

Antonio Lucianetti

List of Publications by Year in descending order

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126
papers

3,391
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127
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127
docs citations

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times ranked

3132
citing authors

| # | ARTICLE | IF | CITATIONS |
|----|-------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------|-----|-----------|
| 1 | Diode pumped cryogenic Yb:Lu ₃ Al ₅ O ₁₂ laser in continuous-wave and pulsed regime. Optics and Laser Technology, 2021, 135, 106720. | 2.2 | 6 |
| 2 | Monoclinic zinc monotonungstate Yb ³⁺ ,Li ⁺ :ZnWO ₄ : Part II. Polarized spectroscopy and laser operation. Journal of Luminescence, 2021, 231, 117811. | 1.5 | 5 |
| 3 | Towards rapid large-scale LIPSS fabrication by 4-beam ps DLIP. Optics and Laser Technology, 2021, 133, 106532. | 2.2 | 28 |
| 4 | Diode-pumped, electro-optically Q-switched, cryogenic Tm:YAG laser operating at 1.88 μ m. High Power Laser Science and Engineering, 2021, 9, . | 2.0 | 7 |
| 5 | Faraday Rotation of Dy ₂ O ₃ , CeF ₃ and Y ₃ Fe ₅ O ₁₂ at the Mid-Infrared Wavelengths. Materials, 2020, 13, 5324. | 1.3 | 18 |
| 6 | Micromachining of Invar with 784 Beams Using 1.3 ps Laser Source at 515 nm. Materials, 2020, 13, 2962. | 1.3 | 14 |
| 7 | Large-Beam Picosecond Interference Patterning of Metallic Substrates. Materials, 2020, 13, 4676. | 1.3 | 13 |
| 8 | Spectroscopy and diode-pumped continuous-wave laser operation of Tm:Y ₂ O ₃ transparent ceramic at cryogenic temperatures. Applied Physics B: Lasers and Optics, 2020, 126, 1. | 1.1 | 10 |
| 9 | Experimental Study of Nanosecond Laser-Generated Plasma Channels. Applied Sciences (Switzerland), 2020, 10, 4082. | 1.3 | 1 |
| 10 | Experimental study on compression of 216-W laser pulses below 2 μ s at 1030 nm with chirped volume Bragg grating. Applied Optics, 2020, 59, 7938. | 0.9 | 10 |
| 11 | Numerical analysis of beam distortion induced by thermal effects in chirped volume Bragg grating compressors for high-power lasers. Journal of the Optical Society of America B: Optical Physics, 2020, 37, 3874. | 0.9 | 5 |
| 12 | Verdet constant of potassium terbium fluoride crystal as a function of wavelength and temperature. Optics Letters, 2020, 45, 1683. | 1.7 | 19 |
| 13 | Tensor-to-matrix mapping in elasto-optics. Journal of the Optical Society of America B: Optical Physics, 2020, 37, 1090. | 0.9 | 3 |
| 14 | Multiple pulse picosecond laser induced damage threshold on hybrid mirrors. , 2020, , . | | 0 |
| 15 | Numerical study of sum frequency ultrashort pulse compression in borate crystals. Journal of the Optical Society of America B: Optical Physics, 2020, 37, 3229. | 0.9 | 2 |
| 16 | Verdet Constant of Magneto-Active Materials Developed for High-Power Faraday Devices. Applied Sciences (Switzerland), 2019, 9, 3160. | 1.3 | 77 |
| 17 | Numerical Analysis of Thermal Effects in a Concept of a Cryogenically Cooled Yb: YAG Multislab 10 J/100-Hz Laser Amplifier. IEEE Journal of Quantum Electronics, 2019, 55, 1-8. | 1.0 | 5 |
| 18 | Efficient diode pumped Yb:Y ₂ O ₃ cryogenic laser. Applied Physics B: Lasers and Optics, 2019, 125, 1. | 1.1 | 7 |

| # | ARTICLE | IF | CITATIONS |
|----|------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------|-----|-----------|
| 19 | Characterization of the Verdet Constant of Dy ₂ O ₃ Ceramics in the Two-Micron Spectral Range. , 2019, , . | | 0 |
| 20 | Diode " Pumped Efficient Cryogenic Yb:Y ₂ O ₃ Transparent Ceramic Laser. , 2019, , . | | 0 |
| 21 | Spectroscopy, Continuous-Wave and Passively Q-Switched Laser Operation of Transparent Tm:LuAG Ceramics. , 2019, , . | | 0 |
| 22 | Spectroscopy of Tm:Y ₂ O ₃ Transparent Ceramic at Cryogenic Temperatures. , 2019, , . | | 0 |
| 23 | Effect of Gd ³⁺ /Ga ³⁺ on Yb ³⁺ emission in mixed YAG at cryogenic temperature. Ceramics International, 2019, 45, 9418-9422. | 2.3 | 5 |
| 24 | Design of a 10 J, 100 Hz diode-pumped solid state laser. , 2019, , . | | 2 |
| 25 | Novel unstable resonator configuration for highly efficient cryogenically cooled Yb:YAG Q-switched laser. Optics Express, 2019, 27, 21622. | 1.7 | 8 |
| 26 | Temperature-wavelength dependence of Verdet constant of Dy ₂ O ₃ ceramics. Optical Materials Express, 2019, 9, 2971. | 1.6 | 28 |
| 27 | Laser performances of diode pumped Yb:Lu ₂ O ₃ transparent ceramic at cryogenic temperatures. Optical Materials Express, 2019, 9, 4669. | 1.6 | 8 |
| 28 | Synthesis, Spectroscopy and Efficient Laser Operation of Tm:Lu ₃ Al ₅ O ₁₂ Transparent Ceramics. , 2019, , . | | 0 |
| 29 | Thermo-optical Study of 10 J/ 100 Hz Cryogenically Cooled Yb:YAG Diode Pumped Laser System. , 2019, , . | | 0 |
| 30 | Highly efficient, cryogenically cooled Yb:YAG q-switch laser based on a gain modulated unstable resonator design. , 2019, , . | | 0 |
| 31 | Monocrystalline materials for high-power ultrafast lasers. , 2019, , . | | 0 |
| 32 | Diode-pumped cryogenic Tm:LiYF ₄ laser. , 2019, , . | | 1 |
| 33 | Comparison of multipulse nanosecond LIDT of HR coated YAG and glass substrates at 1030 nm. , 2019, , . | | 0 |
| 34 | Highly Efficient, Compact Tm ³⁺ :RE ₂ O ₃ (RE = Y, Lu, Sc) Sesquioxide Lasers Based on Thermal Guiding. IEEE Journal of Selected Topics in Quantum Electronics, 2018, 24, 1-13. | 1.9 | 40 |
| 35 | Faraday effect measurements of holmium oxide (Ho ₂ O ₃) ceramics-based magneto-optical materials. High Power Laser Science and Engineering, 2018, 6, . | 2.0 | 28 |
| 36 | Crystal growth, low-temperature spectroscopy and multi-watt laser operation of Yb:Ca ₃ NbGa ₃ Si ₂ O ₁₄ . Journal of Luminescence, 2018, 197, 90-97. | 1.5 | 9 |

| # | ARTICLE | IF | CITATIONS |
|----|----------------------------------------------------------------------------------------------------------------------------------------------------------------------------------|-----|-----------|
| 37 | Overview of ytterbium based transparent ceramics for diode pumped high energy solid-state lasers. High Power Laser Science and Engineering, 2018, 6, . | 2.0 | 14 |
| 38 | Passive Q switching of Yb:CNGS lasers by Cr ⁴⁺ :YAG and V ³⁺ :YAG saturable absorbers. Applied Optics, 2018, 57, 8236. | 0.9 | 2 |
| 39 | Spectroscopic investigations of thulium doped YAG and YAP crystals between 77â€°K and 300â€°K for short-wavelength infrared lasers. Journal of Luminescence, 2018, 202, 427-437. | 1.5 | 26 |
| 40 | Efficient diode-pumped Er:KLu(WO ₄) ₂ laser at $\lambda = 1610$ nm. Optics Letters, 2018, 43, 218. | 1.7 | 6 |
| 41 | Fs-laser-written erbium-doped double tungstate waveguide laser. Optics Express, 2018, 26, 30826. | 1.7 | 9 |
| 42 | 100J-level nanosecond pulsed Yb:YAG cryo-cooled DPSSL amplifier. , 2018, , . | | 1 |
| 43 | Characterization of Bivoj/DiPOLE 100: HiLASE 100-J/10-Hz diode pumped solid state laser. , 2018, , . | | 3 |
| 44 | Wavefront correction with photo-controlled deformable mirror. , 2018, , . | | 0 |
| 45 | High-energy subpicosecond 2.1-um fiber laser. , 2018, , . | | 0 |
| 46 | Laser induced damage in optical glasses using nanosecond pulses at 1030 nm. , 2018, , . | | 0 |
| 47 | Multiple pulse nanosecond laser-induced damage threshold on AR coated YAG crystals. , 2018, , . | | 1 |
| 48 | A 100 J-level nanosecond DPSSL for high energy density experiments. Proceedings of SPIE, 2017, , . | 0.8 | 1 |
| 49 | Commissioning of a kW-class nanosecond pulsed DPSSL operating at 105 J, 10 Hz. Proceedings of SPIE, 2017, , . | 0.8 | 2 |
| 50 | Temperature dependent spectroscopic characterization of Tm:YAG crystals as potential laser medium for pulsed high energy laser amplifiers. , 2017, , . | | 1 |
| 51 | Verdet constant dispersion of CeF ₃ in the visible and near-infrared spectral range. Optical Engineering, 2017, 56, 067105. | 0.5 | 15 |
| 52 | The first kilowatt average power 100J-level DPSSL. , 2017, , . | | 0 |
| 53 | Continuous-wave and passively Q-switched cryogenic Yb:KLu(WO ₄) ₂ laser. Optics Express, 2017, 25, 25886. | 1.7 | 4 |
| 54 | Cryogenic Yb:YGAG ceramic laser pumped at 940 nm and zero-phonon-line: a comparative study. Optical Materials Express, 2017, 7, 477. | 1.6 | 0 |

| # | ARTICLE | IF | CITATIONS |
|----|--------------------------------------------------------------------------------------------------------------------------------------------------|-----|-----------|
| 55 | Kilowatt average power 100â€‰%â€‰J-level diode pumped solid state laser. Optica, 2017, 4, 438. | 4.8 | 152 |
| 56 | kW-class picosecond and nanosecond lasers at Hilase for hi-tech industrial applications. , 2017, , . | | 0 |
| 57 | The first multi-joule DPSSL with 1 kW average power. , 2017, , . | | 0 |
| 58 | Microchip Yb:CaLnAlO ₄ lasers with up to 91% slope efficiency. Optics Letters, 2017, 42, 2431. | 1.7 | 57 |
| 59 | Multiple pulse nanosecond laser induced damage threshold on hybrid mirrors. , 2017, , . | | 2 |
| 60 | Temperature-wavelength dependence of terbium gallium garnet ceramics Verdet constant. Optical Materials Express, 2016, 6, 3683. | 1.6 | 63 |
| 61 | Laser induced damage threshold of optical fibers under ns pulses. Proceedings of SPIE, 2016, , . | 0.8 | 1 |
| 62 | Design of deformable mirrors for high power lasers. High Power Laser Science and Engineering, 2016, 4, . | 2.0 | 10 |
| 63 | Microchip laser operation of Yb-doped gallium garnets. Optical Materials Express, 2016, 6, 46. | 1.6 | 31 |
| 64 | Comparative LIDT measurements of optical components for high-energy HiLASE lasers. High Power Laser Science and Engineering, 2016, 4, . | 2.0 | 11 |
| 65 | Cryogenic Yb:YAG Laser Pumped by VBG-Stabilized Narrowband Laser Diode at 969 nm. IEEE Photonics Technology Letters, 2016, 28, 1328-1331. | 1.3 | 14 |
| 66 | Design of an Optimized Adaptive Optics System With a Photo-Controlled Deformable Mirror. IEEE Photonics Technology Letters, 2016, 28, 1422-1425. | 1.3 | 3 |
| 67 | 100â€‰%â€‰J-level nanosecond pulsed diode pumped solid state laser. Optics Letters, 2016, 41, 2089. | 1.7 | 73 |
| 68 | Zero-phonon-line pumped cryogenic Yb:YAG passively Q-switched by Cr:YAG. Proceedings of SPIE, 2016, , . | 0.8 | 0 |
| 69 | Diode pumped compact cryogenic Yb:YAG/Cr:YAG pulsed laser. Proceedings of SPIE, 2016, , . | 0.8 | 4 |
| 70 | Status of the High Average Power Diode-Pumped Solid State Laser Development at HiLASE. Applied Sciences (Switzerland), 2015, 5, 637-665. | 1.3 | 65 |
| 71 | Temperature dependent absorption measurement of various transition metal doped laser materials. Proceedings of SPIE, 2015, , . | 0.8 | 2 |
| 72 | Wavelength tunability of laser based on Yb-doped YGAG ceramics. , 2015, , . | | 2 |

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|----|----------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------|-----|-----------|
| 73 | Thermally induced depolarization in terbium gallium garnet ceramics rod with natural convection cooling. <i>Journal of Optics (United Kingdom)</i> , 2015, 17, 065610. | 1.0 | 8 |
| 74 | Assessment of high-power kW-class single-diode bars for use in highly efficient pulsed solid state laser systems. , 2015, , . | | 0 |
| 75 | Experimental and theoretical study of deformable mirror actuator arrays. <i>Proceedings of SPIE</i> , 2015, , . | 0.8 | 0 |
| 76 | Wavefront control in high average-power multi-slab laser system. , 2015, , . | | 1 |
| 77 | HiLASE Project: high intensity lasers for industrial and scientific applications. , 2015, , . | | 0 |
| 78 | Graphene Q-Switched Compact Yb:YAG Laser. <i>IEEE Photonics Journal</i> , 2015, 7, 1-7. | 1.0 | 15 |
| 79 | Wavelength dependence of magneto-optic properties of terbium gallium garnet ceramics. <i>Optics Express</i> , 2015, 23, 13641. | 1.7 | 42 |
| 80 | 1-J operation of monolithic composite ceramics with Yb:YAG thin layers: multi-TRAM at 10-Hz repetition rate and prospects for 100-Hz operation. <i>Optics Letters</i> , 2015, 40, 855. | 1.7 | 24 |
| 81 | Spectroscopic and lasing characteristics of Yb:YAG ceramic at cryogenic temperatures. <i>Optical Materials Express</i> , 2015, 5, 1289. | 1.6 | 19 |
| 82 | Recent Advances on the J-KAREN laser upgrade. , 2015, , . | | 0 |
| 83 | Joule-Class 940-nm Diode Laser Bars for Millisecond Pulse Applications. <i>IEEE Photonics Technology Letters</i> , 2015, 27, 1663-1666. | 1.3 | 7 |
| 84 | High-Contrast, High-Intensity Petawatt-Class Laser and Applications. <i>IEEE Journal of Selected Topics in Quantum Electronics</i> , 2015, 21, 232-249. | 1.9 | 60 |
| 85 | Microchip Laser Operation of Yb-Doped Gallium Garnets. , 2015, , . | | 0 |
| 86 | Design of a kJ-class HiLASE laser as a driver for inertial fusion energy. <i>High Power Laser Science and Engineering</i> , 2014, 2, . | 2.0 | 15 |
| 87 | Design of kJ-class HiLASE laser as a driver for inertial fusion energy “ CORRIGENDUM. <i>High Power Laser Science and Engineering</i> , 2014, 2, . | 2.0 | 0 |
| 88 | Cryogenic laser performance of Yb:YAG diode-pumped at 940 nm and 969 nm for high power lasers. , 2014, , . | | 0 |
| 89 | Design and optimization of an adaptive optics system for a high-average-power multi-slab laser (HiLASE): erratum. <i>Applied Optics</i> , 2014, 53, 7877. | 2.1 | 0 |
| 90 | Active wavefront control in Hilase multislab high-average-power laser system. , 2014, , . | | 1 |

| # | ARTICLE | IF | CITATIONS |
|-----|------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------|-----|-----------|
| 91 | Characterization of diode-laser stacks for high-energy-class solid state lasers. Proceedings of SPIE, 2014, , . | 0.8 | 1 |
| 92 | Spectroscopic characterization of Yb ³⁺ -doped laser materials at cryogenic temperatures. Applied Physics B: Lasers and Optics, 2014, 116, 75-81. | 1.1 | 70 |
| 93 | Design and optimization of an adaptive optics system for a high-average-power multi-slab laser (HiLASE). Applied Optics, 2014, 53, 3255. | 0.9 | 18 |
| 94 | Efficient ASE Management in Disk Laser Amplifiers With Variable Absorbing Clads. IEEE Journal of Quantum Electronics, 2014, 50, 1-9. | 1.0 | 11 |
| 95 | HiLASE: Development of Fully Diode-Pumped, kW-Class Pulsed Lasers for High-Tech Applications. The Review of Laser Engineering, 2014, 42, 145. | 0.0 | 0 |
| 96 | Development of the estimation method for thermo-optics effects in the TGG ceramics rod. , 2014, , . | | 0 |
| 97 | Optimization of Wavefront Distortions and Thermal-Stress Induced Birefringence in a Cryogenically-Cooled Multislab Laser Amplifier. IEEE Journal of Quantum Electronics, 2013, 49, 960-966. | 1.0 | 46 |
| 98 | Spectroscopic characterization of various Yb ³⁺ -doped laser materials at cryogenic temperatures for the development of high energy class diode pumped solid state lasers. Proceedings of SPIE, 2013, , . | 0.8 | 13 |
| 99 | HiLASE cryogenically-cooled diode-pumped laser prototype for inertial fusion energy. Proceedings of SPIE, 2013, , . | 0.8 | 7 |
| 100 | Design of high-energy-class cryogenically cooled Yb ³⁺ :YAG multislab laser system with low wavefront distortion. Optical Engineering, 2013, 52, 064201. | 0.5 | 20 |
| 101 | Simulation of performance of wavefront correction using deformable mirror in high-average-power laser systems. , 2013, , . | | 6 |
| 102 | Effect of amplified spontaneous emission and parasitic oscillations on the performance of cryogenically-cooled slab amplifiers. Laser and Particle Beams, 2013, 31, 553-560. | 0.4 | 8 |
| 103 | Low Pressure Helium Cooled Active Mirror Amplifiers for HiPER KiloJoule Beamlines. Plasma and Fusion Research, 2013, 8, 3404043-3404043. | 0.3 | 2 |
| 104 | High-vacuum-compatible high-power Faraday isolators for gravitational-wave interferometers. Journal of the Optical Society of America B: Optical Physics, 2012, 29, 1784. | 0.9 | 25 |
| 105 | Thermal effects in the Input Optics of the Enhanced Laser Interferometer Gravitational-Wave Observatory interferometers. Review of Scientific Instruments, 2012, 83, 033109. | 0.6 | 24 |
| 106 | Modeling of amplified spontaneous emission, heat deposition, and energy extraction in cryogenically cooled multislab Yb ³⁺ :YAG laser amplifier for the HiLASE Project. Journal of the Optical Society of America B: Optical Physics, 2012, 29, 1270. | 0.9 | 45 |
| 107 | Comparative design study of 100 J cryogenically cooled Yb:YAG multi-slab amplifiers operating at 10 Hz. , 2012, , . | | 2 |
| 108 | Performance of a 100J cryogenically cooled multi-slab amplifier with respect to the pump beam parameters and geometry. Proceedings of SPIE, 2012, , . | 0.8 | 2 |

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|-----|-----------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------|-----|-----------|
| 109 | Active-mirror-laser-amplifier thermal management with tunable helium pressure at cryogenic temperatures. <i>Optics Express</i> , 2011, 19, 12766. | 1.7 | 35 |
| 110 | Directional Limits on Persistent Gravitational Waves Using LIGO S5 Science Data. <i>Physical Review Letters</i> , 2011, 107, 271102. | 2.9 | 94 |
| 111 | SEARCH FOR GRAVITATIONAL-WAVE BURSTS ASSOCIATED WITH GAMMA-RAY BURSTS USING DATA FROM LIGO SCIENCE RUN 5 AND VIRGO SCIENCE RUN 1. <i>Astrophysical Journal</i> , 2010, 715, 1438-1452. | 1.6 | 60 |
| 112 | FIRST SEARCH FOR GRAVITATIONAL WAVES FROM THE YOUNGEST KNOWN NEUTRON STAR. <i>Astrophysical Journal</i> , 2010, 722, 1504-1513. | 1.6 | 104 |
| 113 | SEARCHES FOR GRAVITATIONAL WAVES FROM KNOWN PULSARS WITH SCIENCE RUN 5 LIGO DATA. <i>Astrophysical Journal</i> , 2010, 713, 671-685. | 1.6 | 155 |
| 114 | Predictions for the rates of compact binary coalescences observable by ground-based gravitational-wave detectors. <i>Classical and Quantum Gravity</i> , 2010, 27, 173001. | 1.5 | 956 |
| 115 | SEARCH FOR GRAVITATIONAL-WAVE INSPIRAL SIGNALS ASSOCIATED WITH SHORT GAMMA-RAY BURSTS DURING LIGO'S FIFTH AND VIRGO'S FIRST SCIENCE RUN. <i>Astrophysical Journal</i> , 2010, 715, 1453-1461. | 1.6 | 90 |
| 116 | All-Sky LIGO Search for Periodic Gravitational Waves in the Early Fifth-Science-Run Data. <i>Physical Review Letters</i> , 2009, 102, 111102. | 2.9 | 83 |
| 117 | On a Sturm Liouville periodic boundary values problem. <i>Integral Transforms and Special Functions</i> , 2009, 20, 353-364. | 0.8 | 4 |
| 118 | STACKED SEARCH FOR GRAVITATIONAL WAVES FROM THE 2006 SGR 1900+14 STORM. <i>Astrophysical Journal</i> , 2009, 701, L68-L74. | 1.6 | 45 |
| 119 | Astrophysically triggered searches for gravitational waves: status and prospects. <i>Classical and Quantum Gravity</i> , 2008, 25, 114051. | 1.5 | 26 |
| 120 | First joint search for gravitational-wave bursts in LIGO and GEO 600 data. <i>Classical and Quantum Gravity</i> , 2008, 25, 245008. | 1.5 | 22 |
| 121 | Search for Gravitational-Wave Bursts from Soft Gamma Repeaters. <i>Physical Review Letters</i> , 2008, 101, 211102. | 2.9 | 69 |
| 122 | Beating the Spin-Down Limit on Gravitational Wave Emission from the Crab Pulsar. <i>Astrophysical Journal</i> , 2008, 683, L45-L49. | 1.6 | 160 |
| 123 | Transverse spatial coherence of a transient nickellike silver soft-x-ray laser pumped by a single picosecond laser pulse. <i>Optics Letters</i> , 2004, 29, 881. | 1.7 | 15 |
| 124 | <title>Ablative capillary discharge plasma as a preformed medium for soft x-ray laser</title>. , 2001, 4505, 7. | | 0 |
| 125 | Thermo-optical properties of transversely pumped composite YAG rods with a Nd-doped core. <i>IEEE Journal of Quantum Electronics</i> , 2000, 36, 220-227. | 1.0 | 19 |
| 126 | Beam-quality improvement of a passively Q-switched Nd:YAG laser with a core-doped rod. <i>Applied Optics</i> , 1999, 38, 1777. | 2.1 | 16 |