Andre Nonat

List of Publications by Year
in descending order

57 papers	6,707 citations	116194 36 h-index	175968 55 g-index
58 all docs	58 docs citations	58 times ranked	4349 citing authors

#	Article	IF	Citations
1	Study of nucleation and growth processes of ettringite in diluted conditions. Cement and Concrete Research, 2020, 127, 105915.	4.6	26
2	Natural fluorapatite as a raw material for Portland clinker. Cement and Concrete Research, 2018, 105, 72-80.	4.6	26
3	Rate-limiting reaction of C 3 S hydration - A reply to the discussion â€œA new view on the kinetics of tricalcium silicate hydrationâ€•by E. Gartner. Cement and Concrete Research, 2018, 104, 118-122.	4.6	14
4	Experimental study and numerical simulation of the dissolution anisotropy of tricalcium silicate. Chemical Geology, 2018, 497, 64-73.	1.4	26
5	Effects of hexitols on the hydration of tricalcium silicate. Cement and Concrete Research, 2017, 91, 87-96.	4.6	11
6	Mesocrystalline calcium silicate hydrate: A bioinspired route toward elastic concrete materials. Science Advances, 2017, 3, e1701216.	4.7	96
7	Revised Atomistic Models of the Crystal Structure of Câ€“Sâ€“H with high C/S Ratio. Zeitschrift Fur Physikalische Chemie, 2016, 230, 1411-1424.	1.4	22
8	Interactions between calcium silicate hydrate (C-S-H) and calcium chloride, bromide and nitrate. Cement and Concrete Research, 2016, 90, 89-96.	4.6	89
9	Ionic complexation and adsorption of small organic molecules on calcium silicate hydrate: Relation with their retarding effect on the hydration of C3S. Cement and Concrete Research, 2016, 89, 97-108.	4.6	44
10	Impacts of hexitols on the hydration of a tricalcium aluminate-calcium sulfate mixture. Cement and Concrete Research, 2016, 89, 177-186.	4.6	8
11	Retarding effectiveness of hexitols on the hydration of the silicate phases of cement: Interaction with the aluminate and sulfate phases. Cement and Concrete Research, 2016, 90, 137-143.	4.6	14
12	Effects of functionality and stereochemistry of small organic molecules on the hydration of tricalcium silicate. Cement and Concrete Research, 2016, 87, 97-104.	4.6	37
13	Fluidizing efficiency of comb-like superplasticizers: The effect of the anionic function, the side chain length and the grafting degree. Cement and Concrete Research, 2015, 71, 115-123.	4.6	79
14	Modification of the rate of formation and surface area of ettringite by polycarboxylate ether superplasticizers during early C3Aâ€“CaSO4 hydration. Cement and Concrete Research, 2015, 69, 105-113.	4.6	88
15	Calcium silicate hydrates: Solid and liquid phase composition. Cement and Concrete Research, 2015, 78, 57-70.	4.6	317
16	From Câ€“Sâ€“H to Câ€“Aâ€“Sâ€“H: Experimental study and thermodynamic modelling. Cement and Concrete Research, 2015, 68, 124-138.	4.6	134
17	Atomistic modeling of crystal structure of Ca 1.67 SiH x. Cement and Concrete Research, 2015, 67, 197-203.	4.6	63
18	Tailoring the anionic function and the side chains of comb-like superplasticizers to improve their adsorption. Cement and Concrete Research, 2015, 67, 21-30.	4.6	134

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19	Identification of Binding Peptides on Calcium Silicate Hydrate: A Novel View on Cement Additives. Advanced Materials, 2014, 26, 1135-1140.	11.1	46
20	Surface Relaxivity of Cement Hydrates. Journal of Physical Chemistry C, 2014, 118, 8387-8396.	1.5	40
21	Ion-specific effects influencing the dissolution of tricalcium silicate. Cement and Concrete Research, 2014, 59, 118-138.	4.6	179
22	Stability of Negatively Charged Platelets in Calcium-Rich Anionic Copolymer Solutions. Langmuir, 2014, 30, 6713-6720.	1.6	22
23	²⁷Al and ²⁹Si Solid-State NMR Characterization of Calcium-Aluminosilicate-Hydrate. Inorganic Chemistry, 2012, 51, 1827-1836.	1.9	234
24	A reply to the discussion â€œAccelerated growth of calcium silicate hydrates: Experiments and simulationsâ€•by S. Bishnoi and K. Scrivener. Cement and Concrete Research, 2012, 42, 881-887.	4.6	7
25	Calcium Mediated Polyelectrolyte Adsorption on Like-Charged Surfaces. Langmuir, 2011, 27, 13572-13581.	1.6	62
26	Mechanisms of cement hydration. Cement and Concrete Research, 2011, 41, 1208-1223.	4.6	1,446
27	C-S-H/solution interface: Experimental and Monte Carlo studies. Cement and Concrete Research, 2011, 41, 161-168.	4.6	103
28	Hydration of cementitious materials, present and future. Cement and Concrete Research, 2011, 41, 651-665.	4.6	561
29	Ettringite surface chemistry: Interplay of electrostatic and ion specificity. Journal of Colloid and Interface Science, 2011, 354, 765-770.	5.0	24
30	Engineering Photocatalytic Cements: Understanding TiO₂ Surface Chemistry to Control and Modulate Photocatalytic Performances. Journal of the American Ceramic Society, 2010, 93, 3360-3369.	1.9	105
31	A new calcium sulfate hemi-hydrate. Dalton Transactions, 2010, 39, 2044.	1.6	21
32	Surface and Intercalation Chemistry of Polycarboxylate Copolymers in Cementitious Systems. Journal of the American Ceramic Society, 2009, 92, 2471-2488.	1.9	95
33	Experimental study of Siâ€“Al substitution in calcium-silicate-hydrate (C-S-H) prepared under equilibrium conditions. Cement and Concrete Research, 2009, 39, 637-643.	4.6	162
34	Mechanisms and parameters controlling the tricalcium aluminate reactivity in the presence of gypsum. Cement and Concrete Research, 2007, 37, 1418-1426.	4.6	270
35	Experimental and theoretical evidence of overcharging of calcium silicate hydrate. Journal of Colloid and Interface Science, 2007, 309, 303-307.	5.0	94
36	Surface Charge Density and Electrokinetic Potential of Highly Charged Minerals:Â Experiments and Monte Carlo Simulations on Calcium Silicate Hydrate. Journal of Physical Chemistry B, 2006, 110, 9219-9230.	1.2	136

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37	Formation of the Câ˜Sâ˜H Layer during Early Hydration of Tricalcium Silicate Grains with Different Sizes. Journal of Physical Chemistry B, 2006, 110, 270-275.	1.2	98
38	Structural model of gelation processes of a sodium silicate sol destabilized by calcium ions: combination of SAXS and rheological measurements. Journal of Non-Crystalline Solids, 2005, 351, 351-354.	1.5	20
39	Nanoscale Experimental Investigation of Particle Interactions at the Origin of the Cohesion of Cement. Langmuir, 2005, 21, 7263-7270.	1.6	162
40	Investigation of the surface structure and elastic properties of calcium silicate hydrates at the nanoscale. Ultramicroscopy, 2004, 100, 331-338.	0.8	113
41	The structure and stoichiometry of C-S-H. Cement and Concrete Research, 2004, 34, 1521-1528.	4.6	448
42	Aggregation Processes and Formation of Silico-calco-alkaline Gels under High Ionic Strength. Journal of Colloid and Interface Science, 2002, 253, 140-149.	5.0	15
43	Hydrated Layer Formation on Tricalcium and Dicalcium Silicate Surfaces: Experimental Study and Numerical Simulations. Langmuir, 2001, 17, 8131-8138.	1.6	209
44	Investigation by atomic force microscopy of forces at the origin of cement cohesion. Ultramicroscopy, 2001, 86, 11-21.	0.8	98
45	Zeta-Potential Study of Calcium Silicate Hydrates Interacting with Alkaline Cations. Journal of Colloid and Interface Science, 2001, 244, 58-65.	5.0	209
46	29Si NMR and Small-Angle X-ray Scattering Studies of the Effect of Alkaline Ions (Li+, Na+, and K+) in Silico-Alkaline Sols. Journal of Physical Chemistry B, 1999, 103, 2091-2099.	1.2	49
47	Aggregation and Gel Formation in Basic Silicoâ˜Calcoâ˜Alkaline Solutions Studied:Â A SAXS, SANS, and ELS Study. Journal of Physical Chemistry B, 1999, 103, 5775-5781.	1.2	50
48	Electrokinetic Properties which Control the Coagulation of Silicate Cement Suspensions during Early Age Hydration. Journal of Colloid and Interface Science, 1998, 202, 261-268.	5.0	145
49	Observation directe de la croissance d'hydrosilicate de calcium sur des surfaces d'alitÃ© et de silice par microscopie Ã force atomique. Comptes Rendus De L'AcadÃ©mie Des Sciences Earth & Planetary Sciences SÃ©rie II, Sciences De La Terre Et Des PlanÃ¨tes =, 1998, 327, 231-236.	0.2	4
50	NMR and Infrared Spectroscopies of C-S-H and Al-Substituted C-S-H Synthesised in Alkaline Solutions. , 1998, , 189-196.		9
51	C-S-H Structure Evolution with Calcium Content by Multinuclear NMR. , 1998, , 119-141.		37
52	The Structure, Stoichiometry and Properties of C-S-H Prepared by C3S Hydration Under Controlled Condition. , 1998, , 197-207.		29
53	Du gÃ¢chage Ã l'Ã©tat durci, ce sont les mÃªmes liaisons qui sont Ã l'Å“uvre. Revue EuropÃ©enne De GÃ©nie Civil, 1998, 2, 759-765.	0.0	2
54	Kinetics of Tricalcium Silicate Hydration in Diluted Suspensions by Microcalorimetric Measurements. Journal of the American Ceramic Society, 1990, 73, 3319-3322.	1.9	82

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55	Lithium iodate: Phase transitions revisited. Physica B: Physics of Condensed Matter & C: Atomic, Molecular and Plasma Physics, Optics, 1987, 144, 277-291.	0.9	12
56	Determination of the equilibrium molecular structure of inverting molecules by microwave spectroscopy: Application to aniline. Journal of Molecular Spectroscopy, 1986, 118, 180-188.	0.4	51
57	Microwave substitution structure of the amine group in meta-chloroaniline C6H4ClNH2. Journal of Molecular Spectroscopy, 1983, 99, 407-414.	0.4	14