Athanassios A. Argiriou

List of Publications by Citations

96 papers	3,720 citations	30 h-index	60 g-index
100 ext. papers	4,111 ext. citations	5.1 avg, IF	5.29 L-index

#	Paper	IF	Citations
96	On the impact of urban climate on the energy consumption of buildings. *Solar Energy*, **2001**, 70, 201-216	6.8	584
95	European residential buildings and empirical assessment of the Hellenic building stock, energy consumption, emissions and potential energy savings. *Building and Environment*, **2007**, 42, 1298-1314	6.5	349
94	Infrared thermography for building diagnostics. *Energy and Buildings*, **2002**, 34, 171-183	7	312
93	Energy performance assessment of existing dwellings. *Energy and Buildings*, **2007**, 39, 393-403	7	179
92	Heating energy consumption and resulting environmental impact of European apartment buildings. *Energy and Buildings*, **2005**, 37, 429-442	7	174
91	Building typologies as a tool for assessing the energy performance of residential buildings ΠA case study for the Hellenic building stock. *Energy and Buildings*, **2011**, 43, 3400-3409	7	140
90	Potential for energy conservation in apartment buildings. *Energy and Buildings*, **2000**, 31, 143-154	7	126
89	Comparison of methodologies for tmy generation using 20 years data for Athens, Greece. *Solar Energy*, **1999**, 66, 33-45	6.8	85
88	Data collection and analysis of the building stock and its energy performanceΠAn example for Hellenic buildings. *Energy and Buildings*, **2010**, 42, 1231-1237	7	82
87	Energy conservation and retrofitting potential in Hellenic hotels. *Energy and Buildings*, **1996**, 24, 65-75	7	78
86	Deterioration of European apartment buildings. *Energy and Buildings*, **2005**, 37, 515-527	7	76
85	Energy efficiency of PV panels under real outdoor conditionsΠAn experimental assessment in Athens, Greece. *Renewable Energy*, **2017**, 101, 236-243	8.1	75
84	A neural network controller for hydronic heating systems of solar buildings. *Neural Networks*, **2004**, 17, 427-40	9.1	66
83	On the combination of air velocity and flow measurements in single sided natural ventilation configurations. *Energy and Buildings*, **1996**, 24, 155-165	7	66
82	Mapping the energy performance of hellenic residential buildings from EPC (energy performance certificate) data. *Energy*, **2016**, 98, 284-295	7.9	64
81	Empirical assessment of the Hellenic non-residential building stock, energy consumption, emissions and potential energy savings. *Energy Conversion and Management*, **2007**, 48, 1160-1175	10.6	62
80	Isotopic composition of precipitation in Greece. *Journal of Hydrology*, **2006**, 327, 486-495	6	60

79	Energy conservation in greenhouses with buried pipes. *Energy*, **1996**, 21, 353-360	7.9	60
78	Isotopic modeling of the sub-cloud evaporation effect in precipitation. *Science of the Total Environment*, **2016**, 544, 1059-72	10.2	53
77	Energy consumption and the potential of energy savings in Hellenic office buildings used as bank branches—A case study. *Energy and Buildings*, **2011**, 43, 770-778	7	53
76	Empirical assessment of calculated and actual heating energy use in Hellenic residential buildings. *Applied Energy*, **2016**, 164, 115-132	10.7	52
75	Intelligent control system for reconciliation of the energy savings with comfort in buildings using soft computing techniques. *Energy and Buildings*, **2011**, 43, 66-74	7	52
74	Development of a neural network heating controller for solar buildings. *Neural Networks*, **2000**, 13, 811-20	7.2	52
73	Gridded data set of the stable isotopic composition of precipitation over the eastern and central Mediterranean. *Journal of Geophysical Research*, **2007**, 112,		47
72	Determination of measuring sites for solar irradiance, based on cluster analysis of satellite-derived cloud estimations. *Solar Energy*, **2013**, 97, 1-11	6.8	43
71	Numerical simulation and performance assessment of a low capacity solar assisted absorption heat pump coupled with a sub-floor system. *Solar Energy*, **2005**, 79, 290-301	6.8	43
70	Energy performance of European residential buildings: Energy use, technical and environmental characteristics of the Greek residential sector – energy conservation and CO₂ reduction. *Energy and Buildings*, **2019**, 183, 86-104	7	39
69	Stable isotopic composition of atmospheric water vapor in Patras, Greece: A concentration weighted trajectory approach. *Atmospheric Research*, **2015**, 152, 93-104	5.4	33
68	Energy certification of Hellenic buildings: First findings. *Energy and Buildings*, **2013**, 65, 429-437	7	32
67	EPIQR surveys of apartment buildings in Europe. *Energy and Buildings*, **2000**, 31, 111-128	7	30
66	The impact of the energy performance regulations' updated on the construction technology, economics and energy aspects of new residential buildings: The case of Greece. *Energy and Buildings*, **2017**, 155, 225-237	7	29
65	The sensitivity of numerical forecasts to convective parameterization during the warm period and the use of lightning data as an indicator for convective occurrence. *Atmospheric Research*, **2009**, 94, 704-714	5.4	29
64	Active solar space heating of residential buildings in northern Hellas—a case study. *Energy and Buildings*, **1997**, 26, 215-221	7	29
63	Combined analysis of rainfall and lightning data produced by mesoscale systems in the central and eastern Mediterranean. *Atmospheric Research*, **2007**, 83, 55-63	5.4	29
62	Assessment of energy and natural resources conservation in office buildings using TOBUS. *Energy and Buildings*, **2002**, 34, 135-153	7	29

61	Spatially interpolated time series of δ18O in Eastern Mediterranean precipitation. *Global and Planetary Change*, **2010**, 71, 150-159	4.2	24
60	Detection and correction of inhomogeneities in Greek climate temperature series. *International Journal of Climatology*, **2014**, 34, 3024-3043	3.5	23
59	Storms and Lightning Activity in Greece during the Warm Periods of 2003-06. *Journal of Applied Meteorology and Climatology*, **2008**, 47, 3089-3098	2.7	23
58	On the efficiency of night ventilation techniques for thermostatically controlled buildings. *Solar Energy*, **1996**, 56, 479-483	6.8	22
57	Homogenization of mean monthly temperature time series of Greece. *International Journal of Climatology*, **2013**, 33, 2649-2666	3.5	20
56	Energy policy and an action plan for renewable energy sources (RES) for the Hellenic islands of the North Aegean region. *Energy*, **1999**, 24, 335-350	7.9	19
55	CSHPSS systems in Greece: Test of simulation software and analysis of typical systems. *Solar Energy*, **1997**, 60, 159-170	6.8	17
54	Single-sided ventilation of buildings through shaded large openings. *Energy*, **2002**, 27, 93-115	7.9	17
53	The Relationship of Lightning Activity with Microwave Brightness Temperatures and Spaceborne Radar Reflectivity Profiles in the Central and Eastern Mediterranean. *Journal of Applied Meteorology and Climatology*, **2007**, 46, 1901-1912	2.7	16
52	The Air Quality of a Mediterranean Urban Environment Area and Its Relation to Major Meteorological Parameters. *Water, Air, and Soil Pollution*, **2015**, 226, 1	2.6	15
51	The solar thermal market in Greece-review and perspectives. *Renewable and Sustainable Energy Reviews*, **2003**, 7, 397-418	16.2	15
50	Lightning activity in the Mediterranean: quantification of cyclones contribution and relation to their intensity. *Atmospheric Science Letters*, **2016**, 17, 510-516	2.4	14
49	Stable isotopic signature of precipitation under various synoptic classifications. *Physics and Chemistry of the Earth*, **2010**, 35, 530-535	3	14
48	Periodicity analysis of δ18O in precipitation over Central Europe: Time-frequency considerations of the isotopic 'temperature' effect. *Journal of Hydrology*, **2016**, 534, 150-163	6	13
47	TOBUS - A European method and software for office building refurbishment. *Energy and Buildings*, **2002**, 34, 111-112	7	13
46	On the Methods for the Delimitation of Seasons. *Water, Air and Soil Pollution*, **2004**, 4, 65-74		12
45	Reverse flood routing with the inverted Muskingum storage routing scheme. *Natural Hazards and Earth System Sciences*, **2012**, 12, 217-227	3.9	11
44	The test of the ecohydrological separation hypothesis in a dry zone of the northeastern Tibetan Plateau. *Ecohydrology*, **2019**, 12, e2077	2.5	9

#	Publication		
43	Baselines for Energy Use and Carbon Emission Intensities in Hellenic Nonresidential Buildings. *Energies*, **2020**, 13, 2100	3.1	8
42	An advanced method for classifying atmospheric circulation types based on prototypes connectivity graph. *Atmospheric Research*, **2012**, 118, 180-192	5.4	8
41	Thermal storage efficiencies of two solar saltless water ponds. *Solar Energy*, **2003**, 75, 207-216	6.8	8
40	Urban Sustainability Audits and Ratings of the Built Environment. *Energies*, **2019**, 12, 4243	3.1	8
39	Stable Isotope Composition in Surface Water in the Upper Yellow River in Northwest China. *Water (Switzerland)*, **2019**, 11, 967	3	7
38	Social cost of electricity generation in Greece. *Renewable Energy*, **1997**, 12, 281-289	8.1	7
37	Temporal trends in the stable isotope composition of precipitation: a comparison between the eastern Mediterranean and central Europe. *Theoretical and Applied Climatology*, **2011**, 105, 199-207	3	6
36	Experimental Study of a Earth-to-Air Heat Exchanger Coupled to a Photovoltaic System. *Journal of Solar Energy Engineering, Transactions of the ASME*, **2004**, 126, 620-625	2.3	6
35	Deuterium Excess in Precipitation Reveals Water Vapor Source in the Monsoon Margin Sites in Northwest China. *Water (Switzerland)*, **2020**, 12, 3315	3	5
34	High resolution air temperature climatology for Greece for the period 1971 2000. *Meteorological Applications*, **2017**, 24, 191-205	2.1	4
33	Water Stable Isotopes in an Alpine Setting of the Northeastern Tibetan Plateau. *Water (Switzerland)*, **2019**, 11, 770	3	4
32	Comparing Control Strategies Using Experimental and Simulation Results: Methodology and Application to Heating Control of Passive Solar Buildings. *HVAC and R Research*, **2006**, 12, 715-737		4
31	A Triple Hot-Wire System for Indoor Air Flow Measurements. *Journal of Solar Energy Engineering, Transactions of the ASME*, **1996**, 118, 168-176	2.3	4
30	Energy Use Intensities for Asset Rating of Hellenic Non-Residential Buildings. *Global Journal of Energy Technology Research Updates*, **2018**, 5, 19-36	0	4
29	Benchmarks for Embodied and Operational Energy Assessment of Hellenic Single-Family Houses. *Energies*, **2020**, 13, 4384	3.1	4
28	Stable Hydrogen and Oxygen Isotope Characteristics of Bottled Water in China: A Consideration of Water Source. *Water (Switzerland)*, **2019**, 11, 1065	3	2
27	The sensitivity of warm period precipitation forecasts to various modifications of the Kain-Fritsch Convective Parameterization scheme. *Natural Hazards and Earth System Sciences*, **2011**, 11, 1327-1339	3.9	2
26	An Efficient Approach to Spatiotemporal Analysis and Modeling of Air Pollution Data. *Journal of Agricultural, Biological, and Environmental Statistics*, **2011**, 16, 371-388	1.9	2

25	Climate Change Scenarios and Their Implications on the Energy Performance of Hellenic Non-Residential Buildings. *Sustainability*, **2021**, 13, 13005	3.6	2
24	Plant water resource partitioning and xylem-to-leaf deuterium enrichment in Lanzhou, northwest China. *Water Science and Technology: Water Supply*, **2020**, 20, 1127-1140	1.4	2
23	Modeling Insights into Precipitation Deuterium Excess as an Indicator of Raindrop Evaporation in Lanzhou, China. *Water (Switzerland)*, **2021**, 13, 193	3	2
22	Unveiling the existing condition and energy use in Hellenic school buildings. *Energy and Buildings*, **2021**, 247, 111150	7	2
21	Neural Network Model for Greenhouse Microclimate Predictions. *Agriculture (Switzerland)*, **2022**, 12, 780	3	2
20	Isoscape of $\delta^{18}O$ in Precipitation of the Qinghai-Tibet Plateau: Assessment and Improvement. *Water (Switzerland)*, **2020**, 12, 3392	3	1
19	Use of shadowband correction models for predicting direct solar irradiance **2013**,		1
18	Homogenization of Precipitation Series in Greece. *Springer Atmospheric Sciences*, **2017**, 583-590	0.7	1
17	Stable Isotope Signatures and Moisture Transport of a Typical Heavy Precipitation Case in the Southern Tianshan Mountains. *Chinese Geographical Science*, **2020**, 30, 180-188	2.9	1
16	An application of a feed-forward neural network model for wind speed predictions. *International Journal of Sustainable Energy*, 1-18	2.7	1
15	Use of GNSS Tropospheric Delay Measurements for the Parameterization and Validation of WRF High-Resolution Re-Analysis over the Western Gulf of Corinth, Greece: The PaTrop Experiment. *Remote Sensing*, **2021**, 13, 1898	5	1
14	Impacts on Indoor Thermal Comfort and Heating Energy Use in Hellenic Dwellings from Occupant Behavioral Reactions. *Applied Sciences (Switzerland)*, **2021**, 11, 6254	2.6	1
13	Representative typology of buildings: case study of hellenic non residential buildings. *Energy Sources, Part A: Recovery, Utilization and Environmental Effects*, 1-21	1.6	1
12	A Stable Isotope Approach for Estimating the Contribution of Recycled Moisture to Precipitation in Lanzhou City, China. *Water (Switzerland)*, **2021**, 13, 1783	3	0
11	Tropospheric Correction of Sentinel-1 Synthetic Aperture Radar Interferograms Using a High-Resolution Weather Model Validated by GNSS Measurements. *Remote Sensing*, **2021**, 13, 2258	5	0
10	The Dark Universe Is Not Invisible. *Physical Sciences Forum*, **2021**, 2, 10		0
9	Local Meteoric Water Lines in a Semi-Arid Setting of Northwest China Using Multiple Methods. *Water (Switzerland)*, **2021**, 13, 2380	3	0
8	Low-Cost Data Acquisition System for Solar Thermal Collectors. *Electronics (Switzerland)*, **2022**, 11, 934	2.6	0

7	Building Energy Audits Diagnosis and Retrofitting towards Decarbonization and Sustainable Cities. *Energies*, **2022**, 15, 2039	3.1	0
6	Optical and thermal performance simulation of a micro-mirror solar collector. *Energy Reports*, **2022**, 8, 6624-6632	4.6	0
5	Weather maps classification over Greek domain based on isobaric line patterns. *Theoretical and Applied Climatology*, **2013**, 114, 691-704	3	
4	Optimizing the input vectors of applied artificial neural network models for wind power production forecasting. *Wind Engineering*, 0309524X2110463	1.2	
3	Efficient ANN Training for the Reconstruction of Isotopic Time Series. *Springer Atmospheric Sciences* , **2013**, 825-831	0.7	
2	Recharge and Infiltration Mechanisms of Soil Water in the Floodplain Revealed by Water-Stable Isotopes in the Upper Yellow River. *Sustainability*, **2021**, 13, 9369	3.6	
1	Validation and Bias Correction of Monthly $\delta^{18}O$ Precipitation Time Series from ECHAM5-Wiso Model in Central Europe. *Oxygen*, **2022**, 2, 109-124		