Eunkeu Oh

List of Publications by Citations

102 papers	6,216 citations	39 h-index	78 g-index
110 ext. papers	7,119 ext. citations	10.2 avg, IF	5.62 L-index

#	Paper	IF	Citations
102	Functionalizing nanoparticles with biological molecules: developing chemistries that facilitate nanotechnology. *Chemical Reviews*, **2013**, 113, 1904-2074	68.1	1008
101	Inhibition assay of biomolecules based on fluorescence resonance energy transfer (FRET) between quantum dots and gold nanoparticles. *Journal of the American Chemical Society*, **2005**, 127, 3270-1	16.4	475
100	Energy Transfer with Semiconductor Quantum Dot Bioconjugates: A Versatile Platform for Biosensing, Energy Harvesting, and Other Developing Applications. *Chemical Reviews*, **2017**, 117, 536-711	68.1	439
99	The Role of Ligands in the Chemical Synthesis and Applications of Inorganic Nanoparticles. *Chemical Reviews*, **2019**, 119, 4819-4880	68.1	375
98	Cellular uptake and fate of PEGylated gold nanoparticles is dependent on both cell-penetration peptides and particle size. *ACS Nano*, **2011**, 5, 6434-48	16.7	334
97	Meta-analysis of cellular toxicity for cadmium-containing quantum dots. *Nature Nanotechnology*, **2016**, 11, 479-86	28.7	303
96	Multifunctional compact zwitterionic ligands for preparing robust biocompatible semiconductor quantum dots and gold nanoparticles. *Journal of the American Chemical Society*, **2011**, 133, 9480-96	16.4	235
95	Energy transfer-based multiplexed assay of proteases by using gold nanoparticle and quantum dot conjugates on a surface. *Analytical Chemistry*, **2008**, 80, 4634-41	7.8	167
94	One-phase synthesis of water-soluble gold nanoparticles with control over size and surface functionalities. *Langmuir*, **2010**, 26, 7604-13	4	139
93	Preparation of a magnetically switchable bio-electrocatalytic system employing cross-linked enzyme aggregates in magnetic mesocellular carbon foam. *Angewandte Chemie - International Edition*, **2005**, 44, 7427-32	16.4	128
92	Effects of ligand coordination number and surface curvature on the stability of gold nanoparticles in aqueous solutions. *Langmuir*, **2009**, 25, 10604-11	4	113
91	Selecting improved peptidyl motifs for cytosolic delivery of disparate protein and nanoparticle materials. *ACS Nano*, **2013**, 7, 3778-96	16.7	111
90	PEGylated Luminescent Gold Nanoclusters: Synthesis, Characterization, Bioconjugation, and Application to One- and Two-Photon Cellular Imaging. *Particle and Particle Systems Characterization* , **2013**, 30, 453-466	3.1	95
89	Bacterial Nanobioreactors--Directing Enzyme Packaging into Bacterial Outer Membrane Vesicles. *ACS Applied Materials & Interfaces*, **2015**, 7, 24963-72	9.5	80
88	A New Family of Pyridine-Appended Multidentate Polymers As Hydrophilic Surface Ligands for Preparing Stable Biocompatible Quantum Dots. *Chemistry of Materials*, **2014**, 26, 5327-5344	9.6	78
87	Protein kinase assay on peptide-conjugated gold nanoparticles by using secondary-ion mass spectrometric imaging. *Angewandte Chemie - International Edition*, **2007**, 46, 6816-9	16.4	74
86	Reactive semiconductor nanocrystals for chemoselective biolabeling and multiplexed analysis. *ACS Nano*, **2011**, 5, 5579-93	16.7	72

85	Nanoparticle-based energy transfer for rapid and simple detection of protein glycosylation. *Angewandte Chemie - International Edition*, **2006**, 45, 7959-63	16.4	72
84	Magnetophoretic immunoassay of allergen-specific IgE in an enhanced magnetic field gradient. *Analytical Chemistry*, **2007**, 79, 2214-20	7.8	70
83	Electric Field Modulation of Semiconductor Quantum Dot Photoluminescence: Insights Into the Design of Robust Voltage-Sensitive Cellular Imaging Probes. *Nano Letters*, **2015**, 15, 6848-54	11.5	62
82	Preparation of stable maleimide-functionalized au nanoparticles and their use in counting surface ligands. *Small*, **2010**, 6, 1273-8	11	58
81	Purple-, Blue-, and Green-Emitting Multishell Alloyed Quantum Dots: Synthesis, Characterization, and Application for Ratiometric Extracellular pH Sensing. *Chemistry of Materials*, **2017**, 29, 7330-7344	9.6	55
80	Extending FRET cascades on linear DNA photonic wires. *Chemical Communications*, **2014**, 50, 7246-9	5.8	54
79	Quantum Dot-Peptide-Fullerene Bioconjugates for Visualization of in Vitro and in Vivo Cellular Membrane Potential. *ACS Nano*, **2017**, 11, 5598-5613	16.7	53
78	Energy Transfer Sensitization of Luminescent Gold Nanoclusters: More than Just the Classical Förster Mechanism. *Scientific Reports*, **2016**, 6, 35538	4.9	53
77	Colloidal Stability of Gold Nanoparticles Coated with Multithiol-Poly(ethylene glycol) Ligands: Importance of Structural Constraints of the Sulfur Anchoring Groups. *Journal of Physical Chemistry C*, **2013**, 117, 18947-18956	3.8	53
76	Influence of luminescence quantum yield, surface coating, and functionalization of quantum dots on the sensitivity of time-resolved FRET bioassays. *ACS Applied Materials & Interfaces*, **2013**, 5, 2881-92	9.5	53
75	Concurrent Modulation of Quantum Dot Photoluminescence Using a Combination of Charge Transfer and Förster Resonance Energy Transfer: Competitive Quenching and Multiplexed Biosensing Modality. *Journal of the American Chemical Society*, **2017**, 139, 363-372	16.4	52
74	Competition between Förster resonance energy transfer and electron transfer in stoichiometrically assembled semiconductor quantum dot-fullerene conjugates. *ACS Nano*, **2013**, 7, 9489-505	16.7	52
73	Quantitative analysis of surface-immobilized protein by TOF-SIMS: effects of protein orientation and trehalose additive. *Analytical Chemistry*, **2007**, 79, 1377-85	7.8	51
72	Understanding How Nanoparticle Attachment Enhances Phosphotriesterase Kinetic Efficiency. *ACS Nano*, **2015**, 9, 8491-503	16.7	50
71	Probing the Enzymatic Activity of Alkaline Phosphatase within Quantum Dot Bioconjugates. *Journal of Physical Chemistry C*, **2015**, 119, 2208-2221	3.8	49
70	Isolation and characterization of Lactobacillus-derived membrane vesicles. *Scientific Reports*, **2019**, 9, 877	4.9	48
69	Engineering Immunological Tolerance Using Quantum Dots to Tune the Density of Self-Antigen Display. *Advanced Functional Materials*, **2017**, 27, 1700290	15.6	47
68	Understanding energy transfer with luminescent gold nanoclusters: a promising new transduction modality for biorelated applications. *Journal of Materials Chemistry B*, **2017**, 5, 7907-7926	7.3	45

67	Quantum Dot-Conjugated SARS-CoV-2 Spike Pseudo-Virions Enable Tracking of Angiotensin Converting Enzyme 2 Binding and Endocytosis. *ACS Nano*, **2020**, 14, 12234-12247	16.7	45
66	Chemoenzymatic Sensitization of DNA Photonic Wires Mediated through Quantum Dot Energy Transfer Relays. *Chemistry of Materials*, **2015**, 27, 6490-6494	9.6	44
65	Synthesis and Characterization of PEGylated Luminescent Gold Nanoclusters Doped with Silver and Other Metals. *Chemistry of Materials*, **2016**, 28, 8676-8688	9.6	42
64	On-chip detection of protein glycosylation based on energy transfer between nanoparticles. *Biosensors and Bioelectronics*, **2009**, 24, 1189-94	11.8	41
63	The SARS-CoV-2 Cytopathic Effect Is Blocked by Lysosome Alkalizing Small Molecules. *ACS Infectious Diseases*, **2021**, 7, 1389-1408	5.5	39
62	Gold nanoparticle-enhanced secondary ion mass spectrometry imaging of peptides on self-assembled monolayers. *Analytical Chemistry*, **2006**, 78, 1913-20	7.8	38
61	Three-Dimensional Solution-Phase Fluster Resonance Energy Transfer Analysis of Nanomolar Quantum Dot Bioconjugates with Subnanometer Resolution. *Chemistry of Materials*, **2014**, 26, 4299-4312	9.6	35
60	Enhancing Coupled Enzymatic Activity by Colocalization on Nanoparticle Surfaces: Kinetic Evidence for Directed Channeling of Intermediates. *ACS Nano*, **2018**, 12, 7911-7926	16.7	32
59	Water-Soluble, Thermostable, Photomodulated Color-Switching Quantum Dots. *Chemistry - A European Journal*, **2017**, 23, 263-267	4.8	31
58	Enhancing coupled enzymatic activity by conjugating one enzyme to a nanoparticle. *Nanoscale*, **2017**, 9, 5172-5187	7.7	30
57	Elucidating Surface Ligand-Dependent Kinetic Enhancement of Proteolytic Activity at Surface-Modified Quantum Dots. *ACS Nano*, **2017**, 11, 5884-5896	16.7	28
56	Probing the kinetics of quantum dot-based proteolytic sensors. *Analytical and Bioanalytical Chemistry*, **2015**, 407, 7307-18	4.4	28
55	Intracellularly Actuated Quantum Dot-Peptide-Doxorubicin Nanobioconjugates for Controlled Drug Delivery via the Endocytic Pathway. *Bioconjugate Chemistry*, **2018**, 29, 136-148	6.3	28
54	Quantum dot display enhances activity of a phosphotriesterase trimer. *Chemical Communications*, **2015**, 51, 6403-6	5.8	27
53	Multimodal characterization of a linear DNA-based nanostructure. *ACS Nano*, **2012**, 6, 1026-43	16.7	27
52	Enhanced enzymatic activity from phosphotriesterase trimer gold nanoparticle bioconjugates for pesticide detection. *Analyst, The*, **2017**, 142, 3261-3271	5	26
51	Bayesian Network Resource for Meta-Analysis: Cellular Toxicity of Quantum Dots. *Small*, **2019**, 15, e1900510	13	25
50	Examining the Polyproline Nanoscopic Ruler in the Context of Quantum Dots. *Chemistry of Materials*, **2015**, 27, 6222-6237	9.6	25

49	Quantum Dot Encapsulation Using a Peptide-Modified Tetrahedral DNA Cage. *Chemistry of Materials*, **2017**, 29, 5762-5766	9.6	24
48	Bridging Lanthanide to Quantum Dot Energy Transfer with a Short-Lifetime Organic Dye. *Journal of Physical Chemistry Letters*, **2017**, 8, 2182-2188	6.4	22
47	Nanoparticle cellular uptake by dendritic wedge peptides: achieving single peptide facilitated delivery. *Nanoscale*, **2017**, 9, 10447-10464	7.7	22
46	Assembling high activity phosphotriesterase composites using hybrid nanoparticle peptide-DNA scaffolded architectures. *Nano Futures*, **2017**, 1, 011002	3.6	19
45	Nanoparticle Size Influences Localized Enzymatic Enhancement-A Case Study with Phosphotriesterase. *Bioconjugate Chemistry*, **2019**, 30, 2060-2074	6.3	18
44	Cholesterol Functionalization of Gold Nanoparticles Enhances Photoactivation of Neural Activity. *ACS Chemical Neuroscience*, **2019**, 10, 1478-1487	5.7	18
43	A Quantum Dot-Protein Bioconjugate That Provides for Extracellular Control of Intracellular Drug Release. *Bioconjugate Chemistry*, **2018**, 29, 2455-2467	6.3	16
42	Efficient excitation of the TE(01) hollow metal waveguide mode for atom guiding. *Optics Express*, **2010**, 18, 323-32	3.3	15
41	One-pot aqueous phase growth of biocompatible 15-130 nm gold nanoparticles stabilized with bidentate PEG. *Journal of Colloid and Interface Science*, **2012**, 376, 107-11	9.3	14
40	Kinetic enhancement in high-activity enzyme complexes attached to nanoparticles. *Nanoscale Horizons*, **2017**, 2, 241-252	10.8	14
39	Femtosecond Laser Pulse Excitation of DNA-Labeled Gold Nanoparticles: Establishing a Quantitative Local Nanothermometer for Biological Applications. *ACS Nano*, **2020**, 14, 8570-8583	16.7	14
38	Nanoparticle-Peptide-Drug Bioconjugates for Unassisted Defeat of Multidrug Resistance in a Model Cancer Cell Line. *Bioconjugate Chemistry*, **2019**, 30, 525-530	6.3	13
37	Transducing Protease Activity into DNA Output for Developing Smart Bionanosensors. *Small*, **2019**, 15, e1805384	11	12
36	Utility of PEGylated dithiolane ligands for direct synthesis of water-soluble Au, Ag, Pt, Pd, Cu and AuPt nanoparticles. *Chemical Communications*, **2018**, 54, 1956-1959	5.8	12
35	Lipid Raft-Mediated Membrane Tethering and Delivery of Hydrophobic Cargos from Liquid Crystal-Based Nanocarriers. *Bioconjugate Chemistry*, **2016**, 27, 982-93	6.3	12
34	Probing the Quenching of Quantum Dot Photoluminescence by Peptide-Labeled Ruthenium(II) Complexes. *Journal of Physical Chemistry C*, **2014**, 118, 9239-9250	3.8	12
33	Magnetic nanoclusters for ultrasensitive magnetophoretic assays. *Small*, **2009**, 5, 2243-6	11	12
32	Protein Kinase Assay on Peptide-Conjugated Gold Nanoparticles by Using Secondary-Ion Mass Spectrometric Imaging. *Angewandte Chemie*, **2007**, 119, 6940-6943	3.6	12

31	Conjugation of biotin-coated luminescent quantum dots with single domain antibody-rhizavidin fusions. *Biotechnology Reports (Amsterdam, Netherlands)*, **2016**, 10, 56-65	5.3	12
30	Hybrid Liquid Crystal Nanocarriers for Enhanced Zinc Phthalocyanine-Mediated Photodynamic Therapy. *Bioconjugate Chemistry*, **2018**, 29, 2701-2714	6.3	11
29	Modulation of Intracellular Quantum Dot to Fluorescent Protein Förster Resonance Energy Transfer via Customized Ligands and Spatial Control of Donor-Acceptor Assembly. *Sensors*, **2015**, 15, 30457-68	3.8	11
28	Nanoparticle-Based Energy Transfer for Rapid and Simple Detection of Protein Glycosylation. *Angewandte Chemie*, **2006**, 118, 8127-8131	3.6	11
27	Analyzing fidelity and reproducibility of DNA templated plasmonic nanostructures. *Nanoscale*, **2019**, 11, 20693-20706	7.7	11
26	DNA–Nanoparticle Composites Synergistically Enhance Organophosphate Hydrolase Enzymatic Activity. *ACS Applied Nano Materials*, **2018**, 1, 3091-3097	5.6	10
25	Gold nanoparticle-enhanced secondary ion mass spectrometry and its bio-applications. *Applied Surface Science*, **2008**, 255, 1064-1067	6.7	10
24	Exploring attachment chemistry with FRET in hybrid quantum dot dye-labeled DNA dendrimer composites. *Molecular Systems Design and Engineering*, **2018**, 3, 314-327	4.6	8
23	Direct and Efficient Conjugation of Quantum Dots to DNA Nanostructures with Peptide-PNA. *ACS Nano*, **2021**, 15, 9101-9110	16.7	8
22	A Multiparametric Evaluation of Quantum Dot Size and Surface-Grafted Peptide Density on Cellular Uptake and Cytotoxicity. *Bioconjugate Chemistry*, **2020**, 31, 1077-1087	6.3	7
21	Gold Nanoparticle Templating Increases the Catalytic Rate of an Amylase, Maltase, and Glucokinase Multienzyme Cascade through Substrate Channeling Independent of Surface Curvature. *ACS Catalysis*, **2021**, 11, 627-638	13.1	7
20	Fabrication of Photoluminescent Quantum Dot Thiol-yne Nanocomposites via Thermal Curing or Photopolymerization. *ACS Omega*, **2018**, 3, 3314-3320	3.9	6
19	Effects of shell thickness on the electric field dependence of exciton recombination in CdSe/CdS core/shell quantum dots. *Optical Materials Express*, **2017**, 7, 1871	2.6	5
18	Display of Potassium Channel-Blocking Tertiapin-Q Peptides on Gold Nanoparticles Enhances Depolarization of Cellular Membrane Potential. *Particle and Particle Systems Characterization*, **2019**, 36, 1800493	3.1	3
17	Gold-Nanoparticle-Mediated Depolarization of Membrane Potential Is Dependent on Concentration and Tethering Distance from the Plasma Membrane. *Bioconjugate Chemistry*, **2020**, 31, 567-576	6.3	3
16	Self-assembled nanoparticle-enzyme aggregates enhance functional protein production in pure transcription-translation systems.. *PLoS ONE*, **2022**, 17, e0265274	3.7	3
15	Anionic Conjugated Polyelectrolytes for FRET-based Imaging of Cellular Membrane Potential. *Photochemistry and Photobiology*, **2020**, 96, 834-844	3.6	2
14	Targeted Plasma Membrane Delivery of a Hydrophobic Cargo Encapsulated in a Liquid Crystal Nanoparticle Carrier. *Journal of Visualized Experiments*, **2017**,	1.6	2

13	Polyhistidine-Tag-Enabled Conjugation of Quantum Dots and Enzymes to DNA Nanostructures. *Methods in Molecular Biology*, **2022**, 61-91	1.4	2
12	Semiconductor quantum dots as Förster resonance energy transfer donors for intracellularly-based biosensors **2017**,		1
11	Modified kinetics of enzymes interacting with nanoparticles **2015**,		1
10	Understanding the Enhanced Kinetics of Enzyme-Quantum Dot Constructs. *MRS Advances*, **2016**, 1, 3831-3836	0.7	1
9	Imaging cellular membrane potential through ionization of quantum dots **2016**,		1
8	Recent development of dihydrolipoic acid appended ligands for robust and biocompatible quantum dots **2013**,		1
7	The humanized nanobody RBD-1-2G tolerates the spike N501Y mutation to neutralize SARS-CoV-2 **2021**,		1
6	Liquid Crystal Nanoparticle Conjugates for Scavenging Reactive Oxygen Species in Live Cells. *Pharmaceuticals*, **2022**, 15, 604	5.2	1
5	Fluorescent quantum dots enable SARS-CoV-2 antiviral drug discovery and development. *Expert Opinion on Drug Discovery*, **2021**, 1-6	6.2	0
4	Affinity Immobilization of Semiconductor Quantum Dots and Metal Nanoparticles on Cellulose Paper Substrates. *ACS Applied Materials & Interfaces*, **2020**, 12, 53462-53474	9.5	0
3	Excited-State Dynamics of Photoluminescent Gold Nanoclusters and Their Assemblies with Quantum Dot Donors. *Journal of Physical Chemistry C*, **2021**, 125, 12073-12085	3.8	0
2	In Situ Self-Assembly of Quantum Dots at the Plasma Membrane Mediates Energy Transfer-Based Activation of Channelrhodopsin. *Particle and Particle Systems Characterization*, **2021**, 38, 2100053	3.1	
1	Quantum dot-enabled membrane-tethering and enhanced photoactivation of chlorin-e6. *Journal of Nanoparticle Research*, **2021**, 23, 1	2.3	