Craig E Barnes

List of Publications by Year
in descending order

63 papers	1,926 citations	331670 21 h-index	265206 42 g-index
70 all docs	70 docs citations	70 times ranked	2183 citing authors

#	Article	IF	Citations
1	Synthesis, characterization and catalytic activity of single site, Lewis acidic aluminosilicates. Catalysis Today, 2019, 334, 131-139.	4.4	10
2	Catalytic transfer hydrogenolysis of organosolv lignin using B-containing FeNi alloyed catalysts. Catalysis Today, 2018, 302, 190-195.	4.4	49
3	Hybrid microporous and mesoporous organosilicate covalent polymers with high porosity. Microporous and Mesoporous Materials, 2017, 240, 205-215.	4.4	6
4	The Power of Non-Hydrolytic Sol-Gel Chemistry: A Review. Catalysts, 2017, 7, 168.	3.5	77
5	Surface reactivity of non-hydrolytic silicophosphate xerogels: a simple method to create BrÃ¸nsted or Lewis acid sites on porous supports. New Journal of Chemistry, 2016, 40, 3705-3715.	2.8	10
6	Novel non-hydrolytic templated solâ€“gel synthesis of mesoporous aluminosilicates and their use as aminolysis catalysts. RSC Advances, 2016, 6, 24273-24284.	3.6	19
7	Non-aqueous template-assisted synthesis of mesoporous nanocrystalline silicon orthophosphate. RSC Advances, 2015, 5, 73670-73676.	3.6	18
8	Mesoporous titanosilicates by templated non-hydrolytic solâ€“gel reactions. Journal of Sol-Gel Science and Technology, 2015, 74, 810-822.	2.4	19
9	Control of micro/mesoporosity in non-hydrolytic hybrid silicophosphate xerogels. Journal of Materials Chemistry A, 2015, 3, 7477-7487.	10.3	22
10	Methane and carbon dioxide adsorption and diffusion in amorphous, metal-decorated nanoporous silica. Molecular Simulation, 2014, 40, 618-633.	2.0	6
11	Synthesis of homogeneous silicophosphate xerogels by non-hydrolytic condensation reactions. Microporous and Mesoporous Materials, 2014, 197, 204-212.	4.4	35
12	Hydrogen adsorption and diffusion in amorphous, metal-decorated nanoporous silica. International Journal of Hydrogen Energy, 2014, 39, 9241-9253.	7.1	10
13	The Adsorption Properties of Amorphous, Metal-Decorated Microporous Silsesquioxanes for Mixtures of Carbon Dioxide, Methane and Hydrogen. Journal of Physical Chemistry C, 2014, 118, 13008-13017.	3.1	5
14	Electrochemical and Solid-State Lithiation of Graphitic C₃N₄. Chemistry of Materials, 2013, 25, 503-508.	6.7	141
15	The targeted synthesis of single site vanadyl species on the surface and in the framework of silicate building block materials. Catalysis Today, 2011, 160, 153-164.	4.4	8
16	¹¹⁹Sn NMR chemical shift tensors in anhydrous and hydrated Si₈O₂₀(SnMe₃)₈ crystals. Magnetic Resonance in Chemistry, 2008, 46, 690-692.	1.9	9
17	Linkage Isomerization as a Mechanism for Photochromic Materials: Cyclopentadienylmanganese Tricarbonyl Derivatives with Chelatable Functional Groups. Organometallics, 2008, 27, 289-296.	2.3	52
18	Reaction of the Si8O20(SnMe3)8Building Block with Silyl Chlorides:Â A New Synthetic Methodology for Preparing Nanostructured Building Block Solids. Chemistry of Materials, 2007, 19, 3212-3218.	6.7	15

#	Article	IF	Citations
19	Synthesis and structure of functional spherosilicate building block molecules for materials synthesis. Journal of Organometallic Chemistry, 2006, 691, 3213-3222.	1.8	20
20	Organofunctional Sol-Gel Materials for Toxic Metal Separation. ACS Symposium Series, 2006, , 223-237.	0.5	6
21	Reactions of thioether carboxylic acids with mercury(II). Formation and X-ray crystal structure of mercury(II) mercaptoacetate. Inorganica Chimica Acta, 2004, 357, 243-249.	2.4	12
22	Functionalized solâ€“gels for mercury(II) separation: a comparison of mesoporous materials prepared with and without surfactant templates. Microporous and Mesoporous Materials, 2004, 70, 57-62.	4.4	43
23	Building block syntheses of site-isolated vanadyl groups in silicate oxidesElectronic supplementary information (ESI) available: summary of experimental procedures, 51V NMR collection parameters, BET, IR and Raman data. See http://www.rsc.org/suppdata/cc/b3/b316184f/. Chemical Communications, 2004, , 856.	4.1	18
24	Bistable Photochromic Organometallics Based on Linkage Isomerization:â€‰ Photochemistry of Dicarbonyl(Î·5-methylcyclopentadienyl)manganese(I) Derivatives with a Bifunctional, Nonchelating Ligand. Organometallics, 2004, 23, 2708-2714.	2.3	33
25	Mechanistic investigation of hydrolysis reactions of dithioacetal derivatives grafted on silica gels. Talanta, 2004, 63, 259-264.	5.5	2
26	Inorganic Chemistry (Housecroft, Catherine E.; Sharpe, Alan G.). Journal of Chemical Education, 2003, 80, 747.	2.3	3
27	Search for Electroweak Interactions in Amino Acid Crystals. II. The Salam Hypothesis. Journal of Physical Chemistry A, 2003, 107, 6674-6680.	2.5	67
28	Ionic Liquids:Â A New Class of Sensing Materials for Detection of Organic Vapors Based on the Use of a Quartz Crystal Microbalance. Analytical Chemistry, 2002, 74, 2172-2176.	6.5	133
29	Synthesis and studies of cis-Mo(CO)2(Lâ€“Lâ€²)2 and Mo(Lâ€“Lâ€²)3 complexes of 2-(phenylazo)pyridines (Lâ€“Lâ€²) and the crystal structures of Mo(CO)2(4-methyl-2-(phenylazo)pyridine)2 and Mo(4-methyl-2-(phenylazo)pyridine)3. Inorganica Chimica Acta, 2002, 334, 193-203.	2.4	18
30	Solvation of Calix[4]arene-bis-crown-6 Molecules. Journal of Inclusion Phenomena and Macrocyclic Chemistry, 2002, 42, 241-245.	1.6	5
31	Tungsten Fluorides:â€‰ Syntheses and Electrochemical Characterization in the FLINAK Molten Salt Eutectic. Inorganic Chemistry, 2001, 40, 715-722.	4.0	12
32	Methylidene and hydrazone complexes of the cluster family: Cpâ€²3M3(CO)2(CH2) (M=Co, Rh, Ir). Journal of Organometallic Chemistry, 2001, 617-618, 561-570.	1.8	6
33	Crown Ether-Doped Solâˆ’Gel Materials for Strontium(II) Separation. Analytical Chemistry, 2000, 72, 5516-5519.	6.5	44
34	EXAFS Study of Uranyl Nitrate Dimer at High and Low Temperature. Inorganic Chemistry, 2000, 39, 862-864.	4.0	22
35	Funtionalized Solâˆ’Gels for Selective Copper(II) Separation. Environmental Science & Technology, 2000, 34, 2209-2214.	10.0	55
36	Inorganic Electronic Structure and Spectroscopy. Volume 1: Methodology; Volume 2: Applications and Case Studies (ed. Solomon, E. I.; Lever, A. B. P.). Journal of Chemical Education, 2000, 77, 1283.	2.3	1

#	Article	IF	Citations
37	Chemistry of Advanced Materials: An Overview (ed.s Interrante, Leonard V.; Hampden-Smith, Mark J.). Journal of Chemical Education, 2000, 77, 1127.	2.3	1
38	Imprint Coating: A Novel Synthesis of Selective Functionalized Ordered Mesoporous Sorbents. Angewandte Chemie - International Edition, 1999, 38, 1235-1239.	13.8	271
39	Applied Mathematics for Physical Chemistry, 2nd Edition (Barrante, James R.). Journal of Chemical Education, 1999, 76, 610.	2.3	0
40	Alkylidene dynamics in the cluster complex Cpâ^—Rh(CpCo)2(CO)2(Î¼-CH2): Observation of an intermediate containing a Î¼3-methylidene ligand. Polyhedron, 1998, 17, 1045-1054.	2.2	8
41	Diffusional and Internal Rotation in Single and Linked Trinuclear Bis(carbyne) Cluster Complexes Determined by13C NMR Relaxation Time Measurements. Inorganic Chemistry, 1997, 36, 3532-3538.	4.0	4
42	Trinuclear Cluster Complexes Containing theFuryneLigand:Â Synthesis, Structure, and Properties of the Cycloalkyne Complexes (CpCo)n(Cp*Co)3-n(CO)(Î¼3-Î·2-C4H4O) (n= 3, 2). Organometallics, 1997, 16, 2152-2159.	2.3	11
43	Comparison of Isomerization Rates of the Metal Carbonyl Cluster Cp*IrCp2Co2(CO)3in Three Oxidation States (47e, 48e, 49e):Â Dramatic Rate Enhancements in the Odd-Electron Speciesâ€. Journal of the American Chemical Society, 1997, 119, 2804-2811.	13.7	12
44	Carbene Migration in a Cluster Complex. Observation of an Intermediate Containing a Î¼3-CH2Ligand. Journal of the American Chemical Society, 1997, 119, 7585-7586.	13.7	7
45	Synthesis and Structure of Aluminum-Fluorine-Oxygen Clusters. Angewandte Chemie International Edition in English, 1997, 36, 2625-2626.	4.4	12
46	Cyclopentadienyl Cobalt Cluster Complexes Containing the Furyne Ligand. Journal of the American Chemical Society, 1995, 117, 1855-1856.	13.7	12
47	Temperature Dependent Rh.cntdot..cntdot..cntdot.Rh EXAFS in Dinuclear and Adsorbed Rhodium Species. Journal of the American Chemical Society, 1995, 117, 5861-5862.	13.7	6
48	Cluster Complexes of Cobalt, Rhodium, and Iridium. , 1995, , 419-520.		6
49	Reversible Carbene-Carbyne Interconversion on a Trinuclear Cluster. Organometallics, 1994, 13, 3770-3772.	2.3	9
50	Olefin Rotation in the Solid State: A 13C, 1H, and 2H NMR Study of Rh(acac)(C2H4)2. Journal of the American Chemical Society, 1994, 116, 7445-7446.	13.7	21
51	Mechanistic study of the solvent-induced fragmentation of Cp3Co3(CO)2. Organometallics, 1993, 12, 1016-1017.	2.3	4
52	Characterization of rhodium olefin complexes chemisorbed onto .gamma.-alumina by solid-state 13C NMR and EXAFS spectroscopies. Organometallics, 1991, 10, 3803-3806.	2.3	9
53	Synthesis, structures, proton NMR spectra, and reactivity of paramagnetic 46-electron trinuclear clusters of the form (Cp*M)n(CpCo)3-n(.mu.3-CO)2 (M = cobalt, rhodium, iridium; n = 1, 2). Organometallics, 1990, 9, 1021-1035.	2.3	15
54	Facile addition of alkynes to (CpCo)3(CO)2. A general method for the synthesis of (CpCo)3(CO)(RCCR') complexes. Organometallics, 1990, 9, 1695-1697.	2.3	9

#	Article	IF	Citations
55	Synthesis, structure, and reactivity of Cp3Co3(CO)2. Journal of the American Chemical Society, 1989, 111, 4992-4994.	13.7	19
56	Synthesis, characterization, and reactivity of several unusual trinuclear clusters containing either rhodium or cobalt and the cyclopentadienyl or pentamethylcyclopentadienyl ligands. Organometallics, 1988, 7, 782-784.	2.3	10
57	Transition-metal methylene complexes. 57. The unusual structure and reactivity of the paramagnetic trinuclear cluster compound (.eta.5-C5Me5)Ir(.mu.-CO)2Co2(.eta.5-C5H5)2. Organometallics, 1985, 4, 172-180.	2.3	25
58	Synthesis, proton NMR, and structural characterization of binuclear ruthenium porphyrin dimers. Journal of the American Chemical Society, 1984, 106, 3500-3510.	13.7	139
59	Two new members of the dimeric .beta.-linked face-to-face porphyrin family: FTF4* and FTF3. Journal of the American Chemical Society, 1983, 105, 2704-2710.	13.7	42
60	Further studies of the dimeric .beta.-linked "face-to-face four" porphyrin: FTF4. Journal of the American Chemical Society, 1983, 105, 2694-2699.	13.7	93
61	Binuclear ruthenium(II) porphyrins: reinvestigation of their preparation, characterization, and interactions with molecular oxygen. Journal of the American Chemical Society, 1981, 103, 7030-7032.	13.7	66
62	Ipso nitration. Characterization of nitro group shifts in 4-methyl-4-nitrocyclohexa-2,5-dienones. Journal of the American Chemical Society, 1978, 100, 973-975.	13.7	22
63	Ipso nitration. A study of the migratory aptitude of the nitro group in the 1,2-dimethyl-1-nitrocyclohexadienyl cation. Journal of the American Chemical Society, 1978, 100, 975-976.	13.7	9