

Aluminate-based nanostructured luminescent materials : design of processing and functional properties

Rojas Hernandez, Rocio Estefania; Rubio-Marcos, Fernando; Fernandez, Jose Francisco; **Hussainova, Irina** Materials 2021 / art. 4591 <https://doi.org/10.3390/ma14164591> [Journal metrics at Scopus](#) [Article at Scopus](#) [Journal metrics at WOS](#) [Article at WOS](#)

Boosting phosphorescence efficiency by crystal anisotropy in SrAl₂O₄:Eu,Dy textured ceramic layers

Rojas Hernandez, Rocio Estefania; Rubio-Marcos, Fernando; Serrano, Aida; **Hussainova, Irina;** Fernandez, Jose Francisco Journal of the European Ceramic Society 2020 / p. 1677–1683 : ill <https://doi.org/10.1016/j.jeurceramsoc.2019.11.019> [Journal metrics at Scopus](#) [Article at Scopus](#) [Journal metrics at WOS](#) [Article at WOS](#)

Cost-effective screen printing approach for Ce/Nd-doped ZnAl₂O₄ films: tuning crystallinity induced by the substrate

Rojas Hernandez, Rocio Estefania; Rubio-Marcos, Fernando; **Necib, Jallouli;** **Danilson, Mati;** Fernandez, Jose Francisco; **Hussainova, Irina** Physical chemistry chemical physics 2023 / p. 15829-15838 <https://doi.org/10.1039/D3CP02005C> [Journal metrics at Scopus](#) [Article at Scopus](#) [Journal metrics at WOS](#) [Article at WOS](#)

Deep-ultraviolet emitter : rare-earth-free ZnAl₂O₄ nanofibers via a simple wet chemical route

Rojas Hernandez, Rocio Estefania; Rubio-Marcos, Fernando; Romet, Ivo; Del Campo, Adolfo; Gorni, Giulio; **Hussainova, Irina;** Fernandez, Jose Francisco; Nagirnyi, Vitali Inorganic Chemistry 2022 / p. 11886-11896 <https://doi.org/10.1021/acs.inorgchem.2c01646> [Journal metrics at Scopus](#) [Article at Scopus](#) [Journal metrics at WOS](#) [Article at WOS](#)

Doping engineering for controlled hydration and mechanical properties in Portland cement mortar with ultra-low ZnO concentration

Tamashiro, Jacqueline Roberta; de la Rubia, Miguel Angel; Rubio-Marcos, Fernando; **Rojas Hernandez, Rocio Estefania;** Silva, Lucas Henrique Pereira; de Paiva, Fabio Friol Guedes; Kinoshita, Angela; Terrades, Amparo Moragues Journal of building engineering 2023 / art. 107748 <https://doi.org/10.1016/j.jobbe.2023.107748> [Journal metrics at Scopus](#) [Article at Scopus](#) [Journal metrics at WOS](#) [Article at WOS](#)

Enhancing NIR emission in ZnAl₂O₄:Nd,Ce nanofibers by co-doping with Ce and Nd: a promising biomarker material with low cytotoxicity

Rojas Hernandez, Rocio Estefania; Rubio-Marcos, Fernando; Gorni, Giulio; Marini, Carlo; **Danilson, Mati;** Pascual, Laura; Ichikawa, Rodrigo Uchida; **Hussainova, Irina;** Fernandez, Jose Francisco Journal of materials chemistry C 2021 / p. 657-670 : ill <https://doi.org/10.1039/D0TC04752J> [Journal metrics at Scopus](#) [Article at Scopus](#) [Journal metrics at WOS](#) [Article at WOS](#)

Erratum: A feasible pathway to stabilize monoclinic and tetragonal phase coexistence in barium titanate-based ceramics (J. Mater. Chem. C (2022) 10 (17743–17756) DOI: 10.1039/D2TC04265G)

Necib, Jallouli; Lopez-Sanchez, Jesus; Rubio-Marcos, Fernando; Serrano, Aida; Navarro, Elena; Pena, Alvaro; Taoufik, Mnasri; Smari, Mourad; **Rojas Hernandez, Rocio Estefania;** Carmona, Noemi; Marín, Pilar Journal of materials chemistry C 2023 / p. 2397 <https://doi.org/10.1039/d3tc90020g> [Journal metrics at Scopus](#) [Article at Scopus](#) [Journal metrics at WOS](#) [Article at WOS](#)

A feasible pathway to stabilize monoclinic and tetragonal phase coexistence in barium titanate-based ceramics

Necib, Jallouli; Lopez-Sanchez, Jesus; Rubio-Marcos, Fernando; Serrano, Aida; Navarro, Elena; Pena, Alvaro; Taoufik, Mnasri; Smari, Mourad; **Rojas Hernandez, Rocio Estefania;** Carmona, Noemi; Marín, Pilar Journal of materials chemistry C 2022 / p. 17743-17756 <https://doi.org/10.1039/D2TC04265G> [Journal metrics at Scopus](#) [Article at Scopus](#) [Journal metrics at WOS](#) [Article at WOS](#)

Functionalization of gamma-alumina nanofibers by alpha-alumina via solution combustion synthesis

Aghayan, Marina; **Voltshin, Nikolai;** Rodriguez, Miguel Angel; Rubio-Marcos, Fernando; **Dong, Minjie;** **Hussainova, Irina** Ceramics international 2014 / p. 12603-12607 : ill <https://doi.org/10.1016/j.ceramint.2014.04.087> [Journal metrics at Scopus](#) [Article at Scopus](#) [Journal metrics at WOS](#) [Article at WOS](#)

Graphene-encapsulated aluminium oxide nanofibers as a novel type of nanofillers for electroconductive ceramics

Ivanov, Roman; **Hussainova, Irina;** **Aghayan, Marina;** **Drozdova, Maria;** Perez-Coll, Domingo; Rodriguez, Miguel Angel; Rubio-Marcos, Fernando Journal of the European Ceramic Society 2015 / p. 4017-4021 : ill <https://doi.org/10.1016/j.jeurceramsoc.2015.06.011> [Journal metrics at Scopus](#) [Article at Scopus](#) [Journal metrics at WOS](#) [Article at WOS](#)

Highly textured zinc aluminate: Nd, Ce films over sapphire for NIR emitting applications

Rojas Hernandez, Rocio Estefania; Rubio-Marcos, Fernando; Serrano, Aida; Roman-Sanchez, Sara; Fernandez, Jose Francisco; **Hussainova, Irina** Ceramics international 2023 / p. 13125 - 13130 <https://doi.org/10.1016/j.ceramint.2022.12.190> [Journal metrics at Scopus](#) [Article at Scopus](#) [Journal metrics at WOS](#) [Article at WOS](#)

Light-induced strain and its correlation with the optical absorption at charged domain walls in polycrystalline ferroelectrics

Rubio-Marcos, Fernando; Pamies, Paula; Del Campo, Adolfo; Tiana, Jordi; Ordonez-Pimentel, Jonathan; Venet, Michel; **Rojas Hernandez, Rocio Estefania;** Ochoa, Diego A.; Fernandez, Jose F.; García, Jose E. Applied materials today 2023 / art. 101838 <https://doi.org/10.1016/j.apmt.2023.101838> [Journal metrics at Scopus](#) [Article at Scopus](#) [Journal metrics at WOS](#) [Article at WOS](#)

Nanostructural evolution in mesoporous networks using in situ high-speed temperature scanner

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On the potential of Transparent Rare-Earth-Free ZnAl₂O₄ Ceramics targeted at the UV-C to UV-B emission

Rojas Hernandez, Rocio Estefania; Rubio-Marcos, Fernando; Romet, Ivo; Feldbach, Eduard; Buryi, Maksym; John, David; **Ivanov, Roman; Hussainova, Irina;** Fernandez, José F.; Nagirnyi, Vitali Applied materials today 2024 / ar. 102230, 14 p. : ill <https://doi.org/10.1016/j.apmt.2024.102230> [Journal metrics at Scopus](#) [Article at Scopus](#) [Journal metrics at WOS](#) [Article at WOS](#)

Photocontrolled strain in polycrystalline ferroelectrics via domain engineering strategy

Rubio-Marcos, Fernando; Del Campo, Adolfo; Ordonez-Pimentel, Jonathan; Venet, Michel; **Rojas Hernandez, Rocio Estefania;** Paez-Margarit, David; Ochoa, Diegi A.; Fernandez, Jose Francisco; Garcia, Jose E. ACS applied materials and interfaces ACS applied materials & interfaces 2021 / p. 20858–20864 <https://doi.org/10.1021/acsami.1c03162> [Journal metrics at Scopus](#) [Article at Scopus](#) [Journal metrics at WOS](#) [Article at WOS](#)

SrAl₂O₄ : Eu,Dy-screen-printed layers to create phosphorescent 2D shapes

Rojas Hernandez, Rocio Estefania; Rubio-Marcos, Fernando; Serrano-lova, Radu-Antonio; Fernandes Lozano, J. F.; **Hussainova, Irina** XVI Conference and Exhibition Of The European Ceramic Society : abstract book 2019 / p. 525 : ill

The template-assisted wet-combustion synthesis of fibrous nickel-based catalyst for carbon dioxide methanation and methane steam reform

Aghayan, Marina; Potemkin, D. I.; Rubio-Marcos, Fernando; **Hussainova, Irina** ECerS 2017 : 15th Conference & Exhibition of the European Ceramic Society, July 9–13, 2017, Budapest, Hungary : Book of abstracts 2017 / p. 419 : ill <https://static.akcongress.com/downloads/ecers/ecers2017-abstract-book.pdf>

The template-assisted wet-combustion synthesis of fibrous nickel-based catalyst for carbon dioxide methanation and methane steam reforming

Aghayan, Marina; Potemkin, D. I.; Rubio-Marcos, Fernando; Uskov, S. I.; Snytnikov, N.; **Hussainova, Irina** ACS applied materials and interfaces ACS applied materials & interfaces 2017 / p. 43553-43562 : ill <https://doi.org/10.1021/acsami.7b08129> [Journal metrics at Scopus](#) [Article at Scopus](#) [Journal metrics at WOS](#) [Article at WOS](#)

Thermal and microstructural analysis of doped alumina nanofibers

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Towards blue long-lasting luminescence of Eu/Nd-doped calcium-aluminate nanostructured platelets via the molten salt route

Rojas Hernandez, Rocio Estefania; Rubio-Marcos, Fernando; Serrano, Aida; **Hussainova, Irina** Nanomaterials 2019 / art. 1473, 14 p. : ill <https://doi.org/10.3390/nano9101473> [Journal metrics at Scopus](#) [Article at Scopus](#) [Journal metrics at WOS](#) [Article at WOS](#)