

# Luis Esquivias

## List of Publications by Year in descending order

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107  
papers

2,056  
citations

257450  
24  
h-index

289244  
40  
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112  
all docs

112  
docs citations

112  
times ranked

1660  
citing authors

#	ARTICLE	IF	CITATIONS
1	Rietveld analysis and mechanical properties of in situ formed La- $\hat{2}$ -Al <sub>2</sub> O <sub>3</sub> /Al <sub>2</sub> O <sub>3</sub> composites prepared by sol-gel method. Ceramics International, 2022, 48, 24462-24470.	4.8	6
2	Characterization and Analysis of the Carbonation Process of a Lime Mortar Obtained from Phosphogypsum Waste. International Journal of Environmental Research and Public Health, 2021, 18, 6664.	2.6	7
3	Mechanical characterization of sol-gel alumina-based ceramics with intragranular reinforcement of multiwalled carbon nanotubes. Ceramics International, 2020, 46, 19723-19730.	4.8	20
4	Environmental Impact of Phosphogypsum-Derived Building Materials. International Journal of Environmental Research and Public Health, 2020, 17, 4248.	2.6	25
5	Phosphogypsum waste lime as a promising substitute of commercial limes: A rheological approach. Cement and Concrete Composites, 2019, 95, 205-216.	10.7	27
6	Intragranular carbon nanotubes in alumina-based composites for reinforced ceramics. Journal of Sol-Gel Science and Technology, 2019, 90, 162-171.	2.4	15
7	Reinforced silica-carbon nanotube monolithic aerogels synthesised by rapid controlled gelation. Journal of Sol-Gel Science and Technology, 2018, 86, 391-399.	2.4	29
8	Carbon dioxide sequestration by phosphogypsum based procedure. , 2018, , 199-223.		7
9	Xerogels, Aerogels, and Aerogel/Mineral Composites for CO <sub>2</sub> Sequestration. , 2018, , 2535-2554.		0
10	New method for carbon dioxide mineralization based on phosphogypsum and aluminium-rich industrial wastes resulting in valuable carbonated by-products. Journal of CO <sub>2</sub> Utilization, 2017, 18, 15-22.	6.8	34
11	Absorption capacity, kinetics and mechanical behaviour in dry and wet states of hydrophobic DEDMS/TEOS-based silica aerogels. Journal of Sol-Gel Science and Technology, 2017, 81, 600-610.	2.4	10
12	Flue gas adsorption by single-wall carbon nanotubes: A Monte Carlo study. Journal of Chemical Physics, 2016, 145, 074701.	3.0	8
13	Xerogels, Aerogels, and Aerogel/Mineral Composites for CO <sub>2</sub> Sequestration. , 2016, , 1-20.		2
14	Hydration and carbonation reactions of calcium oxide by weathering: Kinetics and changes in the nanostructure. Chemical Engineering Journal, 2015, 265, 194-200.	12.7	40
15	Fractionation and fluxes of metals and radionuclides during the recycling process of phosphogypsum wastes applied to mineral CO <sub>2</sub> sequestration. Waste Management, 2015, 45, 412-419.	7.4	90
16	Technological Proposals for Recycling Industrial Wastes for Environmental Applications. Minerals (Basel, Switzerland), 2014, 4, 746-757.	2.0	17
17	Calcium silicates synthesised from industrial residues with the ability for CO <sub>2</sub> sequestration. Waste Management and Research, 2014, 32, 1178-1185.	3.9	4
18	Removal of basic yellow cationic dye by an aqueous dispersion of Moroccan stevensite. Applied Clay Science, 2013, 80-81, 46-51.	5.2	25

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19	Aerogels Synthesis by Sonocatalysis: Sonogels. , 2011, , 419-445.	10	
20	Procedure to use phosphogypsum industrial waste for mineral CO2 sequestration. Journal of Hazardous Materials, 2011, 196, 431-435.	12.4	99
21	Recent insights into xerogel and aerogel mineral composites for CO2 mineral sequestration. Journal of Sol-Gel Science and Technology, 2011, 59, 417-423.	2.4	6
22	Artificial weathering pools of calcium-rich industrial waste for CO2 sequestration. Chemical Engineering Journal, 2011, 166, 132-137.	12.7	33
23	Nano-scale Creep Compliance of Hybrid Aerogels. Materials Research Society Symposia Proceedings, 2011, 1306, 1.	0.1	0
24	Behaviour of sonogels under isotropic pressure. Comptes Rendus Chimie, 2010, 13, 282-289.	0.5	0
25	Advances in Aerogels made by Sonocatalysis. Transactions of the Indian Ceramic Society, 2010, 69, 125-130.	1.0	0
26	Hybrid aerogels and bioactive aerogels under uniaxial compression: an in situ SAXS study. Revista De Metalurgia, 2010, 46, 143-148.	0.5	1
27	Percolation of the organic phase in hybrid organicâ€“inorganic aerogels. Journal of Sol-Gel Science and Technology, 2009, 50, 170-175.	2.4	10
28	Larnite powders and larnite/silica aerogel composites as effective agents for CO2 sequestration by carbonation. Journal of Hazardous Materials, 2009, 168, 1397-1403.	12.4	47
29	Nanostructure and Bioactivity of Hybrid Aerogels. Chemistry of Materials, 2009, 21, 41-47.	6.7	18
30	Fast CO2 sequestration by aerogel composites. Journal of Sol-Gel Science and Technology, 2008, 45, 291-297.	2.4	24
31	SANS study of hybrid silica aerogels under â€œinÂsituâ€•uniaxial compression. Journal of Sol-Gel Science and Technology, 2008, 45, 245-250.	2.4	13
32	Reactivity of CO2 traps in aerogelâ€“wollastonite composites. Journal of Sol-Gel Science and Technology, 2008, 48, 224-230.	2.4	20
33	Changes in the structure of composite colloid-polymer xerogels after cold isostatic pressing. Journal of Sol-Gel Science and Technology, 2008, 47, 194-202.	2.4	5
34	Bioactivity of wollastonite/aerogels composites obtained from a TEOSâ€“MTES matrix. Journal of Materials Science: Materials in Medicine, 2008, 19, 2207-2213.	3.6	18
35	The cluster model: A hierarchically-ordered assemblage of random-packing spheres for modelling microstructure of porous materials. Journal of Non-Crystalline Solids, 2008, 354, 193-198.	3.1	17
36	New route for producing crack-free xerogels: Obtaining uniform pore size. Journal of Non-Crystalline Solids, 2008, 354, 645-650.	3.1	62

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37	Improvement of the bioactivity of organic/inorganic hybrid aerogels/wollastonite composites with TiO <sub>2</sub> . <i>Journal of Sol-Gel Science and Technology</i> , 2008, 45, 261-267.	2.4	12
38	THE RISE OF THE GOSSIP PRESS IN SPAIN. <i>Journalism Studies</i> , 2007, 8, 621-633.	2.1	5
39	Chemically Active Silica Aerogel-Wollastonite Composites for CO <sub>2</sub> Fixation by Carbonation Reactions. <i>Industrial &amp; Engineering Chemistry Research</i> , 2007, 46, 103-107.	3.7	49
40	Nanoindentation on hybrid organic/inorganic silica aerogels. <i>Journal of the European Ceramic Society</i> , 2007, 27, 3311-3316.	5.7	49
41	Structural characterization of nanosized silica spheres. <i>Solid State Sciences</i> , 2007, 9, 351-356.	3.2	20
42	Aerogeles con aplicaciones en biomedicina y medioambiente. <i>Boletin De La Sociedad Espanola De Ceramica Y Vidrio</i> , 2007, 46, 138-144.	1.9	12
43	The Cluster Model: A Simulation of the Aerogel Structure as a Hierarchically-Ordered Arrangement of Randomly Packed Spheres. <i>Journal of Sol-Gel Science and Technology</i> , 2005, 35, 203-210.	2.4	20
44	Structure of bioactive mixed polymer/colloid aerogels. <i>Journal of Non-Crystalline Solids</i> , 2005, 351, 3347-3355.	3.1	3
45	Propiedades mecánicas de aerogeles híbridos de silicio. <i>Boletin De La Sociedad Espanola De Ceramica Y Vidrio</i> , 2005, 44, 291-293.	1.9	7
46	Bioactive organic-inorganic hybrid aerogels. <i>Materials Research Society Symposia Proceedings</i> , 2004, 847, 97.	0.1	8
47	Structure of Hybrid Colloid-Polymer Xerogels. <i>Langmuir</i> , 2004, 20, 3416-3423.	3.5	11
48	The Role of Precursor Concentration on the Characteristics of SiO <sub>2</sub> -CaO Films. <i>Journal of Sol-Gel Science and Technology</i> , 2003, 26, 1179-1182.	2.4	19
49	Mercury Porosimetry Applied to Sono-Aerogels. <i>Journal of Sol-Gel Science and Technology</i> , 2003, 26, 651-655.	2.4	12
50	Small Angle Neutron Scattering Study of PbS Quantum Dots Synthetic Routes via Sol-Gel. <i>Journal of Sol-Gel Science and Technology</i> , 2003, 26, 527-531.	2.4	5
51	Stress During Drying of Two Stone Consolidants Applied in Monumental Conservation. <i>Journal of Sol-Gel Science and Technology</i> , 2003, 26, 1227-1231.	2.4	72
52	Photoluminescence from CdS Quantum Dots in Silica Gel. <i>Journal of Sol-Gel Science and Technology</i> , 2003, 26, 947-951.	2.4	10
53	SiO <sub>2</sub> -CaO Vitreous Films Deposited onto Ti6Al4V Substrates. <i>European Journal of Inorganic Chemistry</i> , 2003, 2003, 1608-1613.	2.0	19
54	Controlled size of PbS nanocrystals doped ORMOSIL. <i>Optical Materials</i> , 2003, 22, 1-6.	3.6	3

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55	Producing Crack-Free Colloid-Polymer Hybrid Gels by Tailoring Porosity. <i>Langmuir</i> , 2003, 19, 951-957.	3.5	43
56	Application of mercury porosimetry to the study of xerogels used as stone consolidants. <i>Journal of Non-Crystalline Solids</i> , 2002, 311, 185-194.	3.1	44
57	Control growth of PbS quantum dots doped sono-ormosil. <i>Journal of Materials Research</i> , 2001, 16, 2572-2578.	2.6	13
58	Sonogels and derived materials. <i>Applied Organometallic Chemistry</i> , 1999, 13, 399-418.	3.5	91
59	Effect of Preparation Conditions on Phase Formation, Densification, and Microstructure Evolution in La <sub>2</sub> O <sub>3</sub> /Al <sub>2</sub> O <sub>3</sub> /Al <sub>2</sub> O <sub>3</sub> Composites. <i>Journal of the American Ceramic Society</i> , 1999, 82, 1318-1324.	3.8	26
60	SANS Study of CdS and CdSe Quantum Dot Crystal Growth in a Silica Matrix by Sol-Gel. <i>Journal of Sol-Gel Science and Technology</i> , 1998, 13, 629-633.	2.4	5
61	Structure of CdS/SiO <sub>2</sub> Nanocomposites: Influence of the Precursor and Cd Concentration. <i>Journal of Sol-Gel Science and Technology</i> , 1998, 11, 217-227.	2.4	3
62	5YSZ powders from gels: Densification and microstructure characterization. <i>Journal of the European Ceramic Society</i> , 1998, 18, 1429-1438.	5.7	6
63	Structural models of dense aerogels. <i>Journal of Non-Crystalline Solids</i> , 1998, 225, 239-243.	3.1	21
64	CaracterizaciÃ³n de capas coloreadas sobre AISI 304. <i>Revista De Metalurgia</i> , 1998, 34, 105-108.	0.5	0
65	Short-range order of titania doped silica sono-aerogel. <i>Journal of Non-Crystalline Solids</i> , 1997, 220, 45-51.	3.1	10
66	Ellipsometric characterization of an AISI 304 stainless steel protective coating. <i>Thin Solid Films</i> , 1997, 301, 12-16.	1.8	11
67	Structural models of dense gels. <i>Journal of Sol-Gel Science and Technology</i> , 1997, 8, 117-123.	2.4	4
68	Trapping copper phthalocyanine in a silica sono-xerogel. <i>Journal of Sol-Gel Science and Technology</i> , 1997, 8, 985-990.	2.4	15
69	Short-range order of yttria doped zirconia powders studied by X-ray absorption (II). <i>Journal of Alloys and Compounds</i> , 1996, 239, 71-76.	5.5	8
70	Aggregation model of sonogels on sintering. <i>Journal of Non-Crystalline Solids</i> , 1996, 196, 297-303.	3.1	0
71	Sol-gel processing of optical and electrooptical materials. <i>Advanced Materials</i> , 1995, 7, 120-129.	21.0	145
72	Short-range order of yttria doped zirconia powders study by X-ray absorption (I). <i>Journal of Alloys and Compounds</i> , 1995, 228, 188-194.	5.5	9

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73	CdS nanocrystals embedded in silica sonogel. <i>Scripta Materialia</i> , 1995, 5, 363-372.	0.5	6
74	Aggregation process in silica aerogels on sintering. <i>Journal of Non-Crystalline Solids</i> , 1995, 192-193, 534-538.	3.1	11
75	Ultrasound-processed silica xerogels behavior during heating. <i>Materials Letters</i> , 1995, 22, 265-270.	2.6	3
76	CdS-silica xerogel nanocomposites: Processing-induced textural changes. <i>Journal of Materials Research</i> , 1994, 9, 2873-2877.	2.6	8
77	Obtaining and sintering yttria stabilized zirconia (YSZ) powders from alkoxides. <i>Journal of Sol-Gel Science and Technology</i> , 1994, 2, 347-352.	2.4	4
78	CdS semiconductor nanoparticles in silica sonogel matrices. <i>Journal of Sol-Gel Science and Technology</i> , 1994, 2, 689-694.	2.4	10
79	Ultrastructural evolution during sintering of mixed sonogels. <i>Journal of Sol-Gel Science and Technology</i> , 1994, 3, 41-46.	2.4	6
80	Sol-gel synthesis of SiO <sub>2</sub> -P <sub>2</sub> O <sub>5</sub> glasses. <i>Journal of Non-Crystalline Solids</i> , 1994, 176, 189-199.	3.1	88
81	Structure of the Cu <sub>15</sub> As <sub>34</sub> Se <sub>51</sub> amorphous alloy by extended X-ray absorption fine structure spectroscopy. <i>Journal of Non-Crystalline Solids</i> , 1994, 167, 59-64.	3.1	13
82	CdSe Nanocrystals Formation in Silica Sonogels. <i>Materials Research Society Symposia Proceedings</i> , 1994, 346, 673.	0.1	4
83	Ultrasound as a tool for the preparation of gels: effect on the textural properties of TiO <sub>2</sub> -SiO <sub>2</sub> aerogels. <i>Journal of Materials Science</i> , 1993, 28, 2191-2195.	3.7	16
84	Modeling of the spatial structure by means of wide-angle x-ray scattering and extended x-ray-absorption fine structure for the Cu <sub>8</sub> As <sub>26</sub> Se <sub>66</sub> and Cu <sub>26</sub> As <sub>37</sub> Se <sub>37</sub> semiconductor alloys. <i>Physical Review B</i> , 1993, 48, 10110-10117.	3.2	11
85	Ultrastructural aspects of sonogels. <i>Journal of Non-Crystalline Solids</i> , 1992, 147-148, 194-200.	3.1	16
86	Ultrastructural evolution during gelation of TiO <sub>2</sub> -SiO <sub>2</sub> sols. <i>Journal of Non-Crystalline Solids</i> , 1992, 147-148, 206-212.	3.1	13
87	Processing of silica xerogels using sonocatalysis and an additive. <i>Journal of Non-Crystalline Solids</i> , 1992, 147-148, 296-302.	3.1	11
88	Preparation of rhodium catalysts dispersed on TiO <sub>2</sub> SiO <sub>2</sub> aerogels. <i>Journal of Non-Crystalline Solids</i> , 1992, 147-148, 758-763.	3.1	30
89	EXAFS Study of the Cu <sub>x</sub> As <sub>x</sub> Se Amorphous Alloys. <i>Physica Status Solidi (B): Basic Research</i> , 1992, 169, 303-311.	1.5	5
90	Silica sonogels with drying control chemical additives. <i>Journal of Materials Science Letters</i> , 1991, 10, 1237-1242.	0.5	26

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91	Kinetic study of gelation of solventless alkoxide-water mixtures. <i>Journal of Non-Crystalline Solids</i> , 1990, 121, 40-44.	3.1	30
92	Effect of the method of preparation on the texture of $TiO_2-SiO_2$ gels. <i>Journal of Non-Crystalline Solids</i> , 1990, 121, 84-89.	3.1	28
93	Structural study of silica sonogels. <i>Journal of Non-Crystalline Solids</i> , 1990, 121, 211-215.	3.1	43
94	TEXTURAL CHARACTERISTICS OF AEROGELS OBTAINED FROM SONOGELS. <i>Journal De Physique Colloque</i> , 1989, 24, C4-233-C4-238.	0.2	0
95	Topological features of Cu <sub>15</sub> As <sub>34</sub> Se <sub>51</sub> glassy semiconductor. <i>Journal of Materials Science Letters</i> , 1988, 7, 105-107.	0.5	4
96	The medium-range order and the interference functions of structural models of Ge <sub>20</sub> As <sub>40</sub> Se <sub>40</sub> and Ge <sub>30</sub> As <sub>20</sub> Se <sub>50</sub> amorphous alloys. <i>Journal of Non-Crystalline Solids</i> , 1986, 85, 239-243.	3.1	0
97	Comments on the formation process and the electrical nature of lock-on filament in Ge <sub>9</sub> As <sub>20</sub> Te <sub>71</sub> glass. <i>Journal of Non-Crystalline Solids</i> , 1986, 81, 255-259.	3.1	7
98	Tetrahedral bonding in the glassy semiconductor Cu <sub>15</sub> As <sub>34</sub> Se <sub>51</sub> . <i>Materials Letters</i> , 1986, 4, 481-484.	2.6	13
99	Atomic arrangement in the glassy semiconductor Ge <sub>30</sub> As <sub>20</sub> Se <sub>50</sub> . <i>Materials Research Bulletin</i> , 1986, 21, 1167-1174.	5.2	3
100	Structural models of the amorphous alloy Ge <sub>0.20</sub> As <sub>0.40</sub> Se <sub>0.40</sub> by a random technique. <i>Physical Review B</i> , 1986, 33, 4094-4099.	3.2	30
101	Electrode-holding devices with an incorporated contact pressure regulating system, designed for the switching effect in amorphous materials. <i>Review of Scientific Instruments</i> , 1985, 56, 1262-1264.	1.3	9
102	A phase-separated model of Al <sub>0.23</sub> Te <sub>0.77</sub> amorphous alloy. <i>Journal of Non-Crystalline Solids</i> , 1985, 72, 165-169.	3.1	12
103	Structural study of amorphous Al <sub>0.20</sub> As <sub>0.50</sub> Te <sub>0.30</sub> , Al <sub>0.10</sub> As <sub>0.40</sub> Te <sub>0.50</sub> and Al <sub>0.10</sub> As <sub>0.20</sub> Te <sub>0.70</sub> by x-ray diffraction (I). <i>Journal of Non-Crystalline Solids</i> , 1985, 70, 211-219.	3.1	8
104	Structural study of amorphous Al <sub>0.20</sub> As <sub>0.50</sub> Te <sub>0.30</sub> , Al <sub>0.10</sub> As <sub>0.40</sub> Te <sub>0.50</sub> and Al <sub>0.10</sub> As <sub>0.20</sub> Te <sub>0.70</sub> by X-ray diffraction (II). <i>Journal of Non-Crystalline Solids</i> , 1985, 70, 221-232.	3.1	25
105	Mechanical Properties of Organic-Inorganic Hybrid Black Coating of Silica and Polyurethane. <i>Key Engineering Materials</i> , 0, 423, 161-165.	0.4	1
106	Creep and Stress Relaxation of Hybrid Organic-Inorganic Aerogels. <i>Key Engineering Materials</i> , 0, 423, 167-172.	0.4	11
107	Mechanical Properties of Bioactive Hybrid Organic/Inorganic Aerogels. <i>Key Engineering Materials</i> , 0, 423, 155-160.	0.4	3