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#### 1. INTRODUCTION

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#### A. Sample Figure

<sup>35</sup> Figure 1 shows an example figure.

#### B. Sample Table

Table 1 shows a sample table. Note that tables should have titles and not captions. To include additional information, use footnotes as shown in the example below.

**Table 1.** Shape Functions for Quadratic Line Elements<sup>a</sup>

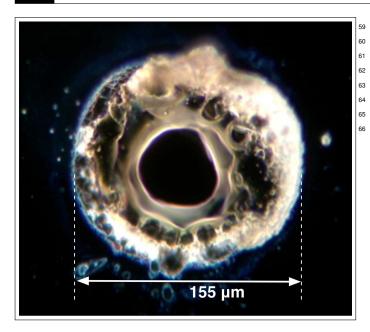
Local Node	$\{N\}_m$	$\{\Phi_i\}_m\ (i=x,y,z)$	
m = 1	$L_1(2L_1-1)$	$\Phi_{i1}$	
m = 2	$L_2(2L_2-1)$	$\Phi_{i2}$	
m = 3	$L_3 = 4L_1L_2$	$\Phi_{i3}$	
<sup>a</sup> Only quadratic line elements are included here.			

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**Fig. 1.** Dark-field image of a point absorber. Reprinted with permission from Smith *et al.*, Phys. Rev. Appl. **17**, 12345 (2024) [46], Copyright 2024 by the American Physical Society.

#### 4. SAMPLE DISPLAY EQUATION

The following is an example of a sample display equation in surrounding text: Let  $X_1, X_2, \ldots, X_n$  be a sequence of independent and identically distributed random variables with  $\mathrm{E}[X_i] = \mu$  and  $\mathrm{Var}[X_i] = \sigma^2 < \infty$ , and let

$$S_n = \frac{X_1 + X_2 + \dots + X_n}{n} = \frac{1}{n} \sum_{i=1}^{n} X_i$$
 (1)

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

## 48 5. SAMPLE ALGORITHM

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<sup>49</sup> Algorithms can be included using the commands as shown in <sup>50</sup> algorithm 1.

## Algorithm 1. Euclid's algorithm

1: <b>procedure</b> EUCLID( <i>a</i> , <i>b</i> )		⊳ The g.c.d. of a and b
2:	$r \leftarrow a \bmod b$	
3:	while $r \neq 0$ do	b We have the answer if r is 0
4:	$a \leftarrow b$	
5:	$b \leftarrow r$	
6:	$r \leftarrow a \bmod b$	
7:	${f return}\; b$	⊳ The gcd is b

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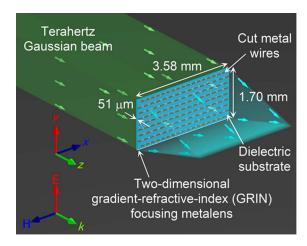


Fig. 2. Terahertz focusing metalens.

#### **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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#### REFERENCES

148

149

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- 1. Y. Zhang, S. Qiao, L. Sun, et al., Opt. Express 22, 11070 (2014).
- 2. Optica Publishing Group, "Optica," https://opg.optica.org.
- P. Forster, V. Ramaswamy, P. Artaxo, et al., "Changes in atmospheric consituents and in radiative forcing," in Climate Change 2007: The Physical Science Basis. Contribution of Working Group 1 to the Fourth Assessment Report of Intergovernmental Panel on Climate Change, S. Solomon, D. Qin, M. Manning, et al., eds. (Cambridge University Press, 2007).
- 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**

163

Y. Zhang, S. Qiao, L. Sun, et al., "Photoinduced active terahertz metamaterials with nanostructured vanadium dioxide film deposited by solgel method," Opt. Express 22, 11070–11078 (2014).

- 2. Optica Publishing Group, "Optica," https://opg.optica.org.
- P. Forster, V. Ramaswamy, P. Artaxo, et al., "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, et al., eds. (Cambridge University Press, 2007).
- 4. R. McKay, "X-ray crystallography," Ph.D. thesis, Princeton University
  (1982).
- 172 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).