Claude Estournes

List of Publications by Year
in descending order

217	8,077	43973 48	64668 79
papers	citations	h-index	g-index

224	224	224	8313
all docs	docs citations	times ranked	citing authors

#	Article	IF	Citations
1	Sintering and densification of nanocrystalline ceramic oxide powders: a review. Advances in Applied Ceramics, 2008, 107, 159-169.	0.6	259
2	Mechano-Synthesis, Characterization, and Magnetic Properties of Nanoparticles of Cobalt Ferrite, CoFe2O4. Chemistry of Materials, 2004, 16, 5689-5696.	3.2	247
3	Spaceâ€“charge theory applied to the grain boundary impedance of proton conducting BaZr0.9Y0.1O3â^'Î´. Solid State Ionics, 2010, 181, 268-275.	1.3	219
4	Sonochemical Synthesis of Functionalized Amorphous Iron Oxide Nanoparticles. Langmuir, 2001, 17, 5093-5097.	1.6	206
5	Stabilisation of active nickel catalysts in partial oxidation of methane to synthesis gas by iron addition. Applied Catalysis A: General, 1999, 180, 163-173.	2.2	175
6	Spark plasma sintering of alumina: Study of parameters, formal sintering analysis and hypotheses on the mechanism(s) involved in densification and grain growth. Acta Materialia, 2011, 59, 1400-1408.	3.8	171
7	Anisotropy of Co nanoparticles induced by swift heavy ions. Physical Review B, 2003, 67, .	1.1	158
8	Dual Magnetic-/Temperature-Responsive Nanoparticles for Microfluidic Separations and Assays. Langmuir, 2007, 23, 7385-7391.	1.6	156
9	Temperature dependence of superparamagnetic resonance of iron oxide nanoparticles. Journal of Magnetism and Magnetic Materials, 2001, 234, 535-544.	1.0	154
10	Knotted Network Consisting of 3-Threads and a Zwitterionic One-Dimensional Polymorphs oftrans-3-(3-Pyridyl)acrylate of Cobalt and Nickel, MII(C8H6NO2)2(H2O)2. Inorganic Chemistry, 2005, 44, 217-224.	1.9	149
11	Superparamagnetic Hybrid Nanocylinders. Advanced Functional Materials, 2004, 14, 871-882.	7.8	144
12	Low-losses, highly tunable Ba0.6Sr0.4TiO3â^•MgO composite. Applied Physics Letters, 2008, 92, .	1.5	136
13	Densification of nanocrystalline Y2O3 ceramic powder by spark plasma sintering. Journal of the European Ceramic Society, 2009, 29, 91-98.	2.8	132
14	Formation of Nanoparticles of Îµ-Fe2O3from Yttrium Iron Garnet in a Silica Matrix:Â An Unusually Hard Magnet with a Morin-Like Transition below 150 K. Chemistry of Materials, 2005, 17, 1106-1114.	3.2	121
15	Co0 from partial reduction of La(Co,Fe)O3 perovskites for Fischerâ€“Tropsch synthesis. Catalysis Today, 2003, 85, 207-218.	2.2	110
16	The preparation of carbon nanotube (CNT)/copper composites and the effect of the number of CNT walls on their hardness, friction and wear properties. Carbon, 2013, 58, 185-197.	5.4	105
17	Magnetic Enhancement of Î³-Fe2O3Nanoparticles by Sonochemical Coating. Chemistry of Materials, 2002, 14, 1778-1787.	3.2	104
18	Doping Î³-Fe2O3Nanoparticles with Mn(III) Suppresses the Transition to the Î±-Fe2O3Structure. Journal of the American Chemical Society, 2003, 125, 11470-11471.	6.6	104

#	Article	IF	Citations
19	The preparation of double-walled carbon nanotube/Cu composites by spark plasma sintering, and their hardness and friction properties. Carbon, 2011, 49, 4535-4543.	5.4	99
20	Nickel nanoparticles in silica gel: Preparation and magnetic properties. Journal of Magnetism and Magnetic Materials, 1997, 173, 83-92.	1.0	98
21	Nanosized iron and ironâ€“cobalt spinel oxides as catalysts for methanol decomposition. Applied Catalysis A: General, 2006, 300, 170-180.	2.2	97
22	Title is missing!. Journal of Materials Science, 1999, 34, 3189-3202.	1.7	96
23	High Coercive Field for Nanoparticles of CoFe2O4 in Amorphous Silica Solâ€“Gel. Advanced Materials, 2003, 15, 1622-1625.	11.1	96
24	Grain growth during spark plasma and flash sintering of ceramic nanoparticles: a review. Journal of Materials Science, 2018, 53, 3087-3105.	1.7	96
25	NMR of microporous compounds. Colloids and Surfaces A: Physicochemical and Engineering Aspects, 1999, 158, 299-311.	2.3	91
26	Biomimetic apatite sintered at very low temperature by spark plasma sintering: Physico-chemistry and microstructure aspects. Acta Biomaterialia, 2010, 6, 577-585.	4.1	91
27	Synthesis of CoFe2O4nanowire in carbon nanotubes. A new use of the confinement effect. Chemical Communications, 2002, , 1882-1883.	2.2	90
28	Nanocrystalline apatites: From powders to biomaterials. Powder Technology, 2009, 190, 118-122.	2.1	76
29	Controlling the Size of Magnetic Nanoparticles Using Pluronic Block Copolymer Surfactants. Journal of Physical Chemistry B, 2005, 109, 15-18.	1.2	75
30	Toughening and hardening in double-walled carbon nanotube/nanostructured magnesia composites. Carbon, 2010, 48, 1952-1960.	5.4	70
31	Electro-thermal measurements and finite element method simulations of a spark plasma sintering device. Journal of Materials Processing Technology, 2013, 213, 1327-1336.	3.1	66
32	Plasma in spark plasma sintering of ceramic particle compacts. Scripta Materialia, 2014, 82, 57-60.	2.6	65
33	High strength â€“ High conductivity double-walled carbon nanotube â€“ Copper composite wires. Carbon, 2016, 96, 212-215.	5.4	65
34	Microstructural investigation and magnetic properties of CoFe2O4nanowires synthesized inside carbon nanotubes. Physical Chemistry Chemical Physics, 2003, 5, 3716-3723.	1.3	63
35	Mixed Ironâ^'Manganese Oxide Nanoparticles. Journal of Physical Chemistry B, 2004, 108, 14876-14883.	1.2	63
36	High surface area silicon carbide doped with zirconium for use as catalyst support. Preparation, characterization and catalytic application. Applied Catalysis A: General, 1999, 180, 385-397.	2.2	62

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37	Spark plasma sintering and complex shapes: The deformed interfaces approach. Powder Technology, 2017, 320, 340-345.	2.1	62
38	3D Long-Range Magnetic Ordering in Layered Metalâ€“Hydroxide Triangular Lattices 25 Ã… Apart. Journal of Solid State Chemistry, 1999, 145, 452-459.	1.4	61
39	Controlling internal barrier in low loss BaTiO3 supercapacitors. Applied Physics Letters, 2009, 94, 072903.	1.5	61
40	Densification and preservation of ceramic nanocrystalline character by spark plasma sintering. Advances in Applied Ceramics, 2012, 111, 280-285.	0.6	59
41	Preparation and characterization of SiC microtubes. Applied Catalysis A: General, 1999, 187, 255-268.	2.2	58
42	Synthesis and Characterization of Supported Co2P Nanoparticles by Grafting of Molecular Clusters into Mesoporous Silica Matrixesâ€–. Chemistry of Materials, 2003, 15, 57-62.	3.2	58
43	Thermal cycling and reactivity of a MoSi2/ZrO2 composite designed for self-healing thermal barrier coatings. Materials and Design, 2016, 94, 444-448.	3.3	58
44	Spark-plasma-sintering and finite element method: From the identification of the sintering parameters of a submicronic Î±-alumina powder to the development of complex shapes. Acta Materialia, 2016, 102, 169-175.	3.8	56
45	Finite-element modeling of the electro-thermal contacts in the spark plasma sintering process. Journal of the European Ceramic Society, 2016, 36, 741-748.	2.8	53
46	In situ NMR study of hydrothermal synthesis of a template-mediated microporous aluminophosphate material: AlPO4-CJ2. Journal De Chimie Physique Et De Physico-Chimie Biologique, 1998, 95, 302-309.	0.2	52
47	Contact resistances in spark plasma sintering: From in-situ and ex-situ determinations to an extended model for the scale up of the process. Journal of the European Ceramic Society, 2017, 37, 1593-1605.	2.8	51
48	Optically transparent ceramics by spark plasma sintering of oxide nanoparticles. Scripta Materialia, 2010, 63, 211-214.	2.6	50
49	Grain growth stagnation in fully dense nanocrystalline Y2O3 by spark plasma sintering. Materials Science & Engineering A: Structural Materials: Properties, Microstructure and Processing, 2010, 527, 1577-1585.	2.6	49
50	Spark and plasma in spark plasma sintering of rigid ceramic nanoparticles: A model system of YAG. Journal of the European Ceramic Society, 2015, 35, 211-218.	2.8	49
51	Metallic nanoparticles from heterometallic Coâ€“Ru carbonyl clusters in mesoporous silica xerogels and MCM-41-type materials. Chemical Communications, 2000, , 1271-1272.	2.2	48
52	Tailoring Dielectric Properties of Multilayer Composites Using Spark Plasma Sintering. Journal of the American Ceramic Society, 2007, 90, 973-976.	1.9	47
53	Self-healing thermal barrier coating systems fabricated by spark plasma sintering. Materials and Design, 2018, 143, 204-213.	3.3	47
54	Influence of synthesis route and composition on electrical properties of La9.33+xSi6O26+3x/2 oxy-apatite compounds. Solid State Ionics, 2008, 179, 1929-1939.	1.3	46

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55	Effect of 1wt% LiF additive on the densification of nanocrystalline Y2O3 ceramics by spark plasma sintering. Journal of the European Ceramic Society, 2011, 31, 1057-1066.	2.8	46
56	Preparation of transparent oxyapatite ceramics by combined use of freeze-drying and spark-plasma sintering. Chemical Communications, 2007, , 1550-1552.	2.2	45
57	Preparation-microstructure-property relationships in double-walled carbon nanotubes/alumina composites. Carbon, 2013, 53, 62-72.	5.4	45
58	Interface Investigation in Nanostructured BaTiO₃/Silica Composite Ceramics. Journal of the American Ceramic Society, 2010, 93, 865-874.	1.9	44
59	Hot pressing and spark plasma sintering of alumina: Discussion about an analytical modelling used for sintering mechanism determination. Scripta Materialia, 2014, 84-85, 35-38.	2.6	44
60	One-Step Synthesis of Core(Cr)/Shell(Î³-Fe2O3) Nanoparticles. Journal of the American Chemical Society, 2005, 127, 5730-5731.	6.6	43
61	Size Effect on Properties of Varistors Made From Zinc Oxide Nanoparticles Through Low Temperature Spark Plasma Sintering. Advanced Functional Materials, 2009, 19, 1775-1783.	7.8	43
62	Pulse analysis and electric contact measurements in spark plasma sintering. Electric Power Systems Research, 2015, 127, 307-313.	2.1	43
63	Reduction of copper in soda-lime-silicate glass by hydrogen. Journal of Non-Crystalline Solids, 1994, 170, 287-294.	1.5	42
64	Dry reforming of methane. Interest of La-Ni-Fe solid solutions compared to LaNiO3 and LaFeO3.. Studies in Surface Science and Catalysis, 1998, , 741-746.	1.5	41
65	Elongated Co nanoparticles induced by swift heavy ion irradiations. Nuclear Instruments & Methods in Physics Research B, 2004, 216, 372-378.	0.6	41
66	Low temperature use of SiC-supported NiS2-based catalysts for selective H2S oxidation. Applied Catalysis A: General, 2002, 234, 191-205.	2.2	40
67	Mechanochemical synthesis and characterization of nanodimensional ironâ€“cobalt spinel oxides. Journal of Alloys and Compounds, 2009, 485, 356-361.	2.8	39
68	A sacrificial material approach for spark plasma sintering of complex shapes. Scripta Materialia, 2016, 124, 126-128.	2.6	39
69	Spark plasma sintering synthesis of Ni1âˆ’Zn Fe2O4 ferrites: MÃ¶ssbauer and catalytic study. Solid State Sciences, 2012, 14, 1092-1099.	1.5	38
70	Structure and magnetic properties of Co+-implanted silica. Nuclear Instruments & Methods in Physics Research B, 2001, 178, 144-147.	0.6	37
71	Pt-modified Ni aluminides, MCrAlY-base multilayer coatings and TBC systems fabricated by Spark Plasma Sintering for the protection of Ni-base superalloys. Surface and Coatings Technology, 2009, 204, 771-778.	2.2	37
72	Spatial and temporal discrimination of silica particles functionalised with luminescent lanthanide markers using time-resolved luminescence microscopy. New Journal of Chemistry, 2004, 28, 777-781.	1.4	36

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73	Carbon nanotubes as a 1D template for the synthesis of air sensitive materials: About the confinement effect. Catalysis Today, 2005, 102-103, 29-33.	2.2	35
74	Ionic conduction in the B2S3-Li2S glass system. Solid State Ionics, 1991, 48, 325-330.	1.3	34
75	Role of impurities on the spark plasma sintering of ZrCxâ€"ZrB2 composites. Journal of the European Ceramic Society, 2008, 28, 671-678.	2.8	34
76	Irradiations of implanted cobalt nanoparticles in silica layers. Nuclear Instruments & Methods in Physics Research B, 2003, 209, 316-322.	0.6	33
77	Multi-walled carbon nanotubeâ€"Al2O3 composites: Covalent or non-covalent functionalization for mechanical reinforcement. Scripta Materialia, 2014, 75, 46-49.	2.6	32
78	Damped Precession of the Magnetization Vector of Superparamagnetic Nanoparticles Excited by Femtosecond Optical Pulses. Physical Review Letters, 2006, 97, 127401.	2.9	31
79	Silica, carbon and boron nitride monoliths with hierarchical porosity prepared by spark plasma sintering process. Microporous and Mesoporous Materials, 2008, 111, 643-648.	2.2	31
80	Microhardness and friction coefficient of multi-walled carbon nanotube-yttria-stabilized ZrO2 composites prepared by spark plasma sintering. Scripta Materialia, 2013, 69, 338-341.	2.6	31
81	Double-walled carbon nanotube/zirconia composites: Preparation by spark plasma sintering, electrical conductivity and mechanical properties. Ceramics International, 2015, 41, 13731-13738.	2.3	30
82	Metal (Fe, Co, Ni) Nanoparticles in Silica Gels: Preparation and Magnetic Properties. Journal of Sol-Gel Science and Technology, 1998, 13, 929-932.	1.1	29
83	Linking hopping conductivity to giant dielectric permittivity in oxides. Applied Physics Letters, 2010, 97, 132901.	1.5	29
84	hcpandfccNickel Nanoparticles Prepared from Organically Functionalized Layered Phyllosilicates of Nickel(II). Chemistry of Materials, 2007, 19, 865-871.	3.2	28
85	Identification of the Nortonâ€Green Compaction Model for the Prediction of the Tiâ€"6Alâ€"4V Densification During the Spark Plasma Sintering Process. Advanced Engineering Materials, 2016, 18, 1720-1727.	1.6	28
86	Carbon nanotubes as a template for mild synthesis of magnetic CoFe2O4 nanowires. Carbon, 2004, 42, 1395-1399.	5.4	27
87	ZnO-based varistors prepared by spark plasma sintering. Journal of the European Ceramic Society, 2015, 35, 1199-1208.	2.8	27
88	Dog-bone copper specimens prepared by one-step spark plasma sintering. Journal of Materials Science, 2015, 50, 7364-7373.	1.7	27
89	Flash sintering of dielectric nanoparticles as a percolation phenomenon through a softened film. Journal of Applied Physics, 2017, 121, 145103.	1.1	27
90	Nickel nano-particles in silica gel monoliths: control of the size and magnetic properties. Materials Science and Engineering C, 2001, 15, 179-182.	3.8	26

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91	Spark plasma sintering as a reactive sintering tool for the preparation of surface-tailored Feâ€“FeAl2O4â€“Al2O3 nanocomposites. Scripta Materialia, 2009, 60, 195-198.	2.6	26
92	Ionic conduction in B2S3-Li2S-LiI glasses. Solid State Ionics, 1992, 53-56, 1208-1213.	1.3	25
93	Reduction of nickel in sodaâ€"limeâ€"silicate glass by hydrogen. Journal of Non-Crystalline Solids, 1996, 197, 192-196.	1.5	25
94	Optical properties of copper-doped silica gels. Journal of Alloys and Compounds, 1997, 262-263, 438-442.	2.8	25
95	Thermo â€“ mechanical properties of SPS produced self-healing thermal barrier coatings containing pure and alloyed MoSi2 particles. Journal of the European Ceramic Society, 2018, 38, 4268-4275.	2.8	25
96	Thermoelectric properties of ZnO ceramics densified through spark plasma sintering. Ceramics International, 2020, 46, 5229-5238.	2.3	25
97	Mild synthesis of CoFe2O4 nanowires using carbon nanotube template: a high-coercivity material at room temperature. Journal of Magnetism and Magnetic Materials, 2004, 272-276, 1642-1644.	1.0	24
98	On the nature of metallic nanoparticles obtained from molecular Co3Ruâ€“carbonyl clusters in mesoporous silica matrices. Physical Chemistry Chemical Physics, 2006, 8, 4018-4028.	1.3	24
99	From coreâ€“shell BaTiO₃@MgO to nanostructured low dielectric loss ceramics by spark plasma sintering. Journal of Materials Chemistry C, 2014, 2, 683-690.	2.7	24
100	Magnetic behavior of Ni+ implanted silica. Nuclear Instruments & Methods in Physics Research B, 1999, 147, 422-426.	0.6	23
101	Oxidation resistant aluminized MCrAlY coating prepared by Spark Plasma Sintering (SPS). Advanced Engineering Materials, 2007, 9, 413-417.	1.6	23
102	First evidence of resistive switching in polycrystalline GaV₄S₈ thin layers. Physica Status Solidi - Rapid Research Letters, 2011, 5, 53-55.	1.2	23
103	Study of the densification and grain growth mechanisms occurring during spark plasma sintering of different submicronic yttria-stabilized zirconia powders. Journal of the European Ceramic Society, 2021, 41, 3581-3594.	2.8	23
104	Deformation yield of Co nanoparticles in SiO2 irradiated with 200 MeV 127I ions. Nuclear Instruments & Methods in Physics Research B, 2004, 225, 154-159.	0.6	22
105	Synthesis and ion conductivity of (Bi2O3)0.75(Dy2O3)0.25 ceramics with grain sizes from the nano to the micro scale. Solid State Ionics, 2011, 198, 6-15.	1.3	22
106	On thermal runaway and local endothermic/exothermic reactions during flash sintering of ceramic nanoparticles. Journal of Materials Science, 2018, 53, 6378-6389.	1.7	22
107	Influence of processing parameters on the densification and the microstructure of pure zinc oxide ceramics prepared by spark plasma sintering. Ceramics International, 2019, 45, 10035-10043.	2.3	22
108	Spark-plasma-sintering of double-walled carbon nanotubeâ€“magnesia nanocomposites. Scripta Materialia, 2009, 60, 741-744.	2.6	21

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109	Constitutive modelling and mechanical characterization of aluminium-based metal matrix composites produced by spark plasma sintering. Mechanics of Materials, 2010, 42, 548-558.	1.7	21
110	La3TaO7 derivatives with Weberite structure type: Possible electrolytes for solid oxide fuel cells and high temperature electrolysers. Comptes Rendus Chimie, 2010, 13, 1351-1358.	0.2	21
111	Microstructure control to reduce leakage current of medium and high voltage ceramic varistors based on doped ZnO. Journal of the European Ceramic Society, 2014, 34, 3707-3714.	2.8	21
112	Influence of embedded MoSi2 particles on the high temperature thermal conductivity of SPS produced yttria-stabilised zirconia model thermal barrier coatings. Surface and Coatings Technology, 2016, 308, 31-39.	2.2	21
113	Two-dimensional colloid-based photonic crystals for distributed feedback polymer lasers. Applied Physics Letters, 2004, 85, 4278.	1.5	20
114	Spark plasma sintered carbon electrodes for electrical double layer capacitor applications. Journal of Power Sources, 2011, 196, 1620-1625.	4.0	20
115	Relationship between mechanical properties and microstructure of yttria stabilized zirconia ceramics densified by spark plasma sintering. Ceramics International, 2019, 45, 23740-23749.	2.3	20
116	Selective Oxidation of a Single Primary Alcohol Function in Oligopyridine Frameworks. Organic Letters, 2004, 6, 2865-2868.	2.4	19
117	Influence of pulse current during Spark Plasma Sintering evidenced on reactive aluminaâ€“hematite powders. Journal of the European Ceramic Society, 2011, 31, 2247-2254.	2.8	19
118	High strengthâ€“high conductivity nanostructured copper wires prepared by spark plasma sintering and room-temperature severe plastic deformation. Materials Science & Engineering A: Structural Materials: Properties, Microstructure and Processing, 2016, 649, 209-213.	2.6	19
119	Activation barriers for d.c. conductivity in ionic glasses: Classical calculations using the small-cluster approximation. The Philosophical Magazine: Physics of Condensed Matter B, Statistical Mechanics, Electronic, Optical and Magnetic Properties, 1993, 67, 389-406.	0.6	18
120	Title is missing!. Catalysis Letters, 1999, 61, 151-155.	1.4	18
121	Spark plasma sintering of double-walled carbon nanotubes. Carbon, 2008, 46, 1812-1816.	5.4	18
122	Enhancement in Tiâ€“6Alâ€“4V sintering via nanostructured powder and spark plasma sintering. Powder Metallurgy, 2014, 57, 147-154.	0.9	18
123	High strength-high conductivity carbon nanotube-copper wires with bimodal grain size distribution by spark plasma sintering and wire-drawing. Scripta Materialia, 2017, 137, 78-82.	2.6	18
124	In-situ creep law determination for modeling Spark Plasma Sintering of TiAl 48-2-2 powder. Intermetallics, 2017, 86, 147-155.	1.8	18
125	Single-step sintering of zirconia ceramics using hydroxide precursors and Spark Plasma Sintering below 400â€¯Â°C. Scripta Materialia, 2019, 168, 134-138.	2.6	18
126	Effect of the total activation pressure on the structural and catalytic performance of the SiC supported MoO3-carbon-modified catalyst for the n-heptane isomerization. Applied Catalysis A: General, 1997, 156, 131-149.	2.2	17

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127	A temperature and magnetic field dependence MÃ¶ssbauer study of É›-Fe2O3. Hyperfine Interactions, 2006, 166, 475-481.	0.2	17
128	Proto-TGO formation in TBC systems fabricated by spark plasma sintering. Surface and Coatings Technology, 2010, 205, 1245-1249.	2.2	17
129	HIGH-FREQUENCY DIELECTRIC SPECTROSCOPY OF BaTiO3 CORE â€" SILICA SHELL NANOCOMPOSITES: PROBLEM OF INTERDIFFUSION. Journal of Advanced Dielectrics, 2011, 01, 309-317.	1.5	17
130	Local Distortions in Nanostructured Ferroelectric Ceramics through Strain Tuning. Advanced Electronic Materials, 2015, 1, 1500190.	2.6	17
131	A predictive model to reflect the final stage of spark plasma sintering of submicronic Î±-alumina. Ceramics International, 2016, 42, 9274-9277.	2.3	17
132	A spark plasma sintering densification modeling approach: from polymer, metals to ceramics. Journal of Materials Science, 2018, 53, 7869-7876.	1.7	17
133	Microstructure and Mechanical Properties of AA7075 Aluminum Alloy Fabricated by Spark Plasma Sintering (SPS). Materials, 2021, 14, 430.	1.3	17
134	High temperature H2Sremoval over high specific surface area [beta]-SiC supported iron oxide sorbent Part 1Preparation and characterization. Journal of the Chemical Society, Faraday Transactions, 1998, 94, 435-442.	1.7	16
135	Synthesis, Sintering, and Electrical Properties of<mml:math xmlns:mml="http://www.w3.org/1998/Math/MathML"><mml:mrow><mml:msub><mml:mrow><mml:mtext>BaCe</mml:mtext></mm Journal of Nanomaterials, 2008, 2008, 1-5.	1.5	16
136	Characterization of the thermo-mechanical properties of p-type (MnSi1.77) and n-type (Mg2Si0.6Sn0.4) thermoelectric materials. Scripta Materialia, 2019, 172, 28-32.	2.6	16
137	Numerical model for sparking and plasma formation during spark plasma sintering of ceramic compacts. Journal of Materials Science, 2015, 50, 4636-4645.	1.7	15
138	Spark plasma sintering of a commercial TiAl 48-2-2 powder: Densification and creep analysis. Materials Science & Engineering A: Structural Materials: Properties, Microstructure and Processing, 2018, 711, 313-316.	2.6	15
139	Spark plasma sintering and mechanical properties of compounds in TiB2-SiC pseudo-diagram. Ceramics International, 2018, 44, 22357-22364.	2.3	15
140	Nanostructured 1% silver-copper composite wires with a high tensile strength and a high electrical conductivity. Materials Science & Engineering A: Structural Materials: Properties, Microstructure and Processing, 2019, 761, 138048.	2.6	15
141	Direct synthesis of mesoporous silica containing cobalt: A new strategy using a cobalt soap as a co-template. Microporous and Mesoporous Materials, 2007, 106, 17-27.	2.2	14
142	High-temperature transport properties of complex antimonides with anti-Th₃P₄structure. Dalton Transactions, 2010, 39, 1118-1123.	1.6	14
143	Densification and polymorphic transition of multiphase Y2O3 nanoparticles during spark plasma sintering. Materials Science & Engineering A: Structural Materials: Properties, Microstructure and Processing, 2011, 528, 7200-7206.	2.6	14
144	Stoichiometry and Grain Boundaries Control by Spark Plasma Sintering in <scp><scp>Ba</scp></scp>_{0.6}<scp><scp>Sr</scp></scp>_{0.4}<scp><scp>TiO</scp></scp>₃:<sc Composites. Journal of the American Ceramic Society, 2012, 95, 3239-3245.	1.9	14

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145	Thermoelectric properties of Ca0.9Yb0.1MnO3âˆ’ prepared by spark plasma sintering in air atmosphere. Scripta Materialia, 2013, 68, 949-952.	2.6	14
146	Biomimetic apatite-based composite materials obtained by spark plasma sintering (SPS): physicochemical and mechanical characterizations. Journal of Materials Science: Materials in Medicine, 2015, 26, 223.	1.7	14
147	Powder/die friction in the spark plasma sintering process: Modelling and experimental identification. Scripta Materialia, 2016, 116, 139-142.	2.6	14
148	One-step synthesis of few-layered-graphene/alumina powders for strong and tough composites with high electrical conductivity. Journal of the European Ceramic Society, 2020, 40, 5779-5789.	2.8	14
149	Electrical conductive double-walled carbon nanotubes â€“ Silica glass nanocomposites prepared by the solâ€“gel process and spark plasma sintering. Scripta Materialia, 2009, 61, 988-991.	2.6	13
150	Microstructural evolution and mechanical properties of pure titanium powders processed by spark plasma sintering. Powder Technology, 2019, 345, 415-424.	2.1	13
151	Manufacturing and performances of silicide-based thermoelectric modules. Energy Conversion and Management, 2021, 242, 114304.	4.4	13
152	A structural study of Li2SÎ—¸B2S3 glasses by neutron diffraction. Journal of Non-Crystalline Solids, 1994, 171, 80-86.	1.5	12
153	Preliminary Results of the Isothermal Oxidation Study of Pt-Al-NiCoCrAlYTa Multi-Layered Coatings Prepared by Sparks Plasma Sintering (SPS). Materials Science Forum, 0, 595-598, 143-150.	0.3	12
154	Thermal Barrier Systems and Multi-Layered Coatings Fabricated by Spark Plasma Sintering for the Protection of Ni-Base Superalloys. Materials Science Forum, 0, 654-656, 1826-1831.	0.3	12
155	Plastic deformation of dense nanocrystalline yttrium oxide at elevated temperatures. Journal of the European Ceramic Society, 2012, 32, 3115-3121.	2.8	12
156	3D mapping of anisotropic ferroelectric/dielectric composites. Journal of the European Ceramic Society, 2015, 35, 337-345.	2.8	12
157	Translucent Î³-AlOOH and Î³-Al2O3 glass-ceramics using the cold sintering process. Scripta Materialia, 2021, 194, 113650.	2.6	12
158	Densification of surface-modified silicon carbide powder by spark-plasma-sintering. Journal of the European Ceramic Society, 2021, 41, 7543-7551.	2.8	12
159	Characterization of nanodimensional Ni-Zn ferrite prepared by mechanochemical and thermal methods. Journal of Physics: Conference Series, 2010, 217, 012102.	0.3	11
160	Thermal cycling behavior of EBPVD TBC systems deposited on doped Pt-rich Î³â€“Î³â€² bond coatings made by Spark Plasma Sintering (SPS). Surface and Coatings Technology, 2011, 206, 1558-1565.	2.2	11
161	Cyclic Oxidation Behavior of TBC Systems with a Pt-Rich Î³-Ni+Î³â€²-Ni3Al Bond-Coating Made by SPS. Oxidation of Metals, 2014, 81, 33-45.	1.0	11
162	Effects of the fundamental oxide properties on the electric field-flash temperature during flash sintering. Scripta Materialia, 2019, 163, 130-132.	2.6	11

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163	Molecular Clusters in Mesoporous Materials as Precursors to Nanoparticles of a New Lacunar Ternary Compound Pd x Mo y P. Journal of Cluster Science, 2008, 19, 73-88.	1.7	10
164	Mechanical and tribological properties of Fe/Crâ€“FeAl2O4â€“Al2O3 nano/micro hybrid composites prepared by spark plasma sintering. Scripta Materialia, 2011, 64, 777-780.	2.6	10
165	Spark Plasma Sintering and Hot Pressing of Heteroâ€Doped <scp><scp>LaNbO</scp></scp>₄. Journal of the American Ceramic Society, 2012, 95, 1563-1571.	1.9	10
166	Toughened carbon nanotubeâ€“ironâ€“mullite composites prepared by spark plasma sintering. Ceramics International, 2013, 39, 5513-5519.	2.3	10
167	Simple method for the identification of electrical and thermal contact resistances in spark plasma sintering. Journal of the European Ceramic Society, 2021, 41, 599-610.	2.8	10
168	Effect of Nanostructuring on the Thermoelectric Properties of Î²-FeSi2. Nanomaterials, 2021, 11, 2852.	1.9	10
169	A.c. conductivity studies of lithium thioborate glasses. The Philosophical Magazine: Physics of Condensed Matter B, Statistical Mechanics, Electronic, Optical and Magnetic Properties, 1994, 70, 809-816.	0.6	9
170	Deposition by radio frequency magnetron sputtering of GaV4S8 thin films for resistive random access memory application. Thin Solid Films, 2013, 533, 54-60.	0.8	9
171	Adjustable dielectric properties of BaTiO 3 containing MgO inclusions deformable under Spark Plasma Sintering. Scripta Materialia, 2016, 110, 82-86.	2.6	9
172	Kinetics of zircon formation in yttria partially stabilized zirconia as a result of oxidation of embedded molybdenum disilicide. Acta Materialia, 2019, 174, 206-216.	3.8	9
173	Perlite for permanent confinement of cesium. Journal of Nuclear Materials, 2006, 352, 196-201.	1.3	8
174	MÃ¶ssbauer study of nanodimensional nickel ferrite â€“ mechanochemical synthesis and catalytic properties. Hyperfine Interactions, 2007, 165, 215-220.	0.2	8
175	Confining caesium in expanded natural Perlite. Journal of the European Ceramic Society, 2007, 27, 619-622.	2.8	8
176	Innovative architectures in ferroelectric multi-materials: Chemistry, interfaces and strain. Journal of Advanced Dielectrics, 2015, 05, 1530001.	1.5	8
177	Flash Spark Plasma Sintering of 3YSZ: Modified sintering pathway and impact on grain boundary formation. Journal of the European Ceramic Society, 2021, 41, 7762-7770.	2.8	8
178	Nickel particles in soda-lime-silicate glass: Preparation and magnetic properties. Journal of Non-Crystalline Solids, 2005, 351, 3023-3030.	1.5	7
179	Hardness and friction behavior of bulk CoAl2O4 and Coâ€“Al2O3 composite layers formed during Spark Plasma Sintering of CoAl2O4 powders. Ceramics International, 2012, 38, 5209-5217.	2.3	7
180	Fully coupled electrothermal and mechanical simulation of the production of complex shapes by spark plasma sintering. Journal of the European Ceramic Society, 2021, 41, 4252-4263.	2.8	7

#	Article	IF	Citations
181	MÃ¶ssbauer and magnetic study of Co x Fe3--x O4 nanoparticles. Hyperfine Interactions, 2007, 165, 61-67.	0.2	6
182	High-Temperature Transport Properties of Yb4â^'x Sm x Sb3. Journal of Electronic Materials, 2010, 39, 1579-1582.	1.0	6
183	Shaping of Nanostructured Materials or Coatings through Spark Plasma Sintering. Materials Science Forum, 0, 706-709, 24-30.	0.3	6
184	Specific core-shell approaches and related properties in nanostructured ferroelectric ceramics. Ferroelectrics, 2018, 532, 138-159.	0.3	6
185	Thermal stability of Mg2Si0.55Sn0.45 for thermoelectric applications. Journal of Alloys and Compounds, 2020, 846, 156413.	2.8	6
186	Dip-coated La2Ti2O7 as a buffer layer for growth of Bi3.25La0.75Ti3O12 films with enhanced (011) orientation. Journal of the European Ceramic Society, 2009, 29, 1977-1985.	2.8	5
187	How to overcome the main challenges of SPS technology: Reproducibility, multi-samples and elaboration of complex shapes. , 2019, , 77-108.		5
188	Influence of alloying on the tensile strength and electrical resistivity of silver nanowire: copper composites macroscopic wires. Journal of Materials Science, 2021, 56, 4884-4895.	1.7	5
189	Ion beam synthesis of Co nanoparticles in SiO2: Monte Carlo simulation. Nuclear Instruments & Methods in Physics Research B, 2004, 216, 329-333.	0.6	4
190	Reactivity and microstructure evolution of a CoNiCrAlY/Talc cermet prepared by Spark Plasma Sintering. Surface and Coatings Technology, 2010, 205, 1183-1188.	2.2	4
191	In-situ reactive synthesis of dense nanostructured Î²-FeSi2 by Spark Plasma Sintering. Journal of Alloys and Compounds, 2022, 902, 163683.	2.8	4
192	Few-layered-graphene/zirconia composites: Single-step powder synthesis, spark plasma sintering, microstructure and properties. Journal of the European Ceramic Society, 2022, 42, 2349-2361.	2.8	4
193	Thin Layers Obtained by Plasma Process for Emerging Non-Volatile Memory (RRAM) Applications. , 2009, , .		3
194	Spark plasma sintering of ductile ceramic particles: study of LiF. Journal of Materials Science, 2014, 49, 5237-5245.	1.7	3
195	Phase evolution and sinterability of lanthanum phosphate â€" Towards a below 600 Â°C Spark Plasma Sintering. Journal of the European Ceramic Society, 2021, 41, 7261-7268.	2.8	3
196	Numerical approach for the determination of multi-mechanisms of the densification of TiAl by spark plasma sintering. Intermetallics, 2022, 141, 107435.	1.8	3
197	Investigation of the mechanical properties of MnSi via EBSD-nanoindentation coupling and ab-initio calculation. Journal of Alloys and Compounds, 2022, 900, 163458.	2.8	3
198	Publisherâ€™s Note: Anisotropy of Co nanoparticles induced by swift heavy ions [Phys. Rev. B67, 220101 (2003)]. Physical Review B, 2003, 68, .	1.1	2

#	Article	IF	Citations
199	Nanomaterials Processed by Spark Plasma Sintering. Journal of Nanomaterials, 2013, 2013, 1-1.	1.5	2
200	MÃ¶ssbauer study of nanodimensional nickel ferrite â€" mechanochemical synthesis and catalytic properties. , 2006, , 215-220.		2
201	Aggregates in silica based matrices. Analusis - European Journal of Analytical Chemistry, 2000, 28, 109-113.	0.4	2
202	Electrical properties of conventional and spark plasma sintering ZnO based varistors. , 2011, , .		1
203	High Strength-High Conductivity Silver Nanowire-Copper Composite Wires by Spark Plasma Sintering and Wire-Drawing for Non-Destructive Pulsed Fields. IEEE Transactions on Applied Superconductivity, 2020, 30, 1-4.	1.1	1
204	High Temperature Removal of H2S over Iron Oxide Supported on SiC Sorbent. European Physical Journal Special Topics, 1997, 07, C1-677-C1-678.	0.2	1
205	Ã‰tude du frittage non-conventionnel de cÃ©ramiques de type YAG:Nd en prÃ©sence d'ajout de silice. Materiaux Et Techniques, 2007, 95, 241-249.	0.3	1
206	Densification par Spark Plasma Sintering (SPS) de matÃ©riaux d'Ã©lectrolytes, difficilement densifiables, pour piles ÃÂcombustible. Materiaux Et Techniques, 2007, 95, 259-268.	0.3	1
207	High Surface Area Silicon Carbide Doped with Zirconium for use as Heterogeneous Catalyst Support. Materials Research Society Symposia Proceedings, 1996, 454, 35.	0.1	0
208	Preparation and characterization of SiC microfibers and Cr3C2 with medium specific surface area for catalytic applications. Studies in Surface Science and Catalysis, 1998, 118, 855-868.	1.5	0
209	Nanoparticles of metallic Cobalt and Nickel prepared by ion implantation into SiO2. Materials Research Society Symposia Proceedings, 2000, 647, 1.	0.1	0
210	Reducibility study of the LaMxFe1â^'xO3 (M = Ni, Co) perovskites. Materials Research Society Symposia Proceedings, 2000, 658, 6221.	0.1	0
211	Decoration of silicon carbide nanotubes by CoFe2O4 Spinel nanoparticles.. Materials Research Society Symposia Proceedings, 2000, 658, 641.	0.1	0
212	Monolithes de silice et de carbone ÃÂporositÃ© hiÃ©rarchisÃ©e obtenus par frittage SPS. Materiaux Et Techniques, 2007, 95, 251-258.	0.3	0
213	Densification de composites carbonÃ©s par SPS : utilisation de nanofibres deÂcarbone comme agent liant. Materiaux Et Techniques, 2007, 95, 281-287.	0.3	0
214	METALLIC IRON NANOPARTICLES IN SILICA GELS: PREPARATION AND PROPERTIES. , 1998, , .		0
215	A temperature and magnetic field dependence MÃ¶ssbauer study of ÎµFe2O3. , 2006, , 475-481.		0
216	MÃ¶ssbauer and magnetic study of CoxFe3â^'x O4 nanoparticles. , 2006, , 61-67.		0

#	Article	IF	Citations
217	Al matrix composites reinforced by in situ synthesized grapheneâ€“Cu hybrid layers: interface control by spark plasma sintering conditions. Journal of Materials Science, 2022, 57, 6266-6281.	1.7	0