



IEC 62899-203

Edition 1.0 2018-09

# INTERNATIONAL STANDARD



**Printed electronics –  
Part 203: Materials – Semiconductor ink**



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**Printed electronics –  
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INTERNATIONAL  
ELECTROTECHNICAL  
COMMISSION

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## PRINTED ELECTRONICS –

## Part 203: Materials – Semiconductor ink

## FOREWORD

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The text of this International Standard is based on the following documents:

FDIS	Report on voting
119/226/FDIS	119/234/RVD

Full information on the voting for the approval of this International Standard can be found in the report on voting indicated in the above table.

This document has been drafted in accordance with the ISO/IEC Directives, Part 2.

A list of all parts in the IEC 62899 series, published under the general title *Printed electronics*, can be found on the IEC website.

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## INTRODUCTION

The IEC 62899 series deals mainly with evaluation methods for materials of printed electronics. The series also includes storage methods, packaging and marking, and transportation conditions.

The IEC 62899 series is divided into several parts according to each material. Each part is prepared as a generic specification containing fundamental information for the area of printing electronics.

The IEC 62899 series consists of the following parts:

Part 1: Terminology

Part 201: Materials – Substrates

Part 202: Materials – Conductive ink

Part 203: Materials – Semiconductor ink

Part 250: Material technologies required in printed electronics for wearable smart devices

Part 301-X: Equipment – Contact printing – Rigid master

Part 302-X: Equipment – Inkjet

Part 303-X: Equipment – Roll-to-roll printing

Part 401: Printability – Overview

Part 402-X: Printability – Measurement of qualities

Part 403-X: Printability – Requirements for reproducibility

Part 502-X: Quality assessment – Organic light emitting diode (OLED) elements

Furthermore, sectional specifications, blank detail specifications, and detail specifications for each material will be based on these parts.

This part of IEC 62899 is prepared for semiconducting materials used in printed electronics and contains the test conditions, the evaluation methods and the storage conditions.