

# Zefeng Ren

## List of Publications by Year in descending order

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62  
papers

2,847  
citations

218592

26  
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168321

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all docs

65  
docs citations

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times ranked

2770  
citing authors

#	ARTICLE	IF	CITATIONS
1	Top-Seed Solution-Based Growth of Perovskite Cs <sub>3</sub> Bi <sub>2</sub> I <sub>9</sub> Single Crystal for High Performance X-ray Detection. ACS Photonics, 2022, 9, 641-651.	3.2	25
2	Chiral Hybrid Copper(I) Halides for High Efficiency Second Harmonic Generation with a Broadband Transparency Window. Angewandte Chemie - International Edition, 2022, 61, .	7.2	53
3	Valence Band of Rutile TiO <sub>2</sub> (110) Investigated by Polarized-Light-Based Angle-Resolved Photoelectron Spectroscopy. Journal of Physical Chemistry Letters, 2022, 13, 2299-2305.	2.1	6
4	Photocatalytic C-H Bond Activation of Toluene on Rutile TiO <sub>2</sub> (110). Journal of Physical Chemistry C, 2022, 126, 11963-11970.	1.5	9
5	Origin of the Adsorption-State-Dependent Photoactivity of Methanol on TiO <sub>2</sub> (110). ACS Catalysis, 2021, 11, 2620-2630.	5.5	18
6	Full diagnostics and optimization of time resolution for time- and angle-resolved photoemission spectroscopy. Review of Scientific Instruments, 2021, 92, 033904.	0.6	10
7	Alkoxylation Reaction of Alcohol on Silica Surfaces Studied by Sum Frequency Vibrational Spectroscopy. Journal of Physical Chemistry C, 2021, 125, 8638-8646.	1.5	17
8	Hydrophobic Modification of Silica Surfaces via Grafting Alkoxy Groups. ACS Applied Electronic Materials, 2021, 3, 1691-1698.	2.0	8
9	Ultrahigh sensitive transient absorption spectrometer. Review of Scientific Instruments, 2021, 92, 053002.	0.6	7
10	Efficient generation of narrowband picosecond pulses from a femtosecond laser. Review of Scientific Instruments, 2021, 92, 083001.	0.6	2
11	Spatially heterogeneous ultrafast interfacial carrier dynamics of 2D-MoS <sub>2</sub> flakes. Materials Today Physics, 2021, 21, 100506.	2.9	6
12	Anisotropic d-d Transition in Rutile TiO <sub>2</sub> . Journal of Physical Chemistry Letters, 2021, 12, 10515-10520.	2.1	5
13	Epitaxial Growth of Centimeter-Scale Single-Crystal MoS <sub>2</sub> Monolayer on Au(111). ACS Nano, 2020, 14, 5036-5045.	7.3	211
14	Adsorption Structure and Coverage-Dependent Orientation Analysis of Sub-Monolayer Acetonitrile on TiO <sub>2</sub> (110). Journal of Physical Chemistry C, 2019, 123, 17915-17924.	1.5	6
15	A broadband sum-frequency generation vibrational spectrometer to probe adsorbed molecules on nanoparticles. Surface Science, 2019, 689, 121459.	0.8	12
16	Single Molecule Photocatalysis on TiO <sub>2</sub> Surfaces. Chemical Reviews, 2019, 119, 11020-11041.	23.0	212
17	Active Species in Photocatalytic Reactions of Methanol on TiO <sub>2</sub> (110) Identified by Surface Sum Frequency Generation Vibrational Spectroscopy. Journal of Physical Chemistry C, 2019, 123, 13789-13794.	1.5	11
18	In Situ Studies on Temperature-Dependent Photocatalytic Reactions of Methanol on TiO <sub>2</sub> (110). Journal of Physical Chemistry C, 2019, 123, 9993-9999.	1.5	14

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19	Flexible high-resolution broadband sum-frequency generation vibrational spectroscopy for intrinsic spectral line widths. <i>Journal of Chemical Physics</i> , 2019, 150, 074702.	1.2	16
20	Femtosecond time-resolved spectroscopic photoemission electron microscopy for probing ultrafast carrier dynamics in heterojunctions. <i>Chinese Journal of Chemical Physics</i> , 2019, 32, 399-405.	0.6	5
21	Role of Pt Loading in the Photocatalytic Chemistry of Methanol on Rutile TiO <sub>2</sub> (110). <i>ACS Catalysis</i> , 2019, 9, 286-294.	5.5	39
22	Elementary Chemical Reactions in Surface Photocatalysis. <i>Annual Review of Physical Chemistry</i> , 2018, 69, 451-472.	4.8	31
23	Deuterium Kinetic Isotope Effect in the Photocatalyzed Dissociation of Methanol on TiO <sub>2</sub> (110). <i>Journal of Physical Chemistry C</i> , 2018, 122, 26512-26518.	1.5	7
24	A review of dynamical resonances in A <sup>+</sup> +BC chemical reactions. <i>Reports on Progress in Physics</i> , 2017, 80, 026401.	8.1	11
25	CH <sub>2</sub> Stabilized at Steps on Ru(0001) by Coadsorbates. <i>Journal of Physical Chemistry C</i> , 2016, 120, 24724-24733.	1.5	8
26	Compact ultrahigh vacuum/high-pressure system for broadband infrared sum frequency generation vibrational spectroscopy studies. <i>Review of Scientific Instruments</i> , 2016, 87, 044101.	0.6	9
27	Fundamental Processes in Surface Photocatalysis on TiO <sub>2</sub> . <i>Green Chemistry and Sustainable Technology</i> , 2016, , 361-416.	0.4	2
28	Elementary photocatalytic chemistry on TiO <sub>2</sub> surfaces. <i>Chemical Society Reviews</i> , 2016, 45, 3701-3730.	18.7	288
29	Methanol Adsorption on TiO <sub>2</sub> Film Studied by Sum Frequency Generation Vibrational Spectroscopy. <i>Chinese Journal of Chemical Physics</i> , 2015, 28, 11-16.	0.6	12
30	Recombination of Formaldehyde and Hydrogen Atoms on TiO <sub>2</sub> (110). <i>Journal of Physical Chemistry C</i> , 2015, 119, 1170-1174.	1.5	26
31	Coverage Dependence of Methanol Dissociation on TiO <sub>2</sub> (110). <i>Journal of Physical Chemistry Letters</i> , 2015, 6, 3327-3334.	2.1	62
32	In Situ Studies on the Dissociation and Photocatalytic Reactions of CH <sub>3</sub> OH on TiO <sub>2</sub> Thin Film by Sum Frequency Generation Vibrational Spectroscopy. <i>Journal of Physical Chemistry C</i> , 2015, 119, 9798-9804.	1.5	33
33	Spectral Identification of Methanol on TiO <sub>2</sub> (110) Surfaces with Sum Frequency Generation in the C-H Stretching Region. <i>Journal of Physical Chemistry C</i> , 2015, 119, 23486-23494.	1.5	33
34	Characterization of the Excited State on Methanol/TiO <sub>2</sub> (110) Interface. <i>Chinese Journal of Chemical Physics</i> , 2015, 28, 123-127.	0.6	3
35	Controlling CH <sub>2</sub> dissociation on Ru(0001) through surface site blocking by adsorbed hydrogen. <i>Journal of Catalysis</i> , 2014, 320, 89-96.	3.1	13
36	First-Principles Study of Methanol Oxidation into Methyl Formate on Rutile TiO <sub>2</sub> (110). <i>Journal of Physical Chemistry C</i> , 2014, 118, 19859-19868.	1.5	33

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37	Dynamical Resonances in F+H <sub>2</sub> Reactions. Springer Theses, 2014, , 33-64.	0.0	0
38	The Non-adiabatic Effects in F(2P)+D <sub>2</sub> →DF+D. Springer Theses, 2014, , 65-76.	0.0	0
39	Hydrogen Atom Rydberg Tagging Time-of-Flight Crossed Molecular Beam Apparatus. Springer Theses, 2014, , 9-32.	0.0	0
40	State-to-State Dynamical Research in the F+H <sub>2</sub> Reaction System. Springer Theses, 2014, , .	0.0	2
41	Band-Gap States of TiO <sub>2</sub> (110): Major Contribution from Surface Defects. Journal of Physical Chemistry Letters, 2013, 4, 3839-3844.	2.1	76
42	Methyl Formate Production on TiO <sub>2</sub> (110), Initiated by Methanol Photocatalysis at 400 nm. Journal of Physical Chemistry C, 2013, 117, 5293-5300.	1.5	100
43	Photocatalytic Dissociation of Ethanol on TiO <sub>2</sub> (110) by Near-Band-Gap Excitation. Journal of Physical Chemistry C, 2013, 117, 10336-10344.	1.5	37
44	Strong Photon Energy Dependence of the Photocatalytic Dissociation Rate of Methanol on TiO <sub>2</sub> (110). Journal of the American Chemical Society, 2013, 135, 19039-19045.	6.6	58
45	Kinetics and Dynamics of Photocatalyzed Dissociation of Ethanol on TiO <sub>2</sub> (110). Chinese Journal of Chemical Physics, 2013, 26, 1-7.	0.6	8
46	Stepwise Photocatalytic Dissociation of Methanol and Water on TiO <sub>2</sub> (110). Journal of the American Chemical Society, 2012, 134, 13366-13373.	6.6	244
47	Surface Photocatalysis-TPD Spectrometer for Photochemical Kinetics. Chinese Journal of Chemical Physics, 2012, 25, 507-512.	0.6	18
48	Surface photochemistry probed by two-photon photoemission spectroscopy. Energy and Environmental Science, 2012, 5, 6833.	15.6	27
49	Effect of defects on photocatalytic dissociation of methanol on TiO <sub>2</sub> (110). Chemical Science, 2011, 2, 1980.	3.7	61
50	Site-specific photocatalytic splitting of methanol on TiO <sub>2</sub> (110). Chemical Science, 2010, 1, 575.	3.7	150
51	A Surface Femtosecond Two-Photon Photoemission Spectrometer for Excited Electron Dynamics and Time-Dependent Photochemical Kinetics. Chinese Journal of Chemical Physics, 2010, 23, 255-261.	0.6	19
52	High Resolution Crossed Beams Scattering Study of the F+H <sub>2</sub> D+H Reaction. Chinese Journal of Chemical Physics, 2009, 22, 551-555.	0.6	3
53	Probing the resonance potential in the F atom reaction with hydrogen deuteride with spectroscopic accuracy. Proceedings of the National Academy of Sciences of the United States of America, 2008, 105, 12662-12666.	3.3	75
54	The Extent of Non-adiabatic Born-Oppenheimer Coupling in the Reaction of Cl( <sup>2</sup> P <sub>1/2</sub> ) with <i>para</i> -H <sub>2</sub> . Science, 2008, 322, 573-576.	6.0	95

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55	HF( $v=3$ ) forward scattering in the $F + H_2$ reaction: Shape resonance and slow-down mechanism. Proceedings of the National Academy of Sciences of the United States of America, 2008, 105, 6227-6231.	3.3	72
56	Breakdown of the Born-Oppenheimer Approximation in the $F + D_2 \rightarrow DF + D$ Reaction. Science, 2007, 317, 1061-1064.	6.0	149
57	Probing Feshbach resonances in $F+H_2(j=1) \rightarrow HF+H$ : Dynamical effect of single quantum $H_2$ -rotation. Journal of Chemical Physics, 2006, 125, 151102.	1.2	30
58	A double-stage pulsed discharge fluorine atom beam source. Review of Scientific Instruments, 2006, 77, 016102.	0.6	31
59	Observation of Feshbach Resonances in the $F + H_2 \rightarrow HF + H$ Reaction. Science, 2006, 311, 1440-1443.	6.0	278
60	Full Quantum State Resolved Scattering Dynamics of the $F+H_2HF+H$ Reaction at 5.02 kJ/mol. Chinese Journal of Chemical Physics, 2006, 19, 93-95.	0.6	15
61	High resolution time-of-flight spectrometer for crossed molecular beam study of elementary chemical reactions. Review of Scientific Instruments, 2005, 76, 083107.	0.6	29
62	Chiral Hybrid Copper(I) Halides for High Efficiency Second Harmonic Generation with a Broadband Transparency Window. Angewandte Chemie, 0, , .	1.6	7