Olivier Thomas

List of Publications by Year
in descending order

240 papers	3,773 citations	126907 33 h-index	197818 49 g-index
243 all docs	243 docs citations	243 times ranked	2842 citing authors

#	Article	IF	Citations
1	First-principles study of the structural, electronic, vibrational, and elastic properties of orthorhombic NiSi. Physical Review B, 2009, 79, .	3.2	202
2	Interplay between Anisotropic Strain Relaxation and Uniaxial Interface Magnetic Anisotropy in Epitaxial Fe Films on (001) GaAs. Physical Review Letters, 2003, 90, 017205.	7.8	128
3	Molybdenum disilicide: Crystal growth, thermal expansion and resistivity. Solid State Communications, 1985, 55, 629-632.	1.9	114
4	Electrical and optical properties of silicide single crystals and thin films. Materials Science and Engineering Reports, 1993, 9, 141-200.	5.8	94
5	Inversion of the diffraction pattern from an inhomogeneously strained crystal using an iterative algorithm. Physical Review B, 2007, 76, .	3.2	70
6	Reaction of titanium with germanium and siliconâ€germanium alloys. Applied Physics Letters, 1989, 54, 228-230.	3.3	68
7	Some titanium germanium and silicon compounds: Reaction and properties. Journal of Materials Research, 1990, 5, 1453-1462.	2.6	66
8	Effect of Co, Pt, and Au additions on the stability and epitaxy of NiSi2 films on (111)Si. Journal of Applied Physics, 1998, 84, 2583-2590.	2.5	66
9	Inversion Domain Boundaries in GaN Wires Revealed by Coherent Bragg Imaging. ACS Nano, 2015, 9, 9210-9216.	14.6	62
10	The diffusion of elements implanted in films of cobalt disilicide. Journal of Applied Physics, 1988, 64, 2973-2980.	2.5	61
11	Metallurgical reinvestigation of rare earth silicides. Applied Surface Science, 1989, 38, 156-161.	6.1	53
12	First-principles study of nickel-silicides ordered phases. Journal of Alloys and Compounds, 2011, 509, 2639-2644.	5.5	52
13	Interdependence of elastic strain and segregation in metallic multilayers: An x-ray diffraction study of (111) Au/Ni multilayers. Journal of Applied Physics, 2000, 87, 1172-1181.	2.5	50
14	Progress of in situ synchrotron X-ray diffraction studies on the mechanical behavior of materials at small scales. Progress in Materials Science, 2018, 94, 384-434.	32.8	50
15	Diffusion of Sb, Ga, Ge, and (As) in TiSi2. Journal of Applied Physics, 1988, 63, 5335-5345.	2.5	49
16	Fast pole figure acquisition using area detectors at the DiffAbs beamline â€“ Synchrotron SOLEIL. Journal of Applied Crystallography, 2013, 46, 1842-1853.	4.5	47
17	Formation of Ni silicide from Ni(Au) films on (111)Si. Journal of Applied Physics, 1996, 79, 4078.	2.5	46
18	Analysis of the electrical resistivity of Ti, Mo, Ta, and W monocrystalline disilicides. Journal of Applied Physics, 1989, 65, 1584-1590.	2.5	43

#	Article	IF	Citations
19	Raman spectra of TiN/AlN superlattices. Thin Solid Films, 2000, 380, 252-255.	1.8	43
20	Dislocation storage in single slip-oriented Cu micro-tensile samples: new insights via X-ray microdiffraction. Philosophical Magazine, 2011, 91, 1256-1264.	1.6	43
21	Limits of validity of the crystallite group method in stress determination of thin film structures. Thin Solid Films, 1998, 319, 9-15.	1.8	42
22	Nucleation and growth in the reaction of titanium with germanium and some silicon-germanium alloys. Applied Surface Science, 1989, 38, 27-36.	6.1	41
23	Combined synchrotron x-ray diffraction and wafer curvature measurements during Niâ€“Si reactive film formation. Applied Physics Letters, 2005, 87, 041904.	3.3	40
24	Strain field in silicon on insulator lines using high resolution x-ray diffraction. Applied Physics Letters, 2007, 90, 111914.	3.3	40
25	Controlling dislocation nucleation-mediated plasticity in nanostructures via surface modification. Acta Materialia, 2019, 166, 572-586.	7.9	40
26	Expected and unexpected plastic behavior at the micron scale: An in situ Î¼Laue tensile study. Acta Materialia, 2012, 60, 1252-1258.	7.9	38
27	3D Imaging of a Dislocation Loop at the Onset of Plasticity in an Indented Nanocrystal. Nano Letters, 2017, 17, 6696-6701.	9.1	37
28	Mechanisms for success or failure of diffusion barriers between aluminum and silicon. Journal of Vacuum Science and Technology A: Vacuum, Surfaces and Films, 1989, 7, 875-880.	2.1	36
29	Low temperature specific heat of VSi2, NbSi2, and TaSi2. Journal of Low Temperature Physics, 1993, 92, 335-351.	1.4	35
30	Thinâ€film growth and compositional effects in YBa2Cu3O7â^'xlayers prepared by metalorganic chemical vapor deposition. Journal of Applied Physics, 1993, 74, 4631-4642.	2.5	35
31	Applicability of an iterative inversion algorithm to the diffraction patterns from inhomogeneously strained crystals. Physical Review B, 2008, 78, .	3.2	35
32	Stress, porosity measurements and corrosion behaviour of AlN films deposited on steel substrates. Thin Solid Films, 2000, 359, 221-227.	1.8	34
33	In situbending of an Au nanowire monitored by micro Laue diffraction. Journal of Applied Crystallography, 2015, 48, 291-296.	4.5	34
34	Interfacial structure in (111) Au:Ni multilayers investigated by anomalous x-ray diffraction. Physical Review B, 2001, 64, .	3.2	33
35	Scanning force microscope forin situnanofocused X-ray diffraction studies. Journal of Synchrotron Radiation, 2014, 21, 1128-1133.	2.4	33
36	Optical properties of WSi2 and MoSi2 single crystals as measured by spectroscopic ellipsometry and reflectometry. Solid State Communications, 1987, 62, 455-459.	1.9	32

#	Article	IF	Citations
37	Chemical vapor deposition of siliconâ€“germanium heterostructures. Journal of Crystal Growth, 2000, 216, 171-184.	1.5	32
38	Stresses arising from a solid state reaction between palladium films and Si(001) investigated byin situcombined x-ray diffraction and curvature measurements. Journal of Applied Physics, 2003, 94, 1584-1591.	2.5	32
39	Nickel silicide encroachment formation and characterization. Microelectronic Engineering, 2010, 87, 245-248.	2.4	32
40	Direct Observation of Gigahertz Coherent Guided Acoustic Phonons in Free-Standing Single Copper Nanowires. Journal of Physical Chemistry Letters, 2014, 5, 4100-4104.	4.6	32
41	Evolution of Crystal Structure During the Initial Stages of ZnO Atomic Layer Deposition. Chemistry of Materials, 2016, 28, 592-600.	6.7	31
42	Stresses during Silicide Formation: A Review. Defect and Diffusion Forum, 1996, 129-130, 137-150.	0.4	30
43	Asymptotic behaviour of stress establishment in thin films. Surface Science, 2000, 465, L764-L770.	1.9	30
44	Spatiotemporal Imaging of the Acoustic Field Emitted by a Single Copper Nanowire. Nano Letters, 2016, 16, 6592-6598.	9.1	29
45	Resistivity and magnetoresistance of high-purity monocrystalline MoSi2. Journal of Physics F: Metal Physics, 1986, 16, 1745-1752.	1.6	28
46	Vibrational response of free standing single copper nanowire through transient reflectivity microscopy. Journal of Applied Physics, 2013, 114, 193509.	2.5	28
47	Superconductivity inTaSi2single crystals. Physical Review B, 1992, 45, 4803-4806.	3.2	27
48	Segregation and strain relaxation in Au/Ni multilayers: An in situ experiment. Applied Physics Letters, 1999, 75, 914-916.	3.3	27
49	Mechanical characterization of low-k and barrier dielectric thin films. Microelectronic Engineering, 2005, 82, 368-373.	2.4	27
50	In situthree-dimensional reciprocal-space mapping during mechanical deformation. Journal of Synchrotron Radiation, 2012, 19, 688-694.	2.4	27
51	Electronic properties of CoSi2 studied by reflectivity and spectroscopic ellipsometry. Solid State Communications, 1986, 60, 923-926.	1.9	26
52	Some transport properties of single crystals of group Va transition metal disilicides. Applied Surface Science, 1991, 53, 247-253.	6.1	26
53	Low-temperature intrinsic plasticity in silicon at small scales. Acta Materialia, 2018, 161, 54-60.	7.9	25
54	Oxidation of titanium, manganese, iron, and niobium silicides: Marker experiments. Journal of Applied Physics, 1990, 68, 5133-5139.	2.5	24

#	Article	IF	Citations
55	Methodology for studying strain inhomogeneities in polycrystalline thin films duringin situthermal loading using coherent x-ray diffraction. New Journal of Physics, 2010, 12, 035018.	2.9	24
56	Crystal growth, characterization and resistivity measurements of TiSi2 single crystals. Journal of the Less Common Metals, 1987, 136, 175-182.	0.8	23
57	Concentration and Strain Fields inside a Ag/Au Coreâ€“Shell Nanowire Studied by Coherent X-ray Diffraction. Nano Letters, 2013, 13, 1883-1889.	9.1	23
58	Towards a quantitative determination of strain in Bragg Coherent X-ray Diffraction Imaging: artefacts and sign convention in reconstructions. Scientific Reports, 2019, 9, 17357.	3.3	23
59	Microwave properties of YBCO thin films. IEEE Transactions on Applied Superconductivity, 1995, 5, 1737-1740.	1.7	22
60	In situ study of stress evolution during the reaction of a nickel film with a silicon substrate. Microelectronic Engineering, 2004, 76, 318-323.	2.4	22
61	Retrieval of the atomic displacements in the crystal from the coherent X-ray diffraction pattern. Journal of Synchrotron Radiation, 2014, 21, 774-783.	2.4	22
62	Influence of Si substrate orientation on stress development in Pd silicide films grown by solid-state reaction. Applied Physics Letters, 2003, 83, 1334-1336.	3.3	20
63	Diffusion of boron, phosphorus, and arsenic implanted in thin films of cobalt disilicide. Journal of Vacuum Science and Technology A: Vacuum, Surfaces and Films, 1988, 6, 1736-1739.	2.1	19
64	Organometallic chemical vapor deposition of superconducting YBa2Cu3O7 â^' Î´ films. Journal of the Less Common Metals, 1990, 164-165, 444-450.	0.8	19
65	de Haasâ€“van Alphen effect inMoSi2. Physical Review B, 1987, 35, 7936-7938.	3.2	18
66	New insights into thermomechanical behavior of GeTe thin films during crystallization. Acta Materialia, 2020, 191, 60-69.	7.9	18
67	Out-of-plane stresses arising from grain interactions in textured thin films. Acta Materialia, 2010, 58, 2452-2463.	7.9	16
68	The reaction of scandium thin films with silicon: diffusion, nucleation, resistivities. Applied Surface Science, 1991, 53, 138-146.	6.1	15
69	Stresses and interfacial structure in Auâ€“Ni and Agâ€“Cu metallic multilayers. Scripta Materialia, 2004, 50, 717-721.	5.2	15
70	New insights into single-grain mechanical behavior from temperature-dependent 3-D coherent X-ray diffraction. Acta Materialia, 2014, 78, 46-55.	7.9	15
71	Piezoelectric response and electrical properties of Pb(Zr1-xTix)O3 thin films: The role of imprint and composition. Journal of Applied Physics, 2017, 122, .	2.5	15
72	Tungstenâ€“rhenium alloys as diffusion barriers between aluminum and silicon. Journal of Vacuum Science and Technology A: Vacuum, Surfaces and Films, 1988, 6, 1650-1655.	2.1	14

#	Article	IF	Citations
73	Reacted amorphous layers: Tantalum and niobium oxides. The Philosophical Magazine: Physics of Condensed Matter B, Statistical Mechanics, Electronic, Optical and Magnetic Properties, 1988, 58, 529-538.	0.6	14
74	Impact of surface preparation on nickelâ€“platinum alloy silicide phase formation. Microelectronic Engineering, 2007, 84, 2523-2527.	2.4	14
75	An Atomistic View of the Incipient Growth of Zinc Oxide Nanolayers. Crystal Growth and Design, 2016, 16, 5339-5348.	3.0	14
76	Crystallographic orientation of facets and planar defects in functional nanostructures elucidated by nano-focused coherent diffractive X-ray imaging. Nanoscale, 2018, 10, 4833-4840.	5.6	14
77	Twin boundary migration in an individual platinum nanocrystal during catalytic CO oxidation. Nature Communications, 2021, 12, 5385.	12.8	14
78	Comparison of the diffusion barrier properties of tungsten films prepared by hydrogen and silicon reduction of tungsten hexafluoride. Thin Solid Films, 1989, 171, 343-357.	1.8	13
79	Cubic local order around Al and intermixing in short-period AlN/TiN multilayers studied by Al K-edge extended x-ray absorption fine structure spectroscopy and x-ray diffraction. Applied Physics Letters, 2003, 82, 3659-3661.	3.3	13
80	Investigation by High Resolution X-ray Diffraction of the local strains induced in Si by periodic arrays of oxide filled trenches. Physica Status Solidi (A) Applications and Materials Science, 2007, 204, 2542-2547.	1.8	13
81	Strain inhomogeneity in copper islands probed by coherent X-ray diffraction. Thin Solid Films, 2013, 530, 120-124.	1.8	13
82	Strain and tilt mapping in silicon around copper filled TSVs using advanced X-ray nano-diffraction. Microelectronic Engineering, 2015, 137, 117-123.	2.4	13
83	Through-silicon via-induced strain distribution in silicon interposer. Applied Physics Letters, 2015, 106, .	3.3	13
84	In situ X-ray diffraction studies on the piezoelectric response of PZT thin films. Thin Solid Films, 2016, 603, 29-33.	1.8	13
85	Resistivity and magnetoresistance of monocrystalline TaSi2 and VSi2. Surface and Coatings Technology, 1991, 45, 237-243.	4.8	12
86	Texture influence on critical current density of YBCO films deposited on (100)-MgO substrates. Physica C: Superconductivity and Its Applications, 1994, 235-240, 627-628.	1.2	12
87	Microstructural analysis of AU/NI multilayers interfaces by SAXS and STM. Applied Surface Science, 2002, 188, 182-187.	6.1	12
88	Exploring Niâ€“Si thin-film reactions by means of simultaneous synchrotron X-Ray diffraction and substrate curvature measurements. Materials Science and Engineering B: Solid-State Materials for Advanced Technology, 2004, 114-115, 67-71.	3.5	12
89	Low-temperature specific heat ofMoSi2. Physical Review B, 1988, 37, 10364-10366.	3.2	11
90	Respective mobilities of metal and silicon in disilicides: Bilayers of chromium with molybdenum or tungsten. Journal of Applied Physics, 1990, 67, 2410-2414.	2.5	11

#	Article	IF	Citations
91	Preparation of YBa2Cu3O7â^'xfilms and YBa2Cu3O7â^'x/Y2O3multilayers using coevaporation and atomic oxygen. Journal of Applied Physics, 1993, 73, 3096-3098.	2.5	11
92	Twinning orientation in YBa2Cu3O7â^'x films deposited on YAlO3 substrates. Applied Physics Letters, 1996, 69, 1942-1944.	3.3	11
93	Silicide formation during reaction between Ni ultra-thin films and Si(001) substrates. Materials Letters, 2014, 116, 139-142.	2.6	11
94	In situ Bragg coherent X-ray diffraction during tensile testing of an individual Au nanowire. Journal of Applied Crystallography, 2018, 51, 781-788.	4.5	11
95	Imaging the facet surface strain state of supported multi-faceted Pt nanoparticles during reaction. Nature Communications, 2022, 13, .	12.8	11
96	Growth and properties of MOCVD YBa2Cu3O7â^'x thin films. Journal of Alloys and Compounds, 1993, 195, 287-290.	5.5	10
97	Impact of thermal cycling on the evolution of grain, precipitate and dislocation structure in Al, 0.5% Cu, 1% Si thin films. Microelectronic Engineering, 2003, 70, 447-454.	2.4	10
98	KB scanning of X-ray beam for Laue microdiffraction on accelero-phobic samples: application toin situmechanically loaded nanowires. Journal of Synchrotron Radiation, 2016, 23, 1395-1400.	2.4	10
99	In situ monitoring of stress change in GeTe thin films during thermal annealing and crystallization. Micro and Nano Engineering, 2018, 1, 63-67.	2.9	10
100	In situstructural evolution of single particle model catalysts under ambient pressure reaction conditions. Nanoscale, 2019, 11, 331-338.	5.6	10
101	A.c. characterization of pyrosol and C.V.D. made high Tc materials. Journal of the Less Common Metals, 1990, 164-165, 1393-1399.	0.8	9
102	Influence of segregation on the measurement of stress in thin films. Journal of Applied Physics, 2002, 91, 2951-2958.	2.5	9
103	X-ray diffraction from inhomogeneous thin films of nanometre thickness: modelling and experiment. Journal of Applied Crystallography, 2003, 36, 154-157.	4.5	9
104	Investigation of local stress fields: Finite element modelling and High Resolution X-Ray Diffraction. Materials Research Society Symposia Proceedings, 2005, 875, 1.	0.1	9
105	Local strain in a 3D nano-crystal revealed by 2D coherent X-ray diffraction imaging. Thin Solid Films, 2007, 515, 5557-5562.	1.8	9
106	Influence of crystallographic orientation on local strains in silicon: A combined high-resolution X-ray diffraction and finite element modelling investigation. Thin Solid Films, 2008, 516, 8042-8048.	1.8	9
107	In situ coherent X-ray diffraction of isolated coreâ€“shell nanowires. Thin Solid Films, 2013, 530, 113-119.	1.8	9
108	Multi-wavelength Bragg coherent X-ray diffraction imaging of Au particles. Journal of Applied Crystallography, 2020, 53, 170-177.	4.5	9

#	Article	IF	Citations
109	Experimental study of partial densities of states in MoSi2. Solid State Communications, 1987, 64, 129-132.	1.9	8
110	The high residual resistivity of CoSi2: Evidence for a homogeneity range. Applied Surface Science, 1989, 38, 88-93.	6.1	8
111	Oxidation and formation mechanisms in disilicides: VSi2and CrSi2, inert marker experiments and interpretation. Journal of Applied Physics, 1990, 68, 6213-6223.	2.5	8
112	Structure characterization of metallic multilayers by symmetric and asymmetric X-ray diffraction. Thin Solid Films, 1998, 319, 78-80.	1.8	8
113	Simulation of local mechanical stresses in lines on substrate. Microelectronic Engineering, 2003, 70, 455-460.	2.4	8
114	Thermal expansion and stress development in the first stages of silicidation in Ti/Si thin films. Journal of Applied Physics, 2003, 94, 7083-7090.	2.5	8
115	Pipe-diffusion ripening of Si precipitates in Al-0.5%Cu-1%Si thin films. Philosophical Magazine, 2005, 85, 3541-3552.	1.6	8
116	Stress Development during the Reactive Formation of Silicide Films. Defect and Diffusion Forum, 2005, 237-240, 801-812.	0.4	8
117	Residual stress analysis in micro- and nano-structured materials by X-ray diffraction. International Journal of Materials and Product Technology, 2006, 26, 354.	0.2	8
118	X-ray microbeam strain investigation on Cuâ€“MEMS structures. Microelectronic Engineering, 2010, 87, 394-397.	2.4	8
119	Exploring Pdâ€“Si(001) and Pdâ€“Si(111) thin-film reactions by simultaneous synchrotron X-ray diffraction and substrate curvature measurements. Thin Solid Films, 2013, 530, 100-104.	1.8	8
120	Continuous and Collective Grain Rotation in Nanoscale Thin Films during Silicidation. Physical Review Letters, 2015, 115, 266101.	7.8	8
121	Stress buildup during crystallization of thin chalcogenide films for memory applications: In situ combination of synchrotron X-Ray diffraction and wafer curvature measurements. Thin Solid Films, 2016, 617, 44-47.	1.8	8
122	Mapping Inversion Domain Boundaries along Single GaN Wires with Bragg Coherent X-ray Imaging. ACS Nano, 2020, 14, 10305-10312.	14.6	8
123	In situ measurements of the structure and strain of a Ï€-conjugated semiconducting polymer under mechanical load. Journal of Applied Physics, 2020, 127, 045108.	2.5	8
124	Crystallization behavior of N -doped Ge-rich GST thin films and nanostructures: An in-situ synchrotron X-ray diffraction study. Microelectronic Engineering, 2021, 244-246, 111573.	2.4	8
125	Ferroelectric nanodomains in epitaxial GeTe thin films. Physical Review Materials, 2021, 5, .	2.4	8
126	Magnetic and transmission electron microscopy studies of the formation of cobalt silicide thin films. Journal of Applied Physics, 1988, 64, 3014-3017.	2.5	7

#	Article	IF	Citations
127	Bilayers with chromium disilicide: Chromium-vanadium. Applied Surface Science, 1989, 38, 106-116.	6.1	7
128	Measurements of critical currents as a function of temperature in YBa2Cu3O7-xthin films: a comparative study. Superconductor Science and Technology, 1994, 7, 195-205.	3.5	7
129	Correlation between the microwave surface resistance and the volumic fraction of a-axis grains in YBa2Cu3O7â˜'x films. Physica C: Superconductivity and Its Applications, 1998, 308, 16-20.	1.2	7
130	X-ray scattering: A powerful probe of lattice strain in materials with small dimensions. Applied Surface Science, 2006, 253, 182-187.	6.1	7
131	Stresses in Copper Damascene Lines: In-situ Measurements and Finite Element Analysis. AIP Conference Proceedings, 2006, , .	0.4	7
132	Nitrogen impurity effects on nickel silicide formation at low temperatures â€“ New â€œnitrogen co-plasmaâ€•approach. Microelectronic Engineering, 2008, 85, 2005-2008.	2.4	7
133	Post Si(C)N hillock nucleation and growth in IC copper lines controlled by diffusional creep. Microelectronic Engineering, 2010, 87, 361-364.	2.4	7
134	Thermoelasticity and interdiffusion in CuNi multilayers. Physical Review B, 2012, 85, .	3.2	7
135	Anomalous coherent diffraction of core-shell nano-objects: A methodology for determination of composition and strain fields. Physical Review B, 2013, 87, .	3.2	7
136	Reactor for nano-focused x-ray diffraction and imaging under catalytic in situ conditions. Review of Scientific Instruments, 2017, 88, 093902.	1.3	7
137	In Situ Coherent X-ray Diffraction during Three-Point Bending of a Au Nanowire: Visualization and Quantification. Quantum Beam Science, 2018, 2, 24.	1.2	7
138	Fast pole figure acquisition using area detectors at the DiffAbs beamline â€“ Synchrotron SOLEIL. Erratum. Journal of Applied Crystallography, 2014, 47, 482-482.	4.5	7
139	Multispectral Spectroscopic Ellipsometry-A New Tool for In Situ Surface Analysis. Materials Research Society Symposia Proceedings, 1987, 101, 403.	0.1	6
140	Structure and morphology of YBa2Cu3O7â˜'x LPCVD layers. Physica C: Superconductivity and Its Applications, 1991, 180, 42-45.	1.2	6
141	Dopant diffusion in silicides: Effect of diffusion paths. Journal of Vacuum Science and Technology A: Vacuum, Surfaces and Films, 1992, 10, 907-911.	2.1	6
142	Microstructure and residual stresses in (111) multilayers. Thin Solid Films, 1996, 275, 29-34.	1.8	6
143	Twinning behaviour in YBCO and PBCO thin films and in PBCO-YBCO superlattices. Journal of Alloys and Compounds, 1997, 251, 322-327.	5.5	6
144	In-situ study of stress evolution during solid state reaction of Pd with Si(001) using synchrotron radiation. Microelectronic Engineering, 2003, 70, 436-441.	2.4	6

#	Article	IF	Citations
145	Numerical modeling of stress build up during nickel silicidation under anisothermal annealing. Materials Science and Engineering B: Solid-State Materials for Advanced Technology, 2006, 135, 95-102.	3.5	6
146	3D strain imaging in sub-micrometer crystals using cross-reciprocal space measurements: Numerical feasibility and experimental methodology. Nuclear Instruments & Methods in Physics Research B, 2010, 268, 388-393.	1.4	6
147	First stage of CoSi2 formation during a solid-state reaction. Journal of Applied Physics, 2014, 116, 245301.	2.5	6
148	Evaluation of Alternative Atomistic Models for the Incipient Growth of ZnO by Atomic Layer Deposition. Journal of Electronic Materials, 2017, 46, 3512-3517.	2.2	6
149	Continuous scanning for Bragg coherent X-ray imaging. Scientific Reports, 2020, 10, 12760.	3.3	6
150	Simultaneous Multi-Bragg Peak Coherent X-ray Diffraction Imaging. Crystals, 2021, 11, 312.	2.2	6
151	Diffusion of dopants in tungsten disilicide: effects of diffusion paths. Applied Surface Science, 1991, 53, 165-170.	6.1	5
152	High Quality YBa₂Cu₃O_{7-x} Superconducting Thin Films Grown by MOCVD. European Physical Journal Special Topics, 1995, 05, C5-365-C5-371.	0.2	5
153	Chemically diffuse interface in (1 1 1) Auâ€“Ni multilayers: an anomalous X-ray diffraction analysis. Applied Surface Science, 2002, 188, 110-114.	6.1	5
154	Diffraction from Periodic Arrays of Oxide-Filled Trenches in Silicon: Investigation of Local Strains. Materials Research Society Symposia Proceedings, 2006, 913, 1.	0.1	5
155	Self-aligned nickelâ€“platinum silicide oxidation. Materials Science and Engineering B: Solid-State Materials for Advanced Technology, 2008, 154-155, 155-158.	3.5	5
156	Texture and strain in narrow copper damascene interconnect lines: An X-ray diffraction analysis. Microelectronic Engineering, 2008, 85, 2175-2178.	2.4	5
157	In situ combined synchrotron X-ray diffraction and wafer curvature measurements during formation of thin palladium silicide film on Si(001) and Si (111). Nuclear Instruments & Methods in Physics Research B, 2012, 284, 74-77.	1.4	5
158	Thermo-mechanical study of a 2.5D passive silicon interposer technology: Experimental, numerical and In-Situ stress sensors developments. , 2013, , .		5
159	Three-point bending behavior of a Au nanowire studied by in-situ Laue micro-diffraction. Journal of Applied Physics, 2018, 124, .	2.5	5
160	Energy-dispersive X-ray micro Laue diffraction on a bent gold nanowire. Journal of Applied Crystallography, 2021, 54, 80-86.	4.5	5
161	When More Is Less: Plastic Weakening of Single Crystalline Ag Nanoparticles by the Polycrystalline Au Shell. ACS Nano, 2021, 15, 14061-14070.	14.6	5
162	Bragg coherent diffraction imaging of single 20â€…nm Pt particles at the ID01-EBS beamline of ESRF. Journal of Applied Crystallography, 2022, 55, 621-625.	4.5	5

#	Article	IF	Citations
163	Some properties of CrxV1â^'xSi2 and CrxMo1â^'xSi2 thin films. Applied Surface Science, 1989, 38, 94-105.	6.1	4
164	Low temperature specific heat measurements of VSi2, NbSi2 and TaSi2. Applied Surface Science, 1993, 73, 232-236.	6.1	4
165	Transport critical current in MOCVD YBa2Cu3O7 thin films using a pulse technique. Journal of Alloys and Compounds, 1993, 195, 475-478.	5.5	4
166	Transport and Low Temperature Specific Heat Measurements of CrSi2 Single Crystals. Materials Research Society Symposia Proceedings, 1995, 402, 343.	0.1	4
167	Stress in Ag/Ni Multilayers: A Comparison of Specimen-Curvature and X-Ray Diffraction Methods. Materials Research Society Symposia Proceedings, 1997, 472, 299.	0.1	4
168	Residual Stresses in Ultrathin Metal Sublayers Within Au/Ni Multilayers. Materials Research Society Symposia Proceedings, 1997, 475, 363.	0.1	4
169	First stages of silicidation in Ti/Si thin films. Microelectronic Engineering, 2003, 70, 166-173.	2.4	4
170	In situstress measurements during the growth at different temperatures of Agâ€“Cu(111) multilayers. Journal of Applied Physics, 2004, 95, 1152-1161.	2.5	4
171	Diffraction analysis of elastic strains in micro and nanostructures. Zeitschrift FÃ¼r Kristallographie, 2008, 223, 569-574.	1.1	4
172	Relation between strain and composition in coherent epitaxial Cu/Ni multilayers: Influence of strong concentration gradients. Physical Review B, 2009, 79, .	3.2	4
173	Finite element simulations of coherent diffraction in elastoplastic polycrystalline aggregates. Comptes Rendus Physique, 2010, 11, 293-303.	0.9	4
174	Lattice instabilities in hexagonal NiSi: A NiAs prototype structure. Physical Review B, 2010, 81, .	3.2	4
175	Combined coherent x-ray micro-diffraction and local mechanical loading on copper nanocrystals. Journal of Physics: Conference Series, 2013, 425, 132003.	0.4	4
176	Facetâ€Ðependent Strain Determination in Electrochemically Synthetized Platinum Model Catalytic Nanoparticles. Small, 2021, 17, e2007702.	10.0	4
177	Low temperature specific heat of CoSi2. Applied Surface Science, 1991, 53, 240-242.	6.1	3
178	Diffusion of elements implanted in amorphous titanium disilicide. Applied Surface Science, 1993, 73, 167-174.	6.1	3
179	Comparative study of the irreversibility line and of harmonic generation in field modulated microwave absorption on YBa2Cu3O7 thin films. Journal of Alloys and Compounds, 1993, 195, 587-590.	5.5	3
180	Irreversibility line of YBa2Cu3O7 thin films studied by field modulated microwave absorption. Physica C: Superconductivity and Its Applications, 1994, 235-240, 3153-3154.	1.2	3

#	Article	IF	Citations
181	YBCO films deposited on YAlO/sub 3/ substrates: microstructure and transport properties. IEEE Transactions on Applied Superconductivity, 1997, 7, 1268-1271.	1.7	3
182	Structural and magnetic properties of Ni/Cr multilayers. Journal of Magnetism and Magnetic Materials, 1997, 165, 205-207.	2.3	3
183	X-Ray Diffraction Analysis and Modeling of Strain Induced Thermal Cycling in a Thin Aluminum (011) Bicrystal Film. Materials Research Society Symposia Proceedings, 2001, 695, 1.	0.1	3
184	Stresses and Interfacial Structure in Metal Films and Multilayers of Nanometre Thickness. Journal of Metastable and Nanocrystalline Materials, 2004, 19, 129-152.	0.1	3
185	Stress Development and Relaxation during Reaction of a Cobalt Film with a Silicon Substrate. Defect and Diffusion Forum, 2005, 237-240, 518-523.	0.4	3
186	Local strain induced in silicon by Si3N4 lines: Modeling and experimental investigation via X-ray diffraction. Nuclear Instruments & Methods in Physics Research B, 2012, 284, 23-28.	1.4	3
187	Comparative study of metallic silicideâ€“germanide orthorhombic MnP systems. Journal of Physics Condensed Matter, 2013, 25, 355403.	1.8	3
188	Piezoelectric Properties of Pb1â^'xLax(Zr0.52Ti0.48)1â^'x/4O3 Thin Films Studied by In Situ X-ray Diffraction. Materials, 2020, 13, 3338.	2.9	3
189	Variableâ€Wavelength Quick Scanning Nanofocused Xâ€Ray Microscopy for In Situ Strain and Tilt Mapping. Small, 2020, 16, 1905990.	10.0	3
190	Berkovich nanoindentation study of 16Ânm Cu/Nb ARB nanolaminate: Effect of anisotropy on the surface pileup. MRS Advances, 2021, 6, 495-499.	0.9	3
191	Crystallographic Anisotropy Dependence of Interfacial Sliding Phenomenon in a Cu(16)/Nb(16) ARB (Accumulated Rolling Bonding) Nanolaminate. Nanomaterials, 2022, 12, 308.	4.1	3
192	X-ray Diffraction Imaging of Deformations in Thin Films and Nano-Objects. Nanomaterials, 2022, 12, 1363.	4.1	3
193	Superconducting properties of YBa2Cu3O7â^'x films deposited by chemical vapor deposition. Physica C: Superconductivity and Its Applications, 1991, 185-189, 2113-2114.	1.2	2
194	In-Situ Preparation of Y-Ba-Cu-O Thin Films Using Mass-Spectrometer Rate Control and Atomic Oxygen. Materials Research Society Symposia Proceedings, 1992, 275, 299.	0.1	2
195	Growth of YBa2Cu3O7â^'x / PrBa2Cu3O7â^'x heterostructures by chemical vapor deposition. Physica C: Superconductivity and Its Applications, 1994, 235-240, 723-724.	1.2	2
196	Comparison between different X-ray diffraction methods to extract strains in metallic multilayers. Nuovo Cimento Della Societa Italiana Di Fisica D - Condensed Matter, Atomic, Molecular and Chemical Physics, Biophysics, 1997, 19, 577-583.	0.4	2
197	The composition analysis of YBa 2 Cu 3 O 7-Î´ or PrBa 2 Cu 3 O 7-Î´ thin films and (YBa 2 Cu 3 O 7-Î´ /PrBa 2 Cu) Tj ETQq1 1 0.784314 rgB 1061-1065.	1.5	2
198	In situ study of strain evolution during thin film Ti/Al(Si,Cu) reaction using synchrotron radiation. Microelectronic Engineering, 2002, 64, 81-89.	2.4	2

#	Article	IF	Citations
199	Local strains induced in silicon channel by a periodic array of nitride capped poly lines investigated by high resolution X-ray diffraction. Materials Science and Engineering B: Solid-State Materials for Advanced Technology, 2008, 154-155, 129-132.	3.5	2
200	Decreasing reaction rate at the end of silicidation: In-situ CoSi2 XRD study and modeling. Microelectronic Engineering, 2013, 106, 125-128.	2.4	2
201	Thermo-mechanical characterization of passive stress sensors in Si interposer. Microelectronics Reliability, 2015, 55, 738-746.	1.7	2
202	A Complex Interrelationship between Temperature-Dependent Polyquaterthiophene (PQT) Structural and Electrical Properties. Journal of Physical Chemistry C, 2017, 121, 23149-23157.	3.1	2
203	Strain Distribution Induced in SOI Photonic Substrate by Through Silicon via Using Advanced Scanning X-Ray Nano-Diffraction. IEEE Transactions on Device and Materials Reliability, 2018, 18, 529-533.	2.0	2
204	Stress Buildup Upon Crystallization of GeTe Thin Films: Curvature Measurements and Modelling. Nanomaterials, 2020, 10, 1247.	4.1	2
205	Inâ€situ force measurement during nanoâ€indentation combined with Laue microdiffraction. Nano Select, 2021, 2, 99-106.	3.7	2
206	Growth of (YBaCuO)_m/(PrBaCuO)_n Superlattices by MOCVD. European Physical Journal Special Topics, 1995, 05, C5-423-C5-430.	0.2	2
207	An inâ€situ synchrotron Xâ€ray diffraction study on the influence of hydrogen on the crystallization of Geâ€rich Ge 2 Sb 2 Te 5. Physica Status Solidi - Rapid Research Letters, 0, , .	2.4	2
208	Ion-implantation-induced fluorine agglomeration in tungsten disilicide prepared by low-pressure chemical vapour deposition. Nuclear Instruments & Methods in Physics Research B, 1989, 40-41, 595-598.	1.4	1
209	Fundamental and harmonic a.c. susceptibility response of MOCVD YBa2Cu3O7 thin films: Model of flux line behaviour. Cryogenics, 1993, 33, 497-501.	1.7	1
210	Precursor Delivery for the Deposition of Superconducting Oxides: a Comparison Between Solid Sources and Aerosol. Materials Research Society Symposia Proceedings, 1993, 335, 209.	0.1	1
211	Thermal modelization and experiments on the current of superconducting microbridges dependence to light in the 10â€“90K range. Physica B: Condensed Matter, 1994, 194-196, 2125-2126.	2.7	1
212	Transmission electron microscopy studies of thin films of YBa2Cu3O7-x. Physica C: Superconductivity and Its Applications, 1994, 235-240, 655-656.	1.2	1
213	Angular dependence of the magnetoresistance of TiSi2 single crystals. Applied Surface Science, 1995, 91, 98-102.	6.1	1
214	Influence of the microstructure on the residual strains in (111) Au/Ni multilayers. Journal of Magnetism and Magnetic Materials, 1996, 156, 31-32.	2.3	1
215	Field modulated microwave absorption in YBa2Cu3O7/PrBa2Cu3O7 multilayers. Journal of Low Temperature Physics, 1996, 105, 1061-1066.	1.4	1
216	Internal Stress In Sputtered Silver Nickel Thin Films And Multilayers: Sputtering Pressure And Thickness Effects. Materials Research Society Symposia Proceedings, 1999, 562, 123.	0.1	1

#	Article	IF	Citations
217	In Situ Stress and Strain Measurements During the Growth of Cu/Ni (001) Multilayers. Materials Research Society Symposia Proceedings, 2000, 615, 861.	0.1	1
218	Stress evolution in a Ti/Al(Si,Cu) dual layer during annealing. Materials Research Society Symposia Proceedings, 2001, 673, 1.	0.1	1
219	Stresses in Multilayer Systems: Test of the sin2Î¨ Method. Advanced Engineering Materials, 2002, 4, 557-561.	3.5	1
220	Investigating Interdiffusion in Mo/V Multilayers from X-Ray Scattering and Kinetic Simulations. Defect and Diffusion Forum, 2007, 264, 13-18.	0.4	1
221	High-resolution X-ray diffraction as a tool to investigate the evolution of local stress in sub-micrometric Si lines isolated by periodic arrays of oxide-filled trenches. Materials Science in Semiconductor Processing, 2009, 12, 64-70.	4.0	1
222	Nanometer Scale Assessment of Mechanical Strain Induced in Silicon by a Periodic Line Array. Journal of Nanoscience and Nanotechnology, 2011, 11, 9160-9166.	0.9	1
223	CoSi2 ultra-thin layer formation kinetics and texture from X-ray diffraction. Thin Solid Films, 2013, 541, 17-20.	1.8	1
224	In situ coupling of atomic force microscopy and sub-micrometer focused X-ray techniques. Materials Research Society Symposia Proceedings, 2014, 1712, 63.	0.1	1
225	Temperature dependency of the strain distribution induced by TSVs in silicon: A comparative study between micro-Laue and monochromatic nano-diffraction. Microelectronic Engineering, 2016, 156, 59-64.	2.4	1
226	Plastic behaviour and deformation mechanisms in silicon nano-objects. Journal of Physics: Conference Series, 2019, 1190, 012004.	0.4	1
227	In depth characterization of Ge-Si core-shell nanowires using X-ray coherent diffraction and time resolved pump-probe spectroscopy. Journal of Applied Physics, 2019, 126, 204304.	2.5	1
228	Direct Observations of the Structural Properties of Semiconducting Polymer: Fullerene Blends under Tensile Stretching. Materials, 2020, 13, 3092.	2.9	1
229	First stages of plasticity in three-point bent Au nanowires detected by in situ Laue microdiffraction. Applied Physics Letters, 2020, 116, 243101.	3.3	1
230	Mechanical and Microstructural Studies of (111) Au/Ni Multilayers. European Physical Journal Special Topics, 1996, 06, C7-135-C7-142.	0.2	1
231	Time-resolved piezoelectric response in relaxor ferroelectric (Pb_{0.88}La_{0.12})(Zr_{0.52}Ti_{0.48})O₃ thin films. Journal of Applied Physics, 2022, 131, 064102.	2.5	1
232	Interdependence between strain relaxation and segregation in Au/Ni multilayers. Journal of Magnetism and Magnetic Materials, 1999, 198-199, 593-595.	2.3	0
233	An In-Situ Study of the Segregation and the Strain Relaxation During Growth of Gold and Nickel Ultrathin Films. Materials Research Society Symposia Proceedings, 1999, 562, 189.	0.1	0
234	In Situ Curvature and Diffraction Studies of Pd Films on Si(001) During Solid-State Reaction. Materials Research Society Symposia Proceedings, 2000, 615, 831.	0.1	0

#	Article	IF	Citations
235	The early stages of stress development during epitaxial growth of Ag/Cu multilayers. Materials Research Society Symposia Proceedings, 2003, 791, 1.	0.1	0
236	Simulation et dÃ©termination par rayons X des contraintes dans des micro-composants modÃ¨les. European Physical Journal Special Topics, 2004, 118, 109-115.	0.2	0
237	X-ray scattering: a wonderful tool to probe lattice strains in materials with small dimensions. Materials Research Society Symposia Proceedings, 2004, 840, Q3.2.1.	0.1	0
238	X-ray nanodiffraction in forward scattering and Bragg geometry of a single isolated Agâ€“Au nanowire. Thin Solid Films, 2016, 617, 9-13.	1.8	0
239	Plasticity in inhomogeneously strained Au nanowires studied by Laue microdiffraction. MRS Advances, 2018, 3, 2331-2339.	0.9	0
240	Magnetic properties of superconducting YBa2Cu3O7-x CVD thin films. , 1992, , 79-84.		0