

# Athanasios G Konstandopoulos

## List of Publications by Year in descending order

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81  
papers

3,193  
citations

218677

26  
h-index

214800

47  
g-index

84  
all docs

84  
docs citations

84  
times ranked

2279  
citing authors

#	ARTICLE	IF	CITATIONS
1	Valorization of Plastic Waste: A Lab-Scale Approach with the Aid of Solar Hydrothermal Liquefaction Technology. Waste and Biomass Valorization, 2022, 13, 3835-3844.	3.4	6
2	Solar fuels and industrial solar chemistry. , 2021, , 677-724.		0
3	Valorization of organic waste with the aid of solar hydrothermal liquefaction technology. AIP Conference Proceedings, 2020, , .	0.4	2
4	Iron oxide-based particles for high temperature thermochemical energy storage via the elemental sulfur thermochemical cycle. AIP Conference Proceedings, 2019, , .	0.4	3
5	Oxidative Reactivity of Particulate Samples from Different Diesel Combustion Systems and Its Relation to Structural and Spectral Characteristics of Soot. Emission Control Science and Technology, 2019, 5, 99-123.	1.5	11
6	Transportation and solar-aided utilization of CO <sub>2</sub> : Technoeconomic analysis of spanning routes of CO <sub>2</sub> conversion to solar fuels. Journal of CO <sub>2</sub> Utilization, 2019, 30, 142-157.	6.8	13
7	Oxide particles as combined heat storage medium and sulphur trioxide decomposition catalysts for solar hydrogen production through sulphur cycles. International Journal of Hydrogen Energy, 2019, 44, 9830-9840.	7.1	10
8	A Tutorial on Testing Particulate Filters with a Side-Stream Reactor (SSR) Exhaust Setup. Emission Control Science and Technology, 2018, 4, 312-320.	1.5	0
9	HYDROSOL-PLANT: Structured redox reactors for H <sub>2</sub> production from solar thermochemical H <sub>2</sub> O splitting. AIP Conference Proceedings, 2018, , .	0.4	8
10	Study of Brake Wear Particle Emissions of a Minivan on a Chassis Dynamometer. Emission Control Science and Technology, 2018, 4, 271-278.	1.5	26
11	On the Effective Density and Fractal-Like Dimension of Diesel Soot Aggregates as a Function of Mobility Diameter. Emission Control Science and Technology, 2018, 4, 240-246.	1.5	0
12	Shortlisting of Composite CaO-Based Structured Bodies Suitable for Thermochemical Heat Storage with the CaO/Ca(OH) <sub>2</sub> Reaction Scheme. Energy & Fuels, 2017, 31, 6548-6559.	5.1	13
13	Material development and assessment of an energy storage concept based on the CaO-looping process. Solar Energy, 2017, 150, 298-309.	6.1	51
14	Multi-cyclic evaluation of composite CaO-based structured bodies for thermochemical heat storage via the CaO/Ca(OH) <sub>2</sub> reaction scheme. Solar Energy, 2017, 146, 65-78.	6.1	43
15	Analysis of CO <sub>2</sub> transport including impurities for the optimization of point-to-point pipeline networks for integration into future solar fuel plants. International Journal of Greenhouse Gas Control, 2017, 66, 10-24.	4.6	8
16	On kinetic modelling for solar redox thermochemical H <sub>2</sub> O and CO <sub>2</sub> splitting over NiFe <sub>2</sub> O <sub>4</sub> for H <sub>2</sub> , CO and syngas production. Physical Chemistry Chemical Physics, 2017, 19, 26776-26786.	2.8	7
17	Thermochemical storage for CSP via redox structured reactors/heat exchangers: The RESTRUCTURE project. AIP Conference Proceedings, 2017, , .	0.4	16
18	Experimental proof of concept of a pilot-scale thermochemical storage unit. AIP Conference Proceedings, 2017, , .	0.4	11

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19	Characterization of Qatar's surface carbonates for CO <sub>2</sub> capture and thermochemical energy storage. AIP Conference Proceedings, 2017, , .	0.4	1
20	Recent Advances in Diesel Particulate Emission Control. The Proceedings of the International Symposium on Diagnostics and Modeling of Combustion in Internal Combustion Engines, 2017, 2017.9, A313.	0.1	0
21	A Heterogeneous Multiscale Dynamic Model for Simulation of Catalytic Reforming Reactors. International Journal of Chemical Kinetics, 2016, 48, 239-252.	1.6	11
22	Co <sub>3</sub> O <sub>4</sub> -based honeycombs as compact redox reactors/heat exchangers for thermochemical storage in the next generation CSP plants. AIP Conference Proceedings, 2016, , .	0.4	6
23	Development and evaluation of materials for thermochemical heat storage based on the CaO/CaCO <sub>3</sub> reaction couple. AIP Conference Proceedings, 2016, , .	0.4	17
24	Study of Oxidation and Combustion Characteristics of Iron Nanoparticles under Idealized and Enginelike Conditions. Energy & Fuels, 2016, 30, 4318-4330.	5.1	21
25	Zinc-copper oxide coated monolithic reactors for high capacity hydrogen sulphide removal from gaseous streams. International Journal of Hydrogen Energy, 2016, 41, 21251-21260.	7.1	7
26	Catalytic Soot Oxidation: Effect of Ceria-Zirconia Catalyst Particle Size. SAE International Journal of Engines, 2016, 9, 1709-1719.	0.4	4
27	Cobalt/cobaltous oxide based honeycombs for thermochemical heat storage in future concentrated solar power installations: Multi-cyclic assessment and semi-quantitative heat effects estimations. Solar Energy, 2016, 133, 394-407.	6.1	79
28	Toxicity assessment and comparison between two types of iron oxide nanoparticles in <i>Mytilus galloprovincialis</i> . Aquatic Toxicology, 2016, 172, 9-20.	4.0	49
29	Soot Oxidation Kinetics of Different Ceria Nanoparticle Catalysts. Emission Control Science and Technology, 2015, 1, 247-253.	1.5	20
30	Impact of Combination of EGR, SCR, and DPF Technologies for the Low-Emission Rail Diesel Engines. Emission Control Science and Technology, 2015, 1, 213-225.	1.5	28
31	Calcium oxide based materials for thermochemical heat storage in concentrated solar power plants. Solar Energy, 2015, 122, 215-230.	6.1	89
32	Diesel Fuel Desulfurization via Adsorption with the Aid of Activated Carbon: Laboratory- and Pilot-Scale Studies. Energy & Fuels, 2015, 29, 5640-5648.	5.1	26
33	Solar Hydrogen Production. Biofuels and Biorefineries, 2015, , 283-311.	0.5	1
34	Friction Coefficient and Mobility Radius of Fractal-Like Aggregates in the Transition Regime. Aerosol Science and Technology, 2014, 48, 1320-1331.	3.1	14
35	Improved kinetic model for water splitting thermochemical cycles using Nickel Ferrite. International Journal of Hydrogen Energy, 2014, 39, 6317-6327.	7.1	23
36	Cobalt oxide based structured bodies as redox thermochemical heat storage medium for future CSP plants. Solar Energy, 2014, 108, 146-163.	6.1	95

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37	Morphology and mobility of synthetic colloidal aggregates. <i>Journal of Colloid and Interface Science</i> , 2014, 417, 27-36.	9.4	27
38	Study of Basic Oxidation and Combustion Characteristics of Aluminum Nanoparticles under Engine-like Conditions. <i>Energy &amp; Fuels</i> , 2014, 28, 3430-3441.	5.1	37
39	Development of an on-line exposure system to determine freshly produced diesel engine emission-induced cellular effects. <i>Toxicology in Vitro</i> , 2013, 27, 1746-1752.	2.4	9
40	Hydrogen production via solar-aided water splitting thermochemical cycles with nickel ferrite: Experiments and modeling. <i>AIChE Journal</i> , 2013, 59, 1213-1225.	3.6	67
41	Emission Reduction Technologies for the Future Low Emission Rail Diesel Engines: EGR vs SCR. , 2013, , .		15
42	Improved Transfer Coefficients for Wall-Flow Monolithic Catalytic Reactors: Energy and Momentum Transport. <i>Industrial &amp; Engineering Chemistry Research</i> , 2012, 51, 13062-13072.	3.7	22
43	Effect of seeding on hydrogen and carbon particle production in a 10-MW solar thermal reactor for methane decomposition. <i>International Journal of Hydrogen Energy</i> , 2012, 37, 16570-16580.	7.1	11
44	The Micromechanics of Catalytic Soot Oxidation in Diesel Particulate Filters. , 2012, , .		5
45	Two-dimensional model of methane thermal decomposition reactors with radiative heat transfer and carbon particle growth. <i>AIChE Journal</i> , 2012, 58, 2545-2556.	3.6	13
46	Hydrogen production via sulfur-based thermochemical cycles: Part 3: Durability and post-characterization of silicon carbide honeycomb substrates coated with metal oxide-based candidate catalysts for the sulfuric acid decomposition step. <i>International Journal of Hydrogen Energy</i> , 2012, 37, 8190-8203.	7.1	33
47	Hydrogen production via solar-aided water splitting thermochemical cycles: Combustion synthesis and preliminary evaluation of spinel redox-pair materials. <i>International Journal of Hydrogen Energy</i> , 2012, 37, 8964-8980.	7.1	85
48	One-dimensional model of solar thermal reactors for the co-production of hydrogen and carbon black from methane decomposition. <i>International Journal of Hydrogen Energy</i> , 2011, 36, 189-202.	7.1	17
49	Hydrogen production via sulfur-based thermochemical cycles: Part 1: Synthesis and evaluation of metal oxide-based candidate catalyst powders for the sulfuric acid decomposition step. <i>International Journal of Hydrogen Energy</i> , 2011, 36, 2831-2844.	7.1	53
50	Hydrogen production via sulfur-based thermochemical cycles: Part 2: Performance evaluation of Fe <sub>2</sub> O <sub>3</sub> -based catalysts for the sulfuric acid decomposition step. <i>International Journal of Hydrogen Energy</i> , 2011, 36, 6496-6509.	7.1	71
51	Oxide Nanoparticles for Hydrogen Production from Water-Splitting and Catalytic Oxidation of Diesel Exhaust Emissions. <i>Nanoscience and Nanotechnology Letters</i> , 2011, 3, 697-704.	0.4	7
52	Solar hydrogen: fuel of the near future. <i>Energy and Environmental Science</i> , 2010, 3, 279.	30.8	126
53	Gas and liquid phase fuels desulphurization for hydrogen production via reforming processes. <i>International Journal of Hydrogen Energy</i> , 2009, 34, 4953-4962.	7.1	27
54	Aerosol spray pyrolysis synthesis of water-splitting ferrites for solar hydrogen production. <i>Granular Matter</i> , 2008, 10, 113-122.	2.2	53

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55	Update on the Science and Technology of Diesel Particulate Filters. KONA Powder and Particle Journal, 2008, 26, 36-65.	1.7	46
56	Advances in the science and technology of diesel particulate filter simulation. Advances in Chemical Engineering, 2007, , 213-294.	0.9	38
57	Application of Digital Material Methods to Silicon Carbide Diesel Particulate Filters. , 2007, , .		5
58	Soot Oxidation Kinetics in Diesel Particulate Filters. , 2007, , .		22
59	Evaluation of porous silicon carbide monolithic honeycombs as volumetric receivers/collectors of concentrated solar radiation. Solar Energy Materials and Solar Cells, 2007, 91, 474-488.	6.2	185
60	Hydrogen production in solar reactors. Catalysis Today, 2007, 127, 265-277.	4.4	71
61	Particle sticking/rebound criteria at oblique impact. Journal of Aerosol Science, 2006, 37, 292-305.	3.8	83
62	A Multi-Reactor Assembly for Screening of Diesel Particulate Filters. , 2006, , .		18
63	Solar Hydrogen Production by a Two-Step Cycle Based on Mixed Iron Oxides. Journal of Solar Energy Engineering, Transactions of the ASME, 2006, 128, 125-133.	1.8	140
64	Urban guerrilla activities in Greece. Technological Forecasting and Social Change, 2005, 72, 49-58.	11.6	3
65	Effect of soot layer microstructure on diesel particulate filter regeneration. AIChE Journal, 2005, 51, 2534-2546.	3.6	25
66	Progress in Diesel Particulate Filter Simulation. , 2005, , .		80
67	Catalytic Filter Systems with Direct and Indirect Soot Oxidation Activity. , 2005, , .		33
68	Multi-channel simulation of regeneration in honeycomb monolithic diesel particulate filters. Chemical Engineering Science, 2003, 58, 3273-3283.	3.8	65
69	Cluster-Cluster Aggregation Kinetics and Primary Particle Growth of Soot Nanoparticles in Flame by Light Scattering and Numerical Simulations. Journal of Colloid and Interface Science, 2002, 247, 33-46.	9.4	44
70	Evolution of aggregate size and fractal dimension during Brownian coagulation. Journal of Aerosol Science, 2001, 32, 1399-1420.	3.8	80
71	Reciprocating flow regeneration of soot filters. Combustion and Flame, 2000, 121, 488-500.	5.2	93
72	Deposit growth dynamics: particle sticking and scattering phenomena. Powder Technology, 2000, 109, 262-277.	4.2	62

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73	Inertial deposition of particles from potential flows past cylinder arrays. Journal of Aerosol Science, 1993, 24, 471-483.	3.8	23
74	Fundamental Studies of Diesel Particulate Filters: Transient Loading, Regeneration and Aging. , 0, , .		331
75	Inertial Contributions to the Pressure Drop of Diesel Particulate Filters. , 0, , .		97
76	Microstructural Properties of Soot Deposits in Diesel Particulate Traps. , 0, , .		112
77	Flow Resistance Descriptors for Diesel Particulate Filters: Definitions, Measurements and Testing. , 0, , .		82
78	Wall-scale Reaction Models in Diesel Particulate Filters. , 0, , .		12
79	Catalytic Nano-structured Materials for Next Generation Diesel Particulate Filters. SAE International Journal of Materials and Manufacturing, 0, 1, 189-198.	0.3	15
80	A Methodology for the Fast Evaluation of the Effect of Ash Aging on the Diesel Particulate Filter Performance. , 0, , .		26
81	Novel Monolithic Reactors for Solar Thermochemical Water Splitting. , 0, , 621-639.		1