

Libor Brabec

List of Publications by Year in descending order

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#	ARTICLE	IF	CITATIONS
1	Stochastic Reconstruction of Particulate Media Using Simulated Annealing: Improving Pore Connectivity. <i>Transport in Porous Media</i> , 2009, 76, 179-198.	2.6	80
2	Effect of Enhanced Accessibility of Acid Sites in Micromesoporous Mordenite Zeolites on Hydroisomerization of <i>n</i> -Hexane. <i>ACS Catalysis</i> , 2017, 7, 5781-5795.	11.2	69
3	Unstable enols in the gas phase. Preparation ionization, energies, and heats of formation of (E)- and (Z)-2-buten-2-ol, 2-methyl-1-propen-1-ol, and 3-methyl-2-buten-2-ol. <i>Journal of the American Chemical Society</i> , 1988, 110, 7984-7990.	13.7	57
4	Transport Properties of Stochastically Reconstructed Porous Media with Improved Pore Connectivity. <i>Transport in Porous Media</i> , 2011, 88, 87-106.	2.6	45
5	Spectroscopic study of the surface oxidation of mechanically activated sulphides. <i>Applied Surface Science</i> , 2002, 200, 36-47.	6.1	40
6	Various types of Ga in MFI metallosilicates: characterization and catalytic activity. <i>Applied Catalysis A: General</i> , 1998, 167, 309-320.	4.3	36
7	A water-swollen thin film composite membrane for effective upgrading of raw biogas by methane. <i>Separation and Purification Technology</i> , 2012, 89, 212-216.	7.9	34
8	High nuclearity Pt carbonyls in alkali-metal X zeolites. <i>Journal of the Chemical Society, Faraday Transactions</i> , 1996, 92, 2035-2041.	1.7	29
9	Post-synthesis incorporation of Al into germanosilicate zeolites: the influence of treatment conditions on the acidic properties and catalytic behavior in tetrahydropyranlylation. <i>Catalysis Science and Technology</i> , 2015, 5, 2973-2984.	4.1	29
10	PtO in alkali faujasites. 1. Preparation by thermal decomposition of [Pt(NH ₃) ₄] ²⁺ in vacuum. <i>Zeolites</i> , 1996, 16, 173-183.	0.5	25
11	Hardness and elastic modulus of silicalite-1 crystal twins. <i>Microporous and Mesoporous Materials</i> , 2006, 94, 226-233.	4.4	25
12	Transition-Metal-Catalyzed Chain-Growth Polymerization of 1,4-Diethynylbenzene into Microporous Crosslinked Poly(phenylacetylene)s: the Effect of Reaction Conditions. <i>Macromolecular Chemistry and Physics</i> , 2014, 215, 1855-1869.	2.2	25
13	Immobilized rGO/TiO ₂ Photocatalyst for Decontamination of Water. <i>Catalysts</i> , 2019, 9, 708.	3.5	25
14	Sulfenic acids in the gas phase. Preparation, ionization energies and heats of formation of methane-, ethene-, and benzenesulfenic acid. <i>Collection of Czechoslovak Chemical Communications</i> , 1988, 53, 2140-2158.	1.0	24
15	Anionic Pt Carbonyl Complexes in Faujasites: A Matrix Effect. <i>The Journal of Physical Chemistry</i> , 1996, 100, 15517-15524.	2.9	24
16	Fe in MFI metallosilicates, characterization and catalytic activity. <i>Applied Catalysis A: General</i> , 1998, 170, 105-116.	4.3	22
17	Photocatalytic performance of porous TiO ₂ layers prepared by quantitative electrophoretic deposition from organic solvents. <i>Applied Catalysis B: Environmental</i> , 2018, 227, 70-78.	20.2	22
18	Silicalite-1 Crystals Etched with Hydrofluoric Acid Dissolved in Water or Acetone. <i>Journal of Physical Chemistry C</i> , 2010, 114, 13685-13694.	3.1	20

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19	Combined silica sources to prepare preferentially oriented silicalite-1 layers on various supports. <i>Microporous and Mesoporous Materials</i> , 2013, 174, 154-162.	4.4	20
20	Silicalite-1 polycrystalline layers and crystal twins: Morphology and grain boundaries. <i>Materials Chemistry and Physics</i> , 2007, 102, 67-74.	4.0	19
21	Catalytic conversion of oxygen containing cyclic compounds. Part I. Cyclohexanol conversion over H[Al]ZSM-5 and H[B]ZSM-5. <i>Journal of Molecular Catalysis</i> , 1994, 94, 117-130.	1.2	18
22	Stochastic reconstruction of mixed-matrix membranes and evaluation of effective permeability. <i>Computational Materials Science</i> , 2014, 89, 142-156.	3.0	18
23	Mechanochemical Pretreatment for Efficient Solvent-Free Synthesis of SSZ-13 Zeolite. <i>Chemistry - A European Journal</i> , 2019, 25, 12068-12073.	3.3	18
24	Analysis of decisive structural parameters of zeolites for alkylation of benzene with ethylene. <i>Applied Catalysis A: General</i> , 2020, 591, 117379.	4.3	17
25	Ship-in-bottle synthesis of anionic Rh carbonyls in faujasites. <i>Journal of Molecular Catalysis A</i> , 2001, 166, 283-292.	4.8	13
26	Pt Species in Zeolite X: Catalytic Activity in ^{18}O Exchange of O_2 with Zeolitic Oxygen, $^{18}\text{O}_2 \rightleftharpoons ^{16}\text{O}_2$ Equilibration, $\text{H}_2 \rightleftharpoons \text{D}_2$ Equilibration, and the $\text{CO} \rightleftharpoons \text{NO}$ Reaction. <i>Journal of Catalysis</i> , 1997, 166, 186-194.	6.2	12
27	Electrolytic Processes in Various Degrees of Dispersion. <i>Langmuir</i> , 2007, 23, 1523-1529.	3.5	12
28	Static in-situ hydrothermal synthesis of small pore zeolite SSZ-16 (AFX) using heated and pre-aged synthesis mixtures. <i>Microporous and Mesoporous Materials</i> , 2016, 228, 107-115.	4.4	12
29	Effect of zeolitic water on the carbonylation route of platinum(II) in NaX to $[\text{Pt}_3(\text{CO})_6]^{2+}$ Chini complexes embedded in cavities of the zeolite. <i>Journal of Molecular Catalysis A</i> , 2000, 157, 151-161.	4.8	11
30	Characterization of textural and surface properties of mesoporous metathesis catalysis. <i>Studies in Surface Science and Catalysis</i> , 2007, 170, 1145-1152.	1.5	11
31	Mixed matrix membranes based on γ -aminopropyltriethoxysilane endcapped polyimides and silicalite-1. <i>Journal of Applied Polymer Science</i> , 2012, 124, E233.	2.6	11
32	Polycrystalline wafers of silicalite-1 etched by HF acid and viewed by SEM. <i>Applied Surface Science</i> , 2004, 228, 1-4.	6.1	10
33	Interaction of human osteoblast-like Saos-2 cells with stainless steel coated by silicalite-1 films. <i>Materials Science and Engineering C</i> , 2017, 76, 775-781.	7.3	10
34	Subnanometer platinum clusters in zeolite NaEMT via stoichiometric carbonyl clusters. <i>Microporous and Mesoporous Materials</i> , 2000, 35-36, 511-519.	4.4	9
35	NaX-encaged Pt carbonyls: reversible substitution of CO ligands by oxygen and ammonia. Evidence for a conservation of the polynuclear Pt skeleton. <i>Physical Chemistry Chemical Physics</i> , 2000, 2, 3099-3104.	2.8	9
36	Ship-in-bottle synthesis of Pt-Rh carbonyls in NaX and NaY: FTIR study. <i>Journal of Molecular Catalysis A</i> , 2001, 169, 127-136.	4.8	9

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37	Relative ionization cross-sections of oxygenated C(4) molecules. International Journal of Mass Spectrometry and Ion Processes, 1990, 97, 117-124.	1.8	8
38	Self-templating synthesis of hollow spheres of zeolite ZSM-5 from spray-dried aluminosilicate precursor. Microporous and Mesoporous Materials, 2016, 228, 59-63.	4.4	8
39	Milling Activation for the Solvent-Free Synthesis of the Zeolite Mordenite. European Journal of Inorganic Chemistry, 2020, 2020, 2791-2797.	2.0	8
40	Morphology and structure of silicalite-1 crystals. Evidence of twinning by X-ray and electron diffraction. Studies in Surface Science and Catalysis, 2005, 158, 741-748.	1.5	6
41	Polycrystalline silicalite-1 layers: texture and kinetics of growth. Microporous and Mesoporous Materials, 2005, 78, 29-36.	4.4	6
42	Network modelling of capillary pressure curves, permeability, and diffusivity. Chemical Engineering Science, 2007, 62, 5117-5122.	3.8	6
43	Effect of Li, Na, K and Cs on Vacuum Decomposition of Tetraammineplatinum(II) in Zeolites. Catalytic Activity in CO + NO Reaction. Collection of Czechoslovak Chemical Communications, 1995, 60, 428-442.	1.0	5
44	Incorporation of zeolites in polyimide matrices. Studies in Surface Science and Catalysis, 2002, , 1521-1528.	1.5	5
45	Catalytic conversion of oxygen containing cyclic compounds. Part II. Cyclohexanone conversion on HZSM-5 zeolites. Journal of Molecular Catalysis, 1994, 94, 243-253.	1.2	4
46	Effective diffusivities of gases in a reconstructed porous body. Chemical Engineering Research and Design, 2008, 86, 713-722.	5.6	4
47	Polyamic acid: nanoprecipitation and electrophoretic deposition on porous supports. Journal of Coatings Technology Research, 2018, 15, 489-496.	2.5	4
48	Ultrasonic Pretreatment as a Tool for the Preparation of Low-Defect Zeolite Mordenite. ACS Omega, 2021, 6, 2340-2345.	3.5	4
49	Controlling the competitive growth of zeolite phases without using an organic structure-directing agent. Synthesis of Al-rich *BEA. Microporous and Mesoporous Materials, 2022, 333, 111726.	4.4	3
50	Square root relationship in growth kinetics of silicalite-1 membranes. Studies in Surface Science and Catalysis, 2002, , 1505-1511.	1.5	2
51	Long-term stability of composite zeolite MFI membranes. Studies in Surface Science and Catalysis, 2008, 174, 673-676.	1.5	2
52	Hierarchical TiO2 Layers Prepared by Plasma Jets. Nanomaterials, 2021, 11, 3254.	4.1	2
53	Methodology for Simultaneous Analysis of Photocatalytic deNOx Products. Catalysts, 2022, 12, 661.	3.5	2
54	Cyclohexanol and cyclohexanone reactions on HZSM-5 zeolites. Studies in Surface Science and Catalysis, 1994, 84, 1889-1896.	1.5	1

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55	Electrophoretic Deposition of Zeolites Focused on Attendant Electrodeposition and Subsequent Growth of Electric Current. <i>ChemistrySelect</i> , 2019, 4, 3185-3190.	1.5	1
56	Influence of the ultrasonic-assisted synthesis on Al distribution in a MOR zeolite: from gel to resulting material. <i>New Journal of Chemistry</i> , 0, , .	2.8	1
57	Frontispiece: Mechanochemical Pretreatment for Efficient Solvent-Free Synthesis of SSZ-13 Zeolite. <i>Chemistry - A European Journal</i> , 2019, 25, .	3.3	0
58	Reaction of Nitric Oxide Adsorbed on Platinum Clusters in X Zeolites. Effect of Cluster Size and Nature of Alkali Cations. <i>Collection of Czechoslovak Chemical Communications</i> , 1999, 64, 474-482.	1.0	0