

Sergey B Mirov

List of Publications by Year in descending order

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all docs

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docs citations

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times ranked

2088
citing authors

#	ARTICLE	IF	CITATIONS
1	Feature issue introduction: advanced solid-state lasers. Optics Express, 2022, 30, 20762.	3.4	1
2	Feature issue introduction: advanced solid-state lasers. Optical Materials Express, 2022, 12, 2283.	3.0	0
3	Kerr-lens mode-locked Cr:ZnS oscillator reaches the spectral span of an optical octave. Optics Express, 2021, 29, 2458.	3.4	23
4	Room temperature hot-pressed Fe:ZnSe ceramic laser. , 2021, , .		0
5	Room temperature, nanosecond, 60 mJ/pulse Fe:ZnSe master oscillator power amplifier system operating at 3.8-5.0 μm . Optics Express, 2021, 29, 2387.	3.4	18
6	High energy (0.8 J) mechanically Q-switched 2.94 μm Er:YAG laser. Optics Express, 2021, 29, 4287.	3.4	22
7	Spectroscopy of GR1 centers in synthetic diamonds. Optical Materials Express, 2021, 11, 757.	3.0	8
8	Two-octave-wide (3 μm - 12 μm) subharmonic produced in a minimally dispersive optical parametric oscillator cavity. Optics Letters, 2021, 46, 709.	3.3	23
9	Focus issue introduction: Advanced Solid-State Lasers 2020. Optical Materials Express, 2021, 11, 952.	3.0	1
10	Focus issue introduction: Advanced Solid-State Lasers 2020. Optics Express, 2021, 29, 8365.	3.4	0
11	Focus issue introduction: Advanced Solid-State Lasers 2020. Optical Materials Express, 2021, 11, 952.	3.0	0
12	Low-threshold supercontinuum generation in polycrystalline media. Journal of the Optical Society of America B: Optical Physics, 2021, 38, 1625.	2.1	9
13	Lasing in 15 atm CO ₂ cell optically pumped by a Fe:ZnSe laser. Optics Express, 2021, 29, 31455.	3.4	8
14	Resonant nonlinear refraction of 4.5 μm light in CO and CO ₂ gas. Physical Review A, 2021, 104, .	2.5	2
15	Vector Solitons in a Kerr-lens Mode-locked Laser Oscillator. , 2021, , .		0
16	Dual Frequency-Comb Spectroscopy with Cr:ZnS Lasers. , 2021, , .		0
17	Long-wave IR femtosecond supercontinuum generation with Cr:ZnS lasers. , 2020, , .		0
18	Gain dynamics in a CO ₂ active medium optically pumped at 4.3 μm . Journal of Applied Physics, 2020, 128, .	2.5	4

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19	Recent progress in mechanically Q-switched 2.94 μm Er:YAG " promising pump source for 4- μm room temperature Fe:ZnSe lasers. , 2020, , .		4
20	Laser spectroscopic and saturation properties of GR1 centers in synthetic diamond. , 2020, , .		1
21	Octave-spanning mid-infrared femtosecond OPA in a ZnGeP_2 pumped by a 2.4- μm Cr:ZnSe chirped-pulse amplifier. Optics Express, 2020, 28, 32403.	3.4	18
22	Hot-pressed ceramic Fe:ZnSe gain-switched laser. Optical Materials Express, 2020, 10, 3417.	3.0	14
23	High Energy Mechanically Q-switched 2.94 μm Er:YAG Laser. , 2020, , .		0
24	Advanced Solid-State Lasers 2019: focus issue introduction. Optics Express, 2020, 28, 15035.	3.4	0
25	Cross-section of electrical impact excitation in bulk n-type monocrystalline Al:Cr:ZnSe. Optical Materials Express, 2020, 10, 2135.	3.0	1
26	The fast resonant rovibrational nonlinearity of CO and CO ₂ in the mid-IR. , 2020, , .		0
27	Gain switched hot-pressed Fe:ZnSe ceramic laser. , 2020, , .		0
28	Optical Frequency Comb Based on Cr:ZnS Laser. , 2020, , .		1
29	Fe:ZnSe hot-pressed ceramic laser. , 2020, , .		0
30	Room Temperature, Nanosecond, 60 mJ/pulse Fe:ZnSe Master Oscillator Power Amplifier System Operating over 3.6-5.2 μm . , 2020, , .		0
31	Advanced Solid-State Lasers 2019: focus issue introduction. Optical Materials Express, 2020, 10, 1303.	3.0	0
32	Resonant nonlinear refraction of 4.3- μm light in CO_2 gas. Physical Review A, 2019, 100, .	2.5	9
33	Vimentin intermediate filament assembly regulates fibroblast invasion in fibrogenic lung injury. JCI Insight, 2019, 4, .	5.0	69
34	Q-switched and gain-switched Fe:ZnSe lasers tunable over 360-515 μm . Optics Express, 2019, 27, 13934.	3.4	40
35	Multi-octave visible to long-wave IR femtosecond continuum generated in Cr:ZnS-GaSe tandem. Optics Express, 2019, 27, 16405.	3.4	16
36	Middle-IR frequency comb based on Cr:ZnS laser. Optics Express, 2019, 27, 35079.	3.4	33

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37	Laser spectroscopic characterization of negatively charged nitrogen-vacancy (NV ⁻) centers in diamond. Optical Materials Express, 2019, 9, 2076.	3.0	39
38	Energy transfer in iron-chromium co-doped ZnSe middle-infrared laser crystals. Optical Materials Express, 2019, 9, 2340.	3.0	21
39	Visible-near-middle infrared spanning supercontinuum generation in a silicon nitride (Si ₃ N ₄) waveguide. Optical Materials Express, 2019, 9, 2553.	3.0	23
40	Super-octave longwave mid-infrared coherent transients produced by optical rectification of few-cycle 25-fs pulses. Optica, 2019, 6, 111.	9.3	96
41	Octave-spanning Cr:ZnS femtosecond laser with intrinsic nonlinear interferometry. Optica, 2019, 6, 126.	9.3	33
42	2-cycle Cr:ZnS Laser with Intrinsic Nonlinear Interferometry. , 2019, , .		0
43	Focus issue introduction: advanced solid-state lasers. Optics Express, 2019, 27, 20938.	3.4	2
44	Focus issue introduction: advanced solid-state lasers. Optical Materials Express, 2019, 9, 3306.	3.0	0
45	Frontiers of Mid-IR Lasers Based on Transition Metal Doped Chalcogenides. IEEE Journal of Selected Topics in Quantum Electronics, 2018, 24, 1-29.	2.9	239
46	Feature issue introduction: Advanced Solid-State Lasers 2017. Optics Express, 2018, 26, 11018.	3.4	0
47	Half-Watt average power femtosecond source spanning 3-8 μm based on subharmonic generation in GaAs. Applied Physics B: Lasers and Optics, 2018, 124, 1.	2.2	27
48	Low-dose cadmium exposure induces peribronchiolar fibrosis through site-specific phosphorylation of vimentin. American Journal of Physiology - Lung Cellular and Molecular Physiology, 2017, 313, L80-L91.	2.9	28
49	Pulsed Laser Deposition of Epitaxial Zn _{Sx} Se _{1-x} Thin Films for Waveguiding Applications in Mid-IR Active Multilayered Structures. MRS Advances, 2017, 2, 315-321.	0.9	0
50	Enhancement of Cr and Fe diffusion in ZnSe/S laser crystals via annealing in vapors of Zn and hot isostatic pressing. Optical Materials Express, 2017, 7, 25.	3.0	17
51	Ultrafast middle-IR lasers and amplifiers based on polycrystalline Cr:ZnS and Cr:ZnSe. Optical Materials Express, 2017, 7, 2636.	3.0	83
52	Laser testing of anti-reflection micro-structures fabricated in ZnSe and chromium-ion doped ZnSe laser gain media. Optical Materials Express, 2017, 7, 3377.	3.0	12
53	Feature issue introduction: shaping and patterning crystals for optics. Optical Materials Express, 2017, 7, 3466.	3.0	1
54	Optical parametric oscillation in a random polycrystalline medium. Optica, 2017, 4, 617.	9.3	37

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55	140 W Cr:ZnSe laser system. Optics Express, 2016, 24, 21090.	3.4	90
56	Mid-IR spectroscopy of Fe:ZnSe quantum dots. Optics Express, 2016, 24, 5366.	3.4	15
57	Hot-pressed chromium doped zinc sulfide infrared transparent ceramics. Scripta Materialia, 2016, 125, 15-18.	5.2	28
58	Mid-IR Kerr-lens mode-locked polycrystalline Cr:ZnS and Cr:ZnSe lasers with intracavity frequency conversion via random quasi-phase-matching. Proceedings of SPIE, 2016, , .	0.8	9
59	Multi-Watt mid-IR femtosecond polycrystalline Cr ²⁺ :ZnS and Cr ²⁺ :ZnSe laser amplifiers with the spectrum spanning 20â€“26 Åµm. Optics Express, 2016, 24, 1616.	3.4	67
60	Three optical cycle mid-IR Kerr-lens mode-locked polycrystalline Cr ²⁺ :ZnS laser. Optics Letters, 2015, 40, 5054.	3.3	56
61	Heme oxygenase-1-mediated autophagy protects against pulmonary endothelial cell death and development of emphysema in cadmium-treated mice. American Journal of Physiology - Lung Cellular and Molecular Physiology, 2015, 309, L280-L292.	2.9	62
62	Gamma radiation-enhanced thermal diffusion of iron ions into II-VI semiconductor crystals. Optical Materials Express, 2015, 5, 558.	3.0	18
63	Spectroscopic characterization of Cr ²⁺ ions in ZnSe/ZnS crystals under visible excitation. , 2015, , .		1
64	Progress in Mid-IR Lasers Based on Cr and Fe-Doped IIâ€“VI Chalcogenides. IEEE Journal of Selected Topics in Quantum Electronics, 2015, 21, 292-310.	2.9	306
65	A histological evaluation and in vivo assessment of intratumoral near infrared photothermal nanotherapy-induced tumor regression. International Journal of Nanomedicine, 2014, 9, 5093.	6.7	21
66	Mid-infrared light emission from a Fe ²⁺ :ZnSe polycrystal using quantum cascade laser pumping. Applied Physics Letters, 2014, 105, 141108.	3.3	8
67	Compact Cr:ZnS channel waveguide laser operating at 2333 nm. Optics Express, 2014, 22, 7052.	3.4	27
68	In-plane spectroscopy of microfluidic systems made in photosensitive glass. Microsystem Technologies, 2013, 19, 173-177.	2.0	3
69	Mid-IR lasing of ironâ€“cobalt co-doped ZnS(Se) crystals via Coâ€“Fe energy transfer. Journal of Luminescence, 2013, 133, 257-261.	3.1	32
70	Frontiers of mid-infrared lasers based on transition metal doped IIâ€“VI semiconductors. Journal of Luminescence, 2013, 133, 268-275.	3.1	87
71	Electrical, spectroscopic, and laser characterization of Î³-irradiated transition metal doped II-VI semiconductors. Optical Materials Express, 2013, 3, 777.	3.0	7
72	Mid-IR volumetric Bragg grating based on LiF color center crystal. Optical Materials Express, 2012, 2, 1209.	3.0	9

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73	In-plane spectroscopy of microfluidic channels using photosensitive glass. , 2012, , .		1
74	Temperature and concentration quenching of mid-IR photoluminescence in iron doped ZnSe and ZnS laser crystals. Journal of Luminescence, 2012, 132, 600-606.	3.1	107
75	Energy scaling of 43 Î¼m room temperature Fe:ZnSe laser. Optics Letters, 2011, 36, 94.	3.3	89
76	Progress in Cr ²⁺ and Fe ²⁺ doped mid-IR laser materials. Laser and Photonics Reviews, 2010, 4, 21-41.	8.7	212
77	Reduction of Nonlinear Absorption in Li ₂ B ₄ O ₇ by Temperature- and Repetition Rate-Control. Japanese Journal of Applied Physics, 2009, 48, 112502.	1.5	14
78	Semiconductor disk laser pumped Cr ²⁺ :Znse lasers. Optics Express, 2009, 17, 18136.	3.4	12
79	Limitations of Adenoviral Vector-Mediated Delivery of Gold Nanoparticles to Tumors for Hyperthermia Induction. The Open Nanomedicine Journal, 2009, 2, 27-35.	1.6	5
80	Highly efficient, narrow-linewidth, and single-frequency actively and passively Q-switched fiber-bulk hybrid Er:YAG lasers operating at 1645 nm. Optics Express, 2008, 16, 19427.	3.4	155
81	Distribution of Polycyclic Aromatic Hydrocarbons among Sediment Size Fractions Determined by Thermal Desorption Gas Chromatography Mass Spectrometry. Proceedings of the Water Environment Federation, 2008, 2008, 6669-6687.	0.0	0
82	Recent Progress in Transition-Metal-Doped II-VI Mid-IR Lasers. IEEE Journal of Selected Topics in Quantum Electronics, 2007, 13, 810-822.	2.9	79
83	Mid-IR transitions of trivalent neodymium in low phonon laser crystals. Optical Materials, 2007, 29, 1115-1128.	3.6	25
84	Middle-infrared electroluminescence of n-type Cr-doped ZnSe crystals. , 2006, 6100, 251.		9
85	Amplification of narrow line  <small>xmlns:xocs= "http://www.elsevier.com/xml/xocs/dtd" xmlns:xs= "http://www.w3.org/2001/XMLSchema" xmlns:xsi= "http://www.w3.org/2001/XMLSchema-instance" xmlns= "http://www.elsevier.com/xml/ja/dtd" xmlns:ja= "http://www.elsevier.com/xml/ja/dtd" xmlns:mml= "http://www.w3.org/1998/Math/MathML" xmlns:tb= "http://www.elsevier.com/xml/common/table/dtd" xmlns:sl= "http://www.elsevier.com/xml/common/struct-bib/dtd" xmlns:sc= "http://www.elsevier.com/"/></small>	2.1	7
86	Middle Infrared, Quantum Cascade Laser Optoelectronic Absorption System for Monitoring Glucose in Serum. Applied Spectroscopy, 2005, 59, 881-884.	2.2	39
87	Multiwavelength mid-IR spatially-dispersive CW laser based on polycrystalline Cr ²⁺ :ZnSe. Optics Express, 2004, 12, 4986.	3.4	40
88	Using two discrete frequencies within the middle infrared to quantitatively determine glucose in serum. Journal of Biomedical Optics, 2002, 7, 613.	2.6	36
89	Broadly tunable compact continuous-wave Cr ²⁺ :ZnS laser. Optics Letters, 2002, 27, 1040.	3.3	125
90	Continuous-wave tunable Cr ²⁺ :ZnS laser. Applied Physics B: Lasers and Optics, 2002, 74, 607-611.	2.2	57

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91	Structural and morphological study of pulsed laser deposited calcium phosphate bioceramic coatings: Influence of deposition conditions, laser parameters, and target properties. , 2000, 50, 248-258.		50
92	Temperature-dependent spectroscopic analysis of F ₂ ⁺ and F ₂ ⁺ -like color centers in LiF. Journal of Luminescence, 2000, 91, 147-153.	3.1	11
93	Nonradiative relaxation and inhomogeneous splitting of aggregated optical centers in the Nd ³⁺ -doped CaF ₂ and SrF ₂ crystals (FLN and decay study). Journal of Luminescence, 1999, 83-84, 361-366.	3.1	12
94	Efficient room temperature LiF:F ₂ ⁺ color center laser tunable in 820–1210 nm range. Optics Communications, 1998, 147, 107-111.	2.1	33
95	High-pressure and high-temperature studies on oxide garnets. Physical Review B, 1996, 54, 6200-6209.	3.2	60
96	Broadly tunable continuous-wave Cr ²⁺ :ZnS laser. , 0, , .		0