

# Ellen R Goldman

## List of Publications by Year in descending order

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114  
papers

14,249  
citations

101543

36  
h-index

23533

111  
g-index

120  
all docs

120  
docs citations

120  
times ranked

14385  
citing authors

#	ARTICLE	IF	CITATIONS
1	Quantum dot bioconjugates for imaging, labelling and sensing. <i>Nature Materials</i> , 2005, 4, 435-446.	27.5	5,774
2	Self-Assembly of CdSe/ZnS Quantum Dot Bioconjugates Using an Engineered Recombinant Protein. <i>Journal of the American Chemical Society</i> , 2000, 122, 12142-12150.	13.7	1,675
3	Self-assembled nanoscale biosensors based on quantum dot FRET donors. <i>Nature Materials</i> , 2003, 2, 630-638.	27.5	1,541
4	Multiplexed Toxin Analysis Using Four Colors of Quantum Dot Fluororeagents. <i>Analytical Chemistry</i> , 2004, 76, 684-688.	6.5	652
5	A Hybrid Quantum Dot/Antibody Fragment Fluorescence Resonance Energy Transfer-Based TNT Sensor. <i>Journal of the American Chemical Society</i> , 2005, 127, 6744-6751.	13.7	562
6	Avidin: A Natural Bridge for Quantum Dot-Antibody Conjugates. <i>Journal of the American Chemical Society</i> , 2002, 124, 6378-6382.	13.7	518
7	Conjugation of Luminescent Quantum Dots with Antibodies Using an Engineered Adaptor Protein To Provide New Reagents for Fluoroimmunoassays. <i>Analytical Chemistry</i> , 2002, 74, 841-847.	6.5	430
8	Facile Generation of Heat-Stable Antiviral and Antitoxin Single Domain Antibodies from a Semisynthetic Llama Library. <i>Analytical Chemistry</i> , 2006, 78, 8245-8255.	6.5	169
9	Assembling programmable FRET-based photonic networks using designer DNA scaffolds. <i>Nature Communications</i> , 2014, 5, 5615.	12.8	142
10	Luminescent quantum dots in immunoassays. <i>Analytical and Bioanalytical Chemistry</i> , 2006, 384, 560-563.	3.7	106
11	Selection of cholera toxin specific IgNAR single-domain antibodies from a naïve shark library. <i>Molecular Immunology</i> , 2007, 44, 1775-1783.	2.2	104
12	Self-assembled luminescent CdSe/ZnS quantum dot bioconjugates prepared using engineered poly-histidine terminated proteins. <i>Analytica Chimica Acta</i> , 2005, 534, 63-67.	5.4	96
13	High affinity nanobodies block SARS-CoV-2 spike receptor binding domain interaction with human angiotensin converting enzyme. <i>Scientific Reports</i> , 2020, 10, 22370.	3.3	95
14	TNT Detection Using Multiplexed Liquid Array Displacement Immunoassays. <i>Analytical Chemistry</i> , 2006, 78, 2279-2285.	6.5	86
15	Enhancing Stability of Camelid and Shark Single Domain Antibodies: An Overview. <i>Frontiers in Immunology</i> , 2017, 8, 865.	4.8	68
16	FRET from Multiple Pathways in Fluorophore-Labeled DNA. <i>ACS Photonics</i> , 2016, 3, 659-669.	6.6	63
17	Achieving Effective Terminal Exciton Delivery in Quantum Dot Antenna-Sensitized Multistep DNA Photonic Wires. <i>ACS Nano</i> , 2013, 7, 7101-7118.	14.6	61
18	Development of Antiricin Single Domain Antibodies Toward Detection and Therapeutic Reagents. <i>Analytical Chemistry</i> , 2008, 80, 9604-9611.	6.5	58

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19	Single domain antibody-quantum dot conjugates for ricin detection by both fluoroimmunoassay and surface plasmon resonance. <i>Analytica Chimica Acta</i> , 2013, 786, 132-138.	5.4	58
20	Analysis of aqueous 2,4,6-trinitrotoluene (TNT) using a fluorescent displacement immunoassay. <i>Analytical and Bioanalytical Chemistry</i> , 2003, 375, 471-475.	3.7	55
21	Resonance Energy Transfer in DNA Duplexes Labeled with Localized Dyes. <i>Journal of Physical Chemistry B</i> , 2014, 118, 14555-14565.	2.6	55
22	Oriented Immobilization of Single-Domain Antibodies Using SpyTag/SpyCatcher Yields Improved Limits of Detection. <i>Analytical Chemistry</i> , 2019, 91, 9424-9429.	6.5	54
23	Isolation of anti-toxin single domain antibodies from a semi-synthetic spiny dogfish shark display library. <i>BMC Biotechnology</i> , 2007, 7, 78.	3.3	53
24	Thermostable Llama Single Domain Antibodies for Detection of Botulinum A Neurotoxin Complex. <i>Analytical Chemistry</i> , 2008, 80, 8583-8591.	6.5	49
25	TNT detection using llama antibodies and a two-step competitive fluid array immunoassay. <i>Journal of Immunological Methods</i> , 2008, 339, 47-54.	1.4	46
26	Binding Kinetics of Antiricin Single Domain Antibodies and Improved Detection Using a B Chain Specific Binder. <i>Analytical Chemistry</i> , 2010, 82, 7202-7207.	6.5	45
27	Optimizing Protein Coordination to Quantum Dots with Designer Peptidyl Linkers. <i>Bioconjugate Chemistry</i> , 2013, 24, 269-281.	3.6	45
28	Ultrasensitive Detection of Ricin Toxin in Multiple Sample Matrixes Using Single-Domain Antibodies. <i>Analytical Chemistry</i> , 2015, 87, 6570-6577.	6.5	45
29	Utilizing HomoFRET to Extend DNA-scaffolded Photonic Networks and Increase Light-Harvesting Capability. <i>Advanced Optical Materials</i> , 2018, 6, 1700679.	7.3	44
30	Evaluation of Disulfide Bond Position to Enhance the Thermal Stability of a Highly Stable Single Domain Antibody. <i>PLoS ONE</i> , 2014, 9, e115405.	2.5	43
31	Extending DNA-Based Molecular Photonic Wires with Homogeneous Förster Resonance Energy Transfer. <i>Advanced Optical Materials</i> , 2016, 4, 399-412.	7.3	43
32	Thermal stability and refolding capability of shark derived single domain antibodies. <i>Molecular Immunology</i> , 2014, 59, 194-199.	2.2	41
33	2,4,6-Trinitrotoluene detection using recombinant antibodies. <i>Journal of Environmental Monitoring</i> , 2003, 5, 380.	2.1	40
34	Rugged Single Domain Antibody Detection Elements for Bacillus anthracis Spores and Vegetative Cells. <i>PLoS ONE</i> , 2012, 7, e32801.	2.5	40
35	Isolation of a Highly Thermal Stable Lama Single Domain Antibody Specific for Staphylococcus aureus Enterotoxin B. <i>BMC Biotechnology</i> , 2011, 11, 86.	3.3	38
36	Enhanced production of a single domain antibody with an engineered stabilizing extra disulfide bond. <i>Microbial Cell Factories</i> , 2015, 14, 158.	4.0	37

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37	Immunodiagnostic reagents using llama single domain antibody-alkaline phosphatase fusion proteins. <i>Analytical Biochemistry</i> , 2011, 417, 188-194.	2.4	35
38	A triangular three-dye DNA switch capable of reconfigurable molecular logic. <i>RSC Advances</i> , 2014, 4, 48860-48871.	3.6	35
39	Improving the biophysical properties of anti-ricin single-domain antibodies. <i>Biotechnology Reports (Amsterdam, Netherlands)</i> , 2015, 6, 27-35.	4.4	35
40	Enhanced stabilization of a stable single domain antibody for SEB toxin by random mutagenesis and stringent selection. <i>Protein Engineering, Design and Selection</i> , 2014, 27, 89-95.	2.1	34
41	Ricin Detection Using Phage Displayed Single Domain Antibodies. <i>Sensors</i> , 2009, 9, 542-555.	3.8	33
42	Single domain antibody-alkaline phosphatase fusion proteins for antigen detection - Analysis of affinity and thermal stability of single domain antibody. <i>Journal of Immunological Methods</i> , 2013, 393, 1-7.	1.4	33
43	Contributions of the Complementarity Determining Regions to the Thermal Stability of a Single-Domain Antibody. <i>PLoS ONE</i> , 2013, 8, e77678.	2.5	33
44	Detection of 2,4,6-Trinitrotoluene in Environmental Samples Using a Homogeneous Fluoroimmunoassay. <i>Environmental Science &amp; Technology</i> , 2003, 37, 4733-4736.	10.0	31
45	Fluoroimmunoassays Using Antibody-Conjugated Quantum Dots. , 2005, 303, 019-034.		30
46	Comparison of single domain antibody immobilization strategies evaluated by surface plasmon resonance. <i>Journal of Immunological Methods</i> , 2013, 388, 68-77.	1.4	30
47	Single-Domain Antibodies for the Detection of SARS-CoV-2 Nucleocapsid Protein. <i>Analytical Chemistry</i> , 2021, 93, 7283-7291.	6.5	30
48	Next-Generation Sequencing of a Single Domain Antibody Repertoire Reveals Quality of Phage Display Selected Candidates. <i>PLoS ONE</i> , 2016, 11, e0149393.	2.5	30
49	Llama-derived single-domain antibodies for the detection of botulinum A neurotoxin. <i>Analytical and Bioanalytical Chemistry</i> , 2010, 398, 339-348.	3.7	29
50	Dendrimeric DNA Nanostructures as Scaffolds for Efficient Bidirectional BRET-FRET Cascades. <i>Advanced Optical Materials</i> , 2017, 5, 1700181.	7.3	27
51	Amplification of immunoassays using phage-displayed single domain antibodies. <i>Journal of Immunological Methods</i> , 2010, 352, 182-185.	1.4	25
52	Improved production of single domain antibodies with two disulfide bonds by co-expression of chaperone proteins in the Escherichia coli periplasm. <i>Journal of Immunological Methods</i> , 2017, 443, 64-67.	1.4	24
53	Selection, characterization, and thermal stabilization of llama single domain antibodies towards Ebola virus glycoprotein. <i>Microbial Cell Factories</i> , 2017, 16, 223.	4.0	24
54	Expanding molecular logic capabilities in DNA-scaffolded multiFRET triads. <i>RSC Advances</i> , 2016, 6, 97587-97598.	3.6	23

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55	Evaluation of anti-botulinum neurotoxin single domain antibodies with additional optimization for improved production and stability. <i>Toxicon</i> , 2017, 135, 51-58.	1.6	23
56	Selection and characterization of protective anti-chikungunya virus single domain antibodies. <i>Molecular Immunology</i> , 2019, 105, 190-197.	2.2	23
57	Development and Evaluation of Single Domain Antibodies for Vaccinia and the L1 Antigen. <i>PLoS ONE</i> , 2014, 9, e106263.	2.5	23
58	Multiplexed fluid array screening of phage displayed anti-ricin single domain antibodies for rapid assessment of specificity. <i>BioTechniques</i> , 2007, 43, 806-811.	1.8	22
59	Llama-Derived Single Domain Antibodies Specific for Abrus Agglutinin. <i>Toxins</i> , 2011, 3, 1405-1419.	3.4	22
60	Thermostable single domain antibody-maltose binding protein fusion for Bacillus anthracis spore protein BclA detection. <i>Analytical Biochemistry</i> , 2014, 447, 64-73.	2.4	22
61	Negative tail fusions can improve ruggedness of single domain antibodies. <i>Protein Expression and Purification</i> , 2014, 95, 226-232.	1.3	22
62	Bioconjugates of rhizavidin with single domain antibodies as bifunctional immunoreagents. <i>Journal of Immunological Methods</i> , 2014, 411, 37-42.	1.4	22
63	Detection of proteins cross-linked within galactoside polyacrylate-based hydrogels by means of a quantum dot fluororeagent. <i>Analytical and Bioanalytical Chemistry</i> , 2004, 380, 880-886.	3.7	20
64	Comparison of an antibody and its recombinant derivative for the detection of the small molecule explosive 2,4,6-trinitrotoluene. <i>Analytica Chimica Acta</i> , 2013, 759, 100-104.	5.4	20
65	Selection and evaluation of single domain antibodies toward MS2 phage and coat protein. <i>Molecular Immunology</i> , 2013, 53, 118-125.	2.2	19
66	Selection and Characterization of Anti-Dengue NS1 Single Domain Antibodies. <i>Scientific Reports</i> , 2018, 8, 18086.	3.3	19
67	Linking Single Domain Antibodies that Recognize Different Epitopes on the Same Target. <i>Biosensors</i> , 2012, 2, 43-56.	4.7	17
68	Thermal stabilization of anti- $\beta$ -cobratoxin single domain antibodies. <i>Toxicon</i> , 2017, 129, 68-73.	1.6	17
69	Conjugation of biotin-coated luminescent quantum dots with single domain antibody-rhizavidin fusions. <i>Biotechnology Reports (Amsterdam, Netherlands)</i> , 2016, 10, 56-65.	4.4	16
70	Stability of isolated antibody-antigen complexes as a predictive tool for selecting toxin neutralizing antibodies. <i>MABs</i> , 2017, 9, 43-57.	5.2	16
71	Transducing Protease Activity into DNA Output for Developing Smart Bionanosensors. <i>Small</i> , 2019, 15, 1805384.	10.0	16
72	TEM imaging of unstained DNA nanostructures using suspended graphene. <i>Soft Matter</i> , 2013, 9, 1414-1417.	2.7	15

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73	Optimizing Nanoplasmonic Biosensor Sensitivity with Orientated Single Domain Antibodies. <i>Plasmonics</i> , 2015, 10, 1649-1655.	3.4	15
74	Restriction Enzymes as a Target for DNA-Based Sensing and Structural Rearrangement. <i>ACS Omega</i> , 2018, 3, 495-502.	3.5	15
75	Single domain antibody templated nanoparticle resistors for sensing. <i>Biosensors and Bioelectronics</i> , 2010, 25, 1908-1913.	10.1	14
76	Comparison of Immunoreactivity of Staphylococcal Enterotoxin B Mutants for Use as Toxin Surrogates. <i>Analytical Chemistry</i> , 2012, 84, 5198-5203.	6.5	14
77	Multi-Enzyme Assembly on T4 Phage Scaffold. <i>Frontiers in Bioengineering and Biotechnology</i> , 2020, 8, 571.	4.1	14
78	Understanding Förster Resonance Energy Transfer in the Sheet Regime with DNA Brick-Based Dye Networks. <i>ACS Nano</i> , 2021, 15, 16452-16468.	14.6	14
79	Selection and Characterization of Single Domain Antibodies Specific for Bacillus anthracis Spore Proteins. <i>Antibodies</i> , 2013, 2, 152-167.	2.5	13
80	Orthogonal Synthetic Zippers as Protein Scaffolds. <i>ACS Omega</i> , 2018, 3, 4810-4815.	3.5	13
81	Importance of Hypervariable Region 2 for Stability and Affinity of a Shark Single-Domain Antibody Specific for Ebola Virus Nucleoprotein. <i>PLoS ONE</i> , 2016, 11, e0160534.	2.5	11
82	Evaluation of llama anti-botulinum toxin Heavy chain Antibody. <i>Botulinum Journal</i> , 2008, 1, 100.	0.2	10
83	Monitoring of Enzymatic Proteolysis Using Self-Assembled Quantum Dot-Protein Substrate Sensors. <i>Journal of Sensors</i> , 2008, 2008, 1-10.	1.1	10
84	Isolation and Epitope Mapping of Staphylococcal Enterotoxin B Single-Domain Antibodies. <i>Sensors</i> , 2014, 14, 10846-10863.	3.8	10
85	Label free checkerboard assay to determine overlapping epitopes of Ebola virus VP-40 antibodies using surface plasmon resonance. <i>Journal of Immunological Methods</i> , 2017, 442, 42-48.	1.4	10
86	Bglbrick strategy for the construction of single domain antibody fusions. <i>Heliyon</i> , 2017, 3, e00474.	3.2	10
87	Bead-Based Fluid Array Detection of Pentaerythritol Tetranitrate: Comparison of Monoclonal vs. Llama Polyclonal Antibodies. <i>Analytical Letters</i> , 2010, 43, 2913-2922.	1.8	9
88	Improving biosensing activity to carcinoembryonic antigen with orientated single domain antibodies. <i>Heliyon</i> , 2017, 3, e00478.	3.2	9
89	Selection of Single-Domain Antibodies towards Western Equine Encephalitis Virus. <i>Antibodies</i> , 2018, 7, 44.	2.5	9
90	Experimental evaluation of single-domain antibodies predicted by molecular dynamics simulations to have elevated thermal stability. <i>Protein Science</i> , 2019, 28, 1909-1912.	7.6	9

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91	Genetic Fusion of an Anti-BclA Single-Domain Antibody with Beta Galactosidase. <i>Antibodies</i> , 2018, 7, 36.	2.5	8
92	Stabilization of a Broadly Neutralizing Anti-Chikungunya Virus Single Domain Antibody. <i>Frontiers in Medicine</i> , 2021, 8, 626028.	2.6	8
93	Application of a Homogenous Assay for the Detection of 2,4,6-Trinitrotoluene to Environmental Water Samples. <i>Scientific World Journal, The</i> , 2005, 5, 446-451.	2.1	7
94	Can template-based protein models guide the design of sequence fitness for enhanced thermal stability of single domain antibodies?. <i>Protein Engineering, Design and Selection</i> , 2015, 28, 395-402.	2.1	7
95	Integrating scFv into xMAP Assays for the Detection of Marine Toxins. <i>Toxins</i> , 2016, 8, 346.	3.4	7
96	Chemical Mapping of Unstained DNA Origami Using STEM/EDS and Graphene Supports. <i>ACS Applied Nano Materials</i> , 2020, 3, 1123-1130.	5.0	7
97	Luminescent Biocompatible Quantum Dots: A Tool for Immunosorbent Assay Design. , 2007, 374, 207-228.		6
98	Structure of a low-melting-temperature anti-cholera toxin: llama VHH domain. <i>Acta Crystallographica Section F: Structural Biology Communications</i> , 2013, 69, 90-93.	0.7	6
99	Pairing Alpaca and Llama-Derived Single Domain Antibodies to Enhance Immunoassays for Ricin. <i>Antibodies</i> , 2017, 6, 3.	2.5	6
100	Förster Resonance Energy Transfer in Linear DNA Multifluorophore Photonic Wires: Comparing Dual versus Split Rail Building Block Designs. <i>Advanced Optical Materials</i> , 2021, 9, 2100884.	7.3	5
101	Sequence Tolerance of a Single-Domain Antibody with a High Thermal Stability: Comparison of Computational and Experimental Fitness Profiles. <i>ACS Omega</i> , 2019, 4, 10444-10454.	3.5	4
102	SdAb heterodimer formation using leucine zippers. , 2013, , .		3
103	Selection and characterization of single domain antibodies against human CD20. <i>Molecular Immunology</i> , 2016, 78, 146-154.	2.2	3
104	Comparison of Replica Exchange Simulations of a Kinetically Trapped Protein Conformational State and its Native Form. <i>Journal of Physical Chemistry B</i> , 2016, 120, 2234-2240.	2.6	3
105	Selection and Characterization of Single-Domain Antibodies for Detection of Lassa Nucleoprotein. <i>Antibodies</i> , 2020, 9, 71.	2.5	3
106	Lipid-tagged single domain antibodies for improved enzyme-linked immunosorbent assays. <i>Journal of Immunological Methods</i> , 2020, 481-482, 112790.	1.4	3
107	SINGLE-DOMAIN ANTIBODIES: RUGGED RECOGNITION ELEMENTS FOR TOMORROW'S BIOSENSORS. , 2008, , 469-492.		3
108	Aberration-Corrected Scanning Transmission Electron Microscopy and Energy-Dispersive Spectral Maps of DNA Origami Triangles Using Graphene Supports. <i>Microscopy and Microanalysis</i> , 2018, 24, 386-387.	0.4	2

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109	Bivalent single domain antibody constructs for effective neutralization of Venezuelan equine encephalitis. <i>Scientific Reports</i> , 2022, 12, 700.	3.3	2
110	Evaluation of anti-hemagglutinin Hn-33 single domain antibodies: kinetics, binding epitopes, and thermal stability. <i>Botulinum Journal</i> , 2011, 2, 59.	0.2	1
111	Phage-Displayed Single Domain Antibodies as Recognition Elements. <i>Methods in Molecular Biology</i> , 2014, 1108, 201-210.	0.9	1
112	Resonance Energy Transfer: Utilizing HomoFRET to Extend DNA-scaffolded Photonic Networks and Increase Light Harvesting Capability ( <i>Advanced Optical Materials</i> 1/2018). <i>Advanced Optical Materials</i> , 2018, 6, 1870005.	7.3	1
113	Towards the Design and Implementation of Surface Tethered Quantum Dot-Based Nanosensors. <i>Materials Research Society Symposia Proceedings</i> , 2003, 789, 306.	0.1	0
114	Using llama derived single domain antibodies to target botulinum neurotoxins. <i>Proceedings of SPIE</i> , 2010, , .	0.8	0