

## Science citation index (SCI) publications:

1. Triangular CdS nanocrystals: Structural and optical studies  
N. Pinna, K. Weiss, J. Urban, M. P. Pileni  
Adv. Mater. 2001, 13, 261
2. Triangular CdS nanocrystals: Synthesis, characterization, and stability  
N. Pinna, K. Weiss, H. Sack-Kongehl, W. Vogel, J. Urban, M.P. Pileni  
Langmuir, 2001, 17, 7982
3. Optical properties of silver nanocrystals self-organized in 2D superlattice: Substrate effect  
N. Pinna, M. Maillard, A. Courty, V. Russier, M. P. Pileni  
Phys. Rev. B, 2002, 66, 045415
4. Divanadium pentoxide nanorods  
N. Pinna, U. Wild, J. Urban, R. Schlögl  
Adv. Mater. 2003, 15, 329
5. Local structure of nanoscopic materials:  $V_2O_5$  nanorods and nanowires  
N. Pinna, M.-G. Willinger, K. Weiss, J. Urban, R. Schlögl  
Nano Lett. 2003, 3, 1131
6. Ligand-directed assembly of preformed titania nanocrystals into highly anisotropic nanostructures  
J. Polleux, N. Pinna, M. Antonietti, M. Niederberger  
Adv. Mater. 2004, 16, 436
7. A general soft chemistry route to perovskite and related materials: Synthesis of  $BaTiO_3$ ,  $BaZrO_3$  and  $LiNbO_3$  nanoparticles  
M. Niederberger, N. Pinna, J. Polleux, M. Antonietti  
Angew. Chem. Int. Ed. 2004, 43, 2270
8. Geometric and electronic structure of  $\gamma$ - $V_2O_5$ : Comparison between  $\alpha$ - $V_2O_5$  and  $\gamma$ - $V_2O_5$   
M.-G. Willinger, N. Pinna, D. Su, and R. Schlögl  
Phy. Rev. B, 2004, 69, 155114
9. Synthesis and characterization of stable and crystalline  $Ce_{1-x}Zr_xO_2$  nanoparticle sols  
A.S. Deshpande, N. Pinna, P. Beato, M. Antonietti, M. Niederberger  
Chem. Mater. 2004, 16, 2599
10. A novel non-aqueous route to  $V_2O_3$  and  $Nb_2O_5$  nanocrystals  
N. Pinna, M. Antonietti, M. Niederberger  
Colloids Surf. A, 2004, 250, 211
11. Highly crystalline cubic mesoporous  $TiO_2$  with 10nm pore diameter made with a new block copolymer template  
B. Smarsly, D. Grosso, T. Brezesinski, N. Pinna, C. Boissière, M. Antonietti, C. Sanchez  
Chem. Mater. 2004, 16, 2948
12. Nonaqueous and halide-free route to crystalline  $BaTiO_3$ ,  $SrTiO_3$  and  $(Ba,Sr)TiO_3$  nanoparticles via a formation mechanism involving a C-C bond formation  
M. Niederberger, G. Garnweitner, N. Pinna, M. Antonietti  
J. Am. Chem. Soc. 2004, 126, 9120
13. Nonaqueous synthesis of nanocrystalline semi-conducting metal oxides for gas sensing  
N. Pinna, G. Neri, M. Antonietti, M. Niederberger  
Angew. Chem. Int. Ed. 2004, 43, 4345

14. Nonaqueous synthesis of high-purity metal oxide nanopowders using an ether elimination process  
N. Pinna, G. Garnweitner, M. Antonietti, M. Niederberger  
Adv. Mater. 2004, 16, 2196
15. Periodically ordered nano islands and mesoporous films composed of nanocrystalline multimetallic oxides  
D. Grosso, C. Boissière, B. Smarsly, T. Brezesinski, N. Pinna, P. A. Albouy, H. Amenitsch, M. Antonietti, C. Sanchez  
Nature Mater. 2004, 3, 787
16. A chemical synthesis of yttria based crystalline and lamellar nanostructures and their formation mechanism  
N. Pinna, G. Garnweitner, P. Beato, M. Niederberger, M. Antonietti  
Small, 2005, 1, 112
17. The generation of mesostructured crystalline CeO<sub>2</sub>, ZrO<sub>2</sub> and CeO<sub>2</sub>-ZrO<sub>2</sub> films using evaporation-induced self-assembly  
T. Brezesinski, M. Antonietti, M. Groenewolt, N. Pinna, B. Smarsly  
New J. Chem. 2005, 29, 237
18. Controlled assembly of preformed ceria nanocrystals into highly ordered 3D nanostructures  
A.S. Deshpande, N. Pinna, B. Smarsly, M. Antonietti, M. Niederberger  
Small, 2005, 1, 313
19. A general nonaqueous route to binary metal oxide nanocrystals involving a C-C bond cleavage  
N. Pinna, G. Garnweitner, M. Antonietti, M. Niederberger  
J. Am. Chem. Soc. 2005, 127, 5608
20. Ligand functionality as a versatile tool to control the assembly behavior of preformed titania nanocrystals  
J. Polleux, N. Pinna, M. Antonietti, C. Hess, U. Wild, R. Schlögl, M. Niederberger  
Chem. Eur. J. 2005, 11, 3541
21. Polymer-induced alignment of DL-alanine nanocrystals to crystalline mesostructures  
S. Wohlrab, N. Pinna, M. Antonietti, H. Cölfen  
Chem. Eur. J. 2005, 11, 2903
22. Magnetite nanocrystals: Nonaqueous synthesis, characterization and solubility  
N. Pinna, S. Grancharov, P. Beato, P. Bonville, M. Antonietti, M. Niederberger  
Chem. Mater. 2005, 17, 3044
23. Superstructures of calcium carbonate crystals by oriented attachment  
N. Gehrke, H. Cölfen, N. Pinna, M. Antonietti and N. Nassif  
Crys. Growth Des. 2005, 5, 1317
24. Synthesis of stable aragonite superstructures via a biomimetic crystallization pathway  
N. Nassif, N. Gehrke, N. Pinna, N. Shirshova, K. Tauer, M. Antonietti, H. Cölfen  
Angew. Chem. Int. Ed. 2005, 44, 6004
25. Amorphous layer around aragonite platelets in nacre  
N. Nassif, N. Pinna, N. Gehrke, M. Antonietti, C. Jaeger, H. Coelfen  
Proc. Nat. Ac. Sci. 2005, 102, 12653
26. Single crystal manganese oxide multipods by oriented attachment  
D. Zitoun, N. Pinna, N. Frolet, C. Belin  
J. Am. Chem. Soc. 2005, 127, 15034
27. Growth and assembly of crystalline tungsten oxide nanostructures assisted by bioligation  
J. Polleux, N. Pinna, M. Antonietti, M. Niederberger  
J. Am. Chem. Soc. 2005, 127, 15595

28. Synthesis and functional verification of the unsupported active phase of  $V_xO_y$  catalysts for partial oxidation of n-butane  
M. Haevecker, N. Pinna, K. Weiss, H. Sack-Kongehl, R.E. Jentoft, D. Wang, M. Swoboda, U. Wild, M. Niederberger, J. Urban, D.S. Su, R. Schlögl  
J. Catal. 2005, 236, 221
29. A highly sensitive oxygen sensor operating at room temperature based on platinum-doped  $In_2O_3$  nanocrystals  
G. Neri, A. Bonavita, G. Micali, G. Rizzo, S. Galvagno, M. Niederberger, N. Pinna  
Chem. Comm. 2005, 6032
30. Retrosynthesis of nacre via amorphous precursor particles  
N. Gehrke, N. Nassif, N. Pinna, M. Antonietti, H. S. Gupta, H. Colfen  
Chem. Mater. 2005, 17, 6514
31. Nonaqueous routes to crystalline metal oxide nanoparticles: Formation mechanisms and applications  
M. Niederberger, G. Garnweitner, N. Pinna, G. Neri  
Prog. Sol. State Chem. 2005, 33, 59
32. Surfactant-mediated generation of iso-oriented dense and mesoporous crystalline metal oxide layers  
T. Brezesinski, M. Groenewolt, N. Pinna, H. Amenitsch, M. Antonietti, B. Smarsly  
Adv. Mater. 2006, 18, 1827
33. Nonaqueous synthesis of metal oxide nanoparticles: Review and indium oxide as case study for the dependence of particle morphology on precursors and solvents  
M. Niederberger, G. Garnweitner, J. Buha, J. Polleux, J. Ba, N. Pinna  
J. Sol-Gel Sci. Technol. 2006, 40, 259
34. Lanthanide-based lamellar nanohybrids: Synthesis, structural characterization and optical properties  
M. Karmaoui, R.A. Sá Ferreira, A.T. Mane, L.D. Carlos, N. Pinna  
Chem. Mater. 2006, 18, 4493
35. EISA at its limit: Ultrathin, crystalline patterns by templating of micellar monolayers  
T. Brezesinski, M. Groenewolt, A. Gibaud, N. Pinna, M. Antonietti, B. Smarsly  
Adv. Mater. 2006, 18, 2260
36. Optical properties of lanthanide-doped lamellar nanohybrids  
R.A. Sá Ferreira, M. Karmaoui, S.S. Nobre, L.D. Carlos, N. Pinna  
Chem. Phys. Chem. 2006, 7, 2215
37. Magnetic properties of cobalt and manganese doped ZnO nanowires  
G. Clavel, N. Pinna, D. Zitoun  
Physica Status Solidi A, 2007, 204, 118
38. Photoluminescent rare-earth based biphenolate lamellar nanostructures  
M. Karmaoui, L. Mafra, R.A. Sá Ferreira, J. Rocha, L.D. Carlos, N. Pinna  
J. Phys. Chem. C, 2007, 111, 2539
39. Towards enhanced performances in gas sensing:  $SnO_2$  based nanocrystalline oxides application  
G. Neri, A. Bonavita, G. Rizzo, S. Galvagno, N. Pinna, M. Niederberger, S. Capone, P. Siciliano  
Sens. Actuators B Chem. 2007, 122, 564
40. Nonaqueous synthesis, assembly and formation mechanisms of metal oxide nanocrystals  
M. Niederberger, G. Garnweitner, J. Ba, J. Polleux, N. Pinna  
Int. J. Nanotechnology, 2007, 4, 263
41. The “benzyl alcohol route”: An elegant approach towards organic-inorganic hybrid nanomaterials  
N. Pinna  
J. Mater. Chem. 2007, 17, 2769

42. Lanthanide-based lamellar nanohybrids: The case of erbium  
M. Karmaoui, R. A. Sá Ferreira, L.D. Carlos, N. Pinna  
*Mater. Sci. Eng. C*, 2007, 27, 1368
43. Solvent dependent shape and magnetic properties of doped ZnO Nanostructures  
G. Clavel, M.-G. Willinger, D. Zitoun, N. Pinna  
*Adv. Funct. Mater.* 2007, 17, 3159
44. A study on the microstructure and gas sensing properties of ITO nanocrystals  
G. Neri, A. Bonavita, G. Micali, G. Rizzo, N. Pinna, M. Niederberger, J. Ba  
*Thin Solid Films*, 2007, 515, 8637
45. In<sub>2</sub>O<sub>3</sub> and Pt-In<sub>2</sub>O<sub>3</sub> nanopowders for low temperature oxygen sensors  
G. Neri, A. Bonavita, G. Micali, G. Rizzo, N. Pinna, M. Niederberger  
*Sensors & Actuators: B* 2007, 127, 455
46. Manganese doped zirconia nanocrystals  
G. Clavel, M.-G. Willinger, D. Zitoun, N. Pinna  
*Eur. J. Inorg. Chem.* 2008, 2008, 863
47. Effect of the chemical composition on the sensing properties of In<sub>2</sub>O<sub>3</sub>-SnO<sub>2</sub> nanoparticles synthesized by a non-aqueous method  
G. Neri, A. Bonavita, G. Micali, G. Rizzo, N. Pinna, M. Niederberger, J. Ba  
*Sens. Actuators B Chem.* 2008, 130, 22
48. Nonaqueous routes to metal oxide thin films by atomic layer deposition  
E. Rauwel, G. Clavel, M.-G. Willinger, P. Rauwel, N Pinna  
*Angew. Chem. Int. Ed.* 2008, 47, 3592
49. Oxide synthesis as Cornerstone of nanoscience  
N. Pinna, M. Niederberger  
*Eur. J. Inorg. Chem.* 2008, 825
50. Microwave-assisted synthesis and characterization of tin oxide nanoparticles  
T. Krishnakumara, N. Pinna, K. Prasanna Kumaria, K. Perumala, R. Jayaprakash  
*Mater. Lett.* 2008, 62, 3437
51. Surfactant-free nonaqueous synthesis of metal oxide nanostructures  
N. Pinna, M. Niederberger  
*Angew. Chem. Int. Ed.* 2008, 47, 5292
52. Tungsten oxide nanowires-based ammonia gas sensors  
G. Neri, G. Micali, A. Bonavita, S. Ipsale, G. Rizzo, M. Niederberger, N. Pinna  
*Sensors Lett.* 2008, 6, 590
53. Carboxylic acids as oxygen sources for the atomic layer deposition of high- $\kappa$  metal oxides  
E. Rauwel, M.-G. Willinger, F. Ducroquet, P. Rauwel, I. Matko, D. Kiselev, N. Pinna  
*J. Phys. Chem. C*, 2008, 112, 12754
54. Citric acid-assisted hydrothermal synthesis of luminescent TbPO<sub>4</sub>:Eu nanocrystals: Controlled morphology and tunable emission  
W. Di, M.-G. Willinger, R. A. Sá Ferreira, X. Ren, S. Lu, N. Pinna  
*J. Phys. Chem. C*, 2008, 112, 18815
55. Vanadium oxide sensing layer grown on carbon nanotubes by a new atomic layer deposition process  
M.-G. Willinger, G. Neri, E. Rauwel, A. Bonavita, G. Micali, N. Pinna  
*Nano Lett.* 2008, 8, 4201

56. Microwave-assisted synthesis and characterization of flower shaped zinc oxide nanostructures  
T. Krishnakumar, R. Jayaprakash, N. Pinna, V.N. Singh, B.R. Mehta, A.R. Phani  
Mater Lett. 2009, 63, 242
57. Nonaqueous sol-gel routes to oxides applied to atomic layer deposition  
G. Clavel, E. Rauwel, M.-G. Willinger, N. Pinna  
J. Mater. Chem. 2009, 19, 454
58. Effect of annealing and electric properties of high-k thin films grown by ALD using carboxylic acids as oxygen source  
E. Rauwel, F. Ducroquet, P. Rauwel, M.-G. Willinger, I. Matko, N. Pinna  
J. Vac. Sci. Technol. B 2009, 27, 230
59. Optical response of ultrafine spherical silver nanoparticles arranged in hexagonal planar arrays studied by the DDA method  
H. Portales, N. Pinna, M.-P. Pileni  
J. Phys. Chem. A, 2009, 113, 4094
60. The controlled deposition of metal oxides onto carbon nanotubes by atomic layer deposition: Examples and a case study on the application of V<sub>2</sub>O<sub>4</sub> coated nanotubes in gas sensing  
M.-G. Willinger, G. Neri, A. Bonavita, G. Micali, E. Rauwel, T. Hertrich, N. Pinna  
Phys. Chem. Chem. Phys. 2009, 11, 3615
61. Transition metal-doped ZrO<sub>2</sub> and HfO<sub>2</sub> Nanocrystals  
A. Pucci, G. Clavel, M.-G. Willinger, D. Zitoun, N. Pinna  
J. Phys. Chem. C, 2009, 113, 12048
62. Structural, optical and electrical characterization of antimony-substituted tin oxide nanoparticles  
T. Krishnakumara, R. Jayaprakash, N. Pinna, A.R. Phanic, M. Passacantando, S. Santucci  
J. Phys. Chem. Solid 2009, 70, 993
63. Sb-SnO<sub>2</sub>-Nanosized-Based Resistive Sensors for NO<sub>2</sub> Detection  
T. Krishnakumar, R. Jayaprakash, N. Pinna, A. Donato, N. Donato, G. Micali, G. Neri  
J. Sensors, 2009, Article ID 980965
64. CO gas sensing of ZnO nanostructures synthesized by an assisted microwave wet chemical route  
T. Krishnakumar, R. Jayaprakash, N. Pinna, N. Donato, A. Bonavita, G. Micali, G. Neri  
Sens. Actuators B Chem. 2009, 143, 198
65. A general soft-chemistry route to metal phosphate nanocrystals  
M.-G. Willinger, G. Clavel, W. Di, N. Pinna  
J. Ind. Eng. Chem. 2009, 15, 883
66. A general nonaqueous route to crystalline alkaline earth aluminate nanostructures  
M. Karmaoui, M.-G. Willinger, L. Mafra, T. Hertrich, N. Pinna  
Nanoscale, 2009, 1, 360
67. Enhanced photoluminescence features of rare earth phenylphosphonate hybrid nanostructures synthesized under nonaqueous conditions  
W. Di, R. A. Sá Ferreira, M.-G. Willinger, X. Ren, N. Pinna  
J. Phys. Chem. C 2010, 114, 6290
68. Nonaqueous sol-gel chemistry applied to atomic layer deposition: Tuning of photonic band gap properties of silica opals  
C. Marichy, J.-F. Dechézelles, M.-G. Willinger, N. Pinna, S. Ravaine, R. Vallée  
Nanoscale, 2010, 2, 786

69. Micro-Raman investigation of vanadium-oxide coated tubular carbon nanofibers for gas-sensing applications  
S. Santangelo, G. Messina, G. Faggio, M.-G. Willinger, N. Pinna, A. Donato, A. Arena, N. Donato, G. Neri  
*Diamond Relat. Mater.* 2010, 19, 590
70. Unusual growth behavior of atomic layer deposited PbTiO<sub>3</sub> thin films using water and ozone as oxygen sources and their combination  
H.J. Lee, M.H. Park, Y.-S. Min, G. Clavel, N. Pinna, C.S. Hwang  
*J. Phys. Chem. C*, 2010, 114, 12736
71. Non-aqueous sol-gel routes to metal oxide nanocrystals under solvothermal conditions: Review and case study on doped group IV metal oxides  
A. Pucci, N. Pinna  
*Z. Naturforsch.* 2010, 65, 1015
72. CoFe<sub>2</sub>O<sub>4</sub>-TiO<sub>2</sub> and CoFe<sub>2</sub>O<sub>4</sub>-ZnO thin film nanostructures elaborated from colloidal chemistry and atomic layer deposition  
G. Clavel, C. Marichy, M.-G. Willinger, S. Ravaine, D. Zitoun, N. Pinna  
*Langmuir*, 2010, 26, 18400
73. Surfactant-free nonaqueous synthesis of lithium titanium oxide (LTO) nanostructures for lithium ion battery applications  
S.-H. Yu, A. Pucci, T. Hertrich, M.-G. Willinger, S.-H. Baek, Y.-E. Sung, N. Pinna  
*J. Mater. Chem.* 2011, 21, 806
74. Tin dioxide sensing layer grown on tubular nanostructures by a non-aqueous atomic layer deposition process  
C. Marichy, N. Donato, M.-G. Willinger, M. Latino, D. Karpinsky, S.-H. Yu, G. Neri, N. Pinna  
*Adv. Funct. Mater.* 2011, 21, 658
75. Photoluminescence, cytotoxicity and in vitro imaging of hexagonal terbium phosphate nanoparticles doped with europium  
W. Di, J. Li, N. Shirahata, Y. Sakka, M.-G. Willinger, N. Pinna  
*Nanoscale*, 2011, 3, 1263
76. The “benzyl alcohol route”: An elegant approach towards doped and multimetal oxide nanocrystals  
N. Pinna, M. Karmaoui, M.-G. Willinger  
*J. Sol-Gel Sci. Technol.* 2011, 57, 323
77. Microwave-assisted synthesis, characterization and ammonia sensing properties of polymer-capped star-shaped zinc oxide nanostructures  
T. Krishnakumar, R. Jayaprakash, D. Sathya Raj, N. Pinna, V. N. Singh, A. R. Phani, G. Neri  
*J. Nanopart. Res.* 2011, 13, 3327
78. Large-scale Synthesis of Ultrathin Manganese Oxide Nanoplates and their Applications to T1 MRI Contrast Agents  
M. Park, N. Lee, S.H. Choi, K. An, S.-H. Yu, J.H. Kim, S.-H. Kwon, D. Kim, H. Kim, S.-I. Baek, T.-Y. Ahn, O.K. Park, J.S. Son, Y.-E. Sung, Y.-W. Kim, Z. Wang, N. Pinna, T. Hyeon  
*Chem. Mater.* 2011, 23, 3318
79. Hybrid dandelion-like YH(O<sub>3</sub>PC<sub>6</sub>H<sub>5</sub>)<sub>2</sub>:Ln (Ln = Eu<sup>3+</sup>, Tb<sup>3+</sup>) particles: formation mechanism, thermal and photoluminescence properties  
W. Di, X. Ren, N. Shirahata, C. Liu, L. Zhang, Y. Sakka, N. Pinna  
*CrystEngComm* 2011, 13, 5226
80. Wavelength-dependent emission enhancement through the design of active plasmonic nanoantennas  
M. Ferrié, N. Pinna, S. Ravaine, R.A.L. Vallée  
*Opt. Express*, 2011, 19, 17697

81. Enhanced activity of Pt-based electrocatalysts for oxygen reduction via a selective Pt deposition process  
T.-Y. Jeon, N. Pinna, S. J. Yoo, S.-H. Yu, S.-K. Kim, S. Lim, D. Peck, D.-H. Jung, Y.-E. Sung  
J. Electroanal. Chem. 2011, 622, 70
82. A one-pot microwave-assisted non-aqueous sol-gel approach to metal oxide/graphene nanocomposites for Li-ion batteries  
S. Baek, S.-H. Yu, S.-K. Park, A. Pucci, C. Marichy, D.-C. Lee, Y.-E. Sung, Y. Piao, N. Pinna  
RSC Adv. 2011, 1, 1687
83. Ultra simple catalyst layer preparation for the growth of vertically aligned CNTs and CNTs-based nanostructures  
R. M. Silva, A. Pucci, C. Marichy, D. Mata, M. C. Ferro, R. F. Silva, N. Pinna  
CrystEngComm 2012, 14, 48
84. Comment on “Unusual photoluminescence of CaHfO<sub>3</sub> and SrHfO<sub>3</sub> nanoparticles”  
G. Clavel, N. Pinna  
Adv. Funct. Mater. 2012, 22, 1112
85. A facile hydrazine-assisted hydrothermal method for the deposition of monodisperse SnO<sub>2</sub> nanoparticles onto graphene for lithium ion batteries  
S.-K. Park, S.-H. Yu, N. Pinna, S. Woo, B.-C. Jang, Y.-H. Chung, Y.-H. Cho, Y.-E. Sung, Y. Piao  
J. Mater. Chem. 2012, 22, 2520
86. Atomic layer deposition of nanostructured materials for energy and environmental applications  
C. Marichy, M. Bechelany, N. Pinna  
Adv. Mater. 2012, 24, 1017
87. Labeling and monitoring the distribution of anchoring sites on functionalized CNTs by atomic layer deposition  
C. Marichy, J.-P. Tessonier, M. C. Ferro, K.-H. Lee, R. Schlögl, N. Pinna, M.-G. Willinger  
J. Mater. Chem. 2012, 22, 7323
88. One-step synthesis and self-assembly of metal oxide nanoparticles into 3D superlattices  
A. Pucci, M.-G. Willinger, F. Liu, X. Zeng, V. Rebutini, G. Clavel, X. Bai, G. Ungar, N. Pinna  
ACS Nano, 2012, 6, 4382
89. Fluorescent and paramagnetic core-shell hybrid nanoparticles for bi-modal magnetic resonance/luminescence imaging  
W. Di, S. K. P. Velu, A. Lascialfari, C. Liu, N. Pinna, P. Arosio, Y. Sakka, W. Qin  
J. Mater. Chem. 2012, 22, 20641
90. Selective deposition of Pt onto supported metal clusters for fuel cell electrocatalysts  
T.-Y. Jeon, N. Pinna, S. J. Yoo, D. Ahn, S. H. Choi, M.-G. Willinger, Y.-H. Cho, K.-S. Lee, H.-Y. Park, S.-H. Yu, Y.-E. Sung  
Nanoscale, 2012, 4, 6461
91. One-step synthesis and optical properties of benzoate- and biphenolate-capped ZrO<sub>2</sub> nanoparticles  
X. Bai, A. Pucci, V. T. Freitas, R. A. S. Ferreira, N. Pinna  
Adv. Funct. Mater. 2012, 22, 4275
92. Directing the deposition of ferromagnetic cobalt onto Pt-tipped CdSe@CdS nanorods: Synthetic and Mechanistic Insights  
L. J. Hill, M. M. Bull, Y. Sung, A. G. Simmonds, P. T. Dirlam, N. E. Richey, S. E. DeRosa, I.-B. Shim, D. Guin, P. J. Costanzo, N. Pinna, M.-G. Willinger, W. Vogel, K. Char, J. Pyun  
ACS Nano, 2012, 6, 8632
93. Room temperature hydrogen sensing with hetero-nanostructures based on reduced graphene oxide and tin oxide

- P. A. Russo, N. Donato, S. G. Leonardi, S. Baek, D. E. Conte, G. Neri, N. Pinna  
Angew. Chem. Int. Ed. 2012, 51, 11053
94. Sensing behavior of SnO<sub>2</sub>/reduced graphene oxide nanocomposites towards NO<sub>2</sub>  
G. Neri, S.G. Leonardi, M. Latino, N. Donato, S. Baek, D.E. Conte, P.A. Russo, N. Pinna  
Sens. Actuators B Chem. 2013, 179, 61
95. Nanoparticles self-assembly using  $\pi - \pi$  interactions  
G. Caputo, N. Pinna  
J. Mater. Chem. A, 2013, 1, 2370
96. Microwave-assisted coating of carbon nanostructures with titanium dioxide for the catalytic dehydration of d-xylose into furfural  
P.A. Russo, S. Lima, V. Rebuttni, M. Pillinger, M.G. Willinger, N. Pinna, A.A. Valente  
RSC Adv. 2013, 3, 2595
97. Zirconia-doped nanoparticles: organic coating, polymeric entrapment and application as dual-imaging agents  
V. Rebuttni, A. Pucci, P. Arosio, X. Bai, E. Locatelli, N. Pinna, A. Lascialfari, M.C. Franchini  
J. Mater. Chem. B 2013, 1, 919
98. In-vacuum projection of nanoparticles for on-chip tunneling spectroscopy  
Q. Yu, L. Cui, N. Lequeux, A. Zimmers, C. Ulysse, V. Rebuttni, N. Pinna, H. Aubin  
ACS Nano, 2013, 7, 1487
99. Nanoparticles charge response from electrostatic force microscopy  
A. Mottaghizadeh, P. L. Lang, L. M. Cui, J. Lesueur, J. Li, D. N. Zheng, V. Rebuttni, N. Pinna, A. Zimmers, H. Aubin  
Appl. Phys. Lett. 2013 102, 053118
100. Improved electrocatalytic stability in ethanol oxidation by microwave-assisted selective deposition of SnO<sub>2</sub> and Pt onto carbon  
P. A. Russo, M. Ahn, Y.-E. Sung, N Pinna  
RSC Adv. 2013, 3, 7001
101. Structure-properties relationship in iron oxide-reduced graphene oxide nanostructures for li-ion batteries  
S.-H. Yu, D. E. Conte, S. Baek, D.-C. Lee, S.-K. Park, K. Jae Lee, Y. Piao, Y.-E. Sung, N. Pinna  
Adv. Funct. Mater. 2013, 23, 4293
102. In situ infrared spectroscopic study of atomic layer deposited TiO<sub>2</sub> thin films by non-aqueous routes  
K. Bernal Ramos, G. Clavel, C. Marichy, W. Cabrera, N. Pinna, Y. J. Chabal  
Chem. Mater. 2013, 25, 1706
103. Galvanic replacement reactions in metal oxide nanocrystals  
M. H. Oh, T. Yu, S.-H. Yu, B. Lim, K.-T. Ko, M.-G. Willinger, D.-H. Seo, B. H. Kim, M. G. Cho, J.-H. Park, K. Kang, Y.-E. Sung, N. Pinna, T. Hyeon  
Science 2013 340, 964
104. Tin dioxide-carbon heterostructures applied to gas sensing: Structure-dependent properties and general sensing mechanism  
C. Marichy, P. A. Russo, M. Latino, J.-P. Tessonnier, M.-G. Willinger, N. Donato, G. Neri, N. Pinna  
J. Phys. Chem. C, 2013 117, 19729
105. Carbon-nanostructures coated/decorated by atomic layer deposition: Growth and applications  
C. Marichy, N. Pinna  
Coord. Chem. Rev. 2013 257, 3232
106. THz nanocrystal acoustic vibrations from ZrO<sub>2</sub> 3D supercrystals  
L. Saviot, D. B. Murray, G. Caputo, M. C. Marco De Lucas, N. Pinna  
J. Mater. Chem. C, 2013, 1, 8108



107. Amperometric sensing of H<sub>2</sub>O<sub>2</sub> using Pt-TiO<sub>2</sub>/reduced graphene oxide nanocomposites  
S. G. Leonardi, D. Aloisio, N. Donato, P. A. Russo, M. C. Ferro, N. Pinna, G. Neri  
ChemElectroChem, 2014, 1, 617
108. Microwave-assisted fluorolytic sol-gel route to iron fluoride nanoparticles for Li-ion batteries  
L. Di Carlo, D. E. Conte, E. Kemnitz, N. Pinna  
Chem. Commun. 2014, 50, 460
109. Journal of Nanoparticle Research: Looking forward  
M.C. Roco, N. Pinna  
J. Nanopart. Res. 2014, 16, 2331
110. Morphology effects on the supercapacitive electrochemical performances of iron oxide/reduced graphene oxide nanocomposites  
P.-C. Gao, P. A. Russo, D. E. Conte, S. Baek, F. Moser, N. Pinna, T. Brousse, F. Favier  
ChemElectroChem, 2014, 1, 747
111. Sulfonated graphene oxide as effective catalyst for conversion of 5-(hydroxymethyl)-2-furfural into bio-fuels  
M. M. Antunes, P. A. Russo, P. V. Wiper, J. M. Veiga, M. Pillinger, L. Mafra, D. V. Evtuguin, N. Pinna, A. A. Valente  
ChemSusChem, 2014, 7, 804
112. Colloidal polymers from dipolar assembly of cobalt-tipped CdSe@CdS nanorods  
L. J. Hill, N. E. Richey, Y. Sung, P. T. Dirlam, E. Lavoie-Higgins, I.-B. Shim, N. Pinna, M.-G. Willinger, W. Vogel, J. J. Benkoski, K. Char, J. Pyun  
ACS Nano, 2014, 8, 3272
113. Synthesis of ferromagnetic cobalt nanoparticle tipped CdSe@CdS nanorods: critical role of Pt-activation  
L. J. Hill, N. E. Richey, Y. Sung, P. T. Dirlam, J. J. Griebel, I.-B. Shim, N. Pinna, M.-G. Willinger, W. Vogel, K. Char, J. Pyun  
CrystEngComm, 2014, 16, 9461
114. Solid acids with SO<sub>3</sub>H groups and tunable surface properties: versatile catalysts for biomass conversion  
P. A. Russo, M. M. Antunes, P. Neves, P. V. Wiper, E. Fazio, F. Neri, F. Barreca, L. Mafra, M. Pillinger, N. Pinna, A. A. Valente  
J. Mater. Chem. A, 2014, 2, 11813
115. Mesoporous carbon-silica solid acid catalysts for producing useful bio-products within the sugar-platform of biorefineries  
P. A. Russo, M. M. Antunes, P. Neves, P. V. Wiper, E. Fazio, F. Neri, F. Barreca, L. Mafra, M. Pillinger, N. Pinna, A. A. Valente  
Green. Chem. 2014, 16, 4292
116. Verwey transition in single magnetite nanoparticles  
Q. Yu, A. Mottaghizadeh, H. Wang, C. Ulysse, A. Zimmers, V. Rebutini, N. Pinna, H. Aubin  
Phys. Rev. B, 2014, 90, 075122
117. Self-assembled supracrystals and hetero-structures made from colloidal nanocrystals  
M. P. Pileni, P. D. Cozzoli, N. Pinna  
CrystEngComm, 2014, 16, 9365
118. A review on the application of iron(III) fluorides as positive electrodes for secondary cells  
D. E. Conte, N. Pinna  
Mater. Renew. Sustain. Energy 2014, 3, 37
119. Highly ordered and vertically oriented TiO<sub>2</sub>/Al<sub>2</sub>O<sub>3</sub> nanotube electrodes for application in dye-sensitized solar cells

J.-Y. Kim, K.-H. Lee, J. Shin, S. H. Park, J. S. Kang, K. S. Han, M. Sung, N. Pinna, Y.-E. Sung  
Nanotechnology, 2014, 25, 504003

120. Efficient and tuneable photoluminescent boehmite hybrid nanoplates lacking metal activator centres for single-phase white-LEDs  
X. Bai, G. Caputo, Z. Hao, V. T. Freitas, J. Zhang, R. L. Longo, O. L. Malta, R. A. S. Ferreira, N. Pinna  
Nature Comm. 2014, 5, 5702
121. Gas sensing properties and p-type response of ALD TiO<sub>2</sub> coated carbon nanotubes  
C. Marichy, N. Donato, M. Latino, M.-G. Willinger, J.-P. Tessonnier, G. Neri, N. Pinna  
Nanotechnology, 2015, 26, 024004
122. Reliable Palladium Nanoparticle Syntheses in Aqueous Solution: The Importance of Understanding Precursor Chemistry and Growth Mechanism  
F. Kettemann, M. Wuithschick, G. Caputo, R. Krähnert, N. Pinna, K. Rademann, J. Polte  
CrystEngComm, 2015, 17, 1865
123. Colloidal polymers from inorganic nanoparticle monomers  
L. J. Hill, N. Pinna, K. Char, J. Pyun  
Prog. Polym. Sci. 2015, 40, 85
124. Vertically aligned N-doped CNTs growth using Taguchi experimental design  
R. M. Silva, A. J. S. Fernandes, M. C. Ferro, N. Pinna, R. F. Silva  
Appl. Surf. Sci. 2015, 344, 57
125. Structural evolution of aragonite superstructures obtained in the presence of the siderophore deferoxamine  
M.-G. Willinger, J. Polleux, M. Antonietti, H. Cölfen, N. Pinna, N. Nassif  
CrystEngComm, 2015, 17, 3927
126. Catalyst-free growth of carbon nanotube arrays directly on Inconel® substrates for electrochemical carbon-based electrodes  
R. M. Silva, A. C. Bastos, F. J. Oliveira, D. E. Conte, Y. Fan, N. Pinna, R. F. Silva  
J. Mater. Chem. A, 2015, 3, 17804
127. Turning periodic mesoporous organosilicas selective to CO<sub>2</sub>/CH<sub>4</sub> separation: deposition of aluminium oxide by atomic layer deposition  
M. A. O. Lourenço, R. M. Silva, R. F. Silva, N. Pinna, S. Pronier, J. Pires da Silva, M. L. Pinto, J. RB Gomes, P. Ferreira  
J. Mater. Chem. A, 2015, 3, 22860
128. Anomalous CV response correlated to relaxation processes in TiO<sub>2</sub> thin film based-metal-insulator-metal capacitor: Effect of titanium and oxygen defects  
A. Kahouli, C. Marichy, A. Sylvestre, N. Pinna  
J. Appl. Phys. 2015, 117, 154101
129. Effect of 10 different TiO<sub>2</sub> and ZrO<sub>2</sub> (nano) materials on the soil invertebrate Enchytraeus crypticus  
S. I. L. Gomes, G. Caputo, N. Pinna, J. J. Scott-Fordsmand, M. J. B. Amorim  
Environ. Toxicol. Chem. 2015, 34, 2409
130. Turkevich in New Robes: Key Questions Answered for the Most Common Gold Nanoparticle Synthesis  
M. Wuithschick, A. Birnbaum, S. Witte, M. Sztucki, U. Vainio, N. Pinna, K. Rademann, F. Emmerling, R. Kraehnert, J. Polte  
ACS Nano, 2015, 9, 7052
131. Chemical Modification of Graphene Oxide through Diazonium Chemistry and Its Influence on the Structure-Property Relationships of Graphene Oxide/Iron Oxide Nanocomposites  
V. Rebutini, E. Fazio, S. Santangelo, F. Neri, G. Caputo, C. Martin, T. Brousse, F. Favier, N. Pinna  
Chem. Eur. J. 2015, 21, 12465

132. Stabilization of Titanium Dioxide Nanoparticles at the Surface of Carbon Nanomaterials Promoted by Microwave Heating  
R. Zhang, S. Santangelo, E. Fazio, F. Neri, M. D'Arienzo, F. Morazzoni, Y. Zhang, N. Pinna, P. A. Russo  
Chem. Eur. J. 2015, 21, 14901
133. ALD SnO<sub>2</sub> Protective Decoration Enhances the Durability of a Pt Based Electrocatalyst  
C. Marichy, G. Ercolano, G. Caputo, M. Willinger, D. Jones, J. Rozière, N. Pinna, S. Cavaliere  
J. Mater. Chem. A, 2016, 4, 969
134. Nanostructured Materials for Room-Temperature Gas Sensors  
J. Zhang, X. Liu, G. Neri, N. Pinna  
Adv. Mater, 2016, 28, 795
135. Synthesis and Assembly of Dipolar Heterostructured Tetrapods: Colloidal Polymers with 'Giant tert-butyl' Groups  
N. G. Pavlopoulos, J. T. Dubose, N. Pinna, M. Willinger, K. Char, J. Pyun  
Angew. Chem. Int. Ed. 2016, 128, 1819
136. Graphene/N-doped carbon sandwiched nanosheets with ultrahigh nitrogen doping for boosting lithium-ion batteries  
X. Liu, J. Zhang, S. Guo, N. Pinna  
J. Mater. Chem. A, 2016, 4, 1423
137. Electrochemical Water Oxidation of Ultra-thin Cobalt Oxide-Based Catalyst Supported onto Aligned ZnO Nanorods  
N. K. Reddy, S. Winkler, N. Koch, N. Pinna  
ACS Appl. Mater. Interfaces, 2016, 8, 3226
138. Selective Dissolution of Surface Ni Close to Pt in PtNi Nanocatalyst toward Oxygen Reduction Reaction  
T. Jeon, S. Kim, N. Pinna, A. Sharma, J. Park, S. Y. Lee, H. C. Lee, S. Kang, H. Lee, H.-H. Lee  
Chem. Mater. 2016, 28, 1879
139. Elemental Sulfur and Molybdenum Disulfide Composites for Li-S Batteries with Long Cycle Life and High-Rate Capability  
P. T. Dirlam, J. Park, A. G. Simmonds, K. J Domanik, C. B Arrington, J. L. Schaefer, V. P. Oleshko, T. S Kleine, K. Char, R. S. Glass, C. L. Soles, C. Kim, N. Pinna, Y. Sung, J. Pyun  
ACS Appl. Mater. Interfaces, 2016, 8, pp 13437
140. The missing piece of the mechanism of the Turkevich method: The critical role of citrate protonation  
F. Kettemann, A. Birnbaum, S. Witte, M. Wuithschick, N. Pinna, R. Kraehnert, K. Rademann, J. Polte  
Chem. Mater. 2016, 28, 4072
141. Nucleation, growth mechanism and controlled coating of ZnO ALD onto vertically aligned N-doped CNTs  
R. M. Silva, M. C. Ferro, J. R. Araujo, C. A. Achete, G. Clavel, R. F. Silva, N. Pinna  
Langmuir, 2016, 32, 7038
142. Coating of Vertically Aligned Carbon Nanotubes by a Novel Manganese Oxide Atomic Layer Deposition Process for Binder-Free Hybrid Capacitors  
R. M. Silva, G. Clavel, Y. Fan, P. Amsalem, N. Koch, R. F. Silva, N. Pinna  
Adv. Mater. Interfaces, 2016, 3, 1600313
143. Operando Mössbauer Spectroscopy Investigation of the Electrochemical Reaction with Lithium in Bronze-type FeF<sub>3</sub>·0.33 H<sub>2</sub>O  
D. E. Conte, L. Di Carlo, M. T. Sougrati, B. Fraisse, L. Stievano, N. Pinna  
J. Phys. Chem. C, 2016, 120, 23933

144. Atomic Layer Deposition to Materials for Gas Sensing Applications  
C. Marichy, N. Pinna  
Adv. Mater. Interfaces, 2016, 3, 1600335
145. USPIO size control through microwave nonaqueous sol-gel method for neoangiogenesis T2 MRI contrast agent  
S. Richard, V. Eder, G. Caputo, C. Journé, P. Ou, J. Bolley, L. Louedec, E. Guenin, L. Motte, N. Pinna, Y. Lalatonne  
Nanomed., 2016, 11, 2769
146. Are Electrospun Carbon/Metal Oxide Composite Fibers Relevant Electrode Materials for Li-Ion Batteries?  
F. Pantò, Y. Fan, P. Frontera, S. Stelitano, E. Fazio, S. Patan, M. Marelli, P. Antonucci, F. Neri, N. Pinna, S. Santangelo  
J. Electrochem. Soc., 2016, 163, A2930
147. Electrospun Nanomaterials for Supercapacitor Electrodes: Designed Architectures and Electrochemical Performance  
X. Lu, C. Wang, F. Favier, N. Pinna  
Adv. Energy Mater. 2017, 7, 1601301
148. Chlorine intercalation in graphitic carbon nitride for efficient photocatalysis  
C. Liu, Y. Zhang, F. Dong, A.H. Reshak, L. Ye, N. Pinna, C. Zeng, T. Zhang, H. Huang  
Appl. Cat. B., 2017, 203, 465
149. Phonons in Hybrid Lamellar Supercrystals  
L. Saviot, G. Caputo, N. Pinna  
J. Phys. Chem. C, 2017, 121, 1990
150. Synthesis of Nickel Phosphide Electrocatalysts from Hybrid Metal Phosphonates  
R. Zhang, P. A. Russo, M. Feist, P. Amsalem, N. Koch, N. Pinna  
ACS Appl. Mater. Interfaces, 2017, 9, 14013
151. Colloidal nanothermometers based on neodymium doped alkaline-earth fluorides in the first and second biological windows  
M. Pedroni, P. Cortelletti, I. X. Cantarelli, N. Pinna, P. Canton, M. Quintanilla, F. Vetrone, A. Speghini  
Sens. Actuator B Chem. 2017, 250, 147
152. Atomic Layer Deposition of Silica on Carbon Nanotubes  
M. Karg, K. S. Lokare, C. Limberg, G. Clavel, N. Pinna  
Chem. Mater. 2017, 29, 4920
153. Electrospun C/GeO<sub>2</sub> paper-like electrodes for flexible Li-ion batteries  
F. Pantò, Y. Fan, S. Stelitano, E. Fazio, S. Patanè, P. Frontera, P. Antonucci, N. Pinna, S. Santangelo  
Int. J. Hydrogen Energy, 2017, 42, 28102-28112
154. Facile synthesis of Fe<sub>3</sub>O<sub>4</sub>/nitrogen-doped carbon hybrid nanofibers as a robust peroxidase-like catalyst for sensitive colorimetric detection of ascorbic acid  
Y. Jiang, N. Song, C. Wang, N. Pinna, X. Lu  
J. Mater. Chem. B, 2017, 5, 5499
155. Two-Dimensional Nanostructured Materials for Gas Sensing  
X. Liu, T. Ma, N. Pinna, J. Zhang  
Adv. Funct. Mater. 2017, 1702168
156. Hybrid Organic-Inorganic Transition-Metal Phosphonates as Precursors for Water Oxidation Electrocatalysts  
R. Zhang, P. A. Russo, A. G. Buzanich, T. Jeon, N. Pinna  
Adv. Funct. Mater. 2017, 1703158

157. Type I vs. quasi-type II modulation in CdSe@CdS tetrapods: ramifications for noble metal tipping  
N. G. Pavlopoulos, J. T. Dubose, Y. Liu, X. Huang, N. Pinna, M.-G. Willinger, T. Lian, K. Chare, J. Pyun  
CrystEngComm, 2017, 19, 6443-6453
158. Unifying Concepts in Room-Temperature CO Oxidation with Gold Catalysts  
F. Kettemann, S. Witte, A. Birnbaum, B. Paul, G. Clavel, N. Pinna, K. Rademann, R. Kraehnert, J. Polte  
ACS Catal. 2017, 7, 8247-8254
159. Tuning the sensitivity of lanthanide activated NIR nanothermometers in the biological windows  
P. Cortelletti, A. Skripka, C. Facciotti, M. Pedroni, G. Caputo, N. Pinna, M. Quintanilla, A. Benayas, F. Vetrone, A. Speghini  
Nanoscale, 2018, 10, 2568
160. A cross-species and model comparison of the acute toxicity of nanoparticles used in the pigment and ink industries  
D. M. Brown, H. J. Johnston, B. Gaisera N. Pinna, G. Caputo, M. Culha, S. Kelestemur, M. Altunbek, V. Stone, J. Chandra Roy, J. H. Kinross, T. F. Fernandes  
NanoImpact, 2018, 11, 20-32
161. Novel Synthesis of Anhydrous and Hydroxylated CuF<sub>2</sub> Nanoparticles and Their Potential for Lithium Ion Batteries  
T. Krahl, F. M. Winkelmann, A. Martin, N. Pinna, E. Kemnitz  
Chem. Eur. J. 2018, 24, 7177
162. Enhancing the Lithium Storage Performance of Graphene/SnO<sub>2</sub> Nanorods by a Carbon Riveting Strategy  
X. Liu, T. Ma, L. Sun, Y. Xu, J. Zhang, N. Pinna  
ChemSusChem, 2018, 11, 1321
163. Cobalt-Assisted Morphology and Assembly Control of Co-Doped ZnO Nanoparticles  
X. Han, S. Wahl, P. A. Russo, N. Pinna  
Nanomaterials, 2018, 8, 249
164. Are Electrospun Fibrous Membranes Relevant Electrode Materials for Li-Ion Batteries? The Case of the C/Ge/GeO<sub>2</sub> Composite Fibers  
F. Pantò, Y. Fan, S. Stelitano, E. Fazio, S. Patanè, P. Frontera, P. Antonucci, N. Pinna, S. Santangelo  
Adv. Funct. Mater. 2018, 1800938
165. Stabilization of Mesoporous Iron-Oxide Films against Sintering and Phase Transformations via Atomic Layer Deposition of Alumina and Silica  
K. Kraffert, M. Karg, R. Schmack, G. Clavel, C. Boissiere, T. Wirth, N. Pinna, R. Kraehnert  
Adv. Mater. Interfaces, 2018, 1800360
166. Polarization resistance-free Mn<sub>3</sub>O<sub>4</sub>-based electrocatalysts for the oxygen reduction reaction  
Y. Fan, Y. Wu, X. Huang, G. Clavel, P. Amsalem, N. Koch, N. Pinna  
ChemElectroChem, 2018, 5, 2010
167. Metal phosphonate coordination networks and frameworks as precursors of electrocatalysts for the hydrogen and oxygen evolution reactions  
R. Zhang, S. M. El-Refaei, P. A. Russo, N. Pinna  
J Nanopart. Res. 2018, 20, 146
168. Reversible Sodium and Lithium Insertion in Iron Fluoride Perovskites  
A. Martin, M.-L. Doublet, E. Kemnitz, N. Pinna  
Adv. Funct. Mater. 2018, 1802057
169. Sea-Sponge-like Structure of Nano-Fe<sub>3</sub>O<sub>4</sub> on Skeleton-C with Long Cycle Life under High Rate for Li-Ion Batteries  
S. Chen, Q. Wu, M. Wen, Q. Wu, J. Li, Y. Cui, N. Pinna, Y. Fan, T. Wu  
ACS Appl. Mater. Interfaces, 2018, 10, 19656

170. Optimization of the activity of Ni-based nanostructures for the oxygen evolution reaction  
Y. Fan, Y. Wu, G. Clavel, M. H. Raza, P. Amsalem, N. Koch, N. Pinna  
ACS Appl. Energy Mater. 2018, 1, 4554
171. Effect of passivating Al<sub>2</sub>O<sub>3</sub> thin films on MnO<sub>2</sub>/carbon nanotube composite lithium-ion battery anodes  
Y. Fan, G. Clavel, N. Pinna  
J Nanopart. Res. 2018, 20, 216
172. Tuning the NiO Thin Film Morphology on Carbon Nanotubes by Atomic Layer Deposition for Enzyme-Free Glucose Sensing  
M. H. Raza, K. Movlaee, Y. Wu, S. M. El-Refaei, M. Karg, S. G. Leonardi, G. Neri and N. Pinna  
ChemElectroChem, 2019, 6, 383
173. Atomically Precise Bimetallic Nanoclusters as Photosensitizers in Photoelectrochemical Cells  
Y. Wang, X. Liu, S. Kovalenko, Q.-Y. Chen, N. Pinna  
Chem. Eur. J. 2019, 25, 4814
174. Ni Strongly Coupled with Mo<sub>2</sub>C Encapsulated in Nitrogen-Doped Carbon Nanofibers as Robust Bifunctional Catalyst for Overall Water Splitting  
M. Li, Y. Zhu, H. Wang, C. Wang, N. Pinna, X. Lu  
Adv. Energy Mater. 2019, 1803185
175. Highly Dispersible Hexagonal Carbon-MoS<sub>2</sub>-Carbon Nanoplates with Hollow Sandwich Structures for Supercapacitors  
T. Quan, N. Goubard-Bretesché, E. Härk, Z. Kochovski, S. Mei, N. Pinna, M. Ballauff, Y. Lu  
Chem. Eur. J. 2019, 25, 4757
176. Fluorolytic sol-gel route and electrochemical properties of polyanionic transition metal phosphate fluorides  
N. Goubard-Bretesché, E. Kemnitz, N. Pinna  
Chem. Eur. J. 2019, 25, 6189
177. A self-limited atomic layer deposition of WS<sub>2</sub> based on the chemisorption and reduction of bis(t-butylimido)bis(dimethylamino) tungsten complexes  
Y. Wu, M. H. Raza, Y. Chen, P. Amsalem, S. Wahl, K. Skrodzky, X. Xu, K. S. Lokare, M. Zhukush, P. Gaval, N. Koch, E. A. Quadrelli, N. Pinna  
Chem. Mater. 2019, 6, 1881
178. Zn<sub>0.35</sub>Co<sub>0.65</sub>O - A Stable and Highly Active Oxygen Evolution Catalyst Formed by Zinc Leaching and Tetrahedral Coordinated Cobalt in Wurtzite Structure  
S. Wahl, S. M. El-Refaei, A. G. Buzanich, P. Amsalem, K.-S. Lee, N. Koch, M.-L. Doublet, N. Pinna  
Adv. Energy Mater. 2019, 1900328
179. A Superior Sodium/Lithium-Ion Storage Material: Sea Sponge C/Sn<sub>2</sub>Fe@GO  
W. Yan, Q. Wu, M. Wen, S. Chen, Q. Wu, N. Pinna  
Inorg. Chem. 2019, 58, 7915
180. Vertically aligned TiO<sub>2</sub>/ZnO nanotube arrays prepared by atomic layer deposition for photovoltaic applications  
J. Kim, K. Shin, M. H. Raza, N. Pinna, Y. Sung  
Korean J. Chem. Eng. 2019, 36, 1157
181. Reversible Insertion in AFeF<sub>3</sub> (A = K<sup>+</sup>, NH<sub>4</sub><sup>+</sup>) Cubic Iron Fluoride Perovskites  
A. Martin, E. S. Santiago, E. Kemnitz, N. Pinna  
ACS Appl. Mater. Interfaces, 2019, 11,36
182. A general low-temperature synthesis route to polyanionic vanadium phosphate fluoride cathode materials: AVPO<sub>4</sub>F (A= Li, Na, K) and Na<sub>3</sub>V<sub>2</sub>(PO<sub>4</sub>)<sub>2</sub>F<sub>3</sub>

- N. Goubard, E. Kemnitz, N. Pinna  
Mater. Chem. Front. 2019, 3, 2164
183. Polyethylene/phosphors composites, a novel treatment for LDPE plastic  
S. Carmona-Téllez, R.I. Sánchez-Alarcón, M.A. Aguilar-Frutis, A.N. Meza-Rocha, R. Lozada-Morales,  
N. Pinna, G. Alarcón-Flores  
Opt. Mater. 2019, 96, 109336
184. Exploiting the condensation reactions of acetophenone to engineer carbon-encapsulated Nb<sub>2</sub>O<sub>5</sub> nanocrystals for high performance Li and Na energy storage systems  
X. Han, P.A. Russo, N. Goubard-Bretesché, S. Patané, S. Santangelo, R. Zhang, N. Pinna  
Adv. Energy Mater. 2019, 1902813
185. Niobium pentoxide nanomaterials with distorted structures as efficient acid catalysts  
K. Skrodzky, M. M. Antunes, X. Han, S. Santangelo, G. Scholz, A. A. Valente, N. Pinna, P. A. Russo  
Commun. Chem. 2019, 2, 129
186. Gas Sensing of NiO-SCCNT Core-Shell Heterostructures: Optimization by Radial Modulation of the Hole-Accumulation Layer  
M. H. Raza, K. Movlaee, S. G. Leonardi, N. Barsan, G. Neri, N. Pinna  
Adv. Funct. Mater. 2020, 1906874
187. Operando Diffuse Reflectance UV-VIS Spectroelectrochemistry for Investigating Oxygen Evolution Electrocatalysts  
S. Wahl, S. M. El-Refaei, P. Amsalem, A. Guilherme Buzanich, N. Koch, N. Pinna  
Catal. Sci. Technol. 2020, 10, 517
188. Toward Optimized Radial Modulation of the Space-Charge Region in One-Dimensional SnO<sub>2</sub>-NiO Core-Shell Nanowires for Hydrogen Sensing  
M. H. Raza, N. Kaur, E. Comini, N. Pinna  
ACS Appl. Mater. Interfaces, 2020, 12, 4
189. Structure, Defects, and Magnetism of Electrospun Hematite Nanofibers Silica-Coated by Atomic Layer Deposition  
A. Ponti, M. H. Raza, F. Pantò, A. M. Ferretti, C. Triolo, S. Patané, N. Pinna, S. Santangelo  
Langmuir 2020, 36, 1305
190. Anchoring ultrasmall Fe(III)-based Nanoparticles on Silica and Titania Mesostructures for Syngas H<sub>2</sub>S Purification  
C. Cara, V. Mameli, E. Rombia, N. Pinna, M. S. Angotzi, D. Niznanský, A. Musinu, C. Cannas  
Micropor. Mesopor. Mater. 2020, 298, 110062
191. Effect of red mud added to zeolite LTA synthesis: Where is Fe in the newly-formed material?  
C. Belviso, C. Cannas, N. Pinna, F. Cavalcante, A. Lettino, P. Lotti, G. D. Gatta  
Micropor. Mesopor. Mater. 2020, 298, 110058
192. Insights into Charge Transfer at an Atomically Precise Nanocluster/Semiconductor Interface  
Y. Wang, X.-H. Liu, Q. Wang, M. Quick, S. Kovalenko, Q.-Y. Chen, N. Koch, N. Pinna  
Angew. Chem. Int. Ed. 2020, 59, 7748
193. MoS<sub>2</sub> Van der Waals p-n Junctions Enabling Highly Selective Room-Temperature NO<sub>2</sub> Sensor  
W. Zheng, Y. Xu, L. Zheng, C. Yang, N. Pinna, X. Liu, J. Zhang  
Adv. Funct. Mater. 2020, 2000435
194. Copper Thiophosphate (Cu<sub>3</sub>PS<sub>4</sub>) as Electrode for Sodium-Ion Batteries with Ether Electrolyte  
W. Brehm, A. L. Santhosha, Z. Zhang, C. Neumann, A. Turchanin, A. Martin, N. Pinna, M. Seyring, M. Rettenmayr, J. R. Buchheim, P. Adelhelm  
Adv. Funct. Mater. 2020, 1910583

195. Comparing the performance of Nb<sub>2</sub>O<sub>5</sub> composites with reduced graphene oxide and amorphous carbon in Li- and Na-ion electrochemical storage devices X. Han, P. A. Russo, C. Triolo, S. Santangelo, N. Goubard-Bretesché, N. Pinna  
ChemElectroChem, 2020, 7, 1689
196. Platinum Single Atoms on Tin Oxide Ultrathin Film for Extremely Sensitive Gas Detection  
Y. Xu, W. Zheng, X. Liu, L. Zhang, L. Zheng, C. Yang, N. Pinna, J. Zhang  
Mater. Horiz. 2020, 7, 1519
197. The Importance of Ligand Selection on the Formation of Metal Phosphonate-Derived CoMoP and CoMoP<sub>2</sub> Nanoparticles for Catalytic Hydrogen Evolution  
S. M. El-Refaei, P. A. Russo, P. Amsalem, N. Koch, N. Pinna  
ACS Appl. Nano Mater. 2020, 3, 4147
198. Sodium niobate based hierarchical 3D perovskite nanoparticle clusters  
L. Branzi, M. Back, P. Cortelletti, N. Pinna, A. Benedetti, A. Speghini  
Dalton Trans. 2020, 49, 15195
199. Niobium-doped titanium dioxide with high dopant contents for enhanced lithium-ion storage  
W. Xu, P. Russo, T. Schulz, N. Koch, N. Pinna  
ChemElectroChem, 2020, 7, 4016
200. Morphology-Controlled MoS<sub>2</sub> by Low-Temperature Atomic Layer Deposition  
C. Shen, M. H. Raza, P. Amsalem, T. Schultz, N. Koch, N. Pinna  
Nanoscale, 2020, 12, 20404
201. Investigations of Carbon Nitride-Supported Mn<sub>3</sub>O<sub>4</sub> Oxide Nanoparticles for ORR  
A. I. Large, S. Wahl, S. Abate, I. da Silva, J. J. Delgado Jaen, N. Pinna, G. Held, R. Arrigo  
Catalysts, 2020, 10, 1289
202. Fluoro(Phosphates,Sulfates) or (Phosphate,Sulfate) Fluorides: Why Does It Matter?  
N. Pinna, N. Goubard-Bretesche?  
Adv. Energy Mater. 2020, 2002971
203. The Journal of Nanoparticle Research victim of an organized rogue editor network!  
N. Pinna, G. Clavel, M. C. Roco  
J. Nanopart. Res. 2020, 22, 376
204. Edge-enriched WS<sub>2</sub> Nanosheets on Carbon Nanofibers Boosts NO<sub>2</sub> Detection at Room Temperature  
Y. Xu, J. Xie, Y. Zhang, F.-H. Tian, C. Yang, W. Zheng, X. Liu, J. Zhang, N. Pinna  
J. Haz. Mat. 2021, 125120
205. Transition metal sulfides meet electrospinning: versatile synthesis, distinct properties and prospective applications  
W. Zhu, Y. Cheng, C. Wang, N. Pinna, X. Lu  
Nanoscale, 2021, 13, 9112
206. Recent Advances in Multimetal and Doped Transition-Metal Phosphides for the Hydrogen Evolution Reaction at Different pH values  
S. M. El-Refaei, P. A. Russo, N. Pinna  
ACS Appl. Mater. Interfaces, 2021, 13, 22077
207. Formation Mechanism and Chirality Evolution of Chiral Carbon Dots Prepared via Radical Assisted Synthesis at Room Temperature  
L. Branzi, G. Lucchini, E. Cattaruzza, N. Pinna, A. Benedetti, A. Speghini  
Nanoscale, 2021, 13, 10478



208. CNT/Al<sub>2</sub>O<sub>3</sub> core-shell nanostructures by atomic layer deposition; effect of Al<sub>2</sub>O<sub>3</sub> thickness on the electrochemical detection of dihydroxybenzene isomers  
K. Moulae, M. H. Raza, N. Pinna, N. Donato, G. Neri  
Phys. Chem. Chem. Phys. 2021, 23, 14064
209. Secondary Phosphine Oxide Functionalized Gold Clusters and their Application in Photoelectrocatalytic Hydrogenation Reactions  
Y. Wang, X.H. Liu, R. Wang, B. Cula, Z.-N. Chen, Q. Chen, N. Koch, N. Pinna  
J. Am. Chem. Soc. 2021, 143, 9595
210. On the plasmon-assisted detection of a 1585 cm<sup>-1</sup> mode in the 532 nm Raman spectra of crystalline  $\alpha$ -Fe<sub>2</sub>O<sub>3</sub>/polycrystalline NiO core/shell nanofibers  
S. Santangelo, M. H. Raza, N. Pinna, S. Patanè  
Appl. Phys. Lett. 2021, 118, 251105
211. Impact of different intermediate layers on the morphology and crystallinity of TiO<sub>2</sub> grown on carbon nanotubes by atomic layer deposition  
J. Wang, Z. Yin, F. Hermerschmidt, E. List-Kratochvil, N. Pinna  
Adv. Mater. Interfaces, 2021, 2100759
212. SnO<sub>2</sub>-SiO<sub>2</sub> 1D Core-Shell Nanowires Heterostructures for Selective Hydrogen Sensing  
M. H. Raza, N. Kaur, E. Comini, N. Pinna  
Adv. Mater. Interfaces, 2021, 2100939
213. Dual doping of molybdenum phosphide with M(Mn,Fe) and S for achieving high hydrogen evolution reaction activity in both acidic and alkaline media  
S. El-Refaei, P. A. Russo, T. Schultz, N. Koch, N. Pinna  
ChemCatChem, 2021, 13, 4392
214. Mesoporous WC<sub>x</sub> Films with NiO-Protected Surface: Highly Active Electrocatalysts for the Alkaline Oxygen Evolution Reaction  
M. Frisch, M.-Y. Ye, M. H. Raza, A. Arinchtein, D. Bernsmeier, A. Gomer, T. Bredow, N. Pinna, R. Kraehnert  
ChemSusChem, 2021, 14, 4708
215. Influence of the Electronic Properties of the Ligand on the Photoelectrochemical Behavior of Au<sub>25</sub> Nanocluster-Sensitized TiO<sub>2</sub> Photoanode  
Y. Liu, E. Wierzbicka, A. Springer, N. Pinna, Y. Wang  
J. Phys. Chem. C 2022, 126, 1778
216. ALD-Coated Mesoporous Iridium-Titanium Mixed Oxides: Maximizing Iridium Utilization for an Outstanding OER Performance  
M. Frisch, M. H. Raza, M.-Y. Ye, R. Sachse, B. Paul, R. Gunder, N. Pinna, R. Kraehnert  
Adv. Mater. Interfaces 2022, 2102035
217. Partially oxidized ruthenium aerogel as highly active bifunctional electrocatalyst for overall water splitting in both alkaline and acidic media  
S. Yan, W. Liao, M. Zhong, W. Li, C. Wang, N. Pinna, W. Chen, X. Lu  
Applied Catalysis B Environmental 2022, 121199
218. One-pot synthesis of high-capacity silicon anodes via on-copper growth of a semiconducting, porous polymer  
J. Huang, A. Martin, A. Urbanski, R. Kulkarni, P. Amsalem, M. Exner, G. Li, J. Müller, D. Burmeister, N. Koch, T. Brezesinski, N. Pinna, P. Uhlmann, M. J. Bojdys  
Nat Sci. 2022, e20210105
219. Role of Heterojunctions of Core-Shell Heterostructures in Gas Sensing  
M. H. Raza, R. Di Chio, K. Moulae, P. Amsalem, N. Koch, N. Barsan, G. Neri, N. Pinna  
ACS Appl. Mater. Interfaces 2022, 14, 22041

220. Evaluation of entropy-stabilized ( $\text{Mg}_{0.2}\text{Co}_{0.2}\text{Ni}_{0.2}\text{Cu}_{0.2}\text{Zn}_{0.2}$ )O oxides produced via solvothermal method or electrospinning as anodes in lithium-ion batteries  
C. Triolo, W. Xu, B. Petrovicová, N. Pinna, S. Santangelo  
Adv. Funct. Mater. 2022, 2202892
221. On the design of mesostructured acidic catalysts for the one-pot dimethyl ether production from  $\text{CO}_2$   
C. Cara, F. Secci, S. Lai, V. Mameli, K. Skrodczky, P. A. Russo, F. Ferrara, E. Rombi, N. Pinna, M. Mureddu, C. Cannas  
J.  $\text{CO}_2$  Utilization 2022, 62, 102066
222. High-entropy spinel oxides produced via sol-gel and electrospinning and their evaluation as anodes in Li-ion batteries  
B. Petrovicová, W. Xu, M.G. Musolino, F. Pantò, S. Patanè, N. Pinna, S. Santangelo, C. Triolo  
Appl. Sci. 2022, 12, 5965
223. Atomic layer deposition of metal oxides and chalcogenides for high performance transistors  
C. Shen, Z. Yin, F. Collins, N. Pinna  
Adv. Sci. 2022, 2104599
224. Atomic layer deposition of  $\text{MoS}_2$  decorated  $\text{TiO}_2$  nanotubes for photoelectrochemical water splitting  
C. Shen, E. Wierzbicka, T. Schultz, R. Wang, N. Koch, N. Pinna  
Adv. Mater. Interfaces 2022, 2200643
225. Ultra-stable self-standing Au nanowires/ $\text{TiO}_2$  nanoporous membrane system for high-performance photoelectrochemical water splitting cells  
E. Wierzbicka, T. Schultz, K. Syrek, G. D. Sulka, N. Koch, N. Pinna  
Mater. Horiz. 2022, 9, 2797
226.  $\text{ZnSnO}_3$  or  $\text{Zn}_2\text{SnO}_4/\text{SnO}_2$  hierarchical material? Insight into the formation of  $\text{ZnSn}(\text{OH})_6$  derived oxides  
D. Redolfi-Bristol, L. Branzi, M. Back, P. Riello, A. Speghini, N. Pinna, A. Benedetti  
Inorganics 2022, 10, 183
227. Selective dealloying of chemically disordered Pt-Ni bimetallic nanoparticles for the oxygen reduction reaction  
T. Jeon, H. Lee, G. Yoon, S. Lee, H. J. Yun, K. Kim, K. Lee, N. Pinna, S. Yu  
Nanoscale 2023, 15, 1136
228. Heterostructured and mesoporous  $\text{Nb}_2\text{O}_5@ \text{TiO}_2$  core-shell spheres as the negative electrode in Li-ion batteries  
W. Xu, Y. Xu, T. Schultz, Y. Lu, N. Koch, N. Pinna  
ACS Appl. Mater. Interfaces 2023, 15, 795
229. Structure and magnetism of electrospun porous high-entropy  $(\text{Cr}_{1/5}\text{Mn}_{1/5}\text{Fe}_{1/5}\text{Co}_{1/5}\text{Ni}_{1/5})_3\text{O}_4$ ,  $(\text{Cr}_{1/5}\text{Mn}_{1/5}\text{Fe}_{1/5}\text{Co}_{1/5})_3\text{O}_4$  and  $(\text{Cr}_{1/5}\text{Mn}_{1/5}\text{Fe}_{1/5}\text{Ni}_{1/5}\text{Zn}_{1/5})_3\text{O}_4$  spinel oxide nanofibers  
A. Ponti, C. Triolo, B. Petrovicová, A. M. Ferretti, G. Pagot, W. Xu, V. Di Noto, N. Pinna, S. Santangelo  
Phys. Chem. Chem. Phys. 2023, 25, 2212
230. Recent developments in Nb-based oxides with crystallographic shear structures as anode materials for high-rate lithium-ion energy storage  
Y. Liu, P. A. Russo, L. A. Montoro, N. Pinna  
Battery Energy 2023, 0220037
231. Correlating heteroatoms doping, electronic structures and photocatalytic activities of single-atom-doped  $\text{Ag}_{25}(\text{SR})_{18}$  nanoclusters  
Y. Liu, D. Long, A. Springer, R. Wang, N. Koch, M. Schwalbe, N. Pinna, Y. Wang  
Solar RRL 2023, 2201057

232. Mesostructured  $\gamma$ -Al<sub>2</sub>O<sub>3</sub>-based bifunctional catalysts for direct synthesis of dimethyl ether from CO<sub>2</sub>  
F Secci, M Sanna Angotzi, V Mameli, S Lai, PA Russo, N. Pinna, M. Mureddu, E. Rombi, C. Cannas  
Catalysts 2023, 13, 505
233. A universal synthesis strategy for tuneable metal-organic framework nanohybrids  
W. Zhang, M. Bojdys, N. Pinna  
Angew. Chem. Int. Ed. 2023, e202301021
234. Atomic layer deposition to heterostructures for application in gas sensors  
H. Pan, L. Zhou, W. Zheng, X. Liu, J. Zhang, N. Pinna  
Int. J. Extrem. Manuf. 2023, 5, 022008
235. PdRh-sensitized iron oxide ultrathin film sensors and mechanistic investigation by operando TEM and DFT calculations  
L. Zhou, Z. Li, X. Chang, X. Liu, Y. Hu, M. Li, P. Xu, N. Pinna, J. Zhang  
Small 2023, 202301485
236. On the role of the nature and density of acid sites on mesostructured aluminosilicates dehydration catalysts for dimethyl ether production from CO<sub>2</sub>  
F. Secci, V. Mameli, E. Rombi, S. Lai, M. Sanna Angotzi, P.A. Russo, N. Pinna, M. Mureddu, C. Cannas  
J. Env. Chem. Eng. 2023, 11, 110018
237. Self-assembly Mechanism and Chiral Transfer in CuO Superstructures  
J. Zhang, R. Vallée, Z. Kochovski, W. Zhang, C. Shen, F. Bertram, N. Pinna  
Angew. Chem. Int. Ed. 2023, e202305353
238. Activating Ru in the pyramidal sites of Ru<sub>2</sub>P-type structures with earth-abundant transition-metals for achieving extremely high HER activity while minimizing noble metal content  
S. El-Refaei, P. Russo, T. Schultz, Z.-N. Chen, P. Amsalem, N. Koch, N. Pinna  
ChemRxiv, 2023, DOI: 10.26434/chemrxiv-2023-bhl32
239. Integration of noble metal nanocrystals in a hollow metal organic framework shell  
W. Zhang, N. Pinna  
ChemRxiv, 2023, DOI: 10.26434/chemrxiv-2023-415s5
240. Tuning the activity of cobalt 2-hydroxyphosphonoacetates-derived electrocatalysts for water splitting and oxygen reduction: insights into the local order by pair distribution function analysis  
Á. Vílchez-Cózar, R.M.P. Colodrero, M. Bazaga-García, D. Marrero-López, S.M. El-refaei, P.A. Russo, N. Pinna, P. Olivera-Pastor, A. Cabeza Díaz  
Appl. Catal. B Env. 2023, 337, 122963
241. Charge storage mechanism in electrospun spinel-structured high-entropy (Mn<sub>0.2</sub>Fe<sub>0.2</sub>Co<sub>0.2</sub>Ni<sub>0.2</sub>Zn<sub>0.2</sub>)<sub>3</sub>O<sub>4</sub> oxide nanofibers as anode material for Li-ion batteries  
C. Triolo, M. Maisuradze, M. Li, Y. Liu, A. Ponti, G. Pagot, V. Di Noto, G. Aquilanti, N. Pinna, M. Giorgetti, S. Santangelo  
Small 2023, 2304585
242. Impact of surface hydroxyl groups on CuO film growth by atomic layer deposition  
J. Wang, P.A. Russo, N. Pinna  
Langmuir 2023, 39, 11603
243. Atomically precise Au<sub>x</sub>Ag<sub>25-x</sub> nanoclusters with modulated interstitial Au-Ag microenvironment for enhanced visible-light-driven photocatalytic hydrogen evolution  
Y. Liu, Z. Li, X.-H. Liu, N. Pinna, Y. Wang  
Nanoscale Horiz., 2023, 8, 1435
244. Integration of noble metal nanocrystals in a hollow metal organic framework shell  
W. Zhang, N. Pinna  
Chem. Mater. 2023, 35, 6799

245. Single-step formation of metal oxide nanostructures wrapped in mesoporous silica and silica?niobia catalysts for the condensation of furfural with acetone  
K. Skrodczky, M.M. Antunes, Q. Zhu, A.A. Valente, N. Pinna, P.A. Russo  
Nanomaterials 2023, 13, 3046
246. Stöber method to amorphous metal organic framework  
W. Zhang, Y. Liu, H. Jeppesen, N. Pinna  
ChemRxiv, 2023, DOI: 10.26434/chemrxiv-2023-m7g7w
247. Insights into the kinetics-morphology relationship of 1-, 2-, and 3D TiNb<sub>2</sub>O<sub>7</sub> anodes for Li-ion storage  
W. Xu, Y. Xu, V. Grzimek, A. Martin, T. Schultz, P. A. Russo, Y. Lu, N. Koch, N. Pinna  
Nano Research, 2024, 17, 2770
248. Spinel-structured high-entropy oxide nanofibers as electrocatalysts for oxygen evolution in alkaline solution: effect of Metal combination and calcination temperature  
C. Triolo, K. Moulae, A. Ponti, G. Pagot, V. Di Noto, N. Pinna, G. Neri, S. Santangelo  
Adv. Funct. Mater. 2024, 2306375
249. Highly active and stable alkaline hydrogen evolution electrocatalyst based on Ir-incorporated partially oxidized Ru aerogel under industrial-level current density  
S. Yan, X. Chen, W. Li, M. Zhong, J. Xu, M. Xu, C. Wang, N. Pinna, X. Lu  
Adv. Sci. 2024, 2307061
250. Bulky olefin epoxidation under mild conditions over Mo-based oxide catalysts  
D.M. Gomes, X. Yao, P. Neves, N. Pinna, P.A. Russo, A.A. Valente  
Catalysis Science & Technology, 2024 14, 646-659
251. Long-term stability of light-induced Ti<sup>3+</sup> defects in TiO<sub>2</sub> nanotubes for amplified photoelectrochemical water splitting  
E. Wierzbicka, E. Szaniawska-Bialas, T. Schultz, A. O. Basilio, D. Siemiaszko, K. Ray, N. Koch, N. Pinna, M. Polanski  
ChemSusChem, 2024, e202301614
252. Gas sensing and electrochemical properties of CNT/WS<sub>2</sub> core-shell nanostructures  
R. Zribi, S. Crispi, D. Giusi, M. Zhukush, C. Ampelli, C. Shen, M. H. Raza, N. Pinna, G. Neri  
ACS Appl. Nano Mater. 2024, 7, 4998
253. Metal organic frameworks synthesis: the versatility of triethylamine  
W Zhang, N Pinna  
Chemistry A European Journal, 2024, e202304256
254. Chemical valorisation of biomass derived furanics and carboxylic acids over niobium-based catalysts  
M.M. Antunes, K. Skrodczky, P.S. Cabanelas, N. Pinna, P. Russo, A.A. Valente  
Green Chem., 2024, 26, 4820
255. Mixed-dimensional heterojunction by 3D CdS nanowire arrays bridged with 2D WSe<sub>2</sub> for ultrafast photoelectric gas sensor  
W. Zheng, G. Lu, S. Fan, Y. Hu, X. Liu, N. Pinna, J. Zhang  
ChemRxiv, 2024, DOI: 10.26434/chemrxiv-2024-qwh7v
256. One-pot synthesis of high-capacity sulfur cathodes via in-situ polymerization of a porous imine-based polymer  
G. Li, Y. Liu, T. Schultz, M. Exner, R. Muydinov, H. Wang, K. Scheurell, J. Huang, N. Koch, P. Szymoniak, N. Pinna, P. Adelhlem, M. J. Bojdys  
Angew. Chem. Int. Ed. 2024, e202400382
257. Activating Ru in the pyramidal sites of Ru<sub>2</sub>P-type structures with earth-abundant transition metals for achieving extremely high HER activity while minimizing noble metal content

S. M. El-Refaei, P. A. Russo, T. Schultz, Z.-N. Chen, P. Amsalem, N. Koch, N. Pinna  
Carbon Energy. 2024, e556

258. Role of the microstructure in the Li-storage performance of spinel-structured high-entropy (Mn, Fe, Co, Ni, Zn) oxide nanofibers  
C. Triolo, M. Maisuradze, Y. Liu, M. Li, G. Pagot, A. Ponti, V. Di Noto, G. Aquilanti, N. Pinna, M. Giorgetti, S. Santangelo  
J. Electrochem. Soc. 2024 171, 060509
259. Template-free synthesis of Co<sub>4</sub>S<sub>3</sub> nanotubes derived from urchin-like clusters for sustainable molten-state high-temperature lithium battery applications  
X. Wei, K. Li, D. Zhu, N. Pinna, Y. Zhu, T. Quan  
J. Energy Storage 2024, 91, 111988
260. Atomically precise metal nanoclusters for photocatalytic water splitting  
Y. Liu, Y. Wang, N. Pinna  
ACS Mater. Lett. 2024, 6, 2995
261. Stöber method to amorphous metal-organic frameworks and coordination polymers  
W. Zhang, Y. Liu, H.S. Jeppesen, N. Pinna  
Nature Comm. 2024, 15, 5463

### Book Chapters:

1. X-Ray diffraction from nanocrystals  
N. Pinna  
Prog. Colloid Polym. Sci. 2005, 130, 29
2. Resistive chemical sensors from metal oxides nanocrystals synthesized in organic solvents  
G. Neri, N. Pinna  
In: "Nanomaterials: New research developments", Nova Science Publishers, 2008, 217
3. Non-aqueous routes to rare-earth based lamellar organic-inorganic hybrid nanoparticles  
N. Pinna, M. Karmaoui  
In: "Recent advances in solution-based chemical synthesis of semiconductor, metal, and oxide nanocrystals", Editor P. D. Cozzoli, 2008, 391
4. Sol-Gel Chemistry and Atomic Layer Deposition  
G. Clavel, C. Marichy, N. Pinna  
In: "Atomic Layer Deposition of Nanostructured Materials", Editors N. Pinna and M. Knez, Wiley-VCH, 2011, 61
5. Coating of Carbon Nanotubes  
C. Marichy, A. Pucci, M.-G. Willinger, N. Pinna  
In: "Atomic Layer Deposition of Nanostructured Materials", Editors N. Pinna and M. Knez, Wiley-VCH, 2011, 327

### Books:

1. Metal oxide nanoparticles in organic solvents: Synthesis, formation, assembly and application  
M. Niederberger and N. Pinna  
Springer, 2009, ISBN: 978-1848826700

2. Atomic Layer Deposition of Nanostructured Materials  
N. Pinna and M. Knez (Editors)  
Wiley-VCH, 2011, ISBN: 978-3527327973

## Patents:

1. Production of metal-oxide highly crystalline and high-purity nanoparticles  
M. Antonietti, M. Niederberger, N. Pinna  
PCT/EP2005/003379, WO/2005/095278
2. Method of forming an oxide thin film  
N. Pinna, E. Rauwel  
PCT/EP2008/051745, WO/2008/098963
3. Methode zur Herstellung aktiver und stabiler titanbasierter Mischoxidkatalysatoren mit optimierter Edelmetallverteilung durch oberflächenkonforme Atomlagenabscheidung  
M. Frisch, M.H. Raza, N. Pinna, R. Krähnert  
PCT/EP 4 170 063 A1
4. Kathode und Verfahren zu ihrer Herstellung  
M. J. Bojdys, J. Huang, A. Martin, N. Pinna  
PCT/WO/2023/041122 A1