Christian Soize

List of Publications by Year
in descending order

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281	7,836	66343	76900
papers	citations	42 h-index	74 g-index

297	297	297	2463
all docs	docs citations	times ranked	citing authors

#	Article	IF	Citations
1	Physical Systems with Random Uncertainties: Chaos Representations with Arbitrary Probability Measure. SIAM Journal of Scientific Computing, 2004, 26, 395-410.	2.8	442
2	A nonparametric model of random uncertainties for reduced matrix models in structural dynamics. Probabilistic Engineering Mechanics, 2000, 15, 277-294.	2.7	392
3	Maximum entropy approach for modeling random uncertainties in transient elastodynamics. Journal of the Acoustical Society of America, 2001, 109, 1979-1996.	1.1	264
4	Random matrix theory for modeling uncertainties in computational mechanics. Computer Methods in Applied Mechanics and Engineering, 2005, 194, 1333-1366.	6.6	208
5	A comprehensive overview of a non-parametric probabilistic approach of model uncertainties for predictive models in structural dynamics. Journal of Sound and Vibration, 2005, 288, 623-652.	3.9	177
6	Non-linear dynamics of a drill-string with uncertain model of the bitâ€“rock interaction. International Journal of Non-Linear Mechanics, 2009, 44, 865-876.	2.6	162
7	Non-Gaussian positive-definite matrix-valued random fields for elliptic stochastic partial differential operators. Computer Methods in Applied Mechanics and Engineering, 2006, 195, 26-64.	6.6	142
8	Stochastic reduced order models for uncertain geometrically nonlinear dynamical systems. Computer Methods in Applied Mechanics and Engineering, 2008, 197, 3951-3963.	6.6	125
9	Stochastic modeling of uncertainties in computational structural dynamicsâ€”Recent theoretical advances. Journal of Sound and Vibration, 2013, 332, 2379-2395.	3.9	124
10	A model and numerical method in the medium frequency range for vibroacoustic predictions using the theory of structural fuzzy. Journal of the Acoustical Society of America, 1993, 94, 849-865.	1.1	120
11	Maximum likelihood estimation of stochastic chaos representations from experimental data. International Journal for Numerical Methods in Engineering, 2006, 66, 978-1001.	2.8	120
12	Non-Gaussian simulation using Hermite polynomial expansion: convergences and algorithms. Probabilistic Engineering Mechanics, 2002, 17, 253-264.	2.7	96
13	Structural-acoustic modeling of automotive vehicles in presence of uncertainties and experimental identification and validation. Journal of the Acoustical Society of America, 2008, 124, 1513-1525.	1.1	94
14	Construction of probability distributions in high dimension using the maximum entropy principle: Applications to stochastic processes, random fields and random matrices. International Journal for Numerical Methods in Engineering, 2008, 76, 1583-1611.	2.8	91
15	Identification of Bayesian posteriors for coefficients of chaos expansions. Journal of Computational Physics, 2010, 229, 3134-3154.	3.8	91
16	Uncertainty Quantification. Interdisciplinary Applied Mathematics, 2017, , .	0.3	89
17	Tensor-valued random fields for meso-scale stochastic model of anisotropic elastic microstructure and probabilistic analysis of representative volume element size. Probabilistic Engineering Mechanics, 2008, 23, 307-323.	2.7	81
18	Random matrix theory and non-parametric model of random uncertainties in vibration analysis. Journal of Sound and Vibration, 2003, 263, 893-916.	3.9	79

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19	Computational nonlinear stochastic homogenization using a nonconcurrent multiscale approach for hyperelastic heterogeneous microstructures analysis. International Journal for Numerical Methods in Engineering, 2012, 91, 799-824.	2.8	79
20	A probabilistic model for bounded elasticity tensor random fields with application to polycrystalline microstructures. Computer Methods in Applied Mechanics and Engineering, 2011, 200, 1637-1648.	6.6	75
21	On the Statistical Dependence for the Components of Random Elasticity Tensors Exhibiting Material Symmetry Properties. Journal of Elasticity, 2013, 111, 109-130.	1.9	75
22	Probabilistic model identification of uncertainties in computational models for dynamical systems and experimental validation. Computer Methods in Applied Mechanics and Engineering, 2008, 198, 150-163.	6.6	74
23	Identification of high-dimension polynomial chaos expansions with random coefficients for non-Gaussian tensor-valued random fields using partial and limited experimental data. Computer Methods in Applied Mechanics and Engineering, 2010, 199, 2150-2164.	6.6	73
24	Uncertainty quantification in computational stochastic multiscale analysis of nonlinear elastic materials. Computer Methods in Applied Mechanics and Engineering, 2013, 254, 61-82.	6.6	71
25	Nonparametric stochastic modeling of linear systems with prescribed variance of several natural frequencies. Probabilistic Engineering Mechanics, 2008, 23, 267-278.	2.7	70
26	Data-driven probability concentration and sampling on manifold. Journal of Computational Physics, 2016, 321, 242-258.	3.8	70
27	Generalized probabilistic approach of uncertainties in computational dynamics using random matrices and polynomial chaos decompositions. International Journal for Numerical Methods in Engineering, 2010, 81, 939-970.	2.8	69
28	Steady-state solution of Fokker-Planck equation in higher dimension. Probabilistic Engineering Mechanics, 1988, 3, 196-206.	2.7	67
29	Probabilistic approach for model and data uncertainties and its experimental identification in structural dynamics: Case of composite sandwich panels. Journal of Sound and Vibration, 2006, 294, 64-81.	3.9	67
30	Stochastic Model and Generator for Random Fields with Symmetry Properties: Application to the Mesoscopic Modeling of Elastic Random Media. Multiscale Modeling and Simulation, 2013, 11, 840-870.	1.6	59
31	Stochastic continuum modeling of random interphases from atomistic simulations. Application to a polymer nanocomposite. Computer Methods in Applied Mechanics and Engineering, 2016, 303, 430-449.	6.6	59
32	Reduced models in the medium frequency range for general dissipative structural-dynamics systems. European Journal of Mechanics, A/Solids, 1998, 17, 657-685.	3.7	58
33	Identification of Chaos Representations of Elastic Properties of Random Media Using Experimental Vibration Tests. Computational Mechanics, 2007, 39, 831-838.	4.0	58
34	Influence of a gradient of material properties on ultrasonic wave propagation in cortical bone: Application to axial transmission. Journal of the Acoustical Society of America, 2009, 125, 4043-4052.	1.1	58
35	Data and model uncertainties in complex aerospace engineering systems. Journal of Sound and Vibration, 2006, 295, 923-938.	3.9	57
36	Track irregularities stochastic modeling. Probabilistic Engineering Mechanics, 2013, 34, 123-130.	2.7	57

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37	Experimental validation of a nonparametric probabilistic model of nonhomogeneous uncertainties for dynamical systems. Journal of the Acoustical Society of America, 2004, 115, 697-705.	1.1	56
38	A computational inverse method for identification of non-Gaussian random fields using the Bayesian approach in very high dimension. Computer Methods in Applied Mechanics and Engineering, 2011, 200, 3083-3099.	6.6	55
39	Reduced Chaos decomposition with random coefficients of vector-valued random variables and random fields. Computer Methods in Applied Mechanics and Engineering, 2009, 198, 1926-1934.	6.6	51
40	Robust optimization of the rate of penetration of a drill-string using a stochastic nonlinear dynamical model. Computational Mechanics, 2010, 45, 415-427.	4.0	48
41	Dynamic stability of a pipe conveying fluid with an uncertain computational model. Journal of Fluids and Structures, 2014, 49, 412-426.	3.4	46
42	Reliability analysis of a satellite structure with a parametric and a non-parametric probabilistic model. Computer Methods in Applied Mechanics and Engineering, 2008, 198, 344-357.	6.6	45
43	Random Uncertainties Model in Dynamic Substructuring Using a Nonparametric Probabilistic Model. Journal of Engineering Mechanics - ASCE, 2003, 129, 449-457.	2.9	43
44	Polynomial Chaos Expansion of a Multimodal Random Vector. SIAM-ASA Journal on Uncertainty Quantification, 2015, 3, 34-60.	2.0	43
45	Hybrid numerical method for harmonic 3-D Maxwell equations: scattering by a mixed conducting and inhomogeneous anisotropic dielectric medium. IEEE Transactions on Antennas and Propagation, 1993, 41, 66-76.	5.1	42
46	Influence of viscoelastic and viscous absorption on ultrasonic wave propagation in cortical bone: Application to axial transmission. Journal of the Acoustical Society of America, 2010, 127, 2622-2634.	1.1	42
47	Rigid multibody system dynamics with uncertain rigid bodies. Multibody System Dynamics, 2012, 27, 285-319.	2.7	42
48	Non-parametricâ€“parametric model for random uncertainties in non-linear structural dynamics: application to earthquake engineering. Earthquake Engineering and Structural Dynamics, 2004, 33, 315-327.	4.4	41
49	Robust Updating of Uncertain Computational Models Using Experimental Modal Analysis. AIAA Journal, 2008, 46, 2955-2965.	2.6	41
50	Time-domain formulation in computational dynamics for linear viscoelastic media with model uncertainties and stochastic excitation. Computers and Mathematics With Applications, 2012, 64, 3594-3612.	2.7	41
51	Post-buckling nonlinear static and dynamical analyses of uncertain cylindrical shells and experimental validation. Computer Methods in Applied Mechanics and Engineering, 2014, 271, 210-230.	6.6	41
52	Stochastic modeling and identification of a hyperelastic constitutive model for laminated composites. Computer Methods in Applied Mechanics and Engineering, 2019, 347, 425-444.	6.6	40
53	Identification of Polynomial Chaos Representations in High Dimension from a Set of Realizations. SIAM Journal of Scientific Computing, 2012, 34, A2917-A2945.	2.8	39
54	Blade Manufacturing Tolerances Definition for a Mistuned Industrial Bladed Disk. Journal of Engineering for Gas Turbines and Power, 2005, 127, 621-628.	1.1	38

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55	Construction of a probabilistic model for impedance matrices. Computer Methods in Applied Mechanics and Engineering, 2007, 196, 2252-2268.	6.6	38
56	A Reduced-Order Model of Detuned Cyclic Dynamical Systems With Geometric Modifications Using a Basis of Cyclic Modes. Journal of Engineering for Gas Turbines and Power, 2010, 132, .	1.1	38
57	Nonparametric Modeling of Random Uncertainties for Dynamic Response of Mistuned Bladed Disks. Journal of Engineering for Gas Turbines and Power, 2004, 126, 610-618.	1.1	37
58	Theoretical framework and experimental procedure for modelling mesoscopic volume fraction stochastic fluctuations in fiber reinforced composites. International Journal of Solids and Structures, 2008, 45, 5567-5583.	2.7	37
59	On measures of nonlinearity effects for uncertain dynamical systemsâ€"Application to a vibro-impact system. Journal of Sound and Vibration, 2007, 303, 659-674.	3.9	36
60	Robust Design Optimization in Computational Mechanics. Journal of Applied Mechanics, Transactions ASME, 2008, 75, .	2.2	36
61	Nonparametric Stochastic Modeling of Structures with Uncertain Boundary Conditions/Coupling Between Substructures. AIAA Journal, 2013, 51, 1296-1308.	2.6	36
62	A nonparametric probabilistic approach for quantifying uncertainties in lowâ€dimensional and highâ€dimensional nonlinear models. International Journal for Numerical Methods in Engineering, 2017, 109, 837-888.	2.8	36
63	Computational stochastic statics of an uncertain curved structure with geometrical nonlinearity in three-dimensional elasticity. Computational Mechanics, 2012, 49, 87-97.	4.0	35
64	Mesoscale probabilistic models for the elasticity tensor of fiber reinforced composites: Experimental identification and numerical aspects. Mechanics of Materials, 2009, 41, 1309-1322.	3.2	34
65	Stochastic framework for modeling the linear apparent behavior of complex materials: Application to random porous materials with interphases. Acta Mechanica Sinica/Lixue Xuebao, 2013, 29, 773-782.	3.4	33
66	Random field representations for stochastic elliptic boundary value problems and statistical inverse problems. European Journal of Applied Mathematics, 2014, 25, 339-373.	2.9	33
67	Stochastic linearization method with random parameters for SDOF nonlinear dynamical systems: prediction and identification procedures. Probabilistic Engineering Mechanics, 1995, 10, 143-152.	2.7	32
68	Dynamic Substructuring of Damped Structures Using Singular Value Decomposition. Journal of Applied Mechanics, Transactions ASME, 1997, 64, 292-298.	2.2	32
69	Transient dynamics in structures with non-homogeneous uncertainties induced by complex joints. Mechanical Systems and Signal Processing, 2006, 20, 854-867.	8.0	32
70	Remarks on the efficiency of POD for model reduction in non-linear dynamics of continuous elastic systems. International Journal for Numerical Methods in Engineering, 2007, 72, 22-45.	2.8	31
71	Design Optimization With an Uncertain Vibroacoustic Model. Journal of Vibration and Acoustics, Transactions of the ASME, 2008, 130, .	1.6	31
72	Generalized stochastic approach for constitutive equation in linear elasticity: a random matrix model. International Journal for Numerical Methods in Engineering, 2012, 90, 613-635.	2.8	30

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73	Uncertainty quantification in computational linear structural dynamics for viscoelastic composite structures. Computer Methods in Applied Mechanics and Engineering, 2016, 305, 154-172.	6.6	30
74	Reduced models in the medium-frequency range for general external structural-acoustic systems. Journal of the Acoustical Society of America, 1998, 103, 3393-3406.	1.1	29
75	Determination of the random anisotropic elasticity layer using transient wave propagation in a fluid-solid multilayer: Model and experiments. Journal of the Acoustical Society of America, 2009, 125, 2027-2034.	1.1	29
76	Computational modeling of the nonlinear stochastic dynamics of horizontal drillstrings. Computational Mechanics, 2015, 56, 849-878.	4.0	29
77	Gust Loading Factors with Nonlinear Pressure Terms. Journal of the Structural Division, 1978, 104, 991-1007.	0.2	29
78	Probabilistic model identification of the bitâ€“rock-interaction-model uncertainties in nonlinear dynamics of a drill-string. Mechanics Research Communications, 2010, 37, 584-589.	1.8	28
79	Computational Aspects for Constructing Realizations of Polynomial Chaos in High Dimension. SIAM Journal of Scientific Computing, 2010, 32, 2820-2831.	2.8	28
80	Structural partitioning of complex structures in the medium-frequency range. An application to an automotive vehicle. Journal of Sound and Vibration, 2011, 330, 937-946.	3.9	28
81	Karhunenâ€“LoÃ¨ve expansion revisited for vector-valued random fields: Scaling, errors and optimal basis.. Journal of Computational Physics, 2013, 242, 607-622.	3.8	28
82	Robust updating of uncertain damping models in structural dynamics for low- and medium-frequency ranges. Mechanical Systems and Signal Processing, 2008, 22, 1774-1792.	8.0	26
83	Identification of stochastic loads applied to a non-linear dynamical system using an uncertain computational model and experimental responses. Computational Mechanics, 2009, 43, 559-571.	4.0	26
84	On the determination of the power spectrum of randomly excited oscillators via stochastic averaging: An alternative perspective. Probabilistic Engineering Mechanics, 2011, 26, 10-15.	2.7	26
85	Reduced models for structures in the medium-frequency range coupled with internal acoustic cavities. Journal of the Acoustical Society of America, 1999, 106, 3362-3374.	1.1	25
86	Elastoacoustic model with uncertain mechanical properties for ultrasonic wave velocity prediction: Application to cortical bone evaluation. Journal of the Acoustical Society of America, 2006, 119, 729.	1.1	25
87	High-speed train suspension health monitoring using computational dynamics and acceleration measurements. Vehicle System Dynamics, 2020, 58, 911-932.	3.7	25
88	Uncertain Dynamical Systems in the Medium-Frequency Range. Journal of Engineering Mechanics - ASCE, 2003, 129, 1017-1027.	2.9	24
89	A time-domain method to solve transient elastic wave propagation in a multilayer medium with a hybrid spectral-finite element space approximation. Wave Motion, 2008, 45, 383-399.	2.0	24
90	A stochastic model for elasticity tensors with uncertain material symmetries. International Journal of Solids and Structures, 2010, 47, 3121-3130.	2.7	24

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91	Probabilistic model of the human cortical bone with mechanical alterations in ultrasonic range. Mechanical Systems and Signal Processing, 2012, 32, 170-177.	8.0	24
92	Stochastic representation for anisotropic permeability tensor random fields. International Journal for Numerical and Analytical Methods in Geomechanics, 2012, 36, 1592-1608.	3.3	24
93	Quantification of the influence of the track geometry variability on the train dynamics. Mechanical Systems and Signal Processing, 2015, 60-61, 945-957.	8.0	24
94	Mistuning analysis and uncertainty quantification of an industrial bladed disk with geometrical nonlinearity. Journal of Sound and Vibration, 2015, 356, 124-143.	3.9	24
95	Probabilistic model for random uncertainties in steady state rolling contact. Wear, 2005, 258, 1543-1554.	3.1	23
96	Probabilistic modeling of a nonlinear dynamical system used for producing voice. Computational Mechanics, 2009, 43, 265-275.	4.0	23
97	Nonâ€Gaussian positiveâ€definite matrixâ€valued random fields with constrained eigenvalues: Application to random elasticity tensors with uncertain material symmetries. International Journal for Numerical Methods in Engineering, 2011, 88, 1128-1151.	2.8	23
98	Linear dynamic analysis of mechanical systems in the medium frequency range. Computers and Structures, 1986, 23, 605-637.	4.4	22
99	Experimental identification of an uncertain computational dynamical model representing a family of structures. Computers and Structures, 2011, 89, 1440-1448.	4.4	22
100	Feasible Probabilistic Learning Method for Model-Form Uncertainty Quantification in Vibration Analysis. AIAA Journal, 2019, 57, 4978-4991.	2.6	22
101	Transient responses of dynamical systems with random uncertainties. Probabilistic Engineering Mechanics, 2001, 16, 363-372.	2.7	21
102	Experimental identification of turbulent fluid forces applied to fuel assemblies using an uncertain model and fretting-wear estimation. Mechanical Systems and Signal Processing, 2009, 23, 2141-2153.	8.0	21
103	Sound-Insulation Layer Modelling in Car Computational Vibroacoustics in the Medium-Frequency Range. Acta Acustica United With Acustica, 2010, 96, 437-444.	0.8	21
104	Probabilistic learning for modeling and quantifying modelâ€form uncertainties in nonlinear computational mechanics. International Journal for Numerical Methods in Engineering, 2019, 117, 819-843.	2.8	21
105	Exact stationary response of multi-dimensional non-linear Hamiltonian dynamical systems under parametric and external stochastic excitations. Journal of Sound and Vibration, 1991, 149, 1-24.	3.9	20
106	Calculation of Lagrange Multipliers in the Construction of Maximum Entropy Distributions in High Stochastic Dimension. SIAM-ASA Journal on Uncertainty Quantification, 2013, 1, 431-451.	2.0	20
107	Bayesian posteriors of uncertainty quantification in computational structural dynamics for low-and medium-frequency ranges. Computers and Structures, 2013, 126, 41-55.	4.4	20
108	Modeling and Quantification of Model-Form Uncertainties in Eigenvalue Computations Using a Stochastic Reduced Model. AIAA Journal, 2018, 56, 1198-1210.	2.6	20

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109	Data-driven kernel representations for sampling with an unknown block dependence structure under correlation constraints. Computational Statistics and Data Analysis, 2018, 119, 139-154.	1.2	20
110	Entropy-based closure for probabilistic learning on manifolds. Journal of Computational Physics, 2019, 388, 518-533.	3.8	20
111	Fuzzy structure theory modeling of sound-insulation layers in complex vibroacoustic uncertain systems: Theory and experimental validation. Journal of the Acoustical Society of America, 2009, 125, 138-153.	1.1	19
112	Energy-density field approach for low- and medium-frequency vibroacoustic analysis of complex structures using a statistical computational model. Journal of Sound and Vibration, 2009, 323, 849-863.	3.9	19
113	Hybrid Sampling/Spectral Method for Solving Stochastic Coupled Problems. SIAM-ASA Journal on Uncertainty Quantification, 2013, 1, 218-243.	2.0	19
114	Uncertainty quantification of voice signal production mechanical model and experimental updating. Mechanical Systems and Signal Processing, 2013, 40, 718-726.	8.0	19
115	ItÃ´ SDE--based Generator for a Class of Non-Gaussian Vector-valued Random Fields in Uncertainty Quantification. SIAM Journal of Scientific Computing, 2014, 36, A2763-A2786.	2.8	19
116	Model identification in computational stochastic dynamics using experimental modal data. Mechanical Systems and Signal Processing, 2015, 50-51, 307-322.	8.0	19
117	Multilevel model reduction for uncertainty quantification in computational structural dynamics. Computational Mechanics, 2017, 59, 219-246.	4.0	19
118	Stochastic modeling and identification of an uncertain computational dynamical model with random fields properties and model uncertainties. Archive of Applied Mechanics, 2013, 83, 831-848.	2.2	18
119	Vibration of structures containing compressible liquids with surface tension and sloshing effects. Reduced-order model. Computational Mechanics, 2015, 55, 1071-1078.	4.0	18
120	Stochastic prediction of high-speed train dynamics to long-term evolution of track irregularities. Mechanics Research Communications, 2016, 75, 29-39.	1.8	18
121	Design optimization of a scramjet under uncertainty using probabilistic learning on manifolds. Journal of Computational Physics, 2019, 399, 108930.	3.8	18
122	Physicsâ€constrained nonâ€Gaussian probabilistic learning on manifolds. International Journal for Numerical Methods in Engineering, 2020, 121, 110-145.	2.8	18
123	Advanced Computational Dissipative Structural Acoustics and Fluid-Structure Interaction in Low-and Medium-Frequency Domains. Reduced-Order Models and Uncertainty Quantification. International Journal of Aeronautical and Space Sciences, 2012, 13, 127-153.	2.0	18
124	Robust Analysis of Design in Vibration of Turbomachines. Journal of Turbomachinery, 2013, 135, .	1.7	17
125	Polynomial chaos representation of databases on manifolds. Journal of Computational Physics, 2017, 335, 201-221.	3.8	17
126	Probabilistic learning and updating of a digital twin for composite material systems. International Journal for Numerical Methods in Engineering, 2022, 123, 3004-3020.	2.8	17

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127	Numerical methods and mathematical aspects for simulation of homogeneous and non homogeneous gaussian vector fields. , 1995, , 17-53.		17
128	Probabilistic impedance of foundation: Impact of the seismic design on uncertain soils. Earthquake Engineering and Structural Dynamics, 2008, 37, 899-918.	4.4	16
129	A Posteriori Error and Optimal Reduced Basis for Stochastic Processes Defined by a Finite Set of Realizations. SIAM-ASA Journal on Uncertainty Quantification, 2014, 2, 745-762.	2.0	16
130	Probabilistic nonconvex constrained optimization with fixed number of function evaluations. International Journal for Numerical Methods in Engineering, 2018, 113, 719-741.	2.8	16
131	Vibration damping in low-frequency range due to structural complexity. A model based on the theory of fuzzy structures and model parameters estimation. Computers and Structures, 1996, 58, 901-915.	4.4	15
132	Modeling uncertainties in molecular dynamics simulations using a stochastic reduced-order basis. Computer Methods in Applied Mechanics and Engineering, 2019, 354, 37-55.	6.6	15
133	Experimental evaluation and model of a nonlinear absorber for vibration attenuation. Communications in Nonlinear Science and Numerical Simulation, 2019, 69, 386-397.	3.3	15
134	Probabilistic learning on manifolds constrained by nonlinear partial differential equations for small datasets. Computer Methods in Applied Mechanics and Engineering, 2021, 380, 113777.	6.6	15
135	MODAL IDENTIFICATION OF WEAKLY NON-LINEAR MULTIDIMENSIONAL DYNAMICAL SYSTEMS USING A STOCHASTIC LINEARISATION METHOD WITH RANDOM COEFFICIENTS. Mechanical Systems and Signal Processing, 1997, 11, 37-49.	8.0	14
136	Equivalent acoustic impedance model. Part 1: experiments and semi-physical model. Journal of Sound and Vibration, 2004, 276, 571-592.	3.9	14
137	Equivalent acoustic impedance model. Part 2: analytical approximation. Journal of Sound and Vibration, 2004, 276, 593-613.	3.9	14
138	Probabilistic Uncertainty Modeling for Thermomechanical Analysis of Plasterboard Submitted to Fire Load. Journal of Structural Engineering, 2008, 134, 1611-1618.	3.4	14
139	Equivalent contributing depth investigated by a lateral wave with axial transmission in viscoelastic cortical bone. Journal of the Acoustical Society of America, 2011, 129, EL114-EL120.	1.1	14
140	Stochastic Reduced-Order Model in Low-Frequency Dynamics in Presence of Numerous Local Elastic Modes. Journal of Applied Mechanics, Transactions ASME, 2011, 78, .	2.2	14
141	Experimental multiscale measurements for the mechanical identification of a cortical bone by digital image correlation. Journal of the Mechanical Behavior of Biomedical Materials, 2016, 63, 125-133.	3.1	14
142	MULTISCALE IDENTIFICATION OF THE RANDOM ELASTICITY FIELD AT MESOSCALE OF A HETEROGENEOUS MICROSTRUCTURE USING MULTISCALE EXPERIMENTAL OBSERVATIONS. International Journal for Multiscale Computational Engineering, 2015, 13, 281-295.	1.2	14
143	Probabilistic learning on manifolds (PLoM) with partition. International Journal for Numerical Methods in Engineering, 2022, 123, 268-290.	2.8	14
144	Estimation of fuzzy structure parameters for continuous junctions. Journal of the Acoustical Society of America, 2000, 107, 2011-2020.	1.1	13

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145	Stochastic dynamics of a drill-string with uncertain weight-on-hook. Journal of the Brazilian Society of Mechanical Sciences and Engineering, 2010, 32, 250-258.	1.6	13
146	Stochastic reduced order computational model of structures having numerous local elastic modes in low frequency dynamics. Journal of Sound and Vibration, 2013, 332, 3667-3680.	3.9	13
147	Variational-Based Reduced-Order Model in Dynamic Substructuring of Coupled Structures Through a Dissipative Physical Interface: Recent Advances. Archives of Computational Methods in Engineering, 2014, 21, 321-329.	10.2	13
148	Sampling of Bayesian posteriors with a non-Gaussian probabilistic learning on manifolds from a small dataset. Statistics and Computing, 2020, 30, 1433-1457.	1.5	13
149	Polynomial chaos representation of a stochastic preconditioner. International Journal for Numerical Methods in Engineering, 2005, 64, 618-634.	2.8	12
150	Stochastic modeling of anisotropy in multiscale analysis of heterogeneous materials: A comprehensive overview on random matrix approaches. Mechanics of Materials, 2012, 44, 35-46.	3.2	12
151	Probabilistic modeling of apparent tensors in elastostatics: A MaxEnt approach under material symmetry and stochastic boundedness constraints. Probabilistic Engineering Mechanics, 2012, 28, 118-124.	2.7	12
152	Sensitivity of train stochastic dynamics to long-term evolution of track irregularities. Vehicle System Dynamics, 2016, 54, 545-567.	3.7	12
153	Optimal Well-Placement Using Probabilistic Learning. Data-Enabled Discovery and Applications, 2018, 2, 1.	1.2	12
154	Robust dynamic analysis of detuned-mistuned rotating bladed disks with geometric nonlinearities. Computational Mechanics, 2020, 65, 711-730.	4.0	12
155	Estimation of the Fuzzy Substructure Model Parameters Using the Mean Power Flow Equation of the Fuzzy Structure. Journal of Vibration and Acoustics, Transactions of the ASME, 1998, 120, 279-286.	1.6	10
156	Dynamic Substructuring in the Medium-Frequency Range. AIAA Journal, 2003, 41, 1113-1118.	2.6	10
157	Enhancing Model Predictability for a Scramjet Using Probabilistic Learning on Manifolds. AIAA Journal, 2019, 57, 365-378.	2.6	10
158	COMPUTATION OF SOBOL INDICES IN GLOBAL SENSITIVITY ANALYSIS FROM SMALL DATA SETS BY PROBABILISTIC LEARNING ON MANIFOLDS. , 2021, 11, 1-23.		10
159	Nonparametric Modeling of the Variability of Vehicle Vibroacoustic Behavior. , 0, , .		9
160	Maximum entropy modeling of discrete uncertain properties with application to friction. Probabilistic Engineering Mechanics, 2016, 44, 128-137.	2.7	9
161	Voice Signals Produced With Jitter Through a Stochastic One-mass Mechanical Model. Journal of Voice, 2017, 31, 111.e9-111.e18.	1.5	9
162	Computational Vibroacoustics in Low- and Medium- Frequency Bands: Damping, ROM, and UQ Modeling. Applied Sciences (Switzerland), 2017, 7, 586.	2.5	9

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163	Revisiting the experiment of a free-surface resonance of a liquid in a vibration tank using a nonlinear fluidâ€“structure computational model. Journal of Fluids and Structures, 2019, 85, 149-164.	3.4	9
164	Clarification about Component Mode Synthesis Methods for Substructures with Physical Flexible Interfaces. International Journal of Aeronautical and Space Sciences, 2014, 15, 113-122.	2.0	9
165	Nonlinear stochastic dynamics of detuned bladed-disks with uncertain mistuning and detuning optimization using a probabilistic machine learning tool. International Journal of Non-Linear Mechanics, 2022, 143, 104023.	2.6	9
166	Oscillators submitted to squared Gaussian processes. Journal of Mathematical Physics, 1980, 21, 2500.	1.1	8
167	Modeling random uncertainties in voice production using a parametric approach. Mechanics Research Communications, 2008, 35, 454-459.	1.8	8
168	Nonparametric probabilistic approach of uncertainties for elliptic boundary value problem. International Journal for Numerical Methods in Engineering, 2009, 80, 673-688.	2.8	8
169	Random Matrix Models and Nonparametric Method for Uncertainty Quantification. , 2015, , 1-69.		8
170	Robust design optimization with an uncertain model of a nonlinear vibro-impact electro-mechanical system. Communications in Nonlinear Science and Numerical Simulation, 2015, 23, 263-273.	3.3	8
171	Jitter generation in voice signals produced by a two-mass stochastic mechanical model. Biomedical Signal Processing and Control, 2016, 27, 87-95.	5.7	8
172	AN IMPROVEMENT OF THE UNCERTAINTY QUANTIFICATION IN COMPUTATIONAL STRUCTURAL DYNAMICS WITH NONLINEAR GEOMETRICAL EFFECTS. , 2017, 7, 83-98.		8
173	Master Structure Frequency Response Function. , 1998, , 61-83.		7
174	Random-field model for the elasticity tensor of anisotropic random media. Comptes Rendus - Mecanique, 2004, 332, 1007-1012.	2.1	7
175	ModÃ©lisation probabiliste d'une expÃ©rience ultrasonore : calcul de la dispersion sur les mesures de cÃ©lÃ©ritÃ©. Comptes Rendus - Mecanique, 2005, 333, 565-573.	2.1	7
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