

# Daniel B Habersat

## List of Publications by Year in descending order

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44  
papers

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758635

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docs citations

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times ranked

764  
citing authors

#	ARTICLE	IF	CITATIONS
1	Basic Mechanisms of Threshold-Voltage Instability and Implications for Reliability Testing of SiC MOSFETs. IEEE Transactions on Electron Devices, 2015, 62, 316-323.	1.6	324
2	Time Dependence of Bias-Stress-Induced SiC MOSFET Threshold-Voltage Instability Measurements. IEEE Transactions on Electron Devices, 2008, 55, 1835-1840.	1.6	255
3	A Physical Model of High Temperature 4H-SiC MOSFETs. IEEE Transactions on Electron Devices, 2008, 55, 2029-2040.	1.6	137
4	Characterization of Transient Gate Oxide Trapping in SiC MOSFETs Using Fast $\Delta V_g$ Techniques. IEEE Transactions on Electron Devices, 2008, 55, 2004-2012.	1.6	105
5	Application of reliability test standards to SiC Power MOSFETs. , 2011, , .		57
6	Threshold-voltage bias-temperature instability in commercially-available SiC MOSFETs. Japanese Journal of Applied Physics, 2016, 55, 04EA03.	0.8	54
7	SiC MOSFET threshold-stability issues. Materials Science in Semiconductor Processing, 2018, 78, 32-37.	1.9	49
8	Bias Stress-Induced Threshold-Voltage Instability of SiC MOSFETs. Materials Science Forum, 2006, 527-529, 1317-1320.	0.3	46
9	High-Temperature Reliability of SiC Power MOSFETs. Materials Science Forum, 0, 679-680, 599-602.	0.3	43
10	Two-Way Tunneling Model of Oxide Trap Charging and Discharging in SiC MOSFETs. Materials Science Forum, 0, 717-720, 465-468.	0.3	42
11	Temperature-Dependence of SiC MOSFET Threshold-Voltage Instability. Materials Science Forum, 2008, 600-603, 807-810.	0.3	37
12	Measurement considerations for evaluating BTI effects in SiC MOSFETs. Microelectronics Reliability, 2018, 81, 121-126.	0.9	31
13	(Invited) Effect of Threshold-Voltage Instability on SiC Power MOSFET High-Temperature Reliability. ECS Transactions, 2011, 41, 203-214.	0.3	20
14	Advances in pulsed-laser-deposited AlN thin films for high-temperature capping, device passivation, and piezoelectric-based RF MEMS/NEMS resonator applications. Journal of Electronic Materials, 2006, 35, 777-794.	1.0	19
15	Comparison of Test Methods for Proper Characterization of $V_{th}$ and $T_{th}$ in SiC MOSFETs. Materials Science Forum, 0, 858, 833-839.	0.3	19
16	Time-Dependent Bias Stress-Induced Instability of SiC MOS Devices. Materials Research Society Symposia Proceedings, 2006, 911, 5.	0.1	18
17	The Effect of Nitridation on SiC MOS Oxides as Evaluated by Charge Pumping. Materials Science Forum, 0, 600-603, 743-746.	0.3	18
18	Evaluations of threshold voltage stability on COTS SiC DMOSFETs using fast measurements. , 2016, , .		18

#	ARTICLE	IF	CITATIONS
19	A Study of High Temperature DC and AC Gate Stressing on the Performance and Reliability of Power SiC MOSFETs. Materials Science Forum, 0, 740-742, 549-552.	0.3	14
20	Evaluation of PBTS and NBTS in SiC MOS Using $I_{\text{ON}}/I_{\text{OFF}}$ In Situ $I_{\text{ON}}/I_{\text{OFF}}$ Charge Pumping Measurements. Materials Science Forum, 0, 740-742, 545-548.	0.3	14
21	On Separating Oxide Charges and Interface Charges in 4H-SiC Metal-Oxide-Semiconductor Devices. Materials Science Forum, 2006, 527-529, 1007-1010.	0.3	12
22	Improved Observation of SiC/SiO <sub>2</sub> Oxide Charge Traps Using MOS $I_{\text{ON}}/I_{\text{OFF}}$ . Materials Science Forum, 0, 679-680, 366-369.	0.3	11
23	Charge Trapping in Sic Power MOSFETs and its Consequences for Robust Reliability Testing. Materials Science Forum, 2012, 717-720, 1085-1088.	0.3	11
24	Detection of Mobile Ions in the Presence of Charge Trapping in SiC MOS Devices. Materials Science Forum, 0, 717-720, 461-464.	0.3	10
25	Feasibility of SiC Threshold Voltage Drift Characterization for Reliability Assessment in Production Environments. Materials Science Forum, 2017, 897, 509-512.	0.3	10
26	Temperature-dependent threshold stability of COTS SiC MOSFETs during gate switching. , 2017, , .		10
27	Effect of $I_{\text{ON}}/I_{\text{OFF}}$ -State Stress on SiC DMOSFET Subthreshold I-V Characteristics. Materials Science Forum, 0, 645-648, 983-986.	0.3	9
28	Measurement Issues Affecting Threshold-Voltage Instability Characterization of SiC MOSFETs. Materials Science Forum, 2016, 858, 461-464.	0.3	7
29	Implications of Threshold-Voltage Instability on SiC DMOSFET Operation. Materials Science Forum, 0, 615-617, 809-812.	0.3	6
30	Bias-Temperature-Stress Response of Commercially-Available SiC Power MOSFETs. Materials Science Forum, 0, 821-823, 677-680.	0.3	6
31	Threshold-Voltage Instability in SiC MOSFETs Due to Near-Interfacial Oxide Traps. Materials Science Forum, 0, 858, 585-590.	0.3	5
32	Influence of High-Temperature Bias Stress on Room-Temperature $I_{\text{ON}}/I_{\text{OFF}}$ Drift Measurements in SiC Power MOSFETs. Materials Science Forum, 0, 963, 757-762.	0.3	5
33	Permanent and Transient Effects of High-Temperature Bias Stress on Room- Temperature $V_{\text{T}}$ Drift Measurements in SiC Power MOSFETs. , 2019, , .		4
34	Using a First Principles Coulomb Scattering Mobility Model for 4H-SiC MOSFET Device Simulation. Materials Science Forum, 2006, 527-529, 1321-1324.	0.3	3
35	Improvements in SiC MOS Processing as Revealed by Studies of Fixed and Oxide Trap Charge. Materials Science Forum, 2009, 615-617, 769-772.	0.3	3
36	Investigation of a high temperature oxide-trap activation model for SiC power MOSFETs. , 2011, , .		3

#	ARTICLE	IF	CITATIONS
37	Simulating ion transport and its effects in silicon carbide power MOSFET gate oxides. , 2013, , .		3
38	Towards a Robust Approach to Threshold Voltage Characterization and High Temperature Gate Bias Qualification. , 2020, , .		3
39	Determination of the Temperature and Field Dependence of the Interface Conductivity Mobility in 4H-SiC/SiO <sub>2</sub> . Materials Science Forum, 2006, 527-529, 1055-1058.	0.3	2
40	Influences of Bias Interruption and Reapplication on High-Temperature Threshold-Voltage Shifts of SiC DMOSFETs. Materials Science Forum, 0, 924, 743-747.	0.3	2
41	Simulating the Influence of Mobile Ionic Oxide Charge on SiC MOS Bias-Temperature Instability Measurements. Materials Science Forum, 2015, 821-823, 697-700.	0.3	1
42	Investigation of Drain Current Saturation in 4H-SiC MOSFETs. Materials Science Forum, 2007, 556-557, 811-814.	0.3	0
43	Using triangular voltage sweep to detect mobile ions in silicon carbide MOS. , 2011, , .		0
44	(Invited) Implications for Robust Reliability Testing of Power SiC MOSFETs. ECS Transactions, 2011, 41, 215-224.	0.3	0