Giovanni Palmisano

List of Publications by Year in Descending Order

122 papers	5,189 citations	37 h-index	70 g-index
132 ext. papers	5,855 ext. citations	7.9 avg, IF	5.88 L-index

#	Paper	IF	Citations
122	Characterization techniques **2022**, 243-314		
121	Adsorption models, surface reaction, and catalyst architectures **2022**, 63-99		
120	Green heterogeneous catalysis **2022**, 193-242		
119	Design of a Microfluidic Photocatalytic Reactor for Removal of Volatile Organic Components: Process Simulation and Techno-Economic Assessment.. *ACS Omega*, **2022**, 7, 8306-8313	3.9	0
118	Computational modeling of green hydrogen generation from photocatalytic H2S splitting: Overview and perspectives. *Journal of Photochemistry and Photobiology C: Photochemistry Reviews*, **2021**, 49, 100456	16.4	1
117	3D printed photocatalytic feed spacers functionalized with □FeOOH nanorods inducing pollutant degradation and membrane cleaning capabilities in water treatment. *Applied Catalysis B: Environmental*, **2021**, 300, 120318	21.8	6
116	Topologically non-trivial metal-organic assemblies inhibit □-microglobulin amyloidogenesis. *Cell Reports Physical Science*, **2021**, 100477	6.1	1
115	Techno-Economic Evaluation of Photocatalytic H2S Splitting. *Energy Technology*, **2021**, 9, 2100163	3.5	1
114	Photocatalytic Degradation of 2-propanol Over TiO2-based Thin Films in a Simulated Pilot Microreactor. *Journal of Photocatalysis*, **2021**, 2, 97-104	0.8	1
113	Three-dimensional CFD modelling of a photocatalytic parallel-channel microreactor. *Chemical Engineering Science*, **2021**, 229, 116051	4.4	7
112	A review of material aspects in developing direct Z-scheme photocatalysts. *Materials Today*, **2021**, 47, 75-107	21.8	42
111	Techno-Economic Evaluation of Photocatalytic H2S Splitting. *Energy Technology*, **2021**, 9, 2170082	3.5	0
110	On the selectivity of butyric acid photoreforming over Au/TiO2 and Pt/TiO2 by UV and visible radiation: A combined experimental and theoretical study. *Applied Catalysis A: General*, **2021**, 624, 118321	5.1	2
109	Tuning the selectivity to aldehyde via pH regulation in the photocatalytic oxidation of 4-methoxybenzyl alcohol and vanillyl alcohol by TiO2 catalysts. *Journal of Environmental Chemical Engineering*, **2021**, 9, 105308	6.8	4
108	A review of recent and emerging antimicrobial nanomaterials in wastewater treatment applications. *Chemosphere*, **2021**, 278, 130440	8.4	7
107	Current and future perspectives on catalytic-based integrated carbon capture and utilization. *Science of the Total Environment*, **2021**, 790, 148081	10.2	14
106	Overview and challenges of the photolytic and photocatalytic splitting of H2S. *Catalysis Today*, **2021**, 380, 125-137	5.3	6

105	Selective photocatalytic oxidation of 3-pyridinemethanol on platinized acid/base modified TiO2. *Catalysis Science and Technology*, **2021**, 11, 4549-4559	5.5	1
104	Graphene-based hybrid photocatalysts: a promising route toward high-efficiency photocatalytic water remediation **2020**, 325-359		
103	Synthesis and Surface Modification of TiO2-Based Photocatalysts for the Conversion of CO2. *Catalysts*, **2020**, 10, 227	4	44
102	Multilayer thin film structures for multifunctional glass: Self-cleaning, antireflective and energy-saving properties. *Applied Energy*, **2020**, 264, 114697	10.7	40
101	Highly stable defective TiO2-x with tuned exposed facets induced by fluorine: Impact of surface and bulk properties on selective UV/visible alcohol photo-oxidation. *Applied Surface Science*, **2020**, 510, 145419	6.7	16
100	Alkaline treatment as a means to boost the activity of TiO2 in selective photocatalytic processes. *Catalysis Science and Technology*, **2020**, 10, 5000-5012	5.5	5
99	Enhanced photoelectrochemical performance of atomic layer deposited Hf-doped ZnO. *Surface and Coatings Technology*, **2020**, 385, 125352	4.4	10
98	Modelling of a recirculating photocatalytic microreactor implementing mesoporous N-TiO2 modified with graphene. *Chemical Engineering Journal*, **2020**, 391, 123574	14.7	7
97	Water microbial disinfection via supported nAg/Kaolin in a fixed-bed reactor configuration. *Applied Clay Science*, **2020**, 184, 105387	5.2	6
96	Photocatalytic activity of neat and polymer-modified bitumen. *Applied Materials Today*, **2020**, 21, 100795	6.6	1
95	Combining energy efficiency with self-cleaning properties in smart glass functionalized with multilayered semiconductors. *Journal of Cleaner Production*, **2020**, 272, 122830	10.3	3
94	Hydrogen production upon UV-light irradiation of Cu/TiO2 photocatalyst in the presence of alkanol-amines. *International Journal of Hydrogen Energy*, **2020**, 45, 26701-26715	6.7	6
93	Metal-organic frameworks for photocatalytic CO2 reduction under visible radiation: A review of strategies and applications. *Catalysis Today*, **2020**, 340, 209-224	5.3	128
92	Photoactivated Fe(III)/Fe(II)/WO3 Pd fuel cell for electricity generation using synthetic and real effluents under visible light. *Renewable Energy*, **2020**, 147, 1070-1081	8.1	10
91	Sputtered vs. sol-gel TiO2-doped films: Characterization and assessment of aqueous bisphenol A oxidation under UV and visible light radiation. *Catalysis Today*, **2020**, 357, 380-391	5.3	6
90	Unveiling the role of bisulfide in the photocatalytic splitting of H2S in aqueous solutions. *Applied Catalysis B: Environmental*, **2020**, 270, 118886	21.8	6
89	Combined photocatalytic properties and energy efficiency via multifunctional glass. *Journal of Environmental Chemical Engineering*, **2019**, 7, 102980	6.8	5
88	(Photo)catalyst Characterization Techniques **2019**, 87-152		20

87	Heterogeneous Photocatalysis and Catalysis: An Overview of Their Distinctive Features **2019**, 1-24		7
86	Hydrogen and Propane Production From Butyric Acid Photoreforming Over Pt-TiO. *Frontiers in Chemistry*, **2019**, 7, 563	5	6
85	Heterogeneous photocatalysis: guidelines on experimental setup, catalyst characterization, interpretation, and assessment of reactivity. *Catalysis Reviews - Science and Engineering*, **2019**, 61, 163-213	12.6	33
84	Long-Lasting Non-hydrogenated Dark Titanium Dioxide: Medium Vacuum Anneal for Enhanced Visible Activity of Modified Multiphase Photocatalysts. *ChemCatChem*, **2018**, 10, 2949-2954	5.2	15
83	Influence of fluorine on the synthesis of anatase TiO2 for photocatalytic partial oxidation: are exposed facets the main actors?. *Catalysis Science and Technology*, **2018**, 8, 1606-1620	5.5	18
82	Differences between bulk and surface electronic structure of doped TiO2 with soft-elements (C, N and S). *Materials Chemistry and Physics*, **2018**, 208, 281-288	4.4	8
81	In situ simultaneous photovoltaic and structural evolution of perovskite solar cells during film formation. *Energy and Environmental Science*, **2018**, 11, 383-393	35.4	67
80	Photoelectrochemical activity of electrospun WO3/NiWO4 nanofibers under visible light irradiation. *Journal of Materials Science*, **2018**, 53, 2208-2220	4.3	17
79	Photocatalytic ozonation under visible light for the remediation of water effluents and its integration with an electro-membrane bioreactor. *Chemosphere*, **2018**, 209, 534-541	8.4	24
78	Relating Photoelectrochemistry and Wettability of Sputtered Cu- and N-Doped TiO2 Thin Films via an Integrated Approach. *Journal of Physical Chemistry C*, **2018**, 122, 12369-12376	3.8	15
77	Influence of the Preparation Temperature on the Photocatalytic Activity of 3D-Ordered Macroporous Anatase Formed with an Opal Polymer Template. *ACS Applied Nano Materials*, **2018**, 1, 2567-2578	5.6	6
76	Overview on microfluidic reactors in photocatalysis: Applications of graphene derivatives. *Catalysis Today*, **2018**, 315, 79-92	5.3	34
75	Selective photocatalytic oxidation of aromatic alcohols in solar-irradiated aqueous suspensions of Pt, Au, Pd and Ag loaded TiO2 catalysts. *Catalysis Today*, **2017**, 281, 53-59	5.3	42
74	Towards the Broad Utilization of Gold Nanoparticles Entrapped in Organosilica. *ChemCatChem*, **2017**, 9, 1322-1328	5.2	4
73	Micro-mesoporous N-doped brookite-rutile TiO2 as efficient catalysts for water remediation under UV-free visible LED radiation. *Journal of Catalysis*, **2017**, 346, 109-116	7.3	36
72	Citrate-stabilized gold nanoparticles hinder fibrillogenesis of a pathological variant of microglobulin. *Nanoscale*, **2017**, 9, 3941-3951	7.7	22
71	Inorganic semiconductors-graphene composites in photo(electro)catalysis: Synthetic strategies, interaction mechanisms and applications. *Journal of Photochemistry and Photobiology C: Photochemistry Reviews*, **2017**, 33, 132-164	16.4	43
70	Radiation-free superhydrophilic and antifogging properties of e-beam evaporated TiO 2 films on glass. *Applied Surface Science*, **2017**, 420, 83-93	6.7	36

69	Growing N-doped multiphase TiO 2 nanocomposites on reduced graphene oxide: Characterization and activity under low energy visible radiation. *Journal of Environmental Chemical Engineering*, **2017**, 5, 5091-5098	6.8	10
68	N-TiO2/Cu-TiO2 double-layer films: Impact of stacking order on photocatalytic properties. *Journal of Catalysis*, **2017**, 353, 116-122	7.3	17
67	Antifouling and Photocatalytic Antibacterial Activity of the AquaSun Coating in Seawater and Related Media. *ACS Omega*, **2017**, 2, 7568-7575	3.9	8
66	Silica-Based Sol□Gel Coatings: A Critical Perspective from a Practical Viewpoint **2016**, 149-159		5
65	Integrated Nano- and Macroscale Investigation of Photoinduced Hydrophilicity in TiO Thin Films. *Langmuir*, **2016**, 32, 11813-11818	4	12
64	Selective photooxidation of ortho-substituted benzyl alcohols and the catalytic role of ortho-methoxybenzaldehyde. *Journal of Photochemistry and Photobiology A: Chemistry*, **2016**, 328, 122-128	4.7	5
63	Photocatalytic activity of an electrophoretically deposited composite titanium dioxide membrane using carbon cloth as a conducting substrate. *RSC Advances*, **2016**, 6, 64219-64227	3.7	5
62	Nanoflower-Like Bi2 WO6 Encapsulated in ORMOSIL as a Novel Photocatalytic Antifouling and Foul-Release Coating. *Chemistry - A European Journal*, **2016**, 22, 7063-7	4.8	13
61	E-beam evaporated TiO2 and Cu-TiO2 on glass: Performance in the discoloration of methylene blue and 2-propanol oxidation. *Applied Catalysis A: General*, **2016**, 526, 191-199	5.1	30
60	Nanostructured anatase TiO2 densified at high pressure as advanced visible light photocatalysts. *Photochemical and Photobiological Sciences*, **2015**, 14, 1685-93	4.2	15
59	Heterogeneous Photocatalysis and Photoelectrocatalysis: From Unselective Abatement of Noxious Species to Selective Production of High-Value Chemicals. *Journal of Physical Chemistry Letters*, **2015**, 6, 1968-81	6.4	89
58	Unexpectedly ambivalent O2 role in the autocatalytic photooxidation of 2-methoxybenzyl alcohol in water. *Journal of Molecular Catalysis A*, **2015**, 403, 37-42		6
57	Validation of a two-dimensional modeling of an externally irradiated slurry photoreactor. *Chemical Engineering Journal*, **2015**, 262, 490-498	14.7	16
56	Sol□Gel for Environmentally Green Products **2015**, 1055-1070		1
55	Advances in anti-scale magnetic water treatment. *Environmental Science: Water Research and Technology*, **2015**, 1, 408-425	4.2	28
54	Electrodes Functionalized with the 2,2,6,6-Tetramethylpiperidinyloxy Radical for the Waste-Free Oxidation of Alcohols. *ChemCatChem*, **2015**, 7, 552-558	5.2	37
53	N-Doped Anatase/Rutile Photocatalysts for the Synthesis of Aromatic Aldehydes Under Ultraviolet and Solar Irradiation. *Science of Advanced Materials*, **2015**, 7, 2306-2319	2.3	10
52	Sol-gel entrapped visible light photocatalysts for selective conversions. *RSC Advances*, **2014**, 4, 18341-18346	3.7	32

51	Visible-light driven oxidation of gaseous aliphatic alcohols to the corresponding carbonyls via TiO2 sensitized by a perylene derivative. *Environmental Science and Pollution Research*, **2014**, 21, 11135-41	5.1	26
50	Halloysite nanotube with fluorinated lumen: non-foaming nanocontainer for storage and controlled release of oxygen in aqueous media. *Journal of Colloid and Interface Science*, **2014**, 417, 66-71	9.3	63
49	Erratum to Two-Dimensional Modeling of an Externally Irradiated Slurry Photoreactor. *International Journal of Chemical Reactor Engineering*, **2014**, 12, 665-665	1.2	
48	Photocatalytic green synthesis of piperonal in aqueous TiO2 suspension. *Applied Catalysis B: Environmental*, **2014**, 144, 607-613	21.8	39
47	Photoelectrocatalytic selective oxidation of 4-methoxybenzyl alcohol in water by TiO2 supported on titanium anodes. *Applied Catalysis B: Environmental*, **2013**, 132-133, 535-542	21.8	31
46	Photocatalytic Selective Oxidation of 5-(Hydroxymethyl)-2-furaldehyde to 2,5-Furandicarbaldehyde in Water by Using Anatase, Rutile, and Brookite TiO2 Nanoparticles. *ACS Sustainable Chemistry and Engineering*, **2013**, 1, 456-461	8.3	73
45	Two-Dimensional Modeling of an Externally Irradiated Slurry Photoreactor. *International Journal of Chemical Reactor Engineering*, **2013**, 11, 675-685	1.2	7
44	Overview on oxidation mechanisms of organic compounds by TiO2 in heterogeneous photocatalysis. *Journal of Photochemistry and Photobiology C: Photochemistry Reviews*, **2012**, 13, 224-245	16.4	219
43	Selective oxidation of phenol and benzoic acid in water via home-prepared TiO2 photocatalysts: Distribution of hydroxylation products. *Applied Catalysis A: General*, **2012**, 441-442, 79-89	5.1	28
42	Enhancing selectivity in photocatalytic formation of p-anisaldehyde in aqueous suspension under solar light irradiation via TiO2 N-doping. *New Journal of Chemistry*, **2012**, 36, 1762	3.6	25
41	Synthesis of vanillin in water by TiO2 photocatalysis. *Applied Catalysis B: Environmental*, **2012**, 111-112, 555-561	21.8	68
40	A new class of heterogeneous Pd catalysts for synthetic organic chemistry. *Catalysis Science and Technology*, **2011**, 1, 736	5.5	57
39	Titania photocatalysts for selective oxidations in water. *ChemSusChem*, **2011**, 4, 1431-8	8.3	85
38	Kinetics of 4-Methoxybenzyl Alcohol Oxidation in Aqueous Solution in a Fixed Bed Photocatalytic Reactor. *Industrial & Engineering Chemistry Research*, **2010**, 49, 6699-6708	3.9	27
37	TiO2-Based Photocatalysis for Organic Synthesis. *Nanostructure Science and Technology*, **2010**, 623-645	0.9	9
36	Solar hydrogen: fuel of the near future. *Energy and Environmental Science*, **2010**, 3, 279	35.4	107
35	Advances in selective conversions by heterogeneous photocatalysis. *Chemical Communications*, **2010**, 46, 7074-89	5.8	322
34	BIPV: merging the photovoltaic with the construction industry. *Progress in Photovoltaics: Research and Applications*, **2010**, 18, 61-72	6.8	87

33	On form dictating function: shape and structural effects in silica-based functional materials. *Chemical Record*, **2010**, 10, 17-28	6.6	8
32	Determination of Photoadsorption Capacity of Polychrystalline TiO2 Catalyst in Irradiated Slurry. *Advances in Chemical Engineering*, **2009**, 36, 1-35	0.6	19
31	Graphite-supported TiO2 for 4-nitrophenol degradation in a photoelectrocatalytic reactor. *Chemical Engineering Journal*, **2009**, 155, 339-346	14.7	43
30	A quantitative method of photoadsorption determination for irradiated catalyst in liquid–solid system. *Catalysis Today*, **2009**, 143, 189-194	5.3	9
29	Selective photocatalytic oxidation of 4-substituted aromatic alcohols in water with rutile TiO2 prepared at room temperature. *Green Chemistry*, **2009**, 11, 510	10	158
28	Nanochemistry aspects of titania in dye-sensitized solar cells. *Energy and Environmental Science*, **2009**, 2, 838	35.4	71
27	Self-assembled titania–silica–sepiolite based nanocomposites for water decontamination. *Journal of Materials Chemistry*, **2009**, 19, 2070		35
26	Home-prepared anatase, rutile, and brookite TiO(2) for selective photocatalytic oxidation of 4-methoxybenzyl alcohol in water: reactivity and ATR-FTIR study. *Photochemical and Photobiological Sciences*, **2009**, 8, 663-9	4.2	60
25	NanoMORALs Metal nanoparticles doped with organic molecules. *Canadian Journal of Chemistry*, **2009**, 87, 673-677	0.9	9
24	Silica-based hybrid coatings. *Journal of Materials Chemistry*, **2009**, 19, 3116		88
23	TiO2/ORMOSIL Thin Films Doped with Phthalocyanine Dyes: New Photocatalytic Devices Activated by Solar Light. *Journal of Physical Chemistry C*, **2008**, 112, 2667-2670	3.8	27
22	Enhanced Mechanical Properties in Organofluorosilica Thin Films. *Journal of Nanomaterials*, **2008**, 2008, 1-5	3.2	2
21	**2008**,		69
20	Environmentally Friendly Photocatalytic Oxidation of Aromatic Alcohol to Aldehyde in Aqueous Suspension of Brookite TiO2. *Catalysis Letters*, **2008**, 126, 58-62	2.8	76
19	Oxidation of aromatic alcohols in irradiated aqueous suspensions of commercial and home-prepared rutile TiO(2): a selectivity study. *Chemistry - A European Journal*, **2008**, 14, 4640-6	4.8	112
18	Flexible solar cells. *ChemSusChem*, **2008**, 1, 880-91	8.3	224
17	Photocatalytic oxidation of aromatic alcohols to aldehydes in aqueous suspension of home-prepared titanium dioxide. *Applied Catalysis A: General*, **2008**, 349, 182-188	5.1	70
16	Photocatalytic oxidation of aromatic alcohols to aldehydes in aqueous suspension of home prepared titanium dioxide: 2. Intrinsic and surface features of catalysts. *Applied Catalysis A: General*, **2008**, 349, 189-197	5.1	60

15	Nanostructured rutile TiO2 for selective photocatalytic oxidation of aromatic alcohols to aldehydes in water. *Journal of the American Chemical Society*, **2008**, 130, 1568-9	16.4	399
14	The chemical effects of molecular sol-gel entrapment. *Chemical Society Reviews*, **2007**, 36, 932-40	58.5	46
13	Optical Properties of TiO2 Suspensions: Influence of pH and Powder Concentration on Mean Particle Size. *Industrial & Engineering Chemistry Research*, **2007**, 46, 7620-7626	3.9	33
12	Photocatalysis: a promising route for 21st century organic chemistry. *Chemical Communications*, **2007**, 3425-37	5.8	562
11	Photocatalytic Selective Oxidation of 4-Methoxybenzyl Alcohol to Aldehyde in Aqueous Suspension of Home-Prepared Titanium Dioxide Catalyst. *Advanced Synthesis and Catalysis*, **2007**, 349, 964-970	5.6	166
10	Photocatalytic oxidation of nitrobenzene and phenylamine: Pathways and kinetics. *AICHE Journal*, **2007**, 53, 961-968	3.6	29
9	Selectivity of hydroxyl radical in the partial oxidation of aromatic compounds in heterogeneous photocatalysis. *Catalysis Today*, **2007**, 122, 118-127	5.3	113
8	Structural insight on organosilica electrodes for waste-free alcohol oxidations. *Catalysis Letters*, **2007**, 114, 55-58	2.8	5
7	Selective Photocatalytic Oxidation of 4-Methoxybenzyl Alcohol to p-Anisaldehyde in Organic-Free Water in a Continuous Annular Fixed Bed Reactor. *International Journal of Chemical Reactor Engineering*, **2007**, 5,	1.2	11
6	Waste-Free Electrochemical Oxidation of Alcohols in Water. *Advanced Synthesis and Catalysis*, **2006**, 348, 2033-2037	5.6	39
5	Influence of the substituent on selective photocatalytic oxidation of aromatic compounds in aqueous TiO2 suspensions. *Chemical Communications*, **2006**, 1012-4	5.8	76
4	ORMOSIL thin films: tuning mechanical properties via a nanochemistry approach. *Langmuir*, **2006**, 22, 11158-62	4	19
3	One-pot electrocatalytic oxidation of glycerol to DHA. *Tetrahedron Letters*, **2006**, 47, 6993-6995	2	96
2	Design of MetalDielectric Multilayer Coatings for Energy-Efficient Building Glazing. *Energy Technology*,2100776	3.5	
1	Advanced Protection Against Marine Biofouling Using Solar Light		1