

RÃ©gis Cottereau

List of Publications by Year in descending order

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47
papers

473
citations

759190

12
h-index

752679

20
g-index

48
all docs

48
docs citations

48
times ranked

399
citing authors

#	ARTICLE	IF	CITATIONS
1	SEM3D: A 3D High-Fidelity Numerical Earthquake Simulator for Broadband (0â€“10 Hz) Seismic Response Prediction at a Regional Scale. <i>Geosciences (Switzerland)</i> , 2022, 12, 112.	2.2	12
2	Introducing a moving load in a simulation in time over a truncated unbounded domain. <i>Journal of Sound and Vibration</i> , 2022, 534, 117035.	3.9	2
3	Optimal error analysis of the spectral element method for the 2D homogeneous wave equation. <i>Computers and Mathematics With Applications</i> , 2022, 119, 241-256.	2.7	1
4	Identification of a Randomly-Fluctuating Continuous Model of the Ballasted Track Based on Measurements at the Pass-By of High-Speed Trains. <i>Notes on Numerical Fluid Mechanics and Multidisciplinary Design</i> , 2021, , 521-528.	0.3	0
5	Dispersion analysis in ballasted railway tracks and Anderson localization in granular media. <i>Journal of Sound and Vibration</i> , 2020, 465, 115010.	3.9	2
6	Influence of local cubic anisotropy on the transition towards an equipartition regime in a 3D texture-less random elastic medium. <i>Wave Motion</i> , 2020, 96, 102574.	2.0	1
7	Scalable parallel scheme for sampling of Gaussian random fields over very large domains. <i>International Journal for Numerical Methods in Engineering</i> , 2019, 117, 845-859.	2.8	8
8	Sensitivity of the wheelâ€“rail contact interactions and Dang Van Fatigue Index in the rail with respect to irregularities of the track geometry. <i>Vehicle System Dynamics</i> , 2018, 56, 1768-1795.	3.7	6
9	Impact of the Heterogeneity of the Ballast on the Dynamical Behavior of the Ballast-Soil System. <i>Computational Methods in Applied Sciences (Springer)</i> , 2018, , 185-205.	0.3	1
10	Accelerometer, Velocimeter Dense Array, and Rotation Sensor Datasets from the Sinaps@ Postseismic Survey (Cephalonia 2014â€“2015 Aftershock Sequence). <i>Seismological Research Letters</i> , 2018, 89, 678-687.	1.9	25
11	Stability of an explicit high-order spectral element method for acoustics in heterogeneous media based on local element stability criteria. <i>International Journal for Numerical Methods in Engineering</i> , 2018, 116, 223-245.	2.8	8
12	Influence of periodically fluctuating material parameters on the stability of explicit high-order spectral element methods. <i>Journal of Computational Physics</i> , 2018, 373, 304-323.	3.8	4
13	Large scale random fields generation using localized Karhunenâ€“LoÃ¨ve expansion. <i>Advanced Modeling and Simulation in Engineering Sciences</i> , 2018, 5, .	1.7	11
14	Numerical observation of the equipartition regime in a 3D random elastic medium, and discussion of the limiting parameters. <i>Computers and Geosciences</i> , 2017, 102, 56-67.	4.2	3
15	Construction of a stochastic model of track geometry irregularities and validation through experimental measurements of dynamic loading. <i>Vehicle System Dynamics</i> , 2017, 55, 399-426.	3.7	11
16	Toward an integrated seismic risk assessment for nuclear safety improving current French methodologies through the SINAPS@ research project. <i>Nuclear Engineering and Design</i> , 2017, 323, 185-201.	1.7	17
17	Fully scalable implementation of a volume coupling scheme for the modeling of multiscale materials. <i>Computational Mechanics</i> , 2017, 60, 827-844.	4.0	2
18	Randomly-fluctuating heterogeneous continuum model of a ballasted railway track. <i>Computational Mechanics</i> , 2017, 60, 845-861.	4.0	14

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19	Investigation of the earthquake ground motion coherence in heterogeneous non-linear soil deposits. <i>Procedia Engineering</i> , 2017, 199, 2354-2359.	1.2	9
20	Stochastic heterogeneous material modeling for wave propagation in a ballast layer. <i>EPJ Web of Conferences</i> , 2017, 140, 11012.	0.3	0
21	A decoupled strategy to solve reduced-order multimodel problems in the PGD and Arlequin frameworks. <i>Computational Mechanics</i> , 2016, 57, 509-521.	4.0	4
22	Influence of the spatial correlation structure of an elastic random medium on its scattering properties. <i>Journal of Sound and Vibration</i> , 2016, 370, 132-148.	3.9	15
23	Fast r-adaptivity for multiple queries of heterogeneous stochastic material fields. <i>Computational Mechanics</i> , 2015, 56, 601-612.	4.0	5
24	On damping created by heterogeneous yielding in the numerical analysis of nonlinear reinforced concrete frame elements. <i>Computers and Structures</i> , 2015, 154, 192-203.	4.4	9
25	Comparison of two parameterizations of a turbulence-induced flocculation model through global sensitivity analysis. <i>Continental Shelf Research</i> , 2014, 85, 85-95.	1.8	3
26	Kinetic modeling of multiple scattering of elastic waves in heterogeneous anisotropic media. <i>Wave Motion</i> , 2014, 51, 1325-1348.	2.0	13
27	A coupling method for stochastic continuum models at different scales. <i>Probabilistic Engineering Mechanics</i> , 2014, 37, 138-147.	2.7	4
28	A Coupling Method for the Homogenization of Stochastic Structural Models. , 2014, , 35-49.		0
29	A Stochastic-deterministic Coupling Method for Multiscale Problems. Application to Numerical Homogenization of Random Materials. <i>Procedia IUTAM</i> , 2013, 6, 35-43.	1.2	10
30	Dynamics of structures coupled with elastic mediaâ€”A review of numerical models and methods. <i>Journal of Sound and Vibration</i> , 2013, 332, 2415-2436.	3.9	47
31	Numerical strategy for unbiased homogenization of random materials. <i>International Journal for Numerical Methods in Engineering</i> , 2013, 95, 71-90.	2.8	19
32	A stable extended FEM formulation for multiâ€”phase problems enforcing the accuracy of the fluxes through Lagrange multipliers. <i>International Journal for Numerical Methods in Engineering</i> , 2013, 96, 303-322.	2.8	7
33	Error estimation and model adaptation for a stochasticâ€”deterministic coupling method based on the Arlequin framework. <i>International Journal for Numerical Methods in Engineering</i> , 2013, 96, 87-109.	2.8	10
34	Numerical modeling of erosion using an improvement of the extended finite element method. <i>European Journal of Environmental and Civil Engineering</i> , 2011, 15, 1187-1206.	2.1	1
35	A stochastic-deterministic coupling method for continuum mechanics. <i>Computer Methods in Applied Mechanics and Engineering</i> , 2011, 200, 3280-3288.	6.6	22
36	Localized modeling of uncertainty in the Arlequin framework. <i>IUTAM Symposium on Cellular, Molecular and Tissue Mechanics</i> , 2011, , 457-468.	0.2	7

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37	Numerical modeling of erosion using an improvement of the extended finite element method. European Journal of Environmental and Civil Engineering, 2011, 15, 1187-1206.	2.1	0
38	Modeling, with a unified level-set representation, of the expansion of a hollow in the ground under different physical phenomena. Computational Mechanics, 2010, 46, 315-327.	4.0	5
39	Modeling of random anisotropic elastic media and impact on wave propagation. European Journal of Computational Mechanics, 2010, 19, 241-253.	0.6	33
40	Strict error bounds for linear and nonlinear solid mechanics problems using a patch-based flux-free method. Mecanique Et Industries, 2010, 11, 249-254.	0.2	1
41	Simple formulas for the dynamic stiffness of pile groups. Earthquake Engineering and Structural Dynamics, 2009, 38, 1665-1685.	4.4	25
42	Strict error bounds for linear solid mechanics problems using a subdomain-based flux-free method. Computational Mechanics, 2009, 44, 533-547.	4.0	32
43	Probabilistic impedance of foundation: Impact of the seismic design on uncertain soils. Earthquake Engineering and Structural Dynamics, 2008, 37, 899-918.	4.4	16
44	Parametric and nonparametric models of the impedance matrix of a random medium. European Journal of Computational Mechanics, 2008, 17, 881-892.	0.6	3
45	Construction of a probabilistic model for impedance matrices. Computer Methods in Applied Mechanics and Engineering, 2007, 196, 2252-2268.	6.6	38
46	Probabilistic nonparametric model of impedance matrices. European Journal of Computational Mechanics, 2006, 15, 131-142.	0.6	7
47	Stochastic heterogeneous approach for wave propagation in ballasted railway track. , 0, , .		0