

# Yoshihiro Furukawa

## List of Publications by Year in descending order

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Version: 2024-02-01

42  
papers

1,125  
citations

394421

19  
h-index

395702

33  
g-index

44  
all docs

44  
docs citations

44  
times ranked

1282  
citing authors

#	ARTICLE	IF	CITATIONS
1	Extraterrestrial ribose and other sugars in primitive meteorites. Proceedings of the National Academy of Sciences of the United States of America, 2019, 116, 24440-24445.	7.1	158
2	New silica clathrate minerals that are isostructural with natural gas hydrates. Nature Communications, 2011, 2, 196.	12.8	120
3	Biomolecule formation by oceanic impacts on early Earth. Nature Geoscience, 2009, 2, 62-66.	12.9	87
4	Evaporite Borate-Containing Mineral Ensembles Make Phosphate Available and Regiospecifically Phosphorylate Ribonucleosides: Borate as a Multifaceted Problem Solver in Prebiotic Chemistry. Angewandte Chemie - International Edition, 2016, 55, 15816-15820.	13.8	76
5	Selective Stabilization of Ribose by Borate. Origins of Life and Evolution of Biospheres, 2013, 43, 353-361.	1.9	53
6	Identifying the wide diversity of extraterrestrial purine and pyrimidine nucleobases in carbonaceous meteorites. Nature Communications, 2022, 13, 2008.	12.8	53
7	An interlaboratory study of TEX <sub>86</sub> and BIT analysis using high-performance liquid chromatography-mass spectrometry. Geochemistry, Geophysics, Geosystems, 2009, 10, .	2.5	52
8	Stability of Amino Acids and Their Oligomerization Under High-Pressure Conditions: Implications for Prebiotic Chemistry. Astrobiology, 2011, 11, 799-813.	3.0	48
9	The Importance of Phobos Sample Return for Understanding the Mars-Moon System. Space Science Reviews, 2020, 216, 1.	8.1	45
10	Nucleobase and amino acid formation through impacts of meteorites on the early ocean. Earth and Planetary Science Letters, 2015, 429, 216-222.	4.4	42
11	Abiotic Regioselective Phosphorylation of Adenosine with Borate in Formamide. Astrobiology, 2015, 15, 259-267.	3.0	34
12	Extraterrestrial hexamethylenetetramine in meteorites—a precursor of prebiotic chemistry in the inner solar system. Nature Communications, 2020, 11, 6243.	12.8	32
13	Borate and the Origin of RNA: A Model for the Precursors to Life. Elements, 2017, 13, 261-265.	0.5	27
14	Airfall on Comet 67P/Churyumov-Gerasimenko. Icarus, 2021, 354, 114004.	2.5	26
15	Impact-induced amino acid formation on Hadean Earth and Noachian Mars. Scientific Reports, 2020, 10, 9220.	3.3	25
16	Temperature-induced oligomerization of polycyclic aromatic hydrocarbons at ambient and high pressures. Scientific Reports, 2017, 7, 7889.	3.3	24
17	Adsorption of RNA on mineral surfaces and mineral precipitates. Beilstein Journal of Organic Chemistry, 2017, 13, 393-404.	2.2	24
18	Impact-induced phyllosilicate formation from olivine and water. Geochimica Et Cosmochimica Acta, 2011, 75, 6461-6472.	3.9	20

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19	Oligomerization and carbonization of polycyclic aromatic hydrocarbons at high pressure and temperature. <i>Carbon</i> , 2015, 84, 225-235.	10.3	20
20	Evaporite Borate-Containing Mineral Ensembles Make Phosphate Available and Regiospecifically Phosphorylate Ribonucleosides: Borate as a Multifaceted Problem Solver in Prebiotic Chemistry. <i>Angewandte Chemie</i> , 2016, 128, 16048-16052.	2.0	19
21	Experimental investigation of reduced volatile formation by high-temperature interactions among meteorite constituent materials, water, and nitrogen. <i>Icarus</i> , 2014, 231, 77-82.	2.5	14
22	Formation of ultrafine particles from impact-generated supercritical water. <i>Earth and Planetary Science Letters</i> , 2007, 258, 543-549.	4.4	13
23	Abiotic Formation of Valine Peptides Under Conditions of High Temperature and High Pressure. <i>Origins of Life and Evolution of Biospheres</i> , 2012, 42, 519-531.	1.9	13
24	Effects of Silicate, Phosphate, and Calcium on the Stability of Aldopentoses. <i>Origins of Life and Evolution of Biospheres</i> , 2016, 46, 189-202.	1.9	13
25	Synthesis of <sup>13</sup> C-enriched amino acids with <sup>13</sup> C-depleted insoluble organic matter in a formose-type reaction in the early solar system. <i>Science Advances</i> , 2021, 7, .	10.3	12
26	Survivability and reactivity of glycine and alanine in early oceans: effects of meteorite impacts. <i>Journal of Biological Physics</i> , 2016, 42, 177-198.	1.5	10
27	Decompression experiments for sulfur-bearing hydrous rhyolite magma: Redox evolution during magma decompression. <i>American Mineralogist</i> , 2021, 106, 216-225.	1.9	10
28	Exposure Experiments of Amorphous Silicates and Organics to Cometary Ice and Vapor Analogs. <i>Astrophysical Journal</i> , 2019, 881, 27.	4.5	9
29	STXM-XANES analyses of Murchison meteorite samples captured by aerogel after hypervelocity impacts: A potential implication of organic matter degradation for micrometeoroid collection experiments. <i>Geochemical Journal</i> , 2019, 53, 53-67.	1.0	9
30	Analytical protocols for Phobos regolith samples returned by the Martian Moons eXploration (MMX) mission. <i>Earth, Planets and Space</i> , 2021, 73, 120.	2.5	8
31	Multicolor imaging of calcium-binding proteins in human kidney stones for elucidating the effects of proteins on crystal growth. <i>Scientific Reports</i> , 2021, 11, 16841.	3.3	5
32	Exploration of Enceladus' Water-Rich Plumes toward Understanding of Chemistry and Biology of the Interior Ocean. <i>Transactions of the Japan Society for Aeronautical and Space Sciences Aerospace Technology Japan</i> , 2014, 12, Tk_7-Tk_11.	0.2	5
33	Stability conditions of polycyclic aromatic hydrocarbons at high pressures and temperatures. <i>Geochemistry International</i> , 2014, 52, 767-772.	0.7	4
34	Shock wave synthesis of amino acids from solutions of ammonium formate and ammonium bicarbonate. <i>Geochemistry, Geophysics, Geosystems</i> , 2015, 16, 2382-2394.	2.5	4
35	Racemization of Valine by Impact-Induced Heating. <i>Origins of Life and Evolution of Biospheres</i> , 2018, 48, 131-139.	1.9	3
36	Aqueous alteration without initial water: possibility of organic-induced hydration of anhydrous silicates in meteorite parent bodies. <i>Earth, Planets and Space</i> , 2021, 73, .	2.5	2

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37	Experimental Investigation of the Formation of Formaldehyde by Hadean and Noachian Impacts. <i>Astrobiology</i> , 2021, 21, 413-420.	3.0	2
38	Morphological changes of olivine grains reacted with amino acid solutions by impact process. <i>Physics and Chemistry of Minerals</i> , 2017, 44, 203-212.	0.8	1
39	Effects of Glycine, Water, Ammonia, and Ammonium Bicarbonate on the Oligomerization of Methionine. <i>Origins of Life and Evolution of Biospheres</i> , 2017, 47, 145-160.	1.9	1
40	RNA Synthesis Before the Origin of Life. , 2019, , 63-74.		1
41	Formation of Ammonia and Organic Molecules by Oceanic Impact of Meteorite. Review of High Pressure Science and Technology/ <i>Koatsuryoku No Kagaku To Gijutsu</i> , 2009, 19, 195-200.	0.0	1
42	Titelbild: Evaporite Borate-Containing Mineral Ensembles Make Phosphate Available and Regiospecifically Phosphorylate Ribonucleosides: Borate as a Multifaceted Problem Solver in Prebiotic Chemistry ( <i>Angew. Chem.</i> 51/2016). <i>Angewandte Chemie</i> , 2016, 128, 15911-15911.	2.0	0