

Tonica Valla

List of Publications by Year in descending order

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115
all docs

115
docs citations

115
times ranked

7506
citing authors

#	ARTICLE	IF	CITATIONS
1	Chiral magnetic effect in ZrTe ₅ . Nature Physics, 2016, 12, 550-554.	16.7	793
2	Evidence for Quantum Critical Behavior in the Optimally Doped Cuprate Bi ₂ Sr ₂ CaCu ₂ O ₈ +. Science, 1999, 285, 2110-2113.	12.6	512
3	Doping and Temperature Dependence of the Mass Enhancement Observed in the Cuprate Bi ₂ Sr ₂ CaCu ₂ O ₈ + δ . Physical Review Letters, 2001, 87, 177007.	7.8	331
4	Many-Body Effects in Angle-Resolved Photoemission: Quasiparticle Energy and Lifetime of a Mo(110) Surface State. Physical Review Letters, 1999, 83, 2085-2088.	7.8	307
5	Electronic Structure Basis for the Extraordinary Magnetoresistance in WTe_2 . Physical Review Letters, 2014, 113, 216601.	7.8	241
6	The Ground State of the Pseudogap in Cuprate Superconductors. Science, 2006, 314, 1914-1916.	12.6	221
7	Emergence of preformed Cooper pairs from the doped Mott insulating state in Bi ₂ Sr ₂ CaCu ₂ O ₈ + δ . Nature, 2008, 456, 77-80.	27.8	217
8	K-Doping Dependence of the Fermi Surface of the Iron-Arsenic $BaFe_2As_4$. Physical Review Letters, 2008, 101, 177005.	7.8	214
9	Using Angle-Resolved Photoemission Spectroscopy to Image Dirac-mass disorder from magnetic dopant atoms in the ferromagnetic topological insulator Cr ₂ (Bi _{0.1} Sb _{0.9}) ₂ Te ₃ . Proceedings of the National Academy of Sciences of the United States of America, 2015, 112, 1316-1321.	7.1	206
10	Electronic Structure of the Topological Insulator Se_2Te_3 . Angle-Resolved Photoemission Spectroscopy: Evidence for a Nearly Full Surface Spin Polarization. Physical Review Letters, 2011, 106, 257004.	7.8	192
11	The mechanism of caesium intercalation of graphene. Nature Communications, 2013, 4, 2772.	12.8	184
12	Photoemission Spectroscopy of Magnetic and Nonmagnetic Impurities on the Surface of the Topological Insulator. Physical Review Letters, 2012, 108, 117601.	7.8	179
13	Temperature Dependent Scattering Rates at the Fermi Surface of Optimally Doped Bi ₂ Sr ₂ CaCu ₂ O ₈ + δ . Physical Review Letters, 2000, 85, 828-831.	7.8	171
14	Coherence \leftrightarrow incoherence and dimensional crossover in layered strongly correlated metals. Nature, 2002, 417, 627-630.	27.8	171
15	Quasiparticle Spectra, Charge-Density Waves, Superconductivity, and Electron-Phonon Coupling in $2H\text{-NbSe}_2$. Physical Review Letters, 2004, 92, 086401.	7.8	163
16	Temperature Dependent Photoemission Studies of Optimally Doped Bi ₂ Sr ₂ CaCu ₂ O ₈ . Physical Review Letters, 1999, 82, 2179-2182.	7.8	145
17	Measurement of an Exceptionally Weak Electron-Phonon Coupling on the Surface of the Topological Insulator Se_2Te_3 . Angle-Resolved Photoemission Spectroscopy. Physical Review Letters, 2012, 108, 187001.	7.8	140
18	High-Energy Kink Observed in the Electron Dispersion of High-Temperature Cuprate Superconductors. Physical Review Letters, 2007, 98, 167003.	7.8	129

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19	Symmetry protected Josephson supercurrents in three-dimensional topological insulators. Nature Communications, 2013, 4, 1689.	12.8	105
20	Spin-orbit interaction effect in the electronic structure of Bi ₂ Te ₃ observed by angle-resolved photoemission spectroscopy. Europhysics Letters, 2008, 81, 57006.	2.0	96
21	Sn-doped Bi _{1.1} Sb _{0.9} Te ₂ S bulk crystal topological insulator with excellent properties. Nature Communications, 2016, 7, 11456.	12.8	94
22	Charge-Density-Wave-Induced Modifications to the Quasiparticle Self-Energy in 2H-TaSe ₂ . Physical Review Letters, 2000, 85, 4759-4762.	7.8	85
23	Realization of a Type-II Nodal-Line Semimetal in Mg ₃ Bi ₂ . Advanced Science, 2019, 6, 1800897.	11.2	84
24	Anisotropic Electron-Phonon Coupling and Dynamical Nesting on the Graphene Sheets in Superconducting CaC ₆ using Angle-Resolved Photoemission Spectroscopy. Physical Review Letters, 2009, 102, 107007.	7.8	78
25	Electrochemical and X-ray photoelectron spectroscopy studies of passive film on tin in citrate buffer solution. Journal of Electroanalytical Chemistry, 1996, 407, 83-89.	3.8	74
26	Extracting the electron-boson spectral function $\hat{\Sigma}^{\pm}2F(\%)$ from infrared and photoemission data using inverse theory. Physical Review B, 2005, 71, .	3.2	74
27	Scaling of the superfluid density in high-temperature superconductors. Physical Review B, 2005, 72, .	3.2	68
28	Electronic Structure of Superconducting KC ₈ and Nonsuperconducting LiC ₆ Graphite Intercalation Compounds: Evidence for a Graphene-Sheet-Driven Superconducting State. Physical Review Letters, 2015, 114, 037001.	7.8	68
29	Quasiparticle Interference, Quasiparticle Interactions, and the Origin of the Charge Density Wave in FeSe. Physical Review Letters, 2015, 114, 037001.	7.8	67
30	Metal to Insulator Transition on the Landau Level in Graphene. Physical Review Letters, 2010, 105, 046804.	7.8	66
31	A New Magnetic Topological Quantum Material Candidate by Design. ACS Central Science, 2019, 5, 900-910.	11.3	63
32	Coupling of spin and orbital excitations in the iron-based superconductor FeSe. Physical Review B, 2010, 81, .	3.2	61
33	Topological semimetal in a Bi-Bi ₂ Se ₃ infinitely adaptive superlattice phase. Physical Review B, 2012, 86, .	3.2	59
34	Quasiparticle Liquid in the Highly Overdoped Bi ₂ Sr ₂ CaCu ₂ O ₈ + δ . Physical Review Letters, 2002, 88, 167006.	7.8	54
35	Termination-dependent topological surface states of the natural superlattice phase Bi ₄ Se ₃ . Physical Review B, 2013, 88, .	3.2	52
36	Electronic structure of silver and copper ultrathin films on V(100): Quantum-well states. Physical Review B, 1996, 54, 11786-11795.	3.2	51

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37	Charge Order, Metallic Behavior, and Superconductivity in $\text{La}_2\text{xBaCuO}_4$ with $x=1/8$. Physical Review Letters, 2006, 96, 257002.	7.8	50
38	Band Structure of the IV-VI Black Phosphorus Analog and Thermoelectric SnSe. Physical Review Letters, 2018, 120, 156403.	7.8	49
39	Surface Collective Modes in the Topological Insulators Bi_2Se_3 and Bi_2Te_3 . Physical Review Letters, 2015, 115, 257402.	7.8	39
40	Phase diagram of $\text{Bi}_2\text{Sr}_2\text{CaCu}_2\text{O}_{8+\delta}$ revisited. Nature Communications, 2018, 9, 5210.	12.8	43
41	Spin-Orbit Interactions and the Nematicity Observed in the Fe-Based Superconductors. Physical Review Letters, 2015, 114, 167001.	7.8	42
42	Differences in Chemical Doping Matter: Superconductivity in $\text{Ti}_x\text{Ta}_{1-x}\text{Se}_2$ but Not in $\text{Ti}_x\text{Nb}_{1-x}\text{Se}_2$. Chemistry of Materials, 2016, 28, 1927-1935.	6.7	40
43	Proximity Effect for a Thin Films of a Topological Insulator Grown on Top of a Bi_2Se_3 . Physical Review Letters, 2014, 113, 067003.	7.8	39
44	Oscillatory electron-phonon coupling in ultra-thin silver films on V(100). Journal of Physics Condensed Matter, 2000, 12, L477-L482.	1.8	37
45	Quasiparticle interference on the surface of the topological crystalline insulator Pb_1Sn_m . Physical Review B, 2013, 88, 041407.	7.8	37
46	Quasiparticle Line Shape of Sr_2RuO_4 and Its Relation to Anisotropic Transport. Physical Review Letters, 2004, 92, 137002.	7.8	36
47	Temperature dependence of photoemission from quantum-well states in $\text{Ag}/\text{V}(100)$: Moving surface-vacuum barrier effects. Physical Review B, 2001, 64, .	3.2	34
48	Spin-resolved photoemission study of photohole lifetimes in ferromagnetic gadolinium. Physical Review B, 2002, 65, .	3.2	33
49	Comparison of Sn-doped and nonstoichiometric vertical-Bridgman-grown crystals of the topological insulator $\text{Bi}_2\text{Te}_2\text{Se}$. Journal of Applied Physics, 2014, 115, 143708.	2.5	33
50	Electron spectroscopy characterization of an activated ruthenium electrode. Journal of Electroanalytical Chemistry, 1993, 356, 81-91.	3.8	32
51	Li adsorption versus graphene intercalation on Ir(111): From quenching to restoration of the Ir surface state. Physical Review B, 2015, 92, .	3.2	27
52	Probing the bulk electronic states of Bi_2Se_3 using nuclear magnetic resonance. Physical Review B, 2012, 86, .	3.2	26
53	Orbital Dependence of the Fermi Liquid State in Sr_2RuO_4 . Physical Review Letters, 2005, 94, 107003.	7.8	25
54	Fine details of the nodal electronic excitations in $\text{Bi}_2\text{Sr}_2\text{CaCu}_2\text{O}_{8+\delta}$. Physical Review B, 2006, 73, .	3.2	25

#	ARTICLE	IF	CITATIONS
55	Electronic properties of iron arsenic high temperature superconductors revealed by angle resolved photoemission spectroscopy (ARPES). <i>Physica C: Superconductivity and Its Applications</i> , 2009, 469, 491-497.	1.2	25
56	Inducing a Lifshitz Transition by Extrinsic Doping of Surface Bands in the Topological Crystalline Insulator $\text{Pb}_{1-x}\text{Sn}_x\text{Se}$. <i>Physical Review Letters</i> , 2014, 112, 146403.	7.8	25
57	Breakdown of the $\nu=0$ quantum Hall state in graphene: Two insulating regimes. <i>Physical Review B</i> , 2009, 80, .	3.2	24
58	Gapped Surface States in a Strong-Topological-Insulator Material. <i>Physical Review Letters</i> , 2015, 114, 256401.	7.8	24
59	Photoelectron spectroscopy characterization of the V(100) surface. <i>Surface Science</i> , 1994, 307-309, 843-847.	1.9	23
60	Unoccupied band structure of wurtzite GaN(0001). <i>Physical Review B</i> , 1999, 59, 5003-5007.	3.2	21
61	Valence band spectroscopy of V(100) surface. <i>Solid State Communications</i> , 1994, 89, 917-920.	1.9	20
62	d-band quantum well states in ultrathin silver films on V(100). <i>Physical Review B</i> , 2003, 68, .	3.2	20
63	Valence band electronic structure of the van der Waals ferromagnetic insulators: VI_3 and CrI_3 . <i>Scientific Reports</i> , 2020, 10, 15602.	3.3	20
64	Spectroscopic study of SiC-like structures formed on polycrystalline silicon sheets during growth. <i>Journal of Applied Physics</i> , 1994, 75, 3586-3592.	2.5	19
65	Strong topological metal material with multiple Dirac cones. <i>Physical Review B</i> , 2016, 93, .	3.2	19
66	Persistent coherence and spin polarization of topological surface states on topological insulators. <i>Physical Review B</i> , 2013, 88, .	3.2	18
67	Surface-state-dominated transport in crystals of the topological crystalline insulator In-doped $\text{Pb}_{1-x}\text{Sn}_x\text{Te}$. <i>Physical Review B</i> , 2015, 91, .	3.2	18
68	Properties of ultra thin silver films on a V(100) surface in a wide temperature range. <i>Surface Science</i> , 1994, 315, 81-92.	1.9	17
69	Interaction of oxygen and silver on the V(100) surface. <i>Applied Surface Science</i> , 1995, 89, 375-381.	6.1	17
70	In-situ angle-resolved photoemission spectroscopy of copper-oxide thin films synthesized by molecular beam epitaxy. <i>Journal of Electron Spectroscopy and Related Phenomena</i> , 2022, 257, 146775.	1.7	17
71	Photoemission studies of self-energy effects in cuprate superconductors. <i>Journal of Electron Spectroscopy and Related Phenomena</i> , 2001, 117-118, 153-164.	1.7	15
72	Disappearance of superconductivity due to vanishing coupling in the overdoped $\text{Bi}_{1-x}\text{Sr}_x\text{CaCuO}_{8+\delta}$. <i>Nature Communications</i> , 2020, 11, 569.	12.8	15

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73	Spin polarized photoemission studies of the Gd(0001) surface. Journal of Electron Spectroscopy and Related Phenomena, 1998, 92, 19-24.	1.7	14
74	Structural and electronic properties of vanadium ultra-thin films on Cu(100). Surface Science, 1998, 397, 270-277.	1.9	14
75	Nature of oxygen dopant-induced states in high-temperature Bi ₂ Sr ₂ CaCu ₂ O _{8-x} superconductors: A photoemission investigation. Physical Review B, 2006, 74, .	3.2	14
76	Doping of a one-dimensional Mott insulator: Photoemission and optical studies of $\text{Sr}_{1-x}\text{Ca}_x\text{VO}_2$. Physical Review B, 2008, 77, .	3.2	14
77	Characterization of the 1 and 2 ML silver films on the V(100) surface. Vacuum, 1995, 46, 1223-1226.	3.5	13
78	Comment on "Multiple Bosonic Mode Coupling in the Electron Self-Energy of $(\text{La}_{2-x}\text{Sr}_x)\text{CuO}_4$ ". Physical Review Letters, 2006, 96, 119701; author reply 119702.	7.8	12
79	Electronic structure of a Co-decorated vicinal Cu(775) surface: High-resolution photoemission spectroscopy. Physical Review B, 2008, 77, .	3.2	12
80	Angle-resolved photoemission from cuprates with static stripes. Physica C: Superconductivity and Its Applications, 2012, 481, 66-74.	1.2	12
81	Growth modes and electronic properties of copper ultra-thin films on a V(100) surface. Surface Science, 1997, 374, 51-60.	1.9	11
82	Quantum Size Effects, Multiple Dirac Cones, and Edge States in Ultrathin Bi(110) Films. ACS Applied Materials & Interfaces, 2021, 13, 33627-33634.	8.0	11
83	On the electronic structure of vanadium: the angular resolved photoelectron spectroscopy of V(100) surface. Vacuum, 1995, 46, 1181-1183.	3.5	10
84	Inverse photoemission and Auger electron spectroscopy of Rh thin films on Cu(100). Journal of Physics Condensed Matter, 1995, 7, 9475-9484.	1.8	10
85	Photoemission and inverse photoemission spectroscopy of V(100). Journal of Physics Condensed Matter, 1996, 8, 4195-4204.	1.8	10
86	The electron spectro-microscopy beamline at National Synchrotron Light Source II: A wide photon energy range, micro-focusing beamline for photoelectron spectro-microscopies. Review of Scientific Instruments, 2012, 83, 023102.	1.3	10
87	Distinct effects of Cr bulk doping and surface deposition on the chemical environment and electronic structure of the topological insulator Bi ₂ Se ₃ . Applied Surface Science, 2017, 407, 371-378.	6.1	10
88	Superconductivity in a Misfit Phase That Combines the Topological Crystalline Insulator $\text{Pb}_{1-x}\text{Sn}_x\text{Se}$ with the CDW-Bearing Transition Metal Dichalcogenide TiSe_2 . Journal of the Physical Society of Japan, 2016, 85, 064705.	1.6	9
89	Photoelectron spectroscopy of gold and silver ultra-thin films on V(100). Surface Science, 1994, 307-309, 576-581.	1.9	8
90	Orbital characters and near two-dimensionality of Fermi surfaces in $\text{NaFe}_{1-x}\text{Co}_x\text{As}$. Applied Physics Letters, 2012, 101, .	3.3	8

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91	Experimental determination of the Fermi surface of the spin spiral compound TlCo ₂ Se ₂ . Europhysics Letters, 2007, 77, 27001.	2.0	7
92	Topological electronic structure of YbMg ₂ Bi ₂ and CaMg ₂ Bi ₂ . Npj Quantum Materials, 2022, 7, .	5.2	7
93	Electronic interactions in strongly correlated systems: what is the glue for high temperature superconductivity?. , 2005, 5932, 593203.		6
94	Growth and characterization of Al ₂ O ₃ films on fluorine functionalized epitaxial graphene. Journal of Applied Physics, 2016, 120, .	2.5	6
95	Charge-density-wave gap in the quasi-two-dimensional conductor Na _{0.9} Mo ₆ O ₁₇ measured by angle-resolved photoemission spectroscopy. Physical Review B, 2005, 72, .	3.2	5
96	Angle-resolved photoemission study of the metal-insulator transition in bismuth cobaltates. Physical Review B, 2007, 76, .	3.2	5
97	Optical and photoemission investigation of structural and magnetic transitions in the iron-based superconductor $\text{Sr}_{0.67}\text{Na}_{0.33}\text{Fe}_2$. Physical Review B, 2019, 100, .	3.2	5
98	Origin of Suppression of Proximity-Induced Superconductivity in Bi ₂ Sr ₂ CaCu ₂ O ₈ +f' Heterostructures. Advanced Quantum Technologies, 2020, 3, 2000038.	3.9	5
99	Dirac energy spectrum and inverted bandgap in metamorphic InAsSb/InSb superlattices. Applied Physics Letters, 2020, 116, 032101.	3.3	5
100	Absence of a Dirac gap in ferromagnetic Cr ₂ (Bi _{0.1} Sb _{0.9}) ₂ Te ₃ . Journal of Applied Physics, 2021, 129, .	2.5	5
101	Multi-hole bands and quasi-two-dimensionality in Cr ₂ Ge ₂ Te ₆ studied by angle-resolved photoemission spectroscopy. Europhysics Letters, 2021, 133, 27002.	2.0	5
102	Simple adapter for a closed-loop helium cryostat in ultrahigh vacuum application. Review of Scientific Instruments, 1991, 62, 3116-3117.	1.3	4
103	Vanadium CVV Auger transition. Solid State Communications, 1996, 99, 393-397.	1.9	4
104	Panet Aal.Reply:. Physical Review Letters, 2012, 108, .	7.8	4
105	Numerical Simulation of Polymer Forging. International Polymer Processing, 1995, 10, 179-185.	0.5	4
106	Homogeneous superconducting gap in Dy _{0.7} Ba _{0.3} O ₇ synthesized by oxide molecular beam epitaxy. Physical Review Materials, 2020, 4, .		4
107	Photoemission study of ultra-thin vanadium films on Cu(100). Vacuum, 1998, 50, 245-249.	3.5	3
108	High-resolution photoemission studies of complex materials. AIP Conference Proceedings, 2000, , .	0.4	3

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109	Reconstruction of the Bi ₂ Sr ₂ CaCu ₂ O ₈ + $\hat{\Gamma}$ Fermi surface. Physical Review B, 2019, 100, .	3.2	3
110	Hole-like Fermi surface in the overdoped non-superconducting Bi _{1.8} Pb _{0.4} Sr ₂ CuO ₆ + $\hat{\Gamma}$. Europhysics Letters, 2021, 134, 17002.	2.0	3
111	Combined spectroscopic imaging STM and ARPES study of different gaps measured in the cuprate phase diagram. Physical Review B, 2020, 101, .	3.2	1
112	Visualizing the unusual spectral weight transfer in DyBa ₂ Cu ₃ O ₇ + $\hat{\Gamma}$ thin film. Scientific Reports, 2022, 12, 830.	3.3	1
113	ARPES EVIDENCE FOR A QUASIPARTICLE LIQUID IN OVERDOPED Bi ₂ Sr ₂ CaCu ₂ O ₈ + $\hat{\Gamma}$. Surface Review and Letters, 2002, 09, 1091-1096.	1.1	0
114	Superconductivity and Electron-Phonon Coupling in Graphite Intercalation Compunds. , 2011, , .		0