George Tsilomelekis

List of Publications by Year
in descending order

34	1,517	430754	360920
papers	citations	18 h-index	35 g-index

39	39	39	2021
all docs	docs citations	times ranked	citing authors

#	Article	IF	Citations
1	Molecular structure, morphology and growth mechanisms and rates of 5-hydroxymethyl furfural (HMF) derived humins. Green Chemistry, 2016, 18, 1983-1993.	4.6	276
2	Origin of 5â€Hydroxymethylfurfural Stability in Water/Dimethyl Sulfoxide Mixtures. ChemSusChem, 2014, 7, 117-126.	3.6	150
3	Mechanism of BrÃ¸nsted Acidâ€Catalyzed Glucose Dehydration. ChemSusChem, 2015, 8, 1334-1341.	3.6	135
4	Structural analysis of humins formed in the BrÃ¸nsted acid catalyzed dehydration of fructose. Green Chemistry, 2018, 20, 997-1006.	4.6	123
5	Polyethylene Hydrogenolysis at Mild Conditions over Ruthenium on Tungstated Zirconia. Jacs Au, 2021, 1, 1422-1434.	3.6	95
6	Vanadia-based SCR catalysts supported on tungstated and sulfated zirconia: Influence of doping with potassium. Journal of Catalysis, 2007, 251, 459-473.	3.1	91
7	Support effects on structure and activity of molybdenum oxide catalysts for the oxidative dehydrogenation of ethane. Catalysis Today, 2007, 127, 139-147.	2.2	65
8	Removal of benzothiophene and dibenzothiophene from hydrocarbon fuels using CuCe mesoporous Y zeolites in the presence of aromatics. Applied Catalysis B: Environmental, 2018, 234, 130-142.	10.8	64
9	Cellulose Hydrolysis in Acidified LiBr Molten Salt Hydrate Media. Industrial & Engineering Chemistry Research, 2015, 54, 5226-5236.	1.8	63
10	On the configuration, molecular structure and vibrational properties of MoOx sites on alumina, zirconia, titania and silica. Catalysis Science and Technology, 2013, 3, 1869.	2.1	59
11	In Situ Raman and FTIR Spectroscopy of Molybdenum(VI) Oxide Supported on Titania Combined with ¹⁸O/¹⁶O Exchange: Molecular Structure, Vibrational Properties, and Vibrational Isotope Effects. Journal of Physical Chemistry C, 2011, 115, 2146-2154.	1.5	42
12	Catalytic performance and stability of Fe-doped CeO₂ in propane oxidative dehydrogenation using carbon dioxide as an oxidant. Catalysis Science and Technology, 2020, 10, 4362-4372.	2.1	35
13	An operando Raman study of molecular structure and reactivity of molybdenum(vi) oxide supported on anatase for the oxidative dehydrogenation of ethane. Physical Chemistry Chemical Physics, 2012, 14, 2216-2228.	1.3	32
14	Changes in Polymorph Composition in P25-TiO₂ during Pretreatment Analyzed by Differential Diffuse Reflectance Spectral Analysis. Journal of Physical Chemistry C, 2018, 122, 5093-5104.	1.5	31
15	Colloidal plasmonic nanostar antennas with wide range resonance tunability. Nanoscale, 2019, 11, 18662-18671.	2.8	31
16	Recent advances in integrated process analytical techniques, modeling, and control strategies to enable continuous biomanufacturing of monoclonal antibodies. Journal of Chemical Technology and Biotechnology, 2022, 97, 2317-2335.	1.6	25
17	Adsorptive Desulfurization of 4,6-Dimethyldibenzothiophene on Bimetallic Mesoporous Y Zeolites: Effects of Cu and Ce Composition and Configuration. Industrial & Engineering Chemistry Research, 2019, 58, 18301-18312.	1.8	22
18	Structural and vibrational properties of molybdena catalysts supported on alumina and zirconia studied by in situ Raman and FTIR spectroscopies combined with 18O/16O isotopic substitution. Catalysis Today, 2010, 158, 146-155.	2.2	18

#	Article	IF	Citations
19	Temperature-Dependent Evolution of the Molecular Configuration of Oxo-Tungsten(VI) Species Deposited on the Surface of Titania. Journal of Physical Chemistry C, 2014, 118, 11319-11332.	1.5	18
20	Molybdena deposited on titania by equilibrium deposition filtration: structural evolution of oxoâ€“molybdenum(<scp>vi</scp>) sites with temperature. Physical Chemistry Chemical Physics, 2016, 18, 23980-23989.	1.3	17
21	Effect of metal chlorides on glucose mutarotation and possible implications on humin formation. Reaction Chemistry and Engineering, 2019, 4, 273-277.	1.9	15
22	Molybdenum(VI) Oxosulfato Complexes in MoO3â€“K2S2O7â€“K2SO4 Molten Mixtures: Stoichiometry, Vibrational Properties, and Molecular Structures. Journal of Physical Chemistry A, 2012, 116, 8861-8872.	1.1	14
23	Characterization of Sulfated SnO2-ZrO2 Catalysts and Their Catalytic Performance on the Tert-Butylation of Phenol. Catalysts, 2020, 10, 726.	1.6	11
24	CO₂-assisted ethane oxidative dehydrogenation over MoO_x catalysts supported on reducible CeO₂â€“TiO₂. Catalysis Science and Technology, 2021, 11, 5791-5801.	2.1	11
25	Solvent-Induced Frequency Shifts of 5-Hydroxymethylfurfural Deduced via Infrared Spectroscopy and ab Initio Calculations. Journal of Physical Chemistry A, 2014, 118, 12149-12160.	1.1	9
26	Accessible and Interactive Learning of Spectroscopic Parameterization through Computer-Aided Training. Journal of Chemical Education, 2020, 97, 4527-4532.	1.1	8
27	FTIR studies on plasticization of silicate glass with ionic liquids (conversion to silicate polymers). Journal of Non-Crystalline Solids, 2021, 561, 120757.	1.5	8
28	Permeation dynamics of dimethyl methylphosphonate through polyelectrolyte composite membranes by in-situ Raman spectroscopy. Journal of Membrane Science, 2020, 595, 117462.	4.1	7
29	Temperature â€“ dependent evolution of molecular configurations of oxomolybdenum species on MoO3/TiO2 catalysts monitored by in situ Raman spectroscopy. Studies in Surface Science and Catalysis, 2010, 175, 613-616.	1.5	6
30	Molecular structure and reactivity of titania-supported transition metal oxide catalysts synthesized by equilibrium deposition filtration for the oxidative dehydrogenation of ethane. Comptes Rendus Chimie, 2016, 19, 1226-1236.	0.2	5
31	Molten Salt Hydrates in the Synthesis of TiO₂ Flakes. ACS Omega, 2019, 4, 21302-21310.	1.6	4
32	Mechanism of BrÃ¸nsted Acid-Catalyzed Glucose Dehydration. ChemSusChem, 2015, 8, 1291-1291.	3.6	3
33	Molten and glassy tellurium(IV) oxosulfato complexes in the TeO 2 â€“K 2 S 2 O 7 system studied by Raman spectroscopy: Stoichiometry, vibrational properties and molecular structure. Vibrational Spectroscopy, 2018, 97, 85-90.	1.2	2
34	Toward the coupling of microbial biosynthesis and catalysis for the production of alkylated phenolic compounds. AICHE Journal, 2020, 66, e16547.	1.8	0