Eric N Coker

List of Publications by Year
in descending order

81 papers	4,326 citations	147801 31 h-index	106344 65 g-index
84 all docs	84 docs citations	84 times ranked	6964 citing authors

#	Article	IF	Citations
1	Morphology and electrical properties of high-speed flexography-printed graphene. Mikrochimica Acta, 2022, 189, 123.	5.0	9
2	A Thermogravimetric Temperature-Programmed Thermal Redox Protocol for Rapid Screening of Metal Oxides for Solar Thermochemical Hydrogen Production. Frontiers in Energy Research, 2022, 10, .	2.3	6
3	Modified Calcium Manganites for Thermochemical Energy Storage Applications. Frontiers in Energy Research, 2022, 10, .	2.3	4
4	Formation of 6H-Ba₃Ce_{0.75}Mn_{2.25}O₉ during Thermochemical Reduction of 12R-Ba₄CeMn₃O₁₂: Identification of a Polytype in the Ba(Ce,Mn)O₃ Family. Inorganic Chemistry, 2022, 61, 6128-6137.	4.0	6
5	Surface Functionalized Barium Titanate Nanoparticles: A Combined Experimental and Computational Study. ECS Journal of Solid State Science and Technology, 2022, 11, 063006.	1.8	4
6	Compositional and operational impacts on the thermochemical reduction of CO₂ to CO by iron oxide/yttria-stabilized zirconia. RSC Advances, 2021, 11, 1493-1502.	3.6	11
7	Computationally Accelerated Discovery and Experimental Demonstration of Gd0.5La0.5Co0.5Fe0.5O3 for Solar Thermochemical Hydrogen Production. Frontiers in Energy Research, 2021, 9, .	2.3	12
8	Modular Metalâ€“Organic Polyhedra Superassembly: From Molecularâ€Level Design to Targeted Drug Delivery. Advanced Materials, 2019, 31, e1806774.	21.0	48
9	Water properties under nano-scale confinement. Scientific Reports, 2019, 9, 8246.	3.3	114
10	Metalâ€“Organic Framework Nanoparticle-Assisted Cryopreservation of Red Blood Cells. Journal of the American Chemical Society, 2019, 141, 7789-7796.	13.7	82
11	Versatile Surface Functionalization of Metalâ€“Organic Frameworks through Direct Metal Coordination with a Phenolic Lipid Enables Diverse Applications. Advanced Functional Materials, 2018, 28, 1705274.	14.9	90
12	Ultra-thin enzymatic liquid membrane for CO2 separation and capture. Nature Communications, 2018, 9, 990.	12.8	62
13	Synthesis and Characterization of Structurally Diverse Alkaline-Earth Salen Compounds for Subterranean Fluid Flow Tracking. Inorganic Chemistry, 2018, 57, 2402-2415.	4.0	23
14	Establishing the effects of mesoporous silica nanoparticle properties on in vivo disposition using imaging-based pharmacokinetics. Nature Communications, 2018, 9, 4551.	12.8	189
15	Understanding the Connection between Nanoparticle Uptake and Cancer Treatment Efficacy using Mathematical Modeling. Scientific Reports, 2018, 8, 7538.	3.3	49
16	Anomalous Oxidative Diffusion in Titanium Pyrotechnic Powders. Propellants, Explosives, Pyrotechnics, 2017, 42, 293-299.	1.6	2
17	Doped calcium manganites for advanced high-temperature thermochemical energy storage. International Journal of Energy Research, 2016, 40, 280-284.	4.5	81
18	High Performance Reduction/Oxidation Metal Oxides for Thermochemical Energy Storage (PROMOTES). , 2016, , .		13

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19	ABO3 (A = La, Ba, Sr, K; B = Co, Mn, Fe) perovskites for thermochemical energy storage. AIP Conference Proceedings, 2016, , .	0.4	20
20	Monitoring of CoS₂ reactions using high-temperature XRD coupled with gas chromatography (GC). Powder Diffraction, 2016, 31, 90-96.	0.2	6
21	Considerations for the Design of a High-Temperature Particle Reoxidation Reactor for Extraction of Heat in Thermochemical Energy Storage Systems. , 2016, , .		7
22	Metallic Phase Change Material Thermal Storage for Dish Stirling. Energy Procedia, 2015, 69, 726-736.	1.8	46
23	Investigation of La Sr1â^'Co M1â^'O3â^' (M = Mn, Fe) perovskite materials as thermochemical energy storage media. Solar Energy, 2015, 118, 451-459.	6.1	117
24	Electrodeposited Ni_xCo_{3â^'x}O₄nanostructured films as bifunctional oxygen electrocatalysts. Chemical Communications, 2015, 51, 9511-9514.	4.1	107
25	Predicting the solar thermochemical water splitting ability and reaction mechanism of metal oxides: a case study of the hercynite family of water splitting cycles. Energy and Environmental Science, 2015, 8, 3687-3699.	30.8	68
26	Understanding catalysis in a multiphasic two-dimensional transition metal dichalcogenide. Nature Communications, 2015, 6, 8311.	12.8	260
27	Synthetic fossilization of soft biological tissues and their shape-preserving transformation into silica or electron-conductive replicas. Nature Communications, 2014, 5, 5665.	12.8	27
28	Oxygen Vacancy Enhanced Photocatalytic Activity of Pervoskite SrTiO₃. ACS Applied Materials & Interfaces, 2014, 6, 19184-19190.	8.0	608
29	Mechanically Encoded Cellular Shapes for Synthesis of Anisotropic Mesoporous Particles. Journal of the American Chemical Society, 2014, 136, 13138-13141.	13.7	24
30	Nonstoichiometric Perovskite Oxides for Solar Thermochemical H2 and CO Production. Energy Procedia, 2014, 49, 2009-2018.	1.8	89
31	Role of Cu-Ion Doping in Cu-Î±-MnO₂ Nanowire Electrocatalysts for the Oxygen Reduction Reaction. Journal of Physical Chemistry C, 2014, 118, 17342-17350.	3.1	112
32	Advancing Oxide Materials for Thermochemical Production of Solar Fuels. Energy Procedia, 2014, 49, 2019-2026.	1.8	24
33	Thermochemical Cycle of a Mixed Metal Oxide for Augmentation of Thermal Energy Storage in Solid Particles. Energy Procedia, 2014, 49, 762-771.	1.8	21
34	Cobalt Ferrite in YSZ for Use as Reactive Material in Solar Thermochemical Water and Carbon Dioxide Splitting, Part I: Material Characterization. Jom, 2013, 65, 1670-1681.	1.9	27
35	Study of a Magnetically Stabilized Porous Structure for Thermochemical Water Splitting via TGA, High-Temperature-XRD, and SEM Analyses. Industrial & Engineering Chemistry Research, 2013, 52, 3683-3692.	3.7	6
36	Cobalt Ferrite in YSZ for Use as Reactive Material in Solar Thermochemical Water and Carbon Dioxide Splitting, Part II: Kinetic Modeling. Jom, 2013, 65, 1682-1693.	1.9	13

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37	ToF-SIMS analysis of iron oxide particle oxidation by isotopic and multivariate analysis. Surface and Interface Analysis, 2013, 45, 320-323.	1.8	2
38	Synthesis and Analysis of Cobalt Ferrite in YSZ for Use as Reactive Material in Solar Thermochemical Water and Carbon Dioxide Splitting. , 2013, , .		0
39	Sr- and Mn-doped LaAlO3â˜Î´ for solar thermochemical H2 and CO production. Energy and Environmental Science, 2013, 6, 2424.	30.8	323
40	Using in-situ techniques to probe high-temperature reactions: thermochemical cycles for the production of synthetic fuels from CO2 and water. Powder Diffraction, 2012, 27, 117-125.	0.2	9
41	Solar thermal decoupled water electrolysis process I: Proof of concept. Chemical Engineering Science, 2012, 84, 372-380.	3.8	26
42	Oxygen transport and isotopic exchange in iron oxide/YSZ thermochemically-active materials via splitting of C(18O)2 at high temperature studied by thermogravimetric analysis and secondary ion mass spectrometry. Journal of Materials Chemistry, 2012, 22, 6726.	6.7	39
43	Ferrite-YSZ composites for solar thermochemical production of synthetic fuels: in operando characterization of CO2 reduction. Journal of Materials Chemistry, 2011, 21, 10767.	6.7	58
44	Formation of a Reversible, Intramolecular Main-Group Metalâ€“CO₂ Adduct. Inorganic Chemistry, 2011, 50, 11288-11290.	4.0	44
45	Porous One-Dimensional Nanostructures through Confined Cooperative Self-Assembly. Nano Letters, 2011, 11, 5196-5200.	9.1	76
46	Templated growth of platinum nanowheels using the inhomogeneous reaction environment of bicelles. Physical Chemistry Chemical Physics, 2011, 13, 4846-4852.	2.8	37
47	Hydrogen Production via Chemical Looping Redox Cycles Using Atomic Layer Deposition-Synthesized Iron Oxide and Cobalt Ferrites. Chemistry of Materials, 2011, 23, 2030-2038.	6.7	153
48	Synthesis and Characterization of Ferrite Materials for Thermochemical CO2Splitting Using Concentrated Solar Energy. ACS Symposium Series, 2010, , 1-13.	0.5	11
49	Impact of copper on the performance and sulfur tolerance of barium-based NOx storage-reduction catalysts. Applied Catalysis B: Environmental, 2008, 78, 315-323.	20.2	13
50	Ion exchange equilibria and kinetics in zeolites: influences of framework flexibility and charge density* *Dedicated to the memories of Richard M. Barrer (1910 â€“ 1996) and Lovat V.C. Rees (1927 â€“ 2006). Studies in Surface Science and Catalysis, 2007, 170, 110-120.	1.5	5
51	Zeolite-templated electrocatalysts for fuel cells. Studies in Surface Science and Catalysis, 2007, 170, 1552-1557.	1.5	0
52	The preparation and characterization of novel Pt/C electrocatalysts with controlled porosity and cluster size. Journal of Materials Chemistry, 2007, 17, 3330.	6.7	19
53	Synthesis of Platinum Nanowire Networks Using a Soft Template. Nano Letters, 2007, 7, 3650-3655.	9.1	328
54	Nanostructured Pt/C electrocatalysts with high platinum dispersions through zeolite-templating. Microporous and Mesoporous Materials, 2007, 101, 440-444.	4.4	28

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55	Zeolite-templated Pt/C electrocatalysts. Microporous and Mesoporous Materials, 2007, 104, 236-247.	4.4	24
56	Kinetics of ion exchange in quasi-crystalline aluminosilicate zeolite precursors. Microporous and Mesoporous Materials, 2005, 84, 171-178.	4.4	32
57	Structurally characterized magnesium carboxylates with tuned melting points. Polyhedron, 2004, 23, 1739-1747.	2.2	24
58	Templateless Assembly of Molecularly Aligned Conductive Polymer Nanowires: A New Approach for Oriented Nanostructures. Chemistry - A European Journal, 2003, 9, 604-611.	3.3	207
59	Precipitation of Spherical Magnesium(II) Cresolate Particles. Chemistry of Materials, 2003, 15, 309-319.	6.7	7
60	Chapter 11 Ion exchange in zeolites. Studies in Surface Science and Catalysis, 2001, 137, 467-524.	1.5	68
61	Zeolite ZSM-5 synthesized in space: catalysts with reduced external surface activity. Microporous and Mesoporous Materials, 2001, 46, 223-236.	4.4	20
62	Coking and regeneration of palladium-doped H3PW12O40/SiO2 catalysts. Catalysis Letters, 2000, 66, 53-57.	2.6	37
63	Adsorption of Benzene and Benzene Derivatives onto Zeolite H-Y Studied by Microcalorimetry. Langmuir, 2000, 16, 1205-1210.	3.5	25
64	Properties of Zeolite A Obtained from Powdered Laundry Detergent. Journal of Chemical Education, 1999, 76, 469.	2.3	7
65	Experiments with Zeolites at the Secondary School Level: Experience from The Netherlands. Journal of Chemical Education, 1999, 76, 1417.	2.3	9
66	The synthesis of zeolites under micro-gravity conditions: a review. Microporous and Mesoporous Materials, 1998, 23, 119-136.	4.4	23
67	Sorption of bulky aromatic molecules into zeolite NaX. Microporous and Mesoporous Materials, 1998, 22, 261-268.	4.4	16
68	Approaches for the Synthesis of Ultra-Large and Ultra-Small Zeolite Crystals. , 1998, , 121-155.		8
69	Novel high-temperature, high-vacuum, all-metal sample cells for microcalorimetric measurements of solids. Review of Scientific Instruments, 1997, 68, 4521-4524.	1.3	9
70	Zeolitic membranes. Current Opinion in Solid State and Materials Science, 1996, 1, 65-68.	11.5	31
71	Zeolite synthesis in unstirred batch reactors II. Effect of non-uniform pre-mixing on the crystallization of zeolites A and X. Microporous Materials, 1995, 3, 637-646.	1.6	9
72	Zeolite synthesis in unstirred batch reactors I. Nuclear magnetic resonance imaging of non-uniform pre-mixing. Microporous Materials, 1995, 3, 623-636.	1.6	7

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73	Microcalorimetric Investigation of H-ZSM-5 Zeolites Using an Ultrahigh-Vacuum System for Gas Adsorption. The Journal of Physical Chemistry, 1994, 98, 8053-8060.	2.9	48
74	High-field nuclear magnetic resonance of thallium in zeolites. Magnetic Resonance in Chemistry, 1993, 31, 1064-1071.	1.9	2
75	The effects of the silica source on the crystallization of zeolite NaX. Zeolites, 1993, 13, 645-653.	0.5	78
76	Solubility and water-softening properties of a crystalline layered sodium silicate, SKS-6. Journal of Materials Chemistry, 1993, 3, 523.	6.7	12
77	Preparation of zeolite X with low levels of iron impurity from reaction mixtures containing triethanolamine. The Journal of Physical Chemistry, 1993, 97, 6465-6469.	2.9	7
78	Ion exchange in beryllophosphate-G. Part 1.â€”Ion-exchange equilibria. Journal of the Chemical Society, Faraday Transactions, 1992, 88, 263-272.	1.7	15
79	Ion exchange in beryllophosphate-G. Part 2.â€”Ion-exchange kinetics. Journal of the Chemical Society, Faraday Transactions, 1992, 88, 273-276.	1.7	11
80	Nuclear magnetic resonance studies of silicon(IV) complexes in aqueous solutionâ€”I. Tris-catecholato complexes. Polyhedron, 1990, 9, 813-823.	2.2	23
81	Near-ambient oxidation of melt-processed aluminum-mercury alloy compounds under air with controlled humidity. Journal of Materials Research, 0, , 1.	2.6	0