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	Laser ignition of nanocomposite thermites. Combustion and Flame, 2004, 138, 373-383.	5.2	328
2	EFFECT OF AL PARTICLE SIZE ON THE THERMAL DEGRADATION OF AL/TEFLON MIXTURES. Combustion Science and Technology, 2007, 179, 1467-1480.	2.3	189
3	Combustion wave speeds of nanocomposite Al/Fe2O3: the effects of Fe2O3 particle synthesis technique. Combustion and Flame, 2005, 140, 299-309.	5.2	187
4	Fast reactions with nano- and micrometer aluminum: A study on oxidation versus fluorination. Combustion and Flame, 2008, 155, 619-634.	5.2	162
5	Melt dispersion mechanism for fast reaction of nanothermites. Applied Physics Letters, 2006, 89, 071909.	3.3	159
6	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
7	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
8	Activating Aluminum Reactivity with Fluoropolymer Coatings for Improved Energetic Composite Combustion. ACS Applied Materials & Interfaces, 2015, 7, 18742-18749.	8.0	127
9	Melt dispersion versus diffusive oxidation mechanism for aluminum nanoparticles: Critical experiments and controlling parameters. Applied Physics Letters, 2008, 92, .	3.3	113
10	The influence of alumina passivation on nano-Al/Teflon reactions. Thermochimica Acta, 2009, 493, 109-110.	2.7	113
11	Tuning Energetic Material Reactivity Using Surface Functionalization of Aluminum Fuels. Journal of Physical Chemistry C, 2012, 116, 24469-24475.	3.1	101
12	Impact ignition of nano and micron composite energetic materials. International Journal of Impact Engineering, 2009, 36, 842-846.	5.0	97
13	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
14	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
15	Effect of Bulk Density on Reaction Propagation in Nanothermites and Micron Thermites. Journal of Propulsion and Power, 2009, 25, 465-470.	2.2	78
16	The aluminium and iodine pentoxide reaction for the destruction of spore forming bacteria. Physical Chemistry Chemical Physics, 2010, 12, 12653.	2.8	78
17	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
18	Nano-scale reactants in the self-propagating high-temperature synthesis of nickel aluminide. Acta Materialia, 2004, 52, 3183-3191.	7.9	63

#	Article	IF	Citations
19	Reaction kinetics of nanometric aluminum and iodine pentoxide. Journal of Thermal Analysis and Calorimetry, 2010, 102, 609-613.	3.6	62
20	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
21	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
22	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
23	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
24	Combustion Behaviors Resulting from Bimodal Aluminum Size Distributions in Thermites. Journal of Propulsion and Power, 2007, 23, 181-185.	2.2	55
25	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
26	Melt-dispersion mechanism for fast reaction of aluminum particles: Extension for micron scale particles and fluorination. Applied Physics Letters, 2008, 92, .	3.3	49
27	Impact ignition of aluminum-teflon based energetic materials impregnated with nano-structured carbon additives. Journal of Applied Physics, 2012, 112, 024902.	2.5	49
28	Fluorination of an Alumina Surface: Modeling Aluminumâ€"Fluorine Reaction Mechanisms. ACS Applied Materials & Interfaces, 2017, 9, 24290-24297.	8.0	49
29	The role of aluminum particle size in electrostatic ignition sensitivity of composite energetic materials. Combustion and Flame, 2013, 160, 2279-2281.	5.2	44
30	Effect of oxide shell growth on nano-aluminum thermite propagation rates. Combustion and Flame, 2012, 159, 3448-3453.	5.2	43
31	Effect of Nanocomposite Synthesis on the Combustion Performance of a Ternary Thermite. Journal of Physical Chemistry B, 2005, 109, 20180-20185.	2.6	42
32	Improving the Explosive Performance of Aluminum Nanoparticles with Aluminum Iodate Hexahydrate (AIH). Scientific Reports, 2018, 8, 8036.	3.3	42
33	Influence of Aluminum Passivation on the Reaction Mechanism: Flame Propagation Studies. Energy & Fuels, 2009, 23, 4231-4235.	5.1	41
34	Plasma surface treatment of aluminum nanoparticles for energetic material applications. Combustion and Flame, 2019, 206, 211-213.	5.2	40
35	Exothermic surface chemistry on aluminum particles promoting reactivity. Applied Surface Science, 2014, 315, 90-94.	6.1	38
36	Fabrication, Characterization, and Energetic Properties of Metallized Fibers. ACS Applied Materials & Interfaces, 2014, 6, 6049-6053.	8.0	38

#	Article	IF	Citations
37	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
38	Impact sensitivity of intermetallic nanocomposites: A study on compositional and bulk density. Intermetallics, 2010, 18, 1612-1616.	3.9	36
39	Electrostatic discharge sensitivity and electrical conductivity of composite energetic materials. Journal of Electrostatics, 2013, 71, 77-83.	1.9	35
40	Pre-stressing aluminum nanoparticles as a strategy to enhance reactivity of nanothermite composites. Combustion and Flame, 2019, 205, 33-40.	5.2	35
41	Examining Hydroxylâ€“Alumina Bonding toward Aluminum Nanoparticle Reactivity. Journal of Physical Chemistry C, 2015, 119, 26547-26553.	3.1	33
42	Deposition and characterization of energetic thin films. Combustion and Flame, 2014, 161, 1117-1124.	5.2	32
43	Controlling the electrostatic discharge ignition sensitivity of composite energetic materials using carbon nanotube additives. Journal of Electrostatics, 2014, 72, 428-432.	1.9	30
44	Ignition sensitivity and electrical conductivity of an aluminum fluoropolymer reactive material with carbon nanofillers. Combustion and Flame, 2015, 162, 1417-1421.	5.2	28
45	Engineering Literacy and Engagement in Kindergarten Classrooms. Journal of Engineering Education, 2016, 105, 630-654.	3.0	28
46	Pre-Stressing Micron-Scale Aluminum Core-Shell Particles to Improve Reactivity. Scientific Reports, 2015, 5, 7879.	3.3	27
47	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
48	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
49	The effect of pre-heating on flame propagation in nanocomposite thermites. Combustion and Flame, 2010, 157, 1581-1585.	5.2	25
50	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
51	3D processing and characterization of acrylonitrile butadiene styrene (ABS) energetic thin films. Journal of Materials Science, 2017, 52, 993-1004.	3.7	25
52	Thermal investigations of nanoaluminum/perfluoropolyether coreâ€“shell impregnated composites for structural energetics. Thermochimica Acta, 2014, 591, 45-50.	2.7	24
53	Reaction Dynamics of Rocket Propellant with Magnesium Oxide Nanoparticles. Energy & Fuels, 2015, 29, 6111-6117.	5.1	24
54	Effect of nanofiller shape on effective thermal conductivity of fluoropolymer composites. Composites Science and Technology, 2015, 118, 251-256.	7.8	23

#	Article	IF	Citations
55	Nonuniform laser ignition in energetic materials. Combustion Science and Technology, 2003, 175, 1929-1951.	2.3	22
56	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
57	Effect of surface coatings on aluminum fuel particles toward nanocomposite combustion. Surface and Coatings Technology, 2013, 237, 456-459.	4.8	22
58	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
59	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
60	Developing An Engineering Identity In Early Childhood. American Journal of Engineering Education, 2015, 6, 61-68.	0.4	22
61	Combustion synthesis of metallic foams from nanocomposite reactants. Intermetallics, 2006, 14, 620-629.	3.9	21
62	Comparison of engineered nanocoatings on the combustion of aluminum and copper oxide nanothermites. Surface and Coatings Technology, 2013, 215, 476-484.	4.8	21
63	Exothermic surface reactions in aluminaâ€"aluminum shellâ€"core nanoparticles with iodine oxide decomposition fragments. Journal of Nanoparticle Research, 2014, 16, 1.	1.9	20
64	Desensitizing nano powders to electrostatic discharge ignition. Journal of Electrostatics, 2015, 76, 102-107.	1.9	20
65	Oxidation of Levitated <i>exo</i>-Tetrahydrodicyclopentadiene Droplets Doped with Aluminum Nanoparticles. Journal of Physical Chemistry Letters, 2019, 10, 5756-5763.	4.6	20
66	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
67	Effect of environment on iodine oxidation state and reactivity with aluminum. Physical Chemistry Chemical Physics, 2016, 18, 11243-11250.	2.8	19
68	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
69	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
70	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
71	Advanced susceptors for microwave heating of energetic materials. Materials and Design, 2016, 90, 47-53.	7.0	17
72	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

#	Article	IF	Citations
73	Neutralizing bacterial spores using halogenated energetic reactions. Biotechnology and Bioprocess Engineering, 2013, 18, 918-925.	2.6	16
74	Determination of the spatial temperature distribution from combustion products: A diagnostic study. Review of Scientific Instruments, 2013, 84, 104902.	1.3	16
75	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
76	Flame Propagation Experiments of Non-gas-Generating Nanocomposite Reactive Materials. Energy & Fuels, 2011, 25, 640-646.	5.1	15
77	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
78	Development of flexible, free-standing, thin films for additive manufacturing and localized energy generation. AIP Advances, 2015, 5, .	1.3	14
79	Impact ignition and combustion of micron-scale aluminum particles pre-stressed with different quenching rates. Journal of Applied Physics, 2018, 124, .	2.5	14
80	Single Particle Combustion of Pre-Stressed Aluminum. Materials, 2019, 12, 1737.	2.9	14
81	Infrared measurements of energy transfer from energetic materials to steel substrates. International Journal of Thermal Sciences, 2010, 49, 1877-1885.	4.9	13
82	Laser Ignition of Nanoâ€Composite Energetic Loose Powders. Propellants, Explosives, Pyrotechnics, 2013, 38, 441-447.	1.6	13
83	Effects of rheological properties on reactivity of energetic thin films. Combustion and Flame, 2015, 162, 3288-3293.	5.2	13
84	Percolation of binary disk systems: Modeling and theory. Physical Review E, 2017, 95, 012118.	2.1	13
85	Thermal analysis of microscale aluminum particles coated with perfluorotetradecanoic (PFTD) acid. Journal of Thermal Analysis and Calorimetry, 2021, 145, 289-296.	3.6	13
86	Self-propagating high-temperature synthesis of nanostructured titanium aluminide alloys with varying porosity. Acta Materialia, 2011, 59, 2447-2454.	7.9	12
87	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
88	The waterâ€"iodine oxide system: a revised mechanism for hydration and dehydration. RSC Advances, 2017, 7, 10183-10191.	3.6	12
89	Surface engineered nanoparticles dispersed in kerosene: The effect of oleophobicity on droplet combustion. Combustion and Flame, 2018, 188, 243-249.	5.2	12
90	Nanochargers: Energetic materials for energy storage. Applied Physics Letters, 2009, 95, .	3.3	11

#	Article	IF	Citations
91	Synthesizing aluminum particles towards controlling electrostatic discharge ignition sensitivity. Journal of Electrostatics, 2014, 72, 28-32.	1.9	11
92	Thermite reactivity with ball milled aluminum-zirconium fuel particles. Combustion and Flame, 2020, 211, 195-201.	5.2	11
93	Target penetration and impact analysis of intermetallic projectiles. International Journal of Impact Engineering, 2020, 136, 103427.	5.0	11
94	Aluminum particle reactivity as a function of alumina shell structure: Amorphous versus crystalline. Powder Technology, 2020, 374, 33-39.	4.2	11
95	Oxygen scavenging enhances exothermic behavior of aluminum-fueled energetic composites. Journal of Thermal Analysis and Calorimetry, 2014, 116, 1133-1140.	3.6	10
96	Factors Influencing Temperature Fields during Combustion Reactions. Propellants, Explosives, Pyrotechnics, 2014, 39, 434-443.	1.6	10
97	A slice of an aluminum particle: Examining grains, strain and reactivity. Combustion and Flame, 2016, 173, 229-234.	5.2	10
98	Tailoring surface conditions for enhanced reactivity of aluminum powders with solid oxidizing agents. Applied Surface Science, 2017, 402, 225-231.	6.1	10
99	Dropping the hammer: Examining impact ignition and combustion using pre-stressed aluminum powder. Journal of Applied Physics, 2017, 122, 125102.	2.5	10
100	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
101	Photoinduced heat conversion enhancement of metallic glass nanowire arrays. Journal of Applied Physics, 2019, 125, .	2.5	10
102	On the possible coexistence of two different regimes of metal particle combustion. Combustion and Flame, 2020, 221, 416-419.	5.2	10
103	A Case Study in Active Learning: Teaching Undergraduate Research in an Engineering Classroom Setting. Engineering Education, 2013, 8, 54-64.	0.3	9
104	Internal stresses in pre-stressed micron-scale aluminum core-shell particles and their improved reactivity. Journal of Applied Physics, 2015, 118, .	2.5	9
105	Synthesis of metal iodates from an energetic salt. RSC Advances, 2020, 10, 14403-14409.	3.6	9
106	Thermal oxidation analysis of aerosol synthesized fuel particles composed of Al versus Al-Si. Powder Technology, 2021, 382, 532-540.	4.2	9
107	Synthesis and Characterization of Mixed Metal Oxide Nanocomposite Energetic Materials. Materials Research Society Symposia Proceedings, 2003, 800, 109.	0.1	8
108	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

#	Article	IF	Citations
109	A multi-objective modeling approach for energetic material evaluation decisions. European Journal of Operational Research, 2009, 194, 629-636.	5.7	8
110	Nanoscale investigation of surfaces exposed to a thermite spray. Applied Thermal Engineering, 2011, 31, 1286-1292.	6.0	8
111	Detonation models of fast combustion waves in nanoscale Al-MoO3bulk powder media. Combustion Theory and Modelling, 2013, 17, 25-39.	1.9	8
112	A mechanistic perspective of atmospheric oxygen sensitivity on composite energetic material reactions. Combustion and Flame, 2014, 161, 1131-1134.	5.2	8
113	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
114	Surface modifications of plasma treated aluminum particles and direct evidence for altered reactivity. Materials and Design, 2021, 210, 110119.	7.0	8
115	Variations in aluminum particle surface energy and reactivity induced by annealing and quenching. Applied Surface Science, 2022, 579, 152185.	6.1	8
116	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
117	Reactive characterization of anhydrous iodine (v) oxide (I2O5) with aluminum: amorphous versus crystalline microstructures. Thermochimica Acta, 2016, 641, 55-62.	2.7	7
118	Fast-Reacting Nanocomposite Energetic Materials. , 2016, , 21-45.		7
119	Material Characterization of Plasma-Treated Aluminum Particles via Different Gases. MRS Advances, 2019, 4, 1589-1595.	0.9	7
120	Thermal-Recoverable Tough Hydrogels Enhanced by Porphyrin Decorated Graphene Oxide. Nanomaterials, 2019, 9, 1487.	4.1	7
121	Stress-altered aluminum powder dust combustion. Journal of Applied Physics, 2020, 127, .	2.5	7
122	Regulating magnesium combustion using surface chemistry and heating rate. Combustion and Flame, 2021, 226, 419-429.	5.2	7
123	Comparison of pyrometry and thermography for thermal analysis of thermite reactions. Applied Optics, 2021, 60, 4976.	1.8	7
124	Comparing pyrometry and thermography in ballistic impact experiments. Measurement: Journal of the International Measurement Confederation, 2022, 189, 110488.	5.0	7
125	Heat Flux Analysis of a Reacting Thermite Spray Impingent on a Substrate. Energy & Fuels, 2012, 26, 1621-1628.	5.1	6
126	Piezoelectric Ignition of Nanocomposite Energetic Materials. Journal of Propulsion and Power, 2014, 30, 15-18.	2.2	6

#	Article	IF	Citations
127	On the Pressure Generated by Thermite Reactions Using Stressâ€Altered Aluminum Particles. Propellants, Explosives, Pyrotechnics, 2021, 46, 99-106.	1.6	6
128	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
129	Reaction Dynamics and Probability Study of Aluminum-Viton-Acetone Droplets. Journal of Propulsion and Power, 2011, 27, 396-401.	2.2	5
130	Synthesis and characterization of flexible, free-standing, energetic thin films. Surface and Coatings Technology, 2015, 284, 422-426.	4.8	5
131	Microwave synthesis of functionally graded tricalcium phosphate for osteoconduction. Materials Today Communications, 2016, 9, 47-53.	1.9	5
132	Thermal and Combustion Properties of Energetic Thin Films with Carbon Nanotubes. Journal of Thermophysics and Heat Transfer, 2017, 31, 646-650.	1.6	5
133	Highly reactive energetic films by pre-stressing nano-aluminum particles. RSC Advances, 2019, 9, 40607-40617.	3.6	5
134	The influence of particle size on the fluid dynamics of a laser-induced plasma. Physics of Fluids, 2022, 34, .	4.0	5
135	Silicon alloying enhances fast heating rate combustion of aluminum particles. Combustion and Flame, 2022, 241, 112156.	5.2	5
136	High Speed Imaging of TATB- and HMX-Based Energetic Material Decomposition in Molten Salts. Propellants, Explosives, Pyrotechnics, 2000, 25, 19-25.	1.6	4
137	Ignition and Combustion Behaviors of Nanocomposite Al/MoO₃. Materials Research Society Symposia Proceedings, 2003, 800, 185.	0.1	4
138	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
139	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
140	Percolation of a metallic binder in energy generating composites. Journal of Materials Chemistry A, 2017, 5, 7200-7209.	10.3	4
141	Highly Reactive Prestressed Aluminum under High Velocity Impact Loading: Processing for Improved Energy Conversion. Advanced Engineering Materials, 2019, 21, 1900492.	3.5	4
142	Effects of Shear Rate during Energetic Material Processing on Reactivity. Advanced Engineering Materials, 2019, 21, 1801324.	3.5	4
143	Synthesis and characterization of polymeric films with stress-altered aluminum particle fillers. Journal of Materials Science, 2020, 55, 14229-14242.	3.7	4
144	Tailoring impact debris dispersion using intact or fragmented thermite projectiles. Journal of Applied Physics, 2020, 128, .	2.5	4

#	Article	IF	Citations
145	Thermal analysis of an iodine rich binder for energetic material applications. Thermochimica Acta, 2020, 690, 178701.	2.7	4
146	Tailoring Thermal Transport Properties by Inducing Surface Oxidation Reactions in Bulk Metal Composites. ACS Applied Materials & Interfaces, 2021, 13, 18358-18364.	8.0	4
147	Direct demonstration of complete combustion of gas-suspended powder metal fuel using bomb calorimetry. Measurement Science and Technology, 2022, 33, 047002.	2.6	4
148	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
149	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
150	Thermite and intermetallic projectiles examined experimentally in air and inert gas environments. Journal of Applied Physics, 2022, 131, .	2.5	3
151	Molten salt destruction of energetic materials: Emission and absorption measurements. Journal of Energetic Materials, 2002, 20, 1-37.	2.0	2
152	Utilizing Microwave Susceptors to Visualize Hot-Spots in Trinitrotoluene. Journal of Microwave Power and Electromagnetic Energy, 2014, 48, 5-12.	0.8	2
153	Combustion Performance Improvement of Energetic Thin Films Using Carbon Nanotubes. , 2015, , .		2
154	Reaction Kinetics and Combustion Dynamics of I₄O₉and Aluminum Mixtures. Journal of Visualized Experiments, 2016, , .	0.3	2
155	Preliminary Toxicity Evaluation of Aluminum/Iodine Pentoxide on Terrestrial and Aquatic Invertebrates. Water, Air, and Soil Pollution, 2017, 228, 1.	2.4	2
156	A closer look at determining burning rates with imaging diagnostics. Optics and Lasers in Engineering, 2020, 124, 105841.	3.8	2
157	Reaction mechanism for fluorination reactions with hydroxylated alumina sites: Pathways promoting aluminum combustion. Journal of Chemical Physics, 2021, 154, 104308.	3.0	2
158	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
159	Nickel Aluminide Superalloys Created by SHS of Nano-Particle Reactants. Materials Research Society Symposia Proceedings, 2003, 800, 151.	0.1	1
160	Thermal Property Measurements of Reactive Materials: The Macroscopic Behavior of a Nanocomposite. Journal of Heat Transfer, 2012, 134, .	2.1	1
161	Desensitizing ignition of energetic materials when exposed to accidental fire. Fire Safety Journal, 2015, 76, 39-43.	3.1	1
162	Fostering Enthusiasm for Engineering from an Early Age. , 2020, , .		1

#	Article	IF	Citations
163	Comprehending Metal Particle Combustion: a Path Forward. Propellants, Explosives, Pyrotechnics, 2022, 47, .	1.6	1
164	A Spreadsheet-Based Analysis for Two-Dimensional Transient Laser Heating of a Cylindrical Solid. Heat Transfer Engineering, 2005, 26, 63-74.	1.9	0
165	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
166	Reaction Dynamics and Probability Study of Aluminum-Viton-Acetone Droplets. , 2010, , .		0
167	High Velocity Impact Testing for Evaluation of Intermetallic Projectiles. , 2019, , .		0
168	Adsorption and exchange reactions of iodine molecules at the alumina surface: modelling alumina-iodine reaction mechanisms. Physical Chemistry Chemical Physics, 2022, , .	2.8	0
169	Back Cover: Comprehending Metal Particle Combustion: a Path Forward (Prop., Explos., Pyrotech.) Tj ETQq1 1 0.784314 rgBT /Overlock	1.6	0