

# Mindaugas Lukosius

## List of Publications by Year in descending order

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55  
papers

1,427  
citations

430874

18  
h-index

330143

37  
g-index

55  
all docs

55  
docs citations

55  
times ranked

2289  
citing authors

#	ARTICLE	IF	CITATIONS
1	Residual Metallic Contamination of Transferred Chemical Vapor Deposited Graphene. ACS Nano, 2015, 9, 4776-4785.	14.6	250
2	Impact of Temperature on the Resistive Switching Behavior of Embedded $\text{HfO}_2$ -Based RRAM Devices. IEEE Transactions on Electron Devices, 2011, 58, 3124-3131.	3.0	201
3	Pulse-induced low-power resistive switching in $\text{HfO}_2$ metal-insulator-metal diodes for nonvolatile memory applications. Journal of Applied Physics, 2009, 105, .	2.5	97
4	Hard x-ray photoelectron spectroscopy study of the electroforming in Ti/ $\text{HfO}_2$ -based resistive switching structures. Applied Physics Letters, 2012, 100, .	3.3	94
5	Graphene growth on Ge(100)/Si(100) substrates by CVD method. Scientific Reports, 2016, 6, 21773.	3.3	83
6	Metal-Free CVD Graphene Synthesis on 200 mm Ge/Si(001) Substrates. ACS Applied Materials & Interfaces, 2016, 8, 33786-33793.	8.0	59
7	Microscopic model for the nonlinear behavior of high-k metal-insulator-metal capacitors. Journal of Applied Physics, 2008, 103, 104103.	2.5	52
8	Resistive switching characteristics of CMOS embedded $\text{HfO}_2$ -based 1T1R cells. Microelectronic Engineering, 2011, 88, 1133-1135.	2.4	52
9	Band alignment and electron traps in $\text{Y}_2\text{O}_3$ layers on (100)Si. Applied Physics Letters, 2009, 95, .	3.3	40
10	Optical properties and band gap characterization of high dielectric constant oxides. Thin Solid Films, 2012, 520, 4532-4535.	1.8	37
11	Investigation of atomic vapour deposited TiN/ $\text{HfO}_2$ / $\text{SiO}_2$ gate stacks for MOSFET devices. Microelectronic Engineering, 2008, 85, 1762-1765.	2.4	28
12	High performance metal-insulator-metal capacitors with atomic vapor deposited $\text{HfO}_2$ dielectrics. Thin Solid Films, 2010, 518, 4380-4384.	1.8	28
13	Characterization of rare earth oxides based MOSFET gate stacks prepared by metal-organic chemical vapour deposition. Materials Science in Semiconductor Processing, 2006, 9, 1065-1072.	4.0	24
14	The role of the $\text{HfO}_2$ -TiN interface in capacitance-voltage nonlinearity of Metal-Insulator-Metal capacitors. Thin Solid Films, 2009, 517, 6334-6336.	1.8	24
15	Graphene Schottky Junction on Pillar Patterned Silicon Substrate. Nanomaterials, 2019, 9, 659.	4.1	22
16	Metallorganic Chemical Vapor Deposition of Dysprosium Scandate High-k Layers Using mmp-Type Precursors. Journal of the Electrochemical Society, 2006, 153, F219.	2.9	18
17	Atomic Vapor Deposition of Titanium Nitride as Metal Electrodes for Gate-last CMOS and MIM Devices. Chemical Vapor Deposition, 2008, 14, 123-128.	1.3	18
18	Atomic Vapor Deposition of Strontium Tantalate Films for MIM Applications. IEEE Transactions on Electron Devices, 2008, 55, 2273-2277.	3.0	18

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19	Plasma-enhanced chemical vapor deposition of amorphous Si on graphene. Applied Physics Letters, 2016, 108, 193105.	3.3	18
20	Chemical vapour deposition of praseodymium oxide films on silicon: influence of temperature and oxygen pressure. Thin Solid Films, 2008, 516, 4758-4764.	1.8	17
21	Resistive switching characteristics of integrated polycrystalline hafnium oxide based one transistor and one resistor devices fabricated by atomic vapor deposition methods. Journal of Vacuum Science and Technology B: Nanotechnology and Microelectronics, 2015, 33, 052204.	1.2	17
22	Nucleation and growth of HfO <sub>2</sub> layers on graphene by chemical vapor deposition. Applied Physics Letters, 2013, 103, .	3.3	16
23	High-Mobility Epitaxial Graphene on Ge/Si(100) Substrates. ACS Applied Materials & Interfaces, 2020, 12, 43065-43072.	8.0	16
24	Atomic - vapour - deposited HfO <sub>2</sub> and Sr <sub>4</sub> Ta <sub>2</sub> O <sub>9</sub> layers for metal-insulator-metal applications. Microelectronic Engineering, 2007, 84, 2165-2168.	2.4	14
25	Ge integration on Si via rare earth oxide buffers: From MBE to CVD (Invited Paper). Microelectronic Engineering, 2009, 86, 1615-1620.	2.4	13
26	Deposition of thin silicon layers on transferred large area graphene. Applied Physics Letters, 2013, 103, .	3.3	13
27	HfO <sub>2</sub> , Sr-Ta-O and Ti-Ta-O High-k Dielectrics for Metal-Insulator-Metal Applications. Journal of the Electrochemical Society, 2011, 158, G119.	2.9	12
28	Current Modulation of a Heterojunction Structure by an Ultra-Thin Graphene Base Electrode. Materials, 2018, 11, 345.	2.9	12
29	Investigation of the Oxidation Behavior of Graphene/Ge(001) Versus Graphene/Ge(110) Systems. ACS Applied Materials & Interfaces, 2020, 12, 3188-3197.	8.0	12
30	Electron Transport across Vertical Silicon/MoS <sub>2</sub> /Graphene Heterostructures: Towards Efficient Emitter Diodes for Graphene Base Hot Electron Transistors. ACS Applied Materials & Interfaces, 2020, 12, 9656-9663.	8.0	10
31	Investigations of thermal annealing effects on electrical and structural properties of SrTaO based MIM capacitor. Microelectronic Engineering, 2010, 87, 2561-2564.	2.4	9
32	Single SrTiO <sub>3</sub> and Al <sub>2</sub> O <sub>3</sub> /SrTiO <sub>3</sub> /Al <sub>2</sub> O <sub>3</sub> based MIM capacitors: Impact of the bottom electrode material. Microelectronic Engineering, 2011, 88, 1521-1524.	2.4	9
33	Graphene Synthesis and Processing on Ge Substrates. ECS Journal of Solid State Science and Technology, 2017, 6, M55-M59.	1.8	9
34	Basic investigation of HfO <sub>2</sub> based metal-insulator-metal diodes. Thin Solid Films, 2011, 519, 5796-5799.	1.8	8
35	Electrical and Morphological Properties of ALD and AVD Grown Perovskite-Type Dielectrics and Their Stacks for Metal-Insulator-Metal Applications. ECS Journal of Solid State Science and Technology, 2012, 1, N1-N5.	1.8	8
36	Large-scale chemical vapor deposition of graphene on polycrystalline nickel films: Effect of annealing conditions. Thin Solid Films, 2019, 690, 137565.	1.8	8

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37	Atomic Vapor Depositions of Ti <sup>x</sup> Ta <sup>1-x</sup> O thin films for Metal-Insulator-Metal applications. Thin Solid Films, 2011, 519, 3831-3834.	1.8	7
38	Perovskite BaHfO <sub>3</sub> Dielectric Layers for Dynamic Random Access Memory Storage Capacitor Applications. Advanced Engineering Materials, 2009, 11, 259-264.	3.5	6
39	Textured strontium titanate layers on platinum by atomic layer deposition. Thin Solid Films, 2012, 520, 6535-6540.	1.8	6
40	Dielectric Material Options for Integrated Capacitors. ECS Journal of Solid State Science and Technology, 2014, 3, N120-N125.	1.8	6
41	Enhanced leakage current behavior of Sr <sub>2</sub> Ta <sub>2</sub> O <sub>7</sub> <sup>x</sup> /SrTiO <sub>3</sub> bilayer dielectrics for metal-insulator-metal capacitors. Thin Solid Films, 2011, 519, 5734-5739.	1.8	5
42	(Invited) Graphene Synthesis and Processing on Ge Substrates. ECS Transactions, 2016, 75, 533-540.	0.5	5
43	Processing and integration of graphene in a 200 <sup>nm</sup> wafer Si technology environment. Microelectronic Engineering, 2019, 205, 44-52.	2.4	5
44	Effect of the composition on the bandgap width of high- $\kappa$ Me <sub>x</sub> Ti <sub>1-x</sub> O <sub>2</sub> (Me = Hf, Ta, Sr) layers. Thin Solid Films, 2011, 519, 5730-5733.	1.8	4
45	Properties of atomic-vapor and atomic-layer deposited Sr, Ti, and Nb doped Ta <sub>2</sub> O <sub>5</sub> Metal-Insulator-Metal capacitors. Thin Solid Films, 2012, 520, 4576-4579.	1.8	4
46	Metal-organic chemical vapor deposition of high- $\kappa$ dielectric Ce <sup>x</sup> Al <sup>1-x</sup> O layers from various metal-organic precursors for metal-insulator-metal capacitor applications. Thin Solid Films, 2013, 536, 68-73.	1.8	4
47	Functionalized Back-End Devices for (Bi)CMOS Circuits. ECS Transactions, 2010, 33, 823-829.	0.5	2
48	Metal-insulator-metal capacitors with MOCVD grown Ce <sup>x</sup> Al <sup>1-x</sup> O as a dielectric. Microelectronic Engineering, 2011, 88, 1529-1532.	2.4	2
49	Contacting graphene in a 200 <sup>nm</sup> wafer silicon technology environment. Solid-State Electronics, 2018, 144, 17-21.	1.4	2
50	(Invited) ALD and AVD Grown Perovskite-type Dielectrics for Metal-Insulator-Metal Applications. ECS Transactions, 2011, 41, 53-61.	0.5	1
51	Ce <sub>x</sub> Al <sub>1-x</sub> O/TiN stack analysis for Metal-Insulator-Metal applications: Effect of annealing and the metal electrode deposition method. Thin Solid Films, 2012, 520, 4518-4522.	1.8	1
52	A comprehensive study of charge transport in Au-contacted graphene on Ge/Si(001). Applied Physics Letters, 2020, 117, .	3.3	1
53	(Invited) Large Scale Graphene Integration for Silicon Technologies. ECS Transactions, 2017, 79, 3-10.	0.5	0
54	(Invited) Challenges of Graphene Process Integration in CMOS Technology. ECS Transactions, 2019, 92, 201-210.	0.5	0

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55	Graphene Research in 200 mm CMOS Pilot Line. , 2022, , .		0