Evgeny Gurentsov

List of Publications by Year in descending order

35 papers	414 citations	759055 12 h-index	794469 19 g-index
35 all docs	35 docs citations	35 times ranked	199 citing authors

#	Article	IF	Citations
1	Size dependence of complex refractive index function of growing nanoparticles. Applied Physics B: Lasers and Optics, 2011, 104, 285-295.	1.1	63
2	TR-LII for sizing of carbon particles forming at room temperature. Applied Physics B: Lasers and Optics, 2006, 83, 449-454.	1.1	30
3	Size measurement of carbon and iron nanoparticles by laser induced incadescence. High Temperature, 2011, 49, 667-673.	0.1	28
4	Experimental study of molecular hydrogen influence on carbon particle growth in acetylene pyrolysis behind shock waves. Combustion and Flame, 2012, 159, 3607-3615.	2.8	26
5	Experimental study of carbon and iron nanoparticle vaporisation under pulse laser heating. Applied Physics B: Lasers and Optics, 2013, 112, 421-432.	1.1	21
6	Experimental study of temperature influence on carbon particle formation in shock wave pyrolysis of benzene and benzeneâ€“ethanol mixtures. Combustion and Flame, 2015, 162, 207-215.	2.8	20
7	Ignition of Multicomponent Hydrocarbon/Air Mixtures behind Shock Waves. High Temperature, 2002, 40, 379-386.	0.1	17
8	Shock wave induced carbon particle formation from CCL4 and C3O2 observed by laser extinction and by laser-induced incandescence (LII). Combustion and Flame, 2003, 135, 77-85.	2.8	17
9	Formation of Iron-Carbon Nanoparticles behind Shock Waves. Kinetics and Catalysis, 2005, 46, 309-318.	0.3	17
10	Quantum Phenomena in Ignition and Detonation at Elevated Density. Physical Review Letters, 2012, 109, 183201.	2.9	15
11	Sizing of Mo nanoparticles synthesised by Krâ€“F laser pulse photo-dissociation of Mo(CO)6. Applied Physics A: Materials Science and Processing, 2015, 119, 615-622.	1.1	14
12	Iron nanoparticle growth induced by Krâ€“F excimer laser photolysis of Fe(CO)5. Journal of Nanoparticle Research, 2013, 15, 1.	0.8	13
13	The change of soot refractive index function along the height of premixed ethylene/air flame and its correlation with soot structure. Applied Physics B: Lasers and Optics, 2020, 126, 1.	1.1	13
14	Formation of carbon nanoparticles by the condensation of supersaturated atomic vapor obtained by the laser photolysis of C3O2. Kinetics and Catalysis, 2007, 48, 194-203.	0.3	11
15	Synthesis of metal-carbon nanoparticles in pulsed UV-photolysis of Fe(CO)5-CCl4 mixtures at room temperature. Technical Physics Letters, 2015, 41, 547-550.	0.2	10
16	Energy gain of the detonation pyrolysis of acetylene. High Temperature, 2015, 53, 363-369.	0.1	10
17	Synthesis of binary ironâ€“carbon nanoparticles by UV laser photolysis of Fe(CO)5with various hydrocarbons. Materials Research Express, 2016, 3, 105041.	0.8	10
18	Study of thermodynamic properties of carbon nanoparticles by the laser heating method. High Temperature, 2017, 55, 723-730.	0.1	10

#	Article	IF	Citations
19	Analysis of the production and clusterization of iron atoms under pulsed laser photolysis of Fe(CO)5. Technical Physics, 2013, 58, 1337-1345.	0.2	8
20	Optical properties and structure of acetylene flame soot. Applied Physics B: Lasers and Optics, 2021, 127, 1.	1.1	8
21	Anomalous behavior of optical density of iron nanoparticles heated behind shock waves. High Temperature, 2016, 54, 902-904.	0.1	7
22	UV laser synthesis of nanoparticles in the gas phase. Kinetics and Catalysis, 2017, 58, 233-254.	0.3	7
23	Nanoparticle formation from supersaturated carbon vapour generated by laser photolysis of carbon suboxide. Journal Physics D: Applied Physics, 2006, 39, 4359-4365.	1.3	6
24	Photosynthesis of nanoparticles. Nanotechnologies in Russia, 2009, 4, 319-330.	0.7	6
25	Synthesis of Small Carbon Nanoparticles in a Microwave Plasma Flow Reactor. Zeitschrift Fur Physikalische Chemie, 2013, 227, 357-370.	1.4	5
26	Binary ironâ€“carbon nanoparticle synthesis in photolysis of Fe(CO)₅with methane and acetylene. Journal of Physics: Conference Series, 2016, 774, 012127.	0.3	4
27	Study of Evaporation of Laser-Heated Ironâ€“Carbon Nanoparticles Using Analysis of Thermal Radiation. Technical Physics, 2019, 64, 1133-1139.	0.2	4
28	Dependence of Soot Primary Particle Size on the Height above a Burner in Target Ethylene/air Premixed Flame. Combustion Science and Technology, 2022, 194, 2847-2863.	1.2	4
29	Diagnostics of carbon-encapsulated iron nanoparticles by laser heating. Journal of Physics: Conference Series, 2018, 946, 012068.	0.3	3
30	Effect of active impurities on the condensation of nanoparticles from supersaturated carbon vapor in the combined laser photolysis of C3O2 and H2S. Kinetics and Catalysis, 2008, 49, 167-177.	0.3	2
31	Kinetics of Mo atom formation and consumption in UV multiphoton dissociation of Mo(CO)₆at room temperature. Physica Scripta, 2015, 90, 128006.	1.2	1
32	Molybdenum atoms yield in pulse ultraviolet laser photolysis of Mo(CO)6. Journal of Physics: Conference Series, 2015, 653, 012029.	0.3	1
33	Ignition delays in methaneâ€“oxygen mixture in the presence of small amount of iron or carbon nanoparticles. Journal of Physics: Conference Series, 2016, 774, 012085.	0.3	1
34	Promotion of methane ignition by the laser heating of suspended nanoparticles. Journal of Physics: Conference Series, 2018, 946, 012064.	0.3	1
35	Methane Decomposition on the Surface of Molybdenum Nanoparticles at Room Temperature. Kinetics and Catalysis, 2020, 61, 224-231.	0.3	1