

# Dmitrii V Sinitsyn

## List of Publications by Year in descending order

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204  
papers

2,058  
citations

257450  
24  
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345221  
36  
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204  
all docs

204  
docs citations

204  
times ranked

1082  
citing authors

#	ARTICLE	IF	CITATIONS
1	Double-range ( $\lambda = 2.6 \mu\text{m}$ – $2.9$ and $4.9 \mu\text{m}$ – $6.0 \mu\text{m}$ ) slab RF discharge CO laser system with intracavity frequency conversion in temperature-controlled ZnGeP <sub>2</sub> crystal. Optics and Laser Technology, 2022, 148, 107777.	4.6	6
2	Multifunctional compact dual band repetitively pulsed slab RF discharge CO laser with average output power up to 40 W. Infrared Physics and Technology, 2022, 120, 103921.	2.9	5
3	Broadband CO Laser with Intracavity Frequency Conversion for Plasma Diagnostics. Physics of Atomic Nuclei, 2021, 84, 1789-1795.	0.4	0
4	Terahertz NH <sub>3</sub> Laser with Optical Pumping by $\sim 100$ ns Pulses of CO <sub>2</sub> Laser for Plasma Diagnostics. Physics of Atomic Nuclei, 2021, 84, 1765-1769.	0.4	0
5	Frequency-selective Q-switched repetitively pulsed slab RF-discharge carbon monoxide laser. Optics and Laser Technology, 2020, 131, 106431.	4.6	4
6	Slab RF-discharge carbon dioxide laser with active mode-locking. Infrared Physics and Technology, 2020, 105, 103250.	2.9	1
7	Multiline CO laser with broadband frequency conversion in nonlinear crystals for gas analysis applications. , 2020, , .		0
8	A Prototype of Electric Discharge Gas-Flow Oxygen–Iodine Laser: 2. Simulation of the Parameters of the Active Medium Formed in a Gas-Flow Slab RF Discharge in O <sub>2</sub> : He : CF <sub>3</sub> I Mixtures. Plasma Physics Reports, 2020, 46, 1114-1123.	0.9	0
9	Broadband ( $1.7 \mu\text{m}$ – $6.0 \mu\text{m}$ ) multiline CO laser system with intra- and extracavity sum frequency generation in BaGa <sub>2</sub> GeSe <sub>6</sub> crystals. Optics and Laser Technology, 2019, 115, 205-209.	4.6	12
10	Frequency Conversion of Broadband mid-IR Carbon Monoxide Laser Radiation into THz Range. , 2019, , .		0
11	Nonlinear Frequency Conversion of Broadband Mid-IR Laser Radiation. , 2019, , .		0
12	Super-broadband hybrid mid-infrared laser systems. , 2019, , .		2
13	Hybrid molecular gas laser systems operating within wavelength range of $1.7 \mu\text{m}$ – $19.3$ micron. , 2019, , .		3
14	Frequency conversion of mid-IR lasers into the long-wavelength domain of $12\text{--}20 \mu\text{m}$ with AgGaSe <sub>2</sub> , BaGa <sub>2</sub> GeSe <sub>6</sub> and PbIn <sub>6</sub> Te <sub>10</sub> nonlinear crystals. Optics Express, 2019, 27, 24353.	3.4	17
15	Role of ozone in cryogenic plasma of carbon monoxide laser. , 2019, , .		0
16	Sum frequency generation under conversion of Q-switched cryogenic slab RF discharge CO laser radiation in ZnGeP <sub>2</sub> . Laser Physics, 2018, 28, 025401.	1.2	15
17	Influence of dispersion stretching of ultrashort UV laser pulse on the critical power for self-focusing. Laser Physics, 2018, 28, 045405.	1.2	0
18	Electron-beam-excited high-pressure He–Ar mixture as a potential active medium for an optically pumped laser. Quantum Electronics, 2018, 48, 1174-1178.	1.0	1

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19	Sum frequency generation of multi-line slab radio frequency discharge carbon monoxide laser system with intracavity nonlinear BaGa <sub>2</sub> Ge <sub>6</sub> crystal. Optics Letters, 2018, 43, 4358.	3.3	17
20	High-Pressure Electron Beam-Optically Pumped He-Ar Laser and Collisional Quenching of 4s Levels of ArI. , 2018, , .		0
21	Influence of molecular oxygen addition on gain and generation characteristics of a cryogenic slab RF-discharge-pumped overtone CO laser. Quantum Electronics, 2018, 48, 596-602.	1.0	1
22	Q-switched repetitively pulsed cryogenic slab RF discharge CO laser with active medium comprising air. Applied Physics B: Lasers and Optics, 2018, 124, 1.	2.2	10
23	Modeling of gas-flow slab RF-discharge oxygen-iodine laser. , 2018, , .		0
24	Optimization of active medium composition for Q-switched slab RF-discharge CO laser. , 2018, , .		0
25	Post-filamentation high-intensive light channels formation upon ultrashort laser pulses self-focusing in air. Proceedings of SPIE, 2017, , .	0.8	0
26	A prototype of an electric-discharge gas flow oxygen-iodine laser: I. Modeling of the processes of singlet oxygen generation in a transverse cryogenic slab RF discharge. Plasma Physics Reports, 2017, 43, 330-339.	0.9	3
27	Q-switched slab RF discharge CO laser. Laser Physics Letters, 2017, 14, 055001.	1.4	18
28	Plasma chemistry of the sealed-off slab CO laser active medium pumped by radio-frequency discharge with liquid-nitrogen-cooled electrodes. Plasma Physics Reports, 2017, 43, 899-909.	0.9	5
29	Nonlinear optical feedback for nano- and micropatterning of silicon surface under femtosecond laser irradiation. Optical Materials Express, 2017, 7, 2793.	3.0	8
30	Post-filamentation propagation of high-power laser pulses in air in the regime of narrowly focused light channels. Quantum Electronics, 2016, 46, 1009-1014.	1.0	7
31	Q-switched cryogenically cooled slab RF discharge CO laser. , 2016, , .		0
32	Ultrafast electron dynamics of material surfaces under the action of femtosecond laser pulses. Bulletin of the Russian Academy of Sciences: Physics, 2016, 80, 450-454.	0.6	4
33	High intensive light channel formation in the post-filamentation region of ultrashort laser pulses in air. Journal of Optics (United Kingdom), 2016, 18, 095503.	2.2	10
34	Plasmon-polariton assisted formation of nanotip arrays on surfaces of bulk aluminum upon femtosecond laser irradiation. Bulletin of the Russian Academy of Sciences: Physics, 2016, 80, 991-995.	0.6	2
35	Detecting of thin oil films on water surface via UV filaments. , 2016, , .		0
36	Remote sensing for oil products on water surface via fluorescence induced by UV filaments. , 2016, , .		2

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37	Detection of thin oil films on the water surface with the help of UV filaments. Atmospheric and Oceanic Optics, 2016, 29, 339-341.	1.3	2
38	Repetitively pulsed cryogenically cooled quasi-sealed-off slab RF discharge first-overtone CO laser. Applied Physics B: Lasers and Optics, 2016, 122, 1.	2.2	6
39	Ultrafast femtosecond laser ablation of graphite. Laser Physics Letters, 2015, 12, 075301.	1.4	13
40	The influence of the energy reservoir on the plasma channel in focused femtosecond laser beams. Laser Physics, 2015, 25, 065402.	1.2	7
41	Spectroscopy based on target luminescence caused by interaction with UV filaments. Laser Physics Letters, 2015, 12, 065701.	1.4	3
42	Electron emission and ultrafast low-fluence plasma formation during single-shot femtosecond laser surface ablation of various materials. JETP Letters, 2015, 101, 308-312.	1.4	18
43	Preablation electron and lattice dynamics on the silicon surface excited by a femtosecond laser pulse. Journal of Experimental and Theoretical Physics, 2015, 121, 737-746.	0.9	14
44	Structural transformation and residual stresses in surface layers of $\text{Ti-6Al-4V}$ titanium alloys nanotextured by femtosecond laser pulses. Applied Physics A: Materials Science and Processing, 2015, 119, 241-247.	2.3	34
45	Nonlinear optical dynamics during femtosecond laser nanostructuring of a silicon surface. Laser Physics Letters, 2015, 12, 025902.	1.4	18
46	Extended plasma channels created by UV laser in air and their application to control electric discharges. Plasma Physics Reports, 2015, 41, 112-146.	0.9	18
47	Nonlinear evolution of aluminum surface relief under multiple femtosecond laser irradiation. JETP Letters, 2015, 101, 350-357.	1.4	8
48	Multiple filamentation of supercritical UV laser beam in atmospheric air. Nuclear Instruments & Methods in Physics Research B, 2015, 355, 227-231.	1.4	8
49	Femtosecond laser filament and plasma channels in focused beam in air. Proceedings of SPIE, 2015, , .	0.8	1
50	Reflection of a probe pulse and thermal emission of electrons produced by an aluminum film heated by a femtosecond laser pulse. Journal of Experimental and Theoretical Physics, 2015, 120, 937-945.	0.9	5
51	Comparative analysis of post-focal filamentation of focused UV and IR laser pulses in air. Quantum Electronics, 2015, 45, 321-329.	1.0	8
52	Effect of nonlinearity in the pass-through optics on femtosecond laser filament in air. Laser Physics Letters, 2015, 12, 015403.	1.4	4
53	Plasma channels during filamentation of a femtosecond laser pulse with wavefront astigmatism in air. Quantum Electronics, 2014, 44, 1085-1090.	1.0	13
54	Nanostructuring of the surface of silicate glass by femtosecond laser pulses in the UV range. Journal of Optical Technology (A Translation of Opticheski Zhurnal), 2014, 81, 262.	0.4	8

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55	Directed transfer of microwave radiation in sliding-mode plasma waveguides produced by ultraviolet laser in atmospheric air. Applied Optics, 2014, 53, 131.	2.1	21
56	Ti:sapphire/KrF hybrid laser system generating trains of subterawatt subpicosecond UV pulses. Quantum Electronics, 2014, 44, 431-439.	1.0	12
57	Structural and electrical characteristics of a hyperdoped silicon surface layer with deep donor sulfur states. JETP Letters, 2014, 100, 55-58.	1.4	8
58	Plasma channels under filamentation of infrared and ultraviolet double femtosecond laser pulses. Laser Physics Letters, 2014, 11, 016002.	1.4	7
59	“Heterogeneous” versus “homogeneous” nucleation and growth of microcones on titanium surface under UV femtosecond-laser irradiation. Applied Physics A: Materials Science and Processing, 2014, 116, 1133-1139.	2.3	24
60	Femtosecond laser fabrication of sub-diffraction nanoripples on wet Al surface in multi-filamentation regime: High optical harmonics effects?. Applied Surface Science, 2014, 292, 678-681.	6.1	24
61	Femtosecond X-ray free-electron lasers: A new tool for studying nanocrystals and single macromolecules. Russian Journal of Physical Chemistry B, 2014, 8, 445-456.	1.3	3
62	Electron dynamics and prompt ablation of aluminum surface excited by intense femtosecond laser pulse. Applied Physics A: Materials Science and Processing, 2014, 117, 1757-1763.	2.3	32
63	Parabolic-like nanoantennas fabrication by femtosecond laser pulses for strong-field plasmonics. , 2014, , .		0
64	Femtosecond laser pulse filamentation with wave front modulation via pass-through optics. , 2014, , .		0
65	Filamentation of IR and UV double femtosecond laser pulses. , 2014, , .		0
66	Enhancement of ultrafast electron photoemission from metallic nanoantennas excited by a femtosecond laser pulse. Laser Physics Letters, 2014, 11, 065301.	1.4	32
67	Filamentation of focused femtosecond laser pulse and plasma channel formation in the vicinity of geometric focus. , 2014, , .		0
68	Effects of picosecond terawatt UV laser beam filamentation and a repetitive pulse train on creation of prolonged plasma channels in atmospheric air. Nuclear Instruments & Methods in Physics Research B, 2013, 309, 218-222.	1.4	10
69	Production of extended plasma channels in atmospheric air by amplitude-modulated UV radiation of GARPUN-MTW Ti : sapphire “KrF laser. Part 2. Accumulation of plasma electrons and electric discharge control. Quantum Electronics, 2013, 43, 339-346.	1.0	20
70	Direct measurement of the characteristic three-body electron attachment time in the atmospheric air in direct current electric field. Applied Physics Letters, 2013, 103, 034106.	3.3	7
71	Sub-100 nanometer transverse gratings written by femtosecond laser pulses on a titanium surface. Laser Physics Letters, 2013, 10, 056004.	1.4	31
72	Beam spatial profile effect on femtosecond laser surface structuring of titanium in scanning regime. Applied Surface Science, 2013, 284, 634-637.	6.1	25

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73	Self-focusing of profiled ultrashort-wavelength laser beams in air. Journal of Experimental and Theoretical Physics, 2013, 116, 197-205.	0.9	6
74	Focusing of intense femtosecond surface plasmon-polaritons. JETP Letters, 2013, 97, 599-603.	1.4	18
75	Femtosecond laser modification of titanium surfaces: direct imprinting of hydroxylapatite nanopowder and wettability tuning via surface microstructuring. Laser Physics Letters, 2013, 10, 045605.	1.4	14
76	Filamentation of IR and UV femtosecond pulses upon focusing in air. Quantum Electronics, 2013, 43, 29-36.	1.0	26
77	Thermal melting and ablation of silicon by femtosecond laser radiation. Journal of Experimental and Theoretical Physics, 2013, 116, 347-362.	0.9	97
78	Nonlinear regime of the excitation of a surface electromagnetic wave on the silicon surface by an intense femtosecond laser pulse. JETP Letters, 2013, 97, 121-125.	1.4	21
79	Direct femtosecond laser fabrication of antireflective layer on GaAs surface. Applied Physics B: Lasers and Optics, 2013, 111, 419-423.	2.2	42
80	Filamentation of femtosecond laser pulses governed by variable wavefront distortions via a deformable mirror. Journal of the Optical Society of America B: Optical Physics, 2013, 30, 2257.	2.1	30
81	Triggering and guiding of electric discharge by a train of sub-TW UV laser pulses. Proceedings of SPIE, 2013, , .	0.8	0
82	Local field enhancement on metallic periodic surface structures produced by femtosecond laser pulses. Quantum Electronics, 2013, 43, 304-307.	1.0	7
83	Production of extended plasma channels in atmospheric air by amplitude-modulated UV radiation of CARPUN-MTW Ti : sapphireâ€”KrF laser. Part 1. Regenerative amplification of subpicosecond pulses in a wide-aperture electron beam pumped KrF amplifier. Quantum Electronics, 2013, 43, 332-338.	1.0	19
84	Self-limited ionization of GaAs at high femtosecond laser intensities. , 2012, , .		1
85	Triggering and guiding electric discharge by a train of ultraviolet picosecond pulses combined with a long ultraviolet pulse. Applied Physics Letters, 2012, 100, 104105.	3.3	45
86	Triggering and guiding electric discharge by a train of ultrashort UV pulses and a long UV pulse emitted by a hybrid Ti:Sapphire-KrF laser facility. Proceedings of SPIE, 2012, , .	0.8	0
87	Triggering and guiding electric discharge by a train of ultrashort UV pulses. , 2012, , .		6
88	Femtosecond laser ablation of carbon: From spallation to formation of hot critical plasma. AIP Conference Proceedings, 2012, , .	0.4	13
89	Nonlinear propagation of a high-power focused femtosecond laser pulse in air under atmospheric and reduced pressure. Quantum Electronics, 2012, 42, 319-326.	1.0	4
90	Ultrafast electron dynamics on the silicon surface excited by an intense femtosecond laser pulse. JETP Letters, 2012, 96, 375-379.	1.4	24

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91	Sub- and near-threshold femtosecond laser nanostructuring of solid surfaces. , 2012, , .		1
92	Self-limited ionization in bandgap renormalized GaAs at high femtosecond laser intensities. Optical Engineering, 2012, 51, 121808.	1.0	14
93	Comparative study of femtosecond and nanosecond laser ablation for propulsion applications. , 2012, , .		3
94	Femtosecond laser color marking of metal and semiconductor surfaces. Applied Physics A: Materials Science and Processing, 2012, 107, 301-305.	2.3	74
95	Dynamics of the spallative ablation of a GaAs surface irradiated by femtosecond laser pulses. JETP Letters, 2012, 94, 753-758.	1.4	20
96	Features of focused propagation of intense femtosecond laser pulses in air under low pressure. Atmospheric and Oceanic Optics, 2012, 25, 185-191.	1.3	4
97	Surface nanostructuring of Ni/Cu foils by femtosecond laser pulses. Quantum Electronics, 2011, 41, 387-392.	1.0	25
98	Near-threshold femtosecond laser fabrication of one-dimensional subwavelength nanogratings on a graphite surface. Physical Review B, 2011, 83, .	3.2	48
99	Generation and detection of superstrong shock waves during ablation of an aluminum surface by intense femtosecond laser pulses. JETP Letters, 2011, 94, 34-38.	1.4	30
100	Nanoscale cavitation instability of the surface melt along the grooves of one-dimensional nanorelief gratings on an aluminum surface. JETP Letters, 2011, 94, 266-269.	1.4	46
101	Formation of quasi-periodic nano- and microstructures on silicon surface under IR and UV femtosecond laser pulses. Quantum Electronics, 2011, 41, 829-834.	1.0	19
102	Formation of periodic nanostructures on aluminum surface by femtosecond laser pulses. Nanotechnologies in Russia, 2011, 6, 237-243.	0.7	26
103	Surface modification of titanium by pulsed laser radiation of femtosecond duration. Inorganic Materials: Applied Research, 2011, 2, 206-209.	0.5	3
104	Third harmonic generation by ultrashort laser pulses tightly focused in air. Laser Physics, 2011, 21, 500-504.	1.2	13
105	Ultrafast changes in the optical properties of a titanium surface and femtosecond laser writing of one-dimensional quasi-periodic nanogratings of its relief. Journal of Experimental and Theoretical Physics, 2011, 113, 14-26.	0.9	63
106	Nanocomposites based on globular photonic crystals grown by laser ablation using femtosecond laser pulses. Bulletin of the Lebedev Physics Institute, 2011, 38, 328-333.	0.6	2
107	Topological evolution of self-induced silicon nanogratings during prolonged femtosecond laser irradiation. Applied Physics A: Materials Science and Processing, 2011, 104, 701-705.	2.3	16
108	Slab RF discharge overtone CO laser. , 2010, , .		2

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109	Transverse gas flow RF slab discharge generator of singlet delta oxygen for oxygen-iodine laser. Proceedings of SPIE, 2010, , .	0.8	2
110	Non-linear Absorption and Ionization of Gases by Intense Femtosecond Laser Pulses. , 2010, , .		4
111	Femtosecond Laser Micro-structuring Of Transparent Materials And Its Ophthalmologic Applications. , 2010, , .		0
112	Gas-Flow Slab RF Discharge as a Source of Singlet Delta Oxygen for Oxygen Iodine Laser. , 2010, , .		1
113	<title>Carrier dynamics-induced transient photoexcitation and energy deposition in femtosecond-laser irradiated GaAs</title>. , 2010, , .		0
114	Bulk femtosecond laser marking of natural diamonds. Laser Physics, 2010, 20, 1778-1782.	1.2	21
115	Peculiarities of filamentation of sharply focused ultrashort laser pulses in air. Journal of Experimental and Theoretical Physics, 2010, 111, 724-730.	0.9	25
116	In vitro femtosecond laser subsurface micro-disruption inside human cornea and pre-cleared sclera. Laser Physics Letters, 2010, 7, 463-466.	1.4	15
117	Evolution of black silicon nano- and micro-scale surface topologies upon femtosecond laser irradiation. Proceedings of SPIE, 2010, , .	0.8	0
118	Multiterawatt Ti:Sapphire/KrF laser GARPUN-MTW as a test bench facility for verification of combined amplification of nanosecond and subpicosecond pulses. Journal of Physics: Conference Series, 2010, 244, 032014.	0.4	13
119	Femtosecond laser nanostructuring of metals: sub100-nm one-dimensional surface gratings. Proceedings of SPIE, 2010, , .	0.8	0
120	Nanostructuring of solid surfaces by femtosecond laser pulses. , 2010, , .		3
121	Influence of nitrogen oxides NO and NO <sub>2</sub> on singlet delta oxygen production in pulsed discharge. Journal Physics D: Applied Physics, 2009, 42, 015201.	2.8	11
122	Slab overtone carbon monoxide laser. Proceedings of SPIE, 2009, , .	0.8	1
123	Femtosecond laser writing of subwave one-dimensional quasiperiodic nanostructures on a titanium surface. JETP Letters, 2009, 90, 107-110.	1.4	80
124	Tunneling ionization of air in the strong field of femtosecond laser pulses. JETP Letters, 2009, 90, 181-185.	1.4	9
125	Multiple filamentation of intense femtosecond laser pulses in air. JETP Letters, 2009, 90, 423-427.	1.4	39
126	Absorption and ionization of molecular nitrogen by UV femtosecond laser pulses. Optics Communications, 2009, 282, 45-47.	2.1	8



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127	RF discharge slab CO laser operating in both fundamental and first-overtone bands. Optics Communications, 2009, 282, 629-634.	2.1	17
128	Carbon monoxide laser emitting nanosecond pulses with 10MHz repetition rate. Optics Communications, 2009, 282, 294-299.	2.1	23
129	A cryogenic slab CO laser. Quantum Electronics, 2009, 39, 229-234.	1.0	7
130	Slab Overtone CO Laser Operating in the 2.5â€“4.0 Micron Spectral Range. IEEE Journal of Quantum Electronics, 2009, 45, 215-217.	1.9	9
131	Wideband CO laser in problems of laser sensing of minor gaseous components in the atmosphere. Russian Physics Journal, 2008, 51, 1200-1207.	0.4	9
132	XeO luminescence in a self-sustained slab radio-frequency discharge. Bulletin of the Lebedev Physics Institute, 2008, 35, 111-112.	0.6	1
133	Nonlinear absorption of ultraviolet femtosecond laser pulses in argon. JETP Letters, 2008, 88, 8-11.	1.4	1
134	Carbon monoxide laser emitting nanosecond pulses with 10 MHz repetition rate. , 2008, , .		0
135	Nonlinear ionization of pure atomic and molecular gases by intense UV femtosecond laser pulses. Proceedings of SPIE, 2008, , .	0.8	0
136	RF discharge slab carbon monoxide laser: overtone lasing (2.5-4.0 micron) and fundamental band tuning (5.0-6.5 micron). Proceedings of SPIE, 2008, , .	0.8	0
137	Influence of nitrogen oxides NO and NO <sub>2</sub> additives on singlet oxygen production in pulsed electron-beam sustained discharge. , 2008, , .		0
138	Influence of nitrogen oxides on singlet delta oxygen production in pulsed electric discharge for oxygen-iodine laser. , 2008, , .		1
139	Mode-locked electron-beam sustained discharge CO laser. Proceedings of SPIE, 2008, , .	0.8	0
140	Multifrequency laser probing of CO-containing gas mixtures excited in a pulsed discharge. Quantum Electronics, 2007, 37, 231-236.	1.0	7
141	CARPUN-MTW: A hybrid Ti:Sapphire/KrF laser facility for simultaneous amplification of subpicosecond/nanosecond pulses relevant to fast-ignition ICF concept. Laser and Particle Beams, 2007, 25, 435-451.	1.0	66
142	High power optical sources of femtosecond pulses on the base of hybrid laser systems with wide-aperture gas laser amplifiers. Proceedings of SPIE, 2007, , .	0.8	0
143	Parametric study of SDO production in MW discharge by titration with iodide. , 2007, , .		1
144	Repetitively pulsed and CW sealed-off slab CO laser with cryogenic cooling. , 2007, , .		6

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145	High-power optical sources of femtosecond pulses on the base of hybrid laser systems with wide-aperture gas laser amplifiers. , 2007, , .		0
146	Cryogenic sealed-off slab CO laser excited by repetitively pulsed RF discharge. Proceedings of SPIE, 2007, , .	0.8	0
147	Gain dynamics in a pulsed laser amplifier on CO $\hat{e}$ He, CO $\hat{e}$ N <sub>2</sub> and CO $\hat{e}$ O <sub>2</sub> gas mixtures. Quantum Electronics, 2007, 37, 111-117.	1.0	14
148	A pulsed overtone CO laser with efficiency of 16%. Quantum Electronics, 2006, 36, 1153-1154.	1.0	15
149	Compact sealed-off cryogenic slab RF discharge CO laser. , 2006, , .		4
150	Singlet delta oxygen production in self-sustained and non-self-sustained slab discharges. , 2006, 6101, 516.		2
151	<title>Supersonic overtone CO laser: research and development</title>. , 2006, 6263, 18.		0
152	Singlet delta oxygen production in a slab discharge in oxygen. , 2006, 6346, 975.		0
153	Singlet delta oxygen in a slab discharge. , 2006, 6261, 344.		0
154	Singlet oxygen in the low-temperature plasma of an electron-beam-sustained discharge. Plasma Physics Reports, 2006, 32, 429-439.	0.9	5
155	Multiline laser probing of CO:He, CO:N <sub>2</sub> , and CO:O <sub>2</sub> active media in a wide-aperture pulsed amplifier. Journal of Russian Laser Research, 2006, 27, 33-69.	0.6	22
156	<title>Investigation of laser ablation of fused and crystal silica and natural silicates induced by pulsed CO<math>\langle inf \rangle \langle roman \rangle 2 \langle /inf \rangle \langle /math> laser irradiation</title>. , 2006, 6053, 227.		0
157	Measurements of the thermodynamic parameters for CO laser gas mixtures excited by pulsed electron-beam sustained discharge. , 2005, , .		0
158	Singlet delta oxygen production in e-beam sustained discharge: theory and experiment. , 2005, 5777, 207.		3
159	Effect of the vibrational excitation of CO molecules on the parameters of an RF discharge. Plasma Physics Reports, 2005, 31, 786-794.	0.9	3
160	High-power supersonic CO laser on fundamental and overtone transitions. Quantum Electronics, 2005, 35, 1126-1130.	1.0	18
161	Gain dynamics in the active medium of a pulsed e-beam sustained discharge CO laser: theory and experiment. Quantum Electronics, 2005, 35, 1107-1112.	1.0	3
162	Time behavior of small-signal gain on high vibrational transitions for pulsed CO laser amplifier with gas mixtures CO:He, CO:N <sub>2</sub> , and CO:O <sub>2</sub> . , 2005, 5777, 418.		0

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163	CO laser: advances in theory and experiment. , 2005, , .		1
164	Singlet Delta Oxygen Production in Slab Discharges Ignited in Oxygen Gas Mixtures. , 2005, , .		2
165	Pulsed electron-beam-sustained discharge in oxygen-containing gas mixtures: electrical characteristics, spectroscopy, and singlet oxygen yield. Quantum Electronics, 2004, 34, 865-870.	1.0	9
166	Theoretical studies on kinetics of singlet oxygen in nonthermal plasma. , 2004, , .		5
167	<title>Small signal gain time behavior on high vibrational transitions ( $V \geq 15$ ) of pulsed CO laser amplifier</title>. , 2004, 5479, 156.		0
168	Electric properties, spectroscopy, and singlet delta oxygen yield of electron-beam sustained discharge in oxygen gas mixtures. , 2004, , .		1
169	The feature of laser ablation of fused and crystal silica and natural silicates induced by pulsed CO <sub>2</sub> laser irradiation. , 2004, , .		0
170	Electron-beam sustained discharge in oxygen gas mixtures: singlet delta oxygen production for oxygen-iodine laser. , 2004, , .		2
171	The methods of singlet oxygen detection for DOIL program. , 2004, , .		5
172	Glow discharge in singlet oxygen. Plasma Physics Reports, 2003, 29, 211-219.	0.9	24
173	Non-self-sustained electric discharge in oxygen gas mixtures: singlet delta oxygen production. Journal Physics D: Applied Physics, 2003, 36, 982-989.	2.8	77
174	Pulsed laser operating on the first vibrational overtone of the CO molecule in the 2.5 $\mu\text{m}$ - 4.2 $\mu\text{m}$ range: 3. The gain and kinetic processes on high vibrational levels. Quantum Electronics, 2002, 32, 404-410.	1.0	9
175	Small-signal gain and kinetic processes on highly excited vibrational levels in active medium of pulsed first-overtone CO laser. , 2002, , .		0
176	Applications of high-power laser technology to wide-bandgap nitride semiconductor processing. , 2002, 4760, 143.		0
177	Theoretical modelling and experimental studies of the multi-quantum vibration exchange in vibrationally excited CO molecules. Journal Physics D: Applied Physics, 2001, 34, 2230-2236.	2.8	6
178	Multiquantum vibrational exchange in vibration-excited CO molecules. , 2001, , .		0
179	Interaction of pulsed CO and CO <sub>2</sub> laser radiation with rocks typical of an oil field. , 2000, 3885, 159.		6
180	Breakdown of highly excited oxygen in a DC electric field. Plasma Physics Reports, 2000, 26, 278-282.	0.9	5

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181	Multiquantum vibrational exchange in highly excited CO molecules. Quantum Electronics, 2000, 30, 573-579.	1.0	10
182	Interaction of pulsed CO and CO. Proceedings of SPIE, 2000, 4065, 602.	0.8	3
183	<title>Application of CO laser for frequency-selective surface heat treatment of polymer materials</title>. , 1998, 3343, 1032.		3
184	Frequency-selected Q-switched e-beam-controlled discharge CO laser and its applications. , 1998, , .		0
185	Pulsed frequency-selective tunable Q-switched CO laser excited by an electron-beam-controlled discharge. Quantum Electronics, 1997, 27, 189-194.	1.0	4
186	Frequency-selective surface processing of polymer materials by pulsed CO laser radiation. Quantum Electronics, 1997, 27, 744-748.	1.0	2
187	Parametric study of intracavity degenerate four-wave mixing and phase conjugation of CO <sub>2</sub> and CO lasers radiation in their inverted medium. , 1997, , .		0
188	&lt;title&gt;Frequency-selected surface heat treatment of polymeric materials by pulsed CO laser radiation&lt;/title&gt;. Proceedings of SPIE, 1997, 2993, 239.	0.8	1
189	Multiquantum VV-exchange modeling of the pulsed Q-switched frequency selected CO laser. , 1997, , .		2
190	Short pulse (~1-10 ns) e-beam-controlled discharge CO laser with selected wavelengths. , 1997, , .		0
191	Frequency-selected Q-switched electron-beam-controlled discharge CO laser. , 1996, , .		0
192	Frequency-selected Q-switched electron-beam-controlled discharge CO laser. , 1996, , .		0
193	<title>Active medium of long-pulsed CO <sub>2</sub> and CO laser as a phase conjugating mirror</title>. , 1995, , .		0
194	Active medium of molecular CO <sub>2</sub> and CO lasers as a nonlinear component of a phase-conjugating mirror. Quantum Electronics, 1994, 24, 513-516.	1.0	2
195	<title>Phase-conjugation of high-power molecular CO<sub>2</sub> and CO lasers radiation inside their active medium</title>. , 1994, 2206, 230.		0
196	<title>High-power N <sub>2</sub> O laser as alternative to CO<sub>2</sub> laser</title>. , 1994, , .		4
197	HIGH PRESSURE N <sub>2</sub> O LASER : DISCHARGE PROPERTIES, GAIN AND SPECTRA. European Physical Journal Special Topics, 1991, 01, C7-729-C7-735.	0.2	0
198	<title>High-power electron beam controlled discharge N <sub>2</sub> O laser</title>. , 1991, 1397, 461.		0

#	ARTICLE	IF	CITATIONS
199	<title>Supersonic electron beam controlled discharge CO laser</title>. , 1991, 1397, 453.		5
200	Pulsed electron-beam-controlled N2O laser with 100 J output energy. Soviet Journal of Quantum Electronics, 1989, 19, 1036-1038.	0.1	5
201	Pulsed electroionization carbon monoxide laser amplifiers. Infrared Physics, 1989, 29, 347-350.	0.5	1
202	Master-oscillator-amplifier electroionization carbon monoxide laser system and propagation of its radiation through atmosphere. Journal of Infrared, Millimeter and Terahertz Waves, 1987, 8, 549-571.	0.6	4
203	Enhancement of the efficiency of a Q-switched electron-beam-controlled CO laser by generating a series of laser pulses. Soviet Journal of Quantum Electronics, 1985, 15, 1096-1099.	0.1	6
204	Electron-beam-controlled CO laser emitting submicrosecond pulses. Soviet Journal of Quantum Electronics, 1983, 13, 810-813.	0.1	6