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1. INTRODUCTION

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A. Sample Figure
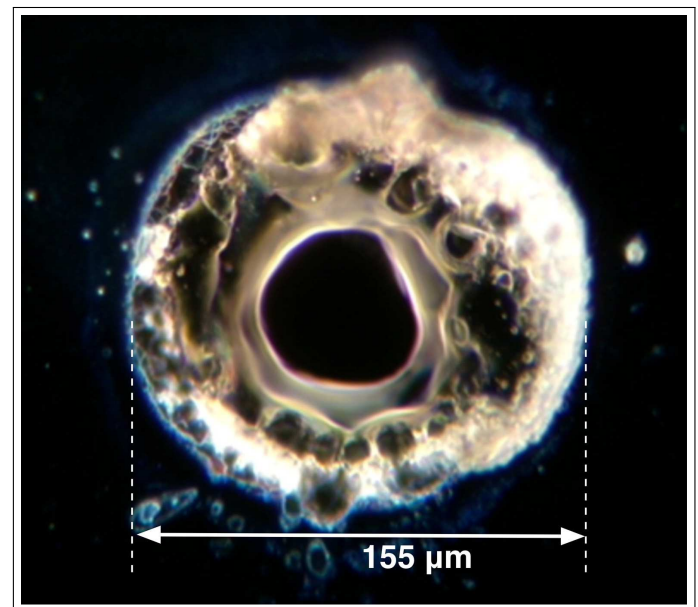
Figure 1 shows an example figure.

Fig. 1. Dark-field image of a point absorber.

B. Sample Table

Table 1 shows an example table.

4. SAMPLE EQUATION

Let $X_1, X_2, \ldots, X_n$ be a sequence of independent and identically distributed random variables with $E[X_i] = \mu$ and $Var[X_i] = \sigma^2 < \infty$, and let

$$S_n = \frac{X_1 + X_2 + \cdots + X_n}{n} = \frac{1}{n}\sum_{i}^{n} X_i \tag{1}$$

Table 1. Shape Functions for Quadratic Line Elements

local node	$\{N\}_m$	$\{\Phi_i\}_m \ (i = x, y, z)$
$m = 1$	$L_1(2L_1 - 1)$	Φ_{i1}
$m = 2$	$L_2(2L_2 - 1)$	Φ_{i2}
$m = 3$	$L_3 = 4L_1L_2$	Φ_{i3}

denote their mean. Then as n approaches infinity, the random variables $\sqrt{n}(S_n - \mu)$ converge in distribution to a normal $\mathcal{N}(0, \sigma^2)$.

5. SAMPLE ALGORITHM

Algorithms can be included using the commands as shown in algorithm 1.

Algorithm 1. Euclids algorithm

1: **procedure** EUCLID(a, b)   ▷ The g.c.d. of a and b
2:    $r \leftarrow a \bmod b$
3:    **while** $r \neq 0$ **do**   ▷ We have the answer if r is 0
4:       $a \leftarrow b$
5:       $b \leftarrow r$
6:       $r \leftarrow a \bmod b$
7:    **return** b ▷ The gcd is b

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B. Sample Dataset Citation

1. M. Partridge, "Spectra evolution during coating," figshare (2014), http://dx.doi.org/10.6084/m9.figshare.1004612.

C. Sample Code Citation

2. C. Rivers, "Epipy: Python tools for epidemiology," Figshare (2014) [retrieved 13 May 2015], http://dx.doi.org/10.6084/m9.figshare.1005064.

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Backmatter sections should be listed in the order Funding/Acknowledgment/Disclosures/Data Availability State-
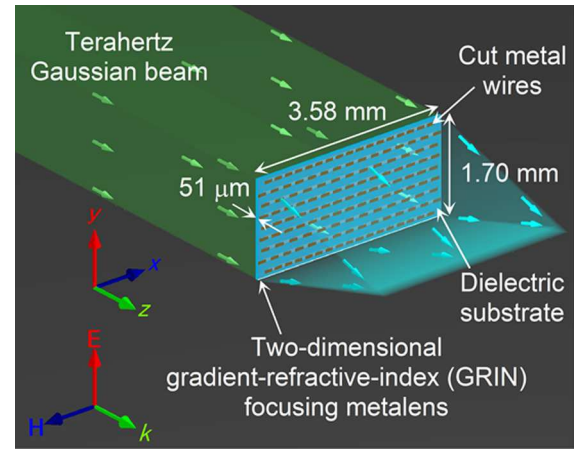
Fig. 2. Terahertz focusing metalens.

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REFERENCES

1. Y. Zhang, S. Qiao, L. Sun, Q. W. Shi, W. Huang, L. Li, and Z. Yang, Opt. Express **22**, 11070 (2014).
2. Optica Publishing Group, "Optica," https://opg.optica.org.
3. P. Forster, V. Ramaswamy, P. Artaxo, T. Bernsten, R. Betts, D. Fahey, J. Haywood, J. Lean, D. Lowe, G. Myhre, J. Nganga, R. Prinn, G. Raga, M. Schulz, and R. V. Dorland, "Changes in atmospheric consituents and in radiative forcing," in *Climate Change 2007: The Physical Science Basis. Contribution of Working Group 1 to the Fourth assesment report of Intergovernmental Panel on Climate Change,* S. Solomon, D. Qin, M. Manning, Z. Chen, M. Marquis, K. B. Averyt, M. Tignor, and H. L. Miler, eds. (Cambridge University Press, 2007).
4. R. McKay, "X-ray crystallography," Ph.D. thesis, Princeton University (1982).
5. V. S. C. Manga Rao and S. Hughes, Phys. Rev. B **75** (2007).

FULL REFERENCES

1. Y. Zhang, S. Qiao, L. Sun, Q. W. Shi, W. Huang, L. Li, and Z. Yang, "Photoindehehuced active terahertz metamaterials with nanostructured vanadium dioxide film deposited by sol-gel method," Opt. Express **22**, 11070–11078 (2014).
2. Optica Publishing Group, "Optica," https://opg.optica.org.
3. P. Forster, V. Ramaswamy, P. Artaxo, T. Bernsten, R. Betts, D. Fahey, J. Haywood, J. Lean, D. Lowe, G. Myhre, J. Nganga, R. Prinn, G. Raga, M. Schulz, and R. V. Dorland, "Changes in atmospheric consituents and in radiative forcing," in *Climate Change 2007: The Physical Science Basis. Contribution of Working Group 1 to the Fourth assesment report of Intergovernmental Panel on Climate Change,* S. Solomon, D. Qin, M. Manning, Z. Chen, M. Marquis, K. B. Averyt, M. Tignor, and H. L. Miler, eds. (Cambridge University Press, 2007).
4. R. McKay, "X-ray crystallography," Ph.D. thesis, Princeton University (1982).
5. V. S. C. Manga Rao and S. Hughes, "Single quantum-dot Purcell factor and β factor in a photonic crystal waveguide," Phys. Rev. B **75** (2007).