Friedlinde Goetz-Neunhoeffer

List of Publications by Year
in descending order

74 papers	4,377 citations	108046 37 h-index	120465 65 g-index
74 all docs	74 docs citations	74 times ranked	3339 citing authors

#	Article	IF	Citations
1	Pyrophosphate ions inhibit calcium phosphate cement reaction and enable storage of premixed pastes with a controlled activation by orthophosphate addition. Ceramics International, 2022, 48, 15390-15404.	2.3	4
2	Relating phase transitions to pore size distributions and mechanical mortar properties in CSA-OPC-C$ based systems â€“ The potential impact of delayed straetlingite formation. Cement and Concrete Research, 2021, 147, 106496.	4.6	13
3	Application of thermodynamic modeling to predict the stable hydrate phase assemblages in ternary CSA-OPC-anhydrite systems and quantitative verification by QXRD. Cement and Concrete Research, 2020, 128, 105956.	4.6	24
4	Phase Solubility Changes during Hydration of Monocalciumaluminate and Calciteâ€"The Influence of Alkali Accumulation. Materials, 2020, 13, 1406.	1.3	6
5	Impact of varying Li2CO3 additions on the hydration of ternary CSA-OPC-anhydrite mixes. Cement and Concrete Research, 2020, 131, 106015.	4.6	17
6	Cu2+ doped Î²-tricalcium phosphate: Solid solution limit and crystallographic characterization by rietveld refinement. Journal of Solid State Chemistry, 2020, 285, 121225.	1.4	17
7	Hydrothermal synthesis of 11 Ã… tobermorite â€“ Effect of adding metakaolin to the basic compound. Applied Clay Science, 2020, 185, 105432.	2.6	10
8	Mechanisms of early ettringite formation in ternary CSAâ€“OPCâ€“anhydrite systems. Advances in Cement Research, 2019, 31, 195-204.	0.7	22
9	Setting Mechanism of a CDHA Forming Î±-TCP Cement Modified with Sodium Phytate for Improved Injectability. Materials, 2019, 12, 2098.	1.3	11
10	Effect of sintering parameters on phase evolution and strength of dental lithium silicate glass-ceramics. Dental Materials, 2019, 35, 1360-1369.	1.6	14
11	Crack-healing during two-stage crystallization of biomedical lithium (di)silicate glass-ceramics. Dental Materials, 2019, 35, 1130-1145.	1.6	43
12	The retarding effect of phosphoric acid during CAC hydration. Cement and Concrete Research, 2019, 122, 83-92.	4.6	23
13	The PONKCS method applied for time resolved XRD quantification of supplementary cementitious material reactivity in hydrating mixtures with ordinary Portland cement. Construction and Building Materials, 2019, 214, 449-457.	3.2	40
14	Advanced Rietveld refinement and SEM analysis of tobermorite in chemically diverse autoclaved aerated concrete. Powder Diffraction, 2019, 34, 143-150.	0.4	13
15	Hydration of calcium aluminates at 60Â°C â€“ Development paths of C₂AH_{<i>x</i>} in dependence on the content of free water. Journal of the American Ceramic Society, 2019, 102, 4376-4387.	1.9	15
16	Accelerating effect of Li2CO3 on formation of monocarbonate and Al-hydroxide in a CA-cement and calcite mix during early hydration. Cement and Concrete Research, 2019, 126, 105897.	4.6	14
17	Alite dissolution and C-S-H precipitation rates during hydration. Cement and Concrete Research, 2019, 115, 283-293.	4.6	53
18	Effects of two oppositely charged colloidal polymers on cement hydration. Cement and Concrete Composites, 2019, 96, 66-76.	4.6	32

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19	Hydration of C 3 S in presence of CA : Mineralâ€pore solution interaction. Journal of the American Ceramic Society, 2019, 102, 3152-3162.	1.9	10
20	Implications for C₃S kinetics from combined C₃S/<scp>CA</scp> hydration. Journal of the American Ceramic Society, 2018, 101, 4137-4145.	1.9	8
21	New analytical possibilities for monitoring the phase development during the production of autoclaved aerated concrete. Cement and Concrete Research, 2018, 107, 247-252.	4.6	40
22	Acceleration of OPC by CAC in binary and ternary systems: The role of pore solution chemistry. Cement and Concrete Research, 2018, 107, 264-274.	4.6	29
23	Hydration mechanism of a calcium phosphate cement modified with phytic acid. Acta Biomaterialia, 2018, 80, 378-389.	4.1	26
24	Impact of initial CA dissolution on the hydration mechanism of CAC. Cement and Concrete Research, 2018, 113, 41-54.	4.6	24
25	The early hydration of OPC investigated by in-situ XRD, heat flow calorimetry, pore water analysis and 1H NMR: Learning about adsorbed ions from a complete mass balance approach. Cement and Concrete Research, 2018, 109, 230-242.	4.6	84
26	Interaction of silicate and aluminate reaction in a synthetic cement system: Implications for the process of alite hydration. Cement and Concrete Research, 2017, 93, 32-44.	4.6	84
27	Studies on the early hydration of two modifications of ye'elimite with gypsum. Cement and Concrete Research, 2017, 91, 106-116.	4.6	112
28	Hydration mechanism of partially amorphized Î²-tricalcium phosphate. Acta Biomaterialia, 2017, 54, 429-440.	4.1	7
29	Routine (an)isotropic crystallite size analysis in the double-Voigt approximation done right?. Powder Diffraction, 2017, 32, S27-S34.	0.4	14
30	Hydration enthalpy of amorphous tricalcium phosphate resulting from partially amorphization of Î²-tricalcium phosphate. BioNanoMaterials, 2017, 18, .	1.4	3
31	Study of hydration potential and kinetics of the ferrite phase in iron-rich CAC. Cement and Concrete Research, 2016, 83, 79-85.	4.6	38
32	Influence of crystallinity and surface area on the hydration kinetics of CA2. Cement and Concrete Research, 2016, 89, 136-144.	4.6	11
33	Influence of the specific surface area of alumina fillers on CAC hydration kinetics. Advances in Cement Research, 2016, 28, 62-70.	0.7	7
34	Influence of the reactivity of the amorphous part of mechanically activated alite on its hydration kinetics. Cement and Concrete Research, 2016, 88, 73-81.	4.6	9
35	Calcium aluminates in clinker remnants as marker phases for various types of 19th-century cement studied by Raman microspectroscopy. European Journal of Mineralogy, 2016, 28, 907-914.	0.4	12
36	Synthesis of monocrystalline Ca3SiO5 using the optical floating zone method. Cement and Concrete Research, 2016, 85, 156-162.	4.6	7

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37	Influence of Sr²⁺ on Calciumâ€Ðeficient Hydroxyapatite Formation Kinetics and Morphology in Partially Amorphized Î±â€TCP. Journal of the American Ceramic Society, 2016, 99, 1055-1063.	1.9	9
38	Effect of polymer latexes with cleaned serum on the phase development of hydrating cement pastes. Cement and Concrete Research, 2016, 84, 30-40.	4.6	91
39	In situ 1 H-TD-NMR: Quantification and microstructure development during the early hydration of alite and OPC. Cement and Concrete Research, 2016, 79, 366-372.	4.6	40
40	Reaction kinetics of dual setting Î±-tricalcium phosphate cements. Journal of Materials Science: Materials in Medicine, 2016, 27, 1.	1.7	113
41	Domain size anisotropy in the double-Voigt approach: an extended model. Journal of Applied Crystallography, 2015, 48, 1998-2001.	1.9	17
42	Calorimetry investigations of milled Î±- tricalcium phosphate (Î±- TCP) powders to determine the formation enthalpies of Î±- TCP and X-ray amorphous tricalcium phosphate. Acta Biomaterialia, 2015, 23, 338-346.	4.1	14
43	A generalized geometric approach to anisotropic peak broadening due to domain morphology. Journal of Applied Crystallography, 2015, 48, 189-194.	1.9	54
44	Mechanically activated alite: New insights into alite hydration. Cement and Concrete Research, 2015, 76, 202-211.	4.6	55
45	How to increase the hydration degree of CA â€" The influence of CA particle fineness. Cement and Concrete Research, 2015, 67, 11-20.	4.6	23
46	The influence of fly ash on the hydration of OPC within the first 44hâ€"A quantitative in situ XRD and heat flow calorimetry study. Cement and Concrete Research, 2014, 56, 129-138.	4.6	87
47	Effect of amorphous phases during the hydraulic conversion of Î±-TCP into calcium-deficient hydroxyapatite. Acta Biomaterialia, 2014, 10, 3931-3941.	4.1	46
48	Effect of polymers on cement hydration: A case study using substituted PDADMA. Cement and Concrete Composites, 2013, 35, 71-77.	4.6	26
49	Hydration kinetics of CA2 and CAâ€"Investigations performed on a synthetic calcium aluminate cement. Cement and Concrete Research, 2013, 43, 62-69.	4.6	105
50	Quantitative analysis of Câ€"Sâ€"H in hydrating alite pastes by in-situ XRD. Cement and Concrete Research, 2013, 53, 119-126.	4.6	180
51	The hydration of synthetic brownmillerite in presence of low Ca-sulfate content and calcite monitored by quantitative in-situ-XRD and heat flow calorimetry. Cement and Concrete Research, 2013, 54, 61-68.	4.6	58
52	Hydration of Portland cement with high replacement by siliceous fly ash. Cement and Concrete Research, 2012, 42, 1389-1400.	4.6	387
53	The early hydration of Ordinary Portland Cement (OPC): An approach comparing measured heat flow with calculated heat flow from QXRD. Cement and Concrete Research, 2012, 42, 134-138.	4.6	292
54	Change in reaction kinetics of a Portland cement caused by a superplasticizer â€" Calculation of heat flow curves from XRD data. Cement and Concrete Research, 2012, 42, 327-332.	4.6	158

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55	Spatially resolved quantitative in-situ phase analysis of a self-leveling compound. Cement and Concrete Research, 2012, 42, 919-927.	4.6	7
56	Cosubstitution of Zinc and Strontium in Î²-Tricalcium Phosphate: Synthesis and Characterization. Journal of the American Ceramic Society, 2011, 94, 230-235.	1.9	27
57	The hydration of alite: a time-resolved quantitative X-ray diffraction approach using the<i>G</i>-factor method compared with heat release. Journal of Applied Crystallography, 2011, 44, 895-901.	1.9	53
58	A new approach in quantitative in-situ XRD of cement pastes: Correlation of heat flow curves with early hydration reactions. Cement and Concrete Research, 2011, 41, 123-128.	4.6	256
59	A remastered external standard method applied to the quantification of early OPC hydration. Cement and Concrete Research, 2011, 41, 602-608.	4.6	291
60	Magnesium quantification in calcites [(Ca,Mg)CO3] by Rietveld-based XRD analysis: Revisiting a well-established method. American Mineralogist, 2011, 96, 1028-1038.	0.9	46
61	Does Ordinary Portland Cement contain amorphous phase? A quantitative study using an external standard method. Powder Diffraction, 2011, 26, 31-38.	0.4	163
62	Synthesis and structural characterization of strontium- and magnesium-co-substituted Î²-tricalcium phosphate. Acta Biomaterialia, 2010, 6, 571-576.	4.1	123
63	A comparative structural study of wet and dried ettringite. Cement and Concrete Research, 2010, 40, 370-375.	4.6	59
64	Newly developed Sr-substituted Î±-TCP bone cements. Acta Biomaterialia, 2010, 6, 928-935.	4.1	79
65	Bioinspired Design of SrAl₂O₄:Eu²⁺Phosphor. Advanced Functional Materials, 2009, 19, 599-603.	7.8	52
66	Biological Templating: Bioinspired Design of SrAl2O4:Eu2+Phosphor (Adv. Funct. Mater. 4/2009). Advanced Functional Materials, 2009, 19, NA-NA.	7.8	0
67	Synthesis and Structure Refinement of Zincâ€Doped Î²â€Tricalcium Phosphate Powders. Journal of the American Ceramic Society, 2009, 92, 1592-1595.	1.9	61
68	Quantitative determination of anhydrite III from dehydrated gypsum by XRD. Cement and Concrete Research, 2009, 39, 936-941.	4.6	64
69	Quantitative <i>in situ</i> X-ray diffraction analysis of early hydration of Portland cement at defined temperatures. Powder Diffraction, 2009, 24, 112-115.	0.4	50
70	Application of two-dimensional XRD for the characterization of the microstructure of self-leveling compounds. Powder Diffraction, 2009, 24, 107-111.	0.4	5
71	Quantitative Analysis of Crystalline and Amorphous Phases in Glassâ€"Ceramic Composites Like LTCC by the Rietveld Method. Journal of the American Ceramic Society, 2006, 89, 2632-2637.	1.9	64
72	Mineralogical characteristics of Ettringites synthesized from solutions and suspensions. Cement and Concrete Research, 2006, 36, 65-70.	4.6	67

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73	Refined ettringite (Ca₆Al₂(SO₄)₃(OH)₁₂â^™26H₂O) structure for quantitative X-ray diffraction analysis. Powder Diffraction, 2006, 21, 4-11.	0.4	158
74	Preceramic polymer derived cellular ceramics. Composites Science and Technology, 2003, 63, 2361-2370.	3.8	101