Adrian J Keating

List of Publications by Year
in descending order

106	1,412	331670	377865
papers	citations	21 h-index	34 g-index

109	109	109	1125
all docs	docs citations	times ranked	citing authors

#	Article	IF	Citations
1	Surface micromachining multilayer porous silicon for spectral filtering applications. Materials Science in Semiconductor Processing, 2022, 138, 106314.	4.0	7
2	Determination of thermal conductivity, thermal diffusivity and specific heat capacity of porous silicon thin films using the 3Ï‰ method. International Journal of Heat and Mass Transfer, 2022, 184, 122346.	4.8	13
3	Ge/BaF2 thin-films for surface micromachined mid-wave and long-wave infrared reflectors. Journal of Optical Microsystems, 2022, 2, .	1.5	2
4	Mechanical properties of thermally evaporated germanium (Ge) and barium fluoride (BaF2) thin-films. MRS Communications, 2022, 12, 112-118.	1.8	2
5	Analytic approximation for the collapse of viscous tubes driven by surface tension and pressure difference. Archive of Applied Mechanics, 2022, 92, 1571.	2.2	0
6	Large-area narrowband Fabryâ€“PÃ©rot interferometers for long-wavelength infrared spectral sensing. Journal of Optical Microsystems, 2022, 2, .	1.5	2
7	Optimising porous silicon electrical properties for thermal sensing applications. Microporous and Mesoporous Materials, 2021, 312, 110767.	4.4	11
8	Enabling high-porosity porous silicon as an electronic material. Microporous and Mesoporous Materials, 2021, 312, 110808.	4.4	11
9	Pattern transferring of Prolift-100 polymer sacrificial layers with controlled sidewall profile. Journal of Micromechanics and Microengineering, 2021, 31, 075001.	2.6	0
10	Engineering 1/f noise in porous silicon thin films for thermal sensing applications. Microporous and Mesoporous Materials, 2021, 324, 111302.	4.4	11
11	Micromachined porous silicon Fabry-PÃ©rot long wavelength infrared filters. Sensors and Actuators A: Physical, 2021, 332, 113101.	4.1	4
12	Small Split-Ring Resonators as Efficient Antennas for Remote LoRa IOT Systemsâ€”A Path to Reduce Physical Interference. Sensors, 2021, 21, 7779.	3.8	3
13	Framework for Validation of Permanently Installed MEMS-Based Acquisition Devices Using Soft Sensor Models. CivilEng, 2020, 1, 93-105.	1.4	0
14	Method for Increasing the Core Count and Area of High Density Optical Fiber Bundles. IEEE Journal of Selected Topics in Quantum Electronics, 2020, 26, 1-8.	2.9	46
15	MEMS based hydrogen sensing with parts-per-billion resolution. Sensors and Actuators B: Chemical, 2019, 281, 335-342.	7.8	18
16	Atomic force microscopy with integrated on-chip interferometric readout. Ultramicroscopy, 2019, 205, 75-83.	1.9	8
17	Compensating porosity gradient to produce flat, micromachined porous silicon structures. Microporous and Mesoporous Materials, 2019, 284, 427-433.	4.4	6
18	Distributed Magnetic Flux Density on the Cross-Section of a Transformer Core. Electronics (Switzerland), 2019, 8, 297.	3.1	6

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19	Large Area Silicon-Air-Silicon DBRs for Infrared Filter Applications. Journal of Lightwave Technology, 2019, 37, 769-779.	4.6	11
20	Selective Oxidation and Carbonization by Laser Writing into Porous Silicon. Advanced Materials Technologies, 2019, 4, 1800334.	5.8	3
21	Micromachined microbeams made from porous silicon for dynamic and static mode sensing. Sensors and Actuators A: Physical, 2018, 269, 91-98.	4.1	4
22	Engineering porous silicon thin films to obtain high TCR and low 1/f noise for application in thermal detectors. , 2018, , .		0
23	Using thermography to investigate thermal characteristics of porous silicon. , 2018, , .		0
24	Method for optical modelling of non-uniform and non-parallel multi-thin film MEMS optical filters and mirrors. , 2018, , .		0
25	Released all-porous-silicon microstructure for spectrometer applications. , 2018, , .		0
26	Modelling and Fabrication of Anti-Stiction Features for Electrostatically Actuated Microsystems. , 2018, , .		0
27	Study of Porosity Gradient in Released Porous Silicon Microstructures. , 2018, , .		0
28	MEMS-based Low SWaP Solutions for Multi/Hyperspectral Infrared Sensing and Imaging. , 2018, , .		1
29	Photolithography on Porous Silicon. , 2018, , 797-804.		0
30	Porous Silicon Diffraction Gratings. , 2018, , 1219-1229.		0
31	A High Deposition Rate Amorphous-Silicon Process for Use as a Thick Sacrificial Layer in Surface-Micromachining. Journal of Microelectromechanical Systems, 2017, 26, 406-414.	2.5	4
32	Fabrication of uniform porosity, all-porous-silicon microstructures and stress/stress gradient control. Journal of Micromechanics and Microengineering, 2017, 27, 044001.	2.6	7
33	Comparison of boundary and size effect models based on new developments. Engineering Fracture Mechanics, 2017, 175, 146-167.	4.3	123
34	Control of Sidewall Profile in Dry Plasma Etching of Polyimide. Journal of Microelectromechanical Systems, 2017, 26, 593-600.	2.5	7
35	Characterizing the Performance of LED Reflective Distance Sensors. IEEE Access, 2017, 5, 14289-14297.	4.2	4
36	A graphic contract. Journal of Strategic Contracting and Negotiation, 2016, 2, 10-18.	0.8	39

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37	Comparative acoustic performance and mechanical properties of silk membranes for the repair of chronic tympanic membrane perforations. Journal of the Mechanical Behavior of Biomedical Materials, 2016, 64, 65-74.	3.1	20
38	Occupancy Estimation Using a Low-Pixel Count Thermal Imager. IEEE Sensors Journal, 2016, 16, 3784-3791.	4.7	72
39	Characterization and Modeling of Photostriction in Silicon Cantilevers Fabricated on Silicon-on-Insulator Substrates. Journal of Microelectromechanical Systems, 2015, 24, 182-191.	2.5	2
40	Stress control of porous silicon films for microelectromechanical systems. Microporous and Mesoporous Materials, 2015, 218, 88-94.	4.4	17
41	On-chip read-out of picomechanical motion under ambient conditions. Nanoscale, 2015, 7, 1927-1933.	5.6	14
42	Stress control of porous silicon film for microelectromechanical systems. , 2014, , .		1
43	Microcantilevers as a platform for the detection of hydrogen. , 2014, , .		0
44	Capturing the impulse response of a second order system. , 2014, , .		0
45	Low temperature through-wafer reactive ion etching for MEMS. , 2014, , .		0
46	Targeted machining during MEMS device fabrication using PDMS microfluidic cassettes. , 2014, , .		0
47	An optically resonant position read-out system for MEMS gas sensors. , 2014, , .		0
48	Tailoring Anchor Etching Profiles During MEMS Release Using Microfluidic Sheathed Flow. Journal of Microelectromechanical Systems, 2014, 23, 918-926.	2.5	1
49	Photolithography on Porous Silicon. , 2014, , 1-8.		0
50	Porous Silicon Diffraction Gratings. , 2014, , 1-10.		0
51	Released micromachined beams utilizing laterally uniform porosity porous silicon. Nanoscale Research Letters, 2014, 9, 426.	5.7	6
52	Porous Silicon Diffraction Gratings. , 2014, , 823-833.		1
53	Photolithography on Porous Silicon. , 2014, , 531-539.		2
54	Semiâ€automated detection of milk duct dilatation recorded by ultrasound (1016.5). FASEB Journal, 2014, 28, 1016.5.	0.5	0

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55	Process Control of Cantilever Deflection for Sensor Application Based on Optical Waveguides. Journal of Microelectromechanical Systems, 2013, 22, 569-579.	2.5	13
56	Optical actuation of silicon cantilevers: modelling and experimental investigation. , 2013, , .		0
57	Targeted sacrificial layer etching for MEMS release using microfluidic channels. , 2013, , .		0
58	Long-wavelength infrared Fabry-Perot etalon for multi-spectral thermal imaging. , 2013, , .		1
59	Demonstration of a method for detecting MEMS suspended beam height. , 2012, , .		0
60	A WDM Capable Integrated Optical Readout of a MEMS Sensor. Procedia Engineering, 2012, 47, 386-389.	1.2	0
61	Integrated Resonant Optical Readout Applicable to Large Arrays of MEMS Beams. IEEE Photonics Technology Letters, 2012, 24, 2243-2246.	2.5	6
62	Surface Morphology Control of Passivated Porous Silicon Using Reactive Ion Etching. Journal of Microelectromechanical Systems, 2012, 21, 756-761.	2.5	11
63	Multilayer porous silicon diffraction gratings operating in the infrared. Nanoscale Research Letters, 2012, 7, 645.	5.7	15
64	Uniform Dispersion of Lanthanum Hexaboride Nanoparticles in a Silica Thin Film: Synthesis and Optical Properties. ACS Applied Materials & Interfaces, 2012, 4, 5833-5838.	8.0	27
65	Model and Analysis of a High Sensitivity Resonant Optical Read-Out Approach Suitable for Cantilever Sensor Arrays. Journal of Lightwave Technology, 2012, 30, 1863-1868.	4.6	17
66	Development of an Alkaline-Compatible Porous-Silicon Photolithographic Process. Journal of Microelectromechanical Systems, 2011, 20, 418-423.	2.5	32
67	Meeting bulk density sampling requirements efficiently to estimate soil carbon stocks. Soil Research, 2011, 49, 680.	1.1	40
68	Chemical resistance of porous silicon: photolithographic applications. Physica Status Solidi C: Current Topics in Solid State Physics, 2011, 8, 1847-1850.	0.8	12
69	N[sub 2]-Based Thermal Passivation of Porous Silicon to Achieve Long-Term Optical Stability. Electrochemical and Solid-State Letters, 2010, 13, H428.	2.2	22
70	Reactive ion etching of porous silicon for MEMS applications. , 2010, , .		1
71	MEMS-based Fabry-Perot microspectrometers for agriculture. Proceedings of SPIE, 2009, , .	0.8	5
72	Low temperature N2-based passivation technique for porous silicon thin films. Solid State Communications, 2009, 149, 1322-1325.	1.9	26

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73	Widely Tunable MEMS-Based Fabryâ€“Perot Filter. Journal of Microelectromechanical Systems, 2009, 18, 905-913.	2.5	106
74	Pulsed Anodization for Control of Porosity Gradients and Interface Roughness in Porous Silicon. Journal of the Electrochemical Society, 2009, 156, H744.	2.9	20
75	Design and Characterization of Fabryâ€“PÃ©rot MEMS-Based Short-Wave Infrared Microspectrometers. Journal of Electronic Materials, 2008, 37, 1811-1820.	2.2	27
76	Materials and Processes for MEMS-Based Infrared Microspectrometer Integrated on HgCdTe Detector. IEEE Journal of Selected Topics in Quantum Electronics, 2008, 14, 1031-1041.	2.9	11
77	MEMS-based tunable Fabry-Perot filters on silicon substrates. Optoelectronic and Microelectronic Materials and Devices (COMMAD), Conference on, 2008, , .	0.0	4
78	Rapid prototyping of microfluidic devices using imprinting: application to microvalves and micropumps. Proceedings of SPIE, 2008, , .	0.8	0
79	OPTICAL MEMS TECHNOLOGIES FOR ELECTRICALLY TUNABLE MULTI-SPECTRAL SHORT-WAVE INFRARED SENSORS AND ARRAYS. International Journal of High Speed Electronics and Systems, 2008, 18, 1035-1044.	0.7	3
80	Cross-flow microfiltration for lab-on-chip defatting of human breast milk. Proceedings of SPIE, 2008, , .	0.8	0
81	An in-situ monitoring system for characterizing porous silicon growth. Proceedings of SPIE, 2008, , .	0.8	0
82	Feasibility of a CWDM-based in-situ monitoring system for characterizing porous silicon growth. , 2007, , .		0
83	Process condition dependence of mechanical and physical properties of silicon nitride thin films. Journal of Applied Physics, 2007, 102, 103517.	2.5	10
84	Fabry-Perot MEMS microspectrometers spanning the SWIR and MWIR. , 2007, , .		2
85	Extending the tuning range of SWIR microspectrometers. , 2007, , .		6
86	Micro-electromechanical systems-based microspectrometers covering wavelengths from 1500nm to 5000nm. , 2007, , .		4
87	A Technique for Fabricating Uniform Double-Sided Porous Silicon Wafers. Electrochemical and Solid-State Letters, 2007, 10, D130.	2.2	15
88	Optical characterization of Fabry-Pe/spl acute/rot MEMS filters integrated on tunable short-wave IR detectors. IEEE Photonics Technology Letters, 2006, 18, 1079-1081.	2.5	26
89	Doubly-Supported Beam Actuators for MEMS-based Tunable Fabry-Perot Etalons. , 2006, , .		0
90	Tunable Fabry-Perot filters operating in the 3 to 5 Î¼m range for infrared micro-spectrometer applications. , 2006, 6186, 69.		9

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91	Monolithic integration of an infrared photon detector with a MEMS-based tunable filter. IEEE Electron Device Letters, 2005, 26, 888-890.	3.9	54
92	Short-wavelength infrared tuneable filters on HgCdTe photoconductors. Optics Express, 2005, 13, 9683.	3.4	9
93	Photocurrent-Assisted Wavelength (PAW) Conversion With Electrical Monitoring Capability Using a Traveling-Wave Electroabsorption Modulator. IEEE Photonics Technology Letters, 2004, 16, 530-532.	2.5	8
94	Three-dimensional mems photonic cross-connect switch design and performance. IEEE Journal of Selected Topics in Quantum Electronics, 2003, 9, 571-578.	2.9	79
95	Analog characterization of low-voltage MQW traveling-wave electroabsorption modulators. Journal of Lightwave Technology, 2003, 21, 3011-3019.	4.6	39
96	Mitigation of optical crosstalk penalty in photonic cross-connects using forward error correction. Electronics Letters, 2003, 39, 678.	1.0	1
97	Long wavelength vertical-cavity semiconductor optical amplifiers. IEEE Journal of Quantum Electronics, 2001, 37, 274-281.	1.9	44
98	High-temperature optically pumped 1.55-Î¼m VCSEL operating at 6 Gb/s. IEEE Photonics Technology Letters, 2000, 12, 116-118.	2.5	14
99	Simultaneous OTDM demultiplexing and detection using an electroabsorptioa modulator. IEEE Photonics Technology Letters, 2000, 12, 711-713.	2.5	12
100	1.3-Î¼m vertical-cavity amplifier. IEEE Photonics Technology Letters, 2000, 12, 951-953.	2.5	24
101	High-speed operation of travelling-wave electroabsorption modulator. Electronics Letters, 1999, 35, 993.	1.0	9
102	Wavelength stabilization in packet-switched WDM networks. Journal of Lightwave Technology, 1997, 15, 76-85.	4.6	4
103	Reduction of excess intensity noise in spectrum-sliced incoherent light for WDM applications. Journal of Lightwave Technology, 1997, 15, 53-61.	4.6	45
104	Multiwavelength source for spectrum-sliced WDM access networks and LAN's. IEEE Photonics Technology Letters, 1997, 9, 1014-1016.	2.5	37
105	Feedforward noise reduction of incoherent light for spectrum-sliced transmission at 2.5 Gb/s. IEEE Photonics Technology Letters, 1995, 7, 1513-1515.	2.5	26
106	Modeling the static and dynamic behavior of quarter-wave-shifted DFB lasers. IEEE Journal of Quantum Electronics, 1992, 28, 1874-1883.	1.9	46