## **Christophe Detavernier**

List of Publications by Year in descending order

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| #  | Article   | IF  | CITATIONS |
|----|---|-----|-----------|
| 1  | Plasma-enhanced atomic layer deposition of nickel and cobalt phosphate for lithium ion batteries.<br>Dalton Transactions, 2022, 51, 2059-2067.  | 1.6 | 3         |
| 2  | Surface reactions between LiHMDS, TMA and TMP leading to deposition of amorphous lithium phosphate. Journal of Materials Chemistry A, 2022, 10, 3543-3551.  | 5.2 | 0         |
| 3  | Atomic layer deposition of ternary ruthenates by combining metalorganic precursors with RuO <sub>4</sub> as the co-reactant. Dalton Transactions, 2022, 51, 10721-10727.                                  | 1.6 | 3         |
| 4  | Selective Vapor-Phase Doping of Pt Nanoparticles into Phase-Controlled Nanoalloys. Journal of<br>Physical Chemistry C, 2022, 126, 1426-1438.  | 1.5 | 4         |
| 5  | Aligning time-resolved kinetics (TAP) and surface spectroscopy (AP-XPS) for a more comprehensive understanding of ALD-derived 2D and 3D model catalysts Faraday Discussions, 2022, , .                    | 1.6 | 0         |
| 6  | Atomic layer deposition of metal phosphates. Applied Physics Reviews, 2022, 9, .  | 5.5 | 7         |
| 7  | Colloidal III–V Quantum Dot Photodiodes for Shortâ€Wave Infrared Photodetection. Advanced Science,<br>2022, 9, e2200844.  | 5.6 | 31        |
| 8  | Titanium Carboxylate Molecular Layer Deposited Hybrid Films as Protective Coatings for Lithium-Ion<br>Batteries. ACS Applied Materials & Interfaces, 2022, 14, 24908-24918.                               | 4.0 | 4         |
| 9  | Shuffling Atomic Layer Deposition Gas Sequences to Modulate Bimetallic Thin Films and Nanoparticle<br>Properties. Chemistry of Materials, 2022, 34, 6142-6154.  | 3.2 | 3         |
| 10 | Properties of ultrathin molybdenum films for interconnect applications. Materialia, 2022, 24, 101511.   | 1.3 | 15        |
| 11 | Tuning size and coverage of Pd nanoparticles using atomic layer deposition. Applied Surface Science, 2021, 539, 148238.   | 3.1 | 4         |
| 12 | Converting molecular layer deposited alucone films into Al <sub>2</sub> O <sub>3</sub> /alucone hybrid multilayers by plasma densification. Dalton Transactions, 2021, 50, 1224-1232.                     | 1.6 | 6         |
| 13 | Impact of changes in bond structure on ovonic threshold switching behaviour in GeSe <sub>2</sub> .<br>Journal of Materials Chemistry C, 2021, 9, 117-126.   | 2.7 | 6         |
| 14 | Covalent graphite modification by low-temperature photocatalytic oxidation using a titanium dioxide thin film prepared by atomic layer deposition. Catalysis Science and Technology, 2021, 11, 6724-6731. | 2.1 | 1         |
| 15 | ALD Pt nanoparticles and thin-film coatings enhancing the stability and performance of silicon photocathodes for solar water splitting. Sustainable Energy and Fuels, 2021, 5, 3115-3123.                 | 2.5 | 2         |
| 16 | Emergence of Metallic Conductivity in Ordered One-Dimensional Coordination Polymer Thin Films upon Reductive Doping. ACS Applied Materials & Interfaces, 2021, 13, 10249-10256.                           | 4.0 | 5         |
| 17 | Acid–Base Mediated Ligand Exchange on Near-Infrared Absorbing, Indium-Based III–V Colloidal<br>Quantum Dots. Journal of the American Chemical Society, 2021, 143, 4290-4301.                              | 6.6 | 38        |
| 18 | Waveguideâ€Coupled Colloidal Quantum Dot Light Emitting Diodes and Detectors on a Silicon Nitride Platform. Laser and Photonics Reviews, 2021, 15, 2000230.   | 4.4 | 16        |

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|----|--|-----|-----------|
| 19 | U(Mo) grain refinement induced by irradiation with high energy iodine. Journal of Nuclear Materials, 2021, 548, 152850.  | 1.3 | 4         |
| 20 | Plasma enhanced atomic layer deposition of a (nitrogen doped) Ti phosphate coating for improved energy storage in Li-ion batteries. Journal of Power Sources, 2021, 497, 229866.   | 4.0 | 8         |
| 21 | Atomic Layer Deposition on Polymer Thin Films: On the Role of Precursor Infiltration and Reactivity.<br>ACS Applied Materials & Interfaces, 2021, 13, 46151-46163.   | 4.0 | 21        |
| 22 | Plasma-enhanced atomic layer deposition: Correlating O2 plasma parameters and species to blister<br>formation and conformal film growth. Journal of Vacuum Science and Technology A: Vacuum,<br>Surfaces and Films, 2021, 39, .                | 0.9 | 4         |
| 23 | Ion beam modification of the Ni-Si solid-phase reaction: The influence of substrate damage and nitrogen impurities introduced by ion implantation. Journal Physics D: Applied Physics, 2021, 54, 015307.                                       | 1.3 | 6         |
| 24 | An IR Spectroscopy Study of the Degradation of Surface Bound Azido-Groups in High Vacuum.<br>Langmuir, 2021, 37, 12608-12615.  | 1.6 | 2         |
| 25 | Tuning of the thermal stability and ovonic threshold switching properties of GeSe with metallic and non-metallic alloying elements. Journal of Applied Physics, 2021, 130, .   | 1.1 | 8         |
| 26 | Controlled synthesis of Fe–Pt nanoalloys using atomic layer deposition. Nanotechnology, 2021, 32,<br>095602.   | 1.3 | 7         |
| 27 | A limitation map of performance for porous electrodes in lithium-ion batteries. IScience, 2021, 24, 103496.  | 1.9 | 5         |
| 28 | Thermal and Plasma-Enhanced Atomic Layer Deposition of Yttrium Oxide Films and the Properties of Water Wettability. ACS Applied Materials & Interfaces, 2020, 12, 3179-3187.   | 4.0 | 14        |
| 29 | Atomic Layer Deposition of Indiumâ€Tinâ€Oxide as Multifunctional Coatings on<br>V <sub>2</sub> O <sub>5</sub> Thinâ€Film Model Electrode for Lithiumâ€Ion Batteries. Advanced Materials<br>Interfaces, 2020, 7, 2001022.                       | 1.9 | 15        |
| 30 | FeO controls the sintering of iron-based oxygen carriers in chemical looping CO2 conversion.<br>Journal of CO2 Utilization, 2020, 40, 101216.  | 3.3 | 26        |
| 31 | A Secondary Reaction Pathway for the Alumina Atomic Layer Deposition Process with<br>Trimethylaluminum and Water, Revealed by Full-Range, Time-Resolved In Situ Mass Spectrometry.<br>Journal of Physical Chemistry C, 2020, 124, 26443-26454. | 1.5 | 8         |
| 32 | Surface mobility and impact of precursor dosing during atomic layer deposition of platinum: <i>in<br/>situ</i> monitoring of nucleation and island growth. Physical Chemistry Chemical Physics, 2020, 22,<br>24917-24933.                      | 1.3 | 19        |
| 33 | Designing Nanoparticles and Nanoalloys for Gas-Phase Catalysis with Controlled Surface Reactivity<br>Using Colloidal Synthesis and Atomic Layer Deposition. Molecules, 2020, 25, 3735.   | 1.7 | 10        |
| 34 | Hierarchical Fe-modified MgAl <sub>2</sub> O <sub>4</sub> as a Ni-catalyst support for methane dry reforming. Catalysis Science and Technology, 2020, 10, 6987-7001.   | 2.1 | 22        |
| 35 | Atomic Layer Deposition of SnO2-Based Composite Anodes for Thin-Film Lithium-Ion Batteries.<br>Frontiers in Energy Research, 2020, 8, .  | 1.2 | 11        |
| 36 | Reaction Pathways for Atomic Layer Deposition with Lithium Hexamethyl Disilazide, Trimethyl<br>Phosphate, and Oxygen Plasma. Journal of Physical Chemistry C, 2020, 124, 27829-27839.  | 1.5 | 5         |

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|----|--|------|-----------|
| 37 | Molecular Layer Deposition of "Magnesiconeâ€ <del>,</del> a Magnesium-based Hybrid Material. Chemistry of<br>Materials, 2020, 32, 4451-4466.   | 3.2  | 17        |
| 38 | Atomic Layer Deposition of Nitrogen-Doped Al Phosphate Coatings for Li-Ion Battery Applications. ACS Applied Materials & Interfaces, 2020, 12, 25949-25960.  | 4.0  | 14        |
| 39 | Reaction mechanism of the Me <sub>3</sub> AuPMe <sub>3</sub> –H <sub>2</sub> plasma-enhanced ALD process. Physical Chemistry Chemical Physics, 2020, 22, 11903-11914.  | 1.3  | 2         |
| 40 | Formation and preferential orientation of Au-free Al/Ti-based ohmic contacts on different hexagonal nitride-based heterostructures. Journal of Applied Physics, 2020, 127, 215701.   | 1.1  | 4         |
| 41 | A liquid alkoxide precursor for the atomic layer deposition of aluminum oxide films. Journal of<br>Vacuum Science and Technology A: Vacuum, Surfaces and Films, 2020, 38, .  | 0.9  | 3         |
| 42 | Boosting Roomâ€Temperature Magnetoâ€Ionics in a Nonâ€Magnetic Oxide Semiconductor. Advanced<br>Functional Materials, 2020, 30, 2003704.  | 7.8  | 18        |
| 43 | Plasmonic gold-embedded TiO2 thin films as photocatalytic self-cleaning coatings. Applied Catalysis B:<br>Environmental, 2020, 267, 118654.  | 10.8 | 61        |
| 44 | Creation of gallium acid and platinum metal sites in bifunctional zeolite hydroisomerization and<br>hydrocracking catalysts by atomic layer deposition. Catalysis Science and Technology, 2020, 10,<br>1778-1788.  | 2.1  | 13        |
| 45 | Use of Neutron Absorbers to Influence the Neutron Transmutation Doping Process in Silicon. Nuclear Technology, 2020, 206, 758-765.   | 0.7  | 0         |
| 46 | Ovonic Thresholdâ€6witching Ge <sub><i>x</i></sub> Se <sub><i>y</i></sub> Chalcogenide Materials:<br>Stoichiometry, Trap Nature, and Material Relaxation from First Principles. Physica Status Solidi - Rapid<br>Research Letters, 2020, 14, 1900672.                | 1.2  | 45        |
| 47 | <i>In situ</i> study of the thermal stability of supported Pt nanoparticles and their stabilization <i>via</i> atomic layer deposition overcoating. Nanoscale, 2020, 12, 11684-11693.  | 2.8  | 8         |
| 48 | Study of the surface species during thermal and plasma-enhanced atomic layer deposition of titanium oxide films using <i>in situ</i> IR-spectroscopy and <i>in vacuo</i> X-ray photoelectron spectroscopy. Physical Chemistry Chemical Physics, 2020, 22, 9262-9271. | 1.3  | 18        |
| 49 | The co-reactant role during plasma enhanced atomic layer deposition of palladium. Physical Chemistry Chemical Physics, 2020, 22, 9124-9136.  | 1.3  | 6         |
| 50 | Atomic Layer Deposition of Localized Boron- and Hydrogen-Doped Aluminum Oxide Using Trimethyl<br>Borate as a Dopant Precursor. Chemistry of Materials, 2020, 32, 4152-4165.  | 3.2  | 2         |
| 51 | Mitigation of photon background in nanoplasmonic all-on-chip Raman sensors. Optics Express, 2020, 28, 33564.   | 1.7  | 8         |
| 52 | (Invited) MLD of Metal-Organic Thin Films with Tunable Conductance for Neuromorphic Computing<br>Applications. ECS Meeting Abstracts, 2020, MA2020-02, 1683-1683.  | 0.0  | 0         |
| 53 | Aluminum tri-isopropoxide as an alternative precursor for atomic layer deposition of aluminum oxide thin films. Journal of Vacuum Science and Technology A: Vacuum, Surfaces and Films, 2019, 37, .  | 0.9  | 8         |
| 54 | Stabilizing Fluoride Phosphors: Surface Modification by Atomic Layer Deposition. Chemistry of Materials, 2019, 31, 7192-7202.  | 3.2  | 42        |

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|----|--|-----|-----------|
| 55 | Atomic layer deposition of ZnO–SnO2 composite thin film: The influence of structure, composition<br>and crystallinity on lithium-ion battery performance. Electrochimica Acta, 2019, 320, 134604.                                    | 2.6 | 48        |
| 56 | In Situ Photoluminescence of Colloidal Quantum Dots During Gas Exposure—The Role of Water and<br>Reactive Atomic Layer Deposition Precursors. ACS Applied Materials & Interfaces, 2019, 11,<br>26277-26287.                          | 4.0 | 9         |
| 57 | Setting Carriers Free: Healing Faulty Interfaces Promotes Delocalization and Transport in Nanocrystal Solids. ACS Nano, 2019, 13, 12774-12786.   | 7.3 | 22        |
| 58 | Effectiveness of Ligand Denticity-Dependent Oxidation Protection in Copper MOD Inks. Langmuir, 2019, 35, 16101-16110.  | 1.6 | 7         |
| 59 | Switchable Piezoresistive SmS Thin Films on Large Area. Sensors, 2019, 19, 4390.   | 2.1 | 8         |
| 60 | Atomic layer deposition of thin films as model electrodes: A case study of the synergistic effect in<br>Fe2O3-SnO2. Journal of Vacuum Science and Technology A: Vacuum, Surfaces and Films, 2019, 37,<br>050904.                     | 0.9 | 5         |
| 61 | Plasma-Enhanced Atomic Layer Deposition of Nanostructured Gold Near Room Temperature. ACS<br>Applied Materials & Interfaces, 2019, 11, 37229-37238.  | 4.0 | 12        |
| 62 | CO2 sorption properties of Li4SiO4 with a Li2ZrO3 coating. Journal of CO2 Utilization, 2019, 34, 688-699.  | 3.3 | 16        |
| 63 | Corrosion protection of Cu by atomic layer deposition. Journal of Vacuum Science and Technology A:<br>Vacuum, Surfaces and Films, 2019, 37, 060902.  | 0.9 | 7         |
| 64 | Impurity-enhanced solid-state amorphization: the Ni–Si thin film reaction altered by nitrogen. Journal Physics D: Applied Physics, 2019, 52, 145301.   | 1.3 | 8         |
| 65 | Electron Transfer and Near-Field Mechanisms in Plasmonic Gold-Nanoparticle-Modified<br>TiO <sub>2</sub> Photocatalytic Systems. ACS Applied Nano Materials, 2019, 2, 4067-4074.  | 2.4 | 34        |
| 66 | Redox Layer Deposition of Thin Films of MnO <sub>2</sub> on Nanostructured Substrates from Aqueous Solutions. Chemistry of Materials, 2019, 31, 4805-4816.   | 3.2 | 18        |
| 67 | Atomic layer deposition of vanadium oxides: process and application review. Materials Today Chemistry, 2019, 12, 396-423.  | 1.7 | 46        |
| 68 | Fe <sub>2</sub> O <sub>3</sub> –MgAl <sub>2</sub> O <sub>4</sub> for CO Production from<br>CO <sub>2</sub> : Mössbauer Spectroscopy and in Situ X-ray Diffraction. ACS Sustainable Chemistry<br>and Engineering, 2019, 7, 9553-9565. | 3.2 | 17        |
| 69 | Selective electroless deposition of cobalt using amino-terminated SAMs. Journal of Materials Chemistry C, 2019, 7, 4392-4402.  | 2.7 | 21        |
| 70 | Formation and Functioning of Bimetallic Nanocatalysts: The Power of Xâ€ray Probes. Angewandte<br>Chemie - International Edition, 2019, 58, 13220-13230.  | 7.2 | 31        |
| 71 | Photocatalytic Lithography with Atomic Layer–Deposited TiO <sub>2</sub> Films to Tailor<br>Biointerface Properties. Advanced Materials Interfaces, 2019, 6, 1900035.   | 1.9 | 7         |
| 72 | Formation and Functioning of Bimetallic Nanocatalysts: The Power of Xâ€ray Probes. Angewandte<br>Chemie, 2019, 131, 13354-13364.   | 1.6 | 6         |

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|----|--|------|-----------|
| 73 | Nucleation Enhancement and Area-Selective Atomic Layer Deposition of Ruthenium Using<br>RuO <sub>4</sub> and H <sub>2</sub> Gas. Chemistry of Materials, 2019, 31, 1491-1499.  | 3.2  | 36        |
| 74 | Plasma enhanced atomic layer deposition of gallium sulfide thin films. Journal of Vacuum Science and<br>Technology A: Vacuum, Surfaces and Films, 2019, 37, .  | 0.9  | 16        |
| 75 | Ligand Binding to Copper Nanocrystals: Amines and Carboxylic Acids and the Role of Surface Oxides.<br>Chemistry of Materials, 2019, 31, 2058-2067.   | 3.2  | 24        |
| 76 | Ultra-thin sub-10 nm Ga2O3-WO3 heterostructures developed by atomic layer deposition for sensitive<br>and selective C2H5OH detection on ppm level. Sensors and Actuators B: Chemical, 2019, 287, 147-156.                  | 4.0  | 41        |
| 77 | Chemical and Structural Configuration of Pt-Doped Metal Oxide Thin Films Prepared by Atomic Layer<br>Deposition. Chemistry of Materials, 2019, 31, 9673-9683.  | 3.2  | 8         |
| 78 | Assessing stability of metal tellurides as alternative photomask materials for extreme ultraviolet<br>lithography. Journal of Vacuum Science and Technology B:Nanotechnology and Microelectronics,<br>2019, 37, 061607.    | 0.6  | 8         |
| 79 | Bifunctional earth-abundant phosphate/phosphide catalysts prepared <i>via</i> atomic layer deposition for electrocatalytic water splitting. Nanoscale Advances, 2019, 1, 4166-4172.  | 2.2  | 24        |
| 80 | Micro-Transfer-Printing of Al <sub>2</sub> O <sub>3</sub> -Capped Short-Wave-Infrared PbS Quantum<br>Dot Photoconductors. ACS Applied Nano Materials, 2019, 2, 299-306.  | 2.4  | 14        |
| 81 | Near Room Temperature PE-ALD of Nanostructured Gold for Enhanced Raman Scattering. ECS Meeting Abstracts, 2019, , .  | 0.0  | 0         |
| 82 | Impact of Atomic Layer Deposition on the Photoluminescence of Colloidal Quantum Dots. ECS Meeting Abstracts, 2019, , .   | 0.0  | 0         |
| 83 | (Invited) A Tutorial on Atomic Layer Deposition and Its Application in Lithium-Ion Batteries. ECS<br>Meeting Abstracts, 2019, , .  | 0.0  | 0         |
| 84 | (Invited) ALD and MLD of Functional Thin-Film Coatings for Enhanced Performance in Li-Ion and<br>Li-Metal Solid-State Batteries. ECS Meeting Abstracts, 2019, , .  | 0.0  | 0         |
| 85 | Catalyst-assisted chemical looping auto-thermal dry reforming: Spatial structuring effects on process efficiency. Applied Catalysis B: Environmental, 2018, 231, 123-136.  | 10.8 | 48        |
| 86 | Controlling the formation and stability of ultra-thin nickel silicides - An alloying strategy for preventing agglomeration. Journal of Applied Physics, 2018, 123, .   | 1.1  | 21        |
| 87 | The transformation behaviour of "aluconesâ€; deposited by molecular layer deposition, in nanoporous<br>Al <sub>2</sub> O <sub>3</sub> layers. Dalton Transactions, 2018, 47, 5860-5870.                                    | 1.6  | 40        |
| 88 | Influence of the Chalcogen Element on the Filament Stability in<br>CuIn(Te,Se,S) <sub>2</sub> /Al <sub>2</sub> O <sub>3</sub> Filamentary Switching Devices. ACS Applied<br>Materials & Interfaces, 2018, 10, 14835-14842. | 4.0  | 4         |
| 89 | TiO <sub>2</sub> -coated luminescent porous silicon micro-particles as a promising system for nanomedicine. Journal of Materials Chemistry B, 2018, 6, 1815-1824.  | 2.9  | 15        |
| 90 | Plasma enhanced atomic layer deposition of aluminum sulfide thin films. Journal of Vacuum Science<br>and Technology A: Vacuum, Surfaces and Films, 2018, 36, .   | 0.9  | 22        |

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|-----|---|--------------------|-----------|
| 91  | PdZn nanoparticle catalyst formation for ethanol dehydrogenation: Active metal impregnation vs<br>incorporation. Applied Catalysis A: General, 2018, 555, 12-19.  | 2.2                | 16        |
| 92  | Bifunctional Co- and Ni- ferrites for catalyst-assisted chemical looping with alcohols. Applied Catalysis B: Environmental, 2018, 222, 59-72.   | 10.8               | 36        |
| 93  | Surface species during ALD of platinum observed with <i>in situ</i> reflection IR spectroscopy.<br>Physical Chemistry Chemical Physics, 2018, 20, 25343-25356.  | 1.3                | 20        |
| 94  | Voltage-Controlled ON–OFF Ferromagnetism at Room Temperature in a Single Metal Oxide Film. ACS<br>Nano, 2018, 12, 10291-10300.  | 7.3                | 57        |
| 95  | Axiotaxy and epitaxial textures in C54-TiSi <sub>2</sub> films on Si(0 0 1) and Si(1 1 1) subst<br>Physics D: Applied Physics, 2018, 51, 445302.  | ates. Jourr<br>1.3 | nal       |
| 96  | ALD assisted nanoplasmonic slot waveguide for on-chip enhanced Raman spectroscopy. APL Photonics, 2018, 3, .  | 3.0                | 35        |
| 97  | Effect of thermal annealing and chemical treatments on secondary electron emission properties of atomic layer deposited MgO. Journal of Vacuum Science and Technology A: Vacuum, Surfaces and Films, 2018, 36, 06A102.                                | 0.9                | 9         |
| 98  | Fe-Containing Magnesium Aluminate Support for Stability and Carbon Control during Methane<br>Reforming. ACS Catalysis, 2018, 8, 5983-5995.  | 5.5                | 66        |
| 99  | Oxidation barrier of Cu and Fe powder by Atomic Layer Deposition. Surface and Coatings Technology, 2018, 349, 1032-1041.  | 2.2                | 12        |
| 100 | Kinetics of Lifetime Changes in Bimetallic Nanocatalysts Revealed by Quick Xâ€ray Absorption<br>Spectroscopy. Angewandte Chemie - International Edition, 2018, 57, 12430-12434.   | 7.2                | 15        |
| 101 | Red Mn <sup>4+</sup> -Doped Fluoride Phosphors: Why Purity Matters. ACS Applied Materials &<br>Interfaces, 2018, 10, 18845-18856.   | 4.0                | 74        |
| 102 | The influence of alloying on the phase formation sequence of ultra-thin nickel silicide films and on the inheritance of texture. Journal of Applied Physics, 2018, 123, 185302.   | 1.1                | 14        |
| 103 | Kinetics of Lifetime Changes in Bimetallic Nanocatalysts Revealed by Quick Xâ€ray Absorption<br>Spectroscopy. Angewandte Chemie, 2018, 130, 12610-12614.  | 1.6                | 2         |
| 104 | Annealing of thin "Tincone―films, a tin-based hybrid material deposited by molecular layer deposition,<br>in reducing, inert, and oxidizing atmospheres. Journal of Vacuum Science and Technology A: Vacuum,<br>Surfaces and Films, 2018, 36, 051506. | 0.9                | 16        |
| 105 | Pore pressure estimation in irradiated UMo. Journal of Nuclear Materials, 2018, 510, 472-483.   | 1.3                | 22        |
| 106 | (Invited) Atomic Layer Deposition for Interface Engineering of (Thin-Film) Lithium-Ion Battery. ECS<br>Meeting Abstracts, 2018, , .   | 0.0                | 0         |
| 107 | Synthesis of 3D Porous Nanostructured Platinum Using Atomic Layer Deposition. ECS Meeting Abstracts, 2018, , .  | 0.0                | 0         |
| 108 | Inherent Area-Selective Growth and Nucleation Enhancement during Ru ALD Using the<br>RuO <sub>4</sub> -Precursor and H <sub>2</sub> -Gas. ECS Meeting Abstracts, 2018, MA2018-02, 984-984.  | 0.0                | 1         |

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|-----|--|------|-----------|
| 109 | (Invited) Red Fluoride Phosphors: A Story of Reliability. ECS Meeting Abstracts, 2018, , .   | 0.0  | 0         |
| 110 | Electrodeposition of Adherent MnO2 Films with Optimized Current Collector Interface for 3D Li-Ion Electrodes. ECS Meeting Abstracts, 2018, , .   | 0.0  | 0         |
| 111 | Silver-polymer core-shell nanoparticles for ultrastable plasmon-enhanced photocatalysis. Applied<br>Catalysis B: Environmental, 2017, 200, 31-38.  | 10.8 | 48        |
| 112 | Atomic layer deposition-enabled single layer of tungsten trioxide across a large area. Applied<br>Materials Today, 2017, 6, 44-53.   | 2.3  | 52        |
| 113 | Heterogeneous TiO <sub>2</sub> /V <sub>2</sub> O <sub>5</sub> /Carbon Nanotube Electrodes for<br>Lithium-Ion Batteries. ACS Applied Materials & Interfaces, 2017, 9, 8055-8064.  | 4.0  | 32        |
| 114 | Controlling the stability of a Fe–Ni reforming catalyst: Structural organization of the active components. Applied Catalysis B: Environmental, 2017, 209, 405-416.   | 10.8 | 89        |
| 115 | The role of composition and microstructure in Ni–W silicide formation and low temperature epitaxial<br>NiSi2 growth by premixing Si. Journal Physics D: Applied Physics, 2017, 50, 065303.   | 1.3  | 3         |
| 116 | Molecular layer deposition of "vanadiconeâ€; a vanadium-based hybrid material, as an electrode for<br>lithium-ion batteries. Dalton Transactions, 2017, 46, 4542-4553.   | 1.6  | 42        |
| 117 | Monte Carlo simulations of atomic layer deposition on 3D large surface area structures: Required precursor exposure for pillar- versus hole-type structures. Journal of Vacuum Science and Technology A: Vacuum, Surfaces and Films, 2017, 35, . | 0.9  | 24        |
| 118 | Amorphous and Crystalline Vanadium Oxides as High-Energy and High-Power Cathodes for<br>Three-Dimensional Thin-Film Lithium Ion Batteries. ACS Applied Materials & Interfaces, 2017, 9,<br>13121-13131.  | 4.0  | 73        |
| 119 | Size- and composition-controlled Pt–Sn bimetallic nanoparticles prepared by atomic layer deposition.<br>RSC Advances, 2017, 7, 20201-20205.  | 1.7  | 12        |
| 120 | The Influence of Ultrathin Amorphous ALD Alumina and Titania on the Rate Capability of Anatase<br>TiO <sub>2</sub> and LiMn <sub>2</sub> O <sub>4</sub> Lithium Ion Battery Electrodes. Advanced<br>Materials Interfaces, 2017, 4, 1601237.      | 1.9  | 50        |
| 121 | Ternary silicide formation from Ni-Pt, Ni-Pd and Pt-Pd alloys on Si(100): Nucleation and solid solubility of the monosilicides. Acta Materialia, 2017, 130, 19-27.   | 3.8  | 9         |
| 122 | Plasma enhanced atomic layer deposition of zinc sulfide thin films. Journal of Vacuum Science and<br>Technology A: Vacuum, Surfaces and Films, 2017, 35, .   | 0.9  | 21        |
| 123 | K <sub>2</sub> MnF <sub>6</sub> as a precursor for saturated red fluoride phosphors: the struggle for structural stability. Journal of Materials Chemistry C, 2017, 5, 10761-10769.  | 2.7  | 34        |
| 124 | (Invited) Atomic Layer Deposition of Nanoalloys of Noble and Non-Noble Metals. ECS Transactions, 2017, 80, 97-106.   | 0.3  | 1         |
| 125 | Independent tuning of size and coverage of supported Pt nanoparticles using atomic layer deposition.<br>Nature Communications, 2017, 8, 1074.  | 5.8  | 95        |
| 126 | Sensing the framework state and guest molecules in MIL-53(Al) via the electron paramagnetic<br>resonance spectrum of V <sup>IV</sup> dopant ions. Physical Chemistry Chemical Physics, 2017, 19,<br>24545-24554.                                 | 1.3  | 24        |

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|-----|--|-----|-----------|
| 127 | Key role of surface oxidation and reduction processes in the coarsening of Pt nanoparticles.<br>Nanoscale, 2017, 9, 13159-13170.   | 2.8 | 25        |
| 128 | Plasma-enhanced atomic layer deposition of vanadium phosphate as a lithium-ion battery electrode material. Journal of Vacuum Science and Technology A: Vacuum, Surfaces and Films, 2017, 35, .                           | 0.9 | 12        |
| 129 | Formation of ultrathin Ni germanides: solid-phase reaction, morphology and texture. Journal Physics<br>D: Applied Physics, 2017, 50, 455301.   | 1.3 | 6         |
| 130 | A USB-controlled potentiostat/galvanostat for thin-film battery characterization. HardwareX, 2017, 2, 34-49.   | 1.1 | 76        |
| 131 | Axiotaxy in oxide heterostructures: Preferential orientation of BaCeO3 nanoparticles embedded in superconducting YBa2Cu3O7â^² thin films. Thin Solid Films, 2017, 638, 105-113.  | 0.8 | 3         |
| 132 | Formation and stability of an active PdZn nanoparticle catalyst on a hydrotalcite-based support for ethanol dehydrogenation. Catalysis Science and Technology, 2017, 7, 3715-3727.                                       | 2.1 | 12        |
| 133 | Plasma-Enhanced Atomic Layer Deposition of Silver Using Ag(fod)(PEt <sub>3</sub> ) and NH <sub>3</sub> -Plasma. Chemistry of Materials, 2017, 29, 7114-7121.   | 3.2 | 20        |
| 134 | Electrodeposition of Adherent Submicron to Micron Thick Manganese Dioxide Films with Optimized<br>Current Collector Interface for 3D Li-Ion Electrodes. Journal of the Electrochemical Society, 2017,<br>164, D954-D963. | 1.3 | 14        |
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