

Content

Summary	2
Souhrn	3
Klíčová slova	4
Keywords.....	4
1. Introduction	7
2. Diamond Thin Films.....	7
2.1. Diamond Properties	7
2.2. Diamond Synthesis.....	8
3. Hydrogen and Oxygen Terminated Diamond Surface.....	9
3.1. Hydrogen Termination	10
3.2. Oxygen Termination.....	10
4. Diamond as Functional Coating for (bio-) Sensors	11
4.1. Optical Elements for Infrared Spectroscopy.....	12
4.2. Field Effect Transistors - FETs	13
4.3. Gas Sensor	16
4.4. Electrical Monitoring of Cell Growth.....	18
5. Conclusions	20
6. References	21
Ing. Alexander Kromka, Ph.D. - Curriculum vitae.....	24