

Yu-Tao Pei

List of Publications by Year in descending order

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| # | ARTICLE | IF | CITATIONS |
|----|--|-----|-----------|
| 1 | Nanostructure and properties of TiC/a-C:H composite coatings. <i>Acta Materialia</i> , 2005, 53, 4505-4521. | 3.8 | 264 |
| 2 | Effects of size on the mechanical response of metallic glasses investigated through in situ TEM bending and compression experiments. <i>Acta Materialia</i> , 2010, 58, 189-200. | 3.8 | 246 |
| 3 | Functionally graded materials produced by laser cladding. <i>Acta Materialia</i> , 2000, 48, 2617-2624. | 3.8 | 214 |
| 4 | Oxidation-induced crack healing in Ti ₃ AlC ₂ ceramics. <i>Scripta Materialia</i> , 2008, 58, 13-16. | 2.6 | 198 |
| 5 | The evolution of microstructure in a laser clad TiB ₂ /Ti composite coating. <i>Acta Materialia</i> , 2003, 51, 831-845. | 3.8 | 149 |
| 6 | Intrinsic and extrinsic size effects in the deformation of metallic glass nanopillars. <i>Acta Materialia</i> , 2012, 60, 889-898. | 3.8 | 144 |
| 7 | Microstructural control of TiC/a-C nanocomposite coatings with pulsed magnetron sputtering. <i>Acta Materialia</i> , 2008, 56, 696-709. | 3.8 | 135 |
| 8 | SiCp/Ti ₆ Al ₄ V functionally graded materials produced by laser melt injection. <i>Acta Materialia</i> , 2002, 50, 2035-2051. | 3.8 | 132 |
| 9 | Nanostructured TiC/a-C coatings for low friction and wear resistant applications. <i>Surface and Coatings Technology</i> , 2005, 198, 44-50. | 2.2 | 114 |
| 10 | Mechanical properties of attapulgite clay reinforced polyurethane shape-memory nanocomposites. <i>European Polymer Journal</i> , 2009, 45, 1904-1911. | 2.6 | 108 |
| 11 | Laser melt injection in aluminum alloys: on the role of the oxide skin. <i>Acta Materialia</i> , 2000, 48, 4225-4233. | 3.8 | 103 |
| 12 | Ultralightweight and 3D Squeezable Graphene-Polydimethylsiloxane Composite Foams as Piezoresistive Sensors. <i>ACS Applied Materials & Interfaces</i> , 2019, 11, 35201-35211. | 4.0 | 96 |
| 13 | Deformation and failure mechanism of nano-composite coatings under nano-indentation. <i>Surface and Coatings Technology</i> , 2006, 200, 6718-6726. | 2.2 | 91 |
| 14 | Thermo-mechanical properties of polystyrene-based shape memory nanocomposites. <i>Journal of Materials Chemistry</i> , 2010, 20, 3442. | 6.7 | 86 |
| 15 | High temperature healing of Ti ₂ AlC: On the origin of inhomogeneous oxide scale. <i>Scripta Materialia</i> , 2011, 65, 135-138. | 2.6 | 85 |
| 16 | Design and fabrication of conformal cooling channels in molds: Review and progress updates. <i>International Journal of Heat and Mass Transfer</i> , 2021, 171, 121082. | 2.5 | 82 |
| 17 | Self-healing performance of Ti ₂ AlC ceramic. <i>Journal of Materials Chemistry</i> , 2012, 22, 8304. | 6.7 | 77 |
| 18 | Mechanical behavior and failure mechanism of resistance spot welded DP1000 dual phase steel. <i>Materials and Design</i> , 2017, 124, 171-182. | 3.3 | 73 |

| # | ARTICLE | IF | CITATIONS |
|----|--|-----|-----------|
| 19 | Effect of stacking fault energy on the restoration mechanisms and mechanical properties of friction stir welded copper alloys. <i>Materials and Design</i> , 2019, 162, 185-197. | 3.3 | 70 |
| 20 | Five-fold branched Si particles in laser clad AlSi functionally graded materials. <i>Acta Materialia</i> , 2001, 49, 561-571. | 3.8 | 69 |
| 21 | Influence of deposition parameters on the structure and mechanical properties of nanocomposite coatings. <i>Surface and Coatings Technology</i> , 2006, 201, 590-598. | 2.2 | 67 |
| 22 | Tribological behavior of W-DLC coated rubber seals. <i>Surface and Coatings Technology</i> , 2008, 202, 1869-1875. | 2.2 | 67 |
| 23 | Wear and friction performance of PTFE filled epoxy composites with a high concentration of SiO ₂ particles. <i>Wear</i> , 2015, 322-323, 171-180. | 1.5 | 67 |
| 24 | Antimicrobial Electrodeposited Silver-Containing Calcium Phosphate Coatings. <i>ACS Applied Materials & Interfaces</i> , 2020, 12, 5531-5541. | 4.0 | 67 |
| 25 | Advanced TiC/a-C:H nanocomposite coatings deposited by magnetron sputtering. <i>Journal of the European Ceramic Society</i> , 2006, 26, 565-570. | 2.8 | 66 |
| 26 | Development of self-healing epoxy composites via incorporation of microencapsulated epoxy and mercaptan in poly(methyl methacrylate) shell. <i>Polymer Testing</i> , 2019, 73, 395-403. | 2.3 | 66 |
| 27 | Three-dimensional micron-porous graphene foams for lightweight current collectors of lithium-sulfur batteries. <i>Carbon</i> , 2019, 144, 713-723. | 5.4 | 65 |
| 28 | Status and perspectives of hierarchical porous carbon materials in terms of high-performance lithium-sulfur batteries. , 2022, 4, 346-398. | | 65 |
| 29 | Ni-toughened nc-TiN/a-SiN _x nanocomposite thin films. <i>Surface and Coatings Technology</i> , 2005, 200, 1530-1534. | 2.2 | 64 |
| 30 | Ultra-high temperature ablation behavior of Ti ₂ AlC ceramics under an oxyacetylene flame. <i>Journal of the European Ceramic Society</i> , 2011, 31, 855-862. | 2.8 | 64 |
| 31 | Oxide-scale growth on Cr ₂ AlC ceramic and its consequence for self-healing. <i>Scripta Materialia</i> , 2013, 69, 203-206. | 2.6 | 64 |
| 32 | TEM characterization of a Cr/Ti/TiC graded interlayer for magnetron-sputtered TiC/a-C:H nanocomposite coatings. <i>Acta Materialia</i> , 2005, 53, 3925-3934. | 3.8 | 61 |
| 33 | In-situ microscopy investigation of failure mechanisms in Al/SiCp metal matrix composite produced by laser embedding. <i>Scripta Materialia</i> , 2000, 42, 589-595. | 2.6 | 58 |
| 34 | Early stages of oxidation of Ti ₃ AlC ₂ ceramics. <i>Materials Chemistry and Physics</i> , 2008, 112, 762-768. | 2.0 | 57 |
| 35 | Surface alloying of high-vanadium high-speed steel on ductile iron using plasma transferred arc technique: Microstructure and wear properties. <i>Materials and Design</i> , 2016, 100, 223-234. | 3.3 | 57 |
| 36 | Bioinspired Cilia Sensors with Graphene Sensing Elements Fabricated Using 3D Printing and Casting. <i>Nanomaterials</i> , 2019, 9, 954. | 1.9 | 57 |

| # | ARTICLE | IF | CITATIONS |
|----|--|-----|-----------|
| 37 | Ion energy distribution measurements in rf and pulsed dc plasma discharges. <i>Plasma Sources Science and Technology</i> , 2012, 21, 024004. | 1.3 | 53 |
| 38 | Bioinspired designs and biomimetic applications of triboelectric nanogenerators. <i>Nano Energy</i> , 2021, 84, 105865. | 8.2 | 53 |
| 39 | TEM study of the initial oxide scales of Ti ₂ AlC. <i>Acta Materialia</i> , 2011, 59, 5216-5223. | 3.8 | 52 |
| 40 | Adhesion improvement of hydrogenated diamond-like carbon thin films by pre-deposition plasma treatment of rubber substrate. <i>Surface and Coatings Technology</i> , 2009, 203, 1964-1970. | 2.2 | 51 |
| 41 | Interface fracture behavior of zinc coatings on steel: Experiments and finite element calculations. <i>Surface and Coatings Technology</i> , 2006, 201, 4311-4316. | 2.2 | 49 |
| 42 | Magnetron reactively sputtered Ti-DLC coatings on HNBR rubber: The influence of substrate bias. <i>Surface and Coatings Technology</i> , 2008, 202, 4939-4944. | 2.2 | 49 |
| 43 | Influence of hardness and roughness on the tribological performance of TiC/a-C nanocomposite coatings. <i>Surface and Coatings Technology</i> , 2010, 205, 2624-2632. | 2.2 | 48 |
| 44 | Crystal growth mechanism of calcium phosphate coatings on titanium by electrochemical deposition. <i>Surface and Coatings Technology</i> , 2018, 334, 526-535. | 2.2 | 45 |
| 45 | Mechanical and biological properties of electrodeposited calcium phosphate coatings. <i>Materials Science and Engineering C</i> , 2019, 100, 475-484. | 3.8 | 43 |
| 46 | Breakdown of the Coulomb friction law in TiC/a-C:H nanocomposite coatings. <i>Journal of Applied Physics</i> , 2006, 100, 114309. | 1.1 | 41 |
| 47 | Gradient microstructure in laser clad TiC-reinforced Ni-alloy composite coating. <i>Materials Science & Engineering A: Structural Materials: Properties, Microstructure and Processing</i> , 1998, 241, 259-263. | 2.6 | 40 |
| 48 | Effect of process parameters on mechanical and tribological performance of pulsed-DC sputtered TiC/a-C:H nanocomposite films. <i>Surface and Coatings Technology</i> , 2010, 205, 2633-2642. | 2.2 | 40 |
| 49 | Microstructural and mechanical properties of low-carbon ultra-fine bainitic steel produced by multi-step austempering process. <i>Materials Science & Engineering A: Structural Materials: Properties, Microstructure and Processing</i> , 2018, 734, 329-337. | 2.6 | 40 |
| 50 | Microstructure and wear resistance of laser clad TiC particle reinforced coating. <i>Materials Science and Technology</i> , 1995, 11, 520-525. | 0.8 | 39 |
| 51 | Micro-mechanics of nanostructured carbon/shape memory polymer hybrid thin film. <i>Soft Matter</i> , 2016, 12, 106-114. | 1.2 | 39 |
| 52 | Laser cladding of ZrO ₂ -(Ni alloy) composite coating. <i>Surface and Coatings Technology</i> , 1996, 81, 131-135. | 2.2 | 37 |
| 53 | Biomimetic Soft Polymer Microstructures and Piezoresistive Graphene MEMS Sensors Using Sacrificial Metal 3D Printing. <i>ACS Applied Materials & Interfaces</i> , 2021, 13, 1094-1104. | 4.0 | 36 |
| 54 | Structural changes in polytetrafluoroethylene molecular chains upon sliding against steel. <i>Journal of Materials Science</i> , 2014, 49, 1484-1493. | 1.7 | 35 |

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|----|--|-----|-----------|
| 55 | Healing performance of Ti ₂ AlC ceramic studied with in situ microcantilever bending. <i>Journal of the European Ceramic Society</i> , 2013, 33, 383-391. | 2.8 | 34 |
| 56 | Ultrashort pulsed laser ablation of stainless steels. <i>International Journal of Machine Tools and Manufacture</i> , 2019, 138, 27-35. | 6.2 | 34 |
| 57 | Influence of Surface Roughness on the Transfer Film Formation and Frictional Behavior of TiC/a-C Nanocomposite Coatings. <i>Tribology Letters</i> , 2011, 41, 97-101. | 1.2 | 32 |
| 58 | Growth of nanocomposite films: From dynamic roughening to dynamic smoothing. <i>Acta Materialia</i> , 2009, 57, 5156-5164. | 3.8 | 31 |
| 59 | Effect of pulse scheme on the microstructural evolution, residual stress state and mechanical performance of resistance spot welded DP1000-GI steel. <i>Science and Technology of Welding and Joining</i> , 2018, 23, 649-658. | 1.5 | 31 |
| 60 | Tunable self-organization of nanocomposite multilayers. <i>Applied Physics Letters</i> , 2010, 96, . | 1.5 | 30 |
| 61 | Flexible diamond-like carbon films on rubber: On the origin of self-acting segmentation and film flexibility. <i>Acta Materialia</i> , 2012, 60, 5526-5535. | 3.8 | 30 |
| 62 | Effect of carbon concentration and argon flow rate on the microstructure and triboperformance of magnetron sputtered WS ₂ /a-C coatings. <i>Surface and Coatings Technology</i> , 2017, 332, 142-152. | 2.2 | 30 |
| 63 | Tailoring three-dimensional interconnected nanoporous graphene micro/nano-foams for lithium-sulfur batteries. <i>Carbon</i> , 2020, 157, 437-447. | 5.4 | 30 |
| 64 | Single and bundled carbon nanofibers as ultralightweight and flexible piezoresistive sensors. <i>Npj Flexible Electronics</i> , 2020, 4, . | 5.1 | 30 |
| 65 | Determination of the sp ³ C content of a-C films through EELS analysis in the TEM. <i>Surface and Coatings Technology</i> , 2005, 200, 739-743. | 2.2 | 29 |
| 66 | Nanoscale deformation mechanism of TiC/a-C nanocomposite thin films. <i>Journal of Applied Physics</i> , 2009, 105, . | 1.1 | 29 |
| 67 | Effect of sputtering pressure on the surface topography, structure, wettability and tribological performance of DLC films coated on rubber by magnetron sputtering. <i>Surface and Coatings Technology</i> , 2019, 365, 33-40. | 2.2 | 29 |
| 68 | Experimental and numerical investigation of the origin of surface roughness in laser powder bed fused overhang regions. <i>Virtual and Physical Prototyping</i> , 2021, 16, S66-S84. | 5.3 | 29 |
| 69 | Microstructure of laser-clad SiC-(Ni alloy) composite coating. <i>Materials Science & Engineering A: Structural Materials: Properties, Microstructure and Processing</i> , 1995, 194, 219-224. | 2.6 | 28 |
| 70 | Flexible protective diamond-like carbon film on rubber. <i>Scripta Materialia</i> , 2010, 63, 649-652. | 2.6 | 28 |
| 71 | Size effects and ductility of Al-based metallic glass. <i>Scripta Materialia</i> , 2012, 67, 344-347. | 2.6 | 28 |
| 72 | A methodology to determine anisotropy effects in non-cubic coatings. <i>Surface and Coatings Technology</i> , 2007, 201, 6911-6916. | 2.2 | 27 |

| # | ARTICLE | IF | CITATIONS |
|----|--|------|-----------|
| 73 | Synthesis of mixed alcohols with enhanced C3+ alcohol production by CO hydrogenation over potassium promoted molybdenum sulfide. <i>Applied Catalysis B: Environmental</i> , 2019, 246, 232-241. | 10.8 | 27 |
| 74 | Tribological behaviour of laser-clad TiCp composite coating. <i>Wear</i> , 1995, 185, 167-172. | 1.5 | 26 |
| 75 | Electro-Responsive Polystyrene Shape Memory Polymer Nanocomposites. <i>Nanoscience and Nanotechnology Letters</i> , 2012, 4, 814-820. | 0.4 | 26 |
| 76 | Microstructure evolutions of graded high-vanadium tool steel composite coating in-situ fabricated via atmospheric plasma beam alloying. <i>Journal of Alloys and Compounds</i> , 2017, 720, 169-181. | 2.8 | 26 |
| 77 | Enhanced C3+ alcohol synthesis from syngas using KCoMoSx catalysts: effect of the Co-Mo ratio on catalyst performance. <i>Applied Catalysis B: Environmental</i> , 2020, 272, 118950. | 10.8 | 26 |
| 78 | Strength of submicrometer diameter pillars of metallic glasses investigated within situ transmission electron microscopy. <i>Philosophical Magazine Letters</i> , 2009, 89, 633-640. | 0.5 | 25 |
| 79 | In situ compression study of taper-free metallic glass nanopillars. <i>Applied Physics Letters</i> , 2011, 98, . | 1.5 | 25 |
| 80 | Flexible diamond-like carbon films on rubber: Friction and the effect of viscoelastic deformation of rubber substrates. <i>Acta Materialia</i> , 2012, 60, 7216-7225. | 3.8 | 24 |
| 81 | Apparently homogeneous but intrinsically intermittent flow of taper-free metallic glass nanopillars. <i>Scripta Materialia</i> , 2012, 67, 947-950. | 2.6 | 24 |
| 82 | Template-Free Synthesis of Nanoporous Nickel and Alloys as Binder-Free Current Collectors of Li Ion Batteries. <i>ACS Applied Nano Materials</i> , 2018, 1, 2206-2218. | 2.4 | 24 |
| 83 | Microstructure and chemical bonding of DLC films deposited on ACM rubber by PACVD. <i>Surface and Coatings Technology</i> , 2011, 205, S75-S78. | 2.2 | 23 |
| 84 | An analytical method to predict and compensate for residual stress-induced deformation in overhanging regions of internal channels fabricated using powder bed fusion. <i>Additive Manufacturing</i> , 2019, 29, 100796. | 1.7 | 23 |
| 85 | Tribological performance of DLC films deposited on ACM rubber by PACVD. <i>Surface and Coatings Technology</i> , 2011, 205, 4838-4843. | 2.2 | 22 |
| 86 | Microstructure and tribological performance of diamond-like carbon films deposited on hydrogenated rubber. <i>Thin Solid Films</i> , 2012, 524, 218-223. | 0.8 | 22 |
| 87 | The Relationship between Bulk Silicone and Benzophenone-Initiated Hydrogel Coating Properties. <i>Polymers</i> , 2018, 10, 534. | 2.0 | 22 |
| 88 | TiNi shape memory alloy coated with tungsten: a novel approach for biomedical applications. <i>Journal of Materials Science: Materials in Medicine</i> , 2014, 25, 1249-1255. | 1.7 | 21 |
| 89 | Tribological behavior and thermal stability of TiC ^a -a-C:H nanocomposite coatings. <i>Journal of Vacuum Science and Technology A: Vacuum, Surfaces and Films</i> , 2006, 24, 1448-1453. | 0.9 | 20 |
| 90 | Microstructural and frictional control of diamond-like carbon films deposited on acrylic rubber by plasma assisted chemical vapor deposition. <i>Thin Solid Films</i> , 2011, 519, 2213-2217. | 0.8 | 20 |

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| 91 | On the nature of the coefficient of friction of diamond-like carbon films deposited on rubber. Journal of Applied Physics, 2012, 111, . | 1.1 | 20 |
| 92 | On the S/W stoichiometry and triboperformance of WS _x C(H) coatings deposited by magnetron sputtering. Surface and Coatings Technology, 2019, 365, 41-51. | 2.2 | 20 |
| 93 | On the adhesion and wear resistance of DLC films deposited on nitrile butadiene rubber: A Ti-C interlayer. Diamond and Related Materials, 2020, 101, 107563. | 1.8 | 20 |
| 94 | Biomimetic Multiscale Hierarchical Topography Enhances Osteogenic Differentiation of Human Mesenchymal Stem Cells. Advanced Materials Interfaces, 2020, 7, 2000385. | 1.9 | 20 |
| 95 | Quantification of the recrystallization behaviour in Al-alloy AA1050. Journal of Materials Science, 2002, 37, 989-995. | 1.7 | 19 |
| 96 | Microstructure and tribological behavior of tungsten-containing diamondlike carbon coated rubbers. Journal of Vacuum Science and Technology A: Vacuum, Surfaces and Films, 2008, 26, 1085-1092. | 0.9 | 19 |
| 97 | On the evolution of film roughness during magnetron sputtering deposition. Journal of Applied Physics, 2010, 108, 094330. | 1.1 | 19 |
| 98 | A Versatile Route for the Synthesis of Single Crystalline Oxide Nanorods: Growth Behavior and Field Emission Characteristics. Crystal Growth and Design, 2010, 10, 2585-2590. | 1.4 | 19 |
| 99 | Friction stir welding of Monel alloy at different heat input conditions: Microstructural mechanisms and tensile behavior. Materials Letters, 2019, 245, 94-97. | 1.3 | 19 |
| 100 | Electroactive Self-Healing Shape Memory Polymer Composites Based on Diels-Ålder Chemistry. ACS Applied Polymer Materials, 2021, 3, 6147-6156. | 2.0 | 19 |
| 101 | Deposition and characterization of hydrogenated diamond-like carbon thin films on rubber seals. Thin Solid Films, 2010, 518, S42-S45. | 0.8 | 18 |
| 102 | On the evolution of nanocluster size distribution in a nanocluster aggregation source. Journal of Applied Physics, 2012, 111, . | 1.1 | 18 |
| 103 | On the control of deposition process for enhanced mechanical properties of nc-TiC/a-C:H coatings with DC magnetron sputtering at low or high ion flux. Surface and Coatings Technology, 2014, 255, 8-14. | 2.2 | 18 |
| 104 | Effect of bias voltage on the tribological and sealing properties of rubber seals modified by DLC films. Surface and Coatings Technology, 2019, 360, 391-399. | 2.2 | 18 |
| 105 | The tribological properties of short range ordered W-B-C protective coatings prepared by pulsed magnetron sputtering. Surface and Coatings Technology, 2019, 357, 364-371. | 2.2 | 18 |
| 106 | A study on the effect of chemical composition on the microstructural characteristics and mechanical performance of DP1000 resistance spot welds. Materials Science & Engineering A: Structural Materials: Properties, Microstructure and Processing, 2020, 788, 139501. | 2.6 | 18 |
| 107 | Interfacial adhesion of laser clad functionally graded materials. Materials Science & Engineering A: Structural Materials: Properties, Microstructure and Processing, 2003, 342, 192-200. | 2.6 | 17 |
| 108 | Temperature-Adaptive Ultralubricity of a WS ₂ /a-C Nanocomposite Coating: Performance from Room Temperature up to 500 Å°C. ACS Applied Materials & Interfaces, 2021, 13, 28843-28854. | 4.0 | 17 |

| # | ARTICLE | IF | CITATIONS |
|-----|--|-----|-----------|
| 109 | On the dynamic roughening transition in nanocomposite film growth. <i>Applied Physics Letters</i> , 2009, 95, 223102. | 1.5 | 16 |
| 110 | Flexible diamond-like carbon film coated on rubber. <i>Progress in Organic Coatings</i> , 2013, 76, 1773-1778. | 1.9 | 16 |
| 111 | Microstructure and adhesion strength quantification of PVD bi-layered ZnMg-Zn coatings on DP800 steel. <i>Surface and Coatings Technology</i> , 2019, 359, 227-238. | 2.2 | 16 |
| 112 | Cracking behavior and formability of Zn-Al-Mg coatings: Understanding the influence of steel substrates. <i>Materials and Design</i> , 2021, 212, 110215. | 3.3 | 15 |
| 113 | Laser clad ZrO ₂ -Y ₂ O ₃ ceramic/Ni-base alloy composite coatings. <i>Ceramics International</i> , 1995, 21, 131-136. | 2.3 | 14 |
| 114 | Reactive magnetron sputtering deposition and columnar growth of nc-TiC/a-C:H nanocomposite coatings. <i>Journal of Vacuum Science and Technology A: Vacuum, Surfaces and Films</i> , 2006, 24, 1441-1447. | 0.9 | 14 |
| 115 | Surface roughness evolution of nanocomposite thin films. <i>Journal of Applied Physics</i> , 2009, 105, . | 1.1 | 14 |
| 116 | Fundamentals of the adhesion of physical vapor deposited ZnMg-Zn bilayer coatings to steel substrates. <i>Materials and Design</i> , 2020, 190, 108560. | 3.3 | 14 |
| 117 | Laser powder bed fusion of 17% PH ₄ stainless steel: A comparative study on the effect of heat treatment on the microstructure evolution and mechanical properties. <i>Additive Manufacturing</i> , 2021, 46, 102176. | 1.7 | 14 |
| 118 | Microstructure of bonding zones in laser-clad Ni-alloy-based composite coatings reinforced with various ceramic powders. <i>Metallurgical and Materials Transactions A: Physical Metallurgy and Materials Science</i> , 1996, 27, 391-400. | 1.1 | 13 |
| 119 | Influence of Plasma Treatments on the Frictional Performance of Rubbers. <i>Tribology Letters</i> , 2012, 47, 303-311. | 1.2 | 13 |
| 120 | Formation of metal F bonds during frictional sliding: Influence of water and applied load. <i>Applied Surface Science</i> , 2016, 368, 427-434. | 3.1 | 13 |
| 121 | Instant WS ₂ platelets reorientation of self-adaptive WS ₂ /a-C tribocoating. <i>Materials Letters</i> , 2018, 229, 64-67. | 1.3 | 13 |
| 122 | Unraveling dislocation mediated plasticity and strengthening in crack-resistant ZnAlMg coatings. <i>International Journal of Plasticity</i> , 2021, 144, 103041. | 4.1 | 13 |
| 123 | New insights into the fracture behavior of advanced high strength steel resistance spot welds. <i>Journal of Materials Processing Technology</i> , 2022, 301, 117433. | 3.1 | 13 |
| 124 | The effect of grain refinement on the deformation and cracking resistance in Zn-Al-Mg coatings. <i>Materials Science & Engineering A: Structural Materials: Properties, Microstructure and Processing</i> , 2022, 840, 142995. | 2.6 | 13 |
| 125 | Tribological properties of nc-TiC/a-C:H coatings prepared by magnetron sputtering at low and high ion bombardment of the growing film. <i>Surface and Coatings Technology</i> , 2014, 241, 64-73. | 2.2 | 12 |
| 126 | Low-temperature synthesis of large-area graphene-based carbon films on Ni. <i>Materials and Design</i> , 2018, 144, 245-255. | 3.3 | 12 |

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|-----|--|-----|-----------|
| 127 | Effects of loading conditions on free surface roughening of AISI 420 martensitic stainless steel. <i>Journal of Materials Processing Technology</i> , 2020, 275, 116311. | 3.1 | 12 |
| 128 | Genesis and mechanism of microstructural scale deformation and cracking in ZnAlMg coatings. <i>Materials and Design</i> , 2020, 186, 108364. | 3.3 | 12 |
| 129 | Catalyst Performance Studies on the Guerbet Reaction in a Continuous Flow Reactor Using Mono- and Bi-Metallic Cu-Ni Porous Metal Oxides. <i>Catalysts</i> , 2020, 10, 996. | 1.6 | 12 |
| 130 | Formation of γ -Al ₂ O ₃ in reaction coatings produced with lasers. <i>Scripta Materialia</i> , 2001, 44, 643-649. | 2.6 | 11 |
| 131 | Synthesis of ultra-smooth and ultra-low friction DLC based nanocomposite films on rough substrates. <i>Thin Solid Films</i> , 2010, 519, 1618-1622. | 0.8 | 11 |
| 132 | Performance of diamond-like carbon-protected rubber under cyclic friction. II. Influence of substrate viscoelasticity on the friction evolution. <i>Journal of Applied Physics</i> , 2011, 110, . | 1.1 | 11 |
| 133 | Performance of diamond-like carbon-protected rubber under cyclic friction. I. Influence of substrate viscoelasticity on the depth evolution. <i>Journal of Applied Physics</i> , 2011, 110, . | 1.1 | 11 |
| 134 | Micro-patterned TiO ₂ films for photocatalysis. <i>Materials Letters</i> , 2019, 254, 448-451. | 1.3 | 11 |
| 135 | A Novel Approach to Structure Modification of Brasses by Combination of Non-equilibrium Heat Treatment and Friction Stir Processing. <i>Metallurgical and Materials Transactions A: Physical Metallurgy and Materials Science</i> , 2019, 50, 2391-2398. | 1.1 | 11 |
| 136 | Comments on "microstructural evolution during high-temperature oxidation of Ti ₂ AlC ceramics". <i>Scripta Materialia</i> , 2011, 65, 930-932. | 2.6 | 10 |
| 137 | Copper-mediated homogeneous living radical polymerization of acrylamide with waxy potato starch-based macroinitiator. <i>Carbohydrate Polymers</i> , 2018, 192, 61-68. | 5.1 | 10 |
| 138 | Enhanced efficiency of self-healing of Cr ₂ AlC. <i>Materials Letters</i> , 2018, 227, 51-54. | 1.3 | 10 |
| 139 | Micromechanical evaluation of DP1000-GI dual-phase high-strength steel resistance spot weld. <i>Journal of Materials Science</i> , 2019, 54, 1703-1715. | 1.7 | 10 |
| 140 | Nanoscale deformation in TiC/a-C multilayered nanocomposite coatings. <i>Applied Physics Letters</i> , 2008, 92, 241913. | 1.5 | 9 |
| 141 | Tribological Behavior of TiC/a-C:H-Coated and Uncoated Steels Sliding Against Phenol-Formaldehyde Composite Reinforced with PTFE and Glass Fibers. <i>Tribology Letters</i> , 2013, 52, 123-135. | 1.2 | 9 |
| 142 | High throughput deposition of hydrogenated amorphous carbon coatings on rubber with expanding thermal plasma. <i>Surface and Coatings Technology</i> , 2014, 245, 74-83. | 2.2 | 9 |
| 143 | Smectite clay pillared with copper complexed polyhedral oligosilsesquioxane for adsorption of chloridazon and its metabolites. <i>Environmental Science: Nano</i> , 2020, 7, 424-436. | 2.2 | 9 |
| 144 | TEM Characterization of W-O-N Coatings. <i>Microscopy and Microanalysis</i> , 2008, 14, 27-30. | 0.2 | 8 |

| # | ARTICLE | IF | CITATIONS |
|-----|---|-----|-----------|
| 145 | Selective functionalization of patterned glass surfaces. Journal of Materials Chemistry B, 2014, 2, 2606-2615. | 2.9 | 8 |
| 146 | Effect of surface reactions on steel, Al ₂ O ₃ and Si ₃ N ₄ counterparts on their tribological performance with polytetrafluoroethylene filled composites. Applied Surface Science, 2015, 331, 482-489. | 3.1 | 8 |
| 147 | Low-temperature solid-state growth of three-dimensional bicontinuous nanoporous graphene with tunable porosity for lithium-sulfur batteries. Journal of Materials Chemistry A, 2018, 6, 11405-11415. | 5.2 | 8 |
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