Celso Valentim Santilli

List of Publications by Year
in descending order

93	2,819	172457	206112
papers	citations	29 h-index	48 g-index

94	94	94	3115
all docs	docs citations	times ranked	citing authors

#	Article	IF	Citations
1	Catalysis and Temperature Dependence on the Formation of ZnO Nanoparticles and of Zinc Acetate Derivatives Prepared by the Solâ^'Gel Route. Journal of Physical Chemistry B, 2003, 107, 568-574.	2.6	176
2	A comparative study of glycerol dehydration catalyzed by micro/mesoporous MFI zeolites. Journal of Catalysis, 2013, 300, 102-112.	6.2	131
3	Small-Angle X-ray Scattering Study of Solâ^'Gel-Derived Siloxaneâ^'PEG and Siloxaneâ^'PPG Hybrid Materials. Journal of Physical Chemistry B, 1999, 103, 4937-4942.	2.6	120
4	Adsorption of Acid Yellow 42 dye on calcined layered double hydroxide: Effect of time, concentration, pH and temperature. Applied Clay Science, 2017, 140, 132-139.	5.2	113
5	Multivariate curve resolution analysis applied to time-resolved synchrotron X-ray Absorption Spectroscopy monitoring of the activation of copper alumina catalyst. Catalysis Today, 2014, 229, 114-122.	4.4	108
6	Thermal decomposition and recovery properties of ZnAlâ€"CO₃ layered double hydroxide for anionic dye adsorption: insight into the aggregative nucleation and growth mechanism of the LDH memory effect.. Journal of Materials Chemistry A, 2017, 5, 9998-10009.	10.3	104
7	Zeta Potential and Colloidal Stability Predictions for Inorganic Nanoparticle Dispersions: Effects of Experimental Conditions and Electrokinetic Models on the Interpretation of Results. Langmuir, 2021, 37, 13379-13389.	3.5	88
8	Structure and Luminescence of Eu3+-Doped Class I Siloxaneâ^'Poly(ethylene glycol) Hybrids. Chemistry of Materials, 2001, 13, 2818-2823.	6.7	68
9	On the structure of high performance anticorrosive PMMAâ€"siloxaneâ€"silica hybrid coatings. RSC Advances, 2015, 5, 106754-106763.	3.6	68
10	One-step glycerol oxidehydration to acrylic acid on multifunctional zeolite catalysts. Applied Catalysis A: General, 2015, 492, 243-251.	4.3	66
11	Highly corrosion resistant siloxane-polymethyl methacrylate hybrid coatings. Journal of Sol-Gel Science and Technology, 2012, 63, 266-274.	2.4	57
12	Controlled Drug Release from Ureasilâ^'Polyether Hybrid Materials. Chemistry of Materials, 2009, 21, 463-467.	6.7	56
13	Local Structure and Near-Infrared Emission Features of Neodymium-Based Amine Functionalized Organic/Inorganic Hybrids. Journal of Physical Chemistry B, 2005, 109, 20093-20104.	2.6	52
14	XAS/WAXS Time-Resolved Phase Speciation of Chlorine LDH Thermal Transformation: Emerging Roles of Isovalent Metal Substitution. Chemistry of Materials, 2013, 25, 2855-2867.	6.7	52
15	Glycerol dehydration catalyzed by MWW zeolites and the changes in the catalyst deactivation caused by porosity modification. Applied Catalysis A: General, 2015, 495, 84-91.	4.3	52
16	Structure and properties of epoxy-siloxane-silica nanocomposite coatings for corrosion protection. Journal of Colloid and Interface Science, 2018, 513, 617-628.	9.4	51
17	Structural modelling of Eu3+-based siloxaneâ€"poly(oxyethylene) nanohybrids. Journal of Materials Chemistry, 2001, 11, 3249-3257.	6.7	50
18	Effect of the balance between Co(II) and Co(0) oxidation states on the catalytic activity of cobalt catalysts for Ethanol Steam Reforming. Catalysis Today, 2014, 229, 88-94.	4.4	50

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19	Siloxaneâ€“PMMA hybrid anti-corrosion coatings reinforced by lignin. Surface and Coatings Technology, 2015, 275, 9-16.	4.8	49
20	Effects of crystal size, acidity, and synthesis procedure on the catalytic performance of gallium and aluminum MFI zeolites in glycerol dehydration. Journal of Molecular Catalysis A, 2016, 422, 148-157.	4.8	48
21	Correlation between Structural and Catalytic Properties of Copper Supported on Porous Alumina for the Ethanol Dehydrogenation Reaction. ChemCatChem, 2015, 7, 1668-1677.	3.7	46
22	Multi-scale structural description of siloxaneâ€“PPO hybrid ionic conductors doped by sodium salts. Journal of Materials Chemistry, 2007, 17, 744-757.	6.7	42
23	Hydroxyapatite and Î²-TCP modified PMMA-TiO2 and PMMA-ZrO2 coatings for bioactive corrosion protection of Ti6Al4V implants. Materials Science and Engineering C, 2020, 116, 111149.	7.3	39
24	Fenton-like degradation of sulfathiazole using copper-modified MgFe-CO3 layered double hydroxide. Journal of Hazardous Materials, 2021, 413, 125388.	12.4	38
25	Highly Controlled Diffusion Drug Release from Ureasilâ€“Poly(ethylene) Tj ETQq1 1 0.784314 rgBT /Overlock 10 Tf 50 507 Td (oxide)â€ & Interfaces, 2018, 10, 19059-19068.	8.0	37
26	Porosity evolution inSnO2xerogels during sintering under isothermal conditions. Physical Review B, 1995, 51, 8801-8809.	3.2	36
27	Preparation of hierarchically structured porous aluminas by a dual soft template method. Microporous and Mesoporous Materials, 2010, 132, 268-275.	4.4	36
28	The multiple benefits of glycerol conversion to acrolein and acrylic acid catalyzed by vanadium oxides supported on micro-mesoporous MFI zeolites. Catalysis Today, 2017, 289, 20-28.	4.4	35
29	Polymerâ€“clay nanocomposites thermal stability: experimental evidence of the radical trapping effect. RSC Advances, 2013, 3, 22830.	3.6	32
30	Barrier properties of high performance PMMA-silica anticorrosion coatings. Progress in Organic Coatings, 2020, 138, 105398.	3.9	31
31	Role of the Surface State and Structural Feature in the Thermoreversible Solâ^'Gel Transition of a Zirconyl Aqueous Precursor Modified by Sulfuric Acid. Chemistry of Materials, 2004, 16, 3995-4004.	6.7	28
32	Efficiency of ethanol conversion induced by controlled modification of pore structure and acidic properties of alumina catalysts. Applied Catalysis A: General, 2011, 398, 59-65.	4.3	28
33	Ureasilâ€“polyether hybrid blend with tuneable hydrophilic/hydrophobic features based on U-PEO1900 and U-PPO400 mixtures. Journal of Sol-Gel Science and Technology, 2014, 70, 317-328.	2.4	28
34	Time-resolved XAS/MS/Raman monitoring of mutual copper self-reduction and ethanol dehydrogenation reactions. RSC Advances, 2016, 6, 20453-20457.	3.6	28
35	Drugâ€“matrix interaction of sodium diclofenac incorporated into ureasilâ€“poly(ethylene oxide) hybrid materials. RSC Advances, 2012, 2, 5629.	3.6	27
36	Thermal treatments of precursors of molybdenum and vanadium oxides and the formed Mo x V y O z phases active in the oxydehydration of glycerol. Applied Catalysis A: General, 2017, 532, 1-11.	4.3	27

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37	Dual Role of Lithium on the Structure and Self-Healing Ability of PMMA-Silica Coatings on AA7075 Alloy. ACS Applied Materials & Interfaces, 2019, 11, 40629-40641.	8.0	27
38	Operando monitoring of metal sites and coke evolution during non-oxidative and oxidative ethanol steam reforming over Ni and NiCu ex-hydrotalcite catalysts. Catalysis Today, 2019, 336, 122-130.	4.4	27
39	Studies on dispersion and reactivity of vanadium oxides deposited on lamellar ferrierite zeolites for condensation of glycerol into bulky products. Molecular Catalysis, 2018, 458, 161-170.	2.0	25
40	Ureasilâ€“polyether hybrid film-forming materials. Colloids and Surfaces B: Biointerfaces, 2013, 101, 156-161.	5.0	24
41	Hydrothermal synthesis of Mo-V mixed oxides possessing several crystalline phases and their performance in the catalytic oxydehydration of glycerol to acrylic acid. Catalysis Today, 2017, 296, 10-18.	4.4	24
42	PMMA-silica nanocomposite coating: Effective corrosion protection and biocompatibility for a Ti6Al4V alloy. Materials Science and Engineering C, 2020, 110, 110713.	7.3	24
43	Design of microstructure of zirconia foams from the emulsion template properties. Soft Matter, 2013, 9, 550-558.	2.7	23
44	Formation of colloidal particles of hydrous iron oxide by forced hydrolysis. Journal of Non-Crystalline Solids, 2000, 273, 41-47.	3.1	22
45	Structure and thermal behavior of PMMAâ€“polysilsesquioxane organicâ€“inorganic hybrids. Polymer Degradation and Stability, 2014, 104, 112-119.	5.8	22
46	Correlation of Solâ€“Gel Aluminaâ€Supported Cobalt Catalyst Processing to Cobalt Speciation, Ethanol Steam Reforming Activity, and Stability. ChemCatChem, 2017, 9, 3918-3929.	3.7	21
47	Sol-gel synthesis of nanocrystalline MgO and its application as support in Ni/MgO catalysts for ethanol steam reforming. Applied Surface Science, 2021, 542, 148744.	6.1	21
48	Fine-tuning of a nanostructure, swelling, and drug delivery profile by blending ureasilâ€“PEO and ureasilâ€“PPO hybrids. Polymer Chemistry, 2014, 5, 1897-1904.	3.9	20
49	Small-Angle X-ray Scattering Study of Gelation and Aging of Eu3+-Doped Solâˆ’Gel-Derived Siloxaneâˆ’Poly(oxyethylene) Nanocomposites. Journal of Physical Chemistry B, 2002, 106, 4377-4382.	2.6	19
50	Chitosan/(ureasilâ€“PEO hybrid) blend for drug delivery. Journal of Sol-Gel Science and Technology, 2014, 72, 233-238.	2.4	19
51	Insights into the Preparation of Copper Catalysts Supported on Layered Double Hydroxide Derived Mixed Oxides for Ethanol Dehydrogenation. ACS Applied Materials & Interfaces, 2021, 13, 26001-26012.	8.0	19
52	High surface area hierarchical porous Al₂O₃ prepared by the integration of solâ€“gel transition and phase separation. RSC Advances, 2016, 6, 57217-57226.	3.6	18
53	Magnetic hyperthermia-induced drug release from ureasil-PEO-Î³-Fe₂O₃ nanocomposites. RSC Advances, 2016, 6, 63291-63295.	3.6	17
54	Preparation and characterization of a red luminescent composite composed of an EVA copolymer and a Y₃BO₆:Eu³⁺ phosphor. New Journal of Chemistry, 2017, 41, 12006-12013.	2.8	17

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55	Operando XAS/Raman/MS monitoring of ethanol steam reforming reactionâ€“regeneration cycles. Catalysis Science and Technology, 2018, 8, 6297-6301.	4.1	17
56	Conjugation of superparamagnetic iron oxide nanoparticles and curcumin photosensitizer to assist in photodynamic therapy. Colloids and Surfaces B: Biointerfaces, 2020, 196, 111297.	5.0	17
57	Evolution of rheological properties and local structure during gelation of siloxane-polymethylmethacrylate hybrid materials. Journal of Sol-Gel Science and Technology, 2006, 37, 179-184.	2.4	15
58	Liquid Foam Templates Associated with the Sol-Gel Process for Production of Zirconia Ceramic Foams. Materials, 2013, 6, 1967-1979.	2.9	15
59	Investigations on PVP/Y₃BO₆:Eu³⁺, a red luminescent composite for lighting devices based on near UV-LEDs. Journal of Materials Chemistry C, 2014, 2, 6301-6311.	5.5	15
60	Sulfated zirconia foams synthesized by integrative route combining surfactants, air bubbles and solâ€“gel transition applied to heterogeneous catalysis. RSC Advances, 2016, 6, 6686-6694.	3.6	14
61	Surfactant-assisted synthesis of Moâ€“V mixed oxide catalysts for upgraded one-step conversion of glycerol to acrylic acid. RSC Advances, 2018, 8, 11975-11982.	3.6	14
62	Coupling Photoluminescence and Ionic Conduction Properties Using the Different Coordination Sites of Ureasilâ€“Polyether Hybrid Materials. ACS Applied Materials & Interfaces, 2018, 10, 37364-37373.	8.0	14
63	Protective PMMA-silica coatings for aluminum alloys: Nanostructural control of elevated thermal stability and anticorrosive performance. Progress in Organic Coatings, 2021, 152, 106129.	3.9	14
64	Design of hierarchical porous aluminas by using one-pot synthesis and different calcination temperatures. Journal of Sol-Gel Science and Technology, 2012, 63, 242-250.	2.4	13
65	Preparation of hydrophobic MFI zeolites containing hierarchical micro-mesopores using seeds functionalized with octyltriethoxysilane. Colloids and Surfaces A: Physicochemical and Engineering Aspects, 2020, 585, 124109.	4.7	12
66	Liquid crystalline formulations containing modified surface TiO2 nanoparticles obtained by solâ€“gel process. Journal of Sol-Gel Science and Technology, 2012, 63, 251-257.	2.4	11
67	Formation of TiO2 ceramic foams from the integration of the solâ€“gel method with surfactants assembly and emulsion. Journal of Sol-Gel Science and Technology, 2012, 63, 224-229.	2.4	10
68	The Critical Role of Thioacetamide Concentration in the Formation of ZnO/ZnS Heterostructures by Sol-Gel Process. Nanomaterials, 2018, 8, 55.	4.1	10
69	Ethanol dehydrogenative reactions catalyzed by copper supported on porous Alâ€“Mg mixed oxides. RSC Advances, 2019, 9, 3294-3302.	3.6	10
70	Thermal properties, nanoscopic structure and swelling behavior of chitosan/(ureasilâ€“polyethylene) Tj ETQq0 0 0 rgBT /Overlock 10 Tf 5	3.6	9
71	Thermal stability of PMMAâ€“LDH nanocomposites: decoupling the physical barrier, radical trapping, and charring contributions using XAS/WAXS/Raman time-resolved experiments. RSC Advances, 2018, 8, 34670-34681.	3.6	9
72	Nanostructured Poly(methyl Methacrylate)â€“Silica Coatings for Corrosion Protection of Reinforcing Steel. ACS Applied Nano Materials, 2022, 5, 2603-2615.	5.0	9

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73	Emulsion-mediated synthesis of hierarchical mesoporous-macroporous Al-Mg hydrotalcites. Microporous and Mesoporous Materials, 2017, 240, 149-158.	4.4	8
74	Organic-Inorganic Hybrid Coatings for Corrosion Protection of Metallic Surfaces. , 0, , .		8
75	Quick-EXAFS and Raman monitoring of activation, reaction and deactivation of NiCu catalysts obtained from hydrotalcite-like precursors. Physical Chemistry Chemical Physics, 2020, 22, 18835-18848.	2.8	8
76	Wettability and photodegradation activity of solâ€“gel dip-coated zinc oxide films. Journal of Sol-Gel Science and Technology, 2012, 63, 230-234.	2.4	7
77	Multi-spectroscopic monitoring of cisplatin-derived species delivery from ureasil polyether hybrid matrix. Phase Transitions, 2011, 84, 687-699.	1.3	6
78	Synthesis of PTSH-modified CeO2 nanoparticles: Effect of the modifier on structure, optical properties, and dispersibility. Colloids and Surfaces A: Physicochemical and Engineering Aspects, 2013, 426, 63-69.	4.7	6
79	Structure and catalytic properties of sulfated zirconia foams. Journal of Sol-Gel Science and Technology, 2014, 72, 252-259.	2.4	6
80	Textured macro- and mesoporous alumina samples designed in the presence of different surfactant types. Journal of Sol-Gel Science and Technology, 2014, 71, 9-15.	2.4	6
81	Loaded Ce-Ag organic-inorganic hybrids and their antibacterial activity. Colloids and Surfaces B: Biointerfaces, 2016, 147, 151-160.	5.0	6
82	MgAl-Layered Double Hydroxide Nanoparticles as Smart Nanofillers To Control the Rheological Properties and the Residual Porosity of Cement-Based Materials. ACS Applied Nano Materials, 2022, 5, 7896-7907.	5.0	6
83	Nanostructure and luminescent properties of sol-gel derived europium-doped amine functionalised hybrids. Journal of Sol-Gel Science and Technology, 2006, 37, 99-104.	2.4	5
84	Rehydration of katoite as a layered double hydroxide: an in situ study. RILEM Technical Letters, 0, 6, 8-16.	0.0	5
85	Smart PMMAâ€‘cerium oxide anticorrosive coatings: Effect of ceria content on structure and electrochemical properties. Progress in Organic Coatings, 2021, 161, 106548.	3.9	5
86	ConstruÃ§Ã£o de uma cÃ¢mara para monitoramento in situ do processo de secagem de geis e sÃ³lidos porosos. Quimica Nova, 2011, 34, 1455-1458.	0.3	4
87	Sulfated tin oxide with macro- and mesopores controlled using an integrated sol-gel and surfactant template route. Colloids and Surfaces A: Physicochemical and Engineering Aspects, 2019, 583, 124012.	4.7	4
88	Relevance of solâ€“gel transition and spinodal decomposition for hierarchical porosity structure of monolithic alumina. Journal of Sol-Gel Science and Technology, 2022, 102, 6-17.	2.4	4
89	Catalytic performance of texturally improved Alâ€“Mg mixed oxides derived from emulsion-synthesized hydrotalcites. RSC Advances, 2018, 8, 6039-6046.	3.6	3
90	Ureasilâ€“Polyetherâ€“CoFe2O4 Nanocomposites: Coupling a Drug Delivery System and Magnetic Hyperthermia. ACS Applied Polymer Materials, 0, , .	4.4	3

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91	Green-High-Performance PMMAâ€“Silicaâ€“Li Barrier Coatings. Corrosion and Materials Degradation, 2022, 3, 303-319.	2.4	3
92	Accelerated ultraviolet aging of structural and luminescent properties of the ureasil-polyether hybrid materials U-PEO:Eu3+ and U-PPO:Eu3+. Polymer, 2019, 177, 102-110.	3.8	1
93	Fingerprint of semi-crystalline structure memory in the thermal and ionic conduction properties of amorphous ureasilâ€“polyether hybrid solid electrolytes. RSC Advances, 2022, 12, 5225-5235.	3.6	1