

1. Zielinska-Jurek A., Kowalska E., **Sobczak J.W., Lisowski W.**, Bunsho Ohtani, Zaleska A. „Preparation and characterization of monometallic (Au) and bimetallic (Ag/Au) modified-titania photocatalysts activated by visible light”, *Applied Catalysis B: Environmental* 101 (2011) 504-514
2. Bartnik A, Fiedorowicz H., Jarocki R., Kostecki J., Szczurek M., Chernyayeva O., **Sobczak JW.**, ”EUV-induced physico-chemical changes in near-surface layers of polymers”, *Journal of Electron Spectroscopy and Related Phenomena*, 184, 270-275 (2011)
3. Jankowski P., Ogonczyk D., Kosinski A., **Lisowski W.** Garstecki P., „Hydrophobic modification of polycarbonate for reproducible and stable formation of biocompatible microparticles”, *Lab Chip*, 2011, 11, 748-752
4. Godlewski M., Guziewicz E., Lukasiewicz M.I., Kowalik I.A., Sawicki M., Witkowski B.S., Jakiela R., **Lisowski W., J.W. Sobczak J.W., Krawczyk M.**, “Role of interface In ferromagnetism of (Zn, Co)O films”, *Phys. Status Solidi B*, 248, 1596-1600 (2011)
5. Derzsi L, Jankowski P, **Lisowski W.** Garstecki P., „Hydrophilic polycarbonate for generation of oil in water emulsions in microfluidic devices”, *Lab Chip*, 2011, 11, 1151-1156
6. Srebowata A., **Lisowski W., Sobczak J.W.**, Karpinski Z. ”Hydrogen-assisted dechlorination of 1,2-dichloroethane on active carbon supported palladium–copper catalysts”, *Catal. Today* 2011, 175 576-584
7. Rozniecka E., Jonsson-Niedziolka M., **Sobczak J.W.**, Opallo M. ”Mediatorless bioelectrocatalysis of dioxygen reduction at ITO and ITO nanoparticulate film electrodes”, *Electrochimica Acta*, 2011, 56, 8739-8745
8. Iwanek E., Krawczyk K., Petryk J., **Sobczak J.W.**, Kaszkur Z. ”Direct nitrous oxide decomposition with CoOx-CeO₂ catalysts”, *Applied Catalysis B: Environmental*, 2011, 106, 416-422
9. **Krawczyk M., Lisowski W., Sobczak J.W., Kosinski A., Jablonski A.**, Skierbiszewski C., Siekacz M., Wiazkowska S. ,”Surface and in-depth characterization of InGaN compounds synthesized by plasma-assisted molecular beam epitaxy”, *Journal Alloys and Compounds*, 2011, 509, 9565-9571
10. L. Ilieva, G. Pantaleo, I. Ivanov, R. Zanella, **J. W. Sobczak, W. Lisowski**, A. M. Venezia, D. Andreeva, Preferential oxidation of CO in H₂ rich stream (PROX) over gold catalysts supported on doped ceria: effect of water and CO₂, *Catalysis Today*, 2011, 175 411-419
11. G. Gergely, S. Gurban, M. Menyhard, **A. Jablonski**, J. Zemek and K. Goto, Experimental determination of the electron elastic backscattering probability and the surface excitation parameter for Si, Ni, Cu and Ag at 0.5 and 1 keV energies, *Surface Interface Analysis*, 2011, 43, 1365-1370
12. Tougaard S, **Jablonski A.**, Experimental verification of the shape of the excitation depth distribution function for AES, *Journal of Vacuum Science & Technology A*, 2011, 29, art.no. 051401
13. C.J. Powell, **A. Jablonski**, Surface sensitivity of Auger –electron spectroscopy and X-ray photoelectron spectroscopy, *J. Surface Analysis* 2011, 17, 170-176
14. **A. Jablonski**, C.J. Powell , The backscattering correction factor in AES. A New Outlook.*J. Surface Analysis*, 2011, 17, 213-219
15. L. Ilieva, G. Munteanu, P. Petrova, T. Tabakova, **J.W. Sobczak, W. Lisowski, M. Krawczyk**, M.V. Abrashev, D. Andreeva, Reduction behavior of nanosized gold catalysts supported on ceria doped with CoOx, *Nanoscience and Nanotechnology* (Eds. E. Balabanova, I. Dragieva), 2011,

11, 59-63

16. O.Chernyayeva, D. Lisovytskiy, Characterisation of titanium oxide films obtained by electrochemical plasma treatment, *Functional Materials*, 2011, 18, 107-110
17. A. Lewera, L. Timperman, A. Roguska, N. Alonso-Vante: Metal-support Interactions between nanosized Pt and metal oxides (WO₃ and TiO₂) studied using X-ray photoelectron spectroscopy. *The Journal of Physical Chemistry C* 115 (2011) 20153-20159
18. M. Pisarek, A. Roguska, M. Andrzejczuk: Charakterystyka nanoporowatych warstw na Ti jako perspektywicznych podłoży dla zastosowań biomedycznych. *Inżynieria Materiałowa* 2 (2011) 71-76
19. M. Pisarek, A. Roguska, M. Andrzejczuk, L. Marcon, S. Szunerits, M. Lewandowska, M. Janik-Czachor: Effect of two-step functionalization of Ti by chemical processes on protein adsorption. *Applied Surface Science* 257 (2011) 8196– 8204
20. A. Roguska, A. Kudelski, M. Pisarek, M. Opara, M. Janik-Czachor: Surface-enhanced Raman scattering (SERS) activity of Ag, Au and Cu nanoclusters on TiO₂-nanotubes/Ti substrate. *Applied Surface Science* 257 (2011) 8182– 8189
21. A.Roguska, A.Kudelski, M.Pisarek, M.Opara, M.Janik-Czachor, Raman investigations of SERS activity of Ag nanoclusters on a TiO₂-nanotubes/Ti substrate, *Vibrational Spectroscopy*, 55 (1) (2011) 38-43
22. A. Roguska, M. Pisarek, M. Andrzejczuk, M. Dolata, M. Lewandowska M. Janik-Czachor: Characterization of a calcium phosphate-TiO₂ nanotube composite layer for biomedical applications. *Materials Science and Engineering C* 31 (2011) 906-914
23. A. Roguska, S. Hiromoto, A. Yamamoto, M.J. Woźniak, M. Pisarek, M. Lewandowska: Collagen immobilization on 316L stainless steel surface with cathodic deposition of calcium phosphate. *Applied Surface Science* 257 (2011) 5037-5045 (IF 1.616)
24. X. Liu, I. Abrahams, S. Hull, S.T. Norberg, M. Holdynski and F. Krok, „A neutron total scattering study of defect structure in Bi₃Nb0.5Y0.5O_{6.5}”, *Solid State Ionics* 192 (2011) 176-180
25. M. Polanski, J. Bystrzycki, R.A. Varin, T. Płociński, M. Pisarek, The effect of chromium (III) oxide (Cr₂O₃) nanopowder on the microstructure and cyclic hydrogen storage behavior on magnesium hydride (MgH₂), *Journal of Alloys and Compounds*, 509 (2011) 2386-2391
26. A. Delimi, E. Galopin, Y. Coffinier, M. Pisarek, R. Boukherroub, B. Talhi, S. Szunerits, Investigation of the corrosion behavior of carbon steel coated with fluoropolymer thin films, *Surface & Coatings Technology* 205 (2011) 4011–4017
27. M. Pisarek, A. Roguska, M. Andrzejczuk, L. Marcon, S. Szunerits, M. Lewandowska, M. Janik-Czachor, Effect of two-step functionalization of Ti by chemical processes on protein adsorption, *Applied Surface Science*, 257 (2011) 8196-8204
28. I.E. Malka, M. Pisarek, T. Czujko, J. Bystrzycki, A study of the ZrF₄, NbF₅, TaF₅, and TiCl₃ influences on the MgH₂ sorption properties, *International Journal of Hydrogen Energy* 36 (2011) I2909-I2917
29. M. Barlak, J. Piekoszewski, Z. Werner, B. Sartowska, M. Pisarek, L. Walis, W. Starosta, A. Kolitsch, R. Gröetzschel, K. Bochenska, C. Pochrybniak, Modes of the use of high intensity plasma beams for ceramic surface modification, *Surface Coatings and Technology*, 206 (2011) 916–919

2010 ↑

1. Gergely G, Gurban S, Menyhard M, **Jablonski A, Zommer L** Goto K., „The inelastic mean

free path of electrons. Past and present research”, *Vacuum*, 84 134-136 (2010)

2. **Jablonski A**, Powell CJ, „Improved analytical formulae for correcting elastic-scattering effects in X-ray photoelectron spectroscopy”, *Surface Science* 604 327-336 (2010)
3. **Jablonski A**, „Determination of Surface Composition by X-ray Photoelectron Spectroscopy Taking into Account Elastic Photoelectron Collisions”, *Analytical Sciences*, 26 155-164 (2010)
4. **Jablonski A**, Zemek J., „Remarks on Some Reference Materials for Applications in Elastic Peak Electron Spectroscopy”, *Analytical Sciences* 26 239-246 (2010)
5. **Zommer L, Jablonski A**, Kotis L, Safran G, Menyhard M., “Simulation and measurement of AES depth profiles; a case study of the C/Ta/C/Si system”, *Surface Science* 604 633-640 (2010)
6. Powell CJ, **Jablonski A**, „Progress in quantitative surface analysis by X-ray photoelectron spectroscopy: Current status and perspectives”, *Journal of Electron Spectroscopy and Related Phenomena* 178-179 331-346 (2010)
7. **Zommer L, Jablonski A**, „Calculations of Auger intensity versus beam position for a sample with layers perpendicular to its surface”, *Japanese Journal of Applied Physics* 43 275301-1-7 (2010)
8. **Jablonski A**, Powell C.,” Dependence of the AES backscattering correction factor on the experimental configuration”, *Surface Science* 604 1928-1939 (2010)
9. Pavluch J, **Zommer L**, Masek K, Skala T, Sutara F, Nehasil V, Pis I, Polyak Y.,” Non-destructive Depth Profiling of the Activated Ti-Zr-V Getter by Means of Excitation Energy Resolved Photoelectron Spectroscopy”, *Analytical Sciences* 26 209-215 (2010)
10. Lunarska E, **Chernyayeva O**, Lisovitskiy D, Zachariasz R.,” Softening of a-Ti by electrochemically introduced hydrogen”, *Materials Science And Engineering C-Materials for Biological Applications* 30 181-189 (2010)
11. Bartnik A, Fiedorowicz H, Jarocki R, Kostecki J, Szczurek M, **Bilinski A, Chernyayeva O, Sobczak JW.**,” Physical and chemical modifications of PET surface using a laser-plasma EUV source”, *Applied Physics A*, 99 831-836 (2010)
12. **Lisowski W**, Keim EG.,” Vacuum annealing phenomena in ultrathin TiDy/Pd bi-layer films evaporated on Si(100) as studies by TEM and XPS”, *Analytical and Bioanalytical Chemistry* , 396 2797-2804 (2010)
13. Cypryk M, Pospiech P, Strzelec K, Wasikowska K, **Sobczak JW.**,” Soluble polysiloxane-supported palladium catalysts for the Mizoroki–Heck reaction”, *Journal of Molecular Catalysis A: Chemical* 319 32-40 (2010)
14. Zielinska A, Kowalska E, **Sobczak JW**, Lacka I, Gazda M, Ohtani B, Hupka J, Zaleska A, „Silver-doped TiO₂ prepared by microemulsion method: surface properties, bio- and photoactivity”, *Separation and Purification Technology* 72 309-318 (2010)
15. Skolek-Stefaniszyn E, Kaminski J, **Sobczak JW**, Wierzchon T., „Modifying the properties of AISI 316L steel by glow discharge assisted low-temperature nitriding and oxynitriding”, *Vacuum* 85 164 -169 (2010)
16. Andreeva D, Kantcheva DM, Ivanov I, Ilieva L, **Sobczak JW, W. Lisowski W.**, “Gold supported on ceria doped by Me³⁺ (Me³⁺=Al and Sm) for water gas shift reaction: Influence of dopant and preparation method” *Catalysis Today* 158 69-77 (2010)
17. Sannicolò F, Rizzo S, Benincori T, Kutner W, Noworyta K, **Sobczak JW.**,” An effective multipurpose building block for 3D electropolymerisation: 2,2'-Bis(2,2'-bithiophene-5-yl)3,3'-bithianaphthene”, *Electrochimica Acta* 55 8352-8364 (2010)
18. Rzanek-Boroch Z, Buczek M, Ilik A, **Kosinski, A.**, „Wplyw zawartosci fluoru na wlasciwosci powlok osadzonych w wyladowaniu barierowym pod cisnieniem atmosferycznym”, *Przemysl Chemiczny* , 89 1209-1211 (2010)

19. H.Nykyforczyn, E.Lunarska, O.Tsyrulnik, **K.Nikiforov**, MN.E.Genarro, G.Gabetta,"Environmentally assisted "in-bulk" steel degradation of long term service gas trunkline",*Engineering Failure Analysis* 17, 624-632 (2010)
20. Krupa D, Baszkiewicz J, Zdunek J, Smolik J, Slomka Z, **Sobczak JW.**, "Characterization of the surface layers formed on titanium by plasma electrolytic oxidation ", *Surface & Coatings Technology* 205, 1743-1749 (2010)
21. Wilczkowska E, Krawczyk K, Petryk J, **Sobczak JW**, Kaszkur Z., „Direct nitrous oxide decomposition with a cobalt oxide catalyst”, *Applied Catalysis A: General* 389,165-172 (2010)
22. Lorkiewicz J., Kula J., Klimasz M., Pszona S., **Sobczak J.W.**, "Wytwarzanie cienkich warstw antyemisyjnych TiN na powierzchniach elementów mocy mikrofalowej i ich charakterystyka / Thin anti-multipactor TiN layers coating on RF power components and their characteristics", *Inżynieria Materiałowa*, 31 (nr4-176), 1068-1074 (2010)
23. I. Kaminska, J. Niedziolka-Jonsson, **A. Roguska**, M. Opallo. Electrodeposition of gold nanoparticles at a solidionic liquidaqueous electrolyte three-phase junction. *Electrochemistry Communications* 12 (2010) 1742-1745 (IF 4.243)
24. M. Lewandowska, **A. Roguska**. Nanomaterials: friends or foes, *Inżynieria Materiałowa* 3 (2010) 773-776 (9 pkt.)
25. M. Leszczynska, **M. Holdynski**, F. Krok, I. Abrahams, X. Liu and W. Wrobel, „Structural and electrical properties of Bi₃Nb_{1-x}Er_xO_{7-x}”, *Solid State Ionics* 181 (2010) 796-811
26. C.Delacote, A.Lewera, **M.Pisarek**, P.J.Kulesza, P.Zelenay and N.Alonso-Vante, The effect of diluting ruthenium by iron in RuxSey catalyst for oxygen reduction, *Electrochimica Acta*, 55 (2010) 7575-7580
27. J. Niedziolka-Jonsson, F.Barka, X.Castel, **M.Pisarek**, N.Bezzi, R.Boukherroub, S.Szunerits, Development of new localized surface Plasmon resonance interfaces based on gold nanostructures sandwiched between tin-doped indium oxide films, *Langmuir* 26(6) (2010) 4266-4273

2009 ↑

1. D.Krupa, J.Baszkiewicz, J.Mizera, T.Borowski, **J.W.Sobczak, A.Bilinski**, M.Lewandowska - Szumiel, M.Wojewodzka, "Effect of the heating temperature on the corrosion resistance of alkali-treated titanium", *Journal of Biomedical Materials Research Part A* , 88, 589-598 (2009)
2. Drelinkiewicz, A., **Sobczak, J.W.**, Sobczak, E., **Krawczyk, M.**, Zieba, A., Waksmundzka-Góra, A., "Physicochemical and catalytic properties of Pt-poly(4-vinylpyridine) composites", *Materials Chemistry and Physics* 114, 763-773 (2009)
3. D. Andreeva, I. Ivanov, L. Ilieva, M.V. Abrashev, R. Zanella, **J.W. Sobczak, W. Lisowski**, M. Kantcheva, G. Avdeev, K. Petrov, "Gold catalysts supported on doped by rare earth metals ceria for water gas shift reaction: influence of the preparation method", *Appl. Catal. A* , 357, 159-169(2009)
4. Zaleska A., Grabowska E., **Sobczak J.W.**, Gazda M., Hupka J., "Photocatalytic activity of boron-modified TiO₂ under visible light: the effect of boron content, calcination temperature and TiO₂ matrix", *Applied Catalysis B: Environmental*, 89, 469-475 (2009)
5. J.R. Sobiecki, M. Ossowski, **J.W. Sobczak**, A. Zajaczkowska, E. Czarnowska, T. Wierzchon, "Bioactivity of oxynitrided layers produced on the Ti6Al4V titanium Alloys", *Engineering of Biomaterials*, 77-80, 86-88, (2008)

6. E. Czarnowska, A. Zajaczkowska, M.M. Godlewski, W. Mróz, **J.W. Sobczak**, T. Wierzchon, "Combination of hydroxyapatite islets with Ti3P surface layer produced on titanium alloys for bone implants", *J. of Nanoscience and Nanotechnology*, 9, 3462-3468, (2009)
7. L. Ilieva, G. Pantaleo, R. Nedyalkova, **J.W. Sobczak**, **W. Lisowski**, M. Kantcheva, A.M. Venezia, D. Andreeva, "NO reduction by CO over gold catalysts based on modified by Me⁺³ (Me = Al or lanthanides) ceria supports, prepared by mechanochemical activation: effect of water in the feed gas", *Applied Catalysis B: Environmental*, 90, 286-294 (2009)
8. M. Ruszel, B. Grzybowska, M.A. Malecka, L. Kepinski, **J.W. Sobczak** and M. Wojciechowska, "Nano- Au/MgF₂ and Au/MgO Catalysis in Oxidation of CO", *Polish J. Chem.*, 83, 1185-1193 (2009)
9. Marek Cypryk, Piotr Pospiech, Krzysztof Strzelec, **Janusz W. Sobczak**, "Soluble Alkylthiopolysiloxane - Supported Palladium Catalysts for the Heck Reaction", *Phosphorus, Sulfur, and Silicon*, 184:1-13, 2009
10. V. Stonkus, K. Edolfa, L. Leite, **J. W Sobczak**, L. Plyasova, P. Petrova, "Palladium-promoted Co-SiO₂ catalysts for 1,4-butanediol cyclization", *Appl. Catal. A: General*, 362, 147-154, (2009)
11. Drelinkiewicz, A., Zieba, A., **Sobczak, J.W.**, Bonarowska, M., Karpinski, Z., Waksmundzka-Góra, A., Stejskal, J., "Polyaniline stabilized highly dispersed Pt nanoparticles: Preparation, characterization and catalytic properties", *Reactive and Functional Polymers* 69, 630-642, 2009
12. **A. Jablonski**, C.J. Powell, „Effects of Electron backscattering in Auger Electron Spectroscopy: Recent development”, *J. Surface Analysis*, 15, 139-149 (2008)
13. **A. Jablonski**, J. Zemek, “Overlayer thickness determination by XPS using the multiline approach”, *Surf. Interface Anal.* 41, 193-204 (2009)
14. **A. Jablonski**, “The backscattering factor for systems with a non-uniform surface region: Definition and calculations”, *Surface Science* 603, 2047-2056 (2009)
15. **A. Jablonski**, “Quantification on surface-sensitive electron spectroscopies”, *Surface Science* 603, 1342-1352 (2009)
16. **W. Lisowski**, E.G. Keim, Application of TEM and XPS in the interpretation of the kinetics of deuterium evolution from ultrathin TiDy/Pd films evaporated on quartz, *Anal. Bioanal. Chem.* 393, 1923-1929 (2009)
17. J. Zemek, J. Houdkova, P. Jiricek, **A. Jablonski**, V. Jurka and J. Kub, "Determination of electron inelastic mean free paths for poly[methyl(phenyl)silylene] films", *Polymer* 50, 2445-2450, (2009)
18. C.J. Powell, **A. Jablonski**, "Surface sensitivity of X-ray photoelectron spectroscopy", Nuclear Instruments and Methods in *Physics Research Section A: Accelerators, Spectrometers, Detectors and Associated Equipment*, 601, 54-65 (2009)
19. **A. Jablonski**, C.J. Powell, "Practical expressions for the mean escape depth, the information depth, and the effective attenuation length in Auger-electron spectroscopy and x-ray photoelectron spectroscopy", *J. Vac. Sci. Technol. A*, 27, 253-261 (2009)
20. **Zommer L.**, „EPES information depth for an overlayer/substrate system with a diffuse interface”, *J. Electr. Spectr. Rel. Phen.* 169, 57-61 (2009)
21. G. Gergely, S. Gurban, M. Menyhard, **A. Jablonski and L. Zommer**, "The Inelastic Mean Free Path of Electrons. Research in Budapest, Warsaw, Wroclaw and Clermont-Ferrand. Brief History and New Results", *Acta Phys. Pol. A*, 114, s49-s58
22. **A. Roguska**, A. Kudelski, **M. Pisarek**, M. Lewandowska, K.J. Kurzydłowski, M. Janik-Czachor. In situ spectroelectrochemical surface-enhanced Raman scattering (SERS) investigations on composite Ag/TiO₂-nanotubes/Ti substrates. *Surface Science* 603 (2009) 2820-2824 (IF 1.798)

- 23**A. Roguska, A. Kudelski, M. Pisarek, M. Lewandowska, M. Dolata, M. Janik-Czachor. Raman investigations of TiO₂ nanotube substrates covered with thin Ag or Cu deposits. *Journal of Raman Spectroscopy* 40 (2009) 1652-1656 (IF 3.137)
- 24**A.Roguska, A. Kudelski, M.Pisarek, M. Lewandowska, Kurzydłowski, M. Janik-Czachor: Raman Investigations of Adsorbate-Substrate Interactions on Composite Ag (or Cu)/TiO₂ Nanotubes/Ti Substrates. WDS'09 Proceedings of contributed papers: Part III – Physics, Matfyzpress (2009) 136–141
- 25.** M. Malys, M. Holdynski, F. Krok, W. Wrobel, J.R. Dygas, C. Pirovano, R.-N. Vannier, E. Capoen and I. Abrahams „Investigation of transport numbers in yttrium doped bismuth niobates”, *Journal of Power Sources* 194 (2009) 16-19
- 26**M.Pisarek, P.Kędzierzawski, M.Janik-Czachor, K.J.Kurzydłowski, Effect of Hydrostatic Extrusion on Passivity Breakdown on 303 Austenitic Stainless Steel in Chloride Solution, *Journal of Solid State Electrochemistry (Special Issue EMRS 2007)*, 13 (2009) 283-291
- 27.** M.Pisarek, M.Łukaszewski, P.Winiarek, P.Kędzierzawski, M.Janik-Czachor, Selective catalytic hydrogenation of isophorone on Ni-Al alloy modified with Cr, *Materials Chemistry and Physics*, 114 (2009) 774-779
- 28.** M.Rosinski, B.Badziak, P.Parys, J.Wołowski, M.Pisarek, Modification of semiconductor materials using laser-produced ion streams additionally accelerated in the electric fields, *Applied Surface Science*, 255 (2009) 5418-5420
- 29.** M.Pisarek, M.Łukaszewski, P.Winiarek, P.Kędzierzawski, M.Janik-Czachor, Catalytic activity of Cr or Co modified Ni-based rapidly quenched alloys in the hydrogenation of isophorone, *Applied Catalysis A*, 358 (2009) 240-248
- 30.** Z.Werner, M.Pisarek, M.Barlak, R.Ratajczak, W.Starosta, J.Piekoszewski, W.Szymczyk, R.Gröttschel, Chemical effects in Zr- and Co-implanted sapphire, *Vacuum*, 83 (2009) S57–S60
- 31.** M.Pisarek, M.Janik-Czachor, T.Płociński, M.Łukaszewski, Characterization of catalysts obtained from rapidly quenched alloy precursors by electrochemical/chemical processes of material degradation—selected examples, *Journal of Materials Science*: 44 (2009) 5701-5712
- 32.** M.Pisarek, M.Łukaszewski, M.Janik-Czachor, Auger Electron Spectroscopy for Materials Science: Examples of Applications, *Polish Journal of Chemistry*, 83 (2009) 1393-1412
- 33.** M.Janik-Czachor, M.Pisarek, Electrochemical, Microscopic and Surface Analytical Studies of Amorphous and Nanocrystalline Alloys, *Progres in Corrosion Science and Engineering I*, Modern Aspects of Electrochemistry, Su-II Pyun, Jong-Won Lee (Eds.), Vol. 46 (2009) 175-230
- 34.** M.Manesse, R.Sanjines, V.Stambouli, C.Jorel, B.Pelissier, M.Pisarek, R.Boukherroub and S.Szunerits, Preparation and characterization of silver substrates coated with antimony doped SnO₂ thin films for surface plasmon resonance studies, *Langmuir* 25(14) (2009) 8036-8041
- 35.** H.Lin, S.Szunerits, M.Pisarek, W.Xu, R.Boukherroub, Preparation of Superhydrophobic Coatings on Zinc, Silicon, and Steel by a Solution-Immersion Technique, *Applied Materials and Interfaces*, 1(9) (2009) 2086-2091

2008 ↑

- 1.** L. Zommer and A. Jablonski, “The Backscattering Factor for Systems with a Buried Layer”, *J. Phys. D: Appl. Phys.* 41, 055501 (2008).
- 2.** A. Jablonski, S. Tanuma and C. J. Powell, „Modified Predictive Formula for the Electron Stopping Power”, *J. Appl. Phys.* 103, 063708 (2008).
- 3.** L. Zommer and A. Jablonski, L. Kotis and M. Menyhard, “Monte Carlo Calculations of Backscattering Factor for Ni-C Multilayer System”, *J. Phys. D: Appl. Phys.* 41, 155312 (2008).

4. Keim E.G., **Lisowski W.**, Smithers M.A., „ TEM/SEM studies of microstructural transformations in ultrathin TiDy/Pd films evaporated on Si(100) after TDMS induced decomposition of the TiDy phase.”, *Microscopy and Microanalysis*, 2008, 14, 316-317
5. **Lisowski W.**, Keim E.G., Kaszkur Z., van den Berg A.H.J., Smithers M.A., Decomposition of thin titanium deuteride films; thermal desorption kinetics studies combined with microstructure analysis., *Applied Surface Science*, 2008, 254, 2629-2637
6. **M. Krawczyk**, Quantification of surface excitation effects on the EPES-determined IMFPs for GaN and SiC, *Surface & Interface Analysis*, 2008, 40, 725-727
7. D. Andreeva, P. Petrova, L. Ilieva, **J.W.Sobczak**, M. Abrashev, Design of new gold catalysts supported on mechanochemically activated ceria-alumina promoted by molybdena for complete benzene oxidation, *Applied Catalysis B: Environmental*, 2008, 77, 364-372
8. A. Zaleska, **J. W. Sobczak**, E. Grabowska, J. Hupka, Preparation and photocatalytic activity of boron-modified TiO₂ under UV and visible light, *Applied Catalysis B: Environmental*, 2008, 78, 92-100
9. Baszkiewicz, J., Krupa, D., Kozubowski, J.A., Rajchel, B., Lewandowska-Szumił, M., Barcz, A., **Sobczak, J.W.**, **Kosinski A.**, Chróścicka, A., The effect of sodium-ion implantation on the properties of titanium, *Journal of Materials Science: Materials in Medicine*, 2008, 19, 3081-3091
10. Drelinkiewicz, A., Zieba, A., Król, A., **Sobczak, J.W.**, Grzywa, M., “Polyaniline supported Pd and Pt catalysts. Role of metal in hydrogenation of 2-butyne-1,4-diol, *Polish J. of Chemistry*, 2008, 82, 1717-1732
11. Sitek R., Sikorski K., **Sobczak J.W.**, Wierzchon T., “Structure and properties of the multilayers produced on Inconel 600 by the PACVD method with the participation of trimethylaluminum vapours”, *Material Sciences-Poland*, 2008, 26, 767-776
12. Lorkiewicz, J., Kula, J., Pszona, S., **Sobczak, J.W.**, **Bilinski, A.**, “Sublimation TiN coating of RF power components”, *American Institute of Physics - Conference Proceedings*, 2008, 993, 411-414
13. Drelinkiewicz, A., Knapik, A., Stanuch, W., **Sobczak, J.W.**, Bukowska, A., Bukowski, W., “Diamine functionalized gel-type resin as a support for palladium catalysts: Preparation, characterization and catalytic properties in hydrogenation of alkynes”, *Reactive and Functional Polymers*, 68 (2008), 1650-1662
14. Górska, P., Zaleska, A., Kowalska, E., Klimczuk, T., **Sobczak, J.W.**, Skwarek, E., Janusz, W., Hupka, J., “TiO₂ photoactivity in Vis and UV light: the influence of calcination temperature and surface properties”, *Applied Catalysis B: Environmental*, 2008, 84, 440-447
15. **M. Krawczyk**, “Corrected electron inelastic mean free paths (IMFPs) for selected wideband semiconductors”, *J. of Physics: Conference Series*, 100 (2008) 042033
16. F. Krok, I. Abrahams, **M. Holdynski**, A. Kozanecka-Szmigiel, M. Malys, M. Struzik, X. Liu and J.R. Dygas „Oxide Ion Distribution and Conductivity in Bi₇Nb₂ 2xY₂O_{15.5} 2x”, *Solid State Ionics* 179 (2008) 975-980
17. **M.Pisarek**, M.Janik-Czachor, M.Donten, Local characterization of electrodeposited Ni-W amorphous alloy by Auger microanalysis, *Surface Coatings and Technology* 202 (2008) 1980-1984
18. **M.Pisarek**, P.Kędzierzawski, M.Janik-Czachor, K.J.Kurzydłowski, The Effect of Hydrostatic Extrusion on the Corrosion Resistance of 316 Stainless Steel, *Corrosion NACE* Vol.64, No.2 (2008) 131-137
19. **M.Pisarek**, P.Kędzierzawski, T.Płociński, M.Janik-Czachor, K.J.Kurzydłowski, Characterization of the Effects of Hydrostatic Extrusion on Grain Size, Surface Composition and the Corrosion Resistance of Austenitic Stainless Steels, *Materials Characterization*, 59 (9) (2008) 1292-1300

20. M.Pisarek, M.Łukaszewski, P.Winiarek, P.Kędzierzawski, M.Janik-Czachor, Influence of Cr addition to Raney Ni catalyst on hydrogenation of isophorone, *Catalysis Communications*, 10 (2008) 213-216

2007 ↑

1. Andreeva D., Ivanov I., Ilieva L., **Sobczak J.W.**, Avdeev G., Petrov K.; Gold based catalysts on ceria and ceria-alumina for WGS reaction (WGS Gold catalysts) *Top. Catal.*, 44, 173-182 (2007).
2. Andreeva D., Ivanov I., Ilieva L., **Sobczak J.W.**, Avdeev G., Tabakova T.; Nanosized gold catalysts supported on ceria and ceria-alumina for WGS reaction: influence of the preparation method. *Appl. Catal., A*, 333, 153-160 (2007).
3. Baszkiewicz J., Krupa D., Rajchel B., Kozubowski J.A., Barcz A., **Sobczak J.W., Kosinski A.**; Effect of sodium-ion implantation on the properties of the surface layers formed on CoCrMo alloy (Endocast SL); *Vacuum*, 81, 1306-1309 (2007).
4. Drelinkiewicz A., Waksmundzka-Góra A., **Sobczak J.W.**, Stejskal J.; Hydrogenation of 2-ethyl-9,10-anthraquinone on Pd-polyaniline (SiO₂) composite catalyst. The effect of humidity.; *Appl. Catal., A*, 333, 219-228 (2007).
5. Gergely G., Menyhard M., Sulyok A., Gurban S., Lesiak B., **Jablonski A., Kosinski A.**, Toth J., Varga D.; Evaluation of the inelastic mean free path (IMFP) of electrons in polyaniline and polyacetylene samples obtained from elastic peak electron spectroscopy (EPES).; *Cent. Eur. J. Phys.*, 5, 188–200 (2007)
6. Ilieva L., Pantaleo G., **Sobczak J.W.**, Ivanov I., Venezia A.M., Andreeva D.; NO reduction by CO in the presence of water over gold supported catalysts on CeO₂-Al₂O₃ mixed support, prepared by mechanochemical activation.; *Appl. Catal., B*, 76, 107-114 (2007)
7. **Jablonski A.**, Powell C.J.; A universal algorithm for calculating the backscattering factor in AES.; *Surf. Sci.*, 601, 965-977 (2007)
8. **Jablonski A.**, Powell C.J.; Improved algorithm for calculating the transport cross sections of electrons with energies from 50 eV to 30 keV. *Phys. Rev. B*, 76, 085123 (2007)
9. **Jablonski A.**, Zemek J.; Angle-resolved Elastic-Peak Electron Spectroscopy: Role of surface excitations.; *Surf. Sci.*, 601, 3409–3420 (2007)
10. Keim E.G., **Lisowski W.**, Smithers M.A., Kaszkur Z.; Microstructural transformation of thin Ti/Pd and TiDy/Pd bi-layer films induced by vacuum annealing. *Microsc. Microanal.*, 13, 1290-1291 (2007)
11. Kozakiewicz J., Kuczynska H., Jesionowski T., Nowakowski R., **Sobczak J.W.**, Koncka-Foland A.; Zastosowanie nanocząsteczek o zaprojektowanej budowie jako modyfikatorów farb proszkowych.; *Inżynieria Materiałowa*, 5, 863-866 (2007)
12. Krawczyk M., Bilinski A., **Sobczak J.W.**, Ben Khalifa S., Robert-Goumet C.; Interaction of hydrogen with InN thin films elaborated on InP(100.) *Surf. Sci.*, 601, 3722-3725 (2007)
13. Krupa D., Baszkiewicz J., Rajchel B., Barcz A., **Sobczak J.W., Bilinski A.**, Borowski T.; Effect of calcium-ion implantation on the corrosion resistance and bioactivity of the Ti6Al4V alloy.; *Vacuum*, 81, 1310-1313 (2007)
14. Krzton-Maziopa A., **Sobczak J.W.**, Plocharski J.; Electrorheological activity of suspensions of surface-modified pyrolyzed polyacronitrile. *Polym. Eng. Sci.*, 47, 1192-1197 (2007)
15. Lesiak B., **Kosinski A.**, Nowakowski R., Kover L., Toth J., Varga D., Cserny I., Sulyok A., Gergely G.; Morphology, surface roughness, electron inelastic and quasielastic scattering in elastic peak electron spectroscopy of polymers.; *Surf. Interface Anal.*, 39, 798-804 (2007)

- 16.** Lisowski W., Keim E.G., Kaszkur Z., van den Berg A.H.J., Smithers M.A.; Microstructural and chemical transformation of thin Ti/Pd and TiDy/Pd bi-layer films induced by vacuum annealing.; *Anal. Bioanal. Chem.*, 389, 1489-1498 (2007)
- 17.** Wachowski L., Sobczak J.W., Hofman M.; Speciaton of functional groups formed on the surface of ammoxidised carbonaceous materials by XPS metod.; *Appl. Surf. Sci.*, 253, 4456-4461 (2007)
- 18.** Winkler K., Grodzka E., Sobczak J.W., Balch A.L.; Charge transfer process in bilayers and copolymers composed of C60Pd and 2'-ferrocenypyrrolidyno-[3',4';1,2]C60Pd two-component polymers.; *J. Mater. Chem.*, 17, 572-581 (2007)
- 19.** Zaleska A., Górska P., Sobczak J.W., Hupka J.; Thioacetamide and thiourea impact on visible light activity of TiO₂.; *Appl. Catal.*, B, 76, 1-8 (2007)
- 20.** Zemek J., Jiricek P., Houdkova J., Olejnik K., Jablonski A.; Attenuation of photoelectrons and Auger electrons leaving nickel deposited on a gold surface.; *Surf. Interface Anal.*, 39, 916-921 (2007)
- 21.** Zommer L., Jablonski A., Gergely G., Gurban G.; Monte Carlo Backscattering Yield (BY) calculations applying Continuous Slowing Down Approximation (CSDA) and experimental data.; *Vacuum*, 2008, 82, 201–204 (2007)
- 22.** M. Pisarek, M. Lewandowska, A. Roguska, K.J. Kurzydłowski, M. Janik-Czachor. SEM, Scanning Auger and XPS characterization of chemically pretreated Ti surfaces intended for biomedical applications. *Materials Chemistry and Physics*, 104 (2007) 93-97 (IF 2.015)
- 23.** M. Lewandowska, A. Roguska, M. Pisarek, B. Polak, M. Janik-Czachor, K.J. Kurzydłowski. Morphology and chemical characterization of Ti surfaces modified for biomedical applications. *Biomolecular Engineering*, 24 (2007) 438-442 (IF 2.568)
- 24.** M. Lewandowska, M. Włodkowska, R. Olkowski, A.Roguska, B. Polak, M. Pisarek, M. Lewandowska-Szumieł, K.J.Kurzydłowski. Chemical Surface Modifications of Titanium Implants. *Macromolecular Symposia* 253 (2007) 115-121

2006 ↑

- 1.** Ćwil, M., Konarski, P., Pajak, M., Bieniek, T., Kosinski, A., Kaczorek, K.; RuO₂/SiO₂/Si and SiO₂/porous Si/Si interfaces analysed by SIMS; *Appl. Surf. Sci.*, 252 (2006) 7058-7061
- 2.** Krawczyk, M., Zommer, L., Kosinski, A., Sobczak, J. W., Jablonski, A.; Calculated and measured electron IMFPs for SiC; *Surf. Intef. Anal.*, 38 (2006) 644-647
- 3.** Krawczyk, M., Kosinski, A., Jablonski, A. and Mycielski, A.; Electron IMFPs in bulk {Cd0.88Mn0.12Te crystals determined by EPES; *Surf. Sci.*, 600 (2006) 3744-3748
- 4.** Rzanek-Boroch, Z., Józwik, K., Ilik, A., Kosinski, A.; Wpływ parametrów osadzania na właściwości powierzchniowe warstw; *Przemysł Chemiczny*, 85 (2006) 748—750
- 5.** Rzanek-Boroch, Z., Wojucki, M., Ilik, A., Kosinski, A.; Silicon-fluoric films deposited in DBD under atmospheric pressure.; HAKONE10, *10th International Symposium on High Pressure Low Temperature Plasma Chemistry* - contributed papers, pp 318-321,
- 6.** Tabakova T., Bocuzzi F., Manzoli M., Sobczak J.W., Idakiev V., Andreeva D.; A comparative study of nanosized IB/ceria catalysts for low-temperature water-gas shift reaction; *App. Catal. A*. 298, 127-143 (2006)
- 7.** Opalinska T., Ulejczyk B., Sobczak J.W., Bilinski A. and Schmidt-Szalowski K.; Plasma Treatment of Polycarbonates Surface in Oxidizing Conditions; *Polish J. Chem.*, 79, 1957–1962 (2005)
- 8.** Opalinska T., Ulejczyk B., Sobczak J.W., Bilinski A. and Schmidt-Szalowski K.; Influence of

Oxygen on SiO_x Thin-Film Formation in Pulsed Electric Discharges; *Polish J. Chem.*, 80, 497–502 (2006)

9. Kozakiewicz J., Koncka-Foland A., Skarzynski J., **Sobczak J.W.**, Zielecka M.; Studies on the effect of structural parameters on the properties of polysiloxaneurethane dispersions and coatings; *Surface Coatings International Part B - Coating Transactions* 89, 31-39 (2006)
10. Andreeva D., Petrova P., **Sobczak J.W.**, Ilieva L., Abrashev M.; Gold supported on ceria and ceria-alumina promoted by molybdena for complete benzene oxidation; *Appl. Catal. B*, 67, 237-245 (2006)
11. Szmigiel D. Romanski K., Prokaryn P., Grabiec P., **Sobczak J.W.**; The effect of fluorine-based plasma treatment on morphology and chemical surface composition of biocompatible silicone elastomer.; *Appl.Surf.Sci.* 253, 1506-1511 (2006)
12. Gergely G., Menyhard M., Orosz G. T., Lesiak B., **Kosinski A.**, **Jablonski A.**, Nowakowski R., Toth J., Varga D.; Surface excitation correction of the inelastic mean free path in selected conducting polymers.; *Appl. Surf. Sci.*, 252, 4982-4989 (2006).
13. Gurban S., Gergely G., Toth J., Varga D., **Jablonski A.**, Menyhard M.; Experimental determination of the inelastic mean free path (IMFP) of electrons in selected oxide films applying surface excitation correction.; *Surf. Interface Anal.*, 38, 624-627 (2006)
14. **Jablonski A.**, Olejnik K., Zemek J.; Elastic electron backscattering from flat and rough Si surface; *J. Electron Spectrosc. Relat. Phenom.*, 152, 100-106 (2006).
15. **Jablonski A.**, Salvat F.; Solid state effects in simulations of electron elastic backscattering.; *Nucl. Instrum. Methods Phys. Res.*, Sect. B, 251, 371-382 (2006).
16. Jablonski A., Tanuma S., Powell C. J.; A predictive formula for the electron stopping power.; *Scanning*, 28, 113-114 (2006)
17. **Jablonski A.**, Tanuma S., Powell C. J.; A predictive formula for the electron stopping power.; *J. Surface Anal.*, 13, 170-177 (2006)
18. **Jablonski A.**, Tanuma S., Powell C. J.; New universal expression for the electron stopping power for energies between 200 eV and 30 keV.; *Surf. Interface Anal.*, 38, 76-83 (2006)
19. **Jablonski A.**, Zemek J.; Angle-resolved elastic peak electron spectroscopy: Solid state effects.; *Surf. Sci.*, 600, 4464-4474 (2006)
20. Lesiak B., **Bilinski A.**, Józwik A.; Application of the line shape analysis to the XPS/XAES spectra for investigating segregation of Au in alloys.; *Acta. Phys. Pol. A*, 109 (6), 701-714 (2006)
21. Lesiak B., Gergely G., Tóth J., Menyhard M., Varga D., Gurban S., Sulyok A., **Kosinski A.**. Determining of the surface excitation correction in elastic peak Electron spectroscopy for selected conducting polymers.; *J. Electron Spectrosc. Relat. Phenom.*, 154, 14-17 (2006)
22. Lesiak B., **Kosinski A.**, **Jablonski A.**, Sulyok A., Gergely G., Toth J., Varga D.; Influence of recoil effect and surface excitations on the inelastic mean free paths of electrons in polymers.; *Acta Phys. Pol. A*, 109, 789-800 (2006)
23. Powell C. J., **Jablonski A.**; Dependence of calculated electron effective attenuation lengths on transport mean free paths obtained from two atomic potentials. *Surf. Interface Anal.*, 38, 1348-1356 (2006)
24. Zemek J., Houdkova J., Lesiak B., **Jablonski A.**, Potmesil J., Vanecek M.; Electron spectroscopy of nanocrystalline diamond surfaces.; *J. Optoelectron. Adv. Mater.*, 8 (6), 2133-2138 (2006)
25. Zemek J., Jiricek P., Werner W. S. M., Lesiak B., **Jablonski A.**; Angular-resolved elastic peak electron spectroscopy. Experiment and Monte Carlo calculations. *Surf. Interface Anal.*, 38, 615-619 (2006)
26. **Zommer L.** “Interface effect for EPES sampling depth for overlayer/substrate systems”*Surf. Sci.*, 600, 4735-4740 (2006)

- 27.** Zommer L., Jablonski A. "EPES sampling depth paradox for overlayer/substrate system" *J. Electron Spectrosc. Relat. Phenom.*, 150, 56-61 (2006)

2005 ↑

- 1.** Baszkiewicz J., Krupa D., Kozubowski J.A., Rajchel B., Barcz A., **Sobczak J.W., Bilinski A.**; Effect of sodium-ion implantation on the corrosion resistance of titanium and Ti6Al4V alloy., *Proceedings of 16th International Corrosion Congress*, Beijing, China, 2005.
- 2.** Baszkiewicz J., Krupa D., Kozubowski J.A., Rajchel B., Barcz A., **Sobczak J.W., Bilinski A.**; Effect of sodium-ion implantation on the corrosion resistance of Co-Cr-Mo alloy (Vitalium).; *Proceedings of the European Corrosion Congress EUROCORR 2005*, Lisbon, Portugal, 2005
- 3.** Baszkiewicz J., Krupa D., Kozubowski J.A., Rajchel B., Barcz A., **Sobczak J.W., Bilinski A.**; Wpływ implantacji jonów sodu na odporność korozyjną tytanu i stopu tytanu Ti6Al4V.; *Proceedings of the VIII Polish Conference: Tytan i jego stopy*, Warsaw-Serock, Poland, 2005
- 4.** Baszkiewicz J., Krupa D., Mizera J., Barcz A., **Sobczak J.W., Bilinski A.**; Effect of alkali-and heat treatment on the corrosion resistance of titanium.; *Proceedings of the European Corrosion Congress EUROCORR 2005*, Lisbon, Portugal, 2005
- 5.** Baszkiewicz J., Krupa D., Mizera J., **Sobczak J.W., Bilinski A.**; Corrosion resistance of the surface layers formed on titanium by plasma electrolytic oxidation and hydrothermal treatment.; *Vacuum*, 78, 143-147 (2005)
- 6.** Drelinkiewicz A., Hasik M., **Sobczak J.W.**, Sobczak E., Bernasik A., Bielanska E.; Physicochemical and catalytic properties of palladium supported on poly(o-methoxyaniline).; *Materials Research Bulletin*, 40, 869-889 (2005)
- 7.** Gergely G., Menyhard M., Gurban S., **Jablonski A.**; Surface excitation correction for elastic peak electron spectroscopy.; *J. Surf. Anal.*, 12, 140 – 145 (2005)
- 8.** Ilieva L., **Sobczak J.W.**, Manzoli M., Su B.-L., Andreeva D.; Reduction behavior of nanostructured gold catalysts supported on mesoporous titania and zirconia.; *Appl. Catal. A.*, 291, 85-92 (2005)
- 9.** **Jablonski A.**; Calculations of the electron inelastic mean free path in solids from the elastic peak intensity.; *Surf. Interface Anal.*, 37, 1035–1044 (2005)
- 10.** **Jablonski A.**; Modelling of elastic and inelastic electron backscattering from surfaces.; *Progress Surf. Sci.*, 79, 3-25 (2005)
- 11.** **Jablonski A.** Role of the emission depth distribution function in quantification of electron spectroscopies.; *Surf. Sci.*, 586, 115-128 (2005)
- 12.** **Jablonski A.**, Lesiak B., Zemek J., Jiricek P.; Determination of the electron inelastic mean free path for samarium.; *Surf. Sci.*, 595, 1-5 (2005)
- 13.** **Jablonski A.**, Powell C.J.; Monte Carlo simulations of electron transport in solids: applications to electron backscattering from surfaces.; *Appl. Surf. Sci.*, 242, 220-235 (2005)
- 14.** **Jablonski A.**, Powell C.J.; The backscattering factor in Auger-electron spectroscopy: New approach for an old subject.; *Surf. Sci.*, 574, 219-232 (2005)
- 15.** **Jablonski A.**, Powell C.J., Tanuma S.; Monte Carlo strategies for simulation of electron backscattering from surfaces.; *Surf. Interface Anal.*, 37, 861 – 874 (2005)
- 16.** **Jablonski A.**, Salvat F., Powell C.J.; Evaluation of elastic-scattering cross sections for electrons and positrons over a wide energy range.; *Surf. Interface Anal.*, 37, 1115-1123 (2005)
- 17.** **Jablonski A.**, Zemek J., Jiricek P.; The backscattering factor for the Au N67VV Auger

- transition.; *Applied Surf. Sci.* 252, 905-915 (2005)
18. Krupa D., Baszkiewicz J., Kozubowski J.A., Barcz A., **Sobczak J.W., Bilinski A.**, Lewandowska-Szumiel M., Rajchel B.; Effect of dual ion implantation of calcium and phosphorus on the properties of titanium.; *Biomaterials*, 26, 2847-2856 (2005)
19. Krupa D., Baszkiewicz J., Kozubowski J.A., Mizera J., Barcz A., **Sobczak J.W., Bilinski A.**, Rajchel B.; Corrosion resistance and bioactivity of titanium after surface treatment by three different methods: ion implantation, alkaline treatment and anodic oxidation.; *Anal. & Bioanal. Chem.* 381, 617-625 (2005)
20. Krupa D., Baszkiewicz J., Kozubowski J.A., Mizera J., **Sobczak J.W., Bilinski A.**, Smolik J., Slomka Z.; Effect of anodic oxidation on the corrosion resistance of the Ti6Al4V alloy.; *Proceedings of 16th International Corrosion Congress*, Beijing, China, 2005.
21. Lesiak B., **Bilinski A.**, Józwik A.; X-ray photoelectron spectroscopy and the pattern recognition method – their application to surface studies in CoPd alloys.; *Surf. Interface Anal.*, 37, 1143-1150 (2005)
22. Lesiak B., **Jablonski A.**, Zemek J., Jiricek P., Cernansky M.; Studies of iron and iron oxide layers by electron spectrosopes.; *Appl. Surf. Sci.*, 252, 330–338 (2005)
23. Orosz G.T., Gergely G., Gurban S., Menyhard M., **Jablonski A.** Inelastic mean free path data for Si corrected for surface excitation.; *Microsc. Microanal.*, 11, 581-585 (2005)
24. Powell C.J., **Jablonski A.**, Salvat F.; NIST Databases with electron elastic-scattering cross sections, inelastic mean free paths, and effective attenuation lengths.; *Surf. Interface Anal.*, 37, 1068–1071 (2005)
25. Powell C.J., **Jablonski A.**, Salvat F., Tanuma S., Penn D.R.; New developments in data for Auger electron spectroscopy and X-ray photoelectron spectroscopy.; *J. Surf. Anal.*, 12, 88–96 (2005)
26. Powell C.J., **Jablonski A.**, Werner W.S.M., Smekal W.; Characterization of thin films on the nanometer scale by Auger electron spectroscopy and X-ray photoelectron spectroscopy ; *Applied Surf. Sci.*, 239, 470-480 (2005), Corrigendum: *Appl. Surface . Sci.* 242, 219 (2005)
27. Salvat F., **Jablonski A.**, Powell C.J.; ELSEPA - Dirac partial-wave calculation of elastic scattering of electrons and positrons by atoms, positive ions and molecules. *Comput. Phys. Commun.*, 165, 157-190 (2005)

2004 ↑

1. Baszkiewicz J., Krupa D., Kozubowski J., Mizera J., Rajchel B., **Sobczak J.W., Bilinski A.**; Modyfikacja powierzchni tytanu w celu podwyzszenia bioaktywnosci.; *Annales Academiae Medicae Silesiensis*, 36-41, 2004
2. Benadda A., Katrib A., **Sobczak J.W.**, Barama A.; Hydroisomerization of n-heptane and dehydration of 2-propanol on bulk and supported WO₂(Hx)ac on TiO₂.; *Appl. Catal. A.*, 260, 175-183 (2004)
3. Drelinkiewicz A., Stejskal J., Waksmundzka A., **Sobczak J.W.**; Physicochemical and catalytic properties of palladium deposited on polyaniline-coated silica gel.; *Synthetic Met.*, 140, 233-246 (2004)
4. Drelinkiewicz A., Waksmundzka A., Makowski W., **Sobczak J.W.**, Król A., Zieba A.; Acetophenone hydrogenation on polymer-palladium catalysts. The effect of polymer matrix.; *Catal. Lett.*, 94, 143-156 (2004)
5. Gergely G., Menyhard M., Sulyok A., Orosz G.T., Lesiak B., **Jablonski A.**, Tóth J., Varga D.; Surface excitation of selected conducting polymers studied by elastic peak electron

spectroscopy (EPES) and reflection electron energy loss spectroscopy (REELS); *Surf. Interface Anal.*, 36, 1056-1059 (2004)

6. **Jablonski A.**, Powell C.J.; Electron effective attenuation lengths in electron spectroscopies.; *J. Alloys Compd.*, 362, 26-32 (2004)

7. **Jablonski A.**, Powell C.J.; Information depth for elastic-peak electron spectroscopy.; *Surf. Sci.*, 551, 106-124 (2004)

8. **Jablonski A.**, Salvat F., Powell C.J.; Comparison of electron elastic-scattering cross sections calculated from two commonly used atomic potentials; *J. Phys. Chem. Ref. Data*, 33, 409-451 (2004)

9. **Jablonski A.**, Salvat F., Powell C.J.; Differential cross sections for elastic scattering of electrons by atoms and solids.; *J. Electron Spectrosc. Relat. Phenom.*, 137-140, 299-303 (2004)

10. **Jablonski A.**, Salvat F., Powell C.J. Effect of different electron elastic-scattering cross sections on inelastic mean free paths obtained from elastic-backscattering experiments.; *Mikrochim. Acta*, 145, 75-80 (2004)

11. **Jablonski A.**, Zemek J., Jiricek P.; Elastic electron backscattering from surfaces in selected angular ranges.; *Appl. Surface Sci.*, 229, 67-80 (2004)

12. **Krawczyk M.**, **Sobczak J.W.**; Surface characterisation of cobalt-palladium alloys.; *Appl. Surf. Sci.*, 235, 49-52 (2004)

13. **Krawczyk M.**, **Zommer L.**, **Jablonski A.**, Grzegory I., Boækowski M.; Energy dependence of electron inelastic mean free paths in bulk GaN crystals.; *Surf. Sci.*, 566-568, 1234-1239 (2004)

14. **Krawczyk M.**, **Zommer L.**, **Sobczak J.W.**, **Jablonski A.**; Determination of the electron inelastic mean free path in some binary alloys for application in quantitative surface analysis.; *Appl. Surf. Sci.*, 235, 15-20 (2004)

15. **Krawczyk M.**, **Zommer L.**, **Sobczak J.W.**, **Jablonski A.**, Petit M., Robert-Goumet C., Gruza B.; IMFP measurements near Au-Ni alloy surfaces by EPES: indirect evidence of submonolayer Au surface enrichment.; *Surf. Sci.*, 566-568, 856-861 (2004)

16. Krupa D., Baszkiewicz J., Lewandowska-Szumiel M., **Sobczak J.W.**, **Bilinski A.**, Mizera J., Smolik J.; Własciwosci warstw tlenkowych wytworzonych na powierzchni tytanu metoda utleniania anodowego.; *Annales Academiae Medicae Silesiensis*, 124-129, (2004)

17. Krupa D., Baszkiewicz J., Kozubowski J.A., Lewandowska-Szumiel M., Barcz A., **Sobczak J.W.**, **Bilinski A.**, Rajchel B.; Effect of calcium and phosphorus ion implantation on the corrosion resistance and biocompatibility of titanium.; *Bio-Med. Mater. Eng.*, 14, 525-536 (2004)

18. Leite L., Stonkus V., Adolfa K., Ilieva L., Andreeva D., Plyasova L., **Sobczak J.W.**, Ionescu S., Munteanu G.; Active phases of supported cobalt catalysts for 2,3-dihydrofuran synthesis.; *J. Mol. Catal. A: Chemical*, 215, 95-101 (2004)

19. Orossz G.T., Gergely G., Menyhard M., Tóth J., Varga D., Lesiak B., **Jablonski A.**; Hydrogen and surface excitation in electron spectra of polyethylene *Surf. Sci.*, 566-568, 544-548 (2004)

20. Sobczak E., **Sobczak J.W.**, Hasik M., Wenda E.; XAFS study of local structure In Pt-doped conjugated polymers.; *Applied Crystallography, Proceedings of the XIX Conference*, World Scientific, Singapore, 385-388 (2004)

21. **Sobczak J.W.**, **Kosinski A.**, Sobczak E.; X-ray absorption study of Pd doped polyaniline. *Applied Crystallography, Proceedings of the XIX Conference*, World Scientific, Singapore, 377-380 (2004)

22. **Sobczak J.W.**, Sobczak E., Drelinkiewicz A., Hasik M., Wenda E.; Local structure of Pd-doped polymer investigated by a linear combination of XANES spectra.; *J. Alloys Compd.*, 362, 162-166 (2004)

- 23.** Sobczak J.W., Sobczak E., Krawczyk M., Drelinkiewicz A., Hasik M.; X-ray absorption study of Pt-doped polymers.; Annual Report 2003. *Hamburger Synchrotron-strahlungslabor HASYLAB am Deutschen Electronen-Synchrotron DESY*. Hamburg, Germany, Part I, 997-998 (2004)
- 24.** Tabakova T., Bocuzzi F., Manzoli M., Sobczak J.W., Idakiev V., Andreeva D.; Effect of synthesis procedure on the WGS activity of Au/ceria catalysts. *Appl. Catal. B*, 49(2), 73-81 (2004)
- 25.** Zemek J., Jiricek P., Lesiak B., Jablonski A.; Elastic electron backscattering from silicon surfaces: effect of charge carrier concentrations.; *Surf. Interface Anal.*, 36, 809-811 (2004)
- 26.** Zemek J., Jiricek P., Lesiak B., Jablonski A.; Surface excitations in electron backscattering from silicon surfaces. *Surf. Sci.*, 562, 92-100 (2004)
- 27.** Zommer L.; Energy dependence intensity of electrons elastically backscattered from Ag and Ni into CMA.; *J. Elect. Spectrosc. Rel. Phenomen.*, 141, 39-44 (2004)

2003 ↑

- 1** Jablonski A., Salvat F., Powell C.J.; "NIST Electron Elastic-Scattering Cross-Section Database, Version 3.0", (SRD 64), U.S. Department of Commerce, *National Institute of Standards and Technology*, Gaithersburg, Maryland, 2002, pp. 1-47
- 2** Czlonkowska-Kohutnicka Z., Zielonka M., Wilson-Polit D., Kwiatkowski R., Sobczak J.W., Leszczynska I., Kozakiewicz J., Winiarska A.; Własciwosci roztworów oraz powierzchni prepolymerów polisiloksanouretanowych zawierajacych mikrozele.; *Polimery*, 48, 800-808 (2003)
- 3.** Hasik M., Wenda E., Bernasik A., Kowalski K., Sobczak J.W., Sobczak E., Bielanska E.; Poly(o-toluidyne) as the matrix for incorporation of palladium species from PdCl₂ aqueous solutions.; *Polymer*, 46, 7809-7819 (2003)
- 4.** Jablonski A.; Analytical applications of elastic electron backscattering from surfaces.; *Progress Surface Sci.*, 74, 357-374 (2003)
- 5.** Jablonski A., Powell C.J.; The information depth and the escape depth in auger electron spectroscopy and X-ray photoelectron spectroscopy.; *J. Vac. Sci. Technol.*, A21, 274-283 (2003)
- 6** Katrib A., Sobczak J.W., Benadda A., Maire G. XPS and catalytic properties of the bifunctional supported MoO₂(Hx)ac on TiO₂ for the hydroisomerization reactions of hexanes and 1-hexene.; *Appl. Catal.*, A242, 31-40 (2003)
- 7.** Krupa D., Baszkiewicz J., Sobczak J.W., Bilinski A., Barcz A., Rajchel B.; Influence of anodic oxidation on bioactivity and corrosion resistance of phosphorus-ion implanted titanium.; *Vacuum*, 70, 109-113 (2003)
- 8.** Krupa D., Baszkiewicz J., Sobczak J.W., Bilinski A., Barcz A.; Modyfying the properties of tytanium surface with the aim of improving its bioactivity and corrosion resistance.; *J. Mater. Proc. Technol.*, 143-144, 158-163 (2003)
- 9.** Powell C.J., Jablonski A.; Measurements of gate-oxide film thicknesses by X-ray photoelectron spectroscopy.; Proc. of International Conference, *Characterization and Metrology for ULSI Technology*. American Institute of Physics, New York, 321-325 (2003)
- 10** Powell C.J., Jablonski A.; NIST databases for surface analysis by Auger-electron spectroscopy and X-ray photoelectron spectroscopy.; *J. Surf. Anal.*, 10, 158-162 (2003)
- 11.** Sobczak J.W., Sobczak E., Drelinkiewicz A., Hasik M., Wenda E.; Local structure of a Pd-doped polymer investigated using a linear combination of XANES spectra.; *J. Alloys Compd.*,

362, 162-166 (2003)

12 **Sobczak J.W.**, Sobczak E., Hasik M., Drelinkiewicz A. EXAFS studies of palladium supported on poly-o-methoxyaniline.; *Annual Report 2002 Hamburger Synchrotronstrahlungslabor HASYLAB am Deutschen Electronen-Synchrotron, DESY*, Hamburg, 269-270 (2003)

13. **Sobczak J.W.**, Sobczak E., Hasik M., Drelinkiewicz A.; Nonconventional XANES analysis applied for Pd-doped polymer.; *Annual Report 2002 Hamburger Synchrotronstrahlungslabor HASYLAB am Deutschen Electronen-Synchrotron, DESY*, Hamburg, 347-348 (2003)

14. Zemek J., Jiricek P., Lesiak B., **Jablonski A.** " Surface excitation effects in elastic peak electron spectroscopy" *Surface Sci.*, 531, L335-L339 (2003)

2002 ↑

1A. Katrib, **J. W. Sobczak, M. Krawczyk, L. Zommer**, A. Benadda, A. Jablonski and G. Maire, "Surface Studies and Catalytic Properties of the Bifunctional Bulk MoO₂ System", *Surface Interface Anal.* 34, 225 (2002).

2C. J. Powell and **A. Jablonski**, "The NIST Electron Effective-Attenuation-Length Database", *J. Surface Anal.* 9, 322 (2002).

3**A. Jablonski** and C. J. Powell, "The Attenuation Length Revisited", *Surface Science Reports* 47, 33 (2002).

4J. Zemek, P. Jiricek, **A. Jablonski** and B. Lesiak, „Growth mode of Ultrathin Gold Films Deposited on Nickel”, *Appl. Surface Sci.* 199, 138 (2002).

5**A. Jablonski** and C. J. Powell, "Comparisons of Practical Attenuation Lengths Obtained from Different Algorithms for Application in XPS", *Surface Sci.* 520, 78-96 (2002)

6**M.Krawczyk, A.Jablonski**, T.Suski, M.Bockowski, I.Grzegory, " Elastic peak electron spectroscopy (EPES) measurements for determining the inelastic mean free path (IMFP) of electrons in selected oxide and nitride materials", *Zeszyty Naukowe Politechniki Warszawskiej, seria Elektronika* (2002)

7**M.Krawczyk**, "N₂O adsorption on Co-Pd alloy surfaces studied by Auger electron and thermal desorption spectroscopies", *Zeszyty Naukowe Politechniki Warszawskiej, seria Elektronika* (2002)

8D. Krupa, J. Baszkiewicz, J.A. Kozubowski., A. Barcz., **J.W. Sobczak, A. Bilinski**, M.Lewandowska-Szumiel, B.Rajchel, "Effect of phosphorus-ion implantation on the corrosion resistance and biocompatibility of titanium", *Biomaterials* 23, 3329 (2002).

9P. Jiricek, J. Zemek, P.Lejcek, B.Lesiak, **A.Jablonski**, M.Cernansky, "Stability of the Inelastic Mean Free Paths Determined by Elastic Peak Electron Spectroscopy in Nickel and Silicon", *J. Vac. Sci. Technol. A* 20 (2), 447 (2002).

10M. Zielecka, J. Kozakiewicz, J. Przybylski, **J.W. Sobczak**, "Studies on the surface properties of silicone-containing hybrid systems", *Surface Coatings International. Part B. Coating Transactions*, 85, 215 (2002).

11**M. Krawczyk, A. Jablonski, L. Zommer**, J. Toth, D. Varga, L. Kover, G. Gergely, M. Menyhard, A. Sulyok, Zs Bendek, B. Gruzza and C. Robert, "Determination of Inelastic Mean Free Path for AuPd Alloys by Elastic Peak Electron Spectroscopy (EPES)", *Surface Interface Anal.* 33, 23 (2002).

12C. J. Powell and **A. Jablonski**, "Electron Effective Attenuation Lengths for Applications in Auger-Electron Spectroscopy and X-ray Photoelectron Spectroscopy", *Surface Interface Anal.* 33, 211 (2002).

13B. Lesiak, **A. Jablonski**, J. Zemek, P. Jiricek, and J. Pavluch, „Influence of Surface

Composition and Density on Electron Inelastic Mean Free Paths in Ge", *Surface Interface Anal.* 33, 381 (2002).

14. **A. Jablonski**, "Remarks on the Definition of the Backscattering Factor in AES", *Surface Sci.* 499, 219 (2002).

15B. Lesiak, **A. Jablonski, A. Kosinski**, L. Kover, J. Toth, D. Varga, I. Cserny, B. Aszalos-Kiss, G. Gergely, M. Hasik, A. Drelinkiewicz, E. Wenda, "Determination of the Inelastic Mean Free Path of Electrons by Elastic Peak Electron Spectroscopy", *Surface Sci.* 507-510, 900 (2002).

16. L. Kover, T. Toth, D. Varga, B. Lesiak, and **A. Jablonski**, "Surface Composition of Alloys Derived from Elastic Peak Intensity", *Surface Sci.* 507-510, 895 (2002).

17. J. Zemek, P. Jiricek, **A. Jablonski** and B. Lesiak, „Elastic Electron Backscattering from Silicon Surfaces: Effect of Surface Roughness”, *Surface Interface Anal.* 34, 215 (2002).

2001 ↑

1B. Lesiak, **A. Kosinski, A. Jablonski**, L.Kover, J.Toth, D. Varga, I. Cserny, M. Zagorska, I. Kuliszewicz-Bajer, G. Gergely, " Determination of the inelastic mean free path of electrons in polythiophenes using elastic peak electron spectroscopy method", Applied Surface Science 174 (2001) 70-85

2. **J.W. Sobczak**, E. Sobczak, **A. Kosinski, A. Bilinski**, "XANES investigations of Pd-doped polyaniline", Journal of Alloys and Compounds 328 (2001) 132-134

3D. Krupa, J. Baszkiewicz, J. Kozubowski, A. Barcz, **J.W. Sobczak, A. Bilinski**, B. Rajchel, The influence of calcium and/or phosphorus ion implantation on the structure and corrosion resistance of titanium, Vacuum 63 (2001) 715- 719

4D. Krupa, J. Baszkiewicz, J.A. Kozubowski, A. Barcz, **J.W. Sobczak, A. Bilinski**, M. Lewandowska-Szumiel, B. Rajchel, "Effect of calcium-ion implantation on the corrosion resistance and biocompatibility of titanium", Biomaterials 22 (2001) 2139-2151

5D. Varga, L. Kövér, J. Tóth, K. Tökési, B. Lesiak, **A. Jablonski**, C. Robert, B. Gruzza and L. Bideux, "Determination of yield ratios of elastically backscattered electrons for deriving inelastic mean free paths in solids", Surface and Interface Analysis, 30, 202-206 (2001)

6S. Tougaard, **M. Krawczyk, A. Jablonski**, J. Pavluch, J. Toth, D. Varga, G. Gergely, M. Menyhard and A. Sulyok, "Intercomparison of methods for separation of REELS elastic peak intensities for determination of IMFP", Surface and Interface Analysis, 31, 1-10 (2001)

7. **M. Krawczyk, L. Zommer, A. Jablonski**, C. Robert, J. Pavluch, L. Bideux and B. Gruzza, "Electron inelastic mean free paths (IMFPs) in binary Au-Cu alloys determined by elastic peak electron spectroscopy "Surface and Interface Analysis, 31, 415-420 (2001)

8**Krawczyk, M.**, "Oxygen adsorption on binary Co50Pd50 alloy surfaces", Vacuum 63 (2001) 23-27

9Powell, C.J.; **Jablonski, A.**, "Effects of elastic-electron scattering on measurements of silicon dioxide film thicknesses by X-ray photoelectron spectroscopy", Journal of Electron Spectroscopy and Related Phenomena, 114-116, 1139-1143 (2001)

10Powell, C.J.; **Jablonski, A.**; Naumkin, A.; Kraut-Vass, A.; Conny, J.M.; Rumble, J.R., "NIST data resources for surface analysis by X-ray photoelectron spectroscopy and Auger electron spectroscopy", Journal of Electron Spectroscopy and Related Phenomena, 114-116, 1097-1102 (2001)

11Powell, C.J.; **Jablonski, A.**; Influence of elastic-electron scattering on measurements of silicon dioxide film thicknesses by x-ray photoelectron spectroscopy, Journal of Vacuum Science and Technology, 19, 2604-2611 (2001)

[12](#) Baszkiewicz J., Krupa D., Rajchel B., Barcz A., **Sobczak J.W., Bilinski A.**, "Properties of the Phosphate layer produced on titanium surface by the IBAD metod", Engineering of Biomaterials, 13, 21-25 (2001)

[13](#) Krupa D., Baszkiewicz J., **Sobczak J.W., Biliński A.**, Barcz A., Rajchel B. "Wpływ utleniania na bioaktywność i odporność korozyjną tytanu implantowanego fosforem". Acta of Bioengineering and Biomechanics, 3, suppl.2, 2001 p.289-296

[14.](#) **Krawczyk M., Sobczak J. W., Jabłoński A.** Wyznaczanie średniej nieelastycznej drogi swobodnej elektronów w wybranych stopach binarnych za pomocą elektronowej spektroskopii piku elastycznego (EPES). Elektronika, 8-9, 66 (2001)

[15.](#) **Sobczak J.W.**, Sobczak E., Hasik M., Drelinkiewicz A., "Pd K-edge XAFS studies of Pd-doped Polypyrrole", Annual Report 2001, Hamburger Synchrotronstrahlungslabor HASYLAB am Deutschen Electronen-Synchrotron DESY

2000 ↑

[1.](#) S. Hucek, J. Zemek, A. Jablonski and I. S. Tilinin, Emission depth distribution function of Al 2s photoelectrons in Al₂O₃, Surface Review and Letters, 7 109-114 (2000)

[2.](#) Krupa D., Baszkiewicz J., Kozubowski J., Barcz A., Szumiel M., **Sobczak J.W., Biliński A.**, Rajchel B. "Wpływ implantacji jonów wapnia, fosforu oraz wapnia i fosforu oraz wapnia i fosforu na odporność korozyjną i biozgodność tytanu" Problemy Eksploatacji, 37 (2), 163-167, (2000)

[3.](#) **Sobczak J.W.**, Andreeva D. "XPS Study of Au/TiO₂ catalytic systems". Studies in Surface Science and Catalysis, 130D, 3303-3308 (2000)

[4.](#) Michalska Z.M., Strzelec K., **Sobczak J.W.** "Hydrosilylation of phenylacetylene catalyzed by metal complex catalysts supported on polyamides containing a pyridine moiety" J. Molecular Catalysis A: Chemical, 156, (1-2), 91-102 (2000)

[5.](#) Czerwosz E., Dłuzewski P., Gierałtowski W., **Sobczak J.W.**, Starnawska E., Wronka H. "Electron emission from C₆₀/C₇₀+Pd films containing Pd nanocrystals" J. Vacuum Science & Technology B, 18(2), 1064-1067 (2000)

[6.](#) **Sobczak J.W., Kosinski A., Jablonski A.** and Palczewska W. "Catalytic reactivity and surface chemistry of polyaniline(EB)--Pd--H₂O systems" Topics in Catalysis, 11-12, 307-316 (2000)

[7.](#) **Jablónski A.**, "Quantitative Surface Analysis by X-ray Photoelectron Spectroscopy", Polish Journal of Chemistry. 74, 1533-1564 (2000)

[8.](#) C. J. Powell and **A. Jablonski**, Evaluation of electron inelastic mean free paths for selected elements and compounds, Surface and Interface Analysis, 29, 108-4 (2000)

[9.](#) B. Lesiak, **A. Kosinski, A. Jablonski**, L. Kövér, J. Tóth, D. Varga and I. Cserny, Determination of the inelastic mean free path of electrons in polyaniline samples by elastic peak electron spectroscopy, Surface and Interface Analysis, 29, 614-623 (2000)

[10.](#) G. Gergely, M. Menyhard, S. Gurban, Zs. Benedek, Cs. Daroczi, V. Rakovics, J. Tóth, D. Varga, **M. Krawczyk and A. Jablonski**, "Experimental determination of the inelastic mean free path of electrons in GaP and InAs , Surface and Interface Analysis, 30, 195-198 (2000) >

[11.](#) D. Varga, L. Kövér, J. Tóth, K. Tökési, B. Lesiak, **A. Jablonski**, C. Robert, B. Gruzza and L. Bideux, Determination of yield ratios of elastically backscattered electrons for deriving inelastic mean free paths in solids, Surface and Interface Analysis, 30, 202-206 (2000) >

[12.](#) B. Lesiak, **A. Jablonski**, J. Zemek, P. Jiricek, P. Lejcek and M. Cernanský, Inelastic mean free path measurements of electrons near nickel surfaces, Surface and Interface Analysis, 30, 217-221 (2000)

[13.](#) J. Zemek, P. Jiricek, S. Hucek, B. Lesiak and **A. Jablonski**, Measurements of the escape

probability of photoelectrons and the inelastic mean free path in silver sulphide, Surface and Interface Analysis, 30, 222-227 (2000)

14. B. Lesiak, **A. Jablonski**, J. Zemek, M. Trchová, and J. Stejskal, "Determination of the Inelastic Mean Free Path of Electrons in Different Polyaniline Samples, Langmuir, 16, 1415-1423 (2000)

15. Dubus, A.; **Jablonski, A.**; Tougaard, S., Evaluation of theoretical models for elastic electron backscattering from surfaces, Progress in Surface Science 63, 135-175 (2000)

16. **Jablonski, A.**; Powell, C.J, Effects of interaction potential on elastic-electron-scattering parameters in surface-sensitive electron spectroscopies, Surface Science 463, 24-54 (2000)

17. **Jablonski, A.**; NIST Standard Reference Database 64, NIST Electron Elastic-Scattering Cross-Section Database: Version 3.2, National Institute of Standards and Technology, Gaithersburg, USA, 1-33

18. **Jablonski, A.**; NIST Standard Reference Database 71, NIST Electron Inelastic-Mean-Free-Path Database: Version 1.2 National Institute of Standards and Technology, Gaithersburg, USA, 1-48