Franco Marabelli

List of Publications by Year
in descending order

147 papers	3,049 citations	159585 30 h-index	189892 50 g-index
148 all docs	148 docs citations	148 times ranked	3324 citing authors

#	Article	IF	Citations
1	Covalent insulatorCeO2: Optical reflectivity measurements. Physical Review B, 1987, 36, 1238-1243.	3.2	272
2	Optical gap of CuO. Physical Review B, 1995, 52, 1433-1436.	3.2	259
3	Colloidal Photonic Crystals Doped with Gold Nanoparticles: Spectroscopy and Optical Switching Properties. Advanced Functional Materials, 2007, 17, 2779-2786.	14.9	102
4	Polymer Distributed Bragg Reflectors for Vapor Sensing. ACS Photonics, 2015, 2, 537-543.	6.6	100
5	Band structure and optical properties of opal photonic crystals. Physical Review B, 2005, 72, .	3.2	98
6	Electronic structure of ScN. Physical Review B, 1986, 34, 3876-3882.	3.2	91
7	Luminescence fromÎ²â^'FeSi2precipitates in Si. II: Origin and nature of the photoluminescence. Physical Review B, 2002, 66, .	3.2	90
8	Theory and experiment on the optical properties ofCrSi2. Physical Review B, 1992, 46, 9380-9389.	3.2	72
9	Optical constants of highly stretch-oriented poly(p-phenylene-vinylene): A joint experimental and theoretical study. Physical Review B, 2000, 62, 10173-10184.	3.2	63
10	Plutonium chalcogenides: Intermediate valence and electronic structure. Physical Review B, 1991, 43, 11136-11144.	3.2	59
11	P-type macroporous silicon for two-dimensional photonic crystals. Journal of Applied Physics, 2002, 92, 6966-6972.	2.5	57
12	Structure and physical properties of type-I clathrate solid-solutionBa8PtxGe46â^'xâ^'yâ—»y(â—»=vacancy). Physical Review B, 2007, 76, .	3.2	51
13	Ternary clathrates Baâ€“Znâ€“Ge: phase equilibria, crystal chemistry and physical properties. Journal of Physics Condensed Matter, 2007, 19, 216223.	1.8	50
14	Electronic structure and optical spectra ofLuInCu4andYbMCu4â€,(M=Cu,Ag, Au, Pd, and In). Physical Review B, 2000, 62, 1742-1752.	3.2	47
15	Electronic structure of UPt3 in the vicinity of the fermi energy. Solid State Communications, 1986, 59, 381-384.	1.9	46
16	Demonstration of fluorescence enhancement via Bloch surface waves in all-polymer multilayer structures. Physical Chemistry Chemical Physics, 2016, 18, 14086-14093.	2.8	46
17	Multiplexed label-free optical biosensor for medical diagnostics. Journal of Biomedical Optics, 2014, 19, 017006.	2.6	45
18	Superconductivity in the complex metallic alloy<mml:math xmlns:mml="http://www.w3.org/1998/Math/MathML" display="inline"><mml:mrow><mml:mi>Î²</mml:mi><mml:mtext>â^'</mml:mtext><mml:msub><mml:mi mathvariant="normal">Al</mml:mi><mml:mn>3</mml:mn></mml:msub><mml:msub><mml:mi mathvariant="normal">Mg</mml:mi><mml:mn>2</mml:mn></mml:msub></mml:mrow></mml:math>. Physical Review B, 2007, 76, .	3.2	44

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19	A Localized Surface Plasmon Resonance-Based Portable Instrument for Quick On-Site Biomolecular Detection. IEEE Transactions on Instrumentation and Measurement, 2016, 65, 317-327.	4.7	42
20	Measurement and simulation of anisotropy in the infrared and Raman spectra of Î’-FeSi2single crystals. Physical Review B, 1997, 55, 14290-14297.	3.2	41
21	Light Localization Effect on the Optical Properties of Opals Doped with Gold Nanoparticles. Journal of Physical Chemistry C, 2008, 112, 6293-6298.	3.1	40
22	Spectroscopy of photonic bands in macroporous silicon photonic crystals. Physical Review B, 2002, 65, .	3.2	39
23	Direct measurement of refractive-index dispersion of transparent media by white-light interferometry. Applied Optics, 2003, 42, 3910.	2.1	39
24	Non-Fermi-liquid behavior ofYbCu5â^'xAlx. Physical Review B, 1999, 60, 1238-1246.	3.2	35
25	Photonic bands and group-velocity dispersion inSi/SiO2photonic crystals from white-light interferometry. Physical Review B, 2004, 69, .	3.2	35
26	Ellipsometric investigation of C60 single crystal. Solid State Communications, 1994, 90, 639-642.	1.9	34
27	Electronic and optical properties of isostructuralÎ²â^'FeSi2andOsSi2. Physical Review B, 2001, 64, .	3.2	34
28	Anisotropic photoluminescence properties of oriented poly(p-phenylene-vinylene) films: Effects of dispersion of optical constants. Physical Review B, 2007, 75, .	3.2	34
29	Elastic and vibrational properties of pseudomorphic FeSi films. Physical Review B, 1994, 50, 3570-3576.	3.2	30
30	Spectroscopic Investigation of Artificial Opals Infiltrated with a Heteroaromatic Quadrupolar Dye. Journal of Physical Chemistry C, 2010, 114, 2403-2413.	3.1	30
31	Fluorescence excitation enhancement by Bloch surface wave in all-polymer one-dimensional photonic structure. Applied Physics Letters, 2014, 105, .	3.3	30
32	Hybrid ZnO:polystyrene nanocomposite for allâ€polymer photonic crystals. Physica Status Solidi C: Current Topics in Solid State Physics, 2015, 12, 158-162.	0.8	30
33	Nanostructured Organic/Hybrid Materials and Components in Miniaturized Optical and Chemical Sensors. Nanomaterials, 2020, 10, 480.	4.1	29
34	Temperature dependence of the optical conductivity of the heavy-fermion systemCeCu6. Physical Review B, 1990, 42, 3307-3311.	3.2	28
35	Plasmonic resonances in nanostructured gold/polymer surfaces by colloidal lithography. Physica Status Solidi (A) Applications and Materials Science, 2010, 207, 935-942.	1.8	28
36	Photonic bands in patterned silicon-on-insulator waveguides. IEEE Journal of Quantum Electronics, 2002, 38, 885-890.	1.9	27

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37	Magnetic structures and bulk magnetic properties of YbCu4M, Mî—»Au, Pd. Physica B: Condensed Matter, 1997, 234-236, 676-678.	2.7	26
38	Growth and optical studies of opal films as three-dimensional photonic crystals. Materials Science and Engineering C, 2003, 23, 61-65.	7.3	25
39	Wide-band transmission of nondistorted slow waves in one-dimensional optical superlattices. Applied Physics Letters, 2006, 88, 241103.	3.3	25
40	Correlation between structural and optical properties of ion beam synthesized Î²-FeSi2 precipitates in Si. Journal of Luminescence, 1998, 80, 467-471.	3.1	24
41	Fabrication and optical measurements of silicon on insulator photonic nanostructures. Microelectronic Engineering, 2002, 61-62, 529-536.	2.4	24
42	Interaction among plasmonic resonances in a gold film embedding a two-dimensional array of polymeric nanopillars. Journal of the Optical Society of America B: Optical Physics, 2012, 29, 1641.	2.1	24
43	Raman Spectra of Poly(pâ€phenylenevinylene)s with Fluorinated Vinylene Units: Evidence of Interâ€ring Distortion. ChemPhysChem, 2009, 10, 1284-1290.	2.1	23
44	Infra-red properties of bulk heavily doped silicon. Nuovo Cimento Della Societa Italiana Di Fisica D - Condensed Matter, Atomic, Molecular and Chemical Physics, Biophysics, 1985, 5, 292-303.	0.4	22
45	Electronic structure of UPt3: A low energy optical study. Journal of Magnetism and Magnetic Materials, 1986, 62, 287-292.	2.3	21
46	Optical properties ofWSi2. Physical Review B, 1991, 44, 8437-8445.	3.2	21
47	Electronic structure and physical properties ofNbSi2. Physical Review B, 1996, 53, 15631-15637.	3.2	19
48	Highly oriented poly(paraphenylene vinylene): Polarized optical spectroscopy under pressure. Physical Review B, 2009, 79, .	3.2	19
49	Electronic structure and magnetic properties of heavy fermions. Journal of Magnetism and Magnetic Materials, 1987, 70, 364-368.	2.3	18
50	Optical properties ofPd2Si. Physical Review B, 1992, 45, 13285-13292.	3.2	18
51	Amplified spontaneous emission from opal photonic crystals engineered with structural defects. Physical Chemistry Chemical Physics, 2009, 11, 11515.	2.8	18
52	Evolution of a metallic and magnetic state in (Fe,Mn)Si and Fe(Si,Ge). Journal of Magnetism and Magnetic Materials, 1998, 177-181, 1401-1402.	2.3	17
53	Optical functions of epitaxial Î²-FeSi2 on Si(001) and Si(111). Solid State Communications, 1995, 96, 751-756.	1.9	16
54	Optical properties of highly oriented poly(p-phenylene-vinylene). Synthetic Metals, 2001, 124, 53-58.	3.9	15

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55	Electronic structure of CeCu6and LaCu6. Physical Review B, 1989, 39, 1407-1410.	3.2	14
56	Evidence of localized states in the optical gap of CuO. Physica B: Condensed Matter, 1994, 199-200, 255-256.	2.7	14
57	Study of CoSi2 formation from a Coâ€“Ni alloy. Microelectronic Engineering, 2002, 60, 221-230.	2.4	14
58	Optical properties and photonic mode dispersion in two-dimensional and waveguide-embedded photonic crystals. Synthetic Metals, 2003, 139, 695-700.	3.9	14
59	Optical Sensitivity Gain in Silica-Coated Plasmonic Nanostructures. Journal of Physical Chemistry Letters, 2014, 5, 2935-2940.	4.6	14
60	Anisotropic magnetization and field-induced effects on CuO high quality monocrystals. Solid State Communications, 1993, 86, 131-135.	1.9	13
61	Interferometric determination of the anisotropic refractive index dispersion of poly-(p-phenylene-vinylene). Applied Physics Letters, 2005, 86, 201119.	3.3	13
62	Field Enhancement by Shaping Nanocavities in a Gold Film. Plasmonics, 2013, 8, 975-981.	3.4	13
63	Organic Lightâ€Emitting Transistors in a Smartâ€Integrated System for Plasmonicâ€Based Sensing. Advanced Functional Materials, 2021, 31, 2104927.	14.9	13
64	Evolution of ground state properties of YbCu5â^'xAux. Physica B: Condensed Matter, 2002, 312-313, 489-491.	2.7	12
65	Experimental assessment of nonergodicity in tetracene single crystals. Physical Review B, 2012, 86, .	3.2	12
66	On electronic structure and pressure response of FeSi1â^'xGex. Physica B: Condensed Matter, 1999, 259-261, 866-867.	2.7	11
67	Role of the substrate in the C49â€“C54 transformation of TiSi[sub 2]. Journal of Vacuum Science & Technology an Official Journal of the American Vacuum Society B, Microelectronics Processing and Phenomena, 2000, 18, 721.	1.6	11
68	Strong Modulations of Optical Reflectance in Tapered Coreâ€“Shell Nanowires. Materials, 2019, 12, 3572.	2.9	11
69	Optical constants and electrical transport parameters of HfSi2. Journal of Applied Physics, 1991, 69, 7645-7650.	2.5	10
70	Theoretical interpretation of optical conductivity of YbCu4Ag,Au. Journal of Applied Physics, 1996, 79, 6423.	2.5	10
71	Optical response of Cu3Ge thin films. Journal of Applied Physics, 1996, 79, 8115-8117.	2.5	10
72	Far infrared optical study of the heavy fermion CeCu6. Solid State Communications, 1988, 67, 931-934.	1.9	9

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73	Optical study of U2PTC2: Evidence of heavy fermion behavior. Solid State Communications, 1990, 74, 1075-1078.	1.9	9
74	Optical and electronic properties of 5th-column transition metal disilicides. Applied Surface Science, 1991, 53, 230-236.	6.1	9
75	Optical study of the temperatureâ€induced valence transition in YbCu4In. Journal of Applied Physics, 1993, 73, 5418-5420.	2.5	9
76	Optical properties of fullerite thin films in the 0.4 to 32 eV energy range. Physica Status Solidi (B): Basic Research, 1994, 183, 267-275.	1.5	9
77	Experimental identification of the optical phonon of CoSi2 in the infrared. Applied Surface Science, 1995, 91, 30-33.	6.1	9
78	Stoichiometric effects on the optical spectra and pressure response of Fe1â^'xMnxSi. Physica B: Condensed Matter, 1997, 230-232, 794-796.	2.7	9
79	Onset of magnetism and Fermi-liquid instabilities in Yb compounds. Physica B: Condensed Matter, 2000, 281-282, 319-325.	2.7	9
80	Far-infrared optical properties of CrCl3 and CrBr3. Solid State Communications, 1984, 52, 463-465.	1.9	7
81	Heavy fermion behavior in far infrared optical spectroscopy. Physica B: Condensed Matter, 1990, 163, 224-226.	2.7	7
82	Optical response of the Kondo lattices YbCu4Ag, YbCu4Au and YbCu4Pd. Physica B: Condensed Matter, 1995, 206-207, 355-357.	2.7	7
83	Kinetics of the C49â€“C54 phase transition in TiSi2: New indications from sheet resistance, infrared spectroscopy and molecular dynamics simulations. Microelectronic Engineering, 1997, 37-38, 441-448.	2.4	7
84	Triplet excitons in acyl- and alkyl-substituted polycarbazolyldiacetylenes: A spectroscopical and photophysical study. Physical Review B, 2004, 69, .	3.2	7
85	Effects of the deposition parameters on the growth of ultrathin and thin SiO2 films. Journal of Vacuum Science and Technology A: Vacuum, Surfaces and Films, 2007, 25, 485-491.	2.1	7
86	A Combined Ion Implantation/Nanosecond Laser Irradiation Approach towards Si Nanostructures Doping. Journal of Nanotechnology, 2012, 2012, 1-6.	3.4	7
87	Electronic structure and Yb-valence in the Kondo lattices YbCu4M (M = Ag, Au, Pd, In). Physica Scripta, 1996, T66, 177-182.	2.5	7
88	Optical spectroscopy of the covalent insulatorCeF4. Physical Review B, 1992, 46, 10012-10016.	3.2	6
89	The physics of heavy fermions with a hybridization gap. Physica Scripta, 1992, T45, 120-124.	2.5	6
90	Optical characteristic of epitaxial pseudomorphic FeSi2. Solid State Communications, 1993, 86, 217-219.	1.9	6

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91	Morphology and optical properties of bare and polydiacetylenes-infiltrated opals. Synthetic Metals, 2003, 139, 633-636.	3.9	6
92	GeO2-doped SiO2 sputtered thin films: Microstructure, stoichiometry, and optical properties. Journal of Vacuum Science and Technology A: Vacuum, Surfaces and Films, 2004, 22, 2234-2238.	2.1	6
93	Polarized optical and photoluminescence properties of highly oriented poly(p-phenylene-vinylene). Synthetic Metals, 2005, 153, 281-284.	3.9	6
94	Polarized pressure dependence of the anisotropic dielectric functions of highly oriented poly(p-phenylene vinylene). Journal of Applied Physics, 2010, 107, 073106.	2.5	6
95	Electronic structure of UPt 3 : A low energy optical study. Journal of Magnetism and Magnetic Materials, 1987, 63-64, 377-379.	2.3	5
96	Optical study of heavy-fermion behavior in U(Pt1â^'x, 3dx)3. Journal of Magnetism and Magnetic Materials, 1992, 108, 79-81.	2.3	5
97	Experimental and theoretical studies of the anisotropical complex dielectric constant of highly stretch-oriented poly(p-phenylene-vinylene). Synthetic Metals, 2001, 116, 107-110.	3.9	5
98	Photo-induced absorption spectra of a poly(p-phenylenevinylene) polymer with fluorinated double bonds. Organic Electronics, 2017, 43, 214-221.	2.6	5
99	The electronic structure of YbCu4In as observed through optical measurements. Physica B: Condensed Matter, 1997, 230-232, 304-306.	2.7	4
100	Texturing, surface energetics and morphology in the C49â€“C54 transformation of TiSi2. Solid-State Electronics, 1999, 43, 1069-1074.	1.4	4
101	The anisotropical optical spectra of highly stretch-oriented poly(p-phenylene-vinylene). Synthetic Metals, 2001, 119, 643-644.	3.9	4
102	Photoinduced absorption spectra in polydiacetylenes for non linear optical applications. Synthetic Metals, 2003, 138, 75-78.	3.9	4
103	Morphology, band structure, and optical properties of artificial opals. , 2004, 5511, 135.		4
104	Optical effects in artificial opals infiltrated with gold nanoparticles. , 2006, , .		4
105	Porous Silicon Bragg Reflector and 2D Gold-Polymer Nanograting: A Route Towards a Hybrid Optoplasmonic Platform. Nanomaterials, 2019, 9, 1017.	4.1	4
106	Plasma Fabrication and SERS Functionality of Gold Crowned Silicon Submicrometer Pillars. Materials, 2020, 13, 1244.	2.9	4
107	Narrow bands and magnetic properties of heavy fermions. Journal of Magnetism and Magnetic Materials, 1988, 73, 229-232.	2.3	3
108	Optical study of niobium disilicide polycrystalline films. Physical Review B, 1991, 44, 3757-3761.	3.2	3

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109	Anisotropic Optical Response in Î²-FeSi₂ Single Crystals and Thin Films. Materials Research Society Symposia Proceedings, 1995, 402, 349.	0.1	3
110	Kinetics of the C49-C54 transformation in patterned and blanket TiSi₂ films: a comparison.. Materials Research Society Symposia Proceedings, 1998, 514, 219.	0.1	3
111	Synergic combination of the solâ€“gel method with dip coating for plasmonic devices. Beilstein Journal of Nanotechnology, 2015, 6, 500-507.	2.8	3
112	Far-Infrared Properties of Intermediate Valence- and Heavy Fermion Materials. , 1987, , 269-278.		3
113	Ellipsometry with fourier transform spectrometer: An application to TaSi2 films. Nuovo Cimento Della Societa Italiana Di Fisica D - Condensed Matter, Atomic, Molecular and Chemical Physics, Biophysics, 1991, 13, 169-176.	0.4	2
114	Optical and electrical characterization of VSi2 and NbSi2 single crystals. Applied Surface Science, 1993, 73, 237-242.	6.1	2
115	Heavy-fermion behavior in the optical functions of CeCu5. Physica B: Condensed Matter, 1994, 199-200, 34-35.	2.7	2
116	Evolution of carrier density in the seriesYCu5â^'xInx. Physical Review B, 1996, 53, 9517-9520.	3.2	2
117	Electronic structure and magnetic properties of URhSi. Journal of Applied Physics, 1998, 83, 6438-6440.	2.5	2
118	Polarized photoluminescence of highly oriented poly(p-phenylene-vinylene). , 2004, , .		2
119	Emission properties of artificial opals infiltrated with a heteroaromatic quadrupolar dye. , 2008, , .		2
120	Thickness controlled sol-gel silica films for plasmonic bio-sensing devices. , 2014, , .		2
121	Thermal evolution of tetramethylammonium tetrafluoborate and perchlorate investigated through dielectric and IR spectroscopy. Materials Chemistry and Physics, 2014, 147, 120-126.	4.0	2
122	Plasmonic Structures for Sensing and Emitting Devices. Journal of Physics: Conference Series, 2014, 566, 012015.	0.4	2
123	Evidence of double-loop hysteresis in disordered ferroelectric crystal. Journal of Applied Physics, 2020, 127, 184107.	2.5	2
124	Angular dependence and absorption properties of the anapole mode of Si nano-disks. Journal of Applied Physics, 2021, 129, .	2.5	2
125	Some specific examples of thermoreflectance investigation. , 1990, 1286, 154.		1
126	The resistivity behavior of heavy fermions obtained from a phenomenological two band model. Physica B: Condensed Matter, 1990, 163, 550-552.	2.7	1

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127	The photophysics of triplet excitons in substituted polycarbazolyldiacetylenes. Synthetic Metals, 2003, 139, 889-892.	3.9	1
128	Lab on Chip: Portable Optical Device for On-site Multi-parametric Analysis. , 2013, , .		1
129	Far infrared reflectivity of narrow band materials. Mikrochimica Acta, 1988, 95, 345-347.	5.0	0
130	Narrow bands and magnetic properties of heavy fermions (abstract). Journal of Applied Physics, 1988, 63, 3422-3422.	2.5	0
131	Micro-Ftir and Theoretical Study of C60 Single-Crystal Vibrational Modes. Materials Research Society Symposia Proceedings, 1994, 359, 469.	0.1	0
132	Disorder and Strain Effects in the Optical Response of Thin CoSi Epitaxial Films on Si(111). Materials Research Society Symposia Proceedings, 1995, 402, 631.	0.1	0
133	Kinetics of the C49-C54 phase transition in TiSi₂: new indications from sheet resistance, infrared spectroscopy and molecular dynamics simulations. , 1997, , .		0
134	Structure, Morphology and Kinetics of the C49 to C54 Phase Transformation In Tisi2 Thin Films. Materials Research Society Symposia Proceedings, 1997, 481, 593.	0.1	0
135	Properties of Ion Beam Synthesized Iron Disilicide Dots. Materials Research Society Symposia Proceedings, 1999, 571, 287.	0.1	0
136	Optical properties and photonic bands of Si-based photonic crystals. , 0, , .		0
137	Optical Properties of Polystyrene Opals Infiltrated with Cyanine Dyes in the form of J-Aggregates. Materials Research Society Symposia Proceedings, 2004, 846, DD12.11.1.	0.1	0
138	Spectroscopical and photophysical investigations on polydiacetylenes with different ordering of the A g and B u excited states. , 2004, , .		0
139	Evolution of optical response in the series. Physica B: Condensed Matter, 2006, 378-380, 740-741.	2.7	0
140	Back Cover (Phys. Status Solidi A 4/2010). Physica Status Solidi (A) Applications and Materials Science, 2010, 207, .	1.8	0
141	Plasmonic Structures for Near Infrared Applications. Materials Research Society Symposia Proceedings, 2014, 1629, 1.	0.1	0
142	A multiplexed label free plasmonic nano-device for near infrared applications. , 2015, , .		0
143	Nanoplasmonic platform for multiparametric and highthroughput biosensing. , 2016, , .		0
144	Simultaneous detection of multiple biomarkers by means of SERS on polymer nanopillar gold arrays. , 2016, , .		0

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145	OPTICAL PROPERTIES OF SILICIDES: THEORY AND EXPERIMENTS. , 2000, , .		0
146	ELECTRONIC STRUCTURE OF UPt3: A LOW ENERGY OPTICAL STUDY. , 1987, , 377-379.		0
147	Plasmonic Sensors on 2D Ordered Structures. , 2015, , 359-373.		0