

## Mgr. Jindřich Matoušek, Ph.D.

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Narozen:

9.února 1978 v Mostě

Vzdělání:

1992 – 1996 Gymnázium Schola ludus (UL)

1998 – 2003 Katedra fyziky (KFY), Pedagogická fakulta Univerzity J.E.Purkyně (Učitelství matematiky a fyziky pro III. Stupeň).

od r. 2004 zaměstnán na KFY, Přírodovědecká fakulta, UJEP

v r. 2013 dokončil PhD studium na MFF UK, zaměstnán jako odborný asistent (na KFY PřF UJEP)

Jazykové znalosti:

Anglický jazyk – zkouška pro PhD studenty na MFF UK (úroveň odpovídající First Certificate in English)

Německý jazyk – pasivně

Specializace:

depozice a analýzy tenkých vrstev, modifikace práškových materiálů v plazmatu, magnetronové naprašování a další plazmochemické depoziční techniky, analýzy metodami XPS, XRD, SIMS, SEM, FTIR,...

Pedagogická činnost:

vedení cvičení – Repetitorium z matematiky a fyziky, Praktika B (elektřina a magnetismus), Praktikum C (optika) a přednášek – Úvod do fyziky, Fyzikální metody depozice, Polymerní nanomateriály

Publikační činnost:

h-index = 10

počet publikací 29

počet citací bez autocitací 244

Seznam publikací v impaktovaných časopisech podle Web of Science (řazeno sestupně podle data)

1. Mullerova, M.; Sabata, S.; Matousek, J. et al., *Organoclays with carbosilane dendrimers containing ammonium or phosphonium groups*, NEW JOURNAL OF CHEMISTRY 42 (2018) 1187-1196. DOI 10.1039/c7nj03979d
2. Henych, J.; Kormunda, M.; Matousek, J. et al., *Water-based synthesis of TiO<sub>2</sub>/CeO<sub>2</sub> composites supported on plasma-treated montmorillonite for parathion methyl degradation*, APPLIED CLAY SCIENCE 144 (2017) 26-35, DOI 10.1016/j.clay.2017.05.001
3. Barchuk, M.; Capkova, P.; Matousek, J. et al. *Structure and surface properties of chitosan/PEO/gelatin nanofibrous membrane*, JOURNAL OF POLYMER RESEARCH 23 (2016) DOI 10.1007/s10965-015-0906-0
4. Matousek, J.; Bendlova, N.; Kolska, Z. et al., *Time dependence of the surface chemistry of the plasma treated polypropylene powder*, ADVANCED POWDER TECHNOLOGY 27 (2016) 262-267, DOI 10.1016/j.appt.2015.12.010

5. Capkova, P.; Matousek, J.; Rejnek, J. et al. *Effect of plasma treatment on structure and surface properties of montmorillonite*, APPLIED CLAY SCIENCE 129 (2016) 15-19, DOI 10.1016/j.clay.2016.04.016
6. Miksova, R.; Mackova, A.; Cutroneo, M.; Slepicka, P.; Matousek, J., *Compositional, structural and optical changes of polyimide irradiated by heavy ions*, SURFACE AND INTERFACE ANALYSIS 48 (2016) 566-569, DOI 10.1002/sia.6007
7. Strasak, T.; Maly, M.; Matousek, J. et al., *Synthesis and characterization of carbosilane dendrimer-sodium montmorillonite clay nanocomposites. Experimental and theoretical studies*, RSC ADVANCES 6 (2016) 43356-43366, DOI 10.1039/c6ra04442e
8. Kolska, Z.; Matousek, J.; Capkova, P. et al., *A new luminescent montmorillonite/borane nanocomposite*, APPLIED CLAY SCIENCE 118 (2015) 295-300, DOI 10.1016/j.clay.2015.10.009
9. Cutroneo, M.; Mackova, A.; Matousek, J.; et al., *High-intensity laser for Ta and Ag implantation into different substrates for plasma diagnostics*, NUCLEAR INSTRUMENTS & METHODS IN PHYSICS RESEARCH SECTION B-BEAM INTERACTIONS WITH MATERIALS AND ATOMS 354 (2015) 56-59, DOI 10.1016/j.nimb.2014.11.082
10. Benkocka, M.; Knapova, T.; Matousek, J. et al., *Chemically Activated and Grafted Substrates and Their Analyses*, CHEMICKE LISTY 109 (2015) 960-964
11. Cutroneo, M.; Malinsky, P.; Mackova, A.; Matousek, J. et al., *Ta-ion implantation induced by a high-intensity laser for plasma diagnostics and target preparation*, NUCLEAR INSTRUMENTS & METHODS IN PHYSICS RESEARCH SECTION B-BEAM INTERACTIONS WITH MATERIALS AND ATOMS 365 (2015) 384-388, DOI 10.1016/j.nimb.2015.07.071
12. Hajkova, P.; Matousek, J.; Antos, P. *Aging of the photocatalytic TiO<sub>2</sub> thin films modified by Ag and Pt*, APPLIED CATALYSIS B-ENVIRONMENTAL 160 (2014) 51-56, DOI 10.1016/j.apcatb.2014.04.045
13. Mackova, A.; Malinsky, P.; Matousek, J., *Characterization of PEEK, PET and PI implanted with Mn ions and sub-sequently annealed*, NUCLEAR INSTRUMENTS & METHODS IN PHYSICS RESEARCH SECTION B-BEAM INTERACTIONS WITH MATERIALS AND ATOMS 325 (2014) 89-96, DOI 10.1016/j.nimb.2014.01.012
14. Homola, T.; Matousek, J.; Kormunda, M. et al., *Plasma Treatment of Glass Surfaces Using Diffuse Coplanar Surface Barrier Discharge in Ambient Air*, PLASMA CHEMISTRY AND PLASMA PROCESSING 33 (2013) 881-894, DOI 10.1007/s11090-013-9467-3
15. Lorincik, J.; Sroubek, Z.; Matousek, J. et al., *Kinetic electron emission from Cu induced by impact of slow Cs<sup>+</sup> ions*, NUCLEAR INSTRUMENTS & METHODS IN PHYSICS RESEARCH SECTION B-BEAM INTERACTIONS WITH MATERIALS AND ATOMS 315 (2013) 287-290, DOI 10.1016/j.nimb.2013.04.019
16. Kulhankova, L.; Tokarsky, J.; Ivanek, L. et al., *Enhanced electrical conductivity of polyaniline films by postsynthetic DC high-voltage electrical field treatment*, SYNTHETIC METALS 179 (2013) 116-121, DOI 10.1016/j.synthmet.2013.07.024
17. Homola, T.; Matousek, J.; Medvecká, V. et al., *Atmospheric pressure diffuse plasma in ambient air for ITO surface cleaning*, APPLIED SURFACE SCIENCE 258 (2012) 7135-7139, DOI 10.1016/j.apsusc.2012.03.188

18. Homola, T.; Matousek, J.; Hergelova, B. et al., *Activation of poly(methyl methacrylate) surfaces by atmospheric pressure plasma*, POLYMER DEGRADATION AND STABILITY 97 (2012) 886-892, DOI 10.1016/j.polymdegradstab.2012.03.029
19. Homola, T.; Matousek, J.; Hergelova, B. et al., *Activation of poly(ethylene terephthalate) surfaces by atmospheric pressure plasma*, POLYMER DEGRADATION AND STABILITY 97 (2012) 2249-2254, DOI 10.1016/j.polymdegradstab.2012.08.001
20. Kormunda, M.; Homola, T.; Matousek, J. et al., *Surface analysis of poly(ethylene naphthalate) (PEN) films treated at atmospheric pressure using diffuse coplanar surface barrier discharge in air and in nitrogen*, POLYMER DEGRADATION AND STABILITY 97 (2012) 547-553, DOI 10.1016/j.polymdegradstab.2012.01.014
21. Prysiaznyi, V.; Matousek, J.; Cernak, M., *Steel surface treatment and following aging effect after coplanar barrier discharge plasma in air, nitrogen and oxygen*, CHEMICKE LISTY 106 (2012) S1475-1481
22. Drabik, M.; Choukourov, A.; Artemenko, A. et al., *Morphology of Titanium Nanocluster Films Prepared by Gas Aggregation Cluster Source*, PLASMA PROCESSES AND POLYMERS 8 (2011) 640-650, DOI 10.1002/ppap.201000126
23. Drabik, M.; Choukourov, A.; Matousek, J. et al., *Aging of nanocluster Ti/TiO<sub>x</sub> films prepared by means of gas aggregation cluster source*, SURFACE & COATINGS TECHNOLOGY 205 (2011) S48-S52, DOI 10.1016/j.surfcoat.2011.02.013
24. Matousek, J.; Hrach, R.; Svec, M. et al., *Experimental and computational study of morphological and electrical properties of tin/plasma polymer nanocomposites*, SURFACE & COATINGS TECHNOLOGY 205 (2011) S63-S66, DOI 10.1016/j.surfcoat.2011.02.045
25. Hajkova, P.; Kolouch, A.; Hedanek, O.; Matousek, J., *Increase of Photocatalytic Activity of TiO<sub>2</sub> Films by Pt and Ag Modification*, PROCEEDINGS OF THE 6TH EUROPEAN MEETING ON SOLAR CHEMISTRY & PHOTOCATALYSIS: ENVIRONMENTAL APPLICATIONS (2010) 162-163.
26. Hajkova, P.; Spatenka, P.; Matousek, J. et al., *The Influence of Surface Treatment on Photocatalytic Activity of PE CVD TiO<sub>2</sub> Thin Films*, PLASMA PROCESSES AND POLYMERS 6 (2009) S735-S740, DOI 10.1002/ppap.200931808
27. Hajkova, P.; Spatenka, P.; Matousek, J. et al., *Antibacterial effect of silver modified TiO<sub>2</sub>/PECVD films*, EUROPEAN PHYSICAL JOURNAL D 54 (2009) 189-193, DOI 10.1140/epjd/e2009-00087-7
28. Matousek, J.; Pavlik, J.; Stryhal, Z. et al., *Properties of tin/plasma polymer nanocomposites*, VACUUM 84 (2009) 86-89, DOI 10.1016/j.vacuum.2009.04.015
29. Kondyurin, A.; Polonskyi, O.; Matousek, J. et al., *Covalent Attachment and Bioactivity of Horseradish Peroxidase on Plasma-Polymerized Hexane Coatings*, PLASMA PROCESSES AND POLYMERS 5 (2008) 727-736, DOI 10.1002/ppap.200800010