

Virginia Chu

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304
papers

3,942
citations

31
h-index

47
g-index

324
ext. papers

4,360
ext. citations

4.2
avg, IF

5.24
L-index

#	Paper	IF	Citations
304	Photothermal and photoconductive determination of surface and bulk defect densities in amorphous silicon films. <i>Applied Physics Letters</i> , 1987 , 50, 1521-1523	3.4	159
303	Thermal-equilibrium defect processes in hydrogenated amorphous silicon. <i>Physical Review Letters</i> , 1986 , 57, 2450-2453	7.4	143
302	Amorphous and microcrystalline silicon films grown at low temperatures by radio-frequency and hot-wire chemical vapor deposition. <i>Journal of Applied Physics</i> , 1999 , 86, 3812-3821	2.5	122
301	An on-chip thin film photodetector for the quantification of DNA probes and targets in microarrays. <i>Nucleic Acids Research</i> , 2004 , 32, e70	20.1	72
300	Detection of DNA and proteins using amorphous silicon ion-sensitive thin-film field effect transistors. <i>Biosensors and Bioelectronics</i> , 2008 , 24, 545-51	11.8	71
299	Optoelectronic and structural properties of amorphous silicon-carbon alloys deposited by low-power electron-cyclotron resonance plasma-enhanced chemical-vapor deposition. <i>Journal of Applied Physics</i> , 1999 , 85, 3327-3338	2.5	71
298	Detection of ochratoxin A in wine and beer by chemiluminescence-based ELISA in microfluidics with integrated photodiodes. <i>Sensors and Actuators B: Chemical</i> , 2013 , 176, 232-240	8.5	66
297	Current routes in hydrogenated microcrystalline silicon. <i>Physical Review B</i> , 2005 , 71,	3.3	65
296	Microspot-based ELISA in microfluidics: chemiluminescence and colorimetry detection using integrated thin-film hydrogenated amorphous silicon photodiodes. <i>Lab on A Chip</i> , 2011 , 11, 4063-71	7.2	58
295	Amorphous and microcrystalline silicon films deposited by hot-wire chemical vapor deposition at filament temperatures between 1500 and 1900 °C. <i>Journal of Applied Physics</i> , 1996 , 79, 8748-8760	2.5	54
294	Control of sequential fluid delivery in a fully autonomous capillary microfluidic device. <i>Lab on A Chip</i> , 2013 , 13, 641-5	7.2	53
293	Transport and photoluminescence of hydrogenated amorphous silicon-carbon alloys. <i>Journal of Applied Physics</i> , 1995 , 78, 3164-3173	2.5	53
292	DNA aptamer-based sandwich microfluidic assays for dual quantification and multi-glycan profiling of cancer biomarkers. <i>Biosensors and Bioelectronics</i> , 2016 , 79, 313-9	11.8	51
291	Amorphous silicon electrostatic microresonators with high quality factors. <i>Applied Physics Letters</i> , 2004 , 84, 622-624	3.4	49
290	On-chip sample preparation and analyte quantification using a microfluidic aqueous two-phase extraction coupled with an immunoassay. <i>Lab on A Chip</i> , 2014 , 14, 4284-94	7.2	48
289	Direct measurement of Urbach tail and gap state absorption in CuGaSe ₂ thin films by photothermal deflection spectroscopy and the constant photocurrent method. <i>Journal of Applied Physics</i> , 2002 , 92, 3016-3020	2.5	47
288	Optoelectronic properties of hydrogenated amorphous silicon films deposited under negative substrate bias. <i>Journal of Applied Physics</i> , 1991 , 69, 2942-2950	2.5	44

287	Multiplexed capillary microfluidic immunoassay with smartphone data acquisition for parallel mycotoxin detection. <i>Biosensors and Bioelectronics</i> , 2018 , 99, 40-46	11.8	43
286	Design of a microfluidic platform for monoclonal antibody extraction using an aqueous two-phase system. <i>Journal of Chromatography A</i> , 2012 , 1249, 1-7	4.5	43
285	Spin dependent tunnel junctions for memory and read-head applications. <i>IEEE Transactions on Magnetics</i> , 2000 , 36, 2796-2801	2	43
284	Electrostatic actuation of thin-film microelectromechanical structures. <i>Journal of Applied Physics</i> , 2003 , 93, 10018-10029	2.5	41
283	Optimization and miniaturization of aqueous two phase systems for the purification of recombinant human immunodeficiency virus-like particles from a CHO cell supernatant. <i>Separation and Purification Technology</i> , 2015 , 154, 27-35	8.3	39
282	Integrated optical detection of autonomous capillary microfluidic immunoassays:a hand-held point-of-care prototype. <i>Biosensors and Bioelectronics</i> , 2014 , 57, 284-91	11.8	39
281	Hybrid magnetoresistive microelectromechanical devices for static field modulation and sensor 1f noise cancellation. <i>Journal of Applied Physics</i> , 2008 , 103, 07E924	2.5	38
280	Amorphous silicon air-gap resonators on large-area substrates. <i>Applied Physics Letters</i> , 2000 , 77, 907-909	3.4	36
279	The application of microbeads to microfluidic systems for enhanced detection and purification of biomolecules. <i>Methods</i> , 2017 , 116, 112-124	4.6	35
278	Immobilization and hybridization by single sub-millisecond electric field pulses, for pixel-addressed DNA microarrays. <i>Biosensors and Bioelectronics</i> , 2004 , 19, 1591-7	11.8	35
277	A point-of-use microfluidic device with integrated photodetector array for immunoassay multiplexing: Detection of a panel of mycotoxins in multiple samples. <i>Biosensors and Bioelectronics</i> , 2017 , 87, 823-831	11.8	33
276	Electric-field assisted immobilization and hybridization of DNA oligomers on thin-film microchips. <i>Nanotechnology</i> , 2005 , 16, 2061-71	3.4	32
275	Doping of amorphous and microcrystalline silicon films deposited at low substrate temperatures by hot-wire chemical vapor deposition. <i>Journal of Vacuum Science and Technology A: Vacuum, Surfaces and Films</i> , 2001 , 19, 2328-2334	2.9	32
274	Determination of aqueous two phase system binodal curves using a microfluidic device. <i>Journal of Chromatography A</i> , 2014 , 1370, 115-20	4.5	31
273	A Novel Microfluidic Cell Co-culture Platform for the Study of the Molecular Mechanisms of Parkinson's Disease and Other Synucleinopathies. <i>Frontiers in Neuroscience</i> , 2016 , 10, 511	5.1	31
272	State distribution in hydrogenated microcrystalline silicon. <i>Physical Review B</i> , 2004 , 69,	3.3	29
271	Field-enhanced electrical transport mechanisms in amorphous carbon films. <i>Philosophical Magazine</i> , 2003 , 83, 3351-3365	1.6	29
270	Diode/magnetic tunnel junction cell for fully scalable matrix-based biochip. <i>Journal of Applied Physics</i> , 2006 , 99, 08B307	2.5	27

269	Detection of Chemiluminescence Using an Amorphous Silicon Photodiode. <i>IEEE Sensors Journal</i> , 2007 , 7, 415-416	4	27
268	Electronic and structural properties of doped amorphous and nanocrystalline silicon deposited at low substrate temperatures by radio-frequency plasma-enhanced chemical vapor deposition. <i>Journal of Vacuum Science and Technology A: Vacuum, Surfaces and Films</i> , 2003 , 21, 1048-1054	2.9	27
267	Multiplexed microfluidic fluorescence immunoassay with photodiode array signal acquisition for sub-minute and point-of-need detection of mycotoxins. <i>Lab on A Chip</i> , 2018 , 18, 1569-1580	7.2	26
266	Doping of amorphous and microcrystalline silicon films deposited by hot-wire chemical vapor deposition using phosphine and trimethylboron. <i>Journal of Vacuum Science and Technology A: Vacuum, Surfaces and Films</i> , 1997 , 15, 2968-2982	2.9	26
265	An ultrarapid and regenerable microfluidic immunoassay coupled with integrated photosensors for point-of-use detection of ochratoxin A. <i>Sensors and Actuators B: Chemical</i> , 2016 , 235, 554-562	8.5	26
264	Modulation of alpha-synuclein toxicity in yeast using a novel microfluidic-based gradient generator. <i>Lab on A Chip</i> , 2014 , 14, 3949-57	7.2	25
263	Improved mobility of amorphous silicon thin-film transistors deposited by hot-wire chemical vapor deposition on glass substrates. <i>Applied Physics Letters</i> , 1997 , 70, 2714-2716	3.4	25
262	Electrostatically actuated thin-film amorphous silicon microbridge resonators. <i>Journal of Applied Physics</i> , 2005 , 97, 094501	2.5	25
261	High-Throughput Nanoliter-Scale Analysis and Optimization of Multimodal Chromatography for the Capture of Monoclonal Antibodies. <i>Analytical Chemistry</i> , 2016 , 88, 7959-67	7.8	24
260	Top-Down Fabricated Silicon Nanowire Arrays for Field-Effect Detection of Prostate-Specific Antigen. <i>ACS Omega</i> , 2018 , 3, 8471-8482	3.9	24
259	Towards the miniaturization of GPCR-based live-cell screening assays. <i>Trends in Biotechnology</i> , 2012 , 30, 566-74	15.1	24
258	Electrostatically actuated polymer microresonators. <i>Applied Physics Letters</i> , 2005 , 87, 104104	3.4	24
257	Piezoresistive sensors on plastic substrates using doped microcrystalline silicon. <i>IEEE Sensors Journal</i> , 2002 , 2, 336-341	4	24
256	Silica bead-based microfluidic device with integrated photodiodes for the rapid capture and detection of rolling circle amplification products in the femtomolar range. <i>Biosensors and Bioelectronics</i> , 2019 , 128, 68-75	11.8	24
255	Photocurrent collection in a Schottky barrier on an amorphous silicon-germanium alloy structure with 1.23 eV optical gap. <i>Applied Physics Letters</i> , 1989 , 55, 262-264	3.4	23
254	Advances, challenges and opportunities for point-of-need screening of mycotoxins in foods and feeds. <i>Analyst, The</i> , 2018 , 143, 1015-1035	5	22
253	Lab-on-chip systems for integrated bioanalyses. <i>Essays in Biochemistry</i> , 2016 , 60, 121-31	7.6	22
252	Heterogeneous immunoassays in microfluidic format using fluorescence detection with integrated amorphous silicon photodiodes. <i>Biomicrofluidics</i> , 2011 , 5, 14102	3.2	22

251	Photoluminescence and sub band gap absorption of CuGaSe ₂ thin films. <i>Thin Solid Films</i> , 2002 , 403-404, 495-499	2.2	22
250	Air-gap amorphous silicon thin film transistors. <i>Applied Physics Letters</i> , 1998 , 73, 502-504	3.4	22
249	Miniaturization of aqueous two-phase extraction for biological applications: From micro-tubes to microchannels. <i>Biotechnology Journal</i> , 2016 , 11, 1498-1512	5.6	21
248	Performance of thin film silicon MEMS on flexible plastic substrates. <i>Sensors and Actuators A: Physical</i> , 2008 , 144, 201-206	3.9	21
247	Hybrid Magnetic Tunnel Junction-MEMS High Frequency Field Modulator for 1/f Noise Suppression. <i>IEEE Transactions on Magnetics</i> , 2008 , 44, 2554-2557	2	21
246	Amorphous and microcrystalline silicon deposited by hot-wire chemical vapor deposition at low substrate temperatures: application to devices and thin-film microelectromechanical systems. <i>Thin Solid Films</i> , 2001 , 395, 105-111	2.2	21
245	Sensitization of the electron lifetime in a-Si:H: The story of oxygen. <i>Physical Review B</i> , 2001 , 63,	3.3	21
244	Steady state and transient transport in a-Si, Ge : H, F alloys. <i>Journal of Non-Crystalline Solids</i> , 1987 , 97-98, 1023-1026	3.9	21
243	Aqueous two-phase systems for enhancing immunoassay sensitivity: simultaneous concentration of mycotoxins and neutralization of matrix interference. <i>Journal of Chromatography A</i> , 2014 , 1361, 67-76	4.5	20
242	The effect of the surface functionalization and the electrolyte concentration on the electrical conductance of silica nanochannels. <i>Biomicrofluidics</i> , 2013 , 7, 34111	3.2	20
241	Electric-field-pulse-assisted covalent immobilization of DNA in the nanosecond time scale. <i>Applied Physics Letters</i> , 2003 , 83, 1465-1467	3.4	20
240	Thermal actuation of thin film microelectromechanical structures. <i>Journal of Non-Crystalline Solids</i> , 2002 , 299-302, 1224-1228	3.9	20
239	Electronic Transport and the Density of States Distribution in a-(Si,Ge):H,F Alloys. <i>Materials Research Society Symposia Proceedings</i> , 1986 , 70, 269		20
238	Microstructure factor and mechanical and electronic properties of hydrogenated amorphous and nanocrystalline silicon thin-films for microelectromechanical systems applications. <i>Journal of Applied Physics</i> , 2013 , 114, 184905	2.5	19
237	Amorphous and microcrystalline silicon films obtained by hot-wire chemical vapour deposition using high filament temperatures between 1900 and 2500°C. <i>The Philosophical Magazine: Physics of Condensed Matter B, Statistical Mechanics, Electronic, Optical and Magnetic Properties</i> , 1997 , 76, 299-308		19
236	A regenerable microfluidic device with integrated valves and thin-film photodiodes for rapid optimization of chromatography conditions. <i>Sensors and Actuators B: Chemical</i> , 2018 , 255, 3636-3646	8.5	18
235	A microfluidic immunoassay platform for the detection of free prostate specific antigen: a systematic and quantitative approach. <i>Analyst, The</i> , 2015 , 140, 4423-33	5	18
234	Characterisation of hydrogenated silicon-carbon alloy filters with different carbon composition for on-chip fluorescence detection of biomolecules. <i>Sensors and Actuators A: Physical</i> , 2010 , 163, 96-100	3.9	18

233	Single base mismatch detection by microsecond voltage pulses. <i>Biosensors and Bioelectronics</i> , 2005 , 21, 888-93	11.8	18
232	Low substrate temperature deposition of amorphous and microcrystalline silicon films on plastic substrates by hot-wire chemical vapor deposition. <i>Journal of Non-Crystalline Solids</i> , 2000 , 266-269, 110-114	3.9	18
231	Low filament temperature deposition of a-Si:H by hot-wire chemical vapor deposition. <i>Journal of Applied Physics</i> , 1995 , 78, 3776-3783	2.5	18
230	The optoelectronic properties of a-Si, Ge:H(F) alloys. <i>Journal of Non-Crystalline Solids</i> , 1989 , 114, 453-458	3.9	18
229	Capillary-driven microfluidic device with integrated nanoporous microbeads for ultrarapid biosensing assays. <i>Sensors and Actuators B: Chemical</i> , 2018 , 265, 452-458	8.5	17
228	Metabolic viability of Escherichia coli trapped by dielectrophoresis in microfluidics. <i>Electrophoresis</i> , 2013 , 34, 575-82	3.6	17
227	Chemiluminescent Detection of Horseradish Peroxidase Using an Integrated Amorphous Silicon Thin-Film Photosensor. <i>IEEE Sensors Journal</i> , 2009 , 9, 1282-1290	4	17
226	Electrostatic microresonators from doped hydrogenated amorphous and nanocrystalline silicon thin films. <i>Journal of Microelectromechanical Systems</i> , 2005 , 14, 1082-1088	2.5	17
225	Electronic transport in microcrystalline silicon controlled by trapping and intra-grain mobility. <i>Journal of Non-Crystalline Solids</i> , 2002 , 299-302, 365-369	3.9	17
224	Vertical integration of a spin dependent tunnel junction with an amorphous Si diode for MRAM application. <i>IEEE Transactions on Magnetics</i> , 1999 , 35, 2832-2834	2	17
223	Mechanical properties of thin silicon films deposited at low temperatures by PECVD. <i>Journal of Micromechanics and Microengineering</i> , 2010 , 20, 035022	2	16
222	Electrostatically actuated resonance of amorphous silicon microresonators in water. <i>Applied Physics Letters</i> , 2006 , 89, 143109	3.4	16
221	Vertical integration of a spin dependent tunnel junction with an amorphous Si diode. <i>Applied Physics Letters</i> , 1999 , 74, 3893-3895	3.4	16
220	The Optoelectronic Properties of a-Si, Ge:H(F) Alloys). <i>Materials Research Society Symposia Proceedings</i> , 1988 , 118, 623		16
219	Study on the bio-functionalization of memristive nanowires for optimum memristive biosensors. <i>Journal of Materials Chemistry B</i> , 2016 , 4, 2153-2162	7.3	16
218	A simple method for point-of-need extraction, concentration and rapid multi-mycotoxin immunodetection in feeds using aqueous two-phase systems. <i>Journal of Chromatography A</i> , 2017 , 1511, 15-24	4.5	15
217	Mechanical and piezoresistive properties of thin silicon films deposited by plasma-enhanced chemical vapor deposition and hot-wire chemical vapor deposition at low substrate temperatures. <i>Journal of Applied Physics</i> , 2012 , 112, 024906	2.5	15
216	Fluorescence detection of DNA using an amorphous silicon p-i-n photodiode. <i>Journal of Applied Physics</i> , 2008 , 104, 054913	2.5	15

215	Properties of amorphous silicon/amorphous silicon-germanium multilayers. <i>Journal of Applied Physics</i> , 1994 , 75, 1638-1655	2.5	15
214	Determination of partition coefficients of biomolecules in a microfluidic aqueous two phase system platform using fluorescence microscopy. <i>Journal of Chromatography A</i> , 2017 , 1487, 242-247	4.5	14
213	Surface plasmon resonance application in prostate cancer biomarker research. <i>Chemical Papers</i> , 2015 , 69,	1.9	14
212	On-chip magnetoresistive detection of resonance in microcantilevers. <i>Applied Physics Letters</i> , 2009 , 95, 023502	3.4	14
211	Deposition of amorphous silicon using a tubular reactor with concentric-electrode confinement. <i>Journal of Applied Physics</i> , 1992 , 71, 3981-3989	2.5	14
210	Thin-Film Silicon MEMS for Dynamic Mass Sensing in Vacuum and Air: Phase Noise, Allan Deviation, Mass Sensitivity and Limits of Detection. <i>Journal of Microelectromechanical Systems</i> , 2019 , 28, 390-400	2.5	13
209	Studies on the purification of antibody fragments. <i>Separation and Purification Technology</i> , 2018 , 195, 388-397	8.3	13
208	An amorphous silicon photodiode microfluidic chip to detect nanomolar quantities of HIV-1 virion infectivity factor. <i>Analyst, The</i> , 2014 , 139, 3709-13	5	13
207	Effect of plasma treatment on the performance of two drug-loaded hydrogel formulations for therapeutic contact lenses. <i>Journal of Biomedical Materials Research - Part B Applied Biomaterials</i> , 2015 , 103, 1059-68	3.5	13
206	pH sensitive photoconductor based on poly(para-phenylene-vinylene). <i>Sensors and Actuators B: Chemical</i> , 2007 , 123, 153-157	8.5	13
205	Noise Characteristics and Particle Detection Limits in Diode+\$MTJ Matrix Elements for Biochip Applications. <i>IEEE Transactions on Magnetics</i> , 2007 , 43, 2403-2405	2	13
204	Electrostatically actuated bilayer polyimide-based microresonators. <i>Journal of Micromechanics and Microengineering</i> , 2007 , 17, 797-803	2	13
203	Hot-wire thin-film transistors on PET at 100 °C. <i>Thin Solid Films</i> , 2003 , 430, 240-244	2.2	13
202	Integrated magnetic sensing of electrostatically actuated thin-film microbridges. <i>Journal of Microelectromechanical Systems</i> , 2003 , 12, 550-556	2.5	13
201	High-field transport in amorphous carbon and carbon nitride films. <i>Journal of Non-Crystalline Solids</i> , 2004 , 338-340, 349-352	3.9	13
200	Microelectromechanical system microbridge deflection monitoring using integrated spin valve sensors and micromagnets. <i>Journal of Applied Physics</i> , 2002 , 91, 7774	2.5	13
199	Thin film micro arrays with immobilized DNA for hybridization analysis. <i>Materials Research Society Symposia Proceedings</i> , 2002 , 723, 231		13
198	Integrated fluorescence detection of labeled biomolecules using a prism-like PDMS microfluidic chip and lateral light excitation. <i>Lab on A Chip</i> , 2014 , 14, 1991-5	7.2	12

197	. <i>IEEE Electron Device Letters</i> , 1992 , 13, 5-7	4.4	12
196	Sub-bandgap optical absorption and light-induced defects in amorphous silicon. <i>AIP Conference Proceedings</i> , 1987 ,	0	12
195	A microfluidic platform for physical entrapment of yeast cells with continuous production of invertase. <i>Journal of Chemical Technology and Biotechnology</i> , 2017 , 92, 334-341	3.5	11
194	A multiplexed microfluidic toolbox for the rapid optimization of affinity-driven partition in aqueous two phase systems. <i>Journal of Chromatography A</i> , 2017 , 1515, 252-259	4.5	11
193	Integration of thin film amorphous silicon photodetector with lab-on-chip for monitoring protein fluorescence in solution and in live microbial cells. <i>Sensors and Actuators B: Chemical</i> , 2011 , 156, 662-667	8.5	11
192	Microelectromechanical resonators based on an all polymer/carbon nanotube composite structural material. <i>Applied Physics Letters</i> , 2011 , 99, 044104	3.4	11
191	Properties of high growth rate amorphous silicon deposited by MC-RF-PECVD. <i>Vacuum</i> , 2002 , 64, 245-248	3.7	11
190	a-(Si,Ge):H,F Alloys Prepared from SiH ₄ and GeF ₄ . <i>Materials Research Society Symposia Proceedings</i> , 1986 , 70, 275		11
189	Comparison of the mechanical and resonance properties of thin film silicon MEMS fabricated at 110 and 250 °C. <i>Journal of Micromechanics and Microengineering</i> , 2009 , 19, 025018	2	10
188	Microscopic and macroscopic manifestations of percolation transitions in a semiconductor composite. <i>Physical Review B</i> , 2009 , 80,	3.3	10
187	Amorphous and Microcrystalline Silicon Deposited by Low-Power Electron-Cyclotron Resonance Plasma-Enhanced Chemical-Vapor Deposition. <i>Japanese Journal of Applied Physics</i> , 1997 , 36, 38-49	1.4	10
186	Wide band gap a-SiC:H films for optoelectronic applications. <i>Journal of Non-Crystalline Solids</i> , 1998 , 227-230, 465-469	3.9	10
185	Detection of molecular tags with an integrated amorphous silicon photodetector for biological applications. <i>Journal of Non-Crystalline Solids</i> , 2008 , 354, 2594-2597	3.9	10
184	Colorimetric detection of molecular recognition reactions with an enzyme biolabel using a thin-film amorphous silicon photodiode on a glass substrate. <i>Sensors and Actuators B: Chemical</i> , 2008 , 135, 102-107	8.5	10
183	Label-free electronic detection of biomolecules using a-Si:H field-effect devices. <i>Journal of Non-Crystalline Solids</i> , 2006 , 352, 2007-2010	3.9	10
182	Thin-film silicon MEMS DNA sensors. <i>Journal of Non-Crystalline Solids</i> , 2006 , 352, 1999-2003	3.9	10
181	Low-temperature thin-film silicon MEMS. <i>Thin Solid Films</i> , 2003 , 427, 181-186	2.2	10
180	Thermal relaxation of the electric conductivity in amorphous silicon-germanium alloys. <i>Physical Review B</i> , 1989 , 40, 6424-6427	3.3	10

179	Determination of the D 0/level in amorphous Si,Ge:H(F) by time-of-flight charge collection. <i>Applied Physics Letters</i> , 1988 , 53, 1542-1544	3.4	10
178	Microfluidic bioreactors for enzymatic synthesis in packed-bed reactors-Multi-step reactions and upscaling. <i>Journal of Biotechnology</i> , 2020 , 323, 24-32	3.7	10
177	Label-Free Detection of Biomolecules in Microfluidic Systems Using On-Chip UV and Impedimetric Sensors. <i>IEEE Sensors Journal</i> , 2019 , 19, 7803-7812	4	9
176	Microfluidic device for the point of need detection of a pathogen infection biomarker in grapes. <i>Analyst, The</i> , 2019 , 144, 4871-4879	5	9
175	Performance of Hydrogenated Amorphous Silicon Thin Film Photosensors at Ultra-Low Light Levels: Towards Attomole Sensitivities in Lab-on-Chip Biosensing Applications. <i>IEEE Sensors Journal</i> , 2017 , 1-1	4	9
174	High-throughput study of alpha-synuclein expression in yeast using microfluidics for control of local cellular microenvironment. <i>Biomicrofluidics</i> , 2012 , 6, 14109-141099	3.2	9
173	Detection of fluorescently labeled biomolecules immobilized on a detachable substrate using an integrated amorphous silicon photodetector. <i>Applied Physics Letters</i> , 2009 , 94, 164106	3.4	9
172	Electrostatically actuated conducting polymer microbridges. <i>Journal of Applied Physics</i> , 2007 , 101, 064507.5	7.5	9
171	Doping of amorphous and microcrystalline silicon films by hot-wire CVD and RFPECVD at low substrate temperatures on plastic substrates. <i>Materials Research Society Symposia Proceedings</i> , 2000 , 609, 2261		9
170	Defect Saturation in a-SiGe:H(F) Alloys. <i>Materials Research Society Symposia Proceedings</i> , 1992 , 258, 589		9
169	Optical and electronic properties of an amorphous silicon-germanium alloy with a 1.28 eV optical gap. <i>Applied Physics Letters</i> , 1988 , 52, 477-479	3.4	9
168	Development of a rapid bead-based microfluidic platform for DNA hybridization using single- and multi-mode interactions for probe immobilization. <i>Sensors and Actuators B: Chemical</i> , 2019 , 286, 328-336	8.5	8
167	Tunable Properties of Hydrogenated Amorphous/Nanocrystalline Silicon Thin-Films for Enhanced MEMS Resonators Performance. <i>Journal of Microelectromechanical Systems</i> , 2014 , 23, 600-609	2.5	8
166	Monitoring intracellular calcium in response to GPCR activation using thin-film silicon photodiodes with integrated fluorescence filters. <i>Biosensors and Bioelectronics</i> , 2014 , 52, 232-8	11.8	8
165	Electrical detection of DNA immobilization and hybridization by streaming current measurements in microchannels. <i>Applied Physics Letters</i> , 2011 , 99, 183702	3.4	8
164	Electronic transport in low-temperature silicon nitride. <i>Journal of Non-Crystalline Solids</i> , 2002 , 299-302, 434-438	3.9	8
163	In situ ellipsometric study of amorphous silicon/amorphous silicon-carbon interfaces. <i>Journal of Applied Physics</i> , 1991 , 69, 3363-3365	2.5	8
162	Optically transparent diamond/PDMS microfluidic system for electronic monitoring of cells. <i>Physica Status Solidi (B): Basic Research</i> , 2014 , 251, 2593-2598	1.3	7

161	Streaming currents in microfluidics with integrated polarizable electrodes. <i>Microfluidics and Nanofluidics</i> , 2013 , 15, 361-376	2.8	7
160	Integrated detection of intrinsic fluorophores in live microbial cells using an array of thin film amorphous silicon photodetectors. <i>Biosensors and Bioelectronics</i> , 2012 , 36, 242-9	11.8	7
159	Study of the out-of-plane vibrational modes in thin-film amorphous silicon micromechanical disk resonators. <i>Journal of Applied Physics</i> , 2013 , 113, 174904	2.5	7
158	Photoluminescence of polymer-like amorphous carbon films grown in different plasma reactors. <i>Journal of Non-Crystalline Solids</i> , 1998 , 227-230, 574-578	3.9	7
157	Resonance of electrostatically actuated thin-film amorphous silicon microelectromechanical systems microresonators in aqueous solutions: Effect of solution conductivity and viscosity. <i>Journal of Applied Physics</i> , 2007 , 101, 094308	2.5	7
156	The effect of the flow of silane on the properties of a-Si:H deposited by concentric-electrode radio frequency glow-discharge. <i>Journal of Applied Physics</i> , 1992 , 71, 3990-3996	2.5	7
155	Effect of Material Properties on the Performance of a-Si,Ge:H,F Photodetectors. <i>Materials Research Society Symposia Proceedings</i> , 1988 , 118, 457		7
154	Microfluidic device for multiplexed detection of fungal infection biomarkers in grape cultivars. <i>Analyst, The</i> , 2021 , 145, 7973-7984	5	7
153	Aptamer-based approaches to detect nucleolin in prostate cancer. <i>Talanta</i> , 2021 , 226, 122037	6.2	7
152	Derivation of the near-surface dielectric function of amorphous silicon from photoelectron loss spectra. <i>Journal of Non-Crystalline Solids</i> , 2012 , 358, 2019-2022	3.9	6
151	Comparison of amorphous silicon photodiodes and photoconductors for detection of quantum dot biomolecular tags. <i>Journal of Applied Physics</i> , 2009 , 106, 104904	2.5	6
150	Conductive Blended Polymer MEMS Microresonators. <i>Journal of Microelectromechanical Systems</i> , 2007 , 16, 329-335	2.5	6
149	Electromechanical properties of amorphous and microcrystalline silicon micromachined structures. <i>Materials Research Society Symposia Proceedings</i> , 2001 , 664, 2641		6
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