Anil K Chopra

List of Publications by Year
in descending order

99 papers	7,017 citations	57631 44 h-index	58464 82 g-index
102 all docs	102 docs citations	102 times ranked	2570 citing authors

#	Article	IF	Citations
1	Modeling viscous damping in nonlinear response history analysis of steel momentâ€frame buildings: Designâ€plus ground motions. Earthquake Engineering and Structural Dynamics, 2021, 50, 903-915.	2.5	11
2	Modal combination rules in response spectrum analysis: Early history. Earthquake Engineering and Structural Dynamics, 2021, 50, 260-269.	2.5	5
3	Selecting, scaling, and orienting three components of ground motions for intensity-based assessments at far-field sites. Earthquake Spectra, 2020, 36, 1013-1037.	1.6	11
4	Direct finite element method for nonlinear earthquake analysis of concrete dams: Simplification, modeling, and practical application. Earthquake Engineering and Structural Dynamics, 2019, 48, 818-842.	2.5	23
5	Direct finite element method for nonlinear earthquake analysis of 3â€dimensional semiâ€unbounded damâ€“waterâ€“foundation rock systems. Earthquake Engineering and Structural Dynamics, 2018, 47, 1309-1328.	2.5	31
6	Determining Bidirectional Ground Motions for Nonlinear Response History Analysis of Buildings at Far-Field Sites. Earthquake Spectra, 2018, 34, 1931-1954.	1.6	8
7	Direct finite element method for nonlinear analysis of semiâ€unbounded damâ€“waterâ€“foundation rock systems. Earthquake Engineering and Structural Dynamics, 2017, 46, 1267-1285.	2.5	49
8	A Generalized Conditional Mean Spectrum and Its Application for Intensity-Based Assessments of Seismic Demands. Earthquake Spectra, 2017, 33, 123-143.	1.6	28
9	Response to John Hall's Discussion (EQEâ€16â€0008) to Chopra and McKenna's paper, â€˜Modeling viscous damping in nonlinear response history analysis of buildings for earthquake excitationâ€™. Earthquake Engineering and Structural Dynamics, 2016, 45, 2235-2238.	2.5	6
10	Modeling viscous damping in nonlinear response history analysis of buildings for earthquake excitation. Earthquake Engineering and Structural Dynamics, 2016, 45, 193-211.	2.5	140
11	Evaluation of the exact conditional spectrum and generalized conditional intensity measure methods for ground motion selection. Earthquake Engineering and Structural Dynamics, 2016, 45, 757-777.	2.5	23
12	A ground motion selection procedure for enforcing hazard consistency and estimating seismic demand hazard curves. Earthquake Engineering and Structural Dynamics, 2015, 44, 2467-2487.	2.5	18
13	Authors' reply to the discussion by Brendon A. Bradley of â€˜A framework for the evaluation of ground motion selection and modification proceduresâ€™. Earthquake Engineering and Structural Dynamics, 2015, 44, 823-828.	2.5	1
14	Errors caused by peak factor assumptions in responseâ€spectrumâ€based analyses. Earthquake Engineering and Structural Dynamics, 2015, 44, 1729-1746.	2.5	8
15	A framework for the evaluation of ground motion selection and modification procedures. Earthquake Engineering and Structural Dynamics, 2015, 44, 795-815.	2.5	30
16	Evaluation of ground motion selection and modification procedures using synthetic ground motions. Earthquake Engineering and Structural Dynamics, 2015, 44, 1841-1861.	2.5	21
17	Response Spectrum Analysis of Concrete Gravity Dams Including Dam-Water-Foundation Interaction. Journal of Structural Engineering, 2015, 141, .	1.7	24
18	Modal Pushover-Based Scaling of Two Components of Ground Motion Records for Nonlinear RHA of Structures. Earthquake Spectra, 2012, 28, 1243-1267.	1.6	27

#	Article	IF	Citations
19	Helmut Krawinkler: a tribute. Earthquake Engineering and Structural Dynamics, 2012, 41, 1413-1414.	2.5	0
20	Earthquake Analysis of Arch Dams: Factors to Be Considered. Journal of Structural Engineering, 2012, 138, 205-214.	1.7	73
21	Threeâ€dimensional modal pushover analysis of buildings subjected to two components of ground motion, including its evaluation for tall buildings. Earthquake Engineering and Structural Dynamics, 2011, 40, 789-806.	2.5	119
22	Evaluation of threeâ€dimensional modal pushover analysis for unsymmetricâ€plan buildings subjected to two components of ground motion. Earthquake Engineering and Structural Dynamics, 2011, 40, 1475-1494.	2.5	60
23	Earthquake response of arch dams to spatially varying ground motion. Earthquake Engineering and Structural Dynamics, 2010, 39, 887-906.	2.5	14
24	Nonlinear Analysis of Ordinary Bridges Crossing Fault-Rupture Zones. Journal of Bridge Engineering, 2009, 14, 216-224.	1.4	35
25	Linear Analysis of Ordinary Bridges Crossing Fault-Rupture Zones. Journal of Bridge Engineering, 2009, 14, 203-215.	1.4	31
26	Call for Papers:Seismic Protection Techniques. Earthquake Engineering and Structural Dynamics, 2009, 38, 1051-1052.	2.5	0
27	Evaluation of the MPA Procedure for Estimating Seismic Demands: RC-SMRF Buildings. Earthquake Spectra, 2008, 24, 827-845.	1.6	24
28	Role of Shear Keys in Seismic Behavior of Bridges Crossing Fault-Rupture Zones. Journal of Bridge Engineering, 2008, 13, 398-408.	1.4	72
29	Elastic response spectrum: a historical note. Earthquake Engineering and Structural Dynamics, 2007, 36, 3-12.	2.5	72
30	Estimating bearing response in symmetric and asymmetric-plan isolated buildings with rocking and torsion. Earthquake Engineering and Structural Dynamics, 2006, 35, 1009-1036.	2.5	9
31	Approximate incremental dynamic analysis using the modal pushover analysis procedure. Earthquake Engineering and Structural Dynamics, 2006, 35, 1853-1873.	2.5	133
32	Response To: B. Maison's Discussion of â€œEvaluation of Modal and FEMA Pushover Analyses: SAC Buildingsâ€• Earthquake Spectra, 2005, 21, 277-279.	1.6	5
33	An improved capacity spectrum method for ATC-40 by Y.-Y. Lin and K.-C. Chang,Earthquake Engineering and Structural Dynamics 2003;32(13):2013-2026. Earthquake Engineering and Structural Dynamics, 2005, 34, 97-97.	2.5	1
34	Extension of Modal Pushover Analysis to Compute Member Forces. Earthquake Spectra, 2005, 21, 125-139.	1.6	52
35	Nonlinear Model for Leadâ€“Rubber Bearings Including Axial-Load Effects. Journal of Engineering Mechanics - ASCE, 2005, 131, 1270-1278.	1.6	71
36	Estimation of Seismic Demands on Isolators Based on Nonlinear Analysis. Journal of Structural Engineering, 2004, 130, 392-402.	1.7	79

#	Article	IF	Citations
37	Estimating the seismic displacement of friction pendulum isolators based on non-linear response history analysis. Earthquake Engineering and Structural Dynamics, 2004, 33, 359-373.	2.5	51
38	Estimation of seismic demands on isolators in asymmetric buildings using non-linear analysis. Earthquake Engineering and Structural Dynamics, 2004, 33, 395-418.	2.5	13
39	A modal pushover analysis procedure to estimate seismic demands for unsymmetric-plan buildings. Earthquake Engineering and Structural Dynamics, 2004, 33, 903-927.	2.5	316
40	Perfectly matched layers for transient elastodynamics of unbounded domains. International Journal for Numerical Methods in Engineering, 2004, 59, 1039-1074.	1.5	182
41	Evaluation of Modal and FEMA Pushover Analyses: Vertically â€œRegularâ€•and Irregular Generic Frames. Earthquake Spectra, 2004, 20, 255-271.	1.6	30
42	Evaluation of a Modified MPA Procedure Assuming Higher Modes as Elastic to Estimate Seismic Demands. Earthquake Spectra, 2004, 20, 757-778.	1.6	217
43	Evaluation of Modal and FEMA Pushover Analyses: SAC Buildings. Earthquake Spectra, 2004, 20, 225-254.	1.6	115
44	Seismic Response of Vertically Irregular Frames: Response History and Modal Pushover Analyses. Journal of Structural Engineering, 2004, 130, 1177-1185.	1.7	122
45	Inelastic Deformation Ratios for Design and Evaluation of Structures: Single-Degree-of-Freedom Bilinear Systems. Journal of Structural Engineering, 2004, 130, 1309-1319.	1.7	234
46	Evaluation of modal pushover analysis using generic frames. Earthquake Engineering and Structural Dynamics, 2003, 32, 417-442.	2.5	80
47	Asymmetric one-storey elastic systems with non-linear viscous and viscoelastic dampers: Earthquake response. Earthquake Engineering and Structural Dynamics, 2003, 32, 555-577.	2.5	35
48	Asymmetric one-storey elastic systems with non-linear viscous and viscoelastic dampers: Simplified analysis and supplemental damping system design. Earthquake Engineering and Structural Dynamics, 2003, 32, 579-596.	2.5	27
49	Authors' reply to discussion by Chongmin Song and John P. Wolf of ?numerical evaluation of the damping-solvent extraction method in the frequency domain?Earthquake Engng. Struct. Dyn. 2002;31(6):1231-1250. Earthquake Engineering and Structural Dynamics, 2003, 32, 1481-1482.	2.5	0
50	A modal pushover analysis procedure for estimating seismic demands for buildings. Earthquake Engineering and Structural Dynamics, 2002, 31, 561-582.	2.5	945
51	Numerical evaluation of the damping-solvent extraction method in the frequency domain. Earthquake Engineering and Structural Dynamics, 2002, 31, 1231-1250.	2.5	15
52	Earthquake response of elastic SDF systems with non-linear fluid viscous dampers. Earthquake Engineering and Structural Dynamics, 2002, 31, 1623-1642.	2.5	163
53	Authors' Reply to Discussion by Stavros A. Anagnostopoulos of â€˜Evaluation of combination rules for maximum response calculation in multicomponent seismic analysisâ€™Earthquake Engng Struct. Dyn.2001;30(9) : 1379-1398. Earthquake Engineering and Structural Dynamics, 2002, 31, 1755-1756.	2.5	0
54	Approximate analysis methods for asymmetric plan base-isolated buildings. Earthquake Engineering and Structural Dynamics, 2002, 31, 33-54.	2.5	10

#	Article	IF	Citations
55	Evaluation of combination rules for maximum response calculation in multicomponent seismic analysis. Earthquake Engineering and Structural Dynamics, 2001, 30, 1379-1398.	2.5	73
56	Understanding and predicting effects of supplemental viscous damping on seismic response of asymmetric one-storey systems. Earthquake Engineering and Structural Dynamics, 2001, 30, 1475-1494.	2.5	45
57	Comparing response of SDF systems to near-fault and far-fault earthquake motions in the context of spectral regions. Earthquake Engineering and Structural Dynamics, 2001, 30, 1769-1789.	2.5	287
58	Drift Spectrum vs. Modal Analysis of Structural Response to Near-Fault Ground Motions. Earthquake Spectra, 2001, 17, 221-234.	1.6	43
59	A macro-element model for inelastic building analysis. Earthquake Engineering and Structural Dynamics, 2000, 29, 1725-1757.	2.5	10
60	Critical response of structures to multicomponent earthquake excitation. Earthquake Engineering and Structural Dynamics, 2000, 29, 1759-1778.	2.5	88
61	Evaluation of Bridge Abutment Capacity and Stiffness during Earthquakes. Earthquake Spectra, 1997, 13, 1-23.	1.6	57
62	Dam-Foundation Rock Interaction Effects in Earthquake Response of Arch Dams. Journal of Structural Engineering, 1996, 122, 528-538.	1.7	28
63	Earthquake analysis of arch dams including dam-water-foundation rock interaction. Earthquake Engineering and Structural Dynamics, 1995, 24, 1453-1474.	2.5	76
64	Dam-foundation rock interaction effects in frequency-response functions of arch dams. Earthquake Engineering and Structural Dynamics, 1995, 24, 1475-1489.	2.5	41
65	Accidental torsion in buildings due to stiffness uncertainty. Earthquake Engineering and Structural Dynamics, 1994, 23, 117-136.	2.5	45
66	Accidental torsion in buildings due to base rotational excitation. Earthquake Engineering and Structural Dynamics, 1994, 23, 1003-1021.	2.5	70
67	Inelastic seismic response of one-storey, asymmetric-plan systems: Effects of system parameters and yielding. Earthquake Engineering and Structural Dynamics, 1991, 20, 201-222.	2.5	23
68	Impedance functions for three-dimensional foundations supported on an infinitely-long canyon of uniform cross-section in a homogeneous half-space. Earthquake Engineering and Structural Dynamics, 1991, 20, 1011-1027.	2.5	20
69	Inelastic seismic response of one-storey, asymmetric-plan systems: Effects of stiffness and strength distribution. Earthquake Engineering and Structural Dynamics, 1990, 19, 949-970.	2.5	72
70	Earthquake analysis of a class of torsionally-coupled buildings. Earthquake Engineering and Structural Dynamics, 1989, 18, 305-323.	2.5	57
71	Earthquake analysis of intake-outlet towers including tower-water-foundation-soil interaction. Earthquake Engineering and Structural Dynamics, 1989, 18, 325-344.	2.5	38
72	Earthquake analysis of arch dams including damâ€“water interaction, reservoir boundary absorption and foundation flexibility. Earthquake Engineering and Structural Dynamics, 1986, 14, 155-184.	2.5	59

#	Article	IF	Citations
73	Frequency response functions for arch dams: Hydrodynamic and foundation flexibility effects. Earthquake Engineering and Structural Dynamics, 1986, 14, 769-795.	2.5	44
74	Effects of reservoir bottom absorption and dam-water-foundation rock interaction on frequency response functions for concrete gravity dams. Earthquake Engineering and Structural Dynamics, 1985, 13, 13-31.	2.5	85
75	Earthquake response of structures with partial uplift on winkler foundation. Earthquake Engineering and Structural Dynamics, 1984, 12, 263-281.	2.5	75
76	Earthquake analysis of concrete gravity dams including reservoir bottom absorption and dam-water-foundation rock interaction. Earthquake Engineering and Structural Dynamics, 1984, 12, 663-680.	2.5	136
77	Effects of reservoir bottom absorption on earthquake response of concrete gravity dams. Earthquake Engineering and Structural Dynamics, 1983, 11, 809-829.	2.5	78
78	Hydrodynamic and foundation interaction effects in frequency response functions for concrete gravity dams. Earthquake Engineering and Structural Dynamics, 1982, 10, 89-106.	2.5	25
79	Discussion on â€˜a note on the perturbation analysis of the mode shapes of torsionally coupled buildingsâ€™. Earthquake Engineering and Structural Dynamics, 1982, 10, 175-176.	2.5	2
80	Two-dimensional dynamic analysis of concrete gravity and embankment dams including hydrodynamic effects. Earthquake Engineering and Structural Dynamics, 1982, 10, 305-332.	2.5	114
81	Hydrodynamic effects in the dynamic response of concrete gravity dams. Earthquake Engineering and Structural Dynamics, 1982, 10, 333-345.	2.5	44
82	Hydrodynamic effects in dynamic response of simple arch dams. Earthquake Engineering and Structural Dynamics, 1982, 10, 417-431.	2.5	25
83	Earthquake analysis of concrete gravity dams including dam-water-foundation rock interaction. Earthquake Engineering and Structural Dynamics, 1981, 9, 363-383.	2.5	127
84	Discussion on paper by W. H. Wittrick and R. W. Horsington. Earthquake Engineering and Structural Dynamics, 1980, 8, 291-293.	2.5	1
85	Rocking response of rigid blocks to earthquakes. Earthquake Engineering and Structural Dynamics, 1980, 8, 565-587.	2.5	422
86	Discussion on paper by J. A. Gutierrez and A. K. Chopra. Earthquake Engineering and Structural Dynamics, 1979, 7, 193-194.	2.5	1
87	Evaluation of simulated ground motions for predicting elastic response of long period structures and inelastic response of structures. Earthquake Engineering and Structural Dynamics, 1979, 7, 383-402.	2.5	7
88	A substructure method for earthquake analysis of structures including structure-soil interaction. Earthquake Engineering and Structural Dynamics, 1978, 6, 51-69.	2.5	99
89	Elastic earthquake analysis of torsionally coupled multistorey buildings. Earthquake Engineering and Structural Dynamics, 1977, 5, 395-412.	2.5	87
90	Effects of Torsional Coupling on Earthquake Forces in Buildings. Journal of the Structural Division, 1977, 103, 805-819.	0.2	67

#	Article	IF	Citations
91	Dynamics of towers surrounded by water. Earthquake Engineering and Structural Dynamics, 1974, 3, 33-49.	2.5	165
92	Earthquake response analysis of multistorey buildings including foundation interaction. Earthquake Engineering and Structural Dynamics, 1974, 3, 65-77.	2.5	133
93	Earthquake analysis of axisymmetric towers partially submerged in water. Earthquake Engineering and Structural Dynamics, 1974, 3, 233-248.	2.5	28
94	Mathematical models for the dynamic analysis of concrete gravity dams. Earthquake Engineering and Structural Dynamics, 1974, 3, 249-258.	2.5	30
95	Reply to discussion By T. H. Lee and D. A. Wesley. Earthquake Engineering and Structural Dynamics, 1974, 3, 402-402.	2.5	0
96	Effects of stiffness degradation on ductility requirements for multistorey buildings. Earthquake Engineering and Structural Dynamics, 1973, 2, 35-45.	2.5	14
97	Earthquake analysis of gravity dams including hydrodynamic interaction. Earthquake Engineering and Structural Dynamics, 1973, 2, 143-160.	2.5	98
98	The earthquake experience at koyna dam and stresses in concrete gravity dams. Earthquake Engineering and Structural Dynamics, 1972, 1, 151-164.	2.5	65
99	Hydrodynamic pressures and response of gravity dams to vertical earthquake component. Earthquake Engineering and Structural Dynamics, 1972, 1, 325-335.	2.5	28