Dean Deng

List of Publications by Year
in descending order

60 papers	4,166 citations	126907 33 h-index	138484 58 g-index
60 all docs	60 docs citations	60 times ranked	1680 citing authors

#	Article	IF	Citations
1	Numerical simulation of temperature field and residual stress in multi-pass welds in stainless steel pipe and comparison with experimental measurements. Computational Materials Science, 2006, 37, 269-277.	3.0	511
2	FEM prediction of welding residual stress and distortion in carbon steel considering phase transformation effects. Materials & Design, 2009, 30, 359-366.	5.1	450
3	Prediction of welding distortion and residual stress in a thin plate butt-welded joint. Computational Materials Science, 2008, 43, 353-365.	3.0	303
4	Numerical simulation of welding distortion in large structures. Computer Methods in Applied Mechanics and Engineering, 2007, 196, 4613-4627.	6.6	248
5	Prediction of welding residual stress in multi-pass butt-welded modified 9Crâ€“1Mo steel pipe considering phase transformation effects. Computational Materials Science, 2006, 37, 209-219.	3.0	220
6	Determination of welding deformation in fillet-welded joint by means of numerical simulation and comparison with experimental measurements. Journal of Materials Processing Technology, 2007, 183, 219-225.	6.3	197
7	Numerical and experimental investigations on welding residual stress in multi-pass butt-welded austenitic stainless steel pipe. Computational Materials Science, 2008, 42, 234-244.	3.0	147
8	A comparative study on welding temperature fields, residual stress distributions and deformations induced by laser beam welding and CO2 gas arc welding. Materials & Design, 2014, 63, 519-530.	5.1	121
9	FEM prediction of buckling distortion induced by welding in thin plate panel structures. Computational Materials Science, 2008, 43, 591-607.	3.0	110
10	Experimental and numerical investigations of welding distortion induced by CO2 gas arc welding in thin-plate bead-on joints. Materials & Design, 2013, 52, 720-729.	5.1	96
11	Applications of inherent strain and interface element to simulation of welding deformation in thin plate structures. Computational Materials Science, 2012, 51, 43-52.	3.0	89
12	Influence of transformation induced plasticity on simulated results of welding residual stress in low temperature transformation steel. Computational Materials Science, 2013, 78, 55-62.	3.0	85
13	Finite element analysis of temperature field, microstructure and residual stress in multi-pass butt-welded 2.25Crâ€“1Mo steel pipes. Computational Materials Science, 2008, 43, 681-695.	3.0	77
14	FEM prediction of welding residual stresses in a SUS304 girth-welded pipe with emphasis on stress distribution near weld start/end location. Computational Materials Science, 2010, 50, 612-621.	3.0	74
15	Investigation of welding residual stress in flash-butt joint of U71Mn rail steel by numerical simulation and experiment. Materials and Design, 2015, 88, 1296-1309.	7.0	71
16	Numerical simulation of residual stresses induced by laser beam welding in a SUS316 stainless steel pipe with considering initial residual stress influences. Nuclear Engineering and Design, 2010, 240, 688-696.	1.7	70
17	Numerical investigation of formation mechanism of welding residual stress in P92 steel multi-pass joints. Journal of Materials Processing Technology, 2017, 244, 240-252.	6.3	69
18	Prediction of residual stresses in a dissimilar metal welded pipe with considering cladding, buttering and post weld heat treatment. Computational Materials Science, 2009, 47, 398-408.	3.0	67

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19	Numerical simulation of welding temperature field, residual stress and deformation induced by electro slag welding. Computational Materials Science, 2012, 62, 23-34.	3.0	67
20	Effects of friction stir welding on microstructure and mechanical properties of magnesium alloy Mg-5Al-3Sn. Materials and Design, 2016, 110, 266-274.	7.0	63
21	Prediction of welding distortion in a curved plate structure by means of elastic finite element method. Journal of Materials Processing Technology, 2008, 203, 252-266.	6.3	62
22	Influence of groove type on welding-induced residual stress, deformation and width of sensitization region in a SUS304 steel butt welded joint. Advances in Engineering Software, 2015, 86, 39-48.	3.8	59
23	Influences of heat source model on welding residual stress and distortion in a multi-pass J-groove joint. Computational Materials Science, 2009, 46, 987-995.	3.0	56
24	Influence of deposition sequence on welding residual stress and deformation in an austenitic stainless steel J-groove welded joint. Materials & Design, 2013, 49, 1022-1033.	5.1	56
25	Predicting welding residual stresses in a dissimilar metal girth welded pipe using 3D finite element model with a simplified heat source. Nuclear Engineering and Design, 2011, 241, 46-54.	1.7	54
26	Investigations on welding residual stresses in penetration nozzles by means of 3D thermal elastic plastic FEM and experiment. Computational Materials Science, 2009, 45, 1031-1042.	3.0	51
27	Investigation of welding residual stress distribution in a thick-plate joint with an emphasis on the features near weld end-start. Materials & Design, 2015, 67, 303-312.	5.1	49
28	Investigations on welding distortion in an asymmetrical curved block by means of numerical simulation technology and experimental method. Computational Materials Science, 2010, 48, 187-194.	3.0	47
29	Investigating the influence of external restraint on welding distortion in thin-plate bead-on joint by means of numerical simulation and experiment. International Journal of Advanced Manufacturing Technology, 2016, 82, 1049-1062.	3.0	41
30	Influences of heat input, welding sequence and external restraint on twisting distortion in an asymmetrical curved stiffened panel. Advances in Engineering Software, 2018, 115, 439-451.	3.8	39
31	FEM analysis of residual stress induced by repair welding in SUS304 stainless steel pipe butt-welded joint. Journal of Manufacturing Processes, 2020, 58, 975-983.	5.9	38
32	Influence of Material Model on Prediction Accuracy of Welding Residual Stress in an Austenitic Stainless Steel Multi-pass Butt-Welded Joint. Journal of Materials Engineering and Performance, 2017, 26, 1494-1505.	2.5	36
33	Influence of tool rotation rates on temperature profiles and mechanical properties of friction stir welded AZ31 magnesium alloy. International Journal of Advanced Manufacturing Technology, 2017, 88, 2191-2200.	3.0	35
34	Finite element analysis of residual stress in 2.25Cr-1Mo steel pipe during welding and heat treatment process. Journal of Manufacturing Processes, 2019, 47, 110-118.	5.9	35
35	Simulating welding residual stress and deformation in a multi-pass butt-welded joint considering balance between computing time and prediction accuracy. International Journal of Advanced Manufacturing Technology, 2017, 93, 2215-2226.	3.0	34
36	Controlling angular distortion in high strength low alloy steel thick-plate T-joints. Journal of Materials Processing Technology, 2019, 267, 257-267.	6.3	31

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37	Influence of the groove shape on welding residual stresses in P92/SUS304 dissimilar metal butt-welded joints. Journal of Manufacturing Processes, 2021, 66, 376-386.	5.9	31
38	Prediction of the residual welding stress in 2.25Cr-1Mo steel by taking into account the effect of the solid-state phase transformations. Acta Metallurgica Sinica (English Letters), 2013, 26, 333-339.	2.9	23
39	Influence of welding sequence on residual stress distribution and deformation in Q345 steel H-section butt-welded joint. Journal of Materials Research and Technology, 2021, 13, 144-153.	5.8	23
40	Effects of pass arrangement on angular distortion, residual stresses and lamellar tearing tendency in thick-plate T-joints of low alloy steel. Journal of Materials Processing Technology, 2019, 274, 116293.	6.3	21
41	Determining inherent deformations of HSLA steel T-joint under structural constraint by means of thermal elastic plastic FEM. Thin-Walled Structures, 2020, 147, 106568.	5.3	21
42	Fabrication of reliable ZTA composite/Ti6Al4V alloy joints via vacuum brazing method: Microstructural evolution, mechanical properties and residual stress prediction. Journal of the European Ceramic Society, 2021, 41, 4273-4283.	5.7	20
43	FEM analysis of residual stress distribution near weld start/end location in thick plates. Computational Materials Science, 2011, 50, 2459-2469.	3.0	18
44	Comparison of welding residual stress and deformation induced by local vacuum electron beam welding and metal active gas arc welding in a stainless steel thick-plate joint. Journal of Materials Research and Technology, 2021, 13, 1967-1967.	5.8	17
45	Estimating inherent deformation in thin-plate Al-alloy joint by means of inverse analysis with the help of cutting technique. Advances in Engineering Software, 2016, 99, 89-99.	3.8	16
46	Influence of lumping passes on calculation accuracy and efficiency of welding residual stress of thick-plate butt joint in boiling water reactor. Engineering Structures, 2020, 222, 111136.	5.3	16
47	Investigating Welding Distortion of Thin-Plate Stiffened Panel Steel Structures by Means of Thermal Elastic Plastic Finite Element Method. Journal of Materials Engineering and Performance, 2021, 30, 3677-3690.	2.5	16
48	Influence of contact behavior on welding distortion and residual stress in a thin-plate butt-welded joint performed by partial-length welding. Thin-Walled Structures, 2022, 176, 109302.	5.3	16
49	Predicting Welding Residual Stress of a Multi-pass P92 Steel Butt-Welded Joint with Consideration of Phase Transformation and Tempering Effect. Journal of Materials Engineering and Performance, 2019, 28, 7452-7463.	2.5	14
50	Influence of Accelerated Cooling Condition on Welding Thermal Cycle, Residual Stress, and Deformation in SM490A Steel ESW Joint. Journal of Materials Engineering and Performance, 2015, 24, 3487-3501.	2.5	12
51	A new numerical model to predict welding-induced sensitization in SUS304 austenitic stainless steel joint. Journal of Materials Research and Technology, 2022, 17, 234-243.	5.8	10
52	Numerical Simulation of Residual Stress and Deformation in Wire Arc Additive Manufacturing. Crystals, 2022, 12, 803.	2.2	10
53	Microstructure and Mechanical Properties of Vacuum Diffusion Bonded Ti2AlNb/Ti/TC4 Joint. Crystals, 2021, 11, 770.	2.2	6
54	Investigating the influence of external restraint on welding distortion in thin-plate welded structures by means of numerical simulation technology. Journal of Physics: Conference Series, 2018, 1063, 012082.	0.4	4

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55	Indenter misalignment in impression creep test: Uncertainty, correction and recommendation. Journal of Strain Analysis for Engineering Design, 2022, 57, 84-94.	1.8	4
56	Finite Element Analyses of Residual Stresses in Typical Welded Joints Used in Nuclear Power Plants and Comparisons With Experiments. , 2010, , .		3
57	Nanostructured Al/Ni energetic composites: processing, reaction properties and activation energy. Journal of Materials Research and Technology, 2022, 19, 3994-4002.	5.8	3
58	Bonding SiCp/Al Composites via Laser-Induced Exothermic Reactions. Crystals, 2021, 11, 535.	2.2	2
59	Wetting Behavior of the Ag-5CuO Brazing Alloy on ZTA Composite Ceramic with/without CuO Coating in Air. Crystals, 2021, 11, 609.	2.2	2
60	Characterization of ZTA Composite Ceramic/Ti6Al4V Alloy Joints Brazed by AgCu Filler Alloy Reinforced with One-Dimensional Al18B4O33 Single Crystal. Crystals, 2022, 12, 933.	2.2	0