

Piotr Konarski

List of Publications by Year in descending order

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82
papers

972
citations

471061

17
h-index

500791

28
g-index

83
all docs

83
docs citations

83
times ranked

951
citing authors

| # | ARTICLE | IF | CITATIONS |
|----|--|-----|-----------|
| 1 | Experimental and theoretical studies of the physicochemical and mechanical properties of multi-layered TiN/SiC films: Temperature effects on the nanocomposite structure. Composites Part B: Engineering, 2018, 142, 85-94. | 5.9 | 98 |
| 2 | Superhard CrN/MoN coatings with multilayer architecture. Materials and Design, 2018, 153, 47-59. | 3.3 | 94 |
| 3 | A new type of (TiZrNbTaHf)N/MoN nanocomposite coating: Microstructure and properties depending on energy of incident ions. Composites Part B: Engineering, 2018, 146, 132-144. | 5.9 | 60 |
| 4 | Multilayered vacuum-arc nanocomposite TiN/ZrN coatings before and after annealing: Structure, properties, first-principles calculations. Materials Characterization, 2017, 134, 55-63. | 1.9 | 46 |
| 5 | SIMS analysis of hydrogen content in near surface layers of AISI 316L SS after electrolytic polishing under different conditions. Surface and Coatings Technology, 2011, 205, 4228-4236. | 2.2 | 36 |
| 6 | Antibacterial Effect of Au Implantation in Ductile Nanocomposite Multilayer (TiAlSiY)N/CrN Coatings. ACS Applied Materials & Interfaces, 2019, 11, 48540-48550. | 4.0 | 36 |
| 7 | Nano-multilayered coatings of (TiAlSiY)N/MeN (Me=Mo, Cr and Zr): Influence of composition of the alternating layer on their structural and mechanical properties. Journal of Alloys and Compounds, 2018, 767, 483-495. | 2.8 | 35 |
| 8 | Core-shell morphology of welding fume micro- and nanoparticles. Vacuum, 2003, 70, 385-389. | 1.6 | 27 |
| 9 | B4C/Mo/Si and Ta2O5/Ta nanostructures analysed by ultra-low energy argon ion beams. Applied Surface Science, 2003, 203-204, 354-358. | 3.1 | 27 |
| 10 | Hydrogen content influence on tribological properties of nc-WC/a-C:H coatings. Diamond and Related Materials, 2016, 67, 16-25. | 1.8 | 27 |
| 11 | Wear Resistance Improvement of Cemented Tungsten Carbide Deep-Hole Drills after Ion Implantation. Materials, 2021, 14, 239. | 1.3 | 23 |
| 12 | Medium-energy ion scattering study of the initial stage of oxidation of Fe(001). Physical Review B, 1989, 39, 5713-5718. | 1.1 | 22 |
| 13 | Thermogravimetric investigation of wastes from electrical and electronic equipment (WEEE). Journal of Thermal Analysis and Calorimetry, 2006, 86, 137-140. | 2.0 | 21 |
| 14 | Formation of Si-Rich Interfaces by Radiation-Induced Diffusion and Microsegregation in CrN/ZrN Nanolayer Coating. ACS Applied Materials & Interfaces, 2021, 13, 16928-16938. | 4.0 | 21 |
| 15 | Nanostructured multielement (TiHfZrNbVTa)N coatings before and after implantation of N+ ions (1018 cm ⁻²): Their structure and mechanical properties. Nuclear Instruments & Methods in Physics Research B, 2016, 385, 74-83. | 0.6 | 20 |
| 16 | Comparison of urban and rural particulate air pollution characteristics obtained by SIMS and SSMS. Applied Surface Science, 2006, 252, 7010-7013. | 3.1 | 19 |
| 17 | SIMS and GDMS depth profile analysis of hard coatings. Vacuum, 2008, 82, 1133-1136. | 1.6 | 18 |
| 18 | Comparative measurements and analysis of the mechanical and electrical properties of Ti-Zr-C nanocomposite: Role of stoichiometry. Measurement: Journal of the International Measurement Confederation, 2021, 176, 109223. | 2.5 | 18 |

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|----|---|-----|-----------|
| 19 | Ion mass interferences and matrix effects on SIMS depth profiling of thin Ti/Si multilayer films induced by hydrogen, carbon and oxygen contaminations. <i>International Journal of Mass Spectrometry</i> , 2007, 263, 54-58. | 0.7 | 17 |
| 20 | Stoichiometry, phase composition, and properties of superhard nanostructured Ti-Hf-Si-N coatings obtained by deposition from high-frequency vacuum-arc discharge. <i>Technical Physics Letters</i> , 2011, 37, 636-639. | 0.2 | 16 |
| 21 | SIMS studies of titanium biomaterial hydrogenation after magnetoelectropolishing. <i>Surface and Coatings Technology</i> , 2012, 206, 4027-4031. | 2.2 | 16 |
| 22 | Structural Properties of InSbBi and InSbAsBi Thin Films Prepared by the Flash-Evaporation Method. <i>Crystal Research and Technology</i> , 2001, 36, 1155-1171. | 0.6 | 15 |
| 23 | Morphology of working environment microparticles. <i>Vacuum</i> , 2001, 63, 679-683. | 1.6 | 14 |
| 24 | SIMS depth profiling of working environment nanoparticles. <i>Applied Surface Science</i> , 2003, 203-204, 757-761. | 3.1 | 12 |
| 25 | Micropump for Generation and Control of Vacuum Inside Miniature Devices. <i>Journal of Microelectromechanical Systems</i> , 2014, 23, 50-55. | 1.7 | 12 |
| 26 | Bakeable duoplasmatron ion gun for SIMS microanalysis. <i>Review of Scientific Instruments</i> , 1992, 63, 2397-2399. | 0.6 | 11 |
| 27 | RuO ₂ /SiO ₂ /Si and SiO ₂ /porous Si/Si interfaces analysed by SIMS. <i>Applied Surface Science</i> , 2006, 252, 7058-7061. | 3.1 | 11 |
| 28 | Spectral analysis of nanosize forms of carbon synthesized by pulsed intense ion beams. <i>Vacuum</i> , 2013, 89, 118-121. | 1.6 | 11 |
| 29 | Effect of nitrogen ion implantation on the life time of WC-Co tools used in particleboard milling. <i>Wood Material Science and Engineering</i> , 2022, 17, 521-532. | 1.1 | 11 |
| 30 | SIMS investigation of nitride coatings. <i>Vacuum</i> , 2005, 78, 545-550. | 1.6 | 10 |
| 31 | Quadrupole-based glow discharge mass spectrometer: Design and results compared to secondary ion mass spectrometry analyses. <i>Vacuum</i> , 2007, 81, 1323-1327. | 1.6 | 10 |
| 32 | Surface roughening at the ZnTe/GaAs interface in stationary and sample rotation SIMS depth profiling. <i>Vacuum</i> , 1996, 47, 1111-1115. | 1.6 | 9 |
| 33 | Ion sputtering of microparticles in SIMS depth profile analysis. <i>Vacuum</i> , 2001, 63, 685-689. | 1.6 | 9 |
| 34 | Influence of the bilayer thickness of nanostructured multilayer MoN/CrN coating on its microstructure, hardness, and elemental composition. <i>Physics of the Solid State</i> , 2017, 59, 1798-1802. | 0.2 | 9 |
| 35 | Modification of magnetron sputter deposition of nc-WC/a-C(:H) coatings with an additional RF discharge. <i>Diamond and Related Materials</i> , 2019, 98, 107509. | 1.8 | 9 |
| 36 | Microstructure and tribomechanical properties of multilayer TiZrN/TiSiN composite coatings with nanoscale architecture by cathodic-arc evaporation. <i>Journal of Materials Science</i> , 2021, 56, 5067-5081. | 1.7 | 9 |

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|----|--|-----|-----------|
| 37 | Ultrahigh vacuum manipulator for sample rotation in secondary ion mass spectrometry depth profile analysis. <i>Review of Scientific Instruments</i> , 1995, 66, 4713-4715. | 0.6 | 8 |
| 38 | Improvement of high temperature oxidation resistance of AISI 316L stainless steel by incorporation of Ce-La elements using intense pulsed plasma beams. <i>Surface and Coatings Technology</i> , 2011, 206, 854-858. | 2.2 | 8 |
| 39 | Electron-beam pulse annealed Ti-implanted GaP. <i>Journal of Applied Physics</i> , 2016, 120, 085103. | 1.1 | 8 |
| 40 | Ion implanted inconel alloy - SIMS and GDMS depth profile analysis. <i>Surface and Interface Analysis</i> , 2013, 45, 494-497. | 0.8 | 7 |
| 41 | Core-shell structure of fly ash particles - SIMS depth profile analysis. <i>Surface and Interface Analysis</i> , 2013, 45, 592-595. | 0.8 | 6 |
| 42 | Morphology of micro- and nanoparticles emitted by copper plants in Western Poland. <i>Thin Solid Films</i> , 2004, 459, 86-89. | 0.8 | 5 |
| 43 | Fluorine-doped SiO ₂ and fluorocarbon low-k dielectrics investigated by SIMS. <i>Applied Surface Science</i> , 2008, 255, 1334-1337. | 3.1 | 4 |
| 44 | Generation and Control of Vacuum Inside Miniature Devices. <i>Procedia Engineering</i> , 2012, 47, 1354-1357. | 1.2 | 4 |
| 45 | Changes of tribological properties of Inconel 600 after ion implantation process. <i>Bulletin of the Polish Academy of Sciences: Technical Sciences</i> , 2014, 62, 827-833. | 0.8 | 4 |
| 46 | Influence of Phosphorus Implantation on Electrical Properties of Al/SiO ₂ /SiC MOS Structure. <i>Materials Science Forum</i> , 0, 821-823, 496-499. | 0.3 | 4 |
| 47 | Two-dimensional elemental mapping using glow discharge mass spectrometry. <i>Journal of Analytical Atomic Spectrometry</i> , 2016, 31, 2192-2197. | 1.6 | 4 |
| 48 | Ion beam analysis of urban aerosol micro and nanoparticles compared with environmentally related children diseases in two Polish towns. <i>Vacuum</i> , 2005, 78, 297-301. | 1.6 | 3 |
| 49 | Critical currents density and current loops range in MgB ₂ thin layers obtained by the technique of ions implantation followed by pulsed plasma transient annealing. <i>Cryogenics</i> , 2007, 47, 267-271. | 0.9 | 3 |
| 50 | Surface characteristics of glass fibres covered with an aluminum layer after a chemical modification process using secondary ion mass spectrometry (SIMS) and atomic force microscopy (AFM). <i>International Journal of Mass Spectrometry</i> , 2009, 286, 11-16. | 0.7 | 3 |
| 51 | SIMS depth profile analysis of particles collected in an urban environment. <i>Surface and Interface Analysis</i> , 2011, 43, 470-474. | 0.8 | 3 |
| 52 | Hydrogen Reduction in MEP Niobium Studied by Secondary Ion Mass Spectrometry (SIMS). <i>Metals</i> , 2017, 7, 442. | 1.0 | 3 |
| 53 | Characteristic STATE of substrate and coatings interface formed by Impulse Plasma Deposition method. <i>Thin Solid Films</i> , 2018, 663, 25-30. | 0.8 | 3 |
| 54 | Morphology of the interface in the MBE-grown heterostructures analysed by SIMS depth profiling. <i>Thin Solid Films</i> , 1995, 267, 114-120. | 0.8 | 2 |

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|----|--|-----|-----------|
| 55 | Ion beam shadowing effects in SIMS depth profile analysis of MBE-grown nanostructures. <i>Vacuum</i> , 2005, 78, 291-295. | 1.6 | 2 |
| 56 | SIMS characterisation of superconductive MgB ₂ layers prepared by ion implantation and pulsed plasma treatment. <i>Applied Surface Science</i> , 2006, 252, 7078-7081. | 3.1 | 2 |
| 57 | Formation of Pedestal Oxynitride Layer by Extremely Shallow Nitrogen Implantation in Planar R.F. Plasma Reactor. <i>ECS Transactions</i> , 2006, 1, 407-417. | 0.3 | 2 |
| 58 | Effects of vacuum heating in AISI 410 and AISI 321 stainless steels' surface layer revealed by SIMS/GDMS depth profile analysis. <i>Surface and Interface Analysis</i> , 2011, 43, 217-220. | 0.8 | 2 |
| 59 | Cold plasma cleaning of copper and aluminum tested by SIMS depth profile analysis. <i>Surface and Interface Analysis</i> , 2011, 43, 612-617. | 0.8 | 2 |
| 60 | The Effect of Phosphorus Incorporation into SiO ₂ /4H-SiC (0001) Interface on Electrophysical Properties of MOS Structure. <i>Acta Physica Polonica A</i> , 2014, 126, 1100-1103. | 0.2 | 2 |
| 61 | Storing matter technique performed in the analytical chamber of a quadrupole SIMS analyser. <i>Surface and Interface Analysis</i> , 2014, 46, 360-363. | 0.8 | 2 |
| 62 | Effects of ultra-shallow ion implantation from RF plasma onto electrical properties of 4H-SiC MIS structures with SiO _x /HfO _x and SiO _x N _y /HfO _x double-gate dielectric stacks. <i>Microelectronic Engineering</i> , 2017, 178, 116-121. | 1.1 | 2 |
| 63 | Application of "Storing Matter"™ technique in SIMS depth profile analysis. <i>Nuclear Instruments & Methods in Physics Research B</i> , 2019, 450, 153-156. | 0.6 | 2 |
| 64 | Depth Profile Analysis of Phosphorus Implanted SiC Structures. <i>Acta Physica Polonica A</i> , 2015, 128, 864-867. | 0.2 | 2 |
| 65 | EVALUATION OF THE PHASE STABILITY, MICROSTRUCTURE, AND DEFECTS IN HIGH-ENTROPY CERAMICS AFTER HIGH-ENERGY ION IMPLANTATION. <i>High Temperature Material Processes</i> , 2022, 26, 77-93. | 0.2 | 2 |
| 66 | Dielectric Studies of the Ordering Due to an External DC Electric Field in Nematic 4,4'-di- <i>n</i> -hexyloxyazoxybenzene. <i>Molecular Crystals and Liquid Crystals</i> , 1978, 47, 105-114. | 0.9 | 1 |
| 67 | Si-oxide/Si and Si-oxynitride/Si interfaces analysed by ultra-low energy SIMS. <i>Physica Status Solidi (A) Applications and Materials Science</i> , 2006, 203, 2200-2204. | 0.8 | 1 |
| 68 | Application of r.f. plasma ultrashallow nitrogen ion implantation for pedestal oxynitride layer formation. <i>Vacuum</i> , 2008, 82, 1020-1028. | 1.6 | 1 |
| 69 | Annealed Ni/Ti/SiC structure analysed by SIMS and GDMS. <i>Journal of Surface Investigation</i> , 2013, 7, 1221-1224. | 0.1 | 1 |
| 70 | Plasma deposition of thin layers containing titanium and barium with the use of DBD. <i>EPJ Applied Physics</i> , 2013, 61, 24325. | 0.3 | 1 |
| 71 | Chlorine-enhanced thermal oxides growth and significant trap density reduction at SiO ₂ /SiC interface by incorporation of phosphorus. <i>Thin Solid Films</i> , 2015, 591, 86-89. | 0.8 | 1 |
| 72 | Metal oxide collectors for storing matter technique applied in secondary ion mass spectrometry. <i>Nuclear Instruments & Methods in Physics Research B</i> , 2016, 371, 199-204. | 0.6 | 1 |

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|----|--|-----|-----------|
| 73 | Effect of Hf addition and deposition condition on the structure and properties of the Ti-Hf-Si-N coatings. , 2017, , . | | 1 |
| 74 | Ion Etching Effects Occurring in Secondary Ion Mass Spectrometry Depth profiling of InGaAs/InP and InGaAs/AlAs/InP MBE Grown Heterostructures. Acta Physica Polonica A, 1996, 90, 869-874. | 0.2 | 1 |
| 75 | Influence of Al adsorption on In and Ga thermal desorption from InP and GaAs surfaces heated under As ₄ flux. Thin Solid Films, 1997, 306, 248-252. | 0.8 | 0 |
| 76 | Development of characterization procedure of particulate matter pollution collected in immediate vicinity of urban residents. Surface and Interface Analysis, 2014, 46, 389-392. | 0.8 | 0 |
| 77 | The distribution analysis for elements in depth of nitride coating based on high-entropy Ti-Hf-V-Nb-Zr alloy. , 2014, , . | | 0 |
| 78 | Selection of Processing Parameters for the Conversion Coatings on High-Strength Aluminum Alloys by Cyclic Voltammetry. Materials Science, 2015, 50, 634-645. | 0.3 | 0 |
| 79 | Effect of DC magnetron sputtering parameters on the structure, composition and tribological properties of tantalum diboride films. , 2017, , . | | 0 |
| 80 | Structure and elemental composition of multilayered nanocomposite TiN/ZrN coatings before and after annealing in air. , 2017, , . | | 0 |
| 81 | Structure and properties of nanoscale MoN/CrN multilayered coatings. , 2017, , . | | 0 |
| 82 | Phase Stability and Defect Structure of (TiZrHfNbV)N Nitride Coatings under Xe ¹⁴⁺ 200 MeV Ion Irradiation. , 2021, , . | | 0 |