Luis Scalvi

List of Publications by Year
in descending order

98 papers	1,083 citations	394286 19 h-index	526166 27 g-index
102 all docs	102 docs citations	102 times ranked	941 citing authors

#	Article	IF	Citations
1	Influence of Pb2+ doping in the optical and electro-optical properties of SnO2 thin films. Materials Chemistry and Physics, 2022, 278, 125571.	2.0	6
2	Deposition of hybrid structures of reduced graphene oxide and tin dioxide thin films, and persistent photoconductivity observation. Current Applied Physics, 2022, 41, 49-58.	1.1	2
3	Zirconium oxide film deposition properties to build transparent electronic devices in conjunction with tin dioxide. International Journal of Modern Physics B, 2022, 36, .	1.0	2
4	Synthesis and Characterization of Cu2-xS structures by Different Chemical Routes for Electronic Applications. Materials Research, 2021, 24, .	0.6	1
5	Enhancement of surface properties of sol gel tin dioxide thin films with addition of surfactant in the precursor solution. Applied Physics A: Materials Science and Processing, 2021, 127, 1.	1.1	4
6	Anomalous diode behavior of Cu2S/SnO2 pâ€“n junction. Journal of Materials Science: Materials in Electronics, 2021, 32, 21804-21812.	1.1	2
7	Deposition of TiO2 thin Films by Dip-Coating Technique from a Two-Phase Solution Method and Application to Photocatalysis. Materials Research, 2021, 24, .	0.6	7
8	Transient decay of photoinduced current in semiconductors and heterostructures. Journal Physics D: Applied Physics, 2020, 53, 033001.	1.3	12
9	Low-temperature ZrO2 thin films obtained by polymeric route for electronic applications. Journal of Materials Science: Materials in Electronics, 2020, 31, 16065-16072.	1.1	3
10	A dynamic time-temperature-dependent process for thermal oxidation of Sn leading to SnOx thin films: Impedance spectroscopy study. International Journal of Modern Physics B, 2020, 34, 2050184.	1.0	1
11	Photo-induced electrical behavior under gas adsorption on SnO2 -based heterostructures. Materials Chemistry and Physics, 2020, 255, 123510.	2.0	0
12	Anataseâ€“Rutile Transition and Photo-Induced Conductivity of Highly Yb-Doped TiO2 Films Deposited by Acid Solâ€“Gel Dip-Coating Method. Journal of Electronic Materials, 2020, 49, 6369-6379.	1.0	1
13	X-ray absorption spectroscopy and Eu3+-emission characteristics in GaAs/SnO2 heterostructure. SN Applied Sciences, 2020, 2, 1.	1.5	5
14	Influence of thermal annealing on the properties of evaporated Er-doped SnO2. Materials Research Bulletin, 2019, 120, 110585.	2.7	8
15	Generation and Propagation of Superhigh-Frequency Bulk Acoustic Waves in GaAs. Physical Review Applied, 2019, 12, .	1.5	11
16	Influence of substrate temperature on the deposition of the homostructure SnO₂:Sb/SnO₂:Er via solâ€“gel dip-coating. Ferroelectrics, 2019, 545, 10-21.	0.3	1
17	Annealing temperature influence on sol-gel processed zirconium oxide thin films for electronic applications. Ceramics International, 2018, 44, 10790-10796.	2.3	20
18	Investigation of sensing properties of solâ€“gel processed 4Âat%Sb:SnO2/TiO2 thin films. Journal of Materials Science: Materials in Electronics, 2018, 29, 467-473.	1.1	4

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19	Thermal Annealing Influence on the Properties of Heterostructure Based on 2Âat.%Eu Doped SnO2 and Cu1.8S. Journal of Electronic Materials, 2018, 47, 7463-7471.	1.0	4
20	Ambipolar transport in tin dioxide thin film transistors promoted by PCBM fullerene. Journal of Materials Science: Materials in Electronics, 2018, 29, 20010-20016.	1.1	6
21	On the photo-induced electrical conduction related to gas sensing of the Sb:SnO2/TiO2 heterostructure. Sensors and Actuators A: Physical, 2018, 281, 250-257.	2.0	8
22	Electron trapping in the photo-induced conductivity decay in GaAs/SnO2 heterostructure. Applied Physics A: Materials Science and Processing, 2018, 124, 1.	1.1	5
23	Memristive behavior of the SnO2/TiO2 interface deposited by solâ€“gel. Applied Surface Science, 2017, 410, 278-281.	3.1	29
24	Interface conduction and photo-induced electrical transport in the heterojunction formed by GaAs and Ce3+-doped SnO2. Journal of Materials Science: Materials in Electronics, 2017, 28, 5415-5424.	1.1	3
25	Photoluminescence of Rare-Earth Ions in the Nanocrystalline GaAs/SnO2 Heterostructure and the Photoinduced Electrical Properties Related to the Interface. Condensed Matter, 2017, 2, 9.	0.8	3
26	Emission Properties Related to Distinct Phases of Sol-Gel Dip-Coating Titanium Dioxide, and Carrier Photo-Excitation in Different Energy Ranges. Materials Research, 2017, 20, 866-873.	0.6	11
27	Effects of Solution History on Solâ€Gel Processed Tinâ€Oxide Thinâ€Film Transistors. Journal of the American Ceramic Society, 2016, 99, 4000-4006.	1.9	6
28	On the electrical properties of distinct Eu3+ emission centers in the heterojunction GaAs/SnO2. Thin Solid Films, 2016, 612, 303-309.	0.8	7
29	Dip-coating deposition of resistive BiVO4 thin film and evaluation of their photoelectrochemical parameters under distinct sources illumination. Journal of Solid State Electrochemistry, 2016, 20, 1527-1538.	1.2	4
30	Improved electrical transport in lightly Er-doped solâ€“gel spin-coating SnO2 thin films, processed by photolithography. Applied Physics A: Materials Science and Processing, 2015, 118, 1419-1427.	1.1	11
31	Photoelectrochemical properties of FTO/p-NiO electrode induced by UV light irradiation. Ionics, 2015, 21, 1407-1415.	1.2	4
32	Luminescence of Eu^3+ in the thin film heterojunction GaAs/SnO_2. Optical Materials Express, 2015, 5, 59.	1.6	7
33	Dip-coating deposition of BiVO4/NiO pâ€“n heterojunction thin film and efficiency for methylene blue degradation. Journal of Materials Science: Materials in Electronics, 2015, 26, 7705-7714.	1.1	17
34	Heterojunction between Al2O3 and SnO2 thin films for application in transparent FET. Materials Research, 2014, 17, 1420-1426.	0.6	10
35	A Theoretical Analysis of Sb⁵⁺ Incorporation in Highly Doped SnO₂ Matrix. Current Physical Chemistry, 2014, 4, 15-20.	0.1	0
36	Al₂O₃ Obtained through Resistive Evaporation for Use as Insulating Layer in Transparent Field Effect Transistor. Advanced Materials Research, 2014, 975, 248-253.	0.3	1

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37	Photoelectrochemical properties of FTO/m-BiVO4 electrode in different electrolytes solutions under visible light irradiation. Ionics, 2014, 20, 105-113.	1.2	18
38	Deposition of Al2O3 by resistive evaporation and thermal oxidation of Al to be applied as a transparent FET insulating layer. Ceramics International, 2014, 40, 3785-3791.	2.3	16
39	Preparation of TiO₂/SnO₂ Thin Films by Solâ€“Gel Method and Periodic B3LYP Simulations. Journal of Physical Chemistry A, 2014, 118, 5857-5865.	1.1	23
40	Deposition and photo-induced electrical resistivity of dip-coated NiO thin films from a precipitation process. Journal of Materials Science: Materials in Electronics, 2013, 24, 1823-1831.	1.1	5
41	Nanoparticle characterization of Er-doped SnO2 pellets obtained with different pH of colloidal suspension. Journal of Applied Physics, 2013, 114, .	1.1	22
42	Decay of photo-induced conductivity in Sb-doped SnO2 thin films, using monochromatic light of about bandgap energy. Applied Surface Science, 2013, 267, 164-168.	3.1	23
43	Interface formation of nanostructured heterojunction SnO2:Eu/GaAs and electronic transport properties. Applied Surface Science, 2013, 267, 200-205.	3.1	15
44	Photo-Induced conductivity of heterojunction GaAs/Rare-Earth doped SnO2. Materials Research, 2013, 16, 831-838.	0.6	3
45	Deposition and characterization of BiVO4 thin films and evaluation as photoanodes for methylene blue degradation. Journal of Solid State Electrochemistry, 2012, 16, 3267-3274.	1.2	20
46	Photo-induced dipole relaxation current in natural Amethyst. Materials Research, 2012, 15, 461-466.	0.6	2
47	A continuously differentiable upwinding scheme for the simulation of fluid flow problems. Applied Mathematics and Computation, 2012, 218, 8614-8633.	1.4	4
48	Characterization of metallic electrical contacts to SnO2 thin films lightly doped with Eu3+ ions, and photo-induced resistivity. Materials Chemistry and Physics, 2012, 134, 994-1000.	2.0	3
49	Influence of pH of colloidal suspension on the electrical conductivity of SnO2 thin films deposited via Sol-Gel-Dip-Coating. Materials Research, 2011, 14, 113-117.	0.6	12
50	Growth of Al2O3 thin film by oxidation of resistively evaporated Al on top of SnO2, and electrical properties of the heterojunction SnO2/Al2O3. Journal of Materials Science, 2011, 46, 6627-6632.	1.7	13
51	Resistividade do filme depositado via sol-gel e estado de oxidaÃ§Ã£o do dopante Ce na matriz SnO2. Ceramica, 2011, 57, 225-230.	0.3	0
52	Interface Formation and Electrical Transport in SnO2:Eu3+/GaAs Heterojunction Deposited by Solâ€“Gel Dip-Coating and Resistive Evaporation. Journal of Electronic Materials, 2010, 39, 1170-1176.	1.0	15
53	Numerical simulation of the liquid phase in SnO2 thin film deposition by sol-gel-dip-coating. Journal of Sol-Gel Science and Technology, 2010, 55, 385-393.	1.1	14
54	Raman and photoluminescence of Er3+-doped SnO2 obtained via the solâ€“gel technique from solutions with distinct pH. Optical Materials, 2010, 33, 66-70.	1.7	9

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55	Evaluation of bulk and surfaces absorption edge energy of sol-gel-dip-coating SnO2 thin films. Materials Research, 2010, 13, 437-443.	0.6	19
56	Structural Characterization of Nanocrystalline Sb-Doped SnO₂ Xerogels by Multiedge X-ray Absorption Spectroscopy. Journal of Physical Chemistry C, 2010, 114, 19206-19213.	1.5	15
57	Cr+3 Distribution in Al1 and Al2 Sites of Alexandrite (BeAl2O4: Cr3+) Induced by Annealing, Investigated by Optical Spectroscopy. Energy and Power Engineering, 2010, 02, 18-24.	0.5	11
58	DeterminaÃ§Ã£o de diagramas de bandas de energia e da borda de absorÃ§Ã£o em SnO2, depositado via sol-gel, sobre quartzo. Ceramica, 2009, 55, 88-93.	0.3	1
59	Optical emission and electron capture of rare-earth trivalent ions located at distinct sites in <mml:math xmlns:mml="http://www.w3.org/1998/Math/MathML" altimg="si1.gif" display="inline" overflow="scroll"><mml:msub><mml:mrow><mml:mstyle mathvariant="normal"><mml:mi>SnO</mml:mi></mml:mstyle></mml:mrow><mml:mrow><mml:mn>2</mml:mn></mml:mrow></mml: thin films. Physics Procedia, 2009, 2, 353-364.	1.2	8
60	Effect of pH of colloidal suspension on crystallization and activation energy of deep levels in SnO2 thin films obtained via solâ€"gel. Journal of Physics and Chemistry of Solids, 2009, 70, 1312-1316.	1.9	17
61	Photoluminescence of Eu3+ ion in SnO2 obtained by solâ€"gel. Journal of Materials Science, 2008, 43, 345-349.	1.7	61
62	Schottky emission in nanoscopically crystallized Ce-doped SnO2 thin films deposited by solâ€"gel-dip-coating. Thin Solid Films, 2008, 517, 976-981.	0.8	22
63	Rare earth centers properties and electron trapping in SnO2 thin films produced by solâ€"gel route. Journal of Non-Crystalline Solids, 2008, 354, 4840-4845.	1.5	30
64	Powder Diffraction of Components Subject to Corrosion in Fuse Cutouts with Ceramic Insulation. Materials Science Forum, 2008, 591-593, 548-553.	0.3	0
65	Optical excitation of charge carriers from intra-bandgap states in Ce-doped SnO[sub 2] thin films. AIP Conference Proceedings, 2008, , .	0.3	0
66	Visible emission from Er-doped SnO2 thin films deposited by sol-gel. Ceramica, 2007, 53, 187-191.	0.3	9
67	Electron trapping of laser-induced carriers in Er-doped SnO2 thin films. Journal of the European Ceramic Society, 2007, 27, 3803-3806.	2.8	28
68	EXAFS investigation on Sb incorporation effects to electrical transport in SnO2 thin films deposited by solâ€"gel. Journal of the European Ceramic Society, 2007, 27, 4265-4268.	2.8	31
69	Decay of photo-excited conductivity of Er-doped SnO2 thin films. Journal of Materials Science, 2007, 42, 2216-2221.	1.7	18
70	Analysis of Er3+ incorporation in SnO2 by optical investigation. Brazilian Journal of Physics, 2006, 36, 270-273.	0.7	8
71	Drude's model calculation rule on electrical transport in Sb-doped SnO2 thin films, deposited via solâ€"gel. Journal of Physics and Chemistry of Solids, 2006, 67, 1410-1415.	1.9	49
72	Ultraviolet excitation of photoconductivity in thin films of solâ€"gel SnO2. Journal of the European Ceramic Society, 2005, 25, 2825-2828.	2.8	14

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73	Thermal annealing-induced electric dipole relaxation in natural alexandrite. Physics and Chemistry of Minerals, 2005, 31, 733-737.	0.3	7
74	Poole-Frenkel effect in Er doped SnO2thin films deposited by sol-gel-dip-coating. Physica Status Solidi (A) Applications and Materials Science, 2005, 202, 301-308.	0.8	31
75	Photoconductivity excitation spectrum for stretch-oriented PPV. Synthetic Metals, 2005, 154, 77-80.	2.1	2
76	Electro-optical properties of Er-doped SnO2 thin films. Journal of the European Ceramic Society, 2004, 24, 1857-1860.	2.8	38
77	Annealing effects on optical properties of natural alexandrite. Journal of Physics Condensed Matter, 2003, 15, 7437-7443.	0.7	12
78	Sb doping effects and oxygen adsorption in SnO2 thin films deposited via sol-gel. Materials Research, 2003, 6, 451-456.	0.6	38
79	Er rare-earth ion incorporation in sol-gel SnO2. Materials Research, 2003, 6, 445-449.	0.6	8
80	Planar Waveguides Based on Nanocrystalline and Er³⁺ Doped SnO₂. Journal of Metastable and Nanocrystalline Materials, 2002, 14, 107-110.	0.1	4
81	Planar Waveguides Based on Nanocrystalline and Er³⁺ Doped SnO₂. Materials Science Forum, 2002, 403, 107-110.	0.3	1
82	Optical characteristics of Er3+â€"Yb3+ doped SnO2 xerogels. Journal of Alloys and Compounds, 2002, 344, 217-220.	2.8	54
83	Light-induced electric dipole relaxation in synthetic and natural alexandrite. Radiation Effects and Defects in Solids, 2001, 156, 295-299.	0.4	4
84	Contribution of oxygen related defects to the electronic transport in SnO2sol-gel films. Radiation Effects and Defects in Solids, 2001, 156, 145-149.	0.4	1
85	Photo-induced electron trapping in indirect bandgap at low temperature. Journal of Physics Condensed Matter, 1999, 11, 425-433.	0.7	2
86	Oxygen related defects excitation and photoconductivity dependence of SnO₂Sol-Gel films with several light sources. Radiation Effects and Defects in Solids, 1999, 150, 391-395.	0.4	3
87	Electron scattering and effects of sources of light on photoconductivity of SnO2 coatings prepared by solâ€"gel. Journal of Non-Crystalline Solids, 1999, 247, 171-175.	1.5	30
88	Title is missing!. Journal of Sol-Gel Science and Technology, 1998, 13, 793-798.	1.1	23
89	Photodesorption and electron trapping in n-type SnO₂thin films grown by dip-coating technique. Radiation Effects and Defects in Solids, 1998, 146, 199-206.	0.4	4
90	Investigation of temperature influence on photo-induced conductivity in n-type AlxGa1âˆ'xAs. Radiation Effects and Defects in Solids, 1998, 146, 175-186.	0.4	1

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91	Light-induced relaxing dipoles inn-typeAlxGa1âˆ’xAs. Physical Review B, 1995, 51, 13864-13867.	1.1	4
92	Subband mixing inducing negative resistance. Solid State Communications, 1993, 86, 301-304.	0.9	0
93	Dipole relaxation current innâ€type AlxGa1âˆ’xAs. Applied Physics Letters, 1993, 63, 2658-2660.	1.5	3
94	Substitutional donor related states and Au/Ge/Ni contacts to AlxGa1âˆ’xAs. The Philosophical Magazine: Physics of Condensed Matter B, Statistical Mechanics, Electronic, Optical and Magnetic Properties, 1993, 68, 727-735.	0.6	1
95	Dipole Relaxation Current in N-Type AlxGa1-xAs. Materials Research Society Symposia Proceedings, 1993, 325, 285.	0.1	1
96	Transient decay of persistent photoconductivity in Al0.3Ga0.7As. Journal of Applied Physics, 1990, 68, 601-605.	1.1	23
97	Nanostructured TiO₂-Based Composites for Light Absorption. Advanced Materials Research, 0, 975, 207-212.	0.3	0
98	Investigation of Photoinduced Electrical Properties in the Heterojunction TiO₂/SnO₂. Advanced Materials Research, 0, 975, 201-206.	0.3	0