Cyril Aymonier

List of Publications by Year
in descending order

185 papers	7,157 citations	61857 43 h-index	69108 77 g-index
193 all docs	193 docs citations	193 times ranked	8243 citing authors

#	Article	IF	Citations
1	Nanostructured materials for photocatalysis. Chemical Society Reviews, 2019, 48, 3868-3902.	18.7	744
2	Thermogravimetric analysis as a new method to determine the lignocellulosic composition of biomass. Biomass and Bioenergy, 2011, 35, 298-307.	2.9	545
3	Hybrids of silver nanoparticles with amphiphilic hyperbranched macromolecules exhibiting antimicrobial properties. Chemical Communications, 2002, , 3018-3019.	2.2	329
4	Review of supercritical fluids in inorganic materials science. Journal of Supercritical Fluids, 2006, 38, 242-251.	1.6	262
5	Design of functional nanostructured materials using supercritical fluids. Journal of Supercritical Fluids, 2009, 47, 508-516.	1.6	189
6	Current and Foreseeable Applications of Supercritical Water for Energy and the Environment. ChemSusChem, 2008, 1, 486-503.	3.6	178
7	Near- and supercritical solvolysis of carbon fibre reinforced polymers (CFRPs) for recycling carbon fibers as a valuable resource: State of the art. Journal of Supercritical Fluids, 2012, 66, 232-240.	1.6	171
8	Design and Packaging of Microreactors for High Pressure and High Temperature Applications. Industrial & Engineering Chemistry Research, 2010, 49, 11310-11320.	1.8	162
9	Review on materials science and supercritical fluids. Current Opinion in Solid State and Materials Science, 2003, 7, 331-340.	5.6	150
10	Supercritical microfluidics: Opportunities in flow-through chemistry and materials science. Journal of Supercritical Fluids, 2012, 66, 251-264.	1.6	124
11	Supercritical water for environmental technologies. Journal of Chemical Technology and Biotechnology, 2010, 85, 583-589.	1.6	110
12	Solubility of inorganic salts in sub- and supercritical hydrothermal environment: Application to SCWO processes. Journal of Supercritical Fluids, 2017, 120, 18-31.	1.6	92
13	Environmental Feasibility of the Recycling of Carbon Fibers from CFRPs by Solvolysis Using Supercritical Water. ACS Sustainable Chemistry and Engineering, 2014, 2, 1498-1502.	3.2	90
14	Poly(Methyl methacrylate)/Palladium Nanocomposites:â€‰ Synthesis and Characterization of the Morphological, Thermomechanical, and Thermal Properties. Chemistry of Materials, 2003, 15, 4874-4878.	3.2	85
15	Near- and Supercritical Alcohols as Solvents and Surface Modifiers for the Continuous Synthesis of Cerium Oxide Nanoparticles. Langmuir, 2012, 28, 16656-16663.	1.6	83
16	Shape-Selective Synthesis of Palladium Nanoparticles Stabilized by Highly Branched Amphiphilic Polymers. Advanced Functional Materials, 2004, 14, 999-1004.	7.8	81
17	Synthesis of nanostructured materials in supercritical ammonia: nitrides, metals and oxides. Journal of Materials Chemistry, 2004, 14, 228.	6.7	78
18	Single-step synthesis of well-crystallized and pure barium titanate nanoparticles in supercritical fluids. Nanotechnology, 2005, 16, 1137-1143.	1.3	73

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19	Hydrothermal oxidation of a nitrogen-containing compound: the fenuron. Journal of Supercritical Fluids, 2000, 17, 45-54.	1.6	72
20	Some recent advances in the design and the use of miniaturized droplet-based continuous process: Applications in chemistry and high-pressure microflows. Lab on A Chip, 2011, 11, 779-787.	3.1	68
21	Microfluidic approach for studying CO2 solubility in water and brine using confocal Raman spectroscopy. Chemical Physics Letters, 2012, 551, 139-143.	1.2	68
22	Advances in Subcritical Hydroâ€/Solvothermal Processing of Graphene Materials. Advanced Materials, 2017, 29, 1605473.	11.1	68
23	Prospects of Supercritical Fluids in Realizing Grapheneâ€Based Functional Materials. Advanced Materials, 2016, 28, 2663-2691.	11.1	66
24	Supercritical fluid technology: A reliable process for high quality BaTiO3 based nanomaterials. Advanced Powder Technology, 2014, 25, 1415-1429.	2.0	65
25	Conversion of fern (Pteris vittata L.) biomass from a phytoremediation trial in sub- and supercritical water conditions. Biomass and Bioenergy, 2011, 35, 872-883.	2.9	64
26	High Yield Synthesis of Aspect Ratio Controlled Graphenic Materials from Anthracite Coal in Supercritical Fluids. ACS Nano, 2016, 10, 5293-5303.	7.3	64
27	Synthesis of Exciton Luminescent ZnO Nanocrystals Using Continuous Supercritical Microfluidics. Angewandte Chemie - International Edition, 2011, 50, 12071-12074.	7.2	63
28	Hybrid Materials Combining Photoactive 2,3-DidecyloxyAnthracene Physical Gels and Gold Nanoparticles. Chemistry of Materials, 2009, 21, 3424-3432.	3.2	61
29	Semi-continuous flow recycling method for carbon fibre reinforced thermoset polymers by near- and supercritical solvolysis. Polymer Degradation and Stability, 2016, 133, 264-274.	2.7	59
30	A microfluidic approach for investigating multicomponent system thermodynamics at high pressures and temperatures. Lab on A Chip, 2014, 14, 3843.	3.1	56
31	Synthetic Talc and Talcâ€Like Structures: Preparation, Features and Applications. Chemistry - A European Journal, 2018, 24, 519-542.	1.7	50
32	Playing with chemistry in supercritical solvents and the associated technologies for advanced materials by design. Journal of Supercritical Fluids, 2018, 134, 184-196.	1.6	49
33	Coreâ^'Shell-Structured Highly Branched Poly(ethylenimine amide)s:Â Synthesis and Structure. Macromolecules, 2005, 38, 5914-5920.	2.2	48
34	General Approach for the Synthesis of Organicâ^'Inorganic Hybrid Nanoparticles Mediated by Supercritical CO₂. Journal of the American Chemical Society, 2007, 129, 10602-10606.	6.6	48
35	Degradation pathways of holocellulose, lignin and Î±-cellulose from Pteris vittata fronds in sub- and super critical conditions. Biomass and Bioenergy, 2012, 43, 65-71.	2.9	47
36	Fast and continuous processing of a new sub-micronic lanthanide-based metalâ€“organic framework. New Journal of Chemistry, 2014, 38, 1477-1483.	1.4	47

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37	Coupling in situ synchrotron radiation with ex situ spectroscopy characterizations to study the formation of Ba1â^'xSrxTiO3 nanoparticles in supercritical fluids. Journal of Supercritical Fluids, 2014, 87, 111-117.	1.6	47
38	Positioning supercritical solvolysis among innovative recycling and current waste management scenarios for carbon fiber reinforced plastics thanks to comparative life cycle assessment. Journal of Supercritical Fluids, 2019, 154, 104607.	1.6	47
39	Evaluating nanotechnology opportunities and risks through integration of life-cycle and risk assessment. Nature Nanotechnology, 2017, 12, 734-739.	15.6	46
40	Solution Structure of Metal Particles Prepared in Unimolecular Reactors of Amphiphilic Hyperbranched Macromolecules. Macromolecules, 2004, 37, 7893-7900.	2.2	45
41	Kinetically Controlled Formation of Supported Nanoparticles in Low Temperature Supercritical Media for the Development of Advanced Nanostructured Materials. Journal of Physical Chemistry C, 2009, 113, 5096-5104.	1.5	45
42	CeO 2 nanopowders as solid sorbents for efficient CO 2 capture/release processes. Journal of CO2 Utilization, 2017, 20, 52-58.	3.3	45
43	Dripping to jetting transitions observed from supercritical fluid in liquid microcoflows. Applied Physics Letters, 2009, 95, 134105.	1.5	43
44	Hydrogen sorption properties of magnesium particles decorated with metallic nanoparticles as catalyst. Journal of Alloys and Compounds, 2009, 476, 152-159.	2.8	43
45	Microfluidic supercritical antisolvent continuous processing and direct spray-coating of poly(3-hexylthiophene) nanoparticles for OFET devices. Chemical Communications, 2015, 51, 1008-1011.	2.2	42
46	Simultaneous Graphite Exfoliation and N Doping in Supercritical Ammonia. ACS Applied Materials & Interfaces, 2016, 8, 30964-30971.	4.0	41
47	CeO₂ Nanocrystals from Supercritical Alcohols: New Opportunities for Versatile Functionalizations?. Langmuir, 2014, 30, 5965-5972.	1.6	40
48	In Situ IR Spectroscopy and Ab Initio Calculations To Study Polymer Swelling by Supercritical CO₂. Journal of Physical Chemistry B, 2009, 113, 897-905.	1.2	39
49	Siliconâ€Based Dielectric Metamaterials: Focus on the Current Synthetic Challenges. Angewandte Chemie - International Edition, 2018, 57, 4478-4498.	7.2	39
50	Microfluidic Synthesis of Palladium Nanocrystals Assisted by Supercritical CO₂: Tailored Surface Properties for Applications in Boron Chemistry. Angewandte Chemie - International Edition, 2012, 51, 8525-8528.	7.2	38
51	Hydrothermal Solubilizationâ€“Hydrolysisâ€“Dehydration of Cellulose to Glucose and 5-Hydroxymethylfurfural Over Solid Acid Carbon Catalysts. Topics in Catalysis, 2018, 61, 1912-1927.	1.3	37
52	Bringing together fundamental and applied science: The supercritical fluids route. Journal of Molecular Liquids, 2006, 125, 88-99.	2.3	35
53	Development of an improved falling ball viscometer for high-pressure measurements with supercritical CO2. Journal of Supercritical Fluids, 2010, 55, 96-106.	1.6	35
54	Supported metal NPs on magnesium using SCFs for hydrogen storage: Interface and interphase characterization. Journal of Supercritical Fluids, 2010, 53, 102-107.	1.6	34

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55	Synthesis of cerium oxide-based nanostructures in near- and supercritical fluids. Journal of Supercritical Fluids, 2013, 84, 89-97.	1.6	34
56	Continuous BaTi1â˜'yZryO3 (0â‰¤yâ‰¤1) nanocrystals synthesis in supercritical fluids for nanostructured lead-free ferroelectric ceramics. Materials and Design, 2015, 86, 354-360.	3.3	33
57	Supercritical Fluid Chemical Deposition as an Alternative Process to CVD for the Surface Modification of Materials. Chemical Vapor Deposition, 2011, 17, 342-352.	1.4	32
58	Design at the nanometre scale of multifunctional materials using supercritical fluid chemical deposition. Nanotechnology, 2006, 17, 4594-4599.	1.3	31
59	Hostâ€"Guest Inclusion Compound from Nitramine Crystals Exposed to Condensed Carbon Dioxide. Chemistry - A European Journal, 2010, 16, 13473-13478.	1.7	31
60	Ultrafast and continuous synthesis of crystalline ferrite nanoparticles in supercritical ethanol. Nanoscale, 2013, 5, 2126.	2.8	31
61	Anticipatory life-cycle assessment of supercritical fluid synthesis of barium strontium titanate nanoparticles. Green Chemistry, 2016, 18, 4924-4933.	4.6	31
62	A comparative study of copper thin films deposited using magnetron sputtering and supercritical fluid deposition techniques. Thin Solid Films, 2017, 643, 53-59.	0.8	31
63	Investigation of the precipitation of Na2SO4 in supercritical water. Chemical Engineering Science, 2017, 174, 268-276.	1.9	31
64	Chemistry in supercritical fluids for the synthesis of metal nanomaterials. Reaction Chemistry and Engineering, 2019, 4, 2030-2054.	1.9	31
65	Self-assembled composite nano-materials exploiting a thermo reversible n-acene fibrillar scaffold and organic-capped ZnO nanoparticles. Journal of Materials Chemistry, 2011, 21, 2740.	6.7	30
66	Hybrid organogels and aerogels from co-assembly of structurally different low molecular weight gelators. Journal of Materials Chemistry C, 2013, 1, 3305.	2.7	30
67	Continuous synthesis of high quality CdSe quantum dots in supercritical fluids. Journal of Materials Chemistry C, 2015, 3, 7561-7566.	2.7	30
68	Continuous supercritical synthesis and dielectric behaviour of the whole BST solid solution. Nanotechnology, 2006, 17, 3527-3532.	1.3	29
69	Implementation of in situ SAXS/WAXS characterization into silicon/glass microreactors. Lab on A Chip, 2015, 15, 2002-2008.	3.1	29
70	Supercritical Fluid Flow Synthesis to Support Sustainable Production of Engineered Nanomaterials: Case Study of Titanium Dioxide. ACS Sustainable Chemistry and Engineering, 2018, 6, 5142-5151.	3.2	28
71	Process intensification for the synthesis of ultra-small organic nanoparticles with supercritical CO2 in a microfluidic system. Chemical Engineering Journal, 2020, 397, 125333.	6.6	28
72	Continuous supercritical route for quantum-confined GaN nanoparticles. Reaction Chemistry and Engineering, 2016, 1, 151-155.	1.9	27

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73	Supercritical Fluid Technology of Nanoparticle Coating for New Ceramic Materials. Journal of Nanoscience and Nanotechnology, 2005, 5, 980-983.	0.9	25
74	Particle decoration in super critical fluid to improve the hydrogen sorption cyclability of magnesium. Journal of Alloys and Compounds, 2007, 429, 250-254.	2.8	24
75	Tuning Al2O3 crystallinity under supercritical fluid conditions: Effect on sintering. Journal of the European Ceramic Society, 2008, 28, 223-228.	2.8	24
76	Numerical simulation of dripping and jetting in supercritical fluids/liquid micro coflows. Journal of Supercritical Fluids, 2013, 81, 15-22.	1.6	24
77	Continuous supercritical synthesis of high quality UV-emitting ZnO nanocrystals for optochemical applications. Journal of Materials Chemistry C, 2013, 1, 5058.	2.7	24
78	Insights into BaTi_{1â€“y}Zr_yO₃ (0 â‰¤ y â‰¤ 1) Synthesis under Supercritical Fluid Conditions. Chemistry of Materials, 2016, 28, 3391-3400.	3.2	24
79	Fabrication of plasmonic TiN nanostructures by nitridation of nanoimprinted TiO₂ nanoparticles. Journal of Materials Chemistry C, 2018, 6, 1399-1406.	2.7	24
80	Supercritical Fluid Route for Synthesizing Crystalline Barium Strontium Titanate Nanoparticles. Journal of Nanoscience and Nanotechnology, 2005, 5, 1741-1744.	0.9	23
81	Preparation of functional hybrid palladium nanoparticles using supercritical fluids: a novel approach to detach the growth and functionalization steps. Chemical Communications, 2008, , 1428.	2.2	23
82	Monodisperse model to predict the growth of inorganic nanostructured particles in supercritical fluids through a coalescence and aggregation mechanism. Journal of Supercritical Fluids, 2009, 48, 79-84.	1.6	23
83	Structural Relationships in 2,3-Bis-n-decyloxyanthracene and 12-Hydroxystearic Acid Molecular Gels and Aerogels Processed in Supercritical CO₂. Journal of Physical Chemistry B, 2010, 114, 11409-11419.	1.2	22
84	Low-Temperature Deposition of Undoped Ceria Thin Films in scCO₂ As Improved Interlayers for IT-SOFC. Chemistry of Materials, 2011, 23, 5323-5330.	3.2	22
85	Defect chemistry in ferroelectric perovskites: long standing issues and recent advances. Dalton Transactions, 2015, 44, 13411-13418.	1.6	22
86	Noble metals supported on carbon nanotubes using supercritical fluids for the preparation of composite materials: A look at the interface. Journal of Supercritical Fluids, 2015, 101, 110-116.	1.6	22
87	Dendritic Coreâ”Shell Macromolecules Soluble in Supercritical Carbon Dioxide. Macromolecules, 2006, 39, 3978-3979.	2.2	21
88	Synthesis and Characterization of Functionalized Polysiloxane for the Stabilization of Catalytically Active Metal Nanoparticles. Macromolecules, 2009, 42, 4937-4940.	2.2	21
89	Gasification study of winery waste using a hydrothermal diamond anvil cell. Journal of Supercritical Fluids, 2010, 53, 72-81.	1.6	21
90	Continuous coflow synthesis of hybrid palladium nanocrystals as catalysts for borylation reaction. Nanoscale, 2013, 5, 12425.	2.8	21

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91	A new solvent system: Hydrothermal molten salt. Science Advances, 2020, 6, eaaz7770.	4.7	21
92	Fastâ€Geomimicking using Chemistry in Supercritical Water. Angewandte Chemie - International Edition, 2016, 55, 9868-9871.	7.2	20
93	Aggregation of Na₂SO₄ Nanocrystals in Supercritical Water. Industrial & Engineering Chemistry Research, 2018, 57, 2376-2384.	1.8	20
94	Influence of multiphasic systems on salt(s) solubility in supercritical water: the case of NaCl and NaCl-Na2SO4. Journal of Supercritical Fluids, 2019, 152, 104567.	1.6	20
95	Ultrasound for Hydrothermal Treatments of Aqueous Wastes:â€‰ Solution for Overcoming Salt Precipitation and Corrosion. Industrial & Engineering Chemistry Research, 2000, 39, 4734-4740.	1.8	19
96	Tailor-made Surface Properties of Particles with a Hydrophilic or Hydrophobic Polymer Shell Mediated by Supercritical CO2. Langmuir, 2008, 24, 252-258.	1.6	19
97	Tuning surface grafting density of CeO₂ nanocrystals with near- and supercritical solvent characteristics. Physical Chemistry Chemical Physics, 2016, 18, 1727-1734.	1.3	19
98	Sequential dehydrogenationâ€“arylation of diisopropylamineâ€“borane complex catalyzed by palladium nanoparticles. Tetrahedron, 2014, 70, 6156-6161.	1.0	18
99	Influence of crystallinity and particle size on the electrochemical properties of spray pyrolyzed Nd2NiO4+Î´ powders. Electrochimica Acta, 2013, 87, 330-335.	2.6	17
100	Local Distortions in Nanostructured Ferroelectric Ceramics through Strain Tuning. Advanced Electronic Materials, 2015, 1, 1500190.	2.6	17
101	Microfluidics and Surface-Enhanced Raman Spectroscopy: A Perfect Match for New Analytical Tools. IEEE Transactions on Nanobioscience, 2019, 18, 558-566.	2.2	17
102	Continuous supercritical solvothermal preparation of nanostructured ceria-zirconia as supports for dry methane reforming catalysts. Journal of Supercritical Fluids, 2020, 162, 104855.	1.6	17
103	Determination of Hydrothermal Oxidation Reaction Heats by Experimental and Simulation Investigations. Industrial & Engineering Chemistry Research, 2001, 40, 114-118.	1.8	16
104	Supercritical Water Biomass Gasification Process As a Successful Solution to Valorize Wine Distillery Wastewaters. ACS Sustainable Chemistry and Engineering, 2013, 1, 110-117.	3.2	15
105	Creation of interfaces in composite/hybrid nanostructured materials using supercritical fluids. Nanotechnology Reviews, 2015, 4, .	2.6	15
106	ScCO2 assisted preparation of supported metal NPs. Application to catalyst design.. Journal of Supercritical Fluids, 2015, 105, 84-91.	1.6	15
107	Instant Oneâ€Pot Preparation of Functional Layered Double Hydroxides (LDHs) via a Continuous Hydrothermal Approach. ChemNanoMat, 2017, 3, 614-619.	1.5	15
108	The ferroelectric transition temperature as an intrinsic probe for sintered nanocrystalline BaTiO3synthesized under supercritical conditions. Nanotechnology, 2005, 16, 797-802.	1.3	14

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109	Supercritical fluid deposition of compositionally uniform yttria stabilized zirconia films. Journal of Supercritical Fluids, 2012, 66, 328-332.	1.6	14
110	Luminescence properties of ZrO2 mesoporous thin films doped with Eu3+ and Agn. Microporous and Mesoporous Materials, 2013, 170, 123-130.	2.2	14
111	Simultaneous measurement of fluids density and viscosity using HP/HT capillary devices. Journal of Supercritical Fluids, 2015, 105, 186-192.	1.6	14
112	Investigating nucleation and growth phenomena in microfluidic supercritical antisolvent process by coupling in situ fluorescence spectroscopy and direct numerical simulation. Chemical Engineering Science, 2022, 248, 117240.	1.9	14
113	Nanopowder synthesis of the SOFC cathode material Nd2NiO4+Î´ by ultrasonic spray pyrolysis. Solid State Ionics, 2010, 181, 1015-1023.	1.3	13
114	Supercritical fluid chemical deposition of Pd nanoparticles on magnesiumâ€“scandium alloy for hydrogen storage. Journal of Alloys and Compounds, 2013, 574, 6-12.	2.8	13
115	Effect of Thermal Treatment on the Textural Properties of CeO₂ Powders Synthesized in Nearâ€•and Supercritical Alcohols. ChemPhysChem, 2015, 16, 3493-3499.	1.0	13
116	Ultraâ€Fast Supercritical Hydrothermal Synthesis of Tobermorite under Thermodynamically Metastable Conditions. Angewandte Chemie - International Edition, 2017, 56, 3162-3167.	7.2	13
117	Ultraâ€Fast Supercritical Hydrothermal Synthesis of Tobermorite under Thermodynamically Metastable Conditions. Angewandte Chemie, 2017, 129, 3210-3215.	1.6	13
118	An effective in situ reduction strategy assisted by supercritical fluids for the preparation of graphene - polymer composites. Carbon, 2018, 139, 572-580.	5.4	13
119	Nanofiberâ€Directed Anisotropic Selfâ€Assembly of CdSeâ€“CdS Quantum Rods for Linearly Polarized Light Emission Evidenced by Quantum Rod Orientation Microscopy. Small, 2018, 14, e1802311.	5.2	13
120	Behavior of Silicon Carbide Materials under Dry to Hydrothermal Conditions. Nanomaterials, 2021, 11, 1351.	1.9	13
121	Global reaction heat of acetic acid oxidation in supercritical water. Journal of Supercritical Fluids, 2001, 21, 219-226.	1.6	12
122	Corrosion of ceramics for vinasse gasification in supercritical water. Journal of the European Ceramic Society, 2012, 32, 2219-2233.	2.8	12
123	Highly Reactive Pd NCs by Versatile Continuous Supercritical Fluids Synthesis for the Preparation of Metalâ€“Nonmetal Pd-Based NCs. Journal of Physical Chemistry C, 2014, 118, 14017-14025.	1.5	12
124	Catalysed stereodivergent hydrosilylation with Onium Salts stabilised M(0) nanocatalysts prepared in scCO₂. RSC Advances, 2014, 4, 59953-59960.	1.7	11
125	Simple salts of abundant metals (Fe, Bi, and Ti) supported on montmorillonite as efficient and recyclable catalysts for regioselective intramolecular and intermolecular hydroalkoxylation reactions of double bonds and tandem processes. RSC Advances, 2016, 6, 19807-19818.	1.7	11
126	Supercritical hydrothermal flow synthesis of xonotlite nanofibers. Journal of Flow Chemistry, 2018, 8, 89-95.	1.2	11

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127	Unveiling the complexity of salt(s) in water under transcritical conditions. Journal of Supercritical Fluids, 2020, 165, 104977.	1.6	11
128	Broadband Forward Light Scattering by Architectural Design of Coreâ€“Shell Silicon Particles. Advanced Functional Materials, 2021, 31, 2100915.	7.8	11
129	Fastâ€Geomimicking using Chemistry in Supercritical Water. Angewandte Chemie, 2016, 128, 10022-10025.	1.6	10
130	Continuous supercritical synthesis of unsupported and high specific surface area catalyst precursors for deep-hydrodesulfurization. Journal of Supercritical Fluids, 2016, 117, 252-259.	1.6	10
131	Continuous Synthesis of Nanominerals in Supercritical Water. Chemistry - A European Journal, 2019, 25, 5814-5823.	1.7	10
132	Stabilization of Tetragonal Zirconia Nanocrystallites Using an Original Supercritical-Based Synthesis Route. Chemistry of Materials, 2020, 32, 8169-8181.	3.2	10
133	Hydrolysisâ€“dehydration of cellulose to glucose and 5-hydroxymethylfurfural over Sibunit solid acid carbon catalysts under semi-flow conditions. Wood Science and Technology, 2021, 55, 607-624.	1.4	10
134	Preparation of Nickel Phosphide Hydrodesulfurization Catalysts Assisted by Supercritical Carbon Dioxide. ChemCatChem, 2015, 7, 3441-3444.	1.8	9
135	Supercritical CO2-assisted deposition of NiO on (101)-anatase-TiO2 for efficient facet engineered photocatalysts. New Journal of Chemistry, 2018, 42, 18649-18658.	1.4	9
136	Crosslinked polynorbornene particles synthesis by ringâ€opening metathesis polymerization in dispersion. Journal of Polymer Science Part A, 2012, 50, 1746-1754.	2.5	8
137	Hydrolysis in Near- and SupercriticalÂWater for Biomass Conversion andÂMaterial Recycling. , 2014, , 139-156.		8
138	Innovative architectures in ferroelectric multi-materials: Chemistry, interfaces and strain. Journal of Advanced Dielectrics, 2015, 05, 1530001.	1.5	8
139	Supercritical CO₂ Assisted Preparation of Supported Molybdenum Phosphide for Hydrotreating Catalysis. ChemCatChem, 2017, 9, 2352-2357.	1.8	8
140	Kinetic modeling of the multistep hydrolysis-dehydration of cellulose to platform molecules over a solid carbon acid catalyst in pure water. Reaction Kinetics, Mechanisms and Catalysis, 2020, 130, 669-684.	0.8	8
141	Supercritical carbon dioxide-based cleaning and sterilization treatments for the reuse of filtering facepiece respirators FFP2 in the context of COVID-19 pandemic. Journal of Supercritical Fluids, 2022, 180, 105428.	1.6	8
142	Experiments and Simulations of Time-Dependant Phenomena in a Hydrothermal Oxidation Tubular Reactor. Industrial & Engineering Chemistry Research, 2003, 42, 4708-4714.	1.8	7
143	Breathing Particles for Controlling Thermoâ€Sequential On/Off Drug Delivery. ChemPhysChem, 2012, 13, 692-694.	1.0	7
144	Advanced nanostructured catalysts for hydroboration. Catalysis Today, 2015, 255, 60-65.	2.2	7

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145	A review of Ni and Co incorporation during talc synthesis: Applications to crystal chemistry, industrial compounds and natural Ni- and Co-rich ore. Journal of Geochemical Exploration, 2019, 200, 27-36.	1.5	7
146	Oneâ€Step Synthesis of Spin Crossover Nanoparticles Using Flow Chemistry and Supercritical CO 2. Chemistry - A European Journal, 2020, 26, 16286-16290.	1.7	7
147	Continuous Segmented-Flow Synthesis of Ag and Au Nanoparticles Using a Low Cost Microfluidic PTFE Tubing Reactor. IEEE Transactions on Nanobioscience, 2022, 21, 135-140.	2.2	7
148	Processes Using Supercritical Fluids: A Sustainable Approach for the Design of Functional Nanomaterials. International Journal of Chemical Reactor Engineering, 2007, 5, .	0.6	6
149	Specific core-shell approaches and related properties in nanostructured ferroelectric ceramics. Ferroelectrics, 2018, 532, 138-159.	0.3	6
150	Investigating (Pseudo)-Heterogeneous Pd-Catalysts for Kraft Lignin Depolymerization under Mild Aqueous Basic Conditions. Catalysts, 2021, 11, 1311.	1.6	6
151	In situ Raman investigation of the preparation of HDS catalyst precursors using scCO2. Journal of Supercritical Fluids, 2018, 141, 104-112.	1.6	5
152	Solvothermal flow synthesis of zinc phosphate pigment. Dalton Transactions, 2018, 47, 9136-9142.	1.6	5
153	Greening Pathways for Synthetic Talc Production Based on the Supercritical Hydrothermal Flow Process. ACS Sustainable Chemistry and Engineering, 2021, 9, 16597-16605.	3.2	5
154	Infiltration of nickel and copper catalysts into a GDC backbone assisted by supercritical CO₂ for efficient SOFC anodes. Sustainable Energy and Fuels, 2022, 6, 1801-1811.	2.5	5
155	New trends in supercritical fluids: Energy; materials; processing. A special issueâ€"9th International Symposium on Supercritical Fluids, May 18â€"20, 2009, Arcachon, France. Journal of Supercritical Fluids, 2010, 53, 1.	1.6	4
156	Pd@[nBu4][Br] as a Simple Catalytic System for N-Alkylation Reactions with Alcohols. Molecules, 2016, 21, 1042.	1.7	4
157	Preparation of Nanomaterials in Flow at Supercritical Conditions from Coordination Complexes. Topics in Organometallic Chemistry, 2016, , 177-211.	0.7	4
158	Toward a sustainable preparation of tunable mesoporous silica. Journal of Supercritical Fluids, 2019, 143, 139-145.	1.6	4
159	Correlation between the Dynamics of Nanoconfined Water and the Local Chemical Environment in Calcium Silicate Hydrate Nanominerals. Chemistry - A European Journal, 2021, 27, 11309-11318.	1.7	4
160	In situ fabrication of layered double hydroxide film immobilizing gold nanoparticles in capillary microreactor for efficient catalytic carbonylation of glycerol. Molecular Catalysis, 2021, 513, 111825.	1.0	4
161	CHAPTER 10. Materials Processing and Recycling with Near- and Supercritical CO2-based Solvents. RSC Green Chemistry, 2018, , 304-339.	0.0	4
162	Sub- and supercritical hydrothermal route for the synthesis of xonotlite nanofibers for application to green concrete materials. Journal of Supercritical Fluids, 2022, 184, 105583.	1.6	4

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163	Geoinspired syntheses of materials and nanomaterials. Chemical Society Reviews, 2022, 51, 4828-4866.	18.7	4
164	Doped / Undoped Ceria Buffer Layers for Improved LT SOFC Performances with Pr₂NiO_{4+Î´} Cathode. ECS Transactions, 2011, 35, 1945-1954.	0.3	3
165	Preparation of ceramic materials using supercritical fluid chemical deposition. Journal of Supercritical Fluids, 2018, 141, 113-119.	1.6	3
166	Ba_{0.6}Sr_{0.4}TiO₃ Thin Films Deposited by Spray Coating for High Capacitance Density Capacitors. Physica Status Solidi (A) Applications and Materials Science, 2018, 215, 1800478.	0.8	3
167	Role of CeO₂-ZrO₂Support for Structural, Textural and Functional Properties of Ni-based Catalysts Active in Dry Reforming of Methane. E3S Web of Conferences, 2019, 108, 02018.	0.2	3
168	Wireâ€Like Tipâ€Toâ€Tip Linked Assemblies of CdSeâ€CdS Quantum Rods Promoted on Supramolecular Nanofibers of Hybrid Organoâ€•and Hydrogels. ChemNanoMat, 2020, 6, 79-88.	1.5	3
169	Supercritical fluid techniques. European Journal of Control, 2006, 31, 317-337.	1.6	3
170	Application of Polymer Swelling by scCO₂ to the Synthesis of Polymer/Metal Nanocomposites. Solid State Phenomena, 0, 151, 24-29.	0.3	2
171	A water-based process for the surface functionalisation of ceramic fibres. Green Chemistry, 2020, 22, 8308-8315.	4.6	2
172	Flow supercritical synthesis of brucite and magnesian T-O, T-O-T phyllosilicates: an opportunity to tune the structure with the solvent composition. Clay Minerals, 2018, 53, 497-503.	0.2	1
173	Fabrication of High Capacitance Density Capacitor Using Spray Coated Ba0.6Sr0.4TiO3 Thin Films. , 2018, , .		1
174	Chemistry Platform for the Ultrafast Continuous Synthesis of Highâ€Quality IIIâ€“V Quantum Dots. Chemistry - A European Journal, 2021, 27, 12965-12970.	1.7	1
175	<title>Interferometric measurements of thermo-optic coefficients of ZnS, CaF<formula><inf><roman>2</roman></inf></formula>, and Ge in the infrared</title>. , 1996, 2775, 115.		0
176	Data for scaling-up hydrothermal waste water treatment process. High Pressure Research, 2001, 20, 507-514.	0.4	0
177	One-step Solvothermal Synthesis and Characterization of BaTiO3 Nanoparticles. Materials Research Society Symposia Proceedings, 2005, 878, 1.	0.1	0
178	Formation of controlled alumina films using Supercritical Fluids Chemical Deposition for electronic and telecommunication devices. Materials Research Society Symposia Proceedings, 2008, 1113, 1.	0.1	0
179	Luminescence of sensitive materials: towards new optical sensing. Proceedings of SPIE, 2015, , .	0.8	0
180	Ba<inf>1â^'x</inf>Sr<inf>x</inf>TiO<inf>3</inf> (x =0.4) nanoparticles dispersion for 3D integration of decoupling capacitors on glass interposer. , 2016, , .		0

#	Article	IF	Citations
181	Herausforderungen bei der Synthese siliciumbasierter dielektrischer Metamaterialien. Angewandte Chemie, 2018, 130, 4568-4589.	1.6	0
182	Frontispiece: Synthetic Talc and Talcâ€Like Structures: Preparation, Features and Applications. Chemistry - A European Journal, 2018, 24, .	1.7	0
183	Frontispiece: Continuous Synthesis of Nanominerals in Supercritical Water. Chemistry - A European Journal, 2019, 25, .	1.7	0
184	Correlation between the Dynamics of Nanoconfined Water and the Local Chemical Environment in Calcium Silicate Hydrate Nanominerals. Chemistry - A European Journal, 2021, 27, 11238-11238.	1.7	0
185	Supercritical Fluids as New Reaction Media to Synthesize Nanostructured Materials. Materials Research Society Symposia Proceedings, 2003, 775, 1161.	0.1	0