

Ravi Kiran Yellavajjala

List of Publications by Year in descending order

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47
papers

1,055
citations

430442

18
h-index

433756

31
g-index

47
all docs

47
docs citations

47
times ranked

728
citing authors

#	ARTICLE	IF	CITATIONS
1	A triaxiality and Lode parameter dependent ductile fracture criterion. <i>Engineering Fracture Mechanics</i> , 2014, 128, 121-138.	2.0	101
2	Gurson model parameters for ductile fracture simulation in ASTM A992 steels. <i>Fatigue and Fracture of Engineering Materials and Structures</i> , 2014, 37, 171-183.	1.7	60
3	A micromechanical model for ductile fracture prediction in ASTM A992 steels. <i>Engineering Fracture Mechanics</i> , 2013, 102, 101-117.	2.0	55
4	Wheat Lodging Detection from UAS Imagery Using Machine Learning Algorithms. <i>Remote Sensing</i> , 2020, 12, 1838.	1.8	54
5	Influence of stress concentration and cooling methods on post-fire mechanical behavior of ASTM A36 steels. <i>Construction and Building Materials</i> , 2018, 186, 920-945.	3.2	50
6	Post-fire mechanical behavior of ASTM A572 steels subjected to high stress triaxialities. <i>Engineering Structures</i> , 2019, 191, 323-342.	2.6	46
7	Influence of corrosion and surface roughness on wettability of ASTM A36 steels. <i>Journal of Constructional Steel Research</i> , 2018, 144, 310-326.	1.7	45
8	Experimental Studies and Models for Ductile Fracture in ASTM A992 Steels at High Triaxiality. <i>Journal of Structural Engineering</i> , 2014, 140, .	1.7	44
9	Modified pullout test for indirect characterization of natural fiber and cementitious matrix interface properties. <i>Construction and Building Materials</i> , 2019, 208, 381-393.	3.2	42
10	A micromechanical cyclic void growth model for ultra-low cycle fatigue. <i>International Journal of Fatigue</i> , 2015, 70, 24-37.	2.8	40
11	Combined effects of triaxiality, Lode parameter and shear stress on void growth and coalescence. <i>Engineering Fracture Mechanics</i> , 2018, 199, 410-437.	2.0	35
12	Complex step derivative approximation for numerical evaluation of tangent moduli. <i>Computers and Structures</i> , 2014, 140, 1-13.	2.4	32
13	Influence of high stress triaxiality on mechanical strength of ASTM A36, ASTM A572 and ASTM A992 steels. <i>Construction and Building Materials</i> , 2018, 176, 129-134.	3.2	29
14	Identification and characterization of fracture in metals using machine learning based texture recognition algorithms. <i>Engineering Fracture Mechanics</i> , 2019, 219, 106618.	2.0	26
15	Microstructureâ€œMechanical Property Relationships for Post-Fire Structural Steels. <i>Journal of Materials in Civil Engineering</i> , 2020, 32, .	1.3	26
16	Texture-Based Metallurgical Phase Identification in Structural Steels: A Supervised Machine Learning Approach. <i>Metals</i> , 2019, 9, 546.	1.0	25
17	Employing corn derived products to reduce the corrosivity of pavement deicing materials. <i>Construction and Building Materials</i> , 2020, 263, 120662.	3.2	25
18	On anisotropy, strain rate and size effects in vat photopolymerization based specimens. <i>Additive Manufacturing</i> , 2018, 23, 181-196.	1.7	22

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19	Fast-to-Compute Weakly Coupled Ductile Fracture Model for Structural Steels. Journal of Structural Engineering, 2014, 140, .	1.7	19
20	A survey on the effects of deicing materials on properties of Cement-based materials. Construction and Building Materials, 2022, 319, 126062.	3.2	19
21	A coupled microvoid elongation and dilation based ductile fracture model for structural steels. Engineering Fracture Mechanics, 2015, 145, 15-42.	2.0	18
22	A novel sensitivity-based method for feature selection. Journal of Big Data, 2021, 8, .	6.9	18
23	Naïve Bayes classifier, multivariate linear regression and experimental testing for classification and characterization of wheat straw based on mechanical properties. Industrial Crops and Products, 2018, 112, 434-448.	2.5	17
24	Complex Perturbation Method for Sensitivity Analysis of Nonlinear Trusses. Journal of Structural Engineering, 2017, 143, .	1.7	16
25	Fugitive Dust Suppression in Unpaved Roads: State of the Art Research Review. Sustainability, 2021, 13, 2399.	1.6	16
26	Automatic implementation of finite strain anisotropic hyperelastic models using hyper-dual numbers. Computational Mechanics, 2015, 55, 229-248.	2.2	15
27	Improving the ice-melting capacity of traditional deicers. Construction and Building Materials, 2021, 271, 121527.	3.2	15
28	Performance of cubic convergent methods for implementing nonlinear constitutive models. Computers and Structures, 2015, 156, 83-100.	2.4	14
29	High-risk human papillomaviruses and Epstein-Barr virus in breast cancer in Lebanese women and their association with tumor grade: a molecular and tissue microarray study. Cancer Cell International, 2021, 21, 308.	1.8	13
30	Data Mining and Equi-Accident Zones for US Pipeline Accidents. Journal of Pipeline Systems Engineering and Practice, 2018, 9, .	0.9	12
31	Analysis and design of a three-phase TRIP steel microstructure for enhanced fracture resistance. International Journal of Fracture, 2020, 221, 53-85.	1.1	11
32	A modified micromechanics framework to predict shear involved ductile fracture in structural steels at intermediate and low-stress triaxialities. Engineering Fracture Mechanics, 2020, 225, 106860.	2.0	10
33	Soy-protein and corn-derived polyol based coatings for corrosion mitigation in reinforced concrete. Construction and Building Materials, 2022, 319, 126056.	3.2	10
34	A case study on pre 1970s constructed concrete exterior beam-column joints. Case Studies in Structural Engineering, 2014, 1, 20-25.	1.6	9
35	Numerically approximated Cauchy integral (NACI) for implementation of constitutive models. Finite Elements in Analysis and Design, 2014, 89, 33-51.	1.7	8
36	Detection of Corrosion-Indicating Oxidation Product Colors in Steel Bridges under Varying Illuminations, Shadows, and Wetting Conditions. Metals, 2020, 10, 1439.	1.0	8

#	ARTICLE	IF	CITATIONS
37	Computational Models for Ductile Fracture Prediction in Structural Engineering Applications. , 2014, 3, 1947-1955.		7
38	Additive Manufacturing and Mechanical Performance of Trifurcated Steel Joints for Architecturally Exposed Steel Structures. Materials, 2020, 13, 1901.	1.3	7
39	Hyperspectral imaging for the elimination of visual ambiguity in corrosion detection and identification of corrosion sources. Structural Health Monitoring, 2022, 21, 1678-1693.	4.3	7
40	Improving the wettability of structural steels by employing ionic liquids. Journal of Molecular Liquids, 2021, 324, 115137.	2.3	6
41	Exploring the Use of Polyols, Corn, and Beet Juice for Decreasing the Freezing Point of Brine Solution for Deicing of Pavements. Sustainability, 2021, 13, 5765.	1.6	6
42	Novel sensitivity method for evaluating the first derivative of the feed-forward neural network outputs. Journal of Big Data, 2021, 8, .	6.9	5
43	Effect of agro-derived corrosion inhibitors on the properties of Portland cement mortar. Construction and Building Materials, 2021, 310, 125236.	3.2	5
44	On the application of multipoint Root-Solvers for improving global convergence of fracture problems. Engineering Fracture Mechanics, 2018, 193, 77-95.	2.0	4
45	A Pathfinding Algorithm for Lowering Infection Exposure of Healthcare Personnel Working in Makeshift Hospitals. Healthcare (Switzerland), 2022, 10, 344.	1.0	2
46	Relationship between Nano and Macroscale Properties of Postfire ASTM A36 Steels. Journal of Materials in Civil Engineering, 2022, 34, .	1.3	1
47	Closure to "Complex Perturbation Method for Sensitivity Analysis of Nonlinear Trusses" by Ravi Kiran, Lei Li, and Kapil Khandelwal. Journal of Structural Engineering, 2017, 143, 07017006.	1.7	0