

# Hessel L Castricum

## List of Publications by Year in descending order

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41  
papers

1,693  
citations

218592

26  
h-index

302012

39  
g-index

44  
all docs

44  
docs citations

44  
times ranked

1391  
citing authors

#	ARTICLE	IF	CITATIONS
1	Hydrothermally stable molecular separation membranes from organically linked silica. <i>Journal of Materials Chemistry</i> , 2008, 18, 2150.	6.7	180
2	Tailoring the Separation Behavior of Hybrid Organosilica Membranes by Adjusting the Structure of the Organic Bridging Group. <i>Advanced Functional Materials</i> , 2011, 21, 2319-2329.	7.8	155
3	Hybrid ceramic nanosieves: stabilizing nanopores with organic links. <i>Chemical Communications</i> , 2008, , 1103.	2.2	132
4	High-performance hybrid pervaporation membranes with superior hydrothermal and acid stability. <i>Journal of Membrane Science</i> , 2008, 324, 111-118.	4.1	114
5	Pushing membrane stability boundaries with HybSi <sup>®</sup> pervaporation membranes. <i>Journal of Membrane Science</i> , 2011, 380, 124-131.	4.1	87
6	Hydrophobic modification of $\gamma$ -alumina membranes with organochlorosilanes. <i>Journal of Membrane Science</i> , 2004, 243, 125-132.	4.1	81
7	Hybrid organosilica membranes and processes: Status and outlook. <i>Separation and Purification Technology</i> , 2014, 121, 2-12.	3.9	70
8	Stable Hybrid Silica Nanosieve Membranes for the Dehydration of Lower Alcohols. <i>ChemSusChem</i> , 2009, 2, 158-160.	3.6	62
9	Hybrid silica membranes with enhanced hydrogen and CO <sub>2</sub> separation properties. <i>Journal of Membrane Science</i> , 2015, 488, 121-128.	4.1	60
10	The effect of the reduction temperature on the structure of Cu/ZnO/SiO <sub>2</sub> catalysts for methanol synthesis. <i>Journal of Catalysis</i> , 2005, 229, 136-143.	3.1	58
11	Tuning the nanopore structure and separation behavior of hybrid organosilica membranes. <i>Microporous and Mesoporous Materials</i> , 2014, 185, 224-234.	2.2	54
12	Evaluation of hybrid silica sols for stable microporous membranes using high-throughput screening. <i>Journal of Sol-Gel Science and Technology</i> , 2011, 57, 245-252.	1.1	49
13	Dielectric heating effects on the activity and SO <sub>2</sub> resistance of La <sub>0.8</sub> Ce <sub>0.2</sub> MnO <sub>3</sub> perovskite for methane oxidation. <i>Journal of Catalysis</i> , 2004, 221, 523-531.	3.1	45
14	Studies of water and ice in hydrophilic and hydrophobic mesoporous silicas: pore characterisation and phase transformations. <i>Physical Chemistry Chemical Physics</i> , 2010, 12, 2838.	1.3	45
15	From hydrophilic to hydrophobic HybSi <sup>®</sup> membranes: A change of affinity and applicability. <i>Journal of Membrane Science</i> , 2013, 428, 157-162.	4.1	45
16	Microwave-assisted in-situ regeneration of a perovskite coated diesel soot filter. <i>Chemical Engineering Science</i> , 2005, 60, 797-804.	1.9	38
17	Microporous structure and enhanced hydrophobicity in methylated SiO <sub>2</sub> for molecular separation. <i>Journal of Materials Chemistry</i> , 2007, 17, 1509.	6.7	38
18	Structure of hybrid organic-inorganic sols for the preparation of hydrothermally stable membranes. <i>Journal of Sol-Gel Science and Technology</i> , 2008, 48, 11-17.	1.1	35

#	ARTICLE	IF	CITATIONS
19	Structural studies of water in hydrophilic and hydrophobic mesoporous silicas: An x-ray and neutron diffraction study at 297 K. <i>Journal of Chemical Physics</i> , 2011, 134, 064509.	1.2	35
20	Step response and transient isotopic labelling studies into the mechanism of CO oxidation over La <sub>0.8</sub> Ce <sub>0.2</sub> MnO <sub>3</sub> perovskite. <i>Applied Catalysis B: Environmental</i> , 2004, 54, 93-103.	10.8	32
21	Hydrophobisation of mesoporous $\gamma$ -Al <sub>2</sub> O <sub>3</sub> with organochlorosilanes: efficiency and structure. <i>Microporous and Mesoporous Materials</i> , 2005, 83, 1-9.	2.2	29
22	Highly Mixed Phases in Ball-milled Cu/ZnO Catalysts: An EXAFS and XANES Study. <i>Journal of Physical Chemistry B</i> , 2006, 110, 16892-16901.	1.2	29
23	Oxidation and reduction in copper/zinc oxides by mechanical milling. <i>Materials Science &amp; Engineering A: Structural Materials: Properties, Microstructure and Processing</i> , 2001, 304-306, 418-423.	2.6	28
24	Structure and Growth of Polymeric Niobia-Silica Mixed-Oxide Sols for Microporous Molecular Sieving Membranes: A SAXS Study. <i>Chemistry of Materials</i> , 2009, 21, 1822-1828.	3.2	28
25	Increasing the hydrothermal stability of mesoporous SiO <sub>2</sub> with methylchlorosilanes: a structural study. <i>Microporous and Mesoporous Materials</i> , 2006, 88, 63-71.	2.2	27
26	Mechanochemical Reactions in Cu/ZnO Catalysts Induced by Mechanical Milling. <i>Journal of Physical Chemistry B</i> , 2001, 105, 7928-7937.	1.2	26
27	Exfoliation and Restacking of Lepidocrocite-type Layered Titanates Studied by Small-Angle X-ray Scattering. <i>Journal of Physical Chemistry C</i> , 2010, 114, 21281-21286.	1.5	22
28	Nanoscale Structure Evolution in Alkoxide-Carboxylate Sol-Gel Precursor Solutions of Barium Titanate. <i>Journal of Physical Chemistry C</i> , 2011, 115, 20449-20459.	1.5	16
29	Evolution of microstructure in mixed niobia-hybrid silica thin films from sol-gel precursors. <i>Journal of Colloid and Interface Science</i> , 2013, 404, 24-35.	5.0	13
30	Time-resolved small angle X-ray scattering study of sol-gel precursor solutions of lead zirconate titanate and zirconia. <i>Journal of Colloid and Interface Science</i> , 2012, 369, 184-192.	5.0	12
31	Nanostructure Development in Alkoxide-Carboxylate-Derived Precursor Films of Barium Titanate. <i>Journal of Physical Chemistry C</i> , 2012, 116, 425-434.	1.5	10
32	Free volume changes in mechanically milled PS and PC studied by positron annihilation lifetime spectroscopy (PALS). <i>Polymer Engineering and Science</i> , 2004, 44, 1351-1359.	1.5	9
33	New Highly Mixed Phases in Ball-Milled Cu/ZnO Catalysts as Established by EXAFS and XANES. <i>AIP Conference Proceedings</i> , 2007, , .	0.3	6
34	Development of Nanoscale Inhomogeneities during Drying of Sol-Gel Derived Amorphous Lead Zirconate Titanate Precursor Thin Films. <i>Langmuir</i> , 2011, 27, 11081-11089.	1.6	6
35	Perovskite-type oxides as susceptor materials in dielectric heating. <i>Journal of Materials Science</i> , 2007, 42, 5851-5859.	1.7	5
36	Structural studies of water in a confined hydrophobic environment. <i>Journal of Physics: Conference Series</i> , 2009, 177, 012010.	0.3	3

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37	Instrumentation for $\hat{\nu}$ photoproduction experiments on nuclei with high-energy resolution. Nuclear Instruments and Methods in Physics Research, Section A: Accelerators, Spectrometers, Detectors and Associated Equipment, 1997, 399, 160-170.	0.7	2
38	Mechanochemical Reactions on Copper-Based Compounds. Journal of Metastable and Nanocrystalline Materials, 1999, 2-6, 209-214.	0.1	1
39	Versatile membrane makes large-scale energy-efficient separation possible. Membrane Technology, 2011, 2011, 9.	0.5	0
40	MEMBRANES: Tailoring the Separation Behavior of Hybrid Organosilica Membranes by Adjusting the Structure of the Organic Bridging Group (Adv. Funct. Mater. 12/2011). Advanced Functional Materials, 2011, 21, 2318-2318.	7.8	0
41	STRUCTURAL TRANSFORMATIONS IN AMORPHOUS POLYMERS BY MECHANICAL MILLING. , 1998, , .		0