Laura Ilharco

List of Publications by Year
in descending order

123	4,278	134610	139680
papers	citations	34 h-index	61 g-index

131	131	131	6618
all docs	docs citations	times ranked	citing authors

#	Article	IF	Citations
1	Pectin: New science and forthcoming applications of the most valued hydrocolloid. Food Hydrocolloids, 2022, 127, 107483.	5.6	46
2	Red Orange and Bitter Orange IntegroPectin: Structure and Main Functional Compounds. Molecules, 2022, 27, 3243.	1.7	2
3	New Neuroprotective Effect of Lemon IntegroPectin on Neuronal Cellular Model. Antioxidants, 2021, 10, 669.	2.2	22
4	Effects of hygrothermal, UV and SO2 accelerated ageing on the durability of ETICS in urban environments. Building and Environment, 2021, 204, 108151.	3.0	28
5	Hydrophobic granular silica-based aerogels obtained from ambient pressure monoliths. Materialia, 2020, 9, 100527.	1.3	7
6	Silanes for Building Protection: A Case Study in Systems Thinking Approach to Materials Science Education. Education Sciences, 2020, 10, 171.	1.4	3
7	Pectin: A Longâ€Neglected Broadâ€Spectrum Antibacterial. ChemMedChem, 2020, 15, 2228-2235.	1.6	53
8	The Case for a Lemon Bioeconomy. Advanced Sustainable Systems, 2020, 4, 2000006.	2.7	12
9	Synthesis of ribonucleotides from the corresponding ribonucleosides under plausible prebiotic conditions within self-assembled supramolecular structures. New Journal of Chemistry, 2020, 44, 2206-2209.	1.4	5
10	Physical, mechanical, and microstructural characterisation of an innovative thermal insulating render incorporating silica aerogel. Energy and Buildings, 2020, 211, 109793.	3.1	59
11	Nanohybrid silica/polymer aerogels: The combined influence of polymer nanoparticle size and content. Materials and Design, 2020, 189, 108521.	3.3	13
12	AurOrGlass: ORMOSIL Solâ€Gel Glasses Functionalized with Gold Nanoparticles for Advanced Optical Applications. ChemistrySelect, 2019, 4, 8746-8750.	0.7	1
13	Economic and Technical Feasibility of Betanin and Pectin Extraction from Opuntia ficus-indica Peel via Microwave-Assisted Hydrodiffusion. ACS Omega, 2019, 4, 12121-12124.	1.6	11
14	Herbicides based on pelargonic acid: Herbicides of the bioeconomy. Biofuels, Bioproducts and Biorefining, 2019, 13, 1476-1482.	1.9	37
15	Real-Scale Integral Valorization of Waste Orange Peel via Hydrodynamic Cavitation. Processes, 2019, 7, 581.	1.3	68
16	Vanillin: The Case for Greener Production Driven by Sustainability Megatrend. ChemistryOpen, 2019, 8, 660-667.	0.9	37
17	Integral Extraction of Opuntia ficus-indica Peel Bioproducts via Microwave-Assisted Hydrodiffusion and Hydrodistillation. ACS Sustainable Chemistry and Engineering, 2019, 7, 7884-7891.	3.2	21
18	Structure and Properties of Corkâ€“Silica Xerogel Nanocomposites: Influence of the Cork Content. Langmuir, 2019, 35, 804-814.	1.6	4

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19	Betanin: A Bioeconomy Insight into a Valued Betacyanin. ACS Sustainable Chemistry and Engineering, 2018, 6, 2860-2865.	3.2	33
20	Polymers of Limonene Oxide and Carbon Dioxide: Polycarbonates of the Solar Economy. ACS Omega, 2018, 3, 4884-4890.	1.6	78
21	Dihydroxyacetone: An Updated Insight into an Important Bioproduct. ChemistryOpen, 2018, 7, 233-236.	0.9	47
22	EN 998-1 performance requirements for thermal aerogel-based renders. Construction and Building Materials, 2018, 179, 453-460.	3.2	17
23	High-Quality Essential Oils Extracted by an Eco-Friendly Process from Different Citrus Fruits and Fruit Regions. ACS Sustainable Chemistry and Engineering, 2017, 5, 5578-5587.	3.2	36
24	Microfabricated sol-gel relative humidity sensors for soil suction measurement during laboratory tests. Canadian Geotechnical Journal, 2017, 54, 1176-1183.	1.4	5
25	Ambient Pressure Hybrid Silica Monoliths with Hexamethyldisilazane: From Vitreous Hydrophilic Xerogels to Superhydrophobic Aerogels. ACS Omega, 2017, 2, 5060-5070.	1.6	13
26	Alkane Coiling in Perfluoroalkane Solutions: A New Primitive Solvophobic Effect. Langmuir, 2017, 33, 11429-11435.	1.6	28
27	Lemon Essential Oil of Variable Composition by Changing the Conditions of the Extraction from Lemon Peel via Microwave Hydrodiffusion and Gravity. ChemistrySelect, 2017, 2, 7123-7127.	0.7	7
28	A corkâ€“silica xerogel nanocomposite with unique properties. Journal of Sol-Gel Science and Technology, 2017, 83, 567-573.	1.1	5
29	Controlling the Degree of Esterification of Citrus Pectin for Demanding Applications by Selection of the Source. ACS Omega, 2017, 2, 7991-7995.	1.6	40
30	Microplastics effects in Scrobicularia plana. Marine Pollution Bulletin, 2017, 122, 379-391.	2.3	344
31	Spectroscopic Methods for Quantifying Gabapentin: Framing the Methods without Derivatization and Application to Different Pharmaceutical Formulations. Applied Spectroscopy, 2017, 71, 2519-2531.	1.2	1
32	Anti-ice and snow coating for EDP DistribuiÃ§Ã£o's overhead lines. CIRED - Open Access Proceedings Journal, 2017, 2017, 33-36.	0.1	2
33	Sol-Gel Relative Humidity Sensors: Impact of Electrode Geometry on Performance in Soil Suction Measurements. Journal of Sensor Technology, 2017, 07, 1-23.	0.4	1
34	Liquid Mixtures Involving Hydrogenated and Fluorinated Alcohols: Thermodynamics, Spectroscopy, and Simulation. Journal of Physical Chemistry B, 2016, 120, 10091-10105.	1.2	27
35	Aerogel-based renders with lightweight aggregates: Correlation between molecular/pore structure and performance. Construction and Building Materials, 2016, 124, 485-495.	3.2	65
36	Silica-based aerogels as aggregates for cement-based thermal renders. Cement and Concrete Composites, 2016, 72, 309-318.	4.6	60

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37	Extraction, benefits and valorization of olive polyphenols. European Journal of Lipid Science and Technology, 2016, 118, 503-511.	1.0	74
38	Lycopene: Emerging Production Methods and Applications of a Valued Carotenoid. ACS Sustainable Chemistry and Engineering, 2016, 4, 643-650.	3.2	61
39	Eco-Friendly Extraction of Pectin and Essential Oils from Orange and Lemon Peels. ACS Sustainable Chemistry and Engineering, 2016, 4, 2243-2251.	3.2	98
40	Sol-Gel Microspheres Doped with Glycerol: A Structural Insight in Light of Forthcoming Applications in the Polyurethane Foam Industry. ChemistryOpen, 2015, 4, 78-78.	0.9	1
41	Sol-Gel Microspheres Doped with Glycerol: A Structural Insight in Light of Forthcoming Applications in the Polyurethane Foam Industry. ChemistryOpen, 2015, 4, 120-126.	0.9	2
42	New Catalyst Series from the Solâ€“Gelâ€Entrapment of Gold Nanoparticles in Organically Modified Silica Matrices: Proof of Performance in a Model Oxidation Reaction. ChemCatChem, 2015, 7, 254-260.	1.8	13
43	The Problem of 2,4,6-Trichloroanisole in Cork Planks Studied by Attenuated Total Reflection Infrared Spectroscopy: Proof of Concept. Journal of Agricultural and Food Chemistry, 2015, 63, 128-135.	2.4	14
44	SiliaCat: A Versatile Catalyst Series for Synthetic Organic Chemistry. Organic Process Research and Development, 2015, 19, 755-768.	1.3	40
45	Towards waste free organic synthesis using nanostructured hybrid silicas. Nanoscale, 2014, 6, 6293-6300.	2.8	11
46	Synthesis, characterization and heterogeneous catalytic application of copper integrated mesoporous matrices. Dalton Transactions, 2014, 43, 3215-3226.	1.6	21
47	Hydrofluoric acid-induced fluorination and formation of silica nanocapsules for ¹⁹F magnetic resonance imaging. RSC Advances, 2014, 4, 16931-16934.	1.7	4
48	Reactivity of Pyrimidine on Clean Ru(0001): Experimental and Calculated Infrared Spectra. Journal of Physical Chemistry C, 2014, 118, 17521-17530.	1.5	0
49	Superhydrophobic hybrid aerogel powders from waterglass with distinctive applications. Microporous and Mesoporous Materials, 2014, 199, 29-39.	2.2	34
50	Polymorphism in 4â€²-hydroxyacetophenone: A vibrational analysis. Journal of Molecular Structure, 2014, 1078, 181-187.	1.8	10
51	The sol-gel entrapment of noble metals in hybrid silicas: a molecular insight. Chemistry Central Journal, 2013, 7, 161.	2.6	12
52	The Solâ€“Gel Route to Advanced Silica-Based Materials and Recent Applications. Chemical Reviews, 2013, 113, 6592-6620.	23.0	487
53	Flexible hybrid aerogels prepared under subcritical conditions. Journal of Materials Chemistry A, 2013, 1, 12044.	5.2	23
54	Specific surface area and salt weathering of limestones: a laboratory study. Quarterly Journal of Engineering Geology and Hydrogeology, 2013, 46, 477-484.	0.8	3

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55	Reactivity of the Antitumor Complex (H2trz)[trans-RuCl4(N2-Htrz)2] in the Presence of DNA Purines within a Fluorinated Silica Matrix. Journal of Physical Chemistry B, 2012, 116, 1189-1199.	1.2	1
56	Nanoparticles and Surfaces Presenting Antifungal, Antibacterial and Antiviral Properties. Langmuir, 2012, 28, 7646-7656.	1.6	129
57	Solâ€Gel Microencapsulation of Organic Molecules: A Structural and Chemical Insight. ChemPlusChem, 2012, 77, 536-540.	1.3	6
58	Tailoring the structure and hydrophobic properties of amorphous silica by silylation. Microporous and Mesoporous Materials, 2012, 158, 39-46.	2.2	21
59	Volumetric Properties and Spectroscopic Studies of Pyridine or Nicotine Solutions in Liquid Polyethylene Glycols. Journal of Physical Chemistry B, 2011, 115, 8481-8492.	1.2	32
60	Tannic Acid Mediated Suppression of PNIPAAm Microgels Thermoresponsive Behavior. Macromolecules, 2011, 44, 612-621.	2.2	74
61	Effect of functionalized carbon as Pt electrocatalyst support on the methanol oxidation reaction. Applied Catalysis B: Environmental, 2011, 102, 496-504.	10.8	51
62	Phase behaviour of oleanolic acid, pure and mixed with stearic acid: Interactions and crystallinity. Chemistry and Physics of Lipids, 2010, 163, 655-666.	1.5	38
63	Interactions between DNA Purines and Ruthenium Ammine Complexes within Nanostructured Solâ˜Gel Silica Matrixes. Journal of Physical Chemistry B, 2010, 114, 3987-3998.	1.2	5
64	Phase behaviour of oleanolic acid/stearyl stearate binary mixtures in bulk and at the airâ€“water interface. Chemistry and Physics of Lipids, 2009, 160, 45-57.	1.5	7
65	Kinetic study of controlled release of VPA and DPH antiepileptic drugs using biocompatible nanostructured solâ€“gel TiO2. Journal of Materials Science, 2009, 44, 5459-5468.	1.7	12
66	Wet solâ€“gel silica matrices as delivery devices for phenytoin. Journal of Sol-Gel Science and Technology, 2009, 49, 320-328.	1.1	21
67	Reactivity of 3-hexyne on oxygen modified Ru(001) surfaces: Observation of oxametallacycles by RAIRS. Surface Science, 2009, 603, 380-386.	0.8	4
68	Encapsulation of Ruthenium Nitrosylnitrate and DNA Purines in Nanostructured Solâ˜Gel Silica Matrices. Langmuir, 2009, 25, 10243-10250.	1.6	7
69	Activation of double and triple bonds in C₆ unsaturated hydrocarbons by the Ru(001) surface: an overview. Journal of Physical Organic Chemistry, 2008, 21, 703-712.	0.9	6
70	The Infrared Spectrum of Solid <scp>l</scp>-Alanine: Influence of pH-Induced Structural Changes. Journal of Physical Chemistry A, 2008, 112, 8280-8287.	1.1	52
71	The grounds for the activity of TPAP in oxidation catalysis in supercritical carbon dioxide when confined in hybrid fluorinated silica matrices. Physical Chemistry Chemical Physics, 2008, 10, 2026.	1.3	6
72	Enhanced Biocatalytic Activity of ORMOSIL-Encapsulated Cutinase:â€‰ The Matrix Structural Perspective. Journal of Physical Chemistry C, 2008, 112, 2008-2015.	1.5	13

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73	Enhanced Mechanical Properties in Organofluorosilica Thin Films. Journal of Nanomaterials, 2008, 2008, 1-5.	1.5	2
74	Nanostructured silica/polymer subcritical aerogels. Journal of Materials Chemistry, 2007, 17, 2195.	6.7	18
75	Interactions of <scp>l</scp>-Alanine with Alumina as Studied by Vibrational Spectroscopy. Langmuir, 2007, 23, 10164-10175.	1.6	30
76	Hybrid Silica/Polymer Aerogels Dried at Ambient Pressure. Chemistry of Materials, 2007, 19, 2603-2609.	3.2	62
77	Microdomains in mixed monolayers of oleanolic and stearic acids: thermodynamic study and BAM observation at the airâ€“water interface and AFM and FTIR analysis of LB monolayers. Chemistry and Physics of Lipids, 2007, 149, 1-13.	1.5	25
78	Solâ€“gel encapsulation: An efficient and versatile immobilization technique for cutinase in non-aqueous media. Journal of Biotechnology, 2006, 121, 23-33.	1.9	76
79	The effect of pre-adsorbed atoms on the reactivity of methanol-d4 on Ru(001): Comparison between hydrogen and oxygen. Surface Science, 2006, 600, 2425-2433.	0.8	1
80	The influence of the wet gels processing on the structure and properties of silica xerogels. Microporous and Mesoporous Materials, 2005, 84, 229-235.	2.2	28
81	The chemistry of formic acid on oxygen modified Ru(001) surfaces. Surface Science, 2005, 591, 142-152.	0.8	22
82	Adsorption of [D2]Methanol on Ru(001)ï£¿O Surfaces: The Influence of Preadsorbed Oxygen on the Methoxide Geometry. ChemPhysChem, 2005, 6, 1299-1306.	1.0	9
83	Enhancing Selectivity in Oxidation Catalysis with Solâ€”Gel Nanocomposites.. ChemInform, 2005, 36, no.	0.1	0
84	The Structural Origins of Superior Performance in Solâ€”Gel Catalysts. ChemInform, 2005, 36, no.	0.1	0
85	The structural origins of superior performance in solâ€“gel catalysts. Soft Matter, 2005, 1, 231.	1.2	27
86	Role of the Alkylâ^'Alkoxide Precursor on the Structure and Catalytic Properties of Hybrid Solâ^'Gel Catalysts. Chemistry of Materials, 2005, 17, 6686-6694.	3.2	143
87	Enhancing selectivity in oxidation catalysis with solâ€“gel nanocomposites. Organic and Biomolecular Chemistry, 2005, 3, 2389.	1.5	33
88	Chemical Tailoring of Porous Silica Xerogels: Local Structure by Vibrational Spectroscopy. Chemistry - A European Journal, 2004, 10, 392-398.	1.7	131
89	Effect of geometrical isomerism on the reactivity of 3-hexene on clean Ru(001). Surface Science, 2004, 566-568, 733-739.	0.8	1
90	Fermi resonance coupling in the Câ€“H stretching region of methoxide adsorbed on clean Ru(001): a combined RAIRS and theoretical study. Surface Science, 2004, 566-568, 965-970.	0.8	13

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91	Experimental evidence for methoxide geometry on clean Ru(001). Surface Science, 2004, 572, 277-282.	0.8	9
92	Effect of Oxygen Precoverage on the Reactivity of Methanol on Ru(001) Surfaces. Journal of Physical Chemistry B, 2004, 108, 4831-4839.	1.2	43
93	Correlation between physical properties and structure of silica xerogels. Journal of Non-Crystalline Solids, 2004, 347, 128-137.	1.5	73
94	Chemical Control of Highly Porous Silica Xerogels:Â Physical Properties and Morphology. Chemistry of Materials, 2003, 15, 2186-2192.	3.2	77
95	Thickness, Morphology and Structure of Sol-Gel Hybrid Films: Ilâ€"The Role of the Solvent. Journal of Sol-Gel Science and Technology, 2003, 26, 357-362.	1.1	10
96	Title is missing!. Journal of Sol-Gel Science and Technology, 2003, 26, 363-367.	1.1	8
97	Decomposition of 2-hexyne on clean Ru() studied by RAIRS. Surface Science, 2003, 532-535, 179-184.	0.8	6
98	Reactivity of methanol on clean Ru() studied by RAIRS: effect of deuterium substitution. Surface Science, 2003, 532-535, 185-190.	0.8	14
99	Kinetics of Tripletâ^'Triplet Annihilation of Tetraphenylporphyrin in Liquid and Frozen Films of Decanol on the External Surface of Zeolite. Fast Probe Diffusion in Monolayers and Polycrystals. Journal of Physical Chemistry A, 2003, 107, 328-336.	1.1	10
100	Hydrophobic Silica Aerogels under Subcritical Conditions: Preparation and Characterization. , 2003, , 135-148.		1
101	A RAIRS study of the methanol decomposition on oxygen precovered Ru(0001). Surface Science, 2002, 502-503, 156-163.	0.8	14
102	Evidence of metallocycle formation by decomposition of 1-hexyne on Ru(): a RAIRS study. Surface Science, 2002, 502-503, 169-175.	0.8	8
103	The reactivity of Z-2-hexene on Ru(001) studied by RAIRS. Surface Science, 2002, 516, 85-94.	0.8	5
104	The defect structure of solâ€"gel-derived silica/polytetrahydrofuran hybrid films by FTIR. Journal of Non-Crystalline Solids, 2001, 283, 144-154.	1.5	264
105	The chemical behaviour of 3-hexene on the Ru(0001) surface: a characterisation by RAIRS. Surface Science, 2001, 482-485, 107-113.	0.8	6
106	The Decomposition Pathways of Methanol on Clean Ru(0001), Studied by Reflectionâ^'Absorption Infrared Spectroscopy (RAIRS). Journal of Physical Chemistry B, 2001, 105, 11186-11193.	1.2	64
107	Water in toluene revisited: vibrational patterns in the stretching region. Spectrochimica Acta - Part A: Molecular and Biomolecular Spectroscopy, 2001, 57, 137-147.	2.0	3
108	The role of cellulose acetate as a matrix for aggregation of pseudoisocyanine iodide: absorption and emission studies. Spectrochimica Acta - Part A: Molecular and Biomolecular Spectroscopy, 2001, 57, 1809-1817.	2.0	5

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109	The Structure of Hybrid Gels by Drift and NMR Spectroscopies. Journal of Sol-Gel Science and Technology, 2000, 19, 403-407.	1.1	28
110	A comparative reflectionâ€“absorption infrared spectroscopy study of the thermal decomposition of 1-hexene on Ru(0001) and on Pt(111). Surface Science, 2000, 459, 115-123.	0.8	25
111	Characterization of Solid Complexes between Aromatic Ketones and Î²-Cyclodextrin Using Diffuse Reflectance Infrared Fourier Transform Spectroscopy. Langmuir, 2000, 16, 10392-10397.	1.6	15
112	Aggregation of Pseudoisocyanine Iodide in Cellulose Acetate Films:Â Structural Characterization by FTIR. Langmuir, 2000, 16, 9331-9337.	1.6	87
113	Chemistry of 3-Hexyne on Ru(0001):Â A Reflectionâ^'Absorption Infrared Spectroscopy Study. Journal of Physical Chemistry B, 1999, 103, 6746-6751.	1.2	13
114	Hybrid and Nonhybrid Silica Solâ^'Gel Systems Doped with 1,12-Bis(1-pyrenyl)dodecane. Langmuir, 1999, 15, 7490-7494.	1.6	21
115	Hybrid Silica Gel-Polytetrahydrofuran Thin Films. Journal of Sol-Gel Science and Technology, 1998, 13, 433-437.	1.1	6
116	Features of diffusion-controlled bimolecular reaction of fluorescence quenching in sol-gel-xerogel transitions. Theoretical and Experimental Chemistry, 1998, 34, 111-114.	0.2	0
117	Ultravioletâ^'Visible and Fourier Transform Infrared Diffuse Reflectance Studies of Benzophenone and Fluorenone Adsorbed onto Microcrystalline Cellulose. Langmuir, 1997, 13, 3787-3793.	1.6	31
118	Infrared Approach to the Study of Adsorption on Cellulose:â€‰ Influence of Cellulose Crystallinity on the Adsorption of Benzophenone. Langmuir, 1997, 13, 4126-4132.	1.6	119
119	Aggregation of 1,12-bis(1-pyrenyl) dodecane in sol-gel systems. Chemical Physics Letters, 1997, 277, 51-56.	1.2	7
120	Relationship between infrared absorption and porosity in silica-based sol-gel films. , 1994, 2288, 678.		17
121	Influence of processing parameters on the thickness of sol-gel silica films. , 1992, , .		9
122	Determination of saturated organic vapour concentrations by a spectroscopic method. Chemical Physics, 1987, 111, 137-144.	0.9	2
123	Water-Resistance of Mortars with Lightweight Aggregates. Key Engineering Materials, 0, 634, 46-53.	0.4	14