Kevin P Nichols

List of Publications by Year
in descending order

26 papers	1,363 citations	471509 17 h-index	580821 25 g-index
35 all docs	35 docs citations	35 times ranked	2004 citing authors

#	Article	IF	Citations
1	SlipChip. Lab on A Chip, 2009, 9, 2286.	6.0	314
2	SARS-CoV-2 Coronavirus Nucleocapsid Antigen-Detecting Half-Strip Lateral Flow Assay Toward the Development of Point of Care Tests Using Commercially Available Reagents. Analytical Chemistry, 2020, 92, 11305-11309.	6.5	272
3	Toward Mechanistic Understanding of Nuclear Reprocessing Chemistries by Quantifying Lanthanide Solvent Extraction Kinetics via Microfluidics with Constant Interfacial Area and Rapid Mixing. Journal of the American Chemical Society, 2011, 133, 15721-15729.	13.7	99
4	SlipChip for Immunoassays in Nanoliter Volumes. Analytical Chemistry, 2010, 82, 3276-3282.	6.5	94
5	Design of a stable steam reforming catalystâ€"A promising route to sustainable hydrogen from biomass oxygenates. Applied Catalysis B: Environmental, 2009, 90, 38-44.	20.2	72
6	A Digital Microfluidic System for the Investigation of Pre-Steady-State Enzyme Kinetics Using Rapid Quenching with MALDI-TOF Mass Spectrometry. Analytical Chemistry, 2007, 79, 8699-8704.	6.5	69
7	Electrowetting-Based Microdrop Tensiometer. Langmuir, 2008, 24, 10549-10551.	3.5	67
8	Simple Polydisperse Droplet Emulsion Polymerase Chain Reaction with Statistical Volumetric Correction Compared with Microfluidic Droplet Digital Polymerase Chain Reaction. Analytical Chemistry, 2018, 90, 9374-9380.	6.5	36
9	Enzyme Kinetics by Directly Imaging a Porous Silicon Microfluidic Reactor Using Desorption/Ionization on Silicon Mass Spectrometry. Analytical Chemistry, 2008, 80, 8314-8319.	6.5	33
10	Wash-Free, Digital Immunoassay in Polydisperse Droplets. Analytical Chemistry, 2020, 92, 3535-3543.	6.5	31
11	Characterization of oral swab samples for diagnosis of pulmonary tuberculosis. PLoS ONE, 2021, 16, e0251422.	2.5	31
12	Nanochannels in SU-8 with floor and ceiling metal electrodes and integrated microchannels. Lab on A Chip, 2008, 8, 173-175.	6.0	28
13	Recirculating, passive micromixer with a novel sawtooth structure. Lab on A Chip, 2006, 6, 242-246.	6.0	24
14	A paper microfluidic cartridge for automated staining of malaria parasites with an optically transparent microscopy window. Lab on A Chip, 2014, 14, 2040-2046.	6.0	23
15	Dead-End Filling of SlipChip Evaluated Theoretically and Experimentally as a Function of the Surface Chemistry and the Gap Size between the Plates for Lubricated and Dry SlipChips. Langmuir, 2010, 26, 12465-12471.	3.5	22
16	Chemical Analog-to-Digital Signal Conversion Based on Robust Threshold Chemistry and Its Evaluation in the Context of Microfluidics-Based Quantitative Assays. Journal of the American Chemical Society, 2013, 135, 14775-14783.	13.7	20
17	A SARS-CoV-2 coronavirus nucleocapsid protein antigen-detecting lateral flow assay. PLoS ONE, 2021, 16, e0258819.	2.5	19
18	Threshold-Based Quantification in a Multiline Lateral Flow Assay via Computationally Designed Capture Efficiency. Analytical Chemistry, 2018, 90, 6643-6650.	6.5	18

#	Article	IF	Citations
19	Polydisperse emulsion digital assay to enhance time to detection and extend dynamic range in bacterial cultures enabled by a statistical framework. Analyst, The, 2018, 143, 2828-2836.	3.5	15
20	Antibody Screening Results for Anti-Nucleocapsid Antibodies Toward the Development of a Lateral Flow Assay to Detect SARS-CoV-2 Nucleocapsid Protein. ACS Omega, 2021, 6, 25116-25123.	3.5	15
21	Clinical validation of an open-access SARS-COV-2 antigen detection lateral flow assay, compared to commercially available assays. PLoS ONE, 2021, 16, e0256352.	2.5	14
22	Automated liquid handling robot for rapid lateral flow assay development. Analytical and Bioanalytical Chemistry, 2022, 414, 2607-2618.	3.7	9
23	Screening Antibodies Raised against the Spike Glycoprotein of SARS-CoV-2 to Support the Development of Rapid Antigen Assays. ACS Omega, 2021, 6, 20139-20148.	3.5	8
24	Rapid concentration and elution of malarial antigen histidine-rich protein II using solid phase Zn(II) resin in a simple flow-through pipette tip format. Biomicrofluidics, 2017, 11, 034115.	2.4	8
25	General methods for quantitative interpretation of results of digital variable-volume assays. Analyst, The, 2019, 144, 7209-7219.	3.5	7
26	Development of a simplified reader for digital droplet assays performed in limited resource settings. , 2019, , .		1