Isabel Van Driessche

List of Publications by Year
in descending order

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41 papers	1,004 citations	516561 16 h-index	434063 31 g-index
41 all docs	41 docs citations	41 times ranked	1546 citing authors

#	Article	IF	Citations
1	Life Cycle Assessment of Completely Recyclable Concrete. Materials, 2014, 7, 6010-6027.	1.3	133
2	Probing Solventâ€“Ligand Interactions in Colloidal Nanocrystals by the NMR Line Broadening. Chemistry of Materials, 2018, 30, 5485-5492.	3.2	117
3	From ligands to binding motifs and beyond; the enhanced versatility of nanocrystal surfaces. Dalton Transactions, 2016, 45, 13277-13283.	1.6	97
4	Superconducting YBa₂Cu₃O_{7â€“Î´} Nanocomposites Using Preformed ZrO₂ Nanocrystals: Growth Mechanisms and Vortex Pinning Properties. Advanced Electronic Materials, 2016, 2, 1600161.	2.6	55
5	The Trouble with ODE: Polymerization during Nanocrystal Synthesis. Nano Letters, 2019, 19, 7411-7417.	4.5	54
6	Stabilization of Colloidal Ti, Zr, and Hf Oxide Nanocrystals by Protonated Tri-n-octylphosphine Oxide (TOPO) and Its Decomposition Products. Chemistry of Materials, 2017, 29, 10233-10242.	3.2	47
7	Fast, microwave-assisted synthesis of monodisperse HfO2 nanoparticles. Journal of Nanoparticle Research, 2013, 15, 1.	0.8	45
8	Optimizing Nanocomposites through Nanocrystal Surface Chemistry: Superconducting YBa₂Cu₃O₇ Thin Films via Low-Fluorine Metal Organic Deposition and Preformed Metal Oxide Nanocrystals. Chemistry of Materials, 2017, 29, 6104-6113.	3.2	45
9	Stabilizing Fluoride Phosphors: Surface Modification by Atomic Layer Deposition. Chemistry of Materials, 2019, 31, 7192-7202.	3.2	42
10	Optimization of spray dried attrition-resistant iron based oxygen carriers for chemical looping reforming. Chemical Engineering Journal, 2017, 309, 824-839.	6.6	34
11	High Critical Current Density and Enhanced Pinning in Superconducting Films of YBa₂Cu₃O_{7â^'Î´} Nanocomposites with Embedded BaZrO₃, BaHfO₃, BaTiO₃, and SrZrO₃ Nanocrystals. ACS Applied Nano Materials, 2020, 3, 5542-5553.	2.4	28
12	X-ray Photoelectron Spectroscopy (XPS) Depth Profiling for Evaluation of La2Zr2O7 Buffer Layer Capacity. Materials, 2012, 5, 364-376.	1.3	23
13	How Ligands Affect Resistive Switching in Solution-Processed HfO₂ Nanoparticle Assemblies. ACS Applied Materials & Interfaces, 2018, 10, 4824-4830.	4.0	23
14	Chemical and Physical Analysis of Acetate-Oxide Sol-Gel Processing Routes for the Y-Ba-Cu-O System. Journal of Sol-Gel Science and Technology, 2005, 36, 87-94.	1.1	20
15	Pair Distribution Function Analysis of ZrO2 Nanocrystals and Insights in the Formation of ZrO2-YBa2Cu3O7 Nanocomposites. Materials, 2018, 11, 1066.	1.3	20
16	Solution-based synthesis of BaZrO3 nanoparticles: conventional versus microwave synthesis. Journal of Nanoparticle Research, 2013, 15, 1.	0.8	17
17	Controlled crystal orientation in fluorine-free superconducting YBa2Cu3O7â^'Î´ films. Materials Chemistry and Physics, 2012, 133, 998-1002.	2.0	15
18	Influence of Morphology and Texture of CeO₂ on YBa₂Cu₃O₇ (YBCO) Growth and BaCeO₃ Formation in Solutionâ€Derived Synthesis. European Journal of Inorganic Chemistry, 2012, 2012, 1186-1194.	1.0	15

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19	Size Tunable Synthesis and Surface Chemistry of Metastable TiO₂-Bronze Nanocrystals. Chemistry of Materials, 2018, 30, 4298-4306.	3.2	15
20	Influence of Ba²⁺ consumption and intermediate dwelling during processing of YBa₂Cu₃O₇ nanocomposite films. Journal of the American Ceramic Society, 2019, 102, 3870-3878.	1.9	15
21	Comments on the wetting behavior of non-porous substrates for ceramic coated-conductor applications. Journal of Sol-Gel Science and Technology, 2012, 62, 378-388.	1.1	14
22	In-field performance and flux pinning mechanism of pulsed laser deposition grown BaSnO₃/GdBa₂Cu₃O_{7â€“Î´} nanocomposite coated conductors by SuperOx. Superconductor Science and Technology, 2019, 32, 094003.	1.8	13
23	Ceo2 Based Catalysts for the Treatment of Propylene in Motorcycleâ€™s Exhaust Gases. Materials, 2014, 7, 7379-7397.	1.3	12
24	Microwave-assisted synthesis of mesoporous titania with increased crystallinity, specific surface area, and photocatalytic activity. Journal of Materials Science, 2016, 51, 9822-9829.	1.7	12
25	Thickness Characterization Toolbox for Transparent Protective Coatings on Polymer Substrates. Materials, 2018, 11, 1101.	1.3	12
26	Improved photocatalytic activity of polymer-modified TiO2 films obtained by a wet chemical route. Journal of Materials Science, 2012, 47, 6366-6374.	1.7	11
27	Microwaveâ€assisted YBa₂Cu₃O₇ precursors: A fast and reliable method towards chemical precursors for superconducting films. Journal of the American Ceramic Society, 2017, 100, 2407-2418.	1.9	11
28	Aqueous ZrO2 and YSZ Colloidal Systems through Microwave Assisted Hydrothermal Synthesis. Materials, 2013, 6, 4082-4095.	1.3	9
29	Durability and efficiency of ink-jet printed TiO2 coatings: Influence of processing temperature. Thin Solid Films, 2014, 556, 160-167.	0.8	8
30	Effect of Polymer Inclusion in Preparation of Thick LZO Buffer Layers forÂYBCO Coated Conductors. Journal of Materials Science and Technology, 2013, 29, 261-266.	5.6	7
31	Unravelling the Crystallization Process in Solution-Derived YBa₂Cu₃O_{7-Î´} Nanocomposite Films with Preformed ZrO₂ Nanocrystals via Definitive Screening Design. Journal of Physical Chemistry Letters, 2021, 12, 2118-2125.	2.1	7
32	Memristive Behavior of Mixed Oxide Nanocrystal Assemblies. ACS Applied Materials & Interfaces, 2021, 13, 21635-21644.	4.0	6
33	Chemical solution deposition of functional ceramic coatings using ink-jet printing. Pure and Applied Chemistry, 2015, 87, 231-238.	0.9	5
34	Mesoporous TiO2 from poly(N,N-dimethylacrylamide)-b-polystyrene block copolymers for long-term acetaldehyde photodegradation. Journal of Materials Science, 2020, 55, 1933-1945.	1.7	4
35	Influence of the heating ramp on the superconducting properties of YBa2Cu3O7â^Î´ films using chemical solution deposition in a direct sintering method. Thin Solid Films, 2013, 548, 498-501.	0.8	3
36	Pore Narrowing of Mesoporous Silica Materials. Materials, 2013, 6, 570-579.	1.3	3

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37	Ink-jet Printing of YBa2Cu3O7 Superconducting Coatings and Patterns from Aqueous Solutions. Materials Research Society Symposia Proceedings, 2012, 1449, 25.	0.1	2
38	Magnetically induced anisotropy of flux penetration into strong-pinning superconductor/ferromagnet bilayers. New Journal of Physics, 2019, 21, 113019.	1.2	2
39	Strongly Enhanced Growth of High-Temperature Superconducting Films on an Advanced Metallic Template. Crystal Growth and Design, 2022, 22, 2097-2104.	1.4	2
40	The Application of High Surface Area Cordierite Synthesized from Kaolin as a Substrate for Auto Exhaust Catalysts. Journal of the Chinese Chemical Society, 2015, 62, 536-546.	0.8	1
41	Chemical stability of YBiO3 buffer layers for implementation in YBa2Cu3O7-Î´ coated conductors. Acta Materialia, 2015, 100, 224-231.	3.8	0