Mark E Davis

List of Publications by Citations

212 papers	34,858 citations	80 h-index	186 g-index
224 ext. papers	37,266 ext. citations	11.7 avg, IF	7.92 L-index

#	Paper	IF	Citations
212	Ordered porous materials for emerging applications. *Nature*, **2002**, 417, 813-21	50.4	4430
211	Nanoparticle therapeutics: an emerging treatment modality for cancer. *Nature Reviews Drug Discovery*, **2008**, 7, 771-82	64.1	3332
210	Evidence of RNAi in humans from systemically administered siRNA via targeted nanoparticles. *Nature*, **2010**, 464, 1067-70	50.4	2018
209	Cyclodextrin-based pharmaceutics: past, present and future. *Nature Reviews Drug Discovery*, **2004**, 3, 1023-35	64.1	1386
208	Zeolite and molecular sieve synthesis. *Chemistry of Materials*, **1992**, 4, 756-768	9.6	1198
207	The first targeted delivery of siRNA in humans via a self-assembling, cyclodextrin polymer-based nanoparticle: from concept to clinic. *Molecular Pharmaceutics*, **2009**, 6, 659-68	5.6	810
206	Tin-containing zeolites are highly active catalysts for the isomerization of glucose in water. *Proceedings of the National Academy of Sciences of the United States of America*, **2010**, 107, 6164-8	11.5	750
205	Impact of tumor-specific targeting on the biodistribution and efficacy of siRNA nanoparticles measured by multimodality in vivo imaging. *Proceedings of the National Academy of Sciences of the United States of America*, **2007**, 104, 15549-54	11.5	702
204	Insights into the kinetics of siRNA-mediated gene silencing from live-cell and live-animal bioluminescent imaging. *Nucleic Acids Research*, **2006**, 34, 322-33	20.1	603
203	A molecular sieve with eighteen-membered rings. *Nature*, **1988**, 331, 698-699	50.4	585
202	PEGylation significantly affects cellular uptake and intracellular trafficking of non-viral gene delivery particles. *European Journal of Cell Biology*, **2004**, 83, 97-111	6.1	582
201	Mechanism of active targeting in solid tumors with transferrin-containing gold nanoparticles. *Proceedings of the National Academy of Sciences of the United States of America*, **2010**, 107, 1235-40	11.5	551
200	Mechanism of glucose isomerization using a solid Lewis acid catalyst in water. *Angewandte Chemie - International Edition*, **2010**, 49, 8954-7	16.4	547
199	One-Pot Synthesis of 5-(Hydroxymethyl)furfural from Carbohydrates using Tin-Beta Zeolite. *ACS Catalysis*, **2011**, 1, 408-410	13.1	544
198	Sequence-specific knockdown of EWS-FLI1 by targeted, nonviral delivery of small interfering RNA inhibits tumor growth in a murine model of metastatic Ewing's sarcoma. *Cancer Research*, **2005**, 65, 8984-92	10.1	495
197	Molecular imprinting of bulk, microporous silica. *Nature*, **2000**, 403, 286-9	50.4	449
196	Synthesis of Pure Alumina Mesoporous Materials. *Chemistry of Materials*, **1996**, 8, 1451-1464	9.6	378

195	Cooperative catalysis by silica-supported organic functional groups. *Chemical Society Reviews*, **2008**, 37, 1118-26	58.5	376
194	Organic-functionalized molecular sieves as shape-selective catalysts. *Nature*, **1998**, 393, 52-54	50.4	375
193	Non-viral gene delivery systems. *Current Opinion in Biotechnology*, **2002**, 13, 128-31	11.4	365
192	New vistas in zeolite and molecular sieve catalysis. *Accounts of Chemical Research*, **1993**, 26, 111-115	24.3	354
191	Administration in non-human primates of escalating intravenous doses of targeted nanoparticles containing ribonucleotide reductase subunit M2 siRNA. *Proceedings of the National Academy of Sciences of the United States of America*, **2007**, 104, 5715-21	11.5	346
190	Small-Pore Zeolites: Synthesis and Catalysis. *Chemical Reviews*, **2018**, 118, 5265-5329	68.1	336
189	Mechanism of Structure Direction in the Synthesis of Si-ZSM-5: An Investigation by Intermolecular 1H-29Si CP MAS NMR. *The Journal of Physical Chemistry*, **1994**, 98, 4647-4653		334
188	Transcytosis and brain uptake of transferrin-containing nanoparticles by tuning avidity to transferrin receptor. *Proceedings of the National Academy of Sciences of the United States of America* , **2013**, 110, 8662-7	11.5	315
187	Activation of Carbonyl-Containing Molecules with Solid Lewis Acids in Aqueous Media. *ACS Catalysis*, **2011**, 1, 1566-1580	13.1	313
186	Metalloenzyme-like catalyzed isomerizations of sugars by Lewis acid zeolites. *Proceedings of the National Academy of Sciences of the United States of America*, **2012**, 109, 9727-32	11.5	303
185	Nanotechnology and cancer. *Annual Review of Medicine*, **2008**, 59, 251-65	17.4	295
184	Hydroformylation by supported aqueous-phase catalysis: a new class of heterogeneous catalysts. *Nature*, **1989**, 339, 454-455	50.4	289
183	Clinical experiences with systemically administered siRNA-based therapeutics in cancer. *Nature Reviews Drug Discovery*, **2015**, 14, 843-56	64.1	288
182	Mechanisms of Structure Direction in the Synthesis of Pure-Silica Zeolites. 1. Synthesis of TPA/Si-ZSM-5. *Chemistry of Materials*, **1995**, 7, 920-928	9.6	273
181	Correlating animal and human phase Ia/Ib clinical data with CALAA-01, a targeted, polymer-based nanoparticle containing siRNA. *Proceedings of the National Academy of Sciences of the United States of America*, **2014**, 111, 11449-54	11.5	262
180	Functional polarity is introduced by Dicer processing of short substrate RNAs. *Nucleic Acids Research*, **2005**, 33, 4140-56	20.1	260
179	Polycation-siRNA nanoparticles can disassemble at the kidney glomerular basement membrane. *Proceedings of the National Academy of Sciences of the United States of America*, **2012**, 109, 3137-42	11.5	259
178	Physicochemical and biological characterization of targeted, nucleic acid-containing nanoparticles. *Bioconjugate Chemistry*, **2007**, 18, 456-68	6.3	242

177	Framework and Extraframework Tin Sites in Zeolite Beta React Glucose Differently. *ACS Catalysis*, **2012**, 2, 2705-2713	13.1	233
176	Active Sites in Sn-Beta for Glucose Isomerization to Fructose and Epimerization to Mannose. *ACS Catalysis*, **2014**, 4, 2288-2297	13.1	211
175	Zeolites from a Materials Chemistry Perspective. *Chemistry of Materials*, **2014**, 26, 239-245	9.6	208
174	Synthesis of terephthalic acid via Diels-Alder reactions with ethylene and oxidized variants of 5-hydroxymethylfurfural. *Proceedings of the National Academy of Sciences of the United States of America*, **2014**, 111, 8363-7	11.5	205
173	SiO-.cntdot. .cntdot. .cntdot.HOSi Hydrogen Bonds in As-Synthesized High-Silica Zeolites. *The Journal of Physical Chemistry*, **1995**, 99, 12588-12596		205
172	Preclinical efficacy of the camptothecin-polymer conjugate IT-101 in multiple cancer models. *Clinical Cancer Research*, **2006**, 12, 1606-14	12.9	198
171	Rational Catalyst Design via Imprinted Nanostructured Materials. *Chemistry of Materials*, **1996**, 8, 1820-1839	9.6	197
170	Base catalysis by alkali-modified zeolites I. Catalytic activity. *Journal of Catalysis*, **1989**, 116, 263-278	7.3	197
169	Zeolites and molecular sieves: not just ordinary catalysts. *Industrial & Engineering Chemistry Research*, **1991**, 30, 1675-1683	3.9	190
168	Design and synthesis of a heterogeneous asymmetric catalyst. *Nature*, **1994**, 370, 449-450	50.4	187
167	Guest/Host Relationships in the Synthesis of the Novel Cage-Based Zeolites SSZ-35, SSZ-36, and SSZ-39. *Journal of the American Chemical Society*, **2000**, 122, 263-273	16.4	181
166	Thermochemistry of Pure-Silica Zeolites. *Journal of Physical Chemistry B*, **2000**, 104, 10001-10011	3.4	175
165	Increased brain uptake of targeted nanoparticles by adding an acid-cleavable linkage between transferrin and the nanoparticle core. *Proceedings of the National Academy of Sciences of the United States of America*, **2015**, 112, 12486-91	11.5	171
164	Mechanism of Structure Direction in the Synthesis of Pure-Silica Zeolites. 2. Hydrophobic Hydration and Structural Specificity. *Chemistry of Materials*, **1995**, 7, 1453-1463	9.6	164
163	Imaging the Assembly Process of the Organic-Mediated Synthesis of a Zeolite. *Chemistry - A European Journal*, **1999**, 5, 2083-2088	4.8	163
162	Design and development of IT-101, a cyclodextrin-containing polymer conjugate of camptothecin. *Advanced Drug Delivery Reviews*, **2009**, 61, 1189-92	18.5	155
161	Characterization of the Extra-Large-Pore Zeolite UTD-1. *Journal of the American Chemical Society*, **1997**, 119, 8474-8484	16.4	152
160	Impact of tumor-specific targeting and dosing schedule on tumor growth inhibition after intravenous administration of siRNA-containing nanoparticles. *Biotechnology and Bioengineering*, **2008**, 99, 975-85	4.9	149

159	Properties of organic cations that lead to the structure-direction of high-silica molecular sieves. *Microporous Materials*, **1996**, 6, 213-229		147
158	VPI-5: The first molecular sieve with pores larger than 10 Ångstroms. *Zeolites*, **1988**, 8, 362-366		146
157	Clinical developments in nanotechnology for cancer therapy. *Pharmaceutical Research*, **2011**, 28, 187-99	4.5	145
156	Investigations into the nature of a silicoaluminophosphate with the faujasite structure. *Journal of the American Chemical Society*, **1987**, 109, 2686-2691	16.4	143
155	Potent siRNA inhibitors of ribonucleotide reductase subunit RRM2 reduce cell proliferation in vitro and in vivo. *Clinical Cancer Research*, **2007**, 13, 2207-15	12.9	142
154	Pharmacokinetics and tumor dynamics of the nanoparticle IT-101 from PET imaging and tumor histological measurements. *Proceedings of the National Academy of Sciences of the United States of America*, **2009**, 106, 11394-9	11.5	141
153	Monosaccharide and disaccharide isomerization over Lewis acid sites in hydrophobic and hydrophilic molecular sieves. *Journal of Catalysis*, **2013**, 308, 176-188	7.3	129
152	Pharmacokinetics and biodistribution of the camptothecin-polymer conjugate IT-101 in rats and tumor-bearing mice. *Cancer Chemotherapy and Pharmacology*, **2006**, 57, 654-62	3.5	127
151	The Quest For Extra-Large Pore, Crystalline Molecular Sieves. *Chemistry - A European Journal*, **1997**, 3, 1745-1750	4.8	125
150	CRLX101 nanoparticles localize in human tumors and not in adjacent, nonneoplastic tissue after intravenous dosing. *Proceedings of the National Academy of Sciences of the United States of America*, **2016**, 113, 3850-4	11.5	122
149	CIT-5: a high-silica zeolite with 14-ring pores. *Chemical Communications*, **1997**, 2179-2180	5.8	119
148	Self-Pillared, Single-Unit-Cell Sn-MFI Zeolite Nanosheets and Their Use for Glucose and Lactose Isomerization. *Angewandte Chemie - International Edition*, **2015**, 54, 10848-51	16.4	115
147	CIT-1: A New Molecular Sieve with Intersecting Pores Bounded by 10- and 12-Rings. *Journal of the American Chemical Society*, **1995**, 117, 3766-3779	16.4	113
146	Effect of Cage Size on the Selective Conversion of Methanol to Light Olefins. *ACS Catalysis*, **2012**, 2, 2490-2495	13.1	112
145	Beyond shape selective catalysis with zeolites: Hydrophobic void spaces in zeolites enable catalysis in liquid water. *AICHE Journal*, **2013**, 59, 3349-3358	3.6	108
144	Effect of siRNA nuclease stability on the in vitro and in vivo kinetics of siRNA-mediated gene silencing. *Biotechnology and Bioengineering*, **2007**, 97, 909-21	4.9	103
143	Investigations into the Mechanisms of Molecular Recognition with Imprinted Polymers. *Macromolecules*, **1999**, 32, 4113-4121	5.5	103
142	Synthesis, Characterization, and Structure Solution of CIT-5, a New, High-Silica, Extra-Large-Pore Molecular Sieve. *Journal of Physical Chemistry B*, **1998**, 102, 7139-7147	3.4	97

141	Impact of Controlling the Site Distribution of Al Atoms on Catalytic Properties in Ferrierite-Type Zeolites. *Journal of Physical Chemistry C*, **2011**, 115, 1096-1102	3.8	96
140	Effect of Heteroatom Concentration in SSZ-13 on the Methanol-to-Olefins Reaction. *ACS Catalysis*, **2016**, 6, 542-550	13.1	89
139	Base catalysis by alkali-modified zeolites: II. Nature of the active site. *Journal of Catalysis*, **1989**, 116, 279-284	7.3	89
138	ZrO2 promoted with sulfate, iron and manganese: a solid superacid catalyst capable of low temperaturen-butane isomerization. *Catalysis Letters*, **1994**, 25, 21-28	2.8	86
137	Mechanism of Glucose Isomerization Using a Solid Lewis Acid Catalyst in Water. *Angewandte Chemie*, **2010**, 122, 9138-9141	3.6	85
136	Tandem catalysis for the production of alkyl lactates from ketohexoses at moderate temperatures. *Proceedings of the National Academy of Sciences of the United States of America*, **2015**, 112, 11777-82	11.5	81
135	Organic-functionalized molecular sieves (OFMSs):: II. Synthesis, characterization and the transformation of OFMSs containing non-polar functional groups into solid acids. *Microporous and Mesoporous Materials*, **1999**, 33, 223-240	5.3	81
134	Characterization and catalytic activity of titanium containing SSZ-33 and aluminum-free zeolite beta. *Applied Catalysis A: General*, **1996**, 143, 53-73	5.1	81
133	Thermodynamics of Pure-Silica Molecular Sieve Synthesis. *Journal of Physical Chemistry B*, **2002**, 106, 3629-3638	3.4	80
132	Enantiomerically enriched, polycrystalline molecular sieves. *Proceedings of the National Academy of Sciences of the United States of America*, **2017**, 114, 5101-5106	11.5	79
131	Challenges of and Insights into Acid-Catalyzed Transformations of Sugars. *Journal of Physical Chemistry C*, **2014**, 118, 22815-22833	3.8	79
130	Structure-directing effects in the crown ether-mediated syntheses of FAU and EMT zeolites. *Microporous Materials*, **1993**, 1, 265-282		79
129	Synthesis of a specified, silica molecular sieve by using computationally predicted organic structure-directing agents. *Angewandte Chemie - International Edition*, **2014**, 53, 8372-4	16.4	76
128	Route to Renewable PET: Reaction Pathways and Energetics of Diels–Alder and Dehydrative Aromatization Reactions Between Ethylene and Biomass-Derived Furans Catalyzed by Lewis Acid Molecular Sieves. *ACS Catalysis*, **2015**, 5, 5904-5913	13.1	73
127	Reflections on Routes to Enantioselective Solid Catalysts. *Topics in Catalysis*, **2003**, 25, 3-7	2.3	71
126	Location of Pyridine Guest Molecules in an Electroneutral {3}[SiO4/2] Host Framework: Single-Crystal Structures of the As-Synthesized and Calcined Forms of High-Silica Ferrierite. *The Journal of Physical Chemistry*, **1996**, 100, 5039-5049		68
125	Organic-Free Synthesis of CHA-Type Zeolite Catalysts for the Methanol-to-Olefins Reaction. *ACS Catalysis*, **2015**, 5, 4456-4465	13.1	65
124	Methanol-to-Olefins Catalysis with Hydrothermally Treated Zeolite SSZ-39. *ACS Catalysis*, **2015**, 5, 6078-6085	11.5	64

123	Systemic delivery of siRNA nanoparticles targeting RRM2 suppresses head and neck tumor growth. *Journal of Controlled Release*, **2012**, 159, 384-92	11.7	63
122	SSZ-35 and SSZ-44: Two Related Zeolites Containing Pores Circumscribed by Ten- and Eighteen-Membered Rings. *Angewandte Chemie - International Edition*, **1999**, 38, 1269-1272	16.4	63
121	Proton Conductivity of Acid-Functionalized Zeolite Beta, MCM-41, and MCM-48: Effect of Acid Strength. *Chemistry of Materials*, **2008**, 20, 5122-5124	9.6	62
120	A nanoparticle-based model delivery system to guide the rational design of gene delivery to the liver. 2. In vitro and in vivo uptake results. *Bioconjugate Chemistry*, **2005**, 16, 1071-80	6.3	61
119	Imidazolium structure directing agents in zeolite synthesis: Exploring guest/host relationships in the synthesis of SSZ-70. *Microporous and Mesoporous Materials*, **2010**, 130, 255-265	5.3	60
118	Synthesis and characterization of pure-silica and boron-substituted SSZ-24 using N(16) methylsparteinium bromide as structure-directing agent. *Microporous Materials*, **1994**, 3, 61-69		56
117	A Chromium Hydroxide/MIL-101(Cr) MOF Composite Catalyst and Its Use for the Selective Isomerization of Glucose to Fructose. *Angewandte Chemie - International Edition*, **2018**, 57, 4926-4930	16.4	54
116	Facile Synthesis and Catalysis of Pure-Silica and Heteroatom LTA. *Chemistry of Materials*, **2015**, 27, 7774-7779	9.6	52
115	SSZ-33: A Promising Material for Use as a Hydrocarbon Trap. *Journal of Physical Chemistry B*, **2004**, 108, 13059-13061	3.4	52
114	Single-antibody, targeted nanoparticle delivery of camptothecin. *Molecular Pharmaceutics*, **2013**, 10, 2558-67	5.6	51
113	Heterogeneous Catalysis for the Conversion of Sugars into Polymers. *Topics in Catalysis*, **2015**, 58, 405-409	2.3	50
112	Pharmacodynamic and pharmacogenomic study of the nanoparticle conjugate of camptothecin CRLX101 for the treatment of cancer. *Nanomedicine: Nanotechnology, Biology, and Medicine*, **2014**, 10, 1477-86	6	50
111	Preclinical results of camptothecin-polymer conjugate (IT-101) in multiple human lymphoma xenograft models. *Clinical Cancer Research*, **2009**, 15, 4365-73	12.9	49
110	Titanium-Beta Zeolites Catalyze the Stereospecific Isomerization of d-Glucose to l-Sorbose via Intramolecular C5□1 Hydride Shift. *ACS Catalysis*, **2013**, 3, 1469-1476	13.1	48
109	Catalysis by framework zinc in silica-based molecular sieves. *Chemical Science*, **2016**, 7, 2264-2274	9.4	47
108	Low-temperature, manganese oxide-based, thermochemical water splitting cycle. *Proceedings of the National Academy of Sciences of the United States of America*, **2012**, 109, 9260-4	11.5	47
107	Synthesis of CIT-6, a zincosilicate with the *BEA topology. *Topics in Catalysis*, **1999**, 9, 35-42	2.3	46
106	Physicochemical Properties and Catalytic Behavior of the Molecular Sieve SSZ-70. *Chemistry of Materials*, **2010**, 22, 2563-2572	9.6	44

105	Raman and 29Si MAS NMR spectroscopy of framework materials containing three-membered rings. *Microporous Materials*, **1993**, 1, 57-65		44
104	Cage-Defining Ring: A Molecular Sieve Structural Indicator for Light Olefin Product Distribution from the Methanol-to-Olefins Reaction. *ACS Catalysis*, **2019**, 9, 6012-6019	13.1	43
103	Synthesis of Hydrophobic Molecular Sieves by Hydrothermal Treatment with Acetic Acid. *Chemistry of Materials*, **2001**, 13, 1041-1050	9.6	43
102	VPI-8: A High-Silica Molecular Sieve with a Novel "Pinwheel" Building Unit and Its Implications for the Synthesis of Extra-Large Pore Molecular Sieves. *Journal of the American Chemical Society*, **1996**, 118, 7299-7310	16.4	40
101	High resolution, quasi-equilibrium sorption studies of molecular sieves. *Catalysis Letters*, **1990**, 5, 333-347	2.8	40
100	VPI-5, AlPO4-8, and MCM-9: similarities and differences. *Zeolites*, **1989**, 9, 436-439		39
99	Synthesis and Characterization of CIT-13, a Germanosilicate Molecular Sieve with Extra-Large Pore Openings. *Chemistry of Materials*, **2016**, 28, 6250-6259	9.6	38
98	Influence of Organic Structure Directing Agent Isomer Distribution on the Synthesis of SSZ-39. *Chemistry of Materials*, **2015**, 27, 2695-2702	9.6	37
97	Structural and kinetic changes to small-pore Cu-zeolites after hydrothermal aging treatments and selective catalytic reduction of NOx with ammonia. *Reaction Chemistry and Engineering*, **2017**, 2, 168-179	4.9	36
96	Organocations in zeolite synthesis: fused bicyclo [l.m.0] cations and the discovery of zeolite SSZ-48. *Journal of the American Chemical Society*, **2002**, 124, 7024-34	16.4	36
95	A new catalyst for the selective oxidation of butane and propane. *Angewandte Chemie - International Edition*, **2002**, 41, 858-60	16.4	35
94	Nickel-Exchanged Zincosilicate Catalysts for the Oligomerization of Propylene. *ACS Catalysis*, **2014**, 4, 4189-4195	13.1	34
93	Nanoparticle therapeutics: an emerging treatment modality for cancer **2009**, 239-250		34
92	Synthesis of RTH-Type Zeolites Using a Diverse Library of Imidazolium Cations. *Chemistry of Materials*, **2015**, 27, 3756-3762	9.6	33
91	Pure-silica LTA, CHA, STT, ITW, and -SVR thin films and powders for low-k applications. *Microporous and Mesoporous Materials*, **2010**, 130, 49-55	5.3	33
90	Tin Silsesquioxanes as Models for the "Open" Site in Tin-Containing Zeolite Beta. *ChemCatChem*, **2016**, 8, 121-124	5.2	33
89	Solid State NMR Characterization of Sn-Beta Zeolites that Catalyze Glucose Isomerization and Epimerization. *Topics in Catalysis*, **2015**, 58, 435-440	2.3	32
88	CIT-7, a crystalline, molecular sieve with pores bounded by 8 and 10-membered rings. *Chemical Science*, **2015**, 6, 1728-1734	9.4	32

87	Intrazeolite rhodium carbonyl and rhodium carbonyl phosphine complexes. *Inorganic Chemistry*, **1984**, 23, 52-56	5.1	32
86	Analysis of a diffusion-limited hollow fiber reactor for the measurement of effective substrate diffusivities. *Biotechnology and Bioengineering*, **1985**, 27, 182-6	4.9	31
85	Synthesis of the RTH-type layer: the first small-pore, two dimensional layered zeolite precursor. *Chemical Science*, **2015**, 6, 5955-5963	9.4	29
84	Analysis of a continuous, aerobic, fixed-film bioreactor. I. Steady-state behavior. *Biotechnology and Bioengineering*, **1984**, 26, 457-67	4.9	29
83	Store-Operated Ca2+ Channels in Mesangial Cells Inhibit Matrix Protein Expression. *Journal of the American Society of Nephrology: JASN*, **2015**, 26, 2691-702	12.7	28
82	Materials science. Distinguishing the (almost) indistinguishable. *Science*, **2003**, 300, 438-9	33.3	28
81	Synthesis and Structure of Ultrafine Zeolite KL (LTL) Crystallites and their Use for Thin Film Zeolite Processing. *Materials Research Society Symposia Proceedings*, **1994**, 371, 21		27
80	High-silica, heulandite-type zeolites prepared by direct synthesis and topotactic condensation. *Journal of Materials Chemistry A*, **2015**, 3, 12890-12897	13	26
79	Chapter 4 Phosphate-based molecular sieves with pores comprised of greater than 12-rings. *Catalysis Today*, **1994**, 19, 61-106	5.3	26
78	Analysis of a continuous, aerobic, fixed-film bioreactor. II. Dynamic behavior. *Biotechnology and Bioengineering*, **1984**, 26, 468-76	4.9	26
77	A Chromium Hydroxide/MIL-101(Cr) MOF Composite Catalyst and Its Use for the Selective Isomerization of Glucose to Fructose. *Angewandte Chemie*, **2018**, 130, 5020-5024	3.6	25
76	Self-Pillared, Single-Unit-Cell Sn-MFI Zeolite Nanosheets and Their Use for Glucose and Lactose Isomerization. *Angewandte Chemie*, **2015**, 127, 10998-11001	3.6	25
75	Fighting cancer with nanoparticle medicines□he nanoscale matters. *MRS Bulletin*, **2012**, 37, 828-835	3.2	25
74	Isobutane alkylation over solid acid catalysts under supercritical conditions. *Research on Chemical Intermediates*, **1998**, 24, 449-459	2.8	25
73	Pillared Sn-MWW Prepared by a Solid-State-Exchange Method and its Use as a Lewis Acid Catalyst. *ChemCatChem*, **2016**, 8, 1274-1278	5.2	25
72	Further Studies on How the Nature of Zeolite Cavities That Are Bounded by Small Pores Influences the Conversion of Methanol to Light Olefins. *ChemPhysChem*, **2018**, 19, 412-419	3.2	25
71	Upgrading Light Hydrocarbons: A Tandem Catalytic System for Alkane/Alkene Coupling. *Topics in Catalysis*, **2015**, 58, 494-501	2.3	24
70	Steam-dealuminated, OSDA-free RHO and KFI-type zeolites as catalysts for the methanol-to-olefins reaction. *Microporous and Mesoporous Materials*, **2016**, 232, 126-137	5.3	24

69	Synthesis of Germanosilicate Molecular Sieves from Mono- and Di-Quaternary Ammonium OSDAs Constructed from Benzyl Imidazolium Derivatives: Stabilization of Large Micropore Volumes Including New Molecular Sieve CIT-13. *Chemistry of Materials*, **2016**, 28, 2158-2164	9.6	24
68	Effect of Pore and Cage Size on the Formation of Aromatic Intermediates During the Methanol-to-Olefins Reaction. *Topics in Catalysis*, **2015**, 58, 416-423	2.3	23
67	The synthesis of aluminophosphate and germanosilicate LTA using a triquaternary structure directing agent. *Microporous and Mesoporous Materials*, **2014**, 200, 132-139	5.3	22
66	Targeted nanoparticles assembled via complexation of boronic-acid-containing targeting moieties to diol-containing polymers. *Bioconjugate Chemistry*, **2013**, 24, 669-77	6.3	22
65	Synthesis of (Alumino) Silicate Materials Using Organic Molecules and Self-Assembled Organic Aggregates as Structure-Directing Agents. *Materials Research Society Symposia Proceedings*, **1994**, 346, 831		22
64	Method of establishing breast cancer brain metastases affects brain uptake and efficacy of targeted, therapeutic nanoparticles. *Bioengineering and Translational Medicine*, **2019**, 4, 30-37	14.8	21
63	Facile Synthesis, Characterization, and Catalytic Behavior of a Large-Pore Zeolite with the IWV Framework. *Chemistry - A European Journal*, **2016**, 22, 4022-9	4.8	20
62	Facile Preparation of Aluminosilicate RTH across a Wide Composition Range Using a New Organic Structure-Directing Agent. *Chemistry of Materials*, **2014**, 26, 7099-7105	9.6	20
61	Spinel Metal Oxide-Alkali Carbonate-Based, Low-Temperature Thermochemical Cycles for Water Splitting and CO2 Reduction. *Chemistry of Materials*, **2013**, 25, 1564-1571	9.6	20
60	The Effect of Adsorbed Molecule Gas-Phase Deprotonation Enthalpy on Ion Exchange in Sodium Exchanged Zeolites: An In Situ FTIR Investigation. *Topics in Catalysis*, **2015**, 58, 393-404	2.3	19
59	Synthesis of a Specified, Silica Molecular Sieve by Using Computationally Predicted Organic Structure-Directing Agents. *Angewandte Chemie*, **2014**, 126, 8512-8514	3.6	19
58	Carbonylation of Dimethyl Ether to Methyl Acetate over SSZ-13. *ACS Catalysis*, **2020**, 10, 842-851	13.1	19
57	Lack of in vivo antibody dependent cellular cytotoxicity with antibody containing gold nanoparticles. *Bioconjugate Chemistry*, **2015**, 26, 812-6	6.3	18
56	Zeolites P1 and L as precursors for the preparation of alkaline-earth zeolites. *Microporous Materials*, **1997**, 12, 347-359		17
55	Transesterification on □mprinted□silica. *Catalysis Letters*, **1996**, 40, 109-114	2.8	17
54	Synthesis of gmelinite and ZSM-12 zeolites with a polymer template. *Journal of the Chemical Society Chemical Communications*, **1988**, 920		17
53	A Thirty-Year Journey to the Creation of the First Enantiomerically Enriched Molecular Sieve. *ACS Catalysis*, **2018**, 8, 10082-10088	13.1	17
52	Pilot trial of CRLX101 in patients with advanced, chemotherapy-refractory gastroesophageal cancer. *Journal of Gastrointestinal Oncology*, **2017**, 8, 962-969	2.8	16

51	Proton-Conducting Solid Electrolyte via Ozonolysis of Cationic Ammonium Organoalkoxysilane Surfactant-Templated MCM-41. *Chemistry of Materials*, **2006**, 18, 5634-5636	9.6	16
50	129Xe NMR spectroscopy on molecular sieves SAPO-37, AlPO4-5, SAPO-5 and SSZ-24. *Catalysis Letters*, **1990**, 6, 331-339	2.8	16
49	CIT-4: The first synthetic analogue of brewsterite. *Microporous Materials*, **1997**, 11, 87-95		15
48	Evolution of extra-large pore materials. *Studies in Surface Science and Catalysis*, **2001**, 135, 29-36	1.8	15
47	CIT-9: A Fault-Free Gmelinite Zeolite. *Angewandte Chemie - International Edition*, **2017**, 56, 13475-13478	16.4	14
46	Negative regulation of Smad1 pathway and collagen IV expression by store-operated Ca entry in glomerular mesangial cells. *American Journal of Physiology - Renal Physiology*, **2017**, 312, F1090-F1100	4.3	12
45	Synthesis of rhodium zeolite A. *Journal of the Chemical Society Chemical Communications*, **1986**, 234		12
44	Methyl-ligated tin silsesquioxane catalyzed reactions of glucose. *Journal of Catalysis*, **2016**, 341, 62-71	7.3	12
43	Host immune response to anti-cancer camptothecin conjugated cyclodextrin-based polymers. *Journal of Biomedical Science*, **2019**, 26, 85	13.3	11
42	Store-operated calcium entry suppressed the TGF-1/Smad3 signaling pathway in glomerular mesangial cells. *American Journal of Physiology - Renal Physiology*, **2017**, 313, F729-F739	4.3	11
41	Hybrid Organic–Inorganic Solids That Show Shape Selectivity. *Chemistry of Materials*, **2010**, 22, 2646-2652	9.6	11
40	Adsorption studies with gmelinite zeolites containing mono-, di- and tri-valent cations. *Microporous and Mesoporous Materials*, **2000**, 38, 143-149	5.3	11
39	Reaction chemistry and reaction engineering principles in catalyst design. *Chemical Engineering Science*, **1994**, 49, 3971-3980	4.4	11
38	Combinatorial methods: How will they integrate into chemical engineering?. *AICHE Journal*, **1999**, 45, 2270-2272	3.6	10
37	Cationic Mucic Acid Polymer-Based siRNA Delivery Systems. *Bioconjugate Chemistry*, **2015**, 26, 1791-803	6.3	9
36	Transformation of Extra-Large Pore Germanosilicate CIT-13 Molecular Sieve into Extra-Large Pore CIT-5 Molecular Sieve. *Chemistry of Materials*, **2019**, 31, 9777-9787	9.6	9
35	Shape-Selective Catalysis with Zeolites and Molecular Sieves. *ACS Symposium Series*, **1993**, 206-221	0.4	9
34	Inhibition of interleukin-6 on matrix protein production by glomerular mesangial cells and the pathway involved. *American Journal of Physiology - Renal Physiology*, **2020**, 318, F1478-F1488	4.3	8

33	On the synthesis of SSZ-48, SSZ-43 and their variations. *Microporous and Mesoporous Materials*, **2002**, 52, 19-28	5.3	8
32	Heteropolyacid-based catalysts for selective alkane oxidation: mechanism of formation of maleic anhydride from propane. *Catalysis Today*, **2003**, 81, 189-195	5.3	8
31	New horizons for the use of porous materials as catalysts. *Studies in Surface Science and Catalysis*, **1999**, 121, 23-32	1.8	6
30	Nanoparticles Containing a Combination of a Drug and an Antibody for the Treatment of Breast Cancer Brain Metastases. *Molecular Pharmaceutics*, **2020**, 17, 717-721	5.6	6
29	Integration of thermochemical water splitting with CO direct air capture. *Proceedings of the National Academy of Sciences of the United States of America*, **2019**, 116, 25001-25007	11.5	6
28	Silicoaluminophosphate Molecular Sieves. *ACS Symposium Series*, **1990**, 38-47	0.4	5
27	AXIAL DISPERSION IN THE ANNULAR BED REACTOR. *Chemical Engineering Communications*, **1984**, 25, 1-10	2.2	5
26	Hydroformylation of propene with zeolite-supported rhodium phosphine complexes. *Journal of the Chemical Society Chemical Communications*, **1985**, 1477		5
25	SSZ-35 und SSZ-44: zwei verwandte Zeolithe mit Poren aus Zehner- und Achtzehnerringen. *Angewandte Chemie*, **1999**, 111, 1349-1353	3.6	4
24	Crystallization of Aluminophosphate VPI-5 Using Magic Angle Spinning NMR Spectroscopy. *ACS Symposium Series*, **1990**, 48-65	0.4	4
23	Imaging the Assembly Process of the Organic-Mediated Synthesis of a Zeolite **1999**, 5, 2083		4
22	Fluoride-free Synthesis of Germanosilicate CIT-13 and Its Inverse Sigma Transformation To Form CIT-14. *Chemistry of Materials*, **2020**, 32, 2014-2024	9.6	3
21	CIT-9: A Fault-Free Gmelinite Zeolite. *Angewandte Chemie*, **2017**, 129, 13660-13663	3.6	3
20	The rise and realization of molecular chemical engineering. *AICHE Journal*, **2009**, 55, 1636-1640	3.6	3
19	The Effects of Charge Separation in Quaternary Ammonium, DABCO-Containing Polymers on In Vitro Toxicity and Gene Delivery. *Materials Research Society Symposia Proceedings*, **2002**, 724, N10.2.1		3
18	Reactions of meta-Diisopropylbenzene on Acid Molecular Sieves. *ACS Symposium Series*, **1993**, 222-232	0.4	3
17	Molecular Sieve Coated Saw Device for the Detection of Carbon Dioxide in the Presence of Water. *Materials Research Society Symposia Proceedings*, **1994**, 360, 359		3
16	Zeolite Synthesis: Can It Be Designed?. *ACS Symposium Series*, **1994**, 27-37	0.4	2

15	Towards the Rational Design and Synthesis of Zeolites. *Materials Research Society Symposia Proceedings*, **1994**, 371, 3		2
14	THE NON-ITERATIVE SOLUTION OF NONLINEAR PARABOLIC AND MIXED-TYPE PROBLEMS ARISING IN REACTOR DESIGN. *Chemical Engineering Communications*, **1983**, 23, 89-99	2.2	2
13	Cyclodextrin-containing polymer treatment of cutaneous lupus and influenza improves outcomes. *Molecular Therapy*, **2021**,	11.7	2
12	Further Investigations of Racemic and Chiral Molecular Sieves of the STW Topology. *Chemistry of Materials*, **2021**, 33, 1752-1759	9.6	2
11	The Engineering of Biology and Medicine. *Proceedings of the National Academy of Sciences of the United States of America*, **2015**, 112, 14423	11.5	1
10	Reply to Perris, Borghese, and Magro. *Pigment Cell and Melanoma Research*, **2011**, 24, 983-985	4.5	1
9	The Effects of Structure on Gene Delivery with Linear and Cyclodextrin-Containing Polycations. *Journal of Inclusion Phenomena and Macrocyclic Chemistry*, **2002**, 44, 453-457		1
8	Synthesis of Ordered Silicates by the Use of Organic Structure-Directing Agents. *Materials Research Society Symposia Proceedings*, **1996**, 435, 263		1
7	VPI-5: A Novel Large Pore Molecular Sieve. *Materials Research Society Symposia Proceedings*, **1987**, 111, 267		1
6	Methanol-to-olefins catalysis on ERI-type molecular sieves: towards enhancing ethylene selectivity. *Journal of Catalysis*, **2021**, 404, 620-620	7.3	1
5	Initiating a research-focused academic career in chemical engineering: Perspectives from faculty at different career stages. *AICHE Journal*, **2020**, 66, e16927	3.6	0
4	Sulfonic Acid-Functionalized Zeolite Beta: Bronsted Acid Catalysts for Reactions Involving Liquid Water. *ACS Sustainable Chemistry and Engineering*, **2021**, 9, 17120-17127	8.3	0
3	Catalysis in Water as a Special Unit Operation: Section 4.7 **2005**, 313-323		
2	Fine Chemicals Synthesis by Heterogeneous Asymmetric Catalysis. *Materials Research Society Symposia Proceedings*, **1994**, 368, 165		
1	Preclinical Results of the Camptothecin-Polymer Conjugate IT-101 in Multiple Human Lymphoma Xenografts.. *Blood*, **2007**, 110, 1376-1376	2.2	