Steve F Son

List of Publications by Year in Descending Order

223 papers	6,331 citations	41 h-index	71 g-index
256 ext. papers	7,421 ext. citations	3.4 avg, IF	5.99 L-index

#	Paper	IF	Citations
223	Preparation and characterization of multifunctional piezoenergetic polyvinylidene fluoride/aluminum nanocomposite films. *Journal of Applied Physics*, **2022**, 131, 055108	2.5	0
222	Vibration-assisted printing of highly viscous food. *Additive Manufacturing*, **2022**, 102851	6.1	
221	Effects of flexoelectric and piezoelectric properties on the impact-driven ignition sensitivity of P(VDF-TrFE)/nAl films. *Combustion and Flame*, **2022**, 242, 112181	5.3	1
220	Wavelength-modulation spectroscopy in the mid-infrared for temperature and HCl measurements in aluminum-lithium composite-propellant flames. *Combustion and Flame*, **2022**, 242, 112180	5.3	0
219	Identification of Elusive Keto and Enol Intermediates in the Photolysis of 1,3,5-Trinitro-1,3,5-Triazinane. *Journal of Physical Chemistry Letters*, **2021**, 12, 6062-6069	6.4	2
218	Experimental Study of Factors Affecting Hypergolic Ignition of Ammonia Borane. *Journal of Propulsion and Power*, **2021**, 37, 202-210	1.8	3
217	The kinetics of thermal decomposition and hot-stage microscopy of selected energetic cocrystals. *Journal of Energetic Materials*, **2021**, 39, 313-332	1.6	1
216	High-speed multi-spectral imaging of the hypergolic ignition of ammonia borane. *Proceedings of the Combustion Institute*, **2021**, 38, 4433-4440	5.9	3
215	Tailoring the reactivity of printable Al/PVDF filament. *Combustion and Flame*, **2021**, 223, 110-117	5.3	10
214	Dynamic X-Ray Imaging of Additively Manufactured Reactive Components in Solid Propellants. *Journal of Propulsion and Power*, **2021**, 37, 362-368	1.8	0
213	Characterization of the influence of aluminum particle size on the temperature of composite-propellant flames using CO absorption and AlO emission spectroscopy. *Proceedings of the Combustion Institute*, **2021**, 38, 4365-4372	5.9	4
212	Characterization of an Aluminum–Lithium-Alloy-Based Composite Propellant at Elevated Pressures. *Journal of Propulsion and Power*, **2021**, 37, 332-337	1.8	4
211	Structural Energetic Properties of Al/PVDF Composite Materials Prepared Using Fused Filament Fabrication. *Propellants, Explosives, Pyrotechnics*, **2021**, 46, 670-678	1.7	1
210	Temperature-dependent x-ray fluorescent response from thermographic phosphors under x-ray excitation. *Applied Physics Letters*, **2021**, 119, 034103	3.4	
209	Conductive Polymer Spark Gap Igniters. *Propellants, Explosives, Pyrotechnics*, **2021**, 46, 1500	1.7	
208	Direct observations of ultrasonically generated hot spots in polymer composite energetic materials. *Combustion and Flame*, **2021**, 235, 111704	5.3	
207	Dynamic Combustion of Functionally Graded Additively Manufactured Composite Solid Propellant. *Journal of Propulsion and Power*, **2021**, 37, 725-732	1.8	2

206	Photoflash and laser ignition of full density nano-aluminum PVDF films. *Combustion and Flame*, **2021**, 233, 111570	5.3	4
205	Burning rate and flame structure of cocrystals of CL-20 and a polycrystalline composite crystal of HMX/AP. *Combustion and Flame*, **2020**, 219, 129-135	5.3	10
204	Development and Characterization of a Photopolymeric Binder for Additively Manufactured Composite Solid Propellant Using Vibration Assisted Printing. *Propellants, Explosives, Pyrotechnics*, **2020**, 45, 853-863	1.7	11
203	The Elusive Ketene (H CCO) Channel in the Infrared Multiphoton Dissociation of Solid 1,3,5-Trinitro-1,3,5-Triazinane (RDX). *ChemPhysChem*, **2020**, 21, 837-842	3.2	4
202	Investigation of Additively Manufactured Layered Composite Solid Propellant **2020**,		2
201	Void Collapse in Shocked -HMX Single Crystals: Simulations and Experiments. *Propellants, Explosives, Pyrotechnics*, **2020**, 45, 243-253	1.7	11
200	Dynamic stress-strain response of high-energy ball milled aluminium powder compacts. *Mechanics of Materials*, **2020**, 143, 103337	3.3	1
199	X-ray Phase Contrast Imaging of the Impact of Multiple HMX Particles in a Polymeric Matrix. *Propellants, Explosives, Pyrotechnics*, **2020**, 45, 607-614	1.7	4
198	The Effect of Process Parameters on the Structural Energetic Properties of Additively Manufactured Reactive Structures. *Journal of Engineering Materials and Technology, Transactions of the ASME*, **2020**, 142,	1.8	4
197	Decomposition of Ammonium-Perchlorate-Encapsulated Nanoscale and Micron-Scale Catalyst Particles. *Journal of Propulsion and Power*, **2020**, 36, 862-868	1.8	2
196	The role of adhesion and binder stiffness in the impact sensitivity of cast composite energetic materials. *Journal of Applied Physics*, **2020**, 128, 214902	2.5	4
195	Prediction of Energetic Material Properties from Electronic Structure Using 3D Convolutional Neural Networks. *Journal of Chemical Information and Modeling*, **2020**, 60, 4457-4473	6.1	14
194	Insight into the Chemistry of PETN Under Shock Compression Through Ultrafast Broadband Mid-Infrared Absorption Spectroscopy. *Journal of Physical Chemistry A*, **2020**, 124, 7031-7046	2.8	10
193	The effect of the chosen distribution form on reaction probability estimates from drop-weight impact results. *Journal of Energetic Materials*, **2020**, 1-22	1.6	1
192	Investigating the Photochemical Decomposition of Solid 1,3,5-Trinitro-1,3,5-triazinane (RDX). *Journal of Physical Chemistry A*, **2020**, 124, 6801-6823	2.8	2
191	Shock-induced reactions in metal nitride Boron nanostructured composites. *Scripta Materialia*, **2020**, 189, 58-62	5.6	1
190	Observation of Damage During Dynamic Compression of Production and Low-Defect HMX Crystals in Sylgard Binder Using X-Ray Phase Contrast Imaging. *Journal of Dynamic Behavior of Materials*, **2020**, 6, 34-44	1.8	2
189	A benchtop shock physics laboratory: Ultrafast laser driven shock spectroscopy and interferometry methods. *Review of Scientific Instruments*, **2019**, 90, 063001	1.7	5

188	The effect of the particle surface and binder properties on the response of polymer bonded explosives at low impact velocities. *Computational Materials Science*, **2019**, 166, 170-178	3.2	7
187	X-Ray Phase Contrast Imaging of the Impact of a Single HMX Particle in a Polymeric Matrix. *Propellants, Explosives, Pyrotechnics*, **2019**, 44, 447-454	1.7	8
186	In-situ X-ray observations of ultrasound-induced explosive decomposition. *Applied Materials Today*, **2019**, 15, 286-294	6.6	4
185	Additive manufacturing of ammonium perchlorate composite propellant with high solids loadings. *Proceedings of the Combustion Institute*, **2019**, 37, 3135-3142	5.9	49
184	Altering Agglomeration in a Composite Propellant with Aluminum–Silicon Eutectic Alloy. *Journal of Propulsion and Power*, **2019**, 35, 1048-1056	1.8	4
183	Mesoscale observations of the thermal decomposition of energetic composites under ultrasonic excitation. *Journal of Applied Physics*, **2019**, 125, 215114	2.5	3
182	Probing the Reaction Mechanisms Involved in the Decomposition of Solid 1,3,5-Trinitro-1,3,5-triazinane by Energetic Electrons. *Journal of Physical Chemistry A*, **2019**, 123, 9479-9497	2.8	5
181	Investigation of Polymer Matrix Nano-Aluminum Composites with Pulsed Laser Heating by In-Situ TEM. *Propellants, Explosives, Pyrotechnics*, **2019**, 44, 1608-1612	1.7	0
180	Dynamic imaging of the temperature field within an energetic composite using phosphor thermography. *Applied Optics*, **2019**, 58, 4320-4325	1.7	8
179	Characterization of the Hypergolic Ignition Delay of Ammonia Borane. *Journal of Propulsion and Power*, **2019**, 35, 182-189	1.8	17
178	Detonation Velocity Measurement of a Hydrogen Peroxide Solvate of CL-20. *Propellants, Explosives, Pyrotechnics*, **2019**, 44, 313-318	1.7	10
177	The Effects of Confinement on the Fracturing Performance of Printed Nanothermites. *Propellants, Explosives, Pyrotechnics*, **2019**, 44, 47-54	1.7	8
176	Agglomerate Sizing in Aluminized Propellants Using Digital Inline Holography and Traditional Diagnostics. *Journal of Propulsion and Power*, **2018**, 34, 1002-1014	1.8	13
175	Impact Sensitivity and Ignition Mechanisms of Nanoaluminum-poly(perfluorinated methacrylate) Nanocomposites. *MRS Advances*, **2018**, 3, 887-903	0.7	
174	Influence of Stoichiometry on the Thrust and Heat Deposition of On-Chip Nanothermites. *Propellants, Explosives, Pyrotechnics*, **2018**, 43, 258-266	1.7	6
173	Shock-induced reaction synthesis of cubic boron nitride. *Applied Physics Letters*, **2018**, 112, 171903	3.4	7
172	3D printing of extremely viscous materials using ultrasonic vibrations. *Additive Manufacturing*, **2018**, 22, 98-103	6.1	35
171	Laser ignition of CL-20 (hexanitrohexaazaisowurtzitane) cocrystals. *Combustion and Flame*, **2018**, 188, 104-115	5.3	22

170	Innovative scheme for high-repetition-rate imaging of CN radical. *Optics Letters*, **2018**, 43, 443-446	3	3
169	Selectively-deposited energetic materials: A feasibility study of the piezoelectric inkjet printing of nanothermites. *Additive Manufacturing*, **2018**, 22, 69-74	6.1	22
168	Ignition and combustion behavior of mechanically activated Al/Mg particles in composite solid propellants. *Combustion and Flame*, **2018**, 194, 410-418	5.3	34
167	Detonation Performance Characterization of a Novel CL-20 Cocrystal Using Microwave Interferometry. *Propellants, Explosives, Pyrotechnics*, **2018**, 43, 38-47	1.7	11
166	Relating a small-scale shock sensitivity experiment to large-scale failure diameter in an aluminized ammonium nitrate non-ideal explosive. *Combustion and Flame*, **2018**, 194, 271-277	5.3	2
165	Localized Heating Near a Rigid Spherical Inclusion in a Viscoelastic Binder Material Under Compressional Plane Wave Excitation. *Journal of Applied Mechanics, Transactions ASME*, **2017**, 84,	2.7	4
164	The effect of decorated graphene addition on the burning rate of ammonium perchlorate composite propellants. *Combustion and Flame*, **2017**, 183, 322-329	5.3	49
163	Controlled Substrate Destruction Using Nanothermite. *Propellants, Explosives, Pyrotechnics*, **2017**, 42, 579-584	1.7	7
162	The role of fracture in the impact initiation of Ni-Al intermetallic composite reactives during dynamic loading. *Acta Materialia*, **2017**, 133, 247-257	8.4	11
161	The Relationship Between Flame Structure and Burning Rate for Ammonium Perchlorate Composite Propellants. *Challenges and Advances in Computational Chemistry and Physics*, **2017**, 171-211	0.7	2
160	Additive manufacturing of multifunctional reactive materials. *Additive Manufacturing*, **2017**, 17, 176-182	6.1	47
159	Two-component additive manufacturing of nanothermite structures via reactive inkjet printing. *Journal of Applied Physics*, **2017**, 122, 184901	2.5	21
158	Microexplosions and ignition dynamics in engineered aluminum/polymer fuel particles. *Combustion and Flame*, **2017**, 176, 162-171	5.3	32
157	Tailoring burning rates using reactive wires in composite solid rocket propellants. *Proceedings of the Combustion Institute*, **2017**, 36, 2283-2290	5.9	20
156	A mechanism for shattering microexplosions and dispersive boiling phenomena in aluminum/lithium alloy based solid propellant. *Proceedings of the Combustion Institute*, **2017**, 36, 2309-2316	5.9	24
155	The effects of crystal proximity and crystal-binder adhesion on the thermal responses of ultrasonically-excited composite energetic materials. *Journal of Applied Physics*, **2017**, 122, 244901	2.5	15
154	Phase Changes in Embedded HMX in Response to Periodic Mechanical Excitation. *Conference Proceedings of the Society for Experimental Mechanics*, **2017**, 79-86	0.3	3
153	Microscopic two-color infrared imaging of NiAl reactive particles and pellets. *Thin Solid Films*, **2016**, 620, 48-53	2.2	3

152	The impact of crystal morphology on the thermal responses of ultrasonically-excited energetic materials. *Journal of Applied Physics*, **2016**, 119, 024903	2.5	18
151	Performance and Flame Visualization of Dicyclopentadiene Rocket Propellants with Metal Hydride Additives. *Journal of Propulsion and Power*, **2016**, 32, 869-881	1.8	8
150	Removing hydrochloric acid exhaust products from high performance solid rocket propellant using aluminum-lithium alloy. *Journal of Hazardous Materials*, **2016**, 317, 259-266	12.8	25
149	Near-surface flame structure characterization of simplified ammonium perchlorate/hydroxyl-terminated polybutadiene compositions. *Combustion and Flame*, **2016**, 164, 201-211	5.3	10
148	Graphene Oxide/Ammonium Perchlorate Composite Material for Use in Solid Propellants. *Journal of Propulsion and Power*, **2016**, 32, 682-686	1.8	28
147	Photoflash and laser ignition of select high-nitrogen materials. *Combustion and Flame*, **2016**, 167, 207-215	5.3	23
146	Encapsulated Nanoscale Particles and Inclusions in Solid Propellant Ingredients **2016**, 323-340		
145	Oxidizer coarse-to-fine ratio effect on microscale flame structure in a bimodal composite propellant. *Combustion and Flame*, **2016**, 163, 406-413	5.3	11
144	Reactive flow modeling of small scale detonation failure experiments for a baseline non-ideal explosive. *Journal of Applied Physics*, **2016**, 120, 064901	2.5	8
143	High speed X-ray phase contrast imaging of energetic composites under dynamic compression. *Applied Physics Letters*, **2016**, 109, 131903	3.4	39
142	High speed OH PLIF applied to multiphase combustion (Review). *Combustion, Explosion and Shock Waves*, **2016**, 52, 1-13	1	10
141	Solid AmineBoranes as High-Performance and Hypergolic Hybrid Rocket Fuels. *Journal of Propulsion and Power*, **2016**, 32, 23-31	1.8	22
140	Combustion of mechanically activated Ni/Al reactive composites with microstructural refinement tailored using two-step milling. *Intermetallics*, **2015**, 66, 88-95	3.5	18
139	Using time-frequency analysis to determine time-resolved detonation velocity with microwave interferometry. *Review of Scientific Instruments*, **2015**, 86, 044705	1.7	8
138	Design and Synthesis of a Series of Nitrogen-Rich Energetic Cocrystals of 5,5?-Dinitro-2H,2H?-3,3?-bi-1,2,4-triazole (DNBT). *Crystal Growth and Design*, **2015**, 15, 2545-2549	3.5	74
137	Critical Ignition Criteria for Monomethylhydrazine and Red Fuming Nitric Acid. *Journal of Propulsion and Power*, **2015**, 31, 1184-1192	1.8	7
136	Characterization of Ethylenediamine Bisborane as a Hypergolic Hybrid Rocket Fuel Additive. *Journal of Propulsion and Power*, **2015**, 31, 365-372	1.8	20
135	Exploring mechanisms for agglomerate reduction in composite solid propellants with polyethylene inclusion modified aluminum. *Combustion and Flame*, **2015**, 162, 846-854	5.3	55

134	Nanoscale Characterization of Mock Explosive Materials Using Advanced Atomic Force Microscopy Methods. *Journal of Energetic Materials*, **2015**, 33, 51-65	1.6	7
133	Numerical modeling of self-propagating reactions in Ru/Al nanoscale multilayer foils. *Applied Physics Letters*, **2015**, 107, 073103	3.4	6
132	Simulations of nanoscale Ni/Al multilayer foils with intermediate Ni2Al3 growth. *Journal of Applied Physics*, **2015**, 117, 214904	2.5	10
131	The effect of encapsulated nanosized catalysts on the combustion of composite solid propellants. *Combustion and Flame*, **2015**, 162, 1821-1828	5.3	42
130	Altering combustion of silicon/polytetrafluoroethylene with two-step mechanical activation. *Combustion and Flame*, **2015**, 162, 1350-1357	5.3	12
129	Performance and Aging of Mn/MnO2as an Environmentally Friendly Energetic Time Delay Composition. *ACS Sustainable Chemistry and Engineering*, **2014**, 2, 1312-1317	8.3	16
128	Preparation and Characterization of Aqueous Nanothermite Inks for Direct Deposition on SCB Initiators. *Propellants, Explosives, Pyrotechnics*, **2014**, 39, 463-470	1.7	15
127	Formulation and Characterization of a New Nitroglycerin-Free Double Base Propellant. *Propellants, Explosives, Pyrotechnics*, **2014**, 39, 205-210	1.7	19
126	Mechanical, pyrolysis, and combustion characterization of briquetted coal fines with municipal solid waste plastic (MSW) binders. *Fuel*, **2014**, 115, 62-69	7.1	33
125	Composite Propellant Based on a New Nitrate Ester. *Propellants, Explosives, Pyrotechnics*, **2014**, 39, 684-688	1.7	9
124	Aluminum agglomeration reduction in a composite propellant using tailored Al/PTFE particles. *Combustion and Flame*, **2014**, 161, 311-321	5.3	143
123	Solid-Fuel Regression Rates and Flame Characteristics in an Opposed Flow Burner. *Journal of Propulsion and Power*, **2014**, 30, 1675-1682	1.8	10
122	Detonation Failure Characterization of Homemade Explosives. *Propellants, Explosives, Pyrotechnics*, **2014**, 39, 609-616	1.7	5
121	Microwave frequency material properties of PBS 9501 and PBX 9501 and small scale heating experiments. *Journal of Physics: Conference Series*, **2014**, 500, 052040	0.3	1
120	Amine-boranes: green hypergolic fuels with consistently low ignition delays. *Chemistry - A European Journal*, **2014**, 20, 16869-72	4.8	40
119	Influence of Ammonia Borane on the Stability of a Liquid Rocket Combustor. *Journal of Propulsion and Power*, **2014**, 30, 290-298	1.8	7
118	High-repetition-rate three-dimensional OH imaging using scanned planar laser-induced fluorescence system for multiphase combustion. *Applied Optics*, **2014**, 53, 316-26	1.7	44
117	The Effect of Silicon Powder Characteristics on the Combustion of Silicon/Teflon/Viton Nanoenergetics. *Propellants, Explosives, Pyrotechnics*, **2014**, 39, 337-347	1.7	14

116	Ti/C-3Ni/Al as a Replacement Time Delay Composition. *Propellants, Explosives, Pyrotechnics*, **2014**, 39, 138-147	1.7	11
115	Heat generation in an elastic binder system with embedded discrete energetic particles due to high-frequency, periodic mechanical excitation. *Journal of Applied Physics*, **2014**, 116, 204902	2.5	14
114	Experimental Investigation of Blast Mitigation for Target Protection **2014**, 1-19		2
113	Fate and toxicity of CuO nanospheres and nanorods used in Al/CuO nanothermites before and after combustion. *Environmental Science & Technology*, **2013**, 47, 11258-67	10.3	15
112	Effect of Solids Loading on Resonant Mixed Al-Bi2O3 Nanothermite Powders. *Propellants, Explosives, Pyrotechnics*, **2013**, 38, 605-610	1.7	36
111	The role of microstructure refinement on the impact ignition and combustion behavior of mechanically activated Ni/Al reactive composites. *Journal of Applied Physics*, **2013**, 114, 113501	2.5	30
110	The effect of doping on the combustion and reaction kinetics of silicon reactives. *Combustion and Flame*, **2013**, 160, 1835-1841	5.3	6
109	Transition from Impact-induced Thermal Runaway to Prompt Mechanochemical Explosion in Nanoscaled Ni/Al Reactive Systems. *Propellants, Explosives, Pyrotechnics*, **2013**, 38, 611-621	1.7	9
108	Combustion Performance of Several Nanosilicon-Based Nanoenergetics. *Journal of Propulsion and Power*, **2013**, 29, 1435-1444	1.8	18
107	Micro-RVE modeling of mechanistic response in porous intermetallics subject to weak and moderate impact loading. *International Journal of Plasticity*, **2013**, 51, 1-32	7.6	6
106	CuO/Al Thermites for Solid Rocket Motor Ignition. *Journal of Propulsion and Power*, **2013**, 29, 1194-1199	1.8	6
105	Dependence of Nano-Aluminum and Water Propellant Combustion on pH and Rheology. *Combustion Science and Technology*, **2013**, 185, 817-834	1.5	11
104	Thermal and mechanical response of PBX 9501 under contact excitation. *Journal of Applied Physics*, **2013**, 113, 084904	2.5	27
103	The diffusion flame structure of an ammonium perchlorate based composite propellant at elevated pressures. *Proceedings of the Combustion Institute*, **2013**, 34, 649-656	5.9	16
102	Coupling micro and meso-scale combustion models of AP/HTPB propellants. *Combustion and Flame*, **2013**, 160, 982-992	5.3	32
101	The effect of polymeric binder on composite propellant flame structure investigated with 5kHz OH PLIF. *Combustion and Flame*, **2013**, 160, 1531-1540	5.3	13
100	Rheological Characterization of Monomethylhydrazine Gels. *Journal of Propulsion and Power*, **2013**, 29, 313-320	1.8	19
99	Effects of ammonia borane on the combustion of an ethanol droplet at atmospheric pressure. *Combustion and Flame*, **2013**, 160, 2194-2203	5.3	17

98	Combustion of Nanoaluminum and Water Propellants: Effect of Equivalence Ratio and Safety/Aging Characterization. *Propellants, Explosives, Pyrotechnics*, **2013**, 38, 56-66	1.7	21
97	Altering Reactivity of Aluminum with Selective Inclusion of Polytetrafluoroethylene through Mechanical Activation. *Propellants, Explosives, Pyrotechnics*, **2013**, 38, 286-295	1.7	86
96	Modifying Aluminum Reactivity with Poly(Carbon Monofluoride) via Mechanical Activation. *Propellants, Explosives, Pyrotechnics*, **2013**, 38, 321-326	1.7	16
95	Oxy-fuel combustion: Laboratory experiments and pilot scale tests. *Fuel*, **2013**, 104, 452-461	7.1	13
94	An experimental and numerical study of blast induced shock wave mitigation in sandwich structures. *Applied Acoustics*, **2013**, 74, 1-9	3.1	15
93	Combustion of micron-aluminum and hydrogen peroxide propellants. *Combustion and Flame*, **2013**, 160, 184-190	5.3	29
92	X-Band Microwave Properties and Ignition Predictions of Neat Explosives. *Propellants, Explosives, Pyrotechnics*, **2013**, 38, 810-817	1.7	19
91	Performance of Dicyclopentadiene/H2O2-Based Hybrid Rocket Motors with Metal Hydride Additives. *Journal of Propulsion and Power*, **2013**, 29, 1122-1129	1.8	25
90	Microexplosion Investigation of Monomethylhydrazine Gelled Droplet with OH Planar Laser-Induced Fluorescence. *Journal of Propulsion and Power*, **2013**, 29, 1303-1310	1.8	18
89	Preparation and Characterization of Energetic Crystals with Nanoparticle Inclusions. *Propellants, Explosives, Pyrotechnics*, **2012**, 37, 635-638	1.7	16
88	Tuning azolium azolate ionic liquids to promote surface interactions with titanium nanoparticles leading to increased passivation and colloidal stability. *Physical Chemistry Chemical Physics*, **2012**, 14, 13194-8	3.6	7
87	Hypergolic ionic liquids to mill, suspend, and ignite boron nanoparticles. *Chemical Communications*, **2012**, 48, 4311-3	5.8	67
86	Tailored Reactivity of Ni+Al Nanocomposites: Microstructural Correlations. *Journal of Physical Chemistry C*, **2012**, 116, 21027-21038	3.8	82
85	Experimental observation of the flame structure of a bimodal ammonium perchlorate composite propellant using 5 kHz PLIF. *Combustion and Flame*, **2012**, 159, 427-437	5.3	27
84	An experimental study of the effects of catalysts on an ammonium perchlorate based composite propellant using 5 kHz PLIF. *Combustion and Flame*, **2012**, 159, 1748-1758	5.3	38
83	Feasibility Study and Demonstration of an Aluminum and Ice Solid Propellant. *International Journal of Aerospace Engineering*, **2012**, 2012, 1-11	0.9	22
82	Fluoropolymer and aluminum piezoelectric reactives **2012**,		6
81	Detonation failure characterization of non-ideal explosives **2012**,		3

80	Paraffin Fuel and Additive Combustion in an Opposed Flow Burner Configuration **2012**,		3
79	Critical Ignition Criteria for Monomethylhydrazine and Red Fuming Nitric Acid in an Impinging Jet Apparatus **2012**,		1
78	COMBUSTION OF BIMODAL ALUMINUM PARTICLES AND ICE MIXTURES. *International Journal of Energetic Materials and Chemical Propulsion*, **2012**, 11, 259-273	1.9	8
77	Intermetallic Compounds as Fuels for Composite Rocket Propellants **2011**,		7
76	Experimental modeling of explosive blast-related traumatic brain injuries. *NeuroImage*, **2011**, 54 Suppl 1, S45-54	7.9	41
75	Ignition of Gelled Monomethylhydrazine and Red Fuming Nitric Acid in an Impinging Jet Apparatus **2011**,		7
74	Mechanical activation and gasless explosion: Nanostructural aspects. *Chemical Engineering Journal*, **2011**, 174, 677-686	14.7	49
73	Nano Aluminum Energetics: The Effect of Synthesis Method on Morphology and Combustion Performance. *Propellants, Explosives, Pyrotechnics*, **2011**, 36, 551-557	1.7	22
72	Further Development of an Aluminum and Water Solid Rocket Propellant **2011**,		4
71	Validation of Numerical Simulations for Nano-Aluminum Composite Solid Propellants. *Journal of Propulsion and Power*, **2011**, 27, 1280-1287	1.8	10
70	Combustion of Silicon/Teflon/Viton and Aluminum/Teflon/Viton Energetic Composites. *Journal of Propulsion and Power*, **2010**, 26, 734-743	1.8	52
69	Kinetics of high temperature reaction in Ni-Al system: influence of mechanical activation. *Journal of Physical Chemistry A*, **2010**, 114, 6111-6	2.8	71
68	Thermal and Impact Reaction Initiation in Ni/Al Heterogeneous Reactive Systems. *Journal of Physical Chemistry C*, **2010**, 114, 14772-14780	3.8	58
67	Aspects of Monomethylhydrazine and Red Fuming Nitric Acid Ignition **2010**,		8
66	Detailed Characterization of Al/Ice Propellants **2010**,		3
65	Dynamics of phase transformation during thermal explosion in the Al–Ni system: Influence of mechanical activation. *Physica B: Condensed Matter*, **2010**, 405, 778-784	2.8	81
64	Microstructural transformations and kinetics of high-temperature heterogeneous gasless reactions by high-speed x-ray phase-contrast imaging. *Physical Review B*, **2009**, 80,	3.3	12
63	The effect of stoichiometry on the combustion behavior of a nanoscale Al/MoO3 thermite. *Proceedings of the Combustion Institute*, **2009**, 32, 1921-1928	5.9	69

62	Metal particle combustion and nanotechnology. *Proceedings of the Combustion Institute*, **2009**, 32, 1819-1838	5.9	543
61	Realizing microgravity flame spread characteristics at 1 g over a bed of nano-aluminum powder. *Proceedings of the Combustion Institute*, **2009**, 32, 2437-2444	5.9	2
60	Aluminum-ICE (ALICE) Propellants for Hydrogen Generation and Propulsion **2009**,		10
59	Combustion Properties of Silicon/Teflon/Viton and Aluminum/Teflon/Viton Composites **2009**,		1
58	Thermal explosion in Al-Ni system: influence of mechanical activation. *Journal of Physical Chemistry A*, **2009**, 113, 13541-7	2.8	87
57	BLAST LOADING EXPERIMENTS OF SURROGATE MODELS FOR TBI SCENARIOS **2009**,		1
56	BURNING RATE STUDIES OF BIS-TRIAMINOGUANIDINIUM AZOTETRAZOLATE (TAGzT) AND HEXAHYDRO-1,3,5-TRINITRO-1,3,5-TRIAZINE (RDX) MIXTURES. *International Journal of Energetic Materials and Chemical Propulsion*, **2009**, 8, 31-38	1.9	2
55	Experimental study of blast-induced traumatic brain injury using a physical head model. *Stapp Car Crash Journal*, **2009**, 53, 215-27	1	10
54	An Investigation of Novel Metal Complexes as Composite Propellant Burn Rate Modifiers **2008**,		2
53	The Effect of Added Al2O3 on the Propagation Behavior of an Al/CuO Nanoscale Thermite. *Combustion Science and Technology*, **2008**, 180, 1278-1294	1.5	47
52	Combustion and Conversion Efficiency of Nanoaluminum-Water Mixtures. *Combustion Science and Technology*, **2008**, 180, 2127-2142	1.5	51
51	The Effect of Microscale Confinement Diameter on the Combustion of an Al/MoO3 Thermite **2008**,		1
50	Ammonia Borane Based-Propellants **2008**,		7
49	Combustion and Characterization of Nanoscale Aluminum and Ice Propellants **2008**,		14
48	Combustion characteristics of nanoaluminum, liquid water, and hydrogen peroxide mixtures. *Combustion and Flame*, **2008**, 154, 587-600	5.3	44
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