# Frederic Houze

List of Publications by Year
in descending order



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|---|---|---|---|
| 60 papers | 1,057 citations | 430874 18 h-index | 454955 30 g-index |
| 60 all docs | 60 docs citations | 60 times ranked | 1203 citing authors |

| # | Article | IF | Citations |
|---|---|---|---|
| 1 | Electromechanical conversion efficiency of GaN NWs: critical influence of the NW stiffness, the Schottky nano-contact and the surface charge effects. Nanoscale, 2022, 14, 4965-4976. | 5.6 | 3 |
| 2 | High Piezoelectric Conversion Properties of Axial InGaN/GaN Nanowires. Nanomaterials, 2018, 8, 367. | 4.1 | 14 |
| 3 | Energy harvesting efficiency in GaN nanowire-based nanogenerators: the critical influence of the Schottky nanocontact. Nanoscale, 2017, 9, 4610-4619. | 5.6 | 29 |
| 4 | Piezo-generator integrating a vertical array of GaN nanowires. Nanotechnology, 2016, 27, 325403. | 2.6 | 50 |
| 5 | Wide range local resistance imaging on fragile materials by conducting probe atomic force microscopy in intermittent contact mode. Applied Physics Letters, 2016, 108, 243101. | 3.3 | 2 |
| 6 | Nitride Nanowires: From Rigid to Flexible Piezo-generators. Journal of Physics: Conference Series, 2016, 773, 012010. | 0.4 | 1 |
| 7 | From single III-nitride nanowires to piezoelectric generators: New route for powering nomad electronics. Semiconductor Science and Technology, 2016, 31, 103002. | 2.0 | 45 |
| 8 | Conducting Probe Atomic Force Microscope as a Relevant Tool for Studying Some Phenomena in MEMS Switches. Sensing and Imaging, 2015, 16, 1. | 1.5 | 0 |
| 9 | Three-level multi-scale modeling of electrical contacts sensitivity study and experimental validation. , 2015, , . | | 4 |
| 10 | Specific methodology for capacitance imaging by atomic force microscopy: A breakthrough towards an elimination of parasitic effects. Applied Physics Letters, 2014, 104, 083108. | 3.3 | 11 |
| 11 | GaN nanowires for piezoelectric generators. Physica Status Solidi - Rapid Research Letters, 2014, 8, 414-419. | 2.4 | 23 |
| 12 | Impact of the GaN nanowire polarity on energy harvesting. Applied Physics Letters, 2014, 104, . | 3.3 | 20 |
| 13 | Conductive-probe AFM characterization of graphene sheets bonded to gold surfaces. Applied Surface Science, 2012, 258, 2920-2926. | 6.1 | 35 |
| 14 | Evaluation of the nanotube intrinsic resistance across the tip-carbon nanotube-metal substrate junction by Atomic Force Microscopy. Nanoscale Research Letters, 2011, 6, 335. | 5.7 | 9 |
| 15 | Multi-scale investigation of electronic transport and electromechanical behavior in carbon nanotube materials. Composites Part B: Engineering, 2011, 42, 2098-2104. | 12.0 | 5 |
| 16 | Field emission and material transfer in microswitches electrical contacts. Applied Physics Letters, 2010, 97, . | 3.3 | 37 |
| 17 | Influence of morphology on the conductance of single-crystal diamond surfaces measured by atomic force microscopy. Journal of Applied Physics, 2009, 106, 054301. | 2.5 | 6 |
| 18 | Metal-rich Au-silicide nanoparticles for use in nanotechnology. Applied Physics Letters, 2009, 94, . | 3.3 | 27 |

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|---|---|---|---|
| 19 | An Original Apparatus for Endurance Testing of MEMS Electrical Contact Materials. , 2009, , . | | 3 |
| 20 | Nanocomposite Thin Films for Surface Protection in Electrical Contact Applications. IEEE Transactions on Components and Packaging Technologies, 2009, 32, 358-364. | 1.3 | 4 |
| 21 | Tribological and electrical study of fluorinated diazonium films as dry lubricants for electrical contacts. Surface and Interface Analysis, 2008, 40, 802-805. | 1.8 | 8 |
| 22 | Capacitance measurements on small parallel plate capacitors using nanoscale impedance microscopy. Applied Physics Letters, 2007, 90, 043116. | 3.3 | 15 |
| 23 | Nanocomposite thin films for surface protection in electrical contact applications. , 2007, , . | | 6 |
| 24 | Local photoconductivity on diamond metal-semiconductor-metal photodetectors measured by conducting probe atomic force microscopy. Diamond and Related Materials, 2007, 16, 1074-1077. | 3.9 | 10 |
| 25 | Local electrical characterization of Schottky diodes on H-terminated diamond surfaces by conducting probe atomic force microscopy. Diamond and Related Materials, 2006, 15, 618-621. | 3.9 | 5 |
| 26 | Electrical characterization of Schottky diodes based on boron doped homoepitaxial diamond films by conducting probe atomic force microscopy. Superlattices and Microstructures, 2006, 40, 343-349. | 3.1 | 13 |
| 27 | Fabrication of high-Tc superconducting hot electron bolometers for terahertz mixer applications. , 2005, , . | | 10 |
| 28 | Simultaneous resistance and capacitance cartography by conducting probe atomic force microscopy in contact mode. Applied Physics Letters, 2005, 86, 123103. | 3.3 | 10 |
| 29 | MgO substrate surface optimization for YBaCuO thin film growth. IEEE Transactions on Applied Superconductivity, 2003, 13, 2721-2724. | 1.7 | 10 |
| 30 | Correlation between structural and transport properties of silicon thin films deposited at various substrate temperatures. Journal of Vacuum Science & Technology an Official Journal of the American Vacuum Society B, Microelectronics Processing and Phenomena, 2003, 21, 1048. | 1.6 | 1 |
| 31 | Copper sample analyzed with an n-doped silicon tip using conducting probe atomic force microscopy. Journal of Vacuum Science & Technology an Official Journal of the American Vacuum Society B, Microelectronics Processing and Phenomena, 2002, 20, 1929. | 1.6 | 4 |
| 32 | Influence of microstructure on electrical and microwave properties of YBaCuO thin films. Physica C: Superconductivity and Its Applications, 2002, 372-376, 578-581. | 1.2 | 5 |
| 33 | Influence of temperature and pressure on the static contact resistance of vacuum heat-treated polyacrylonitrile films. Synthetic Metals, 2001, 118, 121-132. | 3.9 | 5 |
| 34 | Conducting Probe-Mediated Electrochemical Nanopatterning of Molecular Materials. Journal of the American Chemical Society, 2001, 123, 11486-11487. | 13.7 | 17 |
| 35 | Electronic and topographic properties of amorphous and microcrystalline silicon thin films. Thin Solid Films, 2001, 383, 57-60. | 1.8 | 47 |
| 36 | Mesostructure of polymer/carbon black composites observed by conductive probe atomic force microscopy. Carbon, 2001, 39, 314-318. | 10.3 | 40 |

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| 37 | Title is missing!. Journal of Materials Science, 2001, 36, 3355-3363. | 3.7 | 28 |
| 38 | Conducting probe atomic force microscopy applied to organic conducting blends. Applied Physics Letters, 2001, 79, 2993-2995. | 3.3 | 40 |
| 39 | Atomic force microscopy with a conducting tip: correlation studies between microstructure and electrical properties of YBaCuO thin films. Physica C: Superconductivity and Its Applications, 2000, 341-348, 1965-1968. | 1.2 | 6 |
| 40 | Self-assembled monolayers of alkanethiols on nickel surfaces for low level electrical contact applications. IEEE Transactions on Components and Packaging Technologies, 1999, 22, 79-84. | 1.3 | 33 |
| 41 | Adhesion properties and surface analyses of monolayers ofn-dodecanethiol self-assembled on galvanic gold. Surface and Interface Analysis, 1998, 26, 889-895. | 1.8 | 7 |
| 42 | Surface modifications of nickel substrates with self-assembled monolayers of alkanethiols for electrical contact applications. Surface and Coatings Technology, 1998, 100-101, 463-468. | 4.8 | 27 |
| 43 | First observations of YBaCuO thin films by atomic force microscopy with conducting tips. , 1998, 3481, 265. | | 2 |
| 44 | Study of the local electrical properties of metal surfaces using an AFM with a conducting probe. IEEE Transactions on Components and Packaging Technologies, 1998, 21, 76-81. | 0.7 | 30 |
| 45 | Apparent tunnel barrier heights of PtIrâ€“Au interfaces in relation to the Au surface composition. Journal of Vacuum Science & Technology an Official Journal of the American Vacuum Society B, Microelectronics Processing and Phenomena, 1998, 16, 2006. | 1.6 | 2 |
| 46 | Atomic force microscopy study of the topographic evolution of polyacrylonitrile thin films submitted to a rapid thermal treatment. Thin Solid Films, 1997, 303, 200-206. | 1.8 | 12 |
| 47 | Imaging the local electrical properties of metal surfaces by atomic force microscopy with conducting probes. Applied Physics Letters, 1996, 69, 1975-1977. | 3.3 | 176 |
| 48 | Bulk and surface structural properties of Si1â^'xâ^'yGexCy layers processed on Si(001) by pulsed laser induced epitaxy. Applied Surface Science, 1996, 102, 28-32. | 6.1 | 4 |
| 49 | Elaboration of heat-treated thin films of polyacrylonitrile for connector application. IEEE Transactions on Components and Packaging Technologies, 1995, 18, 364-368. | 0.7 | 6 |
| 50 | Ã‰laboration et caractÃ©risation chimique, topographique, tribologique et Ã©lectrique de films de polyacrylonitrile post-traitÃ©s en vue d'applications en connectique. Journal De Physique III, 1995, 5, 661-675. | 0.3 | 0 |
| 51 | The influence of surface roughness on the capacitance between a sphere and a plane. Journal Physics D: Applied Physics, 1994, 27, 1504-1508. | 2.8 | 52 |
| 52 | Tribological behaviour of heat-treated thin films of electropolymerized polyacrylonitrile. Surface and Interface Analysis, 1994, 22, 393-397. | 1.8 | 7 |
| 53 | Electrical properties of very thin heat-treated polyacrylonitrile layers electropolymerized on nickel for contact application. Synthetic Metals, 1994, 62, 207-216. | 3.9 | 18 |
| 54 | Electrical and physical modeling of contact defects due to fretting. IEEE Transactions on Components and Packaging Technologies, 1994, 17, 134-140. | 0.7 | 9 |

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|---|---|---|---|
| 55 | Constriction resistance of a multispot contact: an improved analytical expression. IEEE Transactions on Components, Hybrids and Manufacturing Technology, 1991, 14, 134-136. | 0.4 | 12 |
| 56 | A quantitative approach to the effects of surface topography on tunnelling current between two large rough metal bodies. Journal of Physics Condensed Matter, 1991, 3, 4655-4675. | 1.8 | 3 |
| 57 | Electrical and mechanical contact between rough gold surfaces in air. Journal of Physics Condensed Matter, 1991, 3, 5195-5201. | 1.8 | 26 |
| 58 | Determination of the effective contact radius between a conducting sphere and a thin metallic film. Journal Physics D: Applied Physics, 1988, 21, 495-502. | 2.8 | 12 |
| 59 | Experimental and theoretical study of creep effects in electrical contacts. , 0, , . | | 6 |
| 60 | Self-assembled monolayers of alcanethiols on nickel surfaces for low level electrical contact applications. , 0, , . | | 5 |