Alexander Dolgoborodov

List of Publications by Year
in descending order

57 papers	531 citations	759233 12 h-index	677142 22 g-index
57 all docs	57 docs citations	57 times ranked	315 citing authors

#	Article	IF	Citations
1	Detonation in an aluminum-Teflon mixture. JETP Letters, 2005, 81, 311-314.	1.4	88
2	Mechanical Sensitivity and Detonation Parameters of Aluminized Explosives. Combustion, Explosion and Shock Waves, 2004, 40, 445-457.	0.8	67
3	Acceleration Ability and Heat of Explosive Decomposition of Aluminized Explosives. Combustion, Explosion and Shock Waves, 2004, 40, 458-466.	0.8	39
4	Explosive characteristics of aluminized HMX-based nanocomposites. Combustion, Explosion and Shock Waves, 2008, 44, 198-212.	0.8	32
5	Mechanically activated oxidizer-fuel energetic composites. Combustion, Explosion and Shock Waves, 2015, 51, 86-99.	0.8	31
6	Explosive compositions based on the mechanoactivated metal-oxidizer mixtures. Russian Journal of Physical Chemistry B, 2007, 1, 606-611.	1.3	23
7	Structure of mechanically activated high-energy Al + polytetrafluoroethylene nanocomposites. Colloid Journal, 2009, 71, 852-860.	1.3	21
8	Nature of high reactivity of metal/solid oxidizer nanocomposites prepared by mechanoactivation: a review. Journal of Materials Science, 2017, 52, 11810-11825.	3.7	21
9	Thermal decomposition of mechanoactivated ammonium perchlorate. Thermochimica Acta, 2018, 669, 60-65.	2.7	14
10	Kinetics of mechanical activation of Al/CuO thermite. Journal of Materials Science, 2018, 53, 13550-13559.	3.7	14
11	Promising energetic materials composed of nanosilicon and solid oxidizers. Russian Journal of Physical Chemistry B, 2012, 6, 523-530.	1.3	13
12	Ignition of nanothermites by a laser diode pulse. Defence Technology, 2022, 18, 194-204.	4.2	13
13	Nanoribbon-Based Electronic Detection of a Glioma-Associated Circular miRNA. Biosensors, 2021, 11, 237.	4.7	11
14	Investigation of shock and detonation waves by optical pyrometry. International Journal of Impact Engineering, 1999, 23, 283-293.	5.0	9
15	Investigation of Nickel Aluminide Formed Due to Shock Loading of Aluminumâ€"Nickel Mixtures in Flat Recovery Ampoules. Combustion, Explosion and Shock Waves, 2018, 54, 64-71.	0.8	9
16	Effect of aluminum on the acceleration ability of composite formulations based on regular high explosives. Russian Journal of Physical Chemistry B, 2012, 6, 730-743.	1.3	7
17	Detonation parameters of pressed charges of benzotrifuroxane. Combustion, Explosion and Shock Waves, 2013, 49, 723-730.	0.8	7
18	Defective structure and reactivity of mechanoactivated magnesium/fluoroplastic energy-generating composites. Colloid Journal, 2015, 77, 213-225.	1.3	7

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19	Defective structure, plastic properties, and reactivity of mechanically activated magnesium. Russian Journal of Physical Chemistry B, 2015, 9, 148-156.	1.3	6
20	Propagation of detonation in fuelâ€“air mixtures in flat channels. Russian Journal of Physical Chemistry B, 2016, 10, 298-305.	1.3	6
21	Shock Compressibility of Mixtures of Micro- and Nano-Sized Nickel and Aluminum Powders. Combustion, Explosion and Shock Waves, 2018, 54, 552-557.	0.8	6
22	Micro-Raman Characterization of Structural Features of High-k Stack Layer of SOI Nanowire Chip, Designed to Detect Circular RNA Associated with the Development of Glioma. Molecules, 2021, 26, 3715.	3.8	6
23	Shock Hugoniot of porous nanosized nickel. Journal of Applied Physics, 2022, 131, .	2.5	6
24	Anomalies of the propagation of shock waves in mixtures. Combustion, Explosion and Shock Waves, 1992, 28, 308-314.	0.8	5
25	Detonation velocity of mechanically activated mixtures of ammonium perchlorate and aluminum. Combustion, Explosion and Shock Waves, 2017, 53, 461-470.	0.8	5
26	Structure and Behavior of Gasless Combustion Waves in Powders. Combustion Science and Technology, 2017, 189, 2220-2241.	2.3	5
27	The Impact of Fast-Rise-Time Electromagnetic Field and Pressure on the Aggregation of Peroxidase upon Its Adsorption onto Mica. Applied Sciences (Switzerland), 2021, 11, 11677.	2.5	5
28	Detonation performance of high-dense BTF charges. Journal of Physics: Conference Series, 2014, 500, 052010.	0.4	4
29	Combustion and detonation of mechanoactivated aluminumâ€“potassium perchlorate mixtures. Russian Journal of Physical Chemistry B, 2015, 9, 615-624.	1.3	4
30	Sound Velocity in Shock-Compressed Samples from a Mixture of Micro- and Nanodispersed Nickel and Aluminum Powders. Combustion, Explosion and Shock Waves, 2019, 55, 732-738.	0.8	4
31	Shock wave initiation of liquid explosives. AIP Conference Proceedings, 2000, , .	0.4	3
32	Composite Ceramic Based on Cubic Boron Nitride and Carbon Nanostructures. Refractories and Industrial Ceramics, 2017, 57, 496-500.	0.6	3
33	Explosive Burning of a Mechanically Activated Al and CuO Thermite Mixture. Energies, 2022, 15, 489.	3.1	3
34	Dynamic presure transfer through porous bodies. Combustion, Explosion and Shock Waves, 1982, 18, 597-600.	0.8	2
35	Damping of short-duration shock waves in condensed substances. Combustion, Explosion and Shock Waves, 1983, 19, 655-658.	0.8	2
36	Velocities of wave perturbations behind a shock-wave front in aluminum. Combustion, Explosion and Shock Waves, 1989, 25, 80-85.	0.8	2

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37	Detonation of pressed HMX charges. Combustion, Explosion and Shock Waves, 2000, 36, 492-495.	0.8	2
38	Detonation velocity of BTNEN/Al. Combustion, Explosion and Shock Waves, 2006, 42, 480-485.	0.8	2
39	The mechanism of small-gas detonation in mechanically activated low-density powder mixtures. Technical Physics Letters, 2015, 41, 575-578.	0.7	2
40	Discrete combustion waves of two-dimensional nanocomposites. Combustion, Explosion and Shock Waves, 2015, 51, 338-346.	0.8	2
41	Shock initiation of exothermic reactions in mechanically activated mixtures. Journal of Physics: Conference Series, 2016, 774, 012069.	0.4	2
42	Deflagration to detonation transition in mechanoactivated mixtures of ammonium perchlorate with aluminum. Journal of Physics: Conference Series, 2016, 774, 012068.	0.4	2
43	Structure and reactivity of mechanoactivated Mg (Al)/MoO3 nanocomposites. Russian Journal of Physical Chemistry B, 2016, 10, 707-718.	1.3	2
44	The combustion of Alâ€"CuO powder mixture under shock wave initiation of the reaction. Journal of Physics: Conference Series, 2018, 946, 012054.	0.4	2
45	Estimating Chemical Conversion Rates for Composite Explosives on the Basis of Experimental Data on Pseudo-Ideal Detonation. Russian Journal of Physical Chemistry B, 2019, 13, 145-155.	1.3	2
46	Shock-Wave Initiation of a Thermite Mixture of AlÂ+ÂCuO. Combustion, Explosion and Shock Waves, 2020, 56, 220-230.	0.8	2
47	Dynamic compaction of Ni and Al micron powder blends in cylindrical recovery scheme. Journal of Physics: Conference Series, 2015, 653, 012037.	0.4	1
48	Pseudoideal detonation of mechanoactivated mixtures of ammonium perchlorate with nanoaluminum. Journal of Physics: Conference Series, 2018, 946, 012055.	0.4	1
49	Mechanochemistry of Bi2O3. 2. Mechanical Activation and Thermal Reactions in a High-Energy Al + Bi2O3 System. Colloid Journal, 2019, 81, 575-582.	1.3	1
50	Shock compressibility of polycrystalline nickel aluminide. High Pressure Research, 2019, 39, 471-479.	1.2	1
51	Qualitative characteristics of the results of experimental studies of initiation and combustion of mechanically activated mixtures of aluminum and copper oxide powders. Journal of Physics: Conference Series, 2019, 1147, 012035.	0.4	1
52	Attenuation of Shock Waves in Reactive Materials. Russian Journal of Physical Chemistry B, 2020, 14, 642-646.	1.3	1
53	Study of combustion wave propagation in linear charges from mechanically activated thermite mixtures. Journal of Physics: Conference Series, 2021, 1787, 012017.	0.4	1
54	Effect of mechanical activation on combustion characteristics of Alâ€"CuO powder mixture. Journal of Physics: Conference Series, 2021, 1787, 012016.	0.4	1

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55	Investigation of Shock Wave Impulse Influence on Solid Propellant Combustion. AIP Conference Proceedings, 2002, , .	0.4	0
56	Aluminised Explosive Compositions Based on NQ and BTNEN. AIP Conference Proceedings, 2002, , .	0.4	0
57	Low-Gas Detonation in Low-Density Mechanically Activated Powder Mixtures. Technical Physics, 2019, 64, 767-775.	0.7	0