Luigi T De Luca

List of Publications by Year
in descending order

38 papers	1,516 citations	361413 20 h-index	361022 35 g-index
41 all docs	41 docs citations	41 times ranked	814 citing authors

#	Article	IF	Citations
1	Effect of Nano-Sized Energetic Materials (nEMs) on the Performance of Solid Propellants: A Review. Nanomaterials, 2022, 12, 133.	4.1	16
2	Effect of Metal Nanopowders on the Performance of Solid Rocket Propellants: A Review. Nanomaterials, 2021, 11, 2749.	4.1	27
3	Combustion behavior of AP/HTPB/Al composite propellant containing hydroborate iron compound. Combustion and Flame, 2020, 220, 157-167.	5.2	31
4	Nanoenergetic Materials: Preparation, Properties, and Applications. Nanomaterials, 2020, 10, 2347.	4.1	22
5	CL-20-Based Cocrystal Energetic Materials: Simulation, Preparation and Performance. Molecules, 2020, 25, 4311.	3.8	31
6	Innovative Methods to Enhance the Combustion Properties of Solid Fuels for Hybrid Rocket Propulsion. Aerospace, 2019, 6, 47.	2.2	19
7	The rapid H2 release from AlH3 dehydrogenation forming porous layer in AlH3/hydroxyl-terminated polybutadiene (HTPB) fuels during combustion. Journal of Hazardous Materials, 2019, 371, 53-61.	12.4	50
8	Combustion enhancement of hydroxyl-terminated polybutadiene by doping multiwall carbon nanotubes. Carbon, 2019, 144, 472-480.	10.3	24
9	Nanoenergetic Ingredients to Augment Solid Rocket Propulsion. , 2019, , 177-261.		4
10	Effect of amide-based compounds on the combustion characteristics of composite solid rocket propellants. Arabian Journal of Chemistry, 2019, 12, 3639-3651.	4.9	67
11	Thermal behavior and decomposition kinetics of composite solid propellants in the presence of amide burning rate suppressants. Journal of Thermal Analysis and Calorimetry, 2018, 132, 1601-1615.	3.6	104
12	Overview of Al-based nanoenergetic ingredients for solid rocket propulsion. Defence Technology, 2018, 14, 357-365.	4.2	83
13	A NOVEL POLYETHYLENE PARTICLES/PARAFFIN-BASED SELF-DISINTEGRATION FUEL FOR HYBRID ROCKET PROPULSION. International Journal of Energetic Materials and Chemical Propulsion, 2018, 17, 205-216.	0.3	2
14	Innovative Solid Rocket Propellant Formulations for Space Propulsion. Advances in Chemical and Materials Engineering Book Series, 2018, , 1-24.	0.3	4
15	Professor Boris Vasilievich Novozhilov (1930 - 2017). Combustion and Flame, 2017, 180, A1-A3.	5.2	0
16	Preparation and Properties of a nRDX-based Propellant. Propellants, Explosives, Pyrotechnics, 2017, 42, 649-658.	1.6	23
17	Recent advances in new oxidizers for solid rocket propulsion. Green Chemistry, 2017, 19, 4711-4736.	9.0	178
18	Mechanical Modifications of Paraffinâ€based Fuels and the Effects on Combustion Performance. Propellants, Explosives, Pyrotechnics, 2017, 42, 1268-1277.	1.6	40

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19	Hybrid Combustion Studies on Regression Rate Enhancement and Transient Ballistic Response. Springer Aerospace Technology, 2017, , 627-651.	0.3	1
20	Prospects of Aluminum Modifications as Energetic Fuels in Chemical Rocket Propulsion. Springer Aerospace Technology, 2017, , 191-233.	0.3	9
21	EFFECT OF AZODICARBONAMIDE PARTICLES ON THE REGRESSION RATE OF HYDROXYL-TERMINATED POLYBUTADIENE (HTPB)-BASED FUELS FOR HYBRID ROCKET PROPULSION. International Journal of Energetic Materials and Chemical Propulsion, 2017, 16, 103-114.	0.3	3
22	Catalytic effects of nano additives on decomposition and combustion of RDX-, HMX-, and AP-based energetic compositions. Progress in Energy and Combustion Science, 2016, 57, 75-136.	31.2	283
23	Activated aluminum powders for space propulsion. Powder Technology, 2015, 270, 46-52.	4.2	58
24	EFFECTS OF NANO-METRIC ALUMINUM POWDER ON THE PROPERTIES OF COMPOSITE SOLID PROPELLANTS. International Journal of Energetic Materials and Chemical Propulsion, 2015, 14, 265-282.	0.3	7
25	Characterization of HTPB-based solid fuel formulations: Performance, mechanical properties, and pollution. Acta Astronautica, 2013, 92, 150-162.	3.2	79
26	Combustion of metal agglomerates in a solid rocket core flow. Acta Astronautica, 2013, 92, 163-171.	3.2	34
27	Testing and Modeling Fuel Regression Rate in a Miniature Hybrid Burner. International Journal of Aerospace Engineering, 2012, 2012, 1-15.	0.9	5
28	Theoretical analysis of hydrides in solid and hybrid rocket propulsion. International Journal of Hydrogen Energy, 2012, 37, 1760-1769.	7.1	80
29	Efficient solid rocket propulsion for access to space. Acta Astronautica, 2010, 66, 1563-1573.	3.2	59
30	AGGREGATION VERSUS AGGLOMERATION IN METALLIZED SOLID ROCKET PROPELLANTS. International Journal of Energetic Materials and Chemical Propulsion, 2010, 9, 91-105.	0.3	16
31	Nanoaluminum as a Solid Propellant Fuel. Journal of Propulsion and Power, 2009, 25, 482-489.	2.2	72
32	Fracture Mechanics of Composite Solid Rocket Propellant Grains: Material Testing. Journal of Propulsion and Power, 2009, 25, 60-73.	2.2	41
33	Combustion Mechanism of Ammonium-Nitrate-Based Propellants. Journal of Propulsion and Power, 2008, 24, 1068-1078.	2.2	36
34	ACOUSTIC EMISSION OF UNDERWATER BURNING SOLID ROCKET PROPELLANTS. International Journal of Energetic Materials and Chemical Propulsion, 2002, 5, 274-283.	0.3	1
35	FREQUENCY RESPONSE OF A MODEL SUBSCALE ROCKET MOTOR. International Journal of Energetic Materials and Chemical Propulsion, 2002, 5, 889-902.	0.3	0
36	BURNING RATE DATA REDUCTION OF SMALL-SCALE TEST MOTORS. International Journal of Energetic Materials and Chemical Propulsion, 2002, 5, 146-160.	0.3	1

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37	LIMIT CYCLES FOR SOLID PROPELLANT BURNING RATE AT CONSTANT PRESSURE. International Journal of Energetic Materials and Chemical Propulsion, 2002, 5, 825-836.	0.3	1
38	Surface Pyrolysis of High Energy Materials. Defence Science Journal, 1998, 48, 379-402.	0.8	1