

# Lakshminarayanan Ak

## List of Publications by Year in descending order

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71  
papers

1,547  
citations

471371

17  
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330025

37  
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71  
docs citations

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times ranked

1163  
citing authors

#	ARTICLE	IF	CITATIONS
1	Decisive impact of Filler-free joining processes on the Microstructural evolution, tensile and impact properties of 9Cr-1Mo-V-Nb to 316L(N) dissimilar joints. Proceedings of the Institution of Mechanical Engineers, Part C: Journal of Mechanical Engineering Science, 2022, 236, 2408-2427.	1.1	2
2	An insight into the stress corrosion cracking resistance of friction stir processed and micro arc oxidation coated ZE41 grade magnesium alloy. Proceedings of the Institution of Mechanical Engineers, Part C: Journal of Mechanical Engineering Science, 2022, 236, 1255-1273.	1.1	5
3	Decisive influence of critical process parameters on the microstructure and tensile properties of friction stir back extruded magnesium alloy tubes. Journal of Manufacturing Processes, 2022, 73, 207-219.	2.8	3
4	Harnessing friction stir back extrusion process to fabricate microtubes from as-cast Mg <sub>4</sub> Zn <sub>0.7</sub> Zr <sub>1.6</sub> RE magnesium alloy. Surface Topography: Metrology and Properties, 2022, 10, 015042.	0.9	3
5	Stress Corrosion Cracking Susceptibility of 316LN Grade Stainless Steel Weld Joint in Boiling Magnesium Chloride Hexahydrate Environment. Metals and Materials International, 2022, 28, 2778-2797.	1.8	2
6	Comparative Study of Friction Stir Welding and Underwater Friction Stir Welding on Magnesium ZE41 Alloy. Lecture Notes in Mechanical Engineering, 2021, , 755-766.	0.3	1
7	Study of Infrared Thermography on Tensile Behavior of Laser Beam Welded 316LN Austenitic Stainless Steel. Lecture Notes in Mechanical Engineering, 2021, , 779-787.	0.3	0
8	Probing the stress corrosion cracking resistance of laser beam welded AISI 316LN austenitic stainless steel. Proceedings of the Institution of Mechanical Engineers, Part C: Journal of Mechanical Engineering Science, 2020, , 095440622096563.	1.1	1
9	On the Local Constitutive Behavior of Friction Stir Welded AISI 304 Stainless Steel Joints. Materials Science Forum, 2020, 979, 107-113.	0.3	0
10	Fabrication and Numerical Analysis of Friction Stir Back Extruded Lightweight Magnesium Alloy Heat Pipes. Materials Science Forum, 2020, 979, 129-134.	0.3	3
11	Analysis of Tensile Deformation Behavior in Friction Stir Welded P91-316LN Dissimilar Joints Using Infrared Thermography. Materials Science Forum, 2020, 979, 114-118.	0.3	0
12	Influence of Friction Stir Welding Variants on Crashworthiness of Friction Stir Welded Aluminium Top Hat Sections. Materials Science Forum, 2020, 979, 97-101.	0.3	0
13	Correlation between Tensile Deformation Behavior and Microstructural Morphology of Nuclear Grade Austenitic Stainless Steel Weld Joints using Infrared Thermography Technique. Przegląd Spawalnictwa, 2020, 92, 7-15.	0.5	0
14	Microstructural characteristics of chitosan deposited az91 magnesium alloy. Materials Today: Proceedings, 2019, 16, 456-462.	0.9	5
15	Role of welding processes on microstructure and mechanical properties of nuclear grade stainless steel joints. Proceedings of the Institution of Mechanical Engineers, Part L: Journal of Materials: Design and Applications, 2019, 233, 2335-2351.	0.7	10
16	Understanding the Effect of Tool Rotational Speed on Microstructure and Mechanical Properties of Friction Stir Processed ZE41 Grade Magnesium Alloy. Lecture Notes in Mechanical Engineering, 2019, , 427-435.	0.3	3
17	Impact of friction diffusion welding parameters on the properties of rare earth containing magnesium alloy tube-tube plate welds. Journal of Alloys and Compounds, 2017, 712, 355-364.	2.8	5
18	Dissimilar and Similar Laser Beam and GTA Welding of Nuclear Fuel Pin Cladding Tube to End Plug Joint. Advanced Engineering Forum, 2017, 24, 40-47.	0.3	2

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19	Evaluating stress corrosion cracking behaviour of high strength AA7075-T651 aluminium alloy. Journal of the Mechanical Behavior of Materials, 2017, 26, 105-112.	0.7	5
20	Assessment of Stress Corrosion Cracking Resistance of Activated Tungsten Inert Gas-Welded Duplex Stainless Steel Joints. Journal of Materials Engineering and Performance, 2017, 26, 5825-5836.	1.2	14
21	Thermal Performance Evaluation of Friction Stir Welded and Bolted Cold Plates with Al/Cu Interface. Jom, 2015, 67, 1032-1044.	0.9	6
22	Feasibility of surface-coated friction stir welding tools to join AISI 304 grade austenitic stainless steel. Defence Technology, 2014, 10, 360-370.	2.1	16
23	Process Parameters Optimisation for Friction Stir Welding of AISI 409M Grade Ferritic Stainless Steel. Experimental Techniques, 2013, 37, 59-73.	0.9	9
24	Use of DL-EPR Test to Assess Sensitization Resistance of AISI 409M Grade Ferritic Stainless Steel Joints. Journal of Materials Engineering and Performance, 2013, 22, 2293-2303.	1.2	17
25	Influences of welding processes on microstructure and mechanical properties of modified 12 wt % Cr ferritic stainless steel. International Journal of Manufacturing Research, 2012, 7, 331.	0.1	9
26	Evaluation of Microstructure and Mechanical Properties of Laser Beam Welded AISI 409M Grade Ferritic Stainless Steel. Journal of Iron and Steel Research International, 2012, 19, 72-78.	1.4	38
27	Characteristics of Laser Beam and Friction Stir Welded AISI 409M Ferritic Stainless Steel Joints. Journal of Materials Engineering and Performance, 2012, 21, 530-539.	1.2	18
28	Sensitization resistance of friction stir welded AISI 409M grade ferritic stainless steel joints. International Journal of Advanced Manufacturing Technology, 2012, 59, 961-967.	1.5	15
29	On the fatigue behaviour of electron beam and gas tungsten arc weldments of 409M grade ferritic stainless steel. Materials & Design, 2012, 35, 760-769.	5.1	12
30	Assessment of sensitization resistance of AISI 409M grade ferritic stainless steel joints using Modified Strauss test. Materials & Design, 2012, 39, 175-185.	5.1	18
31	Assessment of fatigue life and crack growth resistance of friction stir welded AISI 409M ferritic stainless steel joints. Materials Science & Engineering A: Structural Materials: Properties, Microstructure and Processing, 2012, 539, 143-153.	2.6	52
32	Comparison of Electron Beam and Friction Stir Weldments of Modified 12wt% Ferritic Stainless Steel. Materials and Manufacturing Processes, 2011, 26, 868-877.	2.7	23
33	Developing friction stir welding window for AA2219 aluminium alloy. Transactions of Nonferrous Metals Society of China, 2011, 21, 2339-2347.	1.7	41
34	Understanding the parameters controlling friction stir welding of AISI 409M ferritic stainless steel. Metals and Materials International, 2011, 17, 969-981.	1.8	26
35	Microstructure and mechanical properties of electron beam-welded AISI 409M-grade ferritic stainless steel. International Journal of Advanced Manufacturing Technology, 2011, 55, 153-162.	1.5	16
36	Tensile and Impact Toughness Properties of Gas Tungsten Arc Welded and Friction Stir Welded Interstitial Free Steel Joints. Journal of Materials Engineering and Performance, 2011, 20, 82-89.	1.2	12

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37	An assessment of microstructure, hardness, tensile and impact strength of friction stir welded ferritic stainless steel joints. <i>Materials &amp; Design</i> , 2010, 31, 4592-4600.	5.1	128
38	Comparison of Friction Stir and Gas Tungsten Arc Weldments of Modified 12 wt.% Cr Ferritic Stainless Steel. <i>Steel Research International</i> , 2010, 81, 1023-1033.	1.0	1
39	Microstructure, Tensile and Impact Toughness Properties of Friction Stir Welded Mild Steel. <i>Journal of Iron and Steel Research International</i> , 2010, 17, 68-74.	1.4	45
40	Application of RSM and ANN to predict the tensile strength of Friction Stir Welded A319 cast aluminium alloy. <i>International Journal of Manufacturing Research</i> , 2009, 4, 306.	0.1	16
41	Effect of welding processes on tensile, impact, hardness and microstructure of joints made of AISI 409M FSS base metal and AISI 308L ASS filler metals. <i>Ironmaking and Steelmaking</i> , 2009, 36, 75-80.	1.1	11
42	Fatigue Crack Growth Behavior of Gas Metal Arc Welded AISI 409 Grade Ferritic Stainless Steel Joints. <i>Journal of Materials Engineering and Performance</i> , 2009, 18, 917-924.	1.2	8
43	Effect of welding processes on tensile properties of AA6061 aluminium alloy joints. <i>International Journal of Advanced Manufacturing Technology</i> , 2009, 40, 286-296.	1.5	237
44	Effect of welding processes on fatigue crack growth behaviour of AISI 409M ferritic stainless steel joints fabricated using duplex stainless steel fillers. <i>Fatigue and Fracture of Engineering Materials and Structures</i> , 2009, 32, 656-664.	1.7	4
45	Effect of weld metal properties on fatigue crack growth behaviour of gas tungsten arc welded AISI 409M grade ferritic stainless steel joints. <i>International Journal of Pressure Vessels and Piping</i> , 2009, 86, 517-524.	1.2	27
46	Comparison of RSM with ANN in predicting tensile strength of friction stir welded AA7039 aluminium alloy joints. <i>Transactions of Nonferrous Metals Society of China</i> , 2009, 19, 9-18.	1.7	188
47	Application of Response Surface Methodology to Prediction of Dilution in Plasma Transferred Arc Hardfacing of Stainless Steel on Carbon Steel. <i>Journal of Iron and Steel Research International</i> , 2009, 16, 44-53.	1.4	71
48	Effect of Autogenous Arc Welding Processes on Tensile and Impact Properties of Ferritic Stainless Steel Joints. <i>Journal of Iron and Steel Research International</i> , 2009, 16, 62-68.	1.4	51
49	Effect of welding processes on tensile and impact properties, hardness and microstructure of AISI 409M ferritic stainless joints fabricated by duplex stainless steel filler metal. <i>Journal of Iron and Steel Research International</i> , 2009, 16, 66-72.	1.4	48
50	Predicting the dilution of plasma transferred arc hardfacing of stellite on carbon steel using response surface methodology. <i>Metals and Materials International</i> , 2008, 14, 779-789.	1.8	41
51	Process parameters optimization for friction stir welding of RDE-40 aluminium alloy using Taguchi technique. <i>Transactions of Nonferrous Metals Society of China</i> , 2008, 18, 548-554.	1.7	193
52	Understanding the Parameters Controlling Plasma Transferred Arc Hardfacing Using Response Surface Methodology. <i>Materials and Manufacturing Processes</i> , 2008, 23, 674-682.	2.7	26
53	The mechanical properties of the GMAW, GTAW and FSW joints of the RDE-40 aluminium alloy. <i>International Journal of Microstructure and Materials Properties</i> , 2008, 3, 837.	0.1	18
54	Fatigue Crack Growth Behavior of AISI 409M Grade Ferritic Stainless Steel Welded Joints Using Austenitic, Ferritic and Duplex Stainless Steel Electrodes. <i>ISIJ International</i> , 2008, 48, 1640-1646.	0.6	1

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55	Effect of Autogenous Arc Welding Processes on Fatigue Crack Growth Behaviour of Ferritic Stainless Steel Joints. ISIJ International, 2008, 48, 489-495.	0.6	6
56	Predicting the dilution of plasma transferred arc hardfacing of stellite on carbon steel using response surface methodology. Metals and Materials International, 2008, 14, 779-789.	1.8	5
57	Effect of Welding Processes on Fatigue Behaviour of AISI 409M Grade Ferritic Stainless Steel Joints. Advanced Materials Research, 0, 794, 391-412.	0.3	5
58	Improving Wear Resistance of AISI 316LN Austenitic Stainless Steel Using Friction Stir Processing. Applied Mechanics and Materials, 0, 787, 421-425.	0.2	1
59	Numerical Simulation on Effect of Impact Velocity and Target Thickness in Magnesium Alloy AZ31B. Applied Mechanics and Materials, 0, 787, 291-295.	0.2	2
60	Corrosion Resistance of Friction Stir Processed AZ91D Magnesium Alloy under a Salt Fog Environment. Applied Mechanics and Materials, 0, 787, 426-430.	0.2	2
61	Assessment of Microstructure and Wear Resistance of Friction Stir Processed Cast Mg-Al-Zn Magnesium Alloy. Applied Mechanics and Materials, 0, 787, 442-447.	0.2	2
62	Understanding the Parameters Controlling the Resistance Spot Welding of DP980 Steel. Applied Mechanics and Materials, 0, 787, 411-415.	0.2	1
63	Zone Wise Properties of Friction Stir Welded Copper “Stainless Steel Joints Using Digital Image Correlation. Applied Mechanics and Materials, 0, 787, 485-489.	0.2	6
64	Optimum Welding Conditions for Dissimilar Spot Friction Joining of Aluminium - Interstitial Free Steel Joints. Applied Mechanics and Materials, 0, 787, 396-400.	0.2	1
65	Microstructure and Tensile Properties of Friction Stir and Gas Tungsten Arc Welded AZ91D Magnesium Alloy Joints. Applied Mechanics and Materials, 0, 787, 470-474.	0.2	0
66	Role of Induction Preheating on Tool Wear and Properties of Friction Stir Welded 409M Stainless Steel Joints. Applied Mechanics and Materials, 0, 787, 401-405.	0.2	1
67	Thermal Performance Evaluation of Friction Stir Welded Flat Plate Heat Sink Using CFD Analysis. Applied Mechanics and Materials, 0, 787, 505-509.	0.2	1
68	Wear Mitigation in Cast Magnesium Alloy through Flyash Reinforced Friction Stir Surface Compositing. Applied Mechanics and Materials, 0, 787, 627-631.	0.2	0
69	On the Microstructure and Erosion Corrosion Behavior of Laser Processed Nickel Aluminium Bronze. Materials Science Forum, 0, 979, 157-161.	0.3	2
70	Use of Friction Extrusion to Fabricate Magnesium Alloy Wires with Rare Earths from Machined Chips. Materials Science Forum, 0, 979, 119-123.	0.3	4
71	Role of Overlap Ratio on the Microstructure of Friction Stir Multiseam Cladded Copper-Stainless Steel Lap Joints. Materials Science Forum, 0, 979, 102-106.	0.3	2