Silvia Irusta

List of Publications by Year in descending order

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112 papers	4,448 citations	109137 35 h-index	114278 63 g-index
113 all docs	113 docs citations	113 times ranked	7380 citing authors

#	Article	IF	Citations
1	Electrospinning synthesis and characterization of nanofibers of Co, Ce and mixed Co-Ce oxides. Their application to oxidation reactions of diesel soot and CO. Catalysis Today, 2022, 383, 266-276.	2.2	17
2	Nanoengineering Palladium Plasmonic Nanosheets Inside Polymer Nanospheres for Photothermal Therapy and Targeted Drug Delivery. Advanced Functional Materials, 2022, 32, 2106932.	7.8	8
3	Gold-Platinum Nanoparticles with Core-Shell Configuration as Efficient Oxidase-like Nanosensors for Glutathione Detection. Nanomaterials, 2022, 12, 755.	1.9	9
4	Submicronic Filtering Media Based on Electrospun Recycled PET Nanofibers: Development, Characterization, and Method to Manufacture Surgical Masks. Nanomaterials, 2022, 12, 925.	1.9	9
5	Light activated pulsatile drug delivery for prolonged peripheral nerve block. Biomaterials, 2022, 283, 121453.	5.7	3
6	Pharmacokinetic control on the release of antimicrobial drugs from pH-responsive electrospun wound dressings. International Journal of Pharmaceutics, 2022, 624, 122003.	2.6	19
7	Multifunctional membranes for lipidic nanovesicle capture. Separation and Purification Technology, 2022, 298, 121561.	3.9	4
8	Ultra-Small Silver Nanoparticles Immobilized in Mesoporous SBA-15. Microwave-Assisted Synthesis and Catalytic Activity in the 4-Nitrophenol Reduction. Catalysis Today, 2021, 362, 81-89.	2.2	23
9	Platinum substituted Cobalt(II, III) Oxide: Interplay of tetrahedral Co(II) sites towards electrochemical oxygen evolution activity. Electrochimica Acta, 2021, 365, 137234.	2.6	12
10	Preparation of Cu cluster catalysts by simultaneous coolingâ€“microwave heating: application in radical cascade annulation. Nanoscale Advances, 2021, 3, 1087-1095.	2.2	4
11	Nanocoral CuCo2S4 thiospinels: Oxygen evolution reaction via redox interaction of metal ions. Electrochimica Acta, 2021, 370, 137701.	2.6	13
12	Tailoring the rheology and electrical properties of polyamide 66 nanocomposites with hybrid filler approach: graphene and carbon nanotubes. Polymer International, 2021, 70, 1329-1343.	1.6	10
13	Nanogels with High Loading of Anesthetic Nanocrystals for Extended Duration of Sciatic Nerve Block. ACS Applied Materials & Interfaces, 2021, 13, 17220-17235.	4.0	11
14	Enhancement of the fatigue life of recycled PP by incorporation of recycled opaque PET collected from household milk bottle wastes. Waste Management, 2021, 125, 49-57.	3.7	13
15	Hollow Fiber and Nanofiber Membranes in Bioartificial Liver and Neuronal Tissue Engineering. Cells Tissues Organs, 2021, , 1-30.	1.3	9
16	Selective point-of-care detection of pathogenic bacteria using sialic acid functionalized gold nanoparticles. Talanta, 2021, 234, 122644.	2.9	9
17	Structure and Properties of Reactively Extruded Opaque Post-Consumer Recycled PET. Polymers, 2021, 13, 3531.	2.0	17
18	Cobalt deposited on micro and nanometric structures of ceria and zirconia applied in diesel soot combustion. Molecular Catalysis, 2020, 481, 100636.	1.0	9

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19	Supercritical solvothermal synthesis under reducing conditions to increase stability and durability of Mo/ZSM-5 catalysts in methane dehydroaromatization. Applied Catalysis B: Environmental, 2020, 263, 118360.	10.8	47
20	Pd and Pd,In nanoparticles supported on polymer fibres as catalysts for the nitrate and nitrite reduction in aqueous media. Journal of Environmental Chemical Engineering, 2020, 8, 103651.	3.3	15
21	Physicochemical and optical properties of one-pot combustion synthesized Pr doped La2O3/La(OH)3. Journal of Luminescence, 2020, 219, 116893.	1.5	11
22	Electroreduction of Carbon Dioxide into Selective Hydrocarbons at Low Overpotential Using Isomorphic Atomic Substitution in Copper Oxide. ACS Sustainable Chemistry and Engineering, 2020, 8, 179-189.	3.2	11
23	Potential Implantable Nanofibrous Biomaterials Combined with Stem Cells for Subchondral Bone Regeneration. Materials, 2020, 13, 3087.	1.3	7
24	Controlling Particle Size and Release Kinetics in the Sustained Delivery of Oral Antibiotics Using pH-Independent Mucoadhesive Polymers. Molecular Pharmaceutics, 2020, 17, 3314-3327.	2.3	11
25	Antimicrobial Wound Dressings against Fluorescent and Methicillin-Sensitive Intracellular Pathogenic Bacteria. ACS Applied Materials & Interfaces, 2020, 12, 51302-51313.	4.0	12
26	Drug-eluting wound dressings having sustained release of antimicrobial compounds. European Journal of Pharmaceutics and Biopharmaceutics, 2020, 152, 327-339.	2.0	23
27	Effect of Bi 3+ Ion Concentration on Physicochemical, Optical and Catalytic Properties of Oneâ€Pot Combustion Synthesized Nanocrystalline Biâ€Doped La 2 O 3. ChemistrySelect, 2020, 5, 7548-7559.	0.7	1
28	Microflow Nanoprecipitation of Positively Charged Gastroresistant Polymer Nanoparticles of EudragitÂ® RS100: A Study of Fluid Dynamics and Chemical Parameters. Materials, 2020, 13, 2925.	1.3	5
29	Continuous Microwave-Assisted Synthesis of Silver Nanoclusters Confined in Mesoporous SBA-15: Application in Alkyne Cyclizations. Chemistry of Materials, 2020, 32, 2874-2883.	3.2	22
30	Electrospun anti-inflammatory patch loaded with essential oils for wound healing. International Journal of Pharmaceutics, 2020, 577, 119067.	2.6	56
31	Efficiency of Antimicrobial Electrospun Thymol-Loaded Polycaprolactone Mats In Vivo. ACS Applied Bio Materials, 2020, 3, 3430-3439.	2.3	18
32	Antibacterial Effect of Thymol Loaded SBA-15 Nanorods Incorporated in PCL Electrospun Fibers. Nanomaterials, 2020, 10, 616.	1.9	29
33	Production, characterization and testing of antibacterial PVA membranes loaded with HAâ€Ag₃PO₄ nanoparticles, produced by SCâ€CO₂ phase inversion. Journal of Chemical Technology and Biotechnology, 2019, 94, 98-108.	1.6	33
34	Cleavable and thermo-responsive hybrid nanoparticles for on-demand drug delivery. Journal of Colloid and Interface Science, 2019, 533, 171-181.	5.0	35
35	Targeted Release of Probiotics from Enteric Microparticulated Formulations. Polymers, 2019, 11, 1668.	2.0	26
36	The Effect of Titanium Dioxide Surface Modification on the Dispersion, Morphology, and Mechanical Properties of Recycled PP/PET/TiO2 PBNANOs. Polymers, 2019, 11, 1692.	2.0	10

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37	Electrochemical insights into layered La2CuO4 perovskite: Active ionic copper for selective CO2 electroreduction at low overpotential. Electrochimica Acta, 2019, 326, 134952.	2.6	19
38	Double porous poly (Æ•caprolactone)/chitosan membrane scaffolds as niches for human mesenchymal stem cells. Colloids and Surfaces B: Biointerfaces, 2019, 184, 110493.	2.5	9
39	Membrane bioreactor for investigation of neurodegeneration. Materials Science and Engineering C, 2019, 103, 109793.	3.8	17
40	Electrospun asymmetric membranes for wound dressing applications. Materials Science and Engineering C, 2019, 103, 109822.	3.8	41
41	Antimicrobial Electrospun Polycaprolactone-Based Wound Dressings: An In Vitro Study About the Importance of the Direct Contact to Elicit Bactericidal Activity. Advances in Wound Care, 2019, 8, 438-451.	2.6	28
42	Composite scaffold obtained by electro-hydrodynamic technique for infection prevention and treatment in bone repair. International Journal of Pharmaceutics, 2019, 557, 162-169.	2.6	30
43	Chitosan-based coatings in the prevention of intravascular catheter-associated infections. Journal of Biomaterials Applications, 2018, 32, 725-737.	1.2	11
44	Enhanced oxygen evolution activity of Co3â^'xNixO4 compared to Co3O4 by low Ni doping. Journal of Electroanalytical Chemistry, 2018, 823, 482-491.	1.9	19
45	Enzyme structure and function protection from gastrointestinal degradation using enteric coatings. International Journal of Biological Macromolecules, 2018, 119, 413-422.	3.6	11
46	Synthesis of a Novel Electrospun Polycaprolactone Scaffold Functionalized with Ibuprofen for Periodontal Regeneration: An In Vitro andIn Vivo Study. Materials, 2018, 11, 580.	1.3	45
47	Evaluation of the Antimicrobial Activity and Cytotoxicity of Different Components of Natural Origin Present in Essential Oils. Molecules, 2018, 23, 1399.	1.7	101
48	Polymeric electrospun scaffolds for bone morphogenetic protein 2 delivery in bone tissue engineering. Journal of Colloid and Interface Science, 2018, 531, 126-137.	5.0	54
49	Luminescent mesoporous nanorods as photocatalytic enzyme-like peroxidase surrogates. Chemical Science, 2018, 9, 7766-7778.	3.7	12
50	Laser-treated electrospun fibers loaded with nano-hydroxyapatite for bone tissue engineering. International Journal of Pharmaceutics, 2017, 525, 112-122.	2.6	35
51	In-situ preparation of ultra-small Pt nanoparticles within rod-shaped mesoporous silica particles: 3-D tomography and catalytic oxidation of n-hexane. Catalysis Communications, 2017, 100, 93-97.	1.6	20
52	Manifestation of Concealed Defects in MoS2Nanospheres for Efficient and Durable Electrocatalytic Hydrogen Evolution Reaction. ChemistrySelect, 2017, 2, 4667-4672.	0.7	2
53	Nonreducible, Basic La₂O₃ to Reducible, Acidic La_{2â€“x}Sb_xO₃ with Significant Oxygen Storage Capacity, Lower Band Gap, and Effect on the Catalytic Activity. Journal of Physical Chemistry C, 2017, 121, 481-489.	1.5	26
54	Human liver microtissue spheroids in hollow fiber membrane bioreactor. Colloids and Surfaces B: Biointerfaces, 2017, 160, 272-280.	2.5	31

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55	Preparation and characterization of electrospun alginate nanofibers loaded with ciprofloxacin hydrochloride. European Polymer Journal, 2017, 96, 350-360.	2.6	79
56	Goldâ€Triggered Uncaging Chemistry in Living Systems. Angewandte Chemie - International Edition, 2017, 56, 12548-12552.	7.2	128
57	Development of noncytotoxic silverâ€“chitosan nanocomposites for efficient control of biofilm forming microbes. RSC Advances, 2017, 7, 52398-52413.	1.7	87
58	The effect of PEGylated hollow gold nanoparticles on stem cell migration: potential application in tissue regeneration. Nanoscale, 2017, 9, 9848-9858.	2.8	35
59	Dermal-epidermal membrane systems by using human keratinocytes and mesenchymal stem cells isolated from dermis. Materials Science and Engineering C, 2017, 71, 943-953.	3.8	8
60	Polycaprolactone/mesoporous silica MCM-41 composites prepared by in situ polymerization. Particuology, 2017, 30, 135-143.	2.0	15
61	Pt-CoOx nanoparticles supported on ETS-10 for preferential oxidation of CO reaction. Applied Catalysis A: General, 2016, 528, 86-92.	2.2	17
62	Microfluidic Synthesis and Biological Evaluation of Photothermal Biodegradable Copper Sulfide Nanoparticles. ACS Applied Materials & Interfaces, 2016, 8, 21545-21554.	4.0	44
63	Polymeric membranes modulate human keratinocyte differentiation in specific epidermal layers. Colloids and Surfaces B: Biointerfaces, 2016, 146, 352-362.	2.5	6
64	Hydrothermal assisted morphology designed MoS 2 material as alternative cathode catalyst for PEM electrolyser application. International Journal of Hydrogen Energy, 2016, 41, 13331-13340.	3.8	45
65	Enhanced purification of carbon nanotubes by microwave and chlorine cleaning procedures. RSC Advances, 2016, 6, 11895-11902.	1.7	48
66	Smart Dressings Based on Nanostructured Fibers Containing Natural Origin Antimicrobial, Anti-Inflammatory, and Regenerative Compounds. Materials, 2015, 8, 5154-5193.	1.3	160
67	Influence of La incorporation on the catalytic activity of Ru/ETS-10 catalysts for hydrogen production. Applied Catalysis A: General, 2015, 504, 391-398.	2.2	6
68	Electrospun Au/CeO2 nanofibers: A highly accessible low-pressure drop catalyst for preferential CO oxidation. Journal of Catalysis, 2015, 329, 479-489.	3.1	35
69	Neuroprotective effect of human mesenchymal stem cells in a compartmentalized neuronal membrane system. Acta Biomaterialia, 2015, 24, 297-308.	4.1	54
70	Osteogenic and osteoclastogenic differentiation of co-cultured cells in polylactic acidâ€“nanohydroxyapatite fiber scaffolds. Journal of Biotechnology, 2015, 204, 53-62.	1.9	54
71	Development of Noncytotoxic Chitosanâ€“Gold Nanocomposites as Efficient Antibacterial Materials. ACS Applied Materials & Interfaces, 2015, 7, 1087-1099.	4.0	258
72	Scaled-up production of plasmonic nanoparticles using microfluidics: from metal precursors to functionalized and sterilized nanoparticles. Lab on A Chip, 2014, 14, 325-332.	3.1	83

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73	High-speed water sterilization using silver-containing cellulose membranes. Nanotechnology, 2014, 25, 305101.	1.3	8
74	Auâ€“PLA nanocomposites for photothermally controlled drug delivery. Journal of Materials Chemistry B, 2014, 2, 409-417.	2.9	48
75	Identification of TiO₂ nanoparticles using La and Ce as labels: application to the evaluation of surface contamination during the handling of nanosized matter. Environmental Science: Nano, 2014, 1, 496-503.	2.2	12
76	Unintended emission of nanoparticle aerosols during common laboratory handling operations. Journal of Hazardous Materials, 2014, 279, 75-84.	6.5	15
77	Kinetics of oxygen uptake by cells potentially used in a tissue engineered trachea. Biomaterials, 2014, 35, 6829-6837.	5.7	19
78	Long-Lasting Antifouling Coating from Multi-Armed Polymer. Langmuir, 2013, 29, 10087-10094.	1.6	53
79	Preparation and characterization of chitosanâ€“silver nanocomposite films and their antibacterial activity againstStaphylococcus aureus. Nanotechnology, 2013, 24, 015101.	1.3	124
80	Fluidized Bed Generation of Stable Silica Nanoparticle Aerosols. Aerosol Science and Technology, 2013, 47, 867-874.	1.5	9
81	Intense generation of respirable metal nanoparticles from a low-power soldering unit. Journal of Hazardous Materials, 2013, 256-257, 84-89.	6.5	10
82	Generation of TiO2Aerosols from Liquid Suspensions: Influence of Colloid Characteristics. Aerosol Science and Technology, 2013, 47, 1383-1392.	1.5	6
83	Effect of inorganic 1D nanoparticles on electrooptic properties of 5CB liquid crystal. Physica Status Solidi (A) Applications and Materials Science, 2013, 210, 2328-2334.	0.8	14
84	Microwave-assisted mild-temperature preparation of neodymium-doped titania for the improved photodegradation of water contaminants. Applied Catalysis A: General, 2012, 441-442, 47-53.	2.2	36
85	Flat and tubular membrane systems for the reconstruction of hippocampal neuronal network. Journal of Tissue Engineering and Regenerative Medicine, 2012, 6, 299-313.	1.3	23
86	Magnetically Triggered Nanocomposite Membranes: A Versatile Platform for Triggered Drug Release. Nano Letters, 2011, 11, 1395-1400.	4.5	241
87	Comparative study of the synthesis of silica nanoparticles in micromixerâ€“microreactor and batch reactor systems. Chemical Engineering Journal, 2011, 171, 674-683.	6.6	74
88	Efficient tuning of the Pt nano-particle mono-dispersion on Vulcan XC-72R by selective pre-treatment and electrochemical evaluation of hydrogen oxidation and oxygen reduction reactions. International Journal of Hydrogen Energy, 2011, 36, 5453-5465.	3.8	51
89	The effect of pretreatment of Vulcan XC-72R carbon on morphology and electrochemical oxygen reduction kinetics of supported Pd nano-particle in acidic electrolyte. Journal of Electroanalytical Chemistry, 2010, 647, 211-221.	1.9	118
90	Combustion of Volatile Organic Compounds at Trace Concentration Levels in Zeolite-Coated Microreactors. Industrial & Engineering Chemistry Research, 2010, 49, 6941-6947.	1.8	24

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91	Effect of Nitinol surface treatments on its physicoâ€chemical properties. Journal of Biomedical Materials Research - Part B Applied Biomaterials, 2009, 91B, 337-347.	1.6	19
92	Human hepatocyte functions in a crossed hollow fiber membrane bioreactor. Biomaterials, 2009, 30, 2531-2543.	5.7	115
93	A Magnetically Triggered Composite Membrane for On-Demand Drug Delivery. Nano Letters, 2009, 9, 3651-3657.	4.5	335
94	Separation of propylene/propane mixtures by titanosilicate ETS-10 membranes prepared in one-step seeded hydrothermal synthesis. Journal of Membrane Science, 2008, 311, 326-335.	4.1	34
95	Influence of membrane surface properties on the growth of neuronal cells isolated from hippocampus. Journal of Membrane Science, 2008, 325, 139-149.	4.1	81
96	Human lymphocyte PEEK-WC hollow fiber membrane bioreactor. Journal of Biotechnology, 2007, 132, 65-74.	1.9	35
97	Preparation and Characterization of Titanosilicate Ag-ETS-10 for Propylene and Propane Adsorption. Journal of Physical Chemistry C, 2007, 111, 4702-4709.	1.5	47
98	Human Hepatocyte Morphology and Functions in a Multibore Fiber Bioreactor. Macromolecular Bioscience, 2007, 7, 671-680.	2.1	37
99	Novel membranes and surface modification able to activate specific cellular responses. New Biotechnology, 2007, 24, 23-26.	2.7	40
100	Mass transfer and metabolic reactions in hepatocyte spheroids cultured in rotating wall gas-permeable membrane system. Biomaterials, 2007, 28, 5487-5497.	5.7	222
101	Mechanochemical characterisation of silica-based coatings on Nitinol substrates. Microporous and Mesoporous Materials, 2007, 98, 292-302.	2.2	7
102	Fetuin-A gene expression, synthesis and release in primary human hepatocytes cultured in a galactosylated membrane bioreactor. Biomaterials, 2007, 28, 4836-4844.	5.7	27
103	Human hepatocyte functions in a galactosylated membrane bioreactor. Journal of Membrane Science, 2007, 302, 27-35.	4.1	23
104	Membrane Bioreactor for Cell Tissues and Organoids. Artificial Organs, 2006, 30, 793-802.	1.0	28
105	Human galactosylated membrane bioreactor for the long-term maintenance of liver specific functions. Desalination, 2006, 199, 147-149.	4.0	3
106	Novel bioactive polymeric membranes to elicit specific human hepatocyte responses. Desalination, 2006, 199, 261-262.	4.0	1
107	Long-term maintenance of human hepatocytes in oxygen-permeable membrane bioreactor. Biomaterials, 2006, 27, 4794-4803.	5.7	71
108	Xylene isomerization in a membrane reactor. Chemical Engineering Journal, 2006, 122, 167-174.	6.6	27

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109	Preparation and characterization of two-layered mordenite-ZSM-5 bi-functional membranes. Microporous and Mesoporous Materials, 2006, 93, 318-324.	2.2	26
110	Biotransformation and liver-specific functions of human hepatocytes in culture on RGD-immobilized plasma-processed membranes. Biomaterials, 2005, 26, 4432-4441.	5.7	89
111	Effect of isoliquiritigenin on viability and differentiated functions of human hepatocytes maintained on PEEK-WCâ€“polyurethane membranes. Biomaterials, 2005, 26, 6625-6634.	5.7	38
112	Biocompatibility of Modified Polyetheretherketone (Peek-Wc) Membranes: Human Plasma Adsorption. Materials Research Society Symposia Proceedings, 2002, 752, 1.	0.1	2