Rui Calçada

List of Publications by Year in descending order

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205 papers 5,137 citations

76322 40 h-index 60 g-index

210 all docs

210 docs citations

times ranked

210

2506 citing authors

#	Article	IF	CITATIONS
1	Non-contact measurement of the dynamic displacement of railway bridges using an advanced video-based system. Engineering Structures, 2014, 75, 164-180.	5.3	194
2	Track–ground vibrations induced by railway traffic: In-situ measurements and validation of a 2.5D FEM-BEM model. Soil Dynamics and Earthquake Engineering, 2012, 32, 111-128.	3.8	182
3	Finite element model updating of a bowstring-arch railway bridge based on experimental modal parameters. Engineering Structures, 2012, 40, 413-435.	5.3	159
4	Numerical modeling of vibrations induced by railway traffic in tunnels: From the source to the nearby buildings. Soil Dynamics and Earthquake Engineering, 2014, 61-62, 269-285.	3.8	150
5	Influence of soil non-linearity on the dynamic response of high-speed railway tracks. Soil Dynamics and Earthquake Engineering, 2010, 30, 221-235.	3.8	144
6	Generalized probabilistic model allowing for various fatigue damage variables. International Journal of Fatigue, 2017, 100, 187-194.	5.7	112
7	Ballast mats for the reduction of railway traffic vibrations. Numerical study. Soil Dynamics and Earthquake Engineering, 2012, 42, 137-150.	3.8	109
8	Computational framework for multiaxial fatigue life prediction of compressor discs considering notch effects. Engineering Fracture Mechanics, 2018, 202, 423-435.	4.3	89
9	Transition zones to railway bridges: Track measurements and numerical modelling. Engineering Structures, 2014, 80, 435-443.	5.3	83
10	Critical speed of railway tracks. Detailed and simplified approaches. Transportation Geotechnics, 2015, 2, 30-46.	4.5	81
11	Assessment of train running safety on bridges: A literature review. Engineering Structures, 2021, 241, 112425.	5.3	78
12	Finite-element model calibration of a railway vehicle based on experimental modal parameters. Vehicle System Dynamics, 2013, 51, 821-856.	3.7	75
13	Wheel–rail contact formulation for analyzing the lateral train–structure dynamic interaction. Computers and Structures, 2015, 152, 200-214.	4.4	72
14	A direct method for analyzing the vertical vehicle–structure interaction. Engineering Structures, 2012, 34, 414-420.	5.3	71
15	A generalization of the fatigue Kohout-VÄ>chet model for several fatigue damage parameters. Engineering Fracture Mechanics, 2017, 185, 284-300.	4.3	71
16	Probabilistic safety assessment of a short span high-speed railway bridge. Engineering Structures, 2014, 71, 99-111.	5.3	70
17	Integer Programming to Optimize Tamping in Railway Tracks as Preventive Maintenance. Journal of Transportation Engineering, 2012, 138, 123-131.	0.9	67
18	Running safety assessment of trains moving over bridges subjected to moderate earthquakes. Earthquake Engineering and Structural Dynamics, 2016, 45, 483-504.	4.4	67

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19	Influence of train dynamic modelling strategy on the prediction of track–ground vibrations induced by railway traffic. Proceedings of the Institution of Mechanical Engineers, Part F: Journal of Rail and Rapid Transit, 2012, 226, 434-450.	2.0	65
20	Design and construction of backfills for railway track transition zones. Proceedings of the Institution of Mechanical Engineers, Part F: Journal of Rail and Rapid Transit, 2015, 229, 58-70.	2.0	65
21	Calibration of the numerical model of a stone masonry railway bridge based on experimentally identified modal parameters. Engineering Structures, 2016, 123, 354-371.	5.3	61
22	Dynamic effects on a train-bridge system caused by stochastically generated turbulent wind fields. Engineering Structures, 2020, 211, 110430.	5.3	60
23	Influence of soil stiffness on building vibrations due to railway traffic in tunnels: Numerical study. Computers and Geotechnics, 2014, 61, 277-291.	4.7	59
24	The effect of differential settlements on the dynamic response of the train–track system: A numerical study. Engineering Structures, 2015, 88, 216-224.	5.3	56
25	Damage detection in railway bridges using traffic-induced dynamic responses. Engineering Structures, 2021, 238, 112189.	5.3	52
26	Fatigue cracking of welded railway bridges: A review. Engineering Failure Analysis, 2019, 104, 154-176.	4.0	51
27	Model updating of a dynamic model of a composite steel-concrete railway viaduct based on experimental tests. Engineering Structures, 2018, 164, 40-52.	5.3	50
28	A comparative study on the running safety of trains subjected to crosswinds simulated with different wind models. Journal of Wind Engineering and Industrial Aerodynamics, 2020, 207, 104398.	3.9	50
29	A direct method for analyzing the nonlinear vehicle–structure interaction. Engineering Structures, 2014, 69, 83-89.	5.3	48
30	Numerical simulations to improve the use of under sleeper pads at transition zones to railway bridges. Engineering Structures, 2018, 164, 169-182.	5.3	48
31	Safety assessment of a short span railway bridge for high-speed traffic using simulation techniques. Engineering Structures, 2012, 40, 141-154.	5.3	47
32	Fatigue assessment based on hot-spot stresses obtained from the global dynamic analysis and local static sub-model. International Journal of Structural Integrity, 2019, 12, 31-47.	3.3	46
33	Micromechanical Modelling of Stress Waves in Rock and Rock Fractures. Rock Mechanics and Rock Engineering, 2010, 43, 741-761.	5.4	45
34	Stability of a train running over the Volga river high-speed railway bridge during crosswinds. Structure and Infrastructure Engineering, 2020, 16, 1121-1137.	3.7	45
35	Under sleeper pads in transition zones at railway underpasses: numerical modelling and experimental validation. Structure and Infrastructure Engineering, 2015, 11, 1432-1449.	3.7	44
36	Remote inspection of RC structures using unmanned aerial vehicles and heuristic image processing. Engineering Failure Analysis, 2020, 117, 104813.	4.0	44

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37	Experimental analysis of track-ground vibrations on a stretch of the Portuguese railway network. Soil Dynamics and Earthquake Engineering, 2016, 90, 358-380.	3.8	43
38	A probabilistic analysis of Miner's law for different loading conditions. Structural Engineering and Mechanics, 2016, 60, 71-90.	1.0	43
39	Track-ground vibrations induced by railway traffic: experimental validation of a 3D numerical model. Soil Dynamics and Earthquake Engineering, 2017, 97, 324-344.	3.8	42
40	Global″ocal fatigue assessment of an ancient riveted metallic bridge based on submodelling of the critical detail. Fatigue and Fracture of Engineering Materials and Structures, 2019, 42, 546-560.	3.4	42
41	Dynamic Analysis of Metallic Arch Railway Bridge. Journal of Bridge Engineering, 2002, 7, 214-222.	2.9	41
42	Non-contact structural displacement measurement using Unmanned Aerial Vehicles and video-based systems. Mechanical Systems and Signal Processing, 2021, 160, 107869.	8.0	39
43	Online unsupervised detection of structural changes using train–induced dynamic responses. Mechanical Systems and Signal Processing, 2022, 165, 108268.	8.0	39
44	On the use of under sleeper pads in transition zones at railway underpasses: experimental field testing. Structure and Infrastructure Engineering, 2015, 11, 112-128.	3.7	37
45	Mechanistic-empirical permanent deformation models: Laboratory testing, modelling and ranking. Transportation Geotechnics, 2020, 23, 100326.	4.5	37
46	Running safety evaluation of a train moving over a high-speed railway viaduct under different track conditions. Engineering Failure Analysis, 2021, 121, 105133.	4.0	36
47	A numerical study on the influence of backfill settlements in the train/track interaction at transition zones to railway bridges. Proceedings of the Institution of Mechanical Engineers, Part F: Journal of Rail and Rapid Transit, 2016, 230, 866-878.	2.0	35
48	Probabilistic assessment of the train running safety on a short-span high-speed railway bridge. Structure and Infrastructure Engineering, 2016, 12, 78-92.	3.7	35
49	Study of ground vibrations induced by railway traffic in a 3D FEM model formulated in the time domain: experimental validation. Structure and Infrastructure Engineering, 2017, 13, 652-664.	3.7	35
50	Influence of loading direction on the static and fatigue fracture properties of the long term operated metallic materials. Engineering Failure Analysis, 2019, 96, 409-425.	4.0	35
51	An approach for wheel flat detection of railway train wheels using envelope spectrum analysis. Structure and Infrastructure Engineering, 2021, 17, 1710-1729.	3.7	35
52	An efficient methodology for fatigue damage assessment of bridge details using modal superposition of stress intensity factors. International Journal of Fatigue, 2015, 81, 61-77.	5.7	33
53	Experimental assessment of the dynamic behaviour of the train-track system at a culvert transition zone. Engineering Structures, 2017, 138, 215-228.	5.3	33
54	Influence of fillet end geometry on fatigue behaviour of welded joints. International Journal of Fatigue, 2019, 123, 196-212.	5.7	33

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55	Validation of a vertical train–track–bridge dynamic interaction model based on limited experimental data. Structure and Infrastructure Engineering, 2020, 16, 181-201.	3.7	33
56	Influence of track foundation on the performance of ballast and concrete slab tracks under cyclic loading: Physical modelling and numerical model calibration. Construction and Building Materials, 2021, 277, 122245.	7.2	33
57	Fatigue life evaluation of a composite steel-concrete roadway bridge through the hot-spot stress method considering progressive pavement deterioration. Engineering Structures, 2018, 166, 46-61.	5. 3	32
58	Dynamic analysis of the train-bridge system considering the non-linear behaviour of the track-deck interface. Engineering Structures, 2020, 220, 110980.	5 . 3	32
59	Railway Vehicle Wheel Flat Detection with Multiple Records Using Spectral Kurtosis Analysis. Applied Sciences (Switzerland), 2021, 11, 4002.	2.5	32
60	Updating and validation of the dynamic model of a railway viaduct with precast deck. Structure and Infrastructure Engineering, 2014, 10, 1484-1509.	3.7	30
61	Efficient methodology for the probabilistic safety assessment of high-speed railway bridges. Engineering Structures, 2015, 101, 138-149.	5 . 3	30
62	Railway Track Transition Zones: Design, Construction, Monitoring and Numerical Modelling. International Journal of Railway Technology, 2013, 2, 33-58.	0.3	30
63	Novel Efficient Technologies in Europe for Axle Bearing Condition Monitoring – the MAXBE Project. Transportation Research Procedia, 2016, 14, 635-644.	1.5	29
64	Evaluation of the train running safety under crosswinds - a numerical study on the influence of the wind speed and orientation considering the normative Chinese Hat Model. International Journal of Rail Transportation, 2021, 9, 204-231.	2.7	29
65	Structural reliability of corroded pipeline using the so-called Separable Monte Carlo method. Journal of Strain Analysis for Engineering Design, 2018, 53, 730-737.	1.8	28
66	Fatigue resistance curves for single and double shear riveted joints from old portuguese metallic bridges. Engineering Failure Analysis, 2019, 96, 255-273.	4.0	28
67	Bridge Weigh-in-Motion system for the identification of train loads using fiber-optic technology. Structures, 2021, 30, 1056-1070.	3.6	28
68	Dynamic Response of a Railway Bridge to Heavy Axle-Load Trains Considering Vehicle–Bridge Interaction. International Journal of Structural Stability and Dynamics, 2018, 18, 1850010.	2.4	26
69	A new strategy to estimate static loads for the dynamic weighing in motion of railway vehicles. Proceedings of the Institution of Mechanical Engineers, Part F: Journal of Rail and Rapid Transit, 2020, 234, 183-200.	2.0	26
70	A Dynamic Vehicle-Track Interaction Model for Predicting the Track Degradation Process. Journal of Infrastructure Systems, 2014, 20, .	1.8	25
71	Fatigue crack growth modelling of FÅ£o Bridge puddle iron under variable amplitude loading. International Journal of Fatigue, 2020, 136, 105588.	5 . 7	25
72	Analysis of Traffic-Induced Vibrations in a Cable-Stayed Bridge. Part I: Experimental Assessment. Journal of Bridge Engineering, 2005, 10, 370-385.	2.9	24

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73	Unitary model for the analysis of bolted connections using the finite element method. Engineering Failure Analysis, 2019, 104, 308-320.	4.0	24
74	The Master S-N curve approach for fatigue assessment of welded bridge structural details. International Journal of Fatigue, 2021, 152, 106432.	5.7	23
75	A contribution for integrated analysis of railway track performance at transition zones and other discontinuities. Construction and Building Materials, 2016, 111, 699-709.	7.2	22
76	Push-Off Tests in the Study of Cyclic Behavior of Interfaces between Concretes Cast at Different Times. Journal of Structural Engineering, 2016, 142, 04015101.	3.4	22
77	Analysis of Traffic-Induced Vibrations in a Cable-Stayed Bridge. Part II: Numerical Modeling and Stochastic Simulation. Journal of Bridge Engineering, 2005, 10, 386-397.	2.9	21
78	Dynamic monitoring of railway track displacement using an optical system. Proceedings of the Institution of Mechanical Engineers, Part F: Journal of Rail and Rapid Transit, 2015, 229, 280-290.	2.0	21
79	Analysis of the fatigue life estimators of the materials using small samples. Journal of Strain Analysis for Engineering Design, 2018, 53, 699-710.	1.8	21
80	Hybrid Fiber-Optic/Electrical Measurement System for Characterization of Railway Traffic and Its Effects on a Short Span Bridge. IEEE Sensors Journal, 2008, 8, 1243-1249.	4.7	20
81	Evaluation of the Performance of Different Damage Indicators in Railway Bridges. Procedia Engineering, 2015, 114, 746-753.	1.2	20
82	Development of an efficient approach for fatigue crack initiation and propagation analysis of bridge critical details using the modal superposition technique. Engineering Failure Analysis, 2018, 89, 118-137.	4.0	20
83	Impact of the train-track-bridge system characteristics in the runnability of high-speed trains against crosswinds - Part I: Running safety. Journal of Wind Engineering and Industrial Aerodynamics, 2022, 224, 104974.	3.9	20
84	Abatement of railway induced vibrations: Numerical comparison of trench solutions. Engineering Analysis With Boundary Elements, 2015, 55, 122-139.	3.7	19
85	Non-Linear Behaviour of Geomaterials in Railway Tracks under Different Loading Conditions. Procedia Engineering, 2016, 143, 1128-1135.	1.2	19
86	Impact of track irregularities and damping on the fatigue damage of a railway bridge deck slab. Structure and Infrastructure Engineering, 2018, 14, 1257-1268.	3.7	19
87	Model-based damage identification of railway bridges using genetic algorithms. Engineering Failure Analysis, 2020, 118, 104845.	4.0	19
88	Probabilistic fatigue S-N curves derivation for notched components. Frattura Ed Integrita Strutturale, 2017, 11, 105-118.	0.9	19
89	Fatigue analysis of box-girder webs subjected to in-plane shear and transverse bending induced by railway traffic. Engineering Structures, 2013, 54, 248-261.	5.3	18
90	Fatigue Assessment of Critical Connections in a Historic Eyebar Suspension Bridge. Journal of Performance of Constructed Facilities, 2019, 33, .	2.0	18

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91	Probabilistic numerical evaluation of dynamic load allowance factors in steel modular bridges using a vehicle-bridge interaction model. Engineering Structures, 2021, 226, 111316.	5.3	18
92	Influence of the railway vehicle properties in the running safety against crosswinds. Journal of Wind Engineering and Industrial Aerodynamics, 2021, 217, 104732.	3.9	18
93	Calibration of the Numerical Model of a Short-span Masonry Railway Bridge Based on Experimental Modal Parameters. Procedia Engineering, 2015, 114, 846-853.	1.2	17
94	Smartphone's Sensing Capabilities for On-Board Railway Track Monitoring: Structural Performance and Geometrical Degradation Assessment. Advances in Civil Engineering, 2019, 2019, 1-13.	0.7	17
95	A comparison between S-N Logistic and Kohout-VÄ>chet formulations applied to the fatigue data of old metallic bridges materials. Frattura Ed Integrita Strutturale, 2019, 13, 400-410.	0.9	17
96	Automatic clustering-based approach for train wheels condition monitoring. International Journal of Rail Transportation, 2023, 11, 639-664.	2.7	17
97	Dynamic analysis of high-speed railway bridge decks using generalised beam theory. Thin-Walled Structures, 2017, 114, 22-31.	5.3	16
98	Application of the modal superposition technique combined with analytical elastoplastic approaches to assess the fatigue crack initiation on structural components. Engineering Fracture Mechanics, 2017, 185, 271-283.	4.3	16
99	Fatigue Strength Evaluation of Resin-Injected Bolted Connections Using Statistical Analysis. Engineering, 2017, 3, 795-805.	6.7	16
100	Probabilistic Fatigue Crack Initiation and Propagation Fields Using the Strain Energy Density. Strength of Materials, 2018, 50, 620-635.	0.5	16
101	Experimental validation of a simplified soil-structure interaction approach for the prediction of vibrations in buildings due to railway traffic. Soil Dynamics and Earthquake Engineering, 2021, 141, 106499.	3.8	16
102	Impact of the train-track-bridge system characteristics in the runnability of high-speed trains against crosswinds - Part II: Riding comfort. Journal of Wind Engineering and Industrial Aerodynamics, 2022, 224, 104987.	3.9	16
103	Stress wave propagation test and numerical modelling of an underground complex. International Journal of Rock Mechanics and Minings Sciences, 2014, 72, 26-36.	5.8	15
104	Calibration and validation of a freight wagon dynamic model in operating conditions based on limited experimental data. Vehicle System Dynamics, 2022, 60, 3024-3050.	3.7	15
105	Numerical Modelling of Railway Bridge Approaches: Influence of Soil Non-Linearity. International Journal of Railway Technology, 2014, 3, 73-95.	0.3	15
106	A NEW METHODOLOGY FOR EVALUATING THE SAFE TEMPERATURE IN CONTINUOUS WELDED RAIL TRACKS. International Journal of Structural Stability and Dynamics, 2013, 13, 1350016.	2.4	14
107	Progressive numerical model validation of a bowstring-arch railway bridge based on a structural health monitoring system. Journal of Civil Structural Health Monitoring, 2021, 11, 421.	3.9	14
108	Model Updating of a Freight Wagon Based on Dynamic Tests under Different Loading Scenarios. Applied Sciences (Switzerland), 2021, 11, 10691.	2.5	14

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109	Detection of exposed steel rebars based on deep-learning techniques and unmanned aerial vehicles. Automation in Construction, 2022, 139, 104324.	9.8	14
110	Fatigue Crack Growth Rate of the Long Term Operated Puddle Iron from the Eiffel Bridge. Metals, 2019, 9, 53.	2.3	13
111	Vibrations induced by railway traffic in buildings: Experimental validation of a sub-structuring methodology based on 2.5D FEM-MFS and 3D FEM. Engineering Structures, 2021, 240, 112381.	5.3	13
112	An approach for predicting fatigue life of CFRP retrofitted metallic structural details. International Journal of Fatigue, 2022, 154, 106557.	5.7	13
113	Statistical methodologies for removing the operational effects from the dynamic responses of a highâ€rise telecommunications tower. Structural Control and Health Monitoring, 2021, 28, e2700.	4.0	13
114	Design recommendations for reinforced concrete interfaces based on statistical and probabilistic methods. Structural Concrete, 2016, 17, 811-823.	3.1	12
115	Calibration and experimental validation of a dynamic model of the train-track system at a culvert transition zone. Structure and Infrastructure Engineering, 2018, 14, 604-618.	3.7	12
116	Constitutive model for fibre reinforced concrete by coupling the fibre and aggregate interlock resisting mechanisms. Cement and Concrete Composites, 2020, 111, 103618.	10.7	12
117	Fatigue Assessments of a Jacket-Type Offshore Structure Based on Static and Dynamic Analyses. Practice Periodical on Structural Design and Construction, 2021, 26, .	1.3	12
118	A finite element post-processor for fatigue assessment of welded structures based on the Master S-N curve method. International Journal of Fatigue, 2021, 153, 106482.	5.7	12
119	Ballastless railway track transition zones: An embankment to tunnel analysis. Transportation Geotechnics, 2022, 33, 100728.	4.5	12
120	Experimental Validation of a Double-Deck Track-Bridge System under Railway Traffic. Sustainability, 2022, 14, 5794.	3.2	12
121	Fatigue crack propagation behaviour in thick steel weldments. International Journal of Structural Integrity, 2012, 3, 184-203.	3.3	11
122	Fatigue crack growth of 42CrMo4 and 41Cr4 steels under different heat treatment conditions. International Journal of Structural Integrity, 2018, 9, 326-336.	3.3	11
123	A practical three-dimensional wheel-rail interaction element for dynamic response analysis of vehicle-track systems. Computers and Structures, 2021, 254, 106581.	4.4	11
124	Modelling probabilistic fatigue crack propagation rates for a mild structural steel. Frattura Ed Integrita Strutturale, 2015, 9, 80-96.	0.9	10
125	A methodology for a global-local fatigue analysis of ancient riveted metallic bridges. International Journal of Structural Integrity, 2018, 9, 355-380.	3.3	10
126	Continuous monitoring of the dynamic behavior of a high-rise telecommunications tower. Structural Design of Tall and Special Buildings, 2019, 28, e1621.	1.9	10

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127	Stress and permanent deformation amplification factors in subgrade induced by dynamic mechanisms in track structures. International Journal of Rail Transportation, 2022, 10, 298-330.	2.7	10
128	Calibration of the numerical model of a track section over a railway bridge based on dynamic tests. Structures, 2021, 34, 4124-4141.	3.6	10
129	Efficient crack analysis of dynamically loaded structures using a modal superposition of stress intensity factors. Engineering Fracture Mechanics, 2012, 93, 75-91.	4.3	9
130	Fatigue Damage Assessment of a Riveted Connection Made of Puddle Iron from the Fão Bridge using the Modified Probabilistic Interpretation Technique. Procedia Engineering, 2015, 114, 760-767.	1.2	9
131	Mitigation of vibrations and re-radiated noise in buildings generated by railway traffic: a parametric study. Procedia Engineering, 2017, 199, 2627-2632.	1.2	9
132	Simulation of the Dynamic Behavior of a Centenary Metallic Bridge under Metro Traffic Actions Based on Advanced Interaction Models. International Journal of Structural Stability and Dynamics, 2021, 21, 2150057.	2.4	9
133	A new inverse analysis approach for predicting the fracture mode I parameters of fibre reinforced concrete. Engineering Fracture Mechanics, 2021, 246, 107613.	4.3	9
134	Fatigue assessment of an existing steel bridge by finite element modelling and field measurements. Journal of Physics: Conference Series, 2017, 843, 012038.	0.4	8
135	The renewed TC12/ESIS technical committee - Risk analysis and safety of large structures and components. Engineering Failure Analysis, 2019, 105, 798-802.	4.0	8
136	Calibration of the numerical model of a freight railway vehicle based on experimental modal parameters. Structures, 2022, 38, 108-122.	3.6	8
137	Dynamic measurements on bridges: design, rehabilitation and monitoring. Proceedings of the Institution of Civil Engineers: Bridge Engineering, 2003, 156, 135-148.	0.6	7
138	Probabilistic S-N Field Assessment for a Notched Plate Made of Puddle Iron From the Eiffel Bridge with an Elliptical Hole. Procedia Engineering, 2015, 114, 691-698.	1.2	7
139	A numerical method to predict the riding comfort induced by foundation construction close to a high-speed-line bridge. Proceedings of the Institution of Mechanical Engineers, Part F: Journal of Rail and Rapid Transit, 2015, 229, 553-564.	2.0	7
140	Application of Modal Superposition Technique in the Fatigue Analysis Using Local Approaches. Procedia Engineering, 2016, 160, 45-52.	1.2	7
141	Weighing-in-motion wireless system for sustainable railway transport. Energy Procedia, 2017, 136, 408-413.	1.8	7
142	Evaluation of Fatigue Design Curves for a Double-Side Welded Connection Used in Offshore Applications. , $2018, \ldots$		7
143	Influence of the Double Composite Action Solution in the Behavior of a High-Speed Railway Viaduct. Journal of Bridge Engineering, 2020, 25, .	2.9	7
144	Statistical analysis of fatigue crack propagation data of materials from ancient portuguese metallic bridges. Frattura Ed Integrita Strutturale, 2017, 11, 136-146.	0.9	7

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145	Global and Local Dynamic Effects on a Railway Viaduct with Precast Deck. , 0, , .		7
146	Real-Time Unsupervised Detection of Early Damage in Railway Bridges Using Traffic-Induced Responses. Structural Integrity, 2022, , 117-142.	1.4	7
147	On-line monitoring system for tracks. , 2015, , .		6
148	Weighing in motion and wheel defect detection of rolling stock. , 2015, , .		6
149	Formulation of the boundary element method in the wavenumber–frequency domain based on the thin layer method. Computers and Structures, 2015, 161, 1-16.	4.4	6
150	Fatigue Life Evaluation of Critical Details of the HercÃlio Luz Suspension Bridge. Procedia Structural Integrity, 2017, 5, 1027-1034.	0.8	6
151	Long-term monitoring of the track–bridge interaction on an extremely skew steel arch bridge. Journal of Civil Structural Health Monitoring, 2020, 10, 377-387.	3.9	6
152	Stochastic analysis of railway embankment with uncertain soil parameters using polynomial chaos expansion. Structure and Infrastructure Engineering, 2023, 19, 1425-1444.	3.7	6
153	Numerical evaluation of the non-linear behaviour of cracked RC members under variable-amplitude cyclic loading. Materials and Structures/Materiaux Et Constructions, 2015, 48, 2815-2838.	3.1	5
154	Fatigue assessment of a high-speed railway composite steel-concrete bridge by the hot-spot stress method. International Journal of Structural Integrity, 2018, 9, 337-354.	3.3	5
155	Modelling and analysis of the dynamic response of a railway viaduct using an accurate and efficient algorithm. Engineering Structures, 2021, 226, 111308.	5.3	5
156	A NONLINEAR VEHICLE STRUCTURE INTERACTION METHODOLOGY WITH WHEEL RAIL DETACHMENT AND REATTACHMENT. , $2014,$, .		5
157	Modeling of vibrations induced in tunnels: a 2.5D FEM-PML approach. Geotecnia, 2018, 144, 89-118.	0.1	4
158	MECHANICAL CHARACTERIZATION OF ANCIENT PORTUGUESE RIVETED BRIDGES STEELS. Engineering Structures and Technologies, 2017, 9, 214-225.	0.1	3
159	Condition Monitoring of Overhead Line Equipment (OHLE) Structures Using Ground-Bourne Vibrations from Train Passages. Sustainable Civil Infrastructures, 2019, , 14-22.	0.2	3
160	An investigation on stress wave propagation in micromechanical models of rock., 2011,, 1253-1258.		3
161	Dynamic Behaviour of a Short Span Filler-Beam Railway Bridge under High Speed Traffic. , 0, , .		3
162	Distortion-Induced Fatigue Reassessment of a Welded Bridge Detail Based on Structural Stress Methods. Metals, 2021, 11, 1952.	2.3	3

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163	Fatigue Failure of 51CrV4 Steel Under Rotating Bending and Tensile. Structural Integrity, 2022, , 307-313.	1.4	3
164	Characterization of railway traffic and its effects on a short span bridge by using a hybrid fibre optic/electrical measurement system., 2007, 6619, 624.		2
165	Fatigue Crack Propagation Behavior of the Welded Steel of a Railway Bridge. Materials Science Forum, 0, 730-732, 787-792.	0.3	2
166	Calibration of the Numerical Model of a Stand in Dragão Stadium Based on Genetic Algorithms. Structural Engineering International: Journal of the International Association for Bridge and Structural Engineering (IABSE), 2018, 28, 196-207.	0.8	2
167	CINPAR2016–strengthening and repair of structures. International Journal of Structural Integrity, 2018, 9, 278-280.	3.3	2
168	Aerodynamic damping in cables of overhead transmission lines subjected to wind loads. Wind Engineering, 2018, 42, 268-275.	1.9	2
169	A Stress Intensity Factor Study for a Pressure Vessel CT Specimen Using Finite Element Method. Structural Integrity, 2019, , 181-186.	1.4	2
170	Train-bridge interaction effects on the dynamic response of a small span high-speed railway bridge. Bridge Maintenance, Safety and Management, 2012, , 1718-1725.	0.1	2
171	STRUCTURAL INTEGRITY OF MATERIALS AND STRUCTURES. Engineering Structures and Technologies, 2017, 9, 157-157.	0.1	2
172	New Methodology for Calculation of Required Prestressing Levels in Continuous Precast Bridge Decks. Journal of Bridge Engineering, 2013, 18, 1219-1226.	2.9	1
173	Measurement of the Dynamic Displacements of Railway Bridges Using Video Technology. MATEC Web of Conferences, 2015, 24, 02007.	0.2	1
174	Calibration of Numerical Models of Railway Vehicles Based on Dynamic Tests. Mechanisms and Machine Science, 2021, , 201-211.	0.5	1
175	Dynamic effects induced by abrupt changes in track stiffness in high speed railway lines. , 2007, , .		1
176	AVALIAÇÃO EXPERIMENTAL DOS EFEITOS DINÃ,MICOS DA AÇÃO DO VENTO EM UMA TORRE DE TELECOMUNICAÇÕES DE ELEVADA ALTURA. Anais Do Congresso Ibero-Latino-Americano De Métodos Computacionais Em Engenharia, 0, , .	0.0	1
177	Structural analysis of a stone arch bridge under incremental railway static loading. IABSE Symposium Report, 2019, , .	0.0	1
178	Failure of Overhead Line Equipment (OHLE) Structure Under Hurricane. Sustainable Civil Infrastructures, 2020, , 54-63.	0.2	1
179	Influence of Track Irregularities in the Stress Levels of the Ballasted and Ballastless Tracks. Lecture Notes in Civil Engineering, 2020, , 601-612.	0.4	1
180	Fatigue in Trapezoidal Leaf Springs of Suspensions in Two-Axle Wagonsâ€"An Overview and Simulation. Structural Integrity, 2022, , 97-114.	1.4	1

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181	Railway ground-borne vibrations: Comprehensive field test development and experimental validation of prediction tools., 2022,, 209-241.		1
182	Structural health monitoring strategy for damage detection in railway bridges using traffic induced dynamic responses., 2022,, 389-408.		1
183	Approaches for weigh-in-motion and wheel defect detection of railway vehicles. , 2022, , 183-207.		1
184	Fatigue assessment of composite bridges in high speed railway lines including resonance phenomena. IABSE Symposium Report, 2007, , .	0.0	0
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