

Alexander M Malyarevich

List of Publications by Year in descending order

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106
papers

1,710
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38
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107
all docs

107
docs citations

107
times ranked

1203
citing authors

| # | ARTICLE | IF | CITATIONS |
|----|---|-----|-----------|
| 1 | V:YAG - a new passive Q-switch for diode-pumped solid-state lasers. Applied Physics B: Lasers and Optics, 1998, 67, 555-558. | 2.2 | 154 |
| 2 | Temperature-dependent photoluminescence of PbS quantum dots in glass: Evidence of exciton state splitting and carrier trapping. Physical Review B, 2010, 82, . | 3.2 | 111 |
| 3 | Optical applications of glass-ceramics. Journal of Non-Crystalline Solids, 2010, 356, 3042-3058. | 3.1 | 66 |
| 4 | Cobalt-doped transparent glass ceramic as a saturable absorber Q switch for erbium:glass lasers. Applied Optics, 2001, 40, 4322. | 2.1 | 65 |
| 5 | Semiconductor-doped glass saturable absorbers for near-infrared solid-state lasers. Journal of Applied Physics, 2008, 103, . | 2.5 | 54 |
| 6 | Glass doped with PbS quantum dots as a saturable absorber for 1-1¼m neodymium lasers. Journal of the Optical Society of America B: Optical Physics, 2002, 19, 28. | 2.1 | 51 |
| 7 | Linear and nonlinear optical properties of cobalt-doped zinc aluminum glass ceramics. Journal of Applied Physics, 2003, 93, 3827-3831. | 2.5 | 49 |
| 8 | Passive mode locking of diode-pumped Tm:KYW laser with PbS quantum-dot-doped glass. Laser Physics Letters, 2010, 7, 286-289. | 1.4 | 45 |
| 9 | Nonlinear optical properties of CuxS and CuInS2 nanoparticles in sol-gel glasses. Journal of Applied Physics, 2000, 87, 212-216. | 2.5 | 43 |
| 10 | PbS-doped phosphate glasses saturable absorbers for 1.3-1¼m neodymium lasers. Applied Physics B: Lasers and Optics, 2002, 75, 841-846. | 2.2 | 41 |
| 11 | Ultrafast dynamics of excited-state absorption in V3+:YAG crystal. Journal of Applied Physics, 1996, 80, 4782-4784. | 2.5 | 39 |
| 12 | Passive mode locking of a Cr4+:YAG laser by PbS quantum-dot-doped glass saturable absorber. Optics Communications, 2004, 241, 449-454. | 2.1 | 37 |
| 13 | Passive mode locking of 209 1¼m Cr,Tm,Ho:Y_3Sc_2Al_3O_12 laser using PbS quantum-dot-doped glass. Optics Letters, 2009, 34, 3403. | 3.3 | 37 |
| 14 | Magnesium- and zinc-aluminosilicate cobalt-doped glass ceramics as saturable absorbers for diode-pumped 13-1¼m laser. Applied Optics, 2004, 43, 682. | 2.1 | 36 |
| 15 | Diode-pumped Tm:KY(WO4)2 laser passively Q-switched with PbS-doped glass. Applied Physics B: Lasers and Optics, 2008, 93, 787-791. | 2.2 | 36 |
| 16 | Glass doped with PbS quantum dots for passive Q switching of a 154-Åµm laser. Applied Optics, 2000, 39, 4345. | 2.1 | 35 |
| 17 | Nonlinear optical properties of PbS quantum dots in boro-silicate glass. Journal of Non-Crystalline Solids, 2007, 353, 1195-1200. | 3.1 | 35 |
| 18 | Absorption, emission and absorption saturation of Cr4+ ions in calcium aluminate glass. Journal of Non-Crystalline Solids, 2005, 351, 3551-3555. | 3.1 | 34 |

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|----|--|-----|-----------|
| 19 | Optical absorption and luminescence study of cobalt-doped magnesium aluminosilicate glass ceramics. <i>Journal of the Optical Society of America B: Optical Physics</i> , 2002, 19, 1815. | 2.1 | 30 |
| 20 | Nanosized glass-ceramics doped with transition metal ions: nonlinear spectroscopy and possible laser applications. <i>Journal of Alloys and Compounds</i> , 2002, 341, 247-250. | 5.5 | 29 |
| 21 | Optical transient bleaching and induced absorption of surface-modified copper sulfide nanocrystals. <i>Applied Physics B: Lasers and Optics</i> , 1996, 64, 73-78. | 2.2 | 28 |
| 22 | Passively Q-switched Ho ³⁺ :Y ₃ Al ₅ O ₁₂ laser using a PbSe-doped glass. <i>Applied Physics Letters</i> , 2001, 78, 572-573. | 3.3 | 28 |
| 23 | Compact passively Q-switched diode-pumped Tm:KY(WO ₄) ₂ laser with 8 ns/30/LJ pulses. <i>Laser Physics Letters</i> , 2012, 9, 291-294. | 1.4 | 27 |
| 24 | Saturable absorber: transparent glass-ceramics based on a mixture of Co:Î ² -Zn ₂ SiO ₄ and Co:ZnO nanocrystals. <i>Applied Optics</i> , 2016, 55, 5505. | 2.1 | 27 |
| 25 | Anisotropy of nonlinear absorption in Co ²⁺ :MgAl ₂ O ₄ crystal. <i>Applied Physics B: Lasers and Optics</i> , 2007, 88, 443-447. | 2.2 | 26 |
| 26 | Structure and nonlinear optical properties of novel transparent glass-ceramics based on Co ²⁺ :ZnO nanocrystals. <i>Laser Physics Letters</i> , 2016, 13, 055803. | 1.4 | 25 |
| 27 | PbS(Se) Quantum Dot Doped Glass Applications as Laser Passive Q-Switches. <i>Physica Status Solidi (B): Basic Research</i> , 2001, 224, 253-256. | 1.5 | 23 |
| 28 | Nonlinear spectroscopy of PbS quantum-dot-doped glasses as saturable absorbers for the mode locking of solid-state lasers. <i>Journal of Applied Physics</i> , 2006, 100, 023108. | 2.5 | 23 |
| 29 | Saturable absorbers based on tetrahedrally coordinated transition-metal ions in crystals (Review). <i>Journal of Applied Spectroscopy</i> , 2009, 76, 1-43. | 0.7 | 23 |
| 30 | Optical transient bleaching/absorption of surface-oxidized CuInS ₂ nanocrystals. <i>Applied Physics B: Lasers and Optics</i> , 1997, 65, 545-548. | 2.2 | 22 |
| 31 | Stimulated emission of Co ²⁺ -doped glass-ceramics. <i>Journal of Non-Crystalline Solids</i> , 2007, 353, 2408-2414. | 3.1 | 22 |
| 32 | Intensity-dependent bleaching relaxation in lead salt quantum dots. <i>Journal of the Optical Society of America B: Optical Physics</i> , 2005, 22, 1660. | 2.1 | 21 |
| 33 | Nanostructured glass-crystal materials with lead sulfide for passive Q switching of IR lasers. <i>Journal of Optical Technology (A Translation of Opticheski Zhurnal)</i> , 2006, 73, 576. | 0.4 | 21 |
| 34 | PbS quantum-dot-doped glass for efficient passive mode locking in a CW Yb : KYW laser. <i>IEEE Photonics Technology Letters</i> , 2006, 18, 259-261. | 2.5 | 20 |
| 35 | Glass-ceramics with Ga ₂ O ₃ :Co ²⁺ nanocrystals: saturable absorber for 1.5-1.7-µm Er lasers. <i>Laser Physics Letters</i> , 2015, 12, 035803. | 1.4 | 20 |
| 36 | Structure and upconversion luminescence of transparent glass-ceramics containing (Er,Yb) ₂ (Ti,Zr) ₂ O ₇ nanocrystals. <i>Journal of Non-Crystalline Solids</i> , 2015, 409, 54-62. | 3.1 | 20 |

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|----|---|-----|-----------|
| 37 | Structural characteristics and spectral properties of novel transparent lithium aluminosilicate glass-ceramics containing (Er,Yb)NbO ₄ nanocrystals. Journal of Luminescence, 2015, 160, 337-345. | 3.1 | 19 |
| 38 | Diode-pumped Nd:YVO ₄ and Nd:KGd(WO ₄) ₂ 1.3 μm lasers passively Q-switched with PbS-doped glass. Applied Physics B: Lasers and Optics, 2003, 76, 253-256. | 2.2 | 18 |
| 39 | Holmium lasers passively Q-switched with PbS quantum-dot-doped glasses. Applied Optics, 2006, 45, 536. | 2.1 | 18 |
| 40 | Optical transient bleaching of photochromic polytungstic acid. Chemical Physics Letters, 1998, 288, 567-575. | 2.6 | 16 |
| 41 | Crystallization and nonlinear optical properties of transparent glass-ceramics with Co:Mg(Al,Ga) ₂ O ₄ nanocrystals for saturable absorbers of lasers at 1.6–1.7 μm. Journal of Physics and Chemistry of Solids, 2017, 103, 132-141. | 4.0 | 16 |
| 42 | Passive Q-switching of an Er, Yb:glass laser with Co:Mg(Al,Ga) ₂ O ₄ -based glass-ceramics. Applied Optics, 2017, 56, 2142. | 2.1 | 16 |
| 43 | Excited state absorption of Cr ⁴⁺ ion in forsterite. Applied Physics Letters, 1997, 70, 2523-2525. | 3.3 | 15 |
| 44 | Experiment and modeling of a diode-pumped 1.3 μm Nd:YVO ₄ laser passively Q-switched with PbS-doped glass. Applied Physics B: Lasers and Optics, 2004, 79, 315-319. | 2.2 | 13 |
| 45 | Nd:KGd(WO ₄) ₂ laser at 1.35 μm passively Q-switched with V ³⁺ :YAG crystal and PbS-doped glass. Optical Materials, 2006, 28, 919-924. | 3.6 | 13 |
| 46 | Relaxation of Bleaching in Lead Sulfide Nanoparticles at Different Pump Powers. Journal of Applied Spectroscopy, 2004, 71, 83-88. | 0.7 | 12 |
| 47 | Fluorophosphate glasses doped with PbSe quantum dots and their nonlinear optical characteristics. Glass Physics and Chemistry, 2008, 34, 351-355. | 0.7 | 12 |
| 48 | Optical transient bleaching and induced absorption of surface-oxidized CuFeS nanoparticles. Applied Physics B: Lasers and Optics, 2000, 70, 111-116. | 2.2 | 10 |
| 49 | Passive Q-switching of erbium glass laser by magnesium aluminosilicate siall with cobalt ions. Journal of Applied Spectroscopy, 2007, 74, 140-146. | 0.7 | 10 |
| 50 | Synthesis and spectroluminescence properties of lithium aluminosilicate glass-ceramics containing Er _x Y _{b-2x} Ti ₂ O ₇ nanocrystals. Journal of Optical Technology (A Translation of Opticheskii Tzvetnoy Zhurnal) 10(10) 1000-1004 | 0.7 | 10 |
| 51 | Erbium-glass slab laser with transverse diode pumping. Journal of Optical Technology (A Translation) 10(10) 1000-1004 | 0.4 | 10 |
| 52 | Structural transformations and spectroluminescence properties of magnesium aluminosilicate glass-ceramics containing Er _x Y _{b-2x} (Ti,Zr) ₂ O ₇ nanocrystals. Journal of Optical Technology (A) 10(10) 1000-1004 | 0.4 | 10 |
| 53 | Glasses with Lead Sulfide Nanoparticles for Laser Technologies. Glass and Ceramics (English) 10(10) 1000-1004 | 0.6 | 7 |
| 54 | Influence of reducing-oxidizing conditions on the optical properties of Co ²⁺ -doped magnesium aluminosilicate glass ceramics and their use as an effective saturable absorber Q switch. Applied Optics, 2004, 43, 6011. | 2.1 | 6 |

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| 55 | Passive Q-switching of diode pumped Nd:K ₂ Gd(WO ₄) ₂ lasers by V ³⁺ :Y ₃ Al ₅ O ₁₂ crystal with anisotropy of nonlinear absorption. Applied Optics, 2007, 46, 5732. | 2.1 | 6 |
| 56 | Raman spectroscopy study of hydrogen bonds and vibrations of the triglycine sulfate crystal lattice. Journal of Applied Spectroscopy, 1993, 59, 832-836. | 0.7 | 5 |
| 57 | Transient bleaching/induced absorption in reduced SrTiO ₃ under picosecond excitation. Journal of the Optical Society of America B: Optical Physics, 1997, 14, 415. | 2.1 | 5 |
| 58 | Exciton relaxation in PbS quantum dots. Physica Status Solidi - Rapid Research Letters, 2010, 4, 341-343. | 2.4 | 5 |
| 59 | Luminescence of transparent glass ceramics containing Er ³⁺ and Yb ³⁺ zirconate-titanate nanocrystals. Journal of Applied Spectroscopy, 2011, 78, 650-658. | 0.7 | 5 |
| 60 | Ho:KLu(WO ₄) ₂ Microchip Laser Q-Switched by a PbS Quantum-Dot-Doped Glass. IEEE Photonics Technology Letters, 2015, 27, 1795-1798. | 2.5 | 5 |
| 61 | Excited-state absorption in an yttrium aluminium garnet crystal doped with V ³⁺ ions. Quantum Electronics, 1996, 26, 970-973. | 1.0 | 4 |
| 62 | Nonlinear spectroscopy of photocoloured polytungstic acid nanocomposites. Quantum Electronics, 1998, 28, 710-714. | 1.0 | 4 |
| 63 | Spectroscopic properties of magnesium aluminosilicate glass-ceramics doped with divalent cobalt ions. Optics and Spectroscopy (English Translation of Optika i Spektroskopiya), 2002, 93, 559-566. | 0.6 | 4 |
| 64 | Study of the optical absorption and luminescence of transparent aluminosilicate glass-crystal materials with a CoO additive. Journal of Optical Technology (A Translation of Opticheski Zhurnal), 2003, 70, 864. | 0.4 | 4 |
| 65 | The assignment of lattice vibrations in triglycine sulfate-type crystals. Journal of Molecular Structure, 1996, 375, 43-51. | 3.6 | 3 |
| 66 | <title>Ultrafast optical processes in new Cu-Fe-S nanoparticles</title>. , 1999, , . | | 3 |
| 67 | Passive Q-switch operation of PbSe-doped glass at 2.1 μm. , 2001, 4350, 32. | | 3 |
| 68 | Nonlinear optical properties of PbS and PbSe quantum dots in glassy matrices. , 2002, 4748, 375. | | 3 |
| 69 | Saturation of absorption by lead sulfide nanoparticles in the main absorption band region. Journal of Applied Spectroscopy, 2006, 73, 216-221. | 0.7 | 3 |
| 70 | Nonlinear spectroscopy of phosphate glasses containing cadmium selenide nanoparticles. Quantum Electronics, 1998, 28, 715-718. | 1.0 | 2 |
| 71 | PbSe quantum-dot-doped phosphate glasses as material for saturable absorbers for 1- to 3-μm spectral region. , 2004, , . | | 2 |
| 72 | Passive Q-switching of diode-pumped Tm:KY(WO ₄) ₂ laser with PbS-doped glass and Cr:ZnSe crystal. , 2007, , . | | 2 |

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| 73 | Nonlinear bleachable media for the near IR range based on lead chalcogenide quantum dots (review). Journal of Applied Spectroscopy, 2007, 74, 773-801. | 0.7 | 2 |
| 74 | Spatially-temporal dynamics of a passively Q-switched Raman-active solid-state oscillator. Optics Communications, 2010, 283, 1854-1858. | 2.1 | 2 |
| 75 | Phase transitions in vibrational spectra of crystals of the triglycine sulfate family. Journal of Applied Spectroscopy, 1996, 63, 865-871. | 0.7 | 1 |
| 76 | Nonlinear optical properties of oxidised CuS nanocrystals. Quantum Electronics, 1997, 27, 722-726. | 1.0 | 1 |
| 77 | New Co-containing glass ceramics saturable absorbers for 1.5- μ m solid state lasers. , 2001, 4350, 106. | | 1 |
| 78 | Nonlinear absorption properties of new cobalt-doped transparent glass ceramics. , 2002, 4751, 326. | | 1 |
| 79 | Ultrafast exciton recombination in PbS quantum dots. , 2003, , . | | 1 |
| 80 | Passive Q-switching of 2- μ m holmium lasers with PbS-quantum dot-doped glass. , 2005, 6054, 16. | | 1 |
| 81 | Lead sulfide quantum dots for mode-locking and Q-switching of near IR lasers. , 2005, , . | | 1 |
| 82 | Optical properties of transparent cobalt-containing magnesium aluminosilicate glass-ceramics doped with gallium oxide for saturable absorbers. Optics and Spectroscopy (English Translation of Optika i Tj ETQq0 0 0 0 BT /Overlock 10 Tf | | 1 |
| 83 | DEVICE FOR MEASUREMENT OF RELAXATION TIME OF THE BLEACHED STATE OF OPTICAL MATERIALS BY THE «PUMP-PROBE» METHOD IN SUB- μ S TIME DOMAIN. Priborny I Metody Izmerenij, 2016, 7, 24-31. | 0.3 | 1 |
| 84 | Picosecond spectroscopy of thermostained strontium titanate crystals. Journal of Applied Spectroscopy, 1996, 63, 656-663. | 0.7 | 0 |
| 85 | Kinetics of nonlinear absorption in a reduced strontium titanate single crystal under picosecond excitation conditions. Quantum Electronics, 1996, 26, 471-475. | 1.0 | 0 |
| 86 | Differential absorption measurements of Cr ⁴⁺ -doped forsterite under picosecond excitation. , 1997, , . | | 0 |
| 87 | Nonlinear spectroscopy of oxidised CuInS ₂ nanocrystals. Quantum Electronics, 1998, 28, 69-72. | 1.0 | 0 |
| 88 | Nonlinear optical properties of novel phosphate glasses doped with CdSe quantum dots. , 1999, , . | | 0 |
| 89 | Optical properties of new saturable absorbers for 1.3 - 1.6 μ m lasers. , 0, , . | | 0 |
| 90 | Diode-pumped 1.35-micron Nd:KGd(WO ₄) ₂ laser passively Q-switched with cobalt-doped glass ceramics. , 0, , . | | 0 |

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| 91 | PbS quantum-dot-doped glass as saturable absorber for passive mode-locking of a Cr/sup 4+/:YAG laser. , 0, , . | | 0 |
| 92 | Diode-pumped Nd:YVO/sub 4/ 1.3 Î¼m laser passively Q-switched with the PbS-doped glass. , 0, , . | | 0 |
| 93 | PbS-doped phosphate glasses saturable absorbers for 1.3Î¼m neodymium lasers. , 2003, 4829, 113. | | 0 |
| 94 | Stimulated emission from co-doped zinc-aluminosilicate glass ceramics. , 0, , . | | 0 |
| 95 | Stimulated emission of Co ²⁺ ions in transparent glass-ceramics. Journal of Optical Technology (A) Tj ETQq1 1 0.784314 rgBT /Overlock 0.4 | | 0 |
| 96 | Passive mode-locking of a Ho:YSAG laser with PbS-quantum dot-doped glass. , 2009, , . | | 0 |
| 97 | OPTICAL WAVEGUIDES IN GLASSES DOPED WITH LEAD SULFIDE QUANTUM DOTS. , 2009, , . | | 0 |
| 98 | Compact Tm:KYW laser passively Q-switched with a PbS-quantum dot-based saturable absorber. , 2011, , . | | 0 |
| 99 | Inband-Pumped Ho:KLu(WO4)2 Microchip Laser Q-switched with a PbS-Quantum-Dot-Doped Glass. , 2015, , . | | 0 |
| 100 | Glass-ceramics with Co ²⁺ :ZnO nanocrystals: Novel saturatable absorber for Er lasers. , 2016, , . | | 0 |
| 101 | Synthesis, structure and Q-switching behaviour of transparent glass-ceramics based on a mixture of Co:Î²-Zn<inf>2</inf>SiO<inf>4</inf> and Co:ZnO nanocrystals. , 2016, , . | | 0 |
| 102 | Novel transparent glass-ceramics based on Co:Li(Al, Ga)<inf>5</inf>O<inf>8</inf> nanocrystals for passive Q-switching of Er lasers. , 2016, , . | | 0 |
| 103 | Glass-ceramics with Co ²⁺ :Mg(Al,Ga) ₂ O ₄ nanocrystals: novel saturable absorber for compact erbium lasers. Proceedings of SPIE, 2017, , . | 0.8 | 0 |
| 104 | Spectroscopic Characterization of Er ³⁺ :LiKYF5: Judd-Ofelt Analysis and Emission Cross Sections. , 2018, , . | | 0 |
| 105 | Intensity dependent bleaching relaxation in PbS quantum dots. , 2004, , . | | 0 |
| 106 | RELAXATION PROCESSES IN LEAD SULFIDE QUANTUM DOTS. , 2007, , . | | 0 |