Luis Yate

List of Publications by Year
in descending order

84 papers	2,127 citations	185998 28 h-index	276539 41 g-index
86 all docs	86 docs citations	86 times ranked	3511 citing authors

#	Article	IF	Citations
1	TiCN/TiNbCN multilayer coatings with enhanced mechanical properties. Applied Surface Science, 2010, 256, 5898-5904.	3.1	101
2	Tuning the antioxidant activity of graphene quantum dots: Protective nanomaterials against dye decoloration. Carbon, 2017, 116, 366-374.	5.4	100
3	Graphene quantum dot membranes as fluorescent sensing platforms for Cr (VI) detection. Carbon, 2016, 109, 658-665.	5.4	87
4	Palladium Nanoparticle-Loaded Cellulose Paper: A Highly Efficient, Robust, and Recyclable Self-Assembled Composite Catalytic System. Journal of Physical Chemistry Letters, 2015, 6, 230-238.	2.1	82
5	Hard coating performance enhancement by using [Ti/TiN]n, [Zr/ZrN]n and [TiN/ZrN]n multilayer system. Materials Science and Engineering B: Solid-State Materials for Advanced Technology, 2010, 171, 56-61.	1.7	66
6	Effect of applied bias voltage on corrosion-resistance for TiC1âˆ’xNx and Ti1âˆ’xNbxC1âˆ’yNy coatings. Applied Surface Science, 2010, 256, 2876-2883.	3.1	62
7	Selective biomineralization of Co₃(PO₄)₂-sponges triggered by His-tagged proteins: efficient heterogeneous biocatalysts for redox processes. Chemical Communications, 2015, 51, 8753-8756.	2.2	59
8	Composition and mechanical properties of AlC, AlN and AlCN thin films obtained by r.f. magnetron sputtering. Surface and Coatings Technology, 2009, 203, 1904-1907.	2.2	54
9	Enhancement of mechanical and tribological properties in AISI D3 steel substrates by using a non-isostructural CrN/AlN multilayer coating. Materials Chemistry and Physics, 2011, 125, 576-586.	2.0	52
10	Near infrared photolysis of a Ru polypyridyl complex by upconverting nanoparticles. Chemical Communications, 2014, 50, 1715.	2.2	52
11	Humic acid attenuation of silver nanoparticle toxicity by ion complexation and the formation of a Ag3+ coating. Journal of Hazardous Materials, 2018, 353, 173-181.	6.5	49
12	An efficient parts-per-million Î±-Fe₂O₃ nanocluster/graphene oxide catalyst for Suzukiâ€“Miyaura coupling reactions and 4-nitrophenol reduction in aqueous solution. Chemical Communications, 2017, 53, 644-646.	2.2	46
13	Graphene oxide modification with graft polymers via nitroxide mediated radical polymerization. Polymer, 2014, 55, 2347-2355.	1.8	43
14	Topographic reconstruction and mechanical analysis of atomic layer deposited Al2O3/TiO2 nanolaminates by nanoindentation. Materials and Design, 2016, 111, 584-591.	3.3	43
15	Tailoring mechanical properties and electrical conductivity of flexible niobium carbide nanocomposite thin films. RSC Advances, 2014, 4, 61355-61362.	1.7	41
16	Combined reactive/non-reactive DC magnetron sputtering of high temperature composite AlNâ€“TiB2â€“TiSi2. Materials and Design, 2016, 94, 230-239.	3.3	40
17	Nickel Nanoparticle-Doped Paper as a Bioactive Scaffold for Targeted and Robust Immobilization of Functional Proteins. ACS Nano, 2014, 8, 6221-6231.	7.3	38
18	Nbâ€“C Nanocomposite Films with Enhanced Biocompatibility and Mechanical Properties for Hard-Tissue Implant Applications. ACS Applied Materials & Interfaces, 2015, 7, 6351-6358.	4.0	38

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19	Enhanced Antibacterial Activity of Melt Processed Poly(propylene) Ag and Cu Nanocomposites by Argon Plasma Treatment. Plasma Processes and Polymers, 2014, 11, 353-365.	1.6	37
20	Hybrid ZnPc@TiO 2 nanostructures for targeted photodynamic therapy, bioimaging and doxorubicin delivery. Materials Science and Engineering C, 2017, 78, 1072-1085.	3.8	37
21	Nanostructured Indium Tin Oxide Slides for Small-Molecule Profiling and Imaging Mass Spectrometry of Metabolites by Surface-Assisted Laser Desorption Ionization MS. Analytical Chemistry, 2015, 87, 431-440.	3.2	36
22	Mechanical properties of boron nitride thin films prepared by atomic layer deposition. CrystEngComm, 2017, 19, 6089-6094.	1.3	36
23	High Electrocatalytic Response of a Mechanically Enhanced NbC Nanocomposite Electrode Toward Hydrogen Evolution Reaction. ACS Applied Materials & Interfaces, 2017, 9, 30872-30879.	4.0	35
24	Robust tribo-mechanical and hot corrosion resistance of ultra-refractory Ta-Hf-C ternary alloy films. Scientific Reports, 2017, 7, 3080.	1.6	33
25	QD-filled micelles which combine SPECT and optical imaging with light-induced activation of a platinum(iv) prodrug for anticancer applications. Chemical Communications, 2013, 49, 3985.	2.2	30
26	Electrochemical Reduction of Oxygen in Aprotic Ionic Liquids Containing Metal Cations: A Case Study on the Naâ€“O₂ system. ChemSusChem, 2017, 10, 1616-1623.	3.6	30
27	Effect of the bias voltage on the structure of nc-CrC/a-C:H coatings with high carbon content. Surface and Coatings Technology, 2012, 206, 2877-2883.	2.2	29
28	Exposure to air boosts CuAAC reactions catalyzed by PEG-stabilized Cu nanoparticles. Chemical Communications, 2017, 53, 5384-5387.	2.2	29
29	Stability of polyelectrolyte multilayers in oxidizing media: a critical issue for the development of multilayer based membranes for nanofiltration. Colloid and Polymer Science, 2015, 293, 381-388.	1.0	28
30	Tuning the photodynamic efficiency of TiO₂ nanotubes against HeLa cancer cells by Fe-doping. RSC Advances, 2015, 5, 85139-85152.	1.7	28
31	Calcium phosphateâ€“calcium titanate composite coatings for orthopedic applications. Ceramics International, 2016, 42, 10322-10331.	2.3	28
32	The Role of the Electrode Surface in Naâ€“Air Batteries: Insights in Electrochemical Product Formation and Chemical Growth of NaO₂. Advanced Energy Materials, 2018, 8, 1701581.	10.2	28
33	Potential of niobium-based thin films as a protective and osteogenic coating for dental implants: The role of the nonmetal elements. Materials Science and Engineering C, 2019, 96, 166-175.	3.8	26
34	Effect of negative bias voltage on mechanical and electrochemical nature in Tiâ€“Wâ€“N coatings. Journal of Materials Science, 2011, 46, 1244-1252.	1.7	23
35	Towards high durable lithium ion batteries with waterborne LiFePO 4 electrodes. Electrochimica Acta, 2016, 215, 238-246.	2.6	21
36	Enhancement of surface mechanical properties by using TiN[BCN/BN]n/c-BN multilayer system. Applied Surface Science, 2010, 257, 1098-1104.	3.1	20

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37	Influence of the negative R.F. bias voltage on the structural, mechanical and electrical properties of Hfâ€“Câ€“N coatings. Surface and Coatings Technology, 2016, 286, 251-255.	2.2	20
38	Redox synthesis and high catalytic efficiency of transition-metal nanoparticleâ€“graphene oxide nanocomposites. Journal of Materials Chemistry A, 2017, 5, 21947-21954.	5.2	20
39	One-Step Synthesis of Mesoporous Silica Thin Films Containing Available COOH Groups. ACS Omega, 2017, 2, 4548-4555.	1.6	20
40	Influence of ZnO/graphene nanolaminate periodicity on their structural and mechanical properties. Journal of Materials Science and Technology, 2018, 34, 1487-1493.	5.6	20
41	Imidazoleâ€Grafted Nanogels for the Fabrication of Organicâ€“Inorganic Protein Hybrids. Advanced Functional Materials, 2018, 28, 1803115.	7.8	20
42	Improving the physicochemical surface properties on AISI D3 steel coated with Ti-W-N. Surface and Coatings Technology, 2011, 205, 2947-2953.	2.2	19
43	RhAg/rGO nanocatalyst: ligand-controlled synthesis and superior catalytic performances for the reduction of 4-nitrophenol. Journal of Materials Science, 2017, 52, 9465-9476.	1.7	19
44	PEGylated carbon black as lubricant nanoadditive with enhanced dispersion stability and tribological performance. Tribology International, 2019, 137, 228-235.	3.0	19
45	Synthesis and Catalytic Activity of Gold Nanoparticles Supported on Dendrimeric Nanocellulose Hybrids. European Journal of Organic Chemistry, 2016, 2016, 3186-3192.	1.2	18
46	Electrostatic Assembly of Functional and Macromolecular Ferricinium Chloride-Stabilized Gold Nanoparticles. Inorganic Chemistry, 2017, 56, 2784-2791.	1.9	17
47	Nanoscale Effects of Radiation (UV, X-ray, and Î³) on Calcite Surfaces: Implications for its Mechanical and Physico-Chemical Properties. Journal of Physical Chemistry C, 2017, 121, 13357-13369.	1.5	17
48	Effect of nitrogen flow ratio on microstructure, mechanical and tribological properties of TiWSiNx thin film deposited by magnetron co-sputtering. Applied Surface Science, 2018, 456, 445-456.	3.1	17
49	Acetate-Induced Disassembly of Spherical Iron Oxide Nanoparticle Clusters into Monodispersed Coreâ€“Shell Structures upon Nanoemulsion Fusion. Langmuir, 2017, 33, 10351-10365.	1.6	16
50	High Electrocatalytic Response of Ultra-refractory Ternary Alloys of Ta-Hf-C Carbide toward Hydrogen Evolution Reaction in Acidic Media. Journal of Physical Chemistry C, 2018, 122, 25433-25440.	1.5	16
51	Metal Nanoparticle Growth within Clayâ€“Polymer Nacre-Inspired Materials for Improved Catalysis and Plasmonic Detection in Complex Biofluids. Langmuir, 2017, 33, 8774-8783.	1.6	15
52	Ultra low nanowear in novel chromium/amorphous chromium carbide nanocomposite films. Applied Surface Science, 2017, 420, 707-713.	3.1	15
53	Effect of porous silicon substrate on structural, mechanical and optical properties of MOCVD and ALD ruthenium oxide nanolayers. Applied Surface Science, 2019, 471, 686-693.	3.1	15
54	Screen-printed carbon electrodes doped with TiO2-Au nanocomposites with improved electrocatalytic performance. Materials Today Communications, 2017, 11, 11-17.	0.9	14

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55	Cathodic electrochemical deposition of CuI from room temperature ionic liquid-based electrolytes. Electrochemistry Communications, 2015, 59, 20-23.	2.3	13
56	Synthesis, structure, EPR studies and up-conversion luminescence of ZnO:Er³⁺â€“Yb³⁺@Gd₂O₃ nanostructures. RSC Advances, 2016, 6, 89305-89312.	1.7	13
57	Nanostructured and Selective Filter To Improve Detection of Arsenic on Surface Plasmon Nanosensors. ACS Sensors, 2016, 1, 725-731.	4.0	12
58	Influence of the Al content on the in vitro bioactivity and biocompatibility of PVD Ti_{1â^'x}Al_xN coatings for orthopaedic applications. RSC Advances, 2016, 6, 60756-60764.	1.7	12
59	High-Temperature Magnetodielectric <mml:math xmlns:mml="http://www.w3.org/1998/Math/MathML" display="inline" overflow="scroll"><mml:mi>Bi</mml:mi><mml:mo stretchy="false">(</mml:mo><mml:msub><mml:mi>Fe</mml:mi><mml:mrow><mml:mn>0.5</mml:mn></mml:mrow></mml:msub><mml:msub><mml:mi mathvariant="normal">O</mml:mi><mml:mn>3</mml:mn></mml:msub></mml:math> Thin Films with Checkerboard-Ordered Oxyge. Physical Review Applied, 2018, 10, .	1.5	12
60	Improvement of the electrochemical behavior of steel surfaces using a TiN[BCN/BN]n/c-BN multilayer system. Diamond and Related Materials, 2011, 20, 588-595.	1.8	11
61	Layered titanates with fibrous nanotopographic features as reservoir for bioactive ions to enhance osteogenesis. Applied Surface Science, 2018, 436, 653-661.	3.1	11
62	Copper nanoparticles synthesis in hybrid mesoporous thin films: Controlling oxidation state and catalytic performance through pore chemistry. Applied Surface Science, 2019, 471, 862-868.	3.1	11
63	Optical and semiconductive properties of binary and ternary thin films from the Nb-Ti-O system. Results in Physics, 2018, 9, 328-336.	2.0	10
64	Control of the bias voltage in d.c. PVD processes on insulator substrates. Vacuum, 2009, 83, 1287-1290.	1.6	9
65	The effect of top-layer chemistry on the formation of supported lipid bilayers on polyelectrolyte multilayers: primary versus quaternary amines. Physical Chemistry Chemical Physics, 2016, 18, 32396-32405.	1.3	9
66	Enhancement of the Pitting Corrosion Resistance of AISI 316LVM Steel with Ta-Hf-C/Au Bilayers for Biomedical Applications. Journal of Nanomaterials, 2017, 2017, 1-10.	1.5	9
67	Crystalline domains in epitaxial Y(Ni0.5Mn0.5)O3 thin films grown by PLD on different STO substrates. Applied Surface Science, 2015, 324, 114-122.	3.1	8
68	Optical Properties Dependence with Gas Pressure in AlN Films Deposited by Pulsed Laser Ablation. Journal of Physics: Conference Series, 2011, 274, 012119.	0.3	7
69	Dielectric characterization of multiferroic magnetoelectric double-perovskite Y(Ni0.5Mn0.5)O3 thin films. Applied Physics Letters, 2016, 109, .	1.5	7
70	Influence of Si-addition on wear and oxidation resistance of TiWSixN thin films. Ceramics International, 2019, 45, 17363-17375.	2.3	7
71	Strontium confinement in polyacrylic acid brushes: a soft nanoarchitectonics approach for the design of titania coatings with enhanced osseointegration. Molecular Systems Design and Engineering, 2019, 4, 421-430.	1.7	7
72	Mechanical and tribological characterization of CN_x films deposited by d.c. magnetron sputtering. Physica Status Solidi C: Current Topics in Solid State Physics, 2007, 4, 4267-4274.	0.8	6

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73	Atomic aluminum content (x) effect on fretting-corrosion of Ti1âˆ'Al N coatings for orthopedic applications. Wear, 2016, 362-363, 87-96.	1.5	6
74	Second Harmonic Generation Response in Thermally reconstructed Multiferroic Î²â€²- Gd2(MoO4)3 Thin Films. Scientific Reports, 2017, 7, 11800.	1.6	6
75	Exploring the wetting properties of diblock copolymer brushes with a hydrophobic block of poly(1H,1H,2H,2H-Perfluorodecyl acrylate)-(PPFDA) and a Thermoresponsive block of poly(N-isopropylacrylamide)-(PNiPAM) synthesized by RAFT polymerization. Nano Structures Nano Objects, 2018, 16, 412-419.	1.9	6
76	The â€œGraftingâ€toâ€•of Wellâ€Defined Polystyrene on Graphene Oxide via Nitroxideâ€Mediated Polymerization. Macromolecular Chemistry and Physics, 2016, 217, 2099-2106.	1.1	5
77	Orientation dependent Ti diffusion in YNMO/STO thin films deposited by pulsed laser deposition. Applied Surface Science, 2016, 387, 864-868.	3.1	5
78	Characterization of the Micro-Abrasive Wear in Coatings of TaC-HfC/Au for Biomedical Implants. Materials, 2017, 10, 842.	1.3	4
79	Study of nanostructured ultra-refractory Tantalum-Hafnium-Carbide electrodes with wide electrochemical stability window. Chemical Engineering Journal, 2021, 415, 128987.	6.6	4
80	Insights and optimization of the structural and mechanical properties of TiWSiN coatings using the Taguchi method. Applied Surface Science, 2021, 558, 149877.	3.1	4
81	Stabilization of complex orthorhombic o-Cr3C2 thin films under high energetic growth conditions: Experiments and calculations. Journal of Alloys and Compounds, 2020, 848, 156373.	2.8	3
82	Study of the Impact of Polyanions on the Formation of Lipid Bilayers on Top of Polyelectrolyte Multilayers with Poly(allylamine hydrochloride) as the Top Layer. Journal of Physical Chemistry B, 2017, 121, 1158-1167.	1.2	2
83	Cobalt oxide as a selective co-catalyst for water oxidation in the presence of an organic dye. Photochemical and Photobiological Sciences, 2017, 16, 1771-1777.	1.6	2
84	Humic acid: A natural attenuator of toxicity of silver nanoparticles in zebrafish embryos. Toxicology Letters, 2015, 238, S205.	0.4	0