David A Tanner

List of Publications by Year
in descending order

74 papers	1,777 citations	257101 24 h-index	288905 40 g-index
76 all docs	76 docs citations	76 times ranked	1894 citing authors

#	Article	IF	Citations
1	A Single Polymer Nanowire Photodetector. Advanced Materials, 2006, 18, 2379-2383.	11.1	209
2	The antibacterial effects of zinc ion migration from zinc-based glass polyalkenoate cements. Journal of Materials Science: Materials in Medicine, 2006, 17, 489-494.	1.7	108
3	Quench sensitivity and tensile property inhomogeneity in 7010 forgings. Journal of Materials Processing Technology, 2001, 119, 261-267.	3.1	93
4	The influence of quench sensitivity on residual stresses in the aluminium alloys 7010 and 7075. Materials Characterization, 2012, 65, 73-85.	1.9	86
5	Reduced Surfactant Uptake in Three Dimensional Assemblies of VO_x Nanotubes Improves Reversible Li⁺ Intercalation and Charge Capacity. Advanced Functional Materials, 2009, 19, 1736-1745.	7.8	80
6	Investigation of through thickness residual stress distribution in equal channel angular rolled Al 5083 alloy by layer removal technique and X-ray diffraction. Materials & Design, 2012, 40, 516-520.	5.1	62
7	Influence of quenching and aging on residual stress in Alâ€“Znâ€“Mgâ€“Cu alloy 7449. Materials Science and Technology, 2012, 28, 420-430.	0.8	60
8	In-situ SEM study of transverse cracking and delamination in laminated composite materials. Composites Science and Technology, 2014, 105, 118-126.	3.8	58
9	Residual stress prediction and determination in 7010 aluminum alloy forgings. Experimental Mechanics, 2000, 40, 75-82.	1.1	50
10	50th Anniversary Article: The Origin and Management of Residual Stress in Heatâ€treatable Aluminium Alloys. Strain, 2014, 50, 185-207.	1.4	50
11	Modelling stress reduction techniques of cold compression and stretching in wrought aluminium alloy products. Finite Elements in Analysis and Design, 2003, 39, 369-386.	1.7	46
12	Measurement and Prediction of Machining Induced Redistribution of Residual Stress in the Aluminium Alloy 7449. Experimental Mechanics, 2011, 51, 981-993.	1.1	45
13	Enhanced Electrochemiluminescence and Charge Transport Through Films of Metallopolymer-Gold Nanoparticle Composites. Langmuir, 2010, 26, 2130-2135.	1.6	43
14	An experimental investigation into multi-scale damage progression in laminated composites in bending. Composite Structures, 2016, 149, 33-40.	3.1	41
15	Characterisation of ferritic stainless steel by Barkhausen techniques. NDT and E International, 2004, 37, 489-496.	1.7	40
16	Quench factor analysis of aluminium alloys using the Jominy end quench technique. Materials Science and Technology, 2005, 21, 687-692.	0.8	40
17	Effect of precipitation during quenching on the mechanical properties of the aluminium alloy 7010 in the W-temper. Journal of Materials Processing Technology, 2004, 153-154, 998-1004.	3.1	39
18	Magneto-acoustic emission for the characterisation of ferritic stainless steel microstructural state. Journal of Magnetism and Magnetic Materials, 2004, 271, 381-389.	1.0	38

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19	Emission Colour Tuning in Semiconducting Polymer Nanotubes by Energy Transfer to Organoâ€• Lanthanide Dopants. Advanced Materials, 2007, 19, 2474-2479.	11.1	36
20	Synthesis of Pentacene Nanotubes by Melt-Assisted Template Wetting. Chemistry of Materials, 2007, 19, 338-340.	3.2	35
21	Residual stress development and relief in high strength aluminium alloys using standard and retrogression thermal treatments. Materials Science and Technology, 2003, 19, 512-518.	0.8	34
22	Quantitative TEM analysis of a hexagonal mesoporous silicate structure. Physical Chemistry Chemical Physics, 2006, 8, 3467.	1.3	31
23	Reducing residual stress in 2014 aluminium alloy die forgings. Materials & Design, 2008, 29, 1489-1496.	5.1	29
24	A virtual experimental approach to microscale composites testing. Composite Structures, 2017, 171, 1-9.	3.1	29
25	Hydrogenation of sunflower oil over Ptâ€“Ni bimetallic supported catalysts: Preparation, characterization and catalytic activity. Applied Catalysis A: General, 2014, 474, 78-86.	2.2	23
26	Additive manufacturing of aluminium alloy 2024 by laser powder bed fusion: microstructural evolution, defects and mechanical properties. Rapid Prototyping Journal, 2021, 27, 1388-1397.	1.6	22
27	Room temperature synthesis of platinum nanoparticles in water-in-oil microemulsion. Colloids and Surfaces A: Physicochemical and Engineering Aspects, 2009, 337, 205-207.	2.3	21
28	Residual stress magnitudes and related properties in quenched aluminium alloys. Materials Science and Technology, 2006, 22, 77-85.	0.8	20
29	Microstructural characterisation of metallurgical grade porous silicon nanosponge particles. Journal of Materials Science, 2012, 47, 2396-2404.	1.7	20
30	TEM analysis of apatite surface layers observed on zinc based glass polyalkenoate cements. Journal of Materials Science, 2008, 43, 1170-1173.	1.7	17
31	Doping controlled roughness and defined mesoporosity in chemically etched silicon nanowires with tunable conductivity. Journal of Applied Physics, 2013, 114, 034309.	1.1	17
32	Study of Mixed Flowing Gas Exposure of Copper. Journal of the Electrochemical Society, 2008, 155, C147.	1.3	16
33	Ultrasonically set glass polyalkenoate cements for orthodontic applications. Journal of Materials Science: Materials in Medicine, 2006, 17, 313-318.	1.7	15
34	Polyfluorene nanowires with pronounced axial texturing prepared by melt-assisted template wetting. Materials Science and Engineering B: Solid-State Materials for Advanced Technology, 2008, 147, 298-302.	1.7	15
35	The Magnitude of Heat Treatment Induced Residual Stresses and the Thermal Stress Relief of Aluminium Alloys. Materials Science Forum, 2002, 404-407, 355-360.	0.3	14
36	Oneâ€Step Synthesis of Stoichiometrically Defined Metal Oxide Nanoparticles at Room Temperature. Chemistry - A European Journal, 2009, 15, 440-448.	1.7	14

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37	Reducing Residual Stress in 7050 Aluminum Alloy Die Forgings by Heat Treatment. Journal of Engineering Materials and Technology, Transactions of the ASME, 2008, 130, .	0.8	13
38	Mesopore constrictions derived from the substitutionally co-packed SBA-15. Microporous and Mesoporous Materials, 2010, 129, 179-188.	2.2	12
39	Experimental study of process parametersâ€™ effect on surface residual stress magnitudes in equal channel angular rolled aluminium alloys. Proceedings of the Institution of Mechanical Engineers, Part B: Journal of Engineering Manufacture, 2014, 228, 1592-1598.	1.5	12
40	A Review: The Prospect of Inhaled Insulin Therapy via Vibrating Mesh Technology to Treat Diabetes. International Journal of Environmental Research and Public Health, 2020, 17, 5795.	1.2	12
41	Compositional characterisation of metallurgical grade silicon and porous silicon nanosponge particles. RSC Advances, 2013, 3, 19393.	1.7	11
42	Cold Compression Residual Stress Reduction in Aluminium Alloy 7010. Materials Science Forum, 2000, 347-349, 235-240.	0.3	10
43	Hydroxyapatite formation on metallurgical grade nanoporous silicon particles. Journal of Materials Science, 2010, 45, 6562-6568.	1.7	9
44	Retrogression, reaging and residual stresses in 7010 forgings. Fatigue and Fracture of Engineering Materials and Structures, 1999, 22, 51-58.	1.7	8
45	The Influence of Aluminium Alloy Quench Sensitivity on the Magnitude of Heat Treatment Induced Residual Stress. Materials Science Forum, 2006, 524-525, 305-310.	0.3	8
46	Testing method for measuring corrosion resistance of surface mount chip resistors. Microelectronics Reliability, 2012, 52, 1420-1427.	0.9	8
47	The effect of single crystal and welded substrates on the development of braze microstructures. Journal of Alloys and Compounds, 2017, 690, 856-863.	2.8	7
48	Diffusion braze homogenisation and contraction during re-repair heat treatments of a single crystal nickel-based superalloy. Journal of Alloys and Compounds, 2021, 857, 157560.	2.8	7
49	Determination of residual stress within complex-shaped coarse-grained cobaltâ€“chromium biomedical castings. Materials Science and Technology, 2016, 32, 1411-1426.	0.8	6
50	Facile Synthesis of Oxygen Nanogenerators. Nanoscience and Nanotechnology Letters, 2009, 1, 47-51.	0.4	5
51	Time transient validation of residual stress prediction models for aluminium alloy quenching. Materials Science and Technology, 2016, 32, 1533-1543.	0.8	5
52	Refining early stage interventional composite catheter design. Procedia Manufacturing, 2019, 38, 282-290.	1.9	5
53	Synthesis and Structural Characterization of Catalyst-Free Carbon Micro-Cones. Journal of Nanoscience and Nanotechnology, 2009, 9, 4492-4495.	0.9	4
54	Characterization of the Microstructure of GaP Films Grown on {111} Si by Liquid Phase Epitaxy. ACS Applied Materials & Interfaces, 2014, 6, 18626-18634.	4.0	4

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55	Application of multiple residual stress determination methods to coarse-grained biomedical implant castings. Materials Science and Technology, 2017, 33, 1231-1251.	0.8	4
56	Developing CDIO Practitioners: A Systematic Approach to Standard 10. Procedia Manufacturing, 2019, 38, 680-685.	1.9	4
57	An analytical method for powder flow characterisation in direct energy deposition. Additive Manufacturing, 2021, 42, 101991.	1.7	4
58	Precipitation in vanadium bearing ultralow carbon strip steels. Materials Science and Technology, 2006, 22, 525-536.	0.8	3
59	Structure of corrosion film formed on copper exposed to controlled corrosive environment. Materials and Corrosion - Werkstoffe Und Korrosion, 2009, 60, 259-261.	0.8	3
60	Oxidation induced void formation in TEM specimens of Alâ€“Cuâ€“Li alloy. Materials Science and Technology, 2011, 27, 783-788.	0.8	3
61	Enhancing permeability and porosity of ceramic shells for investment casting through pre-wetting. Journal of the European Ceramic Society, 2021, 41, 411-422.	2.8	3
62	A bioactive metallurgical grade porous siliconâ€“polytetrafluoroethylene sheet for guided bone regeneration applications. Bio-Medical Materials and Engineering, 2014, 24, 1563-1574.	0.4	2
63	Development of high power laser ablation process for polycrystalline diamond polishing: Part 1. Fundamental understanding of PCD ultra-short pulsed laser ablation. , 2018, , .		2
64	Development of high-power laser ablation process for polycrystalline diamond polishing, Part 2: upscaling of PCD ultra-short pulsed laser ablation to high power. , 2020, , .		2
65	Cold Compression of 7075 and Factors Influencing Stress Relief. Materials Performance and Characterization, 2018, 7, 898-911.	0.2	2
66	Kirkendall void formation during room-temperature air-oxidation of thin aluminium and aluminium â€“ lithium alloy films. Materials at High Temperatures, 2012, 29, 235-242.	0.5	1
67	Development of high-power laser ablation process for polycrystalline diamond polishing: part 3. processing with an ultra-short-pulsed laser up to 1kW. , 2021, , .		1
68	Residual stress prediction in shot blasted cobaltâ€“chromium biomedical cast components. Materials Science and Technology, 2022, 38, 853-865.	0.8	1
69	Focused ion beam assisted analysis of the oxidation of a NiAl coating on pure Ni. Materials at High Temperatures, 2005, 22, 421-426.	0.5	0
70	Defocus image contrast in hexagonally-ordered mesoporous material. Physical Chemistry Chemical Physics, 2011, 13, 1189-1200.	1.3	0
71	An Analysis of Germaniumâ€“Silicon/Silicon Strained Superlattice Structure Using Convergent Beam Electron Diffraction. Strain, 2016, 52, 162-171.	1.4	0
72	Focused ion beam assisted analysis of the oxidation of a NiAl coating on pure Ni. Materials at High Temperatures, 2005, 22, 421-426.	0.5	0

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73	An Investigation into the Reverse Transformation Mechanisms in the Heat Treatment of Austenitic Stainless Steel. Materials Performance and Characterization, 2018, 7, 643-654.	0.2	0
74	Substrate influence in laser blown powder of nickel superalloys. , 2020, , .		0