

# Ivan Davoli

## List of Publications by Year in descending order

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116  
papers

1,776  
citations

331670

21  
h-index

330143

37  
g-index

117  
all docs

117  
docs citations

117  
times ranked

1821  
citing authors

#	ARTICLE	IF	CITATIONS
1	Multiple-scattering regime and higher-order correlations in x-ray-absorption spectra of liquid solutions. <i>Physical Review B</i> , 1986, 34, 5774-5781.	3.2	196
2	Multielectron configurations in the x-ray-absorption near-edge structure of NiO at the oxygen K threshold. <i>Physical Review B</i> , 1986, 33, 2979-2982.	3.2	85
3	Giant Raman scattering and luminescence by molecules adsorbed on Ag and Au metal island films. <i>Surface Science</i> , 1980, 101, 363-366.	1.9	74
4	Optimization of a NOx gas sensor based on single walled carbon nanotubes. <i>Sensors and Actuators B: Chemical</i> , 2006, 118, 226-231.	7.8	66
5	THE VALENCE AND SPECIATION OF SULFUR IN GLASSES BY X-RAY ABSORPTION SPECTROSCOPY. <i>Canadian Mineralogist</i> , 2001, 39, 331-339.	1.0	58
6	Structure of densified vitreous silica: Silicon and oxygen XANES spectra and multiple scattering calculations. <i>Physics and Chemistry of Minerals</i> , 1992, 19, 171.	0.8	53
7	The REFLEXAFS station at the GILDA beamline (BM08) of ESRF. <i>Journal of Synchrotron Radiation</i> , 2003, 10, 260-264.	2.4	53
8	X-ray absorption and photoelectron spectroscopy studies on graphite and single-walled carbon nanotubes: Oxygen effect. <i>Applied Physics Letters</i> , 2005, 87, 051923.	3.3	53
9	Determination of mixing of 4f-ligand orbitals in Ce(SO4)2 by Xanes is Ce(SO4)2 a mixed valent insulating system?. <i>Journal of Magnetism and Magnetic Materials</i> , 1985, 47-48, 209-211.	2.3	39
10	X-ray photoelectron-diffraction study of intermixing and morphology at the Ge/Si(001) and Ge/Sb/Si(001) interface. <i>Physical Review B</i> , 1996, 54, 8882-8891.	3.2	39
11	Three particle correlation function of metal ions in tetrahedral coordination determined by XANES. <i>Solid State Communications</i> , 1986, 58, 595-599.	1.9	38
12	Indentation modulus and hardness of viscoelastic thin films by atomic force microscopy: A case study. <i>Ultramicroscopy</i> , 2009, 109, 1417-1427.	1.9	37
13	Atomic force acoustic microscopy characterization of nanostructured selenium-tin thin films. <i>Superlattices and Microstructures</i> , 2008, 44, 641-649.	3.1	35
14	Experimental evidence for the "shake-down" peak in LIII (and LII)-xanes of light rare earth intermetallics. <i>Solid State Communications</i> , 1984, 49, 409-415.	1.9	33
15	Theoretical analysis of x-ray-absorption spectra at the silicon L2,3 edges of crystalline and amorphous SiO2. <i>Physical Review B</i> , 1995, 52, 10014-10020.	3.2	31
16	Electrical and Mechanical Characterization of Coated Conductors Lap Joints. <i>IEEE Transactions on Applied Superconductivity</i> , 2010, 20, 1549-1552.	1.7	29
17	Quantitative measurement of indentation hardness and modulus of compliant materials by atomic force microscopy. <i>Review of Scientific Instruments</i> , 2008, 79, 066105.	1.3	26
18	Partial density of unoccupied states and L2,3-x-ray absorption spectrum of bulk silicon and of the Si(1 1) Tj ETQq0 0 0 rgBT /Overlock 10	1.9	25

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19	The study of MgO(001) surfaces by photoelectron diffraction. <i>Surface Science</i> , 1994, 314, 145-156.	1.9	25
20	Auger-electron diffraction in the low kinetic-energy range: The Si(111)7 $\times$ 7 surface reconstruction and Ge/Si interface formation. <i>Physical Review B</i> , 1995, 52, 1806-1815.	3.2	25
21	Structural and chemical evolution of propionate based metal-organic precursors for superconducting YBa <sub>2</sub> Cu <sub>3</sub> O <sub>7-<math>\delta</math></sub> epitaxial film growth. <i>Superconductor Science and Technology</i> , 2011, 24, 115008.	3.5	22
22	Role of multielectron excitations in the L3 XANES of Pd. <i>Solid State Communications</i> , 1983, 46, 367-370.	1.9	21
23	The local electronic structure of PdO crystal and PdO catalyst supported on SiO <sub>2</sub> and $\gamma$ -Al <sub>2</sub> O <sub>3</sub> from L3 and L1 x-ray absorption Pd edge in XANES spectra. <i>Solid State Communications</i> , 1983, 48, 475-478.	1.9	21
24	Characterization of epitaxial YBa <sub>2</sub> Cu <sub>3</sub> O <sub>7-<math>\delta</math></sub> films deposited by metal propionate precursor solution. <i>Superconductor Science and Technology</i> , 2008, 21, 125015.	3.5	21
25	Discoloration of the smalt pigment: experimental studies and ab initio calculations. <i>Journal of Analytical Atomic Spectrometry</i> , 2012, 27, 1941.	3.0	21
26	Temperature modification of the Nb oxidation at the Nb/Al interface studied by reflEXAFS. <i>Surface Science</i> , 2000, 468, 77-84.	1.9	20
27	Structural Evolution of MoO <sub>3</sub> Thin Films Deposited on Copper Substrates upon Annealing: An X-ray Absorption Spectroscopy Study. <i>Condensed Matter</i> , 2019, 4, 41.	1.8	20
28	Asymmetries in the optical properties of vacuum-deposited organic films illuminated at the substrate and non-substrate surfaces. <i>Thin Solid Films</i> , 1987, 146, 115-132.	1.8	19
29	Internal friction in high T <sub>c</sub> iron doped 1-2-3 yttrium ceramic superconductors. <i>Solid State Communications</i> , 1990, 74, 595-598.	1.9	19
30	Intermediate valence and near-edge structure in the x-ray absorption spectrum of CePd <sub>3</sub> , $\text{Ce}$ , and CeCu <sub>2</sub> Si <sub>2</sub> . <i>Physical Review B</i> , 1981, 24, 6139-6142.	3.2	18
31	EXAFS and XANES joint analyses for semiconducting vanadium phosphate glasses. <i>Journal of Non-Crystalline Solids</i> , 1986, 80, 175-180.	3.1	18
32	Palladium L3 absorption edge of PdH <sub>0.6</sub> films: Evidence for hydrogen induced unoccupied states. <i>Solid State Communications</i> , 1989, 71, 383-390.	1.9	18
33	Angular dependence of the EXFAS (extended fine Auger structure) in MgO(100) surfaces: short-range order versus diffraction effects. <i>Surface Science</i> , 1994, 306, 144-154.	1.9	17
34	Xanes analysis on pyroxenes with different ca concentration in M2 site. <i>Physics and Chemistry of Minerals</i> , 1987, 14, 21-25.	0.8	16
35	A new procedure for the quantitative analysis of extended x-ray absorption fine structure data in total reflection geometry. <i>Review of Scientific Instruments</i> , 2008, 79, 103902.	1.3	16
36	Atomic Force Microscopy Techniques for Nanomechanical Characterization: A Polymeric Case Study. <i>Jom</i> , 2015, 67, 849-857.	1.9	16

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37	Electrical Conductivity of NH <sub>2</sub> -Substituted Ni(II)-Phthalocyanine. <i>Physica Status Solidi A</i> , 1991, 125, 597-607.	1.7	15
38	Urbach effects in the kinetics of core holes for excitation of cross-luminescence. <i>Journal of Luminescence</i> , 1992, 51, 275-282.	3.1	15
39	The oxygen adsorption and the initial oxidation of indium. <i>Applied Surface Science</i> , 1992, 59, 195-199.	6.1	15
40	Electron spectroscopy study in the NbN growth for NbN/AlN interfaces. <i>Surface Science</i> , 2007, 601, 2647-2650.	1.9	15
41	Deposition and Characterization of Metal Propionate Derived Epitaxial $\text{YBa}_2\text{Cu}_3\text{O}_{7-x}$ Films for Coated Conductor Fabrication. <i>IEEE Transactions on Applied Superconductivity</i> , 2009, 19, 3204-3207.	1.7	15
42	MOD Derived Pyrochlore Films as Buffer Layer for All-Chemical YBCO Coated Conductors. <i>IEEE Transactions on Applied Superconductivity</i> , 2013, 23, 6600505-6600505.	1.7	15
43	MoO <sub>3</sub> films grown on polycrystalline Cu: Morphological, structural, and electronic properties. <i>Journal of Vacuum Science and Technology A: Vacuum, Surfaces and Films</i> , 2019, 37, .	2.1	15
44	Probing the initial stages of solid-state reactions by total reflection EXAFS (reflEXAFS). <i>Nuclear Instruments &amp; Methods in Physics Research B</i> , 2003, 200, 421-424.	1.4	13
45	Do we have a probe for the initial stages of solid state reactions?. <i>Physical Chemistry Chemical Physics</i> , 2003, 5, 2244-2247.	2.8	13
46	Multiscale mechanical characterization of hybrid Ti/PMMA layered materials. <i>Colloids and Surfaces A: Physicochemical and Engineering Aspects</i> , 2017, 532, 244-251.	4.7	13
47	Low-temperature mechanical energy dissipation phenomena in lanthanum superconductors. <i>Physica C: Superconductivity and Its Applications</i> , 1993, 207, 300-306.	1.2	12
48	An experimental study of an interface reaction at the practical Pd/Si interface by XPS. <i>Vacuum</i> , 1995, 46, 139-142.	3.5	10
49	XAS study of a Pt-containing rod-like organometallic polymer. <i>Chemical Physics</i> , 2006, 325, 422-428.	1.9	10
50	Boosting highly transparent and conducting indium zinc oxide thin films through solution combustion synthesis: influence of rapid thermal annealing. <i>Semiconductor Science and Technology</i> , 2018, 33, 105004.	2.0	10
51	Shift of electronic states at L in $\hat{1}\pm$ -phase Cu-Zn and Cu-Al alloys. <i>Journal of Physics F: Metal Physics</i> , 1979, 9, 2275-2285.	1.6	9
52	Local electronic structures at selected sites of intermetallic perovskites Mn <sub>3</sub> MeX (Me=divalent metal,) <i>Tj ETQq0 0 0 rgBT /Overlock 10 T</i> <i>Chemical Physics, Biophysics</i> , 1986, 7, 493-505.	0.4	9
53	Anelastic effects in CuO. <i>Solid State Communications</i> , 1989, 72, 97-99.	1.9	9
54	Inelastic processes versus diffraction effects: Polar-angle energy-loss spectra of the graphiteKedge. <i>Physical Review B</i> , 1995, 52, 17091-17098.	3.2	9

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55	The effect of Sb surfactant on the growth of (GenSim)p layers on Si: a reflEXAFS study. Surface Science, 2002, 518, 183-191.	1.9	9
56	Natural hybrid organic- inorganic photovoltaic devices. Superlattices and Microstructures, 2009, 45, 555-563.	3.1	9
57	IRIDE: Interdisciplinary research infrastructure based on dual electron linacs and lasers. Nuclear Instruments and Methods in Physics Research, Section A: Accelerators, Spectrometers, Detectors and Associated Equipment, 2014, 740, 138-146.	1.6	9
58	InxGa(1-x)As quantum dots grown on GaAs studied by EXAFS in total reflection mode (RefEXAFS). Nuclear Instruments & Methods in Physics Research B, 2003, 200, 85-89.	1.4	8
59	Structure of a monolayer of Pd-diethynylbiphenyl deposited on chromium studied by total reflection EXAFS. Sensors and Actuators B: Chemical, 2004, 100, 131-134.	7.8	8
60	Electron spectroscopy analysis on NbN to grow and characterize NbN/AlN/NbN Josephson junction. Superlattices and Microstructures, 2008, 43, 518-523.	3.1	8
61	Localization mixing and / or hybridization in intermetallic compounds RPd3 (R = La, Ce, Pr, Nd, Sm) by xanes. Journal of Magnetism and Magnetic Materials, 1985, 47-48, 206-208.	2.3	7
62	Superconducting and anelastic effects in Pb-doped BiSrCaCuO ceramics. Physica C: Superconductivity and Its Applications, 1989, 160, 25-29.	1.2	7
63	Relaxation phenomena in 1-2-3 high Tc superconductors. Solid State Communications, 1990, 75, 789-790.	1.9	7
64	Elastic constant and internal friction in YBa2Cu3Ox single crystal. Solid State Communications, 1990, 76, 357-360.	1.9	7
65	Drift resonance in the quantum hall effect. Solid State Communications, 1990, 73, 583-588.	1.9	7
66	XPD study of atomic intermixing at the Ge/Si(001) interface. Applied Surface Science, 1996, 102, 102-106.	6.1	7
67	Rapid Thermal Annealing for Solution Synthesis of Transparent Conducting Aluminum Zinc Oxide Thin Films. Journal of Electronic Materials, 2017, 46, 6609-6616.	2.2	7
68	Sexafs study of the natural oxide on iron surface detected by total photoelectron yield. Solid State Communications, 1982, 44, 1585-1588.	1.9	6
69	XANES (x ray absorption near edge structure): A new probe of higher order correlation function in amorphous semiconductors. Journal of Non-Crystalline Solids, 1985, 77-78, 1325-1328.	3.1	6
70	Local structure of nickel oxide grown at high temperatures in ceramic electrolyte cells. Journal of the Chemical Society Faraday Transactions I, 1987, 83, 289.	1.0	6
71	Some aspects of mechanical energy dissipation phenomena in yttrium superconductors.. Solid State Communications, 1992, 83, 793-797.	1.9	6
72	Surfactant-Mediated Growth of Ge/Si(001) Interface Studied by XPD. Surface Review and Letters, 1998, 05, 157-161.	1.1	6

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73	Magnetic properties of diluted $(\text{Zn}_{1-x}\text{Mn}_x)_3\text{As}_2$ solutions. Solid State Communications, 1992, 84, 531-535.	1.9	5
74	Local structure of diamond films: Auger and EELFS investigation. Surface Science, 1995, 331-333, 1050-1055.	1.9	5
75	Characterization of thermally treated Mo/Si multilayer mirrors with standing wave-assisted EXAFS. Nuclear Instruments & Methods in Physics Research B, 2006, 246, 127-130.	1.4	5
76	The character of metal-insulator phase transition in $\text{V}_2\text{O}_3$ from the plasmon behaviour. Solid State Communications, 1983, 48, 471-474.	1.9	4
77	Thermoluminescence Study of Charge Traps in Polycrystalline Layers of Phenanthrene. Physica Status Solidi (B): Basic Research, 1988, 149, 363-370.	1.5	4
78	Some properties of thin layers of silica containing carbon and iron oxides prepared by the sol-gel method. Journal of Materials Science, 1990, 25, 2569-2572.	3.7	4
79	Determining Fe-Mg Intersite Distribution in natural and heated Orthopyroxenes by Synchrotron X-ray Absorption Spectroscopy. Rendiconti Lincei, 1991, 2, 379-387.	2.2	4
80	The initial adsorption of oxygen on the $\text{Si}(111)7 \times 7$ surface at 150 K. Applied Surface Science, 1994, 78, 293-297.	6.1	4
81	Incident beam effects in AED (Auger Electron Diffraction): the case of $\text{Cu}(001)$ . Journal of Electron Spectroscopy and Related Phenomena, 1995, 76, 493-497.	1.7	4
82	High-temperature oxidation of one- and two-component metallic systems studied by in-situ X-ray absorption spectroscopy. Journal of Alloys and Compounds, 1995, 218, 237-243.	5.5	4
83	Interface ordering in $\text{Si}/\text{Ge}$ monolayer superlattices: A photoluminescence study. Physical Review B, 1996, 53, 1030-1033.	3.2	4
84	XANES Determination of V-Mixed Valence State in $(\text{V}_2\text{O}_5)_x(\text{P}_2\text{O}_5)_{100-x}$ Binary Oxide Glasses. Springer Series in Chemical Physics, 1983, , 162-164.	0.2	4
85	Internal friction and electrical conductivity in iron-vanadium-phosphate glasses. Journal of Materials Science Letters, 1982, 1, 264-267.	0.5	3
86	Dissociative chemisorption of water on the $\text{Si}(111)7 \times 7$ surface studied at 150 K by X-ray photoelectron spectroscopy and energy loss spectroscopy. Journal of Physics Condensed Matter, 1992, 4, 5855-5862.	1.8	3
87	Low kinetic energy AED: a tool for the study of Ge epitaxial layers grown on Sb-terminated $\text{Si}(111)$ surface. Journal of Electron Spectroscopy and Related Phenomena, 1997, 83, 137-142.	1.7	3
88	Magnetisation and magnetostriction in Fe/Terfechohan/Fe sandwich films with an extended domain wall formation. Journal of Magnetism and Magnetic Materials, 2004, 272-276, E1597-E1599.	2.3	3
89	Characterization of Thick Film of Copper Electrodeposited for Cryogenic Applications. Journal of the Electrochemical Society, 2014, 161, D540-D545.	2.9	3
90	Mechanical characterization of stacked thin films: The cases of aluminum zinc oxide and indium zinc oxide grown by solution and combustion synthesis. Thin Solid Films, 2017, 640, 109-115.	1.8	3

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91	Thermoreflectance study of polydiacetylene-bis (toluene sulphonate) single crystal (PDA-TS). Journal of Physics C: Solid State Physics, 1983, 16, 2165-2176.	1.5	2
92	Optical Constants of Tetracene Single Crystal within the First Absorption Band. Molecular Crystals and Liquid Crystals Incorporating Nonlinear Optics, 1989, 166, 233-244.	0.3	2
93	Exchange interaction and the g-factor for 2D-electrons in heterostructures GaAs-Ga $_{1-x}$ Al $_x$ As. Solid State Communications, 1991, 77, 961-965.	1.9	2
94	High-temperature oxidation technique by in situ characterization of oxide growth. Journal of Materials Chemistry, 1992, 2, 745.	6.7	2
95	Enhanced backscattering of light in a polycrystalline organic film. Thin Solid Films, 1992, 207, 4-5.	1.8	2
96	XPS and AES studies of the interface reaction at the practical Pt/InP interface. Applied Surface Science, 1992, 62, 249-254.	6.1	2
97	An experimental study of interface reaction at the practical Pt/Si interface by XPS. Vacuum, 1993, 44, 1189-1192.	3.5	2
98	Structural surface investigation with low energy backscattered electrons. Journal of Electron Spectroscopy and Related Phenomena, 1995, 76, 29-36.	1.7	2
99	Evidence for the suppression of incident beam effects in Auger electron diffraction. Surface Science, 1998, 396, 221-226.	1.9	2
100	Anodization-based process for the fabrication of all niobium nitride Josephson junction structures. Beilstein Journal of Nanotechnology, 2017, 8, 539-546.	2.8	2
101	Characterization of CdS sputtering deposition on low temperature pulsed electron deposition Cu(In,Ga)Se <sub>2</sub> solar cells. Thin Solid Films, 2020, 697, 137833.	1.8	2
102	The Interatomic Intermediate Valence State of Insulating Correlated Oxides CeO <sub>2</sub> , PrO <sub>2</sub> and TbO <sub>2</sub> . , 1987, , 243-251.		2
103	X-ray absorption spectroscopy in compressed vitreous silica and vanadium pentoxide gel. Journal of Non-Crystalline Solids, 1987, 95-96, 327-333.	3.1	1
104	Variations of internal friction in YBa <sub>2</sub> Cu <sub>3</sub> O <sub>x</sub> superconductors. Journal of Materials Science, 1990, 25, 2125-2128.	3.7	1
105	Mechanical energy dissipation phenomena in 1-2-4 yttrium superconductors. Journal of Physics Condensed Matter, 1992, 4, L115-L117.	1.8	1
106	Electronic Characterization of the SingleWall Carbon Nanotubes a XANES Study. Physica Scripta, 2005, , 717.	2.5	1
107	Oxidation Behavior at the Ni-W and $\text{CeO}_2$ Interface With and Without Pd Over Layer. IEEE Transactions on Applied Superconductivity, 2011, 21, 2891-2895.	1.7	1
108	Nano-indentation mechanical characterizations of solution processed inorganic metal oxide thin films and influence of grain size. AIP Advances, 2020, 10, 105016.	1.3	1

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109	XANES of Palladium Rare Earth Intermetallics (RPd3): Determination of Hybridization and Mixing of 4f-Orbitals. Springer Proceedings in Physics, 1984, , 52-54.	0.2	1
110	Shift of electronic states at L in $\alpha$ -phase Cu-Zn and Cu-Al alloys. Journal of Physics F: Metal Physics, 1979, 9, 2523-2523.	1.6	0
111	Internal friction in vanadium-phosphate glasses doped with Na <sub>2</sub> O. Journal of Non-Crystalline Solids, 1986, 80, 263-268.	3.1	0
112	Local structure determination by surface XANES spectroscopy of SiO <sub>2</sub> amorphous layer on NiO. Journal of Materials Science Letters, 1986, 5, 441-442.	0.5	0
113	Xanes studies of bis-1-oxopyridine-2-thiolato Pt(II) complexes. Chemical Physics Letters, 1989, 155, 599-602.	2.6	0
114	Extended energy loss fine structure technique: an analytical tool for surface and bulk characterization. Vacuum, 1992, 43, 393-396.	3.5	0
115	Local structural investigation of silicon surfaces by electron scattering. Nuovo Cimento Della Societa Italiana Di Fisica D - Condensed Matter, Atomic, Molecular and Chemical Physics, Biophysics, 1998, 20, 991-998.	0.4	0
116	High-Resolution Analysis of the L <sub>2,3</sub> White Lines of Pd. Springer Series in Chemical Physics, 1983, , 177-179.	0.2	0