

# Pat Rajeev

## List of Publications by Year in descending order

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Version: 2024-02-01

97  
papers

2,358  
citations

201575

27  
h-index

243529

44  
g-index

101  
all docs

101  
docs citations

101  
times ranked

1983  
citing authors

#	ARTICLE	IF	CITATIONS
1	Environmental challenges induced by extensive use of face masks during COVID-19: A review and potential solutions. <i>Environmental Challenges</i> , 2021, 3, 100039.	2.0	214
2	Yield stress criteria to assess the buildability of 3D concrete printing. <i>Construction and Building Materials</i> , 2020, 240, 117989.	3.2	132
3	Durability of low-calcium fly ash based geopolymer concrete culvert in a saline environment. <i>Cement and Concrete Research</i> , 2017, 100, 297-310.	4.6	121
4	Carbonation of a blended slag-fly ash geopolymer concrete in field conditions after 8 years. <i>Construction and Building Materials</i> , 2016, 125, 661-669.	3.2	107
5	Seismic fragilities for reinforced concrete buildings with consideration of irregularities. <i>Structural Safety</i> , 2012, 39, 1-13.	2.8	69
6	Distributed Optical Fibre Sensors and their Applications in Pipeline Monitoring. <i>Key Engineering Materials</i> , 0, 558, 424-434.	0.4	66
7	Direct shear test for the assessment of rheological parameters of concrete for 3D printing applications. <i>Materials and Structures/Materiaux Et Constructions</i> , 2019, 52, 1.	1.3	66
8	Numerical study on the effects of diaphragm stiffness and strength on the seismic response of multi-story modular buildings. <i>Engineering Structures</i> , 2018, 163, 25-37.	2.6	63
9	Numerical analysis of an experimental pipe buried in swelling soil. <i>Computers and Geotechnics</i> , 2011, 38, 897-904.	2.3	62
10	Seismic fragilities of non-ductile reinforced concrete frames with consideration of soil structure interaction. <i>Soil Dynamics and Earthquake Engineering</i> , 2012, 40, 78-86.	1.9	62
11	Fly ash-based boroaluminosilicate geopolymers: Experimental and molecular simulations. <i>Ceramics International</i> , 2017, 43, 4119-4126.	2.3	57
12	Confidence Factor?. <i>Journal of Earthquake Engineering</i> , 2010, 14, 989-1007.	1.4	54
13	Vibration induced active rheology control for 3D concrete printing. <i>Cement and Concrete Research</i> , 2021, 140, 106293.	4.6	52
14	Review of performance requirements for inter-module connections in multi-story modular buildings. <i>Journal of Building Engineering</i> , 2020, 28, 101087.	1.6	50
15	Evaluation of defective sewer pipe-induced internal erosion and associated ground deformation using laboratory model test. <i>Canadian Geotechnical Journal</i> , 2017, 54, 1184-1195.	1.4	45
16	Durability Performance of Precast Fly Ash-Based Geopolymer Concrete under Atmospheric Exposure Conditions. <i>Journal of Materials in Civil Engineering</i> , 2018, 30, .	1.3	45
17	Soil moisture monitoring at the field scale using neutron probe. <i>Canadian Geotechnical Journal</i> , 2014, 51, 332-345.	1.4	43
18	Ground-atmosphere interaction modelling for long-term prediction of soil moisture and temperature. <i>Canadian Geotechnical Journal</i> , 2012, 49, 1059-1073.	1.4	42

#	ARTICLE	IF	CITATIONS
19	Alkali activated materials vs geopolymers: Role of boron as an eco-friendly replacement. Construction and Building Materials, 2017, 146, 297-302.	3.2	42
20	Equation to predict maximum pipe stress incorporating internal and external loadings on buried pipes. Canadian Geotechnical Journal, 2016, 53, 1315-1331.	1.4	40
21	A void ratio " water content " net stress model for environmentally stabilized expansive soils. Canadian Geotechnical Journal, 2011, 48, 867-877.	1.4	35
22	The influence of pipe embedment material on sinkhole formation due to erosion around defective sewers. Transportation Geotechnics, 2019, 19, 110-125.	2.0	35
23	Distributed optical fibre sensor for infrastructure monitoring: Field applications. Optical Fiber Technology, 2021, 64, 102577.	1.4	34
24	Microstructural study of environmentally friendly boroaluminosilicate geopolymers. Journal of Cleaner Production, 2018, 189, 805-812.	4.6	33
25	Investigation of waste clay brick as partial replacement of geopolymer binders for rigid pavement application. Construction and Building Materials, 2021, 305, 124787.	3.2	33
26	Modelling of upheaval buckling of offshore pipeline buried in clay soil using genetic programming. Engineering Structures, 2015, 101, 306-317.	2.6	30
27	Damage detection of in service timber poles using Hilbert-Huang transform. NDT and E International, 2019, 107, 102141.	1.7	30
28	Extrusion rheometer for 3D concrete printing. Cement and Concrete Composites, 2021, 121, 104075.	4.6	30
29	Offshore pipeline performance evaluation by different artificial neural networks approaches. Measurement: Journal of the International Measurement Confederation, 2015, 76, 117-128.	2.5	28
30	Stress-strain relationship of cement mortar under triaxial compression. Construction and Building Materials, 2019, 220, 456-463.	3.2	27
31	Energy-based damage index for concentrically braced steel structure using continuous wavelet transform. Journal of Constructional Steel Research, 2014, 103, 241-250.	1.7	26
32	Experimental Study on Contact Erosion Failure in Pavement Embankment with Dispersive Clay. Journal of Materials in Civil Engineering, 2016, 28, .	1.3	25
33	Monitoring of Pressure Transients in Water Supply Networks. Water Resources Management, 2016, 30, 471-485.	1.9	24
34	The effect of chloride ingress in reinforced geopolymer concrete exposed in the marine environment. Journal of Building Engineering, 2021, 39, 102281.	1.6	24
35	Field performance of in-service cast iron water reticulation pipe buried in reactive clay. Canadian Geotechnical Journal, 2015, 52, 1861-1873.	1.4	23
36	Determination of thermal diffusivity of soil using infrared thermal imaging. Canadian Geotechnical Journal, 2011, 48, 1295-1302.	1.4	21

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37	Increased Accuracy of Vector-IM-Based Seismic Risk Assessment?. Journal of Earthquake Engineering, 2008, 12, 111-124.	1.4	19
38	Interpretation of the loading-wetting behaviour of compacted soils within the "MPK" framework. Part II: Dynamic compaction. Canadian Geotechnical Journal, 2016, 53, 806-827.	1.4	19
39	Effect of seismic and soil parameter uncertainties on seismic damage of buried segmented pipeline. Transportation Geotechnics, 2019, 21, 100274.	2.0	18
40	Evaluation of alkalinity changes and carbonation of geopolymer concrete exposed to wetting and drying. Journal of Building Engineering, 2021, 35, 102029.	1.6	18
41	Direct displacement-based seismic design of steel concentric braced frame structures. Australian Journal of Structural Engineering, 2012, 13, .	0.4	15
42	Displacement profile for displacement based seismic design of concentric braced frames. Journal of Constructional Steel Research, 2019, 155, 233-248.	1.7	15
43	Effect of Infill-Wall Material Types and Modeling Techniques on the Seismic Response of Reinforced Concrete Buildings. Natural Hazards Review, 2020, 21, .	0.8	15
44	Modelling of Climate Induced Moisture Variations and Subsequent Ground Movements in Expansive Soils. Geotechnical and Geological Engineering, 2018, 36, 2455-2477.	0.8	14
45	Application of stress wave propagation technique for condition assessment of timber poles. Structure and Infrastructure Engineering, 2019, 15, 1234-1246.	2.0	14
46	Waste Clay Bricks as a Geopolymer Binder for Pavement Construction. Sustainability, 2022, 14, 6456.	1.6	14
47	A New Method for Developing Equations Applied to the Water Retention Curve. Soil Science Society of America Journal, 2012, 76, 806-814.	1.2	13
48	Durability Performance of Concrete Structures Built with Low Carbon Construction Materials. Energy Procedia, 2016, 88, 794-799.	1.8	13
49	Estimating apparent thermal diffusivity of soil using field temperature time series. Geomechanics and Geoengineering, 2016, 11, 28-46.	0.9	12
50	Field Performance of In-Service Cast Iron Gas Reticulation Pipe Buried in Reactive Clay. Journal of Pipeline Systems Engineering and Practice, 2016, 7, .	0.9	11
51	Mitigation of heat stress risks through building energy efficiency upgrade: a case study of Melbourne, Australia. Australian Journal of Civil Engineering, 2018, 16, 64-78.	0.6	11
52	The Use of Restrained Ring Test Method for Soil Desiccation Studies. Geotechnical Testing Journal, 2015, 38, 98-112.	0.5	11
53	Development of an Innovative Boltless Connection for Multistory Modular Buildings. Journal of Structural Engineering, 2022, 148, .	1.7	11
54	Effect of Topology Irregularities and Construction Quality on Life-Cycle Cost of Reinforced Concrete Buildings. Journal of Earthquake Engineering, 2013, 17, 590-610.	1.4	10

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55	Condition assessment tool for timber utility poles using stress wave propagation technique. <i>Nondestructive Testing and Evaluation</i> , 2021, 36, 336-356.	1.1	10
56	Residual stress-strain relationship for the biochar-based mortar after exposure to elevated temperature. <i>Case Studies in Construction Materials</i> , 2021, 14, e00540.	0.8	10
57	Average Vertical Stresses in Underground Mine Stopes Filled with Granular Backfills. <i>Geotechnical and Geological Engineering</i> , 2016, 34, 2053-2061.	0.8	9
58	Suitable intensity measure for probabilistic seismic risk assessment of non-ductile Australian reinforced concrete buildings. <i>Bulletin of Earthquake Engineering</i> , 2019, 17, 3753-3775.	2.3	9
59	Structural health assessment techniques for in-service timber poles. <i>Structure and Infrastructure Engineering</i> , 2023, 19, 439-459.	2.0	9
60	Structural Health Assessment of Timber Utility Poles Using Stress Wave Propagation and Artificial Neural Network Techniques. <i>Journal of Nondestructive Evaluation</i> , 2021, 40, 1.	1.1	9
61	Assessment of thermal cracking in concrete roof tiles. <i>Materials and Design</i> , 2016, 107, 470-477.	3.3	8
62	Effect of hysteretic steel damper uncertainty on seismic performance of steel buildings. <i>Journal of Constructional Steel Research</i> , 2019, 157, 46-58.	1.7	8
63	Seismic Fragility Assessment of Non-ductile Reinforced Concrete Buildings in Australia. <i>Journal of Earthquake Engineering</i> , 2022, 26, 1941-1975.	1.4	8
64	Health monitoring of timber poles using time-frequency analysis techniques and stress wave propagation. <i>Journal of Civil Structural Health Monitoring</i> , 2021, 11, 85-103.	2.0	8
65	Distributed optical fibre sensor for condition monitoring of mining conveyor using wavelet transform and artificial neural network. <i>Structural Control and Health Monitoring</i> , 2021, 28, e2827.	1.9	8
66	Characterizing Extrudability for 3D Concrete Printing Using Discrete Element Simulations. <i>RILEM Bookseries</i> , 2020, , 290-300.	0.2	8
67	Damage Severity Estimation of Timber Poles Using Stress Wave Propagation and Wavelet Entropy Evolution. <i>Journal of Nondestructive Evaluation, Diagnostics and Prognostics of Engineering Systems</i> , 2021, 4, .	0.7	8
68	Effect of brown coal fly ash on dispersive clayey soils. <i>Proceedings of the Institution of Civil Engineers: Ground Improvement</i> , 2017, 170, 231-244.	0.7	7
69	Automatic fault detection system for mining conveyor using distributed acoustic sensor. <i>Measurement: Journal of the International Measurement Confederation</i> , 2022, 187, 110330.	2.5	7
70	Effects of operational loads on buried water pipes using field tests. <i>Tunnelling and Underground Space Technology</i> , 2022, 124, 104463.	3.0	7
71	Lateral Variation of the Vertical Stress in Underground Mine Stopes Filled with Granular Backfills. <i>Geotechnical and Geological Engineering</i> , 2016, 34, 481-492.	0.8	6
72	Effects of vertical irregularities and construction quality in seismic fragilities for reinforced concrete buildings. <i>International Journal of Earthquake and Impact Engineering</i> , 2017, 2, 1.	0.3	6

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73	Comparison of Rheology Measurement Techniques Used in 3D Concrete Printing Applications. Lecture Notes in Civil Engineering, 2021, , 261-273.	0.3	6
74	Laboratory Model Test on Contact Erosion of Dispersive Soil Beneath Pavement Layers. Geotechnical Testing Journal, 2015, 38, 20140179.	0.5	6
75	Stabilizing Dispersive Soil Using Brown Coal Fly Ash and Hydrated Lime. , 2016, , .		5
76	Non-destructive Techniques for Condition Assessment of Timber Utility Poles. Lecture Notes in Civil Engineering, 2020, , 941-951.	0.3	5
77	Cyclic loading response of offshore pipelines using simple shear tests. Soil Dynamics and Earthquake Engineering, 2020, 130, 105991.	1.9	4
78	Field evaluation of in-service buried pipeline using robust instrumentation. Transportation Geotechnics, 2020, 24, 100376.	2.0	4
79	Contribution of Cement Mortar Lining to Structural Capacity of Cast Iron Water Mains. ACI Materials Journal, 2016, 113, .	0.3	4
80	SEISMIC SLOPE FAILURE MODELLING USING THE MESH-FREE SPH METHOD. International Journal of GEOMATE, 2013, , .	0.1	4
81	Waste Clay Brick Binders for Rigid Pavement Subbase and Base Concretes. Lecture Notes in Civil Engineering, 2022, , 903-917.	0.3	4
82	Effect of Irregular Seabed Profile on Upheaval Buckling of Buried Offshore Pipelines. Journal of Pipeline Systems Engineering and Practice, 2017, 8, 04017017.	0.9	3
83	Closure to "Experimental Study on Contact Erosion Failure in Pavement Embankment with Dispersive Clay" by S. Premkumar, J. Piratheepan, A. Arulrajah, M. Disfani, and P. Rajeev. Journal of Materials in Civil Engineering, 2017, 29, .	1.3	3
84	A Modified Mohr-Coulomb Model to Simulate the Response of Buried Pipes Subjected to Large Ground Displacement. , 2016, , .		2
85	Contact erosion initiated by clay dispersion beneath pavement layers. Geomechanics and Geoengineering, 2020, , 1-23.	0.9	2
86	Effect of Insitu Moisture Content in Shrink-Swell Index. Geotechnical and Geological Engineering, 2020, 38, 6385-6392.	0.8	2
87	Stress-strain relationship of cement paste under triaxial compression. Proceedings of Institution of Civil Engineers: Construction Materials, 0, , 1-9.	0.7	2
88	Vulnerability Assessment of Underground Mine Stopes Filled with Granular Backfills. , 2016, , .		1
89	Undrained Load-Displacement Behavior of Partially Embedded Pipeline on Seabed. Journal of Pipeline Systems Engineering and Practice, 2016, 7, 04015016.	0.9	1
90	Equivalent viscous damping for steel eccentrically braced frame structures with buckling restraint braces. Innovative Infrastructure Solutions, 2021, 6, 1.	1.1	1

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91	Effects of vertical irregularities and construction quality in seismic fragilities for reinforced concrete buildings. International Journal of Earthquake and Impact Engineering, 2017, 2, 1.	0.3	1
92	PROBABILISTIC CONDITION ASSESSMENT TECHNIQUE FOR TIMBER POWER POLES. Proceedings of International Structural Engineering and Construction, 2015, 2, .	0.1	1
93	Interaction analysis of waffle slabs supporting houses on expansive soil. Innovative Infrastructure Solutions, 2016, 1, 1.	1.1	0
94	Axial Interaction Behavior of Offshore Pipelines. , 2016, , .		0
95	Machine Learning Algorithms for Health Monitoring of Timber Utility Poles Using Stress Wave Propagation. Lecture Notes in Civil Engineering, 2021, , 739-748.	0.3	0
96	New Practical Framework for Predicting Compacted Soil Behaviour. , 2012, , .		0
97	Structural assessment of underground utility services pit using Bayesian inference. Australian Journal of Structural Engineering, 0, , 1-18.	0.4	0