

Josef Sepitka

List of Publications by Year in descending order

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32
papers

317
citations

1163117

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h-index

888059

17
g-index

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all docs

33
docs citations

33
times ranked

550
citing authors

| # | ARTICLE | IF | CITATIONS |
|----|--|-----|-----------|
| 1 | Calcium-doped titanium thin films prepared with the assistance of an oxygen ion beam: The effect of Ca content on microstructure, mechanical properties and adhesion. Applied Surface Science, 2022, 573, 151569. | 6.1 | 5 |
| 2 | Pulsed Plasma Surfacing of Titanium Matrix Cermet Based on B4C. Journal of Thermal Spray Technology, 2022, 31, 1975-1984. | 3.1 | 3 |
| 3 | Pulsed-PTA Preparation of B4C-Based Titanium Matrix Cermet. , 2021, , . | | 0 |
| 4 | <i>In vitro</i> evaluation of a novel nanostructured Ti-36Nb-6Ta alloy for orthopedic applications. Nanomedicine, 2020, 15, 1843-1859. | 3.3 | 6 |
| 5 | The role of vascularization on changes in ligamentum flavum mechanical properties and development of hypertrophy in patients with lumbar spinal stenosis. Spine Journal, 2020, 20, 1125-1133. | 1.3 | 12 |
| 6 | Arbitrarily-shaped microgels composed of chemically unmodified biopolymers. Biomaterials Science, 2020, 8, 3044-3051. | 5.4 | 3 |
| 7 | Influence of surface pre-treatment with mechanical polishing, chemical, electrochemical and ion sputter etching on the surface properties, corrosion resistance and MG-63 cell colonization of commercially pure titanium. Materials Science and Engineering C, 2020, 115, 111065. | 7.3 | 14 |
| 8 | Different diameters of titanium dioxide nanotubes modulate Saos-2 osteoblast-like cell adhesion and osteogenic differentiation and nanomechanical properties of the surface. RSC Advances, 2019, 9, 11341-11355. | 3.6 | 17 |
| 9 | Hardness response to the stability of a Ti(+N) solid solution in an annealed TiN/Ti(+N)/Ti mixture layer formed by nitrogen ion implantation into titanium. Journal of Alloys and Compounds, 2018, 746, 490-495. | 5.5 | 17 |
| 10 | Creep damage index as a sensitive indicator of damage accumulation in thermoplastic laminates. Journal of Reinforced Plastics and Composites, 2018, 37, 147-154. | 3.1 | 0 |
| 11 | Increased elastic modulus of plasma polymer coatings reinforced with detonation nanodiamond particles improves osteogenic differentiation of mesenchymal stem cells. Turkish Journal of Biology, 2018, 42, 195-203. | 0.8 | 1 |
| 12 | Antibacterial, mechanical and surface properties of Ag-DLC films prepared by dual PLD for medical applications. Materials Science and Engineering C, 2017, 77, 955-962. | 7.3 | 49 |
| 13 | Structural Characterization and Mechanical Properties of a Titanium Nitride-Based Nanolayer Prepared by Nitrogen Ion Implantation on a Titanium Alloy. Journal of Nanomaterials, 2016, 2016, 1-7. | 2.7 | 8 |
| 14 | Physico-chemical properties of PDMS surfaces suitable as substrates for cell cultures. Applied Surface Science, 2016, 389, 247-254. | 6.1 | 34 |
| 15 | Micromechanical Properties of Biocompatible Materials for Bone Tissue Engineering Produced by Direct 3D Printing. Key Engineering Materials, 2015, 662, 138-141. | 0.4 | 2 |
| 16 | Influence of diamond and graphite bonds on mechanical properties of DLC thin films. Journal of Physics: Conference Series, 2015, 594, 012008. | 0.4 | 5 |
| 17 | Nanoindentation studies and modeling of surface layers on austenitic stainless steels by extreme electrochemical treatments. Surface and Interface Analysis, 2015, 47, 643-647. | 1.8 | 6 |
| 18 | Elastic Properties of Human Osteon and Osteonal Lamella Computed by a Bidirectional Micromechanical Model and Validated by Nanoindentation. Journal of Biomechanical Engineering, 2015, 137, 081002. | 1.3 | 7 |

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|----|--|-----|-----------|
| 19 | PDMS substrate stiffness affects the morphology and growth profiles of cancerous prostate and melanoma cells. <i>Journal of the Mechanical Behavior of Biomedical Materials</i> , 2015, 41, 13-22. | 3.1 | 62 |
| 20 | The microstructure and surface hardness of Ti6Al4V alloy implanted with nitrogen ions at an elevated temperature. <i>Journal of Alloys and Compounds</i> , 2015, 620, 48-54. | 5.5 | 38 |
| 21 | Mathematical model of human osteon and its validation by nanomechanical testing of bone lamella. <i>Computer Methods in Biomechanics and Biomedical Engineering</i> , 2014, 17, 24-25. | 1.6 | 0 |
| 22 | Compression tests of a living cell: a contact detection problem. <i>Computer Methods in Biomechanics and Biomedical Engineering</i> , 2014, 17, 40-41. | 1.6 | 2 |
| 23 | Studying the influence of nanodiamonds over the elasticity of polymer/nanodiamond composites for biomedical application. <i>Journal of Physics: Conference Series</i> , 2014, 558, 012060. | 0.4 | 3 |
| 24 | Mechanical properties of deep-sea molluscan shell. <i>Computer Methods in Biomechanics and Biomedical Engineering</i> , 2013, 16, 287-289. | 1.6 | 7 |
| 25 | Nanoindentation mapping reveals gradients in the mechanical properties of dental enamel in rat incisors. <i>Computer Methods in Biomechanics and Biomedical Engineering</i> , 2013, 16, 290-291. | 1.6 | 4 |
| 26 | The Effect of Nitrogen Ion Implantation on the Surface Properties of Ti6Al4V Alloy Coated by a Carbon Nanolayer. <i>Journal of Nanomaterials</i> , 2013, 2013, 1-8. | 2.7 | 7 |
| 27 | Characterization of the Interphase in Carbon Fiber Reinforced Polymeric Composite by a Modulus Mapping Test. <i>Key Engineering Materials</i> , 2013, 586, 253-256. | 0.4 | 0 |
| 28 | Crystallographic texture determines mechanical properties of molluscan nacre. <i>Computer Methods in Biomechanics and Biomedical Engineering</i> , 2013, 16, 292-293. | 1.6 | 2 |
| 29 | Mechanical and Tribological Properties of Carbon Thin Film with Tungsten Interlayer Prepared by Ion Beam Assisted Deposition. <i>Journal of Materials</i> , 2013, 2013, 1-4. | 0.1 | 1 |
| 30 | Nanoscale mechanical analysis of dental filling composite and its finite element modelling. <i>Computer Methods in Biomechanics and Biomedical Engineering</i> , 2011, 14, 261-262. | 1.6 | 1 |
| 31 | Dynamic nanoindentation of porcine spinal zygapophyseal joint cartilage. <i>Computer Methods in Biomechanics and Biomedical Engineering</i> , 2011, 14, 265-266. | 1.6 | 0 |
| 32 | Effect of Sterilization Processes on the Fiber/Matrix Interphase Properties of CF/PDMS Composite to be Used in Orthopaedics. <i>Key Engineering Materials</i> , 0, 586, 234-236. | 0.4 | 1 |