

# Ivar E Reimanis

## List of Publications by Year in Descending Order

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

64  
papers

1,194  
citations

18  
h-index

33  
g-index

65  
ext. papers

1,332  
ext. citations

3.7  
avg, IF

4.43  
L-index

#	Paper	IF	Citations
64	Estimating Ni valence with magnetometry in solid-state reactive sintered yttrium-doped barium zirconate. <i>Journal of the American Ceramic Society</i> , <b>2022</b> , 105, 159	3.8	0
63	Effects of exsolution on the stability and morphology of Ni nanoparticles on BZY thin films. <i>Acta Materialia</i> , <b>2022</b> , 228, 117752	8.4	0
62	The influence of carbon on the microstructure and wear resistance of alumina. <i>Journal of the American Ceramic Society</i> , <b>2021</b> , 104, 4214-4225	3.8	2
61	The effect of Ni and Fe on the decomposition of yttrium doped barium zirconate thin films. <i>Scripta Materialia</i> , <b>2021</b> , 201, 113948	5.6	1
60	A review on the joining of SiC for high-temperature applications. <i>Journal of the Korean Ceramic Society</i> , <b>2020</b> , 57, 246-270	2.2	12
59	Sharp indentation stress fields in fused silica: Finite element analysis and Yoffe analytic model. <i>Journal of the American Ceramic Society</i> , <b>2020</b> , 103, 7135-7146	3.8	0
58	Zero stress aging in notched multi-component glass fibers. <i>Journal of the American Ceramic Society</i> , <b>2019</b> , 102, 6552-6563	3.8	1
57	Enhanced fracture toughness in nonstoichiometric magnesium aluminate spinel through controlled dissolution of second phase alumina. <i>Journal of the American Ceramic Society</i> , <b>2018</b> , 101, 812-820	3.8	1
56	Thermal regimes of Li-ion conductivity in $\beta$ -cryptite. <i>Journal of the American Ceramic Society</i> , <b>2018</b> , 101, 347-355	3.8	6
55	Measurement and Characterization of a High-Temperature, Coke-Resistant Bi-functional Ni/BZY15 Water-Gas-Shift Catalyst Under Steam-Reforming Conditions. <i>Catalysis Letters</i> , <b>2018</b> , 148, 3592-3607	2.8	6
54	Mechanical and optical properties in precipitated regions of alumina-rich magnesium aluminate spinel. <i>International Journal of Applied Ceramic Technology</i> , <b>2017</b> , 14, 236-244	2	4
53	Diffusion limited precipitation of alumina in magnesium aluminate spinel. <i>Journal of the American Ceramic Society</i> , <b>2017</b> , 100, 894-900	3.8	2
52	Fracture strength and principal stress fields during crush testing of the SiC layer in TRISO-coated fuel particles. <i>Journal of Nuclear Materials</i> , <b>2016</b> , 477, 263-272	3.3	5
51	Microstructure evolution during internal reduction of polycrystalline nickel-doped yttria-stabilized zirconia. <i>Acta Materialia</i> , <b>2016</b> , 105, 84-93	8.4	8
50	Tailored metal/ceramic nanocomposites prepared by redox cycling of polycrystalline Ni-doped yttria stabilized zirconia. <i>Scripta Materialia</i> , <b>2016</b> , 112, 109-113	5.6	3
49	Pressure-induced phase transformation in $\beta$ -cryptite: An X-ray diffraction and density functional theory study. <i>Scripta Materialia</i> , <b>2016</b> , 122, 64-67	5.6	6
48	Hertzian Testing to Obtain Flaw Distributions in High Strength Glasses and Glass-Ceramics. <i>Journal of the American Ceramic Society</i> , <b>2016</b> , 99, 3712-3718	3.8	1

47	Electrochemical Impedance Spectroscopy of Transparent Polycrystalline Magnesium Aluminate (MgAl <sub>2</sub> O <sub>4</sub> ) Spinel. <i>Journal of the American Ceramic Society</i> , <b>2015</b> , 98, 2130-2138	3.8	18
46	The Compelling Case for Indentation as a Functional Exploratory and Characterization Tool. <i>Journal of the American Ceramic Society</i> , <b>2015</b> , 98, 2671-2680	3.8	58
45	Characterization of Nickel Ions in Nickel-Doped Yttria-Stabilized Zirconia. <i>Journal of the American Ceramic Society</i> , <b>2014</b> , 97, 1041-1047	3.8	6
44	Superparamagnetic nickel particles in yttria-stabilized zirconia prepared by reduction of Pechini-derived solution. <i>Journal of Nanoparticle Research</i> , <b>2014</b> , 16, 1	2.3	
43	Fifty Years of Research and Development Coming to Fruition; Unraveling the Complex Interactions during Processing of Transparent Magnesium Aluminate (MgAl <sub>2</sub> O <sub>4</sub> ) Spinel. <i>Journal of the American Ceramic Society</i> , <b>2013</b> , 96, 3341-3365	3.8	165
42	Effect of Impurities and LiF Additive in Hot-Pressed Transparent Magnesium Aluminate Spinel. <i>International Journal of Applied Ceramic Technology</i> , <b>2013</b> , 10, E33-E48	2	51
41	Atomic-scale mechanism for pressure-induced amorphization of Eucryptite. <i>Journal of Applied Physics</i> , <b>2013</b> , 114, 083520	2.5	13
40	Recrystallization Kinetics of 3C Silicon Carbide Implanted with 400 keV Cesium Ions. <i>Journal of the American Ceramic Society</i> , <b>2013</b> , 96, 3290-3295	3.8	5
39	In situ Diamond Anvil Cell Raman Spectroscopy and Nanoindentation Study of the Pressure-Induced Phase Transformation in Pure and Zinc-Doped Eucryptite. <i>Journal of the American Ceramic Society</i> , <b>2013</b> , 96, 1909-1915	3.8	2
38	Radiation effects and tolerance mechanism in Eucryptite. <i>Journal of Applied Physics</i> , <b>2013</b> , 113, 033504	2.5	5
37	Determining Activation Volume for the Pressure-Induced Phase Transformation in Eucryptite Through Nanoindentation. <i>Journal of the American Ceramic Society</i> , <b>2012</b> , 95, 2051-2058	3.8	10
36	Effect of Doping on the Thermal Expansion of Eucryptite Prepared by Sol-Gel Methods. <i>Journal of the American Ceramic Society</i> , <b>2012</b> , 95, 2939-2943	3.8	9
35	Solubility of NiO in Pechini-derived ZrO <sub>2</sub> examined with SQUID magnetometry. <i>Journal of Materials Science</i> , <b>2012</b> , 47, 1690-1696	4.3	6
34	Internal Reduction of Ni <sup>2+</sup> in ZrO <sub>2</sub> Stabilized with 10 mol% Y <sub>2</sub> O <sub>3</sub> Examined with VSM and SQUID Magnetometry. <i>Journal of the American Ceramic Society</i> , <b>2012</b> , 95, 4008-4014	3.8	9
33	A reactive force field for lithium-aluminum silicates with applications to eucryptite phases. <i>Modelling and Simulation in Materials Science and Engineering</i> , <b>2012</b> , 20, 015002	2	39
32	Slow Crack Growth Behavior of Zirconia-Toughened Alumina and Alumina Using the Dynamic Fatigue Indentation Technique. <i>Journal of the American Ceramic Society</i> , <b>2011</b> , 94, 576-583	3.8	9
31	The Enhanced Stabilization of the Cubic Phase in Yttria-Stabilized Zirconia with the Addition of Nickel Oxide. <i>Journal of the American Ceramic Society</i> , <b>2011</b> , 94, 2030-2036	3.8	7
30	Reactions in Eucryptite-Based Lithium Aluminum Silicates. <i>Journal of the American Ceramic Society</i> , <b>2010</b> , 93, 1591	3.8	6

29	Elastic constants of $\beta$ -Eucryptite studied by density functional theory. <i>Physical Review B</i> , <b>2010</b> , 81,	3.3	19
28	Influence of the Processing Route in the Microstructure and Mechanical Properties of NiAl/TiB <sub>2</sub> Composites Produced by Combustion Synthesis. <i>Metallurgical and Materials Transactions B: Process Metallurgy and Materials Processing Science</i> , <b>2009</b> , 40, 187-195	2.5	3
27	In Situ Raman Indentation of $\beta$ -Eucryptite: Characterization of the Pressure-Induced Phase Transformation. <i>Journal of the American Ceramic Society</i> , <b>2009</b> , 92, 857-863	3.8	13
26	A Review on the Sintering and Microstructure Development of Transparent Spinel (MgAl <sub>2</sub> O <sub>4</sub> ). <i>Journal of the American Ceramic Society</i> , <b>2009</b> , 92, 1472-1480	3.8	157
25	Sintering Kinetics of a MgAl <sub>2</sub> O <sub>4</sub> Spinel Doped with LiF. <i>Journal of the American Ceramic Society</i> , <b>2008</b> , 91, 444-450	3.8	65
24	Chemical Interaction Between LiF and MgAl <sub>2</sub> O <sub>4</sub> Spinel During Sintering. <i>Journal of the American Ceramic Society</i> , <b>2007</b> , 90, 2038-2042	3.8	62
23	Spontaneous Ejecta from $\beta$ -Eucryptite Composites. <i>Journal of the American Ceramic Society</i> , <b>2007</b> , 90, 2497-2501	3.8	17
22	Analysis of moiré data for near-interface cracks. <i>International Journal of Fracture</i> , <b>2007</b> , 143, 207-217	2.3	2
21	Reactions in the sintering of MgAl <sub>2</sub> O <sub>4</sub> spinel doped with LiF. <i>International Journal of Materials Research</i> , <b>2007</b> , 98, 1273-1278	0.5	24
20	Multiple cracking in CrN and Cr <sub>2</sub> N films on brass. <i>Surface and Coatings Technology</i> , <b>2005</b> , 192, 291-298	4.4	15
19	Mechanical Behavior of MoSi <sub>2</sub> Reinforced Si <sub>3</sub> N <sub>4</sub> Matrix Composites. <i>Journal of the American Ceramic Society</i> , <b>2005</b> , 80, 3070-3076	3.8	41
18	Influence of Cu <sub>2</sub> O and CuAlO <sub>2</sub> Interphases on Crack Propagation at Cu/ $\beta$ -Al <sub>2</sub> O <sub>3</sub> Interfaces. <i>Journal of the American Ceramic Society</i> , <b>2005</b> , 80, 424-432	3.8	29
17	Finite-Element Simulations of Cracks Near Interfaces: Effects of Thermal, Elastic, and Plastic Mismatch. <i>Journal of the American Ceramic Society</i> , <b>2005</b> , 88, 2833-2838	3.8	5
16	A new powder production route for transparent spinel windows: powder synthesis and window properties <b>2005</b> , 5786, 41		25
15	Fabrication of transparent spinel: the role of impurities <b>2005</b> ,		9
14	Fabrication of Graded Nickel-Alumina Composites with a Thermal-Behavior-Matching Process. <i>Journal of the American Ceramic Society</i> , <b>2004</b> , 83, 2147-2154	3.8	35
13	Stresses Occurring during Joining of Ceramics Using Pre ceramic Polymers. <i>Journal of the American Ceramic Society</i> , <b>2004</b> , 84, 2240-2244	3.8	57
12	Microstructural Evolution of Titanium Carbide-Chromium Carbide (TiC/Cr <sub>3</sub> C <sub>2</sub> ) Composites Produced via Combustion Synthesis. <i>Journal of the American Ceramic Society</i> , <b>2004</b> , 85, 1285-1290	3.8	8

11	Fracture Toughness Measurement of Chromium Nitride Films on Brass. <i>Journal of the American Ceramic Society</i> , <b>2004</b> , 87, 1306-1313	3.8	9
10	Preface to the Special Issue on Mechanics of Interfaces. <i>Journal of Materials Science</i> , <b>2003</b> , 11, 275-275		
9	Elastic constants of layers in isotropic laminates. <i>Journal of the Acoustical Society of America</i> , <b>2003</b> , 114, 2618-25	2.2	3
8	Electrophoretic deposition applied to thick metal/ceramic coatings. <i>Surface and Coatings Technology</i> , <b>2002</b> , 157, 267-273	4.4	19
7	A Crystalline Si <sub>3</sub> N <sub>4</sub> /Amorphous Si <sub>3</sub> N <sub>4</sub> Composite. <i>Journal of the American Ceramic Society</i> , <b>1996</b> , 79, 395-400	3.8	6
6	Mechanical Properties of Single-Crystal Si <sub>3</sub> N <sub>4</sub> . <i>Journal of the American Ceramic Society</i> , <b>1996</b> , 79, 2065-2083	3.8	25
5	Fracture Characteristics of Czochralski-Grown Y <sub>3</sub> Al <sub>5</sub> O <sub>12</sub> . <i>Journal of the American Ceramic Society</i> , <b>1995</b> , 78, 2282-2286	3.8	3
4	Role of Oxygen in Microstructure Development at Solid-State Diffusion-Bonded Cu/Al <sub>2</sub> O <sub>3</sub> Interfaces. <i>Journal of the American Ceramic Society</i> , <b>1994</b> , 77, 2036-2042	3.8	34
3	Fracture at NbAl <sub>2</sub> O <sub>3</sub> interfaces. <i>Scripta Metallurgica Et Materialia</i> , <b>1992</b> , 27, 1729-1734		4
2	Plasma-deposited fluorocarbon films on silicon studied by ellipsometry. <i>Thin Solid Films</i> , <b>1986</b> , 143, 269-278		17
1	Functionally Graded Materials		465-486 12