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	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
2	Comparison of various approaches to the calculation of optically induced forces. Annals of Physics, 2012, 327, 2288-2300.	2.8	32
3	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
4	Space solitons in gas mixtures. Optics Communications, 2004, 240, 449-455.	2.1	27
5	Phenomenon of ball lightning and its outgrowths. Physics Letters, Section A: General, Atomic and Solid State Physics, 2005, 337, 112-120.	2.1	26
6	How the ball lightning enters the room through the window panes. Optik, 2016, 127, 5876-5881.	2.9	25
7	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
8	Propagation of a light pulse inside matter in a context of the Abrahamâ€"Minkowski dilemma. Optik, 2014, 125, 2687-2691.	2.9	23
9	How Ball Lightning penetrates in room through small holes and splits. Optik, 2016, 127, 6155-6161.	2.9	22
10	Nonlinear properties of gaseous optical mediums in a context of ball lightning explanation. Optik, 2016, 127, 2319-2324.	2.9	21
11	How ball lightning manages to catch up a flying aircraft and penetrate into its salon. Optik, 2017, 148, 196-200.	2.9	21
12	Explanation of abnormal behavior of ball lightning near the earth surface. Optik, 2018, 171, 167-170.	2.9	20
13	Stability of the self-confined light. Optik, 2016, 127, 2298-2300.	2.9	19
14	Interrelation between various types of optically induced forces. Optics Communications, 2013, 301-302, 147-151.	2.1	18
15	Ball Lightning as a self-confined light. Optik, 2016, 127, 2202-2206.	2.9	18
16	Kinds of optically induced force derived from laws of conservation of the momentum and energy. Optik, 2015, 126, 1878-1883.	2.9	16
17	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
18	Photon and physical phenomena responsible for its momentum. Optik, 2016, 127, 6120-6128.	2.9	15

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19	Momentum of a wave and additional forces connected with the momentum. Optik, 2018, 158, 861-869.	2.9	15
20	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
21	How optical model of ball lightning explains its paradoxical movement upwind. Optik, 2019, 184, 533-537.	2.9	15
22	Optical pressure applied to a semi-infinitive dielectric. Optik, 2016, 127, 6066-6070.	2.9	14
23	Ball lightning as a bubble of light: Existence and stability. Optik, 2019, 193, 162961.	2.9	14
24	Physics of a ball lightning in a form of a bubble of light. Optik, 2019, 188, 294-301.	2.9	14
25	Why ball lightning disappears suddenly traceless. Optik, 2019, 187, 65-69.	2.9	14
26	Ball lightning as a bubble of self-confined light. Optik, 2019, 186, 63-71.	2.9	14
27	Radiation pressure on plane dielectric surfaces. Optik, 2015, 126, 1767-1772.	2.9	13
28	Optical electrostriction pressure in liquid, solids and gases. Optik, 2019, 189, 90-96.	2.9	13
29	The equation of motion of the photon in an optical medium. Optik, 2016, 127, 6768-6770.	2.9	12
30	Physical nature and magnitude of optically induced forces derived from laws of mechanics. Optik, 2016, 127, 5976-5983.	2.9	12
31	How ball lightning finds out slots and holes to penetrate through them. Optik, 2019, 194, 163126.	2.9	12
32	Simple explanation of physical nature of ball lightning. Optik, 2020, 203, 164013.	2.9	12
33	Physical phenomena responsible for stability and spherical form of ball lightning. Optik, 2020, 219, 165098.	2.9	10
34	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
35	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
36	Photon momentum and optically induced force in matter derived from the eikonal equation. Optik, 2016, 127, 8604-8606.	2.9	9

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37	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
38	Additional arguments in favor of the Minkowski form of the momentum of light in matter. Optik, 2019, 186, 390-394.	2.9	7
39	Physical and optical laws responsible for existence and abnormal behavior of ball lightning. Optik, 2020, 222, 165374.	2.9	7
40	Momentum of an arbitrary wave derived from the Doppler law. Optik, 2020, 204, 163518.	2.9	7
41	Steady states and stability of the circulating light in the air atmosphere. Optik, 2021, 235, 166635.	2.9	7
42	Mass of the photon propagating in an optical medium and mass of its electromagnetic and mechanical components. Optik, 2019, 194, 163125.	2.9	6
43	Momentum of a wave of any physical nature in a context of the Abraham-Minkowski dilemma. Optik, 2019, 187, 148-151.	2.9	6
44	Explanation of abnormal motion of ball lightning near the earth's surface. Optik, 2018, 171, 149-152.	2.9	5
45	Another argument in favor of the Minkowski form of the momentum of light in matter. Optik, 2019, 194, 163127.	2.9	5
46	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
47	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
48	Dozen arguments in favor of the Minkowski form of the momentum of light in matter. Optik, 2020, 218, 164986.	2.9	3
49	Ratio of the momentums of an arbitrary wave propagating in various media. Optik, 2020, 219, 164987.	2.9	2
50	Sonoluminescence and circulating light. Optik, 2021, 239, 166799.	2.9	0
51	Unknown features of a behavior of the circulating light. Optik, 2021, 241, 167233.	2.9	0
52	Ball lightning and the Chernobyl accident. Optik, 2021, 241, 167224.	2.9	0
53	Influence of the circulating light on anomalous properties of glowing objects. Optik, 2021, 242, 167090.	2.9	0
54	Behavior of the circulating light in a mixture of gases. Optik, 2021, 243, 167398.	2.9	0

#	Article	IF	Citations
55	Circulating light that burns out holes in metal sheets. Optik, 2021, 243, 167528.	2.9	0
56	Circulating light at continuous electrical current. Optik, 2021, 244, 167395.	2.9	0
57	Circulating light and a separation of components of a mixture of gases. Optik, 2021, 244, 167524.	2.9	0
58	Parameters of natural ball lightning derived from its optical model. Optik, 2021, 243, 167390.	2.9	0