Michelle L Pantoya

List of Publications by Year
in descending order

169 papers	4,727 citations	109321 35 h-index	118850 62 g-index
171 all docs	171 docs citations	171 times ranked	2093 citing authors

#	Article	IF	Citations
1	Comparing pyrometry and thermography in ballistic impact experiments. Measurement: Journal of the International Measurement Confederation, 2022, 189, 110488.	5.0	7
2	Direct demonstration of complete combustion of gas-suspended powder metal fuel using bomb calorimetry. Measurement Science and Technology, 2022, 33, 047002.	2.6	4
3	Variations in aluminum particle surface energy and reactivity induced by annealing and quenching. Applied Surface Science, 2022, 579, 152185.	6.1	8
4	In-situ thermal analysis of intermetallic and thermite projectiles in high velocity impact experiments. International Journal of Heat and Mass Transfer, 2022, 187, 122565.	4.8	4
5	Adsorption and exchange reactions of iodine molecules at the alumina surface: modelling alumina-iodine reaction mechanisms. Physical Chemistry Chemical Physics, 2022, , .	2.8	0
6	Thermite and intermetallic projectiles examined experimentally in air and inert gas environments. Journal of Applied Physics, 2022, 131, .	2.5	3
7	The influence of particle size on the fluid dynamics of a laser-induced plasma. Physics of Fluids, 2022, 34, .	4.0	5
8	Silicon alloying enhances fast heating rate combustion of aluminum particles. Combustion and Flame, 2022, 241, 112156.	5.2	5
9	Comprehending Metal Particle Combustion: a Path Forward. Propellants, Explosives, Pyrotechnics, 2022, 47, .	1.6	1
10	Back Cover: Comprehending Metal Particle Combustion: a Path Forward (Prop., Explos., Pyrotech.) Tj ETQq0 0 0 rgBT /Overlock 10 Tf 50	1.6	0
11	Hydration of alumina (Al2O3) toward advancing aluminum particles for energy generation applications. Colloids and Surfaces A: Physicochemical and Engineering Aspects, 2022, 652, 129740.	4.7	2
12	Thermal analysis of microscale aluminum particles coated with perfluorotetradecanoic (PFTD) acid. Journal of Thermal Analysis and Calorimetry, 2021, 145, 289-296.	3.6	13
13	On the Pressure Generated by Thermite Reactions Using Stressâ€Altered Aluminum Particles. Propellants, Explosives, Pyrotechnics, 2021, 46, 99-106.	1.6	6
14	Reaction mechanism for fluorination reactions with hydroxylated alumina sites: Pathways promoting aluminum combustion. Journal of Chemical Physics, 2021, 154, 104308.	3.0	2
15	Tailoring Thermal Transport Properties by Inducing Surface Oxidation Reactions in Bulk Metal Composites. ACS Applied Materials & Interfaces, 2021, 13, 18358-18364.	8.0	4
16	Regulating magnesium combustion using surface chemistry and heating rate. Combustion and Flame, 2021, 226, 419-429.	5.2	7
17	Thermal oxidation analysis of aerosol synthesized fuel particles composed of Al versus Al-Si. Powder Technology, 2021, 382, 532-540.	4.2	9
18	Comparison of pyrometry and thermography for thermal analysis of thermite reactions. Applied Optics, 2021, 60, 4976.	1.8	7

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19	Engineering integration in elementary science classrooms: Effects of disciplinary language scaffolds on English learners' content learning and engineering identity. Journal of Engineering Education, 2021, 110, 517-544.	3.0	3
20	Surface modifications of plasma treated aluminum particles and direct evidence for altered reactivity. Materials and Design, 2021, 210, 110119.	7.0	8
21	A closer look at determining burning rates with imaging diagnostics. Optics and Lasers in Engineering, 2020, 124, 105841.	3.8	2
22	Thermite reactivity with ball milled aluminum-zirconium fuel particles. Combustion and Flame, 2020, 211, 195-201.	5.2	11
23	Target penetration and impact analysis of intermetallic projectiles. International Journal of Impact Engineering, 2020, 136, 103427.	5.0	11
24	Synthesis and characterization of polymeric films with stress-altered aluminum particle fillers. Journal of Materials Science, 2020, 55, 14229-14242.	3.7	4
25	Tailoring impact debris dispersion using intact or fragmented thermite projectiles. Journal of Applied Physics, 2020, 128, .	2.5	4
26	On the possible coexistence of two different regimes of metal particle combustion. Combustion and Flame, 2020, 221, 416-419.	5.2	10
27	Stress-altered aluminum powder dust combustion. Journal of Applied Physics, 2020, 127, .	2.5	7
28	Synthesis of metal iodates from an energetic salt. RSC Advances, 2020, 10, 14403-14409.	3.6	9
29	Aluminum particle reactivity as a function of alumina shell structure: Amorphous versus crystalline. Powder Technology, 2020, 374, 33-39.	4.2	11
30	Thermal analysis of an iodine rich binder for energetic material applications. Thermochimica Acta, 2020, 690, 178701.	2.7	4
31	Effects of Size and Prestressing of Aluminum Particles on the Oxidation of Levitated <i>exo</i>-Tetrahydrodicyclopentadiene Droplets. Journal of Physical Chemistry A, 2020, 124, 1489-1507.	2.5	22
32	Fostering Enthusiasm for Engineering from an Early Age. , 2020, , .		1
33	Highly Reactive Prestressed Aluminum under High Velocity Impact Loading: Processing for Improved Energy Conversion. Advanced Engineering Materials, 2019, 21, 1900492.	3.5	4
34	Material Characterization of Plasma-Treated Aluminum Particles via Different Gases. MRS Advances, 2019, 4, 1589-1595.	0.9	7
35	Thermal-Recoverable Tough Hydrogels Enhanced by Porphyrin Decorated Graphene Oxide. Nanomaterials, 2019, 9, 1487.	4.1	7
36	Oxidation of Levitated <i>exo</i>-Tetrahydrodicyclopentadiene Droplets Doped with Aluminum Nanoparticles. Journal of Physical Chemistry Letters, 2019, 10, 5756-5763.	4.6	20

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37	Effect of Hydration on Promoting Oxidative Reactions with Aluminum Oxide and Oxyhydroxide Nanoparticles. Journal of Physical Chemistry C, 2019, 123, 15017-15026.	3.1	8
38	Single Particle Combustion of Pre-Stressed Aluminum. Materials, 2019, 12, 1737.	2.9	14
39	Plasma surface treatment of aluminum nanoparticles for energetic material applications. Combustion and Flame, 2019, 206, 211-213.	5.2	40
40	A strategy for increasing the energy release rate of aluminum by replacing the alumina passivation shell with aluminum iodate hexahydrate (AIH). Combustion and Flame, 2019, 205, 327-335.	5.2	10
41	Effects of Shear Rate during Energetic Material Processing on Reactivity. Advanced Engineering Materials, 2019, 21, 1801324.	3.5	4
42	Pre-stressing aluminum nanoparticles as a strategy to enhance reactivity of nanothermite composites. Combustion and Flame, 2019, 205, 33-40.	5.2	35
43	Highly reactive energetic films by pre-stressing nano-aluminum particles. RSC Advances, 2019, 9, 40607-40617.	3.6	5
44	Photoinduced heat conversion enhancement of metallic glass nanowire arrays. Journal of Applied Physics, 2019, 125, .	2.5	10
45	High Velocity Impact Testing for Evaluation of Intermetallic Projectiles. , 2019, , .		0
46	Surface engineered nanoparticles dispersed in kerosene: The effect of oleophobicity on droplet combustion. Combustion and Flame, 2018, 188, 243-249.	5.2	12
47	Impact ignition and combustion of micron-scale aluminum particles pre-stressed with different quenching rates. Journal of Applied Physics, 2018, 124, .	2.5	14
48	Improving the Explosive Performance of Aluminum Nanoparticles with Aluminum Iodate Hexahydrate (AIH). Scientific Reports, 2018, 8, 8036.	3.3	42
49	Extending the excluded volume for percolation threshold estimates in polydisperse systems: The binary disk system. Applied Mathematical Modelling, 2017, 46, 116-125.	4.2	16
50	Tailoring surface conditions for enhanced reactivity of aluminum powders with solid oxidizing agents. Applied Surface Science, 2017, 402, 225-231.	6.1	10
51	Thermal and Combustion Properties of Energetic Thin Films with Carbon Nanotubes. Journal of Thermophysics and Heat Transfer, 2017, 31, 646-650.	1.6	5
52	Percolation of binary disk systems: Modeling and theory. Physical Review E, 2017, 95, 012118.	2.1	13
53	The waterâ€“iodine oxide system: a revised mechanism for hydration and dehydration. RSC Advances, 2017, 7, 10183-10191.	3.6	12
54	Synthesis and reactive characterization of aluminum iodate hexahydrate crystals [Al(H2O)6](IO3)3(HIO3)2. Combustion and Flame, 2017, 179, 154-156.	5.2	22

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55	Percolation of a metallic binder in energy generating composites. Journal of Materials Chemistry A, 2017, 5, 7200-7209.	10.3	4
56	Replacing the Al₂O₃ Shell on Al Particles with an Oxidizing Salt, Aluminum Iodate Hexahydrate. Part I: Reactivity. Journal of Physical Chemistry C, 2017, 121, 23184-23191.	3.1	26
57	Replacing the Al₂O₃ Shell on Al Particles with an Oxidizing Salt, Aluminum Iodate Hexahydrate. Part II: Synthesis. Journal of Physical Chemistry C, 2017, 121, 23192-23199.	3.1	15
58	Dropping the hammer: Examining impact ignition and combustion using pre-stressed aluminum powder. Journal of Applied Physics, 2017, 122, 125102.	2.5	10
59	Characterizing the feasibility of processing wet granular materials to improve rheology for 3D printing. Journal of Materials Science, 2017, 52, 13040-13053.	3.7	68
60	Preliminary Toxicity Evaluation of Aluminum/Iodine Pentoxide on Terrestrial and Aquatic Invertebrates. Water, Air, and Soil Pollution, 2017, 228, 1.	2.4	2
61	Fluorination of an Alumina Surface: Modeling Aluminumâ€“Fluorine Reaction Mechanisms. ACS Applied Materials & Interfaces, 2017, 9, 24290-24297.	8.0	49
62	3D processing and characterization of acrylonitrile butadiene styrene (ABS) energetic thin films. Journal of Materials Science, 2017, 52, 993-1004.	3.7	25
63	Porphyrin Immobilized Nanographene Oxide for Enhanced and Targeted Photothermal Therapy of Brain Cancer. ACS Biomaterials Science and Engineering, 2016, 2, 1357-1366.	5.2	60
64	Effect of Polar Environments on the Aluminum Oxide Shell Surrounding Aluminum Particles: Simulations of Surface Hydroxyl Bonding and Charge. ACS Applied Materials & Interfaces, 2016, 8, 13926-13933.	8.0	17
65	Effect of environment on iodine oxidation state and reactivity with aluminum. Physical Chemistry Chemical Physics, 2016, 18, 11243-11250.	2.8	19
66	A slice of an aluminum particle: Examining grains, strain and reactivity. Combustion and Flame, 2016, 173, 229-234.	5.2	10
67	Reactive characterization of anhydrous iodine (v) oxide (I2O5) with aluminum: amorphous versus crystalline microstructures. Thermochimica Acta, 2016, 641, 55-62.	2.7	7
68	Microwave synthesis of functionally graded tricalcium phosphate for osteoconduction. Materials Today Communications, 2016, 9, 47-53.	1.9	5
69	Engineering Literacy and Engagement in Kindergarten Classrooms. Journal of Engineering Education, 2016, 105, 630-654.	3.0	28
70	Reaction Kinetics and Combustion Dynamics of I₄O₉and Aluminum Mixtures. Journal of Visualized Experiments, 2016, , .	0.3	2
71	Stress relaxation in pre-stressed aluminum coreâ€“shell particles: X-ray diffraction study, modeling, and improved reactivity. Combustion and Flame, 2016, 170, 30-36.	5.2	12
72	Improving aluminum particle reactivity by annealing and quenching treatments: Synchrotron X-ray diffraction analysis of strain. Acta Materialia, 2016, 103, 495-501.	7.9	19

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73	Fast-Reacting Nanocomposite Energetic Materials. , 2016, , 21-45.		7
74	Advanced susceptors for microwave heating of energetic materials. Materials and Design, 2016, 90, 47-53.	7.0	17
75	Development of flexible, free-standing, thin films for additive manufacturing and localized energy generation. AIP Advances, 2015, 5, .	1.3	14
76	Examining Hydroxylâ€“Alumina Bonding toward Aluminum Nanoparticle Reactivity. Journal of Physical Chemistry C, 2015, 119, 26547-26553.	3.1	33
77	Pre-Stressing Micron-Scale Aluminum Core-Shell Particles to Improve Reactivity. Scientific Reports, 2015, 5, 7879.	3.3	27
78	Combustion Performance Improvement of Energetic Thin Films Using Carbon Nanotubes. , 2015, , .		2
79	Desensitizing ignition of energetic materials when exposed to accidental fire. Fire Safety Journal, 2015, 76, 39-43.	3.1	1
80	Desensitizing nano powders to electrostatic discharge ignition. Journal of Electrostatics, 2015, 76, 102-107.	1.9	20
81	Ignition sensitivity and electrical conductivity of an aluminum fluoropolymer reactive material with carbon nanofillers. Combustion and Flame, 2015, 162, 1417-1421.	5.2	28
82	Effects of rheological properties on reactivity of energetic thin films. Combustion and Flame, 2015, 162, 3288-3293.	5.2	13
83	Effect of nanofiller shape on effective thermal conductivity of fluoropolymer composites. Composites Science and Technology, 2015, 118, 251-256.	7.8	23
84	Reaction Dynamics of Rocket Propellant with Magnesium Oxide Nanoparticles. Energy & Fuels, 2015, 29, 6111-6117.	5.1	24
85	Activating Aluminum Reactivity with Fluoropolymer Coatings for Improved Energetic Composite Combustion. ACS Applied Materials & Interfaces, 2015, 7, 18742-18749.	8.0	127
86	Internal stresses in pre-stressed micron-scale aluminum core-shell particles and their improved reactivity. Journal of Applied Physics, 2015, 118, .	2.5	9
87	Synthesis and characterization of flexible, free-standing, energetic thin films. Surface and Coatings Technology, 2015, 284, 422-426.	4.8	5
88	Catalyzing aluminum particle reactivity with a fluorine oligomer surface coating for energy generating applications. Journal of Fluorine Chemistry, 2015, 180, 265-271.	1.7	37
89	Developing An Engineering Identity In Early Childhood. American Journal of Engineering Education, 2015, 6, 61-68.	0.4	22
90	Piezoelectric Ignition of Nanocomposite Energetic Materials. Journal of Propulsion and Power, 2014, 30, 15-18.	2.2	6

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91	Editorial: Safety in Energetic Materials Research and Development â€“ Approaches in Academia and a National Laboratory. Propellants, Explosives, Pyrotechnics, 2014, 39, 483-485.	1.6	4
92	Exothermic surface reactions in aluminaâ€“aluminum shellâ€“core nanoparticles with iodine oxide decomposition fragments. Journal of Nanoparticle Research, 2014, 16, 1.	1.9	20
93	Oxygen scavenging enhances exothermic behavior of aluminum-fueled energetic composites. Journal of Thermal Analysis and Calorimetry, 2014, 116, 1133-1140.	3.6	10
94	Factors Influencing Temperature Fields during Combustion Reactions. Propellants, Explosives, Pyrotechnics, 2014, 39, 434-443.	1.6	10
95	Exothermic surface chemistry on aluminum particles promoting reactivity. Applied Surface Science, 2014, 315, 90-94.	6.1	38
96	Controlling the electrostatic discharge ignition sensitivity of composite energetic materials using carbon nanotube additives. Journal of Electrostatics, 2014, 72, 428-432.	1.9	30
97	Thermal investigations of nanoaluminum/perfluoropolyether coreâ€“shell impregnated composites for structural energetics. Thermochimica Acta, 2014, 591, 45-50.	2.7	24
98	The effects of density on thermal conductivity and absorption coefficient for consolidated aluminum nanoparticles. International Journal of Heat and Mass Transfer, 2014, 73, 595-599.	4.8	26
99	Fabrication, Characterization, and Energetic Properties of Metallized Fibers. ACS Applied Materials & Interfaces, 2014, 6, 6049-6053.	8.0	38
100	A mechanistic perspective of atmospheric oxygen sensitivity on composite energetic material reactions. Combustion and Flame, 2014, 161, 1131-1134.	5.2	8
101	Deposition and characterization of energetic thin films. Combustion and Flame, 2014, 161, 1117-1124.	5.2	32
102	Synthesizing aluminum particles towards controlling electrostatic discharge ignition sensitivity. Journal of Electrostatics, 2014, 72, 28-32.	1.9	11
103	Melt dispersion mechanism for fast reaction of aluminum nano- and micron-scale particles: Flame propagation and SEM studies. Combustion and Flame, 2014, 161, 1668-1677.	5.2	61
104	Utilizing Microwave Susceptors to Visualize Hot-Spots in Trinitrotoluene. Journal of Microwave Power and Electromagnetic Energy, 2014, 48, 5-12.	0.8	2
105	Comparison of engineered nanocoatings on the combustion of aluminum and copper oxide nanothermites. Surface and Coatings Technology, 2013, 215, 476-484.	4.8	21
106	Neutralizing bacterial spores using halogenated energetic reactions. Biotechnology and Bioprocess Engineering, 2013, 18, 918-925.	2.6	16
107	Effect of surface coatings on aluminum fuel particles toward nanocomposite combustion. Surface and Coatings Technology, 2013, 237, 456-459.	4.8	22
108	The role of aluminum particle size in electrostatic ignition sensitivity of composite energetic materials. Combustion and Flame, 2013, 160, 2279-2281.	5.2	44

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109	Electrostatic discharge sensitivity and electrical conductivity of composite energetic materials. Journal of Electrostatics, 2013, 71, 77-83.	1.9	35
110	Detonation models of fast combustion waves in nanoscale Al-MoO3bulk powder media. Combustion Theory and Modelling, 2013, 17, 25-39.	1.9	8
111	Laser Ignition of Nanoâ€Composite Energetic Loose Powders. Propellants, Explosives, Pyrotechnics, 2013, 38, 441-447.	1.6	13
112	Determination of the spatial temperature distribution from combustion products: A diagnostic study. Review of Scientific Instruments, 2013, 84, 104902.	1.3	16
113	Linking molecular level chemistry to macroscopic combustion behavior for nano-energetic materials with halogen containing oxides. Journal of Chemical Physics, 2013, 139, 074701.	3.0	19
114	A Case Study in Active Learning: Teaching Undergraduate Research in an Engineering Classroom Setting. Engineering Education, 2013, 8, 54-64.	0.3	9
115	Effect of oxide shell growth on nano-aluminum thermite propagation rates. Combustion and Flame, 2012, 159, 3448-3453.	5.2	43
116	Tuning Energetic Material Reactivity Using Surface Functionalization of Aluminum Fuels. Journal of Physical Chemistry C, 2012, 116, 24469-24475.	3.1	101
117	Impact ignition of aluminum-teflon based energetic materials impregnated with nano-structured carbon additives. Journal of Applied Physics, 2012, 112, 024902.	2.5	49
118	Thermal Property Measurements of Reactive Materials: The Macroscopic Behavior of a Nanocomposite. Journal of Heat Transfer, 2012, 134, .	2.1	1
119	Heat Flux Analysis of a Reacting Thermite Spray Impingent on a Substrate. Energy & Fuels, 2012, 26, 1621-1628.	5.1	6
120	Experimentally measured thermal transport properties of aluminum?polytetrafluoroethylene nanocomposites with graphene and carbon nanotube additives. International Journal of Heat and Mass Transfer, 2012, 55, 817-824.	4.8	57
121	Flame Propagation Experiments of Non-gas-Generating Nanocomposite Reactive Materials. Energy & Fuels, 2011, 25, 640-646.	5.1	15
122	Self-propagating high-temperature synthesis of nanostructured titanium aluminide alloys with varying porosity. Acta Materialia, 2011, 59, 2447-2454.	7.9	12
123	Toward design of the pre-stressed nano- and microscale aluminum particles covered by oxide shell. Combustion and Flame, 2011, 158, 1413-1417.	5.2	25
124	Nanoscale investigation of surfaces exposed to a thermite spray. Applied Thermal Engineering, 2011, 31, 1286-1292.	6.0	8
125	Effect of a superhydrophobic coating on the combustion of aluminium and iron oxide nanothermites. Surface and Coatings Technology, 2011, 205, 5103-5108.	4.8	22
126	Reaction Dynamics and Probability Study of Aluminum-Viton-Acetone Droplets. Journal of Propulsion and Power, 2011, 27, 396-401.	2.2	5

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127	Infrared measurements of energy transfer from energetic materials to steel substrates. International Journal of Thermal Sciences, 2010, 49, 1877-1885.	4.9	13
128	Reaction kinetics of nanometric aluminum and iodine pentoxide. Journal of Thermal Analysis and Calorimetry, 2010, 102, 609-613.	3.6	62
129	The effect of pre-heating on flame propagation in nanocomposite thermites. Combustion and Flame, 2010, 157, 1581-1585.	5.2	25
130	Impact sensitivity of intermetallic nanocomposites: A study on compositional and bulk density. Intermetallics, 2010, 18, 1612-1616.	3.9	36
131	Reaction Dynamics and Probability Study of Aluminum-Viton-Acetone Droplets. , 2010, , .		0
132	The aluminium and iodine pentoxide reaction for the destruction of spore forming bacteria. Physical Chemistry Chemical Physics, 2010, 12, 12653.	2.8	78
133	Correlation of reactant particle size on residual stresses of nanostructured NiAl generated by self-propagating high-temperature synthesis. Journal of Materials Research, 2009, 24, 2079-2088.	2.6	0
134	Impact ignition of nano and micron composite energetic materials. International Journal of Impact Engineering, 2009, 36, 842-846.	5.0	97
135	A multi-objective modeling approach for energetic material evaluation decisions. European Journal of Operational Research, 2009, 194, 629-636.	5.7	8
136	The influence of alumina passivation on nano-Al/Teflon reactions. Thermochimica Acta, 2009, 493, 109-110.	2.7	113
137	Influence of Aluminum Passivation on the Reaction Mechanism: Flame Propagation Studies. Energy & Fuels, 2009, 23, 4231-4235.	5.1	41
138	Effect of Bulk Density on Reaction Propagation in Nanothermites and Micron Thermites. Journal of Propulsion and Power, 2009, 25, 465-470.	2.2	78
139	Nanochargers: Energetic materials for energy storage. Applied Physics Letters, 2009, 95, .	3.3	11
140	Effect of the Alumina Shell on the Melting Temperature Depression for Aluminum Nanoparticles. Journal of Physical Chemistry C, 2009, 113, 14088-14096.	3.1	81
141	Characterization of a gas burner to simulate a propellant flame and evaluate aluminum particle combustion. Combustion and Flame, 2008, 153, 58-70.	5.2	16
142	Fast reactions with nano- and micrometer aluminum: A study on oxidation versus fluorination. Combustion and Flame, 2008, 155, 619-634.	5.2	162
143	Melt dispersion versus diffusive oxidation mechanism for aluminum nanoparticles: Critical experiments and controlling parameters. Applied Physics Letters, 2008, 92, .	3.3	113
144	Melt-dispersion mechanism for fast reaction of aluminum particles: Extension for micron scale particles and fluorination. Applied Physics Letters, 2008, 92, .	3.3	49

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145	Small angle X-ray scattering analysis of the effect of cold compaction of Al/MoO₃thermite composites. Physical Chemistry Chemical Physics, 2008, 10, 193-199.	2.8	8
146	Mechanochemical mechanism for fast reaction of metastable intermolecular composites based on dispersion of liquid metal. Journal of Applied Physics, 2007, 101, 083524.	2.5	131
147	EFFECT OF AL PARTICLE SIZE ON THE THERMAL DEGRADATION OF AL/TEFLON MIXTURES. Combustion Science and Technology, 2007, 179, 1467-1480.	2.3	189
148	Combustion Behaviors Resulting from Bimodal Aluminum Size Distributions in Thermites. Journal of Propulsion and Power, 2007, 23, 181-185.	2.2	55
149	Melt dispersion mechanism for fast reaction of nanothermites. Applied Physics Letters, 2006, 89, 071909.	3.3	159
150	Combustion Wave Speeds of Solâˆ’Gel-Synthesized Tungsten Trioxide and Nano-Aluminum:â€‰ The Effect of Impurities on Flame Propagation. Energy & Fuels, 2006, 20, 2370-2376.	5.1	60
151	Combustion synthesis of metallic foams from nanocomposite reactants. Intermetallics, 2006, 14, 620-629.	3.9	21
152	Dependence of size and size distribution on reactivity of aluminum nanoparticles in reactions with oxygen and MoO3. Thermochimica Acta, 2006, 444, 117-127.	2.7	133
153	The effect of slow heating rates on the reaction mechanisms of nano and micron composite thermite reactions. Journal of Thermal Analysis and Calorimetry, 2006, 85, 37-43.	3.6	52
154	Combustion wave speeds of nanocomposite Al/Fe2O3: the effects of Fe2O3 particle synthesis technique. Combustion and Flame, 2005, 140, 299-309.	5.2	187
155	A Spreadsheet-Based Analysis for Two-Dimensional Transient Laser Heating of a Cylindrical Solid. Heat Transfer Engineering, 2005, 26, 63-74.	1.9	0
156	Ignition dynamics and activation energies of metallic thermites: From nano- to micron-scale particulate composites. Journal of Applied Physics, 2005, 98, 034909.	2.5	82
157	Ferrihydrite gels derived in the Fe(NO3)3Â·9H2Oâ€“C2H5OHâ€“CH3CHCH2O ternary system. Journal of Non-Crystalline Solids, 2005, 351, 1426-1432.	3.1	4
158	Effect of Nanocomposite Synthesis on the Combustion Performance of a Ternary Thermite. Journal of Physical Chemistry B, 2005, 109, 20180-20185.	2.6	42
159	Nickel aluminum superalloys created by the self-propagating high-temperature synthesis of nanoparticle reactants. Journal of Materials Research, 2004, 19, 3028-3036.	2.6	5
160	A laser induced diagnostic technique for velocity measurements using liquid crystal thermography. International Journal of Heat and Mass Transfer, 2004, 47, 4285-4292.	4.8	7
161	Nano-scale reactants in the self-propagating high-temperature synthesis of nickel aluminide. Acta Materialia, 2004, 52, 3183-3191.	7.9	63
162	Laser ignition of nanocomposite thermites. Combustion and Flame, 2004, 138, 373-383.	5.2	328

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163	The effect of size distribution on burn rate in nanocomposite thermites: a probability density function study. Combustion Theory and Modelling, 2004, 8, 555-565.	1.9	18
164	Nonuniform laser ignition in energetic materials. Combustion Science and Technology, 2003, 175, 1929-1951.	2.3	22
165	Ignition and Combustion Behaviors of Nanocomposite Al/MoO₃. Materials Research Society Symposia Proceedings, 2003, 800, 185.	0.1	4
166	Nickel Aluminide Superalloys Created by SHS of Nano-Particle Reactants. Materials Research Society Symposia Proceedings, 2003, 800, 151.	0.1	1
167	Synthesis and Characterization of Mixed Metal Oxide Nanocomposite Energetic Materials. Materials Research Society Symposia Proceedings, 2003, 800, 109.	0.1	8
168	Molten salt destruction of energetic materials: Emission and absorption measurements. Journal of Energetic Materials, 2002, 20, 1-37.	2.0	2
169	High Speed Imaging of TATB- and HMX-Based Energetic Material Decomposition in Molten Salts. Propellants, Explosives, Pyrotechnics, 2000, 25, 19-25.	1.6	4