Daniel R Strongin

List of Publications by Year
in descending order

93 papers	5,301 citations	76326 40 h-index	85541 71 g-index
95 all docs	95 docs citations	95 times ranked	6835 citing authors

#	Article	IF	Citations
1	Layer by Layer Deposition of 1Tâ€²â€MoS₂ for the Hydrogen Evolution Reaction. ChemistrySelect, 2022, 7, .	1.5	1
2	Implementing the donorâ€“acceptor approach in electronically conducting copolymers<i>via</i>electropolymerization. RSC Advances, 2022, 12, 12089-12115.	3.6	13
3	Electrocatalytic CO₂ reduction on earth abundant 2D Mo₂C and Ti₃C₂ MXenes. Chemical Communications, 2021, 57, 1675-1678.	4.1	40
4	Niâ€and Coâ€Substituted Metallic MoS₂ for the Alkaline Hydrogen Evolution Reaction. ChemElectroChem, 2020, 7, 3606-3615.	3.4	24
5	Biomimetic System for the Application of Nanomaterials in Fluid Purification: Removal of Arsenic with Ferrihydrite. ACS Omega, 2020, 5, 5873-5880.	3.5	3
6	Highly Dispersed RuOOH Nanoparticles on Silica Spheres: An Efficient Photothermal Catalyst for Selective Aerobic Oxidation of Benzyl Alcohol. Nano-Micro Letters, 2020, 12, 41.	27.0	6
7	Photochemistry of ferritin decorated with plasmonic gold nanoparticles. Environmental Science: Nano, 2019, 6, 85-93.	4.3	3
8	Effect of Interlayer Co²⁺ on Structure and Charge Transfer in NiFe Layered Double Hydroxides. Journal of Physical Chemistry C, 2019, 123, 13593-13599.	3.1	11
9	Tunable catalytic activity of cobalt-intercalated layered MnO2 for water oxidation through confinement and local ordering. Journal of Catalysis, 2019, 374, 143-149.	6.2	13
10	Advances in electro-copolymerization of NIR emitting and electronically conducting block copolymers. Journal of Materials Chemistry C, 2019, 7, 3168-3172.	5.5	16
11	High Electron Mobility of Amorphous Red Phosphorus Thin Films. Angewandte Chemie - International Edition, 2019, 58, 6766-6771.	13.8	29
12	High Electron Mobility of Amorphous Red Phosphorus Thin Films. Angewandte Chemie, 2019, 131, 6838-6843.	2.0	4
13	Structural evolution and electrical properties of metal ion-containing polydopamine. Journal of Materials Science, 2019, 54, 6393-6400.	3.7	19
14	Systematic Doping of Cobalt into Layered Manganese Oxide Sheets Substantially Enhances Water Oxidation Catalysis. Inorganic Chemistry, 2018, 57, 557-564.	4.0	43
15	Cobalt Intercalated Layered NiFe Double Hydroxides for the Oxygen Evolution Reaction. Journal of Physical Chemistry B, 2018, 122, 847-854.	2.6	78
16	Effect of Intercalated Metals on the Electrocatalytic Activity of 1T-MoS₂ for the Hydrogen Evolution Reaction. ACS Energy Letters, 2018, 3, 7-13.	17.4	211
17	Structure and Magnetism Evolution from FeCo Nanoparticles to Hollow Nanostructure Conversion for Magnetic Applications. ACS Applied Nano Materials, 2018, 1, 5837-5842.	5.0	11
18	Coâ€Moâ€P Based Electrocatalyst for Superior Reactivity in the Alkaline Hydrogen Evolution Reaction. ChemCatChem, 2018, 10, 4832-4837.	3.7	33

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19	Antimicrobial Properties of 2D MnO₂ and MoS₂ Nanomaterials Vertically Aligned on Graphene Materials and Ti₃C₂ MXene. Langmuir, 2018, 34, 7192-7200.	3.5	111
20	Synergistic In-Layer Cobalt Doping and Interlayer Iron Intercalation into Layered MnO₂ Produces an Efficient Water Oxidation Electrocatalyst. ACS Energy Letters, 2018, 3, 2280-2285.	17.4	36
21	Vertically aligned MoS₂ on Ti₃C₂ (MXene) as an improved HER catalyst. Journal of Materials Chemistry A, 2018, 6, 16882-16889.	10.3	146
22	Effect of Interlayer Spacing on the Activity of Layered Manganese Oxide Bilayer Catalysts for the Oxygen Evolution Reaction. Journal of the American Chemical Society, 2017, 139, 1863-1870.	13.7	144
23	Redox properties of birnessite from a defect perspective. Proceedings of the National Academy of Sciences of the United States of America, 2017, 114, 9523-9528.	7.1	50
24	Nickel Confined in the Interlayer Region of Birnessite: an Active Electrocatalyst for Water Oxidation. Angewandte Chemie, 2016, 128, 10537-10541.	2.0	28
25	Nickel Confined in the Interlayer Region of Birnessite: an Active Electrocatalyst for Water Oxidation. Angewandte Chemie - International Edition, 2016, 55, 10381-10385.	13.8	112
26	Water Oxidation Catalyzed by Cobalt Oxide Supported on the Mattagamite Phase of CoTe₂. ACS Catalysis, 2016, 6, 7393-7397.	11.2	39
27	Intercalation of Cobalt into the Interlayer of Birnessite Improves Oxygen Evolution Catalysis. ACS Catalysis, 2016, 6, 7739-7743.	11.2	79
28	Oxidation of arsenite to arsenate on birnessite in the presence of light. Geochemical Transactions, 2016, 17, 5.	0.7	29
29	Frustrated Solvation Structures Can Enhance Electron Transfer Rates. Journal of Physical Chemistry Letters, 2015, 6, 4804-4808.	4.6	67
30	Coupled Redox Transformation of Chromate and Arsenite on Ferrihydrite. Environmental Science & Technology, 2015, 49, 2858-2866.	10.0	51
31	Formation of carbon nanospheres via ultrashort pulse laser irradiation of methane. Materials Chemistry and Physics, 2015, 156, 47-53.	4.0	8
32	Effect of Phospholipid on Pyrite Oxidation and Microbial Communities under Simulated Acid Mine Drainage (AMD) Conditions. Environmental Science & Technology, 2015, 49, 7701-7708.	10.0	38
33	Decoration of the layered manganese oxide birnessite with Mn(<scp>ii</scp>/<scp>iii</scp>) gives a new water oxidation catalyst with fifty-fold turnover number enhancement. Dalton Transactions, 2015, 44, 12981-12984.	3.3	40
34	Copper-Intercalated Birnessite as a Water Oxidation Catalyst. Langmuir, 2015, 31, 12807-12813.	3.5	69
35	Molecular level investigations of phosphate sorption on corundum (Î±-Al2O3) by 31P solid state NMR, ATR-FTIR and quantum chemical calculation. Geochimica Et Cosmochimica Acta, 2013, 107, 252-266.	3.9	94
36	Adsorption of carbon dioxide on Al/Fe oxyhydroxide. Journal of Colloid and Interface Science, 2013, 400, 1-10.	9.4	22

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37	Reduction of Nitrite and Nitrate on Nano-dimensioned FeS. Origins of Life and Evolution of Biospheres, 2013, 43, 305-322.	1.9	26
38	ATRâ€"FTIR and Density Functional Theory Study of the Structures, Energetics, and Vibrational Spectra of Phosphate Adsorbed onto Goethite. Langmuir, 2012, 28, 14573-14587.	3.5	142
39	Reduction of Nitrite and Nitrate to Ammonium on Pyrite. Origins of Life and Evolution of Biospheres, 2012, 42, 275-294.	1.9	34
40	Photoinduced Oxidation of Arsenite to Arsenate in the Presence of Goethite. Environmental Science & Technology, 2012, 46, 8044-8051.	10.0	85
41	Reactivity of sandstones under conditions relevant to geosequestration: 1. Hematite-bearing sandstone exposed to supercritical carbon dioxide commingled with aqueous sulfite or sulfide solutions. Chemical Geology, 2012, 296-297, 96-102.	3.3	15
42	Photoinduced Oxidation of Arsenite to Arsenate on Ferrihydrite. Environmental Science & Technology, 2011, 45, 2783-2789.	10.0	94
43	Structural water in ferrihydrite and constraints this provides on possible structure models. American Mineralogist, 2011, 96, 513-520.	1.9	51
44	CO2Sequestration through Mineral Carbonation of Iron Oxyhydroxides. Environmental Science & Technology, 2011, 45, 10422-10428.	10.0	26
45	Neutron Pair Distribution Function Study of Two-Line Ferrihydrite. Environmental Science & Technology, 2011, 45, 9883-9890.	10.0	37
46	Hematite reactivity with supercritical CO2 and aqueous sulfide. Chemical Geology, 2011, 283, 210-217.	3.3	25
47	Reductive dissolution of ferrihydrite by ascorbic acid and the inhibiting effect of phospholipid. Journal of Colloid and Interface Science, 2010, 341, 215-223.	9.4	23
48	Surface science studies of environmentally relevant iron (oxy)hydroxides ranging from the nano to the macro-regime. Surface Science, 2010, 604, 1065-1071.	1.9	6
49	Investigation of Surface Structures by Powder Diffraction: A Differential Pair Distribution Function Study on Arsenate Sorption on Ferrihydrite. Inorganic Chemistry, 2010, 49, 325-330.	4.0	53
50	Role of hydrogen peroxide and hydroxyl radical in pyrite oxidation by molecular oxygen. Geochimica Et Cosmochimica Acta, 2010, 74, 4971-4987.	3.9	173
51	Reactivity of ferritin and the structure of ferritin-derived ferrihydrite. Biochimica Et Biophysica Acta - General Subjects, 2010, 1800, 871-885.	2.4	43
52	Ferrihydrite phase transformation in the presence of aqueous sulfide and supercritical CO2. Chemical Geology, 2010, 271, 26-30.	3.3	31
53	Photodissolution of Ferrihydrite in the Presence of Oxalic Acid: An In Situ ATR-FTIR/DFT Study. Langmuir, 2010, 26, 16246-16253.	3.5	53
54	Effects of individual promoters on the Direct Synthesis of methylchlorosilanes. Journal of Catalysis, 2009, 266, 291-298.	6.2	41

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55	Effects of Multiple Promotion of the Direct Synthesis Contact Mass with P, Zn, and Sn on the Synthesis of Methylchlorosilanes. Catalysis Letters, 2009, 133, 14-22.	2.6	25
56	Ferrihydrite reactivity toward carbon dioxide. Journal of Colloid and Interface Science, 2009, 337, 492-500.	9.4	79
57	Effects of phospholipid on pyrite oxidation in the presence of autotrophic and heterotrophic bacteria. Geochimica Et Cosmochimica Acta, 2009, 73, 4111-4123.	3.9	26
58	Abiotic ammonium formation in the presence of Ni-Fe metals and alloys and its implications for the Hadean nitrogen cycle. Geochemical Transactions, 2008, 9, 5.	0.7	91
59	Humidity-induced restructuring of the calcite surface and the effect of divalent heavy metals. Journal of Colloid and Interface Science, 2007, 305, 101-110.	9.4	26
60	The Structure of Ferrihydrite, a Nanocrystalline Material. Science, 2007, 316, 1726-1729.	12.6	754
61	Characterization and Surface Reactivity of Ferrihydrite Nanoparticles Assembled in Ferritin. Langmuir, 2006, 22, 9313-9321.	3.5	53
62	Physical Structures of Lipid Layers on Pyrite. Environmental Science & Technology, 2006, 40, 1511-1515.	10.0	16
63	The effect of adsorbed lipid on pyrite oxidation under biotic conditions. Geochemical Transactions, 2006, 7, 8.	0.7	11
64	Divalent Cd and Pb uptake on calcite cleavage faces: An XPS and AFM study. Journal of Colloid and Interface Science, 2005, 288, 350-360.	9.4	91
65	Mechanistic Aspects of Pyrite Oxidation in an Oxidizing Gaseous Environment:Â An in Situ HATRâˆ'IR Isotope Study. Environmental Science & Technology, 2005, 39, 7576-7584.	10.0	43
66	A vibrational spectroscopic study of the oxidation of pyrite by ferric iron. American Mineralogist, 2004, 88, 1318-1323.	1.9	22
67	Environmental Applications: Treatment/Remediation Using Nanotechnology: An Overview. ACS Symposium Series, 2004, , 202-204.	0.5	1
68	Iron and Cobalt Oxide and Metallic Nanoparticles Prepared from Ferritin. Langmuir, 2004, 20, 10283-10287.	3.5	80
69	Charge Development on Ferritin: An Electrokinetic Study of a Protein Containing a Ferrihydrite Nanoparticle. ACS Symposium Series, 2004, , 226-229.	0.5	2
70	Thermal Chemistry of CH3on Si/Cu(100); the Role of Sn as a Promoter. Journal of Physical Chemistry B, 2004, 108, 16213-16219.	2.6	5
71	Origin of Oxygen in Sulfate during Pyrite Oxidation with Water and Dissolved Oxygen:Â An In Situ Horizontal Attenuated Total Reflectance Infrared Spectroscopy Isotope Study. Environmental Science & Technology, 2004, 38, 5604-5606.	10.0	57
72	A vibrational spectroscopic study of the oxidation of pyrite by molecular oxygen. Geochimica Et Cosmochimica Acta, 2004, 68, 1807-1813.	3.9	49

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73	A Bioengineering Approach to the Production of Metal and Metal Oxide Nanoparticles. ACS Symposium Series, 2004, , 230-237.	0.5	0
74	Pyrite oxidation inhibition by a cross-linked lipid coating. Geochemical Transactions, 2003, 4, 1.	0.7	31
75	Adsorption of Phospholipids on Pyrite and Their Effect on Surface Oxidation. Langmuir, 2003, 19, 8787-8792.	3.5	29
76	Characterization of the structure and the surface reactivity of a marcasite thin film. Geochimica Et Cosmochimica Acta, 2003, 67, 807-812.	3.9	7
77	A mechanism for the production of hydroxyl radical at surface defect sites on pyrite. Geochimica Et Cosmochimica Acta, 2003, 67, 935-939.	3.9	201
78	Suppression of pyrite oxidation in acidic aqueous environments using lipids having two hydrophobic tails. Journal of Environmental Management, 2003, 7, 969-974.	1.7	43
79	Photochemical Reactivity of Ferritin for Cr(VI) Reduction. Chemistry of Materials, 2002, 14, 4874-4879.	6.7	59
80	Pyrite-Induced Hydrogen Peroxide Formation as a Driving Force in the Evolution of Photosynthetic Organisms on an Early Earth. Astrobiology, 2001, 1, 283-288.	3.0	142
81	Aqueous Geochemical and Surface Science Investigation of the Effect of Phosphate on Pyrite Oxidation. Environmental Science & Technology, 2001, 35, 2252-2257.	10.0	51
82	Oxidation of {100} and {111} surfaces of pyrite: Effects of preparation method. American Mineralogist, 2000, 85, 623-626.	1.9	52
83	Adsorption and thermal decomposition of C2D5I on the (110) and (111) planes of NiAl: A temperature programmed deposition and x-ray photoelectron spectroscopy study. Journal of Vacuum Science and Technology A: Vacuum, Surfaces and Films, 1999, 17, 810-816.	2.1	5
84	An introduction to geocatalysis. Journal of Geochemical Exploration, 1998, 62, 201-215.	3.2	106
85	Surface Charge Development on Transition Metal Sulfides: An Electrokinetic Study. Geochimica Et Cosmochimica Acta, 1998, 62, 633-642.	3.9	201
86	Methanol Chemisorption and Reaction on the (111) Crystallographic Plane of NiAl. Journal of Physical Chemistry B, 1998, 102, 2970-2978.	2.6	14
87	Reactivity of the (100) Plane of Pyrite in Oxidizing Gaseous and Aqueous Environments:Â Effects of Surface Imperfections. Environmental Science & Technology, 1998, 32, 3743-3748.	10.0	90
88	Structure sensitivity of pyrite oxidation; comparison of the (100) and (111) planes. American Mineralogist, 1998, 83, 1353-1356.	1.9	73
89	Adsorption and Decomposition of Methyl Iodide on Low Index Planes of NiAl. Langmuir, 1997, 13, 3162-3171.	3.5	7
90	Thiosulfate oxidation: Catalysis of synthetic sphalerite doped with transition metals. Geochimica Et Cosmochimica Acta, 1996, 60, 4701-4710.	3.9	27

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91	A NEXAFS study on the adsorption of ammonia on clean and potassium-promoted iron. Surface Science Letters, 1991, 253, L417-L422.	0.1	1
92	Using hyperthermal ions to selectively adsorb surface intermediates: evidence for the adsorption of CH3 on platinum from a 1â€"3 eV CH+3 ion beam. Chemical Physics Letters, 1991, 187, 281-285.	2.6	15
93	Ammonia-pretreatment-induced restructuring of iron single-crystal surfaces: Its effects on ammonia synthesis and on coadsorbed aluminum oxide and potassium. Journal of Catalysis, 1989, 118, 99-110.	6.2	36