

M Amir Siddiq

List of Publications by Year in descending order

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33
papers

1,087
citations

471509

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414414

32
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35
all docs

35
docs citations

35
times ranked

794
citing authors

#	ARTICLE	IF	CITATIONS
1	A multiscale constitutive model for metal forming of dual phase titanium alloys by incorporating inherent deformation and failure mechanisms. Modelling and Simulation in Materials Science and Engineering, 2022, 30, 025008.	2.0	2
2	Data-driven finite element method: Theory and applications. Proceedings of the Institution of Mechanical Engineers, Part C: Journal of Mechanical Engineering Science, 2020, , 095440622093880.	2.1	2
3	Crystal plasticity based study to understand the interaction of hydrogen, defects and loading in austenitic stainless-steel single crystals. International Journal of Hydrogen Energy, 2020, 45, 32632-32647.	7.1	6
4	Deformation and failure in nanomaterials via a data driven modelling approach. Theoretical and Applied Mechanics Letters, 2020, 10, 249-252.	2.8	3
5	Modelling Hydrogen Induced Stress Corrosion Cracking in Austenitic Stainless Steel. Journal of Mechanics, 2020, 36, 213-222.	1.4	8
6	A CPFEM based study to understand the void growth in high strength dual-phase titanium alloy (Ti-10V-2Fe-3Al). International Journal of Plasticity, 2019, 122, 188-211.	8.8	68
7	Representative volume element (RVE) based crystal plasticity study of void growth on phase boundary in titanium alloys. Computational Materials Science, 2019, 161, 346-350.	3.0	26
8	A porous crystal plasticity constitutive model for ductile deformation and failure in porous single crystals. International Journal of Damage Mechanics, 2019, 28, 233-248.	4.2	18
9	Design and validation of a fixture for positive incremental sheet forming. Proceedings of the Institution of Mechanical Engineers, Part B: Journal of Engineering Manufacture, 2018, 232, 629-643.	2.4	13
10	Void growth in high strength aluminium alloy single crystals: a CPFEM based study. Modelling and Simulation in Materials Science and Engineering, 2017, 25, 035010.	2.0	29
11	Three-dimensional in situ observations of compressive damage mechanisms in syntactic foam using X-ray microcomputed tomography. Journal of Materials Science, 2017, 52, 10186-10197.	3.7	12
12	Smooth particle hydrodynamics study of surface defect machining for diamond turning of silicon. International Journal of Advanced Manufacturing Technology, 2017, 88, 2461-2476.	3.0	33
13	Modelling of stress-corrosion cracking by using peridynamics. International Journal of Hydrogen Energy, 2016, 41, 6593-6609.	7.1	75
14	Peridynamic modeling of composite laminates under explosive loading. Composite Structures, 2016, 144, 14-23.	5.8	106
15	Numerical simulation of triaxial tests to determine the Drucker-Prager parameters of silicon. , 2015, , .		1
16	A multiscale phenomenological constitutive model for strain rate dependent tensile ductility in nanocrystalline metals. Materials Letters, 2015, 142, 60-63.	2.6	3
17	Complex Incremental Sheet Forming Using back Die Support on Aluminium 2024, 5083 and 7075 Alloys. Procedia Engineering, 2014, 81, 2298-2304.	1.2	18
18	Improvement in Ductility in Commercially Pure Titanium Alloys by Stress Relaxation at Room Temperature. Key Engineering Materials, 2014, 611-612, 92-98.	0.4	13

#	ARTICLE	IF	CITATIONS
19	A phenomenological variational multiscale constitutive model for intergranular failure in nanocrystalline materials. <i>Materials Letters</i> , 2013, 107, 56-59.	2.6	5
20	A multiscale constitutive model for intergranular stress corrosion cracking in type 304 austenitic stainless steel. <i>Journal of Physics: Conference Series</i> , 2013, 451, 012022.	0.4	2
21	A phenomenological two-phase constitutive model for porous shape memory alloys. <i>Computational Materials Science</i> , 2012, 60, 44-52.	3.0	25
22	A thermomechanical crystal plasticity constitutive model for ultrasonic consolidation. <i>Computational Materials Science</i> , 2012, 51, 241-251.	3.0	64
23	Ultrasonic-assisted manufacturing processes: Variational model and numerical simulations. <i>Ultrasonics</i> , 2012, 52, 521-529.	3.9	106
24	A variational void coalescence model for ductile metals. <i>Computational Mechanics</i> , 2012, 49, 185-195.	4.0	17
25	Finite element analysis of ultrasonic insertion of SiC fibre in aluminium alloy 6061. <i>International Journal of Materials Engineering Innovation</i> , 2011, 2, 182.	0.5	4
26	Acoustic softening in metals during ultrasonic assisted deformation via CP-FEM. <i>Materials Letters</i> , 2011, 65, 356-359.	2.6	111
27	Fibre embedding in aluminium alloy 3003 using ultrasonic consolidation process—thermo-mechanical analyses. <i>International Journal of Advanced Manufacturing Technology</i> , 2011, 54, 997-1009.	3.0	17
28	Theoretical and FE Analysis of Ultrasonic Welding of Aluminum Alloy 3003. <i>Journal of Manufacturing Science and Engineering, Transactions of the ASME</i> , 2009, 131, .	2.2	43
29	Fiber push-out study of a copper matrix composite with an engineered interface: Experiments and cohesive element simulation. <i>International Journal of Solids and Structures</i> , 2009, 46, 4277-4286.	2.7	33
30	Thermomechanical analyses of ultrasonic welding process using thermal and acoustic softening effects. <i>Mechanics of Materials</i> , 2008, 40, 982-1000.	3.2	146
31	Niobium/alumina bicrystal interface fracture: A theoretical interlink between local adhesion capacity and macroscopic fracture energies. <i>Engineering Fracture Mechanics</i> , 2008, 75, 2320-2332.	4.3	15
32	Fracture of bicrystal metal/ceramic interfaces: A study via the mechanism-based strain gradient crystal plasticity theory. <i>International Journal of Plasticity</i> , 2007, 23, 665-689.	8.8	47
33	Interface fracture analyses of a bicrystal niobium/alumina specimen using a cohesive modelling approach. <i>Modelling and Simulation in Materials Science and Engineering</i> , 2006, 14, 1015-1030.	2.0	14