Ken-ichi Saitow

List of Publications by Year in Descending Order

73 papers	1,439 citations	23 h-index	34 g-index
75 ext. papers	1,593 ext. citations	4.6 avg, IF	4.85 L-index

#	Paper	IF	Citations
73	4D Microspectroscopy Explores Orientation and Aggregations in Conjugated Polymer Films Prepared by Brush Printing.. *Journal of Physical Chemistry Letters*, **2022**, 13, 653-660	6.4	1
72	Orange-Red Si Quantum Dot LEDs from Recycled Rice Husks. *ACS Sustainable Chemistry and Engineering*, **2022**, 10, 1765-1776	8.3	2
71	Cellulose-Templated Stable Foldable Oriented Films with Polarized RGB Luminescence. *Chemistry of Materials*, **2022**, 34, 1052-1064	9.6	0
70	Designing Efficient Si Quantum Dots and LEDs by Quantifying Ligand Effects.. *ACS Applied Materials & Interfaces*, **2021**,	9.5	5
69	Large Field Enhancement of Nanocoral Structures on Porous Si Synthesized from Rice Husks. *ACS Applied Materials & Interfaces*, **2021**, 13, 1105-1113	9.5	2
68	Cost-Effective Synthesis of Silicon Quantum Dots. *Chemistry of Materials*, **2020**, 32, 8382-8392	9.6	15
67	1% defect enriches MoS quantum dot: catalysis and blue luminescence. *Nanoscale*, **2020**, 12, 4352-4358	7.7	7
66	Spectral Visualization of Near-Infrared Enhancement in 2D Layered WS2. *ACS Applied Electronic Materials*, **2020**, 2, 437-446	4	3
65	Nanogap-Rich TiO Film for 2000-Fold Field Enhancement with High Reproducibility. *Journal of Physical Chemistry Letters*, **2020**, 11, 8799-8809	6.4	4
64	Brush Printing Creates Polarized Green Fluorescence: 3D Orientation Mapping and Stochastic Analysis of Conductive Polymer Films. *ACS Applied Materials & Interfaces*, **2020**, 12, 46598-46608	9.5	7
63	Mechanochemical Synthesis of Red-Light-Active Green TiO2 Photocatalysts with Disorder: Defect-Rich, with Polymorphs, and No Metal Loading. *Chemistry of Materials*, **2020**, 32, 9190-9200	9.6	15
62	Size-Selected Submicron Gold Spheres: Controlled Assembly onto Metal, Carbon, and Plastic Substrates. *ACS Omega*, **2019**, 4, 14307-14311	3.9	4
61	Performance of Si/PEDOT:PSS Solar Cell Controlled by Dipole Moment of Additives. *Journal of Physical Chemistry C*, **2019**, 123, 20130-20135	3.8	11
60	Comparison of picosecond and nanosecond lasers for the synthesis of TiN sub-micrometer spherical particles by pulsed laser melting in liquid. *Applied Physics Express*, **2018**, 11, 035001	2.4	13
59	Field enhancement of MoS: visualization of the enhancement and effect of the number of layers. *Nanoscale*, **2018**, 10, 22215-22222	7.7	5
58	Si nanocrystal solution with stability for one year.. *RSC Advances*, **2018**, 8, 41299-41307	3.7	7
57	Ultrapure Films of Polythiophene Derivatives are Born on a Substrate by Liquid Flow. *ACS Applied Energy Materials*, **2018**, 1, 6881-6889	6.1	7

56	Extraordinary Field Enhancement of TiO2 Porous Layer up to 500-Fold. *Advanced Optical Materials*, **2018**, 6, 1800462	8.1	12
55	Mechano-synthesized orange TiO shows significant photocatalysis under visible light. *Scientific Reports*, **2018**, 8, 15549	4.9	13
54	Solvent dependence of laser-synthesized blue-emitting Si nanoparticles: Size, quantum yield, and aging performance. *Chemical Physics Letters*, **2017**, 674, 90-97	2.5	26
53	Synthesis of Size-controlled Luminescent Si Nanocrystals from (HSiO1.5)nPolymers. *Chemistry Letters*, **2017**, 46, 699-702	1.7	5
52	Uniaxial orientation of P3HT film prepared by soft friction transfer method. *Scientific Reports*, **2017**, 7, 5141	4.9	20
51	Significant difference in the attractive energies of ethane and ethanol in supercritical CO2. *Journal of Supercritical Fluids*, **2017**, 120, 328-334	4.2	2
50	Solvation of Esters and Ketones in Supercritical CO2. *Journal of Physical Chemistry B*, **2016**, 120, 785-92	3.4	10
49	Enhancement of Out-of-Plane Mobilities of Three Poly(3-alkylthiophene)s and Associated Mechanism. *Journal of Physical Chemistry C*, **2016**, 120, 23351-23357	3.8	19
48	Performance of Si/PEDOT:PSS Hybrid Solar Cell Controlled by PEDOT:PSS Film Nanostructure. *Journal of Physical Chemistry C*, **2016**, 120, 19043-19048	3.8	34
47	White-blue electroluminescence from a Si quantum dot hybrid light-emitting diode. *Applied Physics Letters*, **2015**, 106, 201102	3.4	45
46	Enhancement of Out-of-plane Mobility in P3HT Film by Rubbing: Aggregation and Planarity Enhanced with Low Regioregularity. *Journal of Physical Chemistry C*, **2015**, 119, 7987-7995	3.8	37
45	Si-nanocrystal/P3HT hybrid films with a 50- and 12-fold enhancement of hole mobility and density: films prepared by successive drop casting. *Nanoscale*, **2015**, 7, 15780-8	7.7	17
44	Hole mobility enhancement of MEH-PPV film by heat treatment at Tg. *AIP Advances*, **2015**, 5, 127130	1.5	10
43	Local Structure of Supercritical Fluids and Nanomaterials Synthesis. *Review of High Pressure Science and Technology/Koatsuryoku No Kagaku To Gijutsu*, **2015**, 25, 215-224	0	
42	Local enhancement effect in the photoluminescence intensity of Si quantum dots: Single Medusa-type particles investigated by in situ microscope spectrometer. *Chemical Physics Letters*, **2014**, 591, 37-42	2.5	7
41	Enhancement of fluorescence intensity by silicon particles and its size effect. *Chemical Communications*, **2014**, 50, 1137-40	5.8	10
40	130-fold enhancement of TiO2 photocatalytic activities by ball milling. *Applied Physics Letters*, **2013**, 103, 031916	3.4	24
39	One-pot facile synthesis of a concentrated Si nanoparticle solution. *Chemical Communications*, **2013**, 49, 10302-4	5.8	15

38	Si quantum dots with a high absorption coefficient: Analysis based on both intensive and extensive variables. *Applied Physics Letters*, **2013**, 103, 151912	3.4	15
37	Investigation of attractive and repulsive interactions associated with ketones in supercritical CO2, based on Raman spectroscopy and theoretical calculations. *Journal of Chemical Physics*, **2013**, 139, 054509	3.9	7
36	White-Light-Emitting Silicon Nanocrystal Generated by Pulsed Laser Ablation in Supercritical Fluid: Investigation of Spectral Components As a Function of Excitation Wavelengths and Aging Time. *Journal of Physical Chemistry C*, **2012**, 116, 3928-3934	3.8	35
35	In situ multipurpose time-resolved spectrometer for monitoring nanoparticle generation in a high-pressure fluid. *Review of Scientific Instruments*, **2012**, 83, 073110	1.7	14
34	Fractal of Gold Nanoparticles Controlled by Ambient Dielectricity: Synthesis by Laser Ablation as a Function of Permittivity. *Journal of Physical Chemistry C*, **2012**, 116, 17252-17258	3.8	25
33	Significant substitution effects in dipolar and non-dipolar supercritical fluids. *Journal of Chemical Physics*, **2011**, 134, 234508	3.9	4
32	Site-selective solvation in supercritical CO2 observed by Raman spectroscopy: phenyl group leads to greater attractive energy than chloro group. *Journal of Physical Chemistry B*, **2010**, 114, 16832-7	3.4	9
31	Solute-solvent intermolecular interactions in supercritical Xe, SF6, CO2, and CHF3 investigated by Raman spectroscopy: greatest attractive energy observed in supercritical Xe. *Journal of Physical Chemistry B*, **2010**, 114, 8659-66	3.4	9
30	Effective Cooling Generates Efficient Emission: Blue, Green, and Red Light-Emitting Si Nanocrystals. *Journal of Physical Chemistry C*, **2009**, 113, 8465-8470	3.8	61
29	Spectrum of excess partial molar absorptivity. I. Near infrared spectroscopic study of aqueous acetonitrile and acetone. *Journal of Physical Chemistry B*, **2009**, 113, 11928-35	3.4	48
28	Solvation structures of cis- and trans-1,2-dichloroethylene in supercritical CO2 investigated by Raman spectroscopy and attractive energy calculations. *Journal of Physical Chemistry B*, **2009**, 113, 13291-9	3.4	11
27	Difference of solute-solvent interactions of cis- and trans-1,2-dichloroethylene in supercritical CO2 investigated by raman spectroscopy. *Journal of Physical Chemistry B*, **2008**, 112, 7980-3	3.4	11
26	Gold Nanospheres and Nanonecklaces Generated by Laser Ablation in Supercritical Fluid. *Journal of Physical Chemistry C*, **2008**, 112, 18340-18349	3.8	59
25	Photodissociation of CH2I2 and subsequent electron transfer in solution. *Chemistry - an Asian Journal*, **2008**, 3, 696-709	4.5	4
24	Development of a Polarized Raman Spectrometer for Supercritical Fluids Having High Critical Points. *Japanese Journal of Applied Physics*, **2006**, 45, 2801-2806	1.4	9
23	Local Structure of Supercritical Fluids Investigated by Translational, Rotational, and Vibrational Motions. *Review of High Pressure Science and Technology/Koatsuryoku No Kagaku To Gijutsu*, **2006**, 16, 120-130	0	
22	Time evolution of density fluctuation in supercritical region. I. Non-hydrogen-bonded fluids studied by dynamic light scattering. *Journal of Physical Chemistry A*, **2005**, 109, 83-91	2.8	22
21	Time evolution of density fluctuation in the supercritical region. 2. Comparison of hydrogen- and non-hydrogen-bonded fluids. *Journal of Physical Chemistry A*, **2005**, 109, 7365-70	2.8	14

20	Silicon nanoclusters selectively generated by laser ablation in supercritical fluid. *Journal of Physical Chemistry B*, **2005**, 109, 3731-3	3.4	57
19	Attractive and repulsive interactions among methanol molecules in supercritical state investigated by Raman spectroscopy and perturbed hard-sphere theory. *Journal of Chemical Physics*, **2005**, 122, 104502	3.9	27
18	How Are Hydrogen Bonds Perturbed in Aqueous NaClO4 Solutions Depending on the Concentration?: A Near Infrared Study of Water. *Journal of Solution Chemistry*, **2004**, 33, 689-698	1.8	22
17	Dynamics of density fluctuation of supercritical fluid mapped on phase diagram. *Journal of the American Chemical Society*, **2004**, 126, 422-3	16.4	38
16	Attractive and Repulsive Intermolecular Interactions of a Polar Molecule: Short-Range Structure of Neat Supercritical CHF3 Investigated by Raman Spectroscopy. *Journal of Physical Chemistry A*, **2004**, 108, 5770-5784	2.8	29
15	Phototriggered self-assembly of hydrogen-bonded rosette. *Journal of the American Chemical Society*, **2004**, 126, 11500-8	16.4	94
14	Local density enhancement in neat supercritical fluid due to attractive intermolecular interactions. *Chemical Physics Letters*, **2003**, 368, 209-214	2.5	37
13	Static inhomogeneity of supercritical ethylene studied by small-angle X-ray scattering. *Chemical Physics*, **2003**, 286, 421-430	2.3	23
12	Correlation time of density fluctuation for supercritical ethylene studied by dynamic light scattering. *Journal of Chemical Physics*, **2002**, 116, 4985	3.9	25
11	Nanosecond photo-fusion of microcrystals on a polymer film observed with time-resolved ultramicroscopy. *Journal of Photochemistry and Photobiology A: Chemistry*, **2001**, 145, 159-164	4.7	2
10	Terahertz absorption spectra of supercritical CHF3 to investigate local structure through rotational and hindered rotational motions. *Chemical Physics Letters*, **2001**, 341, 86-92	2.5	38
9	Raman spectral changes of neat CO2 across the ridge of density fluctuation in supercritical region. *Chemical Physics Letters*, **2000**, 320, 323-327	2.5	64
8	Study of inhomogeneity of supercritical water by small-angle x-ray scattering. *Journal of Chemical Physics*, **2000**, 112, 4203-4211	3.9	96
7	Supercritical-fluid cell with device of variable optical path length giving fringe-free terahertz spectra. *Review of Scientific Instruments*, **2000**, 71, 4061	1.7	14
6	Effect of hydrogen bonding on laser-induced transfer of 1-pyrenebutyric acid in solid polymers. *Chemical Physics Letters*, **1998**, 291, 433-437	2.5	9
5	Photodissociation of CH2I2 and the Subsequent Electron Transfer in Its Cluster Formed in Solution. *Springer Series in Chemical Physics*, **1998**, 624-626	0.3	
4	Formation of benzene dimer cations in neat liquid benzene studied by femtosecond transient absorption spectroscopy. *Chemical Physics Letters*, **1997**, 269, 298-304	2.5	31
3	Photo-induced reactions of CH2I2 in solution studied by the ultrafast transient absorption spectroscopy. *Chemical Physics Letters*, **1996**, 262, 621-626	2.5	52

2	Photochemical Hydrogen Abstraction in Benzophenone Single Crystal. *Molecular Crystals and Liquid Crystals*, **1996**, 277, 125-133		1
1	Triplet exciton abstracts hydrogen from diphenylmethane doped in benzophenone crystal. *Chemical Physics Letters*, **1994**, 229, 323-327	2.5	7