

RÃ©gis Cottereau

List of Publications by Year in descending order

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47
papers

473
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759190

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752679

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48
all docs

48
docs citations

48
times ranked

399
citing authors

| # | ARTICLE | IF | CITATIONS |
|----|---|-----|-----------|
| 1 | 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 |
| 2 | Construction of a probabilistic model for impedance matrices. <i>Computer Methods in Applied Mechanics and Engineering</i> , 2007, 196, 2252-2268. | 6.6 | 38 |
| 3 | Modeling of random anisotropic elastic media and impact on wave propagation. <i>European Journal of Computational Mechanics</i> , 2010, 19, 241-253. | 0.6 | 33 |
| 4 | Strict error bounds for linear solid mechanics problems using a subdomain-based flux-free method. <i>Computational Mechanics</i> , 2009, 44, 533-547. | 4.0 | 32 |
| 5 | Simple formulas for the dynamic stiffness of pile groups. <i>Earthquake Engineering and Structural Dynamics</i> , 2009, 38, 1665-1685. | 4.4 | 25 |
| 6 | Accelerometer, Velocimeter Denseâ€”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 |
| 7 | A stochastic-deterministic coupling method for continuum mechanics. <i>Computer Methods in Applied Mechanics and Engineering</i> , 2011, 200, 3280-3288. | 6.6 | 22 |
| 8 | Numerical strategy for unbiased homogenization of random materials. <i>International Journal for Numerical Methods in Engineering</i> , 2013, 95, 71-90. | 2.8 | 19 |
| 9 | 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 |
| 10 | Probabilistic impedance of foundation: Impact of the seismic design on uncertain soils. <i>Earthquake Engineering and Structural Dynamics</i> , 2008, 37, 899-918. | 4.4 | 16 |
| 11 | 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 |
| 12 | Randomly-fluctuating heterogeneous continuum model of a ballasted railway track. <i>Computational Mechanics</i> , 2017, 60, 845-861. | 4.0 | 14 |
| 13 | Kinetic modeling of multiple scattering of elastic waves in heterogeneous anisotropic media. <i>Wave Motion</i> , 2014, 51, 1325-1348. | 2.0 | 13 |
| 14 | 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 |
| 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 | 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 |
| 17 | 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 |
| 18 | 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 |

| # | ARTICLE | IF | CITATIONS |
|----|---|-----|-----------|
| 19 | 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 |
| 20 | Investigation of the earthquake ground motion coherence in heterogeneous non-linear soil deposits. <i>Procedia Engineering</i> , 2017, 199, 2354-2359. | 1.2 | 9 |
| 21 | 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 |
| 22 | 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 |
| 23 | Probabilistic nonparametric model of impedance matrices. <i>European Journal of Computational Mechanics</i> , 2006, 15, 131-142. | 0.6 | 7 |
| 24 | A stable extended FEM formulation for multi-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 |
| 25 | Localized modeling of uncertainty in the Arlequin framework. <i>IUTAM Symposium on Cellular, Molecular and Tissue Mechanics</i> , 2011, , 457-468. | 0.2 | 7 |
| 26 | Sensitivity of the wheel-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 |
| 27 | Modeling, with a unified level-set representation, of the expansion of a hollow in the ground under different physical phenomena. <i>Computational Mechanics</i> , 2010, 46, 315-327. | 4.0 | 5 |
| 28 | Fast r-adaptivity for multiple queries of heterogeneous stochastic material fields. <i>Computational Mechanics</i> , 2015, 56, 601-612. | 4.0 | 5 |
| 29 | A coupling method for stochastic continuum models at different scales. <i>Probabilistic Engineering Mechanics</i> , 2014, 37, 138-147. | 2.7 | 4 |
| 30 | 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 |
| 31 | 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 |
| 32 | Parametric and nonparametric models of the impedance matrix of a random medium. <i>European Journal of Computational Mechanics</i> , 2008, 17, 881-892. | 0.6 | 3 |
| 33 | 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 |
| 34 | 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 |
| 35 | 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 |
| 36 | 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 |

| # | ARTICLE | IF | CITATIONS |
|----|---|-----|-----------|
| 37 | Introducing a moving load in a simulation in time over a truncated unbounded domain. Journal of Sound and Vibration, 2022, 534, 117035. | 3.9 | 2 |
| 38 | 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 | 1 |
| 39 | Impact of the Heterogeneity of the Ballast on the Dynamical Behavior of the Ballast-Soil System. Computational Methods in Applied Sciences (Springer), 2018, , 185-205. | 0.3 | 1 |
| 40 | Influence of local cubic anisotropy on the transition towards an equipartition regime in a 3D texture-less random elastic medium. Wave Motion, 2020, 96, 102574. | 2.0 | 1 |
| 41 | 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 |
| 42 | Optimal error analysis of the spectral element method for the 2D homogeneous wave equation. Computers and Mathematics With Applications, 2022, 119, 241-256. | 2.7 | 1 |
| 43 | Stochastic heterogeneous material modeling for wave propagation in a ballast layer. EPJ Web of Conferences, 2017, 140, 11012. | 0.3 | 0 |
| 44 | Identification of a Randomly-Fluctuating Continuous Model of the Ballasted Track Based on Measurements at the Pass-By of High-Speed Trains. Notes on Numerical Fluid Mechanics and Multidisciplinary Design, 2021, , 521-528. | 0.3 | 0 |
| 45 | A Coupling Method for the Homogenization of Stochastic Structural Models. , 2014, , 35-49. | | 0 |
| 46 | Stochastic heterogeneous approach for wave propagation in ballasted railway track. , 0, , . | | 0 |
| 47 | 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 |