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## Micrometre-scale silicon electro-optic modulator

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2009	Spectral engineering of bends and branches in microdisk coupled-resonator optical waveguides. <b>2007</b> , 15, 17371		
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1523	Electric field poled organic electro-optic materials: state of the art and future prospects. <b>2010</b> , 110, 25-55	734
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1518	Silicon-Based Microring Resonator Modulators for Intensity Modulation. <b>2010</b> , 16, 149-158	54
1517	High-Performance Modulators and Switches for Silicon Photonic Networks-on-Chip. <b>2010</b> , 16, 6-22	82
1516	. <b>2010</b> , 16, 185-191	30
1515	Quantum-Confined Stark Effect in Ge/SiGe Quantum Wells on Si. <b>2010</b> , 16, 85-92	42
1514	CMOS-Compatible Si-Ring-Assisted Mach-Zehnder Interferometer With Internal Bandwidth Equalization. <b>2010</b> , 16, 45-52	26
1513	Pockels effect in short period silicon germanium superlattices. <b>2010</b> , 283, 432-434	2
1512	10Gb/s broadband silicon electro-optic absorption modulator. <b>2010</b> , 283, 2829-2834	10
1511	Theory-inspired development of new nonlinear optical materials and their integration into silicon photonic circuits and devices. <b>2010</b> , 32, 658-668	53
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1509	CMOS-compatible multiple-wavelength oscillator for on-chip optical interconnects. <b>2010</b> , 4, 37-40	600
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1502	Ultracompact channel filters based on race-track photonic crystal ring resonators. <b>2010</b> ,	
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1489	Accelerating Lightpath setup via broadcasting in binary-tree waveguide in Optical NoCs. <b>2010</b> ,	

1488	An intra-chip free-space optical interconnect. <b>2010</b> , 38, 94-105	12
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1381	Reconfigurable optical directed-logic circuits using microresonator-based optical switches. <b>2011, 19, 5244-59</b>	124

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1303	Nonlinear switching in silicon-based ring resonators. <b>2011</b> , 50, 024601	3
1302	Large extinction ratio 10 Gbit/s silicon optical modulator based on a reverse biased PIPIN diode. <b>2011</b> ,	1
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1300	Optical microcavities clad by transparent conductive oxides. <b>2011</b> ,	
1299	The role of optics in future high radix switch design. <b>2011</b> ,	38
1298	Combining memory and a controller with photonics through 3D-stacking to enable scalable and energy-efficient systems. <b>2011</b> , 39, 425-436	6
1297	Low power consumption and compact eight-channel reconfigurable optical add-drop multiplexers based on cascaded microring resonators. <b>2011</b> ,	
1296	Modeling of Current-Voltage Characteristics of the Photoactivated Device Based on SOI Technology. <b>2012</b> , 2012, 1-7	
1295	Characterisation of bifurcation and chaos in silicon microring resonator. <b>2012</b> , 6, 2671-2675	30
1294	Free Carrier Absorption Loss of Optical Phase Modulator. <b>2012</b> , 545, 355-358	
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1291	Electro-optically tunable switches with 100GHz flat-top passband and 45dB extinction ratio using silicon high-order coupled-microring resonators for optical interconnects. <b>2012</b> ,	

1290	Encoding and decoding of orbital angular momentum for wireless optical interconnects on chip. <b>2012</b> , 20, 26986-95	50
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1288	Silicon Ring Optical Modulator with p/n Junctions Arranged along Waveguide for Low-Voltage Operation. <b>2012</b> , 51, 04DG07	4
1287	A ring resonator optical amplitude modulator using coupling control via carrier injection in the coupler. <b>2012</b> ,	
1286	25 Gbit/s silicon microring modulator based on misalignment-tolerant interleaved PN junctions. <b>2012</b> , 20, 2507-15	114
1285	Cascaded modulator architecture for WDM applications. <b>2012</b> , 20, 27420-8	40
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1282	High speed silicon microring modulator employing dynamic intracavity energy balance. <b>2012</b> , 20, 7404-14	8
1281	Error-free transmission of microring-modulated BPSK. <b>2012</b> , 20, 8681-8	29
1280	112-Gb/s monolithic PDM-QPSK modulator in silicon. <b>2012</b> , 20, B624-9	122
1279	1300 nm wavelength InAs quantum dot photodetector grown on silicon. <b>2012</b> , 20, 10446-52	28
1278	Ultralow drive voltage silicon traveling-wave modulator. <b>2012</b> , 20, 12014-20	146
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1275	On-chip CMOS-compatible optical signal processor. <b>2012</b> , 20, 13560-5	41
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1273	Wide tuning of SiN microring resonators by auto-realigning nematic liquid crystal. <b>2012</b> , 20, 15853-8	11

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1271	Electro-optofluidics: achieving dynamic control on-chip. <b>2012</b> , 20, 22314-26	19
1270	Enhanced photoluminescence and electroluminescence of multilayer GeSi islands on Si001 substrates by phosphorus-doping. <b>2012</b> , 20, 22327-33	5
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1267	Chirp-free optical return-to-zero modulation based on a single microring resonator. <b>2012</b> , 20, 7663-71	0
1266	Experimental demonstration of microring quadrature phase-shift keying modulators. <b>2012</b> , 37, 1178-80	58
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1261	Low-voltage, high-extinction-ratio, Mach-Zehnder silicon optical modulator for CMOS-compatible integration. <b>2012</b> , 20, 3209-18	44
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1259	Photothermal optical modulation of ultra-compact hybrid Si-VOLing resonators. <b>2012</b> , 20, 13215-25	69
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1256	Fabrication and characterization of suspended SiO2 ridge optical waveguides and the devices. <b>2012</b> , 20, 22531-6	9
1255	Ultracompact electro-optic phase modulator based on III-V-on-silicon microdisk resonator. <b>2012</b> , 37, 2379-81	12

1254	Demonstration of reconfigurable electro-optical logic with silicon photonic integrated circuits. <b>2012</b> , 37, 3942-4	55
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1249	Post-fabrication reconfiguration for power-optimized tuning of optically connected multi-core systems. <b>2012</b> ,	
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1247	Adiabatic resonant microring (ARM) modulator. <b>2012</b> ,	3
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1245	Ultra-thin silicon-on-insulator strip waveguides and mode couplers. <b>2012</b> , 101, 221106	15
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1242	High speed GeSi electro-absorption modulator at 1550 nm wavelength on SOI waveguide. <b>2012</b> , 20, 22224-32	94
1241	50-Gb/s silicon quadrature phase-shift keying modulator. <b>2012</b> , 20, 21181-6	70
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1234	Channel-Selectable Optical Link Based on a Silicon Microring for on-Chip Interconnection. <b>2012</b> , 29, 094204	3
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1229	Optical microcavities fabricated using direct proton beam writing. <b>2012</b> ,	2
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1187	Design and analysis of InGaAs PIN photodetectors integrated on silicon-on-insulator racetrack resonators. <b>2012</b> ,	
1186	Silicon-on-insulator electro-optically tunable microring resonators with gear-shaped p-i-n diodes. <b>2012</b> ,	
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1183	Electrically tunable infrared metamaterials based on depletion-type semiconductor devices. <b>2012</b> , 14, 114013	25

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1164	Optical Supercomputing. <b>2013</b> ,	4
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1162	Exploiting Two-Wavelength Switching Capability of Silicon Photonic Microrings. <b>2013</b> , 31, 975-981	9
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1160	Optical Interconnects for Future Data Center Networks. <b>2013</b> ,	32
1159	A Leaky Integrate-and-Fire Laser Neuron for Ultrafast Cognitive Computing. <b>2013</b> , 19, 1-12	143
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1149	Imaging topological edge states in silicon photonics. <b>2013</b> , 7, 1001-1005	922
1148	Plasmonic finite-thickness metal-semiconductor-metal waveguide as ultra-compact modulator. <b>2013</b> , 11, 323-334	18
1147	On-chip optical matrix-vector multiplier. <b>2013</b> ,	1

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1131	Optically-controlled extinction ratio and Q-factor tunable silicon microring resonators based on optical forces. <b>2013</b> ,	1
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1123	Plasma etching dynamics of CaxBa1-xNb2O6 (CBN) material. <b>2013</b> , 110, 265-269	4
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1083	Optimization of efficiency-loss figure of merit in carrier-depletion silicon Mach-Zehnder optical modulator. <b>2013</b> , 21, 19518-29	48
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