

References

- [1] A. Ashkin, "Acceleration and Trapping of Particles by Radiation Pressure," *Phys. Rev. Lett.*, **24**, 156 (1970).
- [2] A. Ashkin, "Applications of Laser Radiation Pressure," *Science*, **210**, 1081 (1980).
- [3] M. Brunner, J. Dobnikar, et al., "Direct Measurement of Three-Body Interactions amongst Charged Colloids," *Phys. Rev. Lett.*, **92**, 078301 (2004).
- [4] K. Ladavac, and D. G. Grier, "Microoptomechanical pumps assembled and driven by holographic optical vortex arrays," *Opt. Exp.* **12**, 1144 (2004).
- [5] A. Ashkin, J. M. Dziedzic, J. E. Bjorkholm, and S. Chu., "Observation of a single-beam gradient force optical trap for dielectric particles," *Opt. Lett.* **11**, 288 (1986).
- [6] K. Sasaki, M. Koshioka, H. Misawa, N. Kitamura, and H. Masuhara, "Optical trapping of a metal particle and a water droplet by a scanning laser beam," *Appl. Phys. Lett.*, **60**, 807 (1992).
- [7] A. Yariv, and P. Yeh, *Photonics*, Sixth edition, Oxford University Press, New York (2007).
- [8] J. Arlt, and M. J. Padgett, "Generation of a beam with a dark focus surrounded by regions of higher intensity the optical bottle beam," *Opt. Lett.*, **25**, 191 (2000).
- [9] J. Yin, Y. Zhu, and Z. Wang, "Atom guiding and cooling in a dark hollow laser beam," *Phys. Rev. A*, **58**, 509 (1998).
- [10] M. P. MacDonald, L. Paterson, and K. Dholakia, "Trapping and manipulation of low-index particles in a two-dimensional interferometric optical trap," *Opt. Lett.*, **26**, 863 (2001).
- [11] J. C. Gutierrez-Vega, R. Rodriguez-Masegosa, and S. Chavez-Cerda, "Focusing evolution of generalized propagation invariant optical fields," *J. Opt. A*, **5**, 276 (2003).
- [12] B. S. Ahluwalia, X. Yuan, and S. Tao, "Bottle beam based optical trapping system for three-dimensional trapping of high and low index microparticles," *Nanoengineering*, **5931**, (2005).
- [13] R. Ozeri, L. Khaykovich, and N. Davidson, "Long spin relaxation times in a single-beam blue-detuned optical trap," *Phys. Rev. A*, **59**, 1750 (1999).
- [14] D. McGloin, G. C. Spalding, H. Melville, W. Sibbett, and K. Dholakia, "Applications of spatial light modulators in atom optics," *Opt. Exp.*, **11**, 158 (2003).
- [15] P. T. Tai, W. F. Hsieh, C. H. Chen, "Direct generation of optical bottle beams from a tightly focused end-pumped solid-state laser," *Opt. Exp.* **12**, 5827 (2004).
- [16] C. H. Chen, P. T. Tai, and W. F. Hsieh, "Bottle beam from a bare laser for single-beam trapping," *Appl. Opt.* **43**, 6001 (2004).

- [17] M. D. Wei, W. L. Shiao, and Y. T. Lin, "Adjustable generation of bottle and hollow beams using an axico," *Opt. Commun.*, **248**, 7 (2005).
- [18] R. R. Alfano and S. L. Shapiro, "Emission in the Region 4000 to 7000 Å Via Four-Photon Coupling in Glass," *Phys. Rev. Lett.*, **24**, 584 (1970).
- [19] J. K. Ranka, R. S. Windeler, "Visible continuum generation in air silica microstructure optical fibers with anomalous dispersion at 800nm," *Opt. Lett.*, **25**, 25 (2000).
- [20] W. H. Reeves, D. V. Skryyabin, F. Biancalana, J. C. Knight, P. St. J. Russell, F. G. Omenetto, A. Efimov, and A. J. Taylor, "Transformation and control of ultra-short pulses in dispersion-engineered photonic crystal fibres," *Nature*, **424**, 511 (2003).
- [21] G. Genty, M. Lehtonen, and H. Ludvigsen, "Spectral broadening of femtosecond pulses into continuum radiation in microstructured fibers," *Opt. Exp.*, **10**, 1083 (2002).
- [22] S. R. Friberg and K. W. DeLong, "Breakup of bound higher-order solitons," *Opt. Lett.*, **17**, 979 (1992).
- [23] F. M. Mitschke and L. F. Mollenauer, "Discovery of the soliton self-frequency shift," *Opt. Lett.*, **11**, 659 (1986).
- [24] N. I. Nikolov, "Improving efficiency of supercontinuum generation in photonic crystal fibers by direct degenerate four-wave mixing," *J. Opt. Soc. Am. B*, **20**, 2329 (2003).
- [25] I. Hartl et al., "Ultrahigh-resolution optical coherence tomography using continuum generation in an air silica microstructured optical fiber," *Opt. Lett.*, **26**, 608 (2001).
- [26] M. Seefeldt, A. Heuer, and R. Menzel, "Compact white-light source with an average output power of 2.4 W and 900 nm spectral bandwidth," *Opt. Commun.*, **216**, 199 (2003).
- [27] T. Udem, R. Holzwarth, and T. W. Hansch, "Optical frequency metrology," *Nature*, **416**, 233 (2002).
- [28] D. J. Jones et al., "Carrier-Envelope Phase Control of femtosecond mode-locked lasers and direct optical frequency synthesis," *Science*, **288**, 635 (2000).
- [29] A. Unterhuber et al., "Advances in broad bandwidth light sources for ultrahigh resolution optical coherence tomography," *Phys. Med. Bio.*, **49**, 1235 (2004).
- [30] P. Li, K. Shi, and Z. Liu, "Manipulation and spectroscopy of a single particle by use of white light optical tweezer," *Opt. Lett.*, **30**, 156 (2005).
- [31] P. Fischer et al., "Enhanced optical guiding of colloidal particles using a supercontinuum light source," *Opt. Exp.*, **14**, 5792 (2006).
- [32] J. H. McLeod, "The Axicon A New Type of Optical Element," *J. Opt. Soc. Am.*, **44**, 592 (1954).
- [33] J. E. Duruvin, J. J. Miceli, and J. H. Eberly, "Nondiffracting optical fields some remarks on their analysis and synthesis," *Phys. Rev. Lett.*, **54**, 1499 (1987).
- [34] G. Indebetouw, "Comment on Nondiffracting Beams," *J. Opt. Soc. Am. A*, **6**, 150

- (1989).
- [35] J. W. Goodman, *Introduction to Fourier Optics*, McGraw-Hill Book Co., Second Edition, Singapore (1996).
- [36] V. Garces-Chavez, K. Volke-Sepulveda, S. Chavez-Cerda, W. Sibbett, and K. Dholakia, "Transfer of orbital angular momentum to an optically trapped low-index particle," *Phys. Rev. A*, **66**, 063402 (2002).
- [37] C. Xie, M. A. Dinno, and Y. Li, "Observation of asymmetrically dynamic motion of single colloidal particles in a polarized optical trap," *Opt. Exp.*, **13**, 1622 (2005).
- [38] A. Ciattoni, B. Crosignani, and P. D. Porto, "Vectorial analytical description of propagation of a highly nonparaxial beam," *Opt. Commun.*, **202**, 17 (2002).
- [39] R. K. Luneburg, *Mathematical Theory of Optics*, University of California Press, Berkeley (1966).
- [40] S. H. Wiersma, P. Torok, T.D. Visser, and P. Varga, "Comparison of different theories for focusing through a plane surface," *J. Opt. Soc. Am. A*, **14**, 1482 (1997).
- [41] P. Torok, P. Varga, Z. Laczik, and G. R. Booker, "Electromagnetic diffraction of light focused through a planer interface between materials of mismatched refractive indices an integral representation," *J. Opt. Soc. Am. A*, **12**, 325 (1995).
- [42] S. H. Wiersma and T. D. Visser, "Defocusing of a converging electromagnetic wave by a plane dielectric interface," *J. Opt. Soc. Am. A*, **13**, 320 (1996).
- [43] Y. Zhang and L. Wang, "Vector propagation of radially polarized Gaussian beams diffracted by an axicon," *J. Opt. Soc. Am. A*, **22**, 2542 (2005).