

# Fumitaka Mafunã©

## List of Publications by Year in descending order

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61  
papers

2,311  
citations

331538

21  
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61  
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61  
docs citations

61  
times ranked

2457  
citing authors

#	ARTICLE	IF	CITATIONS
1	Formation and Size Control of Silver Nanoparticles by Laser Ablation in Aqueous Solution. <i>Journal of Physical Chemistry B</i> , 2000, 104, 9111-9117.	1.2	760
2	Structure and Stability of Silver Nanoparticles in Aqueous Solution Produced by Laser Ablation. <i>Journal of Physical Chemistry B</i> , 2000, 104, 8333-8337.	1.2	490
3	Estimation of Surface Oxide on Surfactant-Free Gold Nanoparticles Laser-Ablated in Water. <i>Journal of Physical Chemistry C</i> , 2007, 111, 17221-17226.	1.5	152
4	Nitrogen Molecule Adsorption on Cationic Tantalum Clusters and Rhodium Clusters and Desorption from Their Nitride Clusters Studied by Thermal Desorption Spectrometry. <i>Journal of Physical Chemistry A</i> , 2016, 120, 4089-4095.	1.1	50
5	Stable Stoichiometry of Gas-Phase Cerium Oxide Cluster Ions and Their Reactions with CO. <i>Journal of Physical Chemistry A</i> , 2015, 119, 1813-1819.	1.1	42
6	Microcrystal delivery by pulsed liquid droplet for serial femtosecond crystallography. <i>Acta Crystallographica Section D: Structural Biology</i> , 2016, 72, 520-523.	1.1	41
7	Degradation of Protein in Nanoplasma Generated around Gold Nanoparticles in Solution by Laser Irradiation. <i>Journal of Physical Chemistry B</i> , 2006, 110, 2393-2397.	1.2	39
8	Reactivity of Oxygen Deficient Cerium Oxide Clusters with Small Gaseous Molecules. <i>Journal of Physical Chemistry A</i> , 2015, 119, 5545-5552.	1.1	37
9	Dissociation energy for O <sub>2</sub> release from gas-phase iron oxide clusters measured by temperature-programmed desorption experiments. <i>Chemical Physics Letters</i> , 2015, 625, 104-109.	1.2	35
10	Oxidation of CO by Nickel Oxide Clusters Revealed by Post Heating. <i>Journal of Physical Chemistry A</i> , 2013, 117, 3260-3265.	1.1	34
11	Oxidation of Nitric Oxide on Gas-Phase Cerium Oxide Clusters via Reactant Adsorption and Product Desorption Processes. <i>Journal of Physical Chemistry A</i> , 2015, 119, 10255-10263.	1.1	33
12	Gold Atoms Supported on Gas-Phase Cerium Oxide Cluster Ions: Stable Stoichiometry and Reactivity with CO. <i>Journal of Physical Chemistry A</i> , 2016, 120, 7624-7633.	1.1	33
13	Reactions of Neutral Platinum Clusters with N <sub>2</sub> O and CO. <i>Journal of Physical Chemistry A</i> , 2013, 117, 12175-12183.	1.1	30
14	Thermal Desorption and Reaction of NO Adsorbed on Rhodium Cluster Ions Studied by Thermal Desorption Spectroscopy. <i>Journal of Physical Chemistry A</i> , 2015, 119, 8461-8468.	1.1	30
15	Selective Degradation of Proteins by Laser Irradiation onto Gold Nanoparticles in Solution. <i>Journal of Physical Chemistry C</i> , 2009, 113, 5027-5030.	1.5	27
16	Thermally and Chemically Stable Mixed Valence Copper Oxide Cluster Ions Revealed by Post Heating. <i>Journal of Physical Chemistry A</i> , 2013, 117, 10145-10150.	1.1	27
17	Formation of wide bandgap cerium oxide nanoparticles by laser ablation in aqueous solution. <i>Chemical Physics Letters</i> , 2014, 599, 110-115.	1.2	27
18	Reactivity Control of Rhodium Cluster Ions by Alloying with Tantalum Atoms. <i>Journal of Physical Chemistry A</i> , 2016, 120, 861-867.	1.1	22

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19	Rhodium Oxide Cluster Ions Studied by Thermal Desorption Spectrometry. Journal of Physical Chemistry A, 2016, 120, 356-363.	1.1	21
20	Adsorption Forms of NO on Rh <sub>n</sub> <sup>+</sup> ( <i>n</i> = 6–16) Revealed by Infrared Multiple Photon Dissociation Spectroscopy. Journal of Physical Chemistry C, 2017, 121, 27417-27426.	1.5	21
21	Oxophilicity as a Descriptor for NO Cleavage Efficiency over Group IX Metal Clusters. Journal of Physical Chemistry Letters, 2020, 11, 4408-4412.	2.1	21
22	Desorption Energy of Oxygen Molecule from Anionic Gold Oxide Clusters, Au <sub>n</sub> O <sub>2</sub> <sup>-</sup> , Using Thermal Desorption Spectrometry. Journal of Physical Chemistry C, 2016, 120, 23069-23073.	1.5	20
23	Adsorption of Multiple NO Molecules on Rh <sub>n</sub> <sup>+</sup> ( <i>n</i> = 6, 7) Investigated by Infrared Multiple Photon Dissociation Spectroscopy. Journal of Physical Chemistry C, 2018, 122, 22884-22891.	1.5	19
24	Tuning the Dissociative Action of Cationic Rh Clusters Toward NO by Substituting a Single Ta Atom. Journal of Physical Chemistry C, 2019, 123, 3476-3481.	1.5	19
25	Adsorption and Desorption of Hydrogen by Gas-Phase Palladium Clusters Revealed by In Situ Thermal Desorption Spectroscopy. Journal of Physical Chemistry A, 2015, 119, 6766-6772.	1.1	18
26	Zooming in on the initial steps of catalytic NO reduction using metal clusters. Physical Chemistry Chemical Physics, 2022, 24, 7595-7610.	1.3	18
27	Stable Stoichiometry of Gas-Phase Manganese Oxide Cluster Ions Revealed by Temperature-Programmed Desorption. Journal of Physical Chemistry A, 2015, 119, 8433-8442.	1.1	17
28	Release of Oxygen from Copper Oxide Cluster Ions by Heat and by Reaction with NO. Journal of Physical Chemistry C, 2015, 119, 11106-11113.	1.5	14
29	Thermal Desorption Spectroscopy Study of the Adsorption and Reduction of NO by Cobalt Cluster Ions under Thermal Equilibrium Conditions at 300 K. Journal of Physical Chemistry A, 2015, 119, 9573-9580.	1.1	13
30	Thermal desorption of oxygen from near-stoichiometric cationic vanadium oxide clusters. Chemical Physics Letters, 2016, 651, 24-27.	1.2	13
31	Self-assembly of gold nanoparticles in protein crystal. Chemical Physics Letters, 2011, 504, 175-179.	1.2	12
32	Desorption of Oxygen from Cationic Niobium Oxide Clusters Revealed by Gas Phase Thermal Desorption Spectrometry and Density Functional Theory Calculations. Journal of Physical Chemistry A, 2017, 121, 2079-2085.	1.1	12
33	Formation of Au(III)-DNA Coordinate Complex by Laser Ablation of Au Nanoparticles in Solution. Nucleosides, Nucleotides and Nucleic Acids, 2005, 24, 1215-1225.	0.4	11
34	Release of Oxygen from Palladium Oxide Cluster Ions by Heat. Journal of Physical Chemistry A, 2015, 119, 8055-8061.	1.1	11
35	Geometrical Structures of Partially Oxidized Rhodium Cluster Cations, Rh <sub>6</sub> O <sub>m</sub> <sup>+</sup> ( <i>m</i> = 4, 5, 6), Revealed by Infrared Multiple Photon Dissociation Spectroscopy. Journal of Physical Chemistry A, 2016, 120, 8599-8605.	1.1	11
36	Adsorption and Desorption of NO and NO <sub>2</sub> Molecules on Gold Cluster Anions Observed by Thermal Desorption Spectrometry. Journal of Physical Chemistry C, 2019, 123, 15575-15581.	1.5	10

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37	Induction of protein crystallization by platinum nanoparticles. <i>Chemical Physics Letters</i> , 2016, 647, 181-184.	1.2	8
38	Catalytic Decomposition of NO by Cationic Platinum Oxide Cluster Pt <sub>3</sub> O <sub>4</sub> <sup>+</sup> . <i>Journal of Physical Chemistry Letters</i> , 2017, 8, 2143-2147.	2.1	8
39	Thermal stability of iron-sulfur clusters. <i>Physical Chemistry Chemical Physics</i> , 2018, 20, 7781-7790.	1.3	8
40	Hydrophilicity and oxophilicity of the isolated CaMn <sub>4</sub> O <sub>5</sub> cationic cluster modeling inorganic core of the oxygen-evolving complex. <i>Chemical Communications</i> , 2019, 55, 14327-14330.	2.2	8
41	Oxygen Release from Cationic Niobium-Vanadium Oxide Clusters, Nb <sub>n</sub> V <sub>m</sub> O <sub>k</sub> <sup>+</sup> , Revealed by Gas Phase Thermal Desorption Spectrometry and Density Functional Theory Calculations. <i>Journal of Physical Chemistry A</i> , 2017, 121, 3864-3870.	1.1	7
42	Thermal Analysis of Hydrated Gold Cluster Cations in the Gas Phase. <i>Journal of Physical Chemistry C</i> , 2017, 121, 16291-16299.	1.5	7
43	Structures of Rhodium Oxide Cluster Cations Rh <sub>7</sub> O <sub>m</sub> <sup>+</sup> (m = 7, 12, 14) Revealed by Infrared Multiple Photon Dissociation Spectroscopy. <i>Journal of Physical Chemistry C</i> , 2019, 123, 5964-5971.	1.5	7
44	Self-assembly of positively charged platinum nanoparticles in lysozyme crystal. <i>Chemical Physics Letters</i> , 2014, 604, 110-115.	1.2	6
45	Catalytic reactions of gas phase zirconium oxide clusters with NO and CO revealed by post heating. <i>Chemical Physics Letters</i> , 2016, 660, 261-265.	1.2	6
46	Reduction Site in Ce <sub>n</sub> V <sub>m</sub> O <sub>k</sub> <sup>+</sup> Revealed by Gas Phase Thermal Desorption Spectrometry. <i>Topics in Catalysis</i> , 2018, 61, 42-48.	1.3	6
47	Adsorption Forms of Water Molecules on Gas-Phase Platinum Clusters Pt <sub>3</sub> <sup>+</sup> Studied by Vibrational Photodissociation Spectroscopy. <i>Zeitschrift Fur Physikalische Chemie</i> , 2019, 233, 881-894.	1.4	6
48	Adsorption Forms of NO on Iridium-Doped Rhodium Clusters in the Gas Phase Revealed by Infrared Multiple Photon Dissociation Spectroscopy. <i>Journal of Physical Chemistry A</i> , 2022, 126, 36-43.	1.1	6
49	Improvement of Production and Isolation of Human Neuraminidase-1 in Cellulose Crystals. <i>ACS Applied Bio Materials</i> , 2019, 2, 4941-4952.	2.3	5
50	Manipulation of protein crystals using a magnetic field by assembling Fe <sub>x</sub> O <sub>y</sub> nanoparticles. <i>Bioinspired, Biomimetic and Nanobiomaterials</i> , 0, 1-7.	0.7	5
51	Dissociative adsorption of NO introduces flexibility in gas phase Rh <sub>6</sub> <sup>+</sup> clusters leading to a rich isomeric distribution. <i>Chemical Physics Letters</i> , 2021, 780, 138937.	1.2	5
52	Structures of Nitrogen Oxides Attached to Anionic Gold Clusters Au <sub>4</sub> <sup>-</sup> Revealed by Infrared Multiple Photon Dissociation Spectroscopy. <i>Journal of Physical Chemistry A</i> , 2021, 125, 9040-9047.	1.1	4
53	Stability and Effect of Hydration on Calcium Oxide Cluster Ions, Ca <sub>n</sub> O <sub>m</sub> <sup>+</sup> , in the Gas Phase. <i>Bulletin of the Chemical Society of Japan</i> , 2018, 91, 1530-1536.	2.0	3
54	Liquid Phase Pulsed Laser Ablation on Pyrite. <i>Chemistry Letters</i> , 2019, 48, 712-714.	0.7	3

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55	Substitution of O with a Single Au Atom as an Electron Acceptor in Al Oxide Clusters. Journal of Physical Chemistry A, 2020, 124, 7511-7517.	1.1	3
56	Decomposition of nitric oxide by rhodium cluster cations at high temperatures. Physical Chemistry Chemical Physics, 2021, 23, 26721-26728.	1.3	3
57	Isomers of Anionic Gold Oxide Clusters, Au <sub>n</sub> O <sub>2</sub> <sup>-</sup> , Investigated by Thermal Desorption Spectrometry. Journal of Physical Chemistry C, 2017, 121, 8498-8503.	1.5	2
58	Effect of atomicity on the oxidation of cationic copper clusters studied using thermal desorption spectrometry. Physical Chemistry Chemical Physics, 2019, 21, 23129-23135.	1.3	2
59	Electron Donation from Cu Atoms to Al Oxide Clusters upon Mixing Revealed by Thermal Desorption Spectrometry. Journal of Physical Chemistry C, 2020, 124, 659-667.	1.5	2
60	Microcanonical Nucleation Theory for Anisotropic Materials Validated on Alumina Clusters. Journal of Physical Chemistry A, 2020, 124, 2328-2334.	1.1	1
61	Newly-developed alternate on-off gas injection method for investigation of reduction of gas-phase cobalt oxide clusters by CO at high temperature. Chemical Physics Letters, 2022, 792, 139418.	1.2	0