

[TECHNOLOGY/Engineering / Chemical & Biochemical]

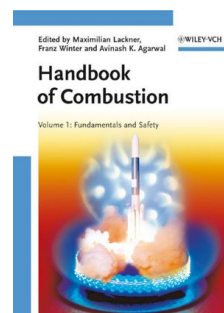
燃焼ハンドブック (全5巻)

Handbook of Combustion

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本書について

燃焼は、発電やエンジン駆動などさまざまな場面で重要な役割を果たしている。燃焼効率をわずかでも高めることは燃料の節約に直結し、コスト削減と環境保護の両面で大きな効果を発揮することから、産業界からの関心が改めて高まっている。本書は燃焼現象を多角的に論じ、研究者・技術者に有益な情報を提供する、全5巻の浩瀚な参考図書。

TABLE OF CONTENTS

- Volume 1: Fundamentals and Safety
- Volume 2: Combustion Diagnostics and Pollutants
- Volume 3: Gases and Liquids
- Volume 4: Solid Fuels
- Volume 5: New Technologies

Volume 1: Fundamentals and Safety

Fundamentals of Combustion / Combustion Chemistry / Combustion Physics / Ignition / Heat Transfer / Thermodynamics / Modelling and Simulation of Droplet and Spray Combustion / Combustion Kinetics Modelling / Modelling of Turbulent Combustion / Supersonic Jets and Atomization of Sprays / Light Emission from Flames / Cool Flames / Steam Production / Explosion Safety / Fuel Cells / Flame Retardants ? Chemistry Applications & Environmental Impacts / Health Effects of Combustion Products / Loss Prevention and Safety Promotion in Industry / History of Combustion / Fire Detection Using Chemical Signatures / Toxicology of Combustion Products / Fire Safety / Fire Spread in Buildings

Volume 2: Combustion Diagnostics and Pollutants

Ultrafast Optical Diagnostics in Flames / NO_x Formation, Control and Reduction Techniques / LDA / LIF / Measurement of Particle Properties / Overview of Combustion Diagnostics / Formation and Diagnostics of Sprays in Combustion / Spontaneous Raman Scattering Diagnostics ? Applications in Practical Combustion Systems / CARS Spectroscopy / GC/MS for Combustion and Pyrolysis Research / Combustion Characteristics of Fossil Fuels by Thermal Analysis Methods / Gas Potentiometry / Catalytic Technology for Soot and Gaseous Pollution Control / SO_x: Formation, Control and Removal Processes / Carbon Monoxide / CO₂ Greenhouse Gas Formation and Capture / Soot and Soot Diagnostics by Laser-Induced Incandescence / PAH / NO_x Formation, Control and Reduction Techniques / Corrosion / Measurements in Large Power Plants / LDA

(Volume 3 以降の目次は次頁)

出版/予定: 2010年4月 ページ数(約): 2,500(全5巻) ISBN13: 978-3-527-32449-1

刊行記念特価 US\$1,075.00(2010年8月31日まで) / 以降 US\$1,210.00

(2010年1月現在/変動あり)

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TABLE OF CONTENTS (前頁からの続き)

Volume 3: Gases and Liquids

Overview of Gaseous Fuels / Global Warming Implication of Natural Gas Combustion / CFD for Gas Explosions / Eulerian Monte Carlo Method to Solve PDF Transport Equations for Turbulent Reactive Flows / Combustion of Low Heating Value Gaseous Fuel Mixtures / Gas Turbines / Flame Lift-Off and Blowout Stability Limits and their Application in Gas Burners / Combustion of Hydrogen and Hydrogen-Fossil-Fuel Blends / Combustion in Compression Ignition Engines of the Dual-Fuel Type (Diesel-Gas Engines) / Fuel Gas Applications in Industry / Overview of Liquid Fuels / Atomization, Combustion and Emission Characteristics of Biofuels / Biodiesel and Bioalcohols / Gasoline Engines / Diesel Engines / Ship Engines / Synfuels / Spray Combustion: Impact on Emissions / Burners / Oil Outlook

Volume 4: Solid Fuels

Overview on Solid Fuels, Characteristics, Origin / Overview of Solid Fuels Combustion Technologies / Overview on Biomass Combustion / Small Scale Combustion / Coal Combustion / Pulverized Coal Boilers / Modelling Fixed and Moving Bed Combustion / Solid Waste Combustion / Gasification and Pyrolysis of Coal / Gasification of Biomass and Waste / Fluidized Beds / Modelling of Circulating Fluidized Bed Combustion / Corrosion During Biomass Combustion / Agglomeration in Fluidized Beds: Mechanisms, Detection, and Counteraction / Ash / Ash Fouling of Boiler Heat Transfer Surfaces and Thermo-Physical Properties of Deposits / Co-Firing Biomass with Coal in Fluidized Bed Combustion Systems / Co-Utilization of Biomass Based Fuels in Pulverized Coal Power Plants in Europe

Volume 5: New Technologies

The Chemistry in HCCI Combustion and the Use of Reduced Kinetic / Mechanisms for Controlling Strategies / Low Temperature Combustion in Engines / Corona Ignition and Other Ignition Systems Applied to Combustion Systems / Plasma Assisted Ignition and Combustion / Laser Ignition / Combustion Enhancement and Stabilization: Problematic, Effects and Diagnostics of the Plasma Assistance / Porous Media Combustion / Staged Combustion and Exhaust Gas Recirculation / Hetero-/Homogeneous Combustion / Catalytic Combustion / Mild Combustion / Underground Coal Gasification: A Clean Coal Technology / Energy from Aquatic Biomass / Flameless Pulverized Coal Combustion / Warm Discharges for Fuel / Metal Halocarbon Combustion / Acoustic Control of Flames / Combustion Synthesis / CO₂ Sequestration / Oxy-Combustion Technologies with Pure Oxygen and Chemical Looping Combustion / Calcium-Based Sorbent Looping Processes for Carbon Capture / Combustion of Pulverized Fuel in CO₂ Atmosphere / Energy Conversion Processes with CO₂-Separation not Reducing Efficiency

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