

Jürgen Neubauer

List of Publications by Year in descending order

Source: <https://exaly.com/author-pdf/6222356/publications.pdf>

Version: 2024-02-01

72
papers

4,881
citations

101543

36
h-index

91884

69
g-index

72
all docs

72
docs citations

72
times ranked

3612
citing authors

#	ARTICLE	IF	CITATIONS
1	Calls out of chaos: the adaptive significance of nonlinear phenomena in mammalian vocal production. <i>Animal Behaviour</i> , 2002, 63, 407-418.	1.9	451
2	Hydration of Portland cement with high replacement by siliceous fly ash. <i>Cement and Concrete Research</i> , 2012, 42, 1389-1400.	11.0	387
3	The early hydration of Ordinary Portland Cement (OPC): An approach comparing measured heat flow with calculated heat flow from QXRD. <i>Cement and Concrete Research</i> , 2012, 42, 134-138.	11.0	292
4	A remastered external standard method applied to the quantification of early OPC hydration. <i>Cement and Concrete Research</i> , 2011, 41, 602-608.	11.0	291
5	A new approach in quantitative in-situ XRD of cement pastes: Correlation of heat flow curves with early hydration reactions. <i>Cement and Concrete Research</i> , 2011, 41, 123-128.	11.0	256
6	Effect of temperature on the hydration of Portland cement blended with siliceous fly ash. <i>Cement and Concrete Research</i> , 2013, 52, 169-181.	11.0	193
7	Quantitative analysis of C ₄ H in hydrating alite pastes by in-situ XRD. <i>Cement and Concrete Research</i> , 2013, 53, 119-126.	11.0	180
8	Does Ordinary Portland Cement contain amorphous phase? A quantitative study using an external standard method. <i>Powder Diffraction</i> , 2011, 26, 31-38.	0.2	163
9	Refined ettringite (Ca ₆ Al ₂ (SO ₄) ₃ (OH) ₁₂ ·26H ₂ O) 0.2 structure for quantitative X-ray diffraction analysis. <i>Powder Diffraction</i> , 2006, 21, 4-11.	0.2	158
10	Change in reaction kinetics of a Portland cement caused by a superplasticizer – Calculation of heat flow curves from XRD data. <i>Cement and Concrete Research</i> , 2012, 42, 327-332.	11.0	158
11	Synthesis and structural characterization of strontium- and magnesium-co-substituted β -tricalcium phosphate. <i>Acta Biomaterialia</i> , 2010, 6, 571-576.	8.3	123
12	Spatio-temporal analysis of irregular vocal fold oscillations: Biphonation due to desynchronization of spatial modes. <i>Journal of the Acoustical Society of America</i> , 2001, 110, 3179-3192.	1.1	114
13	Reaction kinetics of dual setting β -tricalcium phosphate cements. <i>Journal of Materials Science: Materials in Medicine</i> , 2016, 27, 1.	3.6	113
14	Studies on the early hydration of two modifications of ye'elimite with gypsum. <i>Cement and Concrete Research</i> , 2017, 91, 106-116.	11.0	112
15	Hydration kinetics of CA ₂ and CA – Investigations performed on a synthetic calcium aluminate cement. <i>Cement and Concrete Research</i> , 2013, 43, 62-69.	11.0	105
16	Preceramic polymer derived cellular ceramics. <i>Composites Science and Technology</i> , 2003, 63, 2361-2370.	7.8	101
17	Effect of polymer latexes with cleaned serum on the phase development of hydrating cement pastes. <i>Cement and Concrete Research</i> , 2016, 84, 30-40.	11.0	91
18	The influence of fly ash on the hydration of OPC within the first 44h – A quantitative in situ XRD and heat flow calorimetry study. <i>Cement and Concrete Research</i> , 2014, 56, 129-138.	11.0	87

#	ARTICLE	IF	CITATIONS
19	Interaction of silicate and aluminate reaction in a synthetic cement system: Implications for the process of alite hydration. <i>Cement and Concrete Research</i> , 2017, 93, 32-44.	11.0	84
20	Newly developed Sr-substituted $\hat{I}\pm$ -TCP bone cements. <i>Acta Biomaterialia</i> , 2010, 6, 928-935.	8.3	79
21	Mineralogical characteristics of Ettringites synthesized from solutions and suspensions. <i>Cement and Concrete Research</i> , 2006, 36, 65-70.	11.0	67
22	Quantitative Analysis of Crystalline and Amorphous Phases in Glassâ€“Ceramic Composites Like LTCC by the Rietveld Method. <i>Journal of the American Ceramic Society</i> , 2006, 89, 2632-2637.	3.8	64
23	Quantitative determination of anhydrite III from dehydrated gypsum by XRD. <i>Cement and Concrete Research</i> , 2009, 39, 936-941.	11.0	64
24	Synthesis and Structure Refinement of Zincâ€“Doped $\hat{I}\pm$ -Tricalcium Phosphate Powders. <i>Journal of the American Ceramic Society</i> , 2009, 92, 1592-1595.	3.8	61
25	A comparative structural study of wet and dried ettringite. <i>Cement and Concrete Research</i> , 2010, 40, 370-375.	11.0	59
26	The hydration of synthetic brownmillerite in presence of low Ca-sulfate content and calcite monitored by quantitative in-situ-XRD and heat flow calorimetry. <i>Cement and Concrete Research</i> , 2013, 54, 61-68.	11.0	58
27	Relating Ettringite Formation and Rheological Changes during the Initial Cement Hydration: A Comparative Study Applying XRD Analysis, Rheological Measurements and Modeling. <i>Materials</i> , 2019, 12, 2957.	2.9	56
28	Mechanically activated alite: New insights into alite hydration. <i>Cement and Concrete Research</i> , 2015, 76, 202-211.	11.0	55
29	A generalized geometric approach to anisotropic peak broadening due to domain morphology. <i>Journal of Applied Crystallography</i> , 2015, 48, 189-194.	4.5	54
30	The hydration of alite: a time-resolved quantitative X-ray diffraction approach using the $\langle i \rangle G \langle i \rangle$ -factor method compared with heat release. <i>Journal of Applied Crystallography</i> , 2011, 44, 895-901.	4.5	53
31	Quantitative $\langle i \rangle$ in situ $\langle i \rangle$ X-ray diffraction analysis of early hydration of Portland cement at defined temperatures. <i>Powder Diffraction</i> , 2009, 24, 112-115.	0.2	50
32	Magnesium quantification in calcites [(Ca,Mg)CO ₃] by Rietveld-based XRD analysis: Revisiting a well-established method. <i>American Mineralogist</i> , 2011, 96, 1028-1038.	1.9	46
33	Effect of amorphous phases during the hydraulic conversion of $\hat{I}\pm$ -TCP into calcium-deficient hydroxyapatite. <i>Acta Biomaterialia</i> , 2014, 10, 3931-3941.	8.3	46
34	Nonlinear phenomena in contemporary vocal music. <i>Journal of Voice</i> , 2004, 18, 1-12.	1.5	44
35	In situ ¹ H-TD-NMR: Quantification and microstructure development during the early hydration of alite and OPC. <i>Cement and Concrete Research</i> , 2016, 79, 366-372.	11.0	40
36	Study of hydration potential and kinetics of the ferrite phase in iron-rich CAC. <i>Cement and Concrete Research</i> , 2016, 83, 79-85.	11.0	38

#	ARTICLE	IF	CITATIONS
37	Influence of aluminium on the hydration of triclinic C3S with addition of KOH solution. Cement and Concrete Research, 2020, 137, 106198.	11.0	31
38	Cosubstitution of Zinc and Strontium in Î²-Tricalcium Phosphate: Synthesis and Characterization. Journal of the American Ceramic Society, 2011, 94, 230-235.	3.8	27
39	Effect of polymers on cement hydration: A case study using substituted PDADMA. Cement and Concrete Composites, 2013, 35, 71-77.	10.7	26
40	Effect of Carbon-Based Materials on the Early Hydration of Tricalcium Silicate. Journal of the American Ceramic Society, 2016, 99, 2181-2196.	3.8	26
41	Alinite - Chemical composition, solid solution and hydration behaviour. Cement and Concrete Research, 1994, 24, 1413-1422.	11.0	25
42	How to increase the hydration degree of CA - The influence of CA particle fineness. Cement and Concrete Research, 2015, 67, 11-20.	11.0	23
43	Investigation of the Incompatibilities of Cement and Superplasticizers and Their Influence on the Rheological Behavior. Materials, 2020, 13, 977.	2.9	23
44	Mechanisms of early ettringite formation in ternary CSA-OPC-anhydrite systems. Advances in Cement Research, 2019, 31, 195-204.	1.6	22
45	Reaction kinetics during early hydration of calcined phyllosilicates in clinker-free model systems. Cement and Concrete Research, 2021, 143, 106382.	11.0	20
46	Growth of high-quality homoepitaxial diamond films by HF-CVD. Diamond and Related Materials, 2002, 11, 504-508.	3.9	18
47	Quantitative X-ray diffraction of free, not chemically bound water with the PONKCS method. Journal of Applied Crystallography, 2018, 51, 1535-1543.	4.5	18
48	Reactivity of Metakaolin in Alkaline Environment: Correlation of Results from Dissolution Experiments with XRD Quantifications. Materials, 2020, 13, 2214.	2.9	18
49	Domain size anisotropy in the double-Voigt approach: an extended model. Journal of Applied Crystallography, 2015, 48, 1998-2001.	4.5	17
50	C-S-H Pore Size Characterization Via a Combined Nuclear Magnetic Resonance (NMR)-Scanning Electron Microscopy (SEM) Surface Relaxivity Calibration. Materials, 2020, 13, 1779.	2.9	17
51	Hydration of calcium aluminates at 60°C - Development paths of C ₂ AH _x in dependence on the content of free water. Journal of the American Ceramic Society, 2019, 102, 4376-4387.	3.8	15
52	Investigations on introducing Si and Mg into Brownmillerite - A Rietveld refinement. Cement and Concrete Research, 1996, 26, 77-82.	11.0	14
53	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.	8.3	14
54	Routine (an)isotropic crystallite size analysis in the double-Voigt approximation done right?. Powder Diffraction, 2017, 32, S27-S34.	0.2	14

#	ARTICLE	IF	CITATIONS
55	Calcium aluminates in clinker remnants as marker phases for various types of 19th-century cement studied by Raman microspectroscopy. <i>European Journal of Mineralogy</i> , 2016, 28, 907-914.	1.3	12
56	Influence of crystallinity and surface area on the hydration kinetics of CA2. <i>Cement and Concrete Research</i> , 2016, 89, 136-144.	11.0	11
57	Hydration of C 3 S in presence of CA : Mineralâ€pore solution interaction. <i>Journal of the American Ceramic Society</i> , 2019, 102, 3152-3162.	3.8	10
58	Influence of the reactivity of the amorphous part of mechanically activated alite on its hydration kinetics. <i>Cement and Concrete Research</i> , 2016, 88, 73-81.	11.0	9
59	Influence of Sr ²⁺ on Calciumâ€Deficient Hydroxyapatite Formation Kinetics and Morphology in Partially Amorphized Î±â€TCP. <i>Journal of the American Ceramic Society</i> , 2016, 99, 1055-1063.	3.8	9
60	Implications for C ₃ S kinetics from combined C ₃ S/CA hydration. <i>Journal of the American Ceramic Society</i> , 2018, 101, 4137-4145.	3.8	8
61	Spatially resolved quantitative in-situ phase analysis of a self-leveling compound. <i>Cement and Concrete Research</i> , 2012, 42, 919-927.	11.0	7
62	Influence of the specific surface area of alumina fillers on CAC hydration kinetics. <i>Advances in Cement Research</i> , 2016, 28, 62-70.	1.6	7
63	Synthesis of monocrystalline Ca ₃ SiO ₅ using the optical floating zone method. <i>Cement and Concrete Research</i> , 2016, 85, 156-162.	11.0	7
64	Hydration mechanism of partially amorphized Î²-tricalcium phosphate. <i>Acta Biomaterialia</i> , 2017, 54, 429-440.	8.3	7
65	Measuring the Burning Temperatures of Anhydrite Micrograins in a High-Fired Medieval Gypsum Mortar. <i>ChemistrySelect</i> , 2017, 2, 9153-9156.	1.5	6
66	Phase Solubility Changes during Hydration of Monocalciumaluminate and Calciteâ€The Influence of Alkali Accumulation. <i>Materials</i> , 2020, 13, 1406.	2.9	6
67	Application of two-dimensional XRD for the characterization of the microstructure of self-leveling compounds. <i>Powder Diffraction</i> , 2009, 24, 107-111.	0.2	5
68	Impact of KOH on the interfacial precipitation rates of C-S-H during the early hydration of C3S. <i>Cement and Concrete Research</i> , 2021, 146, 106488.	11.0	5
69	A reply to a discussion by John Bensted of the paper â€œalinite-chemical composition, solid solution and hydration behaviourâ€. <i>Cement and Concrete Research</i> , 1995, 25, 1808-1810.	11.0	4
70	Hydration enthalpy of amorphous tricalcium phosphate resulting from partial amorphization of Î²-tricalcium phosphate. <i>BioNanoMaterials</i> , 2017, 18, .	1.4	3
71	Synchronous Monitoring of Cement Hydration and Polymer Film Formation Using ¹ H-Time-Domain-NMR with ² Time-Weighted ¹ Time Evaluation: A Nondestructive Practicable Benchtop Method. <i>ACS Omega</i> , 2021, 6, 7499-7511.	3.5	2
72	Comparing Phase Development and Rheological Properties of OPC Paste Within the First Hour of Hydration. <i>RILEM Bookseries</i> , 2020, , 219-227.	0.4	2