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Series in Plasma Physics

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Atmospheric-pressure plasmas continue to attract considerable research interest due to their diverse applications including high power lasers, opening switches, novel plasma processing applications and sputtering, EM absorbers and reflectors, remediation of gaseous pollutants, and excimer lamps and other non-coherent light sources. Atmospheric-pressure plasmas in air are of particular importance as they can be generated and maintained without vacuum enclosure and without any additional feed gases.

This book reviews recent advances and applications in the generation and maintenance of atmospheric-pressure air plasmas. With contributions from leading international researchers the coverage includes advances in atmospheric-pressure plasma source development, diagnostics and characterization, air plasma chemistry, modeling and computational techniques, and an assessment of the status and prospects of atmospheric-pressure air plasma applications. The extensive sections on applications makes this book attractive for practitioners in many fields of application where technologies based on atmospheric-pressure air plasmas are emerging.

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A summary of references to Air Plasmas compiled by R Vidmar is available on the Web at:

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