

Tero Soukka

List of Publications by Year in descending order

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Version: 2024-02-01

60
papers

2,610
citations

201385

27
h-index

189595

50
g-index

62
all docs

62
docs citations

62
times ranked

2949
citing authors

#	ARTICLE	IF	CITATIONS
1	Quenching of the upconversion luminescence of NaYF ₄ :Yb ³⁺ ,Er ³⁺ and NaYF ₄ :Yb ³⁺ ,Tm ³⁺ nanophosphors by water: the role of the sensitizer Yb ³⁺ in non-radiative relaxation. <i>Nanoscale</i> , 2015, 7, 11746-11757.	2.8	267
2	Europium Nanoparticles and Time-resolved Fluorescence for Ultrasensitive Detection of Prostate-specific Antigen. <i>Clinical Chemistry</i> , 2001, 47, 561-568.	1.5	261
3	Utilization of Kinetically Enhanced Monovalent Binding Affinity by Immunoassays Based on Multivalent Nanoparticle-Antibody Bioconjugates. <i>Analytical Chemistry</i> , 2001, 73, 2254-2260.	3.2	175
4	Supersensitive Time-resolved Immunofluorometric Assay of Free Prostate-specific Antigen with Nanoparticle Label Technology. <i>Clinical Chemistry</i> , 2001, 47, 1269-1278.	1.5	133
5	Photochemical Characterization of Up-Converting Inorganic Lanthanide Phosphors as Potential Labels. <i>Journal of Fluorescence</i> , 2005, 15, 513-528.	1.3	129
6	Integrated Acoustic Separation, Enrichment, and Microchip Polymerase Chain Reaction Detection of Bacteria from Blood for Rapid Sepsis Diagnostics. <i>Analytical Chemistry</i> , 2016, 88, 9403-9411.	3.2	110
7	Ratiometric Sensing and Imaging of Intracellular pH Using Polyethylenimine-Coated Photon Upconversion Nanoprobes. <i>Analytical Chemistry</i> , 2017, 89, 1501-1508.	3.2	95
8	Photon Upconversion in Homogeneous Fluorescence-Based Bioanalytical Assays. <i>Annals of the New York Academy of Sciences</i> , 2008, 1130, 188-200.	1.8	94
9	Highly sensitive immunoassay of free prostate-specific antigen in serum using europium(III) nanoparticle label technology. <i>Clinica Chimica Acta</i> , 2003, 328, 45-58.	0.5	93
10	Upconverting nanoparticle to quantum dot FRET for homogeneous double-nano biosensors. <i>RSC Advances</i> , 2015, 5, 13270-13277.	1.7	89
11	Zeptomole detection sensitivity of prostate-specific antigen in a rapid microtitre plate assay using time-resolved fluorescence. <i>Luminescence</i> , 2000, 15, 351-355.	1.5	74
12	Disintegration of Hexagonal NaYF ₄ :Yb ³⁺ ,Er ³⁺ Upconverting Nanoparticles in Aqueous Media: The Role of Fluoride in Solubility Equilibrium. <i>Journal of Physical Chemistry C</i> , 2017, 121, 656-665.	1.5	73
13	Photon Upconversion in a Molecular Lanthanide Complex in Anhydrous Solution at Room Temperature. <i>ACS Photonics</i> , 2014, 1, 394-397.	3.2	58
14	Quantitative Multianalyte Microarray Immunoassay Utilizing Upconverting Phosphor Technology. <i>Analytical Chemistry</i> , 2012, 84, 8628-8634.	3.2	51
15	Reduction of syndecan-1 expression is associated with dysplastic oral epithelium. <i>Journal of Oral Pathology and Medicine</i> , 2000, 29, 308-313.	1.4	44
16	Upconverting nanophosphors as reporters in a highly sensitive heterogeneous immunoassay for cardiac troponin I. <i>Analytica Chimica Acta</i> , 2016, 925, 82-87.	2.6	43
17	Explaining the influence of dopant concentration and excitation power density on the luminescence and brightness of ¹² -NaYF ₄ :Yb ³⁺ ,Er ³⁺ nanoparticles: Measurements and simulations. <i>Nano Research</i> , 2019, 12, 1871-1879.	5.8	41
18	Environmental and Excitation Power Effects on the Ratiometric Upconversion Luminescence Based Temperature Sensing Using Nanocrystalline NaYF ₄ :Yb ³⁺ ,Er ³⁺ . <i>ChemPhysChem</i> , 2017, 18, 692-701.	1.0	40

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19	Decrease in Luminescence Lifetime Indicating Nonradiative Energy Transfer from Upconverting Phosphors to Fluorescent Acceptors in Aqueous Suspensions. <i>Journal of Physical Chemistry C</i> , 2011, 115, 17736-17742.	1.5	37
20	Highly Sensitive Laser Scanning of Photon-Upconverting Nanoparticles on a Macroscopic Scale. <i>Analytical Chemistry</i> , 2016, 88, 1835-1841.	3.2	35
21	Homogeneous Assay for Whole Blood Folate Using Photon Upconversion. <i>Analytical Chemistry</i> , 2015, 87, 1782-1788.	3.2	33
22	Spectrally and Spatially Multiplexed Serological Array-in-Well Assay Utilizing Two-Color Upconversion Luminescence Imaging. <i>Analytical Chemistry</i> , 2016, 88, 4470-4477.	3.2	33
23	Environmental Impact on the Excitation Path of the Red Upconversion Emission of Nanocrystalline NaYF ₄ :Yb ³⁺ ,Er ³⁺ . <i>Journal of Physical Chemistry C</i> , 2017, 121, 6924-6929.	1.5	33
24	Effects of blood sample anticoagulants on lateral flow assays using luminescent photon-upconverting and Eu(III) nanoparticle reporters. <i>Analytical Biochemistry</i> , 2016, 492, 13-20.	1.1	31
25	Emergency neck MRI: feasibility and diagnostic accuracy in cases of neck infection. <i>Acta Radiologica</i> , 2021, 62, 735-742.	0.5	30
26	Large-Scale Purification of Photon-Upconversion Nanoparticles by Gel Electrophoresis for Analogue and Digital Bioassays. <i>Analytical Chemistry</i> , 2019, 91, 1241-1246.	3.2	28
27	Enhancement of blue upconversion luminescence in hexagonal NaYF ₄ :Yb,Tm by using K and Sc ions. <i>Journal of Nanoparticle Research</i> , 2013, 15, 1.	0.8	27
28	Long-Lifetime Luminescent Europium(III) Complex as an Acceptor in an Upconversion Resonance Energy Transfer Based Homogeneous Assay. <i>Analytical Chemistry</i> , 2016, 88, 653-658.	3.2	27
29	Real-time wash-free detection of unlabeled PNA-DNA hybridization using discrete FET sensor. <i>Scientific Reports</i> , 2017, 7, 15734.	1.6	26
30	Engineering the Compositional Architecture of Core-Shell Upconverting Lanthanide-Doped Nanoparticles for Optimal Luminescent Donor in Resonance Energy Transfer: The Effects of Energy Migration and Storage. <i>Small</i> , 2022, 18, e2200464.	5.2	25
31	Multiple sized europium(III) chelate-dyed polystyrene particles as donors in FRET – an application for sensitive protein quantification utilizing competitive adsorption. <i>Analyst</i> , The, 2009, 134, 980.	1.7	23
32	Intense UV upconversion through highly sensitized NaRF ₄ :Tm (R:Y,Yb) crystals. <i>RSC Advances</i> , 2015, 5, 35858-35865.	1.7	22
33	Lateral flow immunoassay with upconverting nanoparticle-based detection for indirect measurement of interferon response by the level of MxA. <i>Journal of Medical Virology</i> , 2017, 89, 598-605.	2.5	22
34	Improving the sensitivity of immunoassays by reducing non-specific binding of poly(acrylic acid) coated upconverting nanoparticles by adding free poly(acrylic acid). <i>Mikrochimica Acta</i> , 2018, 185, 220.	2.5	20
35	Effect of Particle Size and Surface Chemistry of Photon-Upconversion Nanoparticles on Analog and Digital Immunoassays for Cardiac Troponin. <i>Advanced Healthcare Materials</i> , 2021, 10, e2100506.	3.9	20
36	Miniature Single-Particle Immunoassay for Prostate-specific Antigen in Serum Using Recombinant Fab Fragments. <i>Clinical Chemistry</i> , 2000, 46, 1755-1761.	1.5	19

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37	Photochemical Ligation to Ultrasensitive DNA Detection with Upconverting Nanoparticles. <i>Analytical Chemistry</i> , 2018, 90, 13385-13392.	3.2	18
38	Thulium- and Erbium-Doped Nanoparticles with Poly(acrylic acid) Coating for Upconversion Cross-Correlation Spectroscopy-based Sandwich Immunoassays in Plasma. <i>ACS Applied Nano Materials</i> , 2021, 4, 432-440.	2.4	17
39	Serological Array-in-Well Multiplex Assay Reveals a High Rate of Respiratory Virus Infections and Reinfections in Young Children. <i>MSphere</i> , 2019, 4, .	1.3	16
40	Upconversion Cross-Correlation Spectroscopy of a Sandwich Immunoassay. <i>Chemistry - A European Journal</i> , 2018, 24, 9229-9233.	1.7	15
41	Magnetic resonance imaging findings in pediatric neck infections—a comparison with adult patients. <i>Pediatric Radiology</i> , 2022, 52, 1158-1166.	1.1	12
42	Supersensitive photon upconversion based immunoassay for detection of cardiac troponin I in human plasma. <i>Clinica Chimica Acta</i> , 2021, 523, 380-385.	0.5	11
43	Lanthanide-based bulky counterions against aggregation-caused quenching of dyes in fluorescent polymeric nanoparticles. <i>Aggregate</i> , 2022, 3, e130.	5.2	10
44	Antibody-free lanthanide-based fluorescent probe for determination of protein tyrosine kinase and phosphatase activities. <i>Mikrochimica Acta</i> , 2011, 172, 25-29.	2.5	9
45	Nanoparticle-aided glycovariant assays to bridge biomarker performance and ctDNA results. <i>Molecular Aspects of Medicine</i> , 2020, 72, 100831.	2.7	9
46	Clinical and prognostic significance of emergency MRI findings in neck infections. <i>European Radiology</i> , 2022, 32, 1078-1086.	2.3	9
47	Frequency Encoding of Upconversion Nanoparticle Emission for Multiplexed Imaging of Spectrally and Spatially Overlapping Lanthanide Ions. <i>Journal of the American Chemical Society</i> , 2021, 143, 19399-19405.	6.6	9
48	What Digital Immunoassays Can Learn from Ambient Analyte Theory: A Perspective. <i>Analytical Chemistry</i> , 2022, 94, 6073-6083.	3.2	9
49	Lanthanide-Doped Nanoparticles for Stimulated Emission Depletion Nanoscopy. <i>ACS Applied Nano Materials</i> , 2019, 2, 5817-5823.	2.4	8
50	Array-in-well serodiagnostic assay utilizing upconverting phosphor label technology. <i>Journal of Virological Methods</i> , 2015, 222, 224-230.	1.0	7
51	Development of a Patient-Centered Functional Outcomes Questionnaire in Head and Neck Cancer. <i>JAMA Otolaryngology - Head and Neck Surgery</i> , 2020, 146, 437.	1.2	7
52	High gradient magnetic separation of upconverting lanthanide nanophosphors based on their intrinsic paramagnetism. <i>Journal of Nanoparticle Research</i> , 2013, 15, 1.	0.8	6
53	Pandemic influenza A(H1N1pdm09) vaccine induced high levels of influenza-specific IgG and IgM antibodies as analyzed by enzyme immunoassay and dual-mode multiplex microarray immunoassay methods. <i>Vaccine</i> , 2020, 38, 1933-1942.	1.7	6
54	Simple and inexpensive immunoassay-based diagnostic tests. <i>Bioanalytical Reviews</i> , 2011, 3, 27-40.	0.1	4

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55	Five-, Four- and Three-Dentate Europium Chelates for Anion Sensing and Their Applicability to Enzymatic Dephosphorylation Reactions. <i>ChemistrySelect</i> , 2018, 3, 12430-12439.	0.7	4
56	Switchable lanthanide luminescent binary probes in efficient single nucleotide mismatch discrimination. <i>Sensors and Actuators B: Chemical</i> , 2015, 211, 297-302.	4.0	3
57	Precise construction of oligonucleotide-Fab fragment conjugate for homogeneous immunoassay using HaloTag technology. <i>Analytical Biochemistry</i> , 2015, 472, 37-44.	1.1	3
58	Spacer length, label moiety interchange and probe pair orientation in a homogeneous solid-phase hybridization assay utilizing lanthanide chelate complementation. <i>Analytical Methods</i> , 2014, 6, 5360-5368.	1.3	2
59	Closed-tube human leukocyte antigen DQA1 [∗] 05 genotyping assay based on switchable lanthanide luminescence probes. <i>Analytical Biochemistry</i> , 2014, 465, 6-11.	1.1	2
60	Complement C1q in plasma induces nonspecific binding of poly(acrylic acid)-coated upconverting nanoparticle antibody conjugates. <i>Analytical and Bioanalytical Chemistry</i> , 2022, , 1.	1.9	0