

# Mika Ishigaki

## List of Publications by Year in descending order

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Version: 2024-02-01

31  
papers

664  
citations

623734

14  
h-index

580821

25  
g-index

31  
all docs

31  
docs citations

31  
times ranked

553  
citing authors

#	ARTICLE	IF	CITATIONS
1	Critical evaluation of spectral information of benchtop vs. portable near-infrared spectrometers: quantum chemistry and two-dimensional correlation spectroscopy for a better understanding of PLS regression models of the rosmarinic acid content in Rosmarini folium. <i>Analyst, The</i> , 2017, 142, 455-464.	3.5	94
2	Correlations between Structure and Near-Infrared Spectra of Saturated and Unsaturated Carboxylic Acids. Insight from Anharmonic Density Functional Theory Calculations. <i>Journal of Physical Chemistry A</i> , 2017, 121, 3437-3451.	2.5	64
3	Diagnosis of early-stage esophageal cancer by Raman spectroscopy and chemometric techniques. <i>Analyst, The</i> , 2016, 141, 1027-1033.	3.5	49
4	NIR Spectra Simulations by Anharmonic DFT-Saturated and Unsaturated Long-Chain Fatty Acids. <i>Journal of Physical Chemistry B</i> , 2018, 122, 6931-6944.	2.6	39
5	Near-Infrared Spectroscopy and Imaging Studies of Fertilized Fish Eggs: In Vivo Monitoring of Egg Growth at the Molecular Level. <i>Scientific Reports</i> , 2016, 6, 20066.	3.3	38
6	Spectra-structure correlations of saturated and unsaturated medium-chain fatty acids. Near-infrared and anharmonic DFT study of hexanoic acid and sorbic acid. <i>Spectrochimica Acta - Part A: Molecular and Biomolecular Spectroscopy</i> , 2017, 185, 35-44.	3.9	38
7	Excitation wavelength selection for quantitative analysis of carotenoids in tomatoes using Raman spectroscopy. <i>Food Chemistry</i> , 2018, 258, 308-313.	8.2	37
8	Unveiling the Aggregation of Lycopene in Vitro and in Vivo: UV-Vis, Resonance Raman, and Raman Imaging Studies. <i>Journal of Physical Chemistry B</i> , 2017, 121, 8046-8057.	2.6	35
9	Non-destructive monitoring of mouse embryo development and its qualitative evaluation at the molecular level using Raman spectroscopy. <i>Scientific Reports</i> , 2017, 7, 43942.	3.3	25
10	Critical Evaluation of NIR and ATR-IR Spectroscopic Quantifications of Rosmarinic Acid in Rosmarini folium Supported by Quantum Chemical Calculations. <i>Planta Medica</i> , 2017, 83, 1076-1084.	1.3	25
11	In Vivo Monitoring of the Growth of Fertilized Eggs of Medaka Fish ( <i>Oryzias latipes</i> ) by Near-Infrared Spectroscopy and Near-Infrared Imaging—A Marked Change in the Relative Content of Weakly Hydrogen-Bonded Water in Egg Yolk Just before Hatching. <i>Molecules</i> , 2016, 21, 1003.	3.8	23
12	Nonstaining Blood Flow Imaging Using Optical Interference Due to Doppler Shift and Near-Infrared Imaging of Molecular Distribution in Developing Fish Egg Embryos. <i>Analytical Chemistry</i> , 2018, 90, 5217-5223.	6.5	19
13	NIR in vivo imaging of blood flow and molecular distribution in a developing fish egg are simultaneously obtained using imaging-type two-dimensional Fourier spectroscopy. <i>NIR News</i> , 2018, 29, 8-12.	0.3	18
14	Noninvasive, high-speed, near-infrared imaging of the biomolecular distribution and molecular mechanism of embryonic development in fertilized fish eggs. <i>Journal of Biophotonics</i> , 2018, 11, e201700115.	2.3	17
15	Non-staining visualization of embryogenesis and energy metabolism in medaka fish eggs using near-infrared spectroscopy and imaging. <i>Analyst, The</i> , 2017, 142, 4765-4772.	3.5	14
16	Assessment of Embryonic Bioactivity through Changes in the Water Structure Using Near-Infrared Spectroscopy and Imaging. <i>Analytical Chemistry</i> , 2020, 92, 8133-8141.	6.5	14
17	Theoretical Modeling of Electronic Structures of Polyiodide Species Included in $\beta$ -Cyclodextrin. <i>Journal of Physical Chemistry B</i> , 2020, 124, 4089-4096.	2.6	13
18	Exploration of Insulin Amyloid Polymorphism Using Raman Spectroscopy and Imaging. <i>Biophysical Journal</i> , 2020, 118, 2997-3007.	0.5	12

#	ARTICLE	IF	CITATIONS
19	Lipid Droplet Composition Varies Based on Medaka Fish Eggs Development as Revealed by NIR-, MIR-, and Raman Imaging. <i>Molecules</i> , 2020, 25, 817.	3.8	12
20	Effect of Raman exposure time on the quantitative and discriminant analyses of carotenoid concentrations in intact tomatoes. <i>Food Chemistry</i> , 2021, 360, 129896.	8.2	12
21	Use of the product of mean intensity ratio (PMIR) technique for discriminant analysis of lycopene-rich vegetable juice using a portable NIR-excited Raman spectrometer. <i>Food Chemistry</i> , 2018, 241, 353-357.	8.2	10
22	Near-infrared spectroscopy and imaging in protein research. , 2020, , 143-176.		10
23	Method of Monitoring the Number of Amide Bonds in Peptides Using Near-Infrared Spectroscopy. <i>Analytical Chemistry</i> , 2021, 93, 2758-2766.	6.5	9
24	Iodine staining as a useful probe for distinguishing insulin amyloid polymorphs. <i>Scientific Reports</i> , 2020, 10, 16741.	3.3	8
25	Phosphoric acid and phosphorylation levels are potential biomarkers indicating developmental competence of matured oocytes. <i>Analyst, The</i> , 2019, 144, 1527-1534.	3.5	7
26	NIR Imaging. , 2021, , 517-551.		6
27	Development of an amino acid sequence-dependent analytical method for peptides using near-infrared spectroscopy. <i>Analyst, The</i> , 2022, 147, 3634-3642.	3.5	6
28	High-Speed Scanning for the Quantitative Evaluation of Glycogen Concentration in Bioethanol Feedstock <i>Synechocystis</i> sp. PCC6803 Using a Near-Infrared Hyperspectral Imaging System with a New Near-Infrared Spectral Camera. <i>Applied Spectroscopy</i> , 2017, 71, 463-471.	2.2	5
29	In situ assessment of mitochondrial respiratory activity and lipid metabolism of mouse oocytes using resonance Raman spectroscopy. <i>Analyst, The</i> , 2021, 146, 7265-7273.	3.5	4
30	Introduction of Quantum Chemical Calculation for near Infrared Spectroscopy. <i>NIR News</i> , 2016, 27, 8-11.	0.3	1
31	&lt;i>In situ&lt;/i> Imaging of Living Organisms by Raman and Near-infrared Spectroscopies &quot; A look into the Brilliance of Life through Molecular Spectroscopies &quot;. <i>Bunseki Kagaku</i> , 2022, 71, 221-233.	0.2	0