

Hanser Rights List

Business Computer Engineering

New titles
January - June
2019



Fallacies!

How Our Behavior is Controlled – How We Can Make Better Choices on the Job

ISBN: [978-3-446-45744-7](https://www.hanser.de/978-3-446-45744-7)

220 pages, Hardcover

Publication date: May 2019

Distorted, Selective or Simply Wrong: How to Recognize Thought Patterns, How to Break Them in Order to Solve Problems and Make Better Decisions.

We all know this situation: we just finished a meeting. We think we all came to a wonderful consensus and conclusion, but one participant asks a seemingly insignificant comprehension question.... All of a sudden it becomes obvious that nothing is clear, everybody interprets the speech differently and there are differing degrees of truth.

We are forming our world based on a number of influences on all levels, from the neuronal to the social level. We all view the world differently, depending on our preconceptions, learning history and momentary influences. In the context of collaboration this can lead to conflicts and bad decisions that have fatal consequences.

On the other hand, these differing interpretations of the world can possibly lead to entirely new solutions of problems and to truly better decisions; which could be of an unforeseen benefit given the digital disruption.

This guide addresses those of us who strive to recognize and control self-delusion. This self-recognition allows us to realize what is going wrong in the team and how real synergy can be created.

Reiner Neumann, a psychologist, worked several years as a manager; he also is a coach, consultant and author.



Every Customer Counts
The Workbook of Customer Satisfaction

ISBN [978-3-446-45916-8](https://www.hanser.de/978-3-446-45916-8)

220 pages, Hardcover

Publication date: **May 2019**

The First Workbook of its Kind!

Each customer counts. At the same time the treatment of the customer must not outweigh the common good of the company and its employees. This workbook demonstrates how to master these conflicting issues in your business: giving center stage to the customer and advancing the success of the business and the well being of the employees at the same time.

- **The four factors for success in customer satisfaction**
- **Step-by-step instructions for direct implementation**
- **Concrete practical advice and entertaining examples**
- **Bonus chapter: Do not just keep the customers satisfied, make them love the deal.**

Dana Arzani is tapping into her professional experience as a consultant and presents a new analysis: the mystery of the customer. Who is our customer and what does s/he really want? What is the role of digitalization in customer contact management and why is the human interaction with the customer still decisive, digitalization being what it is? The fact is: Company success can only be assured if the company culture, the employees, management and products follow the Customer-first-dictum.

Dana Arzani is a proven expert for successful customer contact and creator of the concept STEP 4 SPARKLE. She uses her unique know-how to support mid-size and specialized businesses. She has been an enthusiastic business owner for more than 20 years and has lived through all facets of business life from founding to folding an enterprise.



Business Administration Basics for Startups What the Entrepreneur Must Know

ISBN: [978-3-446-45835-2](https://www.hanser.de/978-3-446-45835-2)
250 pages, Hardcover
Publication date: April 2019

Everything a Company Founder Must Know about Business Administration

- Imparts business administration knowledge relevant for startups
- Based on science with excellent practical applications
- Many examples and concrete advice

Startups often fail because of the lack of basic knowledge. Some of the questions that startups need to have answered: What business model is right for us? How to draw up a business plan? How to develop ideas? How to handle processes and controls? Which legal form should our company have?

This book gives answers and provides the necessary business knowledge to the company founder. It details what must be considered and which pool of solutions can be tapped. The text is clearly structured and prepared for gainful application.

The author knows from experience what matters. He knows business administration from study and application; he taught BA for many years and has founded businesses, successful ones and not-so-successful ones. He is one of the most distinguished authors of this subject.

Werner Pepels has taught business administration in college. He is author and editor of many trade publications and is considered one of the ten most successful German textbook authors of marketing management and business administration.



Battle Field Workplace

The Practical Book of Conflict Management in Companies

ISBN: [978-3-446-45872-7](https://www.hanser.de/978-3-446-45872-7)

240 pages, Hardcover

Publication date: February 2019

Conflicts produce lots of disruption and poison human relations. This book shows how to prevent this from happening.

In order to solve a problem, the issue at hand must first be understood. Only if the nature and consequences of a conflict and the own role in it is understood is it possible to exit the problem area. The next step will be the solution of the corollary problems.

- This book presents methods of conflict management and a guide for resolution
- The text provides case studies to show various ways of conflict resolution
- It teaches how conflicts develop and how to avoid them
- Recognize, read and feel body language in conflict situations
- Protect human interactions by addressing hurtful behavior
- Empathize the various roles of the conflicting parties
- Practical advice for immediate application.

Use this book as a guide to rehabilitate a poisonous atmosphere to a healthy workplace.

Anke Sommer works in crisis and conflict management since 1991. Based on her experience she founded "INSTITUTE SOMMER for Leadership Coaching, Team- and Personal Development."

"Disruptions do not go away by themselves. You must show them the way out." *Anke Sommer*



30 Secrets for Success of Top Managers

ISBN: [978-3-446-45816-1](https://www.hanser.de/978-3-446-45816-1)

180 pages, Hardcover

Publication date: April 2019

This book calls out the salient patterns of behavior and actions that differentiate successful managers from the rest. It touches on subjects such as guidance, strategy, rhetoric, networking and personality.

- **30 secrets for success of top managers**
- **Rules to reflect on one's own leadership style and the corollary: development as a leader**
- **Memorable anecdotes from the great treasure chest of experiences of the author**
- **Applicable for various leadership roles spanning from CEO or department manager to local politician of sports club president**

The author draws a picture in this book of a positive model of good leadership that is based on traits such as responsibility, self-confidence and humility. The reader, upon reflecting on the text, is invited to develop his or her behavior as a leader.

Niklaus Leemann has many years of experience as a top management consultant. He had a long tenure as a vice president in an internationally renowned consulting firm. Today he has a business as a strategy advisor. He did consulting work for various listed corporations and mid-size companies. Close contact with more than 200 top managers provided deep insights into the success oriented behavior and action pattern of this eclectic group of people.

Agility



Rooms of Innovation Office Concepts for Agile Teams Experiences, Problem Areas and Success Factors

ISBN: [978-3-446-45820-8](https://www.hanser.de/978-3-446-45820-8)
250 pages, FlexCover
Publication date: **April 2019**

This book is for managers and team members who strive to advance creativity and create the environment that brings out the best in people. It contains practical advice, explanations of creative behavior, suggestions and ideas. How a company creates the interior design matters a great deal whether new ideas blossom or bomb.

As a consultant and trainer, **Ingrid Gerstbach** stands for empathy, creativity, innovation and design thinking. She helps companies to successfully set up and design projects and to make organizations competitive by means of an "upgrade".

Programming



Introduction to Java with Eclipse

ISBN: 978-3-446-45910-6
600 pages, Hardcover
Publication date: **July 2019**

Bernhard Steppan provides an exhaustive introduction to Java that is particularly suitable for the reader with no knowledge of programming. The text explains basic terms, language elements and object orientation before turning to the practical part of the book: writing and commenting Java applications. This is a book for all who strive to understand and master Java programming.



Handbook DATA SCIENCE

Generate Value through Data Analysis and Machine Learning

ISBN: [978-3-446-45710-2](https://www.hanser.de/978-3-446-45710-2)

288 pages, Hardcover

Publication date: May 2019

- Comprehensive overview of the various applications of data science
- Practical case studies provide access to the described concepts
- Imparts applicable knowledge to conduct simple data analysis projects.

This book provides an overview of the various aspects of data science and describes how to generate value in the context of big data. Corporations can use the analysis of big data to make decisions faster, reduce costs and access new markets.

The text approaches the subject data science from several angles. First, it describes how to design big data platforms and use the individual tools. Next, it touches on statistical-mathematical and legal subjects. The account is rounded off with practical case studies that demonstrate how knowledge generated from data can have a decisive impact on various industries. Studying this text will enable the reader to conduct simple data analysis projects.

From the contents:

- Introduction to Big Data
- Statistics Fundamentals
- Fundamentals and Tools of Big Data Platforms
- Data Science
- Architectures of a Data Platform
- Data Science Pipeline
- Data Driven Enterprises
- Selected Applications
- Legal Aspects
- Conclusion



JavaServer Faces

A Practical Workbook
3rd Edition

ISBN: 978-3-446-45670-9
550 pages, Hardcover
Publication date: **August 2019**

THE WORKBOOK FOR JAVA WEB DEVELOPERS

- A well founded workbook for the introduction to the development of user interfaces with JavaServer Faces 2.3
- Includes a complete case study of all relevant aspects of JSF
- Deepen and expand your proficiency with many exercises
- Only open-source-systems are used so that all exercises and examples can be reproduced for free
- On the Internet: Source code of the examples, solutions of the exercises, documentations for JavaServer Faces and the used systems at www.jsfpraxis.de

JavaServer Faces 2.3 is a framework for the development of user interfaces for, or more exactly, as a part of a Java-Web-Application. This workbook provides a step-by-step introduction to programming with JavaServer Faces. You will learn how to develop modern, practical user interfaces. Of course, the author explains how to integrate JavaServer Faces into a Java web application. The text also touches on subjects such as linking to a data base with JPA, use of CDI, generating PDFs and Ajax. Follow the development of an online banking application step by step and learn all relevant aspects of JavaServer Faces 2.3 based on real-life requirements. Use exercises to test and apply your knowledge. The solutions are available for download on the website of the book.

Appendix:

Annotations and Tags

Tags of Standard Libraries as needed

More Info in the Internet and on CD



BESTSELLER

Machine Learning Fundamentals and Algorithms in Python 2nd Edition

ISBN: 978-3-446-45996-0
406 pages, Paperback
Publication date: **January 2019**

This algorithmic introduction describes machine learning in their application and transfer in Python. Only basic math knowledge is required for comprehension as it is taught in grad school classes for computer or engineering science.

From the contents: Introduction to Machine Learning, Python Introduction, Statistic Fundamentals, Linear Models and Lazy Learning, Support Vector Machines, Feedforward Networks, Feature Reduction, Unsupervised Learning, Reinforced Learning, Ensemble Learning.

Professor Jörg Frochte teaches at the Bochum University of Applied Sciences.

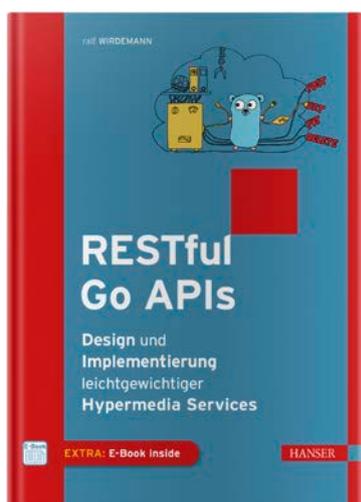
Practical Applications of Machine Learning:

- Speech and Face Recognition Software
- Self-Driving Cars
- Smart-Robots
- Autocompletion of Word Processors
- Antispam Software

Personalized Advertisement on Websites

Knowledge of object-oriented programming and basic knowledge of university mathematics are required. The necessary mathematics is presented embedded in the book and the theory is directly converted into Python code.

The book is ideal for students of computer science, mechatronics, electrical engineering and applied statistics/data science as well as for engineers and computer scientists in practice



RESTful Go APIs

Design and Implementation of Light-Weight Hypermedia Services

ISBN: [978-3-446-45709-6](https://www.hanser.de/978-3-446-45709-6)

186 pages, Flexcover

Publication date: **March 2019**

Everybody builds APIs. As a rough estimate, 80% of today's applications consist basically of one or several server-based components. These encapsulate the business logic and make it available to their clients via a RESTful API. Once the REST paradigm has been understood, the REST APIs can easily be used.

Go is a simple, compiled and highly performing programming language that seems to be made for the development of REST APIs. It is easy to learn, a simple and powerful concurrency model, has very good HTTP-, REST- and JSON-support, cross-platform capability, simple deployment and highly performing binaries.

The book addresses server-side web developers. It introduces the essential aspects of the REST development in Go and uses a simple example that increases in complexity as the account progresses in the text. After studying the book the reader will be able to develop, deploy and operate production ready REST APIs in Go.

The choice of the name "APIs" instead of "Microservices" is intentional: firstly, in order to set apart from the current hype about microservices and secondly, in order to include the wide field of monolithic applications.

The book consists of three parts. Part 1 and 2 are indispensable; part 3 has more of an open structure and may be used to a greater or lesser extent as the development progresses.

#makers DO IT.



CNC Milling for Makers

Build, Program and Control your DIY-Milling Machine.
Using Shapeoko, Grbl, Fusion 360 and Estlcam

ISBN: [978-3-446-45491-0](https://www.hanser.de/978-3-446-45491-0)

270 pages, FlexCover, full-colour

Publication date: March 2019

Build, Program and Control Your Homemade CNC Milling Machine

Are you into model making? Are you an enthusiastic drone pilot? Would you like to build a multi-copter chassis or a frame for your model boat? Your CNC milling machine lets you fabricate any number of 2D or 3D parts, whether out of wood, plastic or similar materials. This book tells you everything you need to know in order to build and program your own CNC mill. Now you can get going with your very own pet projects.

Ralf Steck shows you,

- The classes of hobby mills on the market, what materials they can process and how to select the model that is right for you
- How to go from a CAD-model to G-code: everything about CAM software, controller, etc.
- The components of a milling machine and how it works: everything about the zero points, processing speeds, clamping, etc.
- How to put safety first when working with a mill
- How to build an open source mill, including mechanics, electronics, case and suction; how to upgrade with stronger feed drives, motors and a 4th axis
- How to commission your mill and how to machine your first part: everything about feed, homing, milling strategies, etc.
- Practical examples, for instance, the hull of a model airplane.

This book provides you with the technical skills so that you can realize unique projects with your CNC-mill. You will be able to build, program and control your very own design ideas.

#makers DO IT.



IoT at Home

Develop Smart Gadgets with Arduino, Raspberry Pi, ESP8266 and Calliope. Included: openHAB, FHEM, Home Assistant and ioBroker

ISBN: [978-3-446-45661-7](https://www.hanser.de/978-3-446-45661-7)

300 pages, FlexCover

Publication date: May 2019

Internet of Things (IoT) for the Home: Develop Your Own Smart Gadgets!

Imagine, your fridge senses that the milk jug is empty and automatically orders new milk. The Internet of Things, meaning the connection of items with the Internet, makes this possible. Do you think this is only possible with expensive technology? Don't worry! Arduino, Raspberry Pi, ESP8266, Calliope etc. will also provide you with access to the world of the IoT. This book tells you everything you need to know in order to develop intelligent gadgets for your home, and do so with a low budget, easy to modify and customizable to your needs.

You will learn,

- Basic knowledge in electronics, networks and diagram design with Fritzing that you need to have in order to get going smoothly
- Which microcontroller, single board computer and sensors you can use for your IoT-projects: everything about Arduino, Raspberry Pi, ESP8266, Calliope etc.
- How to network your gadgets with open source smart home (openHAB, FHEM, Home Assist, ioBroker etc.)
- How to use the applicable hard- and software and how to program your smart gadgets
- Security measures that must be considered in order to avoid hacker attacks.

The text provides practice-proven examples to inspire your own projects such as a smart mirror that includes a weather app, a fingerprint protected door lock or a digital savings box, based on the crypto currency IOTA. The appropriate programming language is selected according to project and platform, from the very easy graphics supported Calliope programming, Python for Raspberry Pi and C for Arduino. Each project comes with a list of parts that you need and their source. The code can be downloaded from the Internet.

This book is right for you if you are anxious to develop your own smart gadgets. It provides you with the important skills you need in terms of hardware, software and programming in order to master the Internet of Things.



Motion Picture Design

Movie Making Technology, Image Composition and Emotional Impact

ISBN: [978-3-446-44296-2](https://www.hanser.de/978-3-446-44296-2)

300 pages, FlexCover, full-colour

Publication date: June 2019

The Book of Emotional Movie Making for Starters and Pros:

How do I arouse emotions with visual means?

How do I use presentation conventions of the language of movie?

What must I know in order to best apply movie making technology?

This book introduces to the cinematic building blocks of movie making:

- Camera Image as a Surface
- Space in the Movie
- Plasticity and Figure
- Color Presentation
- Motions
- Stimulus Jolt
- Rhythm.

The text uses many details of current movies to analyze movie making means.

It provides many practical tips for the work on the set in order to produce high quality content beyond the realm of blockbuster pictures.



Fundamentals of Practical Radiation Safety 7th Edition

ISBN: [978-3-446-44919-0](https://doi.org/10.1007/978-3-446-44919-0)

688 pages, Hardcover

Publication date: **May 2019**

Overview of the Most Important Fundamentals of Technical Radiation Protection

This standard of the fundamentals of radioactivity and radiation safety is now in its **7th printing**. It addresses radiation safety officers, technicians that are involved in fabrication, maintenance and repair of X-ray equipment and particle accelerators, and students of environmental, radiation, health and occupational safety.

The text first provides the physical fundamentals; next it focuses on radiation measurement, protective measures against external and internal radiation exposure during use of open and enclosed radioactive substances, and the operation of X-ray equipment and particle accelerators in technical applications.

The latest edition contains up-to-date information about radon protection, modern metrology such as the Bayes statistic and the 2019 status of German radiation protection regulation (StrlSchV) and the radiation protection law (StrlSchG).

After covering the fundamentals, the text describes the calculation rules that are required for many applications. Many tables and diagrams complete the text and make this a very practical and useful book. Practical problems are given, along with a guide for the solution, using formulas and data. The book is rounded off with extensive glossaries that provide the reader with sources to further technical knowledge.



Fit for Technical Radiation Protection

150 Questions for Safe Use of Sources of Ionized Radiation

ISBN: 978-3-446-45210-7

200 pages, Paperback,

Publication date: June 2019

Become Proficient at Technical Radiation Protection – with 150 Test Questions!

The text uses 150 practical problems to impart basic knowledge of radioactivity and technical radiation protection. The book is written for radiation protection officers, technicians that are involved in fabrication, maintenance and repair of X-ray equipment and particle accelerators, and students of the subjects environmental, radiation, health and occupational safety. It is an ideal companion of “Fundamentals of Practical Radiation Safety”, but the work can stand on its own.

Test questions with increasing difficulty follow a brief theoretical digest at the start of each chapter. The problems contain gapped texts, crossword puzzles, math problems, figures, tables and other didactic items.

- The following subjects are covered:
- Math fundamentals: calculating with percentages, magnitudes, log graphics
- Physical fundamentals: radioactive substances, kinds of radiation, terms of dosage
- Biological radiation effects, human exposure to radiation
- Practical radiation protection using distance, shielding and time of exposure
- Calculation of exposition of radiation for gamma-, beta-, neutron- and X-rays
- Radiation protection metrology: function and design of measuring devices, statistical measurement uncertainty
- Radiation protection administration: basic legal terms, calculations.

The book contains the solution of all problems with references to additional resources for download from the Internet. This way the reader can gauge whether the teaching objective has been reached. A small formulary rounds out the content.



Handbook Light-Weight Construction

Methods, Materials, Fabrication

2nd revised edition

ISBN: [978-3-446-45638-9](https://www.hanser.de/978-3-446-45638-9)

1.000 pages, Hardcover, full-colour

Publication date: **May 2019**

Inexhaustible Genius of a Key Industry

Light-weight construction uses materials and structures that lead to a significant weight reduction of the final product without compromising strength and reliability. Many new developments implement changes to the product as a whole in order to get rid of excess and make the item lighter.

- This handbook describes the complex interconnections between methods, materials and fabrication. You will learn everything about the particular aspects of light-weight construction
- Knowledge gained by experience about design, test, evaluation, production and quality assurance
- Comprehensive material science of high-strength steel, light metals (Al, Mg, Ti), fiber reinforced plastics and hybrid structures of various materials
- Many examples of successful light-weight construction projects.

This handbook will spark ideas for own, innovative products that exceed the expectations of your customer in terms of price, performance and environmental impact.

The second revised edition puts an even greater emphasis on the presentation of concrete application examples. The text contains numerous additional application scenarios, whereas some fundamentals have been condensed.



Handbook of Space Technology

5^h revised edition

ISBN: [978-3-446-45429-3](https://www.hanser.de/978-3-446-45429-3)

944 pages, Hardcover, full-coloured

Publication date: **January 2019**

The Standard of Space Technology

This standard work, printed throughout in four colors, provides detailed insights into the fascinating world of space for students, engineers, scientists and space enthusiasts.

- It covers the fundamentals followed by seven main chapters detailing the processes and methods of development, construction, operation and use of space flight systems:
- Space Delivery Systems
- Subsystems of Spacecraft
- Aspects of Human Space Flight
- Mission Operations
- Utilization of Space
- Spacecraft Design Process
- Management of Space Projects.

The fifth printing of this handbook has been amended with information of new planet and satellite missions; the content about space biology, satellite navigation, delivery systems and technology of unmanned and manned spacecraft has been updated. The individual chapters and subchapters, penned by leading experts from schools, research institutions and the space industry, are self-contained. This way selected parts can be accessed quickly for a well-founded overview.



Creep Rupture Behavior of Metallic Materials

Designers Guide of the Thermal-Mechanic Strength of Ferric, Nickel and Cobalt Alloys

ISBN: [978-3-446-45531-3](https://www.hanser.de/978-3-446-45531-3)

300 pages, Hardcover

Publication date: **March 2019**

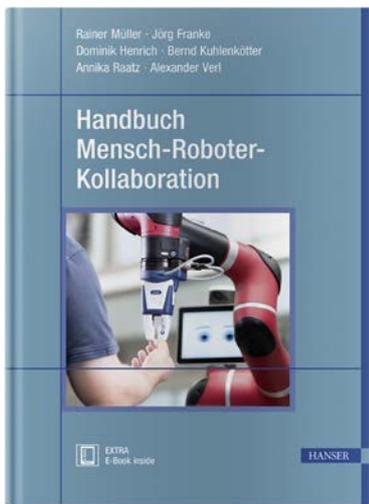
Continuous impact of heat fatigues metals

When steel or high temperature alloys are continuously exposed to 40% of their melting temperature, entirely different material properties apply than at room temperature. The mechanical properties change over time and the values listed in typical reference books cannot be used anymore.

Industries use metals that are exposed to high temperatures. Designers of installations are challenged to find reliable data that satisfy the requirement of mechanical strength under these conditions. This book will provide answers. It provides the designer with:

- A reference work of the creep rupture behavior of the most important Fe-, Ni- und Co-alloys with applicable information of the mechanical properties at high temperatures.
- Methods to obtain creep and rupture data and their inter- and extrapolation
- Telltale signs spanning the range from creep damage to creep failure
- Diagnostics and repair options of creep damages
- A MS Excel-based tool for the selection of the most applicable alloy.

This book closes a large gap in knowledge by providing temperature based creep data for the first time. The author combines his own research with the collection of all scattered data and creates an indispensable guide for engineers who work with high temperature applications.



Handbook Men-Robot-Collaboration

ISBN: [978-3-446-45016-5](https://www.hanser.de/978-3-446-45016-5)

464 pages, Hardcover, full-colour

Publication date: **January 2019**

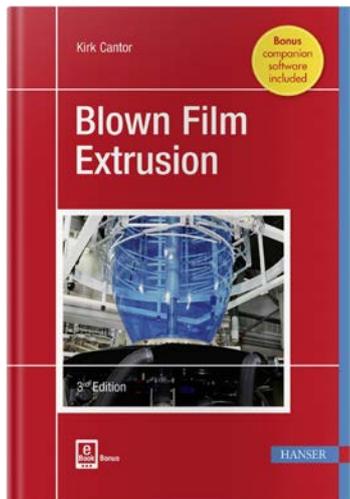
The Collaboration of Men and Robot – Opportunities, Objectives, Limits

Any robot application is only justifiable if it serves men. A robot is used because its ability to do work that we cannot and do not want to do. Men-robot cooperation deals with work situations where a person works in immediate proximity with a robot without the presence of protective measures. Thus the great flexibility of men is combined with the greater endurance and precision of the machine.

This book describes all relevant aspects that come into play when a robot collaborates with a person:

- Economic context – Where and when does the use of a collaborating robot make sense?
- Existing machine park in the factory – Does a robot fit in this scenario or are additional investments called for?
- Occupational safety – Is it safe under all circumstances when men and robot collaborate side by side?
- Technology – What types of robots are there, how are they controlled?
- Production processes – How can robots be integrated on all levels without putting men at a disadvantage?

The text uses many examples from various industries to demonstrate the application scenarios of the collaboration of men and industrial robots. A separate chapter is devoted to future applications, particularly in the service industry. The book is a must-have for all who plan to use robots, not in large quantity fabrication, but in a changing production environment.



Blown Film Extrusion 3rd Edition

ISBN: [978-1-56990-696-5](https://doi.org/10.1007/978-1-56990-696-5)

194 pages, Hardcover, full-colour

Publication date: **December 2018**

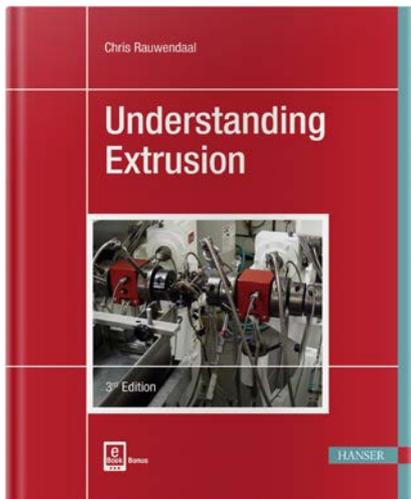
From hardware and materials through processing and properties, a broad coverage of blown film extrusion is presented. A primary objective of this book is to ensure a useful balance of theory and practice. The reader will find the answers to why they encounter certain effects in the blown film process so that they are better able to troubleshoot and improve their operations. At the same time, current practices and equipment are emphasized to keep readers up-to-date with the most productive and efficient technology.

The companion computer-based learning tool, The Blown Film Extrusion Simulator, is provided to enhance the reader's understanding. This software was developed specifically to teach blown film extrusion equipment operation and processing principles, and is available for download. Throughout this book, exercises using the simulator are described to complement the methods and principles explained.

New in this third edition is a chapter on polymer rheology, with an overview of the rheology of polymer melts and its effect on extruding blown film. Additionally, improvements and corrections have been made throughout the book.

Contents:

- Materials for Blown Film
- Polymer Rheology
- Extrusion Overview
- Hardware for Blown Film
- Processing
- Coextrusion
- Film Properties
- Troubleshooting



Understanding Extrusion
3rd Edition

ISBN: [978-1-56990-698-9](https://www.hanser.de/978-1-56990-698-9)

264 pages, Hardcover

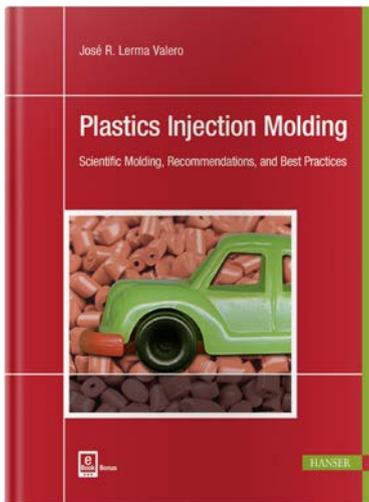
Publication date: **January 2019**

The book provides a practical understanding of basic information on extrusion in a way useful to readers without an engineering degree as well as to those new to the field. It is primarily written for extruder operators, supervisors, technical service personnel, and process engineers. Designed for on-the-job use, it guides the reader step by step through material issues, machinery, processing, and troubleshooting.

This revised and extended third edition now also covers interpretation of extrusion process data, analysis of shrink void formation, dimensional variation by melt temperature fluctuations, efficient extrusion, grooved barrel extruder technology, and more.

Contents:

- Extrusion Machinery
- Instrumentation and Control
- Complete Extrusion Lines
- Plastics and Their Properties Important in Extrusion
- How an Extruder Works
- How to Run an Extruder
- How to Troubleshoot Extrusion Problems
- New Developments in Extrusion and Methods to Increase Efficiency



Plastics Injection Molding

Scientific Molding, Recommendations, and Best Practices

ISBN: [978-1-56990-689-7](https://www.hanser.de/978-1-56990-689-7)

350 pages, Hardcover

Publication date: July 2019

"**Plastics Injection Molding: Scientific Molding, Recommendations, and Best Practices**" is a user-friendly reference book and training tool, with all the essentials to understand injection molding of plastics. It is a practical guide to refining and controlling the process, increasing robustness and consistency, increasing productivity and profitability, and reducing costs.

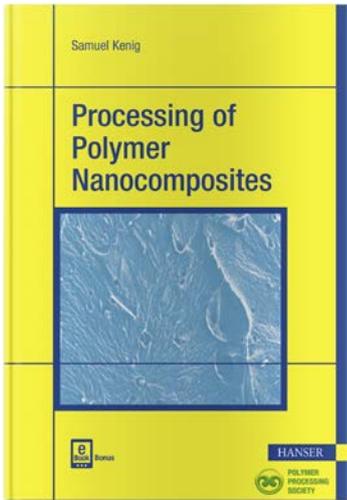
This book contains structured information on process definitions and parameters, optimization methods, key points, interpretation of data sheets, among other useful recommendations regarding both technology and design. It also provides analysis of process deviation, defects, incidents, etc. as well as a section dedicated to material selection and comparison.

Includes a bonus of downloadable Excel spreadsheets for application to scientific molding, process analysis, and optimization.

This book is aimed at injection molding technicians, process engineers, quality engineers, mold designers, part designers, simulation engineers, team leaders, plant managers, and those responsible for purchasing plastic materials.

Contents:

- Plastics
- Material Selection
- Injection: Machines and Processes
- Scientific Molding
- Failure Analysis
- Reference Material



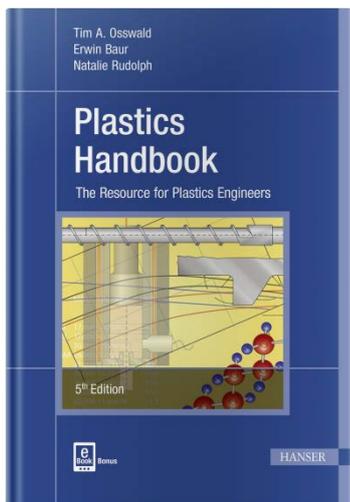
Processing of Polymer Nanocomposites
1st Edition

ISBN: 978-1-56990-635-4
500 pages, Hardcover
Publication date: **April 2019**

This book covers the fundamental unit operations involved in processing of thermoplastic and thermoset nanocomposites. The processing methods include extrusion, injection molding, blow molding, and thermoforming. Also covered are nanoparticle dispersion, distribution, and compatibilization, and applications of polymer nanocomposites.

Nanocomposites have been of high research interest in the past decades and a number of practical applications are now emerging, such as in the automotive sector. Although there have been previous works on nanocomposites, they are not as current as this one and they do not have the emphasis on processing found here.

Edited and written by leading experts in the field, this book is a major contribution to a growing and exciting area of research.



Tim A. Osswald
Plastics Handbook
The Resource for Plastics Engineers
5th edition

ISBN: [978-1-56990-559-3](https://www.hanser.de/978-1-56990-559-3)

Hardcover

Publication date: **January 2019**

The Plastics Handbook provides everything important there is to know about plastics, comprehensively compiled in a compact and well-organized format. From material properties to machines, processing, and applications, the user will find detailed information that allows the successful implementation of new materials and technologies.

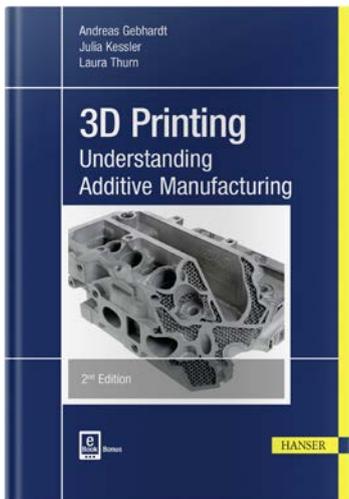
This concise, competent, modern reference not only explains the basic facts and interrelationships, but also serves as a practical guide for engineers to help them succeed in today's challenging, global industrial world.

Searching for specific materials, trade names, properties, or any other information is particularly easy, because the reader also has free access to the electronic version of the book.

The 5th edition is comprehensively updated throughout, with a new clearer layout. Also now in full color!

Contents:

- Common Acronyms in Plastics Technology
- Introduction (Economic Significance, Classification, Composition, Effects of Processing on Properties, Modifications of Plastic Materials)
- Material Properties and Testing Methods
- Plastic Processing Technologies
- Plastic Materials
- Additives, Fillers, and Fibers
- Material Properties



3D Printing

Understanding Additive Manufacturing
2nd Edition

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ISBN: 978-1-56990-702-3

220 pages, Paperback, full-colour

Publication date: **November 2018**

This book is a clear and concise guide to Additive Manufacturing (AM), now a well-established valuable tool for making models and prototypes, and also a manufacturing method for molds and final parts finding applications in industries such as medicine, car manufacturing, and aerospace engineering.

The book was designed as a supporting material for special courses on advanced manufacturing technology, and for supplementing the content of traditional manufacturing lessons. This second edition has been updated to account for the recent explosion of availability of small, inexpensive 3D printers for domestic use, as well as new industrial printers for series production that have come onto the market.

Contents:

- Basics of 3D Printing Technology
- Additive Manufacturing Processes/3D Printing
- The Additive Manufacturing Process Chain and Machines for Additive Manufacturing
- Applications of Additive Manufacturing
- Perspectives and Strategies of Additive Manufacturing
- Materials and Design
- Glossary of Terms, Abbreviations, and Definitions