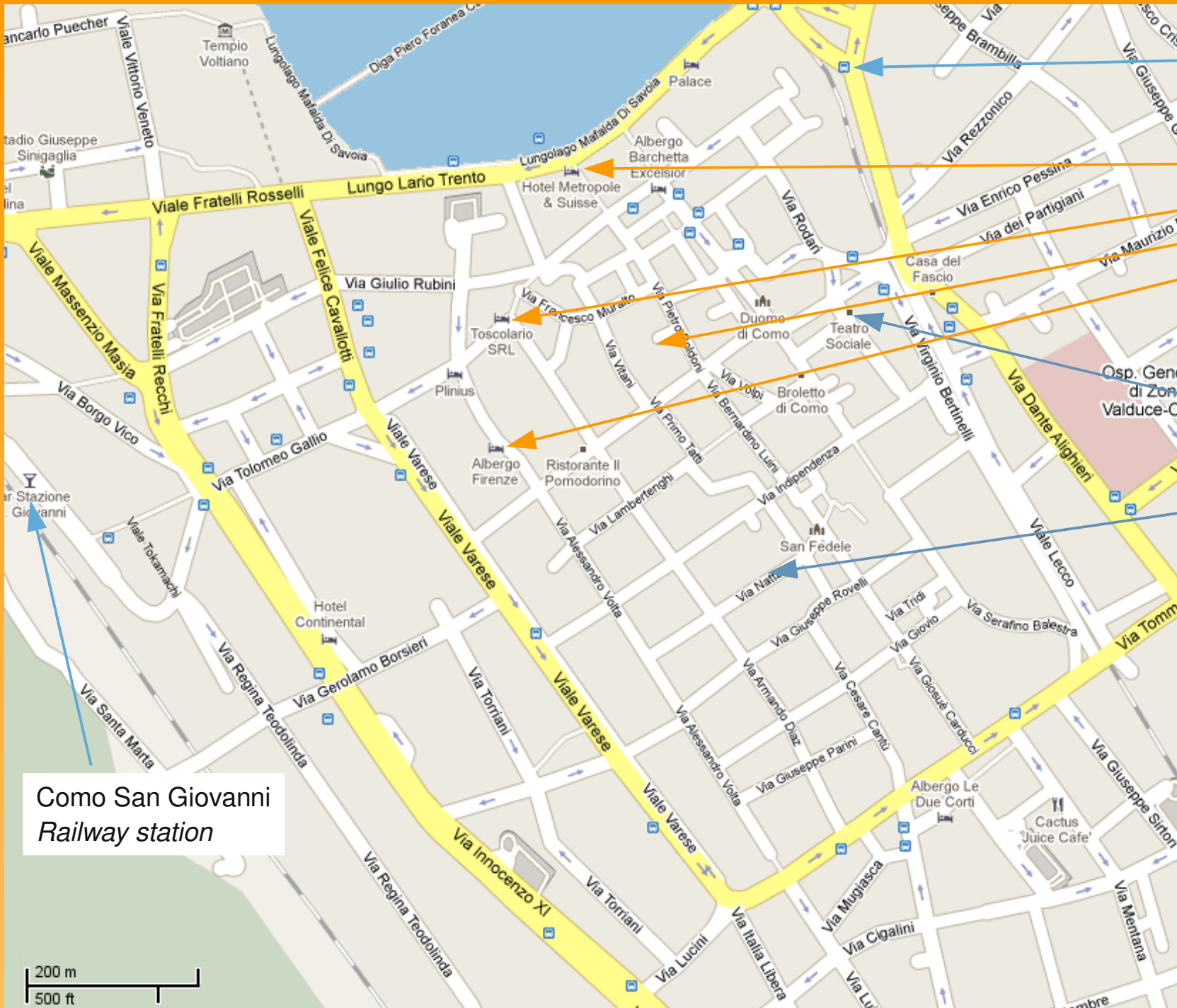


	Monday 14 th June	Tuesday 15 th June	Wednesday 16 th June	Thursday 17 th June	Friday 18 th June
9:00		<i>Welcome from Leo Miglio</i> Novel Patterning Techniques	Novel Index Surfaces I	Patterning for Nanostructures I	SiGe Dots I
10:45	Coffee break				
11:15		Nanowires I	Novel Index Surfaces II	Patterning for Nanostructures II	SiGe Dots II
12:30	Lunch Buffet				<i>Final Remarks from Leo Miglio</i>
13:30		Nanowires II Bottom-up Patterning	Excursion	Graphene Epitaxy	Departure
16:00		Tea break		Tea break	
16:30		Poster session		Exhibitors' presentations	
17:00	Registration <i>Palazzo Natta</i>			Poster session	
18:00	Apéritif		Social dinner	Apéritif	





Como Nord Lago
Railway station

Hotels
Metropole & Suisse
Posta
Tre Re
Firenze

Società del Casino
(Teatro Sociale)
Conference venue

Palazzo Natta
*Registration on
Monday evening*

Como San Giovanni
Railway station

Tuesday 15th June

Morning

Società del Casino (Teatro Sociale)

09:00 Introduction from Leo Miglio

09:15 **Novel Patterning Techniques**

Chair: Leo Miglio

Invited contribution: Harun H. Solak

Fabrication of growth and assembly substrates by extreme ultraviolet interference lithography

Contributions: Tino J. Pfau*, Aleksander Gushterov and Johann Peter Reithmaier

Optimization of wet-chemical pre-patterning for site-controlled quantum dot growth

Andrea Cattoni*, E. Cambri, D. Decanini, G. C. Faini and A. M. Haghiri-Gosnet

Soft UV-NIL at 20 nm scale with flexible mold from Si master fabricated with hydrogen silsequioxane

I. C. Marcus*, I. Berbezier, A. Ronda, M. I. Alonso, M. Garriga, A. R. Goñi, E. Gomes, L. Favre, A. Delobbe and P. Sudraud

Self assembled Ge nanostructures grown on FIB nanopatterned Si substrates

10:45 Coffee break

11:15 **Nanowires I**

Chair: Erik P. A. M. Bakkers

Invited contribution: Magnus T. Borgström

Nanowires with promise for photovoltaics, growth and characterisation

Contributions: K. Sladek*, A. Penz, M. Akabori, H. Hardtdegen and D. Grützmacher

Comparison of growth behavior for undoped and Si-doped GaAs and InAs nanowires deposited by selective area MOVPE

12:30 Lunch

Tuesday 15th June

Afternoon

Società del Casino (Teatro Sociale)

13:30

Nanowires II

Chair: Magnus T. Borgström

Invited contribution: Erik P. A. M. Bakkers, Rienk Algra, Moira Hocevar, Magnus T. Borgström, George Immink, Bas Ketelaars, Lou-Fe Feiner, Willem J. P. van Enckevort, Elias Vlieg and Marcel A. Verheijen

Periodic Nanowire Structures

Contributions: K. Kishino*, S. Sugimoto, S. Ishizawa, R. Araki and A. Kikuchi

Stimulated emission at green wavelength of InGaN-based nanocolumn arrays grown on Ti-mask patterned GaN template

T. U. Schulli*, R. Daudin, G. Renaud, A. Vaysset and A. Pasturel

Catalysts for semiconductor nanowires: island formation, epitaxy and solid-liquid transition on Si(001) and Si(111) surfaces

15:00

Bottom-up Patterning

Chair: Magnus T. Borgström

Contributions: S. Kumar*, O. Makarovsky, A. Rastelli, A. Patanè, L. Eaves, A. G. Balanov, R. Champion, C. T. Foxon and O. G. Schmidt

Direct laser writing of nanoscale light emitting diodes in (Ga, Mn)As/GaAs heterostructures

P. Alonso-González, D. Fuster, Y. González, L. González*, D. Hernández-Maldonado, M. Herrera, D. L. Sales and S. I. Molina

Vertical Quantum Dot Molecules grown by Droplet Epitaxy

A. Urbańczyk*, G. J. Hamhuis and R. Nötzel

In nanocrystals: ordered arrays and quantum dot formation

16:00

Tea break

16:30

Poster session

18:00

Apéritif

Wednesday 16th June

Morning

Società del Casino (Teatro Sociale)

09:00 **Novel Index Surfaces I**

Chair: Stefano Sanguinetti

Invited contribution: Kouichi Akahane*, Naokatsu Yamamoto and Tetsuya Kawanishi

Highly stacked and highly ordered InAs quantum dots grown on InP(311)B substrate

Contributions: N. Kriouche*, M. Leroux, P. Vennéguès, G. Nataf, M. Nemoz and P. de Mierry

Filtering of defects in semipolar (11-22) GaN on m-plane sapphire using 2-steps lateral epitaxial overgrowth

Marco Abbarchi*, Takaaki Mano, Takashi Kuroda and Kazuaki Sakoda

Fine structure splitting reduction in self-assembled GaAs quantum dots grown on AlGaAs (111)A surface by droplet epitaxy

Tomoya Konishi*, Minoru Yamamoto, and Shiro Tsukamoto

Statistical analysis of surface reconstruction domains and quantum dot-forming pattern on InAs wetting layer

10:30 Coffee break

11:00 **Novel Index Surfaces II**

Chair: Kouichi Akahane

Invited contribution: Takaaki Mano*, Takashi Kuroda, Takeshi Noda and Kazuaki Sakoda

Self-Assembly of GaAs Quantum Dots on (n11) (n=0, 1, 3) Substrates by Droplet Epitaxy

Contributions: Emanuele Uccelli*, Sonia Conesa-Boj, Sonia Estrade, Francesca Peiro, Joan Ramon Morante, Jordi Arbiol and Anna Fontcuberta i Morral

InAs Quantum Dot arrays obtained on the side facets of GaAs Nanowire by Molecular Beam Epitaxy

M. Brehm*, M. Grydlik, F. Hackl, H. Groiss, T. Fromherz, F. Schäffler and G. Bauer

Inverted Ge islands in {111}-faceted Si pits - an approach towards islands with higher aspect ratio

B. Sanduijav*, D.G. Matei and G. Springholz

STM study of successive Ge growth on "V"-stripe patterned Si (001) surfaces at different growth temperatures

12:30 Lunch

14:00 Meeting at Piazza Cavour for boat trip on Lake Como

17:30 Meeting at Società del Casino for tour of L-NESS

19:30 Social dinner at the *Trattoria dei Combattenti*

Thursday 17th June

Morning

Società del Casino (Teatro Sociale)

09:00 **Patterning for Nanostructures I**

Chair: Daniel Chrastina

Invited contribution: Shiro Tsukamoto

Quantum structures formed by atomistic selective growth: From artificial to self-organized patterned substrates

Contributions: A. Surrente*, M. Felici, P. Gallo, A. Rudra, B. Dwir and E. Kapon

Growth mechanism and optical properties of dense array of ordered quantum dots

N. Gogneau*, L. Le Gratiet, B. Fain, G. Patriarche, and L. Largeau, G. Beaudoin, C. Ulysse, D. Elvira, R. Hostein, A. Beveratos, I. Robert-Philip and I. Sagnes

Site-controlled InAs/InP quantum dots grown by selective area MOVPE growth for single photon source applications

A. González-González*, M. Alonso, E. Navarro, E. Vasco, J. L. Sacedón and A. Ruiz

Morphology analysis of Si island arrays on Si(001)

E. Lausecker*, M. Brehm, M. Grydlik, I. Bergmair, M. Mühlberger, R. Schöftner, T. Fromherz and G. Bauer

UV nanoimprint lithography for large-area site-controlled growth of Si/Ge islands

10:40 Coffee break

11:00 **Patterning for Nanostructures II**

Chair: Stefano Sanguinetti

Invited contribution: P. Atkinson* and O. G. Schmidt

Site controlled InAs quantum dots on ex-situ patterned substrates

Contributions: D. Fekete, R. Carron, A. Rudra, B. Dwir, P. Gallo* and Eli Kapon

MOVPE grown InGaAsN/GaAs Quantum Wires and Quantum Wells emitting at 1.3 μ m

J. Skiba-Szymanska*, A. Jamil, I. Farrer, C. A. Nicoll, D. J. P. Ellis, M. B. Ward, D. Anderson, G. A. C. Jones, D. A. Ritchie and A. J. Shields

Record narrow emission linewidths from positioned quantum dots

J. A. Floro*, J. F. Graham, C. D. Kell, C. Petz, D. Yang, J. L. Levy and R. Hull

Templated Self-Assembly of GeSi Quantum Dots Using Focused Energetic Beams to Generate Surface Patterns

12:30 Lunch

Thursday 17th June

Afternoon

Società del Casino (Teatro Sociale)

13:30

Graphene Epitaxy

Chair: Roman Sordan

Invited contribution: Jae-Young Choi*, Hyo Sug Lee, Won Mook Choi, Hyeon-Jin Shin, Seon-Mi Yoon, Sang-Woo Kim and Young Hee Lee
Transfer of large-area graphene by roll-to-roll lamination and device applications

Contributions: Hirokazu Fukidome*, Ryota Takahashi, Yu Miyamoto, Hiroyuki Handa, Hyun-Chul Kang, Hiromi Karasawa, Tetsuya Suemitsu, Taiichi Otsuji, Akitaka Yoshigoe, Yuden Teraoka and Maki Suemitsu
Viability of Graphene-on-Silicon Technology toward fusion of Graphene with Advanced Si-CMOS Technologies
Hyun-Kyu Park, Kyung-Sik Shin, Dukhyun Choi, Won Mook Choi, Hyo Sug Lee, Jae-Young Choi and Sang-Woo Kim*
Rollable transparent nanogenerators based on ZnO nanorod-graphene heterostructures
D. Wang, Z. Wei, S. Kim, S. Y. Kim, Y. Hu, M. Yakes, A. Laracuenta, Z. Dai, S. R. Marder, C. Berger, W. King, W. A. de Heer, P. E. Sheehan and E. Riedo*
Nanoscale Tunable Reduction of Graphene Oxide for Graphene Electronics

Kang Wang

Nanoscale materials enabling nonvolatile electronics

15:30

Tea break

16:00

Exhibitors' presentations

17:00

Continuation of poster session and presentation of poster prize

17:30

Concert

18:15

Apéritif

Friday 18th June

Morning

Società del Casino (Teatro Sociale)

09:00

SiGe Dots I

Chair: Giovanni Isella

Invited contribution: G. Springholz*, B. Sanduijav, D. Matei, G. Chen, D. Scopece, F. Montalenti and L. Miglio
Unique growth properties of Ge on high-indexed Si (11 10) surfaces

Contributions: J. J. Zhang*, N. Hrauda, H. Groiss, A. Rastelli, J. Stangl, F. Schäffler, O. G. Schmidt, G. Bauer, A. Marzegalli and L. Miglio
Strain engineering in Si by deposition of ordered SiGe islands on patterned Si(001) substrates

G. Chen*, B. Sanduijav, D. Scopece, D. Matei, F. Montalenti, H. Groiss, J. Stangl, W. Jantsch, G. Springholz, L. Miglio and F. Schäffler

Phase transition from prism to dome for Si_{1-x}Ge_x on Si (1 1 10) substrate

I. Berbezier, G. Amiard, L. Favre, M. Aouassa, A. Ronda, K. Gacem, A. El Hdyi, M. Troyon, M. Scarselli, P. Castrucci, M. De Crescenzi, D. Lockwood, N. Rowell and H. Maaref

Electrical, optical and structural properties of self-organized Ge nanocrystals

10:45

Coffee break

11:15

SiGe Dots II

Chair: Francesco Montalenti

Invited contribution: Yong-Wei Zhang *, Jun-Yan Guo and Vivek Shoney

Heteroepitaxial Growth on Nanowire and Nanoring surfaces: Instabilities and Ordered Quantum Structure Formation

Contributions: M. Grydlik*, M. Brehm, F. Hackl, T. Fromherz, F. Schäffler and G. Bauer

Exploiting the interface between randomly nucleated and ordered dots for unrolling SiGe/Si dot properties on a micrometer scale

G. M. Vanacore, M. Zani, M. Bollani, G. Isella, J. Osmond, E. Bonera, A. Picco, F. Montalenti, S. Molteni and A. Tagliaferri
Epitaxial SiGe self-assembled island growth by Surface Thermal Diffusion on a flat and pit-patterned Si(100) surface

M.-I. Richard*, T. U. Schüllli, G. Renaud, N. A. Katcho, M. G. Proietti, H. Renevier, V. Favre-Nicolin, Z. Zhong, G. Chen, J.J. Zhang, T.H. Metzger, and G. Bauer

X-ray diffraction to probe the structural properties of Ge nano-islands on nominal and nano-structured Si(001) substrates

12:30

Final remarks from Leo Miglio

List of Posters

Società del Casino (Teatro Sociale)

Takashi Toujyou* and Shiro Tsukamoto

Site-control growth of InAs nano-dot on GaAs(001) by STMBE

F. Saidi*, L. Bouzaïene, L. Sfaxi and H. Maaref

Growth rate effects on optical properties of InAs/GaAs (113)A quantum dots grown by molecular beam epitaxy

M. Bennour, L. Bouzaïene*, L. Sfaxi and H. Maaref

Effect of substrate temperature and As/In ratio on InAs critical thickness grown on GaAs (115)A by molecular beam epitaxy

K. Král

Electron transfer between zero-dimensional quantum nanostructures

T. Teraoka*, C. Somaschini, T. Toujyou, T. Noda, S. Sanguinetti, N. Koguchi, T. Konishi and S. Tsukamoto

Nanohole formation on GaAs (001) by Ga droplets revealed from in-situ STM observation

Seong-Soo Kim, Kang-Hyuck Lee, Brijesh Kumar and Sang-Woo Kim*

Controlled growth of CdS nanostructures in a chemical vapor deposition process

Kang-Hyuck Lee, Brijesh Kumar and Sang-Woo Kim*

Hybrid bulk heterojunction solar cells with ZnO nanorods

F. Hackl*, M. Grydlik, M. Brehm, H. Groiss, T. Fromherz, F. Schäffler and G. Bauer

Narrow photoluminescence emission of Ge islands grown on pit-patterned Si(001) substrates at various temperatures

T. V. Hakkarainen*, A. Schramm, A. Tukiainen, R. Ahorinta and M. Guina

Lateral ordering of InAs quantum dots on cross-hatch patterned GaInP

N. Hrauda*, J. J. Zhang, J. Stangl, G. Bauer, C. Biasotto, V. Jovanovic, L. K. Nanver, J. Moers and D. Grützmacher

Investigations on strained Si channels above buried 2D periodic SiGe islands integrated into a Field-Effect Transistor

R. Ferragut*, A. Calloni, A. Dupasquier and G. Isella

Defect characterization in SiGe/SOI epitaxial semiconductor by positron annihilation

A. Jamil*, J. Skiba-Szymanska, I. Farrer, C. A. Nicoll, D. J. P. Ellis, M. B. Ward, D. Anderson, G. A. C. Jones, A. J. Shields and D. A. Ritchie

High quality positioned InAs quantum dots grown on patterned GaAs (100) substrates

M. Nemoz*, G. Nataf, N. Kriouche and P. de Mierry

High resolutions x-ray diffraction of (11-22) InGaN films and (11-22) InGaN/GaN quantum wells

List of Posters

Società del Casino (Teatro Sociale)

Gang Chen*, Wolfgang Jantsch and Friedrich Schäffler

Enhanced intermixing in Ge nano-prisms on groove patterned Si (1 1 10) substrate

M. Bollani*, D. Chrastina, A. Fedorov, A. Picco, G. Vanacore, A. Tagliaferri, R. Sordan and E. Bonera

Ordered arrays of SiGe islands from low-energy PECVD

E. Bonera*, A. Picco, R. Gatti, G. Isella, G. Norga, E. Grilli, M. Guzzi, M. Texier, B. Pichaud, H. von Känel and L. Miglio

Ultrathin body silicon-on-insulator with an epitaxial Si_{1-x}Ge_x stressor

E. Gomes, L. Favre, A. Ronda, I. Berbezier, A. Delobbe and P. Sudraud

Si substrate nanostructuring using mass-filtered focused ion beam with Si and Au ions

M. Aouassa, I. Berbezier, L. Favre, A. Ronda, A. Miranda, P. Della Vedova, F. Traversi, R. Sordan and H. Maaref

Self-organisation of Si nanodroplets by dewetting of ultra-thin crystalline and amorphous SOI

Davide Colombo*, Stefano Cecchi, Daniel Chrastina, Fabio Isa, Giovanni Isella, Hans von Känel and Leo Miglio

Suspended Ge layers grown on patterned Si substrates

Jong Su Kim*, Hyun Jun Jo, In-Ho Bae, Sang Jun Lee and Sam Kyu Noh

Fabrication of InAs quantum dots on GaAs (111)A surface and their optical properties

S. Bietti*, C. Somaschini, N. Koguchi, F. Montalenti, C. Frigeri and S. Sanguinetti

Self assembled Local Artificial Substrates of GaAs on Si substrate

Claudio Somaschini*, Sergio Bietti, Stefano Sanguinetti and Nobuyuki Koguchi

Control of the lateral growth morphology in GaAs droplet epitaxy

Francesca Boioli*, Riccardo Gatti, Francesco Montalenti and Leo Miglio

Plastic relaxation delay in SiGe islands grown on pit-patterned Si(001) substrates

Riccardo Gatti*, Francesca Boioli, Martyna Grydlik, Moritz Brehm, Anna Marzegalli, Francesco Montalenti, Thomas Fromherz, Günther Bauer,

Friedrich Schäffler and Leo Miglio

Dislocation Engineering in SiGe Heteroepitaxial Film on Nanopatterned Si(001) Substrates

R. Bergamaschini*, F. Montalenti, M. Grydlik, M. Brehm, F. Hackl, T. Fromherz and L. Miglio

Optimal growth conditions for selective Ge islands positioning on pit-patterned Si(001)