

Dimitrios Vamvatsikos

List of Publications by Year in descending order

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Version: 2024-02-01

108
papers

6,733
citations

136740

32
h-index

62479

80
g-index

111
all docs

111
docs citations

111
times ranked

2587
citing authors

#	ARTICLE	IF	CITATIONS
1	A Seismic Design Procedure for Different Performance Objectives for Post-Tensioned Walls. Journal of Earthquake Engineering, 2022, 26, 475-492.	1.4	4
2	A simplified approach for including the incidence angle effect in seismic risk assessment. Earthquake Engineering and Structural Dynamics, 2022, 51, 191-212.	2.5	5
3	Macro-characteristics and taxonomy of steel racking systems for seismic vulnerability assessment. Bulletin of Earthquake Engineering, 2022, 20, 2695-2718.	2.3	9
4	The influence of the vertical component of ground motion on the probabilistic treatment of the rocking response of free-standing blocks. Earthquake Engineering and Structural Dynamics, 2022, 51, 1874-1894.	2.5	9
5	Seismic assessment approaches for mass-dominant sliding contents: The case of storage racks. Earthquake Engineering and Structural Dynamics, 2022, 51, 812-831.	2.5	4
6	Rocking incremental dynamic analysis. Earthquake Engineering and Structural Dynamics, 2022, 51, 688-703.	2.5	15
7	Uniform risk spectra for rocking structures. Earthquake Engineering and Structural Dynamics, 2022, 51, 2610-2626.	2.5	4
8	A risk-based evaluation of direct displacement-based design. Bulletin of Earthquake Engineering, 2022, 20, 6611-6633.	2.3	4
9	A holistic monitoring scheme for road infrastructures. , 2022, , .		0
10	Seismic risk and loss estimation for the building stock in Isfahan: part II—hazard analysis and risk assessment. Bulletin of Earthquake Engineering, 2021, 19, 1739-1763.	2.3	14
11	Two frugal options to assess class fragility and seismic safety for low-rise reinforced concrete school buildings in Southern Italy. Bulletin of Earthquake Engineering, 2021, 19, 1415-1439.	2.3	54
12	Conditional spectrum record selection faithful to causative earthquake parameter distributions. Earthquake Engineering and Structural Dynamics, 2021, 50, 2653-2671.	2.5	12
13	Model Type Effects on the Estimated Seismic Response of a 20-Story Steel Moment Resisting Frame. Journal of Structural Engineering, 2021, 147, .	1.7	11
14	Mixed probabilistic seismic demand models for fragility assessment. Bulletin of Earthquake Engineering, 2021, 19, 6397-6421.	2.3	6
15	Seismic response distribution expressions for on-ground rigid rocking blocks under ordinary ground motions. Earthquake Engineering and Structural Dynamics, 2021, 50, 3311-3331.	2.5	12
16	Stability of Single-Bolted Thin-Walled Steel Angle Members with Stochastic Imperfections. Journal of Structural Engineering, 2021, 147, .	1.7	3
17	Simplified Modeling for the Seismic Performance Assessment of Automated Rack-Supported Warehouses. Journal of Structural Engineering, 2021, 147, .	1.7	8
18	Seismic risk and loss estimation for the building stock in Isfahan. Part I: exposure and vulnerability. Bulletin of Earthquake Engineering, 2021, 19, 1709-1737.	2.3	13

#	ARTICLE	IF	CITATIONS
19	The effect of damping on floor spectral accelerations as inferred from instrumented buildings. Bulletin of Earthquake Engineering, 2020, 18, 2149-2164.	2.3	23
20	Onshore wind farm siting prioritization based on investment profitability for Greece. Renewable Energy, 2020, 146, 2827-2839.	4.3	16
21	Correlation of spectral acceleration values of vertical and horizontal ground motion pairs. Earthquake Spectra, 2020, 36, 2112-2128.	1.6	8
22	Multi-level conditional spectrum-based record selection for IDA. Earthquake Spectra, 2020, 36, 1976-1994.	1.6	19
23	Strength reduction factors for the design of light nonstructural elements in buildings. Earthquake Engineering and Structural Dynamics, 2020, 49, 1329-1343.	2.5	18
24	Methodology for failure mode prediction of onshore buried steel pipelines subjected to reverse fault rupture. Soil Dynamics and Earthquake Engineering, 2020, 135, 106116.	1.9	12
25	Seismic and Vibration Performance Rehabilitation for an Industrial Steel Building. Practice Periodical on Structural Design and Construction, 2020, 25, .	0.7	5
26	A risk-consistent approach to determine EN1998 behaviour factors for lateral load resisting systems. Soil Dynamics and Earthquake Engineering, 2020, 131, 106008.	1.9	30
27	Evaluation of Seismic Acceleration Demands on Building Nonstructural Elements. Journal of Structural Engineering, 2020, 146, .	1.7	38
28	Current Challenges and Future Trends in Analytical Fragility and Vulnerability Modeling. Earthquake Spectra, 2019, 35, 1927-1952.	1.6	113
29	Conditional spectrum bidirectional record selection for risk assessment of 3D structures using scalar and vector IMs. Earthquake Engineering and Structural Dynamics, 2019, 48, 1066-1082.	2.5	18
30	Precast Beam Bridges with a Buffer "Gap" Elastomeric Bearings System: Uncertainty in Design Parameters and Randomness in Ground Records. Journal of Bridge Engineering, 2019, 24, .	1.4	3
31	Development and Application of FEMA P-58 Compatible Story Loss Functions. Earthquake Spectra, 2019, 35, 95-112.	1.6	22
32	Pulse-like versus non-pulse-like ground motion records: Spectral shape comparisons and record selection strategies. Earthquake Engineering and Structural Dynamics, 2019, 48, 46-64.	2.5	73
33	Seismic Performance Evaluation of Liquid Storage Tanks Using Nonlinear Static Procedures. Journal of Pressure Vessel Technology, Transactions of the ASME, 2019, 141, .	0.4	16
34	WIND PERFORMANCE ASSESMENT OF TELECOMMUNICATION TOWERS: A CASE STUDY IN GREECE. , 2019, , .		2
35	SIMPLIFIED MODELS FOR THE NONLINEAR ANALYSIS OF ARSW STRUCTURES UNDER SEISMIC LOADING. , 2019, , .		0
36	Conditional spectrum based ground motion record selection using average spectral acceleration. Earthquake Engineering and Structural Dynamics, 2018, 47, 265-265.	2.5	4

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37	The Hysteretic Energy as a Performance Measure in Analytical Studies. <i>Earthquake Spectra</i> , 2018, 34, 719-739.	1.6	19
38	Dynamic analysis of single-degree-of-freedom systems (DYANAS): A graphical user interface for OpenSees. <i>Engineering Structures</i> , 2018, 177, 395-408.	2.6	21
39	Ground motion records for seismic performance assessment: To rotate or not to rotate?. <i>Earthquake Engineering and Structural Dynamics</i> , 2018, 47, 2410-2425.	2.5	30
40	Seismic Fragility Functions via Nonlinear Response History Analysis. <i>Journal of Structural Engineering</i> , 2018, 144, .	1.7	112
41	Seismic intensity measures for above-ground liquid storage tanks. <i>Earthquake Engineering and Structural Dynamics</i> , 2018, 47, 1844-1863.	2.5	31
42	Yield frequency spectra and seismic design of code-compatible RC structures: an illustrative example. <i>Earthquake Engineering and Structural Dynamics</i> , 2017, 46, 1727-1745.	2.5	10
43	Site dependence and record selection schemes for building fragility and regional loss assessment. <i>Earthquake Engineering and Structural Dynamics</i> , 2017, 46, 1625-1643.	2.5	62
44	Conditional spectrum-based ground motion record selection using average spectral acceleration. <i>Earthquake Engineering and Structural Dynamics</i> , 2017, 46, 1667-1685.	2.5	163
45	Safety factor for structural elements subjected to impulsive blast loads. <i>International Journal of Impact Engineering</i> , 2017, 106, 249-258.	2.4	19
46	SPO2FRAG: software for seismic fragility assessment based on static pushover. <i>Bulletin of Earthquake Engineering</i> , 2017, 15, 4399-4425.	2.3	83
47	Performance Assessment of Buried Pipelines at Fault Crossings. <i>Earthquake Spectra</i> , 2017, 33, 201-218.	1.6	20
48	I.11.00: Innovative systems for seismic resistance: The INNOSEIS Project. <i>Ce/Papers</i> , 2017, 1, 3375-3384.	0.1	4
49	I.11.47: A risk-consistent approach to determine behavior factors for innovative steel lateral load resisting systems. <i>Ce/Papers</i> , 2017, 1, 3434-3443.	0.1	4
50	Performance-based assessment of protection measures for buried pipes at strike-slip fault crossings. <i>Soil Dynamics and Earthquake Engineering</i> , 2017, 101, 1-11.	1.9	26
51	Seismic risk assessment of liquid storage tanks via a nonlinear surrogate model. <i>Earthquake Engineering and Structural Dynamics</i> , 2017, 46, 2851-2868.	2.5	48
52	Surrogate Modeling for the Seismic Performance Assessment of Liquid Storage Tanks. <i>Journal of Structural Engineering</i> , 2017, 143, .	1.7	38
53	DEVELOPMENT OF FEMA P-58 COMPATIBLE STORY LOSS FUNCTIONS: STEEL OFFICE BUILDINGS IN HIGH SEISMICITY REGIONS. , 2017, , .		2
54	SIMPLIFIED PREDICTION OF PEAK FLOOR ACCELERATIONS IN INELASTIC WALL STRUCTURES. , 2017, , .		0

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55	Q-FACTOR VERIFICATION OF A 6-STOREY CONCENTRICALLY BRACED FRAME VIA THE INNOSEIS RISK-BASED APPROACH. , 2017, , .		0
56	Probabilistic economic seismic loss estimation in steel buildings using post-tensioned moment-resisting frames and viscous dampers. Earthquake Engineering and Structural Dynamics, 2016, 45, 1725-1741.	2.5	35
57	Analytical modelling of near-source pulse-like seismic demand for multi-linear backbone oscillators. Earthquake Engineering and Structural Dynamics, 2016, 45, 1797-1815.	2.5	19
58	Performance-based seismic design via yield frequency spectra. Earthquake Engineering and Structural Dynamics, 2016, 45, 1759-1778.	2.5	39
59	Implications of Intensity Measure Selection for Seismic Loss Assessment of 3-D Buildings. Earthquake Spectra, 2016, 32, 2167-2189.	1.6	41
60	A response spectrum method for peak floor acceleration demands in earthquake excited structures. Probabilistic Engineering Mechanics, 2016, 46, 94-106.	1.3	26
61	Simplified fragility-based risk analysis for impulse governed blast loading scenarios. Engineering Structures, 2016, 117, 457-469.	2.6	21
62	Vector and Scalar IMs in Structural Response Estimation, Part I: Hazard Analysis. Earthquake Spectra, 2016, 32, 1507-1524.	1.6	67
63	Vector and Scalar IMs in Structural Response Estimation, Part II: Building Demand Assessment. Earthquake Spectra, 2016, 32, 1525-1543.	1.6	99
64	Simplified Mechanical Model to Estimate the Seismic Vulnerability of Heritage Unreinforced Masonry Buildings. Journal of Earthquake Engineering, 2016, 20, 298-325.	1.4	11
65	Performance-Based Seismic Design: Avant-Garde and Code-Compatible Approaches. ASCE-ASME Journal of Risk and Uncertainty in Engineering Systems, Part A: Civil Engineering, 2016, 2, .	1.1	21
66	SPO2FRAG V1.0: SOFTWARE FOR PUSHOVER-BASED DERIVATION OF SEISMIC FRAGILITY CURVES. , 2016, , .		6
67	Seismic Fragility Assessment of Steel Liquid Storage Tanks. , 2015, , .		12
68	Intensity measure selection for vulnerability studies of building classes. Earthquake Engineering and Structural Dynamics, 2015, 44, 2677-2694.	2.5	147
69	Probabilistic Assessment of Innovative Mitigating Measures for Buried Steel Pipeline-Fault Crossing. , 2015, , .		5
70	Incremental Dynamic Analysis. , 2015, , 1165-1171.		0
71	Seismic assessment of structures and lifelines. Journal of Sound and Vibration, 2015, 334, 29-56.	2.1	52
72	Analytic Fragility and Limit States [P(EDP IM)]: Nonlinear Dynamic Procedures. , 2015, , 87-94.		3

#	ARTICLE	IF	CITATIONS
73	PROBABILISTIC FATIGUE ANALYSIS OF OFFSHORE WIND TURBINES. , 2015, , .		1
74	INFLUENCE OF ROTATED GROUND MOTION COMPONENTS ON THE RESPONSE DISTRIBUTION OF INELASTIC OSCILLATORS. , 2015, , .		1
75	A NEXT GENERATION SCALAR INTENSITY MEASURE FOR ANALYTICAL VULNERABILITY STUDIES. , 2015, , .		2
76	SURROGATE MODELLING OF LIQUID STORAGE TANKS FOR SEISMIC PERFORMANCE DESIGN AND ASSESSMENT. , 2015, , .		2
77	PROBABILISTIC ASSESSMENT OF PIPELINE - FAULT CROSSING. , 2015, , .		0
78	Analytic Fragility and Limit States [P(EDP IM)]: Nonlinear Dynamic Procedures. , 2015, , 1-8.		0
79	NEAR -SOURCE PULSE-LIKE SEISMIC DEMAND FOR MULTI-LINEAR BACKBONE OSCILLATORS. , 2015, , .		2
80	Seismic Performance Uncertainty Estimation via IDA with Progressive Accelerogram-Wise Latin Hypercube Sampling. Journal of Structural Engineering, 2014, 140, .	1.7	41
81	Seismic performance of a steel moment-resisting frame subject to strength and ductility uncertainty. Engineering Structures, 2014, 78, 69-77.	2.6	65
82	Application of Nonlinear Static Procedures for the Seismic Assessment of Regular RC Moment Frame Buildings. Earthquake Spectra, 2014, 30, 767-794.	1.6	42
83	Accurate Application and Second-Order Improvement of SAC/FEMA Probabilistic Formats for Seismic Performance Assessment. Journal of Structural Engineering, 2014, 140, .	1.7	30
84	Incremental Dynamic Analysis. , 2014, , 1-8.		3
85	Near-optimal piecewise linear fits of static pushover capacity curves for equivalent SDOF analysis. Earthquake Engineering and Structural Dynamics, 2013, 42, 523-543.	2.5	56
86	Improving Static Pushover Analysis by Optimal Bilinear Fitting of Capacity Curves. Computational Methods in Applied Sciences (Springer), 2013, , 273-295.	0.1	1
87	Reliability Assessment of Urban Water Distribution Networks Under Seismic Loads. Water Resources Management, 2013, 27, 3739-3764.	1.9	36
88	Derivation of new SAC/FEMA performance evaluation solutions with second-order hazard approximation. Earthquake Engineering and Structural Dynamics, 2013, 42, 1171-1188.	2.5	94
89	Applicability of Nonlinear Static Procedures to RC Moment-Resisting Frames. , 2011, , .		3
90	Simplified estimation of seismic risk for reinforced concrete buildings with consideration of corrosion over time. Bulletin of Earthquake Engineering, 2011, 9, 1137-1155.	2.3	34

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91	Equivalent constant rates for performance-based seismic assessment of ageing structures. Structural Safety, 2011, 33, 8-18.	2.8	32
92	Performing incremental dynamic analysis in parallel. Computers and Structures, 2011, 89, 170-180.	2.4	42
93	Some Thoughts on Methods to Compare the Seismic Performance of Alternate Structural Designs. , 2011, , 77-98.		1
94	Static Versus Dynamic Methods of Analysis for Estimating Seismic Performance. , 2011, , 99-133.		0
95	Simplified Estimation of Seismic Risk for Buildings with Consideration of Structural Ageing. , 2011, , 211-231.		0
96	Estimating seismic performance uncertainty using IDA with progressive accelerogram-wise latin hypercube sampling. , 2011, , 2704-2710.		2
97	Incremental dynamic analysis for estimating seismic performance sensitivity and uncertainty. Earthquake Engineering and Structural Dynamics, 2010, 39, 141-163.	2.5	127
98	Fast performance uncertainty estimation via pushover and approximate IDA. Earthquake Engineering and Structural Dynamics, 2010, 39, 683-703.	2.5	32
99	Direct estimation of the seismic demand and capacity of oscillators with multi-linear static pushovers through IDA. Earthquake Engineering and Structural Dynamics, 2006, 35, 1097-1117.	2.5	205
100	Evaluation of the influence of vertical irregularities on the seismic performance of a nine-storey steel frame. Earthquake Engineering and Structural Dynamics, 2006, 35, 1489-1509.	2.5	66
101	Direct estimation of the seismic demand and capacity of oscillators with multi-linear static pushovers through IDA. , 2006, 35, 1097.		1
102	Developing efficient scalar and vector intensity measures for IDA capacity estimation by incorporating elastic spectral shape information. Earthquake Engineering and Structural Dynamics, 2005, 34, 1573-1600.	2.5	212
103	Direct Estimation of Seismic Demand and Capacity of Multidegree-of-Freedom Systems through Incremental Dynamic Analysis of Single Degree of Freedom Approximation. Journal of Structural Engineering, 2005, 131, 589-599.	1.7	173
104	Applied Incremental Dynamic Analysis. Earthquake Spectra, 2004, 20, 523-553.	1.6	461
105	Incremental dynamic analysis. Earthquake Engineering and Structural Dynamics, 2002, 31, 491-514.	2.5	3,029
106	Incremental dynamic analysis. , 2002, 31, 491.		1
107	Numerical implementation of the integral-transform solution to Lamb's point-load problem. Computational Mechanics, 1999, 24, 90-99.	2.2	16
108	Preface to the Special Issue: The evolution of fragility and vulnerability. The origin story of a preface. Bulletin of Earthquake Engineering, 0, , 1.	2.3	2