Maria Luisa Grilli

List of Publications by Year
in descending order

78 papers	1,999 citations	218592 26 h-index	265120 42 g-index
78 all docs	78 docs citations	78 times ranked	1701 citing authors

#	Article	IF	Citations
1	The formation of transient defects during high power laser-coating interaction revealed by the variation of electron beam evaporated coatingsâ€™ optical constants with temperature. Optics Communications, 2022, 516, 127945.	1.0	2
2	Towards Perfect Absorption of Single Layer CVD Graphene in an Optical Resonant Cavity: Challenges and Experimental Achievements. Materials, 2022, 15, 352.	1.3	3
3	Green Synthesis of Silver Oxide Nanoparticles for Photocatalytic Environmental Remediation and Biomedical Applications. Metals, 2022, 12, 769.	1.0	40
4	Machine Learning Methods and Sustainable Development: Metal Oxides and Multilayer Metal Oxides. Metals, 2022, 12, 836.	1.0	15
5	Effect of NiO_xâ€™s film thickness on the electrical properties of Ni/pâ€“NiOx/n-Si structures. Journal of Sandwich Structures and Materials, 2021, 23, 1383-1402.	2.0	12
6	Powder Bed Fusion Additive Manufacturing Using Critical Raw Materials: A Review. Materials, 2021, 14, 909.	1.3	69
7	Critical Raw Materials Saving by Protective Coatings under Extreme Conditions: A Review of Last Trends in Alloys and Coatings for Aerospace Engine Applications. Materials, 2021, 14, 1656.	1.3	27
8	The Critical Raw Materials Issue between Scarcity, Supply Risk, and Unique Properties. Materials, 2021, 14, 1826.	1.3	21
9	Promising Methods for Corrosion Protection of Magnesium Alloys in the Case of Mg-Al, Mg-Mn-Ce and Mg-Zn-Zr: A Recent Progress Review. Metals, 2021, 11, 1133.	1.0	31
10	A Forefront Framework for Sustainable Aquaponics Modeling and Design. Sustainability, 2021, 13, 9313.	1.6	30
11	Experimental Mid-Infrared Absorption (84%) of Single-Layer Graphene in a Reflective Asymmetric Fabryâ€“Perot Filter: Implications for Photodetectors. ACS Applied Nano Materials, 2021, 4, 1495-1502.	2.4	11
12	Density Functional Theory Calculations of Pinus brutia Derivatives and Its Response to Light in a Au/n-Si Device. Energies, 2021, 14, 7983.	1.6	9
13	A Systematic Review of Metal Oxide Applications for Energy and Environmental Sustainability. Metals, 2020, 10, 1604.	1.0	120
14	A Bibliometric Analysis of the Publications on In Doped ZnO to be a Guide for Future Studies. Metals, 2020, 10, 598.	1.0	8
15	WO3 and Ionic Liquids: A Synergic Pair for Pollutant Gas Sensing and Desulfurization. Metals, 2020, 10, 475.	1.0	8
16	Design, Fabrication, and Characterization of New Materials Based on Zirconia Doped with Mixed Rare Earth Oxides: Review and First Experimental Results. Metals, 2020, 10, 746.	1.0	16
17	The Critical Raw Materials in Cutting Tools for Machining Applications: A Review. Materials, 2020, 13, 1377.	1.3	89
18	CaOâ€“CaZrO3 Mixed Oxides Prepared by Autoâ€“Combustion for High Temperature CO2 Capture: The Effect of CaO Content on Cycle Stability. Metals, 2020, 10, 750.	1.0	7

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19	Metal Oxides. Metals, 2020, 10, 820.	1.0	17
20	Experimental demonstration of mid-IR absorption enhancement in single layer CVD graphene. Optics Letters, 2020, 45, 3861.	1.7	11
21	Experimental near infrared absorption enhancement of graphene layers in an optical resonant cavity. Nanotechnology, 2019, 30, 445201.	1.3	21
22	Metal Oxide Nanoparticle-Based Coating as a Catalyzer for A-TIG Welding: Critical Raw Material Perspective. Metals, 2019, 9, 567.	1.0	12
23	Characteristics of Ultrathin Ni Films. Physica Status Solidi (A) Applications and Materials Science, 2019, 216, 1800728.	0.8	2
24	Measuring ultrathin metal coatings using SPR spectroscopic ellipsometry with a prism-dielectric-metal-liquid configuration. Optics Express, 2019, 27, 7912.	1.7	7
25	Optical and electrical characteristics of radio frequency sputtered ITO and In-free transparent conductors. , 2019, , .		0
26	Room temperature deposition of XRD-amorphous TiO2 thin films: Investigation of device performance as a function of temperature. Ceramics International, 2018, 44, 11582-11590.	2.3	55
27	Facile electrochemical-assisted synthesis of TiO2 nanotubes and their role in Schottky barrier diode applications. Superlattices and Microstructures, 2018, 113, 310-318.	1.4	19
28	Possible alternatives to critical elements in coatings for extreme applications. IOP Conference Series: Materials Science and Engineering, 2018, 329, 012005.	0.3	7
29	A facile growth of spray based ZnO films and device performance investigation for Schottky diodes: Determination of interface state density distribution. Journal of Alloys and Compounds, 2017, 708, 55-66.	2.8	43
30	Multi-technique characterization of gold electroplating on silver substrates for cultural heritage applications. Nuclear Instruments & Methods in Physics Research B, 2017, 406, 318-323.	0.6	9
31	Reconsidering the accuracy of X-ray fluorescence and ion beam based methods when used to measure the thickness of ancient gildings. Spectrochimica Acta, Part B: Atomic Spectroscopy, 2017, 135, 42-47.	1.5	20
32	Diatom frustules decorated with zinc oxide nanoparticles for enhanced optical properties. Nanotechnology, 2017, 28, 375704.	1.3	29
33	Solutions for Critical Raw Materials under Extreme Conditions: A Review. Materials, 2017, 10, 285.	1.3	52
34	Optical and Electrical Properties of Tio2 Based Transparent Conductive Films and Multilayer Systems Fabricated by Radio Frequency Sputtering and E-Beam Evaporation. , 2016, , .		2
35	Application of NiOx thin films as p-type emitter layer in heterojunction solar cells. Physica Status Solidi C: Current Topics in Solid State Physics, 2016, 13, 1006-1010.	0.8	21
36	A study on non-stoichiometric p-NiOx/n-Si heterojunction diode fabricated by RF sputtering: Determination of diode parameters. Superlattices and Microstructures, 2016, 100, 924-933.	1.4	31

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37	The modification of the characteristics of nanocrystalline ZnO thin films by variation of Ta doping content. Philosophical Magazine, 2016, 96, 2125-2142.	0.7	13
38	Titania nanotubes self-assembled by electrochemical anodization: Semiconducting and electrochemical properties. Thin Solid Films, 2016, 601, 28-34.	0.8	20
39	Transparent nanostructured electrodes: Electrospun NiO nanofibers/NiO films. Thin Solid Films, 2016, 601, 54-58.	0.8	8
40	Ultrathin and stable Nickel films as transparent conductive electrodes. Thin Solid Films, 2015, 594, 261-265.	0.8	15
41	Behavior of optical thin-film materials and coatings under proton and gamma irradiation. Applied Optics, 2014, 53, A314.	0.9	33
42	Radio frequency sputtered Al:ZnO-Ag transparent conductor: A plasmonic nanostructure with enhanced optical and electrical properties. Journal of Applied Physics, 2013, 114, 094509.	1.1	26
43	Transparent and conductive Alâ€doped ZnO films for solar cells applications. Physica Status Solidi (A) Applications and Materials Science, 2013, 210, 748-754.	0.8	35
44	Optical transmission filters for observation of lightning phenomena in the Earth atmosphere. Applied Optics, 2011, 50, C100.	2.1	3
45	Optical parameters of oxide films typically used in optical coating production. Applied Optics, 2011, 50, C75.	2.1	52
46	Si quantum dots for solar cell fabrication. Materials Science and Engineering B: Solid-State Materials for Advanced Technology, 2009, 159-160, 66-69.	1.7	15
47	Al2O3/SiO2 and HfO2/SiO2 dichroic mirrors for UV solid-state lasers. Thin Solid Films, 2009, 517, 1731-1735.	0.8	26
48	High temperature detection of CO/HCs gases by non-Nernstian planar sensors using Nb2O5 electrode. Sensors and Actuators B: Chemical, 2008, 130, 514-519.	4.0	31
49	Non-Nernstian planar sensors based on YSZ with a Nb2O5 electrode. Sensors and Actuators B: Chemical, 2008, 129, 591-598.	4.0	53
50	AZO films prepared by r.f. magnetron sputtering: structural, electrical, and optical properties. Proceedings of SPIE, 2008, , .	0.8	1
51	Structural, optical and electrical peculiarities of r.f. plasma sputtered indium tin oxide films. Thin Solid Films, 2007, 515, 8469-8473.	0.8	34
52	Optical, electrical, structural and microstructural characteristics of rf sputtered ITO films developed for art protection coatings. Applied Physics A: Materials Science and Processing, 2007, 89, 63-72.	1.1	16
53	Non-Nernstian Planar Sensors Based on YSZ with Ta (10â€ƒat.%)-Doped Nanosized Titania as a Sensing Electrode for High-Temperature Applications. International Journal of Applied Ceramic Technology, 2006, 3, 393-400.	1.1	8
54	Screen-Printed Dense Yttria-Stabilized-Zirconia Electrolytes for Anode-Supported Solid Oxide Fuel Cells.. ECS Transactions, 2006, 1, 83-91.	0.3	1

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55	Non-Nernstian Planar Sensors Based on YSZ with an Nb2O5 Electrode: Discussion on Sensing Mechanism. ECS Transactions, 2006, 1, 163-171.	0.3	4
56	Planar electrochemical sensors based on YSZ with WO3 electrode prepared by different chemical routes. Sensors and Actuators B: Chemical, 2005, 111-112, 91-95.	4.0	21
57	YSZ-based electrochemical sensors: From materials preparation to testing in the exhausts of an engine bench test. Journal of the European Ceramic Society, 2005, 25, 2959-2964.	2.8	33
58	Planar non-nernstian electrochemical sensors: field test in the exhaust of a spark ignition engine. Sensors and Actuators B: Chemical, 2005, 108, 319-325.	4.0	25
59	Testing Planar Gas Sensors Based on Yttria-stabilized Zirconia with Oxide Electrodes in the Exhaust Gases of a Spark Ignition Engine. Sensor Letters, 2005, 3, 22-26.	0.4	7
60	Sensing Mechanism of Potentiometric Gas Sensors Based on Stabilized Zirconia with Oxide Electrodes. Journal of the Electrochemical Society, 2004, 151, H133.	1.3	77
61	Nano-structured perovskite oxide electrodes for planar electrochemical sensors using tape casted YSZ layers. Journal of the European Ceramic Society, 2004, 24, 1187-1190.	2.8	63
62	Planar electrochemical sensors based on tape-cast YSZ layers and oxide electrodes. Solid State Ionics, 2004, 171, 173-181.	1.3	86
63	Zirconiaâ€Based Electrochemical NO_x Sensors with Semiconducting Oxide Electrodes. Journal of the American Ceramic Society, 2004, 87, 1883-1889.	1.9	30
64	Preparation of Sol-Gel Nano-Composites Containing Copper Oxide and Their Gas Sensing Properties. Journal of Sol-Gel Science and Technology, 2003, 26, 1085-1089.	1.1	32
65	Electrical Properties of Sol-Gel Processed Hybrid Films. Journal of Sol-Gel Science and Technology, 2003, 26, 1081-1084.	1.1	1
66	Study of YSZ-Based Electrochemical Sensors with WO[sub 3] Electrodes in NO[sub 2] and CO Environments. Journal of the Electrochemical Society, 2003, 150, H33.	1.3	65
67	NO_x Sensors Based on Interfacing Yttria Stabilized Zirconia with p and n-Type Semiconducting Oxides. Key Engineering Materials, 2002, 206-213, 1243-1246.	0.4	1
68	Electrochemical NO2 Sensors with WO3 Electrodes for High Temperature Applications.. Journal of the Ceramic Society of Japan, 2002, 110, 159-162.	1.3	16
69	Study of YSZ-based electrochemical sensors with oxide electrodes for high temperature applications. Bulletin of Materials Science, 2002, 25, 451-453.	0.8	8
70	Electrochemical NO[sub x] Sensors Based on Interfacing Nanosized LaFeO[sub 3] Perovskite-Type Oxide and Ionic Conductors. Journal of the Electrochemical Society, 2001, 148, H98.	1.3	86
71	The NO2 response of solid electrolyte sensors made using nano-sized LaFeO3 electrodes. Sensors and Actuators B: Chemical, 2001, 76, 483-488.	4.0	119
72	Analysis of the influence of the gas pressure during the deposition of electrochromic WO3 films by reactive r.f. sputtering of W and WO3 target. Solar Energy Materials and Solar Cells, 1999, 56, 259-269.	3.0	23

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73	Inverse photoemission studies of C60 on Au(110). Journal of Electron Spectroscopy and Related Phenomena, 1995, 76, 405-409.	0.8	21
74	Inverse photoemission and Kelvin probe studies of the Au/GaP(110) interface. Vacuum, 1995, 46, 509-512.	1.6	0
75	Study of amorphous germaniumâ€nitrogen alloys through xâ€ray photoelectron and Auger electron spectroscopies. Applied Physics Letters, 1995, 66, 1258-1260.	1.5	10
76	Electrochemical NOx Sensors for Emission Control of Automotive Exhaust Gas. , 0, , .		1
77	A comparative study of the mechanical and tribological properties of thin Al 2 O 3 coatings fabricated by atomic layer deposition and radiofrequency sputtering. Physica Status Solidi (A) Applications and Materials Science, 0, , 2100398.	0.8	2
78	Application of Mechanochemically Treated Waste Materials for Water Remediation. Physica Status Solidi (A) Applications and Materials Science, 0, , 2100515.	0.8	2