Alessandro Porchetta

List of Publications by Year
in descending order

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40 papers	1,715 citations	293460 24 h-index	340414 39 g-index
40 all docs	40 docs citations	40 times ranked	2114 citing authors

#	Article	IF	Citations
1	Programmable Cell-Free Transcriptional Switches for Antibody Detection. Journal of the American Chemical Society, 2022, 144, 5820-5826.	6.6	25
2	Controlling Dynamic DNA Reactions at the Surface of Single-Walled Carbon Nanotube Electrodes to Design Hybridization Platforms with a Specific Amperometric Readout. Analytical Chemistry, 2022, 94, 5075-5083.	3.2	5
3	Enhancement of CRISPR/Cas12a trans-cleavage activity using hairpin DNA reporters. Nucleic Acids Research, 2022, 50, 8377-8391.	6.5	41
4	Foldingâ€uponâ€Repair DNA Nanoswitches for Monitoring the Activity of DNA Repair Enzymes. Angewandte Chemie - International Edition, 2021, 60, 7283-7289.	7.2	27
5	Foldingâ€uponâ€Repair DNA Nanoswitches for Monitoring the Activity of DNA Repair Enzymes. Angewandte Chemie, 2021, 133, 7359-7365.	1.6	10
6	DNA-Based Nanoswitches: Insights into Electrochemiluminescence Signal Enhancement. Analytical Chemistry, 2021, 93, 10397-10402.	3.2	13
7	Engineering DNAâ€Grafted Quatsomes as Stable Nucleic Acidâ€Responsive Fluorescent Nanovesicles. Advanced Functional Materials, 2021, 31, 2103511.	7.8	9
8	Frontispiece: Programming DNAâ€Based Systems through Effective Molarity Enforced by Biomolecular Confinement. Chemistry - A European Journal, 2020, 26, .	1.7	0
9	Proteinâ€Controlled Actuation of Dynamic Nucleic Acid Networks by Using Synthetic DNA Translators**. Angewandte Chemie, 2020, 132, 20758-20762.	1.6	5
10	Proteinâ€Controlled Actuation of Dynamic Nucleic Acid Networks by Using Synthetic DNA Translators**. Angewandte Chemie - International Edition, 2020, 59, 20577-20581.	7.2	18
11	Rapid, Cost-Effective Peptide/Nucleic Acid-Based Platform for Therapeutic Antibody Monitoring in Clinical Samples. ACS Sensors, 2020, 5, 3109-3115.	4.0	11
12	Programming DNAâ€Based Systems through Effective Molarity Enforced by Biomolecular Confinement. Chemistry - A European Journal, 2020, 26, 9826-9834.	1.7	11
13	Harnessing Effective Molarity to Design an Electrochemical DNAâ€based Platform for Clinically Relevant Antibody Detection. Angewandte Chemie - International Edition, 2020, 59, 14973-14978.	7.2	28
14	Harnessing Effective Molarity to Design an Electrochemical DNAâ€based Platform for Clinically Relevant Antibody Detection. Angewandte Chemie, 2020, 132, 15083-15088.	1.6	14
15	Integrated chemiluminescence-based lab-on-chip for detection of life markers in extraterrestrial environments. Biosensors and Bioelectronics, 2019, 123, 195-203.	5.3	31
16	Sub-Cellular Scale Compartments: Printing Life-Inspired Subcellular Scale Compartments with Autonomous Molecularly Crowded Confinement (Adv. Biosys. 7/2019). Advanced Biology, 2019, 3, 1970074.	3.0	3
17	Re-modeling ELISA kits embedded in an automated system suitable for on-line detection of algal toxins in seawater. Sensors and Actuators B: Chemical, 2019, 283, 865-872.	4.0	28
18	Self-Sensing Enzyme-Powered Micromotors Equipped with pH-Responsive DNA Nanoswitches. Nano Letters, 2019, 19, 3440-3447.	4.5	136

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19	Programmable RNA-based systems for sensing and diagnostic applications. Analytical and Bioanalytical Chemistry, 2019, 411, 4293-4302.	1.9	14
20	A label-free impedimetric aptasensor for the detection of Bacillus anthracis spore simulant. Biosensors and Bioelectronics, 2019, 126, 640-646.	5.3	55
21	DNA-Based Scaffolds for Sensing Applications. Analytical Chemistry, 2019, 91, 44-59.	3.2	80
22	Allosterically regulated DNA-based switches: From design to bioanalytical applications. Analytica Chimica Acta, 2018, 1012, 30-41.	2.6	29
23	Programmable Nucleic Acid Nanoswitches for the Rapid, Single-Step Detection of Antibodies in Bodily Fluids. Journal of the American Chemical Society, 2018, 140, 947-953.	6.6	91
24	Antibody-Templated Assembly of an RNA Mimic of Green Fluorescent Protein. Analytical Chemistry, 2018, 90, 1049-1053.	3.2	25
25	Antibody-Mediated Small Molecule Detection Using Programmable DNA-Switches. Analytical Chemistry, 2018, 90, 8196-8201.	3.2	33
26	Allosteric DNA nanoswitches for controlled release of a molecular cargo triggered by biological inputs. Chemical Science, 2017, 8, 914-920.	3.7	23
27	Using Natureâ€™s â€œTricksâ€•To Rationally Tune the Binding Properties of Biomolecular Receptors. Accounts of Chemical Research, 2016, 49, 1884-1892.	7.6	123
28	A modular clamp-like mechanism to regulate the activity of nucleic-acid target-responsive nanoswitches with external activators. Nanoscale, 2016, 8, 18057-18061.	2.8	25
29	Electronic control of DNA-based nanoswitches and nanodevices. Chemical Science, 2016, 7, 66-71.	3.7	48
30	Controlling Hybridization Chain Reactions with pH. Nano Letters, 2015, 15, 5539-5544.	4.5	49
31	General Strategy to Introduce pH-Induced Allostery in DNA-Based Receptors to Achieve Controlled Release of Ligands. Nano Letters, 2015, 15, 4467-4471.	4.5	91
32	Rational Design of pH-Controlled DNA Strand Displacement. Journal of the American Chemical Society, 2014, 136, 16469-16472.	6.6	110
33	Photoinduced Electron Transfer through Peptide-Based Self-Assembled Monolayers Chemisorbed on Gold Electrodes: Directing the Flow-in and Flow-out of Electrons through Peptide Helices. Journal of Physical Chemistry A, 2014, 118, 6674-6684.	1.1	19
34	Allosterically Tunable, DNA-Based Switches Triggered by Heavy Metals. Journal of the American Chemical Society, 2013, 135, 13238-13241.	6.6	99
35	Rational Design of Allosteric Inhibitors and Activators Using the Population-Shift Model: In Vitro Validation and Application to an Artificial Biosensor. Journal of the American Chemical Society, 2012, 134, 15177-15180.	6.6	80
36	Using Distal-Site Mutations and Allosteric Inhibition To Tune, Extend, and Narrow the Useful Dynamic Range of Aptamer-Based Sensors. Journal of the American Chemical Society, 2012, 134, 20601-20604.	6.6	132

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37	Reâ€engineering Electrochemical Biosensors To Narrow or Extend Their Useful Dynamic Range. Angewandte Chemie - International Edition, 2012, 51, 6717-6721.	7.2	80
38	Probe accessibility effects on the performance of electrochemical biosensors employing DNA monolayers. Analytical and Bioanalytical Chemistry, 2012, 402, 413-421.	1.9	40
39	Photocurrent generation through peptideâ€based selfâ€assembled monolayers on a gold surface: antenna and junction effects. Journal of Peptide Science, 2011, 17, 124-131.	0.8	25
40	Conformational Effects on the Electronâ€Transfer Efficiency in Peptide Foldamers Based on Î±,Î±â€Disubstituted Glycyl Residues. Chemistry and Biodiversity, 2008, 5, 1263-1278.	1.0	29