Marc Torrell

List of Publications by Year
in descending order

48 papers	1,409 citations	331538 21 h-index	330025 37 g-index
50 all docs	50 docs citations	50 times ranked	1617 citing authors

#	Article	IF	Citations
1	Residual stress development in cold sprayed Al, Cu and Ti coatings. Acta Materialia, 2013, 61, 6329-6337.	3.8	135
2	Cold gas spray titanium coatings onto a biocompatible polymer. Materials Letters, 2013, 106, 97-99.	1.3	97
3	Three-dimensional printed yttria-stabilized zirconia self-supported electrolytes for solid oxide fuel cell applications. Journal of the European Ceramic Society, 2019, 39, 9-16.	2.8	80
4	Tuning of the surface plasmon resonance in TiO2/Au thin films grown by magnetron sputtering: The effect of thermal annealing. Journal of Applied Physics, 2011, 109, .	1.1	74
5	3D printing the next generation of enhanced solid oxide fuel and electrolysis cells. Journal of Materials Chemistry A, 2020, 8, 16926-16932.	5.2	63
6	Performance and long term degradation of 7ÂW micro-tubular solid oxide fuel cells for portable applications. Journal of Power Sources, 2015, 285, 439-448.	4.0	59
7	Co-electrolysis of steam and CO₂ in full-ceramic symmetrical SOECs: a strategy for avoiding the use of hydrogen as a safe gas. Faraday Discussions, 2015, 182, 241-255.	1.6	57
8	White Light Emission from Planar Remote Phosphor Based on NHC Cycloplatinated Complexes. ACS Applied Materials & Interfaces, 2016, 8, 16160-16169.	4.0	53
9	Multi-scale analysis of the diffusion barrier layer of gadolinia-doped ceria in a solid oxide fuel cell operated in a stack for 3000Âh. Journal of Power Sources, 2017, 344, 141-151.	4.0	50
10	The influence of annealing treatments on the properties of Ag:TiO2 nanocomposite films prepared by magnetron sputtering. Applied Surface Science, 2012, 258, 4028-4034.	3.1	49
11	Cold spray deposition of WCâ€“17 and 12Co cermets onto aluminum. Surface and Coatings Technology, 2013, 235, 54-61.	2.2	49
12	High-performing electrolyte-supported symmetrical solid oxide electrolysis cells operating under steam electrolysis and co-electrolysis modes. International Journal of Hydrogen Energy, 2020, 45, 14208-14217.	3.8	48
13	Nanoscale color control of TiO2 films with embedded Au nanoparticles. Materials Letters, 2010, 64, 2624-2626.	1.3	45
14	Development of new decorative coatings based on gold nanoparticles dispersed in an amorphous TiO2 dielectric matrix. Surface and Coatings Technology, 2010, 204, 1569-1575.	2.2	44
15	Functional and optical properties of Au:TiO2 nanocomposite films: The influence of thermal annealing. Applied Surface Science, 2010, 256, 6536-6542.	3.1	43
16	Mesoporous ceramic oxides as humidity sensors: A case study for gadolinium-doped ceria. Sensors and Actuators B: Chemical, 2015, 216, 41-48.	4.0	38
17	Enhanced Performance of Gadolinia-Doped Ceria Diffusion Barrier Layers Fabricated by Pulsed Laser Deposition for Large-Area Solid Oxide Fuel Cells. ACS Applied Energy Materials, 2018, 1, 1955-1964.	2.5	38
18	Study of the HVOF Ni-Based Coatingsâ€™ Corrosion Resistance Applied on Municipal Solid-Waste Incinerators. Journal of Thermal Spray Technology, 2008, 17, 254-262.	1.6	34

#	Article	IF	Citations
19	Infiltrated mesoporous oxygen electrodes for high temperature co-electrolysis of H₂O and CO₂ in solid oxide electrolysis cells. Journal of Materials Chemistry A, 2018, 6, 9699-9707.	5.2	29
20	Life Cycle Assessment of microtubular solid oxide fuel cell based auxiliary power unit systems for recreational vehicles. Journal of Cleaner Production, 2017, 165, 312-322.	4.6	27
21	Optimisation of HVOF thermal spray coatings for their implementation as MSWI superheater protectors. Corrosion Engineering Science and Technology, 2010, 45, 84-93.	0.7	22
22	High-surface-area ordered mesoporous oxides for continuous operation in high temperature energy applications. Journal of Materials Chemistry A, 2014, 2, 3134.	5.2	21
23	Influence of nanostructured ZrO2 additions on the wear resistance of Ni-based alloy coatings deposited by APS process. Wear, 2013, 303, 591-601.	1.5	19
24	A Durable Electrode for Solid Oxide Cells: Mesoporous Ce0.8Sm0.2O1.9 Scaffolds Infiltrated with a Sm0.5Sr0.5CoO3-Î´ Catalyst. Electrochimica Acta, 2017, 235, 646-653.	2.6	18
25	TiO₂ coatings with Au nanoparticles analysed by photothermal IR radiometry. Journal Physics D: Applied Physics, 2012, 45, 105301.	1.3	17
26	Structural and optical studies of Au doped titanium oxide films. Nuclear Instruments & Methods in Physics Research B, 2012, 272, 61-65.	0.6	16
27	5ÂkW SOFC stack via 3D printing manufacturing: An evaluation of potential environmental benefits. Applied Energy, 2021, 291, 116803.	5.1	16
28	Tribological characterization of biocompatible HAp-TiO2 coatings obtained by high velocity oxy-fuel spray. Wear, 2013, 305, 8-13.	1.5	15
29	Co-electrolysis of steam and carbon dioxide in large area solid oxide cells based on infiltrated mesoporous oxygen electrodes. Journal of Power Sources, 2020, 478, 228774.	4.0	15
30	Tribological characterization of TiO 2 /Au decorative thin films obtained by PVD magnetron sputtering technology. Wear, 2015, 330-331, 419-428.	1.5	13
31	Synthesis and characterization of robust, mesoporous electrodes for solid oxide fuel cells. Journal of Materials Chemistry A, 2016, 4, 7650-7657.	5.2	13
32	Towards a high fuel utilization and low degradation of micro-tubular solid oxide fuel cells. International Journal of Hydrogen Energy, 2017, 42, 13889-13901.	3.8	12
33	Improved mesostructured oxygen electrodes for highly performing solid oxide cells for co-electrolysis of steam and carbon dioxide. Journal of Materials Chemistry A, 2019, 7, 27458-27468.	5.2	11
34	Degradation Studies and Sr Diffusion Behaviour in Anode Supported Cell after 3,000 h SOFC Short Stack Testing. ECS Transactions, 2015, 68, 1803-1813.	0.3	10
35	Functional colored ceramic coatings obtained by thermal spray for decorative applications. Journal of the European Ceramic Society, 2012, 32, 3685-3692.	2.8	9
36	Surface Plasmon Resonance Effect on the Optical Properties of TiO₂ Doped by Noble Metals Nanoparticles. Journal of Nano Research, 0, 18-19, 177-185.	0.8	8

#	Article	IF	Citations
37	Reversible fuel electrode supported solid oxide cells fabricated by aqueous multilayered tape casting. JPhys Energy, 2021, 3, 024002.	2.3	8
38	Structure and Properties of Silver Clusters Implanted in PET by PVD Sputtering for Active Packaging Applications. Journal of Nano Research, 0, 18-19, 105-116.	0.8	7
39	Synthesis of mesoporous nanocomposites for their application in solid oxide electrolysers cells: microstructural and electrochemical characterization. Faraday Discussions, 2015, 182, 423-435.	1.6	7
40	Erosion corrosion properties of HVOF coatings for municipal solid waste incinerator protection. Corrosion Engineering Science and Technology, 2008, 43, 38-45.	0.7	6
41	Understanding longitudinal degradation mechanisms of large-area micro-tubular solid oxide fuel cells. Electrochimica Acta, 2018, 265, 232-243.	2.6	5
42	Tailoring the Transport Properties of Mesoporous Doped Cerium Oxide for Energy Applications. Journal of Physical Chemistry C, 2021, 125, 16451-16463.	1.5	5
43	Hybrid-3D printing of symmetric solid oxide cells by inkjet printing and robocasting. Additive Manufacturing, 2022, 51, 102636.	1.7	5
44	Treatment of cotton with an alkaline Bacillus spp cellulase: Activity towards crystalline cellulose. Biotechnology Journal, 2012, 7, 275-283.	1.8	4
45	Nanocomposite Thin Films Resulting from Au Nanoclusters Dispersed in Titanium Oxide Dielectric Matrixes: the Surface Plasmon Resonance Effect. , 2011, , .		3
46	Modulated IR Radiometry Applied to Study $$ext{ TiO}_{2}$$ Coatings with Gold Nanocluster Inclusions. International Journal of Thermophysics, 2013, 34, 1597-1605.	1.0	3
47	WhatEELS. A python-based interactive software solution for ELNES analysis combining clustering and NLLS. Ultramicroscopy, 2022, 232, 113403.	0.8	3
48	Solid Oxide Cell Electrode Nanocomposites Fabricated by Inkjet Printing Infiltration of Ceria Scaffolds. Nanomaterials, 2021, 11, 3435.	1.9	3