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Scientific publications: (Graphene)

Reynaud, O., Nasibulin, A.G., Anisimov, A.S., Anoshkin, I.V., Jiang, H., Kauppinen, E.I.

Aerosol feeding of catalyst precursor for CNT synthesis and highly conductive and transparent film fabrication

(2014) Chemical Engineering Journal, 255, pp. 134-140.

Rackauskas, S., Jiang, H., Wagner, J.B., Shandakov, S.D., Hansen, T.W., Kauppinen, E.I., Nasibulin, A.G.

In situ study of noncatalytic metal oxide nanowire growth

(2014) Nano Letters, 14 (10), pp. 5810-5813.

Borghesi, M., Azcune, I., Carrasco, P.M., Sainio, J., Kauppinen, E., Ruiz, V.

Nitrogen-doped graphene with enhanced oxygen reduction activity produced by pyrolysis of graphene functionalized with imidazole derivatives

(2014) International Journal of Hydrogen Energy, 39 (24), pp. 12749-12756.

Cui, K., Anisimov, A.S., Chiba, T., Fujii, S., Kataura, H., Nasibulin, A.G., Chiashi, S., Kauppinen, E.I., Maruyama, S.

Air-stable high-efficiency solar cells with dry-transferred single-walled carbon nanotube films

(2014) Journal of Materials Chemistry A, 2 (29), pp. 11311-11318.

Haggren, T., Jiang, H., Kakko, J.-P., Huhtio, T., Dhaka, V., Kauppinen, E., Lipsanen, H.

Strong surface passivation of GaAs nanowires with ultrathin InP and GaP capping layers

(2014) Applied Physics Letters, 105 (3), art. no. 033114, .

Anoshkin, I.V., Talyzin, A.V., Nasibulin, A.G., Krasheninnikov, A.V., Jiang, H., Nieminen, R.M., Kauppinen, E.I.

Coronene encapsulation in single-walled carbon nanotubes: Stacked columns, peapods, and nanoribbons

(2014) *ChemPhysChem*, 15 (8), pp. 1660-1665.

Stamatin, S.N., Borghei, M., Andersen, S.M., Veltze, S., Ruiz, V., Kauppinen, E., Skou, E.M.

Influence of different carbon nanostructures on the electrocatalytic activity and stability of Pt supported electrocatalysts

(2014) *International Journal of Hydrogen Energy*, 39 (16), pp. 8215-8224.

Andersen, S.M., Borghei, M., Dhiman, R., Ruiz, V., Kauppinen, E., Skou, E.

Adsorption behavior of perfluorinated sulfonic acid ionomer on highly graphitized carbon nanofibers and their thermal stabilities

(2014) *Journal of Physical Chemistry C*, 118 (20), pp. 10814-10823.

Andersen, S.M., Borghei, M., Dhiman, R., Jiang, H., Ruiz, V., Kauppinen, E., Skou, E.

Interaction of multi-walled carbon nanotubes with perfluorinated sulfonic acid ionomers and surface treatment studies

(2014) *Carbon*, 71, pp. 218-228.

He, M., Jiang, H., Kauppi, I., Fedotov, P.V., Chernov, A.I., Obraztsova, E.D., Cavalca, F., Wagner, J.B., Hansen, T.W., Sainio, J., Sairanen, E., Lehtonen, J., Kauppinen, E.I.

Insights into chirality distributions of single-walled carbon nanotubes grown on different  $\text{Co}_x\text{Mg}_{1-x}\text{O}$  solid solutions

(2014) *Journal of Materials Chemistry A*, 2 (16), pp. 5883-5889.

Susi, T., Kaukonen, M., Havu, P., Ljungberg, M.P., Ayala, P., Kauppinen, E.I.

Core level binding energies of functionalized and defective graphene

(2014) *Beilstein Journal of Nanotechnology*, 5 (1), pp. 121-132.

Borghei, M., Scotti, G., Kanninen, P., Weckman, T., Anoshkin, I.V., Nasibulin, A.G., Franssila, S., Kauppinen, E.I., Kallio, T., Ruiz, V.

Enhanced performance of a silicon microfabricated direct methanol fuel cell with PtRu catalysts supported on few-walled carbon nanotubes

(2014) *Energy*, 65, pp. 612-620.

Nomura, Y., Anoshkin, I.V., Okuda, C., Iijima, M., Ukyo, Y., Kamiya, H., Nasibulin, A.G., Kauppinen, E.I.

Carbon nanotube/nanofibers and graphite hybrids for li-ion battery application

(2014) *Journal of Nanomaterials*, 2014, art. no. 586241, .

Borghei, M., Kanninen, P., Lundahl, M., Susi, T., Sainio, J., Anoshkin, I., Nasibulin, A., Kallio, T., Tammeveski, K., Kauppinen, E., Ruiz, V.

High oxygen reduction activity of few-walled carbon nanotubes with low nitrogen content

(2014) *Applied Catalysis B: Environmental*, 158-159, pp. 233-241.

Anoshkin, I.V., Nasibulin, A.G., Tian, Y., Liu, B., Jiang, H., Kauppinen, E.I.

Hybrid carbon source for single-walled carbon nanotube synthesis by aerosol CVD method

(2014) *Carbon*, 78, pp. 130-136.

Kanninen, P., Borghei, M., Sorsa, O., Pohjalainen, E., Kauppinen, E.I., Ruiz, V., Kallio, T.

Highly efficient cathode catalyst layer based on nitrogen-doped carbon nanotubes for the alkaline direct methanol fuel cell

(2014) *Applied Catalysis B: Environmental*, 156-157, pp. 341-349.

Chernov, A.I., Fedotov, P.V., Anoshkin, I.V., Nasibulin, A.G., Kauppinen, E.I., Kuznetsov, V.L., Obraztsova, E.D.

Single-walled carbon nanotubes as a template for coronene stack formation

(2014) *Physica Status Solidi (B) Basic Research*, . Article in Press.

Obraztsova, E.D., Tonkikh, A.A., Fedotov, P.V., Alekseev, A.S., Obraztsov, P.A., Tsebro, V.I., Kaunisto, K., Nasibulin, A.G., Kauppinen, E.I., Chuvilin, A.L.

Linear and non-linear optical properties of filled single-wall carbon nanotubes

(2014) Proceedings - 2014 International Conference Laser Optics, LO 2014, art. no. 6886350, .