Guanghua Liu

List of Publications by Year
in descending order

60 papers	1,256 citations	516681 16 h-index	395678 33 g-index
61 all docs	61 docs citations	61 times ranked	1454 citing authors

#	Article	IF	Citations
1	Scalable Selfâ€Propagating Highâ€Temperature Synthesis of Graphene for Supercapacitors with Superior Power Density and Cyclic Stability. Advanced Materials, 2017, 29, 1604690.	21.0	186
2	Combustion synthesis of refractory and hard materials: A review. International Journal of Refractory Metals and Hard Materials, 2013, 39, 90-102.	3.8	150
3	Phase-Selective Epitaxial Growth of Heterophase Nanostructures on Unconventional 2H-Pd Nanoparticles. Journal of the American Chemical Society, 2020, 142, 18971-18980.	13.7	111
4	Enhanced Thermoelectric Properties of Cu₂SnSe₃ by (Ag,In)â€Coâ€Doping. Advanced Functional Materials, 2016, 26, 6025-6032.	14.9	82
5	Seeded Synthesis of Unconventional 2H-Phase Pd Alloy Nanomaterials for Highly Efficient Oxygen Reduction. Journal of the American Chemical Society, 2021, 143, 17292-17299.	13.7	59
6	Combustion synthesis: An effective tool for preparing inorganic materials. Scripta Materialia, 2018, 157, 167-173.	5.2	49
7	Synthesis and Luminescence Properties of Nano-/Microstructured Y₃Al₅O₁₂:Ce³⁺ Microspheres by Controlled Glass Crystallization. Crystal Growth and Design, 2011, 11, 5355-5361.	3.0	47
8	Crystalline boron nitride nanosheets by sonication-assisted hydrothermal exfoliation. Journal of Advanced Ceramics, 2019, 8, 72-78.	17.4	42
9	Effect of secondary phases on thermoelectric properties of Cu 2 SnSe 3. Ceramics International, 2017, 43, 7002-7010.	4.8	29
10	Combustion synthesis of Cu 2 SnSe 3 thermoelectric materials. Journal of the European Ceramic Society, 2016, 36, 1407-1415.	5.7	26
11	Phase separation in melt-casting of ceramic materials by high-gravity combustion synthesis. Materials Chemistry and Physics, 2012, 133, 661-667.	4.0	21
12	Gas-discharge induced flash sintering of YSZ ceramics at room temperature. Journal of Advanced Ceramics, 2022, 11, 603-614.	17.4	20
13	Preparation and Formation Mechanism of Elongated (<scp><scp>Ca</scp></scp>,<scp><scp>Dy</scp></scp>)â€Î±â€Sialon Powder via Carbothermal Reduction and Nitridation. Journal of the American Ceramic Society, 2012, 95, 1871-1877.	3.8	19
14	Combustion Synthesis of SiAlON Ceramic Powders: A Review. Materials and Manufacturing Processes, 2013, 28, 113-125.	4.7	19
15	Melt-Casting of Translucent MgAl₂O₄Ceramics by Combustion Synthesis Under High Gravity. Materials and Manufacturing Processes, 2012, 27, 689-693.	4.7	17
16	One-step preparation of dense TiC1â^’xNxâ€“Ni3Ti cermet by combustion synthesis. Materials and Design, 2015, 87, 6-9.	7.0	17
17	High thermoelectric performance of In-doped Cu2SnSe3 prepared by fast combustion synthesis. New Journal of Chemistry, 2016, 40, 5394-5400.	2.8	16
18	Combustion synthesis of ZnSe with strong red emission. Materials and Design, 2016, 97, 33-44.	7.0	15

#	ARTICLE	IF	CITATIONS
19	Reaction mechanism in fast combustion synthesis of superconducting FeSe and FeSe0.7Te0.3. Acta Materialia, 2017, 122, 187-198.	7.9	15
20	Improved luminescence and afterglow emission from Mn2+/Si4+ co-doped AlN by combustion synthesis method. Journal of Alloys and Compounds, 2021, 883, 160745.	5.5	15
21	Growth mechanism of crystalline SiAlON microtubes prepared by combustion synthesis. CrystEngComm, 2012, 14, 5585.	2.6	14
22	Deepâ€redâ€emitting Ca₂ScSbO₆:Mn⁴⁺ phosphors with a double perovskite structure: Synthesis, characterization and potential in plant growth lighting. Journal of the American Ceramic Society, 2022, 105, 2094-2104.	3.8	14
23	Preparation of Transparent <scp><scp>Y</scp></scp>₂<scp><scp>O</scp></scp>₃â€“<scp><scp>Al</scp></scp>₂<scp Glasses by Highâ€Gravity Combustion Synthesis with Heating Assistance. Journal of the American Ceramic Society, 2012, 95, 1799-1802.	3.8	13
24	Thermoelectric properties of S and Te-doped Cu₂SnSe₃ prepared by combustion synthesis. Journal of Asian Ceramic Societies, 2018, 6, 13-19.	2.3	13
25	Preparation of ZnSe powder by vapor reaction during combustion synthesis. Ceramics International, 2019, 45, 18135-18139.	4.8	13
26	Direct fabrication of highly-dense Cu2ZnSnSe4 bulk materials by combustion synthesis for enhanced thermoelectric properties. Materials and Design, 2016, 93, 238-246.	7.0	12
27	Dynamically Controlled Formation of TiN by Combustion of Ti in Air. Journal of the American Ceramic Society, 2007, 90, 2918-2925.	3.8	11
28	High-gravity combustion synthesis and in situ melt infiltration: A new method for preparing cemented carbides. Scripta Materialia, 2013, 69, 642-645.	5.2	11
29	Fast preparation of ZTA-TiC-FeCrNi cermets by high-gravity combustion synthesis. Ceramics International, 2017, 43, 6904-6909.	4.8	11
30	Combustion synthesis of InSe, In₂Se₃, and GaSe. Journal of the American Ceramic Society, 2018, 101, 36-39.	3.8	11
31	Surface resistivity and bonding strength of atmosphere plasma sprayed copperâ€coated alumina substrate. Journal of the American Ceramic Society, 2021, 104, 1193-1197.	3.8	11
32	Novel Faceted alpha-SiAlON Micro-Crystals Prepared by Combustion Synthesis. Journal of the American Ceramic Society, 2006, 89, 364-366.	3.8	10
33	Interfacial failure mechanism in tungsten fiber reinforced copper-based composites fabricated by combustion synthesis melt infiltration under ultra-high gravity. Materials and Design, 2015, 87, 901-904.	7.0	10
34	Growth mechanism of Y Î±-SiAlON whiskers prepared by combustion synthesis. Journal of Materials Research, 2005, 20, 889-894.	2.6	9
35	Preparation of Fe3Al Alloy by Combustion Synthesis Melt-Casting under Ultra-High Gravity. Materials and Manufacturing Processes, 2012, 27, 486-489.	4.7	9
36	Effect of Yâ€Î±â€Sialon Seeding and Holding Time on the Formation of Elongated (<scp><scp>Ca</scp></scp>,<scp><scp>Dy</scp></scp>)â€Î±â€Sialon Crystals Prepared via Carbothermal Reduction and Nitridation. Journal of the American Ceramic Society, 2012, 95, 2777-2781.	3.8	9

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37	High-Gravity Combustion Synthesis of Al₂TiO₅/Mullite Ceramic Composites. Materials and Manufacturing Processes, 2013, 28, 139-142.	4.7	8
38	Fabrication of hard cermets by in-situ synthesis and infiltration of metal melts into WC powder compacts. Journal of Asian Ceramic Societies, 2017, 5, 418-421.	2.3	8
39	Combustion synthesis of ZrN and AlN using Si3N4 and BN as solid nitrogen sources. Ceramics International, 2018, 44, 11914-11917.	4.8	8
40	Reaction mechanism in mechanochemical synthesis of Cu2-xSe. Ceramics International, 2018, 44, 22172-22175.	4.8	8
41	Combustion synthesis of wellâ€dispersed rodâ€like Î²â€Si₃N₄ crystals by the addition of carbon. Journal of the American Ceramic Society, 2020, 103, 757-761.	3.8	8
42	Coarseâ€grained Î²â€Si₃N₄ powders prepared by combustion synthesis. Journal of the American Ceramic Society, 2021, 104, 2919-2923.	3.8	8
43	Nanoflake-modified MgO microspheres prepared by flame spraying. Materials Letters, 2014, 115, 226-228.	2.6	7
44	Fast synthesis of Fe 1.1 Se 1â^'x Te x superconductors in a self-heating and furnace-free way. Materials and Design, 2016, 106, 349-354.	7.0	7
45	Pressureless sintering of in-situ toughened Yb Î±-SiAlON ceramics by adding seed crystals prepared by combustion synthesis. Journal of Materials Science, 2006, 41, 1791-1796.	3.7	6
46	High-gravity combustion synthesis of W-Cr alloys with improved hardness. Materials Chemistry and Physics, 2016, 182, 6-9.	4.0	6
47	Novel deepâ€redâ€emitting doubleâ€perovskite type Ca ₂ ScNbO ₆ :Mn ⁴⁺ phosphor: Structure, spectral study, and improvement by NaF flux. Journal of the American Ceramic Society, 2022, 105, 4230-4241.	3.8	6
48	Fabrication of yttrium-stabilized Î±-SiAlON powders with rod-like crystals by combustion synthesis. Journal of Materials Science, 2006, 41, 6062-6068.	3.7	5
49	Thermite Synthesis of TiC/FeNiCr Cermet with Double-Layer Structure. Materials and Manufacturing Processes, 2015, 30, 576-584.	4.7	5
50	Controlled growth of SiC crystals in combustion synthesis. Journal of the American Ceramic Society, 2022, 105, 44-49.	3.8	5
51	Synthesis of Si ₃ N ₄ nanowires by catalystâ€free nitridation of (Si + SiO) Tj ETQq1 1 0.784314 rgBT /Overlo	1.3	4
52	In situ combustion synthesis of spherical Si@Si₃N₄ granules. Journal of the American Ceramic Society, 2022, 105, 6529-6536.	3.8	4
53	Hollow Spherical Tiâ€"Alâ€"C Clusters Prepared by Combustion Synthesis. Journal of the American Ceramic Society, 2009, 92, 2385-2387.	3.8	3
54	Crystallization of Y3Al5O12:Ce3+ glass microspheres prepared by flame-spraying synthesis. Journal of Materials Science: Materials in Electronics, 2015, 26, 72-77.	2.2	3

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55	Growth of FeSe 0.5 Te 0.5 crystals with (001) preferred orientation by chemical-furnace-assisted combustion synthesis. Materials Chemistry and Physics, 2017, 189, 146-152.	4.0	3
56	A supersonic target jet mill based on the entrainment of annular supersonic flow. Review of Scientific Instruments, 2018, 89, 085104.	1.3	2
57	Preparation of (Ca, Mg) Î±-SiAlON powders by combustion synthesis. Journal of Materials Science, 2005, 40, 3255-3257.	3.7	1
58	Fast preparation of Cu(In,Ga)Se 2 and CuIn(S,Se) 2 bulk materials by combustion synthesis. Journal of the American Ceramic Society, 2018, 101, 3857-3863.	3.8	1
59	Combustion synthesis of fine aluminum nitride powders under micropositive N 2 pressure with water additive. Journal of the American Ceramic Society, 2018, 102, 914.	3.8	1
60	Measurement of ion mobility based on a reversible migration process in solids. Applied Physics Letters, 2019, 114, 243901.	3.3	1