Esben Taarning

List of Publications by Year
in descending order

61 papers	5,978 citations	126858 33 h-index	118793 62 g-index
70 all docs	70 docs citations	70 times ranked	5497 citing authors

#	Article	IF	Citations
1	Toward Replacing Ethylene Oxide in a Sustainable World: Glycolaldehyde as a Bioâ€Based C 2 Platform Molecule. Angewandte Chemie, 2021, 133, 12312-12331.	1.6	5
2	Toward Replacing Ethylene Oxide in a Sustainable World: Glycolaldehyde as a Bioâ€Based C₂ Platform Molecule. Angewandte Chemie - International Edition, 2021, 60, 12204-12223.	7.2	47
3	Synthesis, Stability, and Dielsâ€Alder Reactions of Methyl 2â€Oxobutâ€3â€enoate. European Journal of Organic Chemistry, 2021, 2021, 4049-4053.	1.2	1
4	Chemical composition analysis of carbohydrate fragmentation products. Journal of Analytical and Applied Pyrolysis, 2021, 156, 105112.	2.6	2
5	Kinetic Modeling of Gas Phase Sugar Cracking to Glycolaldehyde and Other Oxygenates. ACS Sustainable Chemistry and Engineering, 2021, 9, 305-311.	3.2	10
6	Heterogeneous Baseâ€Catalyzed Conversion of Glycolaldehyde to Aldotetroses: Mechanistic and Kinetic Insight. ChemCatChem, 2021, 13, 5141-5147.	1.8	5
7	Thermal Cracking of Sugars for the Production of Glycolaldehyde and Other Small Oxygenates. ChemSusChem, 2020, 13, 688-692.	3.6	28
8	Sensitive NMR method for detecting carbohydrate influx into competing chemocatalytic pathways. Analyst, The, 2020, 145, 4427-4431.	1.7	0
9	The development and validation of a GC-MS method for the quantification of glycolaldehyde formed from carbohydrate fragmentation processes. Analytical Methods, 2020, 12, 1975-1987.	1.3	3
10	Palladium(0)â€Catalyzed Rearrangement of Allylic Esters. ChemistrySelect, 2020, 5, 2559-2563.	0.7	5
11	Stoichiometric active site modification observed by alkali ion titrations of Sn-Beta. Catalysis Science and Technology, 2019, 9, 4339-4346.	2.1	10
12	Discovery and Exploration of the Efficient Acyclic Dehydration of Hexoses in Dimethyl Sulfoxide/Water. ChemSusChem, 2019, 12, 5086-5091.	3.6	11
13	Probing the Lewis Acid Catalyzed Acyclic Pathway of Carbohydrate Conversion in Methanol by <i>In Situ</i> NMR. ChemCatChem, 2019, 11, 5077-5084.	1.8	10
14	Influence of Composition and Preparation Method on the Continuous Performance of Sn-Beta for Glucose-Fructose Isomerisation. Topics in Catalysis, 2019, 62, 1178-1191.	1.3	25
15	Uncharted Pathways for CrCl3 Catalyzed Glucose Conversion in Aqueous Solution. Topics in Catalysis, 2019, 62, 669-677.	1.3	7
16	Response Factors Enable Rapid Quantitative 2D NMR Analysis in Catalytic Biomass Conversion to Renewable Chemicals. Topics in Catalysis, 2019, 62, 590-598.	1.3	8
17	Effects of Alkaliâ€Metal Ions and Counter Ions in Snâ€Betaâ€Catalyzed Carbohydrate Conversion. ChemSusChem, 2018, 11, 1198-1203.	3.6	17
18	NMR Spectroscopic Isotope Tracking Reveals Cascade Steps in Carbohydrate Conversion by Tinâ€Beta. ChemCatChem, 2018, 10, 1414-1419.	1.8	17

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19	Kinetic analysis of hexose conversion to methyl lactate by Sn-Beta: effects of substrate masking and of water. Catalysis Science and Technology, 2018, 8, 2137-2145.	2.1	33
20	Overcoming catalyst deactivation during the continuous conversion of sugars to chemicals: maximising the performance of Sn-Beta with a little drop of water. Reaction Chemistry and Engineering, 2018, 3, 155-163.	1.9	39
21	Exâ€…Situ Formation of Methanethiol: Application in the Gold(I)â€Promoted Antiâ€Markovnikov Hydrothiolation of Olefins. Angewandte Chemie, 2018, 130, 14083-14087.	1.6	3
22	Exâ€…Situ Formation of Methanethiol: Application in the Gold(I)â€Promoted Antiâ€Markovnikov Hydrothiolation of Olefins. Angewandte Chemie - International Edition, 2018, 57, 13887-13891.	7.2	38
23	Synthesis of a novel polyester building block from pentoses by tin-containing silicates. RSC Advances, 2017, 7, 985-996.	1.7	29
24	Facile and benign conversion of sucrose to fructose using zeolites with balanced BrÃ¸nsted and Lewis acidity. Catalysis Science and Technology, 2017, 7, 2782-2788.	2.1	17
25	Quantitative NMR Approach to Optimize the Formation of Chemical Building Blocks from Abundant Carbohydrates. ChemSusChem, 2017, 10, 2990-2996.	3.6	29
26	<i>Ex situ</i> generation of stoichiometric HCN and its application in the Pd-catalysed cyanation of aryl bromides: evidence for a transmetallation step between two oxidative addition Pd-complexes. Chemical Science, 2017, 8, 8094-8105.	3.7	35
27	A strategy for generating high-quality cellulose and lignin simultaneously from woody biomass. Green Chemistry, 2017, 19, 4849-4857.	4.6	82
28	Mechanism and stereoselectivity of zeolite-catalysed sugar isomerisation in alcohols. Chemical Communications, 2016, 52, 12773-12776.	2.2	20
29	Methyl vinyl glycolate as a diverse platform molecule. Green Chemistry, 2016, 18, 5448-5455.	4.6	26
30	Shapeâ€selective Valorization of Biomassâ€derived Glycolaldehyde using Tinâ€containing Zeolites. ChemSusChem, 2016, 9, 3054-3061.	3.6	31
31	Combined Function of BrÃ¸nsted and Lewis Acidity in the Zeoliteâ€Catalyzed Isomerization of Glucose to Fructose in Alcohols. ChemCatChem, 2016, 8, 3107-3111.	1.8	35
32	Shape-selective Valorization of Biomass-derived Glycolaldehyde using Tin-containing Zeolites. ChemSusChem, 2016, 9, 3022-3022.	3.6	5
33	Tin-containing silicates: identification of a glycolytic pathway via 3-deoxyglucosone. Green Chemistry, 2016, 18, 3360-3369.	4.6	56
34	Deactivation of solid catalysts in liquid media: the case of leaching of active sites in biomass conversion reactions. Green Chemistry, 2015, 17, 4133-4145.	4.6	200
35	Tinâ€containing Silicates: Alkali Salts Improve Methyl Lactate Yield from Sugars. ChemSusChem, 2015, 8, 613-617.	3.6	131
36	Ethanol conversion into butadiene over Zr-containing molecular sieves doped with silver. Green Chemistry, 2015, 17, 2552-2559.	4.6	117

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37	Incorporation of tin affects crystallization, morphology, and crystal composition of Sn-Beta. Journal of Materials Chemistry A, 2014, 2, 20252-20262.	5.2	113
38	Design of a Metalâ€Promoted Oxide Catalyst for the Selective Synthesis of Butadiene from Ethanol. ChemSusChem, 2014, 7, 2527-2536.	3.6	152
39	Meerweinâ€"Ponndorfâ€"Verleyâ€"Oppenauer reaction of crotonaldehyde with ethanol over Zr-containing catalysts. Journal of Catalysis, 2014, 316, 121-129.	3.1	125
40	Trends and Challenges in Catalytic Biomass Conversion. , 2013, , 73-89.		3
41	Integration of Chemical and Biological Catalysis: Production of Furylglycolic Acid from Glucose via Cortalcerone. ACS Catalysis, 2013, 3, 2689-2693.	5.5	35
42	Selective Production of Aromatics from Alkylfurans over Solid Acid Catalysts. ChemCatChem, 2013, 5, 2044-2050.	1.8	111
43	Mechanistic Study of Ethanol Dehydrogenation over Silicaâ€Supported Silver. ChemCatChem, 2013, 5, 2367-2373.	1.8	98
44	Tin-containing silicates: structureâ€"activity relations. Proceedings of the Royal Society A: Mathematical, Physical and Engineering Sciences, 2012, 468, 2000-2016.	1.0	149
45	Sn-Beta catalysed conversion of hemicellulosic sugars. Green Chemistry, 2012, 14, 702.	4.6	216
46	Conversion of d-glucose into 5-hydroxymethylfurfural (HMF) using zeolite in [Bmim]Cl or tetrabutylammonium chloride (TBAC)/CrCl2. Tetrahedron Letters, 2012, 53, 983-985.	0.7	70
47	Zeolite-catalyzed biomass conversion to fuels and chemicals. Energy and Environmental Science, 2011, 4, 793-804.	15.6	417
48	Beyond Petrochemicals: The Renewable Chemicals Industry. Angewandte Chemie - International Edition, 2011, 50, 10502-10509.	7.2	464
49	Catalysis with hierarchical zeolites. Catalysis Today, 2011, 168, 3-16.	2.2	340
50	Chemoenzymatic Combination of Glucose Oxidase with Titanium Silicaliteâ€1. ChemCatChem, 2010, 2, 943-945.	1.8	30
51	Zeolite H-USY for the production of lactic acid and methyl lactate from C3-sugars. Journal of Catalysis, 2010, 269, 122-130.	3.1	200
52	Conversion of Sugars to Lactic Acid Derivatives Using Heterogeneous Zeotype Catalysts. Science, 2010, 328, 602-605.	6.0	797
53	Zeoliteâ€Catalyzed Isomerization of Triose Sugars. ChemSusChem, 2009, 2, 625-627.	3.6	252
54	Câ€‰Factors Pinpoint Resource Utilization in Chemical Industrial Processes. ChemSusChem, 2009, 2, 1152-1162.	3.6	27

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55	Unsaturated Aldehydes as Alkene Equivalents in the Dielsâ€"Alder Reaction. Chemistry - A European Journal, 2008, 14, 5638-5644.	1.7	46
56	Chemicals from Renewables: Aerobic Oxidation of Furfural and Hydroxymethylfurfural over Gold Catalysts. ChemSusChem, 2008, 1, 75-78.	3.6	292
57	The Renewable Chemicals Industry. ChemSusChem, 2008, 1, 283-289.	3.6	323
58	Aerobic oxidation of aldehydes under ambient conditions using supported gold nanoparticle catalysts. Green Chemistry, 2008, 10, 168-170.	4.6	153
59	Oxidations of amines with molecular oxygen using bifunctional goldâ€"titania catalysts. Green Chemistry, 2008, 10, 419.	4.6	111
60	Oxidation of glycerol and propanediols in methanol over heterogeneous gold catalysts. Green Chemistry, 2008, 10, 408.	4.6	98
61	Direct aerobic oxidation of primary alcohols to methyl esters catalyzed by a heterogeneous gold catalyst. Catalysis Letters, 2007, 116, 35-40.	1.4	140