INFORMAŢII PERSONALE

	Nume / Prenume	**Rotaru Aurelian**		
	Adresă	Str. Universitatii, Nr. 13, 720229 Suceava, România		
	Telefon / E-mail	**+40 747 815 207**		
	Website	**http://nanomat.usv.ro/**		
	Profil Google Scholar	**https://scholar.google.com/citations?hl=en&user=jyyC34AAAAAJ&view_op=list_works&sortby=pubdate**		
	Data naşterii	**17/06/1982**	Naţionalitate	**Română**

EXPERIENŢA PROFESIONALĂ

[Descrieţi separat fiecare loc de muncă. Începeţi cu cel mai recent.]

Perioada	2024 - prezent
Funcţia sau postul ocupat	Prorector cu activitatea științifică
Numele şi adresa angajatorului	Universitatea „Ștefan cel Mare” din Suceava, Str. Universității, Nr. 13
Tipul sau sectorul de activitate	Activități de management
Activităţi şi responsabilităţi principale	- Elaborarea și implementarea strategiei de cercetare a universității, în concordanță cu planul de dezvoltare instituțională ; - Alinierea cercetării la prioritățile naționale și europene ; - Sprijinirea dezvoltarea unor direcții de cercetare interdisciplinare și inovatoare.

Perioada	2020 - 2024
Funcţia sau postul ocupat	Prodecan cu activitatea de cercetare
Numele şi adresa angajatorului	Facultatea de Inginerie Electrică și Știința Calculatoarelor, Universitatea „Ștefan cel Mare” din Suceava
Tipul sau sectorul de activitate	Activități de management
Activităţi şi responsabilităţi principale	- Elaborarea și implementarea **strategiei de cercetare** a facultății, în concordanță cu strategia generală a universității; - Planificarea și raportarea activităților de cercetare către conducerea universității.

Perioada	2015 - prezent
Funcţia sau postul ocupat	Coordonator activitate de cercetare laborator NANOMAT
Numele şi adresa angajatorului	Centrul de Cercetare MANSiD, Universitatea „Ștefan cel Mare” din Suceava
Tipul sau sectorul de activitate	Activitati de cercetare si de management
Activităţi şi responsabilităţi principale	Organizarea activităților de cercetare a le Laboratorului NANOMAT

Perioada	2011 - prezent
Funcţia sau postul ocupat	Conferențiar universitar
Numele şi adresa angajatorului	Facultatea de Inginerie Electrică și Știința Calculatoarelor, Universitatea „Ștefan cel Mare” din Suceava
Tipul sau sectorul de activitate	Activități didactice și de cercetare Cursuri predate: Fizică 1, Fizică 2, Nanotehnologii pentru Micro- și Nanoelectronică.
Activităţi şi responsabilităţi principale	- Elaborarea și actualizarea fișelor disciplinelor. Conceperea și susținerea cursurilor, lucrărilor de laborator și seminariilor la disciplinele din fișa postului.

Perioada	2010 - 2011
Funcţia sau postul ocupat	Șef de lucrări
Numele şi adresa angajatorului	Facultatea de Inginerie Electrică și Știința Calculatoarelor, Universitatea

	„Ștefan cel Mare” din Suceava
Tipul sau sectorul de activitate	Activități didactice și de cercetare Cursuri predate: Fizică 1, Fizică 2.
Activităţi şi responsabilităţi principale	- Elaborarea și actualizarea fișelor disciplinelor. Conceperea și susținerea cursurilor, lucrărilor de laborator și seminariilor la disciplinele din fișa postului.

Perioada	2009 - 2010
Funcţia sau postul ocupat	Cercetător postdoctoral
Numele şi adresa angajatorului	Advanced Materials Research Institute (AMRI), 2000, Lakeshore Drive, 70148, New Orleans, Louisiana, USA, C/o Dr. Leonard SPINU (lspinu@uno.edu)
Tipul sau sectorul de activitate	Activități de cercetare
Activităţi şi responsabilităţi principale	- Activități de cercetare în domeniul materialelor magnetice, supraconductoare, semiconductori magnetici si materiale moleculare cu tranziție de spin.

Perioada	2008 - 2009
Funcţia sau postul ocupat	Asistent universitar (½ ATER)
Numele şi adresa angajatorului	Departamentul de Fizică, Universitatea Saint-Quentin-en-Yvelines, Versailles, Franța
Tipul sau sectorul de activitate	Activități didactice
Activităţi şi responsabilităţi principale	- Elaborarea și susținerea activităților practice la disciplinele Fizică Numerică, Electricitate și Magnetism.

EDUCAȚIE ȘI FORMARE

[Adăugaţi câmpuri separate pentru fiecare etapă de formare. Începeţi cu cea mai recent.]

Perioada	2006-2009
Calificarea / diploma obținută	Studii doctorale (Teză de doctorat în cotutelă) **Titlul tezei:** *Etude théorique et expérimentale de l'effet de la pression et de la taille sur des composés bistables: comportement thermique et étude de la relaxation.*
Denumirea şi adresa organizaţiei de educaţie / formare	Universitatea din Versailles-Saint-Quentin-en-Yvelines (UVSQ) și Universitatea „Alexandru Ioan Cuza” din Iași (UAIC)

Perioada	2005-2006
Calificarea / diploma obținută	Masterat (M2): MATEC-Matériaux, Technologies et Composants
Denumirea şi adresa organizaţiei de educaţie / formare	Mobilitate Erasmus (10 luni) in cadrul Universității din Versailles-Saint-Quentin-en-Yvelines (UVSQ)

Perioada	2004-2006
Calificarea / diploma obținută	Masterat: Proprietăți Electrice și Magnetice ale structurilor fine și ultrafine.
Denumirea şi adresa organizaţiei de educaţie / formare	Facultatea de Fizică, Universitatea „Alexandru Ioan Cuza” din Iași (UAIC)

Perioada	2000-2004
Calificarea / diploma obținută	Licență: Fizică mdedicală.
Denumirea şi adresa organizaţiei de educaţie / formare	Facultatea de Fizică, Universitatea „Alexandru Ioan Cuza” din Iași (UAIC)

COMPETENTE PERSONALE

[Specificaţi contextul în care au fost dobândite].

Competenţe de comunicare	Abilități de comunicare eficientă și prezentare publică a informațiilor științifice.
Competenţe organizaţionale / manageriale	- Dezvoltarea și implementarea strategiilor pentru cercetare și inovare; - Monitorizarea performanței științifice și administrarea resurselor umane și materiale; - Coordonarea proceselor de evaluare academică și cercetare; - Promovarea colaborării interdisciplinare și a parteneriatelor externe.
Competenţe şi aptitudini sociale	- Lucru în echipă și colaborare interdisciplinară ; - Experiență în coordonarea studenților, masteranzilor și doctoranzilor; - Capacitatea de a gestiona proiecte și activități de grup ; - Adaptabilitate și rezolvare eficientă a conflictelor.
Competenţe digitale	- Automatizare (Labview, LabWindows) - Modelarea si simularea histerezisului (C, Fortran)
Alte competențe personale	Experiență tehnică în analiza proprietăților fizice ale materialelor: magnetice (MPMS, VSM, AGM) sub acțiunea unor stimuli externi (temperatură, presiune, lumină); Magneto-transport; Spectroscopie dielectrică sub acțiunea unor stimuli externi (temperatură, presiune, lumină); Calorimetrice (DSC); Optice în temperatură și presiune variabilă (celulă de presiune cu gaz), spectrofotometrie UV-Vis, FMR (EPR, VNA), PPMS (Caldură scpecifică, susceptibilitate AC, rezistivitate); Nano-electro-manipulare (Dielectroforeză); Microscopie Electronică (FE-SEM, EDX), Microscopie cu scanare a probei (AFM, MFM), depunere de straturi subțiri (spin coating), fabricare de micro- si nano-fibre (Electrospinning).

Limbi străine cunoscute **Engleză**	**Înţelegere**		**Vorbire**		**Scriere**
	Ascultare	Citire	Participare la conversaţie	Discurs oral	Exprimare scrisă
Nivelul	C1	C1	C1	C1	C1

Limbi străine cunoscute **Franceză**	**Înţelegere**		**Vorbire**		**Scriere**
	Ascultare	Citire	Participare la conversaţie	Discurs oral	Exprimare scrisă
Nivelul	C1	C1	C1	C1	C1

Niveluri: A1/2: Utilizator elementar; B1/2: Utilizator independent; C1/2: Utilizator experimentat

INFORMATII SUPLIMENTARE

[Specificaţi numărul şi anexaţi lista de lucrări, invenţii, contracte şi distincţii (integral sau selecţie)].

Publicaţii	Cărți și capitole de cărți publicate la edituri internaționale	**1**
	Lucrări ştiinţifice publicate în reviste cotate ISI	**143**

Contracte de cercetare şi transfer tehnologic	Câştigate prin competiţie internaţională	**5**
	Câştigate prin competiţie naţională	**6**
	Cu terţi	**1**
Granturi didactice	Câştigate prin competiţie internaţională	
	Câştigate prin competiţie naţională	
	Cu terţi	

Publicaţii şi brevete premiate	Premii acordate de organizaţii internaţionale	
	Premii acordate de organizaţii naţionale	**>100**
	Premii acordate de organizaţii cu caracter regional sau local, terţi	

Alte distincţii	Distincţii acordate de organizaţii internaţionale	
	Distincţii acordate de organizaţii naţionale	
	Distincţii acordate de organizaţii cu caracter regional sau local, terţi	

Anexa 1. Vizite/Stagii de cercetare

2025 - *Cercetător invitat la* Institute of Condensed Matter and Nanosciences (IMCN), UCL, Louvain la Neuve, Belgium (**2 săptămâni**)
2022 - *Cercetător invitat la* Institute of Condensed Matter and Nanosciences (IMCN), UCL, Louvain la Neuve, Belgium (**2 săptămâni**)
2021 – *Cercetător invitat la* Coordination Chemistry Laboratory (LCC), Toulouse, France (**1 săpt.**)
2021- *Cercetător invitat la* UkrOrgSyntez Ltd. , Kiev, Ukraine **(2 luni)**
2020 - *Cercetător invitat la* UkrOrgSyntez Ltd. , Kiev, Ukraine **(2 luni)**
2019 – *Cercetător invitat la* Coordination Chemistry Laboratory (LCC), Toulouse, France (**2 saptamani**)
2019 - *Cercetător invitat la* UkrOrgSyntez Ltd. , Kiev, Ukraine **(2 luni)**
2018 - *Cercetător invitat la* UkrOrgSyntez Ltd. , Kiev, Ukraine **(2 luni)**
2017 - *Cercetător invitat la* UkrOrgSyntez Ltd., Kiev, Ukraine **(2 luni)**
2016 - *Cercetător invitat la* Coordination Chemistry Laboratory (LCC), Toulouse, France (**1 luna**)
2015 - *Cercetător invitat la* Institute of Condensed Matter and Nanosciences (IMCN), UCL, Louvain la Neuve, Belgium (**1 saptamana**)
2015 – *Cercetător invitat la* Coordination Chemistry Laboratory (LCC), Toulouse, France (**1 saptamana**)
2014 - *Cercetător invitat la* Institute of Condensed Matter and Nanosciences (IMCN), UCL, Louvain la Neuve, Belgium (**2 saptamani**)
2013 – *Cercetător invitat la* Institute of Condensed Matter and Nanosciences (IMCN), UCL, Louvain la Neuve, Belgium (**2 saptamani**)
2012 – *Cercetător invitat la* Coordination Chemistry Laboratory (LCC), Toulouse, France (**1.5 luni**)
2012 – *Cercetător invitat la* at Institute of Condensed Matter and Nanosciences (IMCN), UCL, Louvain la Neuve, Belgium (**2 saptamani**)
2011 – *Cercetător invitat la* Institute of Condensed Matter and Nanosciences (IMCN), UCL, Louvain la Neuve, Belgium (**1 saptamana**)

Anexa 2. Proiecte/granturi de cercetare

Director de proiect sau membru în peste 20 de proiecte de cercetare naționale și internaționale.
Proiecte selectate:

- Grant PN-III-CEI-BIM-PBE-2020-0042, *"New switchable molecular materials for multi-sensing applications"*, Contract Nr. 8 BM / 2021 (***PI: Aurelian Rotaru (Rou) and Yann Garcia (Be)***)
- Grant PN-III-P1-1.1-TE-2019-2194 – *„Smart nanoelectronic devices based on switchable molecular materials – SmartDevice". (2020 - 2022), Contract Nr. Te 123 / 2020. (**Coordinator: Aurelian Rotaru)***
- Grant PN-III-P4-ID-PCCF-2016-0175 – *„High-k Nanoparticle Multilayer Dielectrics for Nanoelectronics and Energy Storage Applications – HIGHkDEVICE", Contract No.: PCCF18/2018, 2018-2022, Buget Proiect : 8.500.000 Ron, (**Coordinator: Aurelian Rotaru** – Universitatea „Ștefan cel Mare" din Suceava; **Partner 1: Liliana Mitoșeriu** - Universitatea „Alexandru Ioan Cuza", Iasi;* ***Partner 2:*** *Ioana Pintilie* - Institutul National de Cercetare Dezvoltare pentru Fizica Materialelor ; ***Partner 3:*** Aurelian Marcu - Institutul National de Cercetare Dezvoltare pentru Fizica Laserilor, Plasmei si Radiatiei.
- H2020-MSCA-RISE-2016, Project No. 734322 - *"Multifunctional Spin Crossover Materials – SPINSWITCH"*, 2017-2021, **954.000,00 €** (***Coordinator: Aurelian Rotaru***)

- Grant PN II-TE (*Young researcher grant*) – CNCSIS *„Analysis of Spin State Commutation in Spin Crossover based Switchable Devices"* (2015-2017) – **550.000 RON (~ 125.000 Eur)** - ***(PI: Aurelian Rotaru)***
- POS CCE Grant (*Infrastructure Grant*) – ANCSI-MFE (co-funded from European Regional Development Fund) – **31.460.699 RON (~ 7.070.000,00 €)** – "*Integrated Center for Research, Development and Innovation in Advanced Materials, Nanotechnology, and Distributed Systems for fabrication and control"* – MANSiD (April 2015 – December 2015), Contract No 671 / 09.04.2015 ***(Management Team:*** *Prof. Adrian Graur, Prof. Mihai Dimian, Prof. Dumitru Amarandei, Prof. Constantin Filote and* ***Assoc. prof. Aurelian Rotaru (contact person))***
- PCCA Grant (*Partnership Grant*) – UEFISCDI – *"Flexible White OLED for Lighting Aplications - FlexWOL" (2014-2016) – **275 000 RON** (~62 500 €) (**Coordinator -** **Dr. Luminita Marin**, Institute of Macromolecular Chemistry "Petru Poni" Iasi**, Partner 1** - **Dr. Aurelian Rotaru** - Stefan cel Mare University of Suceava**, Partner 2** - **Bogdan Chiricuta** - APEL LASER SRL:).*
- Bilateral Grant Romania-France (UEFISCDI-ANR) – *„Switchable molecules for nanoelectronics and spintronics – SwitchElec"* – (2013-2016) (***PI: Aurelian Rotaru (Rou) and Azzedine Bousseksou (Fr)***).
- Bilateral Grant Romania-Belgium (UEFISCDI-WBI) *–„Thermal- and piezo-switchable molecular senseurs based on alpha and beta-amino acids"(2012-2014)* (***PI: Aurelian Rotaru (Rou) and Yann Garcia (Be)***)
- Grant PN II-TE (*Young researcher grant*) – CNCSIS *„Analysis of cooperativity and low dimensionality effects in bistable molecular systems with applications in nanoelectronics"* (2012-2015) - (***PI: Aurelian Rotaru***)
- Grant BD – CNCSIS (*Doctoral grant*), (2007-2009) - (***PI: Aurelian Rotaru***).

Anexa 3. Capitole de carte

[1] M. Dimian, **A. Rotaru**, Chapter: *"Molecular magnetism modeling with applications in spin crossover compounds"*, in the book**: Magnetic Materials**, *InTech (2016)*, ISBN 978-953-51-2427-6

Anexa 4. Articole ISI

Lista publicațiilor:
***Număr de articole ISI peer-reviewed:* 147**
Număr de citări (fără autocitări): > 4000
***h-index:* 36 (conform WoK), 36 (conform Scopus) and 40 (conform Google Scholar)**

2026

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[147] Y. Bahjou, S. Radi, Y. Draoui, I. Allaoui, M. Wolff, **A. Rotaru**, Y. Garcia, *Bridging Adsorption Strengths: A Tetrazole-Pyrazole Modified MCM-41 Sorbent for High Capacity and Selective Copper Removal*, **Industrial & Engineering Chemistry Research**, **65** (2026) 11086-11100. **(Q2)**

[146] M. Axentii, G.G. Codină, J.E. Andrade Laborde, **A. Rotaru**, *Rapeseed Protein–Fiber Concentrate as a Novel Ingredient for Pasta Production: Technological and Quality Characteristics*, **Gels**, **12** (2026) 560. **(Q1)**

[145] O.I. Kucheriv, **A. Rotaru**, I.O. Fritsky, S. Shova, I.y.A. Gural'skiy, *Hexacyanochromate as the first M (CN) 6 building block for a 2D Fe (II) spin-crossover Hofmann-type framework*, **Journal of Molecular Structure**, **1373** (2026) 146732. **(Q2)**

[144] X. Li, J.W. Wong, M. Wang, Y. Draoui, M. Wolff, K. Robeyns, **A. Rotaru**, Y. Garcia, *Crystal engineering of p-sulfocinnamic acid into mononuclear cationic Fe (ii), Co (ii) and Fe (iii) complexes*, **CrystEngComm**, **28** (2026) 3449-3457. **(Q2)**

[143] M. Pecherkin, V. Mykhailovych, M. Gutmann, G.L. Păşcuţ, P. Fochuk, M. Mykhailovych, **A. Rotaru**, Y. Khalavka, A. Dmytruk, *CsPbBr 3 crystal growth via antisolvent vapor assisted method and their photoelectric properties*, **Materials Advances**, 7 (2026) 4341-4351. **(Q1)**

[142] M. Wang, Y. Draoui, K. Robeyns, J. Yadav, Z. Han, M. Wolff, D. Maskowicz, **A. Rotaru**, D. Pinkowicz, M. Sawczak, *Fe (II) Complexes Incorporating Anthracene-2-sulfonate Anion: Unraveling Photodimerization Potential and Spin Crossover Behavior*, **Crystal Growth & Design**, **26** (2026), 2981-2990. **(Q1)**

[141] Y. Draoui, S. Radi, M. Wang, **A. Rotaru**, Y. Garcia, *Highly selective and reusable porphyrin-functionalized MCM-41 for efficient lead (II) removal from contaminated water: comprehensive adsorption study and real-water validation*, **Clean Technologies and Environmental Policy**, **28** (2026) 57. **(Q2)**

[140] Y. Bahjou, Y. Draoui, S. Radi, K. Robeyns, W. Li, H.N. Miras, M. Ferbinteanu, **A. Rotaru**, H. Bittner, M.A. Jakupec, *Coordination Complexes and Polymers of Novel Hybrid Tetrazole-Triazole-Pyrazole Ligands: Synthesis, Structural Characterization, and Biological Evaluation*, **Chemistry–A European Journal**, (2026) e02238. **(Q1)**

[139] I. Avrămia, A. Dabija, M. Oroian, L. Caisin, V. Agapii, **A. Rotaru**, A. Chetrariu, *Yeast as a By-Product from Wine and Beer Production: Comparative Evaluation of Physico-Chemical Composition*, **Molecules**, 31 (2026) 280. **(Q2)**

[138] F. Lai, L. Vendier, D. Housset, **A. Rotaru**, L. Routaboul, G. Molnár, S. Cobo, A. Bousseksou, Postsynthetic Integration of Silver Atoms into Spin Crossover Hofmann-Type Clathrates, **Inorganic Chemistry**, 65 (2026) 475-482. **(Q1)**

2025

[137] X. Li, N.-E.-I. Belmouri, M. Sy, M. Wolff, **A. Rotaru**, S. Van Terwingen, D. Maskowicz, M. Sawczak, R. Jendrzejewski, K. Boukheddaden, *Three-Step Spin Crossover in a Pseudo-3D Hofmann-Type Complex Originating from Anisotropic Supramolecular Interactions*, **J. Americ. Chem. Soc.**, 147 (2025) 46608-46620. **(Q1)**

[136] M. Axentii, **A. Rotaru**, G.G. Codină, *Exploring the potential of rapeseed protein isolate in innovative pasta formulations*, **Applied Food Research**, 5 (2025) 101401. **(ESCI - Q1)**

[135] A. Oulmidi, S. Radi, K. Karrouchi, L. Fusaro, C. Aprile, **A. Rotaru**, Y. Garcia, *Pincer ligand mesoporous material in heavy metal adsorption for environmental purposes*, **Scientific Reports**, 15 (2025) 1-22. **(Q1)**

[134] Y. Zhang, **A. Rotaru**, T. Ranquet, X. Yang, Y. Zan, B. Reig, I. Séguy, L. Salmon, G. Molnár, A. Bousseksou, *Stress-coupled spin state switching in a spin crossover composite modulates current in an organic semiconductor*, **J. Mater. Chem. C**, 13 (2025) 18905-18912 **(Q1)**

[133] L. Getzner, Y. Remili, Z. Ziani, L. Vendier, W. Nicolazzi, **A. Rotaru**, H. Yu, G. Molnár, S. Cobo, A. Bousseksou, *Elucidating the Correlation Between the Redox Potential, Spin State, and Crystal Structure in a Series of Ferrous Complexes with Redox-Active Ligands*, **Angew. Chem. Int. Ed.**, 137 (2025) e202506965 **(Q1)**.

[132] Y. Draoui, S. Radi, A. El Mahdaoui, M. El Massaoudi, **A. Rotaru**, Y. Garcia, M. do Amparo F. Faustino, M. da Graça P. M. S. Neves, N. M. M. Moura, *Tailoring selectivity and efficiency: pyrazolyl-1H-1,2,4-triazole MCM-41 and silica hybrid materials for efficient cadmium(II) removal from water*, **Environmental Science and Pollution Research**, **in press** 32 (2025), 10984-11003 **(Q1)**

[131] Y. Zhang, I. Séguy, I. Soroceanu, **A. Rotaru**, H. Yu, L. Salmon, G. Molnár, A. Bousseksou, *Integration of the evaporable spin-crossover complex [Fe(HB(1,2,4-triazol-1-yl)3)2] into organic field-effect transistors: towards multifunctional OFET devices*, **RSC Advances**, 15 (2025) 8757-8763. **(Q2)**

[130] C. Pochet, T. Laurent, M. Wang, **A. Rotaru**, K. Robeyns, Y. Garcia, M.L. Singleton, *N,N,N′,N′-Tetrakis((1H-Pyrazol-3-Yl)methyl)-1,2-Ethanediamine Ligands as Versatile Scaffolds for Second Coordination Sphere Design*, **Eur. J. Inorg. Chem.**, 28 (2025), e202400835 **(Q2)**

[129] V. Kumar, A. C. Ghosh, Y. Draoui, M. Wang, K. Van Hecke, **A. Rotaru**, Y. Garcia, *Thermally Induced FeII Spin Crossover Hybrid Complex incorporating para-sulfocinnamic acid*, **Eur. J. Inorg. Chem.**, 28 (2025), e202400753 **(Q2)**

[128] I. Soroceanu, A. Diaconu, V-G. Ciobanu, L. Salmon, G. Molnár, **A. Rotaru**, *RF Dielectric Permittivity Sensing of Molecular Spin State Switching Using a Tunnel Diode Oscillator*, **Journal of Composites Science, *9*** (2025) 49 **(Q2)**

[127] F. Lai, L. Getzner, **A. Rotaru**, G. Molnár, S. Cobo. A. Bousseksou, *Drastic Enhancement of Electrical Conductivity of Metal–Organic Frameworks Displaying Spin Crossover*, **Chemistry of Materials**, 37 (2025) 636-643. **(Q1)**

[126] I. Soroceanu, O. Kulkarni, E. Dantras, **A. Rotaru**, L. Salmon, G. Molnár, A. Bousseksou, *Investigation of*

the effect of ferroelectric polarization on the spin state of spin crossover complexes embedded in a piezopolymer matrix, **Chemical Physics Letters**, **859** (2025) 141775 **(Q1)**

[125] A. Oulmidi, S. Radi,S. Tighadouini, L. Fusaro, C. Aprile, **A. Rotaru**, Y. Garcia, *Rapid and selective separation of heavy metal ions from aquatic medium using a bidentate functionalized hybrid material*, **Colloids and Surfaces A: Physicochemical and Engineering Aspects, 704** (2025) 135462 **(Q2)**

[124] Y. Yosypenko, V. Mykhailovych, V. Yosypenko, **A. Rotaru**, Y. Khalavka, *Optical properties and thermal sensitivity of AgInS2 and AgInS2/ZnS quantum dots embedded in barium sulphate and calcium carbonate matrices*, **Optical Materials**, **158** (2025) 116441 **(Q1)**

[123] Y. Zhang, I. Séguy, I. Soroceanu, **A. Rotaru**, X. Bao, H. Yu, M. Zhu, S. Cobo, L. Salmon, G. Molnár, A. Bousseksou, *Electrical Sensing of Molecular Spin State Switching in a Spin Crossover Complex Using an Organic Field-Effect Transistor*, **Adv. Electron. Mater.**, **(2025)** 2400590 **(Q1)**

2024

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[122] L. Sun, X. Li, C. Vandenbulcke, N. El Islam Belmouri, G. Bouchez, K. Robeyns, **A. Rotaru**, K. Boukheddadenb and Y. Garcia, *Stimuli-responsive spin crossover behavior in 3D Fe(II) porous coordination polymers for guest molecules*, **Materials Advances**, **5 (2024)** 8564-8574 **(Q2)**

[121] L. Getzner, D. Paliwoda, L. Vendier, L. M. Lawson-Daku, **A. Rotaru**, G. Molnár, S. Cobo and A. Bousseksou, *Combining electron transfer, spin crossover, and redox properties in metal-organic frameworks*, **Nature Commun.**, **15** (2024) 7192 **(Q1)**

[120] L. Getzner, L. Vendier, G. Molnar, **A. Rotaru**, S. Cobo, A. Bousseksou, *Hofmann Clathrates: A "Blue Box" Approach to Modulate Spin-Crossover Properties***, Angew. Chem. Int. Ed., 63** (2024) e202412525 **(Q1)**

2023

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[119] Y. Draoui, S. Radi, Y. Bahjou, A. Idir, A. El Mahdaoui, A. Zyad, H. N. Miras, M. Ferbinteanu, **A. Rotaru** and Y. Garcia, *New triazole-based coordination complexes as antitumor agents against triple negative breast cancer MDA-MB-468 cell line*, **RSC Advances**, **13** (2023) 36158-36167 **(Q2)**

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