

ClÃ©ment Sanchez

List of Publications by Year in descending order

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119
papers

20,712
citations

34105

52
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21540

114
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121
all docs

121
docs citations

121
times ranked

22229
citing authors

#	ARTICLE	IF	CITATIONS
1	Sol-gel chemistry of transition metal oxides. Progress in Solid State Chemistry, 1988, 18, 259-341.	7.2	2,003
2	Chemical Strategies To Design Textured Materials: from Microporous and Mesoporous Oxides to Nanonetworks and Hierarchical Structures. Chemical Reviews, 2002, 102, 4093-4138.	47.7	1,832
3	Biomimetism and bioinspiration as tools for the design of innovative materials and systems. Nature Materials, 2005, 4, 277-288.	27.5	1,294
4	Applications of advanced hybrid organic-inorganic nanomaterials: from laboratory to market. Chemical Society Reviews, 2011, 40, 696.	38.1	1,235
5	Designed Hybrid Organic-Inorganic Nanocomposites from Functional Nanobuilding Blocks. Chemistry of Materials, 2001, 13, 3061-3083.	6.7	1,194
6	Hierarchically porous materials: synthesis strategies and structure design. Chemical Society Reviews, 2017, 46, 481-558.	38.1	1,030
7	Nanocellulose, a Versatile Green Platform: From Biosources to Materials and Their Applications. Chemical Reviews, 2018, 118, 11575-11625.	47.7	1,008
8	Nanoscaled Metal Borides and Phosphides: Recent Developments and Perspectives. Chemical Reviews, 2013, 113, 7981-8065.	47.7	877
9	Controlled Formation of Highly Organized Mesoporous Titania Thin Films: From Mesostructured Hybrids to Mesoporous Nanoanatase TiO ₂ . Journal of the American Chemical Society, 2003, 125, 9770-9786.	13.7	871
10	Chemical modification of alkoxide precursors. Journal of Non-Crystalline Solids, 1988, 100, 65-76.	3.1	741
11	Design, Synthesis, and Properties of Inorganic and Hybrid Thin Films Having Periodically Organized Nanoporosity. Chemistry of Materials, 2008, 20, 682-737.	6.7	735
12	Fundamentals of Mesostructuring Through Evaporation-Induced Self-Assembly. Advanced Functional Materials, 2004, 14, 309-322.	14.9	732
13	Hydrolysis of titanium alkoxides: Modification of the molecular precursor by acetic acid. Journal of Non-Crystalline Solids, 1987, 89, 206-216.	3.1	598
14	Porosity and Mechanical Properties of Mesoporous Thin Films Assessed by Environmental Ellipsometric Porosimetry. Langmuir, 2005, 21, 12362-12371.	3.5	396
15	Aerosol Route to Functional Nanostructured Inorganic and Hybrid Porous Materials. Advanced Materials, 2011, 23, 599-623.	21.0	327
16	Sol-gel chemistry. Journal of Non-Crystalline Solids, 1992, 145, 11-19.	3.1	319
17	Chimie douce: A land of opportunities for the designed construction of functional inorganic and hybrid organic-inorganic nanomaterials. Comptes Rendus Chimie, 2010, 13, 3-39.	0.5	270
18	History of Organic-Inorganic Hybrid Materials: Prehistory, Art, Science, and Advanced Applications. Advanced Functional Materials, 2018, 28, 1704158.	14.9	264

#	ARTICLE	IF	CITATIONS
19	Hydrophobic, Antireflective, Self-Cleaning, and Antifogging Solâˆ“Gel Coatings: An Example of Multifunctional Nanostructured Materials for Photovoltaic Cells. <i>Chemistry of Materials</i> , 2010, 22, 4406-4413.	6.7	258
20	Optimised photocatalytic activity of grid-like mesoporous TiO ₂ films: effect of crystallinity, pore size distribution, and pore accessibility. <i>Journal of Materials Chemistry</i> , 2006, 16, 77-82.	6.7	257
21	Inorganic and Hybrid Nanofibrous Materials Templated with Organogelators. <i>Chemistry of Materials</i> , 2008, 20, 782-820.	6.7	236
22	Hybrid materials science: a promised land for the integrative design of multifunctional materials. <i>Nanoscale</i> , 2014, 6, 6267-6292.	5.6	168
23	Nanocrystalline Transition-Metal Oxide Spheres with Controlled Multi-Scale Porosity. <i>Advanced Functional Materials</i> , 2003, 13, 37-42.	14.9	159
24	Stability of Mesoporous Oxide and Mixed Metal Oxide Materials under Biologically Relevant Conditions. <i>Chemistry of Materials</i> , 2007, 19, 4349-4356.	6.7	146
25	CO ₂ methanation on Ru/TiO ₂ catalysts: On the effect of mixing anatase and rutile TiO ₂ supports. <i>Applied Catalysis B: Environmental</i> , 2018, 220, 615-625.	20.2	141
26	Morphological and Structural Evolution of Co ₃ O ₄ Nanoparticles Revealed by <i>in Situ</i> Electrochemical Transmission Electron Microscopy during Electrocatalytic Water Oxidation. <i>ACS Nano</i> , 2019, 13, 11372-11381.	14.6	140
27	Elaboration of Monodisperse Spherical Hollow Particles with Ordered Mesoporous Silica Shells via Dual Latex/Surfactant Templating: Radial Orientation of Mesopore Channels. <i>Langmuir</i> , 2008, 24, 13132-13137.	3.5	133
28	Integrative Approaches to Hybrid Multifunctional Materials: From Multidisciplinary Research to Applied Technologies. <i>Advanced Materials</i> , 2010, 22, 3208-3214.	21.0	131
29	Nickel phosphide nanocatalysts for the chemoselective hydrogenation of alkynes. <i>Nano Today</i> , 2012, 7, 21-28.	11.9	120
30	Aerosol processing: a wind of innovation in the field of advanced heterogeneous catalysts. <i>Chemical Society Reviews</i> , 2018, 47, 4112-4155.	38.1	117
31	Green scalable aerosol synthesis of porous metalâ€“organic frameworks. <i>Chemical Communications</i> , 2013, 49, 3848.	4.1	103
32	Oneâ€“Pot Aerosol Route to MoO ₃ â€“SiO ₂ â€“Al ₂ O ₃ Catalysts with Ordered Super Microporosity and High Olefin Metathesis Activity. <i>Angewandte Chemie - International Edition</i> , 2012, 51, 2129-2131.	13.8	101
33	A General Solution Route toward Metal Boride Nanocrystals. <i>Angewandte Chemie - International Edition</i> , 2011, 50, 3262-3265.	13.8	99
34	Pyrolysis, Crystallization, and Sintering of Mesostructured Titania Thin Films Assessed by <i>in Situ</i> Thermal Ellipsometry. <i>Journal of the American Chemical Society</i> , 2008, 130, 7882-7897.	13.7	96
35	Facile General Route toward Tunable Magnâ€“li Nanostructures and Their Use As Thermoelectric Metal Oxide/Carbon Nanocomposites. <i>ACS Nano</i> , 2011, 5, 9052-9061.	14.6	95
36	Structure and electrochromism of two-dimensional octahedral molecular sieve hâ€“WO ₃ . <i>Nature Communications</i> , 2019, 10, 327.	12.8	88

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37	Improving the Li-Electrochemical Properties of Monodisperse Ni ₂ P Nanoparticles by Self-Generated Carbon Coating. <i>Chemistry of Materials</i> , 2012, 24, 688-697.	6.7	86
38	Selective CO ₂ methanation on Ru/TiO ₂ catalysts: unravelling the decisive role of the TiO ₂ support crystal structure. <i>Catalysis Science and Technology</i> , 2016, 6, 8117-8128.	4.1	84
39	Coupling Nanobuilding Block and Breath Figures Approaches for the Designed Construction of Hierarchically Templated Porous Materials and Membranes. <i>Chemistry of Materials</i> , 2008, 20, 1049-1056.	6.7	81
40	Hybridization in Materials Science – Evolution, Current State, and Future Aspirations. <i>European Journal of Inorganic Chemistry</i> , 2012, 2012, 5097-5105.	2.0	78
41	Bio-inspired synthetic pathways and beyond: integrative chemistry. <i>New Journal of Chemistry</i> , 2008, 32, 1284.	2.8	76
42	One-pot aerosol synthesis of ordered hierarchical mesoporous core-shell silica nanoparticles. <i>Chemical Communications</i> , 2004, , 1630-1631.	4.1	75
43	Direct Aerosol Synthesis of Large-Pore Amorphous Mesostructured Aluminosilicates with Superior Acid-Catalytic Properties. <i>Angewandte Chemie - International Edition</i> , 2009, 48, 2784-2787.	13.8	75
44	Hierarchically Structured Ultraporous Iridium-Based Materials: A Novel Catalyst Architecture for Proton Exchange Membrane Water Electrolyzers. <i>Advanced Energy Materials</i> , 2019, 9, 1802136.	19.5	72
45	Metal-Dependent Interplay between Crystallization and Phosphorus Diffusion during the Synthesis of Metal Phosphide Nanoparticles. <i>Chemistry of Materials</i> , 2012, 24, 4134-4145.	6.7	71
46	Effect of the size and distribution of supported Ru nanoparticles on their activity in ammonia synthesis under mild reaction conditions. <i>Applied Catalysis A: General</i> , 2014, 474, 194-202.	4.3	65
47	First in-situ SAXS studies of the mesostructuration of spherical silica and titania particles during spray-drying process. <i>Chemical Communications</i> , 2003, , 2798-2799.	4.1	64
48	Soft-Chemistry-Based Routes to Epitaxial Î±-Quartz Thin Films with Tunable Textures. <i>Science</i> , 2013, 340, 827-831.	12.6	64
49	New photoactive hybrid organic-inorganic materials based on titanium-oxo-PHEMA nanocomposites exhibiting mixed valence properties. <i>Journal of Materials Chemistry</i> , 2005, 15, 3380.	6.7	56
50	Enzyme-based biohybrid foams designed for continuous flow heterogeneous catalysis and biodiesel production. <i>Energy and Environmental Science</i> , 2011, 4, 2840.	30.8	56
51	The origin of the high electrochemical activity of pseudo-amorphous iridium oxides. <i>Nature Communications</i> , 2021, 12, 3935.	12.8	56
52	Chemical Modification As a Versatile Tool for Tuning Stability of Silica Based Mesoporous Carriers in Biologically Relevant Conditions. <i>Chemistry of Materials</i> , 2012, 24, 4326-4336.	6.7	55
53	Aerosol route to nanostructured WO ₃ -SiO ₂ -Al ₂ O ₃ metathesis catalysts: Toward higher propene yield. <i>Applied Catalysis A: General</i> , 2014, 470, 458-466.	4.3	54
54	Light-induced charge separation and storage in titanium oxide gels. <i>Physical Review E</i> , 2005, 71, 021403.	2.1	53

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55	Hollow zeolite microspheres as a nest for enzymes: a new route to hybrid heterogeneous catalysts. <i>Chemical Science</i> , 2020, 11, 954-961.	7.4	52
56	Aerosol Route to TiO ₂ •SiO ₂ Catalysts with Tailored Pore Architecture and High Epoxidation Activity. <i>Chemistry of Materials</i> , 2019, 31, 1610-1619.	6.7	50
57	Ink Jet Printing of Microdot Arrays of Mesostructured Silica. <i>Journal of the American Ceramic Society</i> , 2006, 89, 1876-1882.	3.8	48
58	Integrative strategies to hybrid lamellar compounds: an integration challenge. <i>Applied Clay Science</i> , 2014, 100, 2-21.	5.2	48
59	Laser-induced photopatterning of organic•inorganic TiO ₂ -based hybrid materials with tunable interfacial electron transfer. <i>Physical Chemistry Chemical Physics</i> , 2009, 11, 1248.	2.8	47
60	Total oxidation of propane with a nano-RuO ₂ /TiO ₂ catalyst. <i>Applied Catalysis A: General</i> , 2014, 481, 11-18.	4.3	47
61	Revisiting the Molecular Roots of a Ubiquitously Successful Synthesis: Nickel(0) Nanoparticles by Reduction of [Ni(acetylacetonate) ₂]. <i>Chemistry - A European Journal</i> , 2012, 18, 14165-14173.	3.3	43
62	In Situ Solid•Gas Reactivity of Nanoscaled Metal Borides from Molten Salt Synthesis. <i>Inorganic Chemistry</i> , 2017, 56, 9225-9234.	4.0	42
63	Anatase TiO ₂ Nanorods as Cathode Materials for Aluminum-Ion Batteries. <i>ACS Applied Nano Materials</i> , 2019, 2, 6428-6435.	5.0	40
64	New route toward nanosized crystalline metal borides with tuneable stoichiometry and variable morphologies. <i>Faraday Discussions</i> , 2016, 191, 511-525.	3.2	37
65	Tunable Multifunctional Mesoporous Silica Microdots Arrays by Combination of Inkjet Printing, EISA, and Click Chemistry. <i>Chemistry of Materials</i> , 2012, 24, 4337-4342.	6.7	36
66	First acidic macro-mesocellular aluminosilicate monolithic foams •SiAl(HIPE)• and their catalytic properties. <i>Chemical Communications</i> , 2015, 51, 14018-14021.	4.1	36
67	A sustainable aqueous route to highly stable suspensions of monodispersed nano ruthenia. <i>Green Chemistry</i> , 2011, 13, 3230.	9.0	35
68	Mesoporous TiO ₂ Support Materials for Ru-Based CO ₂ Methanation Catalysts. <i>ACS Applied Nano Materials</i> , 2019, 2, 3220-3230.	5.0	34
69	Extinction of photo-induced Ti ³⁺ centres in titanium oxide gels and gel-based oxo-PHEMA hybrids. <i>Chemical Physics Letters</i> , 2006, 429, 523-527.	2.6	33
70	The gel route to Cr ³⁺ -doped TiO ₂ , an ESR study. <i>Journal of Non-Crystalline Solids</i> , 1987, 89, 84-97.	3.1	32
71	Structural transitions at the nanoscale: the example of palladium phosphides synthesized from white phosphorus. <i>Dalton Transactions</i> , 2013, 42, 12667.	3.3	32
72	Original Electrospun Core•Shell Nanostructured Magn•li Titanium Oxide Fibers and their Electrical Properties. <i>Advanced Materials</i> , 2014, 26, 2654-2658.	21.0	25

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73	Following in Situ the Degradation of Mesoporous Silica in Biorelevant Conditions: At Last, a Good Comprehension of the Structure Influence. ACS Applied Materials & Interfaces, 2020, 12, 13598-13612.	8.0	25
74	Using Evaporation-Induced Self-Assembly for the Direct Drug Templating of Therapeutic Vectors with High Loading Fractions, Tunable Drug Release, and Controlled Degradation. Chemistry of Materials, 2013, 25, 4671-4678.	6.7	24
75	Crystallization of hollow mesoporous silica nanoparticles. Chemical Communications, 2015, 51, 4164-4167.	4.1	24
76	Aerosol Route to Highly Efficient (Co)Mo/SiO ₂ Mesoporous Catalysts. Advanced Functional Materials, 2014, 24, 233-239.	14.9	23
77	Water-Induced Phase Separation Forming Macrostructured Epitaxial Quartz Films on Silicon. Advanced Functional Materials, 2014, 24, 5494-5502.	14.9	22
78	Synthesis of Ce ₂ O ₂ S and Gd ₂ (¹⁸² Y) ₂ Ce ₂ O ₂ S Nanoparticles and Reactivity from in Situ X-ray Absorption Spectroscopy and X-ray Photoelectron Spectroscopy. Inorganic Chemistry, 2017, 56, 14227-14236.	4.0	22
79	Phase selective synthesis of nickel silicide nanocrystals in molten salts for electrocatalysis of the oxygen evolution reaction. Nanoscale, 2020, 12, 15209-15213.	5.6	22
80	Surface-Driven Magnetotransport in Perovskite Nanocrystals. Advanced Materials, 2017, 29, 1604745.	21.0	21
81	Inkjet-Printing-Engineered Functional Microdot Arrays Made of Mesoporous Hybrid Organosilicas. Chemistry of Materials, 2010, 22, 3875-3883.	6.7	20
82	Mesoscopically structured nanocrystalline metal oxide thin films. Nanoscale, 2014, 6, 14025-14043.	5.6	18
83	Nickel-Doped Sodium Cobaltite 2D Nanomaterials: Synthesis and Electrocatalytic Properties. Chemistry of Materials, 2018, 30, 4986-4994.	6.7	17
84	Band Gap Engineering from Cation Balance: The Case of Lanthanide Oxysulfide Nanoparticles. Chemistry of Materials, 2019, 31, 5014-5023.	6.7	17
85	Laser imprinting of 3D structures in gel-based titanium oxide organic-inorganic hybrids. Applied Physics A: Materials Science and Processing, 2006, 84, 27-30.	2.3	16
86	New Aluminosilicate Materials with Hierarchical Porosity Generated by Aerosol Process. Oil and Gas Science and Technology, 2009, 64, 681-696.	1.4	16
87	Aerosol synthesis of thermally stable porous noble metals and alloys by using bi-functional templates. Materials Horizons, 2020, 7, 541-550.	12.2	13
88	Origin of transparency in scattering biomimetic collagen materials. Proceedings of the National Academy of Sciences of the United States of America, 2020, 117, 11947-11953.	7.1	13
89	Luminescence properties of pHEMA-TiO ₂ gels based hybrids materials. Journal of Luminescence, 2012, 132, 1192-1199.	3.1	11
90	<i>In situ</i> insight into the unconventional ruthenium catalyzed growth of carbon nanostructures. Nanoscale, 2018, 10, 14957-14965.	5.6	11

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91	Self-Assembled Collagen Microparticles by Aerosol as a Versatile Platform for Injectable Anisotropic Materials. <i>Small</i> , 2020, 16, e1902224.	10.0	11
92	Surprisingly high sensitivity of copper nanoparticles toward coordinating ligands: consequences for the hydride reduction of benzaldehyde. <i>Catalysis Science and Technology</i> , 2018, 8, 5073-5080.	4.1	10
93	An expeditious synthesis of early transition metal carbide nanoparticles on graphitic carbons. <i>Chemical Communications</i> , 2016, 52, 9546-9549.	4.1	9
94	Metal-Induced Crystallization in Metal Oxides. <i>Accounts of Chemical Research</i> , 2022, 55, 171-185.	15.6	9
95	Thermal Stability of Oleate-Stabilized Gd ₂ O ₂ S Nanoplates in Inert and Oxidizing Atmospheres. <i>ChemNanoMat</i> , 2019, 5, 539-546.	2.8	8
96	Unraveling the Role of Alkali Cations in the Growth Mechanism of Gd ₂ O ₂ S Nanoparticles. <i>Chemistry of Materials</i> , 2020, 32, 1131-1139.	6.7	8
97	Unambiguous localization of titanium and iron cations in doped manganese hollandite nanowires. <i>Chemical Communications</i> , 2020, 56, 4812-4815.	4.1	6
98	A Single Molecular Stoichiometric Precursor for Phase-Selective Synthesis of Crystalline and Amorphous Iron Phosphide Nanocatalysts. <i>ChemNanoMat</i> , 2020, 6, 1208-1219.	2.8	6
99	Multicationic Sr ₄ Mn ₃ O ₁₀ mesostructures: molten salt synthesis, analytical electron microscopy study and reactivity. <i>Materials Horizons</i> , 2018, 5, 480-485.	12.2	5
100	Alkoxysilane effect in hybrid material: A comparison of pHEMA-TiO ₂ and pMAPTMS-TiO ₂ nanoparticulate hybrids. <i>Materials Research Bulletin</i> , 2019, 114, 130-137.	5.2	5
101	Hierarchy: enhancing performances beyond limits. <i>National Science Review</i> , 2020, 7, 1624-1625.	9.5	5
102	Exceptional Low-Temperature CO Oxidation over Noble-Metal-Free Iron-Doped Hollandites: An In-Depth Analysis of the Influence of the Defect Structure on Catalytic Performance. <i>ACS Catalysis</i> , 2021, 11, 15026-15039.	11.2	5
103	A Confinement-Driven Nucleation Mechanism of Metal Oxide Nanoparticles Obtained via Thermal Decomposition in Organic Media. <i>Small</i> , 2022, 18, e2200414.	10.0	5
104	Tunable Magnetic Properties of (Gd,Ce) ₂ O ₂ S Oxysulfide Nanoparticles. <i>European Journal of Inorganic Chemistry</i> , 2019, 2019, 762-765.	2.0	4
105	Interlayer Silylation of Layered Octosilicate with Organoalkoxysilanes: Effects of Tetrabutylammonium Fluoride as a Catalyst and the Functional Groups of Silanes. <i>European Journal of Inorganic Chemistry</i> , 2021, 2021, 1836-1845.	2.0	4
106	Different Reactivity of Rutile and Anatase TiO ₂ Nanoparticles: Synthesis and Surface States of Nanoparticles of Mixed-Valence Magn@li Oxides. <i>Chemistry - A European Journal</i> , 2019, 25, 11114-11120.	3.3	3
107	Correlative Microscopy Insight on Electrodeposited Ultrathin Graphite Oxide Films. <i>Journal of Physical Chemistry Letters</i> , 2020, 11, 9117-9122.	4.6	3
108	Early transition metal nano-carbides and nano-hydrides from solid-state metathesis initiated at room temperature. <i>Green Chemistry</i> , 2021, 23, 6431-6448.	9.0	3

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109	Liquid-Phase Synthesis, Sintering, and Transport Properties of Nanoparticle-Based Boron-Rich Composites. <i>Chemistry of Materials</i> , 2021, 33, 2099-2109.	6.7	3
110	Shedding Light on Functional Hybrid Nanocomposites 19th Century Paint Medium. <i>Advanced Functional Materials</i> , 2022, 32, 2106346.	14.9	3
111	Dumbbell-Shaped T8 -POSS with Functional Organic Linkers. <i>European Journal of Inorganic Chemistry</i> , 2019, 2019, 3148-3156.	2.0	2
112	Hydroxyapatites as Versatile Inorganic Hosts of Unusual Pentavalent Manganese Cations. <i>Chemistry of Materials</i> , 2020, 32, 10584-10593.	6.7	2
113	SPRAY DRYING: A VERSATILE ROUTE FOR THE PREPARATION OF NEW ACIDIC MESOSTRUCTURED POWDERS. , 2008, , .		2
114	Liquid Processing of Bismuthâ€Silica Nanoparticle/Aluminum Matrix Nanocomposites for Heat Storage Applications. <i>ACS Applied Nano Materials</i> , 2022, 5, 1917-1924.	5.0	2
115	Interdiffusive Surfactant Procedure for the Preparation of Nanoarchitected Porous Films: Application to the Growth of Titania Thin Films on Silicon Substrates. <i>Langmuir</i> , 2019, 35, 7169-7174.	3.5	1
116	Investigating Nineteenth Century Gel Mediums: From Historical Recipes to Model Systems. <i>Studies in Conservation</i> , 0, , 1-8.	1.1	1
117	Tunable Magnetic Properties of (Gd,Ce) ₂ O ₂ S Oxysulfide Nanoparticles. <i>European Journal of Inorganic Chemistry</i> , 2019, 2019, 741-741.	2.0	0
118	Ultrasoundâ€Assisted Liquidâ€Phase Synthesis and Mechanical Properties of Aluminum Matrix Nanocomposites Incorporating Boride Nanocrystals. <i>Small</i> , 2021, , 2104091.	10.0	0
119	From waste incineration by-products to functional materials: a â€Chimie douceâ€route to VOCs mineral adsorbents. <i>Journal of Sol-Gel Science and Technology</i> , 0, , 1.	2.4	0