

# João Elias F S Rodrigues

## List of Publications by Year in descending order

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45

papers

544

citations

759233

12

h-index

713466

21

g-index

45

all docs

45

docs citations

45

times ranked

709

citing authors

#	ARTICLE	IF	CITATIONS
1	Atomic Structure and Lattice Dynamics of CoSb <sub>3</sub> Skutterudite-Based Thermoelectrics. <i>Chemistry of Materials</i> , 2022, 34, 1213-1224.	6.7	9
2	The structural evolution, optical gap, and thermoelectric properties of the RbPb <sub>2</sub> Br <sub>5</sub> layered halide, prepared by mechanochemistry. <i>Journal of Materials Chemistry C</i> , 2022, 10, 6857-6865.	5.5	4
3	Detailed Structural Features of the Perovskite-Related Halide RbPbI <sub>3</sub> for Solar Cell Applications. <i>Inorganic Chemistry</i> , 2022, 61, 5502-5511.	4.0	7
4	Combining Raman spectroscopy and synchrotron X-ray diffraction to unveil the order types in A <sub>3</sub> CaNb <sub>2</sub> O <sub>9</sub> (A=Ba, Sr) complex perovskites. <i>Journal of Raman Spectroscopy</i> , 2022, 53, 1333-1341.	2.5	2
5	Thermal annealing of natural rubber films controls wettability and enhances cytocompatibility. <i>Surfaces and Interfaces</i> , 2022, 31, 102048.	3.0	2
6	Metastable Materials Accessed under Moderate Pressure Conditions (P ≈ 3.5 GPa) in a Piston-Cylinder Press. <i>Materials</i> , 2021, 14, 1946.	2.9	8
7	Surface Wettability of a Natural Rubber Composite under Stretching: A Model to Predict Cell Survival. <i>Langmuir</i> , 2021, 37, 4639-4646.	3.5	4
8	Unveiling the Structural Behavior under Pressure of Filled M <sub>0.5</sub> Co <sub>4</sub> Sb <sub>12</sub> (M = K, Sr, La, Ce, and Yb) Thermoelectric Skutterudites. <i>Inorganic Chemistry</i> , 2021, 60, 7413-7421.	4.0	8
9	Integrating van der Waals materials on paper substrates for electrical and optical applications. <i>Applied Materials Today</i> , 2021, 23, 101012.	4.3	9
10	Stability and equation of state of face-centered cubic and hexagonal close packed phases of argon under pressure. <i>Scientific Reports</i> , 2021, 11, 15192.	3.3	10
11	Monocrystalline fiber growth technique: New critical radius considerations. <i>Journal of Crystal Growth</i> , 2021, 570, 126199.	1.5	0
12	Synergy of diffraction and spectroscopic techniques to unveil the crystal structure of antimonic acid. <i>Scientific Reports</i> , 2021, 11, 17763.	3.3	4
13	Experimental and Theoretical Investigations on the Structural, Electronic, and Vibrational Properties of Cs <sub>2</sub> AgSbCl <sub>6</sub> Double Perovskite. <i>Industrial &amp; Engineering Chemistry Research</i> , 2021, 60, 18918-18928.	3.7	26
14	Crystal and electronic structure of $\text{Co}_3\text{O}_4$ spinel under pressure probed by XANES and Raman spectroscopy. <i>Physical Review B</i> , 2021, 103, .	3.2	8
15	Unveiling the infrared complex dielectric function of ilmenite CdTiO <sub>3</sub> . <i>Journal of Alloys and Compounds</i> , 2020, 813, 152136.	5.5	6
16	Divalent chromium in the octahedral positions of the novel hybrid perovskites CH <sub>3</sub> NH <sub>3</sub> Pb <sub>1-Cr</sub> (Br,Cl) <sub>3</sub> (x= 0.25, 0.5): Induction of narrow bands inside the bandgap. <i>Journal of Alloys and Compounds</i> , 2020, 821, 153414.	5.5	11
17	Structural Features, Anisotropic Thermal Expansion, and Thermoelectric Performance in Bulk Black Phosphorus Synthesized under High Pressure. <i>Inorganic Chemistry</i> , 2020, 59, 14932-14943.	4.0	12
18	A comprehensive examination of the local- and long-range structure of Sb <sub>6</sub> O <sub>13</sub> pyrochlore oxide. <i>Scientific Reports</i> , 2020, 10, 16956.	3.3	9

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19	High-Performance n-type SnSe Thermoelectric Polycrystal Prepared by Arc-Melting. <i>Cell Reports Physical Science</i> , 2020, 1, 100263.	5.6	23
20	Optical phonon modes in 1:2 ordered trigonal Ba <sub>3</sub> MgNb <sub>2</sub> O <sub>9</sub> perovskite: Synergy of both classical and quantum methods. <i>Journal of Raman Spectroscopy</i> , 2020, 51, 1219-1229.	2.5	2
21	Enhanced stability in CH <sub>3</sub> NH <sub>3</sub> PbI <sub>3</sub> hybrid perovskite from mechano-chemical synthesis: structural, microstructural and optoelectronic characterization. <i>Scientific Reports</i> , 2020, 10, 11228.	3.3	19
22	Unveiling the Correlation between the Crystalline Structure of M <sub>x</sub> CoSb <sub>3</sub> (M = Y, K) T <sub>j</sub> ETQq0 0 0 rgBT /Overlock 10 2020, 30, 2001651.	14.9	31
23	Innovative Design for the Enhancement of Lithium Lanthanum Titanate Electrolytes. <i>Crystal Growth and Design</i> , 2019, 19, 4897-4901.	3.0	8
24	Improved Visible Light Photoactivity of CuBi <sub>2</sub> O <sub>4</sub> /CuO Heterojunctions for Photodegradation of Methylene Blue and Metronidazole. <i>Journal of Physical Chemistry C</i> , 2019, 123, 25680-25690.	3.1	85
25	Spin-phonon coupling in uniaxial anisotropic spin-glass based on Fe <sub>2</sub> TiO <sub>5</sub> pseudobrookite. <i>Journal of Alloys and Compounds</i> , 2019, 799, 563-572.	5.5	20
26	Thermal expansion, compressibility and bulk modulus of ilmenite-type CoTiO <sub>3</sub> : X-ray diffraction at high pressures and temperatures. <i>Solid State Sciences</i> , 2019, 88, 1-5.	3.2	5
27	Towards the production of natural rubber-calcium phosphate hybrid for applications as bioactive coatings. <i>Materials Science and Engineering C</i> , 2019, 94, 417-425.	7.3	8
28	Theoretical methods for calculations of optical phonons in BiOBr: Analysis and correction of propagated errors. <i>Journal of Raman Spectroscopy</i> , 2018, 49, 1356-1363.	2.5	31
29	Dielectric and Magnetic Properties of Ni Pb <sub>1</sub> -TiO <sub>3</sub> Solid Solution and Composite: Coexistence of Ferroelectric and Antiferromagnetic Order. <i>Journal of Alloys and Compounds</i> , 2018, 739, 600-606.	5.5	3
30	Blocking effect in promising proton conductors based on Ba <sub>3</sub> Ca <sub>1.18</sub> Nb <sub>1.82-x</sub> R <sub>x</sub> O <sub>9-1'</sub> (R = Y <sup>3+</sup> , Gd <sup>3+</sup> ) T <sub>j</sub> ETQq0 0 0 rgBT /Overlock 4.8 12		
31	The Role of Nb Addition in TiO <sub>2</sub> Nanoparticles: Phase Transition and Photocatalytic Properties (Phys.) T <sub>j</sub> ETQq1 1 0.784314 rgBT /Overlock 1.8 1		
32	First-principles calculations and Raman scattering evidence for local symmetry lowering in rhombohedral ilmenite: temperature- and pressure-dependent studies. <i>Journal of Physics Condensed Matter</i> , 2018, 30, 485401.	1.8	13
33	Combining XRD and Raman spectroscopy techniques to probe the solid solution and composite forms of Pb <sub>1-x</sub> CoxTiO <sub>3</sub> systems. <i>Materials Research Bulletin</i> , 2018, 107, 462-467.	5.2	9
34	The Role of Nb Addition in TiO <sub>2</sub> Nanoparticles: Phase Transition and Photocatalytic Properties. <i>Physica Status Solidi (A) Applications and Materials Science</i> , 2018, 215, 1800321.	1.8	7
35	Calculation of the optical phonons in ordered Ba <sub>2</sub> MgWO <sub>6</sub> perovskite using short-range force field model. <i>Journal of Raman Spectroscopy</i> , 2018, 49, 1822-1829.	2.5	16
36	Structural, vibrational and morphological properties of layered double hydroxides containing Ni <sup>2+</sup> , Zn <sup>2+</sup> , Al <sup>3+</sup> and Zr <sup>4+</sup> cations. <i>Materials Characterization</i> , 2017, 125, 29-36.	4.4	22

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37	Raman signatures of monoclinic distortion in $(Ba_{1-x}Sr_x)_{3-x}CaNb_2O_9$ complex perovskites. <i>Journal of Raman Spectroscopy</i> , 2017, 48, 1243-1249.	2.5	9
38	Ordering effect on the electrical properties of stoichiometric $Ba_3CaNb_2O_9$ -based perovskite ceramics. <i>Ceramics International</i> , 2017, 43, 14015-14022.	4.8	8
39	Structural ordering and dielectric properties of $Ba_3CaNb_2O_9$ -based microwave ceramics. <i>Ceramics International</i> , 2016, 42, 18087-18093.	4.8	25
40	Ordered Complex Perovskites to the Carbon Monoxide Oxidation Reaction. <i>Revista Virtual De Química</i> , 2015, 7, 2049-2065.	0.4	0
41	Synthesis and structural ordering of nano-sized $Ba_3B^2Nb_2O_9$ ( $B^2 = Ca$ and $Zn$ ) powders. <i>Ceramics International</i> , 2014, 40, 5921-5930.	4.8	10
42	Resonance Raman spectroscopy of $NdAlO_3$ single-crystal fibers grown by the laser-heated pedestal growth technique. <i>Vibrational Spectroscopy</i> , 2014, 73, 144-149.	2.2	9
43	Probing phase formation and structural ordering in $Ba_3ZnNb_2O_9$ films using confocal Raman microscopy. <i>Vibrational Spectroscopy</i> , 2014, 72, 8-14.	2.2	3
44	Ordering and phonons in $Ba_3CaNb_2O_9$ complex perovskite. <i>Materials Research Bulletin</i> , 2013, 48, 3298-3303.	5.2	20
45	Relaxations in $Ba_2BiTaO_6$ ceramics investigated by impedance and electric modulus spectroscopies. <i>Materials Research Bulletin</i> , 2012, 47, 878-882.	5.2	6