

Mirko Cinchetti

List of Publications by Year in descending order

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119
papers

5,794
citations

117625
34
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76900
74
g-index

123
all docs

123
docs citations

123
times ranked

5002
citing authors

| # | ARTICLE | IF | CITATIONS |
|----|--|------|-----------|
| 1 | Explaining the paradoxical diversity of ultrafast laser-induced demagnetization. <i>Nature Materials</i> , 2010, 9, 259-265. | 27.5 | 729 |
| 2 | All-optical control of ferromagnetic thin films and nanostructures. <i>Science</i> , 2014, 345, 1337-1340. | 12.6 | 524 |
| 3 | Engineered materials for all-optical helicity-dependent magnetic switching. <i>Nature Materials</i> , 2014, 13, 286-292. | 27.5 | 507 |
| 4 | Activating the molecular spininterface. <i>Nature Materials</i> , 2017, 16, 507-515. | 27.5 | 285 |
| 5 | Phase-covariant quantum cloning. <i>Physical Review A</i> , 2000, 62, . | 2.5 | 266 |
| 6 | Determination of spin injection and transport in ferromagnet/organic semiconductor heterojunction by two-photon photoemission. <i>Nature Materials</i> , 2009, 8, 115-119. | 27.5 | 266 |
| 7 | Ultrafast demagnetization of ferromagnetic transition metals: The role of the Coulomb interaction. <i>Physical Review B</i> , 2009, 80, . | 3.2 | 179 |
| 8 | Light-induced magnetization reversal of high-anisotropy TbCo alloy films. <i>Applied Physics Letters</i> , 2012, 101, . | 3.3 | 158 |
| 9 | Topological states on the gold surface. <i>Nature Communications</i> , 2015, 6, 10167. | 12.8 | 148 |
| 10 | Spin-dependent trapping of electrons at spininterfaces. <i>Nature Physics</i> , 2013, 9, 242-247. | 16.7 | 147 |
| 11 | Spin-Flip Processes and Ultrafast Magnetization Dynamics in Co: Unifying the Microscopic and Macroscopic View of Femtosecond Magnetism. <i>Physical Review Letters</i> , 2006, 97, 177201. | 7.8 | 146 |
| 12 | Photoemission Electron Microscopy as a Tool for the Investigation of Optical Near Fields. <i>Physical Review Letters</i> , 2005, 95, 047601. | 7.8 | 136 |
| 13 | Band structure evolution during the ultrafast ferromagnetic-paramagnetic phase transition in cobalt. <i>Science Advances</i> , 2017, 3, e1602094. | 10.3 | 119 |
| 14 | Feedback Effect during Ultrafast Demagnetization Dynamics in Ferromagnets. <i>Physical Review Letters</i> , 2013, 111, 167204. | 7.8 | 117 |
| 15 | Temperature Dependence of Laser-Induced Demagnetization in Ni: A Key for Identifying the Underlying Mechanism. <i>Physical Review X</i> , 2012, 2, . | 8.9 | 106 |
| 16 | Ultrafast optically induced spin transfer in ferromagnetic alloys. <i>Science Advances</i> , 2020, 6, eaay8717. | 10.3 | 93 |
| 17 | Epitaxial film growth and magnetic properties of Co ₂ FeSi. <i>Physical Review B</i> , 2006, 74, . | 3.2 | 73 |
| 18 | Spin-orbit enhanced demagnetization rate in Co/Pt-multilayers. <i>Applied Physics Letters</i> , 2014, 105, . | 3.3 | 72 |

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|----|--|--|------|-----------|
| 19 | All-optical magnetization recording by tailoring optical excitation parameters. Physical Review B, 2011, 84, . | | 3.2 | 64 |
| 20 | Driving force of ultrafast magnetization dynamics. New Journal of Physics, 2011, 13, 123010. | | 2.9 | 61 |
| 21 | Band-Structure-Dependent Demagnetization in the Heusler Alloy Co_{2}MnSi . Physical Review Letters, 2010, 105, 217202. | | 7.8 | 58 |
| 22 | Interplay of heating and helicity in all-optical magnetization switching. Physical Review B, 2012, 85, . | | 3.2 | 56 |
| 23 | Dynamic spin filtering at the Co/Alq ₃ interface mediated by weakly coupled second layer molecules. Nature Communications, 2016, 7, 12668. | | 12.8 | 55 |
| 24 | Speed and efficiency of femtosecond spin current injection into a nonmagnetic material. Physical Review B, 2017, 96, . | | 3.2 | 52 |
| 25 | Subpicosecond magnetization dynamics in TbCo alloys. Physical Review B, 2014, 89, . | | 3.2 | 50 |
| 26 | Surface spin polarization of the nonstoichiometric Heusler alloy Co_{2}MnSi . Physical Review B, 2012, 85, . | | 3.2 | 47 |
| 27 | Electron emission from films of Ag and Au nanoparticles excited by a femtosecond pump-probe laser. Physical Review B, 2008, 77, . | | 3.2 | 46 |
| 28 | Spin scattering and spin-polarized hybrid interface states at a metal-organic interface. Physical Review B, 2011, 84, . | | 3.2 | 46 |
| 29 | Indirect Magnetic Coupling of Manganese Porphyrin to a Ferromagnetic Cobalt Substrate. Journal of Physical Chemistry C, 2011, 115, 1295-1301. | | 3.1 | 44 |
| 30 | Electronic and magnetic properties of the interface between metal-quinoline molecules and cobalt. Physical Review B, 2014, 89, . | | 3.2 | 41 |
| 31 | Tailoring the Spin Functionality of a Hybrid Metal-Organic Interface by Means of Alkali-Metal Doping. Physical Review Letters, 2010, 104, 217602. | | 7.8 | 39 |
| 32 | Controlling the Spin Texture of Topological Insulators by Rational Design of Organic Molecules. Nano Letters, 2015, 15, 6022-6029. | | 9.1 | 37 |
| 33 | Light Localization and Magneto-Optic Enhancement in Ni Antidot Arrays. Nano Letters, 2016, 16, 2432-2438. | | 9.1 | 36 |
| 34 | Enhancing Light Emission in Interface Engineered Spin-OLEDs through Spin-Polarized Injection at High Voltages. Advanced Materials, 2019, 31, e1806817. | | 21.0 | 36 |
| 35 | Spin-resolved two-photon photoemission study of the surface resonance state on $\text{Co}^{\bullet}/\text{Cu}(001)$. Physical Review B, 2006, 74, . | | 3.2 | 34 |
| 36 | Cavity-assisted ultrafast long-range periodic energy transfer between plasmonic nanoantennas. Light: Science and Applications, 2017, 6, e17111-e17111. | | 16.6 | 33 |

| # | ARTICLE | IF | CITATIONS |
|----|--|------|-----------|
| 37 | Observation of Cu surface inhomogeneities by multiphoton photoemission spectromicroscopy. Applied Physics Letters, 2003, 83, 1503-1505. | 3.3 | 30 |
| 38 | Structural, chemical, and electronic properties of the Co ₂ MnSi(001)/MgO interface. Physical Review B, 2013, 87, . | 3.2 | 30 |
| 39 | A case study for the formation of stanene on a metal surface. Communications Physics, 2019, 2, . | 5.3 | 30 |
| 40 | Efficiency of ultrafast optically induced spin transfer in Heusler compounds. Physical Review Research, 2020, 2, . | 3.6 | 29 |
| 41 | Strong modification of the transport level alignment in organic materials after optical excitation. Nature Communications, 2019, 10, 1470. | 12.8 | 27 |
| 42 | Towards a full Heusler alloy showing room temperature half-metallicity at the surface. Journal Physics D: Applied Physics, 2007, 40, 1544-1547. | 2.8 | 26 |
| 43 | Tuning the charge flow between Marcus regimes in an organic thin-film device. Nature Communications, 2019, 10, 2089. | 12.8 | 25 |
| 44 | Photoemission time-of-flight spectromicroscopy of Ag nanoparticle films on Si(111). Journal of Electron Spectroscopy and Related Phenomena, 2004, 137-140, 249-257. | 1.7 | 24 |
| 45 | Induced versus intrinsic magnetic moments in ultrafast magnetization dynamics. Physical Review B, 2018, 98, . | 3.2 | 24 |
| 46 | Modifying the Surface of a Rashba-Split Pb-Ag Alloy Using Tailored Metal-Organic Bonds. Physical Review Letters, 2016, 117, 096805. | 7.8 | 23 |
| 47 | Spin-dependent electronic structure of the Co/Al(OP) ₃ interface. New Journal of Physics, 2013, 15, 113054. | 2.9 | 21 |
| 48 | Probing the electronic and spintronic properties of buried interfaces by extremely low energy photoemission spectroscopy. Scientific Reports, 2015, 5, 8537. | 3.3 | 21 |
| 49 | Spin injection and spin dynamics at the CuPc/GaAs interface studied with ultraviolet photoemission spectroscopy and two-photon photoemission spectroscopy. Physical Review B, 2008, 78, . | 3.2 | 20 |
| 50 | Two-photon photoemission spectromicroscopy of noble metal clusters on surfaces studied using time-of-flight photoemission electron microscopy. Journal of Physics Condensed Matter, 2005, 17, S1319-S1328. | 1.8 | 19 |
| 51 | Time-of-flight photoelectron spectromicroscopy of single MoS ₂ nanotubes. Journal of Applied Physics, 2006, 100, 084330. | 2.5 | 19 |
| 52 | Spin- and time-resolved photoemission studies of thin Co ₂ FeSi Heusler alloy films. Journal of Magnetism and Magnetic Materials, 2007, 316, e411-e414. | 2.3 | 19 |
| 53 | Evaluation of molecular orbital symmetry via oxygen-induced charge transfer quenching at a metal-organic interface. Applied Surface Science, 2020, 504, 144343. | 6.1 | 19 |
| 54 | Room-temperature On-Spin-Switching and Tuning in a Porphyrin-Based Multifunctional Interface. Small, 2021, 17, e2104779. | 10.0 | 19 |

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|----|---|-----|-----------|
| 55 | Nonlinear Bicolor Holography Using Plasmonic Metasurfaces. ACS Photonics, 2021, 8, 1013-1019. | 6.6 | 18 |
| 56 | Dynamics of the coercivity in ultrafast pump-probe experiments. Journal Physics D: Applied Physics, 2008, 41, 164001. | 2.8 | 16 |
| 57 | Spin-resolved low-energy and hard x-ray photoelectron spectroscopy of off-stoichiometric Co ₂ MnSi Heusler thin films exhibiting a record TMR. Journal Physics D: Applied Physics, 2015, 48, 164002. | 2.8 | 16 |
| 58 | Ferrous to Ferric Transition in FePhthalocyanine Driven by NO ₂ Exposure. Chemistry - A European Journal, 2021, 27, 3526-3535. | 3.3 | 16 |
| 59 | Ultrafast Amplification and Nonlinear Magnetoelastic Coupling of Coherent Magnon Modes in an Antiferromagnet. Physical Review Letters, 2021, 127, 077202. | 7.8 | 16 |
| 60 | Ultrafast magnetization dynamics in the half-metallic Heusler alloy Co ₂ Cr _{0.6} Fe _{0.4} Al. Physica Status Solidi (B): Basic Research, 2011, 248, 2330-2337. | 1.5 | 15 |
| 61 | Ultrafast magnetization dynamics in Co-based Heusler compounds with tuned chemical ordering. New Journal of Physics, 2014, 16, 063068. | 2.9 | 15 |
| 62 | Exchange-mediated magnetic blue-shift of the band-gap energy in the antiferromagnetic semiconductor MnTe. New Journal of Physics, 2020, 22, 083029. | 2.9 | 15 |
| 63 | Tailoring the energy level alignment at the Co/Alq ₃ interface by controlled cobalt oxidation. Applied Physics Letters, 2013, 103, . | 3.3 | 14 |
| 64 | Structure and electronic properties of the (3 Å–3)R30°SnAu ₂ /Au(111) surface alloy. Physical Review B, 2018, 98, . | 3.2 | 14 |
| 65 | Effects of post-growth annealing on structural and compositional properties of the Co ₂ Cr _{0.6} Fe _{0.4} Al surface and its relevance for the surface electron spin polarization. Journal Physics D: Applied Physics, 2009, 42, 084016. | 2.8 | 13 |
| 66 | Electronic structure of metal quinoline molecules from G0W0 calculations. Physical Review B, 2014, 89, . | 3.2 | 13 |
| 67 | Molecular anchoring stabilizes low valence Ni(<i>i</i>)TPP on copper against thermally induced chemical changes. Journal of Materials Chemistry C, 2020, 8, 8876-8886. | 5.5 | 13 |
| 68 | Signatures of an atomic crystal in the band structure of a C_{60} thin film. Physical Review B, 2020, 101, . | 3.2 | 13 |
| 69 | Orbital angular momentum structure of an unoccupied spin-split quantum-well state in Pb/Cu(111). Physical Review B, 2013, 87, . | 3.2 | 11 |
| 70 | Scanning Tunneling Microscopy Study of Ordered C ₆₀ Submonolayer Films on Co/Au(111). Journal of Physical Chemistry C, 2016, 120, 7568-7574. | 3.1 | 11 |
| 71 | Ultrafast Charge-Transfer Exciton Dynamics in C ₆₀ Thin Films. Journal of Physical Chemistry C, 2020, 124, 23579-23587. | 3.1 | 11 |
| 72 | Temperature dependence of the picosecond spin Seebeck effect. Applied Physics Letters, 2021, 119, . | 3.3 | 11 |

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|----|---|------|-----------|
| 73 | Investigation of the spin-dependent properties of electron doped cobalt-CuPc interfaces. Synthetic Metals, 2011, 161, 570-574. | 3.9 | 10 |
| 74 | Influence of alkylphosphonic acid grafting on the electronic and magnetic properties of La ₂ /3Sr ₁ /3MnO ₃ surfaces. Applied Surface Science, 2015, 353, 24-28. | 6.1 | 10 |
| 75 | Control of Cooperativity through a Reversible Structural Phase Transition in MoMo-Methyl/Cu(111). Advanced Functional Materials, 2018, 28, 1703544. | 14.9 | 10 |
| 76 | Wide spectral range ultrafast pump-probe magneto-optical spectrometer at low temperature, high-magnetic and electric fields. Review of Scientific Instruments, 2020, 91, 113001. | 1.3 | 10 |
| 77 | Reversible redox reactions in metal-supported porphyrin: the role of spin and oxidation state. Journal of Materials Chemistry C, 2021, 9, 12559-12565. | 5.5 | 10 |
| 78 | Femtosecond phononic coupling to both spins and charges in a room-temperature antiferromagnetic semiconductor. Physical Review B, 2021, 104, . | 3.2 | 10 |
| 79 | Topology communicates. Nature Nanotechnology, 2014, 9, 965-966. | 31.5 | 9 |
| 80 | Adsorption heights and bonding strength of organic molecules on a Pb-Ag surface alloy. Physical Review B, 2016, 94, . | 3.2 | 9 |
| 81 | Spin- and Angle-Resolved Photoemission Study of the Alq ₃ /Co Interface. Journal of Physical Chemistry C, 2018, 122, 6585-6592. | 3.1 | 8 |
| 82 | Experimental time-resolved photoemission and ab initio GW+T study of lifetimes of excited electrons in ytterbium. Journal of Physics Condensed Matter, 2007, 19, 496213. | 1.8 | 7 |
| 83 | All-optical magnetization switching using phase shaped ultrashort laser pulses. Physica Status Solidi (A) Applications and Materials Science, 2012, 209, 2589-2595. | 1.8 | 7 |
| 84 | Ultrafast electron dynamics in a metallic quantum well nanofilm with spin splitting. Physical Review B, 2013, 88, . | 3.2 | 7 |
| 85 | Epitaxial growth of thermally stable cobalt films on Au(111). New Journal of Physics, 2016, 18, 103054. | 2.9 | 7 |
| 86 | Design of Molecular Spintronics Devices Containing Molybdenum Oxide as Hole Injection Layer. Advanced Electronic Materials, 2017, 3, 1600366. | 5.1 | 7 |
| 87 | Molecular spectroscopy in a solid-state device. Materials Horizons, 2019, 6, 1663-1668. | 12.2 | 7 |
| 88 | Vibronic Fingerprints of the Nickel Oxidation States in Surface-Supported Porphyrin Arrays. Journal of Physical Chemistry C, 2020, 124, 6297-6303. | 3.1 | 7 |
| 89 | Vibron-assisted spin relaxation at a metal/organic interface. Physical Review B, 2015, 91, . | 3.2 | 6 |
| 90 | Entanglement distribution between distant users via a center. Physical Review A, 2001, 63, . | 2.5 | 5 |

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| 91 | Energy-resolved magnetic domain imaging in TbCo alloys by valence band photoemission magnetic circular dichroism. <i>Physical Review B</i> , 2013, 88, . | 3.2 | 5 |
| 92 | Modification of Pb quantum well states by the adsorption of organic molecules. <i>Journal of Physics Condensed Matter</i> , 2019, 31, 134005. | 1.8 | 5 |
| 93 | Extremely low-energy ARPES of quantum well states in cubic-GaN/AlN and GaAs/AlGaAs heterostructures. <i>Scientific Reports</i> , 2021, 11, 19081. | 3.3 | 5 |
| 94 | Distortion-driven spin switching in electron-doped metal porphyrins. <i>Journal of Materials Chemistry C</i> , 2022, 10, 9748-9757. | 5.5 | 5 |
| 95 | Between two spins. <i>Nature Photonics</i> , 2015, 9, 489-490. | 31.4 | 4 |
| 96 | Controlled manipulation of the Co-Alq3 interface by rational design of Alq3 derivatives. <i>Dalton Transactions</i> , 2016, 45, 18365-18376. | 3.3 | 4 |
| 97 | Insight into intramolecular chemical structure modifications by on-surface reaction using photoemission tomography. <i>Chemical Communications</i> , 2021, 57, 3050-3053. | 4.1 | 4 |
| 98 | The Magnetic Behaviour of CoTPP Supported on Coinage Metal Surfaces in the Presence of Small Molecules: A Molecular Cluster Study of the Surface trans-Effect. <i>Nanomaterials</i> , 2022, 12, 218. | 4.1 | 4 |
| 99 | Disproportionation of Nitric Oxide at a Surface-Bound Nickel Porphyrinoid. <i>Angewandte Chemie - International Edition</i> , 2022, 61, . | 13.8 | 4 |
| 100 | Impact of local order and stoichiometry on the ultrafast magnetization dynamics of Heusler compounds. <i>Journal Physics D: Applied Physics</i> , 2015, 48, 164016. | 2.8 | 3 |
| 101 | Spin structure of Rashba-split electronic states of Bi overlayers on Cu(1 1 1). <i>Journal of Electron Spectroscopy and Related Phenomena</i> , 2015, 201, 47-52. | 1.7 | 3 |
| 102 | Spin-Resolved Photoemission Spectroscopy of the Heusler Compound Co\$_{2}MnSi\$. <i>Springer Series in Materials Science</i> , 2016, , 51-86. | 0.6 | 3 |
| 103 | Observation of optical coherence in a disordered metal-molecule interface by coherent optical two-dimensional photoelectron spectroscopy. <i>Physical Review B</i> , 2022, 105, . | 3.2 | 3 |
| 104 | Emission Electron Microscopy of Nanoparticles in Strong fs Laser Fields. <i>Microscopy and Microanalysis</i> , 2003, 9, 168-169. | 0.4 | 2 |
| 105 | Adsorption-induced pyramidal distortion of the trimetallic nitride core inside the endohedral fullerene Sc3N@C80 on the Ag(111) surface. <i>Physical Review B</i> , 2018, 98, . | 3.2 | 2 |
| 106 | Vertical bonding distances and interfacial band structure of PTCDA on a Sn-Ag surface alloy. <i>Physical Review B</i> , 2020, 102, . | 3.2 | 2 |
| 107 | Momentum and energy dissipation of hot electrons in a Pb/Ag(111) quantum well system. <i>Physical Review B</i> , 2021, 104, . | 3.2 | 2 |
| 108 | Positive Magnetoresistance and Chiral Anomaly in Exfoliated Type-II Weyl Semimetal Td-WTe2. <i>Nanomaterials</i> , 2021, 11, 2755. | 4.1 | 2 |

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| 109 | Organische Spinventile. Physik in Unserer Zeit, 2013, 44, 111-112. | 0.0 | 1 |
| 110 | Kerr and Faraday microscope for space- and time-resolved studies. European Physical Journal B, 2014, 87, 1. | 1.5 | 1 |
| 111 | Impact of CoFe buffer layers on the structural and electronic properties of the Co ₂ MnSi/MgO interface. Journal Physics D: Applied Physics, 2016, 49, 195002. | 2.8 | 1 |
| 112 | Ultrafast charge carrier dynamics in potassium-doped endohedral metallofullerene Sc ₃ N@C ₈₀ thin films. Journal of Electron Spectroscopy and Related Phenomena, 2021, 252, 147110. | 1.7 | 1 |
| 113 | Spin Injection and Spin Dynamics at CuPC/GaAs(100) Interface. Materials Research Society Symposia Proceedings, 2006, 965, 1. | 0.1 | 0 |
| 114 | Spin properties of interfaces with organic semiconductors studied by spin- and time-resolved two-photon photoemission. , 2011, , . | 0 | |
| 115 | Characterization of the Surface Electronic Properties of Co ₂ Cr _{1-x} FexAl. , 2013, , 271-284. | 0 | |
| 116 | Magnetische Speicher: Schalten mit Licht. Physik in Unserer Zeit, 2015, 46, 180-186. | 0.0 | 0 |
| 117 | All-optical control of ferromagnetic thin films and nanostructures: Competition between polarized light and applied magnetic field. , 2015, , . | 0 | |
| 118 | Electron Lifetimes in a 2D Electron-Gas with Rashba SO-Coupling: Screening Properties. Springer Proceedings in Physics, 2015, , 175-178. | 0.2 | 0 |
| 119 | Disproportionation of Nitric Oxide at a Surface-bound Nickel Porphyrinoid. Angewandte Chemie, 0, , . | 2.0 | 0 |