

University of Ghent - Cocoon –

Ref. person: Christophe Detavernier

Scientific publications:

Ramachandran, R.K., Dendooven, J., Botterman, J., Pulinthanathu Sree, S., Poelman, D., Martens, J.A., Poelman, H., Detavernier, C.

Plasma enhanced atomic layer deposition of Ga₂O₃ thin films

(2014) Journal of Materials Chemistry A, 2 (45), pp. 19232-19238.

Zierold, R., Le Lam, C., Dendooven, J., Gooth, J., Böhnert, T., Sergelius, P., Munnik, F., Montero Moreno, J.M., Görlitz, D., Detavernier, C., Nielsch, K.

Magnetic characterization and electrical field-induced switching of magnetite thin films synthesized by atomic layer deposition and subsequent thermal reduction

(2014) Journal of Physics D: Applied Physics, 47 (48), art. no. 485001, .

Filez, M., Redekop, E.A., Poelman, H., Galvita, V.V., Ramachandran, R.K., Dendooven, J., Detavernier, C., Marin, G.B.

Unravelling the formation of Pt-Ga alloyed nanoparticles on calcined Ga-modified hydrotalcites by in situ XAS

(2014) Chemistry of Materials, 26 (20), pp. 5936-5949.

Damm, H., Adriaensens, P., De Dobbelaere, C., Capon, B., Elen, K., Drijkoningen, J., Conings, B., Manca, J.V., D'Haen, J., Detavernier, C., Magusin, P.C.M.M., Hadermann, J., Hardy, A., Van Bael, M.K.

Factors influencing the conductivity of aqueous sol(ution)-gel-processed Al-doped ZnO films

(2014) Chemistry of Materials, 26 (20), pp. 5839-5851.

Hu, C., Gassenq, A., Justo, Y., Devloo-Casier, K., Chen, H., Detavernier, C., Hens, Z., Roelkens, G.

Air-stable short-wave infrared PbS colloidal quantum dot photoconductors passivated with Al₂O₃ atomic layer deposition

(2014) Applied Physics Letters, 105 (17), art. no. 171110, .

Van Den Ham, E.J., Peys, N., De Dobbelaere, C., D'Haen, J., Mattelaer, F., Detavernier, C., Notten, P.H.L., Hardy, A., Van Bael, M.K.

Amorphous and perovskite Li₃xLa_{(2/3)-x}TiO₃ (thin) films via chemical solution deposition: solid electrolytes for all-solid-state Li-ion batteries

(2014) Journal of Sol-Gel Science and Technology, 8 p. Article in Press.

Ramachandran, R.K., Dendooven, J., Detavernier, C.

Plasma enhanced atomic layer deposition of Fe₂O₃ thin films

(2014) Journal of Materials Chemistry A, 2 (27), pp. 10662-10667.

Deng, S., Kurttepli, M., Deheryan, S., Cott, D.J., Vereecken, P.M., Martens, J.A., Bals, S., Van Tendeloo, G., Detavernier, C.

Synthesis of a 3D network of Pt nanowires by atomic layer deposition on a carbonaceous template

(2014) Nanoscale, 6 (12), pp. 6939-6944.

Filez, M., Poelman, H., Ramachandran, R.K., Dendooven, J., Devloo-Casier, K., Fonda, E., Detavernier, C., Marin, G.B.

In situ XAS and XRF study of nanoparticle nucleation during O₃-based Pt deposition

(2014) Catalysis Today, 229, pp. 2-13.

Redekop, E.A., Galvita, V.V., Poelman, H., Bliznuk, V., Detavernier, C., Marin, G.B.

Delivering a modifying element to metal nanoparticles via support: Pt-Ga alloying during the reduction of Pt/Mg(Al,Ga)O_x catalysts and its effects on propane dehydrogenation

(2014) ACS Catalysis, 4 (6), pp. 1812-1824.

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(2014) ACS Applied Materials and Interfaces, 6 (10), pp. 7316-7324.

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Phase formation in intermixed Ni-Ge thin films: Influence of Ge content and low-temperature nucleation of hexagonal nickel germanides

(2014) Microelectronic Engineering, 120, pp. 168-173.

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Scanning probe microscopy as a scalpel to probe filament formation in conductive bridging memory devices

(2014) Microelectronic Engineering, 120, pp. 67-70.

Celano, U., Goux, L., Belmonte, A., Opsomer, K., Franquet, A., Schulze, A., Detavernier, C., Richard, O., Bender, H., Jurczak, M., Vandervorst, W.

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(2014) Nano Letters, 14 (5), pp. 2401-2406.

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(2014) Chemical Communications, 50 (35), pp. 4610-4612.

Elen, K., Capon, B., De Dobbelaere, C., Dewulf, D., Peys, N., Detavernier, C., Hardy, A., Van Bael, M.K.

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(2014) *Thin Solid Films*, 555, pp. 33-38.

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(2014) *Thin Solid Films*, 551, pp. 86-91.

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Annealing of sulfide stabilized colloidal semiconductor nanocrystals

(2014) *Journal of Materials Chemistry C*, 2 (1), pp. 178-183.

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(2014) *Applied Catalysis B: Environmental*, 160-161 (1), pp. 204-210.

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(2014) *Journal of Applied Physics*, 115 (5), art. no. 054501, .

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(2014) Journal of Vacuum Science and Technology A: Vacuum, Surfaces and Films, 32 (1), art. no. 01A123, .