

# Vitoon Uthaisangasuk

## List of Publications by Year in descending order

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68  
papers

2,057  
citations

257450

24  
h-index

254184

43  
g-index

68  
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68  
docs citations

68  
times ranked

1312  
citing authors

#	ARTICLE	IF	CITATIONS
1	Microstructure based prediction of strain hardening behavior of dual phase steels. <i>Materials &amp; Design</i> , 2012, 41, 370-379.	5.1	189
2	Modelling of damage and failure in multiphase high strength DP and TRIP steels. <i>Engineering Fracture Mechanics</i> , 2011, 78, 469-486.	4.3	152
3	Experimental and theoretical formability analysis using strain and stress based forming limit diagram for advanced high strength steels. <i>Materials &amp; Design</i> , 2013, 51, 756-766.	5.1	147
4	A micromechanical damage simulation of dual phase steels using XFEM. <i>Computational Materials Science</i> , 2012, 54, 271-279.	3.0	125
5	A Numerical and Experimental Investigation into Hot Stamping of Boron Alloyed Heat Treated Steels. <i>Steel Research International</i> , 2008, 79, 77-84.	1.8	85
6	Micromechanical modelling of damage behaviour of multiphase steels. <i>Computational Materials Science</i> , 2008, 43, 27-35.	3.0	82
7	Experimental and numerical failure criterion for formability prediction in sheet metal forming. <i>Computational Materials Science</i> , 2008, 43, 43-50.	3.0	79
8	Effect of hot working on microstructure evolution of as-cast Nickel Aluminum Bronze alloy. <i>Materials &amp; Design</i> , 2014, 60, 233-243.	5.1	76
9	Stretch-flangeability characterisation of multiphase steel using a microstructure based failure modelling. <i>Computational Materials Science</i> , 2009, 45, 617-623.	3.0	71
10	Springback prediction in sheet metal forming of high strength steels. <i>Materials &amp; Design</i> , 2013, 50, 253-266.	5.1	71
11	Characterisation of formability behaviour of multiphase steels by micromechanical modelling. <i>International Journal of Fracture</i> , 2009, 157, 55-69.	2.2	62
12	Experimental and numerical investigation of springback effect for advanced high strength dual phase steel. <i>Materials &amp; Design</i> , 2012, 39, 318-328.	5.1	62
13	A study of local deformation and damage of dual phase steel. <i>Materials &amp; Design</i> , 2014, 64, 729-742.	5.1	60
14	Modeling of flow behavior of Ti-6Al-4V alloy at elevated temperatures. <i>Materials Science &amp; Engineering A: Structural Materials: Properties, Microstructure and Processing</i> , 2014, 599, 212-222.	5.6	56
15	Micromechanics-based modelling of properties and failure of multiphase steels. <i>Computational Materials Science</i> , 2007, 39, 17-22.	3.0	54
16	A review of recent progress in mechanical and corrosion properties of dual phase steels. <i>Archives of Civil and Mechanical Engineering</i> , 2020, 20, 1.	3.8	44
17	A study of microcrack formation in multiphase steel using representative volume element and damage mechanics. <i>Computational Materials Science</i> , 2011, 50, 1225-1232.	3.0	43
18	Investigation of Hot Deformation Behavior of Duplex Stainless Steel Grade 2507. <i>Metallurgical and Materials Transactions A: Physical Metallurgy and Materials Science</i> , 2017, 48, 95-108.	2.2	35

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19	Microstructure based modeling of deformation and failure of spot-welded advanced high strength steels sheets. <i>Materials and Design</i> , 2018, 160, 731-751.	7.0	34
20	Microstructure based flow stress modeling for quenched and tempered low alloy steel. <i>Materials and Design</i> , 2015, 82, 189-199.	7.0	31
21	Micromechanics-based modeling of stress-strain and fracture behavior of heat-treated boron steels for hot stamping process. <i>Materials Science &amp; Engineering A: Structural Materials: Properties, Microstructure and Processing</i> , 2016, 667, 61-76.	5.6	30
22	Mechanical and fracture behavior of high strength steels under high strain rate deformation: Experiments and modelling. <i>Materials Science &amp; Engineering A: Structural Materials: Properties, Microstructure and Processing</i> , 2020, 779, 139125.	5.6	28
23	Damage initiation and fracture loci for advanced high strength steel sheets taking into account anisotropic behaviour. <i>Journal of Materials Processing Technology</i> , 2017, 248, 218-235.	6.3	27
24	Stress and strain based fracture forming limit curves for advanced high strength steel sheet. <i>International Journal of Material Forming</i> , 2018, 11, 643-661.	2.0	26
25	Description of microstructures and mechanical properties of boron alloy steel in hot stamping process. <i>Journal of Manufacturing Processes</i> , 2016, 21, 87-100.	5.9	25
26	Modeling of bake-hardening effect for fine grain bainite-aided dual phase steel. <i>Materials and Design</i> , 2017, 118, 314-329.	7.0	24
27	Plastic deformation and fracture behavior of X65 pipeline steel: Experiments and modeling. <i>Engineering Fracture Mechanics</i> , 2018, 191, 82-101.	4.3	24
28	Stress based failure criterion for formability characterisation of metastable steels. <i>Computational Materials Science</i> , 2007, 39, 43-48.	3.0	22
29	Study of springback effect of AHS steels using a microstructure based modeling. <i>International Journal of Mechanical Sciences</i> , 2018, 135, 499-516.	6.7	22
30	Investigation of anisotropic plastic deformation of advanced high strength steel. <i>Materials Science &amp; Engineering A: Structural Materials: Properties, Microstructure and Processing</i> , 2014, 592, 207-220.	5.6	19
31	Formability Prediction for Tube Hydroforming of Stainless Steel 304 Using Damage Mechanics Model. <i>Journal of Manufacturing Science and Engineering, Transactions of the ASME</i> , 2018, 140, .	2.2	18
32	Analysis of forming limit behaviour of high strength steels under non-linear strain paths using a micromechanics damage modelling. <i>International Journal of Mechanical Sciences</i> , 2020, 183, 105828.	6.7	18
33	Micromechanical modeling of anisotropic behavior of pipeline steel grade X65. <i>Materials and Design</i> , 2017, 127, 243-260.	7.0	17
34	Effect of Fine Grained Dual Phase Steel on Bake Hardening Properties. <i>Steel Research International</i> , 2017, 88, 1600150.	1.8	17
35	A hybrid method for prediction of damage initiation and fracture and its application to forming limit analysis of advanced high strength steel sheet. <i>Engineering Fracture Mechanics</i> , 2016, 166, 97-127.	4.3	15
36	Investigation of damage initiation in high-strength dual-phase steels using cohesive zone model. <i>International Journal of Damage Mechanics</i> , 2018, 27, 409-438.	4.2	14

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37	Processing, microstructure adjustments, and mechanical properties of dual phase steels: A review. <i>Materials Science and Technology</i> , 2021, 37, 561-591.	1.6	12
38	Influence of Martensite Distribution on the Mechanical Properties of Dual Phase Steels: Experiments and Simulation. , 2009, 80, 582.		12
39	Influences of Microstructure Characteristics on Forming Limit Behavior of Dual Phase Steels. <i>Steel Research International</i> , 2015, 86, 1594-1609.	1.8	11
40	Effects of Isothermal Aging on Microstructure Evolution, Hardness and Wear Properties of Wrought Co-Cr-Mo Alloy. <i>Journal of Materials Engineering and Performance</i> , 2017, 26, 955-968.	2.5	10
41	Tensile properties of hypoeutectic Al-Ni alloys: Experiments and FE simulations. <i>Journal of Alloys and Compounds</i> , 2021, 889, 161664.	5.5	10
42	Characterization of Static Performance and Failure of Resistance Spot Welds of High-Strength and Press-Hardened Steels. <i>Journal of Materials Engineering and Performance</i> , 2019, 28, 2017-2028.	2.5	9
43	Micromechanics Based Modeling of Effect of Sigma Phase on Mechanical and Failure Behavior of Duplex Stainless Steel. <i>Metallurgical and Materials Transactions A: Physical Metallurgy and Materials Science</i> , 2021, 52, 1293-1313.	2.2	9
44	Anisotropic Plastic Behavior of TRIP 780 Steel Sheet in Hole Expansion Test. <i>Key Engineering Materials</i> , 2012, 504-506, 89-94.	0.4	8
45	Microstructure based Description of Deformation Behavior of Dual Phase Steel Sheets. <i>Procedia Engineering</i> , 2014, 81, 1366-1371.	1.2	8
46	Effect of ausforming on microstructure and hardness characteristics of bainitic steel. <i>Journal of Materials Research and Technology</i> , 2020, 9, 13365-13374.	5.8	8
47	Anisotropic fracture forming limit curve and its applications for sheet metal forming with complex strain paths of aluminum sheet. <i>International Journal of Advanced Manufacturing Technology</i> , 2021, 115, 3553-3577.	3.0	8
48	Investigations of fatigue crack propagation in ER8 railway wheel steel with varying microstructures. <i>Materials Science &amp; Engineering A: Structural Materials: Properties, Microstructure and Processing</i> , 2022, 840, 142980.	5.6	8
49	Failure investigation of liquefied petroleum gas cylinder using FAD and XFEM. <i>International Journal of Pressure Vessels and Piping</i> , 2019, 171, 69-78.	2.6	7
50	Micromechanics based modelling of fatigue crack initiation of high strength steel. <i>International Journal of Fatigue</i> , 2020, 139, 105762.	5.7	7
51	Forming Limit Curves and Forming Limit Stress Curves for Advanced High Strength Steels. <i>Materials Science Forum</i> , 0, 773-774, 109-114.	0.3	5
52	Effects of Bainitic Phase on Mechanical Properties of Bainite-Aided Multiphase Steels. <i>Steel Research International</i> , 2017, 88, 1700004.	1.8	4
53	Simplified identification of material parameters for Yoshida-Uemori kinematic hardening model. <i>Proceedings of SPIE</i> , 2014, , .	0.8	3
54	Modelling of Mechanical Properties of Pearlitic Rail Steel. <i>Key Engineering Materials</i> , 0, 798, 3-8.	0.4	3

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55	Determination of Damage Criterion Using a Hybrid Analysis for Advanced High Strength Steel. <i>Advanced Materials Research</i> , 2013, 849, 200-206.	0.3	2
56	Experimental investigations and FE modeling considering microstructural inhomogeneity of laser welded steel-aluminum joints. <i>Archives of Civil and Mechanical Engineering</i> , 2022, 22, 1.	3.8	2
57	Investigations on fracture curves in strain and stress space for advanced high strength steel forming. <i>Journal of Physics: Conference Series</i> , 2016, 734, 032066.	0.4	1
58	A microstructure based modelling of high strength steel sheet under stretch-bending. <i>Journal of Physics: Conference Series</i> , 2018, 1063, 012065.	0.4	1
59	Finite element based analysis of two-stage forming for advanced high strength steel part. <i>Procedia Manufacturing</i> , 2018, 15, 668-675.	1.9	1
60	Experimental and numerical study of springback effect of advanced high strength steel in a V-shape bending. <i>IOP Conference Series: Materials Science and Engineering</i> , 2021, 1157, 012042.	0.6	1
61	A geometrical parametric study of side door reinforced beams under lateral impact load. <i>International Journal of Crashworthiness</i> , 2022, 27, 1662-1677.	1.9	1
62	Microstructure and Mechanical Properties of Dual-Phase Steels by Combining Adjusted Initial Microstructures and Severe Plastic Deformation. <i>Steel Research International</i> , 2022, 93, 2100596.	1.8	1
63	Kinetic Model of Isothermal Bainitic Transformation of Low Carbon Steels under Ausforming Conditions. , 2022, 1, 93-115.		1
64	Effects of Anisotropic Yield Functions on Prediction of Forming Limit Diagram for AHS Steel. <i>Key Engineering Materials</i> , 2014, 622-623, 257-264.	0.4	0
65	Prediction of Stress-Strain Curves of Metastable Austenitic Stainless Steel Considering Deformation-Induced Martensitic Transformation. <i>Journal of Engineering Materials and Technology, Transactions of the ASME</i> , 2017, 139, .	1.4	0
66	Finite element analysis of AHS steel under dynamic loading using a micromechanical modelling. <i>Journal of Physics: Conference Series</i> , 2018, 1063, 012109.	0.4	0
67	Anisotropic fracture forming limit curves of aluminum alloy AA5052-H32 sheet. <i>AIP Conference Proceedings</i> , 2020, , .	0.4	0
68	Study of Effect of Varying Clearances on the Springback of Advanced High Strength Steel Sheets. <i>Journal of Physics: Conference Series</i> , 2022, 2175, 012008.	0.4	0