

# Vassilis Stathopoulos

## List of Publications by Year in descending order

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116  
papers

3,930  
citations

147801

31  
h-index

138484

58  
g-index

121  
all docs

121  
docs citations

121  
times ranked

3930  
citing authors

#	ARTICLE	IF	CITATIONS
1	Techniques for Coating Applications. , 2022, , 243-257.		2
2	CO <sub>2</sub> Gasification Reactivity and Syngas Production of Greek Lignite Coal and Ex-Situ Produced Chars under Non-Isothermal and Isothermal Conditions: Structure-Performance Relationships. <i>Energies</i> , 2022, 15, 679.	3.1	2
3	Titanium dioxide (TiO <sub>2</sub> )-based photocatalyst materials activity enhancement for contaminants of emerging concern (CECs) degradation: In the light of modification strategies. <i>Chemical Engineering Journal Advances</i> , 2022, 10, 100262.	5.2	102
4	Comparative Study of Different Production Methods of Activated Carbon Cathodic Electrodes in Single Chamber MFC Treating Municipal Landfill Leachate. <i>Applied Sciences (Switzerland)</i> , 2022, 12, 2991.	2.5	7
5	Support-induced modifications on the CO <sub>2</sub> hydrogenation performance of Ni/CeO <sub>2</sub> : The effect of ZnO doping on CeO <sub>2</sub> nanorods. <i>Journal of CO<sub>2</sub> Utilization</i> , 2022, 61, 102057.	6.8	8
6	Preparation and Characterization of Supported Molybdenum Doped TiO <sub>2</sub> on $\gamma$ -Al <sub>2</sub> O <sub>3</sub> Ceramic Substrate for the Photocatalytic Degradation of Ibuprofen (IBU) under UV Irradiation. <i>Catalysts</i> , 2022, 12, 562.	3.5	5
7	Molybdenum Modified Sol-Gel Synthesized TiO <sub>2</sub> for the Photocatalytic Degradation of Carbamazepine under UV Irradiation. <i>Processes</i> , 2022, 10, 1113.	2.8	3
8	Synthesis of copper (I, II) oxides/hydrochar nanocomposites for the efficient sonocatalytic degradation of organic contaminants. <i>Journal of Industrial and Engineering Chemistry</i> , 2021, 95, 73-82.	5.8	11
9	Smart Coatings Against Corrosion. , 2021, , 400-400.		3
10	Enhanced Photocatalytic Activity of CuWO <sub>4</sub> Doped TiO <sub>2</sub> Photocatalyst Towards Carbamazepine Removal under UV Irradiation. <i>Separations</i> , 2021, 8, 25.	2.4	26
11	Effect of alkali (Cs) doping on the surface chemistry and CO <sub>2</sub> hydrogenation performance of CuO/CeO <sub>2</sub> catalysts. <i>Journal of CO<sub>2</sub> Utilization</i> , 2021, 44, 101408.	6.8	26
12	Immobilized TiO <sub>2</sub> /ZnO Sensitized Copper (II) Phthalocyanine Heterostructure for the Degradation of Ibuprofen under UV Irradiation. <i>Separations</i> , 2021, 8, 24.	2.4	15
13	Facet-Dependent Reactivity of Ceria Nanoparticles Exemplified by CeO <sub>2</sub> -Based Transition Metal Catalysts: A Critical Review. <i>Catalysts</i> , 2021, 11, 452.	3.5	33
14	H <sub>2</sub> -SCR of NO <sub>x</sub> on low-SSA CeO <sub>2</sub> -supported Pd: The effect of Pd particle size. <i>Applied Catalysis A: General</i> , 2021, 615, 118062.	4.3	28
15	What about greener phase change materials? A review on biobased phase change materials for thermal energy storage applications. <i>International Journal of Thermofluids</i> , 2021, 10, 100081.	7.8	65
16	Phase change materials in solar domestic hot water systems: A review. <i>International Journal of Thermofluids</i> , 2021, 10, 100075.	7.8	83
17	Silver Doped Zinc Stannate (Ag-ZnSnO <sub>3</sub> ) for the Photocatalytic Degradation of Caffeine under UV Irradiation. <i>Water (Switzerland)</i> , 2021, 13, 1290.	2.7	21
18	Shape Effects of Ceria Nanoparticles on the Water-Gas Shift Performance of CuO <sub>x</sub> /CeO <sub>2</sub> Catalysts. <i>Catalysts</i> , 2021, 11, 753.	3.5	12

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19	Thermochemical Energy Storage in Solar Power Plants. , 2021, , .		1
20	Rational Design of Non-Precious Metal Oxide Catalysts by Means of Advanced Synthetic and Promotional Routes. Catalysts, 2021, 11, 895.	3.5	0
21	Deciphering the role of Ni particle size and nickel-ceria interfacial perimeter in the low-temperature CO <sub>2</sub> methanation reaction over remarkably active Ni/CeO <sub>2</sub> nanorods. Applied Catalysis B: Environmental, 2021, 297, 120401.	20.2	65
22	Experimental assessment of a full scale prototype thermal energy storage tank using paraffin for space heating application. International Journal of Thermofluids, 2020, 1-2, 100003.	7.8	14
23	Effect of the Preparation Method on the Physicochemical Properties and the CO Oxidation Performance of Nanostructured CeO <sub>2</sub> /TiO <sub>2</sub> Oxides. Processes, 2020, 8, 847.	2.8	21
24	Investigating the Utility of Fabric Phase Sorptive Extraction and HPLC-UV-Vis/DAD to Determine Antidepressant Drugs in Environmental Aqueous Samples. Separations, 2020, 7, 39.	2.4	16
25	Synthesis and Characterization of B/NaF and Silicon Phthalocyanine-Modified TiO <sub>2</sub> and an Evaluation of Their Photocatalytic Removal of Carbamazepine. Separations, 2020, 7, 71.	2.4	10
26	Hydrothermal Synthesis of ZnO-doped Ceria Nanorods: Effect of ZnO Content on the Redox Properties and the CO Oxidation Performance. Applied Sciences (Switzerland), 2020, 10, 7605.	2.5	13
27	Synthesis, Characterization, and Photocatalytic Evaluation of Manganese (III) Phthalocyanine Sensitized ZnWO <sub>4</sub> (ZnWO <sub>4</sub> MnPc) for Bisphenol A Degradation under UV Irradiation. Nanomaterials, 2020, 10, 2139.	4.1	26
28	Remarkable efficiency of Ni supported on hydrothermally synthesized CeO <sub>2</sub> nanorods for low-temperature CO <sub>2</sub> hydrogenation to methane. Catalysis Communications, 2020, 142, 106036.	3.3	41
29	Development and experimental testing of a compact thermal energy storage tank using paraffin targeting domestic hot water production needs. Thermal Science and Engineering Progress, 2020, 19, 100573.	2.7	20
30	Investigating the performance of a thermal energy storage unit with paraffin as phase change material, targeting buildings' cooling needs: an experimental approach. International Journal of Thermofluids, 2020, 3-4, 100027.	7.8	14
31	Recent Advances on the Rational Design of Non-Precious Metal Oxide Catalysts Exemplified by CuO <sub>x</sub> /CeO <sub>2</sub> Binary System: Implications of Size, Shape and Electronic Effects on Intrinsic Reactivity and Metal-Support Interactions. Catalysts, 2020, 10, 160.	3.5	66
32	La <sub>2</sub> Zr <sub>2</sub> O <sub>7</sub> /LaAlO <sub>3</sub> composite prepared by mixing precipitated precursors: Evolution of its structure under sintering. Materials Chemistry and Physics, 2020, 251, 123093.	4.0	12
33	Evaluation of Zn- and Fe- rich organic coatings for corrosion protection and condensation performance on waste heat recovery surfaces. International Journal of Thermofluids, 2020, 3-4, 100025.	7.8	14
34	Review of Recent Progress in Wastewater Treatment Using Carbon Nanotubes. Current Analytical Chemistry, 2020, 17, 23-30.	1.2	3
35	Plug actuation and active manipulation in closed monolithic fluidics using backpressure. Microelectronic Engineering, 2019, 216, 111046.	2.4	2
36	The Effect of CeO <sub>2</sub> Preparation Method on the Carbon Pathways in the Dry Reforming of Methane on Ni/CeO <sub>2</sub> Studied by Transient Techniques. Catalysts, 2019, 9, 621.	3.5	31

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37	Evaluating a prototype compact thermal energy storage tank using paraffin-based phase change material for domestic hot water production. E3S Web of Conferences, 2019, 116, 00016.	0.5	8
38	Performance assessment of a four-air cathode membraneless microbial fuel cell stack for wastewater treatment and energy extraction. E3S Web of Conferences, 2019, 116, 00093.	0.5	7
39	Cu <sub>2</sub> O-CuO@biochar composite: Synthesis, characterization and its efficient photocatalytic performance. Applied Surface Science, 2019, 498, 143846.	6.1	71
40	Differential scanning calorimetry based evaluation of 3D printed PLA for phase change materials encapsulation or as container material of heat storage tanks. Energy Procedia, 2019, 161, 429-437.	1.8	18
41	Bioelectricity production from fermentable household waste extract using a single chamber microbial fuel cell. Energy Procedia, 2019, 161, 2-9.	1.8	28
42	Design criteria for coatings in next generation condensing economizers. Energy Procedia, 2019, 161, 412-420.	1.8	14
43	A comprehensive review of recent advances in materials aspects of phase change materials in thermal energy storage. Energy Procedia, 2019, 161, 385-394.	1.8	94
44	Facet-Dependent Reactivity of Fe <sub>2</sub> O <sub>3</sub> /CeO <sub>2</sub> Nanocomposites: Effect of Ceria Morphology on CO Oxidation. Catalysts, 2019, 9, 371.	3.5	58
45	Ceria Nanoparticlesâ€™ Morphological Effects on the N <sub>2</sub> O Decomposition Performance of Co <sub>3</sub> O <sub>4</sub> /CeO <sub>2</sub> Mixed Oxides. Catalysts, 2019, 9, 233.	3.5	16
46	Impact of processing parameters on tensile strength, in-process crystallinity and mesostructure in FDM-fabricated PLA specimens. Rapid Prototyping Journal, 2019, 25, 1398-1410.	3.2	36
47	Performance Evaluation of a Small-Scale Latent Heat Thermal Energy Storage Unit for Heating Applications Based on a Nanocomposite Organic PCM. ChemEngineering, 2019, 3, 88.	2.4	7
48	CO <sub>2</sub> Hydrogenation over Nanoceria-Supported Transition Metal Catalysts: Role of Ceria Morphology (Nanorods versus Nanocubes) and Active Phase Nature (Co versus Cu). Nanomaterials, 2019, 9, 1739.	4.1	45
49	Controlled deposition of fullerene derivatives within a graphene template by means of a modified Langmuir-Schaefer method. Journal of Colloid and Interface Science, 2018, 524, 388-398.	9.4	15
50	Optimization of N <sub>2</sub> O decomposition activity of CuOâ€“CeO <sub>2</sub> mixed oxides by means of synthesis procedure and alkali (Cs) promotion. Catalysis Science and Technology, 2018, 8, 2312-2322.	4.1	32
51	Ceria nanoparticles shape effects on the structural defects and surface chemistry: Implications in CO oxidation by Cu/CeO <sub>2</sub> catalysts. Applied Catalysis B: Environmental, 2018, 230, 18-28.	20.2	359
52	Evolution of bulk and surface structures in stoichiometric LaAlO <sub>3</sub> mixed oxide prepared by using starch as template. Materials Chemistry and Physics, 2018, 207, 423-434.	4.0	9
53	A new microfluidic pressure-controlled Field Effect Transistor (pFET) in digital fluidic switch operation mode. Microelectronic Engineering, 2018, 190, 28-32.	2.4	7
54	Preparation of novel CeO <sub>2</sub> -biochar nanocomposite for sonocatalytic degradation of a textile dye. Ultrasonics Sonochemistry, 2018, 41, 503-513.	8.2	81

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55	Evaluation of LaAlO <sub>3</sub> as top coat material for thermal barrier coatings. Transactions of Nonferrous Metals Society of China, 2018, 28, 1582-1592.	4.2	31
56	LaAlO <sub>3</sub> as overlayer in conventional thermal barrier coatings. Procedia Structural Integrity, 2018, 10, 280-287.	0.8	16
57	Evaluation of organic coatings for corrosion protection of condensing economizers. Procedia Structural Integrity, 2018, 10, 295-302.	0.8	21
58	Experimental and computational investigation of a latent heat energy storage system with a staggered heat exchanger for various phase change materials. Thermal Science and Engineering Progress, 2018, 7, 87-98.	2.7	55
59	Computational investigation of actuation mechanisms of droplets on porous air-permeable substrates. Soft Matter, 2018, 14, 6090-6101.	2.7	5
60	Influence of organic phase change materials on the physical and mechanical properties of HDPE and PP polymers. RSC Advances, 2018, 8, 27438-27447.	3.6	33
61	Specific structural features of LnZrO <sub>x</sub> (Ln: La, Sm) mixed oxides prepared by different methods. Progress in Natural Science: Materials International, 2018, 28, 437-446.	4.4	4
62	Doped apatite-type lanthanum silicates in CO oxidation reaction. Catalysis Communications, 2018, 114, 98-103.	3.3	14
63	A facile method for the preparation of ceramic beads with hierarchical porosity. Ceramics International, 2017, 43, 17238-17242.	4.8	10
64	Ultrasound-assisted removal of Acid Red 17 using nanosized Fe <sub>3</sub> O <sub>4</sub> -loaded coffee waste hydrochar. Ultrasonics Sonochemistry, 2017, 35, 72-80.	8.2	102
65	Experimental process investigation of a latent heat energy storage system with a staggered heat exchanger with different phase change materials for solar thermal energy storage applications. E3S Web of Conferences, 2017, 22, 00179.	0.5	0
66	Impact of the synthesis parameters on the solid state properties and the CO oxidation performance of ceria nanoparticles. RSC Advances, 2017, 7, 6160-6169.	3.6	67
67	uVALVIT: A tool for droplet mobility control and valving. MATEC Web of Conferences, 2016, 41, 04003.	0.2	2
68	Ethyl Acetate Abatement on Copper Catalysts Supported on Ceria Doped with Rare Earth Oxides. Molecules, 2016, 21, 644.	3.8	29
69	Hydrogen Production by Ethanol Steam Reforming (ESR) over CeO <sub>2</sub> Supported Transition Metal (Fe, Co.) Tj ETQq1_1_0.784314 rgBT / 0v	3.5	14
70	Surface Chemistry and Catalysis. Catalysts, 2016, 6, 102.	3.5	3
71	Influence of natural water composition on reactivity of quicklime derived from Ca-rich and Mg-rich limestone: implications for sustainability of lime manufacturing through geochemical modeling. RSC Advances, 2016, 6, 65799-65807.	3.6	4
72	Droplet Mobility Manipulation on Porous Media Using Backpressure. Langmuir, 2016, 32, 5250-5258.	3.5	22

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73	Tailoring properties of reticulated vitreous carbon foams with tunable density. <i>Frontiers of Materials Science</i> , 2016, 10, 157-167.	2.2	19
74	Estimation of thermal expansion and thermal conductivity coefficients of amorphous dielectrics at high temperatures. <i>Journal of Contemporary Physics</i> , 2016, 51, 61-64.	0.6	4
75	Compositional effect of Cr contamination susceptibility of $\text{La}_{0.83}\text{Si}_{0.6}\text{Al}_x\text{Fe}_y\text{O}_{26\pm 1}$ apatite-type SOFC electrolytes in contact with CROFER 22 APU. <i>RSC Advances</i> , 2016, 6, 49429-49435.	3.6	8
76	A Ni/apatite-type lanthanum silicate supported catalyst in glycerol steam reforming reaction. <i>RSC Advances</i> , 2016, 6, 78954-78958.	3.6	28
77	The role of Copper-Ceria interactions in catalysis science: Recent theoretical and experimental advances. <i>Applied Catalysis B: Environmental</i> , 2016, 198, 49-66.	20.2	241
78	Design of functionally graded multilayer thermal barrier coatings for gas turbine application. <i>Surface and Coatings Technology</i> , 2016, 295, 20-28.	4.8	39
79	Water-Repellent Approaches for 3-D Printed Internal Passages. <i>Materials and Manufacturing Processes</i> , 2016, 31, 1162-1170.	4.7	27
80	Reversible and dynamic transitions between sticky and slippery states on porous surfaces with ultra-low backpressure. <i>RSC Advances</i> , 2015, 5, 33666-33673.	3.6	20
81	Active porous valves for plug actuation and plug flow manipulation in open channel fluidics. <i>RSC Advances</i> , 2015, 5, 104594-104600.	3.6	14
82	Assessment of biochar as feedstock in a direct carbon solid oxide fuel cell. <i>RSC Advances</i> , 2015, 5, 73399-73409.	3.6	40
83	A comparative study of the physicochemical properties of Mg-rich and Ca-rich quicklimes and their effect on reactivity. <i>Materials and Structures/Materiaux Et Constructions</i> , 2015, 48, 3735-3753.	3.1	6
84	The structure and texture genesis of apatite-type lanthanum silicates during their synthesis by co-precipitation. <i>Ceramics International</i> , 2015, 41, 13393-13408.	4.8	11
85	Surface and redox properties of cobalt-ceria binary oxides: On the effect of Co content and pretreatment conditions. <i>Applied Surface Science</i> , 2015, 341, 48-54.	6.1	95
86	Estimation of thermal expansion coefficient of solid crystalline dielectrics at high temperatures. <i>Journal of Contemporary Physics</i> , 2015, 50, 79-83.	0.6	4
87	Recent Advances on Nitrous Oxide ( $\text{N}_2\text{O}$ ) Decomposition over Non-Noble-Metal Oxide Catalysts: Catalytic Performance, Mechanistic Considerations, and Surface Chemistry Aspects. <i>ACS Catalysis</i> , 2015, 5, 6397-6421.	11.2	297
88	Shape Forming of Ceramic Tubes for Electrochemical Reactors by Gel-Casting Method. <i>ECS Transactions</i> , 2015, 68, 2339-2348.	0.5	4
89	Temperature-programmed $\text{C}_{18}\text{O}_2$ SSITKA for powders of fast oxide-ion conductors: Estimation of oxygen self-diffusion coefficients. <i>Solid State Ionics</i> , 2015, 271, 69-72.	2.7	30
90	Estimation of thermal conductivity coefficient for solid-state crystal dielectrics at high temperatures. <i>Journal of Contemporary Physics</i> , 2014, 49, 176-179.	0.6	3

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91	Preparation and investigation of rare earth magnesium hexaaluminate solid solutions. Journal of Contemporary Physics, 2014, 49, 220-227.	0.6	3
92	Structural ceramics containing electric arc furnace dust. Journal of Hazardous Materials, 2013, 262, 91-99.	12.4	38
93	Redox properties and VOC oxidation activity of Cu catalysts supported on Ce <sub>1-x</sub> Sm <sub>x</sub> O <sub>3</sub> mixed oxides. Journal of Hazardous Materials, 2013, 261, 512-521.	12.4	92
94	Reversible pressure-induced switching of droplet mobility after impingement on porous surface media. Applied Physics Letters, 2013, 103, .	3.3	20
95	Device and materials for in vitro evaluation of forces developed to teeth and periodontal structures during dental practices. Journal of Dental Biomechanics, 2013, 4, 1758736013503648.	1.2	4
96	Characterisation and management of ash produced in the hospital waste incinerator of Athens, Greece. Journal of Hazardous Materials, 2011, 187, 421-432.	12.4	41
97	Synthesis and characterization of doped apatite-type lanthanum silicates for SOFC applications. Solid State Ionics, 2011, 192, 158-162.	2.7	29
98	Electrochemical Characterization of a La <sub>0.8</sub> Sr <sub>0.2</sub> Ni <sub>0.4</sub> Fe <sub>0.6</sub> O <sub>3-<math>\delta</math></sub> Electrode Interfaced with La <sub>9.83</sub> Si <sub>5</sub> Al <sub>0.75</sub> Fe <sub>0.25</sub> O <sub>26</sub> {plus minus} Apatite-type Electrolyte. ECS Transactions, 2009, 25, 2681-2688.	0.5	19
99	Comparative study of La <sub>x</sub> Sr <sub>1-x</sub> Fe <sub>1-x</sub> O perovskite-type oxides prepared by ceramic and surfactant methods over the CH <sub>4</sub> and H <sub>2</sub> lean-deNO <sub>x</sub> . Applied Catalysis B: Environmental, 2009, 93, 1-11.	20.2	51
100	Synthesis and characterization of packed mesoporous tungsteno-silicates: application to the catalytic dehydrogenation of 2-propanol. Applied Catalysis A: General, 2004, 263, 103-108.	4.3	16
101	A novel method for estimating the C-values of the BET equation in the whole range 0 < P/P <sub>0</sub> < 1 using a Scatchard-type treatment of it. Microporous and Mesoporous Materials, 2004, 69, 97-107.	4.4	36
102	Characterization of Al- and Ti-modified MCM-41 using adsorption techniques. Colloids and Surfaces A: Physicochemical and Engineering Aspects, 2004, 250, 289-306.	4.7	34
103	Phosphotungstate anions supported on spherical beads of carbon as highly efficient catalysts for the dehydration of propan-2-ol to propene. Applied Catalysis A: General, 2003, 241, 217-226.	4.3	11
104	Formation of hierarchically ordered silicas prepared by spray drying of nanosized spheres. Studies in Surface Science and Catalysis, 2002, , 339-346.	1.5	8
105	A New Method for Microporosity Detection Based on the Use of the Corrugated Pore Structure Model (CPSM).. Studies in Surface Science and Catalysis, 2002, , 27-34.	1.5	3
106	Pore Structure $\sim$ Chemical Composition Interactions of New High Surface Area Manganese Based Mesoporous Materials. Materials Preparation, Characterization, and Catalytic Activity. Langmuir, 2002, 18, 423-432.	3.5	23
107	Synthesis, structure and surface properties of some mesoporous cero-phosphoro-aluminates. Physical Chemistry Chemical Physics, 2002, 4, 3894-3901.	2.8	3
108	An Investigation of the NO/H <sub>2</sub> /O <sub>2</sub> (Lean De-NO <sub>x</sub> ) Reaction on a Highly Active and Selective Pt/La <sub>0.7</sub> Sr <sub>0.2</sub> Ce <sub>0.1</sub> FeO <sub>3</sub> Catalyst at Low Temperatures. Journal of Catalysis, 2002, 209, 456-471.	6.2	123

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109	The influence of surface acid density on the freezing behavior of water confined in mesoporous MCM-41 solids. <i>Microporous and Mesoporous Materials</i> , 2001, 49, 1-13.	4.4	29
110	An investigation of the physical structure of MCM-41 novel mesoporous materials using a corrugated pore structure model. <i>Applied Catalysis A: General</i> , 2001, 216, 23-39.	4.3	26
111	An Investigation of the NO/H <sub>2</sub> /O <sub>2</sub> (Lean-deNO <sub>x</sub> ) Reaction on a Highly Active and Selective Pt/La <sub>0.5</sub> Ce <sub>0.5</sub> MnO <sub>3</sub> Catalyst. <i>Journal of Catalysis</i> , 2001, 197, 350-364.	6.2	155
112	Title is missing!. <i>Reaction Kinetics and Catalysis Letters</i> , 2001, 72, 43-48.	0.6	9
113	Title is missing!. <i>Reaction Kinetics and Catalysis Letters</i> , 2001, 72, 49-55.	0.6	11
114	Novel Mn-based Mesoporous Mixed Oxidic Solids. <i>Studies in Surface Science and Catalysis</i> , 2000, , 593-602.	1.5	8
115	Catalytic activity of high surface area mesoporous Mn-based mixed oxides for the deep oxidation of methane and lean-NO <sub>x</sub> reduction. <i>Studies in Surface Science and Catalysis</i> , 2000, 130, 1529-1534.	1.5	16
116	Preparation, characterization and surface acid catalytic activity of microporous clays pillared with Al <sub>1-x</sub> Fe <sub>x</sub> O <sub>y</sub> (x=0.00 to 1.00) oxidic species. <i>Microporous and Mesoporous Materials</i> , 1999, 31, 111-121.	4.4	15