

# Richard J Potter

## List of Publications by Year in descending order

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67  
papers

1,630  
citations

236833

25  
h-index

315616

38  
g-index

68  
all docs

68  
docs citations

68  
times ranked

2347  
citing authors

#	ARTICLE	IF	CITATIONS
1	Oxygen deficient $\text{Fe}_2\text{O}_3$ photoelectrodes: a balance between enhanced electrical properties and trap-mediated losses. <i>Chemical Science</i> , 2015, 6, 4009-4016.	3.7	92
2	Some recent developments in the MOCVD and ALD of high- $\kappa$ dielectric oxides. <i>Journal of Materials Chemistry</i> , 2004, 14, 3101-3112.	6.7	78
3	Silicon nanoparticles generated by femtosecond laser ablation in a liquid environment. <i>Journal of Nanoparticle Research</i> , 2010, 12, 573-580.	0.8	71
4	Permittivity enhancement of hafnium dioxide high- $\kappa$ films by cerium doping. <i>Applied Physics Letters</i> , 2008, 93, .	1.5	67
5	Core Levels, Band Alignments, and Valence-Band States in $\text{CuSbS}_2$ for Solar Cell Applications. <i>ACS Applied Materials &amp; Interfaces</i> , 2017, 9, 41916-41926.	4.0	67
6	Deposition of $\text{HfO}_2$ , $\text{Gd}_2\text{O}_3$ and $\text{PrOx}$ by Liquid Injection ALD Techniques. <i>Chemical Vapor Deposition</i> , 2005, 11, 159-169.	1.4	61
7	Modification of the electrical properties of PEDOT:PSS by the incorporation of ZnO nanoparticles synthesized by laser ablation. <i>Chemical Physics Letters</i> , 2010, 484, 283-289.	1.2	58
8	Optical properties of GaNAs and GaInAsN quantum wells. <i>Journal of Physics Condensed Matter</i> , 2004, 16, S3387-S3412.	0.7	56
9	Recent developments in the MOCVD and ALD of rare earth oxides and silicates. <i>Materials Science and Engineering B: Solid-State Materials for Advanced Technology</i> , 2005, 118, 97-104.	1.7	56
10	The role of nitrogen doping in ALD $\text{Ta}_2\text{O}_5$ and its influence on multilevel cell switching in RRAM. <i>Applied Physics Letters</i> , 2017, 110, .	1.5	54
11	III-VI semiconductor nanoparticles synthesized by laser ablation. <i>Applied Physics A: Materials Science and Processing</i> , 2009, 94, 641-647.	1.1	50
12	Atomic layer deposition of TaN and $\text{Ta}_3\text{N}_5$ using pentakis(dimethylamino)tantalum and either ammonia or monomethylhydrazine. <i>Journal of Crystal Growth</i> , 2011, 331, 33-39.	0.7	43
13	The Effects of Zr Doping on the Optical, Electrical and Microstructural Properties of Thin ZnO Films Deposited by Atomic Layer Deposition. <i>Materials</i> , 2015, 8, 7230-7240.	1.3	43
14	Biotransformation of Silver Released from Nanoparticle Coated Titanium Implants Revealed in Regenerating Bone. <i>ACS Applied Materials &amp; Interfaces</i> , 2017, 9, 21169-21180.	4.0	39
15	Interaction Strength between the Highly Localised Nitrogen States and the Extended Semiconductor Matrix States in GaInNAs. <i>Physica Status Solidi A</i> , 2001, 187, 623-632.	1.7	37
16	Picosecond laser patterning of PEDOT:PSS thin films. <i>Synthetic Metals</i> , 2011, 161, 431-439.	2.1	37
17	Band Alignments, Band Gap, Core Levels, and Valence Band States in $\text{Cu}_3\text{BiS}_3$ for Photovoltaics. <i>ACS Applied Materials &amp; Interfaces</i> , 2019, 11, 27033-27047.	4.0	37
18	Atomic Layer Deposition of a Silver Nanolayer on Advanced Titanium Orthopedic Implants Inhibits Bacterial Colonization and Supports Vascularized de Novo Bone Ingrowth. <i>Advanced Healthcare Materials</i> , 2017, 6, 1700033.	3.9	35

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19	S-shaped behaviour of the temperature-dependent energy band gap in dilute nitrides. <i>Physica E: Low-Dimensional Systems and Nanostructures</i> , 2003, 17, 242-244.	1.3	34
20	Deposition of HfO <sub>2</sub> and ZrO <sub>2</sub> films by liquid injection MOCVD using new monomeric alkoxide precursors. <i>Journal of Materials Chemistry</i> , 2005, 15, 1896.	6.7	33
21	Spectroellipsometric assessment of HfO <sub>2</sub> thin films. <i>Thin Solid Films</i> , 2006, 515, 623-626.	0.8	28
22	CdSe nanoparticles synthesized by laser ablation. <i>Europhysics Letters</i> , 2008, 84, 47001.	0.7	27
23	High-k materials and their response to gamma ray radiation. <i>Journal of Vacuum Science &amp; Technology B</i> , 2009, 27, 411.	1.3	27
24	CdTe nanoparticles synthesized by laser ablation. <i>Applied Physics Letters</i> , 2009, 95, .	1.5	26
25	Directing the mechanism of CO <sub>2</sub> reduction by a Mn catalyst through surface immobilization. <i>Physical Chemistry Chemical Physics</i> , 2018, 20, 6811-6816.	1.3	26
26	Self-limiting atomic layer deposition of conformal nanostructured silver films. <i>Applied Surface Science</i> , 2016, 364, 789-797.	3.1	25
27	The effect of In/N ratio on the optical quality and lasing threshold in GaxIn1-xAs1-yNy/GaAs laser structures. <i>Superlattices and Microstructures</i> , 2001, 29, 169-186.	1.4	23
28	Growth of Neodymium Oxide Thin Films by Liquid Injection MOCVD Using a New Neodymium Alkoxide Precursor. <i>Chemical Vapor Deposition</i> , 2004, 10, 301-305.	1.4	23
29	Compositional variation in as-grown GaInNAs/GaAs quantum well structures. <i>Journal of Crystal Growth</i> , 2001, 233, 1-4.	0.7	21
30	Characterization of hafnium aluminate gate dielectrics deposited by liquid injection metalorganic chemical vapor deposition. <i>Applied Physics Letters</i> , 2004, 84, 4119-4121.	1.5	21
31	Enhanced switching stability in Ta <sub>2</sub> O <sub>5</sub> resistive RAM by fluorine doping. <i>Applied Physics Letters</i> , 2017, 111, .	1.5	21
32	Deposition of Pr- and Nd-aluminate by Liquid Injection MOCVD and ALD Using Single-Source Heterometallic Alkoxide Precursors. <i>Chemistry of Materials</i> , 2007, 19, 4796-4803.	3.2	20
33	Investigation of optical and electronic properties of hafnium aluminate films deposited by Metal-Organic Chemical Vapour Deposition. <i>Thin Solid Films</i> , 2007, 515, 3772-3778.	0.8	19
34	Growth of Gadolinium Oxide Thin Films by Liquid Injection MOCVD Using a New Gadolinium Alkoxide Precursor. <i>Chemical Vapor Deposition</i> , 2004, 10, 306-310.	1.4	18
35	The influence of tertiary butyl hydrazine as a co-reactant on the atomic layer deposition of silver. <i>Applied Surface Science</i> , 2017, 399, 123-131.	3.1	18
36	Growth of Hafnium Aluminate Thin Films by Liquid Injection MOCVD Using Alkoxide Precursors. <i>Chemical Vapor Deposition</i> , 2004, 10, 275-279.	1.4	16

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37	Vacuum ultraviolet photochemical selective area atomic layer deposition of Al <sub>2</sub> O <sub>3</sub> dielectrics. AIP Advances, 2015, 5, .	0.6	16
38	Gadolinium nitride films deposited using a PEALD based process. Journal of Crystal Growth, 2012, 338, 111-117.	0.7	15
39	Tuning the electrical properties of ZnO thin-film transistors by thermal annealing in different gases. Thin Solid Films, 2014, 552, 192-195.	0.8	15
40	Stable Ta <sub>2</sub> O <sub>5</sub> Overlayers on Hematite for Enhanced Photoelectrochemical Water Splitting Efficiencies. ChemPhotoChem, 2018, 2, 183-189.	1.5	15
41	In-plane photovoltage and photoluminescence studies in sequentially grown GaInNAs and GaInAs quantum wells. Journal of Applied Physics, 2003, 93, 2440-2448.	1.1	14
42	Deposition of HfO <sub>2</sub> Films by Liquid Injection MOCVD Using a New Monomeric Alkoxide Precursor, [Hf(dmop) <sub>4</sub> ]. Chemical Vapor Deposition, 2005, 11, 299-305.	1.4	14
43	Polymer-nanoparticle composites composed of PEDOT:PSS and nanoparticles of Ag synthesised by laser ablation. Colloid and Polymer Science, 2012, 290, 213-220.	1.0	13
44	Effect of nitrogen fraction on the temperature dependence of GaNAs/GaAs quantum-well emission. Applied Physics Letters, 2003, 82, 3400-3402.	1.5	12
45	Synthesis and characterisation of four new heterometal alkoxides: potential precursors for the MOCVD of ferroelectric oxides. Journal of Materials Chemistry, 2004, 14, 887.	6.7	12
46	Optical and electrical characterization of hafnium oxide deposited by liquid injection atomic layer deposition. Microelectronics Reliability, 2007, 47, 825-829.	0.9	10
47	Comparison of atomic layer deposited Al <sub>2</sub> O <sub>3</sub> and (Ta <sub>2</sub> O <sub>5</sub> ) <sub>0.12</sub> (Al <sub>2</sub> O <sub>3</sub> ) <sub>0.88</sub> gate dielectrics on the characteristics of GaN-capped AlGaIn/GaN metal-oxide-semiconductor high electron mobility transistors. Journal of Applied Physics, 2019, 126, .	1.1	9
48	Optical properties of GaInNAs/GaAs quantum wells. Solid-State Electronics, 2003, 47, 483-487.	0.8	8
49	Atomic vapour deposition (AVD) of SrBi <sub>2</sub> Ta <sub>2</sub> O <sub>9</sub> using an all alkoxide precursor. Journal of Crystal Growth, 2004, 272, 778-784.	0.7	8
50	Tuneable electrical properties of hafnium aluminate gate dielectrics deposited by metal organic chemical vapour deposition. Microelectronics Reliability, 2007, 47, 722-725.	0.9	8
51	VCSEL structure hot electron light emitter. Materials Science and Engineering B: Solid-State Materials for Advanced Technology, 2000, 74, 96-100.	1.7	7
52	Band structure and optical gain in GaInAsN quantum wells. Physica E: Low-Dimensional Systems and Nanostructures, 2003, 17, 245-246.	1.3	7
53	Charge trapping characterization of MOCVD HfO <sub>2</sub> /p-Si interfaces at cryogenic temperatures. Microelectronics Reliability, 2007, 47, 726-728.	0.9	6
54	Comparative analysis of the effects of tantalum doping and annealing on atomic layer deposited (Ta <sub>2</sub> O <sub>5</sub> ) <sub>x</sub> (Al <sub>2</sub> O <sub>3</sub> ) <sub>1-x</sub> as potential gate dielectrics for GaN/Al <sub>x</sub> Ga <sub>1-x</sub> N/GaN high electron mobility transistors. Journal of Applied Physics, 2016, 119, .	1.1	6

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55	Operation of a novel hot-electron vertical-cavity surface-emitting laser. , 1998, , .		5
56	Elucidation of ALD MgZnO deposition processes using low energy ion scattering. Journal of Vacuum Science and Technology A: Vacuum, Surfaces and Films, 2018, 36, .	0.9	5
57	Hot electron light emission from GaInAsP/InP structures with distributed Bragg reflectors. Physica E: Low-Dimensional Systems and Nanostructures, 2003, 17, 607-609.	1.3	3
58	The operation of a wavelength converter based on a field effect light emitting and absorbing heterojunction. Physica Status Solidi A, 2003, 196, 496-503.	1.7	3
59	Thermal stability of hafnium silicate dielectric films deposited by a dual source liquid injection MOCVD. Journal of Materials Science: Materials in Electronics, 2004, 15, 711-714.	1.1	3
60	(Invited) Vacuum Ultraviolet Photochemical Atomic Layer Deposition of Alumina and Titania Films. ECS Transactions, 2015, 69, 139-145.	0.3	3
61	Comparison of theoretical models for interband transitions in dilute nitrides and experimental measurement. Physica E: Low-Dimensional Systems and Nanostructures, 2003, 17, 240-241.	1.3	2
62	1.5- $\mu$ m surface emission from GaInAsP/InP HELLSH structures. , 2001, 4283, 723.		1
63	Photo-induced transient spectroscopy and in-plane photovoltage in GaInNAs/GaAs quantum wells. Physica E: Low-Dimensional Systems and Nanostructures, 2003, 17, 250-251.	1.3	1
64	Charge trapping and interface states in hydrogen annealed HfO <sub>2</sub> /Si structures. Microelectronics Reliability, 2007, 47, 714-717.	0.9	1
65	The Effects of Nitrogen Incorporation on Photogenerated Carrier Dynamics in Dilute Nitrides. , 2008, , 181-197.		1
66	Optical characterization of GaInNAs. , 2001, 4283, 638.		0
67	A superlattice approach to the synthesis of ferroelectric Strontium Bismuth Tantalate thin films using liquid-injection-MOCVD. Materials Research Society Symposia Proceedings, 2005, 902, 1.	0.1	0