

# Jean-Francois H Lambert

## List of Publications by Year in descending order

Source: <https://exaly.com/author-pdf/6283344/publications.pdf>

Version: 2024-02-01

104  
papers

4,792  
citations

87888

38  
h-index

102487

66  
g-index

111  
all docs

111  
docs citations

111  
times ranked

5529  
citing authors

#	ARTICLE	IF	CITATIONS
1	Silica Surface Features and Their Role in the Adsorption of Biomolecules: Computational Modeling and Experiments. <i>Chemical Reviews</i> , 2013, 113, 4216-4313.	47.7	508
2	Adsorption and Polymerization of Amino Acids on Mineral Surfaces: A Review. <i>Origins of Life and Evolution of Biospheres</i> , 2008, 38, 211-242.	1.9	358
3	Ab Initio Study of the Hydroxylated Surface of Amorphous Silica: A Representative Model. <i>Chemistry of Materials</i> , 2008, 20, 3336-3344.	6.7	222
4	Silane Layers on Silicon Surfaces: Mechanism of Interaction, Stability, and Influence on Protein Adsorption. <i>Langmuir</i> , 2012, 28, 656-665.	3.5	189
5	Conditions of Formation of Copper Phyllosilicates in Silica-Supported Copper Catalysts Prepared by Selective Adsorption. <i>Journal of Physical Chemistry B</i> , 2002, 106, 2277-2286.	2.6	165
6	Adsorption and Thermal Condensation Mechanisms of Amino Acids on Oxide Supports. 1. Glycine on Silica. <i>Langmuir</i> , 2004, 20, 914-923.	3.5	155
7	Transformations of $\gamma$ -alumina in aqueous suspensions. <i>Journal of Colloid and Interface Science</i> , 2007, 308, 429-437.	9.4	129
8	Acidity in pillared clays: origin and catalytic manifestations. <i>Topics in Catalysis</i> , 1997, 4, 43-56.	2.8	115
9	The molecular approach to supported catalysts synthesis: state of the art and future challenges. <i>Journal of Molecular Catalysis A</i> , 2000, 162, 5-18.	4.8	110
10	Initial Steps of the Alumina-Supported Platinum Catalyst Preparation: A Molecular Study by $^{195}\text{Pt}$ NMR, UV-Visible, EXAFS, and Raman Spectroscopy. <i>Journal of Catalysis</i> , 1999, 185, 462-478.	6.2	95
11	DFT study of the adsorption of microsolvated glycine on a hydrophilic amorphous silica surface. <i>Physical Chemistry Chemical Physics</i> , 2008, 10, 6360.	2.8	84
12	Application of NMR to Interfacial Coordination Chemistry: A $^{195}\text{Pt}$ NMR Study of the Interaction of Hexachloroplatinic Acid Aqueous Solutions with Alumina. <i>Journal of the American Chemical Society</i> , 1999, 121, 545-556.	13.7	82
13	Al-pillared saponites. Part 3. "Effect of parent clay layer charge on the intercalation" pillaring mechanism and structural properties. <i>Journal of the Chemical Society, Faraday Transactions</i> , 1995, 91, 2229-2239.	1.7	75
14	Al-Pillared saponites. Part 1. "IR studies. <i>Journal of the Chemical Society, Faraday Transactions</i> , 1994, 90, 667-674.	1.7	70
15	Cysteine-montmorillonite composites for heavy metal cation complexation: A combined experimental and theoretical study. <i>Chemical Engineering Journal</i> , 2017, 314, 406-417.	12.7	68
16	Molecular-level studies of transition metal "support interactions during the first steps of catalysts preparation: platinum speciation in the hexachloroplatinate/alumina system. <i>Journal of Molecular Catalysis A</i> , 2000, 158, 91-99.	4.8	62
17	Platinum catalysts supported on Al-pillared clays. <i>Catalysis Today</i> , 2001, 68, 41-51.	4.4	62
18	A Molecular Picture of the Adsorption of Glycine in Mesoporous Silica through NMR Experiments Combined with DFT-D Calculations. <i>Journal of Physical Chemistry C</i> , 2013, 117, 4104-4114.	3.1	60

#	ARTICLE	IF	CITATIONS
19	Selectivities in Adsorption and Peptidic Condensation in the (Arginine and Glutamic) Tj ETQq1 1 0.784314 rgBT /Overlock 10 Tf 50 742	3.1	60
20	Al-Pillared saponites. Part 2. $^{29}\text{Si}$ NMR studies. Journal of the Chemical Society, Faraday Transactions, 1994, 90, 675-682.	1.7	55
21	Cull on Al13-Pillared Saponites: Macroscopic Adsorption Measurements and EPR Spectra. The Journal of Physical Chemistry, 1995, 99, 2155-2161.	2.9	55
22	A comparative study of the catalysis of peptide bond formation by oxide surfaces. Physical Chemistry Chemical Physics, 2013, 15, 13371.	2.8	55
23	Adsorption of Amino Acids on Oxide Supports: A Solid-State NMR Study of Glycine Adsorption on Silica and Alumina. Journal of Physical Chemistry C, 2009, 113, 18163-18172.	3.1	54
24	A New Nanocomposite: L-DOPA/Laponite. Journal of Physical Chemistry Letters, 2010, 1, 85-88.	4.6	54
25	Glycine and lysine adsorption and reactivity on the surface of amorphous silica. European Journal of Mineralogy, 2007, 19, 321-331.	1.3	53
26	Catalytic activity and thermostability of enzymes immobilized on silanized surface: Influence of the crosslinking agent. Enzyme and Microbial Technology, 2013, 52, 336-343.	3.2	52
27	The Support as a Chemical Reagent in the Preparation of $\text{WO}_x/\text{Al}_2\text{O}_3$ Catalysts: $^{18}\text{O}$ Formation and Deposition of Aluminotungstic Heteropolyanions. Journal of the American Chemical Society, 1999, 121, 3377-3381.	13.7	49
28	Effect of Nontronite Smectite Clay on the Chemical Evolution of Several Organic Molecules under Simulated Martian Surface Ultraviolet Radiation Conditions. Astrobiology, 2015, 15, 221-237.	3.0	49
29	Selective Uptake of Alkaline Earth Metals by Cyanobacteria Forming Intracellular Carbonates. Environmental Science & Technology, 2016, 50, 11654-11662.	10.0	47
30	Influence of ageing on $\text{MoO}_3$ formation in the preparation of alumina-supported Mo catalysts. Journal of Molecular Structure, 2003, 656, 231-238.	3.6	46
31	The fate of amino acids adsorbed on mineral matter. Planetary and Space Science, 2009, 57, 460-467.	1.7	46
32	Control of the Nill/Surface Interaction in the First Steps of Supported Catalyst Preparation: $^{60}\text{Co}$ The Interfacial Coordination Chemistry of $[\text{Ni}(\text{en})_2(\text{H}_2\text{O})_2]^{2+}$ . Journal of Physical Chemistry B, 1997, 101, 10347-10355.	2.6	44
33	In vitro synthesis of amorphous Mg-, Ca-, Sr- and Ba-carbonates: What do we learn about intracellular calcification by cyanobacteria?. Geochimica Et Cosmochimica Acta, 2015, 161, 36-49.	3.9	44
34	Preparation and characterisation of Mn- and Co-supported catalysts derived from Al-pillared clays and Mn- and Co-complexes. Applied Catalysis A: General, 2004, 267, 47-58.	4.3	42
35	Cyanobacterial formation of intracellular $\text{Ca}^{2+}$ carbonates in undersaturated solutions. Geobiology, 2018, 16, 49-61.	2.4	42
36	Evidence for Interfacial Molecular Recognition in Transition Metal Complexes Adsorption on Amorphous Silica Surfaces. Journal of Physical Chemistry B, 2003, 107, 651-654.	2.6	41

#	ARTICLE	IF	CITATIONS
37	Glutamic Acid Adsorption and Transformations on Silica. Journal of Physical Chemistry C, 2011, 115, 21813-21825.	3.1	41
38	Density Functional Theory Modeling and Calculation of NMR Parameters: An ab Initio Study of the Polymorphs of Bulk Glycine. Crystal Growth and Design, 2010, 10, 3657-3667.	3.0	40
39	Surface Heterogeneity in Micropores of Pillared Clays: The Limits of Classical Pore-Filling Mechanisms. Journal of Physical Chemistry B, 1998, 102, 3466-3476.	2.6	37
40	Amorphous Silica as a Versatile Supramolecular Ligand for NiII Amine Complexes: Toward Interfacial Molecular Recognition. ChemPhysChem, 2004, 5, 1003-1013.	2.1	37
41	Phosphoribosyl Pyrophosphate: A Molecular Vestige of the Origin of Life on Minerals. Angewandte Chemie - International Edition, 2017, 56, 7920-7923.	13.8	37
42	Microsolvation of glycine by silanol ligands: A DFT study. Computational and Theoretical Chemistry, 2007, 806, 253-259.	1.5	36
43	Inorganic Phosphate and Nucleotides on Silica Surface: Condensation, Dismutation, and Phosphorylation. Journal of Physical Chemistry C, 2013, 117, 12579-12590.	3.1	36
44	Formation of Activated Biomolecules by Condensation on Mineral Surfaces – A Comparison of Peptide Bond Formation and Phosphate Condensation. Origins of Life and Evolution of Biospheres, 2013, 43, 429-443.	1.9	35
45	Enzyme Immobilization on Silane-Modified Surface through Short Linkers: Fate of Interfacial Phases and Impact on Catalytic Activity. Langmuir, 2014, 30, 4066-4077.	3.5	35
46	Synthesis of Pt pillared clay nanocomposite catalysts from [PtII(NH3)4]Cl2 precursor. Physical Chemistry Chemical Physics, 2001, 3, 4843-4852.	2.8	33
47	Fate of L-DOPA in the Presence of Inorganic Matrices: Vectorization or Composite Material Formation?. Journal of Physical Chemistry C, 2011, 115, 19216-19225.	3.1	33
48	Organic pollutant adsorption on clay minerals. Developments in Clay Science, 2018, 9, 195-253.	0.5	33
49	Structural studies of adsorbed protein (betalactoglobulin) on natural clay (montmorillonite). RSC Advances, 2014, 4, 61096-61103.	3.6	31
50	The intercalation process of N-alkyl amines or ammoniums within the structure of KTiNbO5. Journal of Colloid and Interface Science, 1989, 132, 337-351.	9.4	29
51	39K Solid-State NMR Studies of Potassium Tecto- and Phyllosilicates: The In Situ Detection of Hydratable K+ in Smectites. Clays and Clay Minerals, 1992, 40, 253-261.	1.3	29
52	Title is missing!. Catalysis Letters, 2003, 88, 23-30.	2.6	29
53	A Comparative Study of the Acidity toward the Aqueous Phase and Adsorptive Properties of Al13-Pillared Montmorillonite and Al13-Pillared Saponite. Journal of Physical Chemistry B, 1999, 103, 2897-2902.	2.6	28
54	Optimisation of the preparation of an Al-pillared clay: thermal stability and surface acidity. Applied Clay Science, 1997, 12, 349-364.	5.2	25

#	ARTICLE	IF	CITATIONS
55	Chemistry of Silica-Supported Cobalt Catalysts Prepared by Cation Adsorption. 1. Initial Localized Adsorption of Cobalt Precursors. <i>Journal of Physical Chemistry C</i> , 2007, 111, 7152-7164.	3.1	25
56	Adsorption of <scp> </scp>-DOPA Intercalated in Hydrated Na-Saponite Clay: A Combined Experimental and Theoretical Study. <i>Journal of Physical Chemistry C</i> , 2012, 116, 26414-26421.	3.1	25
57	Smectiteâ€“Polymer Nanocomposites. <i>Developments in Clay Science</i> , 2013, , 679-706.	0.5	25
58	Mn-analcime: Synthesis, characterization and application to cyclohexene oxidation. <i>Microporous and Mesoporous Materials</i> , 2014, 196, 158-164.	4.4	25
59	Role of the Al source in the synthesis of aluminum magadiite. <i>Applied Clay Science</i> , 2012, 57, 71-78.	5.2	24
60	LRS-1:â€‰ A New Delaminated Phyllosilicate Material with High Acidity. <i>Chemistry of Materials</i> , 2006, 18, 34-40.	6.7	23
61	Preparation and characterisation of vanadium catalysts supported over alumina-pillared clays. <i>Catalysis Today</i> , 2003, 78, 181-190.	4.4	22
62	Chemistry of Silica-Supported Cobalt Catalysts Prepared by Cation Adsorption. 2. Neoformation of Cobalt Phyllosilicate. <i>Journal of Physical Chemistry C</i> , 2008, 112, 18551-18558.	3.1	22
63	Ordered Nanostructures on a Hydroxylated Aluminum Surface through the Self-Assembly of Fatty Acids. <i>Langmuir</i> , 2012, 28, 5116-5124.	3.5	22
64	Synthesis of RNA Nucleotides in Plausible Prebiotic Conditions from ab Initio Computer Simulations. <i>Journal of Physical Chemistry Letters</i> , 2018, 9, 4981-4987.	4.6	22
65	Stabilization of ribofuranose by a mineral surface. <i>Carbohydrate Research</i> , 2015, 402, 241-244.	2.3	21
66	Salt Concentration and pH-Dependent Adsorption of Two Polypeptides on Planar and Divided Alumina Surfaces. In Situ IR Investigations. <i>Langmuir</i> , 2007, 23, 2463-2471.	3.5	18
67	Characterization of Phosphate Species on Hydrated Anatase TiO <sub>2</sub> Surfaces. <i>Langmuir</i> , 2016, 32, 997-1008.	3.5	18
68	Dynamic Phenomena at the Oxide/Water Interface: the interplay of surface charge formation, metal complex adsorption, and dissolution/precipitation. <i>Studies in Surface Science and Catalysis</i> , 1997, 109, 91-110.	1.5	17
69	Relevant parameters for obtaining high-surface area materials by delamination of magadiite, a layered sodium silicate. <i>Journal of Materials Chemistry</i> , 2011, 21, 18403.	6.7	17
70	Origins of Life and Molecular Information: Selectivity in Mineral Surface-Induced Prebiotic Amino Acid Polymerization. <i>ACS Earth and Space Chemistry</i> , 2020, 4, 1802-1812.	2.7	17
71	Stability of Al-pillared saponites: evidence for disorganization during storage in air. <i>Clay Minerals</i> , 1992, 27, 245-248.	0.6	17
72	<sup>27</sup> Al MQ-MAS NMR as a Tool for Structure Determination in Nanocomposite Materials:Â The Nature of Al Pillars in â€œAl <sub>13</sub> â€ˆheidiâ€“Pillared Clays. <i>Journal of Physical Chemistry B</i> , 2002, 106, 4133-4138.	2.6	16

#	ARTICLE	IF	CITATIONS
73	Clays and Clay Minerals as Layered Nanofillers for (Bio)Polymers. Green Energy and Technology, 2012, , 41-75.	0.6	16
74	Phosphoribosyl Pyrophosphate: A Molecular Vestige of the Origin of Life on Minerals. Angewandte Chemie, 2017, 129, 8028-8031.	2.0	16
75	Iron(III) Oxide Nanoparticles as Catalysts for the Formation of Linear Glycine Peptides. European Journal of Inorganic Chemistry, 2017, 2017, 198-211.	2.0	16
76	One Step up the Ladder of Prebiotic Complexity: Formation of Nonrandom Linear Polypeptides from Binary Systems of Amino Acids on Silica. Chemistry - A European Journal, 2019, 25, 1275-1285.	3.3	16
77	A comparative study of alanine adsorption and condensation to peptides in two clay minerals. Applied Clay Science, 2020, 192, 105617.	5.2	16
78	Thermal Behavior of $\alpha$ -Ribose Adsorbed on Silica: Effect of Inorganic Salt Coadsorption and Significance for Prebiotic Chemistry. Chemistry - A European Journal, 2016, 22, 15834-15846.	3.3	15
79	When RNA meets montmorillonite: Influence of the pH and divalent cations. Applied Clay Science, 2021, 214, 106234.	5.2	15
80	Al-pillaring of saponite with the al polycation $[\text{Al}_{13}(\text{OH})_{24}(\text{H}_2\text{O})_{24}]^{15+}$ using a new synthetic route. Clays and Clay Minerals, 2003, 51, 168-171.	1.3	14
81	Self-Assembly of Fatty Acids on Hydroxylated Al Surface and Effects of Their Stability on Wettability and Nanoscale Organization. Langmuir, 2014, 30, 5797-5807.	3.5	14
82	Prebiotic chemistry. Chemical Society Reviews, 2012, 41, 5373.	38.1	13
83	Hypercondensation of an Amino Acid: Synthesis and Characterization of a Black Glycine Polymer. Chemistry - A European Journal, 2015, 21, 8897-8904.	3.3	13
84	Melanin Polymerization Held in Check: A Composite of Dihydroxyphenylalanine with Zeolite Beta. Journal of Physical Chemistry C, 2015, 119, 8736-8747.	3.1	13
85	Non-biological selectivity in amino acids polymerization on TiO <sub>2</sub> nanoparticles. Amino Acids, 2013, 45, 403-406.	2.7	12
86	Chemistry of the preparation of silica-supported cobalt catalysts from Co(II) and Co(III) complexes: Grafting versus phyllosilicate formation. Studies in Surface Science and Catalysis, 2000, , 1055-1060.	1.5	11
87	Bridging the Gap Between Solution and Solid-State Chemistry: Molecular Recognition at the Liquid-Solid Interface. Topics in Catalysis, 2003, 24, 37-42.	2.8	11
88	Origins of life: From the mineral to the biochemical world. BIO Web of Conferences, 2015, 4, 00012.	0.2	11
89	Spectroscopic and Electrochemical Study of the Adsorption of $[\text{Co}(\text{en})_2\text{Cl}_2]\text{Cl}$ on $\gamma$ -Alumina: Influence of the Alumina Ligand on Co(III)/(II) Redox Potential. Journal of Physical Chemistry B, 2006, 110, 900-906.	2.6	10
90	Influence of alumina dissolution on the final state of MoO <sub>x</sub> /Al <sub>2</sub> O <sub>3</sub> Catalysts. Studies in Surface Science and Catalysis, 1999, , 311-316.	1.5	9

#	ARTICLE	IF	CITATIONS
91	Lipid Layers on Nanoscale Surface Topography: Stability and Effect on Protein Adsorption. Langmuir, 2017, 33, 4414-4425.	3.5	9
92	Protein adsorption on clay minerals. Developments in Clay Science, 2018, , 255-288.	0.5	9
93	Interfacial coordination chemistry for catalyst preparation. Journal of Catalysis, 2021, 396, 104-121.	6.2	9
94	Carbamoyl phosphate and its substitutes for the uracil synthesis in origins of life scenarios. Scientific Reports, 2021, 11, 19356.	3.3	9
95	Intercalation of $[\text{Fe}_8(\frac{1}{4}\text{3-O})_2(\frac{1}{4}\text{2-OH})_{12}(\text{tacn})_6]^{8+}$ single molecule magnets in saponite clay. Journal of Physics and Chemistry of Solids, 2006, 67, 1363-1371.	4.0	7
96	Glycine Interaction with Geminal and Vicinal Silanols. , 2009, , .		6
97	High surface area supports with strong Brønsted acidity in an open porosity. Studies in Surface Science and Catalysis, 2005, , 517-524.	1.5	5
98	Sulfated Zr-pillared saponite: preparation, properties and thermal stability. Studies in Surface Science and Catalysis, 2002, , 903-910.	1.5	4
99	Leucine on Silica: A Combined Experimental and Modeling Study of a System Relevant for Origins of Life, and the Role of Water Coadsorption. Langmuir, 2022, 38, 8038-8053.	3.5	4
100	Non-destructive investigation of fibronectin adsorption on titanium surfaces using PM-AIRS: effect of surface hydroxylation. Surface and Interface Analysis, 2010, 42, 466-470.	1.8	3
101	Delamination of lamellar phyllosilicate Magadiite. Science Bulletin, 2010, 55, 2584-2588.	1.7	1
102	Al-Mn-silicate nanobubbles phase as an intermediate in zeolite formation. Applied Clay Science, 2016, 123, 202-209.	5.2	1
103	Oligopeptide. , 2014, , 1-2.		0
104	Oligopeptide. , 2015, , 1767-1769.		0