

# Pedro Martins

## List of Publications by Year in Descending Order

**Source:** <https://exaly.com/author-pdf/7101357/pedro-martins-publications-by-year.pdf>

**Version:** 2024-04-28

This document has been generated based on the publications and citations recorded by exaly.com. For the latest version of this publication list, visit the link given above.

The third column is the impact factor (IF) of the journal, and the fourth column is the number of citations of the article.

121  
papers

6,034  
citations

34  
h-index

76  
g-index

126  
ext. papers

7,021  
ext. citations

5.8  
avg, IF

6.29  
L-index

#	Paper	IF	Citations
121	Electroactive poly(vinylidene fluoride) electrospun fiber mats coated with polyaniline and polypyrrole for tissue regeneration applications. <i>Reactive and Functional Polymers</i> , <b>2022</b> , 170, 105118	4.6	3
120	Printed multifunctional magnetically activated energy harvester with sensing capabilities. <i>Nano Energy</i> , <b>2022</b> , 94, 106885	17.1	4
119	Bulk Magnetolectric Composites <b>2022</b> , 196-206		
118	Greener Solvent-Based Processing of Magnetolectric Nanocomposites. <i>ACS Sustainable Chemistry and Engineering</i> , <b>2022</b> , 10, 4122-4132	8.3	0
117	Carrageenan based printable magnetic nanocomposites for actuator applications. <i>Composites Science and Technology</i> , <b>2022</b> , 109485	8.6	0
116	Theoretical optimization of magnetolectric multilayer laminates. <i>Composites Science and Technology</i> , <b>2021</b> , 204, 108642	8.6	2
115	Magnetic Nanoparticles for Biomedical Applications: From the Soul of the Earth to the Deep History of Ourselves.. <i>ACS Applied Bio Materials</i> , <b>2021</b> , 4, 5839-5870	4.1	8
114	Magnetic field into multifunctional materials: Magnetorheological, magnetostrictive, and magnetocaloric <b>2021</b> , 391-405		0
113	Magnetolectric Polymer-Based Nanocomposites with Magnetically Controlled Antimicrobial Activity. <i>ACS Applied Bio Materials</i> , <b>2021</b> , 4, 559-570	4.1	9
112	Magnetic materials: a journey from finding north to an exciting printed future. <i>Materials Horizons</i> , <b>2021</b> , 8, 2654-2684	14.4	9
111	Additive manufacturing of multifunctional materials <b>2021</b> , 25-42		1
110	A Facile Nanoimpregnation Method for Preparing Paper-Based Sensors and Actuators. <i>Advanced Materials Technologies</i> , <b>2021</b> , 6, 2100476	6.8	1
109	. <i>IEEE Transactions on Magnetics</i> , <b>2021</b> , 57, 1-57	2	8
108	Polymer-based actuators: back to the future. <i>Physical Chemistry Chemical Physics</i> , <b>2020</b> , 22, 15163-15182	3.6	25
107	Electroactive poly(vinylidene fluoride)-based materials: recent progress, challenges, and opportunities <b>2020</b> , 1-43		2
106	Reconfigurable 3D-printable magnets with improved maximum energy product. <i>Journal of Materials Chemistry C</i> , <b>2020</b> , 8, 952-958	7.1	13
105	Magnetolectrics: Three Centuries of Research Heading towards the 4.0 Industrial Revolution. <i>Materials</i> , <b>2020</b> , 13,	3.5	23

104	Spray-printed magnetoelectric multifunctional composites. <i>Composites Part B: Engineering</i> , <b>2020</b> , 187, 107829	10	21
103	Magnetic materials for magnetoelectric coupling: An unexpected journey. <i>Handbook of Magnetic Materials</i> , <b>2020</b> , 29, 57-110	1.3	2
102	Overview on thermoactive materials, simulations and applications. <i>Journal of Materials Science</i> , <b>2020</b> , 55, 925-946	4.3	6
101	Magnetic Proximity Sensor Based on Magnetoelectric Composites and Printed Coils. <i>Materials</i> , <b>2020</b> , 13,	3.5	8
100	Hydrogel-based magnetoelectric microenvironments for tissue stimulation. <i>Colloids and Surfaces B: Biointerfaces</i> , <b>2019</b> , 181, 1041-1047	6	30
99	Polymer-based magnetoelectric materials: To be or not to be. <i>Applied Materials Today</i> , <b>2019</b> , 15, 558-561	6.6	16
98	All-printed multilayer materials with improved magnetoelectric response. <i>Journal of Materials Chemistry C</i> , <b>2019</b> , 7, 5394-5400	7.1	25
97	Transparent Magnetoelectric Materials for Advanced Invisible Electronic Applications. <i>Advanced Electronic Materials</i> , <b>2019</b> , 5, 1900280	6.4	13
96	Development of a contactless DC current sensor with high linearity and sensitivity based on the magnetoelectric effect. <i>Smart Materials and Structures</i> , <b>2018</b> , 27, 065012	3.4	24
95	Advances in Magnetic Nanoparticles for Biomedical Applications. <i>Advanced Healthcare Materials</i> , <b>2018</b> , 7, 1700845	10.1	277
94	Silk fibroin-magnetic hybrid composite electrospun fibers for tissue engineering applications. <i>Composites Part B: Engineering</i> , <b>2018</b> , 141, 70-75	10	68
93	Electroactive poly(vinylidene fluoride)-based structures for advanced applications. <i>Nature Protocols</i> , <b>2018</b> , 13, 681-704	18.8	320
92	Polymer-based smart materials by printing technologies: Improving application and integration. <i>Additive Manufacturing</i> , <b>2018</b> , 21, 269-283	6.1	81
91	Concentrated solar energy used for sintering magnesium titanates for electronic applications. <i>Applied Surface Science</i> , <b>2018</b> , 438, 59-65	6.7	9
90	Improving Magnetoelectric Contactless Sensing and Actuation through Anisotropic Nanostructures. <i>Journal of Physical Chemistry C</i> , <b>2018</b> , 122, 19189-19196	3.8	12
89	Tailored Biodegradable and Electroactive Poly(Hydroxybutyrate-Co-Hydroxyvalerate) Based Morphologies for Tissue Engineering Applications. <i>International Journal of Molecular Sciences</i> , <b>2018</b> , 19,	6.3	15
88	Low-field giant magneto-ionic response in polymer-based nanocomposites. <i>Nanoscale</i> , <b>2018</b> , 10, 15747-15754	15.7	24
87	Magnetoelectric coupling in nanoscale 0-1 connectivity. <i>Nanoscale</i> , <b>2018</b> , 10, 17370-17377	7.7	6

86	Theoretical design of high-performance polymer-based magnetoelectric of fibrillar structures. <i>Composites Science and Technology</i> , <b>2018</b> , 155, 126-136	8.6	7
85	Optimized Magnetodielectric Coupling on High-Temperature Polymer-Based Nanocomposites. <i>Journal of Physical Chemistry C</i> , <b>2018</b> , 122, 1821-1827	3.8	5
84	Piezoelectric Polymers and Polymer Composites for Sensors and Actuators <b>2018</b> ,		
83	A new approach for preparation of metal-containing polyamide/carbon textile laminate composites with tunable electrical conductivity. <i>Journal of Materials Science</i> , <b>2018</b> , 53, 11444-11459	4.3	4
82	Local probing of magnetoelectric properties of PVDF/FeO electrospun nanofibers by piezoresponse force microscopy. <i>Nanotechnology</i> , <b>2017</b> , 28, 065707	3.4	28
81	. <i>IEEE Transactions on Industrial Electronics</i> , <b>2017</b> , 64, 4928-4934	8.9	24
80	Evaluation and optimization of the magnetoelectric response of CoFe <sub>2</sub> O <sub>4</sub> /poly(vinylidene fluoride) composite spheres by computer simulation. <i>Composites Science and Technology</i> , <b>2017</b> , 146, 119-130	8.6	16
79	Magnetoelectric response on Terfenol-D/ P(VDF-TrFE) two-phase composites. <i>Composites Part B: Engineering</i> , <b>2017</b> , 120, 97-102	10	32
78	Development of water-based printable piezoresistive sensors for large strain applications. <i>Composites Part B: Engineering</i> , <b>2017</b> , 112, 344-352	10	55
77	Materials Selection, Processing, and Characterization Technologies <b>2017</b> , 13-43		
76	Design of Magnetostrictive Nanoparticles for Magnetoelectric Composites <b>2017</b> , 125-151		1
75	Magnetoelectric Composites for Bionics Applications <b>2017</b> , 171-195		4
74	Polymer-Based Magnetoelectric Composites: Polymer as a Binder <b>2017</b> , 65-85		
73	Types of Polymer-Based Magnetoelectric Materials <b>2017</b> , 45-63		
72	Low-Dimensional Polymer-Based Magnetoelectric Structures <b>2017</b> , 115-123		
71	Applications of Polymer-Based Magnetoelectric Materials <b>2017</b> , 153-170		
70	Energy Harvesting <b>2017</b> , 197-224		3
69	Energy Harvesting <b>2017</b> , 225-253		2

68	Poly(vinylidene fluoride)-Based Magnetolectric Polymer Nanocomposite Films <b>2017</b> , 87-113		4
67	Magnetic cellulose nanocrystal nanocomposites for the development of green functional materials. <i>Carbohydrate Polymers</i> , <b>2017</b> , 175, 425-432	10.3	29
66	Cellulose-based magnetolectric composites. <i>Nature Communications</i> , <b>2017</b> , 8, 38	17.4	39
65	Wide-Range Magnetolectric Response on Hybrid Polymer Composites Based on Filler Type and Content. <i>Polymers</i> , <b>2017</b> , 9,	4.5	16
64	Metallic Glass/PVDF Magnetolectric Laminates for Resonant Sensors and Actuators: A Review. <i>Sensors</i> , <b>2017</b> , 17,	3.8	45
63	Temperature and frequency dependence of the dielectric and piezoelectric response of P(VDF/rFE)/CoFe <sub>2</sub> O <sub>4</sub> magnetolectric composites. <i>Lithuanian Journal of Physics</i> , <b>2017</b> , 57,	1.1	2
62	Poly(vinylidene fluoride-hexafluoropropylene)/bayerite composite membranes for efficient arsenic removal from water. <i>Materials Chemistry and Physics</i> , <b>2016</b> , 183, 430-438	4.4	30
61	Understanding nucleation of the electroactive $\beta$ phase of poly(vinylidene fluoride) by nanostructures. <i>RSC Advances</i> , <b>2016</b> , 6, 113007-113015	3.7	57
60	Electronic optimization for an energy harvesting system based on magnetolectric Metglas/poly(vinylidene fluoride)/Metglas composites. <i>Smart Materials and Structures</i> , <b>2016</b> , 25, 085028 <sup>3-4</sup>		30
59	Synthesis and size dependent magnetostrictive response of ferrite nanoparticles and their application in magnetolectric polymer-based multiferroic sensors. <i>Journal of Materials Chemistry C</i> , <b>2016</b> , 4, 10701-10706	7.1	19
58	Magnetically Controlled Drug Release System through Magnetomechanical Actuation. <i>Advanced Healthcare Materials</i> , <b>2016</b> , 5, 3027-3034	10.1	19
57	Processing and size range separation of pristine and magnetic poly(L-lactic acid) based microspheres for biomedical applications. <i>Journal of Colloid and Interface Science</i> , <b>2016</b> , 476, 79-86	9.3	20
56	Increasing X-ray to visible transduction performance of Gd <sub>2</sub> O <sub>3</sub> :Eu <sup>3+</sup> /PVDF composites by PPO/POPOP addition. <i>Composites Part B: Engineering</i> , <b>2016</b> , 91, 610-614	10	10
55	Characterization of Metglas/poly(vinylidene fluoride)/Metglas magnetolectric laminates for AC/DC magnetic sensor applications. <i>Materials and Design</i> , <b>2016</b> , 92, 906-910	8.1	25
54	Proving the suitability of magnetolectric stimuli for tissue engineering applications. <i>Colloids and Surfaces B: Biointerfaces</i> , <b>2016</b> , 140, 430-436	6	99
53	Reactive microencapsulation of carbon allotropes in polyamide shell-core structures and their transformation in hybrid composites with tailored electrical properties. <i>EXPRESS Polymer Letters</i> , <b>2016</b> , 10, 160-175	3.4	12
52	Optimized anisotropic magnetolectric response of Fe <sub>61.6</sub> Co <sub>16.4</sub> Si <sub>10.8</sub> B <sub>11.2</sub> /PVDF/Fe <sub>61.6</sub> Co <sub>16.4</sub> Si <sub>10.8</sub> B <sub>11.2</sub> laminates for AC/DC magnetic field sensing. <i>Smart Materials and Structures</i> , <b>2016</b> , 25, 055050	3.4	27
51	Influence of Solvent Evaporation Rate in the Preparation of Carbon-Coated Lithium Iron Phosphate Cathode Films on Battery Performance. <i>Energy Technology</i> , <b>2016</b> , 4, 573-582	3.5	23

50	Improved magnetodielectric coefficient on polymer based composites through enhanced indirect magnetoelectric coupling. <i>Applied Physics Letters</i> , <b>2016</b> , 109, 112905	3.4	31
49	A green solvent strategy for the development of piezoelectric poly(vinylidene fluoride-trifluoroethylene) films for sensors and actuators applications. <i>Materials and Design</i> , <b>2016</b> , 104, 183-189	8.1	33
48	Ciprofloxacin wastewater treated by UVA photocatalysis: contribution of irradiated TiO <sub>2</sub> and ZnO nanoparticles on the final toxicity as assessed by <i>Vibrio fischeri</i> . <i>RSC Advances</i> , <b>2016</b> , 6, 95494-95503	3.7	36
47	Synthesis of highly magnetostrictive nanostructures and their application in a polymer-based magnetoelectric sensing device. <i>European Polymer Journal</i> , <b>2016</b> , 84, 685-692	5.2	18
46	Synthesis, physical and magnetic properties of BaFe <sub>12</sub> O <sub>19</sub> /P(VDF-TrFE) multifunctional composites. <i>European Polymer Journal</i> , <b>2015</b> , 69, 224-231	5.2	21
45	Tailored Magnetic and Magnetoelectric Responses of Polymer-Based Composites. <i>ACS Applied Materials &amp; Interfaces</i> , <b>2015</b> , 7, 15017-22	9.5	86
44	Dielectric relaxation and ferromagnetic resonance in magnetoelectric (Polyvinylidene-fluoride)/ferrite composites. <i>Journal of Polymer Research</i> , <b>2015</b> , 22, 1	2.7	7
43	Energy harvesting device based on a metallic glass/PVDF magnetoelectric laminated composite. <i>Smart Materials and Structures</i> , <b>2015</b> , 24, 065024	3.4	57
42	Magnetoelectric CoFe <sub>2</sub> O <sub>4</sub> /polyvinylidene fluoride electrospun nanofibres. <i>Nanoscale</i> , <b>2015</b> , 7, 8058-61	7.7	59
41	Determination of the magnetostrictive response of nanoparticles via magnetoelectric measurements. <i>Nanoscale</i> , <b>2015</b> , 7, 9457-61	7.7	41
40	Novel Anisotropic Magnetoelectric Effect on FeO(OH)/P(VDF-TrFE) Multiferroic Composites. <i>ACS Applied Materials &amp; Interfaces</i> , <b>2015</b> , 7, 11224-9	9.5	60
39	Development of magnetoelectric CoFe <sub>2</sub> O <sub>4</sub> /poly(vinylidene fluoride) microspheres. <i>RSC Advances</i> , <b>2015</b> , 5, 35852-35857	3.7	69
38	Novel hybrid multifunctional magnetoelectric porous composite films. <i>Journal of Magnetism and Magnetic Materials</i> , <b>2015</b> , 396, 237-241	2.8	15
37	Development of electrospun photocatalytic TiO <sub>2</sub> -polyamide-12 nanocomposites. <i>Materials Chemistry and Physics</i> , <b>2015</b> , 164, 91-97	4.4	32
36	Structural, mechanical and piezoelectric properties of polycrystalline AlN films sputtered on titanium bottom electrodes. <i>Applied Surface Science</i> , <b>2015</b> , 354, 267-278	6.7	8
35	Gd <sub>2</sub> O <sub>3</sub> :Eu <sup>3+</sup> /PPO/POPOP/PS composites for digital imaging radiation detectors. <i>Applied Physics A: Materials Science and Processing</i> , <b>2015</b> , 121, 581-587	2.6	16
34	Size effects on the magnetoelectric response on PVDF/Vitrovac 4040 laminate composites. <i>Journal of Magnetism and Magnetic Materials</i> , <b>2015</b> , 377, 29-33	2.8	29
33	Gd <sub>2</sub> O <sub>3</sub> :Eu Nanoparticle-Based Poly(vinylidene fluoride) Composites for Indirect X-ray Detection. <i>Journal of Electronic Materials</i> , <b>2015</b> , 44, 129-135	1.9	18

32	Induced Magnetoelectric Effect Driven by Magnetization in BaFe <sub>12</sub> O <sub>19</sub> - P(VDF-TrFE) Composites. <i>IEEE Transactions on Magnetics</i> , <b>2015</b> , 51, 1-4	2	6
31	High-temperature polymer based magnetoelectric nanocomposites. <i>European Polymer Journal</i> , <b>2015</b> , 64, 224-228	5.2	17
30	Improving Photocatalytic Performance and Recyclability by Development of Er-Doped and Er/Pr-Codoped TiO <sub>2</sub> /Poly(vinylidene difluoride)/Trifluoroethylene Composite Membranes. <i>Journal of Physical Chemistry C</i> , <b>2014</b> , 118, 27944-27953	3.8	56
29	Synthesis and characterization of novel piezoelectric nitrile copolyimide films for high temperature sensor applications. <i>Smart Materials and Structures</i> , <b>2014</b> , 23, 105015	3.4	10
28	Aluminosilicate and aluminosilicate based polymer composites: Present status, applications and future trends. <i>Progress in Surface Science</i> , <b>2014</b> , 89, 239-277	6.6	62
27	Effect of filler dispersion and dispersion method on the piezoelectric and magnetoelectric response of CoFe <sub>2</sub> O <sub>4</sub> /P(VDF-TrFE) nanocomposites. <i>Applied Surface Science</i> , <b>2014</b> , 313, 215-219	6.7	69
26	Electroactive phases of poly(vinylidene fluoride): Determination, processing and applications. <i>Progress in Polymer Science</i> , <b>2014</b> , 39, 683-706	29.6	1743
25	Large linear anhysteretic magnetoelectric voltage coefficients in CoFe <sub>2</sub> O <sub>4</sub> /polyvinylidene fluoride 0B nanocomposites. <i>Journal of Nanoparticle Research</i> , <b>2013</b> , 15, 1	2.3	21
24	Effect of poling state and morphology of piezoelectric poly(vinylidene fluoride) membranes for skeletal muscle tissue engineering. <i>RSC Advances</i> , <b>2013</b> , 3, 17938	3.7	103
23	Osteoblast, fibroblast and in vivo biological response to poly(vinylidene fluoride) based composite materials. <i>Journal of Materials Science: Materials in Medicine</i> , <b>2013</b> , 24, 395-403	4.5	34
22	Optimization of the magnetoelectric response of poly(vinylidene fluoride)/epoxy/Vitrovac laminates. <i>ACS Applied Materials &amp; Interfaces</i> , <b>2013</b> , 5, 10912-9	9.5	69
21	Interface characterization and thermal degradation of ferrite/poly(vinylidene fluoride) multiferroic nanocomposites. <i>Journal of Materials Science</i> , <b>2013</b> , 48, 2681-2689	4.3	41
20	Polymer-Based Magnetoelectric Materials. <i>Advanced Functional Materials</i> , <b>2013</b> , 23, 3371-3385	15.6	244
19	Nucleation of the electroactive $\beta$ phase, dielectric and magnetic response of poly(vinylidene fluoride) composites with Fe <sub>2</sub> O <sub>3</sub> nanoparticles. <i>Journal of Non-Crystalline Solids</i> , <b>2013</b> , 361, 93-99	3.9	45
18	Preparation of Magnetoelectric Composites by Nucleation of the Electroactive $\beta$ Phase of Poly(vinylidene fluoride) by NiZnFe <sub>2</sub> O <sub>4</sub> Nanoparticles. <i>Sensor Letters</i> , <b>2013</b> , 11, 110-114	0.9	8
17	Dielectric and magnetic properties of ferrite/poly(vinylidene fluoride) nanocomposites. <i>Materials Chemistry and Physics</i> , <b>2012</b> , 131, 698-705	4.4	110
16	Role of Nanoparticle Surface Charge on the Nucleation of the Electroactive $\beta$ Poly(vinylidene fluoride) Nanocomposites for Sensor and Actuator Applications. <i>Journal of Physical Chemistry C</i> , <b>2012</b> , 116, 15790-15794	3.8	176
15	On the origin of the electroactive poly(vinylidene fluoride) $\beta$ phase nucleation by ferrite nanoparticles via surface electrostatic interactions. <i>CrystEngComm</i> , <b>2012</b> , 14, 2807	3.3	198

14	Hydrothermal assisted synthesis of iron oxide-based magnetic silica spheres and their performance in magnetophoretic water purification. <i>Materials Chemistry and Physics</i> , <b>2012</b> , 135, 510-517	4.4	25
13	Correlation between crystallization kinetics and electroactive polymer phase nucleation in ferrite/poly(vinylidene fluoride) magnetoelectric nanocomposites. <i>Journal of Physical Chemistry B</i> , <b>2012</b> , 116, 794-801	3.4	78
12	Room Temperature Magnetic Response of Sputter Deposited TbDyFe Films as a Function of the Deposition Parameters. <i>Journal of Nano Research</i> , <b>2012</b> , 18-19, 235-239	1	3
11	Nanoparticle dispersion and electroactive phase content in polyvinylidene fluoride/Ni <sub>0.5</sub> Zn <sub>0.5</sub> Fe <sub>2</sub> O <sub>4</sub> nanocomposites for magnetoelectric applications. <i>Journal of Nanoscience and Nanotechnology</i> , <b>2012</b> , 12, 6845-9	1.3	9
10	Optimizing piezoelectric and magnetoelectric responses on CoFe <sub>2</sub> O <sub>4</sub> /P(VDF-TrFE) nanocomposites. <i>Journal Physics D: Applied Physics</i> , <b>2011</b> , 44, 495303	3	110
9	Influence of ferrite nanoparticle type and content on the crystallization kinetics and electroactive phase nucleation of poly(vinylidene fluoride). <i>Langmuir</i> , <b>2011</b> , 27, 7241-9	4	109
8	Nucleation of electroactive phase poly(vinylidene fluoride) with CoFe <sub>2</sub> O <sub>4</sub> and NiFe <sub>2</sub> O <sub>4</sub> nanofillers: a new method for the preparation of multiferroic nanocomposites. <i>Applied Physics A: Materials Science and Processing</i> , <b>2011</b> , 103, 233-237	2.6	144
7	Nucleation of the electroactive phase of poly(vinylidene fluoride) by ferrite nanoparticles: surface versus size effects. <i>Materials Research Society Symposia Proceedings</i> , <b>2011</b> , 1312, 1		
6	Linear anhysteretic direct magnetoelectric effect in Ni <sub>0.5</sub> Zn <sub>0.5</sub> Fe <sub>2</sub> O <sub>4</sub> /poly(vinylidene fluoride-trifluoroethylene) 0-3 nanocomposites. <i>Journal Physics D: Applied Physics</i> , <b>2011</b> , 44, 482001	3	72
5	Degradation studies of transparent conductive electrodes on electroactive poly(vinylidene fluoride) for uric acid measurements. <i>Science and Technology of Advanced Materials</i> , <b>2010</b> , 11, 045006	7.1	2
4	Biological microdevice with fluidic acoustic streaming for measuring uric acid in human saliva. <i>Annual International Conference of the IEEE Engineering in Medicine and Biology Society IEEE Engineering in Medicine and Biology Society Annual International Conference</i> , <b>2009</b> , 2009, 5879-82	0.9	2
3	Local variation of the dielectric properties of poly(vinylidene fluoride) during the $\beta$ to $\beta'$ phase transformation. <i>Physics Letters, Section A: General, Atomic and Solid State Physics</i> , <b>2009</b> , 373, 177-180	2.3	75
2	Scanning electron microscopy analysis of sol-gel derived biocompatible glass. <i>Journal of Physics: Conference Series</i> , <b>2008</b> , 126, 012076	0.3	1
1	Effect of polymer strengtheners on the local environment of biocompatible glass as probed by fluorescence. <i>Journal of Fluorescence</i> , <b>2008</b> , 18, 297-303	2.4	4