

Patrick Dangla

List of Publications by Year in descending order

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Version: 2024-02-01

75
papers

4,256
citations

182225

30
h-index

124990

64
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76
all docs

76
docs citations

76
times ranked

3451
citing authors

| # | ARTICLE | IF | CITATIONS |
|----|---|-----|-----------|
| 1 | Influence of heterogeneities of density on the hydromechanical behaviour of pellet-based bentonite materials in imbibition experiments. <i>Applied Clay Science</i> , 2022, 216, 106353. | 2.6 | 2 |
| 2 | Modeling the sulfate attack induced expansion of cementitious materials based on interface-controlled crystal growth mechanisms. <i>Cement and Concrete Research</i> , 2022, 152, 106676. | 4.6 | 19 |
| 3 | Investigating the hydromechanical behaviour of bentonite pellets by swelling pressure tests and discrete element modelling. <i>Acta Geotechnica</i> , 2021, 16, 507-524. | 2.9 | 16 |
| 4 | Modeling transient variations of permeability in coal seams at the reservoir scale. <i>Journal of Natural Gas Science and Engineering</i> , 2021, 88, 103796. | 2.1 | 6 |
| 5 | Improvement of Recycled Aggregates Properties by Means of CO ₂ Uptake. <i>Applied Sciences (Switzerland)</i> , 2021, 11, 6571. | 1.3 | 23 |
| 6 | Reactive transport modelling of concurrent chloride ingress and carbonation in concrete. <i>Materials and Structures/Materiaux Et Constructions</i> , 2021, 54, 1. | 1.3 | 8 |
| 7 | Reactive transport modelling of concrete subject to de-icing salts and atmospheric carbonation. <i>Materials and Structures/Materiaux Et Constructions</i> , 2021, 54, 1. | 1.3 | 3 |
| 8 | Modelling the behaviour of bentonite pellet-powder mixtures upon hydration from dry granular state to saturated homogeneous state. <i>Engineering Geology</i> , 2020, 278, 105847. | 2.9 | 15 |
| 9 | Locating ettringite due to DEF at the pore scale of cement paste by heat-based dissolution tests. <i>Construction and Building Materials</i> , 2020, 258, 120000. | 3.2 | 7 |
| 10 | Pore size analyses of cement paste exposed to external sulfate attack and delayed ettringite formation. <i>Cement and Concrete Research</i> , 2019, 123, 105766. | 4.6 | 83 |
| 11 | Interplay between Molecular Diffusion and Advection during Solute Transport in Macroporous Media. <i>Vadose Zone Journal</i> , 2019, 18, 1-15. | 1.3 | 12 |
| 12 | Modelling of the sulfuric acid attack on different types of cementitious materials. <i>Cement and Concrete Research</i> , 2018, 105, 126-133. | 4.6 | 41 |
| 13 | Hydro-mechanical behaviour of high-density bentonite pellet on partial hydration. <i>Geotechnique Letters</i> , 2018, 8, 330-335. | 0.6 | 22 |
| 14 | Permeability changes in coal seams: The role of anisotropy. <i>International Journal of Coal Geology</i> , 2018, 199, 52-64. | 1.9 | 17 |
| 15 | Impact of cement composition on the adsorption of hydrogen sulphide and its subsequent oxidation onto cementitious material surfaces. <i>Construction and Building Materials</i> , 2017, 152, 576-586. | 3.2 | 17 |
| 16 | Influence d'une hÃ©tÃ©rogÃ©nÃ©itÃ© macroporale sur les processus de transport de solutÃ© dans un milieu poreux: expÃ©rimentations sur sols modÃ©les et simulations par la mÃ©thode de Lattice-Boltzmann. <i>Houille Blanche</i> , 2017, 103, 32-38. | 0.3 | 0 |
| 17 | Thermo-hydro-ionic transport in sea immersed tube tunnel. <i>Tunnelling and Underground Space Technology</i> , 2016, 58, 147-158. | 3.0 | 10 |
| 18 | Leaching resistance of hazardous waste cement solidification after accelerated carbonation. <i>Cement and Concrete Composites</i> , 2016, 72, 125-132. | 4.6 | 26 |

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|----|--|-----|-----------|
| 19 | Link between microstructure and tritiated water diffusivity in mortars: Impact of aggregates. Cement and Concrete Research, 2016, 82, 92-99. | 4.6 | 19 |
| 20 | Pore structure of cement pastes through NAD and MIP analysis. Advances in Cement Research, 2016, 28, 23-32. | 0.7 | 39 |
| 21 | Stress from NaCl crystallisation by carbon dioxide injection in aquifers. Environmental Geotechnics, 2015, 2, 280-291. | 1.3 | 11 |
| 22 | Thermodynamic of incongruent solubility of C-S-H. Advances in Cement Research, 2015, 27, 601-609. | 0.7 | 4 |
| 23 | Degradation modeling of concrete submitted to biogenic acid attack. Cement and Concrete Research, 2015, 70, 29-38. | 4.6 | 54 |
| 24 | Thermodynamic of incongruent solubility of C-S-H. Advances in Cement Research, 2015, 27, 601-609. | 0.7 | 3 |
| 25 | Experimental investigation of the influence of supercritical state on the relative permeability of Vosges sandstone. Comptes Rendus - Mecanique, 2015, 343, 495-502. | 2.1 | 10 |
| 26 | Desorption-induced shear failure of coal bed seams during gas depletion. International Journal of Coal Geology, 2015, 137, 142-151. | 1.9 | 85 |
| 27 | Impact of accelerated carbonation on OPC cement paste blended with fly ash. Cement and Concrete Research, 2015, 67, 226-236. | 4.6 | 188 |
| 28 | A Thermodynamic Approach to Effective Stresses in Unsaturated Soils Incorporating the Concept of Partial Pore Deformations. Vadose Zone Journal, 2014, 13, 1-11. | 1.3 | 9 |
| 29 | Measurement and modeling of adsorptive poromechanical properties of bituminous coal cores exposed to CO ₂ : Adsorption, swelling strains, swelling stresses and impact on fracture permeability. International Journal of Coal Geology, 2014, 134-135, 80-95. | 1.9 | 96 |
| 30 | A poromechanical model for coal seams saturated with binary mixtures of CH ₄ and CO ₂ . Journal of the Mechanics and Physics of Solids, 2014, 71, 97-111. | 2.3 | 37 |
| 31 | Investigation of the carbonation mechanism of CH and C-S-H in terms of kinetics, microstructure changes and moisture properties. Cement and Concrete Research, 2014, 56, 153-170. | 4.6 | 611 |
| 32 | Reactive transport modeling of CO ₂ through cementitious materials under CO ₂ geological storage conditions. International Journal of Greenhouse Gas Control, 2013, 18, 75-87. | 2.3 | 42 |
| 33 | Degradation modelling of concrete submitted to sulfuric acid attack. Cement and Concrete Research, 2013, 53, 267-277. | 4.6 | 99 |
| 34 | Water Removal by Freeze-Drying of Hardened Cement Paste. Drying Technology, 2013, 31, 67-71. | 1.7 | 19 |
| 35 | Carbonation kinetics of a bed of recycled concrete aggregates: A laboratory study on model materials. Cement and Concrete Research, 2013, 46, 50-65. | 4.6 | 135 |
| 36 | Extension of Petersen matrix to the modelling of chemical equilibrium involved in concrete carbonation. European Journal of Environmental and Civil Engineering, 2013, 17, 920-934. | 1.0 | 0 |

| # | ARTICLE | IF | CITATIONS |
|----|---|-----|-----------|
| 37 | Poromechanics of Salt Nucleation within an Unsaturated Reservoir Rock. , 2013, , . | | 3 |
| 38 | Poroelastic Analysis of Partial Freezing in Cohesive Porous Materials. Journal of Applied Mechanics, Transactions ASME, 2013, 80, . | 1.1 | 22 |
| 39 | A transverse isotropic model for microporous solids: Application to coal matrix adsorption and swelling. Journal of Geophysical Research: Solid Earth, 2013, 118, 6113-6123. | 1.4 | 64 |
| 40 | Link between microstructure and tritiated water diffusivity in mortars. EPJ Web of Conferences, 2013, 56, 01006. | 0.1 | 2 |
| 41 | Dependence on injection temperature and on aquifer's petrophysical properties of the local stress applying on the pore wall of a crystallized pore in the context of CO ₂ storage in deep saline aquifers. EPJ Applied Physics, 2013, 64, 21101. | 0.3 | 10 |
| 42 | Analysis of pore structure, contact angle and pore entrapment of blended cement pastes from mercury porosimetry data. Cement and Concrete Composites, 2012, 34, 1053-1060. | 4.6 | 109 |
| 43 | A Poromechanical Model for Coal Seams Injected with Carbon Dioxide: From an Isotherm of Adsorption to a Swelling of the Reservoir. Oil and Gas Science and Technology, 2012, 67, 777-786. | 1.4 | 27 |
| 44 | Pore structure characterization of cement pastes blended with high-volume fly-ash. Cement and Concrete Research, 2012, 42, 194-204. | 4.6 | 420 |
| 45 | Determination of cement hydration and pozzolanic reaction extents for fly-ash cement pastes. Construction and Building Materials, 2012, 27, 560-569. | 3.2 | 209 |
| 46 | Effect of porosity on thermal expansion coefficient of cement pastes and mortars. Construction and Building Materials, 2012, 28, 468-475. | 3.2 | 80 |
| 47 | A study of freezing behavior of cementitious materials by poromechanical approach. International Journal of Solids and Structures, 2011, 48, 3267-3273. | 1.3 | 100 |
| 48 | Surface fractal analysis of pore structure of high-volume fly-ash cement pastes. Applied Surface Science, 2010, 257, 762-768. | 3.1 | 160 |
| 49 | Penetration of chlorides in hardened concrete during frost salt scaling cycles. EPJ Web of Conferences, 2010, 6, 22017. | 0.1 | 1 |
| 50 | Assessment and prediction of RC structure service life by means of durability indicators and physical/chemical models. Cement and Concrete Composites, 2009, 31, 522-534. | 4.6 | 64 |
| 51 | Rebar corrosion in carbonated concrete exposed to variable humidity conditions. Interpretation of Tuutti's curve. Corrosion Science, 2009, 51, 1747-1756. | 3.0 | 29 |
| 52 | Modelling of coupled ion and moisture transport in porous building materials. Construction and Building Materials, 2008, 22, 2185-2195. | 3.2 | 55 |
| 53 | Sound propagation above a porous road surface with extended reaction by boundary element method. Journal of the Acoustical Society of America, 2007, 122, 731-736. | 0.5 | 8 |
| 54 | Investigation of the carbonation front shape on cementitious materials: Effects of the chemical kinetics. Cement and Concrete Research, 2007, 37, 1047-1058. | 4.6 | 465 |

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|----|---|-----|-----------|
| 55 | Study of the water budget of streets: experimentation and modelling. <i>Water Science and Technology</i> , 2006, 54, 41-48. | 1.2 | 12 |
| 56 | Modelling the influence of ionic and fluid transport on rebars corrosion in unsaturated cement systems. <i>European Physical Journal Special Topics</i> , 2006, 136, 131-140. | 0.2 | 1 |
| 57 | Seismic Site-City Interaction: Main Governing Phenomena through Simplified Numerical Models. <i>Bulletin of the Seismological Society of America</i> , 2006, 96, 1934-1951. | 1.1 | 122 |
| 58 | Sound Propagation above a Porous Road Surface by Boundary Element Method. <i>Road Materials and Pavement Design</i> , 2006, 7, 289-312. | 2.0 | 6 |
| 59 | Prediction of chloride ingress into saturated concrete on the basis of a multi-species model by numerical calculations. <i>Computers and Concrete</i> , 2006, 3, 401-422. | 0.7 | 26 |
| 60 | Sound Propagation above a Porous Road Surface by Boundary Element Method. <i>Road Materials and Pavement Design</i> , 2006, 7, 289-312. | 2.0 | 0 |
| 61 | Evaluation of a thermal criterion for an engineered barrier system. <i>Engineering Geology</i> , 2005, 81, 269-283. | 2.9 | 33 |
| 62 | Adaptation of existing behaviour models to unsaturated states: application to CJS model. <i>International Journal for Numerical and Analytical Methods in Geomechanics</i> , 2005, 29, 1127-1155. | 1.7 | 57 |
| 63 | Role of pH in Electro-Osmosis: Experimental Study on NaClâ€“Water Saturated Kaolinite. <i>Transport in Porous Media</i> , 2005, 61, 93-107. | 1.2 | 34 |
| 64 | A Simple and Efficient Regularization Method for 3D BEM: Application to Frequency-Domain Elastodynamics. <i>Bulletin of the Seismological Society of America</i> , 2005, 95, 1916-1927. | 1.1 | 24 |
| 65 | The equivalent pore pressure and the swelling and shrinkage of cement-based materials. <i>Materials and Structures/Materiaux Et Constructions</i> , 2004, 37, 15-20. | 1.3 | 94 |
| 66 | Modelling of pH-dependent electro-osmotic flows. <i>Comptes Rendus - Mecanique</i> , 2004, 332, 915-920. | 2.1 | 8 |
| 67 | Modal Superposition Method for the Analysis of Seismic-Wave Amplification. <i>Bulletin of the Seismological Society of America</i> , 2003, 93, 1144-1153. | 1.1 | 5 |
| 68 | Seismic site effects in a deep alluvial basin: numerical analysis by the boundary element method. <i>Computers and Geotechnics</i> , 2002, 29, 573-585. | 2.3 | 43 |
| 69 | Seismic site effects for shallow and deep alluvial basins: in-depth motion and focusing effect. <i>Soil Dynamics and Earthquake Engineering</i> , 2002, 22, 849-854. | 1.9 | 37 |
| 70 | Evaluation de la permÃ©abilitÃ© Ã l'eau liquide des bÃ©tons Ã partir de leur perte de masse durant le sÃ©chage. <i>Revue EuropÃ©enne De GÃ©nie Civil</i> , 2001, 5, 269-284. | 0.0 | 11 |
| 71 | Numerical analysis of seismic wave amplification in Nice (France) and comparisons with experiments. <i>Soil Dynamics and Earthquake Engineering</i> , 2000, 19, 347-362. | 1.9 | 83 |
| 72 | A two-scale modelling of a swelling clay. <i>European Physical Journal Special Topics</i> , 1999, 09, Pr9-21-Pr9-31. | 0.2 | 2 |

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|----|---|-----|-----------|
| 73 | A vanishing diffusion process in unsaturated soils. International Journal of Non-Linear Mechanics, 1998, 33, 1027-1037. | 1.4 | 8 |
| 74 | A plane strain soil-structure interaction model. Earthquake Engineering and Structural Dynamics, 1988, 16, 1115-1128. | 2.5 | 28 |
| 75 | Accelerated Biodeterioration Test for the Study of Cementitious Materials in Sewer Networks: Experimental and Modeling. Key Engineering Materials, 0, 711, 1069-1075. | 0.4 | 3 |