## Valérie Keller

## List of Publications by Year in descending order

Source: https://exaly.com/author-pdf/4014597/publications.pdf

Version: 2024-02-01

122 papers 5,012 citations

38 h-index 65 g-index

127 all docs

127 docs citations

times ranked

127

6816 citing authors

#	Article	IF	Citations
1	Investigation of interactions between organophosphorus compounds and TiO <sub>2</sub> modified microcantilevers for molecule detection in air. Materials Advances, 2022, 3, 3600-3609.	5.4	1
2	Few Layer Graphene/TiO <sub>2</sub> Composites for Enhanced Solar-Driven H <sub>2</sub> Production from Methanol. ACS Sustainable Chemistry and Engineering, 2021, 9, 3633-3646.	6.7	10
3	Modified-TiO2 Photocatalyst Supported on $\hat{l}^2$ -SiC Foams for the Elimination of Gaseous Diethyl Sulfide as an Analog for Chemical Warfare Agent: Towards the Development of a Photoreactor Prototype. Catalysts, 2021, 11, 403.	3 <b>.</b> 5	5
4	Plasmonic Au-based junctions onto TiO2, gC3N4, and TiO2-gC3N4 systems for photocatalytic hydrogen production: Fundamentals and challenges. Renewable and Sustainable Energy Reviews, 2021, 149, 111095.	16.4	31
5	Probing the Role of Atomic Defects in Photocatalytic Systems through Photoinduced Enhanced Raman Scattering. ACS Energy Letters, 2021, 6, 4273-4281.	17.4	22
6	Titania-Carbon Nitride Interfaces in Gold-Catalyzed CO Oxidation. ACS Applied Materials & Samp; Interfaces, 2021, 13, 61015-61026.	8.0	4
7	Electrosynthesis of gradient TiO2 nanotubes and rapid screening using scanning photoelectrochemical microscopy. Sustainable Energy and Fuels, 2020, 4, 1099-1104.	4.9	4
8	Rare earth co-doped ZnO photocatalysts: Solution combustion synthesis and environmental applications. Separation and Purification Technology, 2020, 237, 116328.	7.9	98
9	Antibacterial and Biofilm-Preventive Photocatalytic Activity and Mechanisms on P/F-Modified TiO2 Coatings. ACS Applied Bio Materials, 2020, 3, 5687-5698.	4.6	12
10	Comparative study of the photocatalytic effects of pulsed laser deposited CoO and NiO nanoparticles onto TiO2 nanotubes for the photoelectrochemical water splitting. Solar Energy Materials and Solar Cells, 2020, 217, 110703.	6.2	20
11	Double side nanostructuring of microcantilever sensors with TiO <sub>2</sub> -NTs as a route to enhance their sensitivity. Nanoscale, 2020, 12, 13338-13345.	5.6	8
12	Au/TiO2(P25)-gC3N4 composites with low gC3N4 content enhance TiO2 sensitization for remarkable H2 production from water under visible-light irradiation. Nano Energy, 2020, 75, 104888.	16.0	53
13	Enhanced visible-light-photoconversion efficiency of TiO2 nanotubes decorated by pulsed laser deposited CoNi nanoparticles. International Journal of Hydrogen Energy, 2019, 44, 28656-28667.	7.1	9
14	Functionalized TiO <sub>2</sub> Nanorods on a Microcantilever for the Detection of Organophosphorus Chemical Agents in Air. ACS Applied Materials & Interfaces, 2019, 11, 35122-35131.	8.0	15
15	Plasmonic photocatalysis applied to solar fuels. Faraday Discussions, 2019, 214, 417-439.	3.2	15
16	Influence of the gas atmosphere during the synthesis of g-C <sub>3</sub> N <sub>4</sub> for enhanced photocatalytic H <sub>2</sub> production from water on Au/g-C <sub>3</sub> N <sub>4</sub> composites. Journal of Materials Chemistry A, 2019, 7, 14849-14863.	10.3	81
17	Nanostructured and functionalized cantilever for sensing organophosphorous compounds. , 2019, , .		2
18	Sn-doped and porogen-modified TiO2 photocatalyst for solar light elimination of sulfure diethyle as a model for chemical warfare agent. Applied Catalysis B: Environmental, 2019, 245, 279-289.	20.2	41

#	Article	IF	CITATIONS
19	Alveolar TiO2- $\hat{1}^2$ -SiC photocatalytic composite foams with tunable properties for water treatment. Catalysis Today, 2019, 328, 235-242.	4.4	20
20	On the role of BmimPF6 and P/F- containing additives in the sol-gel synthesis of TiO2 photocatalysts with enhanced activity in the gas phase degradation of methyl ethyl ketone. Applied Catalysis B: Environmental, 2018, 234, 56-69.	20.2	16
21	Photocatalytic Decontamination of Airborne T2 Bacteriophage Viruses in a Small-Size TiO2/ $\hat{l}^2$ -SiC Alveolar Foam LED Reactor. Water, Air, and Soil Pollution, 2018, 229, 1.	2.4	26
22	Au/TiO <sub>2</sub> –gC <sub>3</sub> N <sub>4</sub> Nanocomposites for Enhanced Photocatalytic H <sub>2</sub> Production from Water under Visible Light Irradiation with Very Low Quantities of Sacrificial Agents. Advanced Energy Materials, 2018, 8, 1702142.	19.5	163
23	Niobium Alloying of Selfâ€Organized TiO <sub>2</sub> Nanotubes as an Anode for Lithiumâ€Ion Microbatteries. Advanced Materials Technologies, 2018, 3, 1700274.	5.8	33
24	Anions and cations distribution in M 5+ /N 3- co-alloyed TiO 2 nanotubular structures for photo-electrochemical water splitting. Materials Science in Semiconductor Processing, 2018, 73, 22-29.	4.0	4
25	Highâ€Frequency Stimulation of Normal and Blind Mouse Retinas Using TiO <sub>2</sub> Nanotubes. Advanced Functional Materials, 2018, 28, 1804639.	14.9	13
26	Temperature dependent photoluminescence of anatase and rutile TiO2 single crystals: Polaron and self-trapped exciton formation. Journal of Applied Physics, 2018, 124, .	2.5	39
27	Niobium Alloying of Self-Organized TiO2 Nanotubes As an Anode for Lithium-lon Micro Batteries. ECS Meeting Abstracts, 2018, , .	0.0	0
28	One-pot synthesis of lightly doped Zn1â^'x Cu x O and Auâ€"Zn1â^'x Cu x O with solar light photocatalytic activity in liquid phase. Environmental Science and Pollution Research, 2017, 24, 15622-15633.	5.3	16
29	Activation of solid grinding-derived Au/TiO2 photocatalysts for solar H2 production from water-methanol mixtures with low alcohol content. Journal of Catalysis, 2017, 352, 22-34.	6.2	49
30	Wide band gap Ga2O3 as efficient UV-C photocatalyst for gas-phase degradation applications. Environmental Science and Pollution Research, 2017, 24, 26792-26805.	5.3	20
31	Influence of the anatase/rutile ratio on the charge transport properties of TiO <sub>2</sub> -NTs arrays studied by dual wavelength opto-electrochemical impedance spectroscopy. Physical Chemistry Chemical Physics, 2017, 19, 31469-31478.	2.8	15
32	Theoretical and photo-electrochemical studies of surface plasmon induced visible light absorption of Ag loaded TiO2 nanotubes for water splitting. Applied Physics Letters, 2016, 109, 153903.	3.3	8
33	Layer-by-Layer Photocatalytic Assembly for Solar Light-Activated Self-Decontaminating Textiles. ACS Applied Materials & Samp; Interfaces, 2016, 8, 34438-34445.	8.0	15
34	Au/TiO <sub>2</sub> photocatalysts prepared by solid grinding for artificial solar-light water splitting. New Journal of Chemistry, 2016, 40, 4428-4435.	2.8	30
35	Characterization and charge transfer properties of organic BODIPY dyes integrated in TiO <sub>2</sub> nanotube based dye-sensitized solar cells. RSC Advances, 2016, 6, 91529-91540.	3.6	17
36	Ta-doped TiO 2 as photocatalyst for UV-A activated elimination of chemical warfare agent simulant. Journal of Catalysis, 2016, 334, 129-141.	6.2	26

#	Article	lF	CITATIONS
37	Antibacterial textiles functionalized by layer-by-layer assembly of polyelectrolytes and TiO2photocatalyst. RSC Advances, 2015, 5, 38859-38867.	3.6	22
38	$\hat{l}^2$ -SiC alveolar foams as a structured photocatalytic support for the gas phase photocatalytic degradation of methylethylketone. Applied Catalysis B: Environmental, 2015, 170-171, 301-311.	20.2	36
39	Single-Step Synthesis of SnS <sub>2</sub> Nanosheet-Decorated TiO <sub>2</sub> Anatase Nanofibers as Efficient Photocatalysts for the Degradation of Gas-Phase Diethylsulfide. ACS Applied Materials & Amp; Interfaces, 2015, 7, 19324-19334.	8.0	105
40	Structural and electronic effects in bimetallic PdPt nanoparticles on TiO2 for improved photocatalytic oxidation of CO in the presence of humidity. Applied Catalysis B: Environmental, 2015, 166-167, 381-392.	20.2	50
41	Bio-inspired Explosive Sensors and Specific Signatures. Procedia Engineering, 2014, 87, 740-746.	1.2	5
42	H2S photocatalytic oxidation over WO3/TiO2 Hombikat UV100. Environmental Science and Pollution Research, 2014, 21, 3503-3514.	<b>5.</b> 3	29
43	TiO2 nanorods for gas phase photocatalytic applications. Catalysis Today, 2014, 235, 193-200.	4.4	17
44	TiO <sub>2</sub> Photocatalysis Damages Lipids and Proteins in Escherichia coli. Applied and Environmental Microbiology, 2014, 80, 2573-2581.	3.1	195
45	Effect of ball-milling and Fe-/Al-doping on the structural aspect and visible light photocatalytic activity of TiO2 towards Escherichia coli bacteria abatement. Materials Science and Engineering C, 2014, 38, 11-19.	7.3	27
46	Photocatalytic degradation of butanone (methylethylketone) in a small-size TiO2/ $\hat{l}^2$ -SiC alveolar foam LED reactor. Applied Catalysis B: Environmental, 2014, 154-155, 301-308.	20.2	24
47	Synthesis of vertically aligned titanium dioxide nanotubes on microcantilevers for new nanostructured micromechanical sensors for explosive detection. Sensors and Actuators B: Chemical, 2013, 182, 489-497.	7.8	18
48	$\hat{l}^2$ -SiC foams as a promising structured photocatalytic support for water and air detoxification. Catalysis Today, 2013, 209, 13-20.	4.4	59
49	One step synthesis of niobium doped titania nanotube arrays to form (N,Nb) co-doped TiO <sub>2</sub> with high visible light photoelectrochemical activity. Journal of Materials Chemistry A, 2013, 1, 2151-2160.	10.3	75
50	Chemistry of NO <sub><i>x</i></sub> on TiO <sub>2</sub> Surfaces Studied by Ambient Pressure XPS: Products, Effect of UV Irradiation, Water, and Coadsorbed K <sup>+</sup> . Journal of Physical Chemistry Letters, 2013, 4, 536-541.	4.6	79
51	Reply to Comment on "Tunable Generation and Adsorption of Energetic Compounds in the Vapor Phase at Trace Levels: A Tool for Testing and Developing Sensitive and Selective Substrates for Explosive Detection― Analytical Chemistry, 2013, 85, 3016-3016.	6.5	2
52	Ethylene Removal and Fresh Product Storage: A Challenge at the Frontiers of Chemistry. Toward an Approach by Photocatalytic Oxidation. Chemical Reviews, 2013, 113, 5029-5070.	47.7	208
53	Solar light-activated photocatalytic degradation of gas phase diethylsulfide on WO3-modified TiO2 nanotubes. Applied Catalysis B: Environmental, 2013, 138-139, 128-140.	20.2	54
54	On the use of capillary cytometry for assessing the bactericidal effect of TiO2. Identification and involvement of reactive oxygen species. Photochemical and Photobiological Sciences, 2013, 12, 610-620.	2.9	12

#	Article	IF	Citations
55	TiO2 β-SiC foam-structured photoreactor for continuous wastewater treatment. Environmental Science and Pollution Research, 2012, 19, 3727-3734.	5.3	37
56	WO3-modified TiO2 nanotubes for photocatalytic elimination of methylethylketone under UVA and solar light irradiation. Journal of Photochemistry and Photobiology A: Chemistry, 2012, 245, 43-57.	3.9	28
57	Effect of deposition of Ag nanoparticles on photoelectrocatalytic activity of vertically aligned TiO2 nanotubes. Catalysis Today, 2012, 189, 93-100.	4.4	26
58	Comparison of Hombikat UV100 and P25 TiO2 performance in gas-phase photocatalytic oxidation reactions. Journal of Photochemistry and Photobiology A: Chemistry, 2012, 250, 58-65.	3.9	69
59	Synthesis of transparent vertically aligned TiO <sub>2</sub> nanotubes on a few-layer graphene (FLG) film. Chemical Communications, 2012, 48, 1224-1226.	4.1	18
60	Bioâ€Inspired Nanostructured Sensor for the Detection of Ultralow Concentrations of Explosives. Angewandte Chemie - International Edition, 2012, 51, 5334-5338.	13.8	75
61	A parametric study of the UV-A photocatalytic oxidation of H2S over TiO2. Applied Catalysis B: Environmental, 2012, 115-116, 209-218.	20.2	59
62	Design of an efficient measurement cell for characterizing sensing properties of nanostructured sensitive layers coated on chips. Sensors and Actuators B: Chemical, 2012, 166-167, 829-832.	7.8	3
63	Enhanced CO photocatalytic oxidation in the presence of humidity by tuning composition of Pd–Pt bimetallic nanoparticles supported on TiO2. Chemical Communications, 2011, 47, 5331.	4.1	28
64	Impact of three different TiO2 morphologies on hydrogen evolution by methanol assisted water splitting: Nanoparticles, nanotubes and aerogels. International Journal of Hydrogen Energy, 2011, 36, 14360-14373.	7.1	84
65	Photocatalytically Active Polyelectrolyte/Nanoparticle Films for the Elimination of a Model Odorous Gas. Macromolecular Rapid Communications, 2011, 32, 1145-1149.	3.9	13
66	Macromol. Rapid Commun. 15/2011. Macromolecular Rapid Communications, 2011, 32, .	3.9	0
67	Preliminary study of the use of $\hat{I}^2$ -SiC foam as a photocatalytic support for water treatment. Catalysis Today, 2011, 161, 3-7.	4.4	48
68	Self-decontaminating layer-by-layer functionalized textiles based on WO3-modified titanate nanotubes. Application to the solar photocatalytic removal of chemical warfare agents. Applied Catalysis A: General, 2011, 391, 455-467.	4.3	42
69	Beta zeolite supported sol–gel TiO2 materials for gas phase photocatalytic applications. Journal of Hazardous Materials, 2011, 186, 1218-1225.	12.4	32
70	Ordered Layers of TiO2 Nanotubes as Anode for Photoelectrochemical Water Splitting. ECS Meeting Abstracts, 2011, , .	0.0	0
71	Solar light photocatalytic hydrogen production from water over Pt and Au/TiO2(anatase/rutile) photocatalysts: Influence of noble metal and porogen promotion. Journal of Catalysis, 2010, 269, 179-190.	6.2	289
72	UV-A photocatalytic treatment of Legionella pneumophila bacteria contaminated airflows through three-dimensional solid foam structured photocatalytic reactors. Journal of Hazardous Materials, 2010, 175, 372-381.	12.4	41

#	Article	IF	CITATIONS
73	Catalysts, mechanisms and industrial processes for the dimethylcarbonate synthesis. Journal of Molecular Catalysis A, 2010, 317, 1-18.	4.8	204
74	3D solid carbon foam-based photocatalytic materials for vapor phase flow-through structured photoreactors. Applied Catalysis A: General, 2010, 382, 122-130.	4.3	42
75	High surface-to-volume hybrid platelet reactor filled with catalytically grown vertically aligned carbon nanotubes. Catalysis Today, 2010, 150, 133-139.	4.4	12
76	Tunable Generation and Adsorption of Energetic Compounds in the Vapor Phase at Trace Levels: A Tool for Testing and Developing Sensitive and Selective Substrates for Explosive Detection. Analytical Chemistry, 2010, 82, 3389-3393.	6.5	18
77	Photocatalytic Treatment of Bioaerosols: Impact of the Reactor Design. Environmental Science & Technology, 2010, 44, 2605-2611.	10.0	25
78	Optical limiting behavior of carbon nanotubes exposed to infrared laser irradiations studied by the Z-scan technique. Applied Optics, 2010, 49, 1097.	2.1	10
79	Layerâ€by‣ayer Deposited Titanateâ€Based Nanotubes for Solar Photocatalytic Removal of Chemical Warfare Agents from Textiles. Angewandte Chemie - International Edition, 2009, 48, 161-164.	13.8	80
80	Macronized aligned carbon nanotubes for use as catalyst support and ceramic nanoporous membrane template. Catalysis Today, 2009, 145, 76-84.	4.4	21
81	Monitoring the bactericidal effect of UV-A photocatalysis: A first approach through 1D and 2D protein electrophoresis. Catalysis Today, 2009, 147, 169-172.	4.4	21
82	Photocatalytic removal of monoterpenes in the gas phase. Activity and regeneration. Green Chemistry, 2009, 11, 966.	9.0	8
83	Porogen Template Assisted TiO2 Rutile Coupled Nanomaterials for Improved Visible and Solar Light Photocatalytic Applications. Catalysis Letters, 2008, 123, 65-71.	2.6	23
84	Numeration methods for targeting photoactive materials in the UV-A photocatalytic removal of microorganisms. Chemical Society Reviews, 2008, 37, 744.	38.1	72
85	Activation and isomerization of hydrocarbons over WO3/ZrO2 catalystsll. Influence of tungsten loading on catalytic activity: Mechanistic studies and correlation with surface reducibility and tungsten surface species. Journal of Catalysis, 2008, 256, 159-171.	6.2	23
86	Towards the oxygenated phase coverage rate of $\hat{l}^2$ -SiC surface. Diamond and Related Materials, 2008, 17, 1867-1870.	3.9	11
87	Cuâ€"Y zeolite supported on silicon carbide for the vapour phase oxidative carbonylation of methanol to dimethyl carbonate. Green Chemistry, 2008, 10, 207-213.	9.0	28
88	Mesostructured Anatase TiO2 for Visible Light and UV Photocatalysis With Confinement Effect and Semiconductor Coupling. Journal of Solar Energy Engineering, Transactions of the ASME, 2008, 130, .	1.8	7
89	Oxidative dehydrogenation of ethylbenzene to styrene over ultra-dispersed diamond and onion-like carbon. Carbon, 2007, 45, 2145-2151.	10.3	168
90	UV-A photocatalytic treatment of high flow rate air contaminated with Legionella pneumophila. Catalysis Today, 2007, 129, 215-222.	4.4	35

#	Article	IF	CITATIONS
91	On the modification of photocatalysts for improving visible light and UV degradation of gas-phase toluene over TiO2. Applied Catalysis B: Environmental, 2007, 70, 423-430.	20.2	31
92	Room temperature visible light oxidation of CO by high surface area rutile TiO2-supported metal photocatalyst. Applied Catalysis B: Environmental, 2007, 69, 133-137.	20.2	47
93	Temperature dependent photoluminescence of photocatalytically active titania nanopowders. Catalysis Today, 2007, 122, 101-108.	4.4	28
94	Mesoporous TiO2-based photocatalysts for UV and visible light gas-phase toluene degradation. Thin Solid Films, 2006, 495, 272-279.	1.8	79
95	A new one-dimensional tungsten carbide nanostructured material. Materials Letters, 2006, 60, 1774-1777.	2.6	29
96	Sulfate-promoted Titania Photocatalyst for High Efficiency Gas Phase Toluene Degradation. Chemistry Letters, 2005, 34, 336-337.	1.3	8
97	High-efficiency WO3/carbon nanotubes for olefin skeletal isomerization. Catalysis Today, 2005, 102-103, 94-100.	4.4	14
98	H/D exchange using D2O on carbon materials: A flexible tool for surface BrÃ,nsted acidity direct measurement. Catalysis Today, 2005, 102-103, 266-272.	4.4	4
99	Macroscopic carbon nanofibers for use as photocatalyst support. Catalysis Today, 2005, 101, 323-329.	4.4	47
100	A tool for direct quantitative measurement of surface BrÃ, nsted acid sites of solids by H/D exchange using D2O. Applied Catalysis A: General, 2005, 289, 37-43.	4.3	10
101	Gas phase photocatalytic removal of toluene effluents on sulfated titania. Journal of Catalysis, 2005, 235, 318-326.	6.2	57
102	High surface area submicrometer-sized $\hat{l}^2$ -SiC particles grown by shape memory synthesis method. Diamond and Related Materials, 2005, 14, 1353-1360.	3.9	25
103	Direct quantitative determination of surface $Br\tilde{A}_{,n}$ nsted acidity of solids by H/D exchange using D2O. Chemical Communications, 2005, , 201-203.	4.1	6
104	Biological agent inactivation in a flowing air stream by photocatalysis. Chemical Communications, 2005, , 2918.	4.1	58
105	Activation and isomerization of hydrocarbons over WO3/ZrO2 catalystsl. Preparation, characterization, and X-ray photoelectron spectroscopy studies. Journal of Catalysis, 2004, 225, 45-55.	6.2	124
106	Synthesis and characterization of a new medium surface area TiO2â€"β-SiC material for use as photocatalyst. Journal of Materials Chemistry, 2004, 14, 1887-1895.	6.7	21
107	A new TiO2–β-SiC material for use as photocatalyst. Materials Letters, 2004, 58, 970-974.	2.6	22
108	Photocatalytic oxidation of butyl acetate in vapor phase on TiO2, Pt/TiO2 and WO3/TiO2 catalysts. Journal of Catalysis, 2003, 215, 129-138.	6.2	233

#	Article	IF	CITATIONS
109	Synthesis and characterisation of medium surface area silicon carbide nanotubes. Carbon, 2003, 41, 2131-2139.	10.3	123
110	Photocatalytic behavior of a new composite ternary system: WO3/SiC-TiO2. Effect of the coupling of semiconductors and oxides in photocatalytic oxidation of methylethylketone in the gas phase. Catalysis Communications, 2003, 4, 377-383.	3.3	79
111	Kinetic approach of surface acidity of W2N, Mo2N and NbN catalysts using methylbutynol as molecular probe. Journal of Molecular Catalysis A, 2002, 188, 163-172.	4.8	10
112	Cracking and skeletal isomerization of hexenes on acidic MoO3–WO3/α-Al2O3 oxide. Applied Catalysis A: General, 2001, 218, 13-24.	4.3	17
113	Catalytic Activity of Reduced MoO3/l±-Al2O3 for Hexanes Reforming. Journal of Catalysis, 2000, 189, 269-280.	6.2	19
114	Study of the isomerization of 13C labelled methylpentanes on oxygen modified bulk tungsten carbides. Physical Chemistry Chemical Physics, 2000, 2, 2893-2902.	2.8	5
115	Catalytic Activity of Reduced MoO3/α-Al2O3 for Hexanes Reforming. Journal of Catalysis, 1999, 185, 1-11.	6.2	32
116	Catalytic Activity of Bulk Tungsten Carbides for Alkane Reforming. II. Catalytic Activity of Tungsten Carbides Modified by Oxygen. Journal of Catalysis, 1997, 166, 125-135.	6.2	27
117	Catalytic Activity of Bulk Tungsten Carbides for Alkane Reforming. III. Reaction Mechanisms and the Kinetic Model. Journal of Catalysis, 1997, 166, 136-147.	6.2	35
118	Title is missing!. Catalysis Letters, 1997, 47, 63-69.	2.6	3
119	Catalytic Activity of Bulk Tungsten Carbides for Alkane Reforming. Journal of Catalysis, 1995, 153, 9-16.	6.2	67
120	Catalytic activity and XPS surface determination of tungsten carbide for hydrocarbon reforming. Influence of the oxygen. Catalysis Letters, 1995, 35, 65-74.	2.6	20
121	The effect of surface composition on the activity and selectivity in skeletal rearrangement of hydrocarbons on bulk and model tungsten carbides. Catalysis Today, 1993, 17, 493-504.	4.4	20
122	Tungsten carbides as substitutes of platinoids in heterogeneous catalysis I. The effect of surface composition on the reactivity of methylcyclopentane on tungsten carbides. Catalysis Letters, 1991, 10, 137-148.	2.6	19