# Arnaud Caron

List of Publications by Year
in descending order



| 47 | 1,164 | 361413 | 377865 |
|---|---|---|---|
| papers | citations | 20 h-index | 34 g-index |

| 48 | 48 | 48 | 1419 |
|---|---|---|---|
| all docs | docs citations | times ranked | citing authors |

| # | Article | IF | Citations |
|---|---|---|---|
| 1 | Corrosion effects on the nanotribology of a Ni62Nb38 metallic glass. Applied Surface Science, 2022, 573, 151628. | 6.1 | 2 |
| 2 | Unlocking the Hidden Potential of Cosmetics Waste for Building Sustainable Green Pavements in the Future: A Case Study of Discarded Lipsticks. Molecules, 2022, 27, 1697. | 3.8 | 5 |
| 3 | How Good Are the Performances of Graphene and Boron Nitride Against the Wear of Copper?. Materials, 2021, 14, 1148. | 2.9 | 1 |
| 4 | Effect of crystallographic orientation on the friction of copper and graphenized copper. Journal of Materials Science, 2020, 55, 16432-16450. | 3.7 | 7 |
| 5 | Towards the Use of Waste Pig Fat as a Novel Potential Bio-Based Rejuvenator for Recycled Asphalt Pavement. Materials, 2020, 13, 1002. | 2.9 | 26 |
| 6 | Tailoring nanostructured Ni-Nb metallic glassy thin films by substrate temperature. Acta Materialia, 2020, 194, 13-26. | 7.9 | 28 |
| 7 | Li2S-Incorporated Separator for Achieving High-Energy-Density Li-S Batteries. Journal of Electrochemical Science and Technology, 2020, 11, 33-40. | 2.2 | 2 |
| 8 | Effect of Normal Contact Vibration on Nano-Scale Friction. Lubricants, 2019, 7, 99. | 2.9 | 3 |
| 9 | Intermediate structural state for maximizing the rejuvenation effect in metallic glass via thermo-cycling treatment. Journal of Alloys and Compounds, 2019, 795, 493-500. | 5.5 | 34 |
| 10 | Effect of cooling rate on the structure and nanotribology of Agâ€“Cu nano-eutectic alloys. Journal of Materials Science, 2019, 54, 9168-9184. | 3.7 | 11 |
| 11 | Investigation on the role of interfacial water on the tribology between graphite and metals. RSC Advances, 2019, 9, 7285-7291. | 3.6 | 6 |
| 12 | Mesoporous Carbonâ€dispersed Carbon Nanotube Film Electrode Incorporated with Sulfur for Longâ€Life Liâ€“S Batteries. Bulletin of the Korean Chemical Society, 2019, 40, 412-417. | 1.9 | 2 |
| 13 | Chemical effects on the sliding friction of Ag and Au(111). Friction, 2018, 6, 84-97. | 6.4 | 17 |
| 14 | Nanoscopic wear behavior of face centered cubic metals. Acta Materialia, 2018, 147, 203-212. | 7.9 | 21 |
| 15 | Control of electrical to thermal conductivity ratio for p-type LaxFe3CoSb12 thermoelectrics by using a melt-spinning process. Journal of Alloys and Compounds, 2017, 729, 1209-1214. | 5.5 | 9 |
| 16 | Importance of surface oxide for the tribology of a Zr-based metallic glass. Friction, 2017, 5, 115-122. | 6.4 | 25 |
| 17 | Quantitative Hardness Measurement by Instrumented AFM-indentation. Journal of Visualized Experiments, 2016, , . | 0.3 | 4 |
| 18 | Distinction Between Magnesium Diboride and Tetraboride by Kelvin Probe Force Microscopy. Praktische Metallographie/Practical Metallography, 2016, 53, 512-521. | 0.3 | 0 |

| # | Article | IF | Citations |
|---|---|---|---|
| 19 | Lower nanometer-scale size limit for the deformation of a metallic glass by shear transformations revealed by quantitative AFM indentation. Beilstein Journal of Nanotechnology, 2015, 6, 1721-1732. | 2.8 | 10 |
| 20 | Young's modulus, fracture strength, and Poisson's ratio of nanocrystalline diamond films. Journal of Applied Physics, 2014, 116, . | 2.5 | 62 |
| 21 | Novel W-based metallic glass with high hardness and wear resistance. Intermetallics, 2014, 47, 6-10. | 3.9 | 54 |
| 22 | Atomic Scale Mechanisms of Friction Reduction and Wear Protection by Graphene. Nano Letters, 2014, 14, 7145-7152. | 9.1 | 210 |
| 23 | Investigation of transparent magnetic material formed by selective oxidation of a metallic glass. Thin Solid Films, 2013, 531, 471-475. | 1.8 | 13 |
| 24 | Friction and Internal Friction Measurements by Atomic Force Acoustic Microscopy. Nanoscience and Technology, 2013, , 391-416. | 1.5 | 0 |
| 25 | Structure vs Chemistry: Friction and Wear of Pt-Based Metallic Surfaces. ACS Applied Materials & Interfaces, 2013, 5, 11341-11347. | 8.0 | 35 |
| 26 | Structural features and high quasi-static strain rate sensitivity of Au49Cu26.9Ag5.5Pd2.3Si16.3 bulk metallic glass. Applied Physics Letters, 2012, 101, . | 3.3 | 11 |
| 27 | Mesostructural effects on the mechanical properties of Zr-based bulk metallic glasses. Materials Science & Engineering A: Structural Materials: Properties, Microstructure and Processing, 2012, 555, 57-62. | 5.6 | 6 |
| 28 | Phase transformations in Zr-based bulk metallic glass cyclically loaded before plastic yielding. Materials Science & Engineering A: Structural Materials: Properties, Microstructure and Processing, 2012, 550, 358-362. | 5.6 | 22 |
| 29 | On the glass transition temperature and the elastic properties in Zr-based bulk metallic glasses. Philosophical Magazine Letters, 2011, 91, 751-756. | 1.2 | 1 |
| 30 | Structurally enhanced anelasticity in Zr-based bulk metallic glasses. Scripta Materialia, 2011, 64, 946-949. | 5.2 | 5 |
| 31 | Glass-forming ability and thermoplastic formability of a Pd40Ni40Si4P16 glassy alloy. Journal of Materials Science, 2011, 46, 2091-2096. | 3.7 | 33 |
| 32 | Structure and nano-mechanical characteristics of surface oxide layers on a metallic glass. Nanotechnology, 2011, 22, 095704. | 2.6 | 26 |
| 33 | Effect of surface oxidation on the nm-scale wear behavior of a metallic glass. Journal of Applied Physics, 2011, 109, . | 2.5 | 33 |
| 34 | On the anelasticity and strain induced structural changes in a Zr-based bulk metallic glass. Applied Physics Letters, 2011, 99, . | 3.3 | 23 |
| 35 | Influence of minor aluminum concentration changes in zirconium-based bulk metallic glasses on the elastic, anelastic, and plastic properties. Acta Materialia, 2010, 58, 2004-2013. | 7.9 | 31 |
| 36 | Synthesis and properties of hydroxyapatite-containing porous titania coating on ultrafine-grained titanium by micro-arc oxidation. Acta Biomaterialia, 2010, 6, 2816-2825. | 8.3 | 171 |

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|---|---|---|---|
| 37 | Mechanical behaviour and in situ observation of shear bands in ultrafine grained Pd and Pdâ€“Ag alloys. Acta Materialia, 2010, 58, 967-978. | 7.9 | 43 |
| 38 | On the Contribution of Friction to the Contact Damping in Atomic Force Acoustic Microscopy. Japanese Journal of Applied Physics, 2010, 49, 120204. | 1.5 | 9 |
| 39 | Observation of local internal friction and plasticity onset in nanocrystalline nickel by atomic force acoustic microscopy. Acta Materialia, 2009, 57, 4353-4363. | 7.9 | 41 |
| 40 | Interfacial Water an Exceptional Biolubricant. Crystal Growth and Design, 2009, 9, 3852-3854. | 3.0 | 11 |
| 41 | Glassâ€Forming Ability and Ductility of Zrâ€Based and Alâ€Rich Bulk Metallic Glasses. Advanced Engineering Materials, 2008, 10, 1020-1025. | 3.5 | 4 |
| 42 | Quantitative Evaluation of Elastic Properties of Nano-Crystalline Nickel Using Atomic Force Acoustic Microscopy. Zeitschrift Fur Physikalische Chemie, 2008, 222, 471-498. | 2.8 | 31 |
| 43 | Tuning Nanoscopic Water Layers on Hydrophobic and Hydrophilic Surfaces with Laser Light. Langmuir, 2008, 24, 635-636. | 3.5 | 41 |
| 44 | Near-Field Acoustical Imaging using Lateral Bending Mode of Atomic Force Microscope Cantilevers. Acoustical Imaging, 2007, , 31-41. | 0.2 | 1 |
| 45 | Imaging using lateral bending modes of atomic force microscope cantilevers. Applied Physics Letters, 2004, 85, 6398-6400. | 3.3 | 30 |
| 46 | Ultrasonic Modes in Atomic Force Microscopy. Acoustical Imaging, 2004, , 699-706. | 0.2 | 4 |
| 47 | Experimental Studies of Nanometer-Scaled Single-Asperity Contacts with Metal Surfaces. , 0, , . | | 0 |