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**Quantities and units —**  
**Part 12:**  
**Condensed matter physics**

*Grandeurs et unités —*

*Partie 12: Physique de la matière condensée*



Reference number  
ISO 80000-12:2019(E)

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# Contents

	Page
<b>Foreword</b> .....	<b>iv</b>
<b>1 Scope</b> .....	<b>1</b>
<b>2 Normative references</b> .....	<b>1</b>
<b>3 Terms and definitions</b> .....	<b>1</b>
<b>Annex A (normative) Symbols for planes and directions in crystals</b> .....	<b>12</b>
<b>Bibliography</b> .....	<b>13</b>
<b>Index</b> .....	<b>14</b>

## Foreword

ISO (the International Organization for Standardization) is a worldwide federation of national standards bodies (ISO member bodies). The work of preparing International Standards is normally carried out through ISO technical committees. Each member body interested in a subject for which a technical committee has been established has the right to be represented on that committee. International organizations, governmental and non-governmental, in liaison with ISO, also take part in the work. ISO collaborates closely with the International Electrotechnical Commission (IEC) on all matters of electrotechnical standardization.

The procedures used to develop this document and those intended for its further maintenance are described in the ISO/IEC Directives, Part 1. In particular the different approval criteria needed for the different types of ISO documents should be noted. This document was drafted in accordance with the editorial rules of the ISO/IEC Directives, Part 2 (see [www.iso.org/directives](http://www.iso.org/directives)).

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This document was prepared by Technical Committee ISO/TC 12, *Quantities and units*, in collaboration with Technical Committee IEC/TC 25, *Quantities and units*.

This second edition cancels and replaces the first edition (ISO 80000-12:2009), which has been technically revised.

The main changes compared to the previous edition are as follows:

- the table giving the quantities and units has been simplified;
- some definitions and the remarks have been stated physically more precisely.

A list of all parts in the ISO 80000 and IEC 80000 series can be found on the ISO and IEC websites.

Any feedback or questions on this document should be directed to the user's national standards body. A complete listing of these bodies can be found at [www.iso.org/members.html](http://www.iso.org/members.html).

This corrected version of ISO 80000-12:2019 incorporates the following corrections:

- the formula in 12.26 has been corrected (minus sign inserted).

# Quantities and units —

## Part 12: Condensed matter physics

### 1 Scope

This document gives names, symbols, definitions and units for quantities of condensed matter physics. Where appropriate, conversion factors are also given.

### 2 Normative references

There are no normative references in this document.