Giorgio Pia

List of Publications by Year
in descending order

61 papers	1,221 citations	331259 21 h-index	377514 34 g-index
61 all docs	61 docs citations	61 times ranked	927 citing authors

#	Article	IF	Citations
1	Hardening of Nanoporous Au Induced by Exposure to Different Gaseous Environments. Materials, 2022, 15, 2718.	1.3	0
2	Estimation of Nanoporous Au Youngâ€™s Modulus from Serial Block Face-SEM 3D-Characterisation. Materials, 2022, 15, 3644.	1.3	0
3	Stable CsPbBr3 Nanocrystalsâ€"Decorated Nanoporous Gold for Optoelectronic Applications. Crystals, 2022, 12, 863.	1.0	1
4	Weathering of earth-painted surfaces: Environmental monitoring and artificial aging. Construction and Building Materials, 2022, 344, 128193.	3.2	3
5	Coupling of mechanical deformation and reaction in mechanochemical transformations. Physical Chemistry Chemical Physics, 2021, 23, 229-245.	1.3	15
6	Fabrication of Nanoporous Al by Vapor-Phase Dealloying: Morphology Features, Mechanical Properties and Model Predictions. Applied Sciences (Switzerland), 2021, 11, 6639.	1.3	10
7	Morphology influence on elastic deformation behaviour of high porous ceramics. Experimental and phenomenological model predictions. Ceramics International, 2021, 47, 23368-23375.	2.3	3
8	Statistical study on the effects of heterogeneous deformation and grain boundary character on hydrogen-induced crack initiation and propagation in twining-induced plasticity steels. Corrosion Science, 2021, 192, 109796.	3.0	15
9	Porosity effects on water vapour permeability in earthen materials: Experimental evidence and modelling description. Journal of Building Engineering, 2020, 27, 100987.	1.6	4
10	Grain boundary design based on fractal theory to improve intergranular corrosion resistance of TWIP steels. Materials and Design, 2020, 185, 108253.	3.3	21
11	Milling Dynamics and Propagation of Mechanically Activated Self-Sustaining Reactions. Advances in Materials Science and Engineering, 2020, 2020, 1-10.	1.0	1
12	Solid Particle Erosion of a Limestone Target Surface under Controlled Conditions. Advances in Materials Science and Engineering, 2020, 2020, 1-8.	1.0	2
13	From nature geometry to material design: Advanced fractal nature analysis for predicting experimental elastic properties. Ceramics International, 2020, 46, 23947-23955.	2.3	6
14	Microscopic kinetic information from Ag oxalate mechanochemistry in ball drop experiments. Materials Letters, 2020, 267, 127525.	1.3	5
15	A mapping approach to pattern formation in the early stages of mechanical alloying. Philosophical Magazine Letters, 2019, 99, 192-198.	0.5	2
16	Coarsening of nanoporous Au during catalytic CO oxidation. Materials Letters, 2019, 253, 159-161.	1.3	2
17	Advances in Modelling of Heat and Mass Transfer in Porous Materials. Advances in Materials Science and Engineering, 2019, 2019, 1-2.	1.0	3
18	Fractal and multifractal analysis of fracture surfaces caused by hydrogen embrittlement in high-Mn twinning/transformation-induced plasticity steels. Applied Surface Science, 2019, 470, 870-881.	3.1	25

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19	Stiffening of nanoporous Au induced by water physisorption. Materials Letters, 2018, 220, 116-118.	1.3	0
20	Bending strength of porous ceramics tiles: Bounds and estimates of effective properties of an Intermingled Fractal Unitsâ€™ model. Ceramics International, 2018, 44, 10241-10248.	2.3	9
21	Nanoporous Au foams: Variation of effective Young's modulus with ligament size. Scripta Materialia, 2018, 144, 22-26.	2.6	20
22	Ag surface segregation in nanoporous Au catalysts during CO oxidation. Scientific Reports, 2018, 8, 15208.	1.6	16
23	Water Absorption Properties of Cement Pastes: Experimental and Modelling Inspections. Advances in Materials Science and Engineering, 2018, 2018, 1-9.	1.0	9
24	Microstructural evolution in porous ceramics subjected to freezing-thawing cycles: Modelling experimental outcomes. Ceramics International, 2018, 44, 16992-16998.	2.3	4
25	Thermal behaviour of clay ceramics obtained by Spark Plasma Sintering: Is fractal geometry a new possible road to design porous structures?. Ceramics International, 2018, 44, 21710-21716.	2.3	6
26	Grain size reduction in Cu powders subjected to ball milling and ball drop experiments. Materials Letters, 2018, 232, 33-35.	1.3	4
27	Heat transfer in high porous alumina: Experimental data interpretation by different modelling approaches. Ceramics International, 2017, 43, 9184-9190.	2.3	13
28	Hardening of nanoporous Au foams induced by surface chemistry. Materials Letters, 2017, 196, 332-334.	1.3	4
29	Coatingâ€™s influence on water vapour permeability of porous stones typically used in cultural heritage of Mediterranean area: Experimental tests and model controlling procedure. Progress in Organic Coatings, 2017, 102, 239-246.	1.9	12
30	Differential damage in the semi-confined Munazio Ireneo cubicle in Cagliari (Sardinia): a correlation between damage and microclimate. Environmental Earth Sciences, 2017, 76, 1.	1.3	3
31	Gyroidal structures as approximants to nanoporous metal foams: clues from mechanical properties. Journal of Materials Science, 2017, 52, 1106-1122.	1.7	22
32	Pore Size Distribution Influence on Suction Properties of Calcareous Stones in Cultural Heritage: Experimental Data and Model Predictions. Advances in Materials Science and Engineering, 2016, 2016, 1-10.	1.0	4
33	High porous yttria-stabilized zirconia with aligned pore channels: Morphology directionality influence on heat transfer. Ceramics International, 2016, 42, 11674-11681.	2.3	23
34	Fluid flow in complex porous media: Experimental data and IFU model predictions for water vapour permeability. Journal of Natural Gas Science and Engineering, 2016, 35, 283-290.	2.1	24
35	Thermally and catalytically induced coarsening of nanoporous Au. Materials Letters, 2016, 183, 114-116.	1.3	11
36	Pore size distribution and porosity influence on Sorptivity of ceramic tiles: From experimental data to fractal modelling. Ceramics International, 2016, 42, 9583-9590.	2.3	30

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37	Thermal conductivity of porous stones treated with UV light-cured hybrid organicâ€“inorganic methacrylic-based coating. Experimental and fractal modeling procedure. Progress in Organic Coatings, 2016, 94, 105-115.	1.9	21
38	Thermal properties of porous stones in cultural heritage: Experimental findings and predictions using an intermingled fractal units model. Energy and Buildings, 2016, 118, 232-239.	3.1	14
39	Porosity and pore size distribution influence on thermal conductivity of yttria-stabilized zirconia: Experimental findings and model predictions. Ceramics International, 2016, 42, 5802-5809.	2.3	52
40	Application of a Novel Method for a Simulation of Conductivity of a Building Material in a Climatic Chamber. Energy Procedia, 2015, 81, 995-1004.	1.8	2
41	Mechanical Properties of Nanoporous Au: From Empirical Evidence to Phenomenological Modeling. Metals, 2015, 5, 1665-1694.	1.0	10
42	Porous ceramic materials by pore-forming agent method: An intermingled fractal units analysis and procedure to predict thermal conductivity. Ceramics International, 2015, 41, 6350-6357.	2.3	50
43	Mechanical behavior of nanoporous Au with fine ligaments. Chemical Physics Letters, 2015, 635, 35-39.	1.2	7
44	Coarsening of nanoporous Au: Relationship between structure and mechanical properties. Acta Materialia, 2015, 99, 29-38.	3.8	39
45	On the elastic deformation properties of porous ceramic materials obtained by pore-forming agent method. Ceramics International, 2015, 41, 11097-11105.	2.3	45
46	A phenomenological approach to yield strength in nanoporous metal foams. Scripta Materialia, 2015, 103, 26-29.	2.6	8
47	Nanoporous Au: Statistical analysis of morphological features and evaluation of their influence on the elastic deformation behavior by phenomenological modeling. Acta Materialia, 2015, 85, 250-260.	3.8	37
48	Case studies on the influence of microstructure voids on thermal conductivity in fractal porous media. Case Studies in Thermal Engineering, 2014, 2, 8-13.	2.8	32
49	An intermingled fractal units model to evaluate pore size distribution influence on thermal conductivity values in porous materials. Applied Thermal Engineering, 2014, 65, 330-336.	3.0	93
50	Kinetics of nanoporous Au formation by chemical dealloying. Scripta Materialia, 2014, 76, 57-60.	2.6	15
51	An intermingled fractal units model and method to predict permeability in porous rock. International Journal of Engineering Science, 2014, 75, 31-39.	2.7	73
52	Predicting capillary absorption of porous stones by a procedure based on anintermingled fractal units model. International Journal of Engineering Science, 2014, 82, 196-204.	2.7	41
53	Surface stresses and Youngâ€™s modulus in nanoporous Au foams. Scripta Materialia, 2014, 84-85, 55-58.	2.6	7
54	On the elastic deformation behavior of nanoporous metal foams. Scripta Materialia, 2013, 69, 781-784.	2.6	31

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55	A geometrical fractal model for the porosity and thermal conductivity of insulating concrete. Construction and Building Materials, 2013, 44, 551-556.	3.2	72
56	Intermingled fractal units model and electrical equivalence fractal approach for prediction of thermal conductivity of porous materials. Applied Thermal Engineering, 2013, 61, 186-192.	3.0	46
57	A geometrical fractal model for the porosity and permeability of hydraulic cement pastes. Construction and Building Materials, 2010, 24, 1843-1847.	3.2	67
58	Fractal modelling of mediumâ€"high porosity SiC ceramics. Journal of the European Ceramic Society, 2008, 28, 2809-2814.	2.8	37
59	A fractal model of the porous microstructure of earth-based materials. Construction and Building Materials, 2008, 22, 1607-1613.	3.2	48
60	Surface wear resistance of chemically or thermally stabilized earth-based materials. Materials and Structures/Materiaux Et Constructions, 2008, 41, 751-758.	1.3	27
61	A fuzzy model for classifying mechanical properties of vesicular basalt used in prehistoric buildings. Materials Characterization, 2008, 59, 606-612.	1.9	15