Robert W Kay

List of Publications by Year
in descending order

54 papers	1,377 citations	567281 15 h-index	377865 34 g-index
54 all docs	54 docs citations	54 times ranked	1612 citing authors

#	Article	IF	Citations
1	Digitally Driven Aerosol Jet Printing to Enable Customisable Neuronal Guidance. Frontiers in Cell and Developmental Biology, 2021, 9, 722294.	3.7	7
2	Is in vivo sensing in a total hip replacement a possibility? A review on past systems and future challenges. Progress in Biomedical Engineering, 2021, 3, 042004.	4.9	2
3	Spinach-based photo-catalyst for selective plating on polyimide-based substrates for micro-patterning circuitry. Chemical Engineering Research and Design, 2020, 153, 839-848.	5.6	7
4	Electrohydrodynamic and Aerosol Jet Printing for the Copatterning of Polydimethylsiloxane and Graphene Platelet Inks. Advanced Materials Technologies, 2020, 5, 2000148.	5.8	19
5	Light based synthesis of metallic nanoparticles on surface-modified 3D printed substrates for high performance electronic systems. Additive Manufacturing, 2020, 34, 101367.	3.0	9
6	Selective Metallization of 3D Printable Thermoplastic Polyurethanes. IEEE Access, 2019, 7, 104947-104955.	4.2	14
7	Extreme environment interconnects and packaging for power electronics. Journal of Engineering, 2019, 2019, 4226-4230.	1.1	0
8	Aerosol Jet Printing for the Manufacture of Soft Robotic Devices. , 2019, , .		6
9	Direct metallisation of polyetherimide substrates by activation with different metals. Surface and Coatings Technology, 2019, 360, 285-296.	4.8	15
10	A review of aerosol jet printingâ€"a non-traditional hybrid process for micro-manufacturing. International Journal of Advanced Manufacturing Technology, 2019, 105, 4599-4619.	3.0	248
11	A rapid technique for the direct metallization of PDMS substrates for flexible and stretchable electronics applications. Microelectronic Engineering, 2019, 209, 35-40.	2.4	22
12	Selective Electroless Copper Deposition by Using Photolithographic Polymer/Ag Nanocomposite. IEEE Transactions on Electron Devices, 2019, 66, 1843-1848.	3.0	17
13	Hybrid additive manufacturing of precision engineered ceramic components. Rapid Prototyping Journal, 2019, 25, 1061-1068.	3.2	4
14	Micro electronic systems via multifunctional additive manufacturing. Rapid Prototyping Journal, 2018, 24, 752-763.	3.2	2
15	Enabling internal electronic circuitry within additively manufactured metal structures â€“ the effect and importance of inter-laminar topography. Rapid Prototyping Journal, 2018, 24, 204-213.	3.2	2
16	Flexible Electronics: A Rapid Photopatterning Method for Selective Plating of 2D and 3D Microcircuitry on Polyetherimide (Adv. Funct. Mater. 6/2018). Advanced Functional Materials, 2018, 28, 1870041.	14.9	0
17	A Rapid Photopatterning Method for Selective Plating of 2D and 3D Microcircuitry on Polyetherimide. Advanced Functional Materials, 2018, 28, 1704451.	14.9	27
18	Digitally-Driven Hybrid Manufacture of Ceramic Thick-Film Substrates. , 2018, , .		2

#	Article	IF	Citations
19	PEI/Ag as an Optical Gas Nano-Sensor for Intelligent Food Packaging. , 2018, , .		5
20	Hybrid Additive Manufacture of Conformal Antennas. , 2018, , .		4
21	Multifunctional metal matrix composites with embedded printed electrical materials fabricated by ultrasonic additive manufacturing. Composites Part B: Engineering, 2017, 113, 342-354.	12.0	54
22	Integration of additive manufacturing and inkjet printed electronics: a potential route to parts with embedded multifunctionality. Manufacturing Review, 2016, 3, 12.	1.5	24
23	Dynamically controlled deposition of colloidal nanoparticle suspension in evaporating drops using laser radiation. Soft Matter, 2016, 12, 4530-4536.	2.7	32
24	Laser textured surface gradients. Applied Surface Science, 2016, 371, 583-589.	6.1	83
25	Enabling Rapid Production and Mass Customisation of Electronics Using Digitally Driven Hybrid Additive Manufacturing Techniques. , 2016, , .		5
26	Hybrid additive manufacturing of 3D electronic systems. Journal of Micromechanics and Microengineering, 2016, 26, 105005.	2.6	41
27	Laser textured superhydrophobic surfaces and their applications for homogeneous spot deposition. Applied Surface Science, 2016, 365, 153-159.	6.1	236
28	Generation of superhydrophobic surfaces and wettability gradients on metallic substrates by nanosecond laser irradiation. , 2015, , .		0
29	Nanosecond laser textured superhydrophobic metallic surfaces and their chemical sensing applications. Applied Surface Science, 2015, 357, 248-254.	6.1	298
30	Tattoo Antenna Temporary Transfers Operating On-Skin (TATTOOS). Lecture Notes in Computer Science, 2015, , 685-695.	1.3	8
31	Additively manufactured heterogeneous substrates for threeâ€dimensional control of local permittivity. Electronics Letters, 2014, 50, 745-746.	1.0	13
32	Characterization of Cu-Sn SLID interconnects for harsh environment applications. , 2014, , .		1
33	Statistical analysis of stencil technology for wafer-level bumping. Soldering and Surface Mount Technology, 2014, 26, 71-78.	1.5	2
34	Electrodeposition of copper into high aspect ratio PCB micro-via using megasonic agitation. Microsystem Technologies, 2013, 19, 783-790.	2.0	14
35	Fabrication of a low temperature co-fired ceramic package using powder blasting technology. Microsystem Technologies, 2013, 19, 791-799.	2.0	3
36	Lamination based embossing technique for LTCC. Microsystem Technologies, 2013, 19, 801-807.	2.0	9

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37	Microstructure formation in a thick polymer by electrostatic-induced lithography. Journal of Micromechanics and Microengineering, 2013, 23, 035018.	2.6	12
38	A review of stencil printing for microelectronic packaging. Soldering and Surface Mount Technology, 2012, 24, 38-50.	1.5	39
39	Progress towards filling through silicon vias with conductive ink. , 2012, , .		3
40	Electrochemical deposition of Galfenol. , 2012, , .		0
41	Stencil technology for wafer level bumping. , 2012, , .		0
42	Simultaneously printing the redistribution layer and filling of TSVs using a microengineered screen. , 2012, , .		0
43	On the Use of Silver Nanoparticles for Direct Micropatterning on Polyimide Substrates. IEEE Nanotechnology Magazine, 2012, 11, 139-147.	2.0	6
44	Optimization and characterization of Drop-on-Demand inkjet printing process for platinum organometallic inks. , 2011, , .		10
45	Design, manufacturing and packaging of high frequency micro ultrasonic transducers for medical applications. , 2011, , .		3
46	Progress towards the design and numerical analysis of a 3D microchannel biochip separator. International Journal for Numerical Methods in Biomedical Engineering, 2011, 27, 1771-1792.	2.1	5
47	Novel dual layer electroformed stencils for high resolution LTCC circuit manufacture. , 2011, , .		1
48	Ultra-Fine Pitch Stencil Printing for a Low Cost and Low Temperature Flip-Chip Assembly Process. IEEE Transactions on Components and Packaging Technologies, 2007, 30, 129-136.	1.3	25
49	Corrections to "Ultra-fine pitch stencil printing for a low cost and low temperature flip-chip assembly process". IEEE Transactions on Components and Packaging Technologies, 2007, 30, 359-359.	1.3	0
50	Computational modelling for reliable flip-chip packaging at sub-100Î¼m pitch using isotropic conductive adhesives. Microelectronics Reliability, 2007, 47, 132-141.	1.7	10
51	Design, manufacture and testing of microengineered stencils used for sub 100 micron wafer level bumping. , 2006, , .		0
52	Sub process challenges in ultra fine pitch stencil printing of typeâ€6 and typeâ€7 Pbâ€free solder pastes for flip chip assembly applications. Soldering and Surface Mount Technology, 2005, 17, 24-32.	1.5	26
53	Sub-100 micron pitch stencil printing for wafer scale bumping. , 2005, , .		1
54	Ultra-fine pitch flip-chip assembly using isotropic conductive adhesives. , 0, , .		1