

European VCSEL Day 2016 at TU Darmstadt

08:15 - 08:45		<i>Registration + Coffee</i>	
08:45 - 09:00		<i>Welcome</i>	
Telecom/Datacom			
09:00 - 09:20	1	Temperature-stable 980 nm VCSEL for 50 Gb/s optical interconnects	G. Larisch ¹ , P. Moser ¹ , J. A. Lott ¹ , D. Bimberg ^{1,2}
09:20 - 09:40	2	Progress toward 25-35 Gbps direct modulation of 1310-nm waveband wafer fused VCSELS	A. Mereuta ¹ , A. Caliman ¹ , P. Wolf ² , A. Sirbu ¹ , V. Jakovlev ¹ , A. Rudra ¹ , D. Bimberg ^{2,3} and E. Kapon ¹
09:40 - 10:00	3	1.5- μ m VCSELS with 22-GHz Small-Signal Bandwidth	S. Spiga, A. Alexander, M. Müller, B. Gerhard, M.-C. Amann
10:00 - 10:20	4	High-speed widely tunable MEMS-VCSEL	J.Cesar ¹ , S.Paul ¹ , M. T. Haidar ¹ , M. Malekizandi ¹ , M. Ortsiefer ² , B. Kögel ² , C. Neumeyr ² , and F. Küppers ¹
10:20 - 10:40	5	InP-based long-wavelength VCSELS with error-free 56 Gbit/s NRZ modulation	M. Ortsiefer ¹ , B. Kögel ¹ , J. Roskopf ¹ , A. Daly ¹ , C. Gréus ¹ , M. Görblich ¹ , Y. Xu ¹ , C. Neumeyr ¹ , F. E. Doany ² , L. Schares ² , D. M. Kuchta ²
10:40 - 11:00		<i>Coffee break</i>	
Innovative VCSEL design and fabrication 1			
11:00 - 11:20	6	Simulation of spiral phase plate VCSELS	P. Debernardi ¹ , A. Tibaldi ¹ , P. Gerlach ² , R. Orta ^{1,3}
11:20 - 11:40	7	VCSELS with optically controlled current confinement	S. Bader ¹ , P. Gerlach ² , R. Michalzik ¹
11:40 - 12:00	8	Beam shaping of AlGaInP-based vertical-cavity surface-emitting lasers emitting in the red spectral range	M. Stadler ¹ , S. Weidenfeld ² , M. Jetter ¹ , P. Michler ¹
12:00 - 12:20	9	Optimal parameters of monolithic high contrast grating mirror for VCSELS	M. Marciniak ¹ , M. Gebski ^{1,2} , M. Dems ¹ , J.A. Lott ² , T. Czystanowski ¹
12:20 - 13:30		<i>Lunch break</i>	
Innovative VCSEL design and fabrication 2			
13:30 - 13:50	10	First electrically pumped mid-infrared vertical-cavity surface-emitting lasers emitting around 3 μ m	A. Andrejew, S. Sprengel, M.-C. Amann
13:50 - 14:10	11	Ultra-thin VCSELS based on monolithic subwavelength high-index contrast surface gratings	M. Gebski ^{1,2} , E. Haglund ³ , A. Wojcik-Jedlinska ⁴ , M. Riazat ⁵ , P. Moser ² , M. Dems ¹ , M. Bugajski ⁴ , A. Larsson ³ , T. Czystanowski ¹ , J. A. Lott ²
14:10 - 14:30	12	VCSELS fabricated using self-aligned processing	L. Marigo Lombart ¹ , Z. A. Arnoult ¹ , L. Mazon ¹ , P. Dubreuil ¹ , B. Reig ¹ , N. Mauran ¹ , H. Thienpont ² , K. Panajotov ² , G. Almuneau ¹
14:30 - 14:50	13	Fabrication of fiber-fiber and VCSEL-fiber optical links using self-aligned NIR photo-polymerization	V. Bardinal ¹ , O. Soppera ² , F. Diot ² , B. Reig ¹ , T. Camps ¹ , J.B. Doucet ¹ , G. Petit ¹ , C. Ecoffet ² , E. Daran ²
14:50 - 15:10	14	Enhancement of VCSEL performances using a novel bonding process based on localized electroplating copper through Silicon vias	S. Pes ^{1,2} , F. Taleb ¹ , C. Paranthoën ¹ , C. Levallois ¹ , N. Chevalier ¹ , H. Follot ¹ , M. Alouini ²
15:10 - 15:30		<i>Coffee break</i>	
VCSEL Physics and Applications			
15:30 - 15:50	15	Thermal parameter extraction from continuous-wave light-current-voltage data of VCSELS	M. Daubenschütz and R. Michalzik
15:50 - 16:10	16	Spectral analysis of correlation between polarization modes in a VCSEL with optical feedback	Chi-Hak Uy ^{1,2} , Damien Rontani ^{1,2} , Stefan Breuer ^{1,2,3} , Marc Sciamanna ^{1,2}
16:10 - 16:30	17	Multi-mode rate-equation analysis of 980-nm VCSELS with a bandwidth exceeding 30 GHz	W. Hamad, S. Wanckel, W. Hofmann
16:30 - 16:50	18	Dynamics of dual-polarization VCSEL-based optical frequency combs including optical injection locking	E. Prior ¹ , C. de Dios ¹ , R. Criado ² , M. Ortsiefer ³ , P. Meissner ⁴ , P. Acedo ¹
16:50 - 17:10	19	AlGaInP-based VCSEL for active spatial polarization control in microscope objectives	M. Jetter ¹ , S. Weidenfeld ² , F. Schaal ³ , W. Osten ³ , M. Rutloh ⁴ , J. Stumpe ⁴ , P. Michler ¹
17:10 - 17:30		<i>Wrap-up and Closing</i>	
19:00		<i>Dinner</i>	