
Electric field strength spectroscopy in dielectric barrier discharges

Ernst-Moritz-Arndt University Greifswald

Author: Philipp Hacker
Examiner: Prof. Dr. Meichsner

Supervisor: Dr. S. Nemschokmichal,
R. Tschiersch

Report for an internship at the Low-temperature Plasma Physics group of Prof. Dr. Meichsner, submitted in fulfillment of the requirements for the degree

Master of Science

in the

Low-temperature Plasma Physics group

Institute of Physics

Table of Contents

	3	Results	2
		3.1 Integrated spectrum	2
		3.2 Spatial temporal resolved intensities	2
		3.3 Line ratios	2
		3.4 Stark spectroscopy	2
	4	Conclusion	2
	5	Acknowledgments	2
		5.1 References	2
	6	Appendix	2
0 Abstract	1		
1 Introduction	2		
1.1 Dielectric barrier discharges	2		
1.2 Temporal development of the electric field strength	2		
2 Experimentel set up	2		
2.1 Discharge configurations	2		
2.2 Optical emission spectroscopy	2		

0 Abstract

1 Introduction

1.1 Dielectric barrier discharges

1.2 Temporal development of the electric field strength

2 Experimental set up

2.1 Discharge configurations

2.2 Optical emission spectroscopy

3 Results

3.1 Integrated spectrum

3.2 Spatial temporal resolved intensities

3.3 Line ratios

3.4 Stark spectroscopy

4 Conclusion

5 Acknowledgments

5.1 References

References

6 Appendix