

Alkali-silica reaction: Current understanding of the mechanism and knowledge gaps

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Citation Report

#	ARTICLE	IF	CITATIONS
1	Alkali-silica reactivity of cementitious materials using ferro-nickel slag fine aggregates produced in different cooling conditions. <i>Construction and Building Materials</i> , 2015, 99, 279-287.	3.2	100
2	Scale-Dependent ASR Expansion of Concrete and Its Prediction coupled with Silica Gel Generation and Migration. <i>Journal of Advanced Concrete Technology</i> , 2016, 14, 444-463.	0.8	45
3	GEOLOGICAL STUDY AND MINING PLAN IMPORTANCE FOR MITIGATING ALKALI SILICA REACTION IN AGGREGATE QUARRY OPERATION. <i>Jurnal Teknologi (Sciences and Engineering)</i> , 2016, 78, .	0.3	2
4	Application of Image Analysis to Identify Quartz Grains in Heavy Aggregates Susceptible to ASR in Radiation Shielding Concrete. <i>Materials</i> , 2016, 9, 224.	1.3	11
5	Evaluation of alkali-silica reaction potential of quartz-rich rocks by alkaline etching of polished rock sections. <i>Environmental Earth Sciences</i> , 2016, 75, 1.	1.3	5
6	Application of ASR tests to recycled concrete aggregates: Influence of water absorption. <i>Construction and Building Materials</i> , 2016, 124, 714-721.	3.2	31
7	Physically based models to study the alkali-silica reaction. <i>Proceedings of Institution of Civil Engineers: Construction Materials</i> , 2016, 169, 136-144.	0.7	7
8	Types of alkali-aggregate reactions and the products formed. <i>Proceedings of Institution of Civil Engineers: Construction Materials</i> , 2016, 169, 128-135.	0.7	37
9	Influence of alternative fuels on trace element content of ordinary portland cement. <i>Fuel</i> , 2016, 184, 481-489.	3.4	36
10	Effect of calcium on dissolution and precipitation reactions of amorphous silica at high alkalinity. <i>Cement and Concrete Research</i> , 2016, 87, 1-13.	4.6	134
11	Potential alkali silica reactivity of various rock types in an aggregate granite quarry. <i>Measurement: Journal of the International Measurement Confederation</i> , 2016, 81, 221-231.	2.5	14
12	An extended chemical index model to predict the fly ash dosage necessary for mitigating alkali-silica reaction in concrete. <i>Cement and Concrete Research</i> , 2016, 82, 1-10.	4.6	19
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14	The role of activating solution concentration on alkali-silica reaction in alkali-activated fly ash concrete. <i>Cement and Concrete Research</i> , 2016, 83, 124-130.	4.6	76
15	Alkali-Aggregate Reactions in Concrete. , 2016, , 361-383.		0
16	Lithium migration in a two-chamber set-up as treatment against expansion due to alkali-silica reaction. <i>Construction and Building Materials</i> , 2017, 134, 324-335.	3.2	11
17	The influence of alkali-silica reaction (ASR) gel composition on its hydrophilic properties and free swelling in contact with water vapor. <i>Cement and Concrete Research</i> , 2017, 94, 49-58.	4.6	57
18	Application of Electron Backscatter Diffraction to evaluate the ASR risk of concrete aggregates. <i>Cement and Concrete Research</i> , 2017, 95, 47-55.	4.6	13

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19	Effect of coarse aggregate grading on the ASR expansion and damage of concrete. <i>Cement and Concrete Research</i> , 2017, 95, 75-83.	4.6	50
20	Mitigation of Alkali-Silica Reaction by Hydrated Alumina. <i>Transportation Research Record</i> , 2017, 2629, 15-23.	1.0	12
21	Quantifying the swelling properties of alkali-silica reaction (ASR) gels as a function of their composition. <i>Journal of the American Ceramic Society</i> , 2017, 100, 3801-3818.	1.9	24
22	ASR Potential and Mitigation Measures for Wyoming Aggregates. <i>Journal of Materials in Civil Engineering</i> , 2017, 29, .	1.3	2
23	Stress-relaxation of crystalline alkali-silica reaction products: Characterization by micro- and nanoindentation and simplified modeling. <i>Construction and Building Materials</i> , 2017, 148, 455-464.	3.2	15
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29	Empirical Multiphase Dielectric Mixing Model for Cement-Based Materials Containing Alkali-Silica Reaction Gel. <i>IEEE Transactions on Instrumentation and Measurement</i> , 2017, 66, 2428-2436.	2.4	12
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31	Effect of Alkalis on Cementitious Materials: Understanding the Relationship between Composition, Structure, and Volume Change Mechanism. <i>Journal of Advanced Concrete Technology</i> , 2017, 15, 165-177.	0.8	26
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34	Neutron scattering measurement of water content and chemical composition of alkali-glass powder reacted gel. <i>Materials Characterization</i> , 2018, 136, 165-174.	1.9	0
35	Atomic force microscopy characterisation of alkali-silica reaction products to reveal their nanostructure and formation mechanism. <i>Ceramics International</i> , 2018, 44, 7310-7314.	2.3	6
36	Sustainable one-part geopolymer foams with glass fines versus sand as aggregates. <i>Construction and Building Materials</i> , 2018, 171, 223-231.	3.2	100

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38	Alkali-silica reaction in waterglass-activated slag mortars incorporating fly ash and metakaolin. <i>Cement and Concrete Research</i> , 2018, 108, 10-19.	4.6	103
39	Nano-mechanical properties of alkali-silica reaction (ASR) products in concrete measured by nano-indentation. <i>Construction and Building Materials</i> , 2018, 158, 75-83.	3.2	21
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47	Compressive Strength and Durability Properties of Structural Lightweight Concrete with Fine Expanded Glass and/or Clay Aggregates. <i>Materials</i> , 2018, 11, 2434.	1.3	35
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50	Alkali-silica reaction and microstructure of concrete subjected to combined chemical and physical exposure conditions. <i>MATEC Web of Conferences</i> , 2018, 163, 05009.	0.1	1
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80	Synthesis, characterization, and water uptake property of alkali-silica reaction products. <i>Cement and Concrete Research</i> , 2019, 121, 58-71.	4.6	86
81	Microgravity Effect on Microstructural Development of Tri-calcium Silicate (C3S) Paste. <i>Frontiers in Materials</i> , 2019, 6, .	1.2	18
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93	Improved photocatalytic nitrogen oxides removal using recycled glass-nano-TiO ₂ composites with NaOH pre-treatment. <i>Journal of Cleaner Production</i> , 2019, 209, 1095-1104.	4.6	28
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