JÃ¼rgen Neubauer

List of Publications by Year
in descending order

72 papers	4,881 citations	116194 36 h-index	104191 69 g-index
72 all docs	72 docs citations	72 times ranked	3996 citing authors

#	Article	IF	Citations
1	Synchronous Monitoring of Cement Hydration and Polymer Film Formation Using ¹H-Time-Domain-NMR with <i>T</i>₂ Time-Weighted <i>T</i>₁ Time Evaluation: A Nondestructive Practicable Benchtop Method. ACS Omega, 2021, 6, 7499-7511.	1.6	2
2	Reaction kinetics during early hydration of calcined phyllosilicates in clinker-free model systems. Cement and Concrete Research, 2021, 143, 106382.	4.6	20
3	Impact of KOH on the interfacial precipitation rates of C-S-H during the early hydration of C3S. Cement and Concrete Research, 2021, 146, 106488.	4.6	5
4	Influence of aluminium on the hydration of triclinic C3S with addition of KOH solution. Cement and Concrete Research, 2020, 137, 106198.	4.6	31
5	Reactivity of Metakaolin in Alkaline Environment: Correlation of Results from Dissolution Experiments with XRD Quantifications. Materials, 2020, 13, 2214.	1.3	18
6	Phase Solubility Changes during Hydration of Monocalciumaluminate and Calciteâ€"The Influence of Alkali Accumulation. Materials, 2020, 13, 1406.	1.3	6
7	Investigation of the Incompatibilities of Cement and Superplasticizers and Their Influence on the Rheological Behavior. Materials, 2020, 13, 977.	1.3	23
8	C-S-H Pore Size Characterization Via a Combined Nuclear Magnetic Resonance (NMR)â€“Scanning Electron Microscopy (SEM) Surface Relaxivity Calibration. Materials, 2020, 13, 1779.	1.3	17
9	Comparing Phase Development and Rheological Properties of OPC Paste Within the First Hour of Hydration. RILEM Bookseries, 2020, , 219-227.	0.2	2
10	Mechanisms of early ettringite formation in ternary CSAâ€“OPCâ€“anhydrite systems. Advances in Cement Research, 2019, 31, 195-204.	0.7	22
11	Relating Ettringite Formation and Rheological Changes during the Initial Cement Hydration: A Comparative Study Applying XRD Analysis, Rheological Measurements and Modeling. Materials, 2019, 12, 2957.	1.3	56
12	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
13	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
14	Implications for C₃S kinetics from combined C₃S/<scp>CA</scp> hydration. Journal of the American Ceramic Society, 2018, 101, 4137-4145.	1.9	8
15	Quantitative X-ray diffraction of free, not chemically bound water with the PONKCS method. Journal of Applied Crystallography, 2018, 51, 1535-1543.	1.9	18
16	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
17	Studies on the early hydration of two modifications of ye'elimite with gypsum. Cement and Concrete Research, 2017, 91, 106-116.	4.6	112
18	Hydration mechanism of partially amorphized Î²-tricalcium phosphate. Acta Biomaterialia, 2017, 54, 429-440.	4.1	7

#	Article	IF	Citations
19	Routine (an)isotropic crystallite size analysis in the double-Voigt approximation done right?. Powder Diffraction, 2017, 32, S27-S34.	0.4	14
20	Measuring the Burning Temperatures of Anhydrite Micrograins in a High-Fired Medieval Gypsum Mortar. ChemistrySelect, 2017, 2, 9153-9156.	0.7	6
21	Hydration enthalpy of amorphous tricalcium phosphate resulting from partially amorphization of Î²-tricalcium phosphate. BioNanoMaterials, 2017, 18, .	1.4	3
22	Effect of Carbonâ€Based Materials on the Early Hydration of Tricalcium Silicate. Journal of the American Ceramic Society, 2016, 99, 2181-2196.	1.9	26
23	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
24	Influence of crystallinity and surface area on the hydration kinetics of CA2. Cement and Concrete Research, 2016, 89, 136-144.	4.6	11
25	Influence of the specific surface area of alumina fillers on CAC hydration kinetics. Advances in Cement Research, 2016, 28, 62-70.	0.7	7
26	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
27	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
28	Synthesis of monocrystalline Ca3SiO5 using the optical floating zone method. Cement and Concrete Research, 2016, 85, 156-162.	4.6	7
29	Influence of Sr²⁺ on Calciumâ€Deficient Hydroxyapatite Formation Kinetics and Morphology in Partially Amorphized Î±â€TCP. Journal of the American Ceramic Society, 2016, 99, 1055-1063.	1.9	9
30	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
31	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
32	Reaction kinetics of dual setting Î±-tricalcium phosphate cements. Journal of Materials Science: Materials in Medicine, 2016, 27, 1.	1.7	113
33	Domain size anisotropy in the double-Voigt approach: an extended model. Journal of Applied Crystallography, 2015, 48, 1998-2001.	1.9	17
34	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
35	A generalized geometric approach to anisotropic peak broadening due to domain morphology. Journal of Applied Crystallography, 2015, 48, 189-194.	1.9	54
36	Mechanically activated alite: New insights into alite hydration. Cement and Concrete Research, 2015, 76, 202-211.	4.6	55

#	Article	IF	Citations
37	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
38	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
39	Effect of amorphous phases during the hydraulic conversion of Î±-TCP into calcium-deficient hydroxyapatite. Acta Biomaterialia, 2014, 10, 3931-3941.	4.1	46
40	Effect of polymers on cement hydration: A case study using substituted PDADMA. Cement and Concrete Composites, 2013, 35, 71-77.	4.6	26
41	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
42	Effect of temperature on the hydration of Portland cement blended with siliceous fly ash. Cement and Concrete Research, 2013, 52, 169-181.	4.6	193
43	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
44	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
45	Hydration of Portland cement with high replacement by siliceous fly ash. Cement and Concrete Research, 2012, 42, 1389-1400.	4.6	387
46	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
47	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
48	Spatially resolved quantitative in-situ phase analysis of a self-leveling compound. Cement and Concrete Research, 2012, 42, 919-927.	4.6	7
49	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
50	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
51	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
52	A remastered external standard method applied to the quantification of early OPC hydration. Cement and Concrete Research, 2011, 41, 602-608.	4.6	291
53	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
54	Does Ordinary Portland Cement contain amorphous phase? A quantitative study using an external standard method. Powder Diffraction, 2011, 26, 31-38.	0.4	163

#	Article	IF	Citations
55	Synthesis and structural characterization of strontium- and magnesium-co-substituted Î²-tricalcium phosphate. Acta Biomaterialia, 2010, 6, 571-576.	4.1	123
56	A comparative structural study of wet and dried ettringite. Cement and Concrete Research, 2010, 40, 370-375.	4.6	59
57	Newly developed Sr-substituted Î±-TCP bone cements. Acta Biomaterialia, 2010, 6, 928-935.	4.1	79
58	Synthesis and Structure Refinement of Zincâ€Doped Î²â€Tricalcium Phosphate Powders. Journal of the American Ceramic Society, 2009, 92, 1592-1595.	1.9	61
59	Quantitative determination of anhydrite III from dehydrated gypsum by XRD. Cement and Concrete Research, 2009, 39, 936-941.	4.6	64
60	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
61	Application of two-dimensional XRD for the characterization of the microstructure of self-leveling compounds. Powder Diffraction, 2009, 24, 107-111.	0.4	5
62	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
63	Mineralogical characteristics of Ettringites synthesized from solutions and suspensions. Cement and Concrete Research, 2006, 36, 65-70.	4.6	67
64	Refined ettringite (Ca₆Al₂(SO₄)₃(OH)₁₂âˆ™26H₂O) structure for quantitative X-ray diffraction analysis. Powder Diffraction, 2006, 21, 4-11.	0.4	158
65	Nonlinear phenomena in contemporary vocal music. Journal of Voice, 2004, 18, 1-12.	0.6	44
66	Preceramic polymer derived cellular ceramics. Composites Science and Technology, 2003, 63, 2361-2370.	3.8	101
67	Growth of high-quality homoepitaxial diamond films by HF-CVD. Diamond and Related Materials, 2002, 11, 504-508.	1.8	18
68	Calls out of chaos: the adaptive significance of nonlinear phenomena in mammalian vocal production. Animal Behaviour, 2002, 63, 407-418.	0.8	451
69	Spatio-temporal analysis of irregular vocal fold oscillations: Biphonation due to desynchronization of spatial modes. Journal of the Acoustical Society of America, 2001, 110, 3179-3192.	0.5	114
70	Investigations on introducing Si and Mg into Brownmilleriteâ€”A Rietveld refinement. Cement and Concrete Research, 1996, 26, 77-82.	4.6	14
71	A reply to a discussion by John Bensted of the paper â€œalinite-chemical composition, solid solution and hydration behaviourâ€. Cement and Concrete Research, 1995, 25, 1808-1810.	4.6	4
72	Alinite â€” Chemical composition, solid solution and hydration behaviour. Cement and Concrete Research, 1994, 24, 1413-1422.	4.6	25