Nicolas Keller

List of Publications by Citations

115 papers	4,782 citations	38 h-index	65 g-index
123 ext. papers	5,328 ext. citations	9 avg, IF	5.6 L-index

#	Paper	IF	Citations
115	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	7.3	255
114	The catalytic use of onion-like carbon materials for styrene synthesis by oxidative dehydrogenation of ethylbenzene. *Angewandte Chemie - International Edition*, **2002**, 41, 1885-8	16.4	223
113	Carbon Nanofilaments in Heterogeneous Catalysis: An Industrial Application for New Carbon Materials?. *Angewandte Chemie - International Edition*, **2001**, 40, 2066-2068	16.4	217
112	The First Preparation of Silicon Carbide Nanotubes by Shape Memory Synthesis and Their Catalytic Potential. *Journal of Catalysis*, **2001**, 200, 400-410	7.3	209
111	Catalysts, mechanisms and industrial processes for the dimethylcarbonate synthesis. *Journal of Molecular Catalysis A*, **2010**, 317, 1-18		166
110	TiO2 photocatalysis damages lipids and proteins in Escherichia coli. *Applied and Environmental Microbiology*, **2014**, 80, 2573-81	4.8	154
109	Oxidative dehydrogenation of ethylbenzene to styrene over ultra-dispersed diamond and onion-like carbon. *Carbon*, **2007**, 45, 2145-2151	10.4	153
108	Carbon nanofiber supported palladium catalyst for liquid-phase reactions: An active and selective catalyst for hydrogenation of cinnamaldehyde into hydrocinnamaldehyde. *Journal of Molecular Catalysis A*, **2001**, 170, 155-163		151
107	Ethylene removal and fresh product storage: a challenge at the frontiers of chemistry. Toward an approach by photocatalytic oxidation. *Chemical Reviews*, **2013**, 113, 5029-70	68.1	148
106	Synthesis and catalytic uses of carbon and silicon carbide nanostructures. *Catalysis Today*, **2002**, 76, 11-33	5.3	122
105	Synthesis and characterisation of medium surface area silicon carbide nanotubes. *Carbon*, **2003**, 41, 2131-2139	10.4	112
104	Ru catalysts for levulinic acid hydrogenation with formic acid as a hydrogen source. *Green Chemistry* , **2016**, 18, 2014-2028	10	102
103	New catalytic phenomena on nanostructured (fibers and tubes) catalysts. *Journal of Catalysis*, **2003**, 216, 333-342	7.3	99
102	Large scale synthesis of carbon nanofibers by catalytic decomposition of ethane on nickel nanoclusters decorating carbon nanotubes. *Physical Chemistry Chemical Physics*, **2002**, 4, 514-521	3.6	97
101	Single-Step Synthesis of SnS Nanosheet-Decorated TiO Anatase Nanofibers as Efficient Photocatalysts for the Degradation of Gas-Phase Diethylsulfide. *ACS Applied Materials & Interfaces*, **2015**, 7, 19324-34	9.5	94
100	Continuous process for selective oxidation of H2S over SiC-supported iron catalysts into elemental sulfur above its dewpoint. *Applied Catalysis A: General*, **2001**, 217, 205-217	5.1	79
99	Layer-by-layer deposited titanate-based nanotubes for solar photocatalytic removal of chemical warfare agents from textiles. *Angewandte Chemie - International Edition*, **2009**, 48, 161-4	16.4	75

98	Mesoporous TiO2-based photocatalysts for UV and visible light gas-phase toluene degradation. *Thin Solid Films*, **2006**, 495, 272-279	2.2	75
97	One step synthesis of niobium doped titania nanotube arrays to form (N,Nb) co-doped TiO2 with high visible light photoelectrochemical activity. *Journal of Materials Chemistry A*, **2013**, 1, 2151-2160	13	69
96	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	6.7	68
95	Direct oxidation of H2S into S. New catalysts and processes based on SiC support. *Catalysis Today*, **1999**, 53, 535-542	5.3	63
94	Numeration methods for targeting photoactive materials in the UV-A photocatalytic removal of microorganisms. *Chemical Society Reviews*, **2008**, 37, 744-55	58.5	61
93	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	4.7	55
92	Biological agent inactivation in a flowing air stream by photocatalysis. *Chemical Communications*, **2005**, 2918-20	5.8	55
91	Preparation and characterization of SiC microtubes. *Applied Catalysis A: General*, **1999**, 187, 255-268	5.1	52
90	Gas phase photocatalytic removal of toluene effluents on sulfated titania. *Journal of Catalysis*, **2005**, 235, 318-326	7.3	51
89	SiC foams as a promising structured photocatalytic support for water and air detoxification. *Catalysis Today*, **2013**, 209, 13-20	5.3	50
88	Carbon nanotubes as nanosized reactor for the selective oxidation of H2S into elemental sulfur. *Catalysis Today*, **2004**, 91-92, 91-97	5.3	48
87	A parametric study of the UV-A photocatalytic oxidation of H2S over TiO2. *Applied Catalysis B: Environmental*, **2012**, 115-116, 209-218	21.8	47
86	Solar light-activated photocatalytic degradation of gas phase diethylsulfide on WO3-modified TiO2 nanotubes. *Applied Catalysis B: Environmental*, **2013**, 138-139, 128-140	21.8	46
85	Supported carbon nanofibers for the fixed-bed synthesis of styrene. *Carbon*, **2006**, 44, 809-812	10.4	43
84	Room temperature visible light oxidation of CO by high surface area rutile TiO2-supported metal photocatalyst. *Applied Catalysis B: Environmental*, **2007**, 69, 133-137	21.8	42
83	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	21.8	41
82	Supported gold–nickel nano-alloy as a highly efficient catalyst in levulinic acid hydrogenation with formic acid as an internal hydrogen source. *Catalysis Science and Technology*, **2018**, 8, 4318-4331	5.5	41
81	Macroscopic carbon nanofibers for use as photocatalyst support. *Catalysis Today*, **2005**, 101, 323-329	5.3	40

80	Selective oxidation of H2S in Claus tail-gas over SiC supported NiS2 catalyst. *Catalysis Today*, **2000**, 61, 157-163	5.3	40
79	3D solid carbon foam-based photocatalytic materials for vapor phase flow-through structured photoreactors. *Applied Catalysis A: General*, **2010**, 382, 122-130	5.1	39
78	Ti-substituted LaFeO3 perovskite as photoassisted CWPO catalyst for water treatment. *Applied Catalysis B: Environmental*, **2019**, 248, 120-128	21.8	38
77	Low temperature use of SiC-supported NiS2-based catalysts for selective H2S oxidation. *Applied Catalysis A: General*, **2002**, 234, 191-205	5.1	38
76	Kohlenstoffnanofilamente in der heterogenen Katalyse: eine technische Anwendung f□neue Kohlenstoffmaterialien?. *Angewandte Chemie*, **2001**, 113, 2122-2125	3.6	38
75	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	5.1	36
74	UV-A photocatalytic treatment of high flow rate air contaminated with Legionella pneumophila. *Catalysis Today*, **2007**, 129, 215-222	5.3	32
73	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	21.8	31
72	Activity enhancement pathways in LaFeO@TiO heterojunction photocatalysts for visible and solar light driven degradation of myclobutanil pesticide in water. *Journal of Hazardous Materials*, **2020**, 400, 123099	12.8	30
71	TiO2/□SiC foam-structured photoreactor for continuous wastewater treatment. *Environmental Science and Pollution Research*, **2012**, 19, 3727-34	5.1	30
70	Beta zeolite supported sol-gel TiO2 materials for gas phase photocatalytic applications. *Journal of Hazardous Materials*, **2011**, 186, 1218-25	12.8	30
69	UV-A photocatalytic treatment of Legionella pneumophila bacteria contaminated airflows through three-dimensional solid foam structured photocatalytic reactors. *Journal of Hazardous Materials*, **2010**, 175, 372-81	12.8	30
68	□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	21.8	29
67	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	21.8	28
66	Synergy effect between photocatalysis and heterogeneous photo-Fenton catalysis on Ti-doped LaFeO3 perovskite for high efficiency light-assisted water treatment. *Catalysis Science and Technology*, **2020**, 10, 1299-1310	5.5	26
65	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	4.7	26
64	Cu□ zeolite supported on silicon carbide for the vapour phase oxidative carbonylation of methanol to dimethyl carbonate. *Green Chemistry*, **2008**, 10, 207-213	10	26
63	Temperature dependent photoluminescence of photocatalytically active titania nanopowders. *Catalysis Today*, **2007**, 122, 101-108	5.3	26

62	Enhanced CO photocatalytic oxidation in the presence of humidity by tuning composition of Pd-Pt bimetallic nanoparticles supported on TiO2. *Chemical Communications*, **2011**, 47, 5331-3	5.8	25
61	H□S photocatalytic oxidation over WO□/TiO□ Hombikat UV100. *Environmental Science and Pollution Research*, **2014**, 21, 3503-14	5.1	24
60	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, 11-9	8.3	24
59	Reaction pathways, kinetics and toxicity assessment during the photocatalytic degradation of glyphosate and myclobutanil pesticides: Influence of the aqueous matrix. *Chemical Engineering Journal*, **2020**, 384, 123315	14.7	24
58	Ta-doped TiO 2 as photocatalyst for UV-A activated elimination of chemical warfare agent simulant. *Journal of Catalysis*, **2016**, 334, 129-141	7.3	23
57	Carbon nanotubes as a template for mild synthesis of magnetic CoFe2O4 nanowires. *Carbon*, **2004**, 42, 1395-1399	10.4	23
56	Temperature dependent photoluminescence of anatase and rutile TiO2 single crystals: Polaron and self-trapped exciton formation. *Journal of Applied Physics*, **2018**, 124, 133104	2.5	23
55	Heterogeneous photodegradation of Pyrimethanil and its commercial formulation with TiO2 immobilized on SiC foams. *Journal of Photochemistry and Photobiology A: Chemistry*, **2019**, 368, 1-6	4.7	22
54	Photocatalytic degradation of butanone (methylethylketone) in a small-size TiO2/□SiC alveolar foam LED reactor. *Applied Catalysis B: Environmental*, **2014**, 154-155, 301-308	21.8	21
53	Photocatalytic treatment of bioaerosols: impact of the reactor design. *Environmental Science & Technology*, **2010**, 44, 2605-11	10.3	21
52	Porogen Template Assisted TiO2 Rutile Coupled Nanomaterials for Improved Visible and Solar Light Photocatalytic Applications. *Catalysis Letters*, **2008**, 123, 65-71	2.8	21
51	A new TiO2□SiC material for use as photocatalyst. *Materials Letters*, **2004**, 58, 970-974	3.3	21
50	Enhanced Production of □Valerolactone with an Internal Source of Hydrogen on Ca-Modified TiO Supported Ru Catalysts. *ChemSusChem*, **2019**, 12, 639-650	8.3	21
49	Highly robust La1-xTixFeO3 dual catalyst with combined photocatalytic and photo-CWPO activity under visible light for 4-chlorophenol removal in water. *Applied Catalysis B: Environmental*, **2020**, 262, 118310	21.8	21
48	Photocatalytic Decontamination of Airborne T2 Bacteriophage Viruses in a Small-Size TiO2/□SiC Alveolar Foam LED Reactor. *Water, Air, and Soil Pollution*, **2018**, 229, 1	2.6	20
47	Synthesis and characterization of a new medium surface area TiO2□SiC material for use as photocatalyst. *Journal of Materials Chemistry*, **2004**, 14, 1887-1895		20
46	Ferrite Materials for Photoassisted Environmental and Solar Fuels Applications. *Topics in Current Chemistry*, **2019**, 378, 6	7.2	20
45	Antibacterial textiles functionalized by layer-by-layer assembly of polyelectrolytes and TiO2 photocatalyst. *RSC Advances*, **2015**, 5, 38859-38867	3.7	19

44	Monitoring the bactericidal effect of UV-A photocatalysis: A first approach through 1D and 2D protein electrophoresis. *Catalysis Today*, **2009**, 147, 169-172	5.3	19
43	High surface area submicrometer-sized β-SiC particles grown by shape memory synthesis method. *Diamond and Related Materials*, **2005**, 14, 1353-1360	3.5	19
42	Synthesis of transparent vertically aligned TiO2 nanotubes on a few-layer graphene (FLG) film. *Chemical Communications*, **2012**, 48, 1224-6	5.8	18
41	Macronized aligned carbon nanotubes for use as catalyst support and ceramic nanoporous membrane template. *Catalysis Today*, **2009**, 145, 76-84	5.3	17
40	Low-temperature selective oxidation of hydrogen sulfide into elemental sulfur on a NiS2/SiC catalyst. *Catalysis Letters*, **1999**, 61, 151-155	2.8	15
39	Efficient photocatalytic mineralization of polymethylmethacrylate and polystyrene nanoplastics by TiO2/β-SiC alveolar foams. *Environmental Chemistry Letters*, **2021**, 19, 1803-1808	13.3	14
38	Photo-/thermal synergies in heterogeneous catalysis: Towards low-temperature (solar-driven) processing for sustainable energy and chemicals. *Applied Catalysis B: Environmental*, **2021**, 296, 120320	21.8	14
37	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	21.8	13
36	Self-tuned properties of CuZnO catalysts for hydroxymethylfurfural hydrodeoxygenation towards dimethylfuran production. *Catalysis Science and Technology*, **2020**, 10, 658-670	5.5	13
35	One-pot synthesis of lightly doped Zn Cu O and Au-Zn Cu O with solar light photocatalytic activity in liquid phase. *Environmental Science and Pollution Research*, **2017**, 24, 15622-15633	5.1	12
34	Wide band gap GaO as efficient UV-C photocatalyst for gas-phase degradation applications. *Environmental Science and Pollution Research*, **2017**, 24, 26792-26805	5.1	12
33	TiO2 nanorods for gas phase photocatalytic applications. *Catalysis Today*, **2014**, 235, 193-200	5.3	12
32	Photocatalytically active polyelectrolyte/nanoparticle films for the elimination of a model odorous gas. *Macromolecular Rapid Communications*, **2011**, 32, 1145-9	4.8	12
31	Layer-by-Layer Photocatalytic Assembly for Solar Light-Activated Self-Decontaminating Textiles. *ACS Applied Materials & Interfaces*, **2016**, 8, 34438-34445	9.5	12
30	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, 610-20	4.2	11
29	Towards the oxygenated phase coverage rate of β-SiC surface. *Diamond and Related Materials*, **2008**, 17, 1867-1870	3.5	11
28	High-efficiency WO3/carbon nanotubes for olefin skeletal isomerization. *Catalysis Today*, **2005**, 102-103, 94-100	5.3	11
27	Photoactive ZnO Materials for Solar Light-Induced CuO-ZnO Catalyst Preparation. *Materials*, **2018**, 11,	3.5	11

26	High-Frequency Stimulation of Normal and Blind Mouse Retinas Using TiO2 Nanotubes. *Advanced Functional Materials*, **2018**, 28, 1804639	15.6	11
25	High surface-to-volume hybrid platelet reactor filled with catalytically grown vertically aligned carbon nanotubes. *Catalysis Today*, **2010**, 150, 133-139	5.3	10
24	Pd/SiC exhaust gas catalyst for heavy-duty engines: improvement of catalytic performances by controlling the location of the active phase on the support. *Topics in Catalysis*, **2004**, 30/31, 353-358	2.3	10
23	Understanding the influence of the composition of the Ag Pd catalysts on the selective formic acid decomposition and subsequent levulinic acid hydrogenation. *International Journal of Hydrogen Energy*, **2020**, 45, 17339-17353	6.7	10
22	Alveolar TiO2-□SiC photocatalytic composite foams with tunable properties for water treatment. *Catalysis Today*, **2019**, 328, 235-242	5.3	10
21	Immobilization of a Semiconductor Photocatalyst on Solid Supports: Methods, Materials, and Applications **2013**, 145-178		9
20	Photocatalytic removal of monoterpenes in the gas phase. Activity and regeneration. *Green Chemistry*, **2009**, 11, 966	10	8
19	Coating-free TiO@□SiC alveolar foams as a ready-to-use composite photocatalyst with tunable adsorption properties for water treatment.. *RSC Advances*, **2020**, 10, 3817-3825	3.7	7
18	A tool for direct quantitative measurement of surface Br□sted acid sites of solids by H/D exchange using D2O. *Applied Catalysis A: General*, **2005**, 289, 37-43	5.1	7
17	Solar Light Induced Photon-Assisted Synthesis of TiO□Supported Highly Dispersed Ru Nanoparticle Catalysts. *Materials*, **2018**, 11,	3.5	7
16	Light-driven synthesis of sub-nanometric metallic Ru catalysts on TiO2. *Catalysis Today*, **2019**, 326, 8-14	5.3	6
15	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,	2.3	6
14	Direct quantitative determination of surface Br□sted acidity of solids by H/D exchange using D2O. *Chemical Communications*, **2005**, 201-3	5.8	6
13	Sulfate-promoted Titania Photocatalyst for High Efficiency Gas Phase Toluene Degradation. *Chemistry Letters*, **2005**, 34, 336-337	1.7	6
12	Antibacterial and Biofilm-Preventive Photocatalytic Activity and Mechanisms on P/F-Modified TiO Coatings.. *ACS Applied Bio Materials*, **2020**, 3, 5687-5698	4.1	6
11	Solvothermal hydrodeoxygenation of hydroxymethylfurfural derived from biomass towards added value chemicals on Ni/TiO2 catalysts. *Journal of Supercritical Fluids*, **2020**, 163, 104827	4.2	5
10	TiO2 supported Ru catalysts for the hydrogenation of succinic acid: influence of the support. *Catalysis Science and Technology*, **2020**, 10, 6860-6869	5.5	5
9	Preparation and Microstructure of Titanate Nanotube Thin Films by Spray Layer-by-Layer Assembly Method. *Transactions of the Materials Research Society of Japan*, **2009**, 34, 545-549	0.2	4

8	Ni-Pd/Al2O3 Catalysts in the Hydrogenation of Levulinic Acid and Hydroxymethylfurfural towards Value Added Chemicals. *Catalysts*, **2020**, 10, 1026	4	4
7	Ti-Modified LaFeO/SiC Alveolar Foams as Immobilized Dual Catalysts with Combined Photo-Fenton and Photocatalytic Activity. *ACS Applied Materials & Interfaces*, **2020**, 12, 57025-57037	9.5	3
6	Virtually Transparent TiO/Polyelectrolyte Thin Multilayer Films as High-Efficiency Nanoporous Photocatalytic Coatings for Breaking Down Formic Acid and for Removal. *ACS Applied Materials & Interfaces*, **2020**, 12, 55766-55781	9.5	3
5	H/D exchange using D2O on carbon materials: A flexible tool for surface Brønsted acidity direct measurement. *Catalysis Today*, **2005**, 102-103, 266-272	5.3	3
4	Modified-TiO2 Photocatalyst Supported on 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	4	3
3	UV-A light-assisted gas-phase formic acid decomposition on photo-thermo Ru/TiO2 catalyst. *Catalysis Today*, **2021**, 380, 138-146	5.3	3
2	Decoration of silicon carbide nanotubes by CoFe2O4 Spinel nanoparticles.. *Materials Research Society Symposia Proceedings*, **2000**, 658, 641		
1	TiO2 and TiO2-Carbon Hybrid Photocatalysts for Diuron Removal from Water. *Catalysts*, **2021**, 11, 457	4	