <i>High Pressure Research</i> , 2017, 37, 287-295.	0.4	2
79	Laser Fabrication of Two-Dimensional Rotating-Lattice Single Crystal. <i>Crystal Growth and Design</i> , 2017, 17, 1735-1746.	1.4	14
80	Nacre tablet thickness records formation temperature in modern and fossil shells. <i>Earth and Planetary Science Letters</i> , 2017, 460, 281-292.	1.8	51
81	Synchrotron X-ray Analytical Techniques for Studying Materials Electrochemistry in Rechargeable Batteries. <i>Chemical Reviews</i> , 2017, 117, 13123-13186.	23.0	390
82	Parrotfish Teeth: Stiff Biominerals Whose Microstructure Makes Them Tough and Abrasion-Resistant To Bite Stony Corals. <i>ACS Nano</i> , 2017, 11, 11856-11865.	7.3	37
83	Amorphous calcium carbonate particles form coral skeletons. <i>Proceedings of the National Academy of Sciences of the United States of America</i> , 2017, 114, E7670-E7678.	3.3	243
84	Synthesis of monodisperse CeO <sub>2</sub> and ZrO <sub>2</sub> particles exhibiting cyclic superelasticity over hundreds of cycles. <i>Journal of the American Ceramic Society</i> , 2017, 100, 4199-4208.	1.9	15
85	Residual stress determination in oxide layers at different length scales combining Raman spectroscopy and X-ray diffraction: Application to chromia-forming metallic alloys. <i>Journal of Applied Physics</i> , 2017, 122, .	1.1	13
86	Elemental Topological Dirac Semimetal: $\xi_{\pm}$ on InSb(111). <i>Physical Review Letters</i> , 2017, 118, 146402.	2.9	98
87	Probing Plasticity Mechanisms in Low Melting Temperature Metallic Nanostructures Using Synchrotron X-Ray Microdiffraction. <i>Procedia Engineering</i> , 2017, 215, 246-262.	1.2	4
88	Enabling the study of stress states using in situ $\mu$ SXRD in the silicon nanowire anode during electrochemical lithiation in a specially designed Li-ion battery test cell. <i>Procedia Engineering</i> , 2017, 215, 263-275.	1.2	7
89	In-situ characterization of highly reversible phase transformation by synchrotron X-ray Laue microdiffraction. <i>Applied Physics Letters</i> , 2016, 108, .	1.5	13
90	Synthesizing skyrmion bound pairs in Fe-Gd thin films. <i>Applied Physics Letters</i> , 2016, 109, .	1.5	67

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91	Effect of interconnect plasticity on soldering induced residual stress in thin crystalline silicon solar cells. , 2016, , .		6
92	Understanding size effects in the advanced through-silicon via interconnect schemes for 3D ICs. , 2016, , .		1
93	MultiLaue: A Technique to Extract d-spacings from Laue XRD. Microscopy and Microanalysis, 2016, 22, 1784-1785.	0.2	1
94	Hardness and microstructural inhomogeneity at the epitaxial interface of laser 3D-printed Ni-based superalloy. Applied Physics Letters, 2016, 109, .	1.5	13
95	In situ synchrotron study of electromigration induced grain rotations in Sn solder joints. Scientific Reports, 2016, 6, 24418.	1.6	16
96	Real-time data-intensive computing. AIP Conference Proceedings, 2016, , .	0.3	10
97	Phase transformation and fluorescent enhancement of ErF3 at high pressure. Solid State Communications, 2016, 242, 30-35.	0.9	6
98	Determination of the stretch tensor for structural transformations. Journal of the Mechanics and Physics of Solids, 2016, 93, 34-43.	2.3	41
99	A slice of an aluminum particle: Examining grains, strain and reactivity. Combustion and Flame, 2016, 173, 229-234.	2.8	10
100	Probing Phase Transformations and Microstructural Evolutions at the Small Scales: Synchrotron X-ray Microdiffraction for Advanced Applications in 3D IC (Integrated Circuits) and Solar PV (Photovoltaic) Devices. Journal of Electronic Materials, 2016, 45, 6222-6232.	1.0	42
101	Real-time microstructure imaging by Laue microdiffraction: A sample application in laser 3D printed Ni-based superalloys. Scientific Reports, 2016, 6, 28144.	1.6	18
102	Effect of scaling copper through-silicon vias on stress and reliability for 3D interconnects. , 2016, , .		9
103	Rotating lattice single crystal architecture on the surface of glass. Scientific Reports, 2016, 6, 36449.	1.6	22
104	Quantitative microstructural imaging by scanning Laue x-ray micro- and nanodiffraction. MRS Bulletin, 2016, 41, 445-453.	1.7	38
105	Stress relaxation in pre-stressed aluminum core-shell particles: X-ray diffraction study, modeling, and improved reactivity. Combustion and Flame, 2016, 170, 30-36.	2.8	12
106	Critical Temperature Shift for Stress Induced Voiding in Advanced Cu Interconnects for 32 nm and Beyond. Procedia Engineering, 2016, 139, 32-40.	1.2	1
107	Synchrotron X-ray Micro-diffraction - Probing Stress State in Encapsulated Thin Silicon Solar Cells. Procedia Engineering, 2016, 139, 123-133.	1.2	31
108	On the Mechanical Stresses of Cu Through-Silicon Via (TSV) Samples Fabricated by SK Hynix vs. SEMATECH - Enabling Robust and Reliable 3-D Interconnect/Integrated Circuit (IC) Technology. Procedia Engineering, 2016, 139, 101-111.	1.2	40

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109	Microstructure, crystallization and shape memory behavior of titania and yttria co-doped zirconia. <i>Journal of the European Ceramic Society</i> , 2016, 36, 1277-1283.	2.8	35
110	Improving aluminum particle reactivity by annealing and quenching treatments: Synchrotron X-ray diffraction analysis of strain. <i>Acta Materialia</i> , 2016, 103, 495-501.	3.8	19
111	Experimental Stress Characterization and Numerical Simulation for Copper Pumping Analysis of Through-Silicon Vias. <i>IEEE Transactions on Components, Packaging and Manufacturing Technology</i> , 2016, 6, 993-999.	1.4	4
112	Low Stress Encapsulants? Influence of Encapsulation Materials on Stress and Fracture of Thin Silicon Solar Cells as Revealed by Synchrotron X-ray Submicron Diffraction. <i>Procedia Engineering</i> , 2016, 139, 76-86.	1.2	17
113	Controlling the Temperature and Speed of the Phase Transition of VO <sub>2</sub> Microcrystals. <i>ACS Applied Materials &amp; Interfaces</i> , 2016, 8, 2280-2286.	4.0	44
114	Impact of deposition conditions on the crystallization kinetics of amorphous GeTe films. <i>Journal of Materials Science</i> , 2016, 51, 1864-1872.	1.7	34
115	Effect of Au/Pd surface finishing on metastable Sn phase formation in microbumps. , 2015, , .		0
116	A synchrotron study of microstructure gradient in laser additively formed epitaxial Ni-based superalloy. <i>Scientific Reports</i> , 2015, 5, 14903.	1.6	21
117	Ferroelectric soft mode of polar ZnTiO <sub>3</sub> investigated by Raman spectroscopy at high pressure. <i>Physical Review B</i> , 2015, 91, .	1.1	15
118	A synchrotron study of defect and strain inhomogeneity in laser-assisted three-dimensionally-printed Ni-based superalloy. <i>Applied Physics Letters</i> , 2015, 107, .	1.5	31
119	Complementary use of monochromatic and white-beam X-ray micro-diffraction for the investigation of ancient materials. <i>Journal of Applied Crystallography</i> , 2015, 48, 1522-1533.	1.9	18
120	Evolution of terra sigillata technology from Italy to Gaul through a multi-technique approach. <i>Journal of Analytical Atomic Spectrometry</i> , 2015, 30, 658-665.	1.6	20
121	Effect of Surface Microstructure on Electrochemical Performance of Garnet Solid Electrolytes. <i>ACS Applied Materials &amp; Interfaces</i> , 2015, 7, 2073-2081.	4.0	347
122	Deformation patterns in cross-sections of twisted bamboo-structured Au microwires. <i>Acta Materialia</i> , 2015, 97, 216-222.	3.8	25
123	Plasticity evolution in nanoscale Cu/Nb single-crystal multilayers as revealed by synchrotron X-ray microdiffraction. <i>Materials Science &amp; Engineering A: Structural Materials: Properties, Microstructure and Processing</i> , 2015, 635, 6-12.	2.6	56
124	A metastable phase of tin in 3D integrated circuit solder microbumps. <i>Scripta Materialia</i> , 2015, 102, 39-42.	2.6	18
125	Residual stress preserved in quartz from the San Andreas Fault Observatory at Depth. <i>Geology</i> , 2015, 43, 219-222.	2.0	33
126	Mobile metallic domain walls in an all-in-all-out magnetic insulator. <i>Science</i> , 2015, 350, 538-541.	6.0	159



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127	Internal stresses in pre-stressed micron-scale aluminum core-shell particles and their improved reactivity. <i>Journal of Applied Physics</i> , 2015, 118, .	1.1	9
128	Microscopic Cracking on Flat Alloy 600 Surfaces Following Accelerated Caustic Corrosion: Mapping of Strains and Microstructure During the Corrosion Process. <i>Corrosion</i> , 2015, 71, 65-70.	0.5	2
129	Serial snapshot crystallography for materials science with SwissFEL. <i>IUCr</i> , 2015, 2, 361-370.	1.0	19
130	A concise synchrotron X-ray microdiffraction field guide for the Earth scientists. <i>Boletin De La Sociedad Geologica Mexicana</i> , 2015, 67, 467-478.	0.1	1
131	High performance data management and analysis for tomography. <i>Proceedings of SPIE</i> , 2014, , .	0.8	11
132	Relationship between Residual Stresses and Damaging in Thermally Grown Oxide on Metals: Raman Spectroscopy and Synchrotron Micro-Diffraction Contributions. <i>Advances in Science and Technology</i> , 2014, 91, 100-107.	0.2	0
133	Time and spatial resolution of slip and twinning in a grain embedded within a magnesium polycrystal. <i>Acta Materialia</i> , 2014, 78, 203-212.	3.8	33
134	<i>In-situ</i> microscale through-silicon via strain measurements by synchrotron x-ray microdiffraction exploring the physics behind data interpretation. <i>Applied Physics Letters</i> , 2014, 105, .	1.5	21
135	Study of Stresses and Plasticity in Through-Silicon Via Structures for 3D Interconnects by X-Ray Micro-Beam Diffraction. <i>IEEE Transactions on Device and Materials Reliability</i> , 2014, 14, 698-703.	1.5	15
136	Crystal Structure of an Indigo@Silicalite Hybrid Related to the Ancient Maya Blue Pigment. <i>Journal of Physical Chemistry C</i> , 2014, 118, 28032-28042.	1.5	26
137	XMAS: A Versatile Tool for Analyzing Synchrotron X-ray Microdiffraction Data. , 2014, , 125-155.		65
138	Mapping of Microscopic Strain Distributions in an Alloy 600 C-Ring After Application of Hoop Stresses and Stress Corrosion Cracking. <i>Corrosion</i> , 2014, 70, 66-73.	0.5	5
139	Enabling thin silicon technologies for next generation c-Si solar PV renewable energy systems using synchrotron X-ray microdiffraction as stress and crack mechanism probe. <i>Solar Energy Materials and Solar Cells</i> , 2014, 130, 303-308.	3.0	54
140	Learning from the past: Rare $\mu$ -Fe <sub>2</sub> O <sub>3</sub> in the ancient black-glazed Jian (Tenmoku) wares. <i>Scientific Reports</i> , 2014, 4, 4941.	1.6	100
141	Acquisition, Sharing, and Processing of Large Data Sets for Strain Imaging: An Example of an Indented Ni <sub>3</sub> Al/Mo Composite. <i>Jom</i> , 2013, 65, 29-34.	0.9	2
142	Crystal nucleation and near-epitaxial growth in nacre. <i>Journal of Structural Biology</i> , 2013, 184, 454-463.	1.3	54
143	Metal insulator transition characteristics of macro-size single domain VO <sub>2</sub> crystals. <i>Phase Transitions</i> , 2013, 86, 941-946.	0.6	4
144	Crystal lattice tilting in prismatic calcite. <i>Journal of Structural Biology</i> , 2013, 183, 180-190.	1.3	63

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145	Influence of bulk pre-straining on the size effect in nickel compression pillars. <i>Materials Science &amp; Engineering A: Structural Materials: Properties, Microstructure and Processing</i> , 2013, 559, 147-158.	2.6	59
146	Methodology for optimal in situ alignment and setting of bendable optics for nearly diffraction-limited focusing of soft x-rays. <i>Optical Engineering</i> , 2013, 52, 033603.	0.5	17
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