

# Ivan Gregora

## List of Publications by Year in descending order

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90  
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2,539  
citations

172457

29  
h-index

223800

46  
g-index

90  
all docs

90  
docs citations

90  
times ranked

3209  
citing authors

#	ARTICLE	IF	CITATIONS
1	Grain size and grain boundary-related effects on the properties of nanocrystalline barium titanate ceramics. <i>Journal of the European Ceramic Society</i> , 2006, 26, 2889-2898.	5.7	190
2	Applicability of Raman scattering for the characterization of nanocrystalline silicon. <i>Thin Solid Films</i> , 1999, 337, 148-151.	1.8	160
3	Multiple Soft-Mode Vibrations of Lead Zirconate. <i>Physical Review Letters</i> , 2014, 112, 197601.	7.8	110
4	Photoanodes with Fully Controllable Texture: The Enhanced Water Splitting Efficiency of Thin Hematite Films Exhibiting Solely (110) Crystal Orientation. <i>ACS Nano</i> , 2015, 9, 7113-7123.	14.6	102
5	Raman and AFM piezoresponse study of dense BaTiO <sub>3</sub> nanocrystalline ceramics. <i>Journal of the European Ceramic Society</i> , 2005, 25, 3059-3062.	5.7	85
6	Structure and properties of MoO <sub>3</sub> -containing zinc borophosphate glasses. <i>Journal of Non-Crystalline Solids</i> , 2009, 355, 970-975.	3.1	79
7	Resolved E-symmetry zone-centre phonons in LiTaO <sub>3</sub> and LiNbO <sub>3</sub> . <i>Journal of Applied Physics</i> , 2012, 111, .	2.5	76
8	Structure of lead germanate glasses by Raman spectroscopy. <i>Journal of Non-Crystalline Solids</i> , 2001, 279, 136-144.	3.1	70
9	Notes on the photo-induced characteristics of transition metal-doped and undoped titanium dioxide thin films. <i>Journal of Colloid and Interface Science</i> , 2010, 348, 198-205.	9.4	69
10	Nanocrystalline titanium dioxide films: Influence of ambient conditions on surface- and volume-related photoluminescence. <i>Journal of Applied Physics</i> , 2010, 108, .	2.5	59
11	Amorphous nanostructuring in potassium niobium silicate glasses by SANS and SHG: a new mechanism for second-order optical non-linearity of glasses. <i>Journal of Non-Crystalline Solids</i> , 2002, 306, 238-248.	3.1	55
12	Raman investigation of light-emitting porous silicon layers: Estimate of characteristic crystallite dimensions. <i>Journal of Applied Physics</i> , 1994, 75, 3034-3039.	2.5	50
13	Lattice dynamics and dielectric response of undoped, soft and hard PbZr <sub>0.42</sub> Ti <sub>0.58</sub> O <sub>3</sub> . <i>Phase Transitions</i> , 2010, 83, 917-930.	1.3	50
14	Glass-forming ability and structure of ZnO-MoO <sub>3</sub> -P <sub>2</sub> O <sub>5</sub> glasses. <i>Journal of Non-Crystalline Solids</i> , 2010, 356, 2509-2516.	3.1	49
15	Raman spectra and electrical conductivity of glassy carbon. <i>Materials Science and Engineering B: Solid-State Materials for Advanced Technology</i> , 1992, 11, 355-357.	3.5	46
16	Dielectric relaxation in tetragonal tungsten bronze ceramics. <i>Journal of Physics and Chemistry of Solids</i> , 2003, 64, 471-476.	4.0	44
17	Laser photolysis of liquid benzene and toluene: Graphitic and polymeric carbon formation at ambient temperature. <i>Carbon</i> , 1997, 35, 605-611.	10.3	41
18	Raman spectroscopy and effective dielectric function in PLZT $x < i > / < i > 40 < i > / < i > 60$ . <i>Journal of Physics Condensed Matter</i> , 2008, 20, 345229.	1.8	41

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19	Raman scattering of silicon clathrates. <i>Physical Review B</i> , 1998, 57, R9475-R9477.	3.2	40
20	Role of trivalent Sr substituents and Sr vacancies in tetragonal and polar states of SrTiO <sub>3</sub> . <i>Acta Materialia</i> , 2011, 59, 5388-5397.	7.9	40
21	Raman spectroscopy of the zone centre improper ferroelastic transition in ordered complex perovskite ceramic. <i>Solid State Communications</i> , 1995, 94, 899-903.	1.9	38
22	Grain boundary effects on dielectric, infrared and Raman response of SrTiO <sub>3</sub> nanograin ceramics. <i>Journal of the European Ceramic Society</i> , 2006, 26, 2855-2859.	5.7	38
23	Infrared and Raman studies of the dead grain-boundary layers in SrTiO <sub>3</sub> fine-grain ceramics. <i>Journal of Physics Condensed Matter</i> , 2007, 19, 196222.	1.8	35
24	Optical constants of single-crystal GeS in the photon energy range 0.04–4 eV. <i>Journal of Physics and Chemistry of Solids</i> , 1976, 37, 785-794.	4.0	32
25	High-power pulsed plasma deposition of hematite photoanode for PEC water splitting. <i>Catalysis Today</i> , 2014, 230, 8-14.	4.4	32
26	Anisotropic and polarization effects in Raman scattering in porous silicon. <i>Thin Solid Films</i> , 1995, 255, 139-142.	1.8	31
27	Lanthanum borogermanate glass-based active dielectrics. <i>Journal of Non-Crystalline Solids</i> , 2007, 353, 1956-1960.	3.1	31
28	Ferroelectric nanodomains in epitaxial PbTiO <sub>3</sub> films grown on SmScO <sub>3</sub> and TbScO <sub>3</sub> substrates. <i>Journal of Applied Physics</i> , 2013, 113, .	2.5	31
29	Investigation of reactive HiPIMS+MF sputtering of TiO <sub>2</sub> crystalline thin films. <i>Surface and Coatings Technology</i> , 2013, 232, 376-383.	4.8	30
30	Raman study of AlPO <sub>4</sub> (berlinite) at the $\hat{A}\hat{A}\hat{A}$ transition. <i>Journal of Physics Condensed Matter</i> , 2003, 15, 4487-4501.	1.8	29
31	Raman spectroscopy of Pb(Zr <sub>1-x</sub> Ti <sub>x</sub> )O <sub>3</sub> graded ceramics around the morphotropic phase boundary. <i>Phase Transitions</i> , 2011, 84, 528-541.	1.3	28
32	Photoelectrochemical properties of hierarchical nanocomposite structure: Carbon nanofibers/TiO <sub>2</sub> /ZnO thin films. <i>Catalysis Today</i> , 2011, 161, 8-14.	4.4	27
33	Double hollow cathode plasma jet-low temperature method for the TiO <sub>2</sub> photoresponding films. <i>Electrochimica Acta</i> , 2010, 55, 1548-1556.	5.2	26
34	Optical Phonons and Ferroelectric Phase Transition in the LaBGeO <sub>5</sub> Crystal. <i>Physica Status Solidi (B): Basic Research</i> , 1999, 214, 423-439.	1.5	25
35	Grain Boundary and Size Effect on the Dielectric, Infrared and Raman Response of SrTiO <sub>3</sub> Nanograin Ceramics. <i>Ferroelectrics</i> , 2008, 363, 227-244.	0.6	24
36	Atmospheric pressure barrier torch discharge and its optimization for flexible deposition of TiO <sub>2</sub> thin coatings on various surfaces. <i>Surface and Coatings Technology</i> , 2009, 204, 667-675.	4.8	24

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37	Rapid crystallization of amorphous silicon at room temperature. The Philosophical Magazine: Physics of Condensed Matter B, Statistical Mechanics, Electronic, Optical and Magnetic Properties, 2002, 82, 1785-1793.	0.6	21
38	Preparation of thin phthalocyanine layers and their structural and absorption properties. Thin Solid Films, 2009, 517, 5274-5279.	1.8	21
39	Lattice dynamics and phase transitions in $\text{KNbO}_3$ and $\text{K}_{0.5}\text{Na}_{0.5}\text{NbO}_3$ ceramics. IEEE Transactions on Ultrasonics, Ferroelectrics, and Frequency Control, 2009, 56, 1843-1849.	3.0	21
40	Ferroelectricity in antiferroelectric $\text{NaNbO}_3$ crystal. Journal of Physics Condensed Matter, 2014, 26, 125901.	1.8	21
41	The transition to a proton glass state in $\text{Cs}_5\text{H}_3(\text{SO}_4)_4 \cdot \text{H}_2\text{O}$ . Solid State Ionics, 1995, 77, 122-127.	2.7	20
42	Vibrational spectroscopy of $\text{LaBSiO}_5$ glass and glass-crystal composites. Journal of Non-Crystalline Solids, 2001, 290, 224-230.	3.1	20
43	Raman and IR phonons in ferroelectric $\text{Sr}_{0.35}\text{Ba}_{0.69}\text{Nb}_2\text{O}_{6.04}$ single crystals. Phase Transitions, 2013, 86, 217-229.	1.3	20
44	Lattice dynamics and broad-band dielectric properties of the $\text{KTaO}_3$ ceramics. Journal of Applied Physics, 2012, 111, 044101.	2.5	19
45	Changes in the optical properties of quasi-one-dimensional $\text{NaVO}_2$ . Journal of Applied Physics, 2011, 110, 044101.	3.2	18
46	Structure Determination and Compositional Modification of Body-Centered Tetragonal PX-Phase Lead Titanate. Chemistry of Materials, 2011, 23, 2529-2535.	6.7	18
47	Refractive Index of Crystalline and Amorphous GeS. Physica Status Solidi (B): Basic Research, 1981, 104, K95.	1.5	17
48	Ultrabroadband dielectric spectroscopy and phonons in $(\text{Pb}_{1-x}/2\text{Lax})(\text{Zr}_{0.9}\text{Ti}_{0.1})\text{O}_3$ . Journal of Applied Physics, 2010, 108, 104101.	2.5	17
49	Discriminating adenocarcinoma from normal colonic mucosa through deconvolution of Raman spectra. Journal of Biomedical Optics, 2011, 16, 127001.	2.6	17
50	Raman spectroscopy of dip-coated and spin-coated sol-gel $\text{TiO}_2$ thin films on different types of glass substrate. Journal of Sol-Gel Science and Technology, 2012, 63, 294-306.	2.4	17
51	Polar grain boundaries in undoped $\text{SrTiO}_3$ ceramics. Journal of the European Ceramic Society, 2001, 21, 2681-2686.	5.7	16
52	Optical Contrast and Raman Spectroscopy Techniques Applied to Few-Layer 2D Hexagonal Boron Nitride. Nanomaterials, 2019, 9, 1047.	4.1	16
53	Infrared and raman spectroscopy on various PLZT ceramics. Ferroelectrics, 1996, 186, 115-118.	0.6	15
54	Vibrational spectra of guanylurea(1+) hydrogen phosphite—Novel remarkable material for nonlinear optics. Vibrational Spectroscopy, 2012, 63, 485-491.	2.2	15

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55	Optical properties of hydrogenated sputtered silicon in the 0.13 eV photon energy range. <i>Solar Energy Materials and Solar Cells</i> , 1980, 4, 1-10.	0.4	13
56	Far-Infrared and Raman Studies of the Ferroelectric Phase Transition in LiNaGe4O9. <i>Physica Status Solidi (B): Basic Research</i> , 1999, 214, 441-452.	1.5	13
57	Raman Spectra of Crystalline GeS. <i>Physica Status Solidi (B): Basic Research</i> , 1975, 71, K187.	1.5	12
58	Observations of the absorption, infra-red emission, and excitation spectra of Cr in. <i>Journal of Physics Condensed Matter</i> , 1998, 10, 10775-10786.	1.8	12
59	Structure refinement, infrared and Raman spectra of KDyP4O12. <i>Materials Research Bulletin</i> , 2002, 37, 1259-1267.	5.2	12
60	Properties of BaTiO3 confined in nanoporous Vycor and artificial opal silica. <i>Processing and Application of Ceramics</i> , 2010, 4, 215-223.	0.8	12
61	Raman scattering by the coupled plasmon-LO-phonon modes near the E0+Γ0 gap of n-type GaAs: Resonance and interference effects. <i>Physical Review B</i> , 1990, 42, 5802-5808.	3.2	11
62	Raman spectra of crystals in the proton glass state. <i>Journal of Physics Condensed Matter</i> , 1996, 8, 3965-3975.	1.8	11
63	Vibration properties of Pb5Ge3O11 and LaBGeO5 glasses and crystallised glasses. <i>Ferroelectrics</i> , 2000, 239, 39-46.	0.6	11
64	Raman scattering in the proton conductor Rb3H(SeO4)2. <i>Solid State Ionics</i> , 1996, 91, 145-153.	2.7	10
65	Visible photoluminescence in hydrogenated amorphous silicon grown in microwave plasma from SiH4 strongly diluted with He. <i>Journal of Applied Physics</i> , 1999, 86, 1415-1419.	2.5	10
66	Near infra-red luminescence of BaTiO3: Cr. <i>Radiation Effects and Defects in Solids</i> , 1999, 149, 107-112.	1.2	10
67	LiTaO3 crystals with near-zero birefringence. <i>Journal of Applied Crystallography</i> , 2012, 45, 1030-1037.	4.5	10
68	Far infrared reflectivity of CdS. <i>Physica Status Solidi (B): Basic Research</i> , 1972, 49, 271-275.	1.5	9
69	Laser Raman polarization spectra of natural zeolite-natrolite. <i>Collection of Czechoslovak Chemical Communications</i> , 1981, 46, 3043-3048.	1.0	9
70	Raman scattering study of GaP:N epitaxial layers. <i>Journal of Physics and Chemistry of Solids</i> , 1988, 49, 797-805.	4.0	9
71	Diagnostics of Si multi-γ-doped GaAs layers by Raman spectroscopy on bevelled structures. <i>Applied Surface Science</i> , 2001, 183, 86-92.	6.1	9
72	Far infrared and Raman spectroscopy of ferroelectric soft mode in SrTiO3 thin films and ceramics. <i>Integrated Ferroelectrics</i> , 2001, 32, 11-20.	0.7	8

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73	Preparation of silicon nanoaggregates by thermal activated reaction. <i>Materials Science and Engineering B: Solid-State Materials for Advanced Technology</i> , 2003, 100, 27-34.	3.5	8
74	WKB analysis of guided and semileaky modes in graded-index anisotropic optical waveguides. <i>Optics Communications</i> , 1979, 28, 59-63.	2.1	7
75	Raman scattering in GeS single crystals at low temperatures. <i>Physica Status Solidi (B): Basic Research</i> , 1983, 116, 639-643.	1.5	7
76	Raman spectra of DRADP-50 dipolar glass. <i>Journal of Physics Condensed Matter</i> , 1995, 7, 683-695.	1.8	7
77	Pseudophason gap in deuterated betaine calcium chloride dihydrate crystal. <i>Physical Review B</i> , 1997, 56, 13855-13860.	3.2	7
78	Domain structure and Raman modes in $\text{PbTiO}_3$ . <i>Phase Transitions</i> , 2011, 84, 509-520.	1.3	7
79	Raman spectra and improper ferroelastic phase transition in single crystal. <i>Journal of Physics Condensed Matter</i> , 1999, 11, 889-903.	1.8	6
80	Dielectric permittivity and $\text{Cr}^{3+}$ impurity ion probe luminescence in $\text{SrTiO}_3$ sol-gel ceramics. <i>Journal of the European Ceramic Society</i> , 2007, 27, 3705-3707.	5.7	6
81	Catching the intermediate phase in PZT 99/1 single crystals. <i>Phase Transitions</i> , 2014, 87, 1105-1113.	1.3	6
82	Laser photolysis of liquid hexafluorobenzene: graphitic and fluorine-containing carbon formation at ambient temperature. <i>Journal of Materials Chemistry</i> , 1998, 8, 187-191.	6.7	5
83	Raman Spectroscopy of $\text{Sr}_{1-x}\text{Pb}_x\text{TiO}_3$ Thin Films. <i>Ferroelectrics</i> , 2012, 426, 45-52.	0.6	5
84	Analysis of composition homogeneity and polarization orientation of PZT submicron fibers by micro-Raman spectroscopy. <i>Journal of the European Ceramic Society</i> , 2014, 34, 2311-2316.	5.7	4
85	Directional Dispersion of Polar Optical Phonon Frequencies in Low-Symmetry Crystals: Raman Studies on $\text{Sn}_2\text{P}_2\text{S}_6$ . <i>Ferroelectrics</i> , 2002, 267, 237-243.	0.6	2
86	Amplitudon Mode in Deuterated Thiourea by Raman Scattering. <i>Ferroelectrics</i> , 2004, 302, 155-157.	0.6	2
87	IR laser degradation of some fluoro-polymers. <i>Journal of Fluorine Chemistry</i> , 1995, 72, 111-116.	1.7	1
88	Wanted: Amplitudon mode in raman spectra of BCCD. <i>Ferroelectrics</i> , 2000, 240, 1383-1390.	0.6	1
89	Mechanical and Tribological Properties of Carbon Thin Film with Tungsten Interlayer Prepared by Ion Beam Assisted Deposition. <i>Journal of Materials</i> , 2013, 2013, 1-4.	0.1	1
90	Raman study of $0.62\text{Pb}(\text{Fe}_{1/2}\text{Nb}_{1/2})\text{O}_3 \approx 0.38\text{PbTiO}_3$ single crystal. <i>Phase Transitions</i> , 2014, 87, 1080-1085.	1.3	0