Cyril Aymonier

List of Publications by Citations

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The third column is the impact factor (IF) of the journal, and the fourth column is the number of citations of the article.

178 papers	5,694 citations	38 h-index	68 g-index
193 ext. papers	6,443 ext. citations	6.3 avg, IF	5.97 L-index

#	Paper	IF	Citations
178	Nanostructured materials for photocatalysis. *Chemical Society Reviews*, **2019**, 48, 3868-3902	58.5	479
177	Thermogravimetric analysis as a new method to determine the lignocellulosic composition of biomass. *Biomass and Bioenergy*, **2011**, 35, 298-307	5.3	416
176	Hybrids of silver nanoparticles with amphiphilic hyperbranched macromolecules exhibiting antimicrobial properties. *Chemical Communications*, **2002**, 3018-9	5.8	291
175	Review of supercritical fluids in inorganic materials science. *Journal of Supercritical Fluids*, **2006**, 38, 242-251	4.2	235
174	Design of functional nanostructured materials using supercritical fluids. *Journal of Supercritical Fluids*, **2009**, 47, 508-516	4.2	177
173	Current and foreseeable applications of supercritical water for energy and the environment. *ChemSusChem*, **2008**, 1, 486-503	8.3	145
172	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	4.2	139
171	Design and Packaging of Microreactors for High Pressure and High Temperature Applications. *Industrial & Engineering Chemistry Research*, **2010**, 49, 11310-11320	3.9	139
170	Review on materials science and supercritical fluids. *Current Opinion in Solid State and Materials Science*, **2003**, 7, 331-340	12	133
169	Supercritical microfluidics: Opportunities in flow-through chemistry and materials science. *Journal of Supercritical Fluids*, **2012**, 66, 251-264	4.2	109
168	Supercritical water for environmental technologies. *Journal of Chemical Technology and Biotechnology*, **2010**, 85, 583-589	3.5	96
167	Poly(Methyl methacrylate)/Palladium Nanocomposites: Synthesis and Characterization of the Morphological, Thermomechanical, and Thermal Properties. *Chemistry of Materials*, **2003**, 15, 4874-4878	9.6	80
166	Near- and supercritical alcohols as solvents and surface modifiers for the continuous synthesis of cerium oxide nanoparticles. *Langmuir*, **2012**, 28, 16656-63	4	77
165	Shape-Selective Synthesis of Palladium Nanoparticles Stabilized by Highly Branched Amphiphilic Polymers. *Advanced Functional Materials*, **2004**, 14, 999-1004	15.6	76
164	Synthesis of nanostructured materials in supercritical ammonia: nitrides, metals and oxides. *Journal of Materials Chemistry*, **2004**, 14, 228		72
163	Environmental Feasibility of the Recycling of Carbon Fibers from CFRPs by Solvolysis Using Supercritical Water. *ACS Sustainable Chemistry and Engineering*, **2014**, 2, 1498-1502	8.3	65
162	Solubility of inorganic salts in sub- and supercritical hydrothermal environment: Application to SCWO processes. *Journal of Supercritical Fluids*, **2017**, 120, 18-31	4.2	65

161	Single-step synthesis of well-crystallized and pure barium titanate nanoparticles in supercritical fluids. *Nanotechnology*, **2005**, 16, 1137-1143	3.4	65
160	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, 779-87	7.2	62
159	Hybrid Materials Combining Photoactive 2,3-DidecyloxyAnthracene Physical Gels and Gold Nanoparticles. *Chemistry of Materials*, **2009**, 21, 3424-3432	9.6	58
158	Supercritical fluid technology: A reliable process for high quality BaTiO3 based nanomaterials. *Advanced Powder Technology*, **2014**, 25, 1415-1429	4.6	57
157	Prospects of Supercritical Fluids in Realizing Graphene-Based Functional Materials. *Advanced Materials*, **2016**, 28, 2663-91	24	54
156	Microfluidic approach for studying CO2 solubility in water and brine using confocal Raman spectroscopy. *Chemical Physics Letters*, **2012**, 551, 139-143	2.5	54
155	Synthesis of exciton luminescent ZnO nanocrystals using continuous supercritical microfluidics. *Angewandte Chemie - International Edition*, **2011**, 50, 12071-4	16.4	53
154	Hydrothermal oxidation of a nitrogen-containing compound: the fenuron. *Journal of Supercritical Fluids*, **2000**, 17, 45-54	4.2	53
153	High Yield Synthesis of Aspect Ratio Controlled Graphenic Materials from Anthracite Coal in Supercritical Fluids. *ACS Nano*, **2016**, 10, 5293-303	16.7	51
152	A microfluidic approach for investigating multicomponent system thermodynamics at high pressures and temperatures. *Lab on A Chip*, **2014**, 14, 3843-9	7.2	45
151	Advances in Subcritical Hydro-/Solvothermal Processing of Graphene Materials. *Advanced Materials*, **2017**, 29, 1605473	24	44
150	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	3.8	44
149	General approach for the synthesis of organic-inorganic hybrid nanoparticles mediated by supercritical CO2. *Journal of the American Chemical Society*, **2007**, 129, 10602-6	16.4	44
148	Solution Structure of Metal Particles Prepared in Unimolecular Reactors of Amphiphilic Hyperbranched Macromolecules. *Macromolecules*, **2004**, 37, 7893-7900	5.5	44
147	Conversion of fern (Pteris vittata L.) biomass from a phytoremediation trial in sub- and supercritical water conditions. *Biomass and Bioenergy*, **2011**, 35, 872-883	5.3	43
146	Hydrogen sorption properties of magnesium particles decorated with metallic nanoparticles as catalyst. *Journal of Alloys and Compounds*, **2009**, 476, 152-159	5.7	42
145	Core□Shell-Structured Highly Branched Poly(ethylenimine amide)s:□Synthesis and Structure. *Macromolecules*, **2005**, 38, 5914-5920	5.5	42
144	Evaluating nanotechnology opportunities and risks through integration of life-cycle and risk assessment. *Nature Nanotechnology*, **2017**, 12, 734-739	28.7	41

143	Dripping to jetting transitions observed from supercritical fluid in liquid microcoflows. *Applied Physics Letters*, **2009**, 95, 134105	3.4	41
142	CeO□nanocrystals from supercritical alcohols: new opportunities for versatile functionalizations?. *Langmuir*, **2014**, 30, 5965-72	4	39
141	Coupling in situ synchrotron radiation with ex situ spectroscopy characterizations to study the formation of Ba1□SrxTiO3 nanoparticles in supercritical fluids. *Journal of Supercritical Fluids*, **2014**, 87, 111-117	4.2	38
140	Degradation pathways of holocellulose, lignin and □-cellulose from Pteris vittata fronds in sub- and super critical conditions. *Biomass and Bioenergy*, **2012**, 43, 65-71	5.3	37
139	In situ IR spectroscopy and ab initio calculations to study polymer swelling by supercritical CO(2). *Journal of Physical Chemistry B*, **2009**, 113, 897-905	3.4	37
138	Semi-continuous flow recycling method for carbon fibre reinforced thermoset polymers by near- and supercritical solvolysis. *Polymer Degradation and Stability*, **2016**, 133, 264-274	4.7	36
137	Fast and continuous processing of a new sub-micronic lanthanide-based metal□rganic framework. *New Journal of Chemistry*, **2014**, 38, 1477-1483	3.6	35
136	Microfluidic synthesis of palladium nanocrystals assisted by supercritical CO2: tailored surface properties for applications in boron chemistry. *Angewandte Chemie - International Edition*, **2012**, 51, 8525-8	16.4	35
135	Microfluidic supercritical antisolvent continuous processing and direct spray-coating of poly(3-hexylthiophene) nanoparticles for OFET devices. *Chemical Communications*, **2015**, 51, 1008-11	5.8	34
134	Synthetic Talc and Talc-Like Structures: Preparation, Features and Applications. *Chemistry - A European Journal*, **2018**, 24, 519-542	4.8	34
133	Playing with chemistry in supercritical solvents and the associated technologies for advanced materials by design. *Journal of Supercritical Fluids*, **2018**, 134, 184-196	4.2	33
132	Bringing together fundamental and applied science: The supercritical fluids route. *Journal of Molecular Liquids*, **2006**, 125, 88-99	6	33
131	Supported metal NPs on magnesium using SCFs for hydrogen storage: Interface and interphase characterization. *Journal of Supercritical Fluids*, **2010**, 53, 102-107	4.2	32
130	Ultrafast and continuous synthesis of crystalline ferrite nanoparticles in supercritical ethanol. *Nanoscale*, **2013**, 5, 2126-32	7.7	30
129	Development of an improved falling ball viscometer for high-pressure measurements with supercritical CO2. *Journal of Supercritical Fluids*, **2010**, 55, 96-106	4.2	30
128	Simultaneous Graphite Exfoliation and N Doping in Supercritical Ammonia. *ACS Applied Materials & Interfaces*, **2016**, 8, 30964-30971	9.5	29
127	Supercritical Fluid Chemical Deposition as an Alternative Process to CVD for the Surface Modification of Materials. *Chemical Vapor Deposition*, **2011**, 17, 342-352		29
126	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		29

125	Design at the nanometre scale of multifunctional materials using supercritical fluid chemical deposition. *Nanotechnology*, **2006**, 17, 4594-9	3.4	29
124	Continuous synthesis of high quality CdSe quantum dots in supercritical fluids. *Journal of Materials Chemistry C*, **2015**, 3, 7561-7566	7.1	28
123	Synthesis of cerium oxide-based nanostructures in near- and supercritical fluids. *Journal of Supercritical Fluids*, **2013**, 84, 89-97	4.2	28
122	Continuous supercritical synthesis and dielectric behaviour of the whole BST solid solution. *Nanotechnology*, **2006**, 17, 3527-32	3.4	27
121	Silicon-Based Dielectric Metamaterials: Focus on the Current Synthetic Challenges. *Angewandte Chemie - International Edition*, **2018**, 57, 4478-4498	16.4	27
120	Hydrothermal Solubilization–Hydrolysis–Dehydration of Cellulose to Glucose and 5-Hydroxymethylfurfural Over Solid Acid Carbon Catalysts. *Topics in Catalysis*, **2018**, 61, 1912-1927	2.3	27
119	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	4.2	26
118	Continuous BaTi1−xZryO3 (0≤x≤1) nanocrystals synthesis in supercritical fluids for nanostructured lead-free ferroelectric ceramics. *Materials and Design*, **2015**, 86, 354-360	8.1	26
117	Hybrid organogels and aerogels from co-assembly of structurally different low molecular weight gelators. *Journal of Materials Chemistry C*, **2013**, 1, 3305	7.1	26
116	Investigation of the precipitation of Na2SO4 in supercritical water. *Chemical Engineering Science*, **2017**, 174, 268-276	4.4	24
115	Supercritical fluid technology of nanoparticle coating for new ceramic materials. *Journal of Nanoscience and Nanotechnology*, **2005**, 5, 980-3	1.3	24
114	CeO 2 nanopowders as solid sorbents for efficient CO 2 capture/release processes. *Journal of CO2 Utilization*, **2017**, 20, 52-58	7.6	23
113	Implementation of in situ SAXS/WAXS characterization into silicon/glass microreactors. *Lab on A Chip*, **2015**, 15, 2002-8	7.2	23
112	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	4.2	23
111	Tuning Al2O3 crystallinity under supercritical fluid conditions: Effect on sintering. *Journal of the European Ceramic Society*, **2008**, 28, 223-228	6	23
110	Particle decoration in super critical fluid to improve the hydrogen sorption cyclability of magnesium. *Journal of Alloys and Compounds*, **2007**, 429, 250-254	5.7	23
109	Anticipatory life-cycle assessment of supercritical fluid synthesis of barium strontium titanate nanoparticles. *Green Chemistry*, **2016**, 18, 4924-4933	10	22
108	Low-Temperature Deposition of Undoped Ceria Thin Films in scCO2As Improved Interlayers for IT-SOFC. *Chemistry of Materials*, **2011**, 23, 5323-5330	9.6	22

107	Structural relationships in 2,3-bis-n-decyloxyanthracene and 12-hydroxystearic acid molecular gels and aerogels processed in supercritical CO(2). *Journal of Physical Chemistry B*, **2010**, 114, 11409-19	3.4	22
106	Preparation of functional hybrid palladium nanoparticles using supercritical fluids: a novel approach to detach the growth and functionalization steps. *Chemical Communications*, **2008**, 1428-30	5.8	21
105	Dendritic Core□Shell Macromolecules Soluble in Supercritical Carbon Dioxide. *Macromolecules*, **2006**, 39, 3978-3979	5.5	21
104	Supercritical fluid route for synthesizing crystalline Barium Strontium Titanate nanoparticles. *Journal of Nanoscience and Nanotechnology*, **2005**, 5, 1741-4	1.3	21
103	Chemistry in supercritical fluids for the synthesis of metal nanomaterials. *Reaction Chemistry and Engineering*, **2019**, 4, 2030-2054	4.9	20
102	Numerical simulation of dripping and jetting in supercritical fluids/liquid micro coflows. *Journal of Supercritical Fluids*, **2013**, 81, 15-22	4.2	20
101	Continuous supercritical synthesis of high quality UV-emitting ZnO nanocrystals for optochemical applications. *Journal of Materials Chemistry C*, **2013**, 1, 5058	7.1	20
100	Continuous coflow synthesis of hybrid palladium nanocrystals as catalysts for borylation reaction. *Nanoscale*, **2013**, 5, 12425-31	7.7	20
99	Tuning surface grafting density of CeO2 nanocrystals with near- and supercritical solvent characteristics. *Physical Chemistry Chemical Physics*, **2016**, 18, 1727-34	3.6	19
98	Synthesis and Characterization of Functionalized Polysiloxane for the Stabilization of Catalytically Active Metal Nanoparticles. *Macromolecules*, **2009**, 42, 4937-4940	5.5	19
97	Host-guest inclusion compound from nitramine crystals exposed to condensed carbon dioxide. *Chemistry - A European Journal*, **2010**, 16, 13473-8	4.8	19
96	Continuous supercritical route for quantum-confined GaN nanoparticles. *Reaction Chemistry and Engineering*, **2016**, 1, 151-155	4.9	19
95	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	4.2	18
94	Gasification study of winery waste using a hydrothermal diamond anvil cell. *Journal of Supercritical Fluids*, **2010**, 53, 72-81	4.2	18
93	Tailor-made surface properties of particles with a hydrophilic or hydrophobic polymer shell mediated by supercritical CO2. *Langmuir*, **2008**, 24, 252-8	4	18
92	Fast-Geomimicking using Chemistry in Supercritical Water. *Angewandte Chemie - International Edition*, **2016**, 55, 9868-71	16.4	18
91	Ultrasound for Hydrothermal Treatments of Aqueous Wastes: Solution for Overcoming Salt Precipitation and Corrosion. *Industrial & Engineering Chemistry Research*, **2000**, 39, 4734-4740	3.9	17
90	Insights into BaTi1□ZryO3 (0 □y □1) Synthesis under Supercritical Fluid Conditions. *Chemistry of Materials*, **2016**, 28, 3391-3400	9.6	17

89	A comparative study of copper thin films deposited using magnetron sputtering and supercritical fluid deposition techniques. *Thin Solid Films*, **2017**, 643, 53-59	2.2	16
88	Defect chemistry in ferroelectric perovskites: long standing issues and recent advances. *Dalton Transactions*, **2015**, 44, 13411-8	4.3	16
87	Determination of Hydrothermal Oxidation Reaction Heats by Experimental and Simulation Investigations. *Industrial & Engineering Chemistry Research*, **2001**, 40, 114-118	3.9	16
86	ScCO2 assisted preparation of supported metal NPs. Application to catalyst design.. *Journal of Supercritical Fluids*, **2015**, 105, 84-91	4.2	15
85	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	8.3	15
84	Fabrication of plasmonic TiN nanostructures by nitridation of nanoimprinted TiO2 nanoparticles. *Journal of Materials Chemistry C*, **2018**, 6, 1399-1406	7.1	15
83	Influence of crystallinity and particle size on the electrochemical properties of spray pyrolyzed Nd2NiO4+□powders. *Electrochimica Acta*, **2013**, 87, 330-335	6.7	15
82	Sequential dehydrogenation□rylation of diisopropylamine□borane complex catalyzed by palladium nanoparticles. *Tetrahedron*, **2014**, 70, 6156-6161	2.4	15
81	Process intensification for the synthesis of ultra-small organic nanoparticles with supercritical CO2 in a microfluidic system. *Chemical Engineering Journal*, **2020**, 397, 125333	14.7	13
80	Supercritical fluid deposition of compositionally uniform yttria stabilized zirconia films. *Journal of Supercritical Fluids*, **2012**, 66, 328-332	4.2	13
79	Supercritical Water Biomass Gasification Process As a Successful Solution to Valorize Wine Distillery Wastewaters. *ACS Sustainable Chemistry and Engineering*, **2013**, 1, 110-117	8.3	13
78	Synthesis of Exciton Luminescent ZnO Nanocrystals Using Continuous Supercritical Microfluidics. *Angewandte Chemie*, **2011**, 123, 12277-12280	3.6	13
77	The ferroelectric transition temperature as an intrinsic probe for sintered nanocrystalline BaTiO3synthesized under supercritical conditions. *Nanotechnology*, **2005**, 16, 797-802	3.4	13
76	Creation of interfaces in composite/hybrid nanostructured materials using supercritical fluids. *Nanotechnology Reviews*, **2015**, 4,	6.3	12
75	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	4.2	12
74	Highly Reactive Pd NCs by Versatile Continuous Supercritical Fluids Synthesis for the Preparation of Metal□Nonmetal Pd-Based NCs. *Journal of Physical Chemistry C*, **2014**, 118, 14017-14025	3.8	12
73	Luminescence properties of ZrO2 mesoporous thin films doped with Eu3+ and Agn. *Microporous and Mesoporous Materials*, **2013**, 170, 123-130	5.3	12
72	Effect of Thermal Treatment on the Textural Properties of CeO2 Powders Synthesized in Near- and Supercritical Alcohols. *ChemPhysChem*, **2015**, 16, 3493-9	3.2	12

71	Aggregation of Na2SO4 Nanocrystals in Supercritical Water. *Industrial & Engineering Chemistry Research*, **2018**, 57, 2376-2384	3.9	11
70	Corrosion of ceramics for vinasse gasification in supercritical water. *Journal of the European Ceramic Society*, **2012**, 32, 2219-2233	6	11
69	Supercritical fluid chemical deposition of Pd nanoparticles on magnesium□scandium alloy for hydrogen storage. *Journal of Alloys and Compounds*, **2013**, 574, 6-12	5.7	11
68	Instant One-Pot Preparation of Functional Layered Double Hydroxides (LDHs) via a Continuous Hydrothermal Approach. *ChemNanoMat*, **2017**, 3, 614-619	3.5	11
67	Nanopowder synthesis of the SOFC cathode material Nd2NiO4+□by ultrasonic spray pyrolysis. *Solid State Ionics*, **2010**, 181, 1015-1023	3.3	11
66	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	3.7	10
65	Catalysed stereodivergent hydrosilylation with Onium Salts stabilised M(0) nanocatalysts prepared in scCO2. *RSC Advances*, **2014**, 4, 59953-59960	3.7	10
64	Microfluidic Synthesis of Palladium Nanocrystals Assisted by Supercritical CO2: Tailored Surface Properties for Applications in Boron Chemistry. *Angewandte Chemie*, **2012**, 124, 8653-8656	3.6	10
63	Global reaction heat of acetic acid oxidation in supercritical water. *Journal of Supercritical Fluids*, **2001**, 21, 219-226	4.2	10
62	An effective in situ reduction strategy assisted by supercritical fluids for the preparation of graphene - polymer composites. *Carbon*, **2018**, 139, 572-580	10.4	10
61	Ultra-Fast Supercritical Hydrothermal Synthesis of Tobermorite under Thermodynamically Metastable Conditions. *Angewandte Chemie - International Edition*, **2017**, 56, 3162-3167	16.4	9
60	Ultra-Fast Supercritical Hydrothermal Synthesis of Tobermorite under Thermodynamically Metastable Conditions. *Angewandte Chemie*, **2017**, 129, 3210-3215	3.6	9
59	Local Distortions in Nanostructured Ferroelectric Ceramics through Strain Tuning. *Advanced Electronic Materials*, **2015**, 1, 1500190	6.4	9
58	Microfluidics and Surface-Enhanced Raman Spectroscopy: A Perfect Match for New Analytical Tools. *IEEE Transactions on Nanobioscience*, **2019**, 18, 558-566	3.4	8
57	Continuous supercritical solvothermal preparation of nanostructured ceria-zirconia as supports for dry methane reforming catalysts. *Journal of Supercritical Fluids*, **2020**, 162, 104855	4.2	8
56	A new solvent system: Hydrothermal molten salt. *Science Advances*, **2020**, 6, eaaz7770	14.3	8
55	Preparation of Nickel Phosphide Hydrodesulfurization Catalysts Assisted by Supercritical Carbon Dioxide. *ChemCatChem*, **2015**, 7, 3441-3444	5.2	8
54	Innovative architectures in ferroelectric multi-materials: Chemistry, interfaces and strain. *Journal of Advanced Dielectrics*, **2015**, 05, 1530001	1.3	8

53	Simultaneous measurement of fluids density and viscosity using HP/HT capillary devices. *Journal of Supercritical Fluids*, **2015**, 105, 186-192	4.2	8
52	Crosslinked polynorbornene particles synthesis by ring-opening metathesis polymerization in dispersion. *Journal of Polymer Science Part A*, **2012**, 50, 1746-1754	2.5	8
51	Fast-Geomimicking using Chemistry in Supercritical Water. *Angewandte Chemie*, **2016**, 128, 10022-10025	3.6	8
50	Supercritical CO2 Assisted Preparation of Supported Molybdenum Phosphide for Hydrotreating Catalysis. *ChemCatChem*, **2017**, 9, 2352-2357	5.2	7
49	Nanofiber-Directed Anisotropic Self-Assembly of CdSe-CdS Quantum Rods for Linearly Polarized Light Emission Evidenced by Quantum Rod Orientation Microscopy. *Small*, **2018**, 14, e1802311	11	7
48	Supercritical hydrothermal flow synthesis of xonotlite nanofibers. *Journal of Flow Chemistry*, **2018**, 8, 89-95	3.3	7
47	Breathing particles for controlling thermo-sequential on/off drug delivery. *ChemPhysChem*, **2012**, 13, 692-4	3.2	7
46	Advanced nanostructured catalysts for hydroboration. *Catalysis Today*, **2015**, 255, 60-65	5.3	7
45	Experiments and Simulations of Time-Dependant Phenomena in a Hydrothermal Oxidation Tubular Reactor. *Industrial & Engineering Chemistry Research*, **2003**, 42, 4708-4714	3.9	7
44	Continuous supercritical synthesis of unsupported and high specific surface area catalyst precursors for deep-hydrodesulfurization. *Journal of Supercritical Fluids*, **2016**, 117, 252-259	4.2	7
43	Continuous Synthesis of Nanominerals in Supercritical Water. *Chemistry - A European Journal*, **2019**, 25, 5814-5823	4.8	7
42	Supercritical CO2-assisted deposition of NiO on (101)-anatase-TiO2 for efficient facet engineered photocatalysts. *New Journal of Chemistry*, **2018**, 42, 18649-18658	3.6	7
41	Hydrolysis in Near- and Supercritical Water for Biomass Conversion and Material Recycling **2014**, 139-156		6
40	In situ Raman investigation of the preparation of HDS catalyst precursors using scCO2. *Journal of Supercritical Fluids*, **2018**, 141, 104-112	4.2	5
39	Processes Using Supercritical Fluids: A Sustainable Approach for the Design of Functional Nanomaterials. *International Journal of Chemical Reactor Engineering*, **2007**, 5,	1.2	5
38	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	3.8	4
37	Preparation of Nanomaterials in Flow at Supercritical Conditions from Coordination Complexes. *Topics in Organometallic Chemistry*, **2016**, 177-211	0.6	4
36	Solvothermal flow synthesis of zinc phosphate pigment. *Dalton Transactions*, **2018**, 47, 9136-9142	4.3	4

35	New trends in supercritical fluids: Energy; materials; processing. A special issue□th International Symposium on Supercritical Fluids, May 18□0, 2009, Arcachon, France. *Journal of Supercritical Fluids*, **2010**, 53, 1	4.2	4
34	CHAPTER 10:Materials Processing and Recycling with Near- and Supercritical CO2-based Solvents. *RSC Green Chemistry*, **2018**, 304-339	0.9	4
33	Stabilization of Tetragonal Zirconia Nanocrystallites Using an Original Supercritical-Based Synthesis Route. *Chemistry of Materials*, **2020**, 32, 8169-8181	9.6	4
32	Specific core-shell approaches and related properties in nanostructured ferroelectric ceramics. *Ferroelectrics*, **2018**, 532, 138-159	0.6	4
31	One-Step Synthesis of Spin Crossover Nanoparticles Using Flow Chemistry and Supercritical CO. *Chemistry - A European Journal*, **2020**, 26, 16286-16290	4.8	3
30	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	1.6	3
29	Toward a sustainable preparation of tunable mesoporous silica. *Journal of Supercritical Fluids*, **2019**, 143, 139-145	4.2	3
28	Doped / Undoped Ceria Buffer Layers for Improved LT SOFC Performances with Pr2NiO4+□ Cathode. *ECS Transactions*, **2011**, 35, 1945-1954	1	3
27	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	4.2	3
26	Unveiling the complexity of salt(s) in water under transcritical conditions. *Journal of Supercritical Fluids*, **2020**, 165, 104977	4.2	3
25	Pd@[nBu][Br] as a Simple Catalytic System for N-Alkylation Reactions with Alcohols. *Molecules*, **2016**, 21,	4.8	3
24	Hydrolysis□ehydration 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	2.5	3
23	Preparation of ceramic materials using supercritical fluid chemical deposition. *Journal of Supercritical Fluids*, **2018**, 141, 113-119	4.2	3
22	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	0.5	2
21	Supercritical fluid techniques. *European Journal of Control*, **2006**, 31, 317-337	2.5	2
20	Investigating nucleation and growth phenomena in microfluidic supercritical antisolvent process by coupling in situ fluorescence spectroscopy and direct numerical simulation. *Chemical Engineering Science*, **2021**, 248, 117240	4.4	2
19	Wire-Like Tip-To-Tip Linked Assemblies of CdSe-CdS Quantum Rods Promoted on Supramolecular Nanofibers of Hybrid Organo- and Hydrogels. *ChemNanoMat*, **2020**, 6, 79-88	3.5	2
18	Ba0.6Sr0.4TiO3 Thin Films Deposited by Spray Coating for High Capacitance Density Capacitors. *Physica Status Solidi (A) Applications and Materials Science*, **2018**, 215, 1800478	1.6	2

List of Publications

17	Application of Polymer Swelling by scCO2 to the Synthesis of Polymer/Metal Nanocomposites. *Solid State Phenomena*, **2009**, 151, 24-29	0.4	1
16	Broadband Forward Light Scattering by Architectural Design of Core–Shell Silicon Particles. *Advanced Functional Materials*, **2021**, 31, 2100915	15.6	1
15	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	3.3	1
14	A water-based process for the surface functionalisation of ceramic fibres. *Green Chemistry*, **2020**, 22, 8308-8315	10	0
13	Investigating (Pseudo)-Heterogeneous Pd-Catalysts for Kraft Lignin Depolymerization under Mild Aqueous Basic Conditions. *Catalysts*, **2021**, 11, 1311	4	0
12	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	4.8	0
11	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	1.3	0
10	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	5.8	0
9	Sub- and supercritical hydrothermal route for the synthesis of xonotlite nanofibers for application to green concrete materials. *Journal of Supercritical Fluids*, **2022**, 184, 105583	4.2	0
8	Herausforderungen bei der Synthese siliciumbasierter dielektrischer Metamaterialien. *Angewandte Chemie*, **2018**, 130, 4568-4589	3.6	
7	Nanostructured Materials Synthesis in Supercritical Fluids for Catalysis Applications **2012**, 281-310		
6	Formation of controlled alumina films using Supercritical Fluids Chemical Deposition for electronic and telecommunication devices. *Materials Research Society Symposia Proceedings*, **2008**, 1113, 1		
5	One-step Solvothermal Synthesis and Characterization of BaTiO3 Nanoparticles. *Materials Research Society Symposia Proceedings*, **2005**, 878, 1		
4	Data for scaling-up hydrothermal waste water treatment process. *High Pressure Research*, **2001**, 20, 507-514	1.1	
3	Supercritical Fluids as New Reaction Media to Synthesize Nanostructured Materials. *Materials Research Society Symposia Proceedings*, **2003**, 775, 1161		
2	Correlation between the Dynamics of Nanoconfined Water and the Local Chemical Environment in Calcium Silicate Hydrate Nanominerals. *Chemistry - A European Journal*, **2021**, 27, 11238	4.8	
1	Chemistry Platform for the Ultrafast Continuous Synthesis of High-Quality III-V Quantum Dots. *Chemistry - A European Journal*, **2021**, 27, 12965-12970	4.8	