Vadim V Samarkin

List of Publications by Year
in descending order

98 papers	550 citations	687363 13 h-index	752698 20 g-index
99 all docs	99 docs citations	99 times ranked	141 citing authors

#	Article	IF	Citations
1	Adaptive optics system for real-time wavefront correction. Atmospheric and Oceanic Optics, 2015, 28, 381-386.	1.3	52
2	Correction of strong phase and amplitude modulations by two deformable mirrors in a multistaged Ti:sapphire laser. Optics Letters, 2002, 27, 1570.	3.3	50
3	Shack â€" Hartmann wavefront sensor for measuring the parameters of high-power pulsed solid-state lasers. Quantum Electronics, 2010, 40, 321-326.	1.0	38
4	Extremely high-power CO₂ laser beam correction. Applied Optics, 2015, 54, 4352.	1.8	33
5	Bimorph deformable mirror with a high density of electrodes to correct for atmospheric distortions. Applied Optics, 2019, 58, 6019.	1.8	31
6	Control of high power CO2 laser beam by adaptive optical elements. Optics Communications, 1995, 118, 317-322.	2.1	29
7	Wavefront compensation method using a Shack-Hartmann sensor as an adaptive optical element system. Optoelectronics, Instrumentation and Data Processing, 2012, 48, 153-158.	0.6	29
8	Wide aperture piezoceramic deformable mirrors for aberration correction in high-power lasers. High Power Laser Science and Engineering, 2016, 4, .	4.6	29
9	Active laser resonator performance: formation of a specified intensity output. Applied Optics, 2001, 40, 6026.	2.1	26
10	Laser beam focusing through a moderately scattering medium using a bimorph mirror. Optics Express, 2020, 28, 38061.	3.4	19
11	Study of a wide-aperture combined deformable mirror for high-power pulsed phosphate glass lasers. Quantum Electronics, 2015, 45, 1086-1087.	1.0	17
12	Water-cooled stacked-actuator flexible mirror for high-power laser beam correction. Optics and Laser Technology, 2021, 144, 107427.	4.6	17
13	Adaptive Correction of a High-Power Titanium-Sapphire Laser Radiation. Journal of Applied Spectroscopy, 2005, 72, 744-750.	0.7	16
14	Deformable mirrors for laser beam shaping. , 2010, , .		16
15	<title>Bimorph mirrors for powerful laser beam correction and formation</title>. , 2002, , .		14
16	<title>Adaptive optical system based on bimorph mirror and Shack-Hartmann wavefront sensor</title>. , 2002, 4493, 261.		13
17	<title>Adaptive optical elements for laser beam control</title>. , 2001, , .		11
18	State-of-the-Art Technologies in Piezoelectric Deformable Mirror Design. Photonics, 2022, 9, 321.	2.0	11

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19	<title>Low-cost adaptive optical devices for multipurpose applications</title>. , 1999, , .		7
20	Water-cooled bimorph correctors. , 2005, 6018, 300.		6
21	Novel development of tiny bimorph mirrors. , 2007, , .		6
22	Formation of a specified intensity distribution of the radiation from an industrial cw CO2laser. Quantum Electronics, 1999, 29, 339-340.	1.0	5
23	Closed adaptive systems with controllable bimorph mirrors. Journal of Optical Technology (A) Tj ETQq1 1 0.784314 rgBT /Overlock 10	0.4	5
24	Laser beam formation by adaptive optics. , 2011, , .		4
25	Wide aperture (more than 500 mm) deformable mirrors for high power laser beam correction. , 2014, , .		4
26	Fast adaptive optical system for 1.5 km horizontal beam propagation. , 2018, , .		4
27	Wide aperture high resolution stacked-actuator deformable mirror for high power laser beam correction. , 2019, , .		4
28	<title>Beam characteristics of CO2 laser with controllable output mirror</title>. , 1994, , .		3
29	Problem of Shack-Hartmann wavefront sensor and interferometer use while testing strongly distorted laser wavefront. Proceedings of SPIE, 2008, , .	0.8	3
30	Hill-climbing algorithm for adaptive optical system with Shack-Hartmann sensor. , 2010, , .		3
31	Laser beam focusing through the atmosphere aerosol. , 2017, , .		3
32	Water-cooled stacked-actuator deformable mirror for atmospheric applications. , 2019, , .		3
33	Given laser output formation: adaptive optics approach–theory and experiment. , 1999, , .		2
34	<title>Closed-loop adaptive system for laser beam control</title>. , 2001, , .		2
35	Tiny bimorph mirrors for laser beam control. , 2006, , .		2
36	Bimorph flexible mirror for vortex beam formation. , 2006, , .		2

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37	Beam Correction In TiS Lasers By Means Of Adaptive Optics. , 2010, , .		2
38	New approach for laser beam formation by means of deformable mirrors. , 2015, , .		2
39	Largest in the world bimorph deformable mirror for high-power laser beam correction. Proceedings of SPIE, 2016, , .	0.8	2
40	<title>Investigation and optimization of generation performances of a CO2 laser with unstable resonator and output variable-reflectivity mirror</title>. , 1999, , .		1
41	<title>Quasi Q-switch regime of CO<formula><inf><roman>2</roman></inf></formula> laser generation</title>. , 2000, 3930, 38.		1
42	Adaptive system for laser beam formation. , 2002, 4770, 59.		1
43	Intracavity laser beam shaping by means of flexible corrector. , 2002, 4770, 96.		1
44	<title>Adaptive system for high power lasers</title>. , 2003, , .		1
45	Semipassive bimorph correctors for multipurpose applications. , 2003, , .		1
46	High-power lasers and adaptive optics. , 2004, , .		1
47	Screw Phase Dislocation Formation by Means of Flexible Bimorph Mirror. , 2006, , .		1
48	Correction of the radiation of 1 kW CW diode-pumped glass laser. , 2006, , .		1
49	Adaptive optics and high power pulse lasers. , 2006, , .		1
50	Adaptive optical system with water-cooled bimorph deformable mirror. , 2010, , .		1
51	Shack-Hartmann wavefront sensor and its problems. Proceedings of SPIE, 2011, , .	0.8	1
52	Water-cooled stacked-actuator deformable mirror for high CW power laser beam correction. , 2018, , .		1
53	Control of high-power CO 2 laser beam. , 1994, 2207, 209.		0
54	Thin-plates test with modified IT-200 Fizeau interferometer. , 1996, , .		0

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55	Investigation of industrial CO 2 laser beam characteristics with intracavity modulator. , 1996, , .		0
56	<title>Beam quality of a high-power CO<formula><inf><roman>2</roman></inf></formula> laser with an unstable resonator and a variable-reflectivity mirror</title>. , 1999, , .		0
57	<title>Formation of the specified laser output by means of intracavity active mirrors</title>. , 1999, 3760, 76.		0
58	Laser resonator with active mirror-generation of Q-switch regime in industrial CO 2 laser. , 2001, 4184, 282.		0
59	Adaptive optics for laser beam control. , 0, , .		0
60	Adaptive optics for high power laser beam shaping. , 0, , .		0
61	Corrections of the aberrations of the high-power lasers. , 2003, , .		0
62	Characterization of large deformable mirrors. , 2004, 5572, 273.		0
63	Closed-loop adaptive optical system with bimorph mirror and shack-hartmann wavefront sensor - advantages and limitations. , 0, , .		0
64	High power lasers and adaptive optics. , 0, , .		0
65	Water-cooled wavefront correctors. , 0, , .		0
66	Adaptive systems for single pulse lasers. , 2006, 6101, 23.		0
67	Beam Correction in High Intense Lasers. , 2006, , .		0
68	Tiny Multilayer Deformable Mirrors. , 2006, , .		0
69	Femtosecond laser beam correction by means of adaptive optics. , 2008, , .		0
70	Shack-Hartmann wavefront sensor versus Fizeau interferometer while optical surfaces testing. , 2008, , .		0
71	Multi dither adaptive system based on Shack-Hartmann wavefront sensor. Proceedings of SPIE, 2010, , .	0.8	0
72	Multi-dither algorithm on Shack-Hartmann wavefront sensor for laser beam formation. Proceedings of SPIE, 2010, , .	0.8	0

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73	High power laser beam position stabilization system by means of adaptive optics. , 2010, , .		0
74	Fast adaptive optical system for laser beam correction. , 2010, , .		0
75	Shack-Hartmann wavefront sensor - advantages and disadvantages. , 2010, , .		0
76	Adaptive system for high power (more than 100 kW) CW CO2 lasers. , 2013, , .		0
77	Large aperture bimorph deformable mirror for extremely high power laser systems. , 2013, , .		0
78	Extremely high power CO₂laser beam correction. Proceedings of SPIE, 2013, , .	0.8	0
79	Closed loop adaptive system with Hartmann wavefront sensor for CO<inf>2</inf> laser radiation correction. , 2014, , .		0
80	New approaches of uniform focal spot formation by means of deformable mirror. , 2016, , .		0
81	Ion-assisted coating for large-scale Bimorph deformable mirror. Proceedings of SPIE, 2016, , .	0.8	0
82	Problems of uniform focal spot formation by means of deformable mirror. , 2016, , .		0
83	Extremely large bimorph deformable mirror for high intense laser beam correction. , 2017, , .		0
84	Beam shaping by means of different wavefront correctors. , 2017, , .		0
85	Wide-aperture deformable mirrors for wavefront distortions compensation in high-power laser complexes. , 2019, , .		0
86	Focusing laser beam through pinhole using bimorph deformable mirror. , 2019, , .		0
87	High-power laser beam formation and focusing by means of adaptive optics : (Invited). , 2019, , .		0
88	<title>Adaptive optics in a multistage TiS laser</title>. , 2002, , .		0
89	Fast adaptive optical system for the high-power laser beam correction in atmosphere. , 2017, , .		0
90	High spatial resolution bimorph deformable mirror for laser beam control. , 2018, , .		0

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91	Formation of the doughnut and Super-Gaussian intensity distribution by means of different types of wavefront correctors. , 2018, , .		0
92	Comparison of the efficiency of laser beam focusing through the scattering medium using 14- and 31-channel bimorph mirrors. , 2018, , .		0
93	Laser beam focusing through the scattering medium-low order aberration correction approach. , 2018, , .		0
94	Focusing Laser Beam through a Pinhole as an Approach to Enhancing a Free Space Communication Channel via Turbulent Air by Adaptive Optics. , 2019, , .		0
95	Focusing laser beam through pinhole using bimorph deformable mirror. , 2019, , .		0
96	Stacked-actuators deformable mirror vs bimorph mirror for laser beam shaping. , 2019, , .		0
97	New generation of the miniature bimorph mirrors for compensation of the wavefront distortions. , 2019, , .		0
98	Adaptive optics for laser-beam focusing through the pinhole. , 2019, , .		0