Cyrille F Dunant

List of Publications by Year
in descending order

37 papers	4,935 citations	304368 22 h-index	377514 34 g-index
37 all docs	37 docs citations	37 times ranked	8198 citing authors

#	Article	IF	Citations
1	Hematopoietic Stem Cells Reversibly Switch from Dormancy to Self-Renewal during Homeostasis and Repair. Cell, 2008, 135, 1118-1129.	13.5	1,627
2	Variable Clonal Repopulation Dynamics Influence Chemotherapy Response in Colorectal Cancer. Science, 2013, 339, 543-548.	6.0	691
3	Distinct routes of lineage development reshape the human blood hierarchy across ontogeny. Science, 2016, 351, aab2116.	6.0	597
4	Alkaliâ€“silica reaction: Current understanding of the reaction mechanisms and the knowledge gaps. Cement and Concrete Research, 2015, 76, 130-146.	4.6	369
5	CDK6 Levels Regulate Quiescence Exit in Human Hematopoietic Stem Cells. Cell Stem Cell, 2015, 16, 302-313.	5.2	247
6	An extended finite element library. International Journal for Numerical Methods in Engineering, 2007, 71, 703-732.	1.5	221
7	A new quantification method based on SEM-EDS to assess fly ash composition and study the reaction of its individual components in hydrating cement paste. Cement and Concrete Research, 2015, 73, 111-122.	4.6	195
8	Micro-mechanical modelling of alkaliâ€“silica-reaction-induced degradation using the AMIE framework. Cement and Concrete Research, 2010, 40, 517-525.	4.6	122
9	Fly ash as an assemblage of model Caâ€“Mgâ€“Na-aluminosilicate glasses. Cement and Concrete Research, 2015, 78, 263-272.	4.6	104
10	How much cement can we do without? Lessons from cement material flows in the UK. Resources, Conservation and Recycling, 2019, 141, 441-454.	5.3	93
11	Effects of uniaxial stress on alkaliâ€“silica reaction induced expansion of concrete. Cement and Concrete Research, 2012, 42, 567-576.	4.6	64
12	Effects of aggregate size on alkaliâ€“silica-reaction induced expansion. Cement and Concrete Research, 2012, 42, 745-751.	4.6	57
13	Influence of visco-elasticity on the stress development induced by alkaliâ€“silica reaction. Cement and Concrete Research, 2015, 70, 1-8.	4.6	54
14	Options to make steel reuse profitable: An analysis of cost and risk distribution across the UK construction value chain. Journal of Cleaner Production, 2018, 183, 102-111.	4.6	52
15	Microstructural effects in the simulation of creep of concrete. Cement and Concrete Research, 2018, 105, 44-53.	4.6	52
16	A critical comparison of several numerical methods for computing effective properties of highly heterogeneous materials. Advances in Engineering Software, 2013, 58, 1-12.	1.8	47
17	Real and perceived barriers to steel reuse across the UK construction value chain. Resources, Conservation and Recycling, 2017, 126, 118-131.	5.3	46
18	Impact of temperature on expansive behavior of concrete with a highly reactive andesite due to the alkaliâ€“silica reaction. Cement and Concrete Research, 2019, 125, 105888.	4.6	41

#	Article	IF	Citations
19	Architecture tradeoffs of integrating a mesh generator to partition of unity enriched object-oriented finite element software. European Journal of Computational Mechanics, 2007, 16, 237-258.	0.6	29
20	Testing the greenhouse gas emissions reduction potential of alternative strategies for the english housing stock. Resources, Conservation and Recycling, 2019, 144, 267-275.	5.3	28
21	Computing Creep-Damage Interactions in Irradiated Concrete. Journal of Nanomechanics & Micromechanics, 2017, 7, .	1.4	27
22	Molecular landscapes of human hematopoietic stem cells in health and leukemia. Annals of the New York Academy of Sciences, 2016, 1370, 5-14.	1.8	24
23	Regularity and optimisation practice in steel structural frames in real design cases. Resources, Conservation and Recycling, 2018, 134, 294-302.	5.3	21
24	Good early stage design decisions can halve embodied CO2 and lower structural framesâ€™ cost. Structures, 2021, 33, 343-354.	1.7	21
25	Finite elements in space and time for the analysis of generalised visco-elastic materials. International Journal for Numerical Methods in Engineering, 2014, 97, 454-472.	1.5	18
26	An Algorithm to compute damage from load in composites. Frontiers of Architecture and Civil Engineering in China, 2011, 5, 180-193.	0.4	17
27	A marginal abatement cost curve for material efficiency accounting for uncertainty. Resources, Conservation and Recycling, 2019, 144, 39-47.	5.3	16
28	HPC simulations of alkali-silica reaction-induced damage: Influence of alkali-silica gel properties. Cement and Concrete Research, 2018, 109, 90-102.	4.6	14
29	Microstructural simulation and measurement of elastic modulus evolution of hydrating cement pastes. Cement and Concrete Research, 2020, 130, 106007.	4.6	14
30	Algorithmically imposed thermodynamic compliance for material models in mechanical simulations using the AIM method. International Journal for Numerical Methods in Engineering, 2015, 104, 963-982.	1.5	8
31	Physically based models to study the alkaliâ€“silica reaction. Proceedings of Institution of Civil Engineers: Construction Materials, 2016, 169, 136-144.	0.7	7
32	A new method to estimate the lifetime of longâ€life product categories. Journal of Industrial Ecology, 2021, 25, 321-332.	2.8	6
33	Alkali Silica Reaction Mitigating Properties of Ternary Blended Cement with Calcined Clay and Limestone. RILEM Bookseries, 2015, , 577-577.	0.2	3
34	Hematopoietic Stem Cells Reversibly Switch from Dormancy to Self-Renewal during Homeostasis and Repair. Cell, 2009, 138, 209.	13.5	2
35	Effects of temperature on expansion of concrete due to the alkali-silica reaction: A simplified numerical approach. Materiales De Construccion, 2022, 72, e282.	0.2	1
36	A stable finite element method for computing combined plastic and damage behaviour. Procedia Engineering, 2017, 207, 2018-2023.	1.2	0

#	Article	IF	Citations
37	Characterization of Fly Ashes by a Novel Method in the Scanning Electron Microscope. , 2016, , 55-64.		0