Jean Michel Torrenti

List of Publications by Year
in descending order

98 papers	3,372 citations	126907 33 h-index	149698 56 g-index
110 all docs	110 docs citations	110 times ranked	1833 citing authors

#	Article	IF	Citations
1	Reuse of Untreated Fine Sediments as Filler: Is It More Beneficial than Incorporating Them as Sand?. Buildings, 2022, 12, 211.	3.1	11
2	Influence of residual mortar volume on the properties of recycled concrete aggregates. Journal of Building Engineering, 2022, 57, 104945.	3.4	6
3	Toward a codified design of recycled aggregate concrete structures: Background for the new <scp>fib Model Code 2020 and Eurocode 2</scp>. Structural Concrete, 2021, 22, 2916-2938.	3.1	23
4	Prediction of the basic creep of concrete with high substitution of Portland cement by mineral additions at early age. Structural Concrete, 2021, 22, E563.	3.1	2
5	Recommendations of RILEM TC 287-CCS: thermo-chemo-mechanical modelling of massive concrete structures towards cracking risk assessment. Materials and Structures/Materiaux Et Constructions, 2021, 54, 1.	3.1	13
6	Coupling of attrition and accelerated carbonation for CO2 sequestration in recycled concrete aggregates. Cleaner Engineering and Technology, 2021, 3, 100106.	4.0	7
7	Improvement of Recycled Aggregates Properties by Means of CO2 Uptake. Applied Sciences (Switzerland), 2021, 11, 6571.	2.5	23
8	New experimental approach to accelerate the development of internal swelling reactions (ISR) in massive concrete structures. Construction and Building Materials, 2021, 313, 125388.	7.2	2
9	On the relation between the mean compressive strength and the characteristic one. Structural Concrete, 2020, 21, 409-412.	3.1	4
10	Reuse potential of dredged river sediments in concrete: Effect of sediment variability. Journal of Cleaner Production, 2020, 265, 121665.	9.3	34
11	A viscoelastic poromechanical model for shrinkage and creep of concrete. Cement and Concrete Research, 2020, 129, 105970.	11.0	36
12	Modeling Long-term Delayed Strains of Prestressed Concrete with Real Temperature and Relative Humidity History. Journal of Advanced Concrete Technology, 2020, 18, 396-408.	1.8	7
13	Effect of potassium humate as humic substances from river sediments on the rheology, the hydration and the strength development of a cement paste. Cement and Concrete Composites, 2019, 104, 103400.	10.7	22
14	Optimization of concrete mix design to account for strength and hydration heat in massive concrete structures. Cement and Concrete Composites, 2019, 103, 233-241.	10.7	43
15	Novel semi-analytical model to calculate shear forces due to viscoelastic interactions. Engineering Structures, 2019, 183, 999-1013.	5.3	3
16	On DEF expansion modelling in concrete structures under variable hydric conditions. Construction and Building Materials, 2019, 207, 396-402.	7.2	9
17	Durability of cement pastes exposed to external sulfate attack and leaching: Physical and chemical aspects. Cement and Concrete Research, 2019, 116, 134-145.	11.0	136
18	Carbonation of hardened cement pastes: Influence of temperature. Cement and Concrete Research, 2019, 115, 445-459.	11.0	106

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19	Interpretation of very long-term basic creep tests of concrete. European Journal of Environmental and Civil Engineering, 2019, 23, 586-592.	2.1	2
20	Cracking Risk and Regulations. RILEM State-of-the-Art Reports, 2019, , 257-306.	0.7	2
21	Formulation of optimized excavatable cement treated materials using a new punching test apparatus. Materials and Structures/Materiaux Et Constructions, 2018, 51, 1.	3.1	1
22	Comparison between natural and accelerated carbonation (3% CO2): Impact on mineralogy, microstructure, water retention and cracking. Cement and Concrete Research, 2018, 109, 64-80.	11.0	151
23	Is long-term autogenous shrinkage a creep phenomenon induced by capillary effects due to self-desiccation?. Cement and Concrete Research, 2018, 108, 186-200.	11.0	42
24	Basic creep of concrete-coupling between high stresses and elevated temperatures. European Journal of Environmental and Civil Engineering, 2018, 22, 1419-1428.	2.1	19
25	Analysis of some basic creep tests on concrete and their implications for modeling. Structural Concrete, 2018, 19, 483-488.	3.1	31
26	Influential factors in volume change measurements for cementitious materials at early ages and in isothermal conditions. Cement and Concrete Composites, 2018, 85, 105-121.	10.7	8
27	Modelling of the Long Term Behaviour of Prestressed Concrete Structures: the Case of Nuclear Power Plants. , 2018, , .		1
28	Modeling basic creep of concrete since setting time. Cement and Concrete Composites, 2017, 83, 239-250.	10.7	47
29	Long term basic creep behavior of high performance concrete: data and modelling. Materials and Structures/Materiaux Et Constructions, 2017, 50, 1.	3.1	34
30	On a Poromechanical Approach to Long-Term Autogenous Shrinkage. , 2017, , .		0
31	Influence of limestone filler and of the size of the aggregates on DEF. Cement and Concrete Composites, 2016, 71, 175-180.	10.7	20
32	Time evolutions of non-aging viscoelastic Poisson's ratio of concrete and implications for creep of C-S-H. Cement and Concrete Research, 2016, 90, 144-161.	11.0	24
33	Restrained shrinkage of massive reinforced concrete structures: results of the project CEOS.fr. European Journal of Environmental and Civil Engineering, 2016, 20, 785-808.	2.1	6
34	Materials and Properties. RILEM State-of-the-Art Reports, 2016, , 9-29.	0.7	0
35	CEOS.FR Experiments for the Crack Control of Concrete at an Early Age. , 2015, , .		3
36	On the Very Long-Term Delayed Behavior of Biaxially Prestressed Structures: The Case of the Containments of Nuclear Power Plants. , 2015, , .		7

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37	Temperature influence on water transport in hardened cement pastes. Cement and Concrete Research, 2015, 76, 37-50.	11.0	56
38	The Effects of Long-Term Behavior of Both Concrete and Prestressing Tendons on the Delayed Deflection of a Prestressed Structure. , 2015, , .		4
39	Influence of relative humidity on delayed ettringite formation. Cement and Concrete Composites, 2015, 58, 14-22.	10.7	34
40	Impact of carbonation on unsaturated water transport properties of cement-based materials. Cement and Concrete Research, 2015, 74, 44-58.	11.0	103
41	Analysis and Modelling of Basic Creep. , 2015, , .		3
42	Difference between Creep and Relaxation Poissonâ€™s Ratios: Theoretical and Practical Significance for Concrete Creep Testing. , 2015, , .		2
43	Theoretical and practical differences between creep and relaxation Poissonâ€™s ratios in linear viscoelasticity. Mechanics of Time-Dependent Materials, 2015, 19, 537-555.	4.4	32
44	A nonlinear mesoâ€“macro approach to modelling delayed ettringite formation and concrete degradation. Materials and Structures/Materiaux Et Constructions, 2014, 47, 1911-1920.	3.1	7
45	Coupling between mechanical and transfer properties and expansion due to DEF in a concrete of a nuclear power plant. Nuclear Engineering and Design, 2014, 266, 70-77.	1.7	27
46	Design for SLS according to fib Model Code 2010. Structural Concrete, 2013, 14, 99-123.	3.1	55
47	Experimental investigation of the variability of concrete durability properties. Cement and Concrete Research, 2013, 45, 21-36.	11.0	86
48	Creep Consideration Effect on Meso-Scale Modeling of Concrete Hydration Process and Consequences on the Mechanical Behavior. Journal of Engineering Mechanics - ASCE, 2013, 139, 1808-1817.	2.9	22
49	Modelling desiccation shrinkage of large structures. EPJ Web of Conferences, 2013, 56, 02001.	0.3	4
50	Impact of carbonation on the durability of cementitious materials: water transport properties characterization. EPJ Web of Conferences, 2013, 56, 01008.	0.3	6
51	Interest of the probabilistic approach for the equivalent durability concept. European Journal of Environmental and Civil Engineering, 2012, 16, 256-263.	2.1	1
52	Modelling the influence of temperature on accelerated leaching in ammonium nitrate. European Journal of Environmental and Civil Engineering, 2012, 16, 322-335.	2.1	9
53	Influence of the spatial variability of leaching kinetics parameters on the lifespan of a concrete structure. European Journal of Environmental and Civil Engineering, 2012, 16, 606-624.	2.1	3
54	Concrete early age basic creep: Experiments and test of rheological modelling approaches. Construction and Building Materials, 2012, 36, 373-380.	7.2	85

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55	Effects of early-age thermal behaviour on damage risks in massive concrete structures. European Journal of Environmental and Civil Engineering, 2012, 16, 589-605.	2.1	51
56	Probabilistic modelling of calcium leaching in a tunnel for nuclear waste disposal. EPJ Web of Conferences, 2011, 12, 04004.	0.3	1
57	Probabilistic and predictive performance-based approach for assessing reinforced concrete structures lifetime: The applet project. EPJ Web of Conferences, 2011, 12, 01004.	0.3	2
58	A thermal active restrained shrinkage ring test to study the early age concrete behaviour of massive structures. Cement and Concrete Research, 2011, 41, 56-63.	11.0	39
59	Numerical analysis of the thermal active restrained shrinkage ring test to study the early age behavior of massive concrete structures. Engineering Structures, 2011, 33, 1390-1401.	5.3	93
60	Effect of the Young modulus variability on the mechanical behaviour of a nuclear containment vessel. Nuclear Engineering and Design, 2010, 240, 4051-4060.	1.7	24
61	Uncertainty propagation on damage evolution of a concrete structure subjected to coupled leaching and creep. European Journal of Environmental and Civil Engineering, 2010, 14, 891-921.	2.1	4
62	Modeling Concrete at Early Age Using Percolation. Advanced Structured Materials, 2010, , 333-346.	0.5	0
63	Prediction of elastic properties of cement pastes at early ages. Computational Materials Science, 2010, 47, 775-784.	3.0	84
64	Concrete calcium leaching at variable temperature: Experimental data and numerical model inverse identification. Computational Materials Science, 2010, 49, 35-45.	3.0	65
65	Uncertainty propagation on damage evolution of a concrete structure subjected to coupled leaching and creep. European Journal of Environmental and Civil Engineering, 2010, 14, 891-921.	2.1	0
66	Coupling between leaching and creep of concrete. Cement and Concrete Research, 2008, 38, 816-821.	11.0	41
67	Early-age behaviour of concrete nuclear containments. Nuclear Engineering and Design, 2008, 238, 2495-2506.	1.7	117
68	Chemo-mechanical coupling behaviour of leached concrete. Nuclear Engineering and Design, 2007, 237, 2090-2097.	1.7	44
69	Chemo-mechanical coupling behaviour of leached concrete. Nuclear Engineering and Design, 2007, 237, 2083-2089.	1.7	107
70	A viscoelastic approach for the assessment of the drying shrinkage behaviour of cementitious materials. Materials and Structures/Materiaux Et Constructions, 2007, 40, 163-174.	3.1	25
71	Chemical modelling of Alkali Silica reaction: Influence of the reactive aggregate size distribution. Materials and Structures/Materiaux Et Constructions, 2007, 40, 229-239.	3.1	97
72	Long-term performance of cement paste during combined calcium leachingâ€“sulfate attack: kinetics and size effect. Cement and Concrete Research, 2006, 36, 137-143.	11.0	115

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73	A separation of scales homogenization analysis for the modelling of calcium leaching in concrete. Computer Methods in Applied Mechanics and Engineering, 2006, 195, 7196-7210.	6.6	34
74	Influence of Water on Alkali-Silica Reaction: Experimental Study and Numerical Simulations. Journal of Materials in Civil Engineering, 2006, 18, 588-596.	2.9	64
75	Interaction between drying, shrinkage, creep and cracking phenomena in concrete. Engineering Structures, 2005, 27, 239-250.	5.3	147
76	Structural Effects of Drying Shrinkage. Journal of Engineering Mechanics - ASCE, 2005, 131, 1195-1199.	2.9	7
77	Mechanical threshold of cementitious materials at early age. Materials and Structures/Materiaux Et Constructions, 2005, 38, 299-304.	3.1	13
78	Simulated microstructure and transport properties of ultra-high performance cement-based materials. Cement and Concrete Research, 2000, 30, 1947-1954.	11.0	46
79	Modelling of leaching in pure cement paste and mortar. Cement and Concrete Research, 2000, 30, 83-90.	11.0	195
80	Chemoporoplasticity of Calcium Leaching in Concrete. Journal of Engineering Mechanics - ASCE, 1999, 125, 1200-1211.	2.9	99
81	ModÃ©lisation du retrait du bÃ©ton en ambiance variable. Revue EuropÃ©enne De GÃ©nie Civil, 1997, 1, 687-698.	0.0	19
82	Analysis of localization in brittle materials through optical techniques. Experimental Mechanics, 1997, 37, 216-220.	2.0	18
83	Thoughts about drying shrinkage: Scale effects and modelling. Materiaux Et Constructions, 1997, 30, 96-105.	0.3	31
84	Reply to the discussion of D. B. McDonald. Materials and Structures/Materiaux Et Constructions, 1997, 30, 574-575.	3.1	0
85	Thoughts about drying shrinkage: Experimental results and quantification of structural drying creep. Materiaux Et Constructions, 1997, 30, 588-598.	0.3	45
86	Leaching of both calcium hydroxide and C-S-H from cement paste: Modeling the mechanical behavior. Cement and Concrete Research, 1996, 26, 1257-1268.	11.0	202
87	A reply to the discussion by A.M. Brandt of the paper â€œYoung's modulus of concrete reconsideredâ€• Cement and Concrete Research, 1995, 25, 1123.	11.0	0
88	Behaviour of steel-fibre-reinforced concretes under biaxial compression loads. Cement and Concrete Composites, 1995, 17, 261-266.	10.7	16
89	The young's modulus of concrete reconsidered. Cement and Concrete Research, 1994, 24, 641-649.	11.0	0
90	Analyse des effets thermiques sur le comportement mÃ©canique des bÃ©tons destinÃ©s aux revÃªtements de tunnels. Materiaux Et Constructions, 1994, 27, 138-147.	0.3	0

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91	Discussion of â€˜Drying creep of concrete: constitutive model and new experiments separating its mechanismsâ€™, by Z. P. Bazant and Y. Xi. Materiaux Et Constructions, 1994, 27, 616-618.	0.3	5
92	Analysis of localization in concrete through stereophotogrametry, speckle laser and replica. Cement and Concrete Research, 1993, 23, 1340-1350.	11.0	5
93	Influence of Boundary Conditions on Strain Softening in Concrete Compression Test. Journal of Engineering Mechanics - ASCE, 1993, 119, 2369-2384.	2.9	43
94	Comparative study of two biaxial presses for concrete. Materials and Structures/Materiaux Et Constructions, 1991, 24, 52-60.	3.1	5
95	Stereophotogrammetry and Localization in Concrete under Compression. Journal of Engineering Mechanics - ASCE, 1991, 117, 1455-1465.	2.9	22
96	Ultimate Strength and Criterion of Interphase Cracks Propagation. , 1991, , 30-39.		0
97	Modelling Basic Creep of Concrete at Elevated Temperatures and Stresses. Key Engineering Materials, 0, 711, 879-884.	0.4	0
98	Transient Thermal Creep at Moderate Temperature. Key Engineering Materials, 0, 711, 885-891.	0.4	1