Valery A Petrenko

List of Publications by Year
in descending order

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77 papers	5,389 citations	87888 38 h-index	82547 72 g-index
77 all docs	77 docs citations	77 times ranked	4608 citing authors

#	Article	IF	Citations
1	Phage Display. Chemical Reviews, 1997, 97, 391-410.	47.7	1,502
2	Phage display for detection of biological threat agents. Journal of Microbiological Methods, 2003, 53, 253-262.	1.6	236
3	Phage as a molecular recognition element in biosensors immobilized by physical adsorption. Biosensors and Bioelectronics, 2007, 22, 986-992.	10.1	176
4	Affinity-selected filamentous bacteriophage as a probe for acoustic wave biodetectors of Salmonella typhimurium. Biosensors and Bioelectronics, 2006, 21, 1434-1442.	10.1	153
5	Detection of Salmonella typhimurium in fat free milk using a phage immobilized magnetoelastic sensor. Sensors and Actuators B: Chemical, 2007, 126, 544-550.	7.8	126
6	Phagemid Vectors for Phage Display: Properties, Characteristics and Construction. Journal of Molecular Biology, 2012, 417, 129-143.	4.2	125
7	Phages from landscape libraries as substitute antibodies. Protein Engineering, Design and Selection, 2000, 13, 589-592.	2.1	118
8	Phage immobilized magnetoelastic sensor for the detection of Salmonella typhimurium. Journal of Microbiological Methods, 2007, 71, 55-60.	1.6	113
9	Landscape phage probes for Salmonella typhimurium. Journal of Microbiological Methods, 2005, 63, 55-72.	1.6	104
10	Detection of biological threats. A challenge for directed molecular evolution. Journal of Microbiological Methods, 2004, 58, 147-168.	1.6	101
11	Colorimetric Assay of Bacterial Pathogens Based on Co₃O₄ Magnetic Nanozymes Conjugated with Specific Fusion Phage Proteins and Magnetophoretic Chromatography. ACS Applied Materials & Interfaces, 2020, 12, 9090-9097.	8.0	95
12	Specific Probe Selection from Landscape Phage Display Library and Its Application in Enzyme-Linked Immunosorbent Assay of Free Prostate-Specific Antigen. Analytical Chemistry, 2014, 86, 2767-2774.	6.5	94
13	Gold nanoprobe functionalized with specific fusion protein selection from phage display and its application in rapid, selective and sensitive colorimetric biosensing of Staphylococcus aureus. Biosensors and Bioelectronics, 2016, 82, 195-203.	10.1	93
14	Paclitaxel-Loaded Polymeric Micelles Modified with MCF-7 Cell-Specific Phage Protein: Enhanced Binding to Target Cancer Cells and Increased Cytotoxicity. Molecular Pharmaceutics, 2010, 7, 1007-1014.	4.6	91
15	Delivery of siRNA into breast cancer cells via phage fusion protein-targeted liposomes. Nanomedicine: Nanotechnology, Biology, and Medicine, 2011, 7, 315-323.	3.3	85
16	Diagnostic Probes for Bacillus anthracis Spores Selected from a Landscape Phage Library. Clinical Chemistry, 2004, 50, 1899-1906.	3.2	84
17	Thermostability of landscape phage probes. Analytical and Bioanalytical Chemistry, 2005, 382, 1346-1350.	3.7	84
18	Phage display selection of peptides that affect prostate carcinoma cells attachment and invasion. Prostate, 2001, 47, 239-251.	2.3	79

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19	Enhanced binding and killing of target tumor cells by drug-loaded liposomes modified with tumor-specific phage fusion coat protein. Nanomedicine, 2010, 5, 563-574.	3.3	78
20	Detection of Bacillus anthracis spores in liquid using phage-based magnetoelastic micro-resonators. Sensors and Actuators B: Chemical, 2007, 127, 559-566.	7.8	72
21	Synergetic Targeted Delivery of Sleepingâ€Beauty Transposon System to Mesenchymal Stem Cells Using LPD Nanoparticles Modified with a Phageâ€Displayed Targeting Peptide. Advanced Functional Materials, 2013, 23, 1172-1181.	14.9	72
22	Phage coated magnetoelastic micro-biosensors for real-time detection of Bacillus anthracis sporesâ˜†. Sensors and Actuators B: Chemical, 2009, 137, 501-506.	7.8	71
23	A wireless biosensor using microfabricated phage-interfaced magnetoelastic particles. Sensors and Actuators A: Physical, 2008, 144, 38-47.	4.1	70
24	A Label-Free Electrochemical Impedance Cytosensor Based on Specific Peptide-Fused Phage Selected from Landscape Phage Library. Scientific Reports, 2016, 6, 22199.	3.3	70
25	Cytoplasmic Delivery of Liposomes into MCF-7 Breast Cancer Cells Mediated by Cell-Specific Phage Fusion Coat Protein. Molecular Pharmaceutics, 2010, 7, 1149-1158.	4.6	60
26	Bio-mimetic Nanostructure Self-assembled from Au@Ag Heterogeneous Nanorods and Phage Fusion Proteins for Targeted Tumor Optical Detection and Photothermal Therapy. Scientific Reports, 2014, 4, 6808.	3.3	60
27	Sensitive colorimetric immunoassay of Vibrio parahaemolyticus based on specific nonapeptide probe screening from a phage display library conjugated with MnO₂ nanosheets with peroxidase-like activity. Nanoscale, 2018, 10, 2825-2833.	5.6	60
28	Evolutionary Selection of New Breast Cancer Cell-Targeting Peptides and Phages with the Cell-Targeting Peptides Fully Displayed on the Major Coat and Their Effects on Actin Dynamics during Cell Internalization. Molecular Pharmaceutics, 2010, 7, 1629-1642.	4.6	58
29	Identifying Diagnostic Peptides for Lyme Disease through Epitope Discovery. Vaccine Journal, 2001, 8, 150-160.	2.6	56
30	Landscape phage as a molecular recognition interface for detection devices. Microelectronics Journal, 2008, 39, 202-207.	2.0	55
31	Phage-Based Magnetoelastic Wireless Biosensors for Detecting Bacillus Anthracis Spores. IEEE Sensors Journal, 2007, 7, 470-477.	4.7	52
32	Magnetostrictive Microcantilever as an Advanced Transducer for Biosensors. Sensors, 2007, 7, 2929-2941.	3.8	50
33	Enhanced tumor delivery and antitumor activity in vivo of liposomal doxorubicin modified with MCF-7-specific phage fusion protein. Nanomedicine: Nanotechnology, Biology, and Medicine, 2014, 10, 421-430.	3.3	50
34	Liposomes targeted by fusion phage proteins. Nanomedicine: Nanotechnology, Biology, and Medicine, 2009, 5, 83-89.	3.3	47
35	Phage proteinâ€targeted cancer nanomedicines. FEBS Letters, 2014, 588, 341-349.	2.8	47
36	Targeted Delivery of siRNA into Breast Cancer Cells via Phage Fusion Proteins. Molecular Pharmaceutics, 2013, 10, 551-559.	4.6	46

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37	Effects of surface functionalization on the surface phage coverage and the subsequent performance of phage-immobilized magnetoelastic biosensors. Biosensors and Bioelectronics, 2011, 26, 2361-2367.	10.1	43
38	Design and characterization of a magnetoelastic sensor for the detection of biological agents. Journal Physics D: Applied Physics, 2010, 43, 015004.	2.8	40
39	Landscape Phage: Evolution from Phage Display to Nanobiotechnology. Viruses, 2018, 10, 311.	3.3	40
40	Landscape phage fusion protein-mediated targeting of nanomedicines enhances their prostate tumor cell association and cytotoxic efficiency. Nanomedicine: Nanotechnology, Biology, and Medicine, 2010, 6, 538-546.	3.3	39
41	Cell targeted phagemid rescued by preselected landscape phage. Gene, 2004, 341, 59-65.	2.2	38
42	Cross-linked filamentous phage as an affinity matrix. Journal of Immunological Methods, 1998, 215, 151-161.	1.4	35
43	Specific phages-based electrochemical impedimetric immunosensors for label-free and ultrasensitive detection of dual prostate-specific antigens. Sensors and Actuators B: Chemical, 2019, 297, 126727.	7.8	35
44	Phage probes for malignant glial cells. Molecular Cancer Therapeutics, 2003, 2, 1129-37.	4.1	35
45	Selected landscape phage probe as selective recognition interface for sensitive total prostate-specific antigen immunosensor. Biosensors and Bioelectronics, 2018, 106, 1-6.	10.1	34
46	Paclitaxel-Loaded PEG-PEâ€“Based Micellar Nanopreparations Targeted with Tumor-Specific Landscape Phage Fusion Protein Enhance Apoptosis and Efficiently Reduce Tumors. Molecular Cancer Therapeutics, 2014, 13, 2864-2875.	4.1	31
47	Affinity Comparison of p3 and p8 Peptide Displaying Bacteriophages Using Surface Plasmon Resonance. Analytical Chemistry, 2013, 85, 10075-10082.	6.5	30
48	Peptide Microarray with Ligands at High Density Based on Symmetrical Carrier Landscape Phage for Detection of Cellulase. Analytical Chemistry, 2014, 86, 5844-5850.	6.5	30
49	Infective and inactivated filamentous phage as carriers for immunogenic peptides. Journal of Virological Methods, 2012, 183, 63-68.	2.1	29
50	Landscape phages and their fusion proteins targeted to breast cancer cells. Protein Engineering, Design and Selection, 2012, 25, 271-283.	2.1	27
51	Specific ligands for classical swine fever virus screened from landscape phage display library. Antiviral Research, 2014, 109, 68-71.	4.1	27
52	Selection of pancreatic cancer cell-binding landscape phages and their use in development of anticancer nanomedicines. Protein Engineering, Design and Selection, 2014, 27, 235-243.	2.1	25
53	In vitrooptimization of liposomal nanocarriers prepared from breast tumor cell specific phage fusion protein. Journal of Drug Targeting, 2011, 19, 597-605.	4.4	24
54	Phage Display for Generating Peptide Reagents. Current Protocols in Protein Science, 2008, 51, Unit 18.9.	2.8	22

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55	Paradigm shift in bacteriophage-mediated delivery of anticancer drugs: from targeted â€˜magic bulletsâ€™ to self-navigated â€˜magic missilesâ€™. Expert Opinion on Drug Delivery, 2017, 14, 373-384.	5.0	22
56	Blocking Agent Optimization for Nonspecific Binding on Phage Based Magnetoelastic Biosensors. Journal of the Electrochemical Society, 2012, 159, B818-B823.	2.9	21
57	Phage display allows identification of zona pellucida-binding peptides with species-specific properties: Novel approach for development of contraceptive vaccines for wildlife. Journal of Biotechnology, 2012, 162, 311-318.	3.8	21
58	An efficient strategy to synthesize a multifunctional ferroferric oxide core@dye/SiO₂@Au shell nanocomposite and its targeted tumor theranostics. Journal of Materials Chemistry B, 2017, 5, 8209-8218.	5.8	21
59	Combinatorial synthesis and screening of cancer cell-specific nanomedicines targeted via phage fusion proteins. Frontiers in Microbiology, 2015, 6, 628.	3.5	18
60	Humoral immune responses against gonadotropin releasing hormone elicited by immunization with phage-peptide constructs obtained via phage display. Journal of Biotechnology, 2015, 216, 20-28.	3.8	18
61	On the Mechanism of Targeting of Phage Fusion Protein-Modified Nanocarriers: Only the Binding Peptide Sequence Matters. Molecular Pharmaceutics, 2011, 8, 1720-1728.	4.6	14
62	A pulse system for spectrum analysis of magnetoelastic biosensors. Applied Physics Letters, 2010, 96, 163502.	3.3	13
63	Promiscuous tumor targeting phage proteins. Protein Engineering, Design and Selection, 2016, 29, 93-103.	2.1	13
64	Autonomous self-navigating drug-delivery vehicles: from science fiction to reality. Therapeutic Delivery, 2017, 8, 1063-1075.	2.2	12
65	Evolution of a Landscape Phage Library in a Mouse Xenograft Model of Human Breast Cancer. Viruses, 2019, 11, 988.	3.3	12
66	Combinatorial Avidity Selection of Mosaic Landscape Phages Targeted at Breast Cancer Cellsâ€”An Alternative Mechanism of Directed Molecular Evolution. Viruses, 2019, 11, 785.	3.3	11
67	Phage matrix for isolation of glioma cell membrane proteins. BioTechniques, 2004, 37, 254-260.	1.8	10
68	Metastatic prostate cancer cell-specific phage-like particles as a targeted gene-delivery system. Journal of Nanobiotechnology, 2013, 11, 31.	9.1	10
69	Optimization of Landscape Phage Fusion Protein-Modified Polymeric Peg-Pe Micelles for Improved Breast Cancer Cell Targeting. Journal of Nanomedicine & Nanotechnology, 2011, s4, 008.	1.1	10
70	Phage-Displayed Mimotopes of SARS-CoV-2 Spike Protein Targeted to Authentic and Alternative Cellular Receptors. Viruses, 2022, 14, 384.	3.3	10
71	Selection of Lung Cancer-Specific Landscape Phage for Targeted Drug Delivery. Combinatorial Chemistry and High Throughput Screening, 2016, 19, 412-422.	1.1	9
72	Phage-derived protein-mediated targeted chemotherapy of pancreatic cancer. Journal of Drug Targeting, 2018, 26, 505-515.	4.4	7

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73	Selection of PCB binding phages as potential biorecognition elements for food and environmental monitoring. Analytical Methods, 2011, 3, 1865.	2.7	6
74	Specificity and Promiscuity in Human Glutaminase Interacting Protein Recognition: Insight from the Binding of the Internal and C-Terminal Motif. Biochemistry, 2012, 51, 6950-6960.	2.5	5
75	Selective detection of Salmonella typhimurium in the presence of high concentrations of masking bacteria. Sensing and Instrumentation for Food Quality and Safety, 2008, 2, 234-239.	1.5	4
76	Understanding the interactions between bone mineral crystals and their binding peptides derived from filamentous phage. Materials Today Advances, 2022, 15, 100263.	5.2	3
77	Chapter 4. Phage-mediated Drug Delivery. RSC Nanoscience and Nanotechnology, 2011, , 55-82.	0.2	2