BenoÃ®t Heinrichs

List of Publications by Year
in descending order

61 papers	1,900 citations	201674 27 h-index	265206 42 g-index
61 all docs	61 docs citations	61 times ranked	2109 citing authors

#	Article	IF	Citations
1	Heterogeneous singlet oxygen generation: in-operando visible light EPR spectroscopy. Environmental Science and Pollution Research, 2021, 28, 25124-25129.	5.3	20
2	Preparation of polyâ€•d , l â€lactide based nanocomposites with polymerâ€grafted silica by melt blending: Study of molecular, morphological, and mechanical properties. Polymer Composites, 2021, 42, 955-972.	4.6	4
3	Significantly enhancement of sunlight photocatalytic performance of ZnO by doping with transition metal oxides. Scientific Reports, 2021, 11, 2804.	3.3	52
4	Preparation of PDLLA based nanocomposites with modified silica by in situ polymerization: Study of molecular, morphological, and mechanical properties. Materials Today Communications, 2020, 25, 101610.	1.9	7
5	Au nanobipyramids@mSiO₂ coreâ€“shell nanoparticles for plasmon-enhanced singlet oxygen photooxygenations in segmented flow microreactors. Nanoscale Advances, 2020, 2, 5280-5287.	4.6	12
6	Synthesis of medical grade PLLA, PDLLA, and PLGA by a reactive extrusion polymerization. Materials Today Communications, 2020, 24, 101208.	1.9	5
7	Waterâ€Based Paintable LiCoO 2 Microelectrodes: A Highâ€Rate Liâ€Ion Battery Free of Conductive and Binder Additives. Advanced Materials Technologies, 2019, 4, 1900499.	5.8	3
8	Optimizing support properties of heterogeneous catalysts for the coupling of carbon dioxide with epoxides. Chemical Engineering Journal, 2019, 371, 719-729.	12.7	10
9	Porphyrin-based hybrid silica-titania as a visible-light photocatalyst. Journal of Photochemistry and Photobiology A: Chemistry, 2019, 373, 66-76.	3.9	30
10	Role of defects on the enhancement of the photocatalytic response of ZnO nanostructures. Applied Surface Science, 2018, 448, 646-654.	6.1	46
11	Transitioning from conventional batch to microfluidic processes for the efficient singlet oxygen photooxygenation of methionine. Journal of Photochemistry and Photobiology A: Chemistry, 2018, 356, 193-200.	3.9	13
12	Interactions between Zn2+ or ZnO with TiO2 to produce an efficient photocatalytic, superhydrophilic and aesthetic glass. Journal of Photochemistry and Photobiology A: Chemistry, 2018, 350, 32-43.	3.9	30
13	Acid acting as redispersing agent to form stable colloids from photoactive crystalline aqueous solâ€“gel TiO2 powder. Journal of Sol-Gel Science and Technology, 2018, 87, 568-583.	2.4	17
14	Improving Continuous Flow Singlet Oxygen Photooxygenation Reactions with Functionalized Mesoporous Silica Nanoparticles. ChemPhotoChem, 2018, 2, 890-897.	3.0	31
15	Highly Efficient Low-Temperature N-Doped TiO2 Catalysts for Visible Light Photocatalytic Applications. Materials, 2018, 11, 584.	2.9	48
16	Large scale production of photocatalytic TiO₂ coating for volatile organic compound (VOC) air remediation. AIMS Materials Science, 2018, 5, 945-956.	1.4	5
17	Aqueous solâ€“gel synthesis and film deposition methods for the large-scale manufacture of coated steel with self-cleaning properties. Journal of Sol-Gel Science and Technology, 2017, 81, 27-35.	2.4	19
18	Scalable Photocatalytic Oxidation of Methionine under Continuous-Flow Conditions. Organic Process Research and Development, 2017, 21, 1435-1438.	2.7	79

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19	Study of the photocatalytic activity of Fe3+, Cr3+, La3+ and Eu3+ single-doped and co-doped TiO2 catalysts produced by aqueous sol-gel processing. Journal of Alloys and Compounds, 2017, 691, 726-738.	5.5	52
20	Towards a large scale aqueous sol-gel synthesis of doped TiO2: Study of various metallic dopings for the photocatalytic degradation of p-nitrophenol. Journal of Photochemistry and Photobiology A: Chemistry, 2016, 329, 189-202.	3.9	54
21	Efficient P- and Ag-doped titania for the photocatalytic degradation of waste water organic pollutants. Journal of Alloys and Compounds, 2016, 682, 144-153.	5.5	35
22	Protoporphyrin <scp>IX</scp>â€Functionalized AgSiO₂ Coreâ€“Shell Nanoparticles: Plasmonic Enhancement of Fluorescence and Singlet Oxygen Production. Photochemistry and Photobiology, 2016, 92, 247-256.	2.5	17
23	Doping TiO2 films with carbon nanotubes to simultaneously optimise antistatic, photocatalytic and superhydrophilic properties. Journal of Sol-Gel Science and Technology, 2016, 79, 413-425.	2.4	15
24	Doped solâ€“gel films vs. powders TiO 2 : On the positive effect induced by the presence of a substrate. Journal of Environmental Chemical Engineering, 2016, 4, 449-459.	6.7	20
25	Overview of Superhydrophilic, Photocatalytic and Anticorrosive Properties of TiO2 Thin Films Doped with Multi-walled Carbon Nanotubes and Deposited on 316L Stainless Steel. Materials Today: Proceedings, 2016, 3, 434-438.	1.8	7
26	Photocatalytic decomposition of hydrogen peroxide over nanoparticles of TiO 2 and Ni(II)-porphyrin-doped TiO 2 : A relationship between activity and porphyrin anchoring mode. Applied Catalysis B: Environmental, 2016, 182, 405-413.	20.2	16
27	Effect of metal ions and metal nanoparticles encapsulated in porous silica on biphenyl biodegradation by Rhodococcus erythropolis T902.1. Journal of Sol-Gel Science and Technology, 2015, 75, 235-245.	2.4	7
28	Development by the solâ€“gel process of highly dispersed Niâ€“Cu/SiO2 xerogel catalysts for selective 1,2-dichloroethane hydrodechlorination into ethylene. Microporous and Mesoporous Materials, 2015, 209, 197-207.	4.4	34
29	How to modify the photocatalytic activity of TiO2 thin films through their roughness by using additives. A relation between kinetics, morphology and synthesis. Chemical Engineering Journal, 2014, 243, 537-548.	12.7	51
30	Kinetic study of 4-nitrophenol photocatalytic degradation over a Zn2+ doped TiO2 catalyst prepared through an environmentally friendly aqueous solâ€“gel process. Chemical Engineering Journal, 2014, 245, 180-190.	12.7	26
31	How to correctly determine the kinetics of a photocatalytic degradation reaction?. Chemical Engineering Journal, 2014, 249, 1-5.	12.7	22
32	Highly dispersed iron xerogel catalysts for p-nitrophenol degradation by photo-Fenton effects. Microporous and Mesoporous Materials, 2014, 197, 164-173.	4.4	36
33	An ambient temperature aqueous solâ€“gel processing of efficient nanocrystalline doped TiO2-based photocatalysts for the degradation of organic pollutants. Journal of Sol-Gel Science and Technology, 2014, 71, 557-570.	2.4	29
34	P-Doped Titania Xerogels as Efficient UV-Visible Photocatalysts. Journal of Materials Science and Chemical Engineering, 2014, 02, 17-32.	0.4	5
35	Improving effect of metal and oxide nanoparticles encapsulated in porous silica on fermentative biohydrogen production by Clostridium butyricum. Bioresource Technology, 2013, 133, 109-117.	9.6	156
36	Degradation of p-nitrophenol and bacteria with TiO2 xerogels sensitized in situ with tetra(4-carboxyphenyl)porphyrins. Journal of Photochemistry and Photobiology A: Chemistry, 2013, 272, 90-99.	3.9	17

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37	Photocatalytic degradation of phenol and benzoic acid using zinc oxide powders prepared by the solâ€“gel process. AEJ - Alexandria Engineering Journal, 2013, 52, 517-523.	6.4	134
38	Solâ€“gel preparation of pure and doped TiO2 films for the photocatalytic oxidation of ethanol in air. Journal of Sol-Gel Science and Technology, 2012, 63, 526-536.	2.4	11
39	Optimized deposition of TiO2 thin films produced by a non-aqueous solâ€“gel method and quantification of their photocatalytic activity. Chemical Engineering Journal, 2012, 195-196, 347-358.	12.7	42
40	Kinetic study of p-nitrophenol photodegradation with modified TiO2 xerogels. Chemical Engineering Journal, 2012, 191, 441-450.	12.7	35
41	Study of photocatalytic decomposition of hydrogen peroxide over ramsdellite-MnO2 by O2-pressure monitoring. Catalysis Communications, 2011, 15, 132-136.	3.3	31
42	Experimental procedure and statistical data treatment for the kinetic study of selective hydrodechlorination of 1,2-dichloroethane into ethylene over a Pd-Ag solâ€“gel catalyst. Chemical Engineering Journal, 2011, 173, 801-812.	12.7	10
43	Improvement in the methylene blue adsorption capacity and photocatalytic activity of H2-reduced rutile-TiO2 caused by Ni(II)porphyrin preadsorption. Applied Catalysis B: Environmental, 2011, , .	20.2	1
44	Effects of additives and solvents on the gel formation rate and on the texture of P- and Si-doped TiO2 materials. Microporous and Mesoporous Materials, 2010, 134, 157-164.	4.4	15
45	Unpredictable photocatalytic ability of H2-reduced rutile-TiO2 xerogel in the degradation of dye-pollutants under UV and visible light irradiation. Applied Catalysis B: Environmental, 2010, 94, 263-271.	20.2	40
46	Ag- and SiO2-doped porous TiO2 with enhanced thermal stability. Microporous and Mesoporous Materials, 2009, 122, 247-254.	4.4	62
47	Tailor-made morphologies for Pd/SiO2 catalysts through solâ€“gel process with various silylated ligands. Microporous and Mesoporous Materials, 2008, 115, 609-617.	4.4	27
48	Iron(III) species dispersed in porous silica through solâ€“gel chemistry. Journal of Non-Crystalline Solids, 2008, 354, 665-672.	3.1	15
49	Ag/SiO2, Cu/SiO2 and Pd/SiO2 cogelled xerogel catalysts for benzene combustion: Relationships between operating synthesis variables and catalytic activity. Catalysis Communications, 2007, 8, 1244-1248.	3.3	46
50	On the structure-sensitivity of 2-butanol dehydrogenation over Cu/SiO2 cogelled xerogel catalysts. Catalysis Communications, 2007, 8, 2032-2036.	3.3	21
51	Immobilizing metal nanoparticles in porous silica through sol-gel process. Studies in Surface Science and Catalysis, 2006, 162, 521-528.	1.5	3
52	Multigram scale synthesis and characterization of low-density silica xerogels. Journal of Non-Crystalline Solids, 2006, 352, 2763-2771.	3.1	10
53	Methods for the preparation of bimetallic xerogel catalysts designed for chlorinated wastes processing. Journal of Non-Crystalline Solids, 2006, 352, 2751-2762.	3.1	9
54	A TEM study on the localization of metal particles in cogelled xerogel catalysts. Journal of Catalysis, 2006, 241, 229-231.	6.2	13

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55	Carbon xerogels as catalyst supports: Study of mass transfer. AICHE Journal, 2006, 52, 2663-2676.	3.6	58
56	Hydrodechlorination of 1,2-dichloroethane on Pdâ€"Ag catalysts supported on tailored texture carbon xerogels. Catalysis Today, 2005, 102-103, 234-241.	4.4	61
57	Pdâ€"Ag/SiO2 and Pdâ€"Cu/SiO2 cogelled xerogel catalysts for selective hydrodechlorination of 1,2-dichloroethane into ethylene. Catalysis Today, 2005, 100, 283-289.	4.4	64
58	In Situ SAXS Analysis of Silica Gel Formation with an Additive. Journal of Physical Chemistry B, 2004, 108, 8983-8991.	2.6	39
59	Synthesis of SiO2 xerogels and Pd/SiO2 cogelled xerogel catalysts from silylated acetylacetonate ligand. Journal of Non-Crystalline Solids, 2004, 343, 109-120.	3.1	19
60	Mass transfer in low-density xerogel catalysts. AICHE Journal, 2001, 47, 1866-1873.	3.6	27
61	Pd/SiO2-Cogelled Aerogel Catalysts and Impregnated Aerogel and Xerogel Catalysts: Synthesis and Characterization. Journal of Catalysis, 1997, 170, 366-376.	6.2	77