Kenneth Phillips

List of Publications by Year
in descending order

49 papers	2,005 citations	257450 24 h-index	243625 44 g-index

50 all docs	50 docs citations	50 times ranked	2892 citing authors

#	Article	IF	Citations
1	Recent advances in surface plasmon resonance based techniques for bioanalysis. Analytical and Bioanalytical Chemistry, 2007, 387, 1831-1840.	3.7	177
2	Rapid evaluation of the durability of cortical neural implants using accelerated aging with reactive oxygen species. Journal of Neural Engineering, 2015, 12, 026003.	3.5	150
3	Laser-Induced Mixing in Microfluidic Channels. Analytical Chemistry, 2007, 79, 4484-4492.	6.5	146
4	Analytical Challenges of Microbial Biofilms on Medical Devices. Analytical Chemistry, 2012, 84, 3858-3866.	6.5	113
5	2018 international consensus meeting on musculoskeletal infection: Summary from the biofilm workgroup and consensus on biofilm related musculoskeletal infections. Journal of Orthopaedic Research, 2019, 37, 1007-1017.	2.3	113
6	Microfluidic Immunoassay for Bacterial Toxins with Supported Phospholipid Bilayer Membranes on Poly(dimethylsiloxane). Analytical Chemistry, 2005, 77, 327-334.	6.5	108
7	Chemical Analysis of Single Cells. Annual Review of Analytical Chemistry, 2008, 1, 191-227.	5.4	100
8	How microbes read the map: Effects of implant topography on bacterial adhesion and biofilm formation. Biomaterials, 2021, 268, 120595.	11.4	95
9	Strategies for antimicrobial peptide coatings on medical devices: a review and regulatory science perspective. Critical Reviews in Biotechnology, 2021, 41, 94-120.	9.0	89
10	Nanoscale Glassification of Gold Substrates for Surface Plasmon Resonance Analysis of Protein Toxins with Supported Lipid Membranes. Analytical Chemistry, 2006, 78, 596-603.	6.5	85
11	Immunosensing of Staphylococcus enterotoxin B (SEB) in milk with PDMS microfluidic systems using reinforced supported bilayer membranes (r-SBMs). Lab on A Chip, 2006, 6, 675.	6.0	56
12	Surface Plasmon Resonance Imaging Analysis of Protein-Receptor Binding in Supported Membrane Arrays on Gold Substrates with Calcinated Silicate Films. Journal of the American Chemical Society, 2006, 128, 9590-9591.	13.7	53
13	Interactions of Staphylococcus aureus with ultrasoft hydrogel biomaterials. Biomaterials, 2016, 95, 74-85.	11.4	53
14	Medical devices on chips. Nature Biomedical Engineering, 2017, 1, .	22.5	53
15	Development of a â€œMembrane Cloakingâ€•Method for Amperometric Enzyme Immunoassay and Surface Plasmon Resonance Analysis of Proteins in Serum Samples. Analytical Chemistry, 2007, 79, 899-907.	6.5	49
16	Novel Developments in the Prevention, Diagnosis, and Treatment of Periprosthetic Joint Infections. Journal of the American Academy of Orthopaedic Surgeons, The, 2015, 23, S32-S43.	2.5	40
17	Microfluidic fabrication of addressable tethered lipid bilayer arrays and optimization using SPR with silane-derivatized nanoglassy substrates. Lab on A Chip, 2007, 7, 927.	6.0	38
18	Continuous analysis of dye-loaded, single cells on a microfluidic chip. Lab on A Chip, 2011, 11, 1333.	6.0	37

#	Article	IF	Citations
19	Material Properties That Predict Preservative Uptake for Silicone Hydrogel Contact Lenses. Eye and Contact Lens, 2012, 38, 350-357.	1.6	32
20	Injections through skin colonized with Staphylococcus aureus biofilm introduce contamination despite standard antimicrobial preparation procedures. Scientific Reports, 2017, 7, 45070.	3.3	30
21	Stable and Fluid Ethylphosphocholine Membranes in a Poly(dimethylsiloxane) Microsensor for Toxin Detection in Flooded Waters. Analytical Chemistry, 2005, 77, 2960-2965.	6.5	29
22	Cytotoxic evaluation of nanostructured zinc oxide (ZnO) thin films and leachates. Toxicology in Vitro, 2014, 28, 1144-1152.	2.4	29
23	Biofilms, medical devices, and antibiofilm technology: Key messages from a recent public workshop. American Journal of Infection Control, 2015, 43, 2-3.	2.3	28
24	Separations in Poly(dimethylsiloxane) Microchips Coated with Supported Bilayer Membranes. Analytical Chemistry, 2008, 80, 9756-9762.	6.5	25
25	Characterizing Stability Properties of Supported Bilayer Membranes on Nanoglassified Substrates Using Surface Plasmon Resonance. Langmuir, 2008, 24, 8127-8133.	3.5	23
26	Hydrophobic interaction electrokinetic chromatography for the separation of polycyclic aromatic hydrocarbons using non-aqueous matrices. Journal of Chromatography A, 2001, 914, 223-231.	3.7	21
27	The Effect of Fluorescent Labels on Protein Sorption in Polymer Hydrogels. Journal of Fluorescence, 2014, 24, 1639-1650.	2.5	20
28	A contact-lens-on-a-chip companion diagnostic tool for personalized medicine. Lab on A Chip, 2016, 16, 1152-1156.	6.0	18
29	Removal of Staphylococcus aureus from skin using a combination antibiofilm approach. Npj Biofilms and Microbiomes, 2018, 4, 16.	6.4	17
30	Microphysiological system design: simplicity is elegance. Current Opinion in Biomedical Engineering, 2020, 13, 94-102.	3.4	16
31	Characterization of Biofilm Formation by Mycobacterium chimaera on Medical Device Materials. Frontiers in Microbiology, 2020, 11, 586657.	3.5	16
32	Antimicrobial and Anti-Biofilm Medical Devices: Public Health and Regulatory Science Challenges. , 2017, , 37-65.		14
33	An ex vivo model of medical device-mediated bacterial skin translocation. Scientific Reports, 2021, 11, 5746.	3.3	12
34	Air-stable supported membranes for single-cell cytometry on PDMS microchips. Lab on A Chip, 2010, 10, 864.	6.0	9
35	A high-throughput method for testing biofouling and cleaning of polymer hydrogel materials used in medical devices. Analytical Methods, 2014, 6, 4521.	2.7	9
36	The effects of non-ionic polymeric surfactants on the cleaning of biofouled hydrogel materials. Biofouling, 2015, 31, 689-697.	2.2	9

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37	The Effect of Contact Lens Materials on Disinfection Activity of Polyquaternium-1 and Myristamidopropyl Dimethylamine Multipurpose Solution Against Staphylococcus aureus. Eye and Contact Lens, 2012, 38, 374-378.	1.6	8
38	U.S. Food and Drug Administration Authors Publish Articles on Dermal Filler Materials, Injections, Methods, and Skin Preparation. Plastic and Reconstructive Surgery, 2017, 140, 632e-633e.	1.4	7
39	An extraction free modified o-phthalaldehyde assay for quantifying residual protein and microbial biofilms on surfaces. Biofouling, 2018, 34, 925-934.	2.2	7
40	General Assembly, Research Caveats: Proceedings of International Consensus on Orthopedic Infections. Journal of Arthroplasty, 2019, 34, S245-S253.e1.	3.1	7
41	Biofilm Removal by Reversible Shape Recovery of the Substrate. ACS Applied Materials & Interfaces, 2021, 13, 17174-17182.	8.0	7
42	High-Throughput Biofilm Assay to Investigate Bacterial Interactions with Surface Topographies. ACS Applied Bio Materials, 2022, 5, 3816-3825.	4.6	7
43	Surface Plasmon Resonance. Springer Protocols, 2008, , 809-820.	0.3	5
44	Hemoglobin assay for validation and quality control of medical device reprocessing. Analytical and Bioanalytical Chemistry, 2015, 407, 6885-6889.	3.7	5
45	Analytical Chemistry in the Regulatory Science of Medical Devices. Annual Review of Analytical Chemistry, 2018, 11, 307-327.	5.4	5
46	Moving toward Meaningful Standards for Preclinical Performance Testing of Medical Devices and Combination Products with Antimicrobial Effects. , 2020, , 17-25.		5
47	In vitro and in vivo methods to study bacterial colonization of hydrogel dermal fillers. Journal of Biomedical Materials Research - Part B Applied Biomaterials, 2022, 110, 1932-1941.	3.4	3
48	Analysis of polyhexamethylene biguanide and alexidine in contact lens solutions using capillary electrophoresis, ultra-performance liquid chromatography and quadrupole time of flight mass spectrometry. Talanta, 2019, 205, 120056.	5.5	2
49	Assembly and Characterization of Protein Resistant Planar Bilayers in PDMS Microfluidic Devices. Materials Research Society Symposia Proceedings, 2003, 774, 721.	0.1	1