Natalia P Ivleva

List of Publications by Year
in descending order

63 papers	7,325 citations	81900 39 h-index	114465 63 g-index
63 all docs	63 docs citations	63 times ranked	7348 citing authors

#	Article	IF	Citations
1	From the Well to the Bottle: Identifying Sources of Microplastics in Mineral Water. Water (Switzerland), 2021, 13, 841.	2.7	44
2	Which particles to select, and if yes, how many?. Analytical and Bioanalytical Chemistry, 2021, 413, 3625-3641.	3.7	12
3	Analysis of microplastics in drinking water and other clean water samples with micro-Raman and micro-infrared spectroscopy: minimum requirements and best practice guidelines. Analytical and Bioanalytical Chemistry, 2021, 413, 5969-5994.	3.7	94
4	Chemical Analysis of Microplastics and Nanoplastics: Challenges, Advanced Methods, and Perspectives. Chemical Reviews, 2021, 121, 11886-11936.	47.7	309
5	Nondestructive Chemical Analysis of the Iron-Containing Protein Ferritin Using Raman Microspectroscopy. Applied Spectroscopy, 2020, 74, 193-203.	2.2	2
6	Comment on â€œPlastic Teabags Release Billions of Microparticles and Nanoparticles into Teaâ€. Environmental Science & Technology, 2020, 54, 14134-14135.	10.0	37
7	Characterization of coatings on metallic nanoparticles by surfaceâ€enhanced Raman scattering (SERS) for environmental purposes. Vadose Zone Journal, 2020, 19, e20076.	2.2	1
8	The effect of clogging on the long-term stability of different carbon fiber brushes in microbial fuel cells for brewery wastewater treatment. Bioresource Technology Reports, 2020, 11, 100420.	2.7	10
9	Simple Generation of Suspensible Secondary Microplastic Reference Particles via Ultrasound Treatment. Frontiers in Chemistry, 2020, 8, 169.	3.6	53
10	TUM-ParticleTyper: A detection and quantification tool for automated analysis of (Microplastic) particles and fibers. PLoS ONE, 2020, 15, e0234766.	2.5	30
11	Nanoplastic Analysis by Online Coupling of Raman Microscopy and Field-Flow Fractionation Enabled by Optical Tweezers. Analytical Chemistry, 2020, 92, 5813-5820.	6.5	91
12	Comment on "exposure to microplastics (<10 Î¼m) associated to plastic bottles mineral water consumption: The first quantitative study by Zuccarello etÂal. [Water Research 157 (2019) 365â€"371]". Water Research, 2019, 162, 516-517.	11.3	12
13	Implementation of an open source algorithm for particle recognition and morphological characterisation for microplastic analysis by means of Raman microspectroscopy. Analytical Methods, 2019, 11, 3483-3489.	2.7	34
14	Investigation of multiple polymers in a denitrifying sulfur conversion-EBPR system: The structural dynamics and storage states. Water Research, 2019, 156, 179-187.	11.3	17
15	Surface-enhanced Raman spectroscopy of microorganisms: limitations and applicability on the single-cell level. Analyst, The, 2019, 144, 943-953.	3.5	37
16	Raman microspectroscopic identification of microplastic particles in freshwater bivalves (Unio) Tj ETQq0 0 0 rgBT /Overlock 10 Tf 50 14 Environmental Science and Pollution Research, 2019, 26, 2007-2012.	5.3	31
17	Methods for the analysis of submicrometer- and nanoplastic particles in the environment. TrAC - Trends in Analytical Chemistry, 2019, 112, 52-65.	11.4	289
18	Are We Speaking the Same Language? Recommendations for a Definition and Categorization Framework for Plastic Debris. Environmental Science & Technology, 2019, 53, 1039-1047.	10.0	1,322

#	ARTICLE	IF	CITATIONS
19	Towards a Surface Enhanced Raman Scattering (SERS) spectra database for synthetic organic colourants in cultural heritage. The effect of using different metal substrates on the spectra. Microchemical Journal, 2018, 138, 209-225.	4.5	23
20	Genetically Controlled Lysosomal Entrapment of Superparamagnetic Ferritin for Multimodal and Multiscale Imaging and Actuation with Low Tissue Attenuation. Advanced Functional Materials, 2018, 28, 1706793.	14.9	15
21	Variation in plastic abundance at different lake beach zones - A case study. Science of the Total Environment, 2018, 613-614, 530-537.	8.0	47
22	Stable-isotope Raman microspectroscopy for the analysis of soil organic matter. Analytical and Bioanalytical Chemistry, 2018, 410, 923-931.	3.7	10
23	Raman microspectroscopy as a tool for microplastic particle analysis. TrAC - Trends in Analytical Chemistry, 2018, 109, 214-226.	11.4	185
24	Raman microspectroscopy, surface-enhanced Raman scattering microspectroscopy, and stable-isotope Raman microspectroscopy for biofilm characterization. Analytical and Bioanalytical Chemistry, 2017, 409, 4353-4375.	3.7	58
25	Doping graphene via organic solid-solid wetting deposition. Carbon, 2017, 125, 84-92.	10.3	4
26	A multi-technique approach to assess the fate of biochar in soil and to quantify its effect on soil organic matter composition. Organic Geochemistry, 2017, 112, 177-186.	1.8	29
27	Production and characterization of long-term stable superparamagnetic iron oxide-shell silica-core nanocomposites. Journal of Magnetism and Magnetic Materials, 2017, 442, 497-503.	2.3	13
28	Microplastic in Aquatic Ecosystems. Angewandte Chemie - International Edition, 2017, 56, 1720-1739.	13.8	554
29	Expression of Active Subunit of Nitrogenase via Integration into Plant Organelle Genome. PLoS ONE, 2016, 11, e0160951.	2.5	82
30	Pigments and plastic in limnetic ecosystems: A qualitative and quantitative study on microparticles of different size classes. Water Research, 2016, 98, 64-74.	11.3	359
31	The origin of the band at around 730 cm^{âˆ’1} in the SERS spectra of bacteria: a stable isotope approach. Analyst, The, 2016, 141, 2874-2878.	3.5	65
32	Raman microspectroscopic analysis of fibers in beverages. Analytical Methods, 2016, 8, 5722-5725.	2.7	90
33	Reactivity and structure of soot generated at varying biofuel content and engine operating parameters. Combustion and Flame, 2016, 163, 157-169.	5.2	73
34	Investigation of coatings of natural organic matter on silver nanoparticles under environmentally relevant conditions by surface-enhanced Raman scattering. Science of the Total Environment, 2015, 535, 122-130.	8.0	25
35	Label-Free in Situ Discrimination of Live and Dead Bacteria by Surface-Enhanced Raman Scattering. Analytical Chemistry, 2015, 87, 6553-6561.	6.5	163
36	Surface-enhanced Raman scattering detection of bacteria on microarrays at single cell levels using silver nanoparticles. Mikrochimica Acta, 2015, 182, 2259-2266.	5.0	55

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37	Exploring the Potential of Stable Isotope (Resonance) Raman Microspectroscopy and Surface-Enhanced Raman Scattering for the Analysis of Microorganisms at Single Cell Level. Analytical Chemistry, 2015, 87, 6622-6630.	6.5	59
38	Towards a receptor-free immobilization and SERS detection of urinary tract infections causative pathogens. Analytical and Bioanalytical Chemistry, 2014, 406, 3051-3058.	3.7	53
39	SERS Detection of Bacteria in Water by in Situ Coating with Ag Nanoparticles. Analytical Chemistry, 2014, 86, 1525-1533.	6.5	346
40	Photoinduced Câ€“C Reactions on Insulators toward Photolithography of Graphene Nanoarchitectures. Journal of the American Chemical Society, 2014, 136, 4651-4658.	13.7	45
41	Internally mixed multicomponent soot: Impact of different salts on soot structure and thermo-chemical properties. Journal of Aerosol Science, 2014, 70, 26-35.	3.8	30
42	Bioaerosol analysis based on a label-free microarray readout method using surface-enhanced Raman scattering. Analytical and Bioanalytical Chemistry, 2013, 405, 5387-5392.	3.7	22
43	Identification and characterization of individual airborne volcanic ash particles by Raman microspectroscopy. Analytical and Bioanalytical Chemistry, 2013, 405, 9071-9084.	3.7	23
44	Contamination of beach sediments of a subalpine lake with microplastic particles. Current Biology, 2013, 23, R867-R868.	3.9	519
45	Sorption of Silver Nanoparticles to Environmental and Model Surfaces. Environmental Science & Technology, 2013, 47, 5083-5091.	10.0	42
46	Impact of Fe Content in Laboratory-Produced Soot Aerosol on its Composition, Structure, and Thermo-Chemical Properties. Aerosol Science and Technology, 2012, 46, 1337-1348.	3.1	62
47	A novel, highly efficient method for the separation and quantification of plastic particles in sediments of aquatic environments. Limnology and Oceanography: Methods, 2012, 10, 524-537.	2.0	468
48	Microscopic characterization of individual particles from multicomponent ship exhaust. Journal of Environmental Monitoring, 2012, 14, 3101.	2.1	40
49	Extreme Differences in Oxidation States: Synthesis and Structural Analysis of the Germanide Oxometallates A₁₀[Ge₉]₂[WO₄] As Well As A_{10+<i>x</i>}[Ge₉]₂[W_{1â€“<i>x</i>}Nb_{<i>x</i>}O₄] with A = K and Rb Containing [Ge₉]^{4â€“} Polyanions. Inorganic Chemistry, 2012, 51, 4058-4065.	4.8	8
50	Conductivity for Soot Sensing: Possibilities and Limitations. Analytical Chemistry, 2012, 84, 3586-3592.	6.5	41
51	A flow-through microarray cell for the online SERS detection of antibody-captured E. coli bacteria. Analytical and Bioanalytical Chemistry, 2012, 402, 2663-2667.	3.7	42
52	Surface Sensitive Study To Determine the Reactivity of Soot with the Focus on the European Emission Standards IV and VI. Journal of Physical Chemistry A, 2011, 115, 2568-2580.	2.5	60
53	Multiwavelength Raman Microspectroscopy for Rapid Prediction of Soot Oxidation Reactivity. Analytical Chemistry, 2011, 83, 1173-1179.	6.5	59
54	Optimized Surface-enhanced Raman Scattering (SERS) Colloids for the Characterization of Microorganisms. Analytical Sciences, 2010, 26, 761-766.	1.6	43

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55	Surface-Enhanced Raman Scattering-Based Label-Free Microarray Readout for the Detection of Microorganisms. Analytical Chemistry, 2010, 82, 2766-2772.	6.5	84
56	Label-Free in Situ SERS Imaging of Biofilms. Journal of Physical Chemistry B, 2010, 114, 10184-10194.	2.6	93
57	Synthesis of Coreâ˘Shell Surface-Enhanced Raman Tags for Bioimaging. Analytical Chemistry, 2010, 82, 441-446.	6.5	86
58	Changes in Structure and Reactivity of Soot during Oxidation and Gasification by Oxygen, Studied by Micro-Raman Spectroscopy and Temperature Programmed Oxidation. Aerosol Science and Technology, 2009, 43, 1-8.	3.1	96
59	Towards a nondestructive chemical characterization of biofilm matrix by Raman microscopy. Analytical and Bioanalytical Chemistry, 2009, 393, 197-206.	3.7	142
60	Combined use of confocal laser scanning microscopy (CLSM) and Raman microscopy (RM): Investigations on EPS â€“ Matrix. Water Research, 2009, 43, 63-76.	11.3	185
61	Soot Structure and Reactivity Analysis by Raman Microspectroscopy, Temperature-Programmed Oxidation, and High-Resolution Transmission Electron Microscopy. Journal of Physical Chemistry A, 2009, 113, 13871-13880.	2.5	149
62	In Situ Surface-Enhanced Raman Scattering Analysis of Biofilm. Analytical Chemistry, 2008, 80, 8538-8544.	6.5	97
63	Raman Microspectroscopic Analysis of Changes in the Chemical Structure and Reactivity of Soot in a Diesel Exhaust Aftertreatment Model System. Environmental Science & Technology, 2007, 41, 3702-3707.	10.0	156