

Andrea Nicolini

List of Publications by Year in descending order

Source: <https://exaly.com/author-pdf/9108610/publications.pdf>

Version: 2024-02-01

100
papers

2,505
citations

159525

30
h-index

223716

46
g-index

100
all docs

100
docs citations

100
times ranked

2123
citing authors

#	ARTICLE	IF	CITATIONS
1	Analysis of retro-reflective surfaces for urban heat island mitigation: A new analytical model. Applied Energy, 2014, 114, 621-631.	5.1	162
2	Retroreflective façades for urban heat island mitigation: Experimental investigation and energy evaluations. Applied Energy, 2015, 145, 8-20.	5.1	152
3	Lignin as Co-product of Second Generation Bioethanol Production from Ligno-cellulosic Biomass. Energy Procedia, 2014, 45, 52-60.	1.8	99
4	Experimental evaluation of urban heat island mitigation potential of retro-reflective pavement in urban canyons. Energy and Buildings, 2016, 126, 340-352.	3.1	92
5	Experiments on methane hydrates formation in seabed deposits and gas recovery adopting carbon dioxide replacement strategies. Applied Thermal Engineering, 2019, 148, 371-381.	3.0	83
6	Hydrate-based removal of carbon dioxide and hydrogen sulphide from biogas mixtures: Experimental investigation and energy evaluations. Biomass and Bioenergy, 2014, 70, 330-338.	2.9	71
7	Production of Bioethanol in a Second Generation Prototype from Pine Wood Chips. Energy Procedia, 2014, 45, 42-51.	1.8	66
8	Clathrate Hydrates for Thermal Energy Storage in Buildings: Overview of Proper Hydrate-Forming Compounds. Sustainability, 2014, 6, 6815-6829.	1.6	63
9	Simulation of CO ₂ storage and methane gas production from gas hydrates in a large scale laboratory reactor. Journal of Petroleum Science and Engineering, 2016, 147, 515-527.	2.1	58
10	Effect of dynamic characteristics of building envelope on thermal-energy performance in winter conditions: In field experiment. Energy and Buildings, 2014, 80, 218-230.	3.1	57
11	Integrated improvement of occupants' comfort in urban areas during outdoor events. Building and Environment, 2015, 93, 285-292.	3.0	55
12	Environmental Impact of Industrial Prefabricated Buildings: Carbon and Energy Footprint Analysis Based on an LCA Approach. Energy Procedia, 2014, 61, 2841-2844.	1.8	52
13	Optic-energy performance improvement of exterior paints for buildings. Energy and Buildings, 2017, 139, 690-701.	3.1	51
14	A carbon footprint and energy consumption assessment methodology for UHI-affected lighting systems in built areas. Energy and Buildings, 2016, 114, 96-103.	3.1	50
15	Development of Clay Tile Coatings for Steep-Sloped Cool Roofs. Energies, 2013, 6, 3637-3653.	1.6	49
16	Experimental Investigation on CO ₂ Methanation Process for Solar Energy Storage Compared to CO ₂ -Based Methanol Synthesis. Energies, 2017, 10, 855.	1.6	49
17	An energy-balanced analytic model for urban heat canyons: comparison with experimental data. Advances in Building Energy Research, 2013, 7, 222-234.	1.1	47
18	Carbon and energy footprint of the hydrate-based biogas upgrading process integrated with CO ₂ valorization. Science of the Total Environment, 2018, 615, 404-411.	3.9	47

#	ARTICLE	IF	CITATIONS
19	Experimental study on natural gas hydrate exploitation: Optimization of methane recovery, carbon dioxide storage and deposit structure preservation. <i>Journal of Petroleum Science and Engineering</i> , 2019, 177, 594-601.	2.1	47
20	Experimental Analysis of the Effect of Geometry and Façade Materials on Urban Districts' Equivalent Albedo. <i>Sustainability</i> , 2017, 9, 1245.	1.6	44
21	Small-Scale Compressed Air Energy Storage Application for Renewable Energy Integration in a Listed Building. <i>Energies</i> , 2018, 11, 1921.	1.6	44
22	Experimental investigations on scaled-up methane hydrate production with surfactant promotion: Energy considerations. <i>Journal of Petroleum Science and Engineering</i> , 2014, 120, 187-193.	2.1	40
23	Gas hydrate formation as a strategy for CH ₄ /CO ₂ separation: Experimental study on gaseous mixtures produced via Sabatier reaction. <i>Journal of Natural Gas Science and Engineering</i> , 2019, 71, 102985.	2.1	38
24	Water Salinity as Potential Aid for Improving the Carbon Dioxide Replacement Process' Effectiveness in Natural Gas Hydrate Reservoirs. <i>Processes</i> , 2020, 8, 1298.	1.3	38
25	An Integrated HBIM Simulation Approach for Energy Retrofit of Historical Buildings Implemented in a Case Study of a Medieval Fortress in Italy. <i>Energies</i> , 2020, 13, 2601.	1.6	38
26	Comparative Analysis of Monitoring Devices for Particulate Content in Exhaust Gases. <i>Sustainability</i> , 2014, 6, 4287-4307.	1.6	36
27	Experimental Investigation on the Effect of Phase Change Materials on Compressed Air Expansion in CAES Plants. <i>Sustainability</i> , 2015, 7, 9773-9786.	1.6	36
28	Characterization of Various Biomass Feedstock Suitable for Small-Scale Energy Plants as Preliminary Activity of Biocheaper Project. <i>Sustainability</i> , 2020, 12, 6678.	1.6	35
29	Energy and Environmental Analysis of Membrane-Based CH ₄ -CO ₂ Replacement Processes in Natural Gas Hydrates. <i>Energies</i> , 2019, 12, 850.	1.6	32
30	Beneficial effects of retroreflective materials in urban canyons: results from seasonal monitoring campaign. <i>Journal of Physics: Conference Series</i> , 2015, 655, 012012.	0.3	31
31	An experimental investigation to improve the hydrogen production by water photoelectrolysis when cyanin-chloride is used as sensitizer. <i>Applied Energy</i> , 2012, 97, 763-770.	5.1	30
32	Benefits and Challenges of Mechanical Spring Systems for Energy Storage Applications. <i>Energy Procedia</i> , 2015, 82, 805-810.	1.8	30
33	Effects of aging on retro-reflective materials for building applications. <i>Energy and Buildings</i> , 2018, 179, 121-132.	3.1	30
34	Cool roofs as a strategy to tackle global warming: economical and technical opportunities. <i>Advances in Building Energy Research</i> , 2013, 7, 254-268.	1.1	28
35	Evaluation of the Effects of Mitigation on Methane and Ammonia Production by Using <i>Origanum vulgare</i> L. and <i>Rosmarinus officinalis</i> L. Essential Oils on in Vitro Rumen Fermentation Systems. <i>Sustainability</i> , 2015, 7, 12856-12869.	1.6	27
36	An inverse approach to identify selective angular properties of retro-reflective materials for urban heat island mitigation. <i>Solar Energy</i> , 2018, 176, 194-210.	2.9	27

#	ARTICLE	IF	CITATIONS
37	Energy from poultry waste: An Aspen Plus-based approach to the thermo-chemical processes. Waste Management, 2018, 73, 496-503.	3.7	26
38	Optimized retro-reflective tiles for exterior building element. Sustainable Cities and Society, 2018, 37, 146-153.	5.1	25
39	Towards Zero Energy Stadiums: The Case Study of the Dacia Arena in Udine, Italy. Energies, 2018, 11, 2396.	1.6	24
40	A Cylindrical Small Size Molten Carbonate Fuel Cell: Experimental Investigation on Materials and Improving Performance Solutions. Fuel Cells, 2009, 9, 170-177.	1.5	23
41	Multi-Objective Optimization Models to Design a Responsive Built Environment: A Synthetic Review. Energies, 2022, 15, 486.	1.6	23
42	A New Geometry High Performance Small Power MCFC. Journal of Fuel Cell Science and Technology, 2004, 1, 25-29.	0.8	22
43	Experimental Investigation on a Novel Electrolyte Configuration for Cylindrical Molten Carbonate Fuel Cells. Journal of Fuel Cell Science and Technology, 2011, 8, .	0.8	22
44	Evaluation and Optimization of an Innovative Low-Cost Photovoltaic Solar Concentrator. International Journal of Photoenergy, 2011, 2011, 1-10.	1.4	22
45	Ethanol reforming for supplying molten carbonate fuel cells. International Journal of Low-Carbon Technologies, 2013, 8, 140-145.	1.2	22
46	Pollutant emissions of a biomass gasifier inside a multifuel energy plant. Atmospheric Pollution Research, 2019, 10, 2000-2009.	1.8	21
47	Exploiting selective angular properties of retro-reflective coatings to mitigate solar irradiation within the urban canyon. Solar Energy, 2019, 189, 74-85.	2.9	20
48	Experimental Tests and Modeling on a Combined Heat and Power Biomass Plant. Energies, 2019, 12, 2615.	1.6	20
49	Optic-energy and visual comfort analysis of retro-reflective building plasters. Building and Environment, 2020, 174, 106781.	3.0	20
50	Effect of Double-Step Steam Explosion Pretreatment in Bioethanol Production from Softwood. Applied Biochemistry and Biotechnology, 2014, 174, 156-167.	1.4	19
51	A simple model to predict train-induced vibration: theoretical formulation and experimental validation. Environmental Impact Assessment Review, 2003, 23, 305-322.	4.4	17
52	Acid-catalyzed steam explosion for high enzymatic saccharification and low inhibitor release from lignocellulosic cardoon stalks. Biochemical Engineering Journal, 2021, 174, 108121.	1.8	17
53	Investigating alternative development strategies for sport arenas based on active and passive systems. Journal of Building Engineering, 2020, 31, 101340.	1.6	13
54	Outdoor thermal comfort improvement with advanced solar awnings: Subjective and objective survey. Building and Environment, 2022, 215, 108967.	3.0	13

#	ARTICLE	IF	CITATIONS
55	Lignocellulosic Ethanol Production from the Recovery of Stranded Driftwood Residues. <i>Energies</i> , 2016, 9, 634.	1.6	12
56	Production of Carbohydrates from Cardoon Pre-Treated by Acid-Catalyzed Steam Explosion and Enzymatic Hydrolysis. <i>Energies</i> , 2019, 12, 4288.	1.6	12
57	Development and validation of a Monte Carlo-based numerical model for solar analyses in urban canyon configurations. <i>Building and Environment</i> , 2020, 170, 106638.	3.0	12
58	Outdoor thermal comfort improvements due to innovative solar awning solutions: An experimental campaign. <i>Energy and Buildings</i> , 2020, 225, 110341.	3.1	11
59	Experimental assessment of the combined effect of retroreflective façades and pavement in urban canyons. <i>IOP Conference Series: Materials Science and Engineering</i> , 2019, 609, 072004.	0.3	11
60	Small Size Cylindrical Molten Carbonate Fuel Cells and Future Approaches for Decreasing Working Temperature. <i>ECS Transactions</i> , 2008, 12, 455-466.	0.3	10
61	National Water Footprint: Toward a Comprehensive Approach for the Evaluation of the Sustainability of Water Use in Italy. <i>Sustainability</i> , 2017, 9, 1341.	1.6	10
62	Effects of retro-reflective and angular-selective retro-reflective materials on solar energy in urban canyons. <i>Solar Energy</i> , 2020, 209, 662-673.	2.9	10
63	Best Practices for Recovering Rural Abandoned Towers through the Installation of Small-Scale Biogas Plants. <i>Energies</i> , 2017, 10, 1224.	1.6	9
64	Fractionation of <i>Cynara cardunculus</i> L. by Acidified Organosolv Treatment for the Extraction of Highly Digestible Cellulose and Technical Lignin. <i>Sustainability</i> , 2021, 13, 8714.	1.6	9
65	The Effect of the Substrate on the Optic Performance of Retro-Reflective Coatings: An In-Lab Investigation. <i>Energies</i> , 2021, 14, 2921.	1.6	8
66	Sustainable New Brick and Thermo-Acoustic Insulation Panel from Mineralization of Stranded Driftwood Residues. <i>Energies</i> , 2016, 9, 619.	1.6	6
67	Driftwood Biomass in Italy: Estimation and Characterization. <i>Sustainability</i> , 2016, 8, 725.	1.6	6
68	A Comparative Study on Opto-Thermal Properties of Natural Clay Bricks Incorporating Dredged Sediments. <i>Energies</i> , 2021, 14, 4575.	1.6	6
69	An Innovative Configuration for CO ₂ Capture by High Temperature Fuel Cells. <i>Sustainability</i> , 2014, 6, 6687-6695.	1.6	5
70	Electric Vehicles for Postal Service Equipped with a Kinetic Energy Recovery System. <i>International Journal of Green Energy</i> , 2015, 12, 485-492.	2.1	5
71	Experimental Analysis and Process Modeling of Carbon Dioxide Removal Using Tuff. <i>Sustainability</i> , 2016, 8, 1258.	1.6	5
72	Architectural and energy refurbishment of the headquarter of the University of Teramo. <i>Energy Procedia</i> , 2017, 126, 565-572.	1.8	5

#	ARTICLE	IF	CITATIONS
73	A normalization procedure to compare retro-reflective and traditional diffusive materials in terms of UHI mitigation potential. AIP Conference Proceedings, 2019, , .	0.3	5
74	Acid-Assisted Organosolv Pre-Treatment and Enzymatic Hydrolysis of <i>Cynara cardunculus</i> L. for Glucose Production. <i>Energies</i> , 2020, 13, 4195.	1.6	5
75	Life Cycle Assessment and Energy Balance of a Polygeneration Plant Fed with Lignocellulosic Biomass of <i>Cynara cardunculus</i> L.. <i>Energies</i> , 2022, 15, 2397.	1.6	5
76	High Solid and Low Cellulase Enzymatic Hydrolysis of Cardoon Stems Pretreated by Acidified β -Valerolactone/Water Solution. <i>Energies</i> , 2022, 15, 2600.	1.6	5
77	Triacyl Glycerols from Yeast-Catalyzed Batch and Fed-Batch Bioconversion of Hydrolyzed Lignocellulose from Cardoon Stalks. <i>Fermentation</i> , 2021, 7, 315.	1.4	4
78	Energy Enhancement of the Residues from the Cardoon Seeds Milling: Preliminary Experimentation in a Small Size Biogas Plant. <i>Energy Procedia</i> , 2016, 101, 440-447.	1.8	3
79	Insulating Organic Material as a Protection System against Late Frost Damages on the Vine Shoots. <i>Sustainability</i> , 2020, 12, 6279.	1.6	3
80	High-reflective Mulching Membrane for a Sustainable Development: Monitoring Campaign. <i>E3S Web of Conferences</i> , 2020, 197, 08012.	0.2	3
81	Optimized Cool Coatings as a Strategy to Improve Urban Equivalent Albedo at Various Latitudes. <i>Atmosphere</i> , 2021, 12, 1335.	1.0	3
82	Psychoacoustic analysis of squeaking and rattling noises inside vehicle cabins. <i>Noise Control Engineering Journal</i> , 2010, 58, 441.	0.2	2
83	A NATURAL ORGANIC COATING TO CONTROL AND MINIMIZE LATE FROST DAMAGES ON WINE SHOOTS. <i>Heat Transfer Research</i> , 2020, 51, 1625-1635.	0.9	2
84	Glass beads retro-reflective coating for building application: albedo assessment in urban canyon configurations. <i>Journal of Physics: Conference Series</i> , 2022, 2177, 012033.	0.3	2
85	The IRAIT Project Infrared Astronomy from Antarctica. <i>EAS Publications Series</i> , 2005, 14, 181-186.	0.3	1
86	Noise Assessment of Bioethanol Fuelled Hybrid and Electric Postal Vehicles Equipped With a Kinetic Energy Recovery System. , 2012, , .		1
87	Energetic Analysis of Solar-Supplied Processes for Methane, Biogas and Wood Chip Production. <i>Advanced Materials Research</i> , 0, 772, 720-724.	0.3	1
88	An Innovative Tool for Technical, Environmental and Economic Design of Building Energy Plants: A Case Study in Umbria. <i>Energy Procedia</i> , 2015, 82, 652-658.	1.8	1
89	A Brief Overview of Lab - Scale Apparatuses Used in the Recent Years for Experimental Investigations on Gas Hydrates. <i>Key Engineering Materials</i> , 0, 876, 57-66.	0.4	1
90	Life Cycle Assessment of an Innovative Technology against Late Frosts in Vineyard. <i>Sustainability</i> , 2021, 13, 5562.	1.6	1

#	ARTICLE	IF	CITATIONS
91	Influences of a Highly Reflective Mulching Membrane on Heat Propagation throughout the Soil. Sustainability, 2021, 13, 9737.	1.6	1
92	Experimental analysis of the CO ₂ /CH ₄ Replacement Efficiency due to Sodium Chloride Presence in Natural Gas Hydrates Reservoirs. E3S Web of Conferences, 2020, 197, 08008.	0.2	1
93	Control of noise from a fan in a wall gas boiler. Noise Control Engineering Journal, 2006, 54, 41-46.	0.2	0
94	Electromagnetic Transient Effects on Thermal Field for Plane Electrical Conductors. IEEE Transactions on Power Delivery, 2010, 25, 442-447.	2.9	0
95	Noise prediction models for gondola ropeway components. Noise Control Engineering Journal, 2011, 59, 415.	0.2	0
96	Investigation on Thermophysical Properties of Thymic Cell Cultures Exposed to Electromagnetic Fields. Environment and Pollution, 2012, 2, .	0.2	0
97	Performance analysis of a small-size CAES system. AIP Conference Proceedings, 2019, , .	0.3	0
98	Influences of high-reflective mulching membrane coupled with a drip sub-irrigation system on temperature and humidity of the soil. E3S Web of Conferences, 2021, 312, 12006.	0.2	0
99	Injection of CO ₂ /N ₂ gaseous mixtures into gas hydrates to contemporary perform CH ₄ recovery and CO ₂ storage. E3S Web of Conferences, 2021, 312, 08009.	0.2	0
100	Application of a completely organic and bio-degradable sugar-based insulating coating to vine shoots, to prevent late frost damages. E3S Web of Conferences, 2021, 312, 12001.	0.2	0