Corneliu Ghica

List of Publications by Year in descending order

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129 papers 2,247 citations

26 h-index 315357 38 g-index

130 all docs

130 docs citations

130 times ranked

2840 citing authors

#	Article	IF	CITATIONS
1	NaMn0.2Fe0.2Co0.2Ni0.2Ti0.2O2 high-entropy layered oxide – experimental and theoretical evidence of high electrochemical performance in sodium batteries. Energy Storage Materials, 2022, 47, 500-514.	9.5	49
2	Chitosan-Hyaluronan Nanoparticles for Vinblastine Sulfate Delivery: Characterization and Internalization Studies on K-562 Cells. Pharmaceutics, 2022, 14, 942.	2.0	11
3	Effects of Calcination Temperature on CO-Sensing Mechanism for NiO-Based Gas Sensors. Chemosensors, 2022, 10, 191.	1.8	4
4	Influence of relative humidity on CO2 interaction mechanism for Gd-doped SnO2 with respect to pure SnO2 and Gd2O3. Sensors and Actuators B: Chemical, 2022, 368, 132130.	4.0	8
5	Charge State Effects in Swift-Heavy-Ion-Irradiated Nanomaterials. Crystals, 2022, 12, 865.	1.0	6
6	All-Oxide p–n Junction Thermoelectric Generator Based on SnO <i>_×</i> and ZnO Thin Films. ACS Applied Materials & Interfaces, 2021, 13, 35187-35196.	4.0	21
7	Insights about CO Gas-Sensing Mechanism with NiO-Based Gas Sensorsâ€"The Influence of Humidity. Chemosensors, 2021, 9, 244.	1.8	12
8	Nd-doped ZnO films grown on c-cut sapphire by pulsed-electron beam deposition under oblique incidence. Applied Surface Science, 2021, 563, 150287.	3.1	5
9	Wake-up Free Ferroelectric Rhombohedral Phase in Epitaxially Strained ZrO ₂ Thin Films. ACS Applied Materials & Discourse (2021, 13, 51383-51392).	4.0	23
10	New Phenotype and Mineralization of Biogenic Iron Oxide in Magnetotactic Bacteria. Nanomaterials, 2021, 11, 3189.	1.9	4
11	HRTEM analysis of the high-temperature phases of the newly developed high-temperature Ni-base superalloy VDM 780 Premium. Journal of Alloys and Compounds, 2020, 814, 152157.	2.8	17
12	Aminopropyl-silica functionalized with halogen-reactive compounds for antimicrobial applications. Materials Chemistry and Physics, 2020, 241, 122353.	2.0	2
13	Structure and water uptake in BaLnCo2O6â^Î^(Ln =La, Pr, Nd, Sm, Gd, Tb and Dy). Acta Materialia, 2020, 199, 297-310.	3.8	18
14	HfO ₂ â€"Al ₂ O ₃ Dielectric Layer for a Performing Metalâ€"Ferroelectricâ€"Insulatorâ€"Semiconductor Structure with a Ferroelectric 0.5Ba(Zr _{0.2} Ti _{0.8})O ₃ -0.5(Ba _{0.7} Ca _{0.3})TiO _{3 Thin Film. ACS Applied Electronic Materials, 2020, 2, 2780-2787.}	3 ² 78ub>	5
15	Perovskite ferroelectric thin film as an efficient interface to enhance the photovoltaic characteristics of Si/SnO _x heterojunctions. Journal of Materials Chemistry A, 2020, 8, 11314-11326.	5.2	10
16	Energy storage performance of ferroelectric ZrO ₂ film capacitors: effect of HfO ₂ :Al ₂ O ₃ dielectric insert layer. Journal of Materials Chemistry A, 2020, 8, 14171-14177.	5.2	29
17	Low temperature CO sensing under infield conditions with in doped Pd/SnO2. Sensors and Actuators B: Chemical, 2020, 308, 127717.	4.0	7
18	Phase Control in Hafnia: New Synthesis Approach and Convergence of Average and Local Structure Properties. ACS Omega, 2019, 4, 8881-8891.	1.6	15

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19	Nanoclustered Pd decorated nanocrystalline Zn doped SnO2 for ppb NO2 detection at low temperature. Sensors and Actuators B: Chemical, 2019, 294, 148-156.	4.0	25
20	Tailoring the Dopant Distribution in ZnO:Mn Nanocrystals. Scientific Reports, 2019, 9, 6894.	1.6	13
21	Bimodal mesoporous NiO/CeO2-Î-YSZ with enhanced carbon tolerance in catalytic partial oxidation of methaneâ€"Potential IT-SOFCs anode. Applied Catalysis B: Environmental, 2019, 241, 393-406.	10.8	26
22	Ferroelectric photovoltaic characteristics of pulsed laser deposited 0.5Ba(Zr0.2Ti0.8)O3-0.5(Ba0.7Ca0.3)TiO3/ZnO heterostructures. Solar Energy, 2018, 167, 18-23.	2.9	13
23	Hysteretic Characteristics of Pulsed Laser Deposited 0.5Ba(Zr _{0.2} Ti _{0.8})O ₃ –0.5(Ba _{0.7} Ca _{0.3})TiO <s Bilayers. ACS Applied Materials & Interfaces, 2018, 10, 15240-15249.</s 	sub 4.3 <td>b>∥ZnO</td>	b> ∥Z nO
24	Impact of thickness variation on structural, dielectric and piezoelectric properties of (Ba,Ca)(Ti,Zr)O3 epitaxial thin films. Scientific Reports, 2018, 8, 2056.	1.6	28
25	Ambiguous Role of Growth-Induced Defects on the Semiconductor-to-Metal Characteristics in Epitaxial VO ₂ /TiO ₂ Thin Films. ACS Applied Materials & Empty Interfaces, 2018, 10, 14132-14144.	4.0	12
26	Wet chemical synthesis of ZnO-CdS composites and their photocatalytic activity. Materials Research Bulletin, 2018, 99, 174-181.	2.7	46
27	Full Tetragonal Phase Stabilization in ZrO2 Nanoparticles Using Wet Impregnation: Interplay of Host Structure, Dopant Concentration and Sensitivity of Characterization Technique. Nanomaterials, 2018, 8, 988.	1.9	16
28	Rolling dopant and strain in Y-doped BiFeO3 epitaxial thin films for photoelectrochemical water splitting. Scientific Reports, 2018, 8, 15826.	1.6	14
29	A Study of Extended Defects in Surface Damaged Crystals. Crystals, 2018, 8, 67.	1.0	3
30	Ferroelectric switching dynamics in 0.5Ba(Zr0.2Ti0.8)O3-0.5(Ba0.7Ca0.3)TiO3 thin films. Applied Physics Letters, 2018, 113, 082903.	1.5	11
31	On the threshold for ion track formation in CaF ₂ . New Journal of Physics, 2017, 19, 023023.	1.2	19
32	Structure, transition temperature, and magnetoresistance of titanium-doped lanthanum barium manganite epilayers onto STO 001 substrates. Applied Physics Letters, 2017, 111, .	1.5	9
33	Lipoic Acid Gold Nanoparticles Functionalized with Organic Compounds as Bioactive Materials. Nanomaterials, 2017, 7, 43.	1.9	25
34	Fast atomic diffusion in amorphous films induced by laser pulse annealing. , 2016, , .		0
35	Exploring porous nanosilica-TEMPO as heterogeneous aerobic oxidation catalyst: the influence of supported gold clusters. Journal of Porous Materials, 2016, 23, 247-254.	1.3	7
36	Structural, magnetic and magnetocaloric effects in epitaxial La _{0.67} Ba _{0.33} Ti _{0.02} Mn _{0.98} O ₃ ferromagnetic thin films grown on 001-oriented SrTiO ₃ substrates. Dalton Transactions, 2016, 45, 15034-15040.	1.6	17

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37	Joining Chemical Pressure and Epitaxial Strain to Yield Y-doped BiFeO3 Thin Films with High Dielectric Response. Scientific Reports, 2016, 6, 25535.	1.6	15
38	Polarization induced self-doping in epitaxial Pb(Zr0.20Ti0.80)O3 thin films. Scientific Reports, 2015, 5, 14974.	1.6	56
39	Silver Azide Nanoparticles Embedded into Silica as Energetic Nano-materials. Medziagotyra, 2015, 21, .	0.1	O
40	Nanostructuring of GeTiO amorphous films by pulsed laser irradiation. Beilstein Journal of Nanotechnology, 2015, 6, 893-900.	1.5	18
41	Ni-doped (CeO2â^δ)–YSZ mesoarchitectured with nanocrystalline framework: the effect of thermal treatment on structure, surface chemistry and catalytic properties in the partial oxidation of methane (CPOM). Journal of Nanoparticle Research, 2015, 17, 1.	0.8	14
42	"Crystallographic―holes: new insights for a beneficial structural feature for photocatalytic applications. Nanoscale, 2015, 7, 5776-5786.	2.8	11
43	Atomic scale elemental mapping of light elements in multilayered perovskite coatings. Applied Surface Science, 2015, 355, 250-255.	3.1	1
44	Analysis of bimodal thermally-induced denaturation of type I collagen extracted from calfskin. RSC Advances, 2015, 5, 38391-38406.	1.7	14
45	Applicability of the Stoner-Wohlfarth Model for Ni-Fe Graded Thin Films. Journal of Superconductivity and Novel Magnetism, 2015, 28, 965-969.	0.8	3
46	High Permittivity (1 – <i>x</i>)Ba(Zr _{0.2} Ti _{0.8})O ₃ – <i>x</i> (Ba _{0.7} Ca _{0.3})TiO ₃ (<i>x</i>) = 0.45) Epitaxial Thin Films with Nanoscale Phase Fluctuations. ACS Applied Materials & Diterraces, 2015, 7, 23984-23992.	4.0	23
47	General equivalent circuit derived from capacitance and impedance measurements performed on epitaxial ferroelectric thin films. Journal of Applied Physics, 2014, 116, 044108.	1.1	9
48	Strain-induced long range ferroelectric order and linear electro-optic effect in epitaxial relaxor thin films. Journal of Applied Physics, 2014, 116, 074106.	1.1	2
49	Nanoscale monoclinic domains in epitaxial SrRuO3thin films deposited by pulsed laser deposition. Journal of Applied Physics, 2014, 116, 023516.	1.1	5
50	Polarization-Control of the Potential Barrier at the Electrode Interfaces in Epitaxial Ferroelectric Thin Films. ACS Applied Materials & Samp; Interfaces, 2014, 6, 2929-2939.	4.0	69
51	Nanomechanical characterization of bioglass films synthesized by magnetron sputtering. Thin Solid Films, 2014, 553, 166-172.	0.8	28
52	Focusing geometry-induced size tailoring of silver nanoparticles obtained by laser ablation in water. Laser Physics, 2014, 24, 106005.	0.6	7
53	Evaluation of the Segregation of Paramagnetic Impurities at Grain Boundaries in Nanostructured ZnO Films. ACS Applied Materials & Samp; Interfaces, 2014, 6, 14231-14238.	4.0	11
54	Synthesis and exceptional thermal stability of Mg-based bimetallic nanoparticles during hydrogenation. Nanoscale, 2014, 6, 11963-11970.	2.8	18

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55	Determination of the Electronic Energy Levels of Colloidal Nanocrystals using Fieldâ€Effect Transistors and Abâ€Initio Calculations. Advanced Materials, 2014, 26, 5639-5645.	11.1	33
56	Oxide Thin Films and Nano-heterostructures for Microelectronics (MOS Structures, Ferroelectric) Tj ETQq0 0 0 0	rgBT/Qver	lock 10 Tf 50
57	Magnetic configurations of Ni–Cu alloy nanowires obtained by the template method. Journal of Nanoparticle Research, 2013, 15, 1.	0.8	17
58	Functionalized magnetite silica thin films fabricated by MAPLE with antibiofilm properties. Biofabrication, 2013, 5, 015007.	3.7	36
59	Charge transfer and band bending at Au/Pb(Zr0.2Ti0.8)O3 interfaces investigated by photoelectron spectroscopy. Applied Surface Science, 2013, 273, 415-425.	3.1	53
60	Microstructure-related magnetic properties in Co-implanted ZnO thin films. Journal Physics D: Applied Physics, 2013, 46, 065003.	1.3	9
61	Structure and Magnetic Properties of Nanosized Magnetite Obtained by Glass Recrystallization. Journal of Nanoscience and Nanotechnology, 2012, 12, 5043-5050.	0.9	10
62	Reversible aggregation between nanoparticles induced by acid–base interactions. Chemical Physics Letters, 2012, 546, 133-135.	1.2	3
63	Solid-state synthesis and spark plasma sintering of SrZrO3 ceramics. Journal of Alloys and Compounds, 2011, 509, 6395-6399.	2.8	19
64	Rare-earth doped sol–gel derived oxyfluoride glass–ceramics: Structural and optical characterization. Optical Materials, 2011, 33, 1770-1774.	1.7	18
65	Chemically Modified (Nano)Silica as Sensitive Material for Arginine and Lysine. Journal of Inorganic and Organometallic Polymers and Materials, 2011, 21, 492-497.	1.9	1
66	Eu3+-doped CaF2 nanocrystals in sol–gel derived glass–ceramics. Optical Materials, 2011, 33, 613-617.	1.7	42
67	Modification of AlN thin films morphology and structure by temporally shaping of fs laser pulses used for deposition. Thin Solid Films, 2011, 519, 6381-6387.	0.8	9
68	Annealing of hydrogen-induced defects in RF-plasma-treated Si wafers:ex situandin situtransmission electron microscopy studies. Journal Physics D: Applied Physics, 2011, 44, 295401.	1.3	4
69	Laser treatment of plasma-hydrogenated silicon wafers for thin layer exfoliation. Journal of Applied Physics, 2011, 109, 063518.	1.1	1
70	Specificity of defects induced in silicon by RF-plasma hydrogenation. Applied Physics A: Materials Science and Processing, 2010, 98, 777-785.	1.1	12
71	Doped aluminium based spinels synthesized by a soft chemistry method. Materials Science and Engineering B: Solid-State Materials for Advanced Technology, 2010, 170, 99-106.	1.7	10
72	Blue CoAl2O4 spinel via complexation method. Materials Chemistry and Physics, 2010, 122, 491-497.	2.0	66

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73	Skin Layer Defects in Si by Optimized Treatment in Hydrogen RF Plasma. Plasma Processes and Polymers, 2010, 7, 986-991.	1.6	2
74	Organic Photovoltaic Cells Based on ZnO Thin Film Electrodes. Journal of Nanoscience and Nanotechnology, 2010, 10, 1322-1326.	0.9	4
75	Ultrafine particles of ZnGa2O4 obtained by solution combustion and complexation methods. Journal of Alloys and Compounds, 2009, 481, 890-895.	2.8	8
76	Crystallization and spectroscopic properties of Eu-doped CaF2 nanocrystals in transparent oxyfluoride glass-ceramics. Journal of Non-Crystalline Solids, 2009, 355, 1869-1872.	1.5	39
77	Hybrid Metal (Gold)-Inorganic (Silica) Nanoparticles: Synthesis, Characterization, and Spin-Labeling. Journal of Inorganic and Organometallic Polymers and Materials, 2008, 18, 414-419.	1.9	3
78	Dual behavior of gold nanoparticles, as generators and scavengers for free radicals. Journal of Materials Science, 2008, 43, 6571-6574.	1.7	23
79	Influence of polyvinylpyrolidone as an additive in electrochemical preparation of ZnO nanowires and nanostructured thin films. Surface and Interface Analysis, 2008, 40, 556-560.	0.8	5
80	TEM characterization of extended defects induced in Si wafers by H-plasma treatment. Journal Physics D: Applied Physics, 2007, 40, 395-400.	1.3	11
81	p-type ZnO thin films grown by RF plasma beam assisted Pulsed Laser Deposition. Superlattices and Microstructures, 2007, 42, 79-84.	1.4	18
82	Mesoscopic ordering in the 0.9 Pb(Mg1/3Nb2/3)O3-0.1 PbTiO3 relaxor ferroelectric: a HRTEM study. Physica Status Solidi C: Current Topics in Solid State Physics, 2007, 4, 736-739.	0.8	1
83	Paramagnetic silica-coated gold nanoparticles. Journal of Materials Science, 2007, 42, 10058-10064.	1.7	13
84	Nanocrystalline Er:YAG thin films prepared by pulsed laser deposition: An electron microscopy study. Applied Surface Science, 2007, 253, 8268-8272.	3.1	9
85	Femtosecond pulse shaping for phase and morphology control in PLD: Synthesis of cubic SiC. Applied Surface Science, 2006, 252, 4857-4862.	3.1	16
86	Growth and characterization of \hat{l}^2 -SiC films obtained by fs laser ablation. Applied Surface Science, 2006, 252, 4672-4677.	3.1	25
87	Characterization of $\{111\}$ planar defects induced in silicon by hydrogen plasma treatments. Philosophical Magazine, 2006, 86, 5137-5151.	0.7	12
88	Growth and characterization of a-axis textured ZnO thin films. Journal of Crystal Growth, 2005, 277, 26-31.	0.7	45
89	Modification of polyester track membranes by plasma treatments. Surface and Coatings Technology, 2005, 200, 529-533.	2.2	20
90	Properties of ZnO thin films prepared by radio-frequency plasma beam assisted laser ablation. Applied Surface Science, 2005, 247, 518-525.	3.1	45

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91	Strain mapping around dislocations in diamond and cBN. Physica Status Solidi A, 2005, 202, 2224-2228.	1.7	6
92	Nanostructure and properties of Pb(Zr,Ti)O ₃ pb(Zr,Ti)O ₃ piezoceramics. European Physical Journal Special Topics, 2005, 128, 139-143.	0.2	O
93	Synthesis of advanced materials by pulsed-laser deposition. , 2005, 5713, 456.		O
94	Paramagnetic defect centres in crystalline Alq3. Journal of Physics Condensed Matter, 2005, 17, 6271-6283.	0.7	14
95	Pulsed laser deposition of biocompatible polymers: a comparative study in case of pullulan. Thin Solid Films, 2004, 453-454, 262-268.	0.8	36
96	Deposition of hydroxyapatite thin films by Nd:YAG laser ablation: a microstructural study. Materials Research Bulletin, 2004, 39, 2089-2101.	2.7	19
97	Piezoelectric and optical properties of Sr-doped PT–PZ–Pb(Mg1/3Nb2/3)O3 ceramics. Journal of the European Ceramic Society, 2004, 24, 1703-1708.	2.8	4
98	Properties of zirconium silicate thin films prepared by laser ablation. Materials Science in Semiconductor Processing, 2004, 7, 209-214.	1.9	12
99	Excimer Laser Crystallization of SnO2:Sb Sol-Gel Films. Journal of Sol-Gel Science and Technology, 2003, 28, 227-234.	1.1	10
100	Ion beam photography in sol–gel NiO–SiO2 films. Nuclear Instruments & Methods in Physics Research B, 2003, 209, 335-339.	0.6	7
101	ITO spin-coated porous silicon structures. Materials Science and Engineering B: Solid-State Materials for Advanced Technology, 2003, 101, 262-265.	1.7	16
102	Densification and crystallization of SnO2:Sb sol–gel films using excimer laser annealing. Applied Surface Science, 2003, 208-209, 382-387.	3.1	37
103	ITO-on-top organic light-emitting devices: a correlated study of opto-electronic and structural characteristics. Semiconductor Science and Technology, 2003, 18, 253-260.	1.0	44
104	Rapid thermal annealing procedure for densification of sol-gel indium tin oxide thin films. Crystal Engineering, 2002, 5, 187-193.	0.7	21
105	Calcium phosphate thin film processing by pulsed laser deposition and in situ assisted ultraviolet pulsed laser deposition. Journal of Materials Science: Materials in Medicine, 2002, 13, 1167-1173.	1.7	36
106	Influence of the deposition configuration on the composition, structure and morphology of La0.6Y0.07Ca0.33MnO3â^' thin films obtained by pulsed laser deposition. Solid State Sciences, 2001, 3, 1253-1256.	0.8	2
107	The influence of the h-BN morphology and structure on the c-BN growth. Diamond and Related Materials, 2001, 10, 1352-1356.	1.8	16
108	Role of laser pulse duration and gas pressure in deposition of AlN thin films. Journal of Applied Physics, 2001, 90, 456-461.	1.1	25

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109	Hydroxyapatite thin films growth by pulsed laser deposition: effects of the Ti alloys substrate passivation on the film properties by the insertion of a TiN buffer layer., 2001,,.		O
110	In situ transmission electron microscopy study of the silicidation process in Co thin films on patterned (001) Si substrates. Journal of Materials Research, 2001, 16, 701-708.	1.2	5
111	Sr-ferrite thin films grown on sapphire by pulsed laser deposition. Applied Surface Science, 2000, 168, 108-113.	3.1	22
112	Pulsed laser deposition of hydroxyapatite thin films on Ti-5Al-2.5Fe substrates with and without buffer layers. Applied Surface Science, 2000, 168, 127-131.	3.1	97
113	Structural comparison between La0.60Y0.07Ca0.33MnO3â^Î bulk and pulsed laser deposited thin films. Journal of Magnetism and Magnetic Materials, 2000, 211, 54-60.	1.0	5
114	Ge LATERAL SEGREGATION AS A DOMINANT ALLOYING MECHANISM DURING LOW KINETIC SI CAPPING OF STRAINED Si1-xGex HUT ISLANDS. Surface Review and Letters, 1999, 06, 1-6.	0.5	5
115	Growth of thin transparent titanium nitride layers by reactive laser ablation. Applied Surface Science, 1999, 138-139, 593-598.	3.1	12
116	Pulsed laser deposition of lithium niobate: a parametric study. Applied Surface Science, 1999, 138-139, 617-621.	3.1	18
117	Growth of carbon/nickel multilayer for X-ray–UV optics by RF reactive magnetron sputtering. Applied Surface Science, 1999, 148, 142-146.	3.1	4
118	Scanning force microscopy and electron microscopy studies of pulsed laser deposited ZnO thin films: application to the bulk acoustic waves (BAW) devices. Journal of Crystal Growth, 1999, 197, 523-528.	0.7	63
119	Optical studies of carbon nitride thin films deposited by reactive pulsed laser ablation of a graphite target in low pressure ammonia. Thin Solid Films, 1998, 323, 72-78.	0.8	30
120	Characterization of carbon nitride thin films deposited by a combined RF and DC plasma beam. Thin Solid Films, 1998, 325, 123-129.	0.8	28
121	Boron carbon nitride films deposited by sequential pulses laser deposition. Applied Surface Science, 1998, 127-129, 692-696.	3.1	40
122	Boron carbonitride films deposited by pulsed laser ablation. Applied Surface Science, 1998, 133, 239-242.	3.1	80
123	Si adatom surface migration biasing by elastic strain gradients during capping of Ge or Si1â^'xGex hut islands. Applied Physics Letters, 1998, 73, 1053-1055.	1.5	35
124	Growth of polycrystalline hydroxyapatite thin films by pulsed laser deposition and subsequent heat treatment in air. , 1998, , .		2
125	Dependence of the ablative effect of nanosecond laser pulses at the surface of dentine samples on the laser wavelength., 1998, 3405, 702.		0
126	Characteristics of a carbon/nickel multilayer structure for soft x-ray optics deposited by rf magnetron sputtering. , 1998 , , .		0

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127	Effects of UV laser radiation on the surface defects of NiO catalysts. , 1998, , .		O
128	HRTEM study of Silâ^'xGex multilayer. Thin Solid Films, 1997, 294, 80-83.	0.8	4
129	Electrical Properties of Epitaxial Ferroelectric Heterostructures. , 0, , .		O