

# Grigorii S Sokolovskii

## List of Publications by Year in descending order

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Version: 2024-02-01

95  
papers

632  
citations

567281

15  
h-index

713466

21  
g-index

95  
all docs

95  
docs citations

95  
times ranked

433  
citing authors

| #  | ARTICLE                                                                                                                                                                                                                                            | IF  | CITATIONS |
|----|----------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------|-----|-----------|
| 1  | Conical Refraction: New observations and a dual cone model. <i>Optics Express</i> , 2013, 21, 11125.                                                                                                                                               | 3.4 | 44        |
| 2  | InAs/AlSb widely tunable external cavity quantum cascade laser around 3.2 $\mu\text{m}$ . <i>Applied Physics Letters</i> , 2013, 102, 011124.                                                                                                      | 3.3 | 31        |
| 3  | Green-to-red tunable SHG of a quantum-dot laser in a PPKTP waveguide. <i>Laser Physics Letters</i> , 2012, 9, 790-795.                                                                                                                             | 1.4 | 26        |
| 4  | Generation of propagation-invariant light beams from semiconductor light sources. <i>Technical Physics Letters</i> , 2008, 34, 1075-1078.                                                                                                          | 0.7 | 24        |
| 5  | Dual-Frequency Generation in Quantum Cascade Lasers of the 8 $\mu\text{m}$ Spectral Range. <i>Optics and Spectroscopy (English Translation of Optika i Spektroskopiya)</i> , 2018, 125, 402-404.                                                   | 0.6 | 24        |
| 6  | Efficient yellow-green light generation at 561 $\text{nm}$ by frequency-doubling of a QD-FBG laser diode in a PPLN waveguide. <i>Optics Letters</i> , 2014, 39, 6672.                                                                              | 3.3 | 23        |
| 7  | Influence of the axicon characteristics and beam propagation parameter M2 on the formation of Bessel beams from semiconductor lasers. <i>Quantum Electronics</i> , 2013, 43, 423-427.                                                              | 1.0 | 22        |
| 8  | 247nm solar-blind ultraviolet p-i-n photodetector. <i>Journal of Applied Physics</i> , 2006, 100, 096104.                                                                                                                                          | 2.5 | 19        |
| 9  | Orange-to-red tunable picosecond pulses by frequency doubling in a diode-pumped PPKTP waveguide. <i>Optics Letters</i> , 2013, 38, 2835.                                                                                                           | 3.3 | 19        |
| 10 | Study of non-diffracting light beams from broad-stripe edge-emitting semiconductor lasers. <i>Technical Physics Letters</i> , 2010, 36, 9-12.                                                                                                      | 0.7 | 18        |
| 11 | 574 $\mu\text{m}$ –647 $\mu\text{m}$ wavelength tuning by second-harmonic generation from diode-pumped PPKTP waveguides. <i>Optics Letters</i> , 2015, 40, 835.                                                                                    | 3.3 | 18        |
| 12 | 3D laser nano-printing on fibre paves the way for super-focusing of multimode laser radiation. <i>Scientific Reports</i> , 2018, 8, 14618.                                                                                                         | 3.3 | 18        |
| 13 | Room Temperature Lasing of Single-Mode Arched-Cavity Quantum-Cascade Lasers. <i>Technical Physics Letters</i> , 2019, 45, 398-400.                                                                                                                 | 0.7 | 17        |
| 14 | 3.6 mW blue light by direct frequency doubling of a diode laser using an aperiodically poled lithium niobate crystal. <i>Applied Physics Letters</i> , 2001, 78, 3172-3174.                                                                        | 3.3 | 16        |
| 15 | Nonvanishing turn-on delay in quantum dot lasers. <i>Applied Physics Letters</i> , 2012, 100, 081109.                                                                                                                                              | 3.3 | 15        |
| 16 | Optical trapping with Bessel beams generated from semiconductor lasers. <i>Journal of Physics: Conference Series</i> , 2014, 572, 012039.                                                                                                          | 0.4 | 15        |
| 17 | Self-sustained pulsation in the oxide-confined vertical-cavity surface-emitting lasers based on submonolayer InGaAs quantum dots. <i>Applied Physics Letters</i> , 2007, 91, 121106.                                                               | 3.3 | 13        |
| 18 | High-speed photodiodes for the mid-infrared spectral region 1.2 $\mu\text{m}$ –2.4 $\mu\text{m}$ based on GaSb/GaInAsSb/GaAlAsSb heterostructures with a transmission band of 2 $\mu\text{m}$ –5 GHz. <i>Semiconductors</i> , 2013, 47, 1103-1109. | 0.5 | 13        |

| #  | ARTICLE                                                                                                                                                                        | IF  | CITATIONS |
|----|--------------------------------------------------------------------------------------------------------------------------------------------------------------------------------|-----|-----------|
| 19 | Laser beams with conical refraction patterns. Proceedings of SPIE, 2014, , .                                                                                                   | 0.8 | 13        |
| 20 | High-power laser structures incorporating novel curved-gratings. Optical and Quantum Electronics, 1999, 31, 215-221.                                                           | 3.3 | 12        |
| 21 | Self-focused distributed Bragg reflector laser diodes. Journal of Applied Physics, 2004, 95, 1502-1509.                                                                        | 2.5 | 12        |
| 22 | Anomalous dynamic characteristics of semiconductor quantum-dot lasers generating on two quantum states. Technical Physics Letters, 2007, 33, 4-7.                              | 0.7 | 12        |
| 23 | Superfocusing of multimode semiconductor lasers and light-emitting diodes. Technical Physics Letters, 2012, 38, 402-404.                                                       | 0.7 | 11        |
| 24 | Turn-on Dynamics of Quantum Cascade Lasers with a Wavelength of 8100 nm at Room Temperature. Technical Physics, 2018, 63, 1656-1658.                                           | 0.7 | 11        |
| 25 | Temperature effects on optical properties and efficiency of red AlGaInP-based light emitting diodes under high current pulse pumping. Journal of Applied Physics, 2018, 124, . | 2.5 | 11        |
| 26 | Second harmonic generation in a low-loss orientation-patterned GaAs waveguide. Optics Express, 2013, 21, 16424.                                                                | 3.4 | 10        |
| 27 | VCSELs based on arrays of sub-monolayer InGaAs quantum dots. Semiconductors, 2006, 40, 615-619.                                                                                | 0.5 | 9         |
| 28 | Conical refraction output from a Nd:YVO <sub>4</sub> laser with an intracavity conerefringent element. Optics Letters, 2019, 44, 642.                                          | 3.3 | 9         |
| 29 | Flexible particle manipulation techniques with conical refraction-based optical tweezers. , 2012, , .                                                                          |     | 8         |
| 30 | Quantum dot semiconductor disk laser at 13â€‰%â€‰%â€‰%1/4m. Optics Letters, 2015, 40, 3400.                                                                                    | 3.3 | 8         |
| 31 | Close relationship between Besselâ€‰Gaussian and conical refraction beams. Optics Express, 2020, 28, 33900.                                                                    | 3.4 | 8         |
| 32 | Output Radiation Focusing in Curved-Grating Distributed Bragg Reflector Laser. Technical Physics Letters, 2005, 31, 824.                                                       | 0.7 | 7         |
| 33 | Manipulation of microparticles using Bessel beams from semiconductor lasers. Technical Physics Letters, 2014, 40, 475-478.                                                     | 0.7 | 7         |
| 34 | Metamaterial for efficient second harmonic generation. Technical Physics Letters, 2016, 42, 1041-1044.                                                                         | 0.7 | 7         |
| 35 | Efficient THz radiation from a nanocrystalline silicon-based multi-layer photomixer. Semiconductor Science and Technology, 2009, 24, 095025.                                   | 2.0 | 6         |
| 36 | High power Bessel beams from EP-VECSELs. Proceedings of SPIE, 2011, , .                                                                                                        | 0.8 | 6         |

| #  | ARTICLE                                                                                                                                                                                                                                                                              | IF  | CITATIONS |
|----|--------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------|-----|-----------|
| 37 | Slow passage through thresholds in quantum dot lasers. <i>Physical Review E</i> , 2016, 94, 052208.                                                                                                                                                                                  | 2.1 | 6         |
| 38 | AlGaInP red-emitting light emitting diode under extremely high pulsed pumping. <i>Proceedings of SPIE</i> , 2016, , .                                                                                                                                                                | 0.8 | 6         |
| 39 | Conical refraction with low-coherence light sources. <i>Optics Express</i> , 2019, 27, 25428.                                                                                                                                                                                        | 3.4 | 6         |
| 40 | Novel materials GaInAsPSb/GaSb and GaInAsPSb/InAs for room-temperature optoelectronic devices for a $3\text{--}5\ \mu\text{m}$ wavelength range (GaInAsPSb/GaSb and GaInAsPSb/InAs for $3\text{--}5\ \mu\text{m}$ ). <i>Semiconductor Science and Technology</i> , 2008, 23, 125026. | 2.0 | 5         |
| 41 | Dropout dynamics in pulsed quantum dot lasers due to mode jumping. <i>Applied Physics Letters</i> , 2015, 106, 261103.                                                                                                                                                               | 3.3 | 5         |
| 42 | Generation of Droplet Quasi-Bessel Beams Using a Semiconductor Laser. <i>Optics and Spectroscopy (English Translation of Optika i Spektroskopiya)</i> , 2019, 127, 848-853.                                                                                                          | 0.6 | 5         |
| 43 | Near-threshold spectral and modal characteristics of a curved-grating quantum-well distributed-feedback laser. <i>Nanotechnology</i> , 2003, 14, 615-618.                                                                                                                            | 2.6 | 4         |
| 44 | A novel type of quasi-phasematching for the second harmonic generation. <i>Journal of Physics: Conference Series</i> , 2016, 769, 012050.                                                                                                                                            | 0.4 | 4         |
| 45 | Fast-response p-i-n photodiodes for $0.9\text{--}2.4\ \mu\text{m}$ wavelength range. <i>Technical Physics Letters</i> , 2010, 36, 412-414.                                                                                                                                           | 0.7 | 3         |
| 46 | Non-diffracting beams from surface-emitting lasers. <i>Proceedings of SPIE</i> , 2012, , .                                                                                                                                                                                           | 0.8 | 3         |
| 47 | Generation of high-power ultrashort optical pulses by semiconductor lasers. <i>Technical Physics Letters</i> , 2016, 42, 1159-1162.                                                                                                                                                  | 0.7 | 3         |
| 48 | Generation of Droplet Bessel Beams Using a Semiconductor Laser. <i>Technical Physics Letters</i> , 2018, 44, 887-889.                                                                                                                                                                | 0.7 | 3         |
| 49 | Conical refraction mode of an optical resonator. <i>Optics Letters</i> , 2020, 45, 1317.                                                                                                                                                                                             | 3.3 | 3         |
| 50 | Polarization switching time for semiconductor laser radiation. <i>Technical Physics Letters</i> , 1997, 23, 373-376.                                                                                                                                                                 | 0.7 | 2         |
| 51 | Threshold crossing and spectral properties of a curved-grating distributed Bragg reflector quantum-well laser (c-DBR). <i>Semiconductor Science and Technology</i> , 2004, 19, 1010-1014.                                                                                            | 2.0 | 2         |
| 52 | Self-ordering of Mg and O isoelectronic impurities in ZnSe. <i>Semiconductors</i> , 2007, 41, 125-129.                                                                                                                                                                               | 0.5 | 2         |
| 53 | Generation of $\pi$ modes in semiconductor vertical-cavity surface-emitting lasers. <i>Technical Physics Letters</i> , 2009, 35, 1133-1136.                                                                                                                                          | 0.7 | 2         |
| 54 | Effect of gain saturation on the current-power characteristic of semiconductor laser. <i>Technical Physics Letters</i> , 2012, 38, 613-615.                                                                                                                                          | 0.7 | 2         |

| #  | ARTICLE                                                                                                                                                                               | IF  | CITATIONS |
|----|---------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------|-----|-----------|
| 55 | Turn-on delay of QD and QW laser diodes: What is the difference?. Journal of Physics: Conference Series, 2013, 461, 012030.                                                           | 0.4 | 2         |
| 56 | Superfocusing of high-M2 semiconductor laser beams: experimental demonstration. , 2014, , .                                                                                           |     | 2         |
| 57 | Hsp70 and ceramide release by diode laser-treated mouse skin cells in vivo. Journal of Physics: Conference Series, 2014, 572, 012017.                                                 | 0.4 | 2         |
| 58 | Drag coefficient of solid micro-sphere between parallel plates. Journal of Physics: Conference Series, 2016, 769, 012084.                                                             | 0.4 | 2         |
| 59 | Conical refraction of a high-M2 laser beam. , 2017, , .                                                                                                                               |     | 2         |
| 60 | White Light Generation in a Diode-Pumped PPKTP Waveguide. , 2016, , .                                                                                                                 |     | 2         |
| 61 | High power Nd:YVO-KGW conical refraction laser. , 2019, , .                                                                                                                           |     | 2         |
| 62 | <title>Picosecond InP photoconductors produced by deep implantation of heavy ions</title>. , 1996, , .                                                                                |     | 1         |
| 63 | Self-assembling of zinc and tellurium impurities in zinc-blende MgS. Technical Physics Letters, 2006, 32, 818-820.                                                                    | 0.7 | 1         |
| 64 | Phase effects in broad-stripe curved-grating distributed feedback heterolasers. Technical Physics Letters, 2007, 33, 292-294.                                                         | 0.7 | 1         |
| 65 | The effect of slow passage in the pulse-pumped quantum dot laser. , 2014, , .                                                                                                         |     | 1         |
| 66 | Optical trapping with superfocused high-M <sup>2</sup> laser diode beam. Proceedings of SPIE, 2015, , .                                                                               | 0.8 | 1         |
| 67 | Generation of High-Power Ultrashort Optical Pulses Using a Semiconductor Laser with Controlled Current Pumping. Technical Physics, 2017, 62, 1885-1888.                               | 0.7 | 1         |
| 68 | Peaking of Optical Pulses in Vertical-Cavity Surface-Emitting Lasers with an Active Region Based on Submonolayer InGaAs Quantum Dots. Technical Physics Letters, 2017, 43, 1099-1101. | 0.7 | 1         |
| 69 | Dual-band generation around 8 $\mu$ m by quantum cascade lasers in wide temperature range. Journal of Physics: Conference Series, 2018, 1135, 012073.                                 | 0.4 | 1         |
| 70 | Cascaded Second Harmonic Generation with a Half-Order Periodical Orientation. Optics and Spectroscopy (English Translation of Optika i Spektroskopiya), 2020, 128, 1851-1856.         | 0.6 | 1         |
| 71 | Conical refraction with generalized Bessel-Gaussian beams. , 2021, , .                                                                                                                |     | 1         |
| 72 | <title>Near-threshold spectral and modal characteristics of a curved-grating quantum-well distributed-feedback laser (c-DFB)</title>. , 2002, , .                                     |     | 0         |

| #  | ARTICLE                                                                                                                                                                                                                             | IF  | CITATIONS |
|----|-------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------|-----|-----------|
| 73 | <title>Self-focused distributed Bragg reflector QW laser diodes</title>. , 2002, , .                                                                                                                                                |     | 0         |
| 74 | Generation of tunable visible picosecond pulses by frequency-doubling of a quantum-dot laser in a PPKTP waveguide. Proceedings of SPIE, 2013, , .                                                                                   | 0.8 | 0         |
| 75 | Blue-to-red tunable SHG from a diode-pumped PPKTP waveguide. , 2013, , .                                                                                                                                                            |     | 0         |
| 76 | Highly efficient SHG at 561 nm using a QD laser and a PPLN waveguide. , 2013, , .                                                                                                                                                   |     | 0         |
| 77 | Conical refraction: A dual-cone model. , 2013, , .                                                                                                                                                                                  |     | 0         |
| 78 | 15th Russian Youth Conference on Physics and Astronomy (PhysicA.SPb). Journal of Physics: Conference Series, 2013, 461, 011001.                                                                                                     | 0.4 | 0         |
| 79 | Study of a novel type of the optical modes in VCSELs. Journal of Physics: Conference Series, 2014, 572, 012044.                                                                                                                     | 0.4 | 0         |
| 80 | Efficient generation of orange light by frequency-doubling of a quantum-dot laser radiation in a PPKTP waveguide. Proceedings of SPIE, 2014, , .                                                                                    | 0.8 | 0         |
| 81 | 73 nm wavelength tuning from a frequency-doubled quantum-dot laser in PPKTP waveguides. , 2014, , .                                                                                                                                 |     | 0         |
| 82 | 17th Russian Youth Conference on Physics and Astronomy (PhysicA.SPb/2014). Journal of Physics: Conference Series, 2015, 661, 011001.                                                                                                | 0.4 | 0         |
| 83 | Impact of the carrier relaxation paths on two-state operation in quantum dot lasers. , 2015, , .                                                                                                                                    |     | 0         |
| 84 | Metamaterial for the second harmonic generation. , 2016, , .                                                                                                                                                                        |     | 0         |
| 85 | Study of particle drag force in a channel for optical trapping applications. , 2016, , .                                                                                                                                            |     | 0         |
| 86 | Fractional order of poling period for broadly tunable second harmonic generation. , 2016, , .                                                                                                                                       |     | 0         |
| 87 | The Effect of Active Region Heating on Dynamic and Power Characteristics of Quantum Cascade Lasers Emitting at a Wavelength of 4.8 Åµm at Room Temperature. Optics and Spectroscopy (English) Tj ETQq1 1 0.784304rgBT /@overlock 10 |     | 0         |
| 88 | Two-dimensional waveguide for efficient second-harmonic generation in visible range. Journal of Physics: Conference Series, 2019, 1400, 066049.                                                                                     | 0.4 | 0         |
| 89 | Conical Refraction with Laguerre-Gaussian Beams: From Raman Spot to "Anti-Raman" Doughnut Distribution. , 2019, , .                                                                                                                 |     | 0         |
| 90 | Turn-on delay in the mid-infrared quantum-cascade lasers: experiment and numerical simulations. , 2021, , .                                                                                                                         |     | 0         |

| #  | ARTICLE                                                                                                                               | IF  | CITATIONS |
|----|---------------------------------------------------------------------------------------------------------------------------------------|-----|-----------|
| 91 | 10.1007/s11455-008-3003-5. , 2010, 34, 187.                                                                                           |     | 0         |
| 92 | Optical trapping with Bessel beams generated from semiconductor lasers. , 2014, , .                                                   |     | 0         |
| 93 | Conical refraction lasing in a Nd:YVO4 laser with a conerefringent KGW element. , 2019, , .                                           |     | 0         |
| 94 | Photonic crystal waveguide for second harmonic generation: exact solution. Journal of Physics: Conference Series, 2020, 1697, 012068. | 0.4 | 0         |
| 95 | Gain Switching of the Broad-Stripe InAs/GaAs Quantum Dot Lasers. , 2020, , .                                                          |     | 0         |