## Fabio Bernardini

# List of Publications by Year in Descending Order

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The third column is the impact factor (IF) of the journal, and the fourth column is the number of citations of the article.

97	7,721 citations	31	87
papers		h-index	g-index
107	8,441 ext. citations	3.2	5.83
ext. papers		avg, IF	L-index

#	Paper	IF	Citations
97	Topotactic fluorination of intermetallics as an efficient route towards quantum materials <i>Nature Communications</i> , <b>2022</b> , 13, 1462	17.4	О
96	A UHF-RFID multi-antenna sensor fusion enables item and robot localization. <i>IEEE Journal of Radio Frequency Identification</i> , <b>2022</b> , 1-1	2.4	0
95	Geometric effects in the infinite-layer nickelates. <i>Physical Review Materials</i> , <b>2022</b> , 6,	3.2	2
94	The MONITOR Project: RFID-based Robots enabling real-time inventory and localization in warehouses and retail areas <b>2021</b> ,		1
93	Nickelate Superconductors: An Ongoing Dialog between Theory and Experiments. <i>Journal of Experimental and Theoretical Physics</i> , <b>2021</b> , 132, 618-627	1	12
92	Single-layer TStype nickelates: Ni1+ is Ni1+. <i>Physical Review Materials</i> , <b>2021</b> , 5,	3.2	2
91	Intrinsic thermoelectric figure of merit of bulk compositional SiGe alloys: A first-principles study. <i>Physical Review Materials</i> , <b>2021</b> , 5,	3.2	4
90	Robot-Based Indoor Positioning of UHF-RFID Tags: The SAR Method With Multiple Trajectories. <i>IEEE Transactions on Instrumentation and Measurement</i> , <b>2021</b> , 70, 1-15	5.2	29
89	A Synthetic Aperture UHF RFID Localization Method by Phase Unwrapping and Hyperbolic Intersection. <i>IEEE Transactions on Automation Science and Engineering</i> , <b>2021</b> , 1-13	4.9	9
88	Infinite-layer fluoro-nickelates as d 9 model materials. <i>JPhys Materials</i> , <b>2020</b> , 3, 035003	4.2	9
87	Particle Swarm Optimization in SAR-Based Method Enabling Real-Time 3D Positioning of UHF-RFID Tags. <i>IEEE Journal of Radio Frequency Identification</i> , <b>2020</b> , 4, 300-313	2.4	19
86	Ab initio many-body GW correlations in the electronic structure of LaNiO2. <i>Physical Review B</i> , <b>2020</b> , 101,	3.3	22
85	Magnetic penetration depth and Tc in superconducting nickelates. <i>Physical Review Research</i> , <b>2020</b> , 2,	3.9	16
84	Stability and electronic properties of LaNiO2/SrTiO3 heterostructures. <i>JPhys Materials</i> , <b>2020</b> , 3, 03LT01	4.2	19
83	Special issue on novel superconducting and magnetic materials. <i>Journal of Physics Condensed Matter</i> , <b>2020</b> , 32, 040401	1.8	
82	Towards a Multi-antenna approach for UHF-RFID tag 3D localization with a Synthetic Aperture Radar Method <b>2019</b> ,		5
81	Evidence of the isoelectronic character of F doping in SmFeAsO F : a first-principles investigation. Journal of Physics Condensed Matter, <b>2019</b> , 31, 244001	1.8	2

### (2012-2019)

80	Magnetic competition in Fe-based germanide and silicide superconductors. <i>Europhysics Letters</i> , <b>2019</b> , 128, 47004	1.6	1
79	Particle Swarm Optimization in Multi-Antenna SAR-based Localization for UHF-RFID Tags 2019,		9
78	Disorder-induced localisation and suppression of superconductivity in YSrCuO. <i>Journal of Physics Condensed Matter</i> , <b>2019</b> , 31, 284001	1.8	1
77	Iron-based superconductivity extended to the novel silicide LaFeSiH. <i>Physical Review B</i> , <b>2018</b> , 97,	3.3	15
76	The puzzling structure of CuFeS (bornite) at low temperature. <i>Acta Crystallographica Section B: Structural Science, Crystal Engineering and Materials</i> , <b>2018</b> , 74, 405-415	1.8	4
75	Origin of the critical temperature discontinuity in superconducting sulfur under high pressure. <i>Physical Review B</i> , <b>2017</b> , 95,	3.3	14
74	Quantum oscillations in the SmFeAsO parent compound and superconducting SmFeAs(O,F). <i>Physical Review B</i> , <b>2017</b> , 96,	3.3	5
73	The phase diagrams of iron-based superconductors: Theory and experiments. <i>Comptes Rendus Physique</i> , <b>2016</b> , 17, 5-35	1.4	35
72	Unconventional Disorder Effects in Correlated Superconductors. <i>Physical Review Letters</i> , <b>2016</b> , 117, 25	7902	19
71	Understanding the BR spectra of MnSi without magnetic polarons. <i>Physical Review B</i> , <b>2014</b> , 89,	3.3	30
70	A magnetic glassy phase in Fe(1+y)Se(x)Te(1-x) single crystals. <i>Journal of Physics Condensed Matter</i> , <b>2013</b> , 25, 156004	1.8	7
69	Role of Dirac cones in magnetotransport properties of REFeAsO (RE = rare earth) oxypnictides. <i>European Physical Journal B</i> , <b>2013</b> , 86, 1	1.2	15
68	Theoretical investigation of FeTe magnetic ordering under hydrostatic pressure. <i>Physical Review B</i> , <b>2013</b> , 87,	3.3	16
67	Ab initio strategy for muon site assignment in wide band gap fluorides. <i>Physical Review B</i> , <b>2013</b> , 87,	3.3	38
66	Common effect of chemical and external pressures on the magnetic properties of RCoPO (R = La, Pr). <i>Physical Review B</i> , <b>2013</b> , 87,	3.3	29
65	Playing quantum hide-and-seek with the muon: localizing muon stopping sites. <i>Physica Scripta</i> , <b>2013</b> , 88, 068510	2.6	48
64	Effect of external pressure on the magnetic properties of LnFeAsO (Ln = La, Ce, Pr, Sm). Superconductor Science and Technology, <b>2012</b> , 25, 084009	3.1	29
63	Universal conductivity and the electrodynamics of graphite at high pressures. <i>Physical Review B</i> , <b>2012</b> , 86,	3.3	1

62	Effects of isoelectronic Ru substitution at the Fe site on the energy gaps of optimally F-doped SmFeAsO. <i>Superconductor Science and Technology</i> , <b>2012</b> , 25, 084012	3.1	11
61	Magnetotransport in La(Fe,Ru)AsO as a probe of band structure and mobility. <i>Physical Review B</i> , <b>2011</b> , 84,	3.3	37
60	Theoretical investigation of optical conductivity in Ba(Fe1\(\mathbb{R}\)Cox)2As2. <i>Physical Review B</i> , <b>2011</b> , 83,	3.3	18
59	Isoelectronic Ru substitution at the iron site in SmFe1\( \text{IRuxAsO0.85F0.15} \) and its effects on structural, superconducting, and normal-state properties. <i>Physical Review B</i> , <b>2010</b> , 81,	3.3	61
58	Influence of Mg deficiency on crystal structure and superconducting properties in MgB2 single crystals. <i>Physical Review B</i> , <b>2010</b> , 81,	3.3	20
57	Static and dynamical susceptibility of LaO1⊠FxFeAs. <i>Physical Review B</i> , <b>2010</b> , 81,	3.3	6
56	Multiband conductivity and a multigap superconducting phase in V3Si films from optical measurements at terahertz frequencies. <i>Physical Review B</i> , <b>2010</b> , 81,	3.3	19
55	Multiband superconductivity in Pb, H under pressure and CaBeSi from ab initio calculations. <i>Journal of Physics Condensed Matter</i> , <b>2009</b> , 21, 164209	1.8	9
54	The role of Coulomb interaction in the superconducting properties of CaC6and H under pressure. <i>Superconductor Science and Technology</i> , <b>2009</b> , 22, 034006	3.1	29
53	Electronic and structural properties of LiAl co-doped MgB2. <i>Physica C: Superconductivity and Its Applications</i> , <b>2007</b> , 460-462, 566-567	1.3	
52	First-principle investigation of native and impurity defects in MgB 2. Europhysics Letters, <b>2006</b> , 76, 491-4	1976	10
51	Effect of magnetic impurities in a two-band superconductor: a point-contact study of mn-substituted single crystals. <i>Physical Review Letters</i> , <b>2006</b> , 97, 037001	7.4	31
50	Anomalous effect of Li-Al codoping in MgB2: A simple explanation. <i>Physical Review B</i> , <b>2006</b> , 74,	3.3	20
49	Interaction of doping impurities with the 30½ partial dislocations in SiC: An ab initio investigation. <i>Physical Review B</i> , <b>2005</b> , 72,	3.3	15
48	Energetic stability and magnetic properties of Mn dimers in silicon. <i>Applied Physics Letters</i> , <b>2004</b> , 84, 2289-2291	3.4	51
47	Energetics of native point defects in cubic silicon carbide. <i>European Physical Journal B</i> , <b>2004</b> , 38, 437-44	41.2	20
46	Defect energetics of BiC using a new tight-binding molecular dynamics model. <i>Journal of Nuclear Materials</i> , <b>2004</b> , 329-333, 1219-1222	3.3	18
45	CORRELATION BETWEEN LOCAL OXYGEN DISORDER AND ELECTRONIC PROPERTIES IN SUPERCONDUCTING RESR2CU3O6+X(RE = Y, YB). International Journal of Modern Physics B, <b>2003</b> , 17, 873-878	1.1	3

### (2000-2003)

44	Electronic, dynamical and superconducting properties of MgB2: doping, surface and pressure effects. <i>Superconductor Science and Technology</i> , <b>2003</b> , 16, 137-142	3.1	1
43	Electronics and sensors based on pyroelectric AlGaN/GaN heterostructures. <i>Physica Status Solidi C:</i> Current Topics in Solid State Physics, <b>2003</b> , 1878-1907		56
42	Bi incorporation in GaN and AlxGa1⊠N alloys. <i>Physical Review B</i> , <b>2003</b> , 68,	3.3	3
41	Nonlinear Behavior of Spontaneous and Piezoelectric Polarization in IIIIV Nitride Alloys. <i>Physica Status Solidi A</i> , <b>2002</b> , 190, 65-73		39
40	Stability of Ge-related point defects and complexes in Ge-doped SiO2. <i>Physical Review B</i> , <b>2002</b> , 66,	3.3	15
39	Electronic and dynamical properties of the MgB2 surface: Implications for the superconducting properties. <i>Physical Review B</i> , <b>2002</b> , 66,	3.3	10
38	Self-interstitial trapping by carbon complexes in crystalline silicon. <i>Physical Review B</i> , <b>2002</b> , 66,	3.3	42
37	ELECTRONIC AND DYNAMICAL PROPERTIES OF MgB2 AND RELATED COMPOUNDS. <i>International Journal of Modern Physics B</i> , <b>2002</b> , 16, 1563-1569	1.1	4
36	Evidence for nonlinear macroscopic polarization in IIII nitride alloy heterostructures. <i>Applied Physics Letters</i> , <b>2002</b> , 80, 1204-1206	3.4	607
35	First-principles calculation of the piezoelectric tensor d? of IIIIV nitrides. <i>Applied Physics Letters</i> , <b>2002</b> , 80, 4145-4147	3.4	107
34	Pyroelectric properties of Al(In)GaN/GaN hetero- and quantum well structures. <i>Journal of Physics Condensed Matter</i> , <b>2002</b> , 14, 3399-3434	1.8	689
33	First-principles prediction of structure, energetics, formation enthalpy, elastic constants, polarization, and piezoelectric constants of AlN, GaN, and InN: Comparison of local and gradient-corrected density-functional theory. <i>Physical Review B</i> , <b>2001</b> , 64,	3.3	366
32	Nonlinear macroscopic polarization in III-V nitride alloys. <i>Physical Review B</i> , <b>2001</b> , 64,	3.3	238
31	Electronic and structural properties of superconducting MgB2, CaSi2, and related compounds. <i>Physical Review B</i> , <b>2001</b> , 64,	3.3	126
30	MgB2 and BeB2: A comparative study of their electronic and superconducting properties. <i>Physical Review B</i> , <b>2001</b> , 65,	3.3	17
29	Accurate calculation of polarization-related quantities in semiconductors. <i>Physical Review B</i> , <b>2001</b> , 63,	3.3	146
28	Proof of the thermodynamical stability of the EScenter in SiO2. <i>Physical Review Letters</i> , <b>2001</b> , 86, 3064-7	<b>7</b> 7.4	45
27	Polarization fields in nitride nanostructures: 10 points to think about. <i>Applied Surface Science</i> , <b>2000</b> , 166, 23-29	6.7	63

Doping screening of polarization fields in nitride heterostructures. Applied Physics Letters, 2000, 76, 3950-295250 26 Incorporation, diffusion, and electrical activity of Li in GaN. Physical Review B, 2000, 61, 12598-12601 25 3.3 7 Band offsets and stability of BeTe/ZnSe (100) heterojunctions. Physical Review B, 2000, 62, R16302-R1630\$ 24 14 Theoretical evidence for the semi-insulating character of AlN. Journal of Applied Physics, 1999, 85, 2001-2003 23 47 Free-carrier screening of polarization fields in wurtzite GaN/InGaN laser structures. Applied Physics 22 3.4 233 Letters, 1999, 74, 2002-2004 Spontaneous versus Piezoelectric Polarization in IIIIV Nitrides: Conceptual Aspects and Practical 21 1.3 241 Consequences. Physica Status Solidi (B): Basic Research, 1999, 216, 391-398 Effects of macroscopic polarization in III-V nitride multiple quantum wells. Physical Review B, 1999, 20 3.3 432 60,8849-8858 Macroscopic polarization and band offsets at nitride heterojunctions. *Physical Review B*, 1998, 57, R94273R9430340 19 Electronic dielectric constants of insulators calculated by the polarization method. Physical Review 18 3.3 71 B, 1998, 58, 15292-15295 Valence-band offsets at the AlxGa0.5⊠In0.5P-ZnSe(001) lattice-matched interface. Physical Review 17 3.3 B, 1997, 55, 1718-1723 Band offsets at the GaInP/GaAs heterojunction. Journal of Applied Physics, 1997, 82, 3374-3380 16 2.5 20 Theoretical evidence for efficient p-type doping of GaN using beryllium. Applied Physics Letters, 15 3.4 95 **1997**, 70, 2990-2992 Polarization-Based Calculation of the Dielectric Tensor of Polar Crystals. Physical Review Letters, 210 14 7.4 **1997**, 79, 3958-3961 Spontaneous polarization and piezoelectric constants of III-V nitrides. Physical Review B, 1997, 56, R100243R1002ZQ 13 The luminescence transition in porous silicon: the nature of the electronic states. Thin Solid Films, 12 2.2 2 **1996**, 276, 261-264 Electron states and luminescence transition in porous silicon. Physical Review B, 1996, 53, 4557-4564 11 3.3 39 Si/CaF2 Superlattices. A Direct Gap Structure Due to Interface State Coupling. Physica Status Solidi 8 10 1.3 (B): Basic Research, 1995, 190, 117-122 Light Emission at Room Temperature from Si/CaF 2 Multilayers. Europhysics Letters, 1995, 31, 25-30 1.6 38 9

#### LIST OF PUBLICATIONS

8	Electronic structure of thin Si layers in CaF2: Hybridization versus confinement. <i>Solid-State Electronics</i> , <b>1994</b> , 37, 1145-1147	1.7	
7	Gap opening in ultrathin Si layers: Role of confined and interface states. <i>Physical Review Letters</i> , <b>1994</b> , 72, 1044-1047	7.4	30
6	First-principles investigation of the electronic structure of Si-based layered structures. <i>Surface Science</i> , <b>1994</b> , 307-309, 984-988	1.8	2
5	Electronic Properties of Low Dimensional Silicon Structures <b>1993</b> , 219-228		1
4	Hydrogen covered Si(111) surfaces. Surface Science, <b>1992</b> , 269-270, 879-885	1.8	35
3	Fermi-level pinning and interface states at Pb?Si(111) interface. <i>Solid State Communications</i> , <b>1992</b> , 82, 863-866	1.6	2
2	Hydrogen on semiconductor surfaces. <i>Physica B: Condensed Matter</i> , <b>1991</b> , 170, 429-435	2.8	15
1	Chemisorption of H on GaAs(110): a First-Principles Calculation. <i>Europhysics Letters</i> , <b>1990</b> , 13, 653-658	1.6	25