Antonio Gens

List of Publications by Year in Descending Order

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The third column is the impact factor (IF) of the journal, and the fourth column is the number of citations of the article.

230 papers	10,782 citations	52 h-index	101 g-index
249 ext. papers	12,154 ext. citations	3.3 avg, IF	6.37 L-index

#	Paper	IF	Citations
230	Scott William Sloan 1954–2019. *Historical Records of Australian Science*, **2022**, 33, 64-71	0.2	
229	Geotechnical particle finite element method for modeling of soil-structure interaction under large deformation conditions. *Journal of Rock Mechanics and Geotechnical Engineering*, **2022**,	5.3	1
228	The mechanical properties of a high plasticity expansive clay. *Engineering Geology*, **2022**, 303, 106647	6	0
227	Image-based calibration of rolling resistance in discrete element models of sand. *Computers and Geotechnics*, **2021**, 131, 103929	4.4	14
226	A contact model for rough crushable sand. *Soils and Foundations*, **2021**, 61, 798-798	2.9	2
225	Energy balance analyses during Standard Penetration Tests in a virtual calibration chamber. *Computers and Geotechnics*, **2021**, 133, 104040	4.4	4
224	A full-scale in situ heating test in Callovo-Oxfordian claystone: observations, analysis and interpretation. *Computers and Geotechnics*, **2021**, 133, 104045	4.4	4
223	Analysis of cone penetration in brittle liquefiable soils. *Computers and Geotechnics*, **2021**, 134, 104123	4.4	5
222	An effective combined framework for modelling the time-dependent behaviour of soft structured clays. *Acta Geotechnica*, **2021**, 16, 535-550	4.9	3
221	Feasibility of constructing a full-scale radioactive high-level waste disposal cell and characterization of its thermo-hydro-mechanical behavior. *International Journal of Rock Mechanics and Minings Sciences*, **2021**, 137, 104555	6	11
220	HM and THM interactions in bentonite engineered barriers for nuclear waste disposal. *International Journal of Rock Mechanics and Minings Sciences*, **2021**, 137, 104572	6	5
219	DEM examination of SPT correction factors. *EPJ Web of Conferences*, **2021**, 249, 14017	0.3	
218	A Nonlocal Elasto-Plastic Model for Structured Soils at Large Strains for the Particle Finite Element Method. *Lecture Notes in Civil Engineering*, **2021**, 544-551	0.3	
217	Effect of thermo-hydro-mechanical coupling on the evolution of stress in the concrete liner of an underground drift in the Cigéo project. *IOP Conference Series: Earth and Environmental Science*, **2021**, 833, 012200	0.3	0
216	Numerical integration of an elasto-plastic critical state model for soils under unsaturated conditions. *Computers and Geotechnics*, **2021**, 137, 104299	4.4	1
215	Analysis of the process of compaction movements of deposits of crushed salt tailings. *Engineering Geology*, **2021**, 293, 106290	6	1
214	Coupled solid-fluid response of deep tunnels excavated in saturated rock masses with a time-dependent plastic behaviour. *Applied Mathematical Modelling*, **2021**, 100, 508-535	4.5	1

213	Benchmark cases for a multi-component Lattice-Boltzmann method in hydrostatic conditions. *MethodsX*, **2020**, 7, 101090	1.9	1
212	On the Stability of Underground Caves in Calcareous Rocks Due to Long-Term Weathering. *Rock Mechanics and Rock Engineering*, **2020**, 53, 3885-3901	5.7	2
211	A pressuremeter-based evaluation of structure in London Clay using a kinematic hardening constitutive model. *Acta Geotechnica*, **2020**, 15, 2089-2101	4.9	4
210	Temperature effects on water retention and water permeability of an unsaturated clay **2020**, 433-438		1
209	Towards higher temperatures in nuclear waste repositories. *E3S Web of Conferences*, **2020**, 205, 01001	0.5	1
208	Linking shape and rotation of grains during triaxial compression of sand. *Granular Matter*, **2020**, 22, 1	2.6	4
207	Hybrid multi-scale model for partially saturated media based on a pore network approach and lattice Boltzmann method. *Advances in Water Resources*, **2020**, 144, 103709	4.7	6
206	Modelling gas flow in clay materials incorporating material heterogeneity and embedded fractures. *International Journal of Rock Mechanics and Minings Sciences*, **2020**, 136, 104524	6	4
205	Beacon: bentonite mechanical evolution. *EPJ Nuclear Sciences & Technologies*, **2020**, 6, 23	1	7
204	Increasing understanding and confidence in THM simulations of Engineered Barrier Systems. *Environmental Geotechnics*, **2020**, 7, 59-71	1.2	4
203	Scott William Sloan. *Geotechnique*, **2020**, 70, 1174-1175	3.4	
202	High resolution incremental stress testing of crushable granular materials. *E3S Web of Conferences*, **2019**, 92, 14009	0.5	
201	Conceptual uncertainties in modelling the interaction between engineered and natural barriers of nuclear waste repositories in crystalline rocks. *Geological Society Special Publication*, **2019**, 482, 261-283	1.7	5
200	Micro-scale investigation of unsaturated sand in mini-triaxial shearing using X-ray CT. *Geotechnique Letters*, **2019**, 9, 269-277	1.7	4
199	Micromechanical inspection of incremental behaviour of crushable soils. *Acta Geotechnica*, **2019**, 14, 1337-1356	4.9	15
198	Clays in natural and engineered barriers for nuclear waste disposal. *Geomechanics for Energy and the Environment*, **2019**, 17, 1-2	3.7	1
197	Standard penetration testing in a virtual calibration chamber. *Computers and Geotechnics*, **2019**, 111, 277-289	4.4	19
196	Sphericity measures of sand grains. *Engineering Geology*, **2019**, 254, 43-53	6	34

195	Reply to the Discussion on Coupled effective stress analysis of insertion problems in geotechnics with the Particle Finite Element method *Computers and Geotechnics*, **2019**, 109, 290-292	4.4	
194	Low-order stabilized finite element for the full Biot formulation in soil mechanics at finite strain. *International Journal for Numerical and Analytical Methods in Geomechanics*, **2019**, 43, 1488-1515	4	23
193	Numerical simulation of the undrained stability of slopes in anisotropic fine-grained soils. *Geomechanics and Geoengineering*, **2019**, 14, 18-29	1.4	4
192	Geomechanics of Shale Repositories. *Geophysical Monograph Series*, **2019**, 99-123	1.1	
191	Coupled Thermal Hydraulic Mechanical and Chemical Modeling of Clayed Rocks. *Geophysical Monograph Series*, **2019**, 69-82	1.1	0
190	Finite element analysis for the safety evaluation of a dam on a fractured rock foundation **2019**, 3-12		1
189	Characterisation of the multi-scale fabric features of high plasticity clays. *Geotechnique Letters*, **2019**, 9, 361-368	1.7	8
188	A stable mesh-independent approach for numerical modelling of structured soils at large strains. *Computers and Geotechnics*, **2019**, 116, 103215	4.4	16
187	SDMT-Based Numerical Analyses of Deep Excavation in Soft Soil. *Journal of Geotechnical and Geoenvironmental Engineering - ASCE*, **2019**, 145, 04018102	3.4	2
186	Effects of particle breakage and stress reversal on the behaviour of sand around displacement piles. *Geotechnique*, **2019**, 69, 1029-1030	3.4	
185	Grading evolution and critical state in a discrete numerical model of Fontainebleau sand. *Geotechnique*, **2019**, 69, 1-15	3.4	47
184	On the choice of stress strain variables for unsaturated soils and its effect on plastic flow. *Geomechanics for Energy and the Environment*, **2018**, 15, 3-9	3.7	1
183	Discrete Simulation of Cone Penetration in Granular Materials. *Computational Methods in Applied Sciences (Springer)*, **2018**, 95-111	0.4	0
182	DEM Investigation of Particle Crushing Effects on Static and Dynamic Penetration Tests. *Springer Series in Geomechanics and Geoengineering*, **2018**, 274-278	0.1	2
181	Nonlocal plasticity modelling of strain localisation in stiff clays. *Computers and Geotechnics*, **2018**, 103, 138-150	4.4	23
180	Coupled effective stress analysis of insertion problems in geotechnics with the Particle Finite Element Method. *Computers and Geotechnics*, **2018**, 101, 114-129	4.4	43
179	DEM modelling of dynamic penetration in granular material **2018**, 415-418		2
178	Three-dimensional analysis of penetration problems using G-PFEM **2018**, 643-650		2

177	Marchetti Flat Dilatometer Tests in a Virtual Calibration Chamber. *Geotechnical Testing Journal*, **2018**, 41, 20170370	1.3	3
176	Performance of the Opalinus Clay under thermal loading: experimental results from Mont Terri rock laboratory (Switzerland). *Swiss Journal of Geosciences Supplement*, **2018**, 271-288		
175	Hydro-mechanical modelling of an unsaturated seal structure **2018**, 757-763		
174	Microstructural Changes Underlying the Macro-response of a Stiff Clay. *Trends in Mathematics*, **2018**, 89-97	0.3	3
173	Hydraulic conductivity from piezocone on-the-fly: a numerical evaluation. *Geotechnique Letters*, **2018**, 8, 268-277	1.7	8
172	Breakage mechanisms of highly porous particles in 1D compression revealed by X-ray tomography. *Geotechnique Letters*, **2018**, 8, 155-160	1.7	16
171	Performance of the Opalinus Clay under thermal loading: experimental results from Mont Terri rock laboratory (Switzerland). *Swiss Journal of Geosciences*, **2017**, 110, 269-286	2.1	9
170	Modelling the Mechanical Behaviour of Callovo-Oxfordian Argillite. Formulation and Application. *Springer Series in Geomechanics and Geoengineering*, **2017**, 37-44	0.1	1
169	A time-dependent anisotropic model for argillaceous rocks. Application to an underground excavation in Callovo-Oxfordian claystone. *Computers and Geotechnics*, **2017**, 85, 341-350	4.4	27
168	Determination of the critical state of granular materials with triaxial tests. *Soils and Foundations*, **2017**, 57, 733-744	2.9	29
167	Numerical simulation of undrained insertion problems in geotechnical engineering with the Particle Finite Element Method (PFEM). *Computers and Geotechnics*, **2017**, 82, 144-156	4.4	53
166	Performance of mixed formulations for the particle finite element method in soil mechanics problems. *Computational Particle Mechanics*, **2017**, 4, 269-284	3	29
165	Thermomechanical modelling of the behaviour of drifts in rock salt **2017**, 185-194		
164	Numerical analysis of suction embedded plate anchors in structured clay. *Applied Ocean Research*, **2016**, 61, 156-166	3.4	10
163	Fully Coupled Thermo-Hydro-Mechanical Double-Porosity Formulation for Unsaturated Soils. *International Journal of Geomechanics*, **2016**, 16,	3.1	49
162	Anisotropic behaviour of compacted clayey silt subjected to hydromechanical paths. *E3S Web of Conferences*, **2016**, 9, 14021	0.5	1
161	A numerical investigation of the incremental behavior of crushable granular soils. *International Journal for Numerical and Analytical Methods in Geomechanics*, **2016**, 40, 1773-1798	4	22
160	Thrust and torque components on mixed-face EPB drives. *Tunnelling and Underground Space Technology*, **2016**, 57, 47-54	5.7	13

159	DEM modelling of cone penetration tests in a double-porosity crushable granular material. *Computers and Geotechnics*, **2016**, 73, 109-127	4.4	66
158	Exploring ice content on partially saturated frozen soils using dielectric permittivity and bulk electrical conductivity measurements. *E3S Web of Conferences*, **2016**, 9, 07005	0.5	3
157	Analysis of unsaturated materials hydration incorporating the effect of thermo-osmotic flow. *Geomechanics for Energy and the Environment*, **2016**, 6, 101-115	3.7	7
156	Artificial ground freezing of a volcanic ash: laboratory tests and modelling. *Environmental Geotechnics*, **2016**, 3, 141-154	1.2	31
155	A cross-anisotropic formulation for elasto-plastic models. *Geotechnique Letters*, **2016**, 6, 156-162	1.7	12
154	An approach to enhance efficiency of DEM modelling of soils with crushable grains. *Geotechnique*, **2015**, 65, 91-110	3.4	105
153	Wear and abrasivity: observations from EPB drives in mixed soft rock sections. *Geomechanik Und Tunnelbau*, **2015**, 8, 258-264	0.6	6
152	Strain localisation and grain breakage in sand under shearing at high mean stress: insights from in situ X-ray tomography. *Acta Geotechnica*, **2015**, 10, 15-30	4.9	85
151	Relative performance of two unsaturated soil models using different constitutive variables. *Canadian Geotechnical Journal*, **2014**, 51, 1423-1437	3.2	6
150	Sand production simulation coupling DEM with CFD. *European Journal of Environmental and Civil Engineering*, **2014**, 18, 983-1008	1.5	35
149	Multi-scale analysis of cone penetration test (CPT) in a virtual calibration chamber. *Canadian Geotechnical Journal*, **2014**, 51, 51-66	3.2	60
148	Shear strength of rock joints influenced by compacted infill. *International Journal of Rock Mechanics and Minings Sciences*, **2014**, 70, 296-307	6	47
147	A chemo-mechanical constitutive model accounting for cation exchange in expansive clays **2014**, 18-31		1
146	Freezing-thawing tests on natural pyroclastic samples **2014**, 1689-1694		2
145	Thermal Conductivity of Argillaceous Rocks: Determination Methodology Using In Situ Heating Tests. *Rock Mechanics and Rock Engineering*, **2014**, 47, 111-129	5.7	29
144	Abrasivity measures on geotechnical materials of the Barcelona area **2014**, 345-350		3
143	Particle failure in DEM models of crushable soil response **2014**, 345-350		6
142	Probing DEM specimen heterogeneity by simulated CPT **2014**, 547-552		1

141	Hybrid minimization algorithm applied to tunnel back analysis **2014**, 1247-1252		1
140	Explicit finite deformation stress integration of the elasto-plastic constitutive equations **2014**, 267-272		5
139	Laboratory X-ray Tomography: A Valuable Experimental Tool for Revealing Processes in Soils. *Geotechnical Testing Journal*, **2014**, 38, 20140060	1.3	20
138	EPB tunnelling in mixed geological formations: A case study **2014**, 539-544		
137	Compacted soil behaviour: initial state, structure and constitutive modelling. *Geotechnique*, **2013**, 63, 463-478	3.4	105
136	Analysis of hydro-mechanical processes in a ventilated tunnel in an argillaceous rock on the basis of different modelling approaches. *Journal of Rock Mechanics and Geotechnical Engineering*, **2013**, 5, 1-17	5.3	9
135	Homogenization in clay barriers and seals: Two case studies. *Journal of Rock Mechanics and Geotechnical Engineering*, **2013**, 5, 191-199	5.3	11
134	Excavation Damage Zone at High Depths: Field Cases and Coupled Analysis. *Springer Series in Geomechanics and Geoengineering*, **2013**, 363-366	0.1	
133	A chemo-mechanical constitutive model accounting for cation exchange in expansive clays. *Geotechnique*, **2013**, 63, 221-234	3.4	60
132	Steady state of solid-grain interfaces during simulated CPT. *Studia Geotechnica Et Mechanica*, **2013**, 35, 13-22	1	5
131	Soil deformation around a penetrating cone in silt. *Geotechnique Letters*, **2013**, 3, 185-191	1.7	28
130	Sensitivity to damping in sand production DEM-CFD coupled simulations **2013**,		6
129	Coupled thermo-hydraulic pulse tests on two reference Belgian clay formations **2013**, 413-417		1
128	Coupled phenomena induced by freezing in a granular material **2013**, 467-473		3
127	Thermo-Hydraulic Behaviour of Boom Clay Using a Heating Cell: An Experimental Study. *Springer Series in Geomechanics and Geoengineering*, **2013**, 163-168	0.1	2
126	Coupled modelling of barriers for radioactive waste disposal **2013**, 21-34		
125	THM analysis of a large-scale heating test incorporating material fabric changes. *International Journal for Numerical and Analytical Methods in Geomechanics*, **2012**, 36, 391-421	4	44
124	Analysis of tunnel excavation in London Clay incorporating soil structure. *Geotechnique*, **2012**, 62, 1095-1109	3.4	24

123	Experimental micromechanics: grain-scale observation of sand deformation. *Geotechnique Letters*, **2012**, 2, 107-112	1.7	59
122	Thermal–hydraulic–mechanical (THM) behaviour of a large-scale in situ heating experiment during cooling and dismantling. *Canadian Geotechnical Journal*, **2012**, 49, 1169-1195	3.2	28
121	Modelling Compacted Soil Behaviour Including Microstructural Features **2012**, 119-127		1
120	Interpretation of unsaturated soil behaviour in the stress–saturation space. *Computers and Geotechnics*, **2012**, 43, 111-123	4.4	63
119	Erratum to "Interpretation of unsaturated soil behaviour in the stress–saturation space II: Constitutive relationships and validations" *Computers and Geotechnics*, **2012**, 43, 177	4.4	7
118	Interpretation of unsaturated soil behaviour in the stress–saturation space, I: Volume change and water retention behaviour. *Computers and Geotechnics*, **2012**, 43, 178-187	4.4	115
117	Simulation of cement-improved clay structures with a bonded elasto-plastic model: A practical approach. *Computers and Geotechnics*, **2012**, 45, 140-150	4.4	41
116	COUPLED ANALYSIS OF DOUBLE POROSITY SWELLING CLAYS. *Springer Series in Geomechanics and Geoengineering*, **2011**, 85-88	0.1	1
115	Thermo-hydro-mechanical model of the Canister Retrieval Test. *Physics and Chemistry of the Earth*, **2011**, 36, 1806-1816	3	4
114	Hydromechanical behaviour of a heterogeneous compacted soil: experimental observations and modelling. *Geotechnique*, **2011**, 61, 367-386	3.4	82
113	Cone penetration tests in a virtual calibration chamber. *Geotechnique*, **2011**, 61, 525-531	3.4	85
112	Effect of thermo-coupled processes on the behaviour of a clay barrier submitted to heating and hydration. *Anais Da Academia Brasileira De Ciencias*, **2010**, 82, 153-68	1.4	4
111	Soil–environment interactions in geotechnical engineering. *Geotechnique*, **2010**, 60, 3-74	3.4	261
110	Modelling thermo-hydro-mechano-chemical interactions for nuclear waste disposal. *Journal of Rock Mechanics and Geotechnical Engineering*, **2010**, 2, 97-102	5.3	20
109	Heating pulse tests under constant volume on Boom clay. *Journal of Rock Mechanics and Geotechnical Engineering*, **2010**, 2, 124-128	5.3	5
108	Evaluation of a constitutive model for unsaturated soils **2010**, 829-836		2
107	THMC analysis of saturation and heating processes of an expansive clay barrier in radioactive waste isolation **2010**, 1389-1393		1
106	Mapping deformation during CPT in a virtual calibration chamber **2010**, 559-564		2

105	Identification of Bonded Clay Parameters in SBPM Tests: A Numerical Study. *Soils and Foundations*, **2009**, 49, 329-340	2.9	10
104	THM-coupled finite element analysis of frozen soil: formulation and application. *Geotechnique*, **2009**, 59, 159-171	3.4	133
103	Applications of multiphysical geomechanics in underground nuclear waste storage. *European Journal of Environmental and Civil Engineering*, **2009**, 13, 937-962	1.5	11
102	A full-scale in situ heating test for high-level nuclear waste disposal: observations, analysis and interpretation. *Geotechnique*, **2009**, 59, 377-399	3.4	133
101	Reply to Comments on Unsaturated soils: From constitutive modelling to numerical algorithms by Daichao Sheng, Antonio Gens, Delwyn G. Fredlund and Scott W. Sloan [Computers and Geotechnics 35(6) (2008) 810824] by Jingshuang Li, Yichuan Xing and Yujing Hou. *Computers and Geotechnics*, **2009**, 36, 1100	4.4	
100	Homogeneity and Symmetry in DEM Models of Cone Penetration **2009**,		10
99	Behaviour of a bentonite barrier in the laboratory: Experimental results up to 8years and numerical simulation. *Physics and Chemistry of the Earth*, **2008**, 33, S476-S485	3	52
98	Chemical impact on the hydro-mechanical behaviour of high-density FEBEX bentonite. *Physics and Chemistry of the Earth*, **2008**, 33, S516-S526	3	108
97	A new modelling approach for unsaturated soils using independent stress variables. *Canadian Geotechnical Journal*, **2008**, 45, 511-534	3.2	215
96	Reply to the discussion by Zhang and Lytton on A new modelling approach for unsaturated soils using independent stress variables Appears in Canadian Geotechnical Journal, 45(12): 17841787.. *Canadian Geotechnical Journal*, **2008**, 45, 1788-1794	3.2	6
95	A Mechanism Contributing to Subsidence Above Gas Reservoirs and its Application to a Case Study. *International Journal for Computational Methods in Engineering Science and Mechanics*, **2008**, 9, 270-287	0.7	13
94	Swelling pressure in compacted bentonite **2008**, 667-673		
93	Developments in modelling the generalised behaviour of unsaturated soils **2008**, 53-61		1
92	Implementation algorithm of a generalised plasticity model for swelling clays. *Computers and Geotechnics*, **2008**, 35, 860-871	4.4	28
91	Modelling unsaturated soil behaviour during normal consolidation and at critical state. *Computers and Geotechnics*, **2008**, 35, 825-834	4.4	26
90	Unsaturated soils: From constitutive modelling to numerical algorithms. *Computers and Geotechnics* , **2008**, 35, 810-824	4.4	96
89	The soilmodels.info project. *International Journal for Numerical and Analytical Methods in Geomechanics*, **2008**, 32, 1571-1572	4	81
88	Water retention properties of Boom clay **2008**, 229-234		2

87	Monitoring and modeling of slope response to climate changes **2008**, 67-84		7
86	A thermomechanical framework for modeling the response of unsaturated soils **2008**, 547-552		
85	Coupled Thermo-Hydro-Mechanical and Chemical Analysis of Expansive Clay Subjected to Heating and Hydration. *Transport in Porous Media*, **2007**, 66, 341-372	3.1	59
84	In situ behaviour of a stiff layered clay subject to thermal loading: observations and interpretation. *Geotechnique*, **2007**, 57, 207-228	3.4	111
83	Efficiency of a borehole seal by means of pre-compacted bentonite blocks. *Physics and Chemistry of the Earth*, **2007**, 32, 123-134	3	14
82	The effect of structure in pressuremeter tests in clay **2007**,		1
81	Analysis of the Expansive Clay Hydration under Low Hydraulic Gradient **2007**, 309-318		5
80	On constitutive modelling of unsaturated soils. *Acta Geotechnica*, **2006**, 1, 137-147	4.9	144
79	THM and reactive transport analysis of expansive clay barrier in radioactive waste isolation. *Communications in Numerical Methods in Engineering*, **2006**, 22, 849-859		10
78	A Constitutive Model that Incorporates the Effect of Suction in Cemented Geological Materials **2006**, 1944		5
77	Aznalcllar dam failure. Part 1: Field observations and material properties. *Geotechnique*, **2006**, 56, 165-183	3.4	44
76	Aznalcllar dam failure. Part 2: Stability conditions and failure mechanism. *Geotechnique*, **2006**, 56, 185-201	3.4	50
75	Influence of Water Chemistry on the Swelling Capacity of a High-Density Bentonite **2006**, 962		7
74	Aznalcllar dam failure. Part 3: Dynamics of the motion. *Geotechnique*, **2006**, 56, 203-210	3.4	19
73	Response of a saturated mudstone under excavation and thermal loading **2006**, 35-44		2
72	New data about surface subsidence above gas reservoirs. *Revue Europ*ll*enne De G*ll*nie Civil*, **2005**, 9, 817-825		1
71	Hydro-mechanical behaviour of a clayey silt under isotropic compression **2005**, 331-342		4
70	Double structure THM analyses of a heating test in a fractured tuff incorporating intrinsic permeability variations. *International Journal of Rock Mechanics and Minings Sciences*, **2005**, 42, 667-679	6	17

69	Coupled thermal–hydrological–mechanical analyses of the Yucca Mountain Drift Scale Test—comparison of field measurements to predictions of four different numerical models. *International Journal of Rock Mechanics and Minings Sciences*, **2005**, 42, 680-697	6	77
68	A hydro-geochemical analysis of the saturation process with salt water of a bentonite crushed granite rock mixture in an engineered nuclear barrier. *Engineering Geology*, **2005**, 81, 227-245	6	18
67	Analysis of the hydration of a bentonite seal in a deep radioactive waste repository. *Engineering Geology*, **2005**, 81, 317-328	6	17
66	A double structure generalized plasticity model for expansive materials. *International Journal for Numerical and Analytical Methods in Geomechanics*, **2005**, 29, 751-787	4	152
65	THMC coupling in partially saturated geomaterials. *Revue Européenne De Génie Civil*, **2005**, 9, 747-765		4
64	THM Analysis of a Heating Test in a Fractured Tuff. *Elsevier Geo-Engineering Book Series*, **2004**, 2, 181-186		2
63	Coupled Analysis of Damage Formation Around Wellbores. *Elsevier Geo-Engineering Book Series*, **2004**, 2, 599-604		
62	Analysis of the Thmc Behaviour of Compacted Swelling Clay for Radioactive Waste Isolation. *Elsevier Geo-Engineering Book Series*, **2004**, 2, 317-322		3
61	A constitutive model for unsaturated soils: thermomechanical and computational aspects. *Computational Mechanics*, **2004**, 33, 453-465	4	213
60	Experimental study on the hydro-mechanical behaviour of a silty clay **2004**, 15-29		
59	Modelling the THM behaviour of unsaturated expansive soils using a double-structure formulation **2004**, 107-120		
58	An elasto-plastic model for unsaturated soil incorporating the effects of suction and degree of saturation on mechanical behaviour. *Geotechnique*, **2003**, 53, 123-135	3.4	396
57	Influence of rainfall on the deformation and stability of a slope in overconsolidated clays: a case study. *Hydrogeology Journal*, **2003**, 11, 174-192	3.1	94
56	Finite element formulation and algorithms for unsaturated soils. Part I: Theory. *International Journal for Numerical and Analytical Methods in Geomechanics*, **2003**, 27, 745-765	4	130
55	Finite element formulation and algorithms for unsaturated soils. Part II: Verification and application. *International Journal for Numerical and Analytical Methods in Geomechanics*, **2003**, 27, 767-790	4	61
54	Mechanical behaviour of heavily compacted bentonite under high suction changes. *Geotechnique*, **2003**, 53, 27-40	3.4	331
53	Suction effects on a compacted clay under non-isothermal conditions. *Geotechnique*, **2003**, 53, 65-81	3.4	127
52	The role of structure in the chemically induced deformations of FEBEX bentonite. *Applied Clay Science*, **2003**, 23, 229-237	5.2	67

51	Monitoring a preload test on soft ground **2003**, 53-59		1
50	Suction effects on a compacted clay under non-isothermal conditions. *Geotechnique*, **2003**, 53, 65-81	3.4	8
49	A constitutive model for crushed salt. *International Journal for Numerical and Analytical Methods in Geomechanics*, **2002**, 26, 719-746	4	27
48	Evaluation of a constitutive model for clays and sands: Part II Clay behaviour. *International Journal for Numerical and Analytical Methods in Geomechanics*, **2002**, 26, 1123-1146	4	43
47	Highly selective formation of aldehydes in the hydrogenation of the corresponding acid chlorides with silica-supported palladium catalysts prepared by a complexing agent-assisted sol gel method. *Applied Catalysis A: General*, **2002**, 229, 175-180	5.1	6
46	Factors controlling rock clay buffer interaction in a radioactive waste repository. *Engineering Geology*, **2002**, 64, 297-308	6	55
45	Temperature effects on the hydraulic behaviour of an unsaturated clay. *Geotechnical and Geological Engineering*, **2001**, 19, 311-332	1.5	112
44	Clay barriers in radioactive waste disposal. *Revue Europ enne De G nie Civil*, **2001**, 5, 845-856		22
43	THM phenomena in saturated and unsaturated porous media. *Revue Europ enne De G nie Civil*, **2001**, 5, 693-717		10
42	Coupled analysis for geotechnical and environmental applications **2001**, 1180-1183		
41	Numerical Analysis of Radioactive Waste Disposal **2001**, 203-234		2
40	Temperature effects on the hydraulic behaviour of an unsaturated clay **2001**, 311-332		15
39	Precompression design for secondary settlement reduction. *Geotechnique*, **2000**, 50, 645-656	3.4	41
38	A stress point algorithm for an elastoplastic model in unsaturated soils. *International Journal of Plasticity*, **2000**, 16, 121-141	7.6	38
37	Vapour Transport in Low Permeability Unsaturated Soils with Capillary Effects. *Transport in Porous Media*, **2000**, 40, 219-241	3.1	78
36	Water Phase Change and Vapour Transport in Low Permeability Unsaturated Soils with Capillary Effects. *Theory and Applications of Transport in Porous Media*, **2000**, 245-272	0.4	2
35	Water permeability, water retention and microstructure of unsaturated compacted Boom clay. *Engineering Geology*, **1999**, 54, 117-127	6	353
34	Modelling the mechanical behaviour of expansive clays. *Engineering Geology*, **1999**, 54, 173-183	6	369

33	Coupled analysis of a backfill hydration test. *International Journal for Numerical and Analytical Methods in Geomechanics*, **1998**, 22, 1-27	4	8
32	Analysis of a full scale in situ test simulating repository conditions **1998**, 22, 515-548		122
31	Modeling FEBEX Large-Scale s' In Situs' Test. *Materials Research Society Symposia Proceedings*, **1997**, 506, 329		
30	Inverse Analysis of a Tunnel Excavation Problem from Displacement and Pore Water Pressure Measurements **1997**, 163-172		1
29	Numerical formulation for a simulator (CODE_BRIGHT) for the coupled analysis of saline media. *Engineering Computations*, **1996**, 13, 87-112	1.4	371
28	Estimation of parameters in geotechnical backanalysis . Maximum likelihood approach. *Computers and Geotechnics*, **1996**, 18, 1-27	4.4	78
27	Estimation of parameters in geotechnical backanalysis I. Application to a tunnel excavation problem. *Computers and Geotechnics*, **1996**, 18, 29-46	4.4	58
26	PARAMETER AND VARIANCE ESTIMATION IN GEOTECHNICAL BACKANALYSIS USING PRIOR INFORMATION. *International Journal for Numerical and Analytical Methods in Geomechanics*, **1996**, 20, 119-141	4	51
25	Evaluation of safety factors in discontinuous rock. *International Journal of Rock Mechanics and Mining Sciences*, **1996**, 33, 513-537		8
24	Porosity variations in saline media caused by temperature gradients coupled to multiphase flow and dissolution/precipitation. *Transport in Porous Media*, **1996**, 25, 1-25	3.1	34
23	Constitutive Laws **1995**, 129-158		30
22	Rock joints: FEM implementation and applications. *Studies in Applied Mechanics*, **1995**, 395-420		8
21	Nonisothermal multiphase flow of brine and gas through saline media. *Transport in Porous Media*, **1994**, 15, 271-293	3.1	271
20	The landslide of Cortes de Pallas, Spain. *Geotechnique*, **1993**, 43, 507-521	3.4	24
19	A framework for the behaviour of unsaturated expansive clays. *Canadian Geotechnical Journal*, **1992**, 29, 1013-1032	3.2	479
18	A constitutive model for rock joints formulation and numerical implementation. *Computers and Geotechnics*, **1990**, 9, 3-20	4.4	71
17	A constitutive model for partially saturated soils. *Geotechnique*, **1990**, 40, 405-430	3.4	1632
16	An interface element formulation for the analysis of soil-reinforcement interaction. *Computers and Geotechnics*, **1989**, 7, 133-151	4.4	95

15	Critical state models in computational geomechanics. *Engineering Computations*, **1988**, 5, 178-197	1.4	105
14	Drained principal stress rotation in saturated sand. *Geotechnique*, **1988**, 38, 59-81	3.4	75
13	Three-dimensional analysis of slides in cohesive soils. *Geotechnique*, **1988**, 38, 1-23	3.4	106
12	A critical assessment of methods of correcting for drift from the yield surface in elasto-plastic finite element analysis. *International Journal for Numerical and Analytical Methods in Geomechanics*, **1985**, 9, 149-159	4	95
11	Undrained anisotropy and principal stress rotation in saturated sand. *Geotechnique*, **1984**, 34, 11-27	3.4	154
10	Formulation of quasi-axisymmetric boundary value problems for finite element analysis. *Engineering Computations*, **1984**, 1, 144-150	1.4	14
9	The effect of the plastic potential in boundary value problems involving plane strain deformation. *International Journal for Numerical and Analytical Methods in Geomechanics*, **1984**, 8, 259-286	4	40
8	The development of a new hollow cylinder apparatus for investigating the effects of principal stress rotation in soils. *Geotechnique*, **1983**, 33, 355-383	3.4	321
7	Coupled THM Analysis of a Full-Scale Test for High-Level Nuclear Waste and Spent Fuel Disposal Under Actual Repository Conditions During 18 Years of Operation. *Geotechnique*,1-43	3.4	1
6	Mechanics of Unsaturated Geomaterials Applied to Nuclear Waste Storage279-302		1
5	Coupled Analysis of Chemo-Mechanical Processes41-57		
4	Large-strain analysis of undrained smooth tube sampling. *Geotechnique*,1-17	3.4	1
3	Numerical simulation of underground excavations in an indurated clay using non-local regularisation. Part 1: formulation and base case. *Geotechnique*,1-21	3.4	2
2	Numerical simulation of underground excavations in an indurated clay using non-local regularisation. Part 2: sensitivity analysis. *Geotechnique*,1-16	3.4	1
1	Application of a critical state model to the Merriespruit tailings dam failure. *Proceedings of the Institution of Civil Engineers: Geotechnical Engineering*,1-37	0.9	0