

Gerard Delette

List of Publications by Year in descending order

Source: <https://exaly.com/author-pdf/708102/publications.pdf>

Version: 2024-02-01

47
papers

1,430
citations

279798

23
h-index

330143

37
g-index

49
all docs

49
docs citations

49
times ranked

1312
citing authors

#	ARTICLE	IF	CITATIONS
1	A numerical tool to estimate SOFC mechanical degradation: Case of the planar cell configuration. Journal of the European Ceramic Society, 2008, 28, 1857-1869.	5.7	117
2	Modelling of solid oxide steam electrolyser: Impact of the operating conditions on hydrogen production. Journal of Power Sources, 2011, 196, 2080-2093.	7.8	106
3	Characterisation of Solid Oxide Fuel Cell Ni-8YSZ substrate by synchrotron X-ray nano-tomography: from 3D reconstruction to microstructure quantification. Journal of Power Sources, 2012, 198, 182-189.	7.8	103
4	Solid Oxide Fuel Cells damage mechanisms due to Ni-YSZ re-oxidation: Case of the Anode Supported Cell. Journal of Power Sources, 2009, 192, 344-352.	7.8	80
5	3D phase mapping of solid oxide fuel cell YSZ/Ni cermet at the nanoscale by holographic X-ray nanotomography. Journal of Power Sources, 2013, 243, 841-849.	7.8	68
6	Impact of "redox" cycles on performances of solid oxide fuel cells: Case of the electrolyte supported cells. Journal of Power Sources, 2010, 195, 2747-2753.	7.8	67
7	Discrete Element Simulations of the Compaction of Aggregated Ceramic Powders. Journal of the American Ceramic Society, 2006, 89, 3379-3387.	3.8	63
8	Degradation study by 3D reconstruction of a nickel-yttria stabilized zirconia cathode after high temperature steam electrolysis operation. Journal of Power Sources, 2014, 269, 927-936.	7.8	62
9	Compaction of aggregated ceramic powders: From contact laws to fracture and yield surfaces. Powder Technology, 2010, 198, 240-250.	4.2	58
10	Stochastic geometrical modeling of solid oxide cells electrodes validated on 3D reconstructions. Computational Materials Science, 2018, 143, 262-276.	3.0	56
11	Quantitative microstructure characterization of a Ni-YSZ bi-layer coupled with simulated electrode polarisation. Journal of Power Sources, 2014, 256, 394-403.	7.8	48
12	Strength of Highly Porous Ceramic Electrodes. Journal of the American Ceramic Society, 2011, 94, 3500-3508.	3.8	45
13	3D chemical imaging based on a third-generation synchrotron source. TrAC - Trends in Analytical Chemistry, 2010, 29, 518-527.	11.4	44
14	Creep behaviour of porous SOFC electrodes: Measurement and application to Ni-8YSZ cermets. Journal of the European Ceramic Society, 2011, 31, 1741-1752.	5.7	44
15	Micro modelling of solid oxide electrolysis cell: From performance to durability. International Journal of Hydrogen Energy, 2013, 38, 6917-6929.	7.1	42
16	Thermo-elastic properties of SOFC/SOEC electrode materials determined from three-dimensional microstructural reconstructions. International Journal of Hydrogen Energy, 2013, 38, 12379-12391.	7.1	41
17	Elasticity and strength of partially sintered ceramics. Journal of the Mechanics and Physics of Solids, 2010, 58, 829-842.	4.8	40
18	Microstructure of porous composite electrodes generated by the discrete element method. Journal of Power Sources, 2011, 196, 2046-2054.	7.8	39

#	ARTICLE	IF	CITATIONS
19	Operating maps of high temperature H ₂ O electrolysis and H ₂ O+CO ₂ co-electrolysis in solid oxide cells. International Journal of Hydrogen Energy, 2016, 41, 17233-17246.	7.1	33
20	Microstructural correlations for specific surface area and triple phase boundary length for composite electrodes of solid oxide cells. Journal of Power Sources, 2019, 412, 736-748.	7.8	31
21	Impact of cell design and operating conditions on the performances of SOFC fuelled with methane. Journal of Power Sources, 2008, 177, 355-368.	7.8	29
22	Multi-scale 3D imaging of absorbing porous materials for solid oxide fuel cells. Journal of Materials Science, 2014, 49, 5626-5634.	3.7	28
23	Green strength of binder-free ceramics. Journal of the European Ceramic Society, 2013, 33, 975-984.	5.7	25
24	Reaction Mechanism and Impact of Microstructure on Performances for the LSCF/CGO Composite Electrode in Solid Oxide Cells. Fuel Cells, 2019, 19, 429-444.	2.4	21
25	An estimation of ceramic fracture at singularities by a statistical approach. Journal of the European Ceramic Society, 2008, 28, 1-13.	5.7	17
26	Degradation Study of the La _{0.6} Sr _{0.4} Co _{0.2} Fe _{0.8} O ₃ Solid Oxide Electrolysis Cell (SOEC) Anode after High Temperature Electrolysis Operation. ECS Transactions, 2013, 57, 3177-3187.	0.5	15
27	Effect of residual stresses on the propagation of interface cracks between dissimilar brittle materials: Contribution of two and three-dimensional analyses. European Journal of Mechanics, A/Solids, 2012, 35, 97-110.	3.7	14
28	Effect of cobalt addition on the magneto-crystalline anisotropy parameter of sintered NiZn ferrites evaluated from magnetization curves. Journal of Magnetism and Magnetic Materials, 2019, 473, 92-98.	2.3	12
29	Measurement of the fracture energy at the interface between porous cathode layer and electrolyte in planar solid oxide fuel cells. Scripta Materialia, 2008, 59, 31-34.	5.2	10
30	Closed-Circuit Versus Open-Circuit Characterization of Hard Magnets. IEEE Transactions on Magnetics, 2019, 55, 1-5.	2.1	8
31	Amount of iodine responsible for I-SCC of Zircaloy-4 in PCI-conditions: recoil-implanted and thermally released iodine. Nuclear Engineering and Design, 1998, 186, 307-322.	1.7	7
32	A New Stack to Validate Technical Solutions and Numerical Simulations. Fuel Cells, 2012, 12, 239-247.	2.4	7
33	Soft Ferrite Material by Powder Injection Molding Process for Power Electronics. IEEE Transactions on Magnetics, 2020, 56, 1-7.	2.1	6
34	Revisiting the demagnetization curves of Dy-diffused Nd-Fe-B sintered magnets. Journal of Magnetism and Magnetic Materials, 2021, 520, 167280.	2.3	6
35	Thermal Management Design of Transformers for Dual Active Bridge Power Converters. IEEE Transactions on Power Electronics, 2022, 37, 8301-8309.	7.9	6
36	A Numerical Approach to Predict the SOFC Fracture: The Case of an Anode Supported Cell. ECS Transactions, 2007, 7, 677-686.	0.5	5

