

George W Scherer

List of Publications by Year in descending order

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274
papers

19,490
citations

11651

70
h-index

13771

129
g-index

279
all docs

279
docs citations

279
times ranked

10416
citing authors

#	ARTICLE	IF	CITATIONS
1	Mechanisms of cement hydration. Cement and Concrete Research, 2011, 41, 1208-1223.	11.0	1,446
2	Theory of Drying. Journal of the American Ceramic Society, 1990, 73, 3-14.	3.8	871
3	Crystallization in pores. Cement and Concrete Research, 1999, 29, 1347-1358.	11.0	869
4	Tailored Porous Materials. Chemistry of Materials, 1999, 11, 2633-2656.	6.7	714
5	Stress from crystallization of salt. Cement and Concrete Research, 2004, 34, 1613-1624.	11.0	684
6	Comparison of methods for arresting hydration of cement. Cement and Concrete Research, 2011, 41, 1024-1036.	11.0	554
7	Use of the Adam-Gibbs Equation in the Analysis of Structural Relaxation. Journal of the American Ceramic Society, 1984, 67, 504-511.	3.8	385
8	Sintering of Low-Density Glasses: I, Theory. Journal of the American Ceramic Society, 1977, 60, 236-239.	3.8	328
9	Modeling and simulation of cement hydration kinetics and microstructure development. Cement and Concrete Research, 2011, 41, 1257-1278.	11.0	328
10	Effect of air voids on salt scaling and internal freezing. Cement and Concrete Research, 2010, 40, 260-270.	11.0	221
11	Crystallization damage by sodium sulfate. Journal of Cultural Heritage, 2003, 4, 109-115.	3.3	216
12	Drying. , 1990, , 452-513.		205
13	Theories of relaxation. Journal of Non-Crystalline Solids, 1990, 123, 75-89.	3.1	205
14	Early hydration and setting of oil well cement. Cement and Concrete Research, 2010, 40, 1023-1033.	11.0	200
15	Freezing gels. Journal of Non-Crystalline Solids, 1993, 155, 1-25.	3.1	191
16	A review of salt scaling: II. Mechanisms. Cement and Concrete Research, 2007, 37, 1022-1034.	11.0	187
17	The use of hydroxyapatite as a new inorganic consolidant for damaged carbonate stones. Journal of Cultural Heritage, 2011, 12, 346-355.	3.3	186
18	Characterization and Modeling of Pores and Surfaces in Cement Paste. Journal of Advanced Concrete Technology, 2008, 6, 5-29.	1.8	185

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19	Aging and drying of gels. <i>Journal of Non-Crystalline Solids</i> , 1988, 100, 77-92.	3.1	184
20	Degradation of oilwell cement due to exposure to carbonated brine. <i>International Journal of Greenhouse Gas Control</i> , 2010, 4, 546-560.	4.6	183
21	A review of salt scaling: I. Phenomenology. <i>Cement and Concrete Research</i> , 2007, 37, 1007-1021.	11.0	180
22	Pore size and shape in mortar by thermoporometry. <i>Cement and Concrete Research</i> , 2010, 40, 740-751.	11.0	180
23	Compression of aerogels. <i>Journal of Non-Crystalline Solids</i> , 1995, 186, 316-320.	3.1	171
24	Mechanical structure-property relationship of aerogels. <i>Journal of Non-Crystalline Solids</i> , 2000, 277, 127-141.	3.1	170
25	Viscous Sintering on a Rigid Substrate. <i>Journal of the American Ceramic Society</i> , 1985, 68, 216-220.	3.8	159
26	Creep and Densification During Sintering of Glass Powder Compacts. <i>Journal of the American Ceramic Society</i> , 1987, 70, 766-774.	3.8	157
27	Sintering inhomogeneous glasses: Application to optical waveguides. <i>Journal of Non-Crystalline Solids</i> , 1979, 34, 239-256.	3.1	156
28	Mechanism for Salt Scaling. <i>Journal of the American Ceramic Society</i> , 2006, 89, 1161-1179.	3.8	155
29	Deformation of aerogels during characterization. <i>Journal of Non-Crystalline Solids</i> , 1995, 186, 309-315.	3.1	153
30	Thermodynamics of crystallization stresses in DEF. <i>Cement and Concrete Research</i> , 2008, 38, 325-336.	11.0	150
31	Advances in Understanding Damage by Salt Crystallization. <i>Accounts of Chemical Research</i> , 2010, 43, 897-905.	15.6	138
32	Nucleation and growth models for hydration of cement. <i>Cement and Concrete Research</i> , 2012, 42, 982-993.	11.0	136
33	Viscous Sintering of a Bimodal Pore-Size Distribution. <i>Journal of the American Ceramic Society</i> , 1984, 67, 709-715.	3.8	134
34	Editorial Comments on a Paper by Gordon S. Fulcher. <i>Journal of the American Ceramic Society</i> , 1992, 75, 1060-1062.	3.8	131
35	Particle-modified consolidants: A study on the effect of particles on sol-gel properties and consolidation effectiveness. <i>Journal of Cultural Heritage</i> , 2007, 8, 1-6.	3.3	127
36	Drying gels. <i>Journal of Non-Crystalline Solids</i> , 1986, 87, 199-225.	3.1	126

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37	Chemo-mechanics of salt damage in stone. Nature Communications, 2014, 5, 4823.	12.8	126
38	Drying gels. Journal of Non-Crystalline Solids, 1989, 109, 171-182.	3.1	124
39	Silicate Consolidants for Stone. Key Engineering Materials, 0, 391, 1-25.	0.4	122
40	Structure and properties of gels. Cement and Concrete Research, 1999, 29, 1149-1157.	11.0	121
41	Bending of gel beams: method for characterizing elastic properties and permeability. Journal of Non-Crystalline Solids, 1992, 142, 18-35.	3.1	119
42	A commented translation of the paper by C.W. Correns and W. Steinborn on crystallization pressure. Environmental Geology, 2007, 52, 187-203.	1.2	118
43	Dilatation of Porous Glass. Journal of the American Ceramic Society, 1986, 69, 473-480.	3.8	112
44	Study of structural evolution of silica gel using ¹ H and ²⁹ Si NMR. Journal of Non-Crystalline Solids, 1989, 111, 153-166.	3.1	108
45	Nitrogen sorption in aerogels. Journal of Non-Crystalline Solids, 2001, 285, 167-174.	3.1	107
46	Volume Relaxation Far from Equilibrium. Journal of the American Ceramic Society, 1986, 69, 374-381.	3.8	106
47	Recent progress in drying of gels. Journal of Non-Crystalline Solids, 1992, 147-148, 363-374.	3.1	106
48	Cavitation during drying of a gel. Journal of Non-Crystalline Solids, 1995, 189, 197-211.	3.1	101
49	Sintering of sol-gel films. Journal of Sol-Gel Science and Technology, 1997, 8, 353-363.	2.4	101
50	Glasses from colloids. Journal of Non-Crystalline Solids, 1984, 63, 163-172.	3.1	99
51	Morphology of cementitious material during early hydration. Cement and Concrete Research, 2018, 107, 85-100.	11.0	99
52	Artificial weathering of stone by heating. Journal of Cultural Heritage, 2013, 14, e85-e93.	3.3	97
53	Time dependent driving forces and the kinetics of tricalcium silicate hydration. Cement and Concrete Research, 2015, 74, 26-34.	11.0	97
54	Nitrogen adsorption in compliant materials. Journal of Non-Crystalline Solids, 2000, 277, 162-172.	3.1	96

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55	Quantitative reactive transport modeling of Portland cement in CO ₂ -saturated water. <i>International Journal of Greenhouse Gas Control</i> , 2010, 4, 561-574.	4.6	96
56	Crystallization of sodium sulfate salts in limestone. <i>Environmental Geology</i> , 2008, 56, 605-621.	1.2	95
57	Why alite stops hydrating below 80% relative humidity. <i>Cement and Concrete Research</i> , 2011, 41, 987-992.	11.0	92
58	Stress-induced index profile distortion in optical waveguides. <i>Applied Optics</i> , 1980, 19, 2000.	2.1	91
59	Sintering of Low-Density Glasses: II, Experimental Study. <i>Journal of the American Ceramic Society</i> , 1977, 60, 239-243.	3.8	90
60	Degradation of cement at the reservoir/cement interface from exposure to carbonated brine. <i>International Journal of Greenhouse Gas Control</i> , 2011, 5, 1413-1428.	4.6	89
61	New methods to measure liquid permeability in porous materials. <i>Cement and Concrete Research</i> , 2007, 37, 386-397.	11.0	88
62	Effect of shrinkage on the modulus of silica gel. <i>Journal of Non-Crystalline Solids</i> , 1989, 109, 183-190.	3.1	87
63	Computer simulation of mechanical structure-property relationship of aerogels. <i>Journal of Non-Crystalline Solids</i> , 2001, 285, 216-221.	3.1	86
64	Consolidation of calcareous and siliceous sandstones by hydroxyapatite: Comparison with a TEOS-based consolidant. <i>Journal of Cultural Heritage</i> , 2013, 14, e103-e108.	3.3	86
65	Measuring Permeability of Rigid Materials by a Beam-Bending Method: III, Cement Paste. <i>Journal of the American Ceramic Society</i> , 2002, 85, 1537-1544.	3.8	85
66	Crack-tip stress in gels. <i>Journal of Non-Crystalline Solids</i> , 1992, 144, 210-216.	3.1	81
67	Viscoelasticity in silica gel. <i>Journal of Non-Crystalline Solids</i> , 1988, 107, 14-22.	3.1	76
68	Sol-gel glass: III. Viscous sintering. <i>Journal of Non-Crystalline Solids</i> , 1985, 72, 369-389.	3.1	74
69	Thermal expansion of gels: a novel method for measuring permeability. <i>Journal of Non-Crystalline Solids</i> , 1991, 130, 157-170.	3.1	73
70	Cell Models for Viscous Sintering. <i>Journal of the American Ceramic Society</i> , 1991, 74, 1523-1531.	3.8	72
71	Comparison between flexural and uniaxial compression tests to measure the elastic modulus of silica aerogel. <i>Journal of Non-Crystalline Solids</i> , 2008, 354, 4556-4561.	3.1	72
72	Drying gels. <i>Journal of Non-Crystalline Solids</i> , 1987, 89, 217-238.	3.1	71

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73	Effect of drying on properties of silica gel. <i>Journal of Non-Crystalline Solids</i> , 1997, 215, 155-168.	3.1	71
74	Hydroxyapatite coatings for marble protection: Optimization of calcite covering and acid resistance. <i>Applied Surface Science</i> , 2016, 368, 241-257.	6.1	71
75	Nucleation, growth and evolution of calcium phosphate films on calcite. <i>Journal of Colloid and Interface Science</i> , 2014, 435, 128-137.	9.4	70
76	Shrinkage of silica gels aged in TEOS. <i>Journal of Non-Crystalline Solids</i> , 1996, 202, 42-52.	3.1	67
77	An image analysis procedure to quantify the air void system of mortar and concrete. <i>Materials and Structures/Materiaux Et Constructions</i> , 2015, 48, 3087-3098.	3.1	66
78	Mechanics of syneresis I. Theory. <i>Journal of Non-Crystalline Solids</i> , 1989, 108, 18-27.	3.1	65
79	Hydraulic radius and mesh size of gels. <i>Journal of Sol-Gel Science and Technology</i> , 1994, 1, 285-291.	2.4	65
80	Materials Science Research for the Conservation of Sculpture and Monuments. <i>MRS Bulletin</i> , 2001, 26, 44-50.	3.5	65
81	Measuring Permeability of Rigid Materials by a Beam Bending Method: I, Theory. <i>Journal of the American Ceramic Society</i> , 2000, 83, 2231-2239.	3.8	65
82	Thermal Expansion of Confined Water. <i>Langmuir</i> , 2009, 25, 5076-5083.	3.5	65
83	Viscoelastic-Elastic Composites: I, General Theory. <i>Journal of the American Ceramic Society</i> , 1982, 65, 352-360.	3.8	63
84	Effect of pressure on early hydration of class H and white cement. <i>Cement and Concrete Research</i> , 2010, 40, 845-850.	11.0	62
85	Drying, Shrinkage, and Cracking of Cementitious Materials. <i>Transport in Porous Media</i> , 2015, 110, 311-331.	2.6	61
86	Stress development during supercritical drying. <i>Journal of Non-Crystalline Solids</i> , 1992, 145, 33-40.	3.1	59
87	Virtual tours and informational modeling for conservation of cultural heritage sites. <i>Journal of Cultural Heritage</i> , 2018, 29, 123-129.	3.3	59
88	Correction of "drying gels: I. General theory". <i>Journal of Non-Crystalline Solids</i> , 1987, 92, 375-382.	3.1	57
89	Viscosities and Sintering Rates of Composite Packings of Spheres. <i>Journal of the American Ceramic Society</i> , 1995, 78, 521-528.	3.8	57
90	Dynamic pressurization method for measuring permeability and modulus: II. cementitious materials. <i>Materials and Structures/Materiaux Et Constructions</i> , 2007, 40, 711-721.	3.1	57

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91	Effects upon Nitrogen Sorption Analysis in Aerogels. <i>Journal of Colloid and Interface Science</i> , 2001, 236, 385-386.	9.4	56
92	Evaluation of drying methods by nitrogen adsorption. <i>Cement and Concrete Research</i> , 2019, 120, 13-26.	11.0	56
93	Measuring permeability and stress relaxation of young cement paste by beam bending. <i>Cement and Concrete Research</i> , 2003, 33, 1925-1932.	11.0	55
94	Air entraining admixtures: Mechanisms, evaluations, and interactions. <i>Cement and Concrete Research</i> , 2021, 150, 106557.	11.0	54
95	Mechanical strengthening of TMOS-based alcogels by aging in silane solutions. <i>Journal of Sol-Gel Science and Technology</i> , 1994, 3, 199-204.	2.4	53
96	Stress in aerogel during depressurization of autoclave: II. Silica gels. <i>Journal of Sol-Gel Science and Technology</i> , 1994, 3, 141-150.	2.4	53
97	Characterization of cement from a well at Teapot Dome Oil Field: Implications for geological sequestration. <i>International Journal of Greenhouse Gas Control</i> , 2011, 5, 115-124.	4.6	53
98	Impact of in-pore salt crystallization on transport properties. <i>Environmental Earth Sciences</i> , 2013, 69, 2657-2669.	2.7	53
99	Viscosities and Sintering Rates of a Two-Dimensional Granular Composite. <i>Journal of the American Ceramic Society</i> , 1993, 76, 3123-3135.	3.8	52
100	Thermal Expansion Kinetics: Method to Measure Permeability of Cementitious Materials: II, Application to Hardened Cement Pastes. <i>Journal of the American Ceramic Society</i> , 2001, 84, 385-91.	3.8	51
101	Mechanism for salt scaling of a cementitious surface. <i>Materials and Structures/Materiaux Et Constructions</i> , 2007, 40, 259-268.	3.1	51
102	Clay swelling mechanism in clay-bearing sandstones. <i>Environmental Geology</i> , 2008, 56, 529-534.	1.2	51
103	Hydroxyapatite-based consolidant and the acceleration of hydrolysis of silicate-based consolidants. <i>Journal of Cultural Heritage</i> , 2015, 16, 94-101.	3.3	49
104	Sintering of Low-Density Glasses: III, Effect of a Distribution of Pore Sizes. <i>Journal of the American Ceramic Society</i> , 1977, 60, 243-246.	3.8	48
105	Stress in aerogel during depressurization of autoclave: I. theory. <i>Journal of Sol-Gel Science and Technology</i> , 1994, 3, 127-139.	2.4	48
106	Measuring Permeability of Rigid Materials by a Beam Bending Method: II, Porous Glass. <i>Journal of the American Ceramic Society</i> , 2000, 83, 2240-2246.	3.8	48
107	Role of clay minerals in the physicommechanical deterioration of sandstone. <i>Journal of Geophysical Research</i> , 2008, 113, .	3.3	47
108	Mechanisms of salt scaling. <i>Materials and Structures/Materiaux Et Constructions</i> , 2005, 38, 479-488.	3.1	46

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109	The chemomechanics of crystallization during rewetting of limestone impregnated with sodium sulfate. <i>Journal of Materials Research</i> , 2011, 26, 1472-1481.	2.6	46
110	Experimental study of the diffusion-controlled acid degradation of Class H Portland cement. <i>International Journal of Greenhouse Gas Control</i> , 2012, 7, 181-191.	4.6	46
111	Elastic properties of crosslinked Resorcinol-Formaldehyde gels and aerogels. <i>Journal of Non-Crystalline Solids</i> , 1997, 211, 132-142.	3.1	45
112	Relaxation and Glass Transition in an Isostatically Compressed Diopside Glass. <i>Journal of the American Ceramic Society</i> , 2007, 90, 1556-1561.	3.8	45
113	Characterization of aerogels. <i>Advances in Colloid and Interface Science</i> , 1998, 76-77, 321-339.	14.7	44
114	Direct measurements of 3d structure, chemistry and mass density during the induction period of C3s hydration. <i>Cement and Concrete Research</i> , 2016, 89, 14-26.	11.0	44
115	Effect of swelling inhibitors on the swelling and stress relaxation of clay bearing stones. <i>Environmental Geology</i> , 2004, 46, 364.	1.2	43
116	Viscous Sintering under a Uniaxial Load. <i>Journal of the American Ceramic Society</i> , 1986, 69, C-206-C-207.	3.8	42
117	Measurement of permeability I. Theory. <i>Journal of Non-Crystalline Solids</i> , 1989, 113, 107-118.	3.1	42
118	Can drying and re-wetting of magnesium sulfate salts lead to damage of stone?. <i>Environmental Earth Sciences</i> , 2011, 63, 1463-1473.	2.7	42
119	Supercritical drying of cementitious materials. <i>Cement and Concrete Research</i> , 2017, 99, 137-154.	11.0	42
120	Studying AEA interaction in cement systems using tensiometry. <i>Cement and Concrete Research</i> , 2017, 92, 29-36.	11.0	42
121	Measuring chemical shrinkage of ordinary Portland cement pastes with high water-to-cement ratios by adding cellulose nanofibrils. <i>Cement and Concrete Composites</i> , 2020, 111, 103625.	10.7	42
122	Sodium sulfate heptahydrate I: The growth of single crystals. <i>Journal of Crystal Growth</i> , 2011, 329, 44-51.	1.5	41
123	Measurement of permeability II. Silica gel. <i>Journal of Non-Crystalline Solids</i> , 1989, 113, 119-129.	3.1	40
124	Molecular Mechanisms Causing Anomalously High Thermal Expansion of Nanoconfined Water. <i>ChemPhysChem</i> , 2008, 9, 1997-2001.	2.1	40
125	Hydration and percolation at the setting point. <i>Cement and Concrete Research</i> , 2012, 42, 665-672.	11.0	40
126	Resistance to simulated rain of hydroxyapatite- and calcium oxalate-based coatings for protection of marble against corrosion. <i>Corrosion Science</i> , 2017, 127, 168-174.	6.6	39

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127	Thermal Expansion Kinetics: Method to Measure Permeability of Cementitious Materials: I, Theory. Journal of the American Ceramic Society, 2000, 83, 2753-2761.	3.8	38
128	Models of confined growth. Cement and Concrete Research, 2012, 42, 1252-1260.	11.0	38
129	Acid-Resistant Coatings on Marble. Journal of the American Ceramic Society, 2016, 99, 3421-3428.	3.8	38
130	Calcium phosphate coatings for marble conservation: Influence of ethanol and isopropanol addition to the precipitation medium on the coating microstructure and performance. Corrosion Science, 2018, 136, 255-267.	6.6	38
131	Analysis of C-S-H growth rates in supersaturated conditions. Cement and Concrete Research, 2018, 103, 236-244.	11.0	38
132	Adsorption in aerogel networks. Journal of Non-Crystalline Solids, 1998, 225, 192-199.	3.1	37
133	Elasticity of DLCA model gels with loops. International Journal of Solids and Structures, 2002, 39, 4605-4614.	2.7	37
134	Permeability of shale by the beam-bending method. International Journal of Rock Mechanics and Minings Sciences, 2012, 53, 179-191.	5.8	37
135	Investigation of concrete workability through characterization of aggregate gradation in hardened concrete using X-ray computed tomography. Cement and Concrete Composites, 2019, 98, 150-161.	10.7	37
136	Transport of Water in Small Pores. Langmuir, 2009, 25, 5084-5090.	3.5	36
137	Mechanisms of damage by salt. Geological Society Special Publication, 2010, 331, 61-77.	1.3	36
138	Drying gels VII. Diffusion during drying. Journal of Non-Crystalline Solids, 1989, 107, 135-148.	3.1	35
139	Dynamic pressurization method for measuring permeability and modulus: I. theory. Materials and Structures/Materiaux Et Constructions, 2006, 39, 1041-1057.	3.1	35
140	Concrete-ice abrasion mechanics. Cement and Concrete Research, 2015, 73, 79-95.	11.0	35
141	Drying gels. Journal of Non-Crystalline Solids, 1987, 91, 83-100.	3.1	34
142	Viscous Sintering with a Pore-Size Distribution and Rigid Inclusions. Journal of the American Ceramic Society, 1988, 71, C447-C448.	3.8	34
143	Influence of Viscoelasticity and Permeability on the Stress Response of Silica Gel. Langmuir, 1996, 12, 1109-1116.	3.5	34
144	Dynamic pressurization: novel method for measuring fluid permeability. Journal of Non-Crystalline Solids, 2003, 325, 34-47.	3.1	33

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145	Evidence of anomalous thermal expansion of water in cement paste. <i>Cement and Concrete Research</i> , 2005, 35, 57-66.	11.0	31
146	Direct observation of void evolution during cement hydration. <i>Materials and Design</i> , 2017, 136, 137-149.	7.0	31
147	Physical and chemical effects of isopropanol exchange in cement-based materials. <i>Cement and Concrete Research</i> , 2021, 145, 106461.	11.0	31
148	Mechanics of syneresis II. Experimental study. <i>Journal of Non-Crystalline Solids</i> , 1989, 108, 28-36.	3.1	30
149	Stress and fracture during drying of gels. <i>Journal of Non-Crystalline Solids</i> , 1990, 121, 104-109.	3.1	30
150	Densification kinetics and structural evolution during sintering of silica aerogel. <i>Journal of Non-Crystalline Solids</i> , 1998, 240, 118-130.	3.1	30
151	Stress from crystallization of salt in pores. , 2000, , 187-194.		30
152	Carbonation of wellbore cement by CO ₂ diffusion from caprock. <i>International Journal of Greenhouse Gas Control</i> , 2009, 3, 731-735.	4.6	30
153	Using X-ray computed tomography to investigate mortar subjected to freeze-thaw cycles. <i>Cement and Concrete Composites</i> , 2020, 108, 103520.	10.7	30
154	Viscoelastic-Elastic Composites: II, Sandwich Seal. <i>Journal of the American Ceramic Society</i> , 1982, 65, 399-406.	3.8	29
155	Optimization of the rapid supercritical extraction process for aerogels. <i>Journal of Non-Crystalline Solids</i> , 2002, 311, 259-272.	3.1	29
156	Penetration depth and redistribution of an aqueous ammonium phosphate solution used for porous limestone consolidation by brushing and immersion. <i>Construction and Building Materials</i> , 2017, 148, 571-578.	7.2	29
157	Conversion of calcium sulfate dihydrate into calcium phosphates as a route for conservation of gypsum stuccoes and sulfated marble. <i>Construction and Building Materials</i> , 2018, 170, 290-301.	7.2	29
158	Thermal Stresses in Clad-Glass Fibers. <i>Journal of the American Ceramic Society</i> , 1980, 63, 346-347.	3.8	28
159	Relaxation of a viscoelastic gel bar: I. theory. <i>Journal of Sol-Gel Science and Technology</i> , 1994, 1, 169-175.	2.4	28
160	Kinetic analysis of C-S-H growth on calcite. <i>Cement and Concrete Research</i> , 2018, 103, 226-235.	11.0	28
161	Leakage of CO ₂ Through Abandoned Wells. , 2005, , 827-848.		27
162	Measurement and simulation of dendritic growth of ice in cement paste. <i>Cement and Concrete Research</i> , 2010, 40, 1393-1402.	11.0	27

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163	Drying gels. <i>Journal of Non-Crystalline Solids</i> , 1988, 99, 324-358.	3.1	26
164	Use of a Dissociative Potential to Simulate Hydration of Na ⁺ and Cl ⁻ ions. <i>Journal of Physical Chemistry B</i> , 2009, 113, 9886-9893.	2.6	25
165	Nucleation of sodium sulfate heptahydrate on mineral substrates studied by nuclear magnetic resonance. <i>Journal of Crystal Growth</i> , 2012, 338, 166-169.	1.5	25
166	Prediction of the degree of hydration at initial setting time of cement paste with particle agglomeration. <i>Cement and Concrete Research</i> , 2012, 42, 1280-1285.	11.0	25
167	Structural Evolution of Sol-Gel Glasses. <i>Journal of the Ceramic Association Japan</i> , 1987, 95, 31-54.	0.2	24
168	Durable Self-Cleaning Coatings for Architectural Surfaces by Incorporation of TiO ₂ Nano-Particles into Hydroxyapatite Films. <i>Materials</i> , 2018, 11, 177.	2.9	24
169	Drying gels. <i>Journal of Non-Crystalline Solids</i> , 1987, 91, 101-121.	3.1	23
170	Relaxation of a viscoelastic gel bar: II. Silica gel. <i>Journal of Sol-Gel Science and Technology</i> , 1994, 2, 199-204.	2.4	23
171	Effect of precursor and hydrolysis conditions on drying shrinkage. <i>Journal of Non-Crystalline Solids</i> , 1997, 221, 135-143.	3.1	23
172	Bending of gel beams: Effect of deflection rate and Hertzian indentation. <i>Journal of Non-Crystalline Solids</i> , 1996, 201, 1-25.	3.1	22
173	Hydration and Crystallization Pressure of Sodium Sulfate: a Critical Review. <i>Materials Research Society Symposia Proceedings</i> , 2002, 712, 221.	0.1	22
174	Experimental and modeling study of calcium carbonate precipitation and its effects on the degradation of oil well cement during carbonated brine exposure. <i>Cement and Concrete Research</i> , 2018, 113, 1-12.	11.0	22
175	Thermal stresses in a cylinder: Application to optical waveguide blanks. <i>Journal of Non-Crystalline Solids</i> , 1979, 34, 223-238.	3.1	21
176	Glasses and ceramics from colloids. <i>Journal of Non-Crystalline Solids</i> , 1985, 73, 661-667.	3.1	21
177	Bending of a poroelastic beam with lateral diffusion. <i>International Journal of Solids and Structures</i> , 2009, 46, 3451-3462.	2.7	21
178	Measuring permeability by the thermal expansion method for rigid or highly permeable gels. <i>Journal of Sol-Gel Science and Technology</i> , 1994, 3, 31-40.	2.4	20
179	Adsorption in Sparse Networks. <i>Journal of Colloid and Interface Science</i> , 1998, 202, 399-410.	9.4	20
180	Coarsening in a Viscous Matrix. <i>Journal of the American Ceramic Society</i> , 1998, 81, 49-54.	3.8	20

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