

# Vesselin G Michailov

## List of Publications by Year in descending order

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Version: 2024-02-01

39  
papers

611  
citations

1039880

9  
h-index

610775

24  
g-index

40  
all docs

40  
docs citations

40  
times ranked

604  
citing authors

#	ARTICLE	IF	CITATIONS
1	Mechanical properties of additive manufactured titanium (Ti-6Al-4V) blocks deposited by a solid-state laser and wire. <i>Materials &amp; Design</i> , 2011, 32, 4665-4675.	5.1	184
2	Deposition of Ti-6Al-4V using laser and wire, part I: Microstructural properties of single beads. <i>Surface and Coatings Technology</i> , 2011, 206, 1120-1129.	2.2	145
3	Deposition of Ti-6Al-4V using laser and wire, part II: Hardness and dimensions of single beads. <i>Surface and Coatings Technology</i> , 2011, 206, 1130-1141.	2.2	58
4	Thermomechanical laser welding simulation of dissimilar steel-aluminum overlap joints. <i>International Journal of Mechanical Sciences</i> , 2021, 190, 106019.	3.6	23
5	Residual stresses formation in multi-pass weldment: A numerical and experimental study. <i>Journal of Constructional Steel Research</i> , 2017, 138, 633-641.	1.7	20
6	Metallurgical and Mechanical Characterization of High-Speed Friction Stir Welded AA 6082-T6 Aluminum Alloy. <i>Materials</i> , 2019, 12, 4211.	1.3	18
7	Heat source model for laser beam welding of steel-aluminum lap joints. <i>International Journal of Advanced Manufacturing Technology</i> , 2017, 93, 709-716.	1.5	16
8	Mechanical properties of dissimilar steel-aluminum welds. <i>Materials Science &amp; Engineering A: Structural Materials: Properties, Microstructure and Processing</i> , 2018, 722, 242-254.	2.6	16
9	Thermal shock behaviour of laminated multilayer refractories for steel casting applications reinforced by residual stresses. <i>Ceramics International</i> , 2016, 42, 13562-13571.	2.3	10
10	Impact of Impulses on Microstructural Evolution and Mechanical Performance of Al-Mg-Si Alloy Joined by Impulse Friction Stir Welding. <i>Materials</i> , 2021, 14, 347.	1.3	10
11	Finite Element Modeling for the Structural Analysis of Al-Cu Laser Beam Welding. <i>Physics Procedia</i> , 2016, 83, 1404-1414.	1.2	9
12	Analytical and Numerical Calculation of the Force and Power Requirements for Air Bending of Structured Sheet Metals. <i>Key Engineering Materials</i> , 0, 473, 602-609.	0.4	8
13	Experimental Characterisation of Structured Sheet Metal. <i>Key Engineering Materials</i> , 2011, 473, 404-411.	0.4	8
14	Corrosion resistance of zinc-coated structured sheet metals. <i>Corrosion Science</i> , 2013, 69, 270-280.	3.0	8
15	Experimental study of the change of stiffness properties during deep drawing of structured sheet metal. <i>Journal of Materials Processing Technology</i> , 2013, 213, 1811-1817.	3.1	8
16	A study of the heat transfer mechanism in resistance spot welding of aluminum alloys AA5182 and AA6014. <i>International Journal of Advanced Manufacturing Technology</i> , 2020, 111, 263-271.	1.5	8
17	Physical and Numerical Simulation of the Heat-Affected Zone of Multi-Pass Welds. <i>Materials Science Forum</i> , 0, 762, 544-550.	0.3	7
18	Numerical calculation of the main factors on cold cracking. <i>Materialwissenschaft Und Werkstofftechnik</i> , 2003, 34, 145-151.	0.5	6

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19	Investigation of air bending of structured sheet metals by multistage FE simulation. International Journal of Advanced Manufacturing Technology, 2012, 63, 449-455.	1.5	6
20	Experimental Investigation and Analytical Calculation of the Bending Force for Air Bending of Structured Sheet Metals. Advanced Materials Research, 0, 418-420, 1294-1300.	0.3	5
21	Investigation of the Thermal Shock Behavior of Ceramic Using a Combination of Experimental Testing and FEA Simulation Methods. Advanced Engineering Materials, 2013, 15, 480-484.	1.6	5
22	Particularities of testing structured sheet metals in 3-point bending tests. Materialpruefung/Materials Testing, 2016, 58, 495-500.	0.8	5
23	Numerical and experimental analysis of heat transfer in resistance spot welding process of aluminum alloy AA5182. International Journal of Advanced Manufacturing Technology, 2020, 111, 1671-1682.	1.5	4
24	Hybrid Aluminum Composite Materials Based on Carbon Nanostructures. Medziagotyra, 2015, 21, .	0.1	3
25	Corrosion Behavior of Brazed Zinc-Coated Structured Sheet Metal. International Journal of Corrosion, 2017, 2017, 1-8.	0.6	3
26	Hybrid model for prediction of welding distortions in large structures. Frontiers of Materials Science, 2011, 5, 209-215.	1.1	2
27	Physical and Numerical Simulation of Thermo-Mechanical Properties in the Weld Heat Affected Zone of an AlMgSi-Alloy. Materials Science Forum, 0, 706-709, 1491-1496.	0.3	2
28	Quantification of cold cracking parameters of high strength steels by physical simulation under welding conditions. Yosetsu Gakkai Ronbunshu/Quarterly Journal of the Japan Welding Society, 2013, 31, 148s-152s.	0.1	2
29	Neutron diffraction studies of laser welding residual stresses. , 2017, , .		2
30	Distortion analysis of heat spot straightening thin-walled welded structures: part 1: formation of the plastic deformation zone. International Journal of Advanced Manufacturing Technology, 2018, 94, 667-676.	1.5	2
31	Cu/LaCrO <sub>3</sub> joining by local melt infiltration through laser cladding. Journal of the American Ceramic Society, 2018, 101, 4472-4479.	1.9	2
32	Simulation of surface heat treatment with inclined laser beam. Journal of Manufacturing Processes, 2022, 81, 107-114.	2.8	2
33	Numerical simulation of welding stresses and distortions under consideration of temporal and local changes of strain rate. European Physical Journal Special Topics, 2004, 120, 169-175.	0.2	1
34	Modelling the Local Microstructure Properties due to Multi-Pass Welding. Materials Science Forum, 2016, 879, 595-600.	0.3	1
35	Laser beam build-up welding of AlSi12-powder on AlSi1MgMn-alloy substrate. Progress in Additive Manufacturing, 2019, 4, 117-129.	2.5	1
36	Electrochemical Corrosion Characteristic of Structured Low Carbon Steel DC04 and Stainless Steel 304 Sheets in Sodium Chloride Solution. Advanced Materials Research, 0, 396-398, 1736-1743.	0.3	0

#	ARTICLE	IF	CITATIONS
37	Hydrogen Charging of High Strength Steel Specimens and Physical Simulation of Cold Cracking under Laser Beam Welding Conditions. Materials Science Forum, 0, 706-709, 1391-1396.	0.3	0
38	Distortion analysis of heat spot straightening thin-walled welded structures: part 2: analytical-numerical approach. International Journal of Advanced Manufacturing Technology, 2018, 95, 469-478.	1.5	0
39	Determination of residual stresses in fiber laser welded stainless steel joints by neutron diffraction method. , 2019, , .		0