Vp Torchigin

List of Publications by Year
in descending order

58 papers	709 citations	516710 16 h-index	677142 22 g-index
58 all docs	58 docs citations	58 times ranked	21 citing authors

#	ARTICLE	IF	CITATIONS
1	Steady states and stability of the circulating light in the air atmosphere. Optik, 2021, 235, 166635.	2.9	7
2	Sonoluminescence and circulating light. Optik, 2021, 239, 166799.	2.9	0
3	Unknown features of a behavior of the circulating light. Optik, 2021, 241, 167233.	2.9	0
4	Ball lightning and the Chernobyl accident. Optik, 2021, 241, 167224.	2.9	0
5	Influence of the circulating light on anomalous properties of glowing objects. Optik, 2021, 242, 167090.	2.9	0
6	Behavior of the circulating light in a mixture of gases. Optik, 2021, 243, 167398.	2.9	0
7	Circulating light that burns out holes in metal sheets. Optik, 2021, 243, 167528.	2.9	0
8	Circulating light at continuous electrical current. Optik, 2021, 244, 167395.	2.9	0
9	Circulating light and a separation of components of a mixture of gases. Optik, 2021, 244, 167524.	2.9	0
10	Parameters of natural ball lightning derived from its optical model. Optik, 2021, 243, 167390.	2.9	0
11	Momentum and mass of a pulse of light wave as a particular case of waves of arbitrary physical nature. Optik, 2020, 202, 163605.	2.9	4
12	Simple explanation of physical nature of ball lightning. Optik, 2020, 203, 164013.	2.9	12
13	Physical and optical laws responsible for existence and abnormal behavior of ball lightning. Optik, 2020, 222, 165374.	2.9	7
14	Physical phenomena responsible for stability and spherical form of ball lightning. Optik, 2020, 219, 165098.	2.9	10
15	Comparison of the stabilities of a soap bubble and the ball lightning in the form of a bubble of light. Optik, 2020, 219, 165095.	2.9	10
16	Momentum of an arbitrary wave derived from the Doppler law. Optik, 2020, 204, 163518.	2.9	7
17	Dozen arguments in favor of the Minkowski form of the momentum of light in matter. Optik, 2020, 218, 164986.	2.9	3
18	Ratio of the momentums of an arbitrary wave propagating in various media. Optik, 2020, 219, 164987.	2.9	2

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19	Another argument in favor of the Minkowski form of the momentum of light in matter. Optik, 2019, 194, 163127.	2.9	5
20	Mass of the photon propagating in an optical medium and mass of its electromagnetic and mechanical components. Optik, 2019, 194, 163125.	2.9	6
21	How ball lightning finds out slots and holes to penetrate through them. Optik, 2019, 194, 163126.	2.9	12
22	Ball lightning as a bubble of light: Existence and stability. Optik, 2019, 193, 162961.	2.9	14
23	Optical electrostriction pressure in liquid, solids and gases. Optik, 2019, 189, 90-96.	2.9	13
24	Physics of a ball lightning in a form of a bubble of light. Optik, 2019, 188, 294-301.	2.9	14
25	How optical model of ball lightning explains its paradoxical movement upwind. Optik, 2019, 184, 533-537.	2.9	15
26	Additional arguments in favor of the Minkowski form of the momentum of light in matter. Optik, 2019, 186, 390-394.	2.9	7
27	Why ball lightning disappears suddenly traceless. Optik, 2019, 187, 65-69.	2.9	14
28	Ball lightning as a bubble of self-confined light. Optik, 2019, 186, 63-71.	2.9	14
29	Momentum of a wave of any physical nature in a context of the Abraham-Minkowski dilemma. Optik, 2019, 187, 148-151.	2.9	6
30	Explanation of abnormal motion of glowing silicon balls in a framework of optical model of ball lightning. Optik, 2019, 176, 704-710.	2.9	16
31	Momentum of a wave and additional forces connected with the momentum. Optik, 2018, 158, 861-869.	2.9	15
32	Explanation of anomalous bouncing luminous droplets of liquid silicon in a framework of the optical model of ball lightning. Optik, 2018, 171, 88-94.	2.9	15
33	Explanation of abnormal behavior of ball lightning near the earth surface. Optik, 2018, 171, 167-170.	2.9	20
34	Explanation of abnormal motion of ball lightning near the earth's surface. Optik, 2018, 171, 149-152.	2.9	5
35	Optical electrostriction pressure and its influence on the momentum of the light pulse in an optical medium. Optik, 2017, 148, 120-123.	2.9	9
36	How ball lightning manages to catch up a flying aircraft and penetrate into its salon. Optik, 2017, 148, 196-200.	2.9	21

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37	Stability of the self-confined light. Optik, 2016, 127, 2298-2300.	2.9	19
38	How the ball lightning enters the room through the window panes. Optik, 2016, 127, 5876-5881.	2.9	25
39	Optical pressure applied to a semi-infinitive dielectric. Optik, 2016, 127, 6066-6070.	2.9	14
40	The equation of motion of the photon in an optical medium. Optik, 2016, 127, 6768-6770.	2.9	12
41	Photon momentum and optically induced force in matter derived from the eikonal equation. Optik, 2016, 127, 8604-8606.	2.9	9
42	Nonlinear properties of gaseous optical mediums in a context of ball lightning explanation. Optik, 2016, 127, 2319-2324.	2.9	21
43	How Ball Lightning penetrates in room through small holes and splits. Optik, 2016, 127, 6155-6161.	2.9	22
44	Photon and physical phenomena responsible for its momentum. Optik, 2016, 127, 6120-6128.	2.9	15
45	Physical nature and magnitude of optically induced forces derived from laws of mechanics. Optik, 2016, 127, 5976-5983.	2.9	12
46	Ball Lightning as a self-confined light. Optik, 2016, 127, 2202-2206.	2.9	18
47	Kinds of optically induced force derived from laws of conservation of the momentum and energy. Optik, 2015, 126, 1878-1883.	2.9	16
48	Radiation pressure on plane dielectric surfaces. Optik, 2015, 126, 1767-1772.	2.9	13
49	The momentum of an electromagnetic wave inside a dielectric derived from the Snell refraction law. Annals of Physics, 2014, 351, 444-446.	2.8	23
50	Propagation of a light pulse inside matter in a context of the Abrahamâ€“Minkowski dilemma. Optik, 2014, 125, 2687-2691.	2.9	23
51	Interrelation between various types of optically induced forces. Optics Communications, 2013, 301-302, 147-151.	2.1	18
52	Comparison of various approaches to the calculation of optically induced forces. Annals of Physics, 2012, 327, 2288-2300.	2.8	32
53	On phenomenon of light radiation from miniature balls immersed in water. Physics Letters, Section A: General, Atomic and Solid State Physics, 2010, 374, 588-591.	2.1	9
54	Self-organization of intense light within erosive gas discharges. Physics Letters, Section A: General, Atomic and Solid State Physics, 2007, 361, 167-172.	2.1	29

#	Article	IF	Citations
55	Phenomenon of ball lightning and its outgrowths. Physics Letters, Section A: General, Atomic and Solid State Physics, 2005, 337, 112-120.	2.1	26
56	Space solitons in gas mixtures. Optics Communications, 2004, 240, 449-455.	2.1	27
57	Behavior of self-confined spherical layer of light radiation inÂtheÂair atmosphere. Physics Letters, Section A: General, Atomic and Solid State Physics, 2004, 328, 189-195.	2.1	40
58	An increase in the wavelength of light pulses propagating through a fiber. Physics Letters, Section A: General, Atomic and Solid State Physics, 2003, 311, 21-25.	2.1	3