

Michael Fitzpatrick

List of Publications by Year in descending order

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200
papers

4,329
citations

101496

36
h-index

168321

53
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202
all docs

202
docs citations

202
times ranked

3498
citing authors

#	ARTICLE	IF	CITATIONS
1	The effects of surface pits and intermetallics on the competing failure modes in laser shock peened AA7075-T651: Experiments and modelling. <i>International Journal of Fatigue</i> , 2022, 155, 106568.	2.8	2
2	Influence of Deposition Strategies on Residual Stress in Wire + Arc Additive Manufactured Titanium Ti-6Al-4V. <i>Metals</i> , 2022, 12, 253.	1.0	15
3	Machine-Learning Approach to Determine Surface Quality on a Reactor Pressure Vessel (RPV) Steel. <i>Applied Sciences (Switzerland)</i> , 2022, 12, 3721.	1.3	2
4	Precipitation behaviour of single and duplex aged metastable β -Ti alloy, Ti-5Al-5Mo-5V-3Cr. <i>Materials Science and Technology</i> , 2022, 38, 1110-1117.	0.8	4
5	Effect of postprocessing thermal treatments on electron-beam powder bed-fused Ti6Al4V. <i>Material Design and Processing Communications</i> , 2021, 3, e168.	0.5	5
6	Influence of cooling rate on the precipitation kinetics of nanoscale isothermal β -phase in metastable β -Ti alloy, Ti-5Al-5Mo-5V-3Cr. <i>Journal of Alloys and Compounds</i> , 2021, 859, 157822.	2.8	17
7	Effects of laser shock peening on the mechanisms of fatigue short crack initiation and propagation of AA7075-T651. <i>International Journal of Fatigue</i> , 2021, 143, 106025.	2.8	47
8	A technical review of the challenges of powder recycling in the laser powder bed fusion additive manufacturing process. <i>Journal of Engineering</i> , 2021, 2021, 97-103.	0.6	5
9	Machine Learning-Based Prediction and Optimisation System for Laser Shock Peening. <i>Applied Sciences (Switzerland)</i> , 2021, 11, 2888.	1.3	12
10	Effects of ablative and non-ablative laser shock peening on AA7075-T651 corrosion and fatigue performance. <i>Materials Science and Technology</i> , 2021, 37, 1015-1034.	0.8	4
11	WhONet: Wheel Odometry neural Network for vehicular localisation in GNSS-deprived environments. <i>Engineering Applications of Artificial Intelligence</i> , 2021, 105, 104421.	4.3	15
12	The ageing response of direct laser deposited metastable β -Ti alloy, Ti-5Al-5Mo-5V-3Cr. <i>Additive Manufacturing</i> , 2021, 48, 102384.	1.7	3
13	Residual stresses induced by laser shock peening in orthopaedic Ti-6Al-7Nb alloy. <i>Optics and Laser Technology</i> , 2020, 131, 106446.	2.2	39
14	Analysis of Surface Roughness Influence in Non-Destructive Magnetic Measurements Applied to Reactor Pressure Vessel Steels. <i>Applied Sciences (Switzerland)</i> , 2020, 10, 8938.	1.3	9
15	Finite Element Analysis of Laser Peening of Thin Aluminum Structures. <i>Metals</i> , 2020, 10, 93.	1.0	15
16	Characterization and application of Bragg-edge transmission imaging for strain measurement and crystallographic analysis on the IMAT beamline. <i>Journal of Applied Crystallography</i> , 2019, 52, 351-368.	1.9	20
17	TEM study of the effect of high-temperature thermal cycles on the stability of the Y-Al-O oxides in MA956 ODS steel. <i>Journal of Materials Research and Technology</i> , 2019, 8, 3719-3725.	2.6	8
18	Fatigue crack growth in a laser shock peened residual stress field. <i>International Journal of Fatigue</i> , 2019, 123, 157-167.	2.8	62

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19	Evaluation of residual stresses induced by cold spraying of Ti-6Al-4V on Ti-6Al-4V substrates. Surface and Coatings Technology, 2019, 374, 591-602.	2.2	37
20	The effect of material cyclic deformation properties on residual stress generation by laser shock processing. International Journal of Mechanical Sciences, 2019, 156, 370-381.	3.6	21
21	An experimental study of residual stress and direction-dependence of fatigue crack growth behaviour in as-built and stress-relieved selective-laser-melted Ti6Al4V. Materials Science & Engineering A: Structural Materials: Properties, Microstructure and Processing, 2019, 755, 246-257.	2.6	116
22	Recovery of fatigue life using laser peening on 2024-T351 aluminium sheet containing scratch damage: The role of residual stress. Fatigue and Fracture of Engineering Materials and Structures, 2019, 42, 1161-1174.	1.7	22
23	Energy-Efficient machining process analysis and optimisation based on BS EN24T alloy steel as case studies. Robotics and Computer-Integrated Manufacturing, 2019, 58, 1-12.	6.1	26
24	312 MAX Phases: Elastic Properties and Lithiation. Materials, 2019, 12, 4098.	1.3	20
25	Instantaneous vehicle fuel consumption estimation using smartphones and recurrent neural networks. Expert Systems With Applications, 2019, 120, 436-447.	4.4	42
26	Magnetic Barkhausen Noise Method for Characterisation of Low Alloy Steel. , 2019, , .		4
27	Reactor pressure vessel embrittlement: Insights from neural network modelling. Journal of Nuclear Materials, 2018, 502, 311-322.	1.3	23
28	A comparison of fatigue crack growth performance of two aerospace grade aluminium alloys reinforced with bonded crack retarders. Fatigue and Fracture of Engineering Materials and Structures, 2018, 41, 1237-1242.	1.7	4
29	Residual stress and texture control in Ti-6Al-4V wire+arc additively manufactured intersections by stress relief and rolling. Materials and Design, 2018, 150, 193-205.	3.3	137
30	Mapping residual strain induced by cold working and by laser shock peening using neutron transmission spectroscopy. Materials and Design, 2018, 143, 56-64.	3.3	21
31	Intrinsic defect processes and elastic properties of Ti3AC2 (A = Al, Si, Ga, Ge, In, Sn) MAX phases. Journal of Applied Physics, 2018, 123, .	1.1	31
32	Probabilistic kernel machines for predictive monitoring of weld residual stress in energy systems. Engineering Applications of Artificial Intelligence, 2018, 71, 138-154.	4.3	10
33	Physical properties and defect processes of M3SnC2 (M= Ti, Zr, Hf) MAX phases: Effect of M-elements. Journal of Alloys and Compounds, 2018, 748, 804-813.	2.8	49
34	Effect of ultrasonic nanocrystal surface modification on residual stress and fatigue cracking in engineering alloys. Fatigue and Fracture of Engineering Materials and Structures, 2018, 41, 844-855.	1.7	41
35	Robust Virtual Sensing for Vehicle Agile Manoeuvring: A Tyre-Model-Less Approach. IEEE Transactions on Vehicular Technology, 2018, 67, 1894-1908.	3.9	16
36	Optimal design of a quadratic parameter varying vehicle suspension system using contrast-based Fruit Fly Optimisation. Applied Soft Computing Journal, 2018, 62, 463-477.	4.1	27

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37	Automotive magnetorheological dampers: modelling and parameter identification using contrast-based fruit fly optimisation. <i>Soft Computing</i> , 2018, 22, 8131-8149.	2.1	12
38	Effect of texture on the residual stress response from laser peening of an aluminium-lithium alloy. <i>Journal of Materials Processing Technology</i> , 2018, 251, 317-329.	3.1	14
39	Energy-Resolved Neutron Imaging for Reconstruction of Strain Introduced by Cold Working. <i>Journal of Imaging</i> , 2018, 4, 48.	1.7	6
40	Research on energy consumption and energy efficiency of machine tools: a comprehensive survey. <i>International Journal of Nanomanufacturing</i> , 2018, 14, 140.	0.3	2
41	Measurement and modelling of residual stress in wire-feed additively manufactured titanium. <i>Materials Science and Technology</i> , 2018, 34, 2250-2259.	0.8	11
42	The influence of temperature on deformation-induced martensitic transformation in 301 stainless steel. <i>Materials Science and Technology</i> , 2018, 34, 2114-2125.	0.8	8
43	Effect of alloy temper on surface modification of aluminium 2624 by laser shock peening. <i>Surface and Coatings Technology</i> , 2018, 347, 123-135.	2.2	13
44	Prediction of welding residual stresses using machine learning: Comparison between neural networks and neuro-fuzzy systems. <i>Applied Soft Computing Journal</i> , 2018, 70, 131-146.	4.1	74
45	Boundary Effects in the Eigenstrain Method. <i>Experimental Mechanics</i> , 2018, 58, 799-814.	1.1	1
46	On full MAGV lateral dynamics exploitation: Autonomous drift control. , 2018, , .		5
47	Residual stress evaluation in selective-laser-melting additively manufactured titanium (Ti-6Al-4V) and inconel 718 using the contour method and numerical simulation. <i>Additive Manufacturing</i> , 2018, 22, 571-582.	1.7	78
48	Analysis of Residual Stresses in Laser-Shock-Peened and Shot-Peened Marine Steel Welds. <i>Metallurgical and Materials Transactions A: Physical Metallurgy and Materials Science</i> , 2017, 48, 759-770.	1.1	15
49	Effect of temperature and thermal cycling on fatigue crack growth in aluminium reinforced with GLARE bonded crack retarders. <i>International Journal of Fatigue</i> , 2017, 98, 53-61.	2.8	16
50	Prediction of residual stresses in girth welded pipes using an artificial neural network approach. <i>International Journal of Pressure Vessels and Piping</i> , 2017, 150, 89-95.	1.2	25
51	Observations of the stress developed in Si inclusions following plastic flow in the matrix of an $\langle b \rangle$ Al-Si-Mg alloy. <i>Philosophical Magazine</i> , 2017, 97, 1398-1417.	0.7	8
52	Detecting anomalies in time series data via a deep learning algorithm combining wavelets, neural networks and Hilbert transform. <i>Expert Systems With Applications</i> , 2017, 85, 292-304.	4.4	86
53	Determination of plasticity following deformation and welding of austenitic stainless steel. <i>Materials Science & Engineering A: Structural Materials: Properties, Microstructure and Processing</i> , 2017, 701, 203-213.	2.6	4
54	Evolution of stress fields and phase content in corroded zirconium cladding materials. <i>Surface and Coatings Technology</i> , 2017, 324, 140-145.	2.2	10

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55	Effect of Treatment Area on Residual Stress and Fatigue in Laser Peened Aluminum Sheets. Metallurgical and Materials Transactions A: Physical Metallurgy and Materials Science, 2017, 48, 1519-1523.	1.1	2
56	Experimental synthesis and density functional theory investigation of radiation tolerance of $Zr_3(Al_1-xS_x)C_2$ MAX phases. Journal of the American Ceramic Society, 2017, 100, 1377-1387.	1.9	45
57	Efficient truss optimization using the contrast-based fruit fly optimization algorithm. Computers and Structures, 2017, 182, 137-148.	2.4	53
58	Through-Thickness Residual Stress Profiles in Austenitic Stainless Steel Welds: A Combined Experimental and Prediction Study. Metallurgical and Materials Transactions A: Physical Metallurgy and Materials Science, 2017, 48, 6178-6191.	1.1	18
59	Low cycle fatigue life prediction in shot-peened components of different geometries” part I: residual stress relaxation. Fatigue and Fracture of Engineering Materials and Structures, 2017, 40, 761-775.	1.7	19
60	Optimized tire force estimation using extended Kalman filter and fruit fly optimization. , 2017, , .		5
61	Fatigue performance of bonded crack retarders in the presence of cold worked holes and interference-fit fasteners. International Journal of Fatigue, 2017, 105, 111-118.	2.8	12
62	Accurate virtual sensing of vertical tire forces for enhanced handling dynamics. , 2017, , .		4
63	Activation volumes of oxygen self-diffusion in fluorite structured oxides. Materials Research Express, 2016, 3, 105504.	0.8	4
64	The Effect of Hot Deformation Parameters on Microstructure Evolution of the β -Phase in Ti-6Al-4V. Metallurgical and Materials Transactions A: Physical Metallurgy and Materials Science, 2016, 47, 4128-4136.	1.1	22
65	Experimental study of room-temperature indentation viscoplastic “creep” in zirconium. Philosophical Magazine, 2016, 96, 2547-2563.	0.7	4
66	Thermodynamic calculations of oxygen self-diffusion in mixed-oxide nuclear fuels. RSC Advances, 2016, 6, 74018-74027.	1.7	14
67	In situ observation of strain and phase transformation in plastically deformed 301 austenitic stainless steel. Materials and Design, 2016, 112, 107-116.	3.3	58
68	Oxygen self-diffusion in ThO_2 under pressure: connecting point defect parameters with bulk properties. Materials Research Express, 2016, 3, 065501.	0.8	3
69	Investigation of oxygen self-diffusion in PuO_2 by combining molecular dynamics with thermodynamic calculations. RSC Advances, 2016, 6, 103641-103649.	1.7	9
70	Residual stress characterization of single and triple-pass autogenously welded stainless steel pipes. International Journal of Pressure Vessels and Piping, 2016, 144, 1-10.	1.2	0
71	Residual stresses in aerospace structures reinforced with bonded crack retarders. Journal of Strain Analysis for Engineering Design, 2016, 51, 170-175.	1.0	1
72	Development and Application of the Contour Method to Determine the Residual Stresses in Thin Laser-Peened Aluminium Alloy Plates. Experimental Mechanics, 2016, 56, 323-330.	1.1	25

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73	Minimization and Mitigation of Wire EDM Cutting Errors in the Application of the Contour Method of Residual Stress Measurement. Metallurgical and Materials Transactions A: Physical Metallurgy and Materials Science, 2016, 47, 301-313.	1.1	20
74	Atomic force microscopy (AFM) for materials characterization. , 2016, , 1-16.		9
75	High Strain-Rate Material Model Validation for Laser Peening Simulation. Journal of Engineering, 2015, 2015, 150-157.	0.6	8
76	The effect of laser shock peening on hardness and microstructure in a welded marine steel. Journal of Engineering, 2015, 2015, 115-125.	0.6	4
77	Determination of Multiple Near-Surface Residual Stress Components in Laser Peened Aluminum Alloy via the Contour Method. Metallurgical and Materials Transactions A: Physical Metallurgy and Materials Science, 2015, 46, 4268-4275.	1.1	12
78	Effect of Ultrasonic Peening and Accelerated Corrosion Exposure on the Residual Stress Distribution in Welded Marine Steel. Metallurgical and Materials Transactions A: Physical Metallurgy and Materials Science, 2015, 46, 1214-1226.	1.1	16
79	Describing oxygen self-diffusion in PuO ₂ by connecting point defect parameters with bulk properties. Journal of Materials Science: Materials in Electronics, 2015, 26, 3287-3290.	1.1	16
80	The effect of compressive fatigue loads on fatigue strength of non-load carrying specimens subjected to ultrasonic impact treatment. Welding in the World, Le Soudage Dans Le Monde, 2015, 59, 713-721.	1.3	11
81	Application of the eigenstrain approach to predict the residual stress distribution in laser shock peened AA7050-T7451 samples. Surface and Coatings Technology, 2015, 273, 39-49.	2.2	28
82	Effect of impact damage on fatigue performance of structures reinforced with GLARE bonded crack retarders. International Journal of Fatigue, 2015, 80, 231-237.	2.8	11
83	Determination of normal and shear residual stresses from fracture surface mismatch. Materials and Design, 2015, 83, 176-184.	3.3	6
84	Fatigue performance of friction stir welded marine grade steel. International Journal of Fatigue, 2015, 81, 162-170.	2.8	18
85	Germanium diffusion in aluminium: connection between point defect parameters with bulk properties. Journal of Materials Science: Materials in Electronics, 2015, 26, 8421-8424.	1.1	7
86	Modeling oxygen self-diffusion in UO ₂ under pressure. Solid State Ionics, 2015, 282, 26-30.	1.3	55
87	Surface preparation for residual stress measurement of an accelerated corrosion tested welded marine steel. Corrosion Science, 2015, 91, 357-360.	3.0	3
88	Residual Stress Measurements on a Metal Matrix Composite Using the Contour Method with Brittle Fracture. Advanced Materials Research, 2014, 996, 349-354.	0.3	7
89	Insight on the inconsistencies of Barkhausen signal measurements for radiation damage on nuclear reactor steel. , 2014, , .		0
90	An in situ powder neutron diffraction study of nano-precipitate formation during processing of oxide-dispersion-strengthened ferritic steels. Journal of Alloys and Compounds, 2014, 582, 769-773.	2.8	22

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91	Incorporation of Y2O3 Particles into 410L Stainless Steel by a Powder Metallurgy Route. Journal of Materials Engineering and Performance, 2014, 23, 2120-2130.	1.2	7
92	Evolution of residual stress during fatigue crack growth in an aluminium specimen with a bonded crack retarder. Composite Structures, 2014, 117, 12-16.	3.1	7
93	Effect of Thermal Residual Stresses on Bonded Structures Containing Cold Expanded and Bolted Holes. Advanced Materials Research, 2014, 996, 682-687.	0.3	3
94	Improvement of the Contour Method for Measurement of Near-Surface Residual Stresses from Laser Peening. Experimental Mechanics, 2013, 53, 1705-1718.	1.1	38
95	Fatigue and fracture of a 316 stainless steel metal matrix composite reinforced with 25% titanium diboride. International Journal of Fatigue, 2013, 48, 39-47.	2.8	40
96	Through Thickness Residual Stress Measurements by Neutron Diffraction and Hole Drilling in a Single Laser-Peened Spot on a Thin Aluminium Plate. Materials Science Forum, 2013, 772, 167-172.	0.3	2
97	Neutron diffraction residual stress measurements on girth-welded 304 stainless steel pipes with weld metal deposited up to half and full pipe wall thickness. International Journal of Pressure Vessels and Piping, 2013, 101, 1-11.	1.2	20
98	Effect of frequency on high-temperature fatigue crack growth in a silicon carbide reinforced silicon nitride composite. International Journal of Fatigue, 2013, 47, 319-329.	2.8	7
99	Modelling of an imaging beamline at the ISIS pulsed neutron source. Journal of Instrumentation, 2013, 8, P10001-P10001.	0.5	28
100	Application of the Eigenstrain Theory to Predict Residual Stress around Curved Edges after Laser Shock Peening. Materials Science Forum, 2013, 768-769, 185-192.	0.3	1
101	Neutron Diffraction Study of Elastoplastic Behaviour of Al/SiCp Metal Matrix Composite during Tensile Loading and Unloading. Materials Science Forum, 2013, 772, 117-121.	0.3	1
102	Effect of grain size on domain structures, dielectric and thermal depoling of Nd-substituted bismuth titanate ceramics. Applied Physics Letters, 2013, 103, .	1.5	36
103	Modern and Historical Engineering Components Investigated by Neutron Diffraction on ENGIN-X. Journal of Solid Mechanics and Materials Engineering, 2012, 6, 408-418.	0.5	4
104	Anelasticity in austenitic stainless steel. Acta Materialia, 2012, 60, 6851-6861.	3.8	25
105	Effect of laser shock peening on residual stress and fatigue life of clad 2024 aluminium sheet containing scribe defects. Materials Science & Engineering A: Structural Materials: Properties, Microstructure and Processing, 2012, 548, 142-151.	2.6	110
106	A comparison of neutron diffraction and hole-drilling residual strain measurements in thermally sprayed coatings. Surface and Coatings Technology, 2012, 206, 4180-4185.	2.2	23
107	Residual Strain and Fracture Response of Al2O3 Coatings Deposited via APS and HVOF Techniques. Journal of Thermal Spray Technology, 2012, 21, 23-40.	1.6	18
108	Effect of residual stress on the nanoindentation response of aerospace aluminium alloys. Computational Materials Science, 2011, 50, 2967-2976.	1.4	45

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109	Application of synchrotron X-ray diffraction and nanoindentation for the determination of residual stress fields around scratches. <i>Acta Materialia</i> , 2011, 59, 7508-7520.	3.8	37
110	Effect of Temperature on the Residual Stresses in an Integral Structure with a Crackâ€Retarding Patch. <i>Strain</i> , 2011, 47, 293-298.	1.4	4
111	A new bridge technique for neutron tomography and diffraction measurements. <i>Nuclear Instruments and Methods in Physics Research, Section A: Accelerators, Spectrometers, Detectors and Associated Equipment</i> , 2011, 651, 229-235.	0.7	15
112	Neutron diffraction residual strain measurements in nanostructured hydroxyapatite coatings for orthopaedic implants. <i>Journal of the Mechanical Behavior of Biomedical Materials</i> , 2011, 4, 2043-2054.	1.5	21
113	Measurement of the evolution of internal strain and load partitioning in magnesium hybrid composites under compression load using in-situ synchrotron X-ray diffraction analysis. <i>Composites Science and Technology</i> , 2011, 71, 167-176.	3.8	15
114	Synchrotron X-ray diffraction measurements of internal stresses during loading of steel-based metal matrix composites reinforced with TiB ₂ particles. <i>Acta Materialia</i> , 2011, 59, 3373-3383.	3.8	37
115	Problems in using a comb sample as a stress-free reference for the determination of welding residual stress by diffraction. <i>Materials Science & Engineering A: Structural Materials: Properties, Microstructure and Processing</i> , 2011, 528, 1226-1232.	2.6	28
116	Internal Stress Generation in Austenitic Stainless Steels During Creep Deformation. , 2011, , .		1
117	Effect of Prior Cold Work on the Mechanical Properties of Weldments. <i>Conference Proceedings of the Society for Experimental Mechanics</i> , 2011, , 817-826.	0.3	4
118	Life Extension Techniques for Aircraft Structures â€“ Extending Durability and Promoting Damage Tolerance through Bonded Crack Retarders. , 2011, , 753-770.		6
119	OS04F125 Modern and Historical Engineering Concerns Investigated by Neutron Diffraction. <i>The Abstracts of ATEM International Conference on Advanced Technology in Experimental Mechanics Asian Conference on Experimental Mechanics</i> , 2011, 2011.10, _OS04F125--_OS04F125-.	0.0	0
120	Automation of a neutron diffractometer for analysis of residual stress inside complex engineering components. <i>Applied Physics A: Materials Science and Processing</i> , 2010, 99, 601-606.	1.1	4
121	The effect of weld residual stresses and their re-distribution with crack growth during fatigue under constant amplitude loading. <i>International Journal of Fatigue</i> , 2010, 32, 735-743.	2.8	61
122	Impact wear testing of diamond-like carbon films for engine valve-tappet surfaces. <i>Wear</i> , 2010, 268, 1303-1308.	1.5	46
123	The evolution of crack-tip stresses during a fatigue overload event. <i>Acta Materialia</i> , 2010, 58, 4039-4052.	3.8	81
124	A combined experimental and finite element approach for determining mechanical properties of aluminium alloys by nanoindentation. <i>Computational Materials Science</i> , 2010, 49, 751-760.	1.4	54
125	Evolution of residual stresses with fatigue crack growth in integral structures with crack retarders. <i>Materials Science & Engineering A: Structural Materials: Properties, Microstructure and Processing</i> , 2009, 523, 152-159.	2.6	12
126	Application of the work of indentation approach for the characterization of aluminium 2024-T351 and Al cladding by nanoindentation. <i>Journal of Materials Science</i> , 2009, 44, 1006-1015.	1.7	23

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127	Effect of shot peening on the fatigue behaviour of cast magnesium A8. <i>Materials Science & Engineering A: Structural Materials: Properties, Microstructure and Processing</i> , 2009, 507, 50-57.	2.6	37
128	Effect of tool profile and fatigue loading on the local hardness around scratches in clad and unclad aluminium alloy 2024. <i>Materials Science & Engineering A: Structural Materials: Properties, Microstructure and Processing</i> , 2009, 527, 297-304.	2.6	14
129	Weld residual stress effects on fatigue crack growth behaviour of aluminium alloy 2024-T351. <i>International Journal of Fatigue</i> , 2009, 31, 1081-1088.	2.8	71
130	Analysis of residual stress in metal-inert-gas-welded Al-2024 using neutron and synchrotron X-ray diffraction. <i>Materials Science & Engineering A: Structural Materials: Properties, Microstructure and Processing</i> , 2008, 491, 248-257.	2.6	21
131	Evolution of Residual Stresses with Fatigue Crack Growth in a Variable Polarity Plasma Arc-Welded Aluminum Alloy Compact Tension Specimen. <i>Metallurgical and Materials Transactions A: Physical Metallurgy and Materials Science</i> , 2008, 39, 2370-2377.	1.1	10
132	Residual stresses in structures reinforced with adhesively bonded straps designed to retard fatigue crack growth. <i>Composite Structures</i> , 2008, 86, 344-355.	3.1	28
133	Determination of the profile of the complete residual stress tensor in a VPPA weld using the multi-axial contour method. <i>Acta Materialia</i> , 2008, 56, 4417-4428.	3.8	71
134	Evolution of residual stresses with fatigue loading and subsequent crack growth in a welded aluminium alloy middle tension specimen. <i>Engineering Fracture Mechanics</i> , 2008, 75, 3881-3894.	2.0	24
135	Distortion and residual stresses in structures reinforced with titanium straps for improved damage tolerance. <i>Materials Science & Engineering A: Structural Materials: Properties, Microstructure and Processing</i> , 2008, 486, 104-111.	2.6	8
136	Study of Residual Stress Distribution in a Stainless Steel Bead-on-Plate Simulation Benchmark Sample. <i>Materials Science Forum</i> , 2008, 571-572, 367-373.	0.3	1
137	Full Field Measurement of Plastic Flow Properties in a Multi-Pass Austenitic Stainless Steel Weld Specimen. , 2008, , .		0
138	Effect of substrate surface roughness on mechanical properties of diamond-like carbon coatings. <i>Tribology - Materials, Surfaces and Interfaces</i> , 2007, 1, 211-223.	0.6	2
139	Non-destructive determination of the 3D residual stress in a AA7050 upper wing skin-stringer panel using neutron diffraction. <i>Journal of Neutron Research</i> , 2007, 15, 293-301.	0.4	1
140	Evaluation of the tribological properties of DLC for engine applications. <i>Journal Physics D: Applied Physics</i> , 2007, 40, 5427-5437.	1.3	45
141	Stress intensity factors for through-thickness cracks in a wide plate: Derivation and application to arbitrary weld residual stress fields. <i>Engineering Fracture Mechanics</i> , 2007, 74, 2030-2054.	2.0	22
142	Forensic engineering: applying materials and mechanics principles to the investigation of product failures. <i>Forensic Science, Medicine, and Pathology</i> , 2007, 3, 81-92.	0.6	1
143	Measurement of the residual stress field in MIG-welded Al-2024 and Al-7150 aluminium alloy compact tension specimens. <i>Materials Science & Engineering A: Structural Materials: Properties, Microstructure and Processing</i> , 2006, 437, 46-53.	2.6	22
144	In situ analysis of cracks in structural materials using synchrotron X-ray tomography and diffraction. <i>Nuclear Instruments & Methods in Physics Research B</i> , 2006, 246, 217-225.	0.6	52

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145	Use of neutron and synchrotron X-ray diffraction for evaluation of residual stresses in a 2024-T351 aluminum alloy variable-polarity plasma-arc weld. Metallurgical and Materials Transactions A: Physical Metallurgy and Materials Science, 2006, 37, 411-420.	1.1	36
146	Effect of cyclic plasticity on internal stresses in a metal matrix composite. Metallurgical and Materials Transactions A: Physical Metallurgy and Materials Science, 2006, 37, 1977-1986.	1.1	15
147	A Novel Closed-Form Calculation of the Stress Intensity Factor for a Crack in a Residual Stress Field. Materials Science Forum, 2006, 524-525, 83-88.	0.3	0
148	The Effect of Plastic Anisotropy on the Residual Stress within a 316L Stainless Steel Bead-on-Plate Specimen. Materials Science Forum, 2006, 524-525, 679-684.	0.3	3
149	Internal Stress Development during Fatigue Cycling of High-Strength Al/SiC Metal Matrix Composites. Materials Science Forum, 2006, 524-525, 769-774.	0.3	2
150	Residual Stresses Induced by Cross-Rolling. Materials Science Forum, 2006, 524-525, 63-70.	0.3	1
151	Residual Stress Measurements in Single and Multi-Pass Groove Weld Specimens Using Neutron Diffraction and the Contour Method. Materials Science Forum, 2006, 524-525, 671-676.	0.3	26
152	Direct measurement of the residual stresses near a "boat-shaped" repair in a 20mm thick stainless steel tube butt weld. International Journal of Pressure Vessels and Piping, 2005, 82, 288-298.	1.2	26
153	Analysis of the Residual Stress around a Cold-expanded Fastener Hole in a Finite Plate. Strain, 2005, 41, 59-70.	1.4	35
154	Neutron diffraction measurements of residual stress in a powder metallurgy component. Scripta Materialia, 2005, 52, 917-921.	2.6	5
155	Comparative Neutron and Synchrotron X-Ray Diffraction Studies to Determine Residual Stress on an As-Welded AA2024 Plate. Materials Science Forum, 2005, 490-491, 223-228.	0.3	11
156	Residual Stress Mapping in Welds Using the Contour Method. Materials Science Forum, 2005, 490-491, 294-299.	0.3	20
157	Residual Stress Measurement and Fatigue Crack Growth Prediction after Cold Expansion of Cracked Fastener Holes. Journal of Aerospace Engineering, 2004, 17, 91-97.	0.8	17
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