



## Dados Básicos

<b>Programa:</b>	Instrumentação e Óptica Aplicada (31022014007P2)
<b>Nome:</b>	DEPOSITION TECHNOLOGY BY PLASMA PROCESS
<b>Sigla:</b>	IOA
<b>Número:</b>	6044
<b>Créditos:</b>	3
<b>Período de Vigência:</b>	04/06/2019 à -
<b>Disciplina obrigatória:</b>	Não
<b>Ementa:</b>	1. Introduction. 2. Basic concepts of vacuum technology. 3. Low pressure plasma. 4. Industrial plasma sources. 5. Industrial plasma processes (PVD, PECVD). 6. Equipment technology for coating and modifying processes low pressure plasma surfaces. 7. Technology for target production for cathodic Spraying processes. 8. Layers of high hardness (attrition and wear). 9. Optical layers (antireflective coating, thermal insulation, Solar Control, electrochromic and thermochromic layers). 10. Thin coatings for (HD, CD, DVD, rewritable, MO) and to Displays (PED, LCD, PDP, OLED). 11. Layers for solar technology. 12. Metallization of microchip. 13. Catalytic layers. 14. Coating of plastic sheet and metals. 15. Coating of large area substrates.
<b>Bibliografia:</b>	[1] Donald L.Smith. Thin-Film Deposition - Principles & Practice. McGraw-Hill, New York 2006. [2] N.G. Einspruch and D.M. Brown, Eds., "Plasma Processing for VLSI", Vol. 8 in "VLSI Electronics Microstructure Science", Academic Press, Boston, MA (1984). [3] F.K. McTaggart, "Plasma Chemistry in Electrical Discharges", Elsevier, Amsterdam, NL (1967). [4] Macleod, H. Angus, Thin-Film Optical Filters (3. Aufl.), Institute of Physics Publishing, 2002, 641 S, ISBN 0 7503 0688 2. [5] Francis T.S. Yu, Optical Storage and Retrieval, CRC (1996), ISBN 0824797078. [6] Terry W. McDaniel (Editor), Randall Victora (Editor), Handbook of MagnetoOptical Data Recording: Materials, Subsystems, Techniques, Noyes Publications (1997), ISBN 0815513917. [7] Erwin R. Meinders (Author), Andrei V. Mijiritskii (Author), Liesbeth van Pieterse (Author), Matthias Wuttig (Author), Optical Data Storage: Phasechange media and recording (Philips Research Book Series), Springer (2006), ISBN 1402042167. [8] C. Dennis Mee (Author), Eric D. Daniel (Author), Magnetic Recording Technology, McGraw-Hill Professional, (1996), ISBN 0070412766. [9] Jerry C. Whitaker (Author), Electronic Displays: Technology, Design, and Applications, McGraw-Hill Professional Publishing (1994), ISBN 0070696217. [10] Lindsay MacDonald (Editor), Anthony C. Lowe (Editor), Display Systems: Design and Applications, Wiley (1997) ISBN 0471958700. [11] Gregory Crawford (Editor), Flexible Flat Panel Displays, Wiley (2005), ISBN 0470870486. [12] Klaus Müllen (Autor), Ullrich Scherf (Autor), Organic Light - Emitting Devices. Synthesis, Properties and Applications, Wiley-VCH; (2005), ISBN 3527312188. [13] K. Wetzig, C. M. Schneider: Metal Based Thin Films for Electronics, Wiley-VCH 2003.

## Curso(s)

Curso	Nível	Carga Horária
Instrumentação e Óptica Aplicada	Doutorado	45.0 (hs)

## Área(s) de Concentração obrigatória(s) à Disciplina

INSTRUMENTAÇÃO E FOTÔNICA

## Turma(s)

Instituição de Ensino	Período/Ano	Nome	Docentes
	1/2020		ANA LUCIA FERREIRA DE BARROS (Docente)

Fechar



