

Florence Babonneau

List of Publications by Year in descending order

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20759

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249
all docs

249
docs citations

249
times ranked

11106
citing authors

#	ARTICLE	IF	CITATIONS
1	The predominant role of collagen in the nucleation, growth, structure and orientation of bone apatite. <i>Nature Materials</i> , 2012, 11, 724-733.	13.3	482
2	First-Principles Calculation of NMR Parameters Using the Gauge Including Projector Augmented Wave Method: A Chemist's Point of View. <i>Chemical Reviews</i> , 2012, 112, 5733-5779.	23.0	446
3	Structural Characterization of Hydrothermal Carbon Spheres by Advanced Solid-State MAS ¹³ C NMR Investigations. <i>Journal of Physical Chemistry C</i> , 2009, 113, 9644-9654.	1.5	392
4	Highly Porous Polyhedral Silsesquioxane Polymers. Synthesis and Characterization. <i>Journal of the American Chemical Society</i> , 1998, 120, 8380-8391.	6.6	373
5	Preceramic polymer routes to silicon carbide. <i>Chemistry of Materials</i> , 1993, 5, 260-279.	3.2	299
6	Structural Characterization and High-Temperature Behavior of Silicon Oxycarbide Glasses Prepared from Sol-Gel Precursors Containing Si-H Bonds. <i>Journal of the American Ceramic Society</i> , 1995, 78, 379-387.	1.9	259
7	Water-mediated structuring of bone apatite. <i>Nature Materials</i> , 2013, 12, 1144-1153.	13.3	250
8	Hydrothermal Carbon from Biomass: Structural Differences between Hydrothermal and Pyrolyzed Carbons via ¹³ C Solid State NMR. <i>Langmuir</i> , 2011, 27, 14460-14471.	1.6	248
9	Solid-State NMR Study of Ibuprofen Confined in MCM-41 Material. <i>Chemistry of Materials</i> , 2006, 18, 6382-6390.	3.2	242
10	An in Situ Study of Mesostructured CTAB-Silica Film Formation during Dip Coating Using Time-Resolved SAXS and Interferometry Measurements. <i>Chemistry of Materials</i> , 2002, 14, 931-939.	3.2	198
11	Order-Disorder Transitions and Evolution of Silica Structure in Self-Assembled Mesostructured Silica Films Studied through FTIR Spectroscopy. <i>Journal of Physical Chemistry B</i> , 2003, 107, 4711-4717.	1.2	196
12	Humidity-controlled mesostructuration in CTAB-templated silica thin film processing. The existence of a modulable steady state. <i>Journal of Materials Chemistry</i> , 2003, 13, 61-66.	6.7	193
13	The True Structure of Hexagonal Mesophase-Templated Silica Films As Revealed by X-ray Scattering: Effects of Thermal Treatments and of Nanoparticle Seeding. <i>Chemistry of Materials</i> , 2000, 12, 1721-1728.	3.2	187
14	Dimethyldiethoxysilane/tetraethoxysilane copolymers: precursors for the silicon-carbon-oxygen system. <i>Chemistry of Materials</i> , 1989, 1, 554-558.	3.2	177
15	Structural evolutions from polycarbosilane to SiC ceramic. <i>Journal of Materials Science</i> , 1990, 25, 3886-3893.	1.7	176
16	Selective protein adsorption property and characterization of nano-crystalline zinc-containing hydroxyapatite. <i>Acta Biomaterialia</i> , 2006, 2, 69-74.	4.1	166
17	Structural investigation of the hydrolysis-condensation process of titanium alkoxides Ti(OR) ₄ (OR =) Tj ETQq1 1 0.784314 rgBT /Overbo 1989, 1, 240-247.	3.2	162
18	Bone mineral: new insights into its chemical composition. <i>Scientific Reports</i> , 2019, 9, 8456.	1.6	161

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19	Structural Characterization of Sol-Gel Derived Oxycarbide Glasses. 1. Study of the Pyrolysis Process. Chemistry of Materials, 1994, 6, 796-802.	3.2	156
20	Organically Modified SiO ₂ -B ₂ O ₃ Gels Displaying a High Content of Borosiloxane (B-O-Si) Bonds. Chemistry of Materials, 1999, 11, 910-919.	3.2	152
21	Thermal cross-linking and pyrolytic conversion of poly(ureamethylvinyl)silazanes to silicon-based ceramics. Applied Organometallic Chemistry, 2001, 15, 820-832.	1.7	147
22	Influence of mesoporous structure type on the controlled delivery of drugs: release of ibuprofen from MCM-48, SBA-15 and functionalized SBA-15. Journal of Sol-Gel Science and Technology, 2009, 50, 421-429.	1.1	136
23	Structural investigation of the hydrolysis-condensation process of titanium alkoxides Ti(OR) ₄ (OR =) Tj ETQq1 1 0.784314 rgBT /Over Materials, 1989, 1, 248-252.	3.2	129
24	Introducing ecodesign in silica sol-gel materials. Journal of Materials Chemistry, 2009, 19, 8537.	6.7	128
25	New Insights on the High-Temperature Nanostructure Evolution of SiOC and B-Doped SiBOC Polymer-Derived Glasses. Chemistry of Materials, 2007, 19, 5694-5702.	3.2	123
26	Sol-gel synthesis of siloxane-oxide hybrid coatings [Si(CH ₃) ₂ O-MOx: M = Si, Ti, Zr, Al] with luminescent properties. Journal of Materials Chemistry, 1992, 2, 239-244.	6.7	118
27	Nanocrystalline Mesoporous γ -Alumina Powders - Gathers Thermal and Chemical Stability with High Surface Area. Chemistry of Materials, 2006, 18, 5238-5243.	3.2	118
28	Structural Characterization of Sol-Gel Derived Oxycarbide Glasses. 2. Study of the Thermal Stability of the Silicon Oxycarbide Phase. Chemistry of Materials, 1995, 7, 975-981.	3.2	117
29	Poly(methylsilane)-A High Ceramic Yield Precursor to Silicon Carbide. Journal of the American Ceramic Society, 1991, 74, 670-673.	1.9	116
30	Aluminum sec-butoxide modified with ethylacetoacetate: An attractive precursor for the sol-gel synthesis of ceramics. Journal of Non-Crystalline Solids, 1990, 121, 153-157.	1.5	113
31	Competitive Polymerization between Organic and Inorganic Networks in Hybrid Materials. Chemistry of Materials, 2000, 12, 3726-3732.	3.2	112
32	Synthesis and characterization of poly(aminoborane) as a new boron nitride precursor. Polymers for Advanced Technologies, 1999, 10, 702-712.	1.6	101
33	Structural characterization of organically-modified porous silicates synthesized using CTA+ surfactant and acidic conditions. Journal of Materials Chemistry, 1999, 9, 175-178.	6.7	98
34	Chemically Derived BN Ceramics: Extensive ¹¹ B and ¹⁵ N Solid-State NMR Study of a Pre ceramic Polyborazilene. Chemistry of Materials, 2001, 13, 1700-1707.	3.2	98
35	Solid-State NMR Characterization of the Surfactant-Silica Interface in Templated Silicas: Acidic versus Basic Conditions. Chemistry of Materials, 2007, 19, 1343-1354.	3.2	98
36	Organosilicon Polymers? Synthesis, Architecture, Reactivity and Applications. Applied Organometallic Chemistry, 1997, 11, 71-106.	1.7	97

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37	Advanced Solid State NMR Techniques for the Characterization of Sol-Gel-Derived Materials. <i>Accounts of Chemical Research</i> , 2007, 40, 738-746.	7.6	97
38	Structural Insights on Nitrogen-Containing Hydrothermal Carbon Using Solid-State Magic Angle Spinning ¹³ C and ¹⁵ N Nuclear Magnetic Resonance. <i>Journal of Physical Chemistry C</i> , 2011, 115, 8976-8982.	1.5	97
39	Unusual, pH-Induced, Self-Assembly Of Sophorolipid Biosurfactants. <i>ACS Nano</i> , 2012, 6, 4763-4776.	7.3	97
40	Combined <i>ab initio</i> computational and experimental multinuclear solid-state magnetic resonance study of phenylphosphonic acid. <i>Magnetic Resonance in Chemistry</i> , 2004, 42, 445-452.	1.1	88
41	Nuclear magnetic resonance techniques for the structural characterization of siloxane-oxide hybrid materials. <i>Polyhedron</i> , 2000, 19, 315-322.	1.0	83
42	Accurate characterization of pure silicon-substituted hydroxyapatite powders synthesized by a new precipitation route. <i>Acta Biomaterialia</i> , 2013, 9, 6992-7004.	4.1	83
43	Solid State NMR Characterisation of Encapsulated Molecules in Mesoporous Silica. <i>Journal of Sol-Gel Science and Technology</i> , 2004, 31, 219-223.	1.1	82
44	Synthesis and Characterization of Transparent PDMS-Metal-Oxo Based Organic-Inorganic Nanocomposites. <i>Chemistry of Materials</i> , 2003, 15, 3026-3034.	3.2	78
45	Phosphorous-doped MCM-41 as bioactive material. <i>Solid State Sciences</i> , 2005, 7, 233-237.	1.5	78
46	Crystallization Behavior of Novel Silicon Boron Oxycarbide Glasses. <i>Journal of the American Ceramic Society</i> , 2004, 87, 203-208.	1.9	76
47	Hybrid RSiO _{1.5} /B ₂ O ₃ Gels from Modified Silicon Alkoxides and Boric Acid. <i>Journal of Sol-Gel Science and Technology</i> , 2000, 18, 11-19.	1.1	75
48	¹⁷ O Solution NMR Characterization of the Preparation of Sol-Gel Derived SiO ₂ /TiO ₂ and SiO ₂ /ZrO ₂ Glasses. <i>Chemistry of Materials</i> , 1997, 9, 2385-2394.	3.2	69
49	Investigation of the Interface in Silica-Encapsulated Liposomes by Combining Solid State NMR and First Principles Calculations. <i>Journal of the American Chemical Society</i> , 2011, 133, 16815-16827.	6.6	69
50	A carbonate-fluoride defect model for carbonate-rich fluorapatite. <i>American Mineralogist</i> , 2013, 98, 1066-1069.	0.9	69
51	Development of a Cradle-to-Grave Approach for Acetylated Acidic Sophorolipid Biosurfactants. <i>ACS Sustainable Chemistry and Engineering</i> , 2017, 5, 1186-1198.	3.2	69
52	Title is missing!. <i>Journal of Sol-Gel Science and Technology</i> , 2003, 26, 279-283.	1.1	67
53	Evolution of C-rich SiOC ceramics. <i>International Journal of Materials Research</i> , 2006, 97, 699-709.	0.1	65
54	Kinetics of the Formation of 2D-Hexagonal Silica Nanostructured Materials by Nonionic Block Copolymer Templating in Solution. <i>Journal of Physical Chemistry B</i> , 2011, 115, 11330-11344.	1.2	64

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55	Chemical Characterization of Si-Al-C-O Precursor and Its Pyrolysis. <i>Journal of the American Ceramic Society</i> , 1991, 74, 1725-1728.	1.9	63
56	Structural concepts on new amorphous covalent solids. <i>Journal of Non-Crystalline Solids</i> , 1988, 106, 256-261.	1.5	62
57	Sol-Gel-Derived Silicon-Boron Oxycarbide Glasses Containing Mixed Silicon Oxycarbide ($\text{SiC}_{x/4}\text{O}_{x/4}$) and Boron Oxycarbide (BC_yO_{3y}) Units. <i>Journal of the American Ceramic Society</i> , 2001, 84, 2160-2164.	1.9	62
58	Covalent grafting of organoalkoxysilanes on silica surfaces in water-rich medium as evidenced by ^{29}Si NMR. <i>Journal of Sol-Gel Science and Technology</i> , 2009, 50, 152-157.	1.1	62
59	Sophorolipids: a yeast-derived glycolipid as greener structure directing agents for self-assembled nanomaterials. <i>Green Chemistry</i> , 2010, 12, 1564.	4.6	62
60	pH-triggered formation of nanoribbons from yeast-derived glycolipid biosurfactants. <i>Soft Matter</i> , 2014, 10, 3950-3959.	1.2	62
61	^{17}O MAS NMR Study of the Bonding Mode of Phosphonate Coupling Molecules in a Titanium Oxo-Alkoxo-Phosphonate and in Titania-Based Hybrid Materials. <i>Chemistry of Materials</i> , 2003, 15, 4098-4103.	3.2	60
62	A Molecular Picture of the Adsorption of Glycine in Mesoporous Silica through NMR Experiments Combined with DFT-D Calculations. <i>Journal of Physical Chemistry C</i> , 2013, 117, 4104-4114.	1.5	60
63	The Evolutionary Process during Pyrolytic Transformation of Poly(N-methylsilazane) from a Pre-ceramic Polymer into an Amorphous Silicon Nitride/Carbon Composite. <i>Journal of the American Ceramic Society</i> , 1995, 78, 137-145.	1.9	58
64	^{15}N cross-polarization using the inversion-recovery cross-polarization technique and ^{11}B magic angle spinning NMR studies of reference compounds containing B-N bonds. <i>Magnetic Resonance in Chemistry</i> , 1998, 36, 407-414.	1.1	57
65	Ab Initio Calculations of NMR Parameters of Highly Coordinated Oxygen Sites in Aluminosilicates. <i>Journal of Physical Chemistry B</i> , 2004, 108, 13249-13253.	1.2	57
66	Nanostructured copper oxide-cotton fibers: synthesis, characterization, and applications. <i>International Nano Letters</i> , 2012, 2, 1.	2.3	57
67	High resolution solid state NMR investigation of various boron nitride pre-ceramic polymers. <i>Journal of Organometallic Chemistry</i> , 2002, 657, 75-82.	0.8	56
68	Synthesis and high temperature chemistry of methylsilsesquioxane polymers produced by titanium-catalyzed redistribution of methylhydrido-oligo- and -polysiloxanes. <i>Chemistry of Materials</i> , 1990, 2, 464-472.	3.2	55
69	Sol-gel synthesis of SiBOC glasses. <i>Journal of Non-Crystalline Solids</i> , 1998, 224, 173-183.	1.5	55
70	Interfacial Ca^{2+} environments in nanocrystalline apatites revealed by dynamic nuclear polarization enhanced ^{43}Ca NMR spectroscopy. <i>Nature Communications</i> , 2017, 8, 14104.	5.8	55
71	Silicon oxycarbides via sol-gel route: characterization of the pyrolysis process. <i>Journal of Non-Crystalline Solids</i> , 1992, 147-148, 280-284.	1.5	54
72	Neutral Alkoxysilanes from Silica. <i>Journal of the American Chemical Society</i> , 2000, 122, 10063-10072.	6.6	54

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73	Composite Particles of Polyethylene @ Silica. <i>Journal of the American Chemical Society</i> , 2007, 129, 98-108.	6.6	54
74	Characterization of the hydrolysis and polymerization processes of methacryloxypropyltrimethoxysilane. <i>Journal of Sol-Gel Science and Technology</i> , 1994, 2, 185-188.	1.1	53
75	Characterization of methyl-substituted silica gels with Si-H functionalities. <i>Journal of Materials Chemistry</i> , 1995, 5, 1363-1374.	6.7	52
76	Sol-gel synthesis of a siloxypolycarbosilane gel and its pyrolytic conversion to silicon oxycarbide. <i>Chemistry of Materials</i> , 1994, 6, 51-57.	3.2	51
77	Phase transformation during cubic mesostructured silica film formation. <i>Chemical Communications</i> , 2002, , 748-749.	2.2	48
78	Controlling the Thermal Polymerization Process of Hybrid Organic-Inorganic Films Synthesized from 3-Methacryloxypropyltrimethoxysilane and 3-Aminopropyltriethoxysilane. <i>Chemistry of Materials</i> , 2003, 15, 4790-4797.	3.2	48
79	Structural Control in Germania Hybrid Organic-Inorganic Materials. <i>Chemistry of Materials</i> , 2005, 17, 3172-3180.	3.2	48
80	Synthesis, Characterization and Applications of Immobilized Iminodiacetic Acid-Modified Silica. <i>Journal of Sol-Gel Science and Technology</i> , 2003, 28, 255-265.	1.1	47
81	Solid-state NMR characterization of drug-model molecules encapsulated in MCM-41 silica. <i>Pure and Applied Chemistry</i> , 2009, 81, 1345-1355.	0.9	47
82	Solution State NMR Techniques Applied to Solid State Samples: Characterization of Benzoic Acid Confined in MCM-41. <i>Journal of Physical Chemistry C</i> , 2010, 114, 8884-8891.	1.5	46
83	Sol-Gel Processing of a Glycolated Cyclic Organosilane and Its Pyrolysis to Silicon Oxycarbide Monoliths with Multiscale Porosity and Large Surface Areas. <i>Chemistry of Materials</i> , 2010, 22, 1509-1520.	3.2	46
84	Controlling the chemistry, morphology and structure of boron nitride-based ceramic fibers through a comprehensive mechanistic study of the reactivity of spinnable polymers with ammonia. <i>Journal of Materials Chemistry</i> , 2006, 16, 3126.	6.7	45
85	Title is missing!. <i>Journal of Sol-Gel Science and Technology</i> , 1999, 14, 39-48.	1.1	44
86	Structural Characterization and Protein Adsorption Property of Hydroxyapatite Particles Modified With Zinc Ions. <i>Journal of the American Ceramic Society</i> , 2007, 90, 565-569.	1.9	44
87	Amorphous surface layer versus transient amorphous precursor phase in bone - A case study investigated by solid-state NMR spectroscopy. <i>Acta Biomaterialia</i> , 2017, 59, 351-360.	4.1	44
88	Solid-State ¹⁷ O NMR Characterization of PDMS-MxOy (M = Ge(IV), Ti(IV), Zr(IV), Nb(V), and Ta(V)) Organic-Inorganic Nanocomposites. <i>Chemistry of Materials</i> , 2004, 16, 521-529.	3.2	43
89	Gel Precursor to Silicon Oxycarbide Glasses with Ultrahigh Ceramic Yield. <i>Journal of the American Ceramic Society</i> , 1997, 80, 999-1004.	1.9	43
90	¹¹ B and ¹⁵ N solid state NMR investigation of a boron nitride preceramic polymer prepared by ammonolysis of borazine. <i>Journal of the European Ceramic Society</i> , 2005, 25, 129-135.	2.8	43

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91	Solid-state nuclear magnetic resonance: A valuable tool to explore organic-inorganic interfaces in silica-based hybrid materials. <i>Comptes Rendus Chimie</i> , 2010, 13, 58-68.	0.2	43
92	Heterogeneous structure and in vitro degradation behavior of wet-chemically derived nanocrystalline silicon-containing hydroxyapatite particles. <i>Acta Biomaterialia</i> , 2013, 9, 4856-4867.	4.1	43
93	New perspectives in the PAW/GIPAW approach: JP-O-Si coupling constants, antisymmetric parts of shift tensors and NQR predictions. <i>Magnetic Resonance in Chemistry</i> , 2010, 48, S86-S102.	1.1	42
94	Antibacterial properties of sophorolipid-modified gold surfaces against Gram positive and Gram negative pathogens. <i>Colloids and Surfaces B: Biointerfaces</i> , 2017, 157, 325-334.	2.5	42
95	Molecular Chemistry and Engineering of Boron-Modified Polyorganosilazanes as New Processable and Functional SiBCN Precursors. <i>Chemistry - A European Journal</i> , 2017, 23, 9076-9090.	1.7	42
96	The first direct probing of porosity on supported mesoporous silica thin films through hyperpolarised ^{129}Xe NMR. <i>Chemical Communications</i> , 2002, , 2476-2477.	2.2	41
97	Organo-modified mesoporous silicas for organic pollutant removal in water: Solid-state NMR study of the organic/silica interactions. <i>Microporous and Mesoporous Materials</i> , 2008, 110, 534-542.	2.2	40
98	Whewellite, $\text{CaC}_2\text{O}_4 \cdot \text{H}_2\text{O}$: structural study by a combined NMR, crystallography and modelling approach. <i>CrystEngComm</i> , 2013, 15, 8840.	1.3	40
99	Calcium-Phosphate Biomineralization Induced by Alkaline Phosphatase Activity in <i>Escherichia coli</i> : Localization, Kinetics, and Potential Signatures in the Fossil Record. <i>Frontiers in Earth Science</i> , 0, 3, .	0.8	40
100	Calcium oxalate precipitation by diffusion using laminar microfluidics: toward a biomimetic model of pathological microcalcifications. <i>Lab on A Chip</i> , 2016, 16, 1157-1160.	3.1	40
101	Unsupported SiO_2 -based organic-inorganic membranes. <i>Journal of Materials Chemistry</i> , 1997, 7, 67-73.	6.7	39
102	B/C/N Materials and B4C Synthesized by a Non-Oxide Sol-Gel Process. <i>Chemistry of Materials</i> , 2003, 15, 755-764.	3.2	39
103	Design of a Series of Pre-ceramic B-Tri(methylamino)borazine-Based Polymers as Fiber Precursors: Architecture, Thermal Behavior, and Melt-Spinnability. <i>Macromolecules</i> , 2007, 40, 1018-1027.	2.2	39
104	Si-Al-O-N Fibers from Polymeric Precursor: Synthesis, Structural, and Mechanical Characterization. <i>Journal of the American Ceramic Society</i> , 1993, 76, 2595-2600.	1.9	38
105	Solid-state NMR investigations of the polymer route to SiBCN ceramics. <i>Canadian Journal of Chemistry</i> , 2003, 81, 1359-1369.	0.6	38
106	Structural and Microstructural Evolution During Pyrolysis of Hybrid Polydimethylsiloxane-Titania Nanocomposites. <i>Journal of Sol-Gel Science and Technology</i> , 2005, 34, 53-62.	1.1	38
107	^{29}Si , ^{17}O Liquid NMR and ^{29}Si CP-MAS NMR Characterization of Siloxane-Oxide Materials, $[(\text{CH}_3)_2\text{SiO}/\text{TiO}_2]$, $[(\text{CH}_3)_2\text{SiO}/\text{ZrO}_2]$. <i>Materials Research Society Symposia Proceedings</i> , 1994, 346, 949.	0.1	37
108	Thermal evolution and crystallisation of polydimethylsiloxane-zirconia nanocomposites prepared by the sol-gel method. <i>Journal of the European Ceramic Society</i> , 1999, 19, 2849-2858.	2.8	37

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109	Synthesis and characterization of Si ⁴⁺ -Zr ⁴⁺ -C ⁴⁺ -O ceramics from polymer precursors. Journal of the European Ceramic Society, 1991, 8, 29-34.	2.8	36
110	²⁹ Si MAS NMR investigation of the pyrolysis process of cross-linked polysiloxanes prepared from polymethylhydrosiloxane. Journal of Materials Chemistry, 1996, 6, 1673.	6.7	36
111	Resolution enhancement in solid-state MQ-MAS experiments achieved by composite decoupling. Magnetic Resonance in Chemistry, 1998, 36, 956-959.	1.1	36
112	Synthesis and Characterization of beta'-SiAlON Ceramics from Organosilicon Polymers. Journal of the American Ceramic Society, 1991, 74, 2220-2223.	1.9	34
113	Thermal Decomposition of Poly(methylsilsesquicarbodiimide) to Amorphous Si ³ N ⁴ Ceramics. Chemistry of Materials, 1999, 11, 412-420.	3.2	34
114	Synthesis of periodic mesoporous organosilica from bis(triethoxysilyl)methane and their pyrolytic conversion into porous SiCO glasses. Journal of the European Ceramic Society, 2005, 25, 265-270.	2.8	33
115	A Processable Mullite Precursor Prepared by Reacting Silica and Aluminum Hydroxide with Triethanolamine in Ethylene Glycol: Structural Evolution on Pyrolysis. Journal of the American Ceramic Society, 1997, 80, 2597-2606.	1.9	33
116	Organosilicas based on purine-pyrimidine base pair assemblies: a solid state NMR point of view. Journal of Materials Chemistry, 2008, 18, 392-399.	6.7	32
117	Electron spin resonance study of hydrogenation effects in polycrystalline silicon. Applied Physics Letters, 1986, 49, 1620-1622.	1.5	31
118	Investigation of the sol-gel chemistry of ethylacetoacetate modified aluminum sec-butoxide. Journal of Sol-Gel Science and Technology, 1994, 3, 157-168.	1.1	31
119	Sol-gel precursors: a spectroscopic study of transesterification reactions between silicon and titanium alkoxides. Journal of Non-Crystalline Solids, 1994, 167, 29-36.	1.5	31
120	Controlled collagen assembly to build dense tissue-like materials for tissue engineering. Soft Matter, 2011, 7, 9659.	1.2	31
121	Sol-gel encapsulation of cresol red in presence of surfactants. Journal of Sol-Gel Science and Technology, 2012, 62, 117-125.	1.1	31
122	Energetics and Structure of Polymer-Derived Si ₃ N ₄ -(B ₂ O ₃ -C) Glasses: Effect of the Boron Content and Pyrolysis Temperature. Journal of the American Ceramic Society, 2014, 97, 303-309.	1.9	31
123	First Direct Observation by ¹⁷ O Liquid NMR of Co-condensation Reactions between Methyl-Substituted Silicon Alkoxides. Chemistry of Materials, 1995, 7, 1050-1052.	3.2	30
124	Solid state ⁴⁷ Ti, ⁸⁷ Sr and ¹³⁷ Ba NMR characterisation of mixed barium/strontium titanate perovskites. Solid State Nuclear Magnetic Resonance, 2004, 26, 147-152.	1.5	30
125	Crystallisation behaviour and polytype transformation of polymer-derived silicon carbide. Journal of the European Ceramic Society, 1997, 17, 659-666.	2.8	29
126	Evolution of C-rich SiOC ceramics: Part II. Characterization by high lateral resolution techniques: electron energy-loss spectroscopy, high-resolution TEM and energy-filtered TEM. International Journal of Materials Research, 2006, 97, 710-720.	0.8	29

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127	Sol-gel synthesis and NMR characterization of ceramics. <i>Ceramics International</i> , 1997, 23, 13-18.	2.3	28
128	Influence of the nature of the R Group on the Hydrolysis and Condensation Process of Trifunctional Silicon Alkoxides, R-Si(OR') ₃ . <i>Materials Research Society Symposia Proceedings</i> , 1994, 346, 365.	0.1	27
129	²⁹ Si and ¹³ C NMR Investigation of the Polysilane-to-Poly(carbosilane) Conversion of Poly(methylchlorosilanes) Using Cross-Polarization and Inversion Recovery Cross-Polarization Techniques. <i>Chemistry of Materials</i> , 1996, 8, 1415-1428.	3.2	27
130	Encapsulation of Ibuprofen in Mesoporous Silica: Solid State NMR Characterization. <i>Materials Research Society Symposia Proceedings</i> , 2003, 775, 3261.	0.1	27
131	New Monofunctional POSS and Its Utilization as Dewetting Additive in Methacrylate Based Free-Standing Films. <i>Chemistry of Materials</i> , 2009, 21, 4163-4171.	3.2	27
132	GIPAW (gauge including projected augmented wave) and local dynamics in ¹³ C and ²⁹ Si solid state NMR: the study case of silsesquioxanes (RSiO _{1.5}) ₈ . <i>Physical Chemistry Chemical Physics</i> , 2009, 11, 6953.	1.3	27
133	Nanoscale Platelet Formation by Monounsaturated and Saturated Sphorolipids under Basic pH Conditions. <i>Chemistry - A European Journal</i> , 2015, 21, 19265-19277.	1.7	27
134	Vibrational Signatures of Calcium Oxalate Polyhydrates. <i>ChemistrySelect</i> , 2018, 3, 8801-8812.	0.7	27
135	NMR Studies on Hydrolysis and Condensation Reactions of Alkoxysilanes Containing Si-H Bonds. <i>Journal of Sol-Gel Science and Technology</i> , 1998, 13, 75-80.	1.1	26
136	In Situ Time-Resolved SAXS Study of the Formation of Mesostructured Organically Modified Silica through Modeling of Micelles Evolution during Surfactant-Templated Self-Assembly. <i>Langmuir</i> , 2012, 28, 17477-17493.	1.6	25
137	Probing the mobility of ibuprofen confined in MCM-41 materials using MAS-PFG NMR and hyperpolarised- ¹²⁹ Xe NMR spectroscopy. <i>Physical Chemistry Chemical Physics</i> , 2013, 15, 18805.	1.3	25
138	Comparative study of various sol-gel preparations of cordierite using aluminum-27 and silicon-29 liquid- and solid-state NMR spectroscopy. <i>Chemistry of Materials</i> , 1993, 5, 323-330.	3.2	24
139	In-Situ SAXS Studies on the Formation of Silicate/Surfactant Mesophases with Solubilized Benzene under Acidic Conditions. <i>Langmuir</i> , 2002, 18, 10053-10057.	1.6	24
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141	Probing atomic scale transformation of fossil dental enamel using Fourier transform infrared and nuclear magnetic resonance spectroscopy: A case study from the Tugen Hills (Rift Gregory, Kenya). <i>Acta Biomaterialia</i> , 2014, 10, 3952-3958.	4.1	24
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