

# Robert Lad

## List of Publications by Year in descending order

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47  
papers

1,827  
citations

279798

23  
h-index

265206

42  
g-index

47  
all docs

47  
docs citations

47  
times ranked

2272  
citing authors

#	ARTICLE	IF	CITATIONS
1	Photoemission study of the valence-band electronic structure in $\text{Fe}_x\text{O}$ , $\text{Fe}_3\text{O}_4$ , and $\text{Fe}_2\text{O}_3$ single crystals. <i>Physical Review B</i> , 1989, 39, 13478-13485.	3.2	179
2	Structure of $\text{Fe}_2\text{O}_3$ single crystal surfaces following $\text{Ar}^+$ ion bombardment and annealing in $\text{O}_2$ . <i>Surface Science</i> , 1988, 193, 81-93.	1.9	165
3	Stoichiometry and microstructure effects on tungsten oxide chemiresistive films. <i>Sensors and Actuators B: Chemical</i> , 2001, 77, 375-382.	7.8	141
4	Interaction of organophosphorous compounds with $\text{TiO}_2$ and $\text{WO}_3$ surfaces probed by vibrational spectroscopy. <i>Sensors and Actuators B: Chemical</i> , 2001, 76, 442-448.	7.8	98
5	Electronic structure of $\text{MnO}$ studied by angle-resolved and resonant photoemission. <i>Physical Review B</i> , 1988, 38, 10860-10869.	3.2	86
6	Microstructural effects in $\text{WO}_3$ gas-sensing films. <i>Thin Solid Films</i> , 1995, 256, 247-252.	1.8	69
7	Structure, conductivity, and optical absorption of $\text{Ag}_2\text{O}$ films. <i>Thin Solid Films</i> , 2007, 515, 8684-8688.	1.8	64
8	Nanostructured tungsten and tungsten trioxide films prepared by glancing angle deposition. <i>Thin Solid Films</i> , 2010, 518, 4095-4099.	1.8	64
9	Heteroepitaxial growth of tungsten oxide films on sapphire for chemical gas sensors. <i>Thin Solid Films</i> , 2001, 400, 56-63.	1.8	62
10	Growth and structure of silver and silver oxide thin films on sapphire. <i>Thin Solid Films</i> , 2004, 468, 57-64.	1.8	62
11	Challenges in Ceramic Science: A Report from the Workshop on Emerging Research Areas in Ceramic Science. <i>Journal of the American Ceramic Society</i> , 2012, 95, 3699-3712.	3.8	59
12	Postdeposition annealing behavior of rf sputtered $\text{ZnO}$ films. <i>Journal of Vacuum Science and Technology</i> , 1980, 17, 808-811.	1.9	58
13	The influence of microstructure on tribological properties of $\text{WO}_3$ thin films. <i>Wear</i> , 1999, 232, 84-90.	3.1	57
14	Defects and morphology of tungsten trioxide thin films. <i>Thin Solid Films</i> , 2002, 406, 79-86.	1.8	57
15	Electronic and chemical interactions at aluminum/ $\text{TiO}_2(110)$ interfaces. <i>Surface Science</i> , 1993, 289, 297-306.	1.9	56
16	Detection and quantification of nitric oxide in human breath using a semiconducting oxide based chemiresistive microsensor. <i>Sensors and Actuators B: Chemical</i> , 2001, 76, 226-234.	7.8	55
17	Layer-by-layer growth of epitaxial $\text{SnO}_2$ on sapphire by reactive sputter deposition. <i>Applied Physics Letters</i> , 1992, 61, 1921-1923.	3.3	46
18	Satellite structure in the photoemission spectra of $\text{MnO}(100)$ . <i>Physical Review B</i> , 1991, 43, 11971-11977.	3.2	40

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19	High temperature stability of electrically conductive Pt-Rh/ZrO <sub>2</sub> and Pt-Rh/HfO <sub>2</sub> nanocomposite thin film electrodes. <i>Microsystem Technologies</i> , 2014, 20, 523-531.	2.0	40
20	Microstructural effects on the friction and wear of zirconia films in unlubricated sliding contact. <i>Thin Solid Films</i> , 1999, 347, 220-225.	1.8	39
21	The effect of rf power on reactively sputtered zinc oxide. <i>Journal of Applied Physics</i> , 1980, 51, 6405-6410.	2.5	36
22	Influence of composition and multilayer architecture on electrical conductivity of high temperature Pt-alloy films. <i>Surface and Coatings Technology</i> , 2015, 284, 215-221.	4.8	29
23	Energy Conversion Efficiency of an Exponentially Graded Thermoelectric Material. <i>Journal of Electronic Materials</i> , 2014, 43, 308-313.	2.2	26
24	Synthesis and thermal stability of Pt <sub>3</sub> Si, Pt <sub>2</sub> Si, and PtSi films grown by e-beam co-evaporation. <i>Journal of Alloys and Compounds</i> , 2016, 682, 216-224.	5.5	26
25	Initial oxidation and sulfidation of a Ni <sub>60</sub> Fe <sub>40</sub> (100) alloy surface. <i>Surface Science</i> , 1987, 179, 467-482.	1.9	22
26	In situ four-point conductivity and Hall effect apparatus for vacuum and controlled atmosphere measurements of thin film materials. <i>Review of Scientific Instruments</i> , 2002, 73, 2325-2330.	1.3	20
27	Distinguishing Bulk Conduction from Band Bending Transduction Mechanisms in Chemiresistive Metal Oxide Gas Sensors. <i>Journal of Physical Chemistry C</i> , 2018, 122, 10607-10620.	3.1	20
28	Diffraction studies of cubic phase stability in undoped zirconia thin films. <i>Journal of Materials Research</i> , 2000, 15, 369-376.	2.6	18
29	Aggregation and sticking probability of gold on tungsten trioxide films. <i>Sensors and Actuators B: Chemical</i> , 2001, 76, 373-379.	7.8	17
30	Quantifying gas sensor and delivery system response time using GC/MS. <i>Sensors and Actuators B: Chemical</i> , 2003, 96, 200-214.	7.8	14
31	Heteroepitaxial growth of tungsten oxide films on silicon(100) using a BaF <sub>2</sub> buffer layer. <i>Journal of Materials Research</i> , 2003, 18, 2859-2868.	2.6	14
32	Aluminum deposition on NiO(100): growth, structure and composition of the interface. <i>Surface Science</i> , 1993, 290, 35-44.	1.9	13
33	High temperature sensing technology for applications up to 1000°C. , 2008, , .		13
34	Charge transport in flat and nanorod structured ruthenium thin films. <i>Applied Physics Letters</i> , 2010, 96, .	3.3	12
35	Properties of amorphous SiAlON thin films grown by RF magnetron co-sputtering. <i>Surface and Coatings Technology</i> , 2014, 258, 1191-1195.	4.8	11
36	(ArO) <sup>+</sup> and (ArO <sub>2</sub> ) <sup>+</sup> ions in rf sputter deposition discharges. <i>Journal of Applied Physics</i> , 1986, 60, 837-839.	2.5	8

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37	Nanostructure and bonding of zirconium diboride thin films studied by X-ray spectroscopy. Thin Solid Films, 2015, 596, 155-159.	1.8	8
38	Breakup of oxide films on a Ni-Fe(100) surface by S2 impingement. Applied Surface Science, 1986, 27, 318-328.	6.1	6
39	Structure and optical properties of Zr1~Si N thin films on sapphire. Thin Solid Films, 2009, 518, 1522-1526.	1.8	4
40	Phase diagrams for adsorbed layers at crystal surfaces. Bulletin of Alloy Phase Diagrams, 1984, 5, 117-127.	0.2	3
41	Properties of SiAlO2N protective coatings on surface acoustic wave devices. Thin Solid Films, 2013, 534, 198-204.	1.8	3
42	Enhanced Crystallinity of h~BN Films Induced by Substrate Bias During Magnetron Sputtering. Physica Status Solidi (B): Basic Research, 2018, 255, 1700458.	1.5	3
43	Reply to ~comment on ~structure of ~Fe2O3 single crystal surfaces following Ar+ ion bombardment and annealing in O2~ by E. Paparazzo. Surface Science, 1988, 200, L473-L474.	1.9	2
44	Age hardening of a martensitic stainless steel with niobium and copper additions. Scripta Metallurgica, 1979, 13, 771-775.	1.2	1
45	Comparison of PtSi Films Grown by Solid-State Reaction and by E-Beam Co-Evaporation: Thermal Stability in Air at 1000 ~C. MRS Advances, 2016, 1, 1539-1544.	0.9	1
46	A Multi-Parameter Platform For Gas Sensing Using Semiconducting Metal Oxide Films. , 2007, , .		0
47	High-Temperature RF Transmission Loss Characteristics of Platinum~Inconel 600 and Platinum~304 Steel Interconnects. IEEE Transactions on Components, Packaging and Manufacturing Technology, 2022, 12, 610-615.	2.5	0