# Andrei G Vladimirov

List of Publications by Year
in descending order



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|---|---|---|---|
| 144 papers | 3,162 citations | 117453 34 h-index | 174990 52 g-index |
| 145 all docs | 145 docs citations | 145 times ranked | 1164 citing authors |

| # | Article | IF | Citations |
|---|---|---|---|
| 1 | Short- and long-range temporal cavity soliton interaction in delay models of mode-locked lasers. Physical Review E, 2022, 105, 044207. | 0.8 | 4 |
| 2 | Dissipative soliton interaction in Kerr resonators with high-order dispersion. Physical Review A, 2021, 103, . | 1.0 | 13 |
| 3 | Generalized Haus master equation model for mode-locked class- <mml:math xmlns:mml="http://www.w3.org/1998/Math/MathML"><mml:mi>B</mml:mi></mml:math> lasers. Physical Review E, 2021, 104, 014215. | 0.8 | 8 |
| 4 | Delay-differential-equation model for mode-locked lasers based on nonlinear optical and amplifying loop mirrors. Physical Review A, 2021, 104, . | 1.0 | 5 |
| 5 | Interaction between vegetation patches and gaps: A self-organized response to water scarcity. Physica D: Nonlinear Phenomena, 2020, 414, 132708. | 1.3 | 8 |
| 6 | Bifurcation structure of a swept-source laser. Physical Review E, 2020, 101, 012212. | 0.8 | 3 |
| 7 | Temporal cavity solitons in a delayed model of a dispersive cavity ring laser. Mathematical Modelling of Natural Phenomena, 2020, 15, 47. | 0.9 | 9 |
| 8 | Turbulent coherent structures in a long cavity semiconductor laser near the lasing threshold. Optics Letters, 2020, 45, 4903. | 1.7 | 5 |
| 9 | Orthogonally polarized frequency combs in a mode-locked VECSEL. Optics Letters, 2020, 45, 252. | 1.7 | 4 |
| 10 | Turn on transient in a long cavity laser. , 2020, , . | | 0 |
| 11 | Stability of a long cavity laser. , 2020, , . | | 0 |
| 12 | Turbulent coherent structures in a long cavity semiconductor laser near the lasing threshold: publisherâ€™s note. Optics Letters, 2020, 45, 5500. | 1.7 | 0 |
| 13 | Pulsed Operation in a Swept Laser with Feedback. , 2020, , . | | 1 |
| 14 | Dynamics of a class- <mml:math xmlns:mml="http://www.w3.org/1998/Math/MathML"><mml:mi>A</mml:mi></mml:math> nonlinear mirror mode-locked laser. Physical Review E, 2019, 100, 012216. | 0.8 | 7 |
| 15 | Complex Dynamics of Long Cavity Lasers. , 2019, , . | | 0 |
| 16 | Dynamics of an inhomogeneously broadened passively mode-locked laser. European Physical Journal B, 2019, 92, 1. | 0.6 | 2 |
| 17 | Dark Pulses in a Long Ring Laser. , 2019, , . | | 0 |
| 18 | Periodic pulsating dynamics of slowâ€“fast delayed systems with a period close to the delay. European Journal of Applied Mathematics, 2019, 30, 39-62. | 1.4 | 0 |

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| 19 | Convective Nozaki-Bekki holes in a long cavity OCT laser. Optics Express, 2019, 27, 16395. | 1.7 | 12 |
| 20 | Tunable Kerr frequency combs and temporal localized states in time-delayed Giresâ€“Tournois interferometers. Optics Letters, 2019, 44, 4925. | 1.7 | 17 |
| 21 | Analysis of Temporal Dissipative Solitons in a Delayed Model of a Ring Semiconductor Laser. Trends in Mathematics, 2019, , 7-12. | 0.1 | 0 |
| 22 | Stable and unstable Nozaki-Bekki holes in a long laser. , 2019, , . | | 0 |
| 23 | Saturation effects in nonlinear loop mirror lasers: square wave operation. , 2019, , . | | 0 |
| 24 | Effect of Cherenkov radiation on localized-state interaction. Physical Review A, 2018, 97, . | 1.0 | 38 |
| 25 | Light bullets in a time-delay model of a wide-aperture mode-locked semiconductor laser. Philosophical Transactions Series A, Mathematical, Physical, and Engineering Sciences, 2018, 376, 20170372. | 1.6 | 9 |
| 26 | Theoretical study of mode-locked lasers with nonlinear loop mirrors. , 2018, , . | | 1 |
| 27 | Bound Pulse Trains in Arrays of Coupled Spatially Extended Dynamical Systems. Physical Review Letters, 2017, 119, 163901. | 2.9 | 13 |
| 28 | Delayed feedback control of self-mobile cavity solitons in a wide-aperture laser with a saturable absorber. Chaos, 2017, 27, 114304. | 1.0 | 5 |
| 29 | Dispersive Time-Delay Dynamical Systems. Physical Review Letters, 2017, 118, 193901. | 2.9 | 33 |
| 30 | Effect of Cherenkov radiation on the interaction of temporal dissipative solitons in a driven cavity with high order dispersion. , 2017, , . | | 0 |
| 31 | Distributed delay differential model of a multimode semiconductor laser. , 2017, , . | | 0 |
| 32 | Delay differential models in multimode laser dynamics: taking chromatic dispersion into account. , 2016, , . | | 2 |
| 33 | Semiconductor mode-locked lasers with coherent dual-mode optical injection: simulations, analysis, and experiment. Journal of the Optical Society of America B: Optical Physics, 2016, 33, 351. | 0.9 | 23 |
| 34 | Interaction of spatial and temporal cavity solitons in mode-locked lasers and passive cavities. , 2016, , . | | 0 |
| 35 | Modulational instability and zigzagging of dissipative solitons induced by delayed feedback. Physical Review A, 2016, 93, . | 1.0 | 11 |
| 36 | Impact of time-delayed feedback on spatiotemporal dynamics in the Lugiato-Lefever model. Physical Review A, 2016, 93, . | 1.0 | 15 |

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| 37 | Coherence properties of fast frequency swept lasers revealed via full electric field reconstruction. Proceedings of SPIE, 2016, , . | 0.8 | 0 |
| 38 | Timing jitter of passively-mode-locked semiconductor lasers subject to optical feedback: A semi-analytic approach. Physical Review A, 2015, 92, . | 1.0 | 36 |
| 39 | Phase and frequency dynamics of a short cavity swept-source OCT laser. , 2015, , . | | 0 |
| 40 | Localized Structures in Broad Area VCSELs: Experiments and Delay-Induced Motion. Springer Proceedings in Physics, 2015, , 417-437. | 0.1 | 0 |
| 41 | Pulse repetition-frequency multiplication in a coupled cavity passively mode-locked semiconductor lasers. Applied Physics B: Lasers and Optics, 2015, 118, 539-548. | 1.1 | 17 |
| 42 | Multi-stability and polariton solitons in microcavity wires. Optics Letters, 2015, 40, 1787. | 1.7 | 14 |
| 43 | Phase evolution and instantaneous linewidth of a Fourier domain mode locked laser. , 2015, , . | | 0 |
| 44 | Phase and frequency dynamics of Fourier domain mode locked OCT lasers. , 2015, , . | | 0 |
| 45 | Dynamics of a short cavity swept source OCT laser. Optics Express, 2014, 22, 18177. | 1.7 | 36 |
| 46 | Theoretical analysis of passively mode-locked inhomogeneously broadened lasers. , 2014, , . | | 1 |
| 47 | Cavity solitons in vertical-cavity surface-emitting lasers. , 2014, , . | | 1 |
| 48 | Stability of Plane Wave Solutions in Complex Ginzburg--Landau Equation with Delayed Feedback. SIAM Journal on Applied Dynamical Systems, 2014, 13, 986-1009. | 0.7 | 12 |
| 49 | Effect of dynamical instability on timing jitter in passively mode-locked quantum-dot lasers. Optics Letters, 2014, 39, 6815. | 1.7 | 18 |
| 50 | Localized structures in dissipative media: from optics to plant ecology. Philosophical Transactions Series A, Mathematical, Physical, and Engineering Sciences, 2014, 372, 20140101. | 1.6 | 96 |
| 51 | Modeling of multimode laser dynamics by means of delay differential equations. , 2014, , . | | 1 |
| 52 | Cavity solitons in vertical-cavity surface-emitting lasers. Philosophical Transactions Series A, Mathematical, Physical, and Engineering Sciences, 2014, 372, 20140013. | 1.6 | 18 |
| 53 | Bistability and hysteresis in an optically injected two-section semiconductor laser. Physical Review E, 2014, 89, 052903. | 0.8 | 13 |
| 54 | Dynamics of Fourier domain mode-locked lasers. Optics Express, 2013, 21, 19240. | 1.7 | 66 |

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| 55 | Hybrid Mode Locking in Semiconductor Lasers: Simulations, Analysis, and Experiments. IEEE Journal of Selected Topics in Quantum Electronics, 2013, 19, 1100208-1100208. | 1.9 | 41 |
| 56 | Delayed feedback control of self-mobile cavity solitons. Physical Review A, 2013, 88, . | 1.0 | 32 |
| 57 | Delay feedback induces drift of multipeaks cavity solitons in VCSEL devices. , 2013, , . | | 0 |
| 58 | Theoretical analysis of timing jitter in two-section passively mode-locked semiconductor lasers. , 2013, , . | | 0 |
| 59 | Delay induced instabilities of cavity solitons in passive and active laser systems. , 2013, , . | | 0 |
| 60 | Dynamical regimes of a multistripe laser array with external off-axis feedback. Journal of the Optical Society of America B: Optical Physics, 2013, 30, 1606. | 0.9 | 11 |
| 61 | Delay induces motion of multipeak localized structures in cavity semiconductors. , 2012, , . | | 3 |
| 62 | Bistable regimes in an optically injected mode-locked laser. Optics Express, 2012, 20, 25572. | 1.7 | 9 |
| 63 | Delay-induced dynamics and jitter reduction of passively mode-locked semiconductor lasers subject to optical feedback. New Journal of Physics, 2012, 14, 113033. | 1.2 | 83 |
| 64 | Theoretical analysis of a multi-stripe laser array with external off-axis feedback. , 2012, , . | | 3 |
| 65 | Long-Range Interaction and Synchronization of Oscillating Dissipative Solitons. Physical Review Letters, 2012, 108, 263906. | 2.9 | 68 |
| 66 | Delay feedback induces a spontaneous motion of two-dimensional cavity solitons in driven semiconductor microcavities. Physical Review A, 2012, 86, . | 1.0 | 31 |
| 67 | Theoretical Investigation of Striped and Non-Striped Broad Area Lasers With Off-Axis Feedback. IEEE Journal of Quantum Electronics, 2012, 48, 353-360. | 1.0 | 15 |
| 68 | Strong asymmetry of mode-locking pulses in quantum-dot semiconductor lasers. , 2011, , . | | 0 |
| 69 | Optically injected mode-locked laser. Physical Review E, 2011, 83, 066202. | 0.8 | 35 |
| 70 | Synchronization of interacting temporal cavity oscillons. , 2011, , . | | 0 |
| 71 | Pulse Broadening in Quantum-Dot Mode-Locked Semiconductor Lasers: Simulation, Analysis, and Experiments. IEEE Journal of Quantum Electronics, 2011, 47, 935-943. | 1.0 | 27 |
| 72 | Rotational symmetry breaking in small-area circular vertical cavity surface emitting lasers. Optics Communications, 2011, 284, 1299-1302. | 1.0 | 5 |

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| 73 | Relative stability of multipeak localized patterns of cavity solitons. Physical Review A, 2011, 84, . | 1.0 | 37 |
| 74 | Mobility properties of 2D cavity solitons in systems with delayed feedback. , 2011, , . | | 0 |
| 75 | Strong pulse asymmetry in quantum-dot mode-locked semiconductor lasers. Applied Physics Letters, 2011, 98, . | 1.5 | 19 |
| 76 | Dynamics of couple mode-locked quantum dot semiconductor laser. , 2011, , . | | 1 |
| 77 | A model equation for ultrashort optical pulses around the zero dispersion frequency. European Physical Journal D, 2010, 58, 219-226. | 0.6 | 28 |
| 78 | Spontaneous motion of localized structures and localized patterns induced by delayed feedback. European Physical Journal D, 2010, 59, 59-65. | 0.6 | 13 |
| 79 | Traveling wave modeling, simulation, and analysis of quantum-dot mode-locked semiconductor lasers. Proceedings of SPIE, 2010, , . | 0.8 | 4 |
| 80 | Hybrid mode-locking in a 40 GHz monolithic quantum dot laser. Applied Physics Letters, 2010, 96, . | 1.5 | 45 |
| 81 | Locking characteristics of a 40-GHz hybrid mode-locked monolithic quantum dot laser. , 2010, , . | | 5 |
| 82 | Dynamical regimes in a monolithic passively mode-locked quantum dot laser. Journal of the Optical Society of America B: Optical Physics, 2010, 27, 2102. | 0.9 | 30 |
| 83 | Hybrid mode-locking in a 40 GHz monolithic quantum dot laser. , 2009, , . | | 1 |
| 84 | Strong enhancement of interaction of optical pulses induced by oscillatory instability. , 2009, , . | | 0 |
| 85 | Localized Beating between Dynamically Generated Frequencies. Physical Review Letters, 2009, 102, 043905. | 2.9 | 17 |
| 86 | Traveling wave modeling of mode-locked quantum dot semiconductor lasers. , 2009, , . | | 0 |
| 87 | Stripe-array diode-laser in an off-axis external cavity: Theory and experiment. Optics Express, 2009, 17, 19599. | 1.7 | 43 |
| 88 | Spontaneous Motion of Cavity Solitons Induced by a Delayed Feedback. Physical Review Letters, 2009, 103, 103904. | 2.9 | 85 |
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| 92 | Localized structures of light in nonlinear devices with intracavity photonic bandgap material. , 2007, , . | | 0 |
| 93 | Stability of the modelocking regime in quantum dot laser. , 2007, , . | | 2 |
| 94 | Removing modulational instabilities in low dispersion fiber cavities. , 2007, , . | | 0 |
| 95 | Control and removal of modulational instabilities in low-dispersion photonic crystal fiber cavities. Optics Letters, 2007, 32, 662. | 1.7 | 53 |
| 96 | Chaotic bound state of localized structures in the complex Ginzburg-Landau equation. Physical Review E, 2007, 75, 045601. | 0.8 | 32 |
| 97 | Stability of the mode-locked regime in quantum dot lasers. Applied Physics Letters, 2007, 91, . | 1.5 | 35 |
| 98 | Model for mode locking in quantum dot lasers. Applied Physics Letters, 2006, 88, 201102. | 1.5 | 69 |
| 99 | Q-switching instability in a mode-locked semiconductor laser. Journal of the Optical Society of America B: Optical Physics, 2006, 23, 663. | 0.9 | 26 |
| 100 | Bragg localized structures in a passive cavity with transverse modulation of the refractive index and the pump. Optics Express, 2006, 14, 1. | 1.7 | 45 |
| 101 | Modulational instability of discrete solitons in coupled waveguides with group velocity dispersion. Optics Express, 2006, 14, 12347. | 1.7 | 19 |
| 102 | 40ÂGHz Mode-Locked Semiconductor Lasers: Theory, Simulations and Experiment. Optical and Quantum Electronics, 2006, 38, 495-512. | 1.5 | 76 |
| 103 | Pulse interaction via gain and loss dynamics in passive mode locking. Physica D: Nonlinear Phenomena, 2006, 218, 95-104. | 1.3 | 34 |
| 104 | Experimental investigations on the suppression of Q switching in monolithic 40GHz mode-locked semiconductor lasers. Applied Physics Letters, 2006, 88, 221104. | 1.5 | 15 |
| 105 | Model for passive mode locking in semiconductor lasers. Physical Review A, 2005, 72, . | 1.0 | 265 |
| 106 | A new model for a mode-locked semiconductor laser. Radiophysics and Quantum Electronics, 2004, 47, 769-776. | 0.1 | 42 |
| 107 | Delay differential equations for mode-locked semiconductor lasers. Optics Letters, 2004, 29, 1221. | 1.7 | 92 |
| 108 | Interaction and stability of periodic and localized structures in optical bistable systems. IEEE Journal of Quantum Electronics, 2003, 39, 216-226. | 1.0 | 44 |

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| 109 | Topologically multicharged and multihumped rotating solitons in wide-aperture lasers with a saturable absorber. IEEE Journal of Quantum Electronics, 2003, 39, 197-205. | 1.0 | 51 |
| 110 | Interaction of periodic and localized structures in two-dimensional passive cavities. , 2003, , . | | 0 |
| 111 | Synchronization of weakly stable oscillators and semiconductor laser arrays. Europhysics Letters, 2003, 61, 613-619. | 0.7 | 39 |
| 112 | Vortex Induced Rotation of Clusters of Localized States in the Complex Ginzburg-Landau Equation. Physical Review Letters, 2002, 89, 044101. | 2.9 | 62 |
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| 122 | Conditions for the existence of laser bullets. Optics and Spectroscopy (English Translation of Optika) Tj ETQq0 0 0 rgBT /Overlock 10 Tf | 0.2 | 18 |
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| 125 | Symmetry breaking and dynamical independence in a multimode laser. Physical Review E, 2000, 62, 6312-6317. | 0.8 | 9 |
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| 127 | Effect of frequency detunings and finite relaxation rates on laser localized structures. Physical Review E, 2000, 61, 5814-5824. | 0.8 | 93 |
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| 129 | Multidimensional quasiperiodic antiphase dynamics. Physical Review E, 1999, 60, 1616-1629. | 0.8 | 25 |
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| 132 | Intracavity second-harmonic generation: The steady-state solutions. Physical Review A, 1998, 58, 3320-3327. | 1.0 | 6 |
| 133 | Nonlinear dynamics in a single mode three-level laser without inversion. Physical Review E, 1998, 57, 1499-1510. | 0.8 | 8 |
| 134 | The Complex Lorenz Model: Geometric Structure, Homoclinic Bifurcation and One-Dimensional Map. International Journal of Bifurcation and Chaos in Applied Sciences and Engineering, 1998, 08, 723-729. | 0.7 | 12 |
| 135 | Analysis of the stability of laser solitons. Quantum Electronics, 1998, 28, 55-57. | 0.3 | 17 |
| 136 | Phase and amplitude dynamics of the TEM10and TEM01modes in a class-B laser. Quantum Electronics, 1997, 27, 892-896. | 0.3 | 5 |
| 137 | Bifurcation analysis of laser autosolitons. Quantum Electronics, 1997, 27, 949-952. | 0.3 | 22 |
| 138 | Dynamic instabilities in the interaction of transverse modes in a class-B laser. Quantum Electronics, 1997, 27, 887-891. | 0.3 | 2 |
| 139 | <title>Complex Lorenz equations</title>. , 1997, , . | | 0 |
| 140 | <title>Dynamics of transverse modes in a class-B laser</title>. , 1996, 2792, 242. | | 0 |
| 141 | Spontaneous phase symmetry breaking due to cavity detuning in a class-A bidirectional ring laser. Optics Communications, 1995, 116, 109-115. | 1.0 | 10 |
| 142 | Low-intensity chaotic operations of a laser with a saturable absorber. Optics Communications, 1993, 100, 351-360. | 1.0 | 16 |
| 143 | Localized structures in a passive cavity with refractive index modulation. , 0, , . | | 0 |
| 144 | Delay differential equations for passive mode locking. , 0, , . | | 0 |