Tamitake Itoh

List of Publications by Year
in descending order

120	7,124	76326	58581
papers	citations	40 h-index	82 g-index

126	126	126	8046
all docs	docs citations	times ranked	citing authors

#	Article	IF	Citations
1	Present and Future of Surface-Enhanced Raman Scattering. ACS Nano, 2020, 14, 28-117.	14.6	2,153
2	Semiconductor quantum dots and metal nanoparticles: syntheses, optical properties, and biological applications. Analytical and Bioanalytical Chemistry, 2008, 391, 2469-2495.	3.7	469
3	Delivering quantum dots to cells: bioconjugated quantum dots for targeted and nonspecific extracellular and intracellular imaging. Chemical Society Reviews, 2010, 39, 3031.	38.1	338
4	Quantitative evaluation of electromagnetic enhancement in surface-enhanced resonance Raman scattering from plasmonic properties and morphologies of individual Ag nanostructures. Physical Review B, 2010, 81, .	3.2	152
5	Photosensitized Breakage and Damage of DNA by CdSeâ˜ZnS Quantum Dots. Journal of Physical Chemistry B, 2008, 112, 10005-10011.	2.6	143
6	Quenching of Photoluminescence in Conjugates of Quantum Dots and Single-Walled Carbon Nanotube. Journal of Physical Chemistry B, 2006, 110, 26068-26074.	2.6	133
7	Recent progress and frontiers in the electromagnetic mechanism of surface-enhanced Raman scattering. Journal of Photochemistry and Photobiology C: Photochemistry Reviews, 2014, 21, 81-104.	11.6	131
8	Why and how do the shapes of surfaceâ€enhanced Raman scattering spectra change? Recent progress from mechanistic studies. Journal of Raman Spectroscopy, 2016, 47, 78-88.	2.5	121
9	Plasmon-enhanced spectroscopy of absorption and spontaneous emissions explained using cavity quantum optics. Chemical Society Reviews, 2017, 46, 3904-3921.	38.1	113
10	Second enhancement in surface-enhanced resonance Raman scattering revealed by an analysis of anti-Stokes and Stokes Raman spectra. Physical Review B, 2007, 76, .	3.2	112
11	Protein-Mediated Sandwich Strategy for Surface-Enhanced Raman Scattering: Application to Versatile Protein Detection. Analytical Chemistry, 2009, 81, 3350-3355.	6.5	112
12	Surface-enhanced resonance Raman scattering and background light emission coupled with plasmon of single Ag nanoaggregates. Journal of Chemical Physics, 2006, 124, 134708.	3.0	103
13	Quantum dot-Insect Neuropeptide Conjugates for Fluorescence Imaging, Transfection, and Nucleus Targeting of Living Cells. Langmuir, 2007, 23, 10254-10261.	3.5	101
14	Clathrin-Mediated Endocytosis of Quantum Dotâ˜Peptide Conjugates in Living Cells. ACS Nano, 2009, 3, 2419-2429.	14.6	100
15	Polarization dependences of surface plasmon bands and surface-enhanced Raman bands of single Ag nanoparticles. Applied Physics Letters, 2003, 83, 2274-2276.	3.3	91
16	Porous carbon nanowire array for surface-enhanced Raman spectroscopy. Nature Communications, 2020, 11, 4772.	12.8	86
17	Photoinduced Photoluminescence Variations of CdSe Quantum Dots in Polymer Solutions. Journal of Physical Chemistry C, 2007, 111, 7924-7932.	3.1	84
18	Femtosecond light scattering spectroscopy of single gold nanoparticles. Applied Physics Letters, 2001, 79, 1667-1669.	3.3	81

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19	Photoluminescence Quenching and Intensity Fluctuations of CdSeâˆ’ZnS Quantum Dots on an Ag Nanoparticle Film. Journal of Physical Chemistry C, 2008, 112, 1345-1350.	3.1	77
20	Experimental evaluation of the twofold electromagnetic enhancement theory of surface-enhanced resonance Raman scattering. Physical Review B, 2009, 79, .	3.2	75
21	Reversible Dimerization of EGFR Revealed by Singleâ€Molecule Fluorescence Imaging Using Quantum Dots. Chemistry - A European Journal, 2010, 16, 1186-1192.	3.3	75
22	Selective Detection of HbA1c Using Surface Enhanced Resonance Raman Spectroscopy. Analytical Chemistry, 2010, 82, 1342-1348.	6.5	75
23	Blinking Suppression in CdSe/ZnS Single Quantum Dots by TiO₂ Nanoparticles. ACS Nano, 2010, 4, 4445-4454.	14.6	75
24	Quantitative evaluation of blinking in surface enhanced resonance Raman scattering and fluorescence by electromagnetic mechanism. Journal of Chemical Physics, 2012, 136, 024703.	3.0	72
25	Fundamental studies on enhancement and blinking mechanism of surface-enhanced Raman scattering (SERS) and basic applications of SERS biological sensing. Frontiers of Physics, 2014, 9, 31-46.	5.0	71
26	Imaging the cell wall of living single yeast cells using surface-enhanced Raman spectroscopy. Analytical and Bioanalytical Chemistry, 2009, 394, 1803-1809.	3.7	63
27	FRET from Quantum Dots to Photodecompose Undesired Acceptors and Report the Condensation and Decondensation of Plasmid DNA. ACS Nano, 2012, 6, 3776-3788.	14.6	61
28	Direct demonstration for changes in surface plasmon resonance induced by surface-enhanced Raman scattering quenching of dye molecules adsorbed on single Ag nanoparticles. Applied Physics Letters, 2003, 83, 5557-5559.	3.3	57
29	Hyper-Rayleigh scattering and hyper-Raman scattering of dye-adsorbed silver nanoparticles induced by a focused continuous-wave near-infrared laser. Applied Physics Letters, 2006, 88, 084102.	3.3	53
30	Surface enhanced Raman scattering analyses of individual silver nanoaggregates on living single yeast cell wall. Applied Physics Letters, 2008, 92, .	3.3	53
31	Single-molecular surface-enhanced resonance Raman scattering as a quantitative probe of local electromagnetic field: The case of strong coupling between plasmonic and excitonic resonance. Physical Review B, 2014, 89, .	3.2	53
32	Laser-induced self-assembly of silver nanoparticles via plasmonic interactions. Optics Express, 2009, 17, 18760.	3.4	49
33	Selective Optical Assembly of Highly Uniform Nanoparticles by Doughnut-Shaped Beams. Scientific Reports, 2013, 3, 3047.	3.3	47
34	A Raman Spectroscopy Study on Single-Wall Carbon Nanotube/Polystyrene Nanocomposites: Mechanical Compression Transferred from the Polymer to Single-Wall Carbon Nanotubes. Journal of Physical Chemistry C, 2012, 116, 17897-17903.	3.1	46
35	Detailed analysis of single-molecule surface-enhanced resonance Raman scattering spectra of Rhodamine 6G obtained from isolated nano-aggregates of colloidal silver. Journal of Raman Spectroscopy, 2005, 36, 593-599.	2.5	43
36	Variations in Steady-State and Time-Resolved Background Luminescence from Surface-Enhanced Resonance Raman Scattering-Active Single Ag Nanoaggregates. Journal of Physical Chemistry B, 2006, 110, 21536-21544.	2.6	43

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37	One-dimensional plasmonic hotspots located between silver nanowire dimers evaluated by surface-enhanced resonance Raman scattering. Physical Review B, 2017, 95, .	3.2	43
38	Active Tuning of Strong Coupling States between Dye Excitons and Localized Surface Plasmons via Electrochemical Potential Control. ACS Photonics, 2018, 5, 788-796.	6.6	43
39	Tip-Enhanced Raman Scattering of the Local Nanostructure of Epitaxial Graphene Grown on 4H-SiC (0001Ì…). Journal of Physical Chemistry C, 2014, 118, 25809-25815.	3.1	42
40	Recent topics on single-molecule fluctuation analysis using blinking in surface-enhanced resonance Raman scattering: clarification by the electromagnetic mechanism. Analyst, The, 2016, 141, 5000-5009.	3.5	42
41	Correlated measurements of plasmon resonance Rayleigh scattering and surface-enhanced resonance Raman scattering using a dark-field microspectroscopic system. Journal of Photochemistry and Photobiology A: Chemistry, 2006, 183, 322-328.	3.9	41
42	A study on the interaction of single-walled carbon nanotubes (SWCNTs) and polystyrene (PS) at the interface in SWCNTâ€“PS nanocomposites using tip-enhanced Raman spectroscopy. Physical Chemistry Chemical Physics, 2013, 15, 20618.	2.8	40
43	Changes in excitation profiles of surface-enhanced resonance Raman scattering induced by changes in surface plasmon resonance of single Ag nano-aggregates. Chemical Physics Letters, 2004, 389, 225-229.	2.6	39
44	Direct conversion of silver complexes to nanoscale hexagonal columns on a copper alloy for plasmonic applications. Physical Chemistry Chemical Physics, 2013, 15, 14611.	2.8	39
45	Tip-Enhanced Raman Spectroscopy Study of Local Interactions at the Interface of Styreneâ€“Butadiene Rubber/Multiwalled Carbon Nanotube Nanocomposites. Journal of Physical Chemistry C, 2013, 117, 1436-1440.	3.1	39
46	Excitation laser energy dependence of surface-enhanced fluorescence showing plasmon-induced ultrafast electronic dynamics in dye molecules. Physical Review B, 2013, 87, .	3.2	39
47	Evaluation of electromagnetic enhancement of surface enhanced hyper Raman scattering using plasmonic properties of binary active sites in single Ag nanoaggregates. Journal of Chemical Physics, 2009, 130, 214706.	3.0	38
48	Surface Plasmon Resonance Near-Infrared Spectroscopy. Analytical Chemistry, 2004, 76, 6461-6469.	6.5	37
49	Surface Enhanced Raman Scattering from Pseudoisocyanine on Ag Nanoaggregates Produced by Optical Trapping with a Linearly Polarized Laser Beam. Journal of Physical Chemistry C, 2009, 113, 11856-11860.	3.1	37
50	Elucidation of Interaction between Metal-Free Tetraphenylporphine and Surface Ag Atoms through Temporal Fluctuation of Surface-Enhanced Resonance Raman Scattering and Background-Light Emission. Journal of Physical Chemistry B, 2006, 110, 9579-9585.	2.6	32
51	Tip-enhanced Raman spectroscopic measurement of stress change in the local domain of epitaxial graphene on the carbon face of 4H-SiC(000â€“1). Physical Chemistry Chemical Physics, 2014, 16, 20236-20240.	2.8	28
52	All-dielectric chiral-field-enhanced Raman optical activity. Nature Communications, 2021, 12, 3062.	12.8	28
53	Power-law statistics in blinking SERS of thiacyanine adsorbed on a single silver nanoaggregate. Physical Chemistry Chemical Physics, 2010, 12, 7457.	2.8	27
54	Between plasmonics and surface-enhanced resonant Raman spectroscopy: toward single-molecule strong coupling at a hotspot. Nanoscale, 2021, 13, 1566-1580.	5.6	27

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55	Direct Demonstration of Environment-Sensitive Surface Plasmon Resonance Band in Single Gold Nanoparticles. Japanese Journal of Applied Physics, 2002, 41, L76-L78.	1.5	25
56	Spectral shapes of surface-enhanced resonance Raman scattering sensitive to the refractive index of media around single Ag nanoaggregates. Applied Physics Letters, 2009, 95, .	3.3	24
57	Surface Plasmon Excitation and Surface-Enhanced Raman Scattering Using Two-Dimensionally Close-Packed Gold Nanoparticles. Journal of Physical Chemistry C, 2009, 113, 11689-11694.	3.1	24
58	Power-law analysis of surface-plasmon-enhanced electromagnetic field dependence of blinking SERS of thiacyanine or thiacarbocyanine adsorbed on single silver nanoaggregates. Physical Chemistry Chemical Physics, 2011, 13, 7439.	2.8	24
59	High sensitive detection of near-infrared absorption by surface plasmon resonance. Applied Physics Letters, 2003, 83, 2232-2234.	3.3	23
60	Fluctuating single sp2 carbon clusters at single hotspots of silver nanoparticle dimers investigated by surface-enhanced resonance Raman scattering. AIP Advances, 2015, 5, .	1.3	23
61	Rapid detection of hypnotics using surface-enhanced Raman scattering based on gold nanoparticle co-aggregation in a wet system. Analyst, The, 2019, 144, 2158-2165.	3.5	23
62	Relations between Dewetting of Polymer Thin Films and Phase-Separation of Encompassed Quantum Dots. Journal of Physical Chemistry C, 2008, 112, 8184-8191.	3.1	22
63	Nanohole Processing of Polymer Films Based on the Laser-Induced Superheating of Au Nanoparticles. Applied Physics Express, 0, 1, 087001.	2.4	22
64	Laser heating effect on Raman spectra of styreneâ€“butadiene rubber/multiwalled carbon nanotube nanocomposites. Chemical Physics Letters, 2012, 523, 87-91.	2.6	22
65	Fabrication of a quantum dot-polymer matrix by layer-by-layer conjugation. Journal of Photochemistry and Photobiology A: Chemistry, 2006, 183, 285-291.	3.9	21
66	Reproduction of surface-enhanced resonant Raman scattering and fluorescence spectra of a strong coupling system composed of a single silver nanoparticle dimer and a few dye molecules. Journal of Chemical Physics, 2018, 149, 244701.	3.0	20
67	Time-resolved surface scattering imaging of organic liquids under femtosecond KrF laser pulse excitation. Applied Physics Letters, 1998, 73, 3498-3500.	3.3	19
68	Inhibition Assay of Yeast Cell Walls by Plasmon Resonance Rayleigh Scattering and Surface-Enhanced Raman Scattering Imaging. Langmuir, 2012, 28, 8952-8958.	3.5	19
69	Temperature near Gold Nanoparticles under Photoexcitation: Evaluation Using a Fluorescence Correlation Technique. Journal of Physical Chemistry C, 2013, 117, 8388-8396.	3.1	19
70	Different behaviour of molecules in dark SERS state on colloidal Ag nanoparticles estimated by truncated power law analysis of blinking SERS. Physical Chemistry Chemical Physics, 2015, 17, 21204-21210.	2.8	18
71	Truncated Power Law Analysis of Blinking SERS of Thiacyanine Molecules Adsorbed on Single Silver Nanoaggregates by Excitation at Various Wavelengths. Journal of Physical Chemistry C, 2013, 117, 9397-9403.	3.1	17
72	Absorption cross-section spectroscopy of a single strong-coupling system between plasmon and molecular exciton resonance using a single silver nanoparticle dimer generating surface-enhanced resonant Raman scattering. Physical Review B, 2019, 99, .	3.2	17

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73	Close-conjugation of quantum dots and gold nanoparticles to sidewall functionalized single-walled carbon nanotube templates. Journal of Photochemistry and Photobiology A: Chemistry, 2006, 183, 315-321.	3.9	15
74	Darkfield microspectroscopy of nanostructures on silver tip-enhanced Raman scattering probes. Applied Physics Letters, 2016, 108, .	3.3	15
75	Experimental demonstration of the electromagnetic mechanism underlying surface enhanced Raman scattering using single nanoparticle spectroscopy. Journal of Photochemistry and Photobiology A: Chemistry, 2011, 219, 167-179.	3.9	14
76	Plasmonic Imaging of Brownian Motion of Single DNA Molecules Spontaneously Binding to Ag Nanoparticles. Nano Letters, 2013, 13, 1877-1882.	9.1	14
77	Femtosecond Laser Ablation of Liquid Toluene: Molecular Mechanism Studied by Time-Resolved Absorption Spectroscopy. Journal of Physical Chemistry A, 1999, 103, 11257-11263.	2.5	13
78	Identification of Thiacyanine J-aggregates Adsorbed on Single Silver Nanoaggregates by Surface-Enhanced Raman Scattering and Emission Spectroscopy. Bulletin of the Chemical Society of Japan, 2009, 82, 1126-1132.	3.2	13
79	Analysis of excitation laser intensity dependence of blinking SERRS of thiacarbocyanine adsorbed on single silver nanoaggregates by using a power law with an exponential function. Chemical Communications, 2011, 47, 3888.	4.1	13
80	Difference in time dependence of surface-enhanced Raman scattering spectra of thiacarbocyanine J- and H-aggregates adsorbed on single silver nanoaggregates. Chemical Physics Letters, 2010, 493, 309-313.	2.6	12
81	Spectral variations in background light emission of surface-enhanced resonance hyper Raman scattering coupled with plasma resonance of individual silver nanoaggregates. Journal of Chemical Physics, 2010, 133, 124704.	3.0	12
82	Rapid detection of synthetic cannabinoids in herbal highs using surface-enhanced Raman scattering produced by gold nanoparticle co-aggregation in a wet system. Analyst, The, 2019, 144, 6928-6935.	3.5	12
83	Anti-crossing property of strong coupling system of silver nanoparticle dimers coated with thin dye molecular films analyzed by electromagnetism. Journal of Chemical Physics, 2020, 152, 054710.	3.0	12
84	Time-resolved Surface-enhanced Resonance Raman Scattering Spectra of Thiacyanine Molecules in Water. Chemistry Letters, 2009, 38, 54-55.	1.3	11
85	Surface enhanced Raman scattering spectroscopy of Ag nanoparticle aggregates directly photo-reduced on pathogenic bacterium (Helicobacter pylori). Journal of Photochemistry and Photobiology A: Chemistry, 2011, 221, 181-186.	3.9	11
86	Classification of single-molecule surface-enhanced resonance Raman spectra of Rhodamine 6G from isolated Ag colloidal particles by principal component analysis. Vibrational Spectroscopy, 2006, 40, 184-191.	2.2	10
87	Optical force enhanced by plasmon resonance allowing position-sensitive synthesis and immobilization of single Ag nanoparticles on glass surfaces. Applied Physics Letters, 2009, 94, .	3.3	10
88	Cu, Mn doping effect to optical behavior and electronic structure of ZnO ceramic. Journal of Physics and Chemistry of Solids, 2013, 74, 1127-1130.	4.0	10
89	Measurement of pH-dependent surface-enhanced hyper-Raman scattering at desired positions on yeast cells via optical trapping. Analyst, The, 2017, 142, 3967-3974.	3.5	10
90	Time-resolved ultravioletâ€“visible absorption spectroscopic study on femtosecond KrF laser ablation of liquid benzyl chloride. Chemical Physics Letters, 1999, 300, 727-733.	2.6	9

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91	Effects of a central metal on the organization of 5,10,15,20-tetra-(p-chlorophenyl)â€“rare earth porphyrin hydroxyl compound at the air/water interface and in Langmuirâ€“Blodgett films. Journal of Colloid and Interface Science, 2005, 284, 582-592.	9.4	9
92	SERRS fiber probe: fabrication of silver nanoparticles at the aperture of an optical fiber used for SNOM. Chemical Communications, 2009, , 6563.	4.1	9
93	Surface-Enhanced Raman Scattering Spectroscopy. , 2009, , 289-319.		9
94	Surface-Enhanced Raman Scattering from Photoreduced Ag Nanoaggregates on an Optically Trapped Single Bacterium. Bulletin of the Chemical Society of Japan, 2011, 84, 976-978.	3.2	9
95	Development of thin-film tunable band-pass filters based hyper-spectral imaging system applied for both surface enhanced Raman scattering and plasmon resonance Rayleigh scattering. Review of Scientific Instruments, 2012, 83, 103707.	1.3	9
96	Plasmonic staining of DNA molecules with photo-induced Ag nanoparticles monitored using dark-field microscopy. Physical Chemistry Chemical Physics, 2013, 15, 10316.	2.8	9
97	Analysis of blinking from multicoloured SERSâ€active Ag colloidal nanoaggregates with polyâ€Lâ€lysine via truncated power law. Journal of Raman Spectroscopy, 2017, 48, 570-577.	2.5	9
98	Distinguishing Enantiomers by Tipâ€Enhanced Raman Scattering: Chemically Modified Silver Tip with an Asymmetric Atomic Arrangement. Angewandte Chemie - International Edition, 2020, 59, 14564-14569.	13.8	9
99	Propagation mechanism of surface plasmons coupled with surface-enhanced resonant Raman scattering light through a one-dimensional hotspot along a silver nanowire dimer junction. Physical Review B, 2021, 103, .	3.2	9
100	Quantitative Analyses of Absorption-Sensitive Surface Plasmon Resonance Near-Infrared Spectra. Applied Spectroscopy, 2006, 60, 747-751.	2.2	8
101	Ionic Liquids on Photoinduced Nanotube Composite Arrays as a Reaction Medium. Chemistry - A European Journal, 2009, 15, 7520-7525.	3.3	8
102	Biological Applications of SERS Using Functional Nanoparticles. ACS Symposium Series, 2012, , 181-234.	0.5	7
103	Polarization dependence of tip-enhanced Raman and plasmon-resonance Rayleigh scattering spectra. Applied Physics Letters, 2017, 110, 233104.	3.3	7
104	Single-molecule photochemical reactions of Auger-ionized quantum dots. Nano Reviews, 2011, 2, 6366.	3.7	6
105	Title is missing!. ScienceAsia, 2006, 32, 261.	0.5	6
106	Wavelength-Dependent Surface-Enhanced Resonance Raman Scattering by Excitation of a Transverse Localized Surface Plasmon. Journal of Physical Chemistry C, 2009, 113, 11877-11883.	3.1	5
107	Extremely Fast-Response, Highly Nonlinear Doped-Silica Single-Mode Fibers. Japanese Journal of Applied Physics, 1996, 35, L1107-L1110.	1.5	4
108	Calculated shape dependence of electromagnetic field in tip-enhanced Raman scattering by using a monopole antenna model. Spectrochimica Acta - Part A: Molecular and Biomolecular Spectroscopy, 2018, 197, 142-147.	3.9	4

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109	Surface-Enhanced Phosphorescence Measurement by an Optically Trapped Colloidal Ag Nanoaggregate on Anionic Thiacarbocyanine H-Aggregate. Journal of Physical Chemistry C, 2013, 117, 2460-2466.	3.1	3
110	All-Solid-State Mirror-Dispersion-Controlled Sub-10 fs Ti:Sapphire Laser. Japanese Journal of Applied Physics, 1996, 35, L989-L991.	1.5	2
111	Highly Sensitive Detection of Monosaccharides on Microchip Electrophoresis Using pH Discontinuous Solution System. Analytical Sciences, 2010, 26, 731-736.	1.6	2
112	Frontiers in Electromagnetic Mechanism of SERS. , 2018, , 33-60.		2
113	A simple method for evaluation of optical scattering effect on the Raman signal of a sample beneath an Intralipid layer. Vibrational Spectroscopy, 2014, 74, 132-136.	2.2	1
114	Near-Field Interaction between Single Molecule and an Electromagnetic Field at â€œHotspotâ€•Generated by Plasmon Resonance. ACS Symposium Series, 2016, , 23-37.	0.5	1
115	Interaction between metal-free porphine and surface Ag atoms through temporal fluctuation of surface-enhanced resonance raman scattering and background-light emission. Handai Nanophotonics, 2007, 3, 161-174.	0.0	0
116	Inside Cover: Reversible Dimerization of EGFR Revealed by Single-Molecule Fluorescence Imaging Using Quantum Dots (Chem. Eur. J. 4/2010). Chemistry - A European Journal, 2010, 16, 1088-1088.	3.3	0
117	Blinking of SERRS Excited by Various Laser Intensities. , 2010, , .		0
118	SERS microscopic imaging as novel tool for assessing viability and enumerating yeast cells at various stages of cell cycle in lag, log, exponential and stationary phases of growth in culture. Journal of Experimental Nanoscience, 2014, 9, 1003-1014.	2.4	0
119	Strong interaction between dye molecule and electromagnetic field localized around 1 Nm3 at gaps of nanoparticle dimers by plasmon resonance. AIP Conference Proceedings, 2017, , .	0.4	0
120	Evaluation of probes for tip-enhanced Raman scattering by darkfield microspectroscopy and calculation. , 2017, , .		0