

# Maria Iavarone

## List of Publications by Year in descending order

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96  
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270111

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98  
docs citations

98  
times ranked

2745  
citing authors

#	ARTICLE	IF	CITATIONS
1	Visualization of defect induced in-gap states in monolayer MoS <sub>2</sub> . Npj 2D Materials and Applications, 2022, 6, .	3.9	18
2	Electron Tunneling and X-Ray Photoelectron Spectroscopy Studies of the Superconducting Properties of Nitrogen-Doped Niobium Resonator Cavities. Physical Review Applied, 2020, 13, .	1.5	20
3	Proximity-Induced Superconductivity in Monolayer MoS <sub>2</sub> . ACS Nano, 2020, 14, 2718-2728.	7.3	40
4	The Effects of Atomic-Scale Strain Relaxation on the Electronic Properties of Monolayer MoS <sub>2</sub> . ACS Nano, 2019, 13, 8284-8291.	7.3	29
5	Quantitative magnetic force microscopy using calibration on superconducting flux quanta. Nanotechnology, 2019, 30, 314004.	1.3	6
6	Vortex-core properties and vortex-lattice transformation in FeSe. Physical Review B, 2019, 99, .	1.1	15
7	Moiré superlattices and 2D electronic properties of graphite/MoS <sub>2</sub> heterostructures. Journal of Physics and Chemistry of Solids, 2019, 128, 325-330.	1.9	14
8	Evolution of Metastable Defects and Its Effect on the Electronic Properties of MoS <sub>2</sub> Films. Scientific Reports, 2018, 8, 6724.	1.6	40
9	Single crystal growth, transport and scanning tunneling microscopy and spectroscopy of FeSe <sub>1-x</sub> S <sub>x</sub> . CrystEngComm, 2018, 20, 2449-2454.	1.3	17
10	Observation of Anisotropic Charge Density Wave in Layered 1T-TiSe <sub>2</sub> . Microscopy and Microanalysis, 2018, 24, 230-231.	0.2	0
11	Metastable defects in monolayer and few-layer films of MoS <sub>2</sub> . AIP Conference Proceedings, 2018, , .	0.3	1
12	Inter-Layer Coupling Induced Valence Band Edge Shift in Mono- to Few-Layer MoS <sub>2</sub> . Scientific Reports, 2017, 7, 40559.	1.6	32
13	Anisotropic Superconducting Gaps and Boson Mode in FeSe <sub>1-x</sub> S <sub>x</sub> Single Crystals. Journal of Superconductivity and Novel Magnetism, 2017, 30, 763-768.	0.8	2
14	Anisotropic charge density wave in layered $1 \times 1$ T <sub>1</sub> FeSe <sub>1-x</sub> S <sub>x</sub> Single Crystals. Physical Review Materials, 2017, 1, .	0.9	11
15	Mesoscopic Effects in Superconductor-Ferromagnet Hybrids. , 2017, , .		0
16	Doppler-scanning tunneling microscopy current imaging in superconductor-ferromagnet hybrids. Applied Physics Letters, 2016, 108, .	1.5	5
17	Observation of superconducting vortex clusters in S/F hybrids. Scientific Reports, 2016, 6, 38557.	1.6	19
18	Evolution of the superconducting properties in $1 \times 1$ FeSe <sub>1-x</sub> S <sub>x</sub> Single Crystals. Physical Review B, 2015, 92, .	1.1	35

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19	Low-temperature scanning tunneling microscopy and spectroscopy measurements of ultrathin Pb films. Superconductor Science and Technology, 2015, 28, 045003.	1.8	5
20	Emergence of coherence in the charge-density wave state of 2H-NbSe <sub>2</sub> . Nature Communications, 2015, 6, 6313.	5.8	123
21	Influence of Domain Width on Vortex Nucleation in Superconductor/Ferromagnet Hybrid Structures. Journal of Superconductivity and Novel Magnetism, 2015, 28, 1107-1110.	0.8	6
22	Vortex-antivortex coexistence in Nb-based superconductor/ferromagnet heterostructures. Physical Review B, 2014, 89, .	1.1	23
23	Influence of topological edge states on the properties of $Al\langle mml:math xmlns:mml="http://www.w3.org/1998/Math/MathML" display="inline">\langle mml:mi>Al\langle mml:mi>\langle mml:mo>/\langle mml:mo>\langle mml:msub>\langle mml:mo>Bi\langle mml:mo>_2\langle mml:mi>_2\langle mml:mi>/\langle mml:mi>$ Josephson devices. Physical Review B, 2014, 89, .		
24	Magnetic pinning in a superconducting film by a ferromagnetic layer with stripe domains. Superconductor Science and Technology, 2014, 27, 125002.	1.8	4
25	Visualizing domain wall and reverse domain superconductivity. Nature Communications, 2014, 5, 4766.	5.8	28
26	Magnetization properties and vortex phase diagram of Cu $\langle mml:math xmlns:mml="http://www.w3.org/1998/Math/MathML" display="inline">\langle mml:msub>\langle mml:mrow />\langle mml:mi>x\langle mml:mi>\langle mml:msub>\langle mml:math>TiSe\langle mml:math xmlns:mml="http://www.w3.org/1998/Math/MathML" display="inline">\langle mml:msub>\langle mml:mrow />\langle mml:mn>2\langle mml:mn>\langle mml:msub>\langle mml:math>$ single crystals. Physical Review B, 2013, 88, .	1.1	11
27	Vortex Confinement in Planar Superconductor/Ferromagnet Hybrid Structures. IEEE Transactions on Magnetics, 2012, 48, 3275-3279.	1.2	7
28	Evolution of the charge density wave state in Cu $\langle mml:math xmlns:mml="http://www.w3.org/1998/Math/MathML" display="inline">\langle mml:msub>\langle mml:mrow />\langle mml:mi>x\langle mml:mi>\langle mml:msub>\langle mml:math>TiSe\langle mml:math xmlns:mml="http://www.w3.org/1998/Math/MathML" display="inline">\langle mml:msub>\langle mml:mrow />\langle mml:mn>2\langle mml:mn>\langle mml:msub>\langle mml:math>$ . Physical Review B, 2012, 85, .	1.1	34
29	Visualizing Vortex Dynamics in Py/Nb Thin Film Hybrids by Low Temperature Magnetic Force Microscopy. Journal of Superconductivity and Novel Magnetism, 2012, 25, 2167-2171.	0.8	5
30	Evidence of vortex jamming in Abrikosov vortex flux flow regime. Physical Review B, 2012, 86, .	1.1	18
31	The spectroscopic signature of the Co magnetic state in Co <sub>x</sub> NbSe <sub>2</sub> superconducting single crystals. Superconductor Science and Technology, 2011, 24, 024010.	1.8	2
32	Anisotropic Superconductivity and Vortex Dynamics in Magnetically Coupled F/S and F/S/F Hybrids. Journal of Superconductivity and Novel Magnetism, 2011, 24, 905-910.	0.8	2
33	Imaging the spontaneous formation of vortex-antivortex pairs in planar superconductor/ferromagnet hybrid structures. Physical Review B, 2011, 84, .	1.1	49
34	Dimensionality crossover in vortex dynamics of magnetically coupled F/F hybrids. Superconductor Science and Technology, 2011, 24, 024012.	1.8	0
35	Extended X-ray Absorption Fine Structure spectroscopy in Co <sub>0.013</sub> NbSe <sub>2</sub> . Journal of Physics: Conference Series, 2010, 200, 012224.	0.3	4
36	The local effect of magnetic impurities on superconductivity in Co <sub>x</sub> NbSe <sub>2</sub> and Mn <sub>x</sub> NbSe <sub>2</sub> single crystals. Journal of Physics Condensed Matter, 2010, 22, 015501.	0.7	14

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37	Giant conductance anisotropy in magnetically coupled Ferromagnet-Superconductor-Ferromagnet structures. Applied Physics Letters, 2010, 96, 092513.	1.5	7
38	Anisotropic transport properties in tilted c-axis MgB <sub>2</sub> thin films. Superconductor Science and Technology, 2010, 23, 025012.	1.8	3
39	Adjustable Superconducting Anisotropy in Superconductor-Ferromagnet Bilayers. IEEE Transactions on Applied Superconductivity, 2009, 19, 3471-3474.	1.1	5
40	Transverse instabilities of multiple vortex chains in magnetically coupled bilayers. Physical Review B, 2009, 80, .	1.1	38
41	Adjustable superconducting anisotropy in MoGe-Permalloy hybrids. Journal of Physics: Conference Series, 2009, 150, 052095.	0.3	3
42	STM studies of Co <sub>x</sub> NbSe <sub>2</sub> and Mn <sub>x</sub> NbSe <sub>2</sub> . Journal of Physics: Conference Series, 2009, 150, 052073.	0.3	5
43	Coexistence and Coupling of Two Distinct Charge Density Waves in Sm <sub>2</sub> Te <sub>5</sub> . Journal of the American Chemical Society, 2008, 130, 3310-3312.	6.6	28
44	Superconductor/ferromagnet bilayers: Influence of magnetic domain structure on vortex dynamics. Physical Review B, 2008, 77, .	1.1	37
45	Guiding superconducting vortices with magnetic domain walls. Physical Review B, 2008, 77, .	1.1	81
46	Tunable transport in magnetically coupled MoGe/Permalloy hybrids. Applied Physics Letters, 2008, 93, .	1.5	33
47	Effect of magnetic impurities on the vortex lattice properties in NbSe <sub>2</sub> single crystals. Physical Review B, 2008, 78, .	1.1	40
48	Vortex lattice transitions in artificially engineered NbSe <sub>2</sub> single crystals observed by STM. Physica C: Superconductivity and Its Applications, 2007, 460-462, 952-953.	0.6	1
49	STM Observation of Vortex Lattice Transitions in Superconducting Single Crystals with Periodic Pinning Arrays. AIP Conference Proceedings, 2006, .	0.3	0
50	STM Imaging of Vortices in FIB-Sculptured Mesoscopic Superconductors. Microscopy and Microanalysis, 2006, 12, 990-991.	0.2	0
51	Direct observation of vortex lattice transitions in mesoscopic superconducting single crystals using STM. Physica C: Superconductivity and Its Applications, 2006, 437-438, 127-131.	0.6	1
52	Switching of magnetic domains in Permalloy microstructures using two-dimensional electron gas. Applied Physics Letters, 2006, 89, 182513.	1.5	1
53	Characterization of off-axis MgB <sub>2</sub> epitaxial thin films for planar junctions. Applied Physics Letters, 2005, 87, 242506.	1.5	14
54	Effect of disorder in MgB <sub>2</sub> thin films. Physical Review B, 2005, 71, .	1.1	40

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55	Direct Observation of Geometrical Phase Transitions in Mesoscopic Superconductors by Scanning Tunneling Microscopy. <i>Physical Review Letters</i> , 2005, 95, 167002.	2.9	92
56	Imaging of vortex states in mesoscopic superconductors. <i>Applied Physics Letters</i> , 2005, 87, 162515.	1.5	11
57	STM tunnelling spectroscopy in MgB <sub>2</sub> thin films: the role of band structure in tunnelling spectra. <i>Superconductor Science and Technology</i> , 2004, 17, S106-S111.	1.8	7
58	Phase Diagram of Single Crystal MgB <sub>2</sub> . <i>Journal of Low Temperature Physics</i> , 2003, 131, 1237-1244.	0.6	1
59	Directional scanning tunneling spectroscopy in MgB <sub>2</sub> . <i>Physica C: Superconductivity and Its Applications</i> , 2003, 385, 215-220.	0.6	15
60	Momentum-dependent scanning tunneling spectroscopy in MgB <sub>2</sub> . <i>Physica C: Superconductivity and Its Applications</i> , 2003, 388-389, 141-142.	0.6	3
61	MgB <sub>2</sub> : directional tunnelling and two-band superconductivity. <i>Superconductor Science and Technology</i> , 2003, 16, 156-161.	1.8	14
62	STM tunneling spectroscopic studies of YNd <sub>x</sub> Ba <sub>2-x</sub> Cu <sub>3</sub> O <sub>7-δ</sub> thin films. <i>Physical Review B</i> , 2002, 65, .	1.1	9
63	Two-Band Superconductivity in MgB <sub>2</sub> . <i>Physical Review Letters</i> , 2002, 89, 187002.	2.9	306
64	Surface impedance of R <sub>1</sub> (Nd <sub>x</sub> Ba <sub>2-x</sub> )Cu <sub>3</sub> O <sub>7-δ</sub> (R=Nd, Y) thin films. <i>Physica C: Superconductivity and Its Applications</i> , 2002, 372-376, 703-705.	0.6	0
65	Superconducting properties of YNdBaCuO and NdBaCuO thin films deposited by dc sputtering. <i>IEEE Transactions on Applied Superconductivity</i> , 2001, 11, 3201-3204.	1.1	7
66	Scanning Tunneling Spectroscopy in MgB <sub>2</sub> . <i>Physical Review Letters</i> , 2001, 86, 4374-4377.	2.9	185
67	Superconducting gap anisotropy of LuNi <sub>2</sub> B <sub>2</sub> C thin films from microwave surface impedance measurements. <i>Physical Review B</i> , 2001, 64, .	1.1	14
68	Borocarbide Thin Films and Tunneling Measurements. , 2001, , 357-362.		0
69	<title>Excimer laser ablation of borocarbide targets</title>. , 2000, , .		0
70	Superconducting properties of LuNi <sub>2</sub> B <sub>2</sub> C films and junctions. <i>Physica C: Superconductivity and Its Applications</i> , 2000, 341-348, 757-758.	0.6	6
71	SUPERCONDUCTING PROPERTIES OF LuNi <sub>2</sub> B <sub>2</sub> C THIN FILMS. <i>International Journal of Modern Physics B</i> , 2000, 14, 2743-2748.	1.0	1
72	Transport properties of ZrN superconducting films. <i>Physical Review B</i> , 2000, 62, 13915-13918.	1.1	32

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73	ON THE ROLE OF Nd/Ba DISORDER ON THE SUPERCONDUCTING PROPERTIES OF $\text{Re}_1(\text{Nd}_x\text{Ba}_{2-x})\text{Cu}_3\text{O}_{7-\delta}$ (Re=Nd, Y) THIN FILMS. International Journal of Modern Physics B, 2000, 14, 2737-2742.	1.0	0
74	A simple and reliable system for in situ deposition of large-area double-sided, superconducting films. Superconductor Science and Technology, 2000, 13, 1441-1446.	1.8	5
75	Single and Double Side YBCO Thin Films for X-Band Microwave Filters and Devices. International Journal of Modern Physics B, 1999, 13, 1333-1337.	1.0	15
76	Properties of $\text{ErNi}_2\text{B}_2\text{C}$ superconducting thin films. Physica C: Superconductivity and Its Applications, 1999, 312, 1-6.	0.6	5
77	Microwave properties of $\text{RE}\text{Ni}_2\text{B}_2\text{C}$ (RE=Y, Er) superconducting thin films. Physica C: Superconductivity and Its Applications, 1999, 319, 141-149.	0.6	5
78	Synthesis and microwave properties of thin films of the 1:2:2:1 borocarbide superconductors $\text{YNiBC}$ and $\text{ErNiBC}$ . IEEE Transactions on Applied Superconductivity, 1999, 9, 2394-2397.	1.1	0
79	Superconductivity and Antiferromagnetic Order in $\text{ErNi}_2\text{B}_2\text{C}$ Thin Films. Journal of Superconductivity and Novel Magnetism, 1998, 11, 707-712.	0.5	2
80	STM investigation of $\text{BSCCO}$ 2212 and borocarbide materials. Journal of Physics and Chemistry of Solids, 1998, 59, 2030-2033.	1.9	4
81	Synthesis and STM investigation of rare-earth superconducting borocarbides. Superconductor Science and Technology, 1998, 11, 169-172.	1.8	3
82	Unusual Strong-Coupling Effects in the Tunneling Spectroscopy of Optimally Doped and Overdoped $\text{Bi}_2\text{Sr}_2\text{CaCu}_2\text{O}_{8+\delta}$ . Physical Review Letters, 1998, 80, 153-156.	2.9	187
83	VORTEX LATTICE STRUCTURE IN $\text{LuNi}_2\text{B}_2\text{C}$ . Series on Directions in Condensed Matter Physics, 1998, , 107-126.	0.1	1
84	Properties of $\text{YNi}_2\text{B}_2\text{C}$ superconducting thin films. Physical Review B, 1997, 56, 934-939.	1.1	20
85	Scanning Tunneling Microscopy Observation of a Square Abrikosov Lattice in $\text{LuNi}_2\text{B}_2\text{C}$ . Physical Review Letters, 1997, 78, 4273-4276.	2.9	177
86	Nonlinear microwave properties of $\text{Nb}_3\text{Sn}$ sputtered superconducting films. Journal of Applied Physics, 1997, 82, 1736-1742.	1.1	23
87	Microwave measurements of superconducting $\text{Nb}/\text{Sn}$ films by a microstrip resonator technique. IEEE Transactions on Applied Superconductivity, 1997, 7, 1772-1775.	1.1	7
88	The superconducting energy gap and vortex lattice structure in $\text{LuNi}_2\text{B}_2\text{C}$ . Physica C: Superconductivity and Its Applications, 1997, 282-287, 355-358.	0.6	7
89	$\text{RE}\text{Ni}_2\text{B}_2\text{C}$ superconducting borocarbides: in situ growth of thin films, transport and point contact spectroscopy. Journal of Low Temperature Physics, 1997, 107, 527-532.	0.6	3
90	In situ film deposition of superconducting borocarbides. Nuovo Cimento Della Societa Italiana Di Fisica D - Condensed Matter, Atomic, Molecular and Chemical Physics, Biophysics, 1997, 19, 995-1001.	0.4	2

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91	Transport properties of refractory and ceramic superconducting materials. <i>Advanced Materials</i> , 1996, 8, 361-366.	11.1	0
92	In situ growth and superconducting properties of YNi <sub>2</sub> B <sub>2</sub> C thin films. <i>Applied Physics Letters</i> , 1996, 69, 118-120.	1.5	35
93	Transport and tunneling measurements in superconducting YNi <sub>2</sub> B <sub>2</sub> C. <i>Physica C: Superconductivity and Its Applications</i> , 1995, 251, 379-382.	0.6	13
94	Relation between normal-state and superconductive properties of niobium sputtered films. <i>Physical Review B</i> , 1995, 52, 4473-4476.	1.1	29
95	Development of L-band and C-band superconducting planar filters for wireless systems. , 0, , .		4
96	Superconducting Vortexâ€Antivortex Pairs: Nucleation and Confinement in Magnetically Coupled Superconductorâ€Ferromagnet Hybrids. , 0, , .		0