Anatoly Mitrofanov

List of Publications by Year
in descending order

35 papers	428 citations	1040056 9 h-index	713466 21 g-index
35 all docs	35 docs citations	35 times ranked	232 citing authors

#	Article	IF	Citations
1	Role of electronic excitations in explosive decomposition of solids. Journal of Applied Physics, 2001, 89, 4156-4166.	2.5	120
2	Laser Initiation of Energetic Materials: Selective Photoinitiation Regime in Pentaerythritol Tetranitrate. Journal of Physical Chemistry C, 2011, 115, 6893-6901.	3.1	90
3	Understanding Limits of the Thermal Mechanism of Laser Initiation of Energetic Materials. Journal of Physical Chemistry C, 2012, 116, 24482-24486.	3.1	49
4	Topography of Photochemical Initiation in Molecular Materials. Molecules, 2013, 18, 14148-14160.	3.8	22
5	Laser initiation of PETN in the mode of resonance photoinitiation. Russian Journal of Physical Chemistry B, 2011, 5, 67-74.	1.3	14
6	Preexplosion phenomena in heavy metal azides. Combustion, Explosion and Shock Waves, 2000, 36, 622-632.	0.8	12
7	Can a Photosensitive Oxide Catalyze Decomposition of Energetic Materials?. Journal of Physical Chemistry C, 2017, 121, 1153-1161.	3.1	12
8	Laser initiation of PETN containing light-scattering additives. Technical Physics Letters, 2010, 36, 285-287.	0.7	10
9	Sensitization of PETN to laser radiation by opaque film coating. Combustion and Flame, 2016, 172, 215-221.	5.2	9
10	Photo- and thermochemical initiation of PETN under laser excitation. Russian Journal of Physical Chemistry B, 2014, 8, 687-691.	1.3	8
11	Photochemistry of the Î±-Al2O3-PETN Interface. Molecules, 2016, 21, 289.	3.8	8
12	Model of the photostimulated fragmentation of PETN molecules in selective photoinitiation. Russian Journal of Physical Chemistry B, 2011, 5, 821-823.	1.3	7
13	Ignition of Organic Explosive Materials by a Copper Oxide Film Absorbing a Laser Pulse. Propellants, Explosives, Pyrotechnics, 2018, 43, 992-998.	1.6	7
14	Achieving tunable chemical reactivity through photo-initiation of energetic materials at metal oxide surfaces. Physical Chemistry Chemical Physics, 2020, 22, 25284-25296.	2.8	6
15	Explosive Luminescence of Heavy Metal Azides. Physica Status Solidi (B): Basic Research, 1998, 207, 535-540.	1.5	5
16	Dynamic Topography of Silver Azide Preâ€Explosion Luminescence. Combustion, Explosion and Shock Waves, 2003, 39, 581-584.	0.8	5
17	Preexplosion stage duration in laser-initiated PETN. Technical Physics Letters, 2009, 35, 1051-1053.	0.7	5
18	Photochemical and photothermal dissociation of PETN during laser initiation. Russian Journal of Physical Chemistry B, 2011, 5, 658-660.	1.3	5

#	Article	IF	Citations
19	Initiation of Tetranitropentaerythrit by Millisecond Laser Pulses. Russian Physics Journal, 2014, 56, 1357-1362.	0.4	5
20	Role of Hydrogen Abstraction Reaction in Photocatalytic Decomposition of High Energy Density Materials. Journal of Physical Chemistry C, 2016, 120, 24835-24846.	3.1	5
21	Kinetics of the Early Stage of Preexplosion Conduction in Silver Azide. Combustion, Explosion and Shock Waves, 2002, 38, 378-380.	0.8	4
22	Propagation of the Chain Explosive-Decomposition Reaction in Silver Azide Crystals. Combustion, Explosion and Shock Waves, 2003, 39, 701-703.	0.8	4
23	Time-resolved picture of initiation and propagation of preexplosive luminescence in AgN3. Combustion and Flame, 2004, 137, 538-540.	5.2	4
24	Influence of the thickness and absorption coefficient of a copper oxide film on the ignition delay of PENT by a laser pulse. Combustion, Explosion and Shock Waves, 2016, 52, 91-95.	0.8	4
25	Effect of Decomposition of CuO Film on Ignition of Organic Explosives by a Laser Pulse. Propellants, Explosives, Pyrotechnics, 2019, 44, 1554-1561.	1.6	4
26	Effect of the initiating pulse energy on the kinetics of preexplosion processes in silver azide. Technical Physics Letters, 2004, 30, 772-773.	0.7	1
27	Expansion of explosion products of silver azide. Russian Journal of Physical Chemistry B, 2007, 1, 570-572.	1.3	1
28	Effect of radiation treatment on the explosive conduction kinetics of heavy metal azides. Combustion, Explosion and Shock Waves, 2007, 43, 691-696.	0.8	1
29	Emission of electrons from silver azide at the preexplosion stage. Russian Journal of Physical Chemistry B, 2008, 2, 720-721.	1.3	1
30	Predetonation luminescence spectrum of thallium azide. Technical Physics Letters, 1999, 25, 350-351.	0.7	0
31	Kinetics of predetonation conductivity of silver azide. Technical Physics Letters, 1999, 25, 904-905.	0.7	0
32	Lead azide pre-explosive luminescence. Russian Physics Journal, 2000, 43, 181-184.	0.4	0
33	Origin And Propagation Characteristics Of The Explosive Decomposition Chain Reaction In Heavy Metal Azides. AIP Conference Proceedings, 2006, , .	0.4	0
34	Effect of the microfocal nature of the initiation of the explosive decomposition reaction on the efficiency of laser initiation. Russian Journal of Physical Chemistry B, 2014, 8, 848-851.	1.3	0
35	A Fluctuation Model of Photoinitiation of High-Sensitivity Energetic Materials. Russian Physics Journal, 2016, 59, 166-170.	0.4	0