JÃ¡nos SzÃ©pvÃ¶lgyi

List of Publications by Year
in descending order

95 papers	1,528 citations	279487 23 h-index	395343 33 g-index
95 all docs	95 docs citations	95 times ranked	1623 citing authors

#	Article	IF	Citations
1	Effect of Metallic and Non-Metallic Additives on the Synthesis of Fullerenes in Thermal Plasma. Condensed Matter, 2022, 7, 44.	0.8	2
2	Toughening of silicon nitride ceramics by addition of multilayer graphene. Ceramics International, 2019, 45, 4810-4816.	2.3	24
3	Thermal Plasma Decomposition of Tetrachloroethylene. Plasma Chemistry and Plasma Processing, 2018, 38, 771-790.	1.1	1
4	Spark plasma sintering of graphene reinforced silicon carbide ceramics. Ceramics International, 2017, 43, 9005-9011.	2.3	43
5	Silicon nitride-based composites reinforced with zirconia nanofibres. Ceramics International, 2017, 43, 16811-16818.	2.3	19
6	Optical Emission Spectroscopic Study of the Synthesis of Titanium Boride Nanoparticles in RF Thermal Plasma Reactor. Plasma Chemistry and Plasma Processing, 2017, 37, 1491-1503.	1.1	3
7	Gold nano-particle formation from crystalline AuCN: Comparison of thermal, plasma- and ion-beam activated decomposition. Journal of Solid State Chemistry, 2017, 246, 65-74.	1.4	9
8	MICROSTRUCTURE AND SINTERING MECHANISM OF SiC CERAMICS REINFORCED WITH NANOSIZED ZrO2. European Chemical Bulletin, 2017, 6, 484.	2.7	4
9	Decomposition of poly(vinyl chloride) in inductively coupled radiofrequency thermal plasma. Chemical Engineering Journal, 2016, 302, 163-171.	6.6	15
10	Low pressure RF plasma modification of the surface of three different nano-carbon materials. Open Chemistry, 2015, 13, .	1.0	4
11	Spark plasma sintering of Si₃N₄/multilayer graphene composites. Open Chemistry, 2015, 13, .	1.0	24
12	Spark plasma sintering of graphene reinforced hydroxyapatite composites. Ceramics International, 2015, 41, 3647-3652.	2.3	42
13	Influence of ferrite stabilizing elements and Co on structure and magnetic properties of carbon-encapsulated iron nanoparticles synthesized in thermal plasma jet. Journal of Alloys and Compounds, 2015, 619, 592-600.	2.8	0
14	Effect of the solid precursors on the formation of nanosized TiBx powders in RF thermal plasma. Ceramics International, 2014, 40, 3925-3931.	2.3	8
15	Optical emission spectra analysis of thermal plasma treatment of poly(vinyl chloride). Open Chemistry, 2014, 13, .	1.0	17
16	Deposition of Silicon Carbide and Nitrideâ€Based Coatings by Atmospheric Plasma Spraying. International Journal of Applied Ceramic Technology, 2013, 10, 72-78.	1.1	9
17	Decomposition of Chlorobenzene by Thermal Plasma Processing. Plasma Chemistry and Plasma Processing, 2013, 33, 765-778.	1.1	22
18	Palladium Nanoparticleâ€“Graphene Catalysts for Asymmetric Hydrogenation. Catalysis Letters, 2013, 143, 539-546.	1.4	37

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19	Synthesis and characterization of spherical amorphous alumo-silicate nanoparticles using RF thermal plasma method. Journal of Non-Crystalline Solids, 2013, 359, 9-14.	1.5	14
20	Two-wavelength Raman study of poly(ethylene terephthalate) surfaces modified by helium plasma-based ion implantation. Applied Surface Science, 2012, 263, 423-429.	3.1	5
21	Effect of nitrogen plasma immersion ion implantation of polyamide-6 on its sliding properties against steel surface. Wear, 2012, 290-291, 66-73.	1.5	15
22	Synthesis of Mullite from Laboratory Waste Silica through Transferred Arc Plasma Processing Method. Materials and Manufacturing Processes, 2011, 26, 813-820.	2.7	9
23	Surface modification of multi-wall carbon nanotubes by nitrogen attachment. Diamond and Related Materials, 2011, 20, 965-968.	1.8	17
24	Formation of thin boron nitride coating on multiwall carbon nanotube surfaces. Diamond and Related Materials, 2011, 20, 227-231.	1.8	17
25	Cold flame-sprayed and oil-impregnated porous metallic coatings. Applied Surface Science, 2011, 257, 9532-9538.	3.1	1
26	Structureâ€“property and compositionâ€“property relationships for poly(ethylene terephthalate) surfaces modified by helium plasma-based ion implantation. Applied Surface Science, 2011, 257, 10815-10820.	3.1	3
27	Chemical structure and mechanical properties of Si-containing a-C:H and a-C thin films and their Cr- and W-containing derivatives. Surface and Coatings Technology, 2011, 206, 630-639.	2.2	34
28	Synthesis of SiC powder by RF plasma technique. Powder Technology, 2011, 214, 300-305.	2.1	38
29	The influence of ageing on consolidation and sinterability of a sub-micron alumina powder. Powder Technology, 2011, 214, 313-321.	2.1	9
30	Continuous synthesis of controlled size carbon-encapsulated iron nanoparticles. Materials Research Bulletin, 2011, 46, 2408-2417.	2.7	26
31	Synthesis of mullite from sillimanite dissociation through transferred arc plasma torch. International Journal of Mineral Processing, 2011, 99, 54-60.	2.6	12
32	Formation of amorphous carbon on the surface of poly(ethylene terephthalate) by helium plasma based ion implantation. Nuclear Instruments & Methods in Physics Research B, 2011, 269, 1855-1858.	0.6	6
33	CCl4 Decomposition in RF Thermal Plasma in Inert and Oxidative Environments. Plasma Chemistry and Plasma Processing, 2010, 30, 281-286.	1.1	2
34	Nitrogen plasma-based ion implantation of poly(tetrafluoroethylene): Effect of the main parameters on the surface properties. Applied Surface Science, 2010, 256, 6385-6389.	3.1	16
35	The processing of Mgâ€“Ti for hydrogen storage; mechanical milling and plasma synthesis. International Journal of Hydrogen Energy, 2010, 35, 10412-10418.	3.8	20
36	Surface characterisation of boron nitride layers on multiwalled carbon nanotubes. Surface and Interface Analysis, 2010, 42, 1148-1151.	0.8	12

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37	Synthesis of Mullite by Means of Transferred and Nontransferred Arc Plasma Melting. Materials and Manufacturing Processes, 2010, 25, 909-914.	2.7	6
38	Continuous synthesis of carbon-encapsulated magnetic nanoparticles with a minimum production of amorphous carbon. Carbon, 2009, 47, 2040-2048.	5.4	66
39	Synthesis of Niâ€“Zn ferrite nanoparticles in radiofrequency thermal plasma reactor and their use for purification of histidine-tagged proteins. Journal of Nanoparticle Research, 2008, 10, 227-232.	0.8	18
40	Synthesis of nanosized ceramic powders in a radiofrequency thermal plasma reactor. Journal of the European Ceramic Society, 2008, 28, 895-899.	2.8	24
41	Surface modification of poly(tetrafluoroethylene) by saddle field fast atom beam source. Surface and Coatings Technology, 2008, 202, 6034-6037.	2.2	4
42	Synthesis of nanosized zinc ferrites from liquid precursors in RF thermal plasma reactor. Journal of the European Ceramic Society, 2007, 27, 941-945.	2.8	24
43	Production of glassâ€“ceramics from fly ash using arc plasma. Journal of the European Ceramic Society, 2007, 27, 1721-1725.	2.8	54
44	Comparative Process Analysis of Fullerene Production by the Arc and the Radio-Frequency Discharge Methods. Journal of Nanoscience and Nanotechnology, 2007, 7, 1357-1369.	0.9	16
45	Modelling of Carbon Tetrachloride Decomposition in Oxidative RF Thermal Plasma. Plasma Chemistry and Plasma Processing, 2006, 26, 293-318.	1.1	15
46	Effects of Precursors and Plasma Parameters on Fullerene Synthesis in RF Thermal Plasma Reactor. Plasma Chemistry and Plasma Processing, 2006, 26, 597-608.	1.1	28
47	Influence of Carbon Concentration and Rotational Temperature on Fullerene Yield in RF Reactor. Materials Science Forum, 2006, 518, 211-216.	0.3	2
48	RF thermal plasma processing of fullerenes. Journal Physics D: Applied Physics, 2006, 39, 320-326.	1.3	9
49	Influence of the precursor on fullerene synthesis in a RF thermal plasma reactor. Chemical Industry and Chemical Engineering Quarterly, 2006, 12, 246-250.	0.4	0
50	Plasma spheroidization of ceramic particles. Chemical Engineering and Processing: Process Intensification, 2005, 44, 221-224.	1.8	33
51	Treatment of particulate metallurgical wastes in thermal plasmas. Chemical Engineering and Processing: Process Intensification, 2005, 44, 225-229.	1.8	25
52	Comparative Study on Decomposition of CFCl3 in Thermal and Cold Plasma. Plasma Chemistry and Plasma Processing, 2005, 25, 275-288.	1.1	7
53	Comparative Study on the Decomposition of Chloroform in Thermal and Cold Plasma. Plasma Chemistry and Plasma Processing, 2005, 25, 289-302.	1.1	23
54	Kinetic Modeling of the Decomposition of Carbon Tetrachloride in Thermal Plasma. Plasma Chemistry and Plasma Processing, 2005, 25, 109-119.	1.1	25

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55	Optical Emission Study of RF Thermal Plasma During Fullerene Synthesis. Fullerenes Nanotubes and Carbon Nanostructures, 2005, 13, 215-226.	1.0	3
56	Optical diagnostics of fullerene synthesis in the RF thermal plasma process. Journal of the Serbian Chemical Society, 2005, 70, 79-85.	0.4	2
57	EXPERIMENTAL AND THEORETICAL ANALYSIS OF MECHANICAL COATING PROCESS OF PARTICLES WITH THE THETA COMPOSER. Chemical Engineering Communications, 2004, 191, 1259-1270.	1.5	7
58	Comparative Study of the Decomposition of CCl4 in Cold and Thermal Plasma. Plasma Chemistry and Plasma Processing, 2003, 23, 651-664.	1.1	16
59	Hollow alumina microspheres prepared by RF thermal plasma. Powder Technology, 2003, 132, 211-215.	2.1	53
60	Efficient synthesis of fullerenes in RF thermal plasma reactor. Chemical Physics Letters, 2003, 378, 434-439.	1.2	31
61	Decomposition of halogenated methanes in oxygen-free gas mixtures by the use of a silent electric discharge. Chemosphere, 2003, 50, 9-13.	4.2	8
62	Investigation of the morphology and the active site distribution of Rh-graphimet. Applied Catalysis A: General, 2002, 229, 155-163.	2.2	1
63	Behavior of silica particles of different microstructure on RF thermal plasma treatment. Journal of Materials Science Letters, 2002, 21, 1943-1945.	0.5	2
64	Atmospheric ageing of nanosized silicon nitride powders. Journal of Materials Chemistry, 2001, 11, 859-863.	6.7	32
65	Composition and chemical structure characteristics of CN layers prepared by different plasma assisted techniques. Solid State Ionics, 2001, 141-142, 63-69.	1.3	11
66	Thermal plasma synthesis of zinc ferrite nanopowders. Solid State Ionics, 2001, 141-142, 163-168.	1.3	49
67	Heterogeneous Dielsâ€“Alder reaction between cyclopentadiene and different solid carbons. Carbon, 2001, 39, 147-149.	5.4	12
68	Reduction of Metallurgical Wastes in an RF Thermal Plasma Reactor. Plasma Chemistry and Plasma Processing, 2001, 21, 547-563.	1.1	15
69	Effect of Rotor Shape on Particle Composite Process by a High-Speed Elliptical-Rotor-Type Mixer.. Kagaku Kogaku Ronbunshu, 2001, 27, 141-143.	0.1	4
70	Simulation of Motion of Particles in High-speed Elliptical-rotor-type Mixer by Particle Element Method.. Kagaku Kogaku Ronbunshu, 2000, 26, 268-274.	0.1	8
71	Particle size distribution and dislocation density determined by high resolution X-ray diffraction in nanocrystalline silicon nitride powders. Materials Science & Engineering A: Structural Materials: Properties, Microstructure and Processing, 2000, 280, 263-269.	2.6	64
72	Simultaneous calcination and spheroidization of gibbsite powders in an RF thermal plasma. Powder Technology, 2000, 110, 169-178.	2.1	26

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73	The effect of heat-treatment on the grain-size of nanodisperse plasmathermal silicon nitride powder. Journal of Materials Science, 2000, 35, 3711-3717.	1.7	25
74	Cu40Mg60 and Cuâ€“MgO powders prepared by ball-milling: characterization and catalytic tests. Materials Science & Engineering A: Structural Materials: Properties, Microstructure and Processing, 1999, 267, 193-199.	2.6	16
75	New stochastic modelling of mixing in process operations. Chemical Engineering and Processing: Process Intensification, 1999, 38, 1-9.	1.8	5
76	Crystallization of an amorphous silicon nitride powder produced in a radiofrequency thermal plasma. Ceramics International, 1999, 25, 711-715.	2.3	18
77	Densification of nanosized amorphous and crystalline silicon nitride powders. Ceramics International, 1999, 25, 717-721.	2.3	12
78	Formation of boron nitride thin films on Î²-Si3N4 whiskers and Î±-SiC platelets by dip-coating. Journal of the European Ceramic Society, 1998, 18, 1037-1043.	2.8	48
79	Surface Characterization of Cuâ^'M (M = Ti, Zr, or Hf) Alloy Powder Catalysts. Journal of Physical Chemistry B, 1998, 102, 9258-9265.	1.2	11
80	Activation of amorphous Cu-M (M = Ti, Zr or Hf) alloy powders made by mechanical alloying. Materials Science & Engineering A: Structural Materials: Properties, Microstructure and Processing, 1997, 226-228, 1074-1078.	2.6	26
81	The use of a thermal energy recycle unit in conjunction with a basin-type solar still for enhanced productivity. Energy, 1997, 22, 83-91.	4.5	9
82	Composition and microstructure of nanosized, amorphous and crystalline silicon nitride powders before, during and after densification. Journal of Materials Chemistry, 1996, 6, 1175-1186.	6.7	22
83	Preparation of fine amorphous silicon nitride powder in the system SiH4-Ar-NH3. Journal of the European Ceramic Society, 1995, 15, 1071-1077.	2.8	11
84	Experimental investigation into the synthesis of silicon nitride powder in an RF thermal plasma reactor using a factorial design approach. Journal of Materials Chemistry, 1995, 5, 1227-1232.	6.7	9
85	Characterization of an element-specific detector for combined gas chromatographyâ€”atomic emission detection. Journal of Chromatography A, 1993, 654, 269-277.	1.8	6
86	Comparative sintering study on non-conventional and commercial silicon nitride powders. Journal of Materials Chemistry, 1993, 3, 279-286.	6.7	8
87	X-ray photoelectron spectroscopy studies on solid xanthates. Journal of Electron Spectroscopy and Related Phenomena, 1990, 50, 239-250.	0.8	6
88	Thermal decomposition of a bentonite-polyacrylamide complex. Thermochimica Acta, 1990, 170, 155-166.	1.2	14
89	Recent data on the kinetics of ethylene chlorination. Reaction Kinetics and Catalysis Letters, 1989, 39, 15-20.	0.6	3
90	Carbon determination in Si3N4 by slurry atomization ICP-AES. Mikrochimica Acta, 1989, 99, 381-387.	2.5	2

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91	TG study on the reduction kinetics of hematite and iron oxide-containing wastes. Journal of Thermal Analysis, 1988, 33, 575-583.	0.7	1
92	Chlorination of a slag produced from red mud. Reactivity of Solids, 1988, 5, 139-153.	0.3	8
93	Studies on the flotation of a non-ferrous slag. Minerals Engineering, 1988, 1, 127-136.	1.8	2
94	Structural and Mechanical Properties of Milled Si₃N₄/CNTs Composites by Spark Plasma Sintering Method. Materials Science Forum, 0, 729, 31-36.	0.3	2
95	An Integrated Waste-Free Biomass Utilization System for an Increased Productivity of Biofuel and Bioenergy. , 0, , .		2