Alan W Schwartz

List of Publications by Year
in descending order

65 papers	2,436 citations	236925 25 h-index	206112 48 g-index
67 all docs	67 docs citations	67 times ranked	1372 citing authors

#	Article	IF	Citations
1	Evaluating the Plausibility of Prebiotic Multistage Syntheses. Astrobiology, 2013, 13, 784-789.	3.0	12
2	Sparking an unusual nutrient. Nature Geoscience, 2009, 2, 538-539.	12.9	0
3	Extraterrestrial nucleobases in the Murchison meteorite. Earth and Planetary Science Letters, 2008, 270, 130-136.	4.4	317
4	Intractable Mixtures and the Origin of Life. Chemistry and Biodiversity, 2007, 4, 656-664.	2.1	53
5	Phosphorus in prebiotic chemistry. Philosophical Transactions of the Royal Society B: Biological Sciences, 2006, 361, 1743-1749.	4.0	155
6	Thermal Synthesis of Nucleoside H-Phosphonates Under Mild Conditions. Origins of Life and Evolution of Biospheres, 2005, 35, 1-10.	1.9	26
7	Reduction and activation of phosphate on the primitive earth. , 2000, 30, 405-410.		47
8	Chemical reduction of phosphate on the primitive earth. Origins of Life and Evolution of Biospheres, 1999, 29, 555-561.	1.9	71
9	Prebiotic chemistry of phosphonic acids: products derived from phosphonoacetaldehyde in the presence of formaldehyde. Origins of Life and Evolution of Biospheres, 1998, 28, 271-282.	1.9	15
10	Mineral Catalysis of a Potentially Prebiotic Aldol Condensation. Journal of Molecular Evolution, 1998, 47, 501-507.	1.8	13
11	Origins of the RNA world. , 1998, , 237-254.		18
12	Prebiotic evolution: Selecting for homochirality before RNA. Current Biology, 1997, 7, R477-R479.	3.9	8
13	Prebiotic phosphorus chemistry reconsidered. , 1997, 27, 505-512.		26
14	Reactive Phosphonic Acids as Prebiotic Carriers of Phosphorus. Journal of Molecular Evolution, 1997, 44, 237-241.	1.8	40
15	Speculation on the RNA Precursor Problem. Journal of Theoretical Biology, 1997, 187, 523-527.	1.7	31
16	Hydrogen bonding in the template-directed oligomerization of a pyrimidine nucleotide analogue. Journal of Molecular Evolution, 1995, 41, 257-261.	1.8	9
17	A plausibly prebiotic synthesis of phosphonic acids. Nature, 1995, 378, 474-477.	27.8	80
18	The RNA World and its origins. Planetary and Space Science, 1995, 43, 161-165.	1.7	25

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19	An achiral (oligo)nucleotide analog. Journal of Molecular Evolution, 1994, 38, 438-442.	1.8	5
20	Origin of Life: The origin of macromolecular chirality. Current Biology, 1994, 4, 758-760.	3.9	19
21	Chirality and the First Self-Replicating Molecules. , 1994, , 107-114.		0
22	Photoreductive formation of acetaldehyde from aqueous formaldehyde. Tetrahedron Letters, 1993, 34, 2201-2202.	1.4	10
23	The prebiotic synthesis of carbohydrates: A reassessment. Journal of Molecular Evolution, 1993, 36, 101-106.	1.8	112
24	Nucleotide analogs based on pentaerythritol â€" An hypothesis. Origins of Life and Evolution of Biospheres, 1993, 23, 185-194.	1.9	13
25	Is ligation the only solution to the pyrophosphate problem?. Origins of Life and Evolution of Biospheres, 1993, 23, 317-321.	1.9	2
26	Biology and Theory: RNA and the Origin of Life. , 1993, , 323-344.		5
27	Synthesis of Acyclic Nucleoside Analogs Related to Barbituric Acid. Nucleosides & Nucleotides, 1993, 12, 107-114.	0.5	5
28	Selective cleavage of pyrophosphate linkages. Nucleic Acids Research, 1992, 20, 5749-5752.	14.5	13
29	Template-catalyzed oligomerization with an atactic glycerol-based polynucleotide analog. Journal of Molecular Evolution, 1990, 31, 163-166.	1.8	20
30	Oligomerization of cytosine-containing nucleotide analogs in aqueous solution. Journal of Molecular Evolution, 1990, 30, 3-6.	1.8	7
31	Oligomerizations of deoxyadenosine bis-phosphates and of their 3â€²-5â€², 3â€²-3â€², and 5â€²-5â€² dimers: Effects of a pyrophosphate-linked, poly(t) analog. Origins of Life and Evolution of Biospheres, 1990, 20, 369-375.	1.9	1
32	Manganese-catalyzed oligomerizations of nucleotide analogs. Journal of Molecular Evolution, 1989, 29, 284-287.	1.8	19
33	Oligomerization of deoxynucleoside-bisphosphate dimers: Template and linkage specificity. Origins of Life and Evolution of Biospheres, 1989, 19, 3-6.	1.9	2
34	Models for the origins of RNA molecules. Origins of Life and Evolution of Biospheres, 1989, 19, 322-322.	1.9	0
35	Nucleic acid analogues and the origins of replication. Advances in Space Research, 1989, 9, 77-81.	2.6	1
36	Template-directed synthesis of acyclic oligonucleotide analogues. Journal of Molecular Evolution, 1988, 28, 3-6.	1.8	36

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37	Nucleic acid-like structures II. Polynucleotide analogues as possible primitive precursors of nucleic acids. Origins of Life and Evolution of Biospheres, 1987, 17, 351-357.	1.9	26
38	Nucleic acid-like structures III. Oligomerization of 3â€²-deoxyadenosine 2â€²,5â€²-diphosphoimidazolide. Journal of Molecular Evolution, 1987, 26, 291-293.	1.8	10
39	Synthesis of P1,P2-dinucleotide pyrophosphates. Tetrahedron Letters, 1987, 28, 2763-2766.	1.4	8
40	Minimal requirements for molecular information transfer. Advances in Space Research, 1986, 6, 23-27.	2.6	3
41	Template-directed polynucleotide synthesis on mineral surfaces. Journal of Molecular Evolution, 1985, 21, 299-300.	1.8	33
42	Recent progress in the prebiotic chemistry of HCN. Origins of Life and Evolution of Biospheres, 1984, 14, 91-98.	0.6	39
43	Chemical evolution: The first stages. Die Naturwissenschaften, 1983, 70, 373-377.	1.6	17
44	Glaciers, volcanic islands and the origin of life. Precambrian Research, 1983, 22, 167-174.	2.7	11
45	Basic nitrogen-heterocyclic compounds in the Murchison meteorite. Geochimica Et Cosmochimica Acta, 1982, 46, 309-315.	3.9	107
46	Acceleration of HCN oligomerization by formaldehyde and related compounds: Implications for prebiotic syntheses. Journal of Molecular Evolution, 1982, 18, 351-353.	1.8	72
47	Prebiotic adenine synthesis via HCN oligomerization in ice. BioSystems, 1982, 15, 191-193.	2.0	57
48	Uracil synthesisvia HCN oligomerization. Origins of Life and Evolution of Biospheres, 1982, 12, 45-49.	0.6	60
49	Nitrogen-heterocyclic compounds in meteorites: significance and mechanisms of formation. Geochimica Et Cosmochimica Acta, 1981, 45, 563-569.	3.9	178
50	Prebiotic photosynthetic reactions. BioSystems, 1981, 14, 15-32.	2.0	29
51	HCN Oligomerization - Isolation and Preliminary Characterization of a New Precursor of Adenine. , 1981, , 217-223.		6
52	Nitrogen Compounds in Carbonaceous Meteorites: A Reassessment. , 1981, , 59-64.		5
53	Determination of s-triazine derivatives at the nanogram level by gasâ€"liquid chromatography. Journal of Chromatography A, 1979, 168, 455-460.	3.7	32
54	Uracil in carbonaceous meteorites. Nature, 1979, 282, 709-710.	27.8	181

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55	Distribution of amino acids, amino sugars, purines and pyrimidines in a Lake Ontario sediment core. Chemical Geology, 1977, 19, 295-308.	3.3	21
56	Search for purines and pyrimidines in the Murchison meteorite. Geochimica Et Cosmochimica Acta, 1977, 41, 961-968.	3.9	101
57	Synthesis of uracil and thymine under simulated prebiotic conditions. BioSystems, 1977, 9, 87-92.	2.0	50
58	Purines, pyrimidines and organic carbon in lake sediments â€" A comparison of sediments from lakes of varying degrees of eutrophication. Chemical Geology, 1976, 18, 273-284.	3.3	7
59	Possible pathway for prebiotic uracil synthesis by photodehydrogenation. Nature, 1976, 263, 350-351.	27.8	42
60	Changes in the Purine and Pyrimidine Concentrations and Organic Carbon Contents in Lake Sediments. , 1976, , 165-165.		0
61	Prebiotic nucleotide synthesis-demonstration of a geologically plausible pathway. Origins of Life and Evolution of Biospheres, 1975, 6, 163-168.	0.6	33
62	An Evolutionary Model for Prebiotic Phosphorylation. , 1974, , 435-443.		4
63	Synthesis of hypophosphate by ultraviolet irradiation of phosphite solutions. Inorganic and Nuclear Chemistry Letters, 1973, 9, 39-41.	0.7	12
64	Prebiotic phosphorylation. II-nucleotide synthesis in the reaction system apatite-cyanogen-water. BioSystems, 1973, 5, 119-122.	2.0	21
65	Prebiotic phosphorylation-nucleotide synthesis with apatite. Nucleic Acids and Protein Synthesis, 1972, 281, 477-480.	1.7	55