Industrial Plasma Technology: Applications from Environmental to Energy Technologies

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DESCRIPTION

Clearly structured in five major sections on applications, this monograph covers such hot technologies as nanotechnology, solar cell technology, biomedical and clinical applications, and sustainability.

Since the topic, applications and readers are highly interdisciplinary, the book bridges materials science, industrial chemistry, physics, and engineering -- making it a must-have for researchers in industry and academia, as well as those working in application-oriented plasma technology.

ABOUT THE AUTHOR

Hideo Ikegami is Professor Emeritus of both Nagoya University and National Institute for Fusion Science in Nagoya, Japan. His primary interest is basic plasma physics and various plasma applications. In 1996, he created a consulting company of plasma application technology, Technowave Inc., and served as president. He is one of the editors of Advanced Plasma Technology (Wiley-VCH, 2007).

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Akira Mizuno is Professor of the Department of Ecological Engineering at Toyohashi University of Technology. His research includes applied electrostatics and high-voltage engineering, which includes electrostatic precipitation, environmental application of plasma, sterilization and other environmental friendly technologies as well as manipulation and measurement of single DNA molecules. He is editor of the International Journal of Plasma Environmental Science and Technology.

Yoshinobu Kawai works as Research Professor at Interdisciplinary Graduate School of Engineering Sciences at Kyushu University, Japan, since 1974. He is expert in production of large diameter plasma in the frequency range from VHF to microwave for amorphous and microcrystalline silicon solar cell and etching. He is one of the editors of Advanced Plasma Technology (Wiley-VCH, 2007).

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