Alistair Duffy

List of Publications by Year
in descending order

109 papers	1,658 citations	516215 16 h-index	344852 36 g-index
118 all docs	118 docs citations	118 times ranked	917 citing authors

#	Article	IF	Citations
1	Feature Selective Validation (FSV) for Validation of Computational Electromagnetics (CEM). Part I—The FSV Method. IEEE Transactions on Electromagnetic Compatibility, 2006, 48, 449-459.	1.4	397
2	Feature Selective Validation (FSV) for Validation of Computational Electromagnetics (CEM). Part II—Assessment of FSV Performance. IEEE Transactions on Electromagnetic Compatibility, 2006, 48, 460-467.	1.4	325
3	Dielectric Relaxation Spectroscopy and Some Applications in the Pharmaceutical Sciences. Journal of Pharmaceutical Sciences, 1995, 84, 1029-1044.	1.6	90
4	Validation of a Three-Dimensional Transmission Line Matrix (TLM) Model Implementation of a Mode-Stirred Reverberation Chamber. IEEE Transactions on Electromagnetic Compatibility, 2007, 49, 734-744.	1.4	37
5	Notice of Retraction: Review of the Feature Selective Validation Method (FSV). Part I—Theory. IEEE Transactions on Electromagnetic Compatibility, 2018, 60, 814-821.	1.4	35
6	The feature selective validation (FSV) method. , 0, , .		33
7	Dielectric analysis of phosphorylcholine head group mobility in egg lecithin liposomes. Pharmaceutical Research, 1996, 13, 1181-1185.	1.7	29
8	Applying a behavioural and operational diagnostic typology of competitive intelligence practice: empirical evidence from the SME sector in Turkey. Journal of Strategic Marketing, 2012, 20, 19-33.	3.7	29
9	A simple formula for calculating the frequency-dependent resistance of a round wire. Microwave and Optical Technology Letters, 1998, 19, 84-87.	0.9	28
10	Antenna Efficiency Measurements in a Reverberation Chamber Without the Need for a Reference Antenna. IEEE Antennas and Wireless Propagation Letters, 2008, 7, 448-450.	2.4	27
11	Analyzing Transient Phenomena in the Time Domain Using the Feature Selective Validation (FSV) Method. IEEE Transactions on Electromagnetic Compatibility, 2014, 56, 825-834.	1.4	24
12	Analysis of techniques to compare complex data sets. COMPEL - the International Journal for Computation and Mathematics in Electrical and Electronic Engineering, 2002, 21, 540-553.	0.5	22
13	Performance Comparison of the SGM and the SCM in EMC Simulation. IEEE Transactions on Electromagnetic Compatibility, 2016, 58, 1739-1746.	1.4	19
14	Surface transfer impedance measurement: a comparison between current probe and pull-on braid methods for coaxial cables. IEEE Transactions on Electromagnetic Compatibility, 1998, 40, 69-76.	1.4	18
15	A visual interpretation rating scale for validation of numerical models. COMPEL - the International Journal for Computation and Mathematics in Electrical and Electronic Engineering, 2005, 24, 1078-1092.	0.5	18
16	Applying the Analytic Hierarchy Process (AHP) to an FSV-Based Comparison of Multiple Datasets. IEEE Transactions on Electromagnetic Compatibility, 2015, 57, 477-483.	1.4	17
17	Offset Difference Measure Enhancement for the Feature-Selective Validation Method. IEEE Transactions on Electromagnetic Compatibility, 2008, 50, 413-415.	1.4	16
18	Over Coupled Ring Resonator-Based Add/Drop Filters. IEEE Journal of Quantum Electronics, 2014, 50, 598-604.	1.0	16

#	ARTICLE	IF	CITATIONS
19	Use of correlation functions to assist the experimental validation of numerical modeling techniques. Microwave and Optical Technology Letters, 1994, 7, 361-364.	0.9	15
20	Comparing FSV and human responses to data comparisons. , 0, , .		15
21	A Review on the Drawbacks and Enhancement Opportunities of the Feature Selective Validation. IEEE Transactions on Electromagnetic Compatibility, 2014, 56, 800-807.	1.4	15
22	On-Line Partial Discharge Localization in Power Cables Based on Electromagnetic Time Reversal Theory - Numerical Validation. IEEE Transactions on Power Delivery, 2022, 37, 2911-2920.	2.9	14
23	The integrated error against log frequency (IELF) method for CEM validation. , 0, , .		13
24	Introduction to feature selective validation (FSV). , 2006, , .		13
25	Progress in the development of a 2D Feature Selective Validation (FSV) method. , 2008, , .		13
26	Preliminary study of a reverberation chamber method for multiple-source testing using intermodulation. IET Science, Measurement and Technology, 2010, 4, 21-27.	0.9	12
27	Factors influencing the successful validation of transient phenomenon modelling. , 2010, , .		12
28	Comparison of Three-Dimensional Datasets by Using the Generalized n-Dimensional (n-D) Feature Selective Validation (FSV) Technique. IEEE Transactions on Electromagnetic Compatibility, 2017, 59, 103-110.	1.4	12
29	Applications of FSV to EMC and SI data. , 0, , .		11
30	Using the Feature Selective Validation technique to compare data sets. , 2009, , .		11
31	Improvement in the Definition of ODM for FSV. IEEE Transactions on Electromagnetic Compatibility, 2013, 55, 773-779.	1.4	11
32	Uncertainty analysis in EMC simulation based on Stochastic Collocation Method. , 2015, , .		11
33	Comparison of Data With Multiple Degrees of Freedom Utilizing the Feature Selective Validation Method. IEEE Transactions on Electromagnetic Compatibility, 2016, 58, 784-791.	1.4	11
34	Progress in quantifying validation data. , 0, , .		10
35	Dimension-Reduced Sparse Grid Strategy for a Stochastic Collocation Method in EMC Software. IEEE Transactions on Electromagnetic Compatibility, 2018, 60, 218-224.	1.4	10
36	Selection of Dominant Characteristic Modes. IEEE Transactions on Electromagnetic Compatibility, 2020, 62, 451-460.	1.4	10

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37	Numerical simulation of electromagnetic coupling and comparison with experimental results. IEEE Transactions on Electromagnetic Compatibility, 1993, 35, 46-54.	1.4	9
38	Maximum Working Volume and Minimum Working Frequency Tradeoff in a Reverberation Chamber. IEEE Transactions on Electromagnetic Compatibility, 2007, 49, 719-722.	1.4	9
39	Challenges in developing a multidimensional Feature Selective Validation implementation. , 2010, , .		9
40	Electromagnetic Time Reversal Method to Locate Partial Discharges in Power Networks Using 1D TLM Modelling. IEEE Letters on EMC Practice and Applications, 2021, 3, 24-28.	0.7	9
41	Propagation along a wire placed inside a cavity with an aperture: a comparison of measurements and transmission-line modeling (TLM). IEEE Transactions on Electromagnetic Compatibility, 1994, 36, 144-146.	1.4	8
42	Comparison of measured and computed local electric field distributions due to vehicle-mounted antennas using 2D feature selective validation. , 0, , .		8
43	Crosstalk suppression bandwidth optimisation of a vertically coupled ring resonator add/drop filter. IET Optoelectronics, 2015, 9, 30-36.	1.8	8
44	Impact of noise and interference on probabilistic broadcast schemes in mobile ad-hoc networks. Computer Networks, 2015, 88, 178-186.	3.2	8
45	Estimation of the Bandwidth of Acceptable Crosstalk of Parallel Coupled Ring Resonator Add/Drop Filters. IEEE Transactions on Electromagnetic Compatibility, 2015, 57, 1005-1012.	1.4	8
46	Application to Real Power Networks of a Method to Locate Partial Discharges Based On Electromagnetic Time Reversal. IEEE Transactions on Power Delivery, 2022, 37, 2738-2746.	2.9	8
47	Design, simulation, and fabrication of a double annular ring microstrip antenna based on gaps with multiband feature. Engineering Science and Technology, an International Journal, 2022, 29, 101033.	2.0	8
48	Objective validation of automotive EMC models. , 0, , .		7
49	Partial Capacitance Calculation for Shielded Twisted Pair Cables. IEEE Transactions on Electromagnetic Compatibility, 2004, 46, 299-302.	1.4	7
50	Issues in validation of complex-valued simulations for signal integrity analysis. , 0, , .		6
51	The prediction of the electric field level in the reverberation chamber depending on position of stirrer. Expert Systems With Applications, 2011, 38, 1689-1696.	4.4	6
52	The use of probability density functions to improve the interpretation of FSV results. , 2012, , .		6
53	Impact of physical and virtual carrier sensing on the route discovery mechanism in noisy MANETs. IEEE Transactions on Consumer Electronics, 2013, 59, 515-520.	3.0	6
54	Investigating Confidence Histograms and Classification in FSV: Part I. Fuzzy FSV. IEEE Transactions on Electromagnetic Compatibility, 2013, 55, 917-924.	1.4	6

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55	Objective Selection of Minimum Acceptable Mesh Refinement for EMC Simulations. IEEE Transactions on Electromagnetic Compatibility, 2015, 57, 1266-1269.	1.4	6
56	Internal stirring: an approach to approximate evaluation of shielding effectiveness of small slotted enclosures. IET Science, Measurement and Technology, 2016, 10, 659-664.	0.9	6
57	Validation of a non-contact technique for torque measurements in wind turbines using an enhanced transient FSV approach. Measurement: Journal of the International Measurement Confederation, 2020, 151, 107261.	2.5	6
58	Electromagnetic Risk Analysis for EMI Impact on Functional Safety With Probabilistic Graphical Models and Fuzzy Logic. IEEE Letters on EMC Practice and Applications, 2020, 2, 96-100.	0.7	6
59	Measuring similarity for validation of computational electromagnetic modelling. , 0, , .		5
60	A powerful new technique for the quantitative validation of modeled and experimental data. Microwave and Optical Technology Letters, 1998, 17, 284-287.	0.9	5
61	Development of next generation FSV tools and standards. , 2012, , .		5
62	Investigating Confidence Histograms and Classification in FSV: Part II-Float FSV. IEEE Transactions on Electromagnetic Compatibility, 2013, 55, 925-932.	1.4	5
63	Parameter for near end crosstalk prediction in twisted pair cables. , 2016, , .		5
64	Infra–red thermal measurement on a low–power infra–red emitter in CMOS technology. IET Science, Measurement and Technology, 2019, 13, 25-28.	0.9	5
65	Determining the accuracy of TLM in simulating the behaviour of resonant cavities with arbitrary dielectric loading. International Journal of Electronics, 1997, 83, 645-660.	0.9	4
66	Impact of the noise level on the route discovery mechanism in noisy MANETs. , 2012, , .		4
67	Downsampled and Undersampled Datasets in Feature Selective Validation (FSV). IEEE Transactions on Electromagnetic Compatibility, 2014, 56, 817-824.	1.4	4
68	Efficient broadcasting for route discovery in Mobile Ad-hoc Networks. , 2015, , .		4
69	The Effect of the Ring Mains Units for On-Line Partial Discharge Location With Time Reversal in Medium Voltage Networks. IEEE Access, 2022, 10, 33844-33854.	2.6	4
70	Shield behaviour of communications cables. IET Science, Measurement and Technology, 2003, 150, 307-312.	0.7	3
71	Effect of physical and virtual carrier sensing on the AODV routing protocol in noisy MANETs. , 2013, , .		3
72	The Feature Selective Validation Technique as Analysis Tool for Shielding Effectiveness of Slotted Enclosures. IEEE Transactions on Electromagnetic Compatibility, 2015, 57, 1472-1480.	1.4	3

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73	Notice of Retraction: Statistical Figures of Merit for the Feature Selective Validation Method. IEEE Transactions on Electromagnetic Compatibility, 2017, 59, 1482-1489.	1.4	3
74	Towards Modeling Partial Discharge Phenomena and Propagation in Power Networks Using the Transmission-Line Matrix Method. Energies, 2021, 14, 689.	1.6	3
75	Accurate method for predicting return loss of communication channel. Electronics Letters, 2001, 37, 1423.	0.5	2
76	Method for prediction of capacitance of shielded transmission lines. Electronics Letters, 2001, 37, 1424.	0.5	2
77	Analysis and modelling of structured wiring communication channels. IET Science, Measurement and Technology, 2001, 148, 129-136.	0.7	2
78	Introduction to Special Section on â€œValidation of Computational Electromagneticsâ€• IEEE Transactions on Electromagnetic Compatibility, 2014, 56, 746-749.	1.4	2
79	Electromagnetic Monitoring of Semiconductor Ageing. Procedia CIRP, 2014, 22, 98-102.	1.0	2
80	Crosstalk bandwidth of grating-assisted ring resonator add/drop filter. Optical and Quantum Electronics, 2015, 47, 1127-1137.	1.5	2
81	Towards modeling partial discharge phenomena using the transmission line matrix (TLM) method. , 2016, , .		2
82	A preliminary study of the influence of experiential backgrounds of respondents to a reference survey for verification of FSV. , 2016, , .		2
83	Optimization of reflection coefficient in ring resonator add/drop filters. International Journal of Numerical Modelling: Electronic Networks, Devices and Fields, 2017, 30, e2080.	1.2	2
84	Standalone closed-form formula for the throughput rate of asynchronous normally distributed serial flow lines. Journal of Manufacturing Systems, 2017, 43, 117-128.	7.6	2
85	Risk Assessment Approach for EM Resilience in Complex Systems Using Bayesian Networks. , 2021, , .		2
86	FSV: State of the art and current research fronts. IEEE Electromagnetic Compatibility Magazine, 2020, 9, 55-62.	0.1	2
87	Reducing the Functional Safety Risks (and Other Risks) That Can Be Caused by EMI â€" New IEEE Standard 1848. IEEE Letters on EMC Practice and Applications, 2020, 2, 53-61.	0.7	2
88	General regression neural network approach to prediction of electric field level in the reverberation chamber. International Journal of Reasoning-based Intelligent Systems, 2010, 2, 168.	0.1	1
89	Modeling Thermal Radiation Effects in Nanowires Using the TLM Method. IEEE Nanotechnology Magazine, 2013, 12, 1118-1124.	1.1	1
90	Histogram density for the Feature Selective Validation (FSV) method. , 2014, , .		1

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91	Modelling of back reflection in optical ring resonators. , 2014, , .		1
92	Method for determining region boundaries for transient data comparison using Feature Selective Validation (FSV). , 2015, , .		1
93	Using Image Quality Assessment (IQA) Databases to Provide an Appraisal of the Ability of the Feature Selective Validation Method (FSV) to Compare Two-Dimensional Datasets. IEEE Transactions on Electromagnetic Compatibility, 2018, 60, 890-898.	1.4	1
94	Data Comparison with Many Degrees of Freedom: the FSV (Feature Selective Validation) in Multiple Dimensions. , 2018, , .		1
95	EMI Risk Estimation for System-Level Functions Using Probabilistic Graphical Models. , 2021, , .		1
96	Editorial: Advances in communication cables technology. IET Science, Measurement and Technology, 2003, 150, 265-265.	0.7	0
97	Shaping waveguide transmission and reflection characteristics using conducting fabrics. Microwave and Optical Technology Letters, 2009, 51, 1416-1419.	0.9	0
98	EMC Society standards on the Web. IEEE Electromagnetic Compatibility Magazine, 2012, 1, 99-102.	0.1	0
99	Compact Microstrip Antenna Structures with Multiband, Broadband, and Band-Notched Properties, for Portable Devices. International Journal of Antennas and Propagation, 2014, 2014, 1-1.	0.7	0
100	Credibility evaluation of uncertainty analysis results of EMC simulation. , 2014, , .		0
101	Ageing effects on power RF LDMOS reliability using the Transmission Line Matrix method. , 2015, , .		0
102	Return loss prediction for category 8 cable using pseudorandom impedance generation. , 2015, , .		0
103	Transmission line matrix (TLM) simulation of the propagation of partial discharge phenomenon in transmission lines. , 2017, , .		0
104	Measuring the shielding properties of flexible or rigid enclosures for portable electronics. Philosophical Transactions Series A, Mathematical, Physical, and Engineering Sciences, 2018, 376, 20170456.	1.6	0
105	Applying FSV to the Comparison of Return Path Integrity in High Speed Circuit Designs. IEEE Letters on EMC Practice and Applications, 2021, 3, 78-81.	0.7	0
106	Time Reversal for Partial Discharge Localization on Power Lines with Different Termination Impedances. , 2021, , .		0
107	Completed Careers. IEEE Electromagnetic Compatibility Magazine, 2021, 10, 53-58.	0.1	0
108	Announcing the Newly Elected IEEE Division IV Director!. IEEE Electromagnetic Compatibility Magazine, 2021, 10, 13-13.	0.1	0

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109	Completed Careers. IEEE Electromagnetic Compatibility Magazine, 2022, 11, 97-102.	0.1	0