Kishan Dholakia

List of Publications by Year in descending order

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458 papers

28,984 citations

79 h-index

6606

161

470 all docs

470 docs citations

times ranked

470

15378 citing authors

g-index

| # | Article | IF | CITATIONS |
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| 1 | Microfluidic sorting in an optical lattice. Nature, 2003, 426, 421-424. | 13.7 | 1,279 |
| 2 | Bessel beams: Diffraction in a new light. Contemporary Physics, 2005, 46, 15-28. | 0.8 | 1,112 |
| 3 | Optically mediated particle clearing using Airy wavepackets. Nature Photonics, 2008, 2, 675-678. | 15 . 6 | 1,067 |
| 4 | Mechanical equivalence of spin and orbital angular momentum of light:â€fan optical spanner. Optics Letters, 1997, 22, 52. | 1.7 | 1,030 |
| 5 | Simultaneous micromanipulation in multiple planes using a self-reconstructing light beam. Nature, 2002, 419, 145-147. | 13.7 | 962 |
| 6 | Controlled Rotation of Optically Trapped Microscopic Particles. Science, 2001, 292, 912-914. | 6.0 | 960 |
| 7 | The role of LiO2 solubility in O2 reduction in aprotic solvents and its consequences for Li–O2 batteries. Nature Chemistry, 2014, 6, 1091-1099. | 6.6 | 942 |
| 8 | Shaping the future of manipulation. Nature Photonics, 2011, 5, 335-342. | 15.6 | 848 |
| 9 | Generation of high-order Bessel beams by use of an axicon. Optics Communications, 2000, 177, 297-301. | 1.0 | 710 |
| 10 | Light-sheet microscopy using an Airy beam. Nature Methods, 2014, 11, 541-544. | 9.0 | 679 |
| 11 | Optical micromanipulation using a Bessel light beam. Optics Communications, 2001, 197, 239-245. | 1.0 | 531 |
| 12 | Membrane disruption by optically controlled microbubble cavitation. Nature Physics, 2005, 1, 107-110. | 6.5 | 501 |
| 13 | Creation and Manipulation of Three-Dimensional Optically Trapped Structures. Science, 2002, 296, 1101-1103. | 6.0 | 481 |
| 14 | Exploiting multimode waveguides for pure fibre-based imaging. Nature Communications, 2012, 3, 1027. | 5.8 | 450 |
| 15 | <i>Colloquium</i> : Gripped by light: Optical binding. Reviews of Modern Physics, 2010, 82, 1767-1791. | 16.4 | 449 |
| 16 | In situ wavefront correction and its application to micromanipulation. Nature Photonics, 2010, 4, 388-394. | 15.6 | 390 |
| 17 | Optical micromanipulation. Chemical Society Reviews, 2008, 37, 42-55. | 18.7 | 366 |
| 18 | Orbital angular momentum of a high-order Bessel light beam. Journal of Optics B: Quantum and Semiclassical Optics, 2002, 4, S82-S89. | 1.4 | 357 |

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| 19 | Second-harmonic generation and the orbital angular momentum of light. Physical Review A, 1996, 54, R3742-R3745. | 1.0 | 348 |
| 20 | Shaping the light transmission through a multimode optical fibre: complex transformation analysis and applications in biophotonics. Optics Express, 2011, 19, 18871. | 1.7 | 292 |
| 21 | Rotational Frequency Shift of a Light Beam. Physical Review Letters, 1998, 81, 4828-4830. | 2.9 | 285 |
| 22 | The production of multiringed Laguerre–Gaussian modes by computer-generated holograms. Journal of Modern Optics, 1998, 45, 1231-1237. | 0.6 | 269 |
| 23 | Dynamics of microparticles trapped in a perfect vortex beam. Optics Letters, 2013, 38, 4919. | 1.7 | 263 |
| 24 | Second-harmonic generation and the conservation of orbital angular momentum with high-order Laguerre-Gaussian modes. Physical Review A, 1997, 56, 4193-4196. | 1.0 | 254 |
| 25 | Auto-focusing and self-healing of Pearcey beams. Optics Express, 2012, 20, 18955. | 1.7 | 252 |
| 26 | Laser-induced rotation and cooling of a trapped microgyroscope in vacuum. Nature Communications, 2013, 4, 2374. | 5.8 | 251 |
| 27 | Measurement of the Rotational Frequency Shift Imparted to a Rotating Light Beam Possessing Orbital Angular Momentum. Physical Review Letters, 1998, 80, 3217-3219. | 2.9 | 241 |
| 28 | One-Dimensional Optically Bound Arrays of Microscopic Particles. Physical Review Letters, 2002, 89, 283901. | 2.9 | 218 |
| 29 | Optical vortex trap for resonant confinement of metal nanoparticles. Optics Express, 2008, 16, 4991. | 1.7 | 213 |
| 30 | Interfering Bessel beams for optical micromanipulation. Optics Letters, 2003, 28, 657. | 1.7 | 212 |
| 31 | Optical conveyor belt for delivery of submicron objects. Applied Physics Letters, 2005, 86, 174101. | 1.5 | 194 |
| 32 | Atom guiding along Laguerre-Gaussian and Bessel light beams. Applied Physics B: Lasers and Optics, 2000, 71, 549-554. | 1.1 | 190 |
| 33 | Femtosecond optical transfection of cells:viability and efficiency. Optics Express, 2006, 14, 7125. | 1.7 | 185 |
| 34 | Optical micromanipulation takes hold. Nano Today, 2006, 1, 18-27. | 6.2 | 183 |
| 35 | Applications of spatial light modulators in atom optics. Optics Express, 2003, 11, 158. | 1.7 | 175 |
| 36 | Dual beam fibre trap for Raman micro-spectroscopy of single cells. Optics Express, 2006, 14, 5779. | 1.7 | 172 |

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| 37 | Single cell optical transfection. Journal of the Royal Society Interface, 2010, 7, 863-871. | 1.5 | 163 |
| 38 | All-optical control of microfluidic components using form birefringence. Nature Materials, 2005, 4, 530-533. | 13.3 | 161 |
| 39 | Gaussian beams with very high orbital angular momentum. Optics Communications, 1997, 144, 210-213. | 1.0 | 160 |
| 40 | Femtosecond optical tweezers for in-situ control of two-photon fluorescence. Optics Express, 2004, 12, 3011. | 1.7 | 152 |
| 41 | Early detection of cervical neoplasia by Raman spectroscopy. International Journal of Cancer, 2007, 121, 2723-2728. | 2.3 | 150 |
| 42 | Tunable Bessel light modes: engineering the axial propagation. Optics Express, 2009, 17, 15558. | 1.7 | 150 |
| 43 | Optical tweezers: the next generation. Physics World, 2002, 15, 31-35. | 0.0 | 140 |
| 44 | Multiple optical trapping and binding: new routes to self-assembly. Journal of Physics B: Atomic, Molecular and Optical Physics, 2010, 43, 102001. | 0.6 | 135 |
| 45 | Light beats the spread: "nonâ€diffracting―beams. Laser and Photonics Reviews, 2010, 4, 529-547. | 4.4 | 134 |
| 46 | Optical sorting and detection of submicrometer objects in a motional standing wave. Physical Review B, 2006, 74, . | 1.1 | 132 |
| 47 | Optical levitation in a Bessel light beam. Applied Physics Letters, 2004, 85, 4001-4003. | 1.5 | 131 |
| 48 | Trapping in a Material World. ACS Photonics, 2016, 3, 719-736. | 3.2 | 130 |
| 49 | Trapping and manipulation of low-index particles in a two-dimensional interferometric optical trap. Optics Letters, 2001, 26, 863. | 1.7 | 124 |
| 50 | Bidirectional Optical Sorting of Gold Nanoparticles. Nano Letters, 2012, 12, 1923-1927. | 4.5 | 124 |
| 51 | High-order Laguerre–Gaussian laser modes for studies of cold atoms. Optics Communications, 1998, 156, 300-306. | 1.0 | 121 |
| 52 | Three-dimensional arrays of optical bottle beams. Optics Communications, 2003, 225, 215-222. | 1.0 | 119 |
| 53 | Optical dipole traps and atomic waveguides based on Bessel light beams. Physical Review A, 2001, 63, . | 1.0 | 118 |
| 54 | Optical trapping of three-dimensional structures using dynamic holograms. Optics Express, 2003, 11 , 3562. | 1.7 | 118 |

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| 55 | Metasurfaces for biomedical applications: imaging and sensing from a nanophotonics perspective. Nanophotonics, 2020, 10, 259-293. | 2.9 | 118 |
| 56 | Manipulation and filtration of low index particles with holographic Laguerre-Gaussian optical trap arrays. Optics Express, 2004, 12, 593. | 1.7 | 117 |
| 57 | Long-Range One-Dimensional Longitudinal Optical Binding. Physical Review Letters, 2008, 101, 143601. | 2.9 | 116 |
| 58 | Orbital angular momentum transfer in helical Mathieu beams. Optics Express, 2006, 14, 4182. | 1.7 | 115 |
| 59 | Optical tweezers with increased axial trapping efficiency. Journal of Modern Optics, 1998, 45, 1943-1949. | 0.6 | 113 |
| 60 | Construction and calibration of an optical trap on a fluorescence optical microscope. Nature Protocols, 2007, 2, 3226-3238. | 5.5 | 113 |
| 61 | Light forces the pace: optical manipulation for biophotonics. Journal of Biomedical Optics, 2010, 15, 041503. | 1.4 | 110 |
| 62 | In-fiber common-path optical coherence tomography using a conical-tip fiber. Optics Express, 2009, 17, 2375. | 1.7 | 109 |
| 63 | Online Fluorescence Suppression in Modulated Raman Spectroscopy. Analytical Chemistry, 2010, 82, 738-745. | 3.2 | 106 |
| 64 | Parametric down-conversion for light beams possessing orbital angular momentum. Physical Review A, 1999, 59, 3950-3952. | 1.0 | 105 |
| 65 | Optical deflection and sorting of microparticles in a near-field optical geometry. Optics Express, 2008, 16, 3712. | 1.7 | 105 |
| 66 | Experimental observation of optical vortex evolution in a Gaussian beam with an embedded fractional phase step. Optics Communications, 2004, 239, 129-135. | 1.0 | 104 |
| 67 | Propagation characteristics of Airy beams: dependence upon spatial coherence and wavelength. Optics Express, 2009, 17, 13236. | 1.7 | 103 |
| 68 | Fractionation of polydisperse colloid with acousto-optically generated potential energy landscapes. Optics Letters, 2007, 32, 1144. | 1.7 | 99 |
| 69 | Nanoshells for Surface-Enhanced Raman Spectroscopy in Eukaryotic Cells: Cellular Response and Sensor Development. ACS Nano, 2009, 3, 3613-3621. | 7.3 | 97 |
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| 71 | Visualization of the birth of an optical vortex using diffraction from a triangular aperture. Optics Express, 2011, 19, 5760. | 1.7 | 95 |
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| 75 | Revolving interference patterns for the rotation of optically trapped particles. Optics Communications, 2002, 201, 21-28. | 1.0 | 88 |
| 76 | Generation of multiple Bessel beams for a biophotonics workstation. Optics Express, 2008, 16, 14024. | 1.7 | 88 |
| 77 | Brownian Particle in an Optical Potential of the Washboard Type. Physical Review Letters, 2003, 91, 038101. | 2.9 | 84 |
| 78 | Photoporation and cell transfection using a violet diode laser. Optics Express, 2005, 13, 595. | 1.7 | 84 |
| 79 | Optical redistribution of microparticles and cells between microwells. Lab on A Chip, 2009, 9, 1334. | 3.1 | 81 |
| 80 | Transverse particle dynamics in a Bessel beam. Optics Express, 2007, 15, 13972. | 1.7 | 80 |
| 81 | Harnessing speckle for a sub-femtometre resolved broadband wavemeter and laser stabilization. Nature Communications, 2017, 8, 15610. | 5.8 | 80 |
| 82 | Nonlinear optical response of colloidal suspensions. Optics Express, 2009, 17, 10277. | 1.7 | 79 |
| 83 | Optimal algorithm for fluorescence suppression of modulated Raman spectroscopy. Optics Express, 2010, 18, 11382. | 1.7 | 79 |
| 84 | A compact Airy beam light sheet microscope with a tilted cylindrical lens. Biomedical Optics Express, 2014, 5, 3434. | 1.5 | 78 |
| 85 | Optical Eigenmodes; exploiting the quadratic nature of the light-matter interaction. Optics Express, 2011, 19, 933. | 1.7 | 77 |
| 86 | Multi-modal approach using Raman spectroscopy and optical coherence tomography for the discrimination of colonic adenocarcinoma from normal colon. Biomedical Optics Express, 2013, 4, 2179. | 1.5 | 77 |
| 87 | Optically Anisotropic Colloids of Controllable Shape. Advanced Materials, 2005, 17, 680-684. | 11.1 | 76 |
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| 89 | Direct electron-beam writing of continuous spiral phase plates in negative resist with high power efficiency for optical manipulation. Applied Physics Letters, 2004, 85, 5784-5786. | 1.5 | 75 |
| 90 | The resolution of optical traps created by Light Induced Dielectrophoresis (LIDEP). Optics Express, 2007, 15, 12619. | 1.7 | 73 |

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| 91 | Analysis of optical binding in one dimension. Applied Physics B: Lasers and Optics, 2006, 84, 149-156. | 1.1 | 71 |
| 92 | Visualization of optical binding of microparticles using a femtosecond fiber optical trap. Optics Express, 2006, 14, 3677. | 1.7 | 69 |
| 93 | Comparing acoustic and optical forces for biomedical research. Nature Reviews Physics, 2020, 2, 480-491. | 11.9 | 69 |
| 94 | White light propagation invariant beams. Optics Express, 2005, 13, 6657. | 1.7 | 67 |
| 95 | Femtosecond optical transfection of individual mammalian cells. Nature Protocols, 2013, 8, 1216-1233. | 5. 5 | 67 |
| 96 | Three-dimensional optical forces and transfer of orbital angular momentum from multiringed light beams to spherical microparticles. Journal of the Optical Society of America B: Optical Physics, 2004, 21, 1749. | 0.9 | 66 |
| 97 | Optical trapping for analytical biotechnology. Current Opinion in Biotechnology, 2012, 23, 16-21. | 3.3 | 66 |
| 98 | Optical trapping of NaYF4:Er3+,Yb3+ upconverting fluorescent nanoparticles. Nanoscale, 2013, 5, 12192. | 2.8 | 66 |
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| 104 | Is it possible to create a perfect fractional vortex beam?. Optica, 2017, 4, 330. | 4.8 | 60 |
| 105 | Optical Trapping Takes Shape: The Use of Structured Light Fields. Advances in Atomic, Molecular and Optical Physics, 2008, 56, 261-337. | 2.3 | 59 |
| 106 | An experiment to study a "nondiffracting―light beam. American Journal of Physics, 1999, 67, 912-915. | 0.3 | 57 |
| 107 | Enhanced operation of femtosecond lasers and applications in cell transfection. Journal of Biophotonics, 2008, 1, 183-199. | 1.1 | 57 |
| 108 | Modulated Raman spectroscopy for enhanced identification of bladder tumor cells in urine samples. Journal of Biomedical Optics, 2011, 16, 037002. | 1.4 | 57 |

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| 109 | Targeted optical injection of gold nanoparticles into single mammalian cells. Journal of Biophotonics, 2009, 2, 736-743. | 1.1 | 56 |
| 110 | Measuring the orbital angular momentum of partially coherent optical vortices through singularities in their cross-spectral density functions. Optics Letters, 2012, 37, 4949. | 1.7 | 56 |
| 111 | GPU accelerated toolbox for real-time beam-shaping in multimode fibres. Optics Express, 2014, 22, 2933. | 1.7 | 56 |
| 112 | Discrimination of bladder cancer cells from normal urothelial cells with high specificity and sensitivity: Combined application of atomic force microscopy and modulated Raman spectroscopy. Acta Biomaterialia, 2014, 10, 2043-2055. | 4.1 | 56 |
| 113 | Optically guided neuronal growth at near infrared wavelengths. Optics Express, 2006, 14, 9786. | 1.7 | 54 |
| 114 | Effect of pulse temporal shape on optical trapping and impulse transfer using ultrashort pulsed lasers. Optics Express, 2010, 18, 7554. | 1.7 | 53 |
| 115 | Random super-prism wavelength meter. Optics Letters, 2014, 39, 96. | 1.7 | 53 |
| 116 | Ion Oscillation Frequencies in a Combined Trap. Journal of Modern Optics, 1992, 39, 305-316. | 0.6 | 52 |
| 117 | Optical guiding of microscopic particles in femtosecond and continuous wave Bessel light beams. Optics Express, 2004, 12, 2560. | 1.7 | 52 |
| 118 | Atom guiding along high order Laguerre–Gaussian light beams formed by spatial light modulation. Journal of Modern Optics, 2006, 53, 547-556. | 0.6 | 50 |
| 119 | Cellular and Colloidal Separation Using Optical Forces. Methods in Cell Biology, 2007, 82, 467-495. | 0.5 | 50 |
| 120 | Guided neuronal growth using optical line traps. Optics Express, 2008, 16, 10507. | 1.7 | 50 |
| 121 | Modulated Raman Spectroscopy for Enhanced Cancer Diagnosis at the Cellular Level. Sensors, 2015, 15, 13680-13704. | 2.1 | 50 |
| 122 | Efficiency of second-harmonic generation with Bessel beams. Physical Review A, 1999, 60, 2438-2441. | 1.0 | 49 |
| 123 | Optical binding of two cooled micro-gyroscopes levitated in vacuum. Optica, 2018, 5, 910. | 4.8 | 49 |
| 124 | Application of dynamic diffractive optics for enhanced femtosecond laser based cell transfection. Journal of Biophotonics, 2010, 3, 696-705. | 1.1 | 48 |
| 125 | Fiber probe based microfluidic raman spectroscopy. Optics Express, 2010, 18, 7642. | 1.7 | 48 |
| 126 | Optical path clearing and enhanced transmission through colloidal suspensions. Optics Express, 2010, 18, 17130. | 1.7 | 48 |

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| 127 | Raman imaging through a single multimode fibre. Optics Express, 2017, 25, 13782. | 1.7 | 48 |
| 128 | Deep Learning Enabled Laser Speckle Wavemeter with a High Dynamic Range. Laser and Photonics Reviews, 2020, 14, 2000120. | 4.4 | 47 |
| 129 | Effect of the radial and azimuthal mode indices of a partially coherent vortex field upon a spatial correlation singularity. New Journal of Physics, 2013, 15, 113053. | 1.2 | 46 |
| 130 | Multimode fibre: Light-sheet microscopy at the tip of a needle. Scientific Reports, 2015, 5, 18050. | 1.6 | 46 |
| 131 | Enhancement of image quality and imaging depth with Airy light-sheet microscopy in cleared and non-cleared neural tissue. Biomedical Optics Express, 2016, 7, 4021. | 1.5 | 46 |
| 132 | Fibre based cellular transfection. Optics Express, 2008, 16, 17007. | 1.7 | 45 |
| 133 | Simultaneous determination of the constituent azimuthal and radial mode indices for light fields possessing orbital angular momentum. Applied Physics Letters, 2012, 100, . | 1.5 | 45 |
| 134 | Overcoming the speckle correlation limit to achieve a fiber wavemeter with attometer resolution. Optics Letters, 2019, 44, 1367. | 1.7 | 45 |
| 135 | Picoliter Rheology of Gaseous Media Using a Rotating Optically Trapped Birefringent Microparticle. Analytical Chemistry, 2011, 83, 8855-8858. | 3.2 | 43 |
| 136 | Integrated single- and two-photon light sheet microscopy using accelerating beams. Scientific Reports, 2017, 7, 1435. | 1.6 | 43 |
| 137 | A dual beam photonic crystal fiber trap for microscopic particles. Applied Physics Letters, 2008, 93, 041110. | 1.5 | 42 |
| 138 | The Use of Wavelength Modulated Raman Spectroscopy in Label-Free Identification of T Lymphocyte Subsets, Natural Killer Cells and Dendritic Cells. PLoS ONE, 2015, 10, e0125158. | 1.1 | 42 |
| 139 | Near infrared spectroscopic analysis of single malt Scotch whisky on an optofluidic chip. Optics Express, 2011, 19, 22982. | 1.7 | 41 |
| 140 | Three-photon light-sheet fluorescence microscopy. Optics Letters, 2018, 43, 5484. | 1.7 | 41 |
| 141 | Multimodal discrimination of immune cells using a combination of Raman spectroscopy and digital holographic microscopy. Scientific Reports, 2017, 7, 43631. | 1.6 | 40 |
| 142 | Optical hooks. Nature Photonics, 2019, 13, 229-230. | 15.6 | 40 |
| 143 | Guiding a cold atomic beam along a co-propagating and oblique hollow light guide. Optics Communications, 2002, 214, 247-254. | 1.0 | 39 |
| 144 | Spatially optimized gene transfection by laser-induced breakdown of optically trapped nanoparticles. Applied Physics Letters, 2011, 98, . | 1.5 | 39 |

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| 145 | Rotational Dynamics and Heating of Trapped Nanovaterite Particles. ACS Nano, 2016, 10, 11505-11510. | 7.3 | 39 |
| 146 | Wide-field multiphoton imaging through scattering media without correction. Science Advances, 2018, 4, eaau1338. | 4.7 | 39 |
| 147 | Optical trapping with planar silicon metalenses. Optics Letters, 2018, 43, 3224. | 1.7 | 39 |
| 148 | Is there an optimal basis to maximise optical information transfer?. Scientific Reports, 2016, 6, 22821. | 1.6 | 38 |
| 149 | Exploring the Limit of Multiplexed Near-Field Optical Trapping. ACS Photonics, 2021, 8, 2060-2066. | 3.2 | 38 |
| 150 | Characterisation of an extended cavity violet diode laser. Optics Communications, 2000, 175, 185-188. | 1.0 | 37 |
| 151 | Phototransfection of mammalian cells using femtosecond laser pulses: optimization and applicability to stem cell differentiation. Journal of Biomedical Optics, 2010, 15, 041507. | 1.4 | 37 |
| 152 | Quantitative phase study of the dynamic cellular response in femtosecond laser photoporation. Biomedical Optics Express, 2010, 1, 414. | 1.5 | 37 |
| 153 | Enhancement of optical forces using slow light in a photonic crystal waveguide. Optica, 2015, 2, 816. | 4.8 | 37 |
| 154 | Moving interference patterns created using the angular Doppler-effect. Optics Express, 2002, 10, 844. | 1.7 | 36 |
| 155 | Raman-Activated Cell Counting for Profiling Carbon Dioxide Fixing Microorganisms. Journal of Physical Chemistry A, 2012, 116, 6560-6563. | 1.1 | 36 |
| 156 | Biologically enabled sub-diffractive focusing. Optics Express, 2014, 22, 27214. | 1.7 | 36 |
| 157 | Optical eigenmode imaging. Physical Review A, 2011, 84, . | 1.0 | 34 |
| 158 | Dynamics of a levitated microparticle in vacuum trapped by a perfect vortex beam: three-dimensional motion around a complex optical potential. Journal of the Optical Society of America B: Optical Physics, 2017, 34, C14. | 0.9 | 34 |
| 159 | Optical trapping and spectral analysis of aerosols with a supercontiuum laser source. Optics Express, 2008, 16, 7655. | 1.7 | 33 |
| 160 | Optical injection of mammalian cells using a microfluidic platform. Biomedical Optics Express, 2010, 1, 527. | 1.5 | 33 |
| 161 | High-throughput optical injection of mammalian cells using a Bessel light beam. Lab on A Chip, 2012, 12, 4816. | 3.1 | 33 |
| 162 | Orbital-angular-momentum transfer to optically levitated microparticles in vacuum. Physical Review A, 2016, 94, . | 1.0 | 33 |

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| 163 | Photopolymerization with Light Fields Possessing Orbital Angular Momentum: Generation of Helical Microfibers. ACS Photonics, 2018, 5, 4156-4163. | 3.2 | 33 |
| 164 | Light sheet fluorescence microscopy for neuroscience. Journal of Neuroscience Methods, 2019, 319, 16-27. | 1.3 | 33 |
| 165 | Beth's experiment using optical tweezers. American Journal of Physics, 2001, 69, 271-276. | 0.3 | 32 |
| 166 | Laser-induced breakdown of an optically trapped gold nanoparticle for single cell transfection. Optics Letters, 2013, 38, 3402. | 1.7 | 32 |
| 167 | Accelerating vortices in Airy beams. Proceedings of SPIE, 2009, , . | 0.8 | 31 |
| 168 | Photon-correlation detection of ion-oscillation frequencies in quadrupole ion traps. Physical Review A, 1993, 47, 441-448. | 1.0 | 30 |
| 169 | Optical Separation of Cells on Potential Energy Landscapes: Enhancement With Dielectric Tagging. IEEE Journal of Selected Topics in Quantum Electronics, 2007, 13, 1646-1654. | 1.9 | 30 |
| 170 | Wavefront corrected light sheet microscopy in turbid media. Applied Physics Letters, 2012, 100, . | 1.5 | 30 |
| 171 | Creating and probing of a perfect vortex in situ with an optically trapped particle. Optical Review, 2015, 22, 162-165. | 1.2 | 30 |
| 172 | An Organic Vortex Laser. ACS Nano, 2018, 12, 2389-2394. | 7.3 | 30 |
| 173 | Coherent oscillations of a levitated birefringent microsphere in vacuum driven by nonconservative rotation-translation coupling. Science Advances, 2020, 6, eaaz9858. | 4.7 | 30 |
| 174 | Optical trapping in counter-propagating Bessel beams. , 2004, , . | | 29 |
| 175 | Monolithic integration of microfluidic channels and semiconductor lasers. Optics Express, 2006, 14, 7723. | 1.7 | 29 |
| 176 | Optical detection and grading of lung neoplasia by Raman microspectroscopy. International Journal of Cancer, 2009, 124, 376-380. | 2.3 | 29 |
| 177 | Integrated holographic system for all-optical manipulation of developing embryos. Biomedical Optics Express, 2011, 2, 1564. | 1.5 | 29 |
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| 179 | Generation of attenuation-compensating Airy beams. Optics Letters, 2014, 39, 4950. | 1.7 | 28 |
| 180 | Visualization of podocyte substructure with structured illumination microscopy (SIM): a new approach to nephrotic disease. Biomedical Optics Express, 2016, 7, 302. | 1,5 | 28 |

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| 181 | Optical manipulation: advances for biophotonics in the 21st century. Journal of Biomedical Optics, 2021, 26, . | 1.4 | 28 |
| 182 | Integrated optical transfection system using a microlens fiber combined with microfluidic gene delivery. Biomedical Optics Express, 2010, 1, 694. | 1.5 | 27 |
| 183 | Fast targeted gene transfection and optogenetic modification of single neurons using femtosecond laser irradiation. Scientific Reports, 2013, 3, 3281. | 1.6 | 27 |
| 184 | A polarisation spectrometer locked diode laser for trapping cold atoms. Optics Communications, 1999, 170, 79-84. | 1.0 | 26 |
| 185 | Cavity-enhanced optical bottle beam as a mechanical amplifier. Physical Review A, 2002, 66, . | 1.0 | 25 |
| 186 | Imaging in optical micromanipulation using two-photon excitation. New Journal of Physics, 2004, 6, 136-136. | 1.2 | 25 |
| 187 | Theory and simulation of the bistable behaviour of optically bound particles in the Mie size regime. New Journal of Physics, 2006, 8, 139-139. | 1.2 | 25 |
| 188 | Fast volume-scanning light sheet microscopy reveals transient neuronal events. Biomedical Optics Express, 2018, 9, 2154. | 1.5 | 25 |
| 189 | The Temperature of an Optically Trapped, Rotating Microparticle. ACS Photonics, 2018, 5, 3772-3778. | 3.2 | 25 |
| 190 | Light sheet microscopy with acoustic sample confinement. Nature Communications, 2019, 10, 669. | 5.8 | 25 |
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| 192 | Ion dynamics in perturbed quadrupole ion traps. Physical Review A, 1998, 57, 1944-1956. | 1.0 | 24 |
| 193 | Optical chromatography using a photonic crystal fiber with on-chip fluorescence excitation. Optics Express, 2010, 18, 6396. | 1.7 | 24 |
| 194 | Rotation of two trapped microparticles in vacuum: observation of optically mediated parametric resonances. Optics Letters, 2015, 40, 4751. | 1.7 | 24 |
| 195 | Label-free optical vibrational spectroscopy to detect the metabolic state of M. tuberculosis cells at the site of disease. Scientific Reports, 2017, 7, 9844. | 1.6 | 24 |
| 196 | Real-time monitoring of live mycobacteria with a microfluidic acoustic-Raman platform. Communications Biology, 2020, 3, 236. | 2.0 | 24 |
| 197 | Spatial transformation of Laguerre-Gaussian laser modes. Journal of Modern Optics, 2001, 48, 783-787. | 0.6 | 24 |
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