

# Lukas Smetanka

## List of Publications by Year in descending order

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Version: 2024-02-01

23  
papers

188  
citations

1040056

9  
h-index

1058476

14  
g-index

23  
all docs

23  
docs citations

23  
times ranked

71  
citing authors

#	ARTICLE	IF	CITATIONS
1	Computer aided structural analysis of newly developed railway bogie frame. MATEC Web of Conferences, 2018, 157, 02051.	0.2	34
2	Analysis of Contact Stresses of Theoretical and Worn Profile by Using Computer Simulation. Manufacturing Technology, 2017, 17, 580-585.	1.4	26
3	Homogenization of Fibers Reinforced Composite Materials for Simulation Analysis. Manufacturing Technology, 2015, 15, 914-920.	1.4	20
4	Wear research of railway wheelset profile by using computer simulation. MATEC Web of Conferences, 2018, 157, 03017.	0.2	18
5	Global Sensitivity Analysis of Chosen Harmonic Drive Parameters Affecting Its Lost Motion. Materials, 2021, 14, 5057.	2.9	12
6	Development of Modern Railway Bogie for Broad Track Gauge - Bogie Frame Assessment. Manufacturing Technology, 2017, 17, 250-256.	1.4	12
7	Strength analysis of slewing bearings. Transportation Research Procedia, 2019, 40, 891-897.	1.5	11
8	Structural Analysis of a Main Construction Assemblies of the New Wagon Prototype Type Zans. Manufacturing Technology, 2018, 18, 510-517.	1.4	10
9	Investigation of strength conditions of the new wagon prototype type Zans. MATEC Web of Conferences, 2019, 254, 02037.	0.2	9
10	Computer aided simulation analysis for wear investigation of railway wheel running surface. Diagnostyka, 2019, 20, 63-68.	0.8	8
11	OPTIMISATION PROCEDURE OF INNER GEOMETRY IN SPHERICAL ROLLER BEARINGS WITH REGARD TO THEIR DURABILITY. Scientific Journal of Silesian University of Technology Series Transport, 2020, 106, 173-181.	0.4	7
12	Creation of Calculation 3D Model of Slewing Bearing. Lecture Notes in Mechanical Engineering, 2020, , 149-157.	0.4	5
13	Strength Investigation of Main Frame in New "Track friendly" Railway Bogie. Manufacturing Technology, 2018, 18, 315-320.	1.4	4
14	Stiffness analysis of slewing bearings. IOP Conference Series: Materials Science and Engineering, 0, 393, 012060.	0.6	3
15	Driveability prediction in design process of freight wagon underframe. AIP Conference Proceedings, 2019, , .	0.4	3
16	Investigation of railway wheelset profile wear by using computer simulation. MATEC Web of Conferences, 2019, 254, 02041.	0.2	2
17	Generating Random Pattern for Homogenization of Fiber Reinforced Composites Using Memetic Algorithm. Manufacturing Technology, 2017, 17, 354-360.	1.4	2
18	Mathematical algorithm for calculating an optimal axial preload of rolling bearings with the respect to their life. IOP Conference Series: Materials Science and Engineering, 0, 393, 012055.	0.6	1

#	ARTICLE	IF	CITATIONS
19	Dynamic analysis of force interactions in rolling bearings components. AIP Conference Proceedings, 2019, , .	0.4	1
20	The influence of the construction stiffness in the roller bearings arrangement with the line contact on their durability. IOP Conference Series: Materials Science and Engineering, 2018, 393, 012053.	0.6	0
21	Designing and optimizing extractors for automated dispensers. IOP Conference Series: Materials Science and Engineering, 2019, 659, 012038.	0.6	0
22	Contact pressure analysis of slewing rings. IOP Conference Series: Materials Science and Engineering, 2019, 659, 012005.	0.6	0
23	Strength Analysis of a Freight Bogie Frame under the Defined Load Cases. Communications - Scientific Letters of the University of Zilina, 2018, 20, 58-62.	0.6	0