List of Publications

by Artemii Dmitriev

First-authored articles

1. Dmitriev, A. V., Mescheriakov, S. D., Tokmakov, K. V. & Mitrofanov, V. P. Controllable damping of high-Qviolin modes in fused silica suspension fibers. *Classical and Quantum Gravity* **27,** 025009 (Dec. 2009).
2. Dmitriev, A. V. & Mitrofanov, V. P. Enhanced interaction between a mechanical oscillator and two coupled resonant electrical circuits. *Review of Scientific Instruments* **85,** 085005 (Aug. 2014).
3. Dmitriev, A., Gritsenko, D. & Mitrofanov, V. Non-axisymmetric flexural vibrations of free-edge circular silicon wafers. *Physics Letters A* **378,** 673–676 (Feb. 2014).
4. Dmitriev, A., Gritsenko, D. & Mitrofanov, V. Surface vibrational modes in disk-shaped resonators. *Ultrasonics* **54,** 905–913 (Mar. 2014).
5. Dmitriev, A. V. & Sumetsky, M. Tunable photonic elements at the surface of an optical fiber with piezoelectric core. *Optics Letters* **41,** 2165 (May 2016).
6. Dmitriev, A. V. & Sumetsky, M. Precise optical characterization of SNAP structures with a reference fiber. *Optics Letters* **41,** 4963 (Oct. 2016).

Co-authored articles

7. Hamidfar, T., Dmitriev, A., Magdan, B., Bianucci, P. & Sumetsky, M. Surface nanoscale axial photonics at a capillary fiber. *Optics Letters* **42,** 3060 (Aug. 2017).
8. Martinez, A. *et al.* Low-loss saturable absorbers based on tapered fibers embedded in carbon nanotube/polymer composites. *APL Photonics* **2,** 126103 (Dec. 2017).
9. Hamidfar, T. *et al.* Localization of light in an optical microcapillary induced by a droplet. *Optica* **5,** 382 (Mar. 2018).
10. Rowlinson, S., Dmitriev, A., Jones, A. W., Zhang, T. & Freise, A. Feasibility study of beam-expanding telescopes in the interferometer arms for the Einstein Telescope. *Physical Review D* **103** (Jan. 2021).

Conference publications

11. Dmitriev, A., Toropov, N. & Sumetsky, M. *Transient reconfigurable subangstrom-precise photonic circuits at the optical fiber surface* in *2015 IEEE Photonics Conference (IPC), postdeadline* (IEEE, Oct. 2015).
12. Dmitriev, A. V., Toropov, N. A. & Sumetsky, M. *Miniature optical delay lines and buffers* in *2016 18th International Conference on Transparent Optical Networks (ICTON)* (IEEE, July 2016).
13. Shen, F. *et al. Surface nanoscale axial photonics (SNAP) structures introduced with a femtosecond laser* in *Conference on Lasers and Electro-Optics* (OSA, 2016).

14. Dmitriev, A. & Sumetsky, M. *Creation and control of transient tunable arbitrary-shaped photonic elements at the surface of an optical fiber (Conference Presentation)* in *Laser Resonators, Microresonators, and Beam Control XIX* (eds Kudryashov, A. V., Paxton, A. H. & Ilchenko, V. S.) (SPIE, Apr. 2017).
15. Hamidfar, T., Dmitriev, A., Magdan, B., Bianucci, P. & Sumetsky, M. *Surface nanoscale axial photonics (SNAP) at the silica microcapillary with ultrathin wall* in *2017 IEEE Photonics Conference (IPC)* (IEEE, Oct. 2017).
16. Hamidfar, T. *et al. Droplet-induced optical resonator in a silica microcapillary* in *Conference on Lasers and Electro-Optics* (OSA, 2018).

LIGO collaboration papers

17. Abbott, B. *et al.* GW170817: Measurements of Neutron Star Radii and Equation of State. *Physical Review Letters* **121** (Oct. 2018).
18. Abbott, B. *et al.* Search for Subsolar-Mass Ultracompact Binaries in Advanced LIGO's First Observing Run. *Physical Review Letters* **121** (Dec. 2018).
19. Abbott, B. P. *et al.* Binary Black Hole Population Properties Inferred from the First and Second Observing Runs of Advanced LIGO and Advanced Virgo. *The Astrophysical Journal* **882,** L24 (Sept. 2019).
20. Abbott, B. P. *et al.* Low-latency Gravitational-wave Alerts for Multimessenger Astronomy during the Second Advanced LIGO and Virgo Observing Run. *The Astrophysical Journal* **875,** 161 (Apr. 2019).
21. Abbott, B. P. *et al.* Search for Gravitational Waves from a Long-lived Remnant of the Binary Neutron Star Merger GW170817. *The Astrophysical Journal* **875,** 160 (Apr. 2019).
22. Abbott, B. P. *et al.* Search for Transient Gravitational-wave Signals Associated with Magnetar Bursts during Advanced LIGO's Second Observing Run. *The Astrophysical Journal* **874,** 163 (Apr. 2019).
23. Abbott, B. P. *et al.* Searches for Continuous Gravitational Waves from 15 Supernova Remnants and Fomalhaut b with Advanced LIGO. *The Astrophysical Journal* **875,** 122 (Apr. 2019).
24. Abbott, B. P. *et al.* Searches for Gravitational Waves from Known Pulsars at Two Harmonics in 2015–2017 LIGO Data. *The Astrophysical Journal* **879,** 10 (June 2019).
25. Abbott, B. *et al.* All-sky search for continuous gravitational waves from isolated neutron stars using Advanced LIGO O2 data. *Physical Review D* **100** (July 2019).
26. Abbott, B. *et al.* All-sky search for long-duration gravitational-wave transients in the second Advanced LIGO observing run. *Physical Review D* **99** (May 2019).
27. Abbott, B. *et al.* All-sky search for short gravitational-wave bursts in the second Advanced LIGO and Advanced Virgo run. *Physical Review D* **100** (July 2019).
28. Abbott, B. *et al.* Constraining the p -Mode– g -Mode Tidal Instability with GW170817. *Physical Review Letters* **122** (Feb. 2019).
29. Abbott, B. *et al.* Directional limits on persistent gravitational waves using data from Advanced LIGO's first two observing runs. *Physical Review D* **100** (Sept. 2019).
30. Abbott, B. *et al.* GWTC-1: A Gravitational-Wave Transient Catalog of Compact Binary Mergers Observed by LIGO and Virgo during the First and Second Observing Runs. *Physical Review X* **9** (Sept. 2019).
31. Abbott, B. *et al.* Narrow-band search for gravitational waves from known pulsars using the second LIGO observing run. *Physical Review D* **99** (June 2019).
32. Abbott, B. *et al.* Properties of the Binary Neutron Star Merger GW170817. *Physical Review X* **9** (Jan. 2019).

33. Abbott, B. *et al.* Search for the isotropic stochastic background using data from Advanced LIGO's second observing run. *Physical Review D* **100** (Sept. 2019).

34. Abbott, B. *et al.* Tests of General Relativity with GW170817. *Physical Review Letters* **123** (July 2019).

35. Albert, A. *et al.* Search for Multimessenger Sources of Gravitational Waves and High-energy Neutrinos with Advanced LIGO during Its First Observing Run, ANTARES, and IceCube. *The Astrophysical Journal* **870,** 134 (Jan. 2019).

36. Burns, E. *et al.* A Fermi Gamma-Ray Burst Monitor Search for Electromagnetic Signals Coincident with Gravitational-wave Candidates in Advanced LIGO's First Observing Run. *The Astrophysical Journal* **871,** 90 (Jan. 2019).

37. Soares-Santos, M. *et al.* First Measurement of the Hubble Constant from a Dark Standard Siren using the Dark Energy Survey Galaxies and the LIGO/Virgo Binary–Black-hole Merger GW170814. *The Astrophysical Journal* **876,** L7 (Apr. 2019).

38. Abbott, B. P. *et al.* A guide to LIGO–Virgo detector noise and extraction of transient gravitational-wave signals. *Classical and Quantum Gravity* **37,** 055002 (Feb. 2020).

39. Abbott, B. P. *et al.* Model comparison from LIGO–Virgo data on GW170817's binary components and consequences for the merger remnant. *Classical and Quantum Gravity* **37,** 045006 (Jan. 2020).

40. Abbott, B. P. *et al.* GW190425: Observation of a Compact Binary Coalescence with Total Mass $\sim$ 3.4 M $\odot$. *The Astrophysical Journal* **892,** L3 (Mar. 2020).

41. Abbott, B. *et al.* Optically targeted search for gravitational waves emitted by core-collapse supernovae during the first and second observing runs of advanced LIGO and advanced Virgo. *Physical Review D* **101** (Apr. 2020).

42. Abbott, R. *et al.* Gravitational-wave Constraints on the Equatorial Ellipticity of Millisecond Pulsars. *The Astrophysical Journal* **902,** L21 (Oct. 2020).

43. Abbott, R. *et al.* GW190412: Observation of a binary-black-hole coalescence with asymmetric masses. *Physical Review D* **102** (Aug. 2020).

44. Abbott, R. *et al.* GW190521: A Binary Black Hole Merger with a Total Mass of 150 M$\odot$. *Physical Review Letters* **125** (Sept. 2020).

45. Abbott, R. *et al.* GW190814: Gravitational Waves from the Coalescence of a 23 Solar Mass Black Hole with a 2.6 Solar Mass Compact Object. *The Astrophysical Journal* **896,** L44 (June 2020).

46. Abbott, R. *et al.* Properties and Astrophysical Implications of the 150 M $\odot$ Binary Black Hole Merger GW190521. *The Astrophysical Journal* **900,** L13 (Sept. 2020).

47. Hamburg, R. *et al.* A Joint Fermi-GBM and LIGO/Virgo Analysis of Compact Binary Mergers from the First and Second Gravitational-wave Observing Runs. *The Astrophysical Journal* **893,** 100 (Apr. 2020).

48. Abbott, R. *et al.* All-sky search in early O3 LIGO data for continuous gravitational-wave signals from unknown neutron stars in binary systems. *Physical Review D* **103** (Mar. 2021).

49. Abbott, R. *et al.* Constraints on Cosmic Strings Using Data from the Third Advanced LIGO–Virgo Observing Run. *Physical Review Letters* **126** (June 2021).

50. Abbott, R. *et al.* Diving below the Spin-down Limit: Constraints on Gravitational Waves from the Energetic Young Pulsar PSR J0537-6910. *The Astrophysical Journal Letters* **913,** L27 (May 2021).

51. Abbott, R. *et al.* GWTC-2: Compact Binary Coalescences Observed by LIGO and Virgo during the First Half of the Third Observing Run. *Physical Review X* **11** (June 2021).

52. Abbott, R. *et al.* Observation of Gravitational Waves from Two Neutron Star–Black Hole Coalescences. *The Astrophysical Journal Letters* **915,** L5 (June 2021).

53. Abbott, R. *et al.* Open data from the first and second observing runs of Advanced LIGO and Advanced Virgo. *SoftwareX* **13,** 100658 (Jan. 2021).

54. Abbott, R. *et al.* Population Properties of Compact Objects from the Second LIGO–Virgo Gravitational-Wave Transient Catalog. *The Astrophysical Journal Letters* **913,** L7 (May 2021).

55. Abbott, R. *et al.* Search for Gravitational Waves Associated with Gamma-Ray Bursts Detected by Fermi and Swift during the LIGO–Virgo Run O3a. *The Astrophysical Journal* **915,** 86 (July 2021).

56. Abbott, R. *et al.* Tests of general relativity with binary black holes from the second LIGO-Virgo gravitational-wave transient catalog. *Physical Review D* **103** (June 2021).