

GaÃ«l Combe

List of Publications by Year in descending order

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Version: 2024-02-01

61
papers

1,292
citations

394286

19
h-index

360920

35
g-index

63
all docs

63
docs citations

63
times ranked

882
citing authors

| # | ARTICLE | IF | CITATIONS |
|----|---|-----|-----------|
| 1 | FEM–DEM multi-scale model for cemented granular materials: Inter- and intra-granular cracking induced strain localisation. <i>International Journal for Numerical and Analytical Methods in Geomechanics</i> , 2022, 46, 1001-1025. | 1.7 | 8 |
| 2 | Étude du comportement de l'interface sable-pieu sous chargement axial monotone et cyclique à l'échelle granulaire. <i>Revue Française De Géotechnique</i> , 2021, , 4. | 0.1 | 2 |
| 3 | Grain-scale DEM study of open-ended pipe pile penetration in granular soils. <i>EPJ Web of Conferences</i> , 2021, 249, 11007. | 0.1 | 0 |
| 4 | High compressibility caused by particle breakage: a DEM investigation. <i>EPJ Web of Conferences</i> , 2021, 249, 07011. | 0.1 | 0 |
| 5 | Sample preparation of dense granular materials Influence of void ratio e and coordination number Z^* on the mechanical behaviour at failure. <i>EPJ Web of Conferences</i> , 2021, 249, 02012. | 0.1 | 0 |
| 6 | An assessment of discrete element approaches to infer intergranular forces from experiments on 2D granular media. <i>International Journal of Solids and Structures</i> , 2020, 187, 48-57. | 1.3 | 6 |
| 7 | The particle image tracking technique: An accurate optical method for measuring individual kinematics of rigid particles. <i>Strain</i> , 2020, 56, e12362. | 1.4 | 1 |
| 8 | A numerical homogenized law using discrete element method for continuum modelling of boundary value problems. <i>Lecture Notes in Civil Engineering</i> , 2020, , 715-720. | 0.3 | 0 |
| 9 | Characterising processes at sand-pile interface using digital image analysis and X-ray CT. <i>Geotechnique Letters</i> , 2019, 9, 254-262. | 0.6 | 11 |
| 10 | From discrete to continuum modelling of boundary value problems in geomechanics: An integrated FEM–DEM approach. <i>International Journal for Numerical and Analytical Methods in Geomechanics</i> , 2019, 43, 919-955. | 1.7 | 48 |
| 11 | X-ray CT analysis of the evolution of ballast grain morphology along a Micro-Deval test: key role of the asperity scale. <i>Granular Matter</i> , 2019, 21, 1. | 1.1 | 21 |
| 12 | Shaft friction changes for cyclically loaded displacement piles: an X-ray investigation. <i>Geotechnique Letters</i> , 2018, 8, 66-72. | 0.6 | 21 |
| 13 | FEM–DEM multiscale modeling: Model performance enhancement from Newton strategy to element loop parallelization. <i>International Journal for Numerical Methods in Engineering</i> , 2018, 114, 47-65. | 1.5 | 20 |
| 14 | Emergence of Shear Bands in Confined Granular Systems: Singularity of the q-Statistics. <i>Entropy</i> , 2018, 20, 862. | 1.1 | 5 |
| 15 | Fingering phenomena during grain–grain displacement. <i>Computational Particle Mechanics</i> , 2017, 4, 153-164. | 1.5 | 4 |
| 16 | Restoring Mesh Independency in FEM-DEM Multi-scale Modelling of Strain Localization Using Second Gradient Regularization. <i>Springer Series in Geomechanics and Geoengineering</i> , 2017, , 453-457. | 0.0 | 5 |
| 17 | Effects of a large number of cycles on pile shaft resistance analyzed at the grain scale using x-ray tomography. <i>EPJ Web of Conferences</i> , 2017, 140, 07014. | 0.1 | 1 |
| 18 | Experimental investigation of mode I fracture for brittle tube-shaped particles. <i>EPJ Web of Conferences</i> , 2017, 140, 07015. | 0.1 | 3 |

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|----|---|-----|-----------|
| 19 | FEM – DEM: a new efficient multi-scale approach for geotechnical problems with strain localization. EPJ Web of Conferences, 2017, 140, 11007. | 0.1 | 6 |
| 20 | Assessing contact forces in granular materials from experimental measurements of kinematics. EPJ Web of Conferences, 2017, 140, 02012. | 0.1 | 3 |
| 21 | Stochastic model for the micromechanics of jammed granular materials: experimental studies and numerical simulations. EPJ Web of Conferences, 2017, 140, 02021. | 0.1 | 1 |
| 22 | Wear of sharp aggregates in a rotating drum. EPJ Web of Conferences, 2017, 140, 07009. | 0.1 | 6 |
| 23 | Quantifying Degradation of Railway Ballast Using Numerical Simulations of Micro-deval Test and In-situ Conditions. Procedia Engineering, 2016, 143, 1016-1023. | 1.2 | 15 |
| 24 | A study of the influence of REV variability in double-scale FEM – DEM analysis. International Journal for Numerical Methods in Engineering, 2016, 107, 882-900. | 1.5 | 26 |
| 25 | Experimental Validation of a Nonextensive Scaling Law in Confined Granular Media. Physical Review Letters, 2015, 115, 238301. | 2.9 | 107 |
| 26 | Particle Shape Effect on Macroscopic Behaviour of Underground Structures: Numerical and Experimental Study. Studia Geotechnica Et Mechanica, 2015, 36, 67-74. | 0.2 | 1 |
| 27 | Mechanical properties of inclined frictional granular layers. Granular Matter, 2014, 16, 193-201. | 1.1 | 10 |
| 28 | FEM – DEM modelling of cohesive granular materials: Numerical homogenisation and multi-scale simulations. Acta Geophysica, 2014, 62, 1109-1126. | 1.0 | 60 |
| 29 | Jamming transition in a two-dimensional open granular pile with rolling resistance. Papers in Physics, 2014, 6, . | 0.2 | 6 |
| 30 | Pattern formation during capillary rising of a fluid front into a granular media. , 2013, , . | | 1 |
| 31 | Mechanical response of an inclined frictional granular layer approaching unjamming. Europhysics Letters, 2013, 101, 44006. | 0.7 | 10 |
| 32 | TRACKER: A particle image tracking (PIT) technique dedicated to nonsmooth motions involved in granular packings. AIP Conference Proceedings, 2013, , . | 0.3 | 14 |
| 33 | Non-Gaussian behavior in jamming / unjamming transition in dense granular materials. , 2013, , . | | 1 |
| 34 | Experimental evidence of "Granulence". AIP Conference Proceedings, 2013, , . | 0.3 | 10 |
| 35 | A benchmark for particle shape dependence. , 2013, , . | | 3 |
| 36 | Modeling of a cohesive granular materials by a multi-scale approach. AIP Conference Proceedings, 2013, , . | 0.3 | 12 |

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|----|---|-----|-----------|
| 37 | Postmortem analysis of sand grain crushing from pile interface using X-ray tomography. AIP Conference Proceedings, 2013, , . | 0.3 | 8 |
| 38 | An attempt in assessing contact forces from a kinematic field. , 2013, , . | | 1 |
| 39 | An experimental assessment of displacement fluctuations in a 2D granular material subjected to shear. Geotechnique Letters, 2012, 2, 113-118. | 0.6 | 70 |
| 40 | Particle shape dependence in 2D granular media. Europhysics Letters, 2012, 98, 44008. | 0.7 | 48 |
| 41 | Experimental and discrete element modeling studies of the trapdoor problem: influence of the macro-mechanical frictional parameters. Acta Geotechnica, 2012, 7, 15-39. | 2.9 | 119 |
| 42 | Two-scale modeling of granular materials: a DEM-FEM approach. Granular Matter, 2011, 13, 277-281. | 1.1 | 84 |
| 43 | Polygons vs. clumps of discs: A numerical study of the influence of grain shape on the mechanical behaviour of granular materials. Powder Technology, 2011, 208, 279-288. | 2.1 | 38 |
| 44 | Investigation of Load-Transfer Mechanisms in Geotechnical Earth Structures with Thin Fill Platforms Reinforced by Rigid Inclusions. International Journal of Geomechanics, 2011, 11, 239-250. | 1.3 | 39 |
| 45 | Prediction of Load Transfers in Granular Layers Used in Rigid Inclusions Technique—Experimental and Discrete Element Method Analysis. , 2010, , . | | 6 |
| 46 | How granular materials deform in quasistatic conditions. AIP Conference Proceedings, 2010, , . | 0.3 | 29 |
| 47 | A DEM—FEM two scale approach of the behaviour of granular materials. , 2009, , . | | 3 |
| 48 | Mechanical behavior of mixtures of circular and rectangular 2D particles. , 2009, , . | | 6 |
| 49 | Influence of the grains shape on the mechanical behavior of granular materials. , 2009, , . | | 8 |
| 50 | Transitions in the response of a granular layer. , 2009, , . | | 3 |
| 51 | Experimental and Numerical Study of the Response of Granular Layer in the Trap-door Problem. , 2009, , . | | 17 |
| 52 | Departure from elasticity in granular layers: Investigation of a crossover overload force. Computer Physics Communications, 2009, 180, 612-615. | 3.0 | 20 |
| 53 | Coupling between finite and discrete element methods for the modelling of earth structures reinforced by geosynthetic. Computers and Geotechnics, 2009, 36, 709-717. | 2.3 | 69 |
| 54 | Scale Separation in Granular Packings: Stress Plateaus and Fluctuations. Physical Review Letters, 2006, 96, 168001. | 2.9 | 51 |

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|----|---|-----|-----------|
| 55 | Publisher's Note: Scale Separation in Granular Packings: Stress Plateaus and Fluctuations [Phys. Rev. Lett.96, 168001 (2006)]. Physical Review Letters, 2006, 96, . | 2.9 | 1 |
| 56 | Sensitivity of the stress response function to packing preparation. Journal of Physics Condensed Matter, 2005, 17, S2391-S2403. | 0.7 | 34 |
| 57 | Discrete numerical simulation, quasistatic deformation and the origins of strain in granular materials. , 2003, , . | | 8 |
| 58 | Quasistatic rheology and the origins of strain. Comptes Rendus Physique, 2002, 3, 131-140. | 0.3 | 101 |
| 59 | Strain versus Stress in a Model Granular Material: A Devil's Staircase. Physical Review Letters, 2000, 85, 3628-3631. | 2.9 | 78 |
| 60 | Experimental micromechanical analysis of a 2D granular material: relation between structure evolution and loading path. International Journal for Numerical and Analytical Methods in Geomechanics, 1997, 2, 121-163. | 1.0 | 3 |
| 61 | High compression of granular assemblies of brittle hollow tubular particles: investigation through a 3D discrete element model. Computational Particle Mechanics, 0, , 1. | 1.5 | 0 |